

**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 293353

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

|                                                                                                     |                                      |                               |
|-----------------------------------------------------------------------------------------------------|--------------------------------------|-------------------------------|
| 1. Operator Name and Address<br>TAP ROCK OPERATING, LLC<br>523 Park Point Drive<br>Golden, CO 80401 |                                      | 2. OGRID Number<br>372043     |
|                                                                                                     |                                      | 3. API Number<br>30-025-48638 |
| 4. Property Code<br>328891                                                                          | 5. Property Name<br>APOLLO STATE COM | 6. Well No.<br>222H           |

**7. Surface Location**

|               |               |                 |              |              |                  |               |                   |               |               |
|---------------|---------------|-----------------|--------------|--------------|------------------|---------------|-------------------|---------------|---------------|
| UL - Lot<br>N | Section<br>21 | Township<br>24S | Range<br>33E | Lot Idn<br>N | Feet From<br>881 | N/S Line<br>S | Feet From<br>2110 | E/W Line<br>W | County<br>Lea |
|---------------|---------------|-----------------|--------------|--------------|------------------|---------------|-------------------|---------------|---------------|

**8. Proposed Bottom Hole Location**

|               |               |                 |              |              |                 |               |                   |               |               |
|---------------|---------------|-----------------|--------------|--------------|-----------------|---------------|-------------------|---------------|---------------|
| UL - Lot<br>C | Section<br>16 | Township<br>24S | Range<br>33E | Lot Idn<br>C | Feet From<br>30 | N/S Line<br>N | Feet From<br>1750 | E/W Line<br>W | County<br>Lea |
|---------------|---------------|-----------------|--------------|--------------|-----------------|---------------|-------------------|---------------|---------------|

**9. Pool Information**

|                                     |       |
|-------------------------------------|-------|
| WC-025 G-09 S243310P;UPPER WOLFCAMP | 98135 |
|-------------------------------------|-------|

**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>3538 |
| 16. Multiple<br>N         | 17. Proposed Depth<br>23258 | 18. Formation<br>Wolfcamp              | 19. Contractor          | 20. Spud Date<br>12/1/2021         |
| Depth to Ground water     |                             | Distance from nearest fresh water well |                         | Distance to nearest surface water  |

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

**21. Proposed Casing and Cement Program**

| Type | Hole Size | Casing Size | Casing Weight/ft | Setting Depth | Sacks of Cement | Estimated TOC |
|------|-----------|-------------|------------------|---------------|-----------------|---------------|
| Surf | 13.5      | 10.75       | 45.5             | 1250          | 1200            | 0             |
| Int1 | 8.75      | 7.625       | 29.7             | 12080         | 2400            | 0             |
| Int1 | 9.875     | 7.625       | 29.7             | 9500          | 0               | 0             |
| Prod | 6.75      | 5.5         | 20               | 23250         | 700             | 11800         |

**Casing/Cement Program: Additional Comments**

If a DV tool is ran, the depth will be adjusted depending on current hole conditions. Cement volumes will be adjusted proportionally. The DV tool will be set a minimum of 50' below the previous casing shoe and a maximum of 200' above the current casing shoe. If cement is not circulated to surface on the 1st cement job, the 2nd stage will be pumped as planned. If cement does not return to surface on the 2nd stage the NMOCDD will be notified immediately. The DVT set depth will be set between 5,000'-6,000'.

**22. Proposed Blowout Prevention Program**

| Type       | Working Pressure | Test Pressure | Manufacturer |
|------------|------------------|---------------|--------------|
| Annular    | 5000             | 3500          |              |
| Double Ram | 10000            | 5000          |              |
| Pipe       | 10000            | 5000          |              |

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

**OIL CONSERVATION DIVISION**

Signature:

Printed Name: Electronically filed by Christian Combs

Title: Regulatory Manager

Email Address: ccombs@taprk.com

Date: 4/14/2021

Phone: 720-360-4028

Approved By: Paul F Kautz

Title: Geologist

Approved Date: 4/16/2021

Conditions of Approval Attached

Expiration Date: 4/16/2023

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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<br>30-025-48638 | <sup>2</sup> Pool Code<br>98135                        | <sup>3</sup> Pool Name<br>WC-025 G-09 S243310P; UPPER WOLFCAMP |
| <sup>4</sup> Property Code<br>328891    | <sup>5</sup> Property Name<br>APOLLO STATE COM         | <sup>6</sup> Well Number<br>222H                               |
| <sup>7</sup> OGRID No.<br>#372043       | <sup>8</sup> Operator Name<br>TAP ROCK OPERATING, LLC. | <sup>9</sup> Elevation<br>3538'                                |

<sup>10</sup>Surface Location

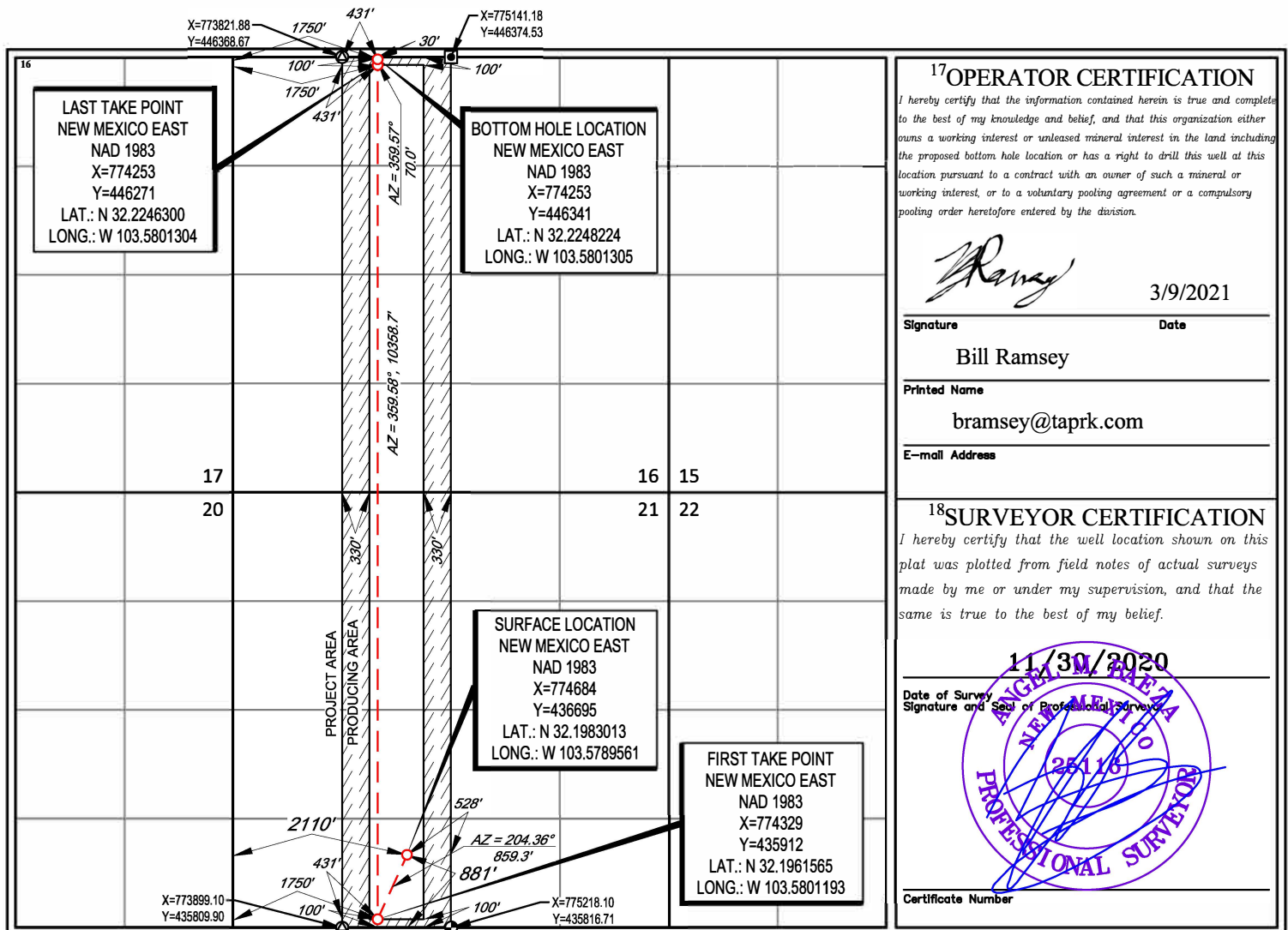
| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| N             | 21      | 24-S     | 33-E  | -       | 881'          | SOUTH            | 2110'         | WEST           | LEA    |

<sup>11</sup>Bottom Hole Location If Different From Surface

| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| C             | 16      | 24-S     | 33-E  | -       | 30'           | NORTH            | 1750'         | WEST           | LEA    |

|                                      |                               |                                  |                         |
|--------------------------------------|-------------------------------|----------------------------------|-------------------------|
| <sup>12</sup> Dedicated Acres<br>320 | <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.



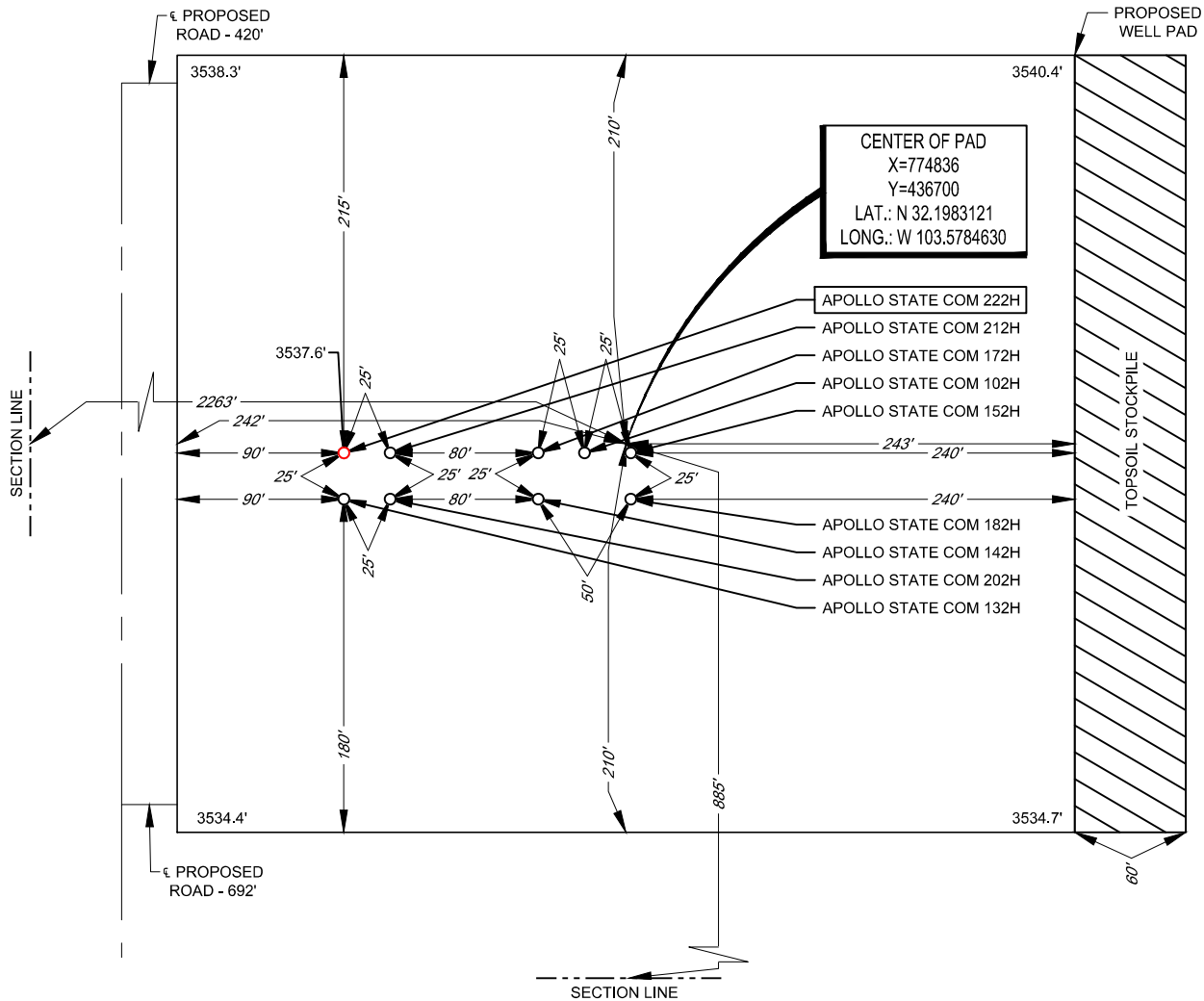
## EXHIBIT 2B



SECTION 21, TOWNSHIP 24-S, RANGE 33-E, N.M.P.M.  
LEA COUNTY, NEW MEXICO

DETAIL VIEW  
SCALE: 1" = 100'

**LEGEND**  
----- SECTION LINE  
----- PROPOSED ROAD



LEASE NAME & WELL NO.: APOLLO STATE COM 222H  
222H LATITUDE N 32.1983013 222H LONGITUDE W 103.5789561

CENTER OF PAD IS 885' FSL & 2263' FWL

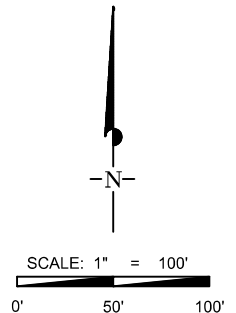


Angel M. Baeza, P.S. No. 25116

ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREON ARE GRID BASED UPON THE NEW MEXICO COORDINATE SYSTEM OF 1983, EAST ZONE, U.S. SURVEY FEET. ELEVATIONS USED ARE NAVD88, OBTAINED THROUGH AN OPUS SOLUTION.

THIS PROPOSED PAD SITE LOCATION SHOWN HEREON HAS BEEN SURVEYED ON THE GROUND UNDER MY SUPERVISION AND PREPARED ACCORDING TO THE EVIDENCE FOUND AT THE TIME OF SURVEY, AND DATA PROVIDED BY TAP ROCK OPERATING, LLC. ONLY THE DATA SHOWN ABOVE IS BEING CERTIFIED TO. ALL OTHER INFORMATION WAS INTENTIONALLY OMITTED. THIS PLAT IS ONLY INTENDED TO BE USED FOR A PERMIT AND IS NOT A BOUNDARY SURVEY. THIS CERTIFICATION IS MADE AND LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS PLAT AND IS NON-TRANSFERABLE. THIS SURVEY IS CERTIFIED FOR THIS TRANSACTION ONLY.

ORIGINAL DOCUMENT SIZE: 8.5" X 11"



**TOPOGRAPHIC**  
LOYALTY INNOVATION LEGACY  
1400 EVERMAN PARKWAY, Ste. 146 • FT. WORTH, TEXAS 76140  
TELEPHONE: (817) 744-7512 • FAX (817) 744-7554  
2903 NORTH BIG SPRING • MIDLAND, TEXAS 79705  
TELEPHONE: (432) 682-1653 OR (800) 767-1653 • FAX (432) 682-1743  
WWW.TOPOGRAPHIC.COM

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

## GAS CAPTURE PLAN

Date: 4/16/2021

☒ Original

Operator & OGRID No.: [372043] TAP ROCK 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<br>(ULSTR) | Footages    | Expected<br>MCF/D | Flared or<br>Vented | Comments          |
|------------------------|--------------|--------------------------|-------------|-------------------|---------------------|-------------------|
| APOLLO STATE COM #222H | 30-025-48638 | N-21-24S-33E             | 0881S 2110W | 3000              | Flared              | Flare for 21 days |

### **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 LUCID ENERGY DELAWARE, LLC and will be connected to LUCID ENERGY DELAWARE, LLC High/Low Pressure gathering system located in Lea County, New Mexico. It will require 2500' of pipeline to connect the facility to High/Low Pressure gathering system. TAP ROCK OPERATING, LLC provides (periodically) to LUCID ENERGY DELAWARE, LLC a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, TAP ROCK OPERATING, LLC and LUCID ENERGY DELAWARE, LLC have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at LUCID ENERGY DELAWARE, LLC Processing Plant located in Sec. 15, Twn. 24S, Rng. 33E, Lea County, New Mexico. The actual flow of the gas will be based on compression operating parameters and gathering system pressures.

### **Flowback Strategy**

After the fracture treatment/completion operations, well(s) will be produced to temporary production tanks and gas will be flared or vented. During flowback, the fluids and sand content will be monitored. When the produced fluids contain minimal sand, the wells will be turned to production facilities. Gas sales should start as soon as the wells start flowing through the production facilities, unless there are operational issues on LUCID ENERGY DELAWARE, LLC system at that time. Based on current information, it is TAP ROCK 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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Form APD Conditions

Permit 293353

**PERMIT CONDITIONS OF APPROVAL**

|                                                                                                            |                                 |
|------------------------------------------------------------------------------------------------------------|---------------------------------|
| Operator Name and Address:<br>TAP ROCK OPERATING, LLC [372043]<br>523 Park Point Drive<br>Golden, CO 80401 | API Number:<br>30-025-48638     |
|                                                                                                            | Well:<br>APOLLO STATE COM #222H |

| OCD<br>Reviewer | Condition                                                                                                                                                                                                                                                                                                                                                         |
|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| pkautz          | Notify OCD 24 hours prior to casing & cement                                                                                                                                                                                                                                                                                                                      |
| pkautz          | Will require a File As Drilled C-102 and a Directional Survey with the C-104                                                                                                                                                                                                                                                                                      |
| pkautz          | Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string                                                                                              |
| pkautz          | 1) SURFACE & INTERMEDIATE1 CASING - Cement must circulate to surface -- 2) INTERMEDIATE2 CASING - Cement must tie back into intermediate1 casing -- 3) PRODUCTION CASING - Cement must tie back into intermediate2 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          | 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. |

# **Tap Rock Operating, LLC.**

**Lea County, NM (NAD83)**

**Apollo State COM**

**222H**

**OH**

**Plan: Plan #1**

## **Standard Planning Report**

**02 March, 2021**

## Planning Report

|                  |                           |                                     |                             |
|------------------|---------------------------|-------------------------------------|-----------------------------|
| <b>Database:</b> | EDM 5000.1 Single User Db | <b>Local Co-ordinate Reference:</b> | Well 222H                   |
| <b>Company:</b>  | Tap Rock Operating, LLC.  | <b>TVD Reference:</b>               | WELL @ 3564.0usft (26' RKB) |
| <b>Project:</b>  | Lea County, NM (NAD83)    | <b>MD Reference:</b>                | WELL @ 3564.0usft (26' RKB) |
| <b>Site:</b>     | Apollo State COM          | <b>North Reference:</b>             | Grid                        |
| <b>Well:</b>     | 222H                      | <b>Survey Calculation Method:</b>   | Minimum Curvature           |
| <b>Wellbore:</b> | OH                        |                                     |                             |
| <b>Design:</b>   | Plan #1                   |                                     |                             |

|                    |                           |                      |                |
|--------------------|---------------------------|----------------------|----------------|
| <b>Project</b>     | Lea County, NM (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                  | Apollo State COM |              |                 |                   |                  |
|-----------------------|------------------|--------------|-----------------|-------------------|------------------|
| Site Position:        |                  | Northing:    | 436,628.77 usft | Latitude:         | 32° 11' 53.336 N |
| From:                 | Lat/Long         | Easting:     | 773,148.60 usft | Longitude:        | 103° 35' 2.112 W |
| Position Uncertainty: | 2.0 usft         | Slot Radius: | 13-3/16 "       | Grid Convergence: | 0.40 °           |

|                      |       |              |                     |                 |               |                   |
|----------------------|-------|--------------|---------------------|-----------------|---------------|-------------------|
| Well                 | 222H  |              |                     |                 |               |                   |
| Well Position        | +N/-S | 66.2 usft    | Northing:           | 436,695.00 usft | Latitude:     | 32° 11' 53.885 N  |
|                      | +E/-W | 1,535.4 usft | Easting:            | 774,684.00 usft | Longitude:    | 103° 34' 44.238 W |
| Position Uncertainty |       | 2.0 usft     | Wellhead Elevation: |                 | Ground Level: | 3,538.0 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> |
|                  | IGRF2020          | 3/1/2021           | 6.58                   | 59.89                | 47,507                     |

|                          |                                |                     |                      |                      |
|--------------------------|--------------------------------|---------------------|----------------------|----------------------|
| <b>Design</b>            | Plan #1                        |                     |                      |                      |
| <b>Audit Notes:</b>      |                                |                     |                      |                      |
| <b>Version:</b>          | <b>Phase:</b>                  | PLAN                | <b>Tie On Depth:</b> | 0.0                  |
| <b>Vertical Section:</b> | <b>Depth From (TVD) (usft)</b> | <b>+N/-S (usft)</b> | <b>+E/-W (usft)</b>  | <b>Direction (°)</b> |
|                          | 0.0                            | 0.0                 | 0.0                  | 359.58               |

| <b>Plan Sections</b>  |                 |             |                       |              |              |                         |                        |                       |         |            |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|------------------------|-----------------------|---------|------------|
| 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    |            |
| 2,450.0               | 0.00            | 0.00        | 2,450.0               | 0.0          | 0.0          | 0.00                    | 0.00                   | 0.00                  | 0.00    |            |
| 3,050.0               | 9.00            | 205.00      | 3,047.5               | -42.6        | -19.9        | 1.50                    | 1.50                   | 0.00                  | 205.00  |            |
| 8,590.0               | 9.00            | 205.00      | 8,519.3               | -828.1       | -386.1       | 0.00                    | 0.00                   | 0.00                  | 0.00    |            |
| 9,190.0               | 0.00            | 0.00        | 9,116.9               | -870.7       | -406.0       | 1.50                    | -1.50                  | 25.83                 | 180.00  |            |
| 12,413.1              | 0.00            | 0.00        | 12,340.0              | -870.7       | -406.0       | 0.00                    | 0.00                   | 0.00                  | 0.00    |            |
| 13,313.3              | 90.01           | 3.90        | 12,913.0              | -298.9       | -367.0       | 10.00                   | 10.00                  | 0.00                  | 3.90    |            |
| 13,529.2              | 90.01           | 359.58      | 12,913.0              | -83.2        | -360.5       | 2.00                    | 0.00                   | -2.00                 | -89.98  |            |
| 23,188.6              | 90.01           | 359.58      | 12,911.0              | 9,576.0      | -431.0       | 0.00                    | 0.00                   | 0.00                  | 0.00    | LTP_A222H  |
| 23,258.6              | 90.01           | 359.58      | 12,911.0              | 9,646.0      | -431.5       | 0.00                    | 0.00                   | 0.00                  | 0.00    | PBHL_A222H |

## Planning Report

|                  |                           |                                     |                             |
|------------------|---------------------------|-------------------------------------|-----------------------------|
| <b>Database:</b> | EDM 5000.1 Single User Db | <b>Local Co-ordinate Reference:</b> | Well 222H                   |
| <b>Company:</b>  | Tap Rock Operating, LLC.  | <b>TVD Reference:</b>               | WELL @ 3564.0usft (26' RKB) |
| <b>Project:</b>  | Lea County, NM (NAD83)    | <b>MD Reference:</b>                | WELL @ 3564.0usft (26' RKB) |
| <b>Site:</b>     | Apollo State COM          | <b>North Reference:</b>             | Grid                        |
| <b>Well:</b>     | 222H                      | <b>Survey Calculation Method:</b>   | Minimum Curvature           |
| <b>Wellbore:</b> | OH                        |                                     |                             |
| <b>Design:</b>   | Plan #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                  |
| 1,167.0                        | 0.00            | 0.00        | 1,167.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| Rustler Anhydrite              |                 |             |                       |              |              |                         |                         |                        |                       |
| 1,200.0                        | 0.00            | 0.00        | 1,200.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 1,300.0                        | 0.00            | 0.00        | 1,300.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 1,400.0                        | 0.00            | 0.00        | 1,400.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 1,500.0                        | 0.00            | 0.00        | 1,500.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 1,600.0                        | 0.00            | 0.00        | 1,600.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 1,658.0                        | 0.00            | 0.00        | 1,658.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| Top Salt                       |                 |             |                       |              |              |                         |                         |                        |                       |
| 1,700.0                        | 0.00            | 0.00        | 1,700.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 1,800.0                        | 0.00            | 0.00        | 1,800.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 1,900.0                        | 0.00            | 0.00        | 1,900.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 2,000.0                        | 0.00            | 0.00        | 2,000.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 2,100.0                        | 0.00            | 0.00        | 2,100.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 2,200.0                        | 0.00            | 0.00        | 2,200.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 2,300.0                        | 0.00            | 0.00        | 2,300.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 2,400.0                        | 0.00            | 0.00        | 2,400.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 2,450.0                        | 0.00            | 0.00        | 2,450.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| Start Build 1.50               |                 |             |                       |              |              |                         |                         |                        |                       |
| 2,500.0                        | 0.75            | 205.00      | 2,500.0               | -0.3         | -0.1         | -0.3                    | 1.50                    | 1.50                   | 0.00                  |
| 2,600.0                        | 2.25            | 205.00      | 2,600.0               | -2.7         | -1.2         | -2.7                    | 1.50                    | 1.50                   | 0.00                  |
| 2,700.0                        | 3.75            | 205.00      | 2,699.8               | -7.4         | -3.5         | -7.4                    | 1.50                    | 1.50                   | 0.00                  |
| 2,800.0                        | 5.25            | 205.00      | 2,799.5               | -14.5        | -6.8         | -14.5                   | 1.50                    | 1.50                   | 0.00                  |
| 2,900.0                        | 6.75            | 205.00      | 2,899.0               | -24.0        | -11.2        | -23.9                   | 1.50                    | 1.50                   | 0.00                  |
| 3,000.0                        | 8.25            | 205.00      | 2,998.1               | -35.8        | -16.7        | -35.7                   | 1.50                    | 1.50                   | 0.00                  |
| 3,050.0                        | 9.00            | 205.00      | 3,047.5               | -42.6        | -19.9        | -42.5                   | 1.50                    | 1.50                   | 0.00                  |
| Start 5540.0 hold at 3050.0 MD |                 |             |                       |              |              |                         |                         |                        |                       |
| 3,100.0                        | 9.00            | 205.00      | 3,096.9               | -49.7        | -23.2        | -49.5                   | 0.00                    | 0.00                   | 0.00                  |
| 3,200.0                        | 9.00            | 205.00      | 3,195.7               | -63.9        | -29.8        | -63.7                   | 0.00                    | 0.00                   | 0.00                  |
| 3,300.0                        | 9.00            | 205.00      | 3,294.5               | -78.1        | -36.4        | -77.8                   | 0.00                    | 0.00                   | 0.00                  |
| 3,400.0                        | 9.00            | 205.00      | 3,393.2               | -92.2        | -43.0        | -91.9                   | 0.00                    | 0.00                   | 0.00                  |
| 3,500.0                        | 9.00            | 205.00      | 3,492.0               | -106.4       | -49.6        | -106.1                  | 0.00                    | 0.00                   | 0.00                  |
| 3,600.0                        | 9.00            | 205.00      | 3,590.8               | -120.6       | -56.2        | -120.2                  | 0.00                    | 0.00                   | 0.00                  |
| 3,700.0                        | 9.00            | 205.00      | 3,689.5               | -134.8       | -62.8        | -134.3                  | 0.00                    | 0.00                   | 0.00                  |
| 3,800.0                        | 9.00            | 205.00      | 3,788.3               | -149.0       | -69.5        | -148.4                  | 0.00                    | 0.00                   | 0.00                  |
| 3,900.0                        | 9.00            | 205.00      | 3,887.1               | -163.1       | -76.1        | -162.6                  | 0.00                    | 0.00                   | 0.00                  |
| 4,000.0                        | 9.00            | 205.00      | 3,985.8               | -177.3       | -82.7        | -176.7                  | 0.00                    | 0.00                   | 0.00                  |
| 4,100.0                        | 9.00            | 205.00      | 4,084.6               | -191.5       | -89.3        | -190.8                  | 0.00                    | 0.00                   | 0.00                  |
| 4,200.0                        | 9.00            | 205.00      | 4,183.4               | -205.7       | -95.9        | -205.0                  | 0.00                    | 0.00                   | 0.00                  |
| 4,300.0                        | 9.00            | 205.00      | 4,282.1               | -219.8       | -102.5       | -219.1                  | 0.00                    | 0.00                   | 0.00                  |
| 4,400.0                        | 9.00            | 205.00      | 4,380.9               | -234.0       | -109.1       | -233.2                  | 0.00                    | 0.00                   | 0.00                  |
| 4,500.0                        | 9.00            | 205.00      | 4,479.7               | -248.2       | -115.7       | -247.3                  | 0.00                    | 0.00                   | 0.00                  |



## Planning Report

|                  |                           |                                     |                             |
|------------------|---------------------------|-------------------------------------|-----------------------------|
| <b>Database:</b> | EDM 5000.1 Single User Db | <b>Local Co-ordinate Reference:</b> | Well 222H                   |
| <b>Company:</b>  | Tap Rock Operating, LLC.  | <b>TVD Reference:</b>               | WELL @ 3564.0usft (26' RKB) |
| <b>Project:</b>  | Lea County, NM (NAD83)    | <b>MD Reference:</b>                | WELL @ 3564.0usft (26' RKB) |
| <b>Site:</b>     | Apollo State COM          | <b>North Reference:</b>             | Grid                        |
| <b>Well:</b>     | 222H                      | <b>Survey Calculation Method:</b>   | Minimum Curvature           |
| <b>Wellbore:</b> | OH                        |                                     |                             |
| <b>Design:</b>   | Plan #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) |
| 4,600.0                     | 9.00            | 205.00      | 4,578.5               | -262.4       | -122.3       | -261.5                  | 0.00                    | 0.00                   | 0.00                  |
| 4,700.0                     | 9.00            | 205.00      | 4,677.2               | -276.6       | -129.0       | -275.6                  | 0.00                    | 0.00                   | 0.00                  |
| 4,800.0                     | 9.00            | 205.00      | 4,776.0               | -290.7       | -135.6       | -289.7                  | 0.00                    | 0.00                   | 0.00                  |
| 4,900.0                     | 9.00            | 205.00      | 4,874.8               | -304.9       | -142.2       | -303.9                  | 0.00                    | 0.00                   | 0.00                  |
| 4,938.7                     | 9.00            | 205.00      | 4,913.0               | -310.4       | -144.7       | -309.3                  | 0.00                    | 0.00                   | 0.00                  |
| <b>Base Salt</b>            |                 |             |                       |              |              |                         |                         |                        |                       |
| 5,000.0                     | 9.00            | 205.00      | 4,973.5               | -319.1       | -148.8       | -318.0                  | 0.00                    | 0.00                   | 0.00                  |
| 5,100.0                     | 9.00            | 205.00      | 5,072.3               | -333.3       | -155.4       | -332.1                  | 0.00                    | 0.00                   | 0.00                  |
| 5,160.4                     | 9.00            | 205.00      | 5,132.0               | -341.8       | -159.4       | -340.7                  | 0.00                    | 0.00                   | 0.00                  |
| <b>Delaware Mountain Gp</b> |                 |             |                       |              |              |                         |                         |                        |                       |
| 5,181.7                     | 9.00            | 205.00      | 5,153.0               | -344.8       | -160.8       | -343.7                  | 0.00                    | 0.00                   | 0.00                  |
| <b>Lamar</b>                |                 |             |                       |              |              |                         |                         |                        |                       |
| 5,200.0                     | 9.00            | 205.00      | 5,171.1               | -347.4       | -162.0       | -346.2                  | 0.00                    | 0.00                   | 0.00                  |
| 5,223.2                     | 9.00            | 205.00      | 5,194.0               | -350.7       | -163.6       | -349.5                  | 0.00                    | 0.00                   | 0.00                  |
| <b>Bell Canyon</b>          |                 |             |                       |              |              |                         |                         |                        |                       |
| 5,255.6                     | 9.00            | 205.00      | 5,226.0               | -355.3       | -165.7       | -354.1                  | 0.00                    | 0.00                   | 0.00                  |
| <b>Ramsey Sand</b>          |                 |             |                       |              |              |                         |                         |                        |                       |
| 5,300.0                     | 9.00            | 205.00      | 5,269.8               | -361.6       | -168.6       | -360.4                  | 0.00                    | 0.00                   | 0.00                  |
| 5,400.0                     | 9.00            | 205.00      | 5,368.6               | -375.8       | -175.2       | -374.5                  | 0.00                    | 0.00                   | 0.00                  |
| 5,500.0                     | 9.00            | 205.00      | 5,467.4               | -390.0       | -181.8       | -388.6                  | 0.00                    | 0.00                   | 0.00                  |
| 5,600.0                     | 9.00            | 205.00      | 5,566.1               | -404.2       | -188.5       | -402.8                  | 0.00                    | 0.00                   | 0.00                  |
| 5,700.0                     | 9.00            | 205.00      | 5,664.9               | -418.3       | -195.1       | -416.9                  | 0.00                    | 0.00                   | 0.00                  |
| 5,800.0                     | 9.00            | 205.00      | 5,763.7               | -432.5       | -201.7       | -431.0                  | 0.00                    | 0.00                   | 0.00                  |
| 5,900.0                     | 9.00            | 205.00      | 5,862.4               | -446.7       | -208.3       | -445.1                  | 0.00                    | 0.00                   | 0.00                  |
| 6,000.0                     | 9.00            | 205.00      | 5,961.2               | -460.9       | -214.9       | -459.3                  | 0.00                    | 0.00                   | 0.00                  |
| 6,100.0                     | 9.00            | 205.00      | 6,060.0               | -475.0       | -221.5       | -473.4                  | 0.00                    | 0.00                   | 0.00                  |
| 6,200.0                     | 9.00            | 205.00      | 6,158.8               | -489.2       | -228.1       | -487.5                  | 0.00                    | 0.00                   | 0.00                  |
| 6,218.5                     | 9.00            | 205.00      | 6,177.0               | -491.8       | -229.3       | -490.1                  | 0.00                    | 0.00                   | 0.00                  |
| <b>Cherry Canyon</b>        |                 |             |                       |              |              |                         |                         |                        |                       |
| 6,300.0                     | 9.00            | 205.00      | 6,257.5               | -503.4       | -234.7       | -501.7                  | 0.00                    | 0.00                   | 0.00                  |
| 6,400.0                     | 9.00            | 205.00      | 6,356.3               | -517.6       | -241.3       | -515.8                  | 0.00                    | 0.00                   | 0.00                  |
| 6,500.0                     | 9.00            | 205.00      | 6,455.1               | -531.8       | -248.0       | -529.9                  | 0.00                    | 0.00                   | 0.00                  |
| 6,600.0                     | 9.00            | 205.00      | 6,553.8               | -545.9       | -254.6       | -544.1                  | 0.00                    | 0.00                   | 0.00                  |
| 6,700.0                     | 9.00            | 205.00      | 6,652.6               | -560.1       | -261.2       | -558.2                  | 0.00                    | 0.00                   | 0.00                  |
| 6,800.0                     | 9.00            | 205.00      | 6,751.4               | -574.3       | -267.8       | -572.3                  | 0.00                    | 0.00                   | 0.00                  |
| 6,900.0                     | 9.00            | 205.00      | 6,850.1               | -588.5       | -274.4       | -586.4                  | 0.00                    | 0.00                   | 0.00                  |
| 7,000.0                     | 9.00            | 205.00      | 6,948.9               | -602.6       | -281.0       | -600.6                  | 0.00                    | 0.00                   | 0.00                  |
| 7,100.0                     | 9.00            | 205.00      | 7,047.7               | -616.8       | -287.6       | -614.7                  | 0.00                    | 0.00                   | 0.00                  |
| 7,200.0                     | 9.00            | 205.00      | 7,146.4               | -631.0       | -294.2       | -628.8                  | 0.00                    | 0.00                   | 0.00                  |
| 7,300.0                     | 9.00            | 205.00      | 7,245.2               | -645.2       | -300.9       | -643.0                  | 0.00                    | 0.00                   | 0.00                  |
| 7,400.0                     | 9.00            | 205.00      | 7,344.0               | -659.4       | -307.5       | -657.1                  | 0.00                    | 0.00                   | 0.00                  |
| 7,500.0                     | 9.00            | 205.00      | 7,442.7               | -673.5       | -314.1       | -671.2                  | 0.00                    | 0.00                   | 0.00                  |
| 7,600.0                     | 9.00            | 205.00      | 7,541.5               | -687.7       | -320.7       | -685.3                  | 0.00                    | 0.00                   | 0.00                  |
| 7,700.0                     | 9.00            | 205.00      | 7,640.3               | -701.9       | -327.3       | -699.5                  | 0.00                    | 0.00                   | 0.00                  |
| 7,714.9                     | 9.00            | 205.00      | 7,655.0               | -704.0       | -328.3       | -701.6                  | 0.00                    | 0.00                   | 0.00                  |
| <b>Brushy Canyon</b>        |                 |             |                       |              |              |                         |                         |                        |                       |
| 7,800.0                     | 9.00            | 205.00      | 7,739.1               | -716.1       | -333.9       | -713.6                  | 0.00                    | 0.00                   | 0.00                  |
| 7,900.0                     | 9.00            | 205.00      | 7,837.8               | -730.2       | -340.5       | -727.7                  | 0.00                    | 0.00                   | 0.00                  |
| 8,000.0                     | 9.00            | 205.00      | 7,936.6               | -744.4       | -347.1       | -741.9                  | 0.00                    | 0.00                   | 0.00                  |
| 8,100.0                     | 9.00            | 205.00      | 8,035.4               | -758.6       | -353.7       | -756.0                  | 0.00                    | 0.00                   | 0.00                  |
| 8,200.0                     | 9.00            | 205.00      | 8,134.1               | -772.8       | -360.4       | -770.1                  | 0.00                    | 0.00                   | 0.00                  |
| 8,300.0                     | 9.00            | 205.00      | 8,232.9               | -787.0       | -367.0       | -784.2                  | 0.00                    | 0.00                   | 0.00                  |
| 8,400.0                     | 9.00            | 205.00      | 8,331.7               | -801.1       | -373.6       | -798.4                  | 0.00                    | 0.00                   | 0.00                  |

## Planning Report

|                  |                           |                                     |                             |
|------------------|---------------------------|-------------------------------------|-----------------------------|
| <b>Database:</b> | EDM 5000.1 Single User Db | <b>Local Co-ordinate Reference:</b> | Well 222H                   |
| <b>Company:</b>  | Tap Rock Operating, LLC.  | <b>TVD Reference:</b>               | WELL @ 3564.0usft (26' RKB) |
| <b>Project:</b>  | Lea County, NM (NAD83)    | <b>MD Reference:</b>                | WELL @ 3564.0usft (26' RKB) |
| <b>Site:</b>     | Apollo State COM          | <b>North Reference:</b>             | Grid                        |
| <b>Well:</b>     | 222H                      | <b>Survey Calculation Method:</b>   | Minimum Curvature           |
| <b>Wellbore:</b> | OH                        |                                     |                             |
| <b>Design:</b>   | Plan #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) |
| 8,500.0                               | 9.00            | 205.00      | 8,430.4               | -815.3       | -380.2       | -812.5                  | 0.00                    | 0.00                   | 0.00                  |
| 8,590.0                               | 9.00            | 205.00      | 8,519.3               | -828.1       | -386.1       | -825.2                  | 0.00                    | 0.00                   | 0.00                  |
| <b>Start DLS 1.50 TFO 180.00</b>      |                 |             |                       |              |              |                         |                         |                        |                       |
| 8,600.0                               | 8.85            | 205.00      | 8,529.2               | -829.5       | -386.8       | -826.6                  | 1.50                    | -1.50                  | 0.00                  |
| 8,700.0                               | 7.35            | 205.00      | 8,628.2               | -842.2       | -392.7       | -839.3                  | 1.50                    | -1.50                  | 0.00                  |
| 8,800.0                               | 5.85            | 205.00      | 8,727.5               | -852.7       | -397.6       | -849.7                  | 1.50                    | -1.50                  | 0.00                  |
| 8,900.0                               | 4.35            | 205.00      | 8,827.1               | -860.7       | -401.4       | -857.8                  | 1.50                    | -1.50                  | 0.00                  |
| 9,000.0                               | 2.85            | 205.00      | 8,926.9               | -866.4       | -404.0       | -863.4                  | 1.50                    | -1.50                  | 0.00                  |
| 9,100.0                               | 1.35            | 205.00      | 9,026.9               | -869.7       | -405.6       | -866.7                  | 1.50                    | -1.50                  | 0.00                  |
| 9,190.0                               | 0.00            | 0.00        | 9,116.9               | -870.7       | -406.0       | -867.7                  | 1.50                    | -1.50                  | 172.22                |
| <b>Start 3223.1 hold at 9190.0 MD</b> |                 |             |                       |              |              |                         |                         |                        |                       |
| 9,195.1                               | 0.00            | 0.00        | 9,122.0               | -870.7       | -406.0       | -867.7                  | 0.00                    | 0.00                   | 0.00                  |
| <b>Bone Spring Lime</b>               |                 |             |                       |              |              |                         |                         |                        |                       |
| 9,200.0                               | 0.00            | 0.00        | 9,126.9               | -870.7       | -406.0       | -867.7                  | 0.00                    | 0.00                   | 0.00                  |
| 9,299.1                               | 0.00            | 0.00        | 9,226.0               | -870.7       | -406.0       | -867.7                  | 0.00                    | 0.00                   | 0.00                  |
| <b>Upper Avalon</b>                   |                 |             |                       |              |              |                         |                         |                        |                       |
| 9,300.0                               | 0.00            | 0.00        | 9,226.9               | -870.7       | -406.0       | -867.7                  | 0.00                    | 0.00                   | 0.00                  |
| 9,400.0                               | 0.00            | 0.00        | 9,326.9               | -870.7       | -406.0       | -867.7                  | 0.00                    | 0.00                   | 0.00                  |
| 9,500.0                               | 0.00            | 0.00        | 9,426.9               | -870.7       | -406.0       | -867.7                  | 0.00                    | 0.00                   | 0.00                  |
| 9,524.1                               | 0.00            | 0.00        | 9,451.0               | -870.7       | -406.0       | -867.7                  | 0.00                    | 0.00                   | 0.00                  |
| <b>Middle Avalon</b>                  |                 |             |                       |              |              |                         |                         |                        |                       |
| 9,600.0                               | 0.00            | 0.00        | 9,526.9               | -870.7       | -406.0       | -867.7                  | 0.00                    | 0.00                   | 0.00                  |
| 9,700.0                               | 0.00            | 0.00        | 9,626.9               | -870.7       | -406.0       | -867.7                  | 0.00                    | 0.00                   | 0.00                  |
| 9,800.0                               | 0.00            | 0.00        | 9,726.9               | -870.7       | -406.0       | -867.7                  | 0.00                    | 0.00                   | 0.00                  |
| 9,893.1                               | 0.00            | 0.00        | 9,820.0               | -870.7       | -406.0       | -867.7                  | 0.00                    | 0.00                   | 0.00                  |
| <b>Lower Avalon</b>                   |                 |             |                       |              |              |                         |                         |                        |                       |
| 9,900.0                               | 0.00            | 0.00        | 9,826.9               | -870.7       | -406.0       | -867.7                  | 0.00                    | 0.00                   | 0.00                  |
| 10,000.0                              | 0.00            | 0.00        | 9,926.9               | -870.7       | -406.0       | -867.7                  | 0.00                    | 0.00                   | 0.00                  |
| 10,100.0                              | 0.00            | 0.00        | 10,026.9              | -870.7       | -406.0       | -867.7                  | 0.00                    | 0.00                   | 0.00                  |
| 10,190.1                              | 0.00            | 0.00        | 10,117.0              | -870.7       | -406.0       | -867.7                  | 0.00                    | 0.00                   | 0.00                  |
| <b>1st Bone Spring Sand</b>           |                 |             |                       |              |              |                         |                         |                        |                       |
| 10,200.0                              | 0.00            | 0.00        | 10,126.9              | -870.7       | -406.0       | -867.7                  | 0.00                    | 0.00                   | 0.00                  |
| 10,300.0                              | 0.00            | 0.00        | 10,226.9              | -870.7       | -406.0       | -867.7                  | 0.00                    | 0.00                   | 0.00                  |
| 10,400.0                              | 0.00            | 0.00        | 10,326.9              | -870.7       | -406.0       | -867.7                  | 0.00                    | 0.00                   | 0.00                  |
| 10,456.1                              | 0.00            | 0.00        | 10,383.0              | -870.7       | -406.0       | -867.7                  | 0.00                    | 0.00                   | 0.00                  |
| <b>2nd Bone Spring Carb</b>           |                 |             |                       |              |              |                         |                         |                        |                       |
| 10,500.0                              | 0.00            | 0.00        | 10,426.9              | -870.7       | -406.0       | -867.7                  | 0.00                    | 0.00                   | 0.00                  |
| 10,600.0                              | 0.00            | 0.00        | 10,526.9              | -870.7       | -406.0       | -867.7                  | 0.00                    | 0.00                   | 0.00                  |
| 10,700.0                              | 0.00            | 0.00        | 10,626.9              | -870.7       | -406.0       | -867.7                  | 0.00                    | 0.00                   | 0.00                  |
| 10,800.0                              | 0.00            | 0.00        | 10,726.9              | -870.7       | -406.0       | -867.7                  | 0.00                    | 0.00                   | 0.00                  |
| 10,864.1                              | 0.00            | 0.00        | 10,791.0              | -870.7       | -406.0       | -867.7                  | 0.00                    | 0.00                   | 0.00                  |
| <b>2nd Bone Spring Sand</b>           |                 |             |                       |              |              |                         |                         |                        |                       |
| 10,900.0                              | 0.00            | 0.00        | 10,826.9              | -870.7       | -406.0       | -867.7                  | 0.00                    | 0.00                   | 0.00                  |
| 11,000.0                              | 0.00            | 0.00        | 10,926.9              | -870.7       | -406.0       | -867.7                  | 0.00                    | 0.00                   | 0.00                  |
| 11,100.0                              | 0.00            | 0.00        | 11,026.9              | -870.7       | -406.0       | -867.7                  | 0.00                    | 0.00                   | 0.00                  |
| 11,200.0                              | 0.00            | 0.00        | 11,126.9              | -870.7       | -406.0       | -867.7                  | 0.00                    | 0.00                   | 0.00                  |
| 11,300.0                              | 0.00            | 0.00        | 11,226.9              | -870.7       | -406.0       | -867.7                  | 0.00                    | 0.00                   | 0.00                  |
| 11,400.0                              | 0.00            | 0.00        | 11,326.9              | -870.7       | -406.0       | -867.7                  | 0.00                    | 0.00                   | 0.00                  |
| 11,400.1                              | 0.00            | 0.00        | 11,327.0              | -870.7       | -406.0       | -867.7                  | 0.00                    | 0.00                   | 0.00                  |
| <b>3rd Bone Spring Carb</b>           |                 |             |                       |              |              |                         |                         |                        |                       |
| 11,500.0                              | 0.00            | 0.00        | 11,426.9              | -870.7       | -406.0       | -867.7                  | 0.00                    | 0.00                   | 0.00                  |
| 11,600.0                              | 0.00            | 0.00        | 11,526.9              | -870.7       | -406.0       | -867.7                  | 0.00                    | 0.00                   | 0.00                  |
| 11,700.0                              | 0.00            | 0.00        | 11,626.9              | -870.7       | -406.0       | -867.7                  | 0.00                    | 0.00                   | 0.00                  |

## Planning Report

|                  |                           |                                     |                             |
|------------------|---------------------------|-------------------------------------|-----------------------------|
| <b>Database:</b> | EDM 5000.1 Single User Db | <b>Local Co-ordinate Reference:</b> | Well 222H                   |
| <b>Company:</b>  | Tap Rock Operating, LLC.  | <b>TVD Reference:</b>               | WELL @ 3564.0usft (26' RKB) |
| <b>Project:</b>  | Lea County, NM (NAD83)    | <b>MD Reference:</b>                | WELL @ 3564.0usft (26' RKB) |
| <b>Site:</b>     | Apollo State COM          | <b>North Reference:</b>             | Grid                        |
| <b>Well:</b>     | 222H                      | <b>Survey Calculation Method:</b>   | Minimum Curvature           |
| <b>Wellbore:</b> | OH                        |                                     |                             |
| <b>Design:</b>   | Plan #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) |
| 11,800.0                               | 0.00            | 0.00        | 11,726.9              | -870.7       | -406.0       | -867.7                  | 0.00                    | 0.00                   | 0.00                  |
| 11,900.0                               | 0.00            | 0.00        | 11,826.9              | -870.7       | -406.0       | -867.7                  | 0.00                    | 0.00                   | 0.00                  |
| 11,996.1                               | 0.00            | 0.00        | 11,923.0              | -870.7       | -406.0       | -867.7                  | 0.00                    | 0.00                   | 0.00                  |
| <b>3rd Bone Spring Sand</b>            |                 |             |                       |              |              |                         |                         |                        |                       |
| 12,000.0                               | 0.00            | 0.00        | 11,926.9              | -870.7       | -406.0       | -867.7                  | 0.00                    | 0.00                   | 0.00                  |
| 12,100.0                               | 0.00            | 0.00        | 12,026.9              | -870.7       | -406.0       | -867.7                  | 0.00                    | 0.00                   | 0.00                  |
| 12,200.0                               | 0.00            | 0.00        | 12,126.9              | -870.7       | -406.0       | -867.7                  | 0.00                    | 0.00                   | 0.00                  |
| 12,293.1                               | 0.00            | 0.00        | 12,220.0              | -870.7       | -406.0       | -867.7                  | 0.00                    | 0.00                   | 0.00                  |
| <b>3rd BS W Sand</b>                   |                 |             |                       |              |              |                         |                         |                        |                       |
| 12,300.0                               | 0.00            | 0.00        | 12,226.9              | -870.7       | -406.0       | -867.7                  | 0.00                    | 0.00                   | 0.00                  |
| 12,331.1                               | 0.00            | 0.00        | 12,258.0              | -870.7       | -406.0       | -867.7                  | 0.00                    | 0.00                   | 0.00                  |
| <b>Wolfcamp A X Sand</b>               |                 |             |                       |              |              |                         |                         |                        |                       |
| 12,400.0                               | 0.00            | 0.00        | 12,326.9              | -870.7       | -406.0       | -867.7                  | 0.00                    | 0.00                   | 0.00                  |
| 12,413.1                               | 0.00            | 0.00        | 12,340.0              | -870.7       | -406.0       | -867.7                  | 0.00                    | 0.00                   | 0.00                  |
| <b>Start Build 10.00</b>               |                 |             |                       |              |              |                         |                         |                        |                       |
| 12,450.0                               | 3.69            | 3.90        | 12,376.8              | -869.5       | -405.9       | -866.5                  | 10.00                   | 10.00                  | 10.58                 |
| 12,494.4                               | 8.13            | 3.90        | 12,421.0              | -865.0       | -405.6       | -862.0                  | 10.00                   | 10.00                  | 0.00                  |
| <b>Wolfcamp A Y Sand</b>               |                 |             |                       |              |              |                         |                         |                        |                       |
| 12,500.0                               | 8.69            | 3.90        | 12,426.5              | -864.1       | -405.6       | -861.1                  | 10.00                   | 10.00                  | 0.00                  |
| 12,550.0                               | 13.69           | 3.90        | 12,475.6              | -854.5       | -404.9       | -851.5                  | 10.00                   | 10.00                  | 0.00                  |
| 12,600.0                               | 18.69           | 3.90        | 12,523.6              | -840.6       | -404.0       | -837.6                  | 10.00                   | 10.00                  | 0.00                  |
| 12,604.7                               | 19.15           | 3.90        | 12,528.0              | -839.0       | -403.9       | -836.1                  | 10.00                   | 10.00                  | 0.00                  |
| <b>Wolfcamp A Lower</b>                |                 |             |                       |              |              |                         |                         |                        |                       |
| 12,650.0                               | 23.68           | 3.90        | 12,570.2              | -822.5       | -402.7       | -819.6                  | 10.00                   | 10.00                  | 0.00                  |
| 12,700.0                               | 28.68           | 3.90        | 12,615.0              | -800.5       | -401.2       | -797.6                  | 10.00                   | 10.00                  | 0.00                  |
| 12,750.0                               | 33.68           | 3.90        | 12,657.8              | -774.7       | -399.5       | -771.8                  | 10.00                   | 10.00                  | 0.00                  |
| 12,800.0                               | 38.68           | 3.90        | 12,698.1              | -745.3       | -397.5       | -742.3                  | 10.00                   | 10.00                  | 0.00                  |
| 12,850.0                               | 43.68           | 3.90        | 12,735.8              | -712.4       | -395.2       | -709.5                  | 10.00                   | 10.00                  | 0.00                  |
| 12,900.0                               | 48.68           | 3.90        | 12,770.4              | -676.5       | -392.8       | -673.6                  | 10.00                   | 10.00                  | 0.00                  |
| 12,950.0                               | 53.68           | 3.90        | 12,801.7              | -637.6       | -390.1       | -634.7                  | 10.00                   | 10.00                  | 0.00                  |
| 13,000.0                               | 58.68           | 3.90        | 12,829.5              | -596.2       | -387.3       | -593.3                  | 10.00                   | 10.00                  | 0.00                  |
| 13,050.0                               | 63.68           | 3.90        | 12,853.6              | -552.5       | -384.3       | -549.6                  | 10.00                   | 10.00                  | 0.00                  |
| 13,100.0                               | 68.68           | 3.90        | 12,873.8              | -506.9       | -381.2       | -504.0                  | 10.00                   | 10.00                  | 0.00                  |
| 13,100.6                               | 68.74           | 3.90        | 12,874.0              | -506.3       | -381.2       | -503.5                  | 10.00                   | 10.00                  | 0.00                  |
| <b>Wolfcamp B</b>                      |                 |             |                       |              |              |                         |                         |                        |                       |
| 13,150.0                               | 73.68           | 3.90        | 12,889.9              | -459.6       | -378.0       | -456.9                  | 10.00                   | 10.00                  | 0.00                  |
| 13,200.0                               | 78.68           | 3.90        | 12,901.9              | -411.2       | -374.7       | -408.5                  | 10.00                   | 10.00                  | 0.00                  |
| 13,250.0                               | 83.68           | 3.90        | 12,909.5              | -361.9       | -371.3       | -359.2                  | 10.00                   | 10.00                  | 0.00                  |
| 13,300.0                               | 88.68           | 3.90        | 12,912.8              | -312.2       | -367.9       | -309.5                  | 10.00                   | 10.00                  | 0.00                  |
| 13,313.3                               | 90.01           | 3.90        | 12,913.0              | -298.9       | -367.0       | -296.2                  | 10.00                   | 10.00                  | 0.00                  |
| <b>Start DLS 2.00 TFO -89.98</b>       |                 |             |                       |              |              |                         |                         |                        |                       |
| 13,400.0                               | 90.01           | 2.17        | 12,913.0              | -212.3       | -362.4       | -209.7                  | 2.00                    | 0.00                   | -2.00                 |
| 13,500.0                               | 90.01           | 0.17        | 12,913.0              | -112.4       | -360.4       | -109.7                  | 2.00                    | 0.00                   | -2.00                 |
| 13,529.2                               | 90.01           | 359.58      | 12,913.0              | -83.2        | -360.5       | -80.5                   | 2.00                    | 0.00                   | -2.00                 |
| <b>Start 9659.4 hold at 13529.2 MD</b> |                 |             |                       |              |              |                         |                         |                        |                       |
| 13,600.0                               | 90.01           | 359.58      | 12,912.9              | -12.4        | -361.0       | -9.7                    | 0.00                    | 0.00                   | 0.00                  |
| 13,700.0                               | 90.01           | 359.58      | 12,912.9              | 87.6         | -361.7       | 90.3                    | 0.00                    | 0.00                   | 0.00                  |
| 13,800.0                               | 90.01           | 359.58      | 12,912.9              | 187.6        | -362.4       | 190.3                   | 0.00                    | 0.00                   | 0.00                  |
| 13,900.0                               | 90.01           | 359.58      | 12,912.9              | 287.6        | -363.2       | 290.3                   | 0.00                    | 0.00                   | 0.00                  |
| 14,000.0                               | 90.01           | 359.58      | 12,912.9              | 387.6        | -363.9       | 390.3                   | 0.00                    | 0.00                   | 0.00                  |
| 14,100.0                               | 90.01           | 359.58      | 12,912.8              | 487.6        | -364.6       | 490.3                   | 0.00                    | 0.00                   | 0.00                  |
| 14,200.0                               | 90.01           | 359.58      | 12,912.8              | 587.6        | -365.4       | 590.3                   | 0.00                    | 0.00                   | 0.00                  |
| 14,300.0                               | 90.01           | 359.58      | 12,912.8              | 687.6        | -366.1       | 690.3                   | 0.00                    | 0.00                   | 0.00                  |

## Planning Report

|                  |                           |                                     |                             |
|------------------|---------------------------|-------------------------------------|-----------------------------|
| <b>Database:</b> | EDM 5000.1 Single User Db | <b>Local Co-ordinate Reference:</b> | Well 222H                   |
| <b>Company:</b>  | Tap Rock Operating, LLC.  | <b>TVD Reference:</b>               | WELL @ 3564.0usft (26' RKB) |
| <b>Project:</b>  | Lea County, NM (NAD83)    | <b>MD Reference:</b>                | WELL @ 3564.0usft (26' RKB) |
| <b>Site:</b>     | Apollo State COM          | <b>North Reference:</b>             | Grid                        |
| <b>Well:</b>     | 222H                      | <b>Survey Calculation Method:</b>   | Minimum Curvature           |
| <b>Wellbore:</b> | OH                        |                                     |                             |
| <b>Design:</b>   | Plan #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) |
| 14,400.0              | 90.01           | 359.58      | 12,912.8              | 787.6        | -366.8       | 790.3                   | 0.00                    | 0.00                   | 0.00                  |
| 14,500.0              | 90.01           | 359.58      | 12,912.8              | 887.6        | -367.6       | 890.3                   | 0.00                    | 0.00                   | 0.00                  |
| 14,600.0              | 90.01           | 359.58      | 12,912.7              | 987.6        | -368.3       | 990.3                   | 0.00                    | 0.00                   | 0.00                  |
| 14,700.0              | 90.01           | 359.58      | 12,912.7              | 1,087.6      | -369.0       | 1,090.3                 | 0.00                    | 0.00                   | 0.00                  |
| 14,800.0              | 90.01           | 359.58      | 12,912.7              | 1,187.6      | -369.8       | 1,190.3                 | 0.00                    | 0.00                   | 0.00                  |
| 14,900.0              | 90.01           | 359.58      | 12,912.7              | 1,287.6      | -370.5       | 1,290.3                 | 0.00                    | 0.00                   | 0.00                  |
| 15,000.0              | 90.01           | 359.58      | 12,912.7              | 1,387.6      | -371.2       | 1,390.3                 | 0.00                    | 0.00                   | 0.00                  |
| 15,100.0              | 90.01           | 359.58      | 12,912.6              | 1,487.6      | -371.9       | 1,490.3                 | 0.00                    | 0.00                   | 0.00                  |
| 15,200.0              | 90.01           | 359.58      | 12,912.6              | 1,587.6      | -372.7       | 1,590.3                 | 0.00                    | 0.00                   | 0.00                  |
| 15,300.0              | 90.01           | 359.58      | 12,912.6              | 1,687.6      | -373.4       | 1,690.3                 | 0.00                    | 0.00                   | 0.00                  |
| 15,400.0              | 90.01           | 359.58      | 12,912.6              | 1,787.6      | -374.1       | 1,790.3                 | 0.00                    | 0.00                   | 0.00                  |
| 15,500.0              | 90.01           | 359.58      | 12,912.6              | 1,887.6      | -374.9       | 1,890.3                 | 0.00                    | 0.00                   | 0.00                  |
| 15,600.0              | 90.01           | 359.58      | 12,912.5              | 1,987.6      | -375.6       | 1,990.3                 | 0.00                    | 0.00                   | 0.00                  |
| 15,700.0              | 90.01           | 359.58      | 12,912.5              | 2,087.6      | -376.3       | 2,090.3                 | 0.00                    | 0.00                   | 0.00                  |
| 15,800.0              | 90.01           | 359.58      | 12,912.5              | 2,187.6      | -377.1       | 2,190.3                 | 0.00                    | 0.00                   | 0.00                  |
| 15,900.0              | 90.01           | 359.58      | 12,912.5              | 2,287.6      | -377.8       | 2,290.3                 | 0.00                    | 0.00                   | 0.00                  |
| 16,000.0              | 90.01           | 359.58      | 12,912.5              | 2,387.6      | -378.5       | 2,390.3                 | 0.00                    | 0.00                   | 0.00                  |
| 16,100.0              | 90.01           | 359.58      | 12,912.4              | 2,487.6      | -379.2       | 2,490.3                 | 0.00                    | 0.00                   | 0.00                  |
| 16,200.0              | 90.01           | 359.58      | 12,912.4              | 2,587.6      | -380.0       | 2,590.3                 | 0.00                    | 0.00                   | 0.00                  |
| 16,300.0              | 90.01           | 359.58      | 12,912.4              | 2,687.6      | -380.7       | 2,690.3                 | 0.00                    | 0.00                   | 0.00                  |
| 16,400.0              | 90.01           | 359.58      | 12,912.4              | 2,787.6      | -381.4       | 2,790.3                 | 0.00                    | 0.00                   | 0.00                  |
| 16,500.0              | 90.01           | 359.58      | 12,912.4              | 2,887.6      | -382.2       | 2,890.3                 | 0.00                    | 0.00                   | 0.00                  |
| 16,600.0              | 90.01           | 359.58      | 12,912.3              | 2,987.5      | -382.9       | 2,990.3                 | 0.00                    | 0.00                   | 0.00                  |
| 16,700.0              | 90.01           | 359.58      | 12,912.3              | 3,087.5      | -383.6       | 3,090.3                 | 0.00                    | 0.00                   | 0.00                  |
| 16,800.0              | 90.01           | 359.58      | 12,912.3              | 3,187.5      | -384.4       | 3,190.3                 | 0.00                    | 0.00                   | 0.00                  |
| 16,900.0              | 90.01           | 359.58      | 12,912.3              | 3,287.5      | -385.1       | 3,290.3                 | 0.00                    | 0.00                   | 0.00                  |
| 17,000.0              | 90.01           | 359.58      | 12,912.3              | 3,387.5      | -385.8       | 3,390.3                 | 0.00                    | 0.00                   | 0.00                  |
| 17,100.0              | 90.01           | 359.58      | 12,912.2              | 3,487.5      | -386.5       | 3,490.3                 | 0.00                    | 0.00                   | 0.00                  |
| 17,200.0              | 90.01           | 359.58      | 12,912.2              | 3,587.5      | -387.3       | 3,590.3                 | 0.00                    | 0.00                   | 0.00                  |
| 17,300.0              | 90.01           | 359.58      | 12,912.2              | 3,687.5      | -388.0       | 3,690.3                 | 0.00                    | 0.00                   | 0.00                  |
| 17,400.0              | 90.01           | 359.58      | 12,912.2              | 3,787.5      | -388.7       | 3,790.3                 | 0.00                    | 0.00                   | 0.00                  |
| 17,500.0              | 90.01           | 359.58      | 12,912.2              | 3,887.5      | -389.5       | 3,890.3                 | 0.00                    | 0.00                   | 0.00                  |
| 17,600.0              | 90.01           | 359.58      | 12,912.1              | 3,987.5      | -390.2       | 3,990.3                 | 0.00                    | 0.00                   | 0.00                  |
| 17,700.0              | 90.01           | 359.58      | 12,912.1              | 4,087.5      | -390.9       | 4,090.3                 | 0.00                    | 0.00                   | 0.00                  |
| 17,800.0              | 90.01           | 359.58      | 12,912.1              | 4,187.5      | -391.7       | 4,190.3                 | 0.00                    | 0.00                   | 0.00                  |
| 17,900.0              | 90.01           | 359.58      | 12,912.1              | 4,287.5      | -392.4       | 4,290.3                 | 0.00                    | 0.00                   | 0.00                  |
| 18,000.0              | 90.01           | 359.58      | 12,912.1              | 4,387.5      | -393.1       | 4,390.3                 | 0.00                    | 0.00                   | 0.00                  |
| 18,100.0              | 90.01           | 359.58      | 12,912.0              | 4,487.5      | -393.8       | 4,490.3                 | 0.00                    | 0.00                   | 0.00                  |
| 18,200.0              | 90.01           | 359.58      | 12,912.0              | 4,587.5      | -394.6       | 4,590.3                 | 0.00                    | 0.00                   | 0.00                  |
| 18,300.0              | 90.01           | 359.58      | 12,912.0              | 4,687.5      | -395.3       | 4,690.3                 | 0.00                    | 0.00                   | 0.00                  |
| 18,400.0              | 90.01           | 359.58      | 12,912.0              | 4,787.5      | -396.0       | 4,790.3                 | 0.00                    | 0.00                   | 0.00                  |
| 18,500.0              | 90.01           | 359.58      | 12,912.0              | 4,887.5      | -396.8       | 4,890.3                 | 0.00                    | 0.00                   | 0.00                  |
| 18,600.0              | 90.01           | 359.58      | 12,911.9              | 4,987.5      | -397.5       | 4,990.3                 | 0.00                    | 0.00                   | 0.00                  |
| 18,700.0              | 90.01           | 359.58      | 12,911.9              | 5,087.5      | -398.2       | 5,090.3                 | 0.00                    | 0.00                   | 0.00                  |
| 18,800.0              | 90.01           | 359.58      | 12,911.9              | 5,187.5      | -399.0       | 5,190.3                 | 0.00                    | 0.00                   | 0.00                  |
| 18,900.0              | 90.01           | 359.58      | 12,911.9              | 5,287.5      | -399.7       | 5,290.3                 | 0.00                    | 0.00                   | 0.00                  |
| 19,000.0              | 90.01           | 359.58      | 12,911.8              | 5,387.5      | -400.4       | 5,390.3                 | 0.00                    | 0.00                   | 0.00                  |
| 19,100.0              | 90.01           | 359.58      | 12,911.8              | 5,487.5      | -401.1       | 5,490.3                 | 0.00                    | 0.00                   | 0.00                  |
| 19,200.0              | 90.01           | 359.58      | 12,911.8              | 5,587.5      | -401.9       | 5,590.3                 | 0.00                    | 0.00                   | 0.00                  |
| 19,300.0              | 90.01           | 359.58      | 12,911.8              | 5,687.5      | -402.6       | 5,690.3                 | 0.00                    | 0.00                   | 0.00                  |
| 19,400.0              | 90.01           | 359.58      | 12,911.8              | 5,787.5      | -403.3       | 5,790.3                 | 0.00                    | 0.00                   | 0.00                  |
| 19,500.0              | 90.01           | 359.58      | 12,911.7              | 5,887.5      | -404.1       | 5,890.3                 | 0.00                    | 0.00                   | 0.00                  |
| 19,600.0              | 90.01           | 359.58      | 12,911.7              | 5,987.5      | -404.8       | 5,990.3                 | 0.00                    | 0.00                   | 0.00                  |
| 19,700.0              | 90.01           | 359.58      | 12,911.7              | 6,087.5      | -405.5       | 6,090.3                 | 0.00                    | 0.00                   | 0.00                  |

## Planning Report

|                  |                           |                                     |                             |
|------------------|---------------------------|-------------------------------------|-----------------------------|
| <b>Database:</b> | EDM 5000.1 Single User Db | <b>Local Co-ordinate Reference:</b> | Well 222H                   |
| <b>Company:</b>  | Tap Rock Operating, LLC.  | <b>TVD Reference:</b>               | WELL @ 3564.0usft (26' RKB) |
| <b>Project:</b>  | Lea County, NM (NAD83)    | <b>MD Reference:</b>                | WELL @ 3564.0usft (26' RKB) |
| <b>Site:</b>     | Apollo State COM          | <b>North Reference:</b>             | Grid                        |
| <b>Well:</b>     | 222H                      | <b>Survey Calculation Method:</b>   | Minimum Curvature           |
| <b>Wellbore:</b> | OH                        |                                     |                             |
| <b>Design:</b>   | Plan #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) |  |
| 19,800.0              | 90.01           | 359.58      | 12,911.7              | 6,187.5      | -406.3       | 6,190.3                 | 0.00                    | 0.00                   | 0.00                  |  |
| 19,900.0              | 90.01           | 359.58      | 12,911.7              | 6,287.5      | -407.0       | 6,290.3                 | 0.00                    | 0.00                   | 0.00                  |  |
| 20,000.0              | 90.01           | 359.58      | 12,911.6              | 6,387.5      | -407.7       | 6,390.3                 | 0.00                    | 0.00                   | 0.00                  |  |
| 20,100.0              | 90.01           | 359.58      | 12,911.6              | 6,487.5      | -408.4       | 6,490.3                 | 0.00                    | 0.00                   | 0.00                  |  |
| 20,200.0              | 90.01           | 359.58      | 12,911.6              | 6,587.5      | -409.2       | 6,590.3                 | 0.00                    | 0.00                   | 0.00                  |  |
| 20,300.0              | 90.01           | 359.58      | 12,911.6              | 6,687.4      | -409.9       | 6,690.3                 | 0.00                    | 0.00                   | 0.00                  |  |
| 20,400.0              | 90.01           | 359.58      | 12,911.6              | 6,787.4      | -410.6       | 6,790.3                 | 0.00                    | 0.00                   | 0.00                  |  |
| 20,500.0              | 90.01           | 359.58      | 12,911.5              | 6,887.4      | -411.4       | 6,890.3                 | 0.00                    | 0.00                   | 0.00                  |  |
| 20,600.0              | 90.01           | 359.58      | 12,911.5              | 6,987.4      | -412.1       | 6,990.3                 | 0.00                    | 0.00                   | 0.00                  |  |
| 20,700.0              | 90.01           | 359.58      | 12,911.5              | 7,087.4      | -412.8       | 7,090.3                 | 0.00                    | 0.00                   | 0.00                  |  |
| 20,800.0              | 90.01           | 359.58      | 12,911.5              | 7,187.4      | -413.6       | 7,190.3                 | 0.00                    | 0.00                   | 0.00                  |  |
| 20,900.0              | 90.01           | 359.58      | 12,911.5              | 7,287.4      | -414.3       | 7,290.3                 | 0.00                    | 0.00                   | 0.00                  |  |
| 21,000.0              | 90.01           | 359.58      | 12,911.4              | 7,387.4      | -415.0       | 7,390.3                 | 0.00                    | 0.00                   | 0.00                  |  |
| 21,100.0              | 90.01           | 359.58      | 12,911.4              | 7,487.4      | -415.8       | 7,490.3                 | 0.00                    | 0.00                   | 0.00                  |  |
| 21,200.0              | 90.01           | 359.58      | 12,911.4              | 7,587.4      | -416.5       | 7,590.3                 | 0.00                    | 0.00                   | 0.00                  |  |
| 21,300.0              | 90.01           | 359.58      | 12,911.4              | 7,687.4      | -417.2       | 7,690.3                 | 0.00                    | 0.00                   | 0.00                  |  |
| 21,400.0              | 90.01           | 359.58      | 12,911.4              | 7,787.4      | -417.9       | 7,790.3                 | 0.00                    | 0.00                   | 0.00                  |  |
| 21,500.0              | 90.01           | 359.58      | 12,911.3              | 7,887.4      | -418.7       | 7,890.3                 | 0.00                    | 0.00                   | 0.00                  |  |
| 21,600.0              | 90.01           | 359.58      | 12,911.3              | 7,987.4      | -419.4       | 7,990.3                 | 0.00                    | 0.00                   | 0.00                  |  |
| 21,700.0              | 90.01           | 359.58      | 12,911.3              | 8,087.4      | -420.1       | 8,090.3                 | 0.00                    | 0.00                   | 0.00                  |  |
| 21,800.0              | 90.01           | 359.58      | 12,911.3              | 8,187.4      | -420.9       | 8,190.3                 | 0.00                    | 0.00                   | 0.00                  |  |
| 21,900.0              | 90.01           | 359.58      | 12,911.3              | 8,287.4      | -421.6       | 8,290.3                 | 0.00                    | 0.00                   | 0.00                  |  |
| 22,000.0              | 90.01           | 359.58      | 12,911.2              | 8,387.4      | -422.3       | 8,390.3                 | 0.00                    | 0.00                   | 0.00                  |  |
| 22,100.0              | 90.01           | 359.58      | 12,911.2              | 8,487.4      | -423.1       | 8,490.3                 | 0.00                    | 0.00                   | 0.00                  |  |
| 22,200.0              | 90.01           | 359.58      | 12,911.2              | 8,587.4      | -423.8       | 8,590.3                 | 0.00                    | 0.00                   | 0.00                  |  |
| 22,300.0              | 90.01           | 359.58      | 12,911.2              | 8,687.4      | -424.5       | 8,690.3                 | 0.00                    | 0.00                   | 0.00                  |  |
| 22,400.0              | 90.01           | 359.58      | 12,911.2              | 8,787.4      | -425.2       | 8,790.3                 | 0.00                    | 0.00                   | 0.00                  |  |
| 22,500.0              | 90.01           | 359.58      | 12,911.1              | 8,887.4      | -426.0       | 8,890.3                 | 0.00                    | 0.00                   | 0.00                  |  |
| 22,600.0              | 90.01           | 359.58      | 12,911.1              | 8,987.4      | -426.7       | 8,990.3                 | 0.00                    | 0.00                   | 0.00                  |  |
| 22,700.0              | 90.01           | 359.58      | 12,911.1              | 9,087.4      | -427.4       | 9,090.3                 | 0.00                    | 0.00                   | 0.00                  |  |
| 22,800.0              | 90.01           | 359.58      | 12,911.1              | 9,187.4      | -428.2       | 9,190.3                 | 0.00                    | 0.00                   | 0.00                  |  |
| 22,900.0              | 90.01           | 359.58      | 12,911.1              | 9,287.4      | -428.9       | 9,290.3                 | 0.00                    | 0.00                   | 0.00                  |  |
| 23,000.0              | 90.01           | 359.58      | 12,911.0              | 9,387.4      | -429.6       | 9,390.3                 | 0.00                    | 0.00                   | 0.00                  |  |
| 23,100.0              | 90.01           | 359.58      | 12,911.0              | 9,487.4      | -430.4       | 9,490.3                 | 0.00                    | 0.00                   | 0.00                  |  |
| 23,188.6              | 90.01           | 359.58      | 12,911.0              | 9,576.0      | -431.0       | 9,578.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| 23,200.0              | 90.01           | 359.58      | 12,911.0              | 9,587.4      | -431.1       | 9,590.3                 | 0.00                    | 0.00                   | 0.00                  |  |
| 23,258.6              | 90.01           | 359.58      | 12,911.0              | 9,646.0      | -431.5       | 9,648.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| TD at 23258.6 MD      |                 |             |                       |              |              |                         |                         |                        |                       |  |

## Planning Report

|                  |                           |                                     |                             |
|------------------|---------------------------|-------------------------------------|-----------------------------|
| <b>Database:</b> | EDM 5000.1 Single User Db | <b>Local Co-ordinate Reference:</b> | Well 222H                   |
| <b>Company:</b>  | Tap Rock Operating, LLC.  | <b>TVD Reference:</b>               | WELL @ 3564.0usft (26' RKB) |
| <b>Project:</b>  | Lea County, NM (NAD83)    | <b>MD Reference:</b>                | WELL @ 3564.0usft (26' RKB) |
| <b>Site:</b>     | Apollo State COM          | <b>North Reference:</b>             | Grid                        |
| <b>Well:</b>     | 222H                      | <b>Survey Calculation Method:</b>   | Minimum Curvature           |
| <b>Wellbore:</b> | OH                        |                                     |                             |
| <b>Design:</b>   | Plan #1                   |                                     |                             |

| Design Targets                                                                               |           |          |          |         |        |            |            |                  |                   |
|----------------------------------------------------------------------------------------------|-----------|----------|----------|---------|--------|------------|------------|------------------|-------------------|
| Target Name                                                                                  |           |          |          |         |        |            |            |                  |                   |
| - hit/miss target                                                                            | Dip Angle | Dip Dir. | TVD      | +N/-S   | +E/-W  | Northing   | Easting    | Latitude         | Longitude         |
| - Shape                                                                                      | (°)       | (°)      | (usft)   | (usft)  | (usft) | (usft)     | (usft)     |                  |                   |
| PBHL_A222H                                                                                   | 0.00      | 0.00     | 12,911.0 | 9,646.0 | -431.0 | 446,341.00 | 774,253.00 | 32° 13' 29.365 N | 103° 34' 48.467 W |
| - plan misses target center by 0.5usft at 23258.6usft MD (12911.0 TVD, 9646.0 N, -431.5 E)   |           |          |          |         |        |            |            |                  |                   |
| - Point                                                                                      |           |          |          |         |        |            |            |                  |                   |
| LTP_A222H                                                                                    | 0.00      | 0.00     | 12,911.0 | 9,576.0 | -431.0 | 446,271.00 | 774,253.00 | 32° 13' 28.672 N | 103° 34' 48.473 W |
| - plan hits target center                                                                    |           |          |          |         |        |            |            |                  |                   |
| - Point                                                                                      |           |          |          |         |        |            |            |                  |                   |
| FTP_A222H                                                                                    | 0.00      | 0.00     | 12,913.0 | -783.0  | -355.0 | 435,912.00 | 774,329.00 | 32° 11' 46.162 N | 103° 34' 48.433 W |
| - plan misses target center by 181.5usft at 12908.6usft MD (12776.0 TVD, -670.0 N, -392.3 E) |           |          |          |         |        |            |            |                  |                   |
| - Point                                                                                      |           |          |          |         |        |            |            |                  |                   |

| Formations |                |                |                      |           |     |               |
|------------|----------------|----------------|----------------------|-----------|-----|---------------|
|            | Measured Depth | Vertical Depth | Name                 | Lithology | Dip | Dip Direction |
|            | (usft)         | (usft)         |                      |           | (°) | (°)           |
|            | 1,167.0        | 1,167.0        | Rustler Anhydrite    |           |     |               |
|            | 1,658.0        | 1,658.0        | Top Salt             |           |     |               |
|            | 4,938.7        | 4,913.0        | Base Salt            |           |     |               |
|            | 5,160.4        | 5,132.0        | Delaware Mountain Gp |           |     |               |
|            | 5,181.7        | 5,153.0        | Lamar                |           |     |               |
|            | 5,223.2        | 5,194.0        | Bell Canyon          |           |     |               |
|            | 5,255.6        | 5,226.0        | Ramsey Sand          |           |     |               |
|            | 6,218.5        | 6,177.0        | Cherry Canyon        |           |     |               |
|            | 7,714.9        | 7,655.0        | Brushy Canyon        |           |     |               |
|            | 9,195.1        | 9,122.0        | Bone Spring Lime     |           |     |               |
|            | 9,299.1        | 9,226.0        | Upper Avalon         |           |     |               |
|            | 9,524.1        | 9,451.0        | Middle Avalon        |           |     |               |
|            | 9,893.1        | 9,820.0        | Lower Avalon         |           |     |               |
|            | 10,190.1       | 10,117.0       | 1st Bone Spring Sand |           |     |               |
|            | 10,456.1       | 10,383.0       | 2nd Bone Spring Carb |           |     |               |
|            | 10,864.1       | 10,791.0       | 2nd Bone Spring Sand |           |     |               |
|            | 11,400.1       | 11,327.0       | 3rd Bone Spring Carb |           |     |               |
|            | 11,996.1       | 11,923.0       | 3rd Bone Spring Sand |           |     |               |
|            | 12,293.1       | 12,220.0       | 3rd BS W Sand        |           |     |               |
|            | 12,331.1       | 12,258.0       | Wolfcamp A X Sand    |           |     |               |
|            | 12,494.4       | 12,421.0       | Wolfcamp A Y Sand    |           |     |               |
|            | 12,604.7       | 12,528.0       | Wolfcamp A Lower     |           |     |               |
|            | 13,100.6       | 12,874.0       | Wolfcamp B           |           |     |               |

## Planning Report

|                  |                           |                                     |                             |
|------------------|---------------------------|-------------------------------------|-----------------------------|
| <b>Database:</b> | EDM 5000.1 Single User Db | <b>Local Co-ordinate Reference:</b> | Well 222H                   |
| <b>Company:</b>  | Tap Rock Operating, LLC.  | <b>TVD Reference:</b>               | WELL @ 3564.0usft (26' RKB) |
| <b>Project:</b>  | Lea County, NM (NAD83)    | <b>MD Reference:</b>                | WELL @ 3564.0usft (26' RKB) |
| <b>Site:</b>     | Apollo State COM          | <b>North Reference:</b>             | Grid                        |
| <b>Well:</b>     | 222H                      | <b>Survey Calculation Method:</b>   | Minimum Curvature           |
| <b>Wellbore:</b> | OH                        |                                     |                             |
| <b>Design:</b>   | Plan #1                   |                                     |                             |

| Plan Annotations            |                             |                   |                 |                                 |
|-----------------------------|-----------------------------|-------------------|-----------------|---------------------------------|
| Measured<br>Depth<br>(usft) | Vertical<br>Depth<br>(usft) | Local Coordinates |                 | Comment                         |
|                             |                             | +N/-S<br>(usft)   | +E/-W<br>(usft) |                                 |
| 2,450.0                     | 2,450.0                     | 0.0               | 0.0             | Start Build 1.50                |
| 3,050.0                     | 3,047.5                     | -42.6             | -19.9           | Start 5540.0 hold at 3050.0 MD  |
| 8,590.0                     | 8,519.3                     | -828.1            | -386.1          | Start DLS 1.50 TFO 180.00       |
| 9,190.0                     | 9,116.9                     | -870.7            | -406.0          | Start 3223.1 hold at 9190.0 MD  |
| 12,413.1                    | 12,340.0                    | -870.7            | -406.0          | Start Build 10.00               |
| 13,313.3                    | 12,913.0                    | -298.9            | -367.0          | Start DLS 2.00 TFO -89.98       |
| 13,529.2                    | 12,913.0                    | -83.2             | -360.5          | Start 9659.4 hold at 13529.2 MD |
| 23,258.6                    | 12,911.0                    | 9,576.0           | -431.0          | TD at 23258.6 MD                |