

**District I**

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

**District II**

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

**District III**

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

**District IV**

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

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

Form C-101  
August 1, 2011

Permit 278742

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

|                                                                                              |                                     |                               |
|----------------------------------------------------------------------------------------------|-------------------------------------|-------------------------------|
| 1. Operator Name and Address<br>CAZA OPERATING, LLC<br>200 N Loraine St<br>Midland, TX 79701 |                                     | 2. OGRID Number<br>249099     |
|                                                                                              |                                     | 3. API Number<br>30-025-47387 |
| 4. Property Code<br>40096                                                                    | 5. Property Name<br>GRAMMA 27 STATE | 6. Well No.<br>007H           |

**7. Surface Location**

|               |               |                 |              |              |                 |               |                   |               |               |
|---------------|---------------|-----------------|--------------|--------------|-----------------|---------------|-------------------|---------------|---------------|
| UL - Lot<br>A | Section<br>27 | Township<br>21S | Range<br>34E | Lot Idn<br>A | Feet From<br>25 | N/S Line<br>N | Feet From<br>1130 | E/W Line<br>E | County<br>Lea |
|---------------|---------------|-----------------|--------------|--------------|-----------------|---------------|-------------------|---------------|---------------|

**8. Proposed Bottom Hole Location**

|               |               |                 |              |              |                 |               |                   |               |               |
|---------------|---------------|-----------------|--------------|--------------|-----------------|---------------|-------------------|---------------|---------------|
| UL - Lot<br>O | Section<br>27 | Township<br>21S | Range<br>34E | Lot Idn<br>O | Feet From<br>20 | N/S Line<br>S | Feet From<br>1973 | E/W Line<br>E | County<br>Lea |
|---------------|---------------|-----------------|--------------|--------------|-----------------|---------------|-------------------|---------------|---------------|

**9. Pool Information**

|                             |       |
|-----------------------------|-------|
| GRAMA RIDGE;BONE SPRING, NE | 28435 |
|-----------------------------|-------|

**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>3689 |
| 16. Multiple<br>N         | 17. Proposed Depth<br>14734 | 18. Formation<br>1st Bone Spring Sand  | 19. Contractor          | 20. Spud Date<br>3/30/2020         |
| Depth to Ground water     |                             | Distance from nearest fresh water well |                         | Distance to nearest surface water  |

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

**21. Proposed Casing and Cement Program**

| Type | Hole Size | Casing Size | Casing Weight/ft | Setting Depth | Sacks of Cement | Estimated TOC |
|------|-----------|-------------|------------------|---------------|-----------------|---------------|
| Surf | 17.5      | 13.375      | 54.5             | 1900          | 1400            | 0             |
| Int1 | 12.25     | 9.625       | 40               | 5400          | 1000            | 0             |
| Prod | 8.75      | 6           | 24.5             | 14734         | 3200            | 0             |

**Casing/Cement Program: Additional Comments**

|                             |
|-----------------------------|
| DVT and ECP set at 3900'+/- |
|-----------------------------|

**22. Proposed Blowout Prevention Program**

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

|                                                                                                                                                                                                                                                                                                    |                                  |                                 |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|---------------------------------|
| 23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief.<br>I further certify I have complied with 19.15.14.9 (A) NMAC <input checked="" type="checkbox"/> and/or 19.15.14.9 (B) NMAC <input checked="" type="checkbox"/> if applicable. | <b>OIL CONSERVATION DIVISION</b> |                                 |
| Signature:                                                                                                                                                                                                                                                                                         |                                  |                                 |
| Printed Name: Electronically filed by Steve Morris                                                                                                                                                                                                                                                 | Approved By: Paul F Kautz        |                                 |
| Title: Engineer                                                                                                                                                                                                                                                                                    | Title: Geologist                 |                                 |
| Email Address: steve.morris@morcoreengineering.com                                                                                                                                                                                                                                                 | Approved Date: 7/7/2020          | Expiration Date: 7/7/2022       |
| Date: 7/6/2020                                                                                                                                                                                                                                                                                     | Phone: 432-201-3031              | Conditions of Approval Attached |

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State of New Mexico  
Energy, Minerals & Natural Resources Department  
OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-102  
Revised August 1, 2011  
Submit one copy to appropriate  
District Office  
☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

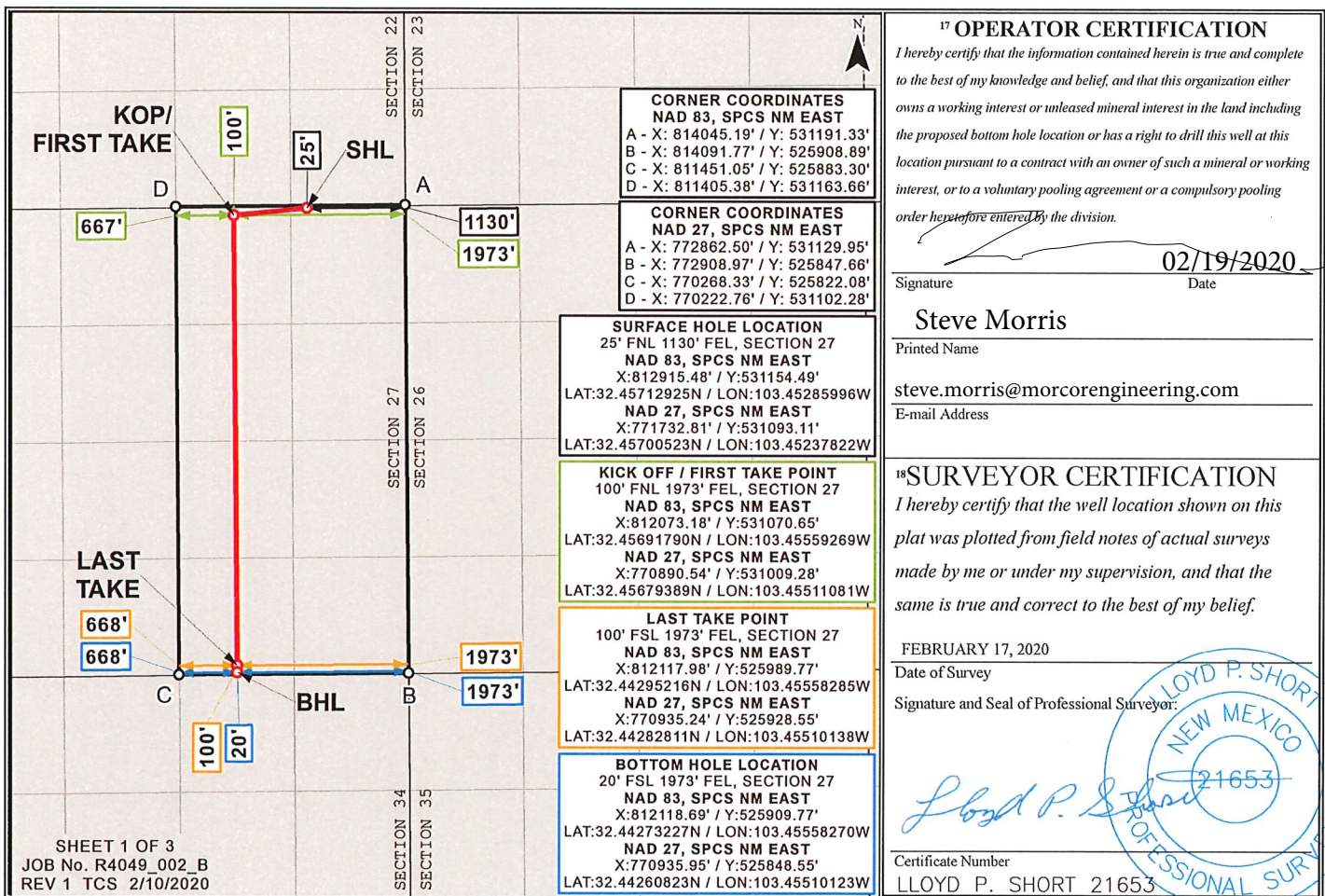
|                                     |                                                  |                                                               |
|-------------------------------------|--------------------------------------------------|---------------------------------------------------------------|
| <sup>1</sup> API Number             | <sup>2</sup> Pool Code<br>28435                  | <sup>3</sup> Pool Name<br>GRAMMA RIDGE; BONE SPRING NORTHEAST |
| <sup>4</sup> Property Code<br>40096 | <sup>5</sup> Property Name<br>GRAMMA 27 STATE    | <sup>6</sup> Well Number<br>7H                                |
| <sup>7</sup> OGRID No.<br>249099    | <sup>8</sup> Operator Name<br>CAZA OPERATING LLC | <sup>9</sup> Elevation<br>3689'                               |

| <sup>10</sup> Surface Location |               |                 |              |         |                     |                           |                       |                        |               |
|--------------------------------|---------------|-----------------|--------------|---------|---------------------|---------------------------|-----------------------|------------------------|---------------|
| UL or lot no.<br>A             | Section<br>27 | Township<br>21S | Range<br>34E | Lot Idn | Feet from the<br>25 | North/South line<br>NORTH | Feet from the<br>1130 | East/West line<br>EAST | County<br>LEA |

| <sup>11</sup> Bottom Hole Location If Different From Surface |               |                 |              |         |                     |                           |                       |                        |               |
|--------------------------------------------------------------|---------------|-----------------|--------------|---------|---------------------|---------------------------|-----------------------|------------------------|---------------|
| UL or lot no.<br>O                                           | Section<br>27 | Township<br>21S | Range<br>34E | Lot Idn | Feet from the<br>20 | North/South line<br>SOUTH | Feet from the<br>1973 | East/West line<br>EAST | County<br>LEA |

|                                      |                               |                                  |                         |
|--------------------------------------|-------------------------------|----------------------------------|-------------------------|
| <sup>12</sup> Dedicated Acres<br>160 | <sup>13</sup> Joint or Infill | <sup>14</sup> Consolidation Code | <sup>15</sup> Order No. |
|--------------------------------------|-------------------------------|----------------------------------|-------------------------|

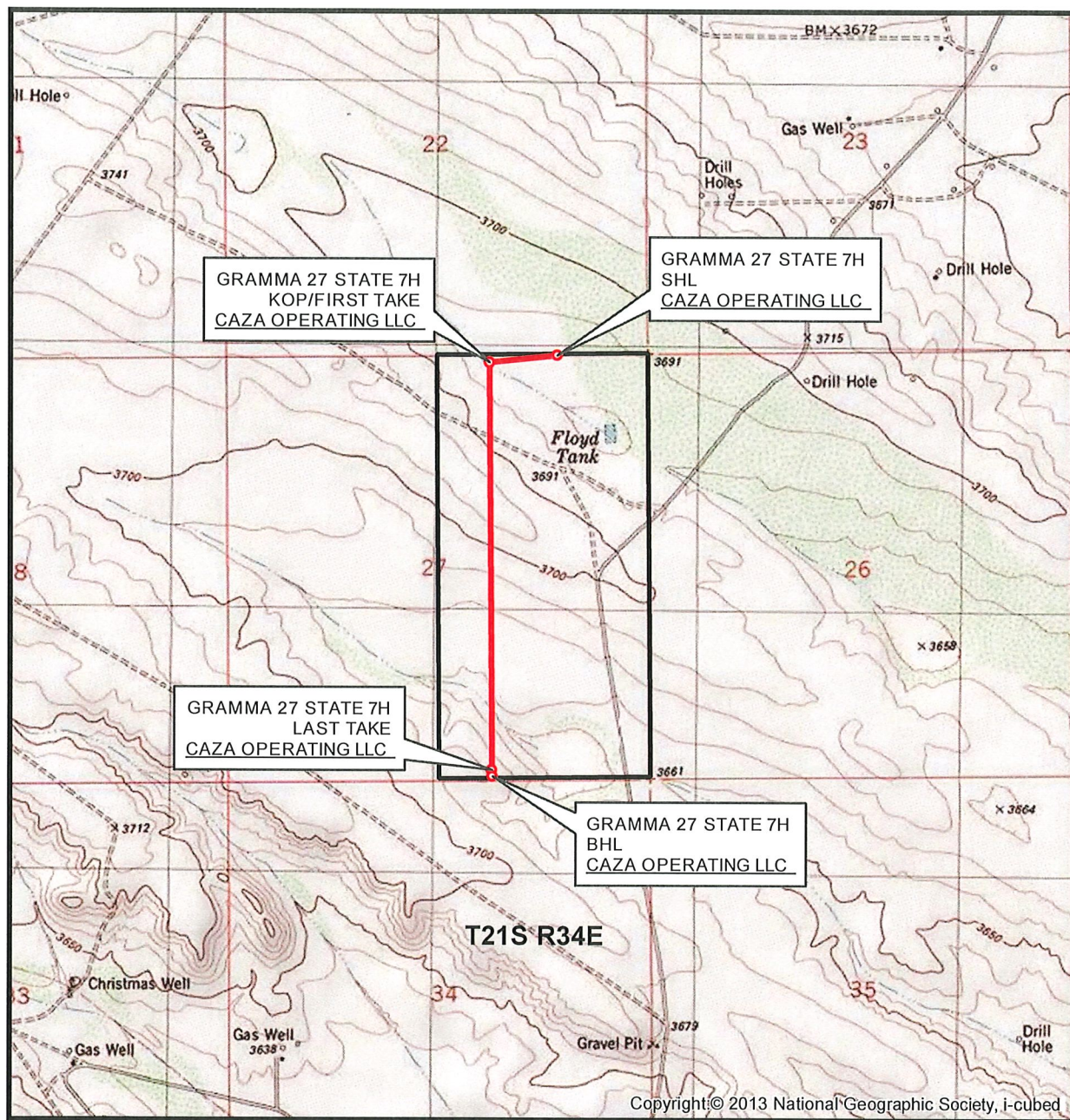
No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.



Distances/areas relative to NAD 83 Combined Scale Factor: 0.99981911 Convergence Angle: 00°28'17.090004"



# LOCATION VERIFICATION MAP



SEC. 27 TWP. 21-S RGE. 34-E  
 SURVEY: N.M.P.M.  
 COUNTY: LEA  
 OPERATOR: CAZA OPERATING LLC  
 DESCRIPTION: 25' FNL & 1130' FEL  
 ELEVATION: 3689'  
 LEASE: GRAMMA 27 STATE  
 U.S.G.S. TOPOGRAPHIC MAP: SAN SIMON RANCH, NM.

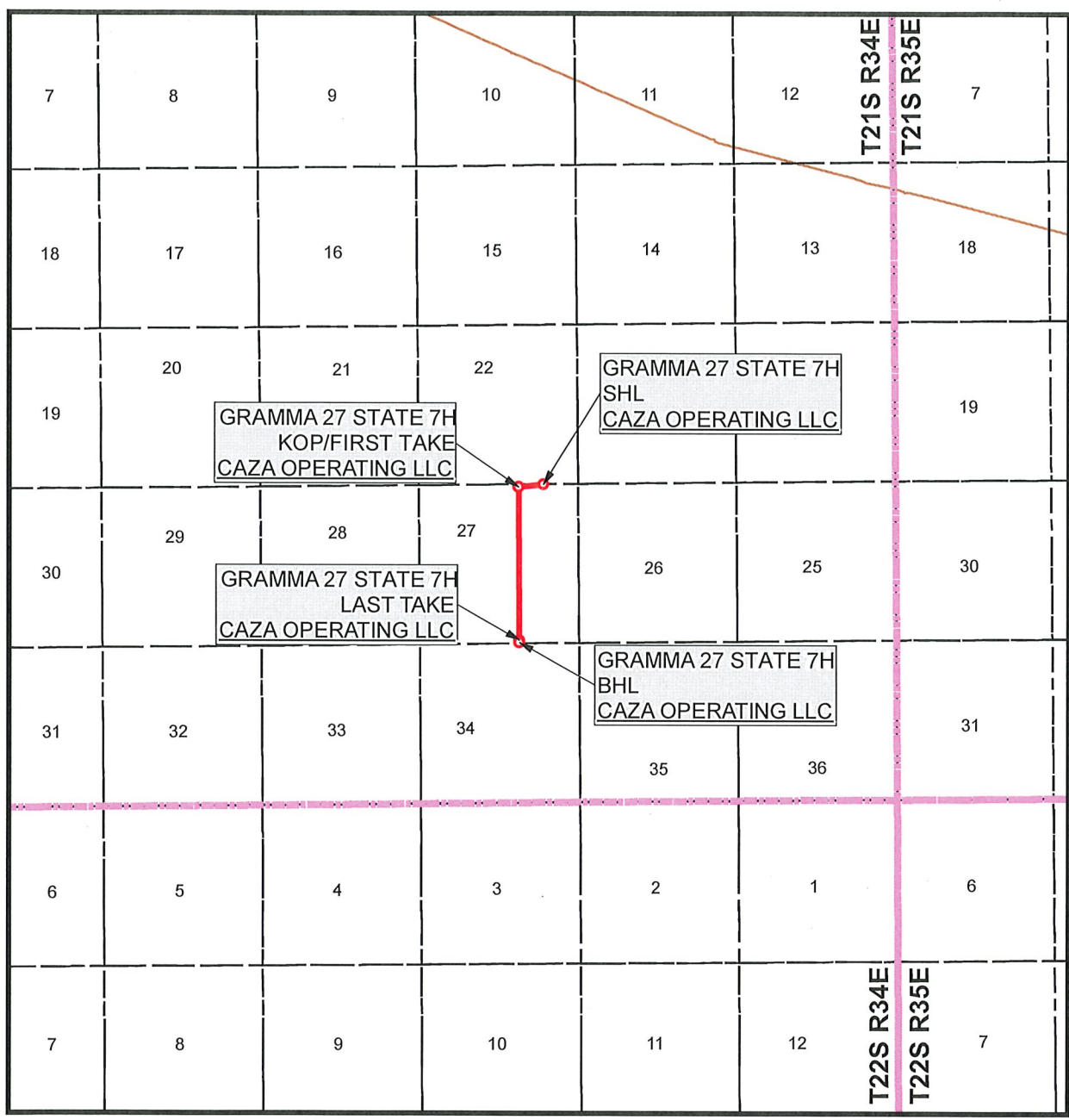
1" = 2,000'  
 CONTOUR INTERVAL = 10'



SHEET 2 OF 3

PREPARED BY:  
 R-SQUARED GLOBAL, LLC  
 1309 LOUISVILLE AVENUE, MONROE, LA 71201  
 318-323-6900 OFFICE  
 JOB No. R4049\_002\_B

# VICINITY MAP



SEC. 27 TWP. 21-S RGE. 34-E  
SURVEY: N.M.P.M.  
COUNTY: LEA  
OPERATOR: CAZA OPERATING LLC  
DESCRIPTION: 25' FNL & 1130' FEL  
ELEVATION: 3689'  
LEASE: GRAMMA 27 STATE  
U.S.G.S. TOPOGRAPHIC MAP: SAN SIMON RANCH, NM.

1" = 1 MILE



SHEET 3 OF 3

PREPARED BY:  
R-SQUARED GLOBAL, LLC  
1309 LOUISVILLE AVENUE, MONROE, LA 71201  
318-323-6900 OFFICE  
JOB No. R4049\_002\_B



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

## GAS CAPTURE PLAN

Date: 7/7/2020

☒ Original

Operator & OGRID No.: [249099] CAZA OPERATING, LLC

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

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

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

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

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

| Well Name             | API          | Well Location (ULSTR) | Footages    | Expected MCF/D | Flared or Vented | Comments |
|-----------------------|--------------|-----------------------|-------------|----------------|------------------|----------|
| GRAMMA 27 STATE #007H | 30-025-47387 | A-27-21S-34E          | 0025N 1130E | 500            | Flared           |          |

### Gathering System and Pipeline Notification

Well(s) will be connected to a production facility after flowback operations are complete, if gas transporter system is in place. The gas produced from production facility is dedicated to TARGA MIDSTREAM SERVICES LLC and will be connected to TARGA MIDSTREAM SERVICES LLC Low Pressure gathering system located in Lea County, New Mexico. It will require 300' of pipeline to connect the facility to Low Pressure gathering system. CAZA OPERATING, LLC provides (periodically) to TARGA MIDSTREAM SERVICES LLC a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, CAZA OPERATING, LLC and TARGA MIDSTREAM SERVICES LLC have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at TARGA MIDSTREAM SERVICES LLC Processing Plant located in Sec. 33, Twn. 21S, Rng. 37E, Lea County, New Mexico. The actual flow of the gas will be based on compression operating parameters and gathering system pressures.

### Flowback Strategy

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

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

### Alternatives to Reduce Flaring

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

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

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

Form APD Comments

Permit 278742

PERMIT COMMENTS

|                                                                                                     |  |                                |
|-----------------------------------------------------------------------------------------------------|--|--------------------------------|
| Operator Name and Address:<br>CAZA OPERATING, LLC [249099]<br>200 N Loraine St<br>Midland, TX 79701 |  | API Number:<br>30-025-47387    |
|                                                                                                     |  | Well:<br>GRAMMA 27 STATE #007H |

|            |         |              |
|------------|---------|--------------|
| Created By | Comment | Comment Date |
|------------|---------|--------------|

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

Form APD Conditions

Permit 278742

**PERMIT CONDITIONS OF APPROVAL**

|                                                                                                     |                                |
|-----------------------------------------------------------------------------------------------------|--------------------------------|
| Operator Name and Address:<br>CAZA OPERATING, LLC [249099]<br>200 N Loraine St<br>Midland, TX 79701 | API Number:<br>30-025-47387    |
|                                                                                                     | Well:<br>GRAMMA 27 STATE #007H |

| OCD<br>Reviewer | Condition                                                                                                                                                                                                                                                                                                                                                                                              |
|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| pkautz          | Will require a directional survey with the C-104                                                                                                                                                                                                                                                                                                                                                       |
| pkautz          | 1) SURFACE & INTERMEDIATE CASING - Cement must circulate to surface -- 2) PRODUCTION CASING - Cement must tie back into intermediate casing --                                                                                                                                                                                                                                                         |
| pkautz          | If cement does not circulate to surface, must run temperature survey or other log to determine top of cement                                                                                                                                                                                                                                                                                           |
| pkautz          | Surface casing must be set 25' below top of Rustler Anhydrite in order to seal off protectable water                                                                                                                                                                                                                                                                                                   |
| pkautz          | 1)- The Operator is to notify NMOCD by sundry (Form C-103) within ten (10) days of the well being spud 2)- Drilling Sundries Form C-103 (Casing and Cement test are to be submitted within 10 days 3)- Completion Reports & Logs are to be submitted within 45 days 4)- Deviation / Directional Drill Survey are to be filed with or prior to C-104                                                    |
| pkautz          | It is the operator's responsibility to monitor cancellation dates of approved APDs. APD's are good for 2 years and may be extended for one year. Only one 1 year extension will be granted if submitted by C-103 before expiration date. After expiration date or after a 1 year extension must submit new APD. If an APD expires and if site construction has occurred, site remediation is required. |
| pkautz          | Stage Tool 1) Must notify OCD Hobbs Office prior to running Stage Tool at 5753703186 2) If using Stage Tool on Surface casing, Stage Tool must be set greater than 350' from surface and a minimum of 200 feet above surface shoe. 3) When using a Stage Tool on Intermediate or Production Casing Stage must be a minimum of 50 feet below previous casing shoe.                                      |

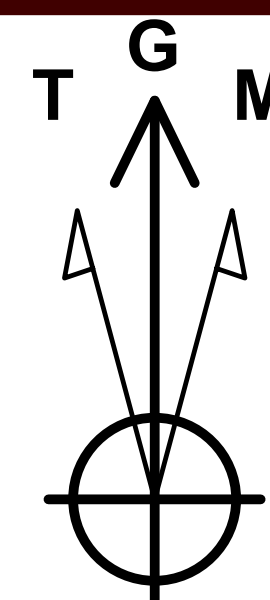




Project: Lea County, New Mexico (NAD83)  
Site: Gramma 27 State  
Well: 7H  
Wellbore: OH  
Design: Plan 1 02-21-20  
Rig: Citadel #2

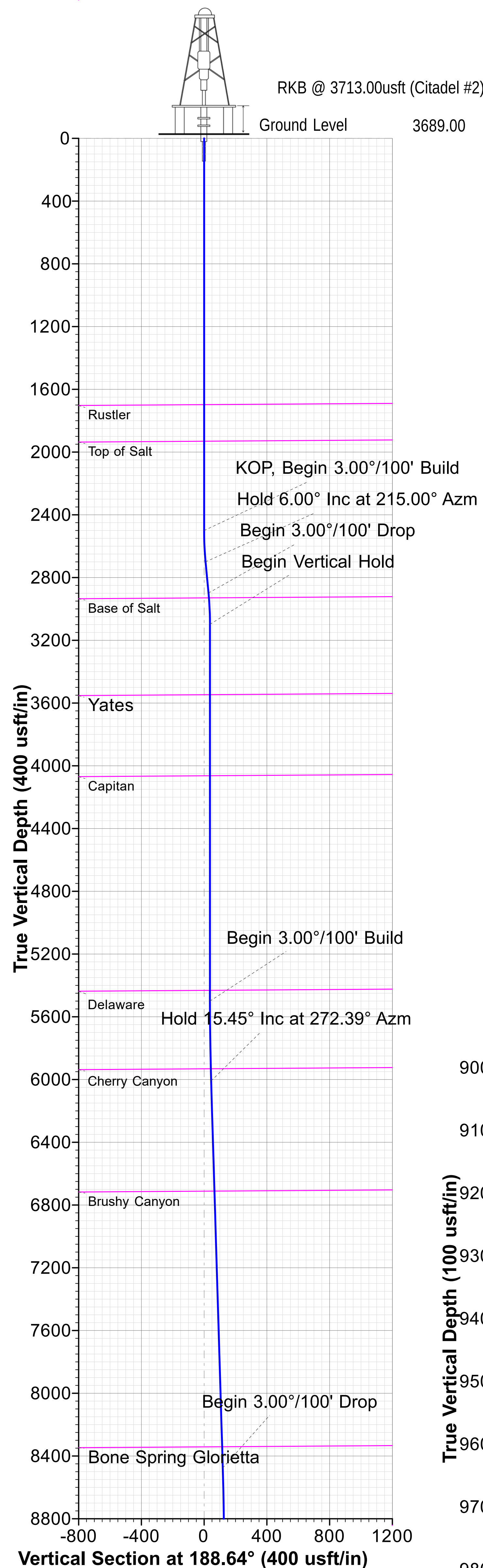


PHOENIX  
TECHNOLOGY SERVICES

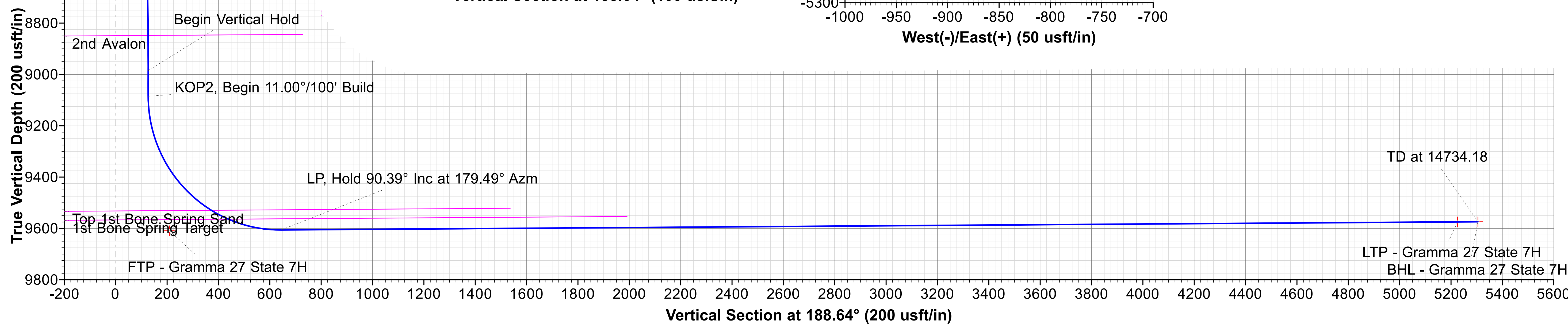


Azimuths to Grid North  
True North: -0.47°  
Magnetic North: 6.09°

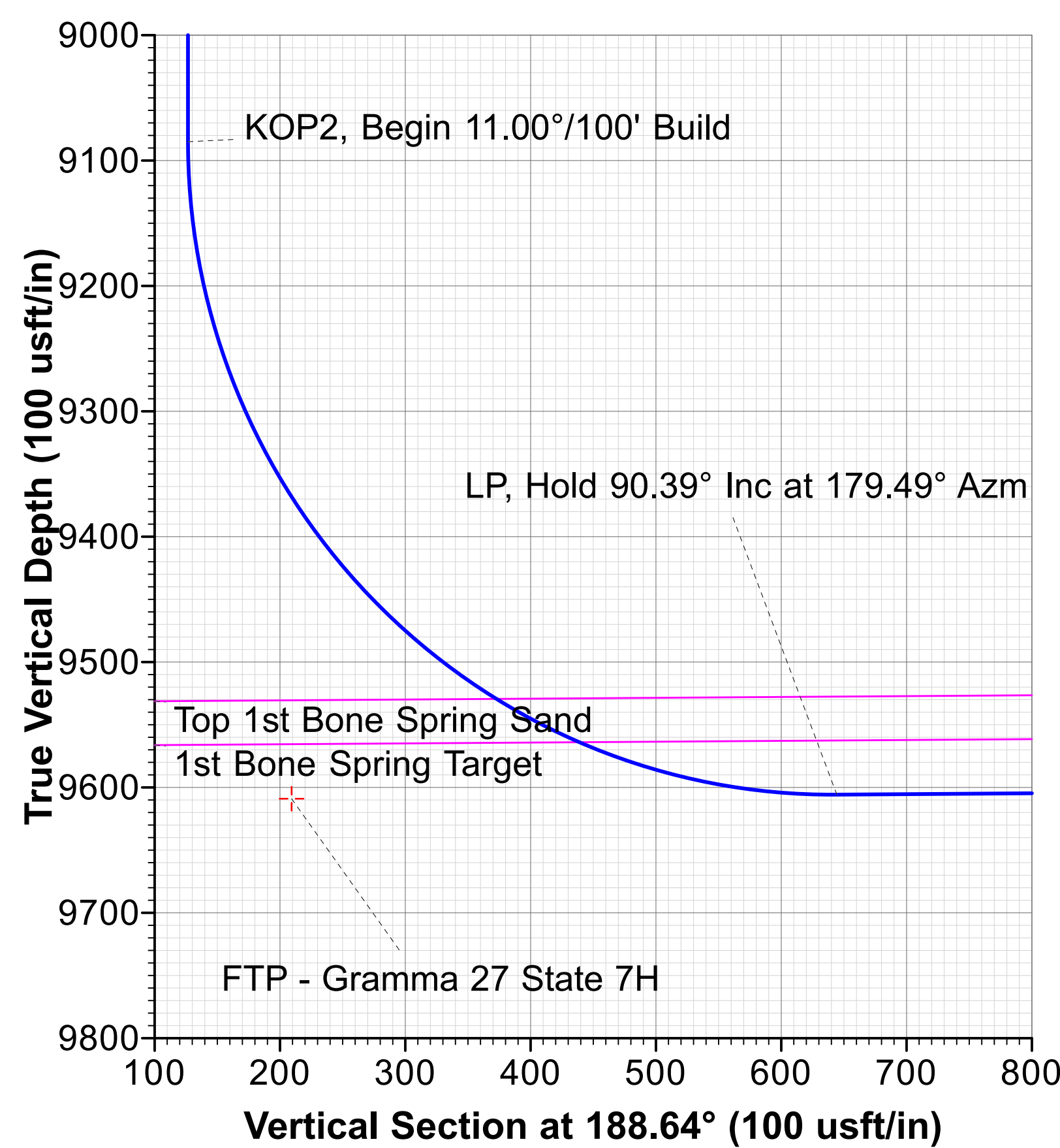
Magnetic Field  
Strength: 47995.4snT  
Dip Angle: 60.22°  
Date: 4/21/2020  
Model: MVHD



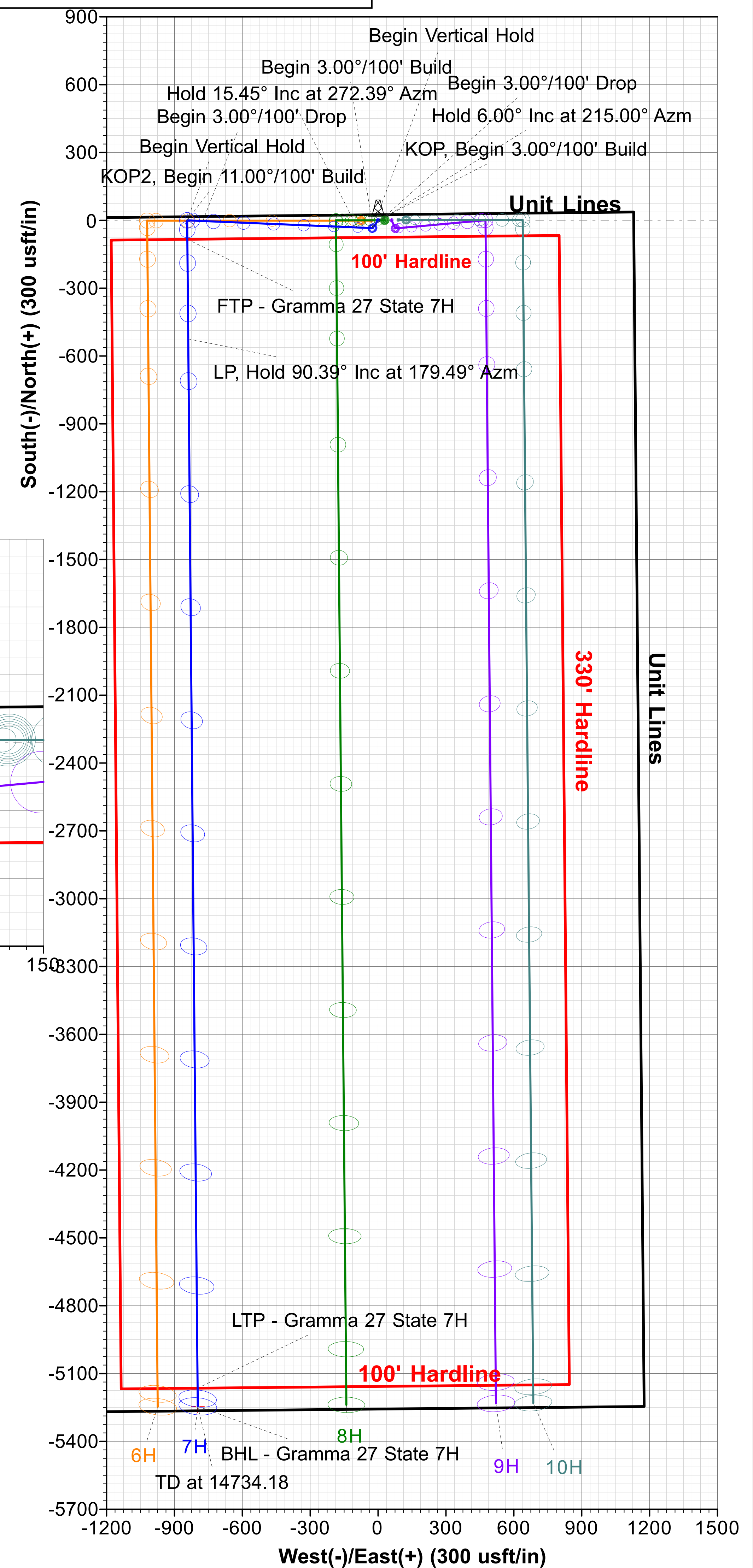
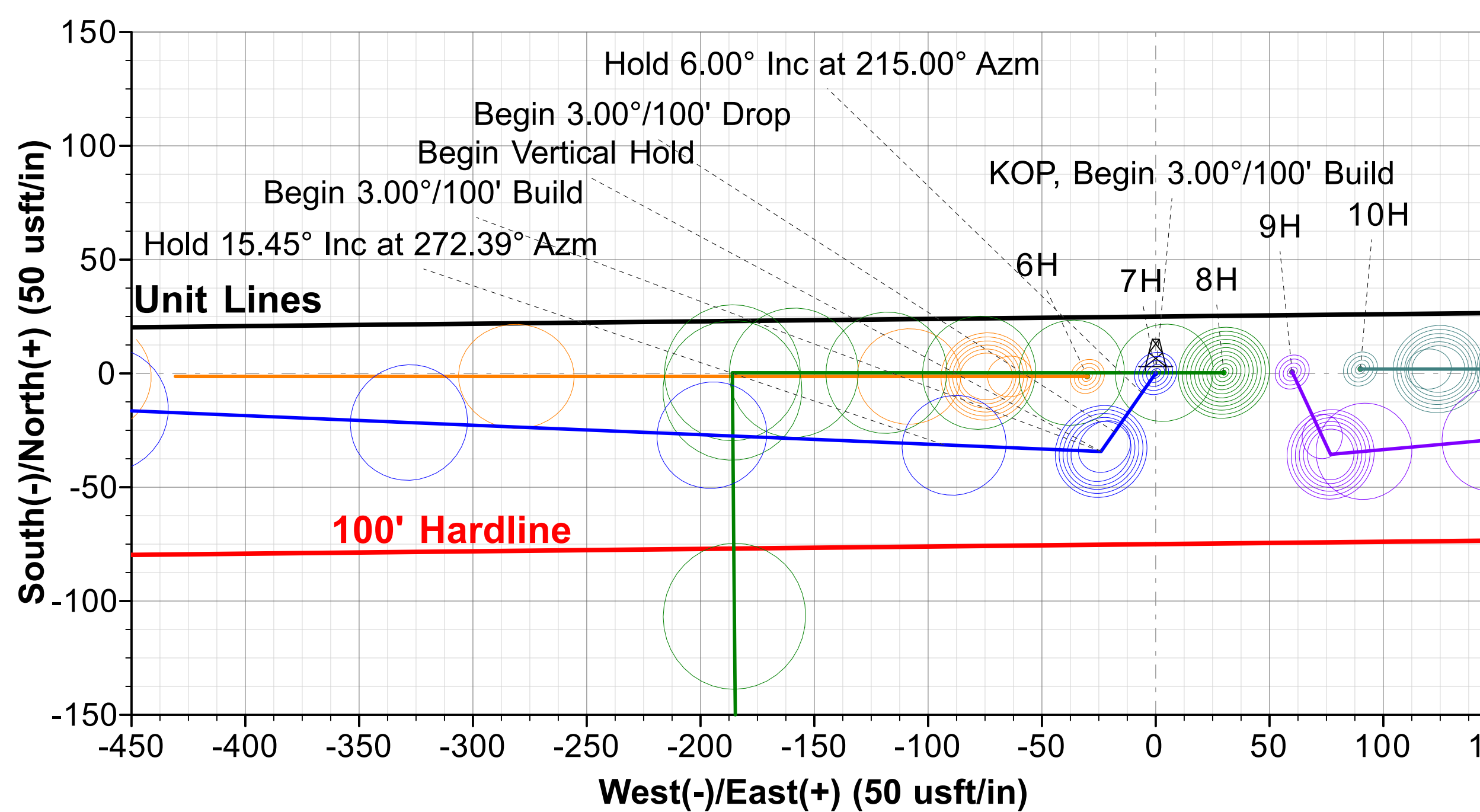
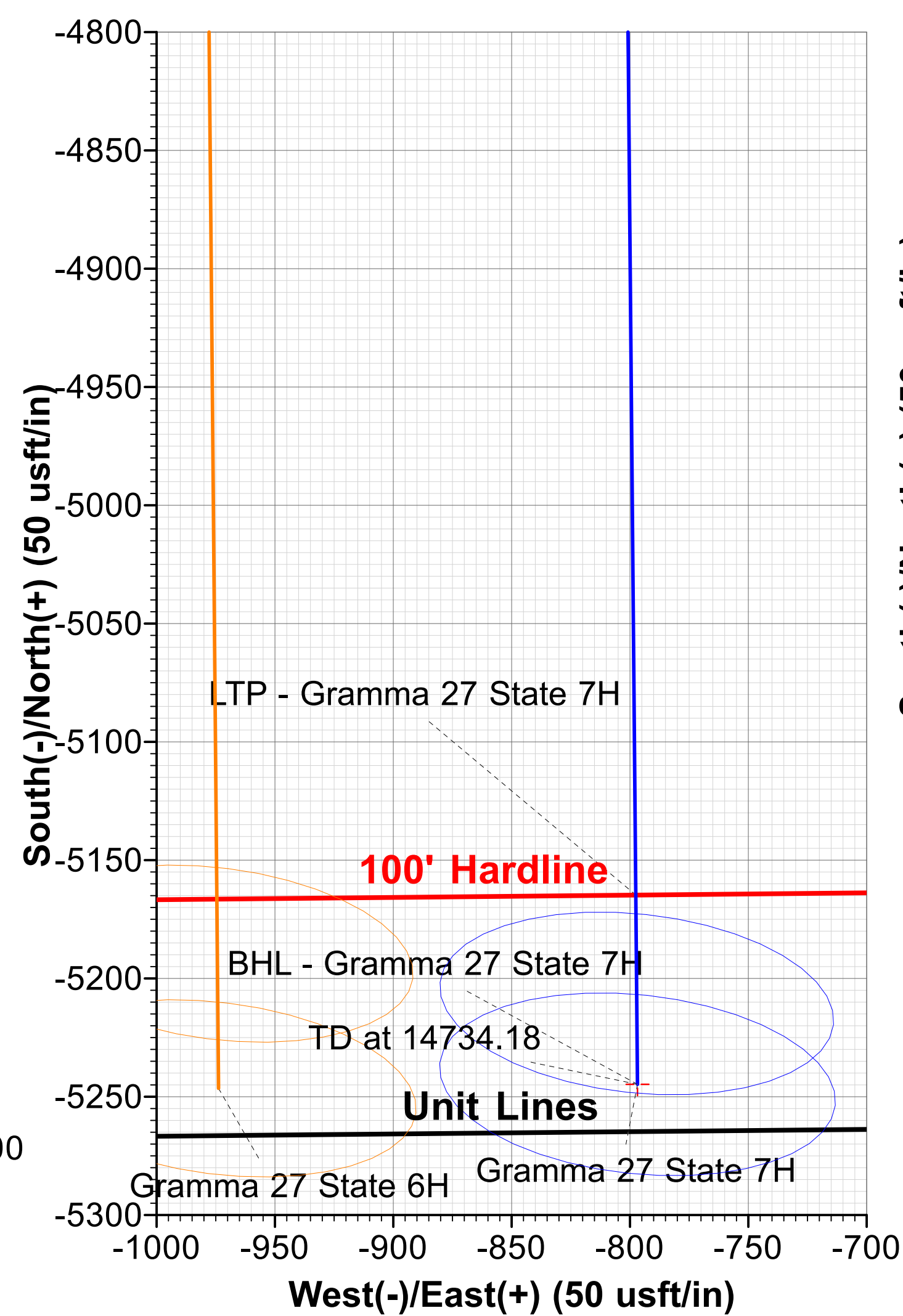
Vertical Section at 188.64° (400 usft/in)



Vertical Section at 188.64° (200 usft/in)



Vertical Section at 188.64° (100 usft/in)



Date: 10:09, February 21 2020





## **Caza Operating, LLC**

**Lea County, New Mexico (NAD83)**

**Gamma 27 State**

**7H**

**OH**

**Plan: Plan 1 02-21-20**

## **Standard Planning Report**

**21 February, 2020**





## Planning Report



|                  |                                |                                     |                                |
|------------------|--------------------------------|-------------------------------------|--------------------------------|
| <b>Database:</b> | USA Compass                    | <b>Local Co-ordinate Reference:</b> | Well 7H                        |
| <b>Company:</b>  | Caza Operating, LLC            | <b>TVD Reference:</b>               | RKB @ 3713.00usft (Citadel #2) |
| <b>Project:</b>  | Lea County, New Mexico (NAD83) | <b>MD Reference:</b>                | RKB @ 3713.00usft (Citadel #2) |
| <b>Site:</b>     | Gamma 27 State                 | <b>North Reference:</b>             | Grid                           |
| <b>Well:</b>     | 7H                             | <b>Survey Calculation Method:</b>   | Minimum Curvature              |
| <b>Wellbore:</b> | OH                             |                                     |                                |
| <b>Design:</b>   | Plan 1 02-21-20                |                                     |                                |

|                    |                                |                      |                |
|--------------------|--------------------------------|----------------------|----------------|
| <b>Project</b>     | Lea County, New Mexico (NAD83) |                      |                |
| <b>Map System:</b> | US State Plane 1983            | <b>System Datum:</b> | Mean Sea Level |
| <b>Geo Datum:</b>  | North American Datum 1983      |                      |                |
| <b>Map Zone:</b>   | New Mexico Eastern Zone        |                      |                |

| Site                  | Gamma 27 State |              |                 |                   |                      |
|-----------------------|----------------|--------------|-----------------|-------------------|----------------------|
| Site Position:        |                | Northing:    | 531,153.17 usft | Latitude:         | 32° 27' 25.654752 N  |
| From:                 | Map            | Easting:     | 812,885.49 usft | Longitude:        | 103° 27' 10.645956 W |
| Position Uncertainty: | 0.00 usft      | Slot Radius: | 13-3/16 "       | Grid Convergence: | 0.47                 |

|                      |       |            |                     |                 |               |                      |
|----------------------|-------|------------|---------------------|-----------------|---------------|----------------------|
| Well                 | 7H    |            |                     |                 |               |                      |
| Well Position        | +N/-S | 1.32 usft  | Northing:           | 531,154.49 usft | Latitude:     | 32° 27' 25.665355 N  |
|                      | +E/-W | 29.99 usft | Easting:            | 812,915.47 usft | Longitude:    | 103° 27' 10.295855 W |
| Position Uncertainty |       | 1.00 usft  | Wellhead Elevation: |                 | Ground Level: | 3,689.00 usft        |

|                  |                   |                    |                        |                      |                            |
|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| <b>Wellbore</b>  | OH                |                    |                        |                      |                            |
| <b>Magnetics</b> | <b>Model Name</b> | <b>Sample Date</b> | <b>Declination (°)</b> | <b>Dip Angle (°)</b> | <b>Field Strength (nT)</b> |
|                  | MVHD              | 4/21/2020          | 6.56                   | 60.22                | 47,995.41559346            |

|                          |                                |                     |                      |                      |
|--------------------------|--------------------------------|---------------------|----------------------|----------------------|
| <b>Design</b>            | Plan 1 02-21-20                |                     |                      |                      |
| <b>Audit Notes:</b>      |                                |                     |                      |                      |
| <b>Version:</b>          | <b>Phase:</b>                  | PLAN                | <b>Tie On Depth:</b> | 0.00                 |
| <b>Vertical Section:</b> | <b>Depth From (TVD) (usft)</b> | <b>+N/-S (usft)</b> | <b>+E/-W (usft)</b>  | <b>Direction (°)</b> |
|                          | 0.00                           | 0.00                | 0.00                 | 188.64               |

|                                 |                        |                          |                      |                 |
|---------------------------------|------------------------|--------------------------|----------------------|-----------------|
| <b>Plan Survey Tool Program</b> | <b>Date</b>            | 2/21/2020                |                      |                 |
| <b>Depth From (usft)</b>        | <b>Depth To (usft)</b> | <b>Survey (Wellbore)</b> | <b>Tool Name</b>     | <b>Remarks</b>  |
| 1                               | 0.00                   | 14,734.18                | Plan 1 02-21-20 (OH) | MWD+HRGM        |
|                                 |                        |                          |                      | OWSG MWD + HRGM |





## Planning Report



|                  |                                |                                     |                                |
|------------------|--------------------------------|-------------------------------------|--------------------------------|
| <b>Database:</b> | USA Compass                    | <b>Local Co-ordinate Reference:</b> | Well 7H                        |
| <b>Company:</b>  | Caza Operating, LLC            | <b>TVD Reference:</b>               | RKB @ 3713.00usft (Citadel #2) |
| <b>Project:</b>  | Lea County, New Mexico (NAD83) | <b>MD Reference:</b>                | RKB @ 3713.00usft (Citadel #2) |
| <b>Site:</b>     | Gamma 27 State                 | <b>North Reference:</b>             | Grid                           |
| <b>Well:</b>     | 7H                             | <b>Survey Calculation Method:</b>   | Minimum Curvature              |
| <b>Wellbore:</b> | OH                             |                                     |                                |
| <b>Design:</b>   | Plan 1 02-21-20                |                                     |                                |

| 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             |
| 0.00                  | 0.00            | 0.00        | 0.00                  | 0.00         | 0.00         | 0.00                    | 0.00                   | 0.00                  | 0.00    |                    |
| 2,500.00              | 0.00            | 0.00        | 2,500.00              | 0.00         | 0.00         | 0.00                    | 0.00                   | 0.00                  | 0.00    |                    |
| 2,700.00              | 6.00            | 215.00      | 2,699.63              | -8.57        | -6.00        | 3.00                    | 3.00                   | 0.00                  | 215.00  |                    |
| 2,900.00              | 6.00            | 215.00      | 2,898.54              | -25.70       | -17.99       | 0.00                    | 0.00                   | 0.00                  | 0.00    |                    |
| 3,100.00              | 0.00            | 0.00        | 3,098.17              | -34.27       | -23.99       | 3.00                    | -3.00                  | 0.00                  | 180.00  |                    |
| 5,501.83              | 0.00            | 0.00        | 5,500.00              | -34.27       | -23.99       | 0.00                    | 0.00                   | 0.00                  | 0.00    |                    |
| 6,016.99              | 15.45           | 272.39      | 6,008.94              | -31.38       | -92.99       | 3.00                    | 3.00                   | 0.00                  | 272.39  |                    |
| 8,576.67              | 15.45           | 272.39      | 8,476.06              | -2.89        | -774.50      | 0.00                    | 0.00                   | 0.00                  | 0.00    |                    |
| 9,091.83              | 0.00            | 0.00        | 8,985.00              | 0.00         | -843.50      | 3.00                    | -3.00                  | 0.00                  | 180.00  |                    |
| 9,191.83              | 0.00            | 0.00        | 9,085.00              | 0.00         | -843.50      | 0.00                    | 0.00                   | 0.00                  | 0.00    |                    |
| 10,013.53             | 90.39           | 179.49      | 9,605.86              | -524.37      | -838.83      | 11.00                   | 11.00                  | 21.84                 | 179.49  |                    |
| 14,734.18             | 90.39           | 179.49      | 9,574.00              | -5,244.72    | -796.79      | 0.00                    | 0.00                   | 0.00                  | 0.00    | BHL - Gamma 27 Stz |



## Planning Report



|                  |                                |                                     |                                |
|------------------|--------------------------------|-------------------------------------|--------------------------------|
| <b>Database:</b> | USA Compass                    | <b>Local Co-ordinate Reference:</b> | Well 7H                        |
| <b>Company:</b>  | Caza Operating, LLC            | <b>TVD Reference:</b>               | RKB @ 3713.00usft (Citadel #2) |
| <b>Project:</b>  | Lea County, New Mexico (NAD83) | <b>MD Reference:</b>                | RKB @ 3713.00usft (Citadel #2) |
| <b>Site:</b>     | Gamma 27 State                 | <b>North Reference:</b>             | Grid                           |
| <b>Well:</b>     | 7H                             | <b>Survey Calculation Method:</b>   | Minimum Curvature              |
| <b>Wellbore:</b> | OH                             |                                     |                                |
| <b>Design:</b>   | Plan 1 02-21-20                |                                     |                                |

| 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) |
| 0.00                                 | 0.00            | 0.00        | 0.00                  | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 1,698.00                             | 0.00            | 0.00        | 1,698.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| <b>Rustler</b>                       |                 |             |                       |              |              |                         |                         |                        |                       |
| 1,931.00                             | 0.00            | 0.00        | 1,931.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| <b>Top of Salt</b>                   |                 |             |                       |              |              |                         |                         |                        |                       |
| 2,500.00                             | 0.00            | 0.00        | 2,500.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| <b>KOP, Begin 3.00°/100' Build</b>   |                 |             |                       |              |              |                         |                         |                        |                       |
| 2,600.00                             | 3.00            | 215.00      | 2,599.95              | -2.14        | -1.50        | 2.35                    | 3.00                    | 3.00                   | 0.00                  |
| 2,700.00                             | 6.00            | 215.00      | 2,699.63              | -8.57        | -6.00        | 9.37                    | 3.00                    | 3.00                   | 0.00                  |
| <b>Hold 6.00° Inc at 215.00° Azm</b> |                 |             |                       |              |              |                         |                         |                        |                       |
| 2,800.00                             | 6.00            | 215.00      | 2,799.09              | -17.13       | -12.00       | 18.74                   | 0.00                    | 0.00                   | 0.00                  |
| 2,900.00                             | 6.00            | 215.00      | 2,898.54              | -25.70       | -17.99       | 28.11                   | 0.00                    | 0.00                   | 0.00                  |
| <b>Begin 3.00°/100' Drop</b>         |                 |             |                       |              |              |                         |                         |                        |                       |
| 2,931.40                             | 5.06            | 215.00      | 2,929.79              | -28.17       | -19.73       | 30.82                   | 3.00                    | -3.00                  | 0.00                  |
| <b>Base of Salt</b>                  |                 |             |                       |              |              |                         |                         |                        |                       |
| 3,000.00                             | 3.00            | 215.00      | 2,998.22              | -32.12       | -22.49       | 35.14                   | 3.00                    | -3.00                  | 0.00                  |
| 3,100.00                             | 0.00            | 0.00        | 3,098.17              | -34.27       | -23.99       | 37.48                   | 3.00                    | -3.00                  | 0.00                  |
| <b>Begin Vertical Hold</b>           |                 |             |                       |              |              |                         |                         |                        |                       |
| 3,200.00                             | 0.00            | 0.00        | 3,198.17              | -34.27       | -23.99       | 37.48                   | 0.00                    | 0.00                   | 0.00                  |
| 3,300.00                             | 0.00            | 0.00        | 3,298.17              | -34.27       | -23.99       | 37.48                   | 0.00                    | 0.00                   | 0.00                  |
| 3,400.00                             | 0.00            | 0.00        | 3,398.17              | -34.27       | -23.99       | 37.48                   | 0.00                    | 0.00                   | 0.00                  |
| 3,500.00                             | 0.00            | 0.00        | 3,498.17              | -34.27       | -23.99       | 37.48                   | 0.00                    | 0.00                   | 0.00                  |
| 3,548.57                             | 0.00            | 0.00        | 3,546.74              | -34.27       | -23.99       | 37.48                   | 0.00                    | 0.00                   | 0.00                  |
| <b>Yates</b>                         |                 |             |                       |              |              |                         |                         |                        |                       |
| 3,600.00                             | 0.00            | 0.00        | 3,598.17              | -34.27       | -23.99       | 37.48                   | 0.00                    | 0.00                   | 0.00                  |
| 3,700.00                             | 0.00            | 0.00        | 3,698.17              | -34.27       | -23.99       | 37.48                   | 0.00                    | 0.00                   | 0.00                  |
| 3,800.00                             | 0.00            | 0.00        | 3,798.17              | -34.27       | -23.99       | 37.48                   | 0.00                    | 0.00                   | 0.00                  |
| 3,900.00                             | 0.00            | 0.00        | 3,898.17              | -34.27       | -23.99       | 37.48                   | 0.00                    | 0.00                   | 0.00                  |
| 4,000.00                             | 0.00            | 0.00        | 3,998.17              | -34.27       | -23.99       | 37.48                   | 0.00                    | 0.00                   | 0.00                  |
| 4,065.57                             | 0.00            | 0.00        | 4,063.74              | -34.27       | -23.99       | 37.48                   | 0.00                    | 0.00                   | 0.00                  |
| <b>Capitan</b>                       |                 |             |                       |              |              |                         |                         |                        |                       |
| 4,100.00                             | 0.00            | 0.00        | 4,098.17              | -34.27       | -23.99       | 37.48                   | 0.00                    | 0.00                   | 0.00                  |
| 4,200.00                             | 0.00            | 0.00        | 4,198.17              | -34.27       | -23.99       | 37.48                   | 0.00                    | 0.00                   | 0.00                  |
| 4,300.00                             | 0.00            | 0.00        | 4,298.17              | -34.27       | -23.99       | 37.48                   | 0.00                    | 0.00                   | 0.00                  |
| 4,400.00                             | 0.00            | 0.00        | 4,398.17              | -34.27       | -23.99       | 37.48                   | 0.00                    | 0.00                   | 0.00                  |
| 4,500.00                             | 0.00            | 0.00        | 4,498.17              | -34.27       | -23.99       | 37.48                   | 0.00                    | 0.00                   | 0.00                  |
| 4,600.00                             | 0.00            | 0.00        | 4,598.17              | -34.27       | -23.99       | 37.48                   | 0.00                    | 0.00                   | 0.00                  |
| 4,700.00                             | 0.00            | 0.00        | 4,698.17              | -34.27       | -23.99       | 37.48                   | 0.00                    | 0.00                   | 0.00                  |
| 4,800.00                             | 0.00            | 0.00        | 4,798.17              | -34.27       | -23.99       | 37.48                   | 0.00                    | 0.00                   | 0.00                  |
| 4,900.00                             | 0.00            | 0.00        | 4,898.17              | -34.27       | -23.99       | 37.48                   | 0.00                    | 0.00                   | 0.00                  |
| 5,000.00                             | 0.00            | 0.00        | 4,998.17              | -34.27       | -23.99       | 37.48                   | 0.00                    | 0.00                   | 0.00                  |
| 5,100.00                             | 0.00            | 0.00        | 5,098.17              | -34.27       | -23.99       | 37.48                   | 0.00                    | 0.00                   | 0.00                  |
| 5,200.00                             | 0.00            | 0.00        | 5,198.17              | -34.27       | -23.99       | 37.48                   | 0.00                    | 0.00                   | 0.00                  |
| 5,300.00                             | 0.00            | 0.00        | 5,298.17              | -34.27       | -23.99       | 37.48                   | 0.00                    | 0.00                   | 0.00                  |
| 5,400.00                             | 0.00            | 0.00        | 5,398.17              | -34.27       | -23.99       | 37.48                   | 0.00                    | 0.00                   | 0.00                  |
| 5,433.57                             | 0.00            | 0.00        | 5,431.74              | -34.27       | -23.99       | 37.48                   | 0.00                    | 0.00                   | 0.00                  |
| <b>Delaware</b>                      |                 |             |                       |              |              |                         |                         |                        |                       |
| 5,500.00                             | 0.00            | 0.00        | 5,498.17              | -34.27       | -23.99       | 37.48                   | 0.00                    | 0.00                   | 0.00                  |
| 5,501.83                             | 0.00            | 0.00        | 5,500.00              | -34.27       | -23.99       | 37.48                   | 0.00                    | 0.00                   | 0.00                  |
| <b>Begin 3.00°/100' Build</b>        |                 |             |                       |              |              |                         |                         |                        |                       |
| 5,600.00                             | 2.95            | 272.39      | 5,598.13              | -34.16       | -26.51       | 37.75                   | 3.00                    | 3.00                   | 0.00                  |
| 5,700.00                             | 5.95            | 272.39      | 5,697.82              | -33.84       | -34.26       | 38.60                   | 3.00                    | 3.00                   | 0.00                  |
| 5,800.00                             | 8.95            | 272.39      | 5,796.96              | -33.30       | -47.20       | 40.01                   | 3.00                    | 3.00                   | 0.00                  |



## Planning Report



|                  |                                |                                     |                                |
|------------------|--------------------------------|-------------------------------------|--------------------------------|
| <b>Database:</b> | USA Compass                    | <b>Local Co-ordinate Reference:</b> | Well 7H                        |
| <b>Company:</b>  | Caza Operating, LLC            | <b>TVD Reference:</b>               | RKB @ 3713.00usft (Citadel #2) |
| <b>Project:</b>  | Lea County, New Mexico (NAD83) | <b>MD Reference:</b>                | RKB @ 3713.00usft (Citadel #2) |
| <b>Site:</b>     | Gamma 27 State                 | <b>North Reference:</b>             | Grid                           |
| <b>Well:</b>     | 7H                             | <b>Survey Calculation Method:</b>   | Minimum Curvature              |
| <b>Wellbore:</b> | OH                             |                                     |                                |
| <b>Design:</b>   | Plan 1 02-21-20                |                                     |                                |

| Planned Survey                        |                 |             |                       |              |              |                         |                         |                        |                       |
|---------------------------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| Measured Depth (usft)                 | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
| 5,900.00                              | 11.95           | 272.39      | 5,895.30              | -32.54       | -65.31       | 41.98                   | 3.00                    | 3.00                   | 0.00                  |
| 5,937.30                              | 13.06           | 272.39      | 5,931.71              | -32.20       | -73.38       | 42.86                   | 3.00                    | 3.00                   | 0.00                  |
| <b>Cherry Canyon</b>                  |                 |             |                       |              |              |                         |                         |                        |                       |
| 6,000.00                              | 14.95           | 272.39      | 5,992.54              | -31.57       | -88.54       | 44.51                   | 3.00                    | 3.00                   | 0.00                  |
| 6,016.99                              | 15.45           | 272.39      | 6,008.94              | -31.38       | -92.99       | 44.99                   | 3.00                    | 3.00                   | 0.00                  |
| <b>Hold 15.45° Inc at 272.39° Azm</b> |                 |             |                       |              |              |                         |                         |                        |                       |
| 6,100.00                              | 15.45           | 272.39      | 6,088.95              | -30.46       | -115.09      | 47.40                   | 0.00                    | 0.00                   | 0.00                  |
| 6,200.00                              | 15.45           | 272.39      | 6,185.33              | -29.34       | -141.72      | 50.30                   | 0.00                    | 0.00                   | 0.00                  |
| 6,300.00                              | 15.45           | 272.39      | 6,281.72              | -28.23       | -168.34      | 53.19                   | 0.00                    | 0.00                   | 0.00                  |
| 6,400.00                              | 15.45           | 272.39      | 6,378.10              | -27.12       | -194.97      | 56.09                   | 0.00                    | 0.00                   | 0.00                  |
| 6,500.00                              | 15.45           | 272.39      | 6,474.48              | -26.00       | -221.59      | 58.99                   | 0.00                    | 0.00                   | 0.00                  |
| 6,600.00                              | 15.45           | 272.39      | 6,570.87              | -24.89       | -248.22      | 61.89                   | 0.00                    | 0.00                   | 0.00                  |
| 6,700.00                              | 15.45           | 272.39      | 6,667.25              | -23.78       | -274.84      | 64.79                   | 0.00                    | 0.00                   | 0.00                  |
| 6,745.96                              | 15.45           | 272.39      | 6,711.55              | -23.27       | -287.08      | 66.12                   | 0.00                    | 0.00                   | 0.00                  |
| <b>Brushy Canyon</b>                  |                 |             |                       |              |              |                         |                         |                        |                       |
| 6,800.00                              | 15.45           | 272.39      | 6,763.64              | -22.66       | -301.47      | 67.69                   | 0.00                    | 0.00                   | 0.00                  |
| 6,900.00                              | 15.45           | 272.39      | 6,860.02              | -21.55       | -328.09      | 70.58                   | 0.00                    | 0.00                   | 0.00                  |
| 7,000.00                              | 15.45           | 272.39      | 6,956.40              | -20.44       | -354.72      | 73.48                   | 0.00                    | 0.00                   | 0.00                  |
| 7,100.00                              | 15.45           | 272.39      | 7,052.79              | -19.32       | -381.34      | 76.38                   | 0.00                    | 0.00                   | 0.00                  |
| 7,200.00                              | 15.45           | 272.39      | 7,149.17              | -18.21       | -407.97      | 79.28                   | 0.00                    | 0.00                   | 0.00                  |
| 7,300.00                              | 15.45           | 272.39      | 7,245.56              | -17.10       | -434.59      | 82.18                   | 0.00                    | 0.00                   | 0.00                  |
| 7,400.00                              | 15.45           | 272.39      | 7,341.94              | -15.98       | -461.22      | 85.08                   | 0.00                    | 0.00                   | 0.00                  |
| 7,500.00                              | 15.45           | 272.39      | 7,438.32              | -14.87       | -487.84      | 87.98                   | 0.00                    | 0.00                   | 0.00                  |
| 7,600.00                              | 15.45           | 272.39      | 7,534.71              | -13.76       | -514.46      | 90.87                   | 0.00                    | 0.00                   | 0.00                  |
| 7,700.00                              | 15.45           | 272.39      | 7,631.09              | -12.64       | -541.09      | 93.77                   | 0.00                    | 0.00                   | 0.00                  |
| 7,800.00                              | 15.45           | 272.39      | 7,727.48              | -11.53       | -567.71      | 96.67                   | 0.00                    | 0.00                   | 0.00                  |
| 7,900.00                              | 15.45           | 272.39      | 7,823.86              | -10.42       | -594.34      | 99.57                   | 0.00                    | 0.00                   | 0.00                  |
| 8,000.00                              | 15.45           | 272.39      | 7,920.24              | -9.30        | -620.96      | 102.47                  | 0.00                    | 0.00                   | 0.00                  |
| 8,100.00                              | 15.45           | 272.39      | 8,016.63              | -8.19        | -647.59      | 105.37                  | 0.00                    | 0.00                   | 0.00                  |
| 8,200.00                              | 15.45           | 272.39      | 8,113.01              | -7.08        | -674.21      | 108.26                  | 0.00                    | 0.00                   | 0.00                  |
| 8,300.00                              | 15.45           | 272.39      | 8,209.40              | -5.97        | -700.84      | 111.16                  | 0.00                    | 0.00                   | 0.00                  |
| 8,400.00                              | 15.45           | 272.39      | 8,305.78              | -4.85        | -727.46      | 114.06                  | 0.00                    | 0.00                   | 0.00                  |
| 8,436.77                              | 15.45           | 272.39      | 8,341.22              | -4.44        | -737.25      | 115.13                  | 0.00                    | 0.00                   | 0.00                  |
| <b>Bone Spring Glorietta</b>          |                 |             |                       |              |              |                         |                         |                        |                       |
| 8,500.00                              | 15.45           | 272.39      | 8,402.16              | -3.74        | -754.09      | 116.96                  | 0.00                    | 0.00                   | 0.00                  |
| 8,576.67                              | 15.45           | 272.39      | 8,476.06              | -2.89        | -774.50      | 119.18                  | 0.00                    | 0.00                   | 0.00                  |
| <b>Begin 3.00°/100' Drop</b>          |                 |             |                       |              |              |                         |                         |                        |                       |
| 8,600.00                              | 14.75           | 272.39      | 8,498.59              | -2.63        | -780.58      | 119.84                  | 3.00                    | -3.00                  | 0.00                  |
| 8,700.00                              | 11.75           | 272.39      | 8,595.91              | -1.67        | -803.48      | 122.34                  | 3.00                    | -3.00                  | 0.00                  |
| 8,800.00                              | 8.75            | 272.39      | 8,694.30              | -0.93        | -821.27      | 124.27                  | 3.00                    | -3.00                  | 0.00                  |
| 8,900.00                              | 5.75            | 272.39      | 8,793.49              | -0.40        | -833.88      | 125.65                  | 3.00                    | -3.00                  | 0.00                  |
| 8,954.86                              | 4.11            | 272.39      | 8,848.14              | -0.21        | -838.59      | 126.16                  | 3.00                    | -3.00                  | 0.00                  |
| <b>2nd Avalon</b>                     |                 |             |                       |              |              |                         |                         |                        |                       |
| 9,000.00                              | 2.75            | 272.39      | 8,893.20              | -0.09        | -841.29      | 126.45                  | 3.00                    | -3.00                  | 0.00                  |
| 9,091.83                              | 0.00            | 0.00        | 8,985.00              | 0.00         | -843.50      | 126.69                  | 3.00                    | -3.00                  | 0.00                  |
| <b>Begin Vertical Hold</b>            |                 |             |                       |              |              |                         |                         |                        |                       |
| 9,100.00                              | 0.00            | 0.00        | 8,993.17              | 0.00         | -843.50      | 126.69                  | 0.00                    | 0.00                   | 0.00                  |
| 9,191.83                              | 0.00            | 0.00        | 9,085.00              | 0.00         | -843.50      | 126.69                  | 0.00                    | 0.00                   | 0.00                  |
| <b>KOP2, Begin 11.00°/100' Build</b>  |                 |             |                       |              |              |                         |                         |                        |                       |
| 9,200.00                              | 0.90            | 179.49      | 9,093.17              | -0.06        | -843.50      | 126.76                  | 11.00                   | 11.00                  | 0.00                  |
| 9,300.00                              | 11.90           | 179.49      | 9,192.39              | -11.19       | -843.40      | 137.74                  | 11.00                   | 11.00                  | 0.00                  |
| 9,400.00                              | 22.90           | 179.49      | 9,287.67              | -41.05       | -843.13      | 167.22                  | 11.00                   | 11.00                  | 0.00                  |
| 9,500.00                              | 33.90           | 179.49      | 9,375.50              | -88.53       | -842.71      | 214.10                  | 11.00                   | 11.00                  | 0.00                  |





## Planning Report



|                  |                                |                                     |                                |
|------------------|--------------------------------|-------------------------------------|--------------------------------|
| <b>Database:</b> | USA Compass                    | <b>Local Co-ordinate Reference:</b> | Well 7H                        |
| <b>Company:</b>  | Caza Operating, LLC            | <b>TVD Reference:</b>               | RKB @ 3713.00usft (Citadel #2) |
| <b>Project:</b>  | Lea County, New Mexico (NAD83) | <b>MD Reference:</b>                | RKB @ 3713.00usft (Citadel #2) |
| <b>Site:</b>     | Gamma 27 State                 | <b>North Reference:</b>             | Grid                           |
| <b>Well:</b>     | 7H                             | <b>Survey Calculation Method:</b>   | Minimum Curvature              |
| <b>Wellbore:</b> | OH                             |                                     |                                |
| <b>Design:</b>   | Plan 1 02-21-20                |                                     |                                |

| Planned Survey                            |                 |             |                       |              |              |                         |                         |                        |                       |
|-------------------------------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| Measured Depth (usft)                     | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
| 9,600.00                                  | 44.90           | 179.49      | 9,452.66              | -151.90      | -842.15      | 276.67                  | 11.00                   | 11.00                  | 0.00                  |
| 9,700.00                                  | 55.90           | 179.49      | 9,516.30              | -228.83      | -841.46      | 352.62                  | 11.00                   | 11.00                  | 0.00                  |
| 9,724.32                                  | 58.57           | 179.49      | 9,529.46              | -249.27      | -841.28      | 372.80                  | 11.00                   | 11.00                  | 0.00                  |
| <b>Top 1st Bone Spring Sand</b>           |                 |             |                       |              |              |                         |                         |                        |                       |
| 9,799.77                                  | 66.87           | 179.49      | 9,564.01              | -316.28      | -840.68      | 438.96                  | 11.00                   | 11.00                  | 0.00                  |
| <b>1st Bone Spring Target</b>             |                 |             |                       |              |              |                         |                         |                        |                       |
| 9,800.00                                  | 66.90           | 179.49      | 9,564.10              | -316.49      | -840.68      | 439.17                  | 11.00                   | 11.00                  | 0.00                  |
| 9,900.00                                  | 77.90           | 179.49      | 9,594.30              | -411.66      | -839.83      | 533.13                  | 11.00                   | 11.00                  | 0.00                  |
| 10,000.00                                 | 88.90           | 179.49      | 9,605.77              | -510.84      | -838.95      | 631.05                  | 11.00                   | 11.00                  | 0.00                  |
| 10,013.53                                 | 90.39           | 179.49      | 9,605.86              | -524.37      | -838.83      | 644.41                  | 11.00                   | 11.00                  | 0.00                  |
| <b>LP, Hold 90.39° Inc at 179.49° Azm</b> |                 |             |                       |              |              |                         |                         |                        |                       |
| 10,100.00                                 | 90.39           | 179.49      | 9,605.28              | -610.83      | -838.06      | 729.78                  | 0.00                    | 0.00                   | 0.00                  |
| 10,200.00                                 | 90.39           | 179.49      | 9,604.60              | -710.82      | -837.17      | 828.50                  | 0.00                    | 0.00                   | 0.00                  |
| 10,300.00                                 | 90.39           | 179.49      | 9,603.93              | -810.82      | -836.28      | 927.23                  | 0.00                    | 0.00                   | 0.00                  |
| 10,400.00                                 | 90.39           | 179.49      | 9,603.25              | -910.81      | -835.39      | 1,025.95                | 0.00                    | 0.00                   | 0.00                  |
| 10,500.00                                 | 90.39           | 179.49      | 9,602.58              | -1,010.81    | -834.50      | 1,124.68                | 0.00                    | 0.00                   | 0.00                  |
| 10,600.00                                 | 90.39           | 179.49      | 9,601.90              | -1,110.80    | -833.61      | 1,223.40                | 0.00                    | 0.00                   | 0.00                  |
| 10,700.00                                 | 90.39           | 179.49      | 9,601.23              | -1,210.79    | -832.72      | 1,322.13                | 0.00                    | 0.00                   | 0.00                  |
| 10,800.00                                 | 90.39           | 179.49      | 9,600.55              | -1,310.79    | -831.83      | 1,420.86                | 0.00                    | 0.00                   | 0.00                  |
| 10,900.00                                 | 90.39           | 179.49      | 9,599.88              | -1,410.78    | -830.93      | 1,519.58                | 0.00                    | 0.00                   | 0.00                  |
| 11,000.00                                 | 90.39           | 179.49      | 9,599.20              | -1,510.77    | -830.04      | 1,618.31                | 0.00                    | 0.00                   | 0.00                  |
| 11,100.00                                 | 90.39           | 179.49      | 9,598.53              | -1,610.77    | -829.15      | 1,717.03                | 0.00                    | 0.00                   | 0.00                  |
| 11,200.00                                 | 90.39           | 179.49      | 9,597.85              | -1,710.76    | -828.26      | 1,815.76                | 0.00                    | 0.00                   | 0.00                  |
| 11,300.00                                 | 90.39           | 179.49      | 9,597.18              | -1,810.76    | -827.37      | 1,914.48                | 0.00                    | 0.00                   | 0.00                  |
| 11,400.00                                 | 90.39           | 179.49      | 9,596.50              | -1,910.75    | -826.48      | 2,013.21                | 0.00                    | 0.00                   | 0.00                  |
| 11,500.00                                 | 90.39           | 179.49      | 9,595.83              | -2,010.74    | -825.59      | 2,111.94                | 0.00                    | 0.00                   | 0.00                  |
| 11,600.00                                 | 90.39           | 179.49      | 9,595.15              | -2,110.74    | -824.70      | 2,210.66                | 0.00                    | 0.00                   | 0.00                  |
| 11,700.00                                 | 90.39           | 179.49      | 9,594.48              | -2,210.73    | -823.81      | 2,309.39                | 0.00                    | 0.00                   | 0.00                  |
| 11,800.00                                 | 90.39           | 179.49      | 9,593.80              | -2,310.72    | -822.92      | 2,408.11                | 0.00                    | 0.00                   | 0.00                  |
| 11,900.00                                 | 90.39           | 179.49      | 9,593.13              | -2,410.72    | -822.03      | 2,506.84                | 0.00                    | 0.00                   | 0.00                  |
| 12,000.00                                 | 90.39           | 179.49      | 9,592.45              | -2,510.71    | -821.14      | 2,605.56                | 0.00                    | 0.00                   | 0.00                  |
| 12,100.00                                 | 90.39           | 179.49      | 9,591.78              | -2,610.71    | -820.25      | 2,704.29                | 0.00                    | 0.00                   | 0.00                  |
| 12,200.00                                 | 90.39           | 179.49      | 9,591.10              | -2,710.70    | -819.36      | 2,803.01                | 0.00                    | 0.00                   | 0.00                  |
| 12,300.00                                 | 90.39           | 179.49      | 9,590.43              | -2,810.69    | -818.47      | 2,901.74                | 0.00                    | 0.00                   | 0.00                  |
| 12,400.00                                 | 90.39           | 179.49      | 9,589.75              | -2,910.69    | -817.58      | 3,000.47                | 0.00                    | 0.00                   | 0.00                  |
| 12,500.00                                 | 90.39           | 179.49      | 9,589.08              | -3,010.68    | -816.68      | 3,099.19                | 0.00                    | 0.00                   | 0.00                  |
| 12,600.00                                 | 90.39           | 179.49      | 9,588.40              | -3,110.67    | -815.79      | 3,197.92                | 0.00                    | 0.00                   | 0.00                  |
| 12,700.00                                 | 90.39           | 179.49      | 9,587.73              | -3,210.67    | -814.90      | 3,296.64                | 0.00                    | 0.00                   | 0.00                  |
| 12,800.00                                 | 90.39           | 179.49      | 9,587.05              | -3,310.66    | -814.01      | 3,395.37                | 0.00                    | 0.00                   | 0.00                  |
| 12,900.00                                 | 90.39           | 179.49      | 9,586.38              | -3,410.66    | -813.12      | 3,494.09                | 0.00                    | 0.00                   | 0.00                  |
| 13,000.00                                 | 90.39           | 179.49      | 9,585.70              | -3,510.65    | -812.23      | 3,592.82                | 0.00                    | 0.00                   | 0.00                  |
| 13,100.00                                 | 90.39           | 179.49      | 9,585.03              | -3,610.64    | -811.34      | 3,691.55                | 0.00                    | 0.00                   | 0.00                  |
| 13,200.00                                 | 90.39           | 179.49      | 9,584.35              | -3,710.64    | -810.45      | 3,790.27                | 0.00                    | 0.00                   | 0.00                  |
| 13,300.00                                 | 90.39           | 179.49      | 9,583.68              | -3,810.63    | -809.56      | 3,889.00                | 0.00                    | 0.00                   | 0.00                  |
| 13,400.00                                 | 90.39           | 179.49      | 9,583.00              | -3,910.62    | -808.67      | 3,987.72                | 0.00                    | 0.00                   | 0.00                  |
| 13,500.00                                 | 90.39           | 179.49      | 9,582.33              | -4,010.62    | -807.78      | 4,086.45                | 0.00                    | 0.00                   | 0.00                  |
| 13,600.00                                 | 90.39           | 179.49      | 9,581.65              | -4,110.61    | -806.89      | 4,185.17                | 0.00                    | 0.00                   | 0.00                  |
| 13,700.00                                 | 90.39           | 179.49      | 9,580.98              | -4,210.61    | -806.00      | 4,283.90                | 0.00                    | 0.00                   | 0.00                  |
| 13,800.00                                 | 90.39           | 179.49      | 9,580.30              | -4,310.60    | -805.11      | 4,382.63                | 0.00                    | 0.00                   | 0.00                  |
| 13,900.00                                 | 90.39           | 179.49      | 9,579.63              | -4,410.59    | -804.22      | 4,481.35                | 0.00                    | 0.00                   | 0.00                  |
| 14,000.00                                 | 90.39           | 179.49      | 9,578.96              | -4,510.59    | -803.33      | 4,580.08                | 0.00                    | 0.00                   | 0.00                  |
| 14,100.00                                 | 90.39           | 179.49      | 9,578.28              | -4,610.58    | -802.44      | 4,678.80                | 0.00                    | 0.00                   | 0.00                  |
| 14,200.00                                 | 90.39           | 179.49      | 9,577.61              | -4,710.57    | -801.54      | 4,777.53                | 0.00                    | 0.00                   | 0.00                  |



## Planning Report



|                  |                                |                                     |                                |
|------------------|--------------------------------|-------------------------------------|--------------------------------|
| <b>Database:</b> | USA Compass                    | <b>Local Co-ordinate Reference:</b> | Well 7H                        |
| <b>Company:</b>  | Caza Operating, LLC            | <b>TVD Reference:</b>               | RKB @ 3713.00usft (Citadel #2) |
| <b>Project:</b>  | Lea County, New Mexico (NAD83) | <b>MD Reference:</b>                | RKB @ 3713.00usft (Citadel #2) |
| <b>Site:</b>     | Gamma 27 State                 | <b>North Reference:</b>             | Grid                           |
| <b>Well:</b>     | 7H                             | <b>Survey Calculation Method:</b>   | Minimum Curvature              |
| <b>Wellbore:</b> | OH                             |                                     |                                |
| <b>Design:</b>   | Plan 1 02-21-20                |                                     |                                |

| 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) |  |
| 14,300.00             | 90.39           | 179.49      | 9,576.93              | -4,810.57    | -800.65      | 4,876.25                | 0.00                    | 0.00                   | 0.00                  |  |
| 14,400.00             | 90.39           | 179.49      | 9,576.26              | -4,910.56    | -799.76      | 4,974.98                | 0.00                    | 0.00                   | 0.00                  |  |
| 14,500.00             | 90.39           | 179.49      | 9,575.58              | -5,010.56    | -798.87      | 5,073.70                | 0.00                    | 0.00                   | 0.00                  |  |
| 14,600.00             | 90.39           | 179.49      | 9,574.91              | -5,110.55    | -797.98      | 5,172.43                | 0.00                    | 0.00                   | 0.00                  |  |
| 14,700.00             | 90.39           | 179.49      | 9,574.23              | -5,210.54    | -797.09      | 5,271.16                | 0.00                    | 0.00                   | 0.00                  |  |
| 14,734.18             | 90.39           | 179.49      | 9,574.00              | -5,244.72    | -796.79      | 5,304.90                | 0.00                    | 0.00                   | 0.00                  |  |
| TD at 14734.18        |                 |             |                       |              |              |                         |                         |                        |                       |  |

| Design Targets                                                                                                                     |               |              |            |              |              |                 |                |                                          |           |  |
|------------------------------------------------------------------------------------------------------------------------------------|---------------|--------------|------------|--------------|--------------|-----------------|----------------|------------------------------------------|-----------|--|
| Target Name                                                                                                                        | Dip Angle (°) | Dip Dir. (°) | TVD (usft) | +N/-S (usft) | +E/-W (usft) | Northing (usft) | Easting (usft) | Latitude                                 | Longitude |  |
| BHL - Gamma 27 State<br>- hit/miss target<br>- Shape<br>- Point                                                                    | 0.00          | 0.00         | 9,574.00   | -5,244.72    | -796.79      | 525,909.77      | 812,118.69     | 32° 26' 33.836172 N 103° 27' 20.097720 W |           |  |
| LTP - Gamma 27 State<br>- plan hits target center<br>- Point                                                                       | 0.00          | 0.00         | 9,574.54   | -5,164.72    | -797.50      | 525,989.77      | 812,117.98     | 32° 26' 34.627777 N 103° 27' 20.098322 W |           |  |
| FTP - Gamma 27 State<br>- plan misses target center by 161.46usft at 9647.29usft MD (9484.60 TVD, -186.75 N, -841.84 E)<br>- Point | 0.00          | 0.00         | 9,609.00   | -83.84       | -842.29      | 531,070.65      | 812,073.18     | 32° 27' 24.904440 N 103° 27' 20.133684 W |           |  |

| Formations            |                       |                          |           |         |                   |  |
|-----------------------|-----------------------|--------------------------|-----------|---------|-------------------|--|
| Measured Depth (usft) | Vertical Depth (usft) | Name                     | Lithology | Dip (°) | Dip Direction (°) |  |
| 1,698.00              | 1,698.00              | Rustler                  |           | -0.39   | 188.64            |  |
| 1,931.00              | 1,931.00              | Top of Salt              |           | -0.39   | 188.64            |  |
| 2,931.40              | 2,929.79              | Base of Salt             |           | -0.39   | 188.64            |  |
| 3,548.57              | 3,546.74              | Yates                    |           | -0.39   | 188.64            |  |
| 4,065.57              | 4,063.74              | Capitan                  |           | -0.39   | 188.64            |  |
| 5,433.57              | 5,431.74              | Delaware                 |           | -0.39   | 188.64            |  |
| 5,937.30              | 5,931.71              | Cherry Canyon            |           | -0.39   | 188.64            |  |
| 6,745.96              | 6,711.55              | Brushy Canyon            |           | -0.39   | 188.64            |  |
| 8,436.77              | 8,341.22              | Bone Spring Glorietta    |           | -0.39   | 188.64            |  |
| 8,954.86              | 8,848.14              | 2nd Avalon               |           | -0.39   | 188.64            |  |
| 9,724.32              | 9,529.46              | Top 1st Bone Spring Sand |           | -0.39   | 188.64            |  |
| 9,799.77              | 9,564.01              | 1st Bone Spring Target   |           | -0.39   | 188.64            |  |



## Planning Report



|                  |                                |                                     |                                |
|------------------|--------------------------------|-------------------------------------|--------------------------------|
| <b>Database:</b> | USA Compass                    | <b>Local Co-ordinate Reference:</b> | Well 7H                        |
| <b>Company:</b>  | Caza Operating, LLC            | <b>TVD Reference:</b>               | RKB @ 3713.00usft (Citadel #2) |
| <b>Project:</b>  | Lea County, New Mexico (NAD83) | <b>MD Reference:</b>                | RKB @ 3713.00usft (Citadel #2) |
| <b>Site:</b>     | Gamma 27 State                 | <b>North Reference:</b>             | Grid                           |
| <b>Well:</b>     | 7H                             | <b>Survey Calculation Method:</b>   | Minimum Curvature              |
| <b>Wellbore:</b> | OH                             |                                     |                                |
| <b>Design:</b>   | Plan 1 02-21-20                |                                     |                                |

| Plan Annotations      |                       |                   |              |                                    |
|-----------------------|-----------------------|-------------------|--------------|------------------------------------|
| Measured Depth (usft) | Vertical Depth (usft) | Local Coordinates |              | Comment                            |
|                       |                       | +N/-S (usft)      | +E/-W (usft) |                                    |
| 2,500.00              | 2,500.00              | 0.00              | 0.00         | KOP, Begin 3.00°/100' Build        |
| 2,700.00              | 2,699.63              | -8.57             | -6.00        | Hold 6.00° Inc at 215.00° Azm      |
| 2,900.00              | 2,898.54              | -25.70            | -17.99       | Begin 3.00°/100' Drop              |
| 3,100.00              | 3,098.17              | -34.27            | -23.99       | Begin Vertical Hold                |
| 5,501.83              | 5,500.00              | -34.27            | -23.99       | Begin 3.00°/100' Build             |
| 6,016.99              | 6,008.94              | -31.38            | -92.99       | Hold 15.45° Inc at 272.39° Azm     |
| 8,576.67              | 8,476.06              | -2.89             | -774.50      | Begin 3.00°/100' Drop              |
| 9,091.83              | 8,985.00              | 0.00              | -843.50      | Begin Vertical Hold                |
| 9,191.83              | 9,085.00              | 0.00              | -843.50      | KOP2, Begin 11.00°/100' Build      |
| 10,013.53             | 9,605.86              | -524.37           | -838.83      | LP, Hold 90.39° Inc at 179.49° Azm |
| 14,734.18             | 9,574.00              | -5,244.72         | -796.79      | TD at 14734.18                     |