

Submit a Copy To Appropriate District
Office
District I – (575) 393-6161
1625 N. French Dr., Hobbs, NM 88240
District II – (575) 748-1283
811 S. First St., Artesia, NM 88210
District III – (505) 334-6178
1000 Rio Brazos Rd., Aztec, NM 87410
District IV – (505) 476-3460
1220 S. St. Francis Dr., Santa Fe, NM
87505

State of New Mexico
Energy, Minerals and Natural Resources

Form C-103
Revised July 18, 2013

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

WELL API NO. 30-025-47427
5. Indicate Type of Lease STATE ☒ FEE ☐
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name Apollo State Com
8. Well Number 201H
9. OGRID Number 372043
10. Pool name or Wildcat WC-025 G-09 S243310P;UPPER WOLFCAMP
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3535 GR

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)	
1. Type of Well: Oil Well ☒ Gas Well ☐ Other	
2. Name of Operator TAP ROCK OPERATING, LLC	
3. Address of Operator 523 PARK POINT DR, SUITE 200, GOLDEN, CO 80401	
4. Well Location Unit Letter <u>M</u> : <u>823</u> feet from the <u>South</u> line and <u>550</u> feet from the <u>West</u> line Section <u>21</u> Township <u>24S</u> Range <u>33E</u> NMPM County <u>LEA</u>	
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3535 GR	

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☒	COMMENCE DRILLING OPNS. ☐	P AND A ☐
PULL OR ALTER CASING ☐	MULTIPLE COMPL ☐	CASING/CEMENT JOB ☐	
DOWNHOLE COMMINGLE ☐			
CLOSED-LOOP SYSTEM ☐			
OTHER: ☐		OTHER: ☐	

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Tap Rock is proposing to change the SHL for the Apollo State Com 201H. Due to this change the directional drilling plan has changed and is attached for detail.

Previously approved SHL: 823 FSL, 550 FWL of Section 21, T24S, R33E

New proposed SHL: 888 FSL, 440 FWL of Section 21, T24S, R33E

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Bill Ramsey TITLE Regulatory Analyst DATE 3/9/2021

Type or print name Bill Ramsey E-mail address: bramsey@taprk.com PHONE: 720-238-2787

For State Use Only

APPROVED BY: P Kautz TITLE DATE 03/19/2021
Conditions of Approval (if any):

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
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811 S. First St., Artesia, NM 88210
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District III
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Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
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Phone: (505) 476-3460 Fax: (505) 476-3462

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

¹ API Number 30-025-47427	² Pool Code 98135	³ Pool Name WC-025 G-09 S243310P;UPPER WOLFCAMP
⁴ Property Code 328891	⁵ Property Name APOLLO STATE COM	⁶ Well Number 201H
⁷ OGRID No. #372043	⁸ Operator Name TAP ROCK OPERATING, LLC.	⁹ Elevation 3534'

¹⁰Surface Location

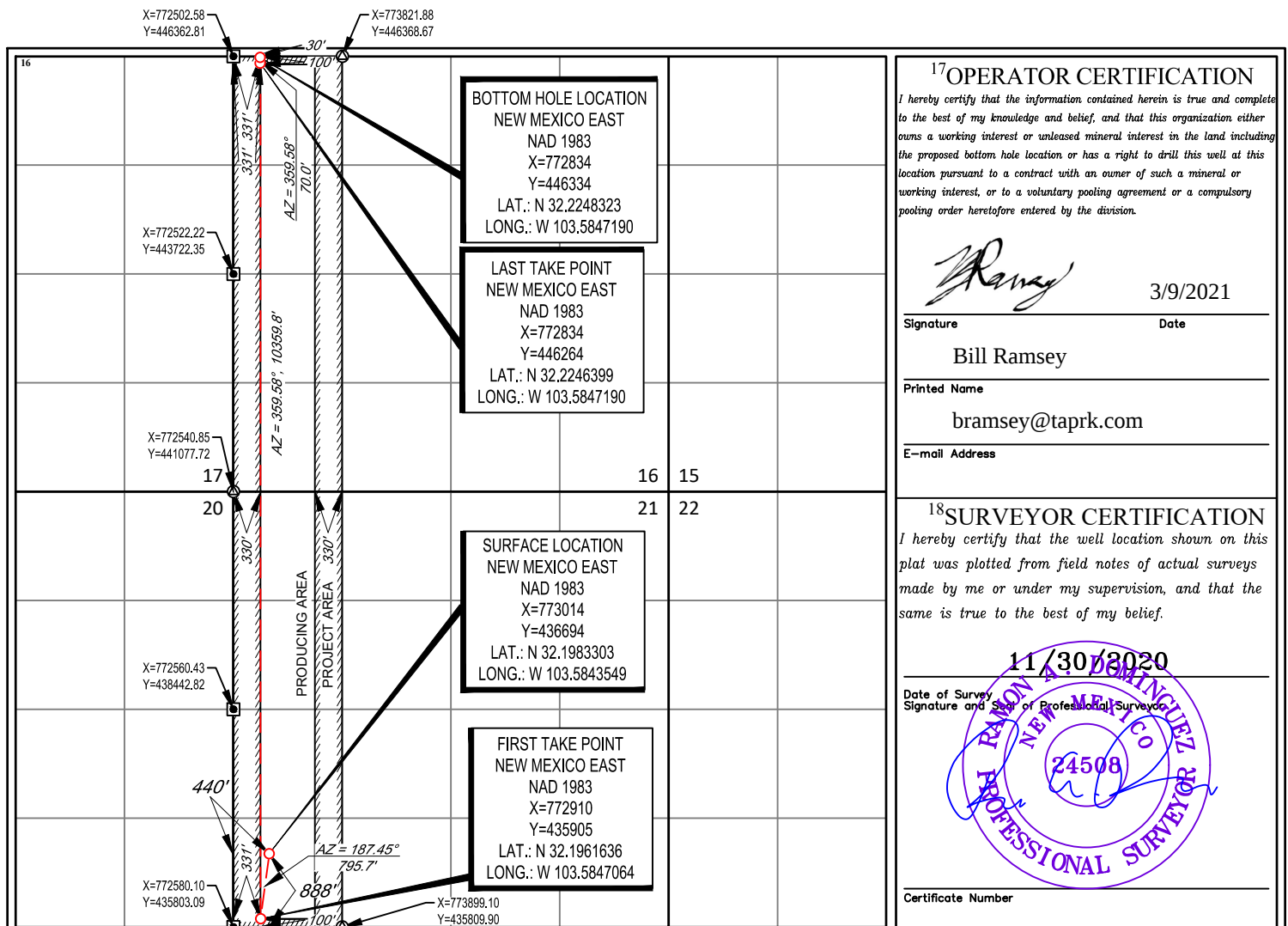
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	21	24-S	33-E	-	888'	SOUTH	440'	WEST	LEA

¹¹Bottom Hole Location If Different From Surface

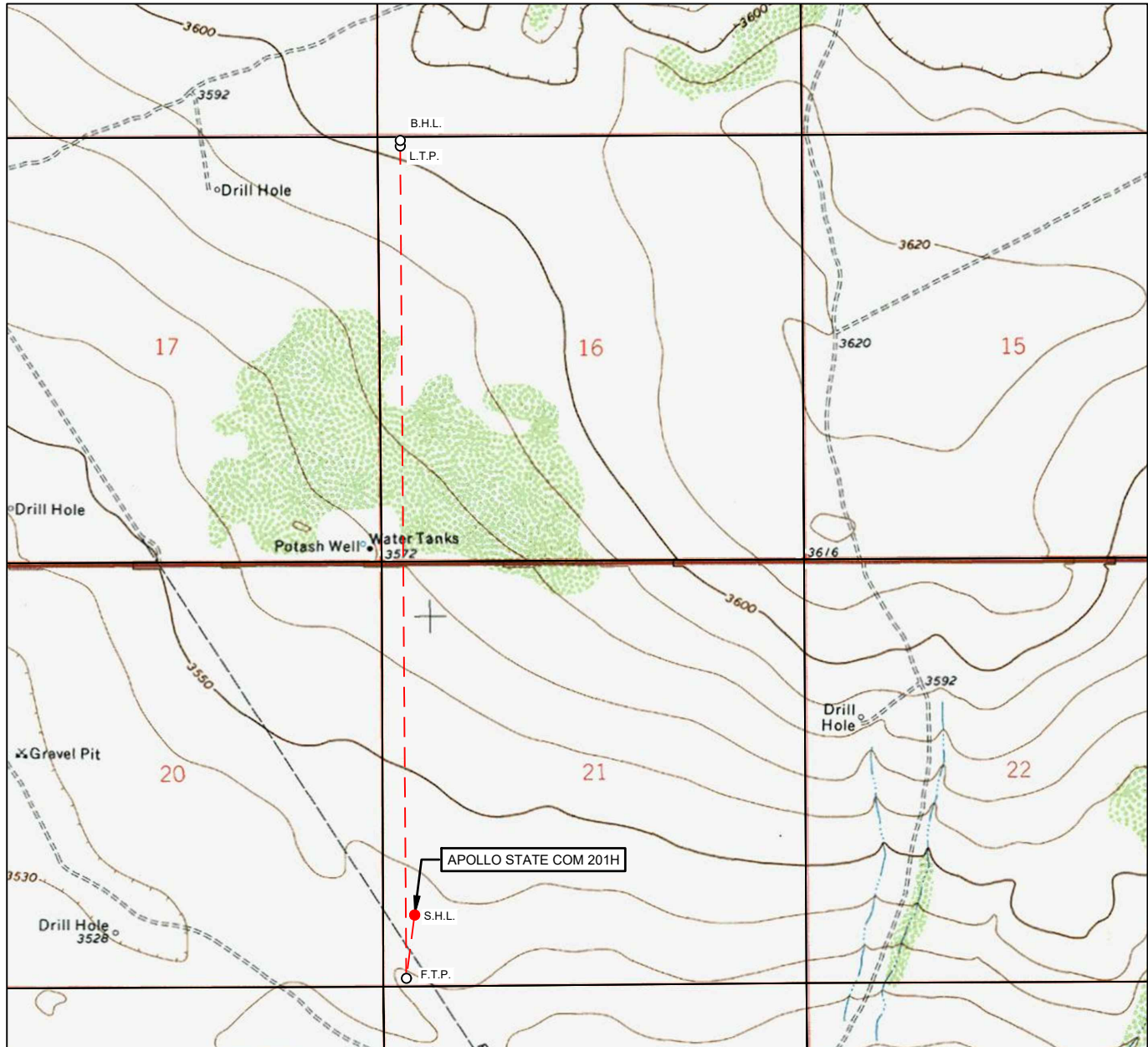
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	16	24-S	33-E	-	30'	NORTH	331'	WEST	LEA

¹² Dedicated Acres 320	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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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.



LOCATION & ELEVATION VERIFICATION MAP

LEASE NAME & WELL NO.: APOLLO STATE COM 201H

SECTION 21 TWP 24-S RGE 33-E SURVEY N.M.P.M.
 COUNTY LEA STATE NM ELEVATION 3534'
 DESCRIPTION 888' FSL & 440' FWL

LATITUDE N 32.1983303 LONGITUDE W 103.5843549

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

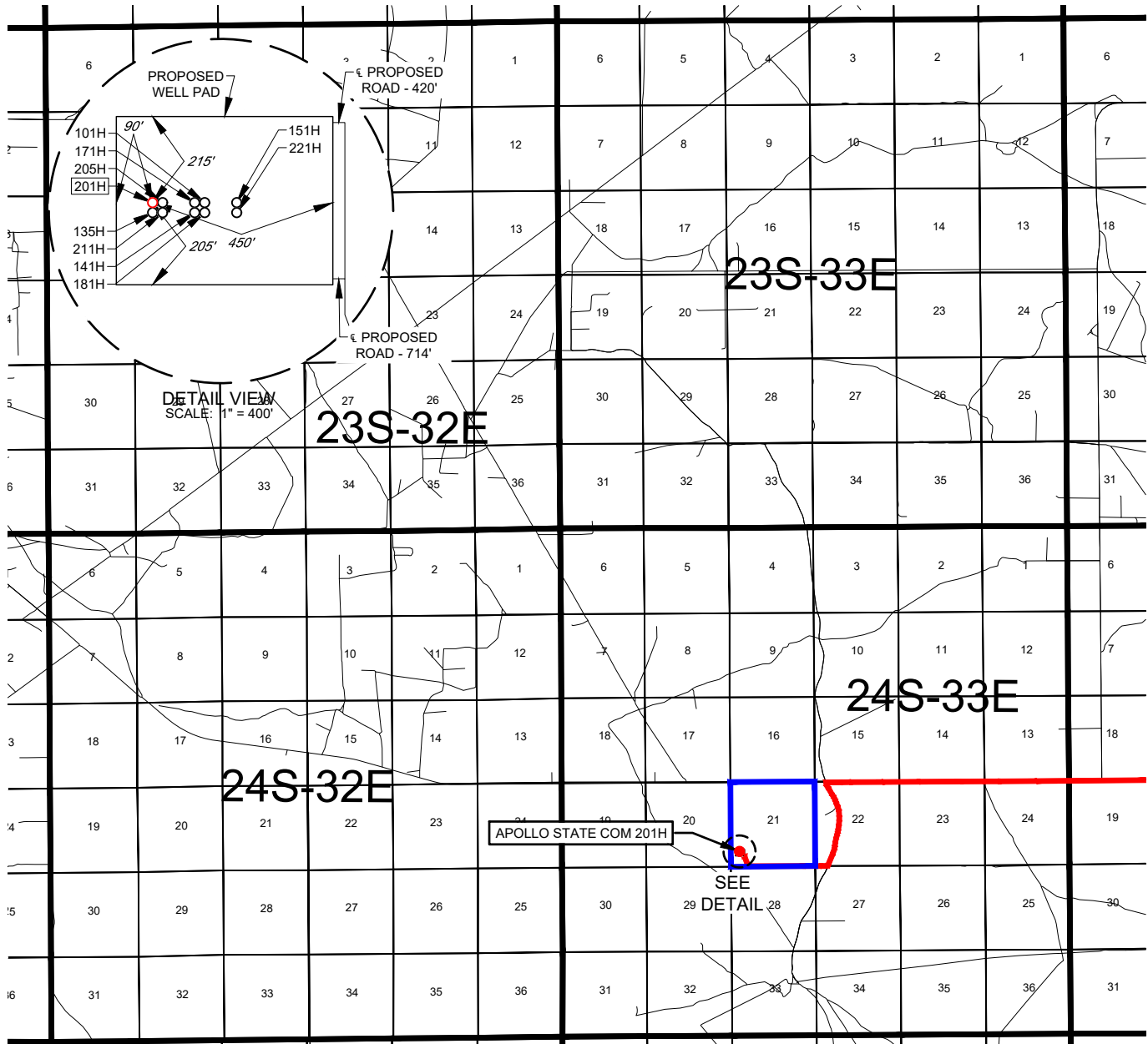
THIS EASEMENT/SERVITUDE LOCATION SHOWN HEREON HAS BEEN SURVEYED ON THE GROUND UNDER MY SUPERVISION AND PREPARED ACCORDING TO THE EVIDENCE FOUND AT THE TIME OF SURVEY, AND DATA PROVIDED BY TAP ROCK OPERATING, LLC. THIS CERTIFICATION IS MADE AND LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS PLAT AND IS NON-TRANSFERABLE. THIS SURVEY IS CERTIFIED FOR THIS TRANSACTION ONLY.

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.



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

EXHIBIT 2
VICINITY MAPLEASE NAME & WELL NO.: APOLLO STATE COM 201HSECTION 21 TWP 24-S RGE 33-E SURVEY N.M.P.M.COUNTY LEA STATE NMDESCRIPTION 888' FSL & 440' FWL

DISTANCE & DIRECTION

FROM INT. OF NM-128. & DELAWARE BASIN RD.. GO WEST ON NM-128
 ±3.3 MILES. THENCE SOUTH (LEFT) ON DIAMOND RD./J-2 ±1.1 MILES,
 THENCE WEST (RIGHT) ON A LEASE RD. ±0.9 MILES, THENCE
 NORTHWEST (RIGHT) ON A PROPOSED RD. ±714 FEET TO A POINT ±488
 FEET SOUTHEAST OF THE LOCATION.

THIS EASEMENT/SERVITUDE 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. 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.

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.



SCALE: 1" = 10000'
 0' 5000' 10000'

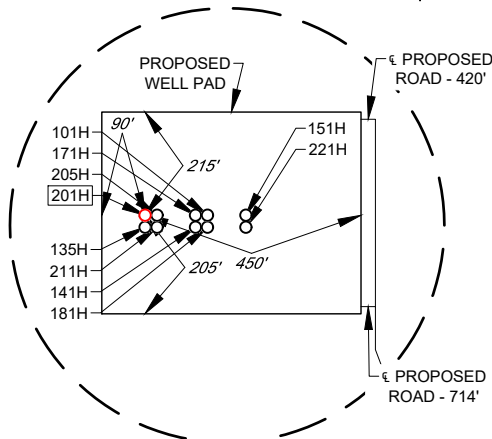
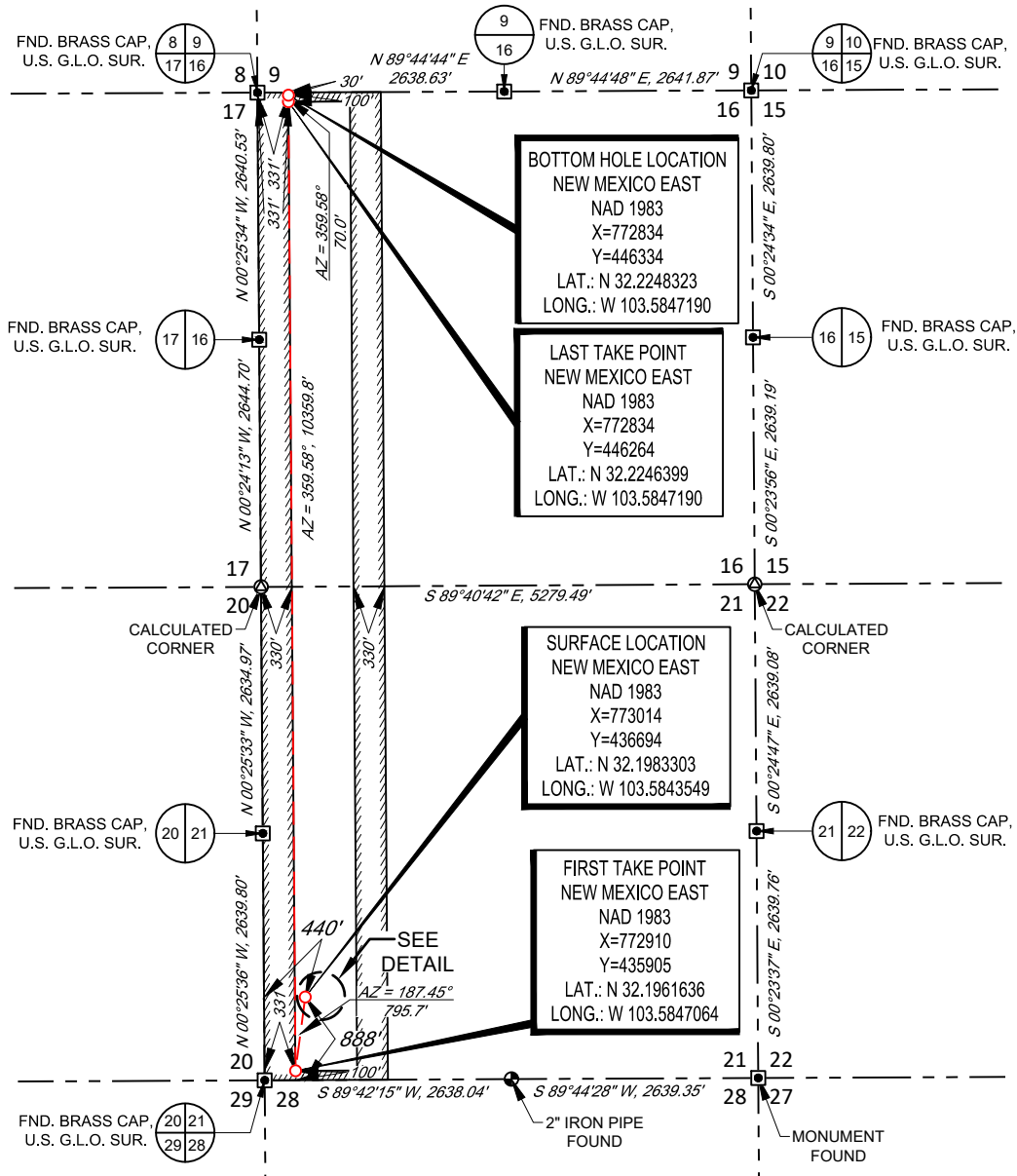


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TAP
ROCK
EXHIBIT 2A

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



DETAIL VIEW
SCALE: 1" = 400'

LEASE NAME & WELL NO.: APOLLO STATE COM 201H

SECTION 21 TWP 24-S RGE 33-E SURVEY N.M.P.M.
COUNTY LEA STATE NM
DESCRIPTION 888' FSL & 440' FWL

DISTANCE & DIRECTION
FROM INT. OF NM-128 & DELAWARE BASIN RD., GO WEST ON NM-128
±3.3 MILES, THENCE SOUTH (LEFT) ON DIAMOND RD./J-2 ±1.1 MILES,
THENCE WEST (RIGHT) ON A LEASE RD. ±0.9 MILES, THENCE
NORTHWEST (RIGHT) ON A PROPOSED RD. ±714 FEET TO A POINT
±488 FEET SOUTHEAST OF THE LOCATION.

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.
THIS EASEMENT/SERVITUDE 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 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.



Ramon A. Dominguez, P.S. No. 24508
February 25, 2021

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
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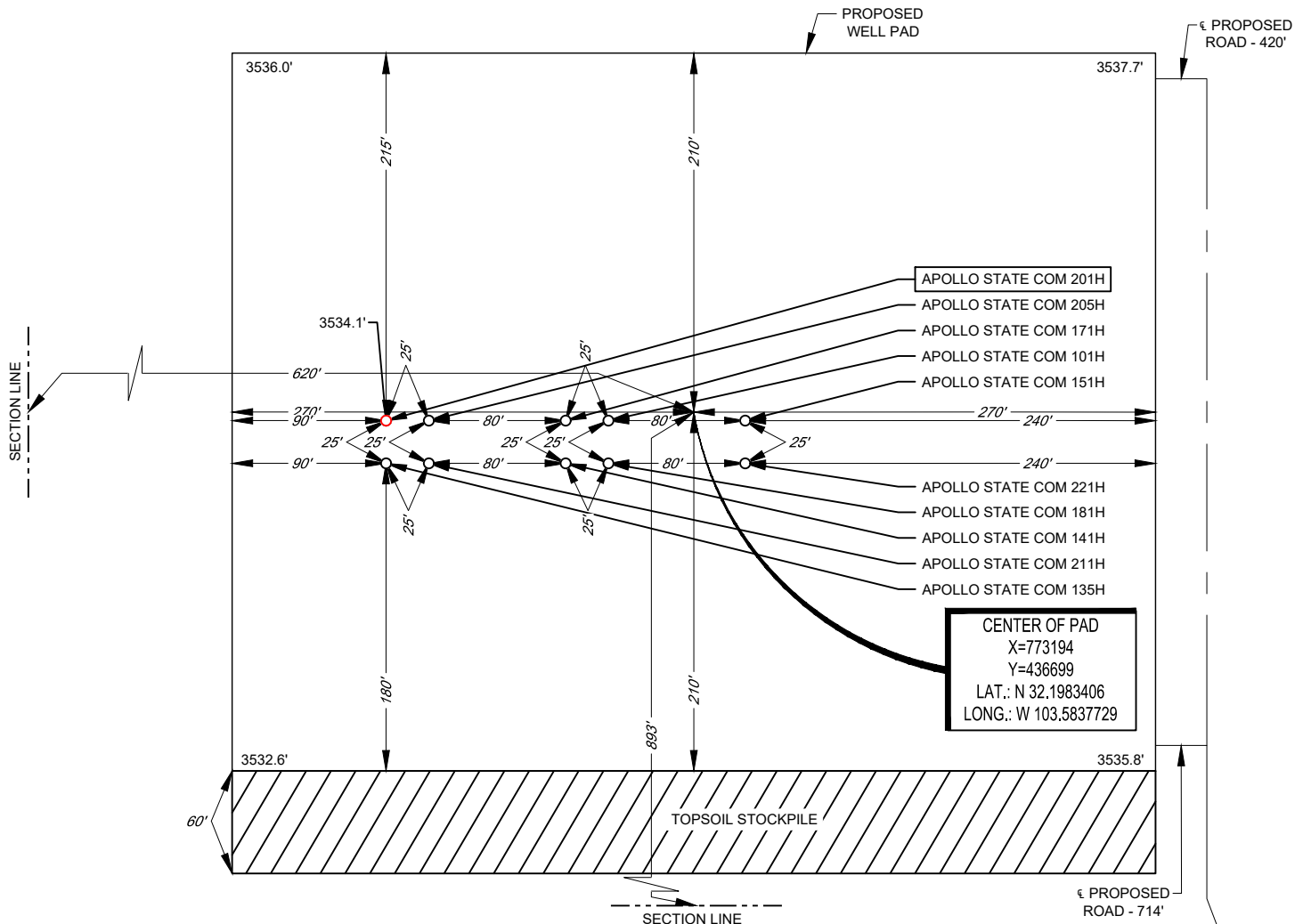


SECTION 21, TOWNSHIP 24-S, RANGE 33-E, N.M.P.M.
LEA COUNTY, NEW MEXICO

DETAIL VIEW
SCALE: 1" = 100'

LEGEND

 SECTION LINE
 PROPOSED ROAD



LEASE NAME & WELL NO.: APOLLO STATE COM 201H
201H LATITUDE N 32.1983303 201H LONGITUDE W 103.5843549

CENTER OF PAD IS 893' FSL & 620' FWL



Ramon A. Dominguez, P.S. No. 24508

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"



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Tap Rock Operating, LLC.

Lea County, NM (NAD83)

Apollo State COM

201H

OH

Plan: Plan #2

Standard Planning Report

02 March, 2021

Planning Report

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well 201H
Company:	Tap Rock Operating, LLC.	TVD Reference:	RKB @ 3560.0usft (26' RKB)
Project:	Lea County, NM (NAD83)	MD Reference:	RKB @ 3560.0usft (26' RKB)
Site:	Apollo State COM	North Reference:	Grid
Well:	201H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #2		

Project	Lea County, NM (NAD83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	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	201H					
Well Position	+N/-S	65.2 usft	Northing:	436,694.00 usft	Latitude:	32° 11' 53.991 N
	+E/-W	-134.6 usft	Easting:	773,014.00 usft	Longitude:	103° 35' 3.673 W
Position Uncertainty	2.0 usft		Wellhead Elevation:		Ground Level:	3,534.0 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	10/28/2019	6.70	60.01	47,678

Design	Plan #2			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	359.58

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,850.0	0.00	0.00	2,850.0	0.0	0.0	0.00	0.00	0.00	0.00	
3,450.0	9.00	193.00	3,447.5	-45.8	-10.6	1.50	1.50	0.00	193.00	
8,550.0	9.00	193.00	8,484.7	-823.2	-190.0	0.00	0.00	0.00	0.00	
9,150.0	0.00	0.00	9,082.3	-869.0	-200.6	1.50	-1.50	27.83	180.00	
11,957.7	0.00	0.00	11,890.0	-869.0	-200.6	0.00	0.00	0.00	0.00	
12,857.9	90.01	6.90	12,463.0	-300.1	-131.8	10.00	10.00	0.00	6.90	
13,223.6	90.01	359.58	12,462.9	64.9	-111.1	2.00	0.00	-2.00	-89.99	
22,729.0	90.01	359.58	12,461.0	9,570.0	-180.0	0.00	0.00	0.00	0.00	LTP_A.201H
22,799.0	90.01	359.58	12,461.0	9,640.0	-180.5	0.00	0.00	0.00	0.00	PBHL_A.201H

Planning Report

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well 201H
Company:	Tap Rock Operating, LLC.	TVD Reference:	RKB @ 3560.0usft (26' RKB)
Project:	Lea County, NM (NAD83)	MD Reference:	RKB @ 3560.0usft (26' RKB)
Site:	Apollo State COM	North Reference:	Grid
Well:	201H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #2		

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
1,164.0	0.00	0.00	1,164.0	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
1,655.0	0.00	0.00	1,655.0	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
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	0.00
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	0.00
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	0.00
2,850.0	0.00	0.00	2,850.0	0.0	0.0	0.0	0.00	0.00	0.00
Start Build 1.50									
2,900.0	0.75	193.00	2,900.0	-0.3	-0.1	-0.3	1.50	1.50	0.00
3,000.0	2.25	193.00	3,000.0	-2.9	-0.7	-2.9	1.50	1.50	0.00
3,100.0	3.75	193.00	3,099.8	-8.0	-1.8	-8.0	1.50	1.50	0.00
3,200.0	5.25	193.00	3,199.5	-15.6	-3.6	-15.6	1.50	1.50	0.00
3,300.0	6.75	193.00	3,299.0	-25.8	-6.0	-25.8	1.50	1.50	0.00
3,400.0	8.25	193.00	3,398.1	-38.5	-8.9	-38.4	1.50	1.50	0.00
3,450.0	9.00	193.00	3,447.5	-45.8	-10.6	-45.7	1.50	1.50	0.00
Start 5100.0 hold at 3450.0 MD									
3,500.0	9.00	193.00	3,496.9	-53.4	-12.3	-53.4	0.00	0.00	0.00
3,600.0	9.00	193.00	3,595.7	-68.7	-15.9	-68.6	0.00	0.00	0.00
3,700.0	9.00	193.00	3,694.5	-83.9	-19.4	-83.8	0.00	0.00	0.00
3,800.0	9.00	193.00	3,793.2	-99.2	-22.9	-99.0	0.00	0.00	0.00
3,900.0	9.00	193.00	3,892.0	-114.4	-26.4	-114.2	0.00	0.00	0.00
4,000.0	9.00	193.00	3,990.8	-129.7	-29.9	-129.4	0.00	0.00	0.00
4,100.0	9.00	193.00	4,089.5	-144.9	-33.5	-144.6	0.00	0.00	0.00
4,200.0	9.00	193.00	4,188.3	-160.1	-37.0	-159.9	0.00	0.00	0.00
4,300.0	9.00	193.00	4,287.1	-175.4	-40.5	-175.1	0.00	0.00	0.00
4,400.0	9.00	193.00	4,385.8	-190.6	-44.0	-190.3	0.00	0.00	0.00
4,500.0	9.00	193.00	4,484.6	-205.9	-47.5	-205.5	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well 201H
Company:	Tap Rock Operating, LLC.	TVD Reference:	RKB @ 3560.0usft (26' RKB)
Project:	Lea County, NM (NAD83)	MD Reference:	RKB @ 3560.0usft (26' RKB)
Site:	Apollo State COM	North Reference:	Grid
Well:	201H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #2		

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	193.00	4,583.4	-221.1	-51.0	-220.7	0.00	0.00	0.00
4,700.0	9.00	193.00	4,682.1	-236.4	-54.6	-235.9	0.00	0.00	0.00
4,800.0	9.00	193.00	4,780.9	-251.6	-58.1	-251.2	0.00	0.00	0.00
4,900.0	9.00	193.00	4,879.7	-266.8	-61.6	-266.4	0.00	0.00	0.00
4,930.7	9.00	193.00	4,910.0	-271.5	-62.7	-271.0	0.00	0.00	0.00
Base Salt									
5,000.0	9.00	193.00	4,978.5	-282.1	-65.1	-281.6	0.00	0.00	0.00
5,100.0	9.00	193.00	5,077.2	-297.3	-68.6	-296.8	0.00	0.00	0.00
5,152.4	9.00	193.00	5,129.0	-305.3	-70.5	-304.8	0.00	0.00	0.00
Delaware Mountain Gp									
5,173.7	9.00	193.00	5,150.0	-308.6	-71.2	-308.0	0.00	0.00	0.00
Lamar									
5,200.0	9.00	193.00	5,176.0	-312.6	-72.2	-312.0	0.00	0.00	0.00
5,215.2	9.00	193.00	5,191.0	-314.9	-72.7	-314.3	0.00	0.00	0.00
Bell Canyon									
5,247.6	9.00	193.00	5,223.0	-319.8	-73.8	-319.3	0.00	0.00	0.00
Ramsey Sand									
5,300.0	9.00	193.00	5,274.8	-327.8	-75.7	-327.2	0.00	0.00	0.00
5,400.0	9.00	193.00	5,373.5	-343.1	-79.2	-342.5	0.00	0.00	0.00
5,500.0	9.00	193.00	5,472.3	-358.3	-82.7	-357.7	0.00	0.00	0.00
5,600.0	9.00	193.00	5,571.1	-373.5	-86.2	-372.9	0.00	0.00	0.00
5,700.0	9.00	193.00	5,669.8	-388.8	-89.8	-388.1	0.00	0.00	0.00
5,800.0	9.00	193.00	5,768.6	-404.0	-93.3	-403.3	0.00	0.00	0.00
5,900.0	9.00	193.00	5,867.4	-419.3	-96.8	-418.5	0.00	0.00	0.00
6,000.0	9.00	193.00	5,966.1	-434.5	-100.3	-433.8	0.00	0.00	0.00
6,100.0	9.00	193.00	6,064.9	-449.7	-103.8	-449.0	0.00	0.00	0.00
6,200.0	9.00	193.00	6,163.7	-465.0	-107.4	-464.2	0.00	0.00	0.00
6,210.4	9.00	193.00	6,174.0	-466.6	-107.7	-465.8	0.00	0.00	0.00
Cherry Canyon									
6,300.0	9.00	193.00	6,262.4	-480.2	-110.9	-479.4	0.00	0.00	0.00
6,400.0	9.00	193.00	6,361.2	-495.5	-114.4	-494.6	0.00	0.00	0.00
6,500.0	9.00	193.00	6,460.0	-510.7	-117.9	-509.8	0.00	0.00	0.00
6,600.0	9.00	193.00	6,558.8	-526.0	-121.4	-525.1	0.00	0.00	0.00
6,700.0	9.00	193.00	6,657.5	-541.2	-124.9	-540.3	0.00	0.00	0.00
6,800.0	9.00	193.00	6,756.3	-556.4	-128.5	-555.5	0.00	0.00	0.00
6,900.0	9.00	193.00	6,855.1	-571.7	-132.0	-570.7	0.00	0.00	0.00
7,000.0	9.00	193.00	6,953.8	-586.9	-135.5	-585.9	0.00	0.00	0.00
7,100.0	9.00	193.00	7,052.6	-602.2	-139.0	-601.1	0.00	0.00	0.00
7,200.0	9.00	193.00	7,151.4	-617.4	-142.5	-616.4	0.00	0.00	0.00
7,300.0	9.00	193.00	7,250.1	-632.7	-146.1	-631.6	0.00	0.00	0.00
7,400.0	9.00	193.00	7,348.9	-647.9	-149.6	-646.8	0.00	0.00	0.00
7,500.0	9.00	193.00	7,447.7	-663.1	-153.1	-662.0	0.00	0.00	0.00
7,600.0	9.00	193.00	7,546.4	-678.4	-156.6	-677.2	0.00	0.00	0.00
7,700.0	9.00	193.00	7,645.2	-693.6	-160.1	-692.4	0.00	0.00	0.00
7,706.9	9.00	193.00	7,652.0	-694.7	-160.4	-693.5	0.00	0.00	0.00
Brushy Canyon									
7,800.0	9.00	193.00	7,744.0	-708.9	-163.7	-707.7	0.00	0.00	0.00
7,900.0	9.00	193.00	7,842.7	-724.1	-167.2	-722.9	0.00	0.00	0.00
8,000.0	9.00	193.00	7,941.5	-739.4	-170.7	-738.1	0.00	0.00	0.00
8,100.0	9.00	193.00	8,040.3	-754.6	-174.2	-753.3	0.00	0.00	0.00
8,200.0	9.00	193.00	8,139.1	-769.8	-177.7	-768.5	0.00	0.00	0.00
8,300.0	9.00	193.00	8,237.8	-785.1	-181.3	-783.7	0.00	0.00	0.00
8,400.0	9.00	193.00	8,336.6	-800.3	-184.8	-798.9	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well 201H
Company:	Tap Rock Operating, LLC.	TVD Reference:	RKB @ 3560.0usft (26' RKB)
Project:	Lea County, NM (NAD83)	MD Reference:	RKB @ 3560.0usft (26' RKB)
Site:	Apollo State COM	North Reference:	Grid
Well:	201H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #2		

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	193.00	8,435.4	-815.6	-188.3	-814.2	0.00	0.00	0.00
8,550.0	9.00	193.00	8,484.7	-823.2	-190.0	-821.8	0.00	0.00	0.00
Start DLS 1.50 TFO 180.00									
8,600.0	8.25	193.00	8,534.2	-830.5	-191.7	-829.1	1.50	-1.50	0.00
8,700.0	6.75	193.00	8,633.3	-843.2	-194.7	-841.8	1.50	-1.50	0.00
8,800.0	5.25	193.00	8,732.8	-853.4	-197.0	-851.9	1.50	-1.50	0.00
8,900.0	3.75	193.00	8,832.5	-861.0	-198.8	-859.6	1.50	-1.50	0.00
9,000.0	2.25	193.00	8,932.3	-866.1	-200.0	-864.7	1.50	-1.50	0.00
9,100.0	0.75	193.00	9,032.3	-868.7	-200.6	-867.2	1.50	-1.50	0.00
9,150.0	0.00	0.00	9,082.3	-869.0	-200.6	-867.5	1.50	-1.50	334.00
Start 2807.7 hold at 9150.0 MD									
9,186.7	0.00	0.00	9,119.0	-869.0	-200.6	-867.5	0.00	0.00	0.00
Bone Spring Lime									
9,200.0	0.00	0.00	9,132.3	-869.0	-200.6	-867.5	0.00	0.00	0.00
9,290.7	0.00	0.00	9,223.0	-869.0	-200.6	-867.5	0.00	0.00	0.00
Upper Avalon									
9,300.0	0.00	0.00	9,232.3	-869.0	-200.6	-867.5	0.00	0.00	0.00
9,400.0	0.00	0.00	9,332.3	-869.0	-200.6	-867.5	0.00	0.00	0.00
9,500.0	0.00	0.00	9,432.3	-869.0	-200.6	-867.5	0.00	0.00	0.00
9,515.7	0.00	0.00	9,448.0	-869.0	-200.6	-867.5	0.00	0.00	0.00
Middle Avalon									
9,600.0	0.00	0.00	9,532.3	-869.0	-200.6	-867.5	0.00	0.00	0.00
9,700.0	0.00	0.00	9,632.3	-869.0	-200.6	-867.5	0.00	0.00	0.00
9,800.0	0.00	0.00	9,732.3	-869.0	-200.6	-867.5	0.00	0.00	0.00
9,884.7	0.00	0.00	9,817.0	-869.0	-200.6	-867.5	0.00	0.00	0.00
Lower Avalon									
9,900.0	0.00	0.00	9,832.3	-869.0	-200.6	-867.5	0.00	0.00	0.00
10,000.0	0.00	0.00	9,932.3	-869.0	-200.6	-867.5	0.00	0.00	0.00
10,100.0	0.00	0.00	10,032.3	-869.0	-200.6	-867.5	0.00	0.00	0.00
10,181.7	0.00	0.00	10,114.0	-869.0	-200.6	-867.5	0.00	0.00	0.00
1st Bone Spring Sand									
10,200.0	0.00	0.00	10,132.3	-869.0	-200.6	-867.5	0.00	0.00	0.00
10,300.0	0.00	0.00	10,232.3	-869.0	-200.6	-867.5	0.00	0.00	0.00
10,400.0	0.00	0.00	10,332.3	-869.0	-200.6	-867.5	0.00	0.00	0.00
10,447.7	0.00	0.00	10,380.0	-869.0	-200.6	-867.5	0.00	0.00	0.00
2nd Bone Spring Carb									
10,500.0	0.00	0.00	10,432.3	-869.0	-200.6	-867.5	0.00	0.00	0.00
10,600.0	0.00	0.00	10,532.3	-869.0	-200.6	-867.5	0.00	0.00	0.00
10,700.0	0.00	0.00	10,632.3	-869.0	-200.6	-867.5	0.00	0.00	0.00
10,800.0	0.00	0.00	10,732.3	-869.0	-200.6	-867.5	0.00	0.00	0.00
10,855.7	0.00	0.00	10,788.0	-869.0	-200.6	-867.5	0.00	0.00	0.00
2nd Bone Spring Sand									
10,900.0	0.00	0.00	10,832.3	-869.0	-200.6	-867.5	0.00	0.00	0.00
11,000.0	0.00	0.00	10,932.3	-869.0	-200.6	-867.5	0.00	0.00	0.00
11,100.0	0.00	0.00	11,032.3	-869.0	-200.6	-867.5	0.00	0.00	0.00
11,200.0	0.00	0.00	11,132.3	-869.0	-200.6	-867.5	0.00	0.00	0.00
11,300.0	0.00	0.00	11,232.3	-869.0	-200.6	-867.5	0.00	0.00	0.00
11,391.7	0.00	0.00	11,324.0	-869.0	-200.6	-867.5	0.00	0.00	0.00
3rd Bone Spring Carb									
11,400.0	0.00	0.00	11,332.3	-869.0	-200.6	-867.5	0.00	0.00	0.00
11,500.0	0.00	0.00	11,432.3	-869.0	-200.6	-867.5	0.00	0.00	0.00
11,600.0	0.00	0.00	11,532.3	-869.0	-200.6	-867.5	0.00	0.00	0.00
11,700.0	0.00	0.00	11,632.3	-869.0	-200.6	-867.5	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well 201H
Company:	Tap Rock Operating, LLC.	TVD Reference:	RKB @ 3560.0usft (26' RKB)
Project:	Lea County, NM (NAD83)	MD Reference:	RKB @ 3560.0usft (26' RKB)
Site:	Apollo State COM	North Reference:	Grid
Well:	201H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #2		

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	11,732.3	-869.0	-200.6	-867.5	0.00	0.00	0.00
11,900.0	0.00	0.00	11,832.3	-869.0	-200.6	-867.5	0.00	0.00	0.00
11,957.7	0.00	0.00	11,890.0	-869.0	-200.6	-867.5	0.00	0.00	0.00
Start Build 10.00									
11,987.7	3.00	6.90	11,920.0	-868.2	-200.5	-866.7	10.00	10.00	22.99
3rd Bone Spring Sand									
12,000.0	4.23	6.90	11,932.2	-867.5	-200.4	-866.0	10.00	10.00	0.00
12,050.0	9.23	6.90	11,981.9	-861.7	-199.7	-860.2	10.00	10.00	0.00
12,100.0	14.23	6.90	12,030.8	-851.6	-198.5	-850.1	10.00	10.00	0.00
12,150.0	19.23	6.90	12,078.7	-837.3	-196.8	-835.8	10.00	10.00	0.00
12,200.0	24.23	6.90	12,125.1	-818.9	-194.6	-817.5	10.00	10.00	0.00
12,250.0	29.23	6.90	12,169.8	-796.6	-191.9	-795.2	10.00	10.00	0.00
12,300.0	34.23	6.90	12,212.3	-770.5	-188.7	-769.1	10.00	10.00	0.00
12,305.7	34.80	6.90	12,217.0	-767.3	-188.3	-765.9	10.00	10.00	0.00
3rd BS W Sand									
12,350.0	39.23	6.90	12,252.3	-740.8	-185.1	-739.5	10.00	10.00	0.00
12,353.4	39.57	6.90	12,255.0	-738.7	-184.9	-737.3	10.00	10.00	0.00
Wolfcamp A X Sand									
12,400.0	44.22	6.90	12,289.7	-707.8	-181.1	-706.5	10.00	10.00	0.00
12,450.0	49.22	6.90	12,323.9	-671.7	-176.7	-670.4	10.00	10.00	0.00
12,500.0	54.22	6.90	12,354.9	-632.7	-172.0	-631.4	10.00	10.00	0.00
12,550.0	59.22	6.90	12,382.3	-591.2	-167.0	-590.0	10.00	10.00	0.00
12,600.0	64.22	6.90	12,406.0	-547.5	-161.7	-546.3	10.00	10.00	0.00
12,629.2	67.14	6.90	12,418.0	-521.1	-158.5	-520.0	10.00	10.00	0.00
Wolfcamp A Y Sand									
12,650.0	69.22	6.90	12,425.7	-501.9	-156.2	-500.8	10.00	10.00	0.00
12,700.0	74.22	6.90	12,441.4	-454.8	-150.5	-453.7	10.00	10.00	0.00
12,750.0	79.22	6.90	12,452.9	-406.5	-144.7	-405.5	10.00	10.00	0.00
12,800.0	84.22	6.90	12,460.1	-357.4	-138.7	-356.4	10.00	10.00	0.00
12,850.0	89.22	6.90	12,462.9	-307.9	-132.7	-306.9	10.00	10.00	0.00
12,857.9	90.01	6.90	12,463.0	-300.1	-131.8	-299.1	10.00	10.00	0.00
Start DLS 2.00 TFO -89.99									
12,900.0	90.01	6.06	12,463.0	-258.2	-127.0	-257.3	2.00	0.00	-2.00
13,000.0	90.01	4.06	12,463.0	-158.6	-118.2	-157.7	2.00	0.00	-2.00
13,100.0	90.01	2.06	12,463.0	-58.8	-112.9	-57.9	2.00	0.00	-2.00
13,200.0	90.01	0.06	12,462.9	41.2	-111.0	42.0	2.00	0.00	-2.00
13,223.6	90.01	359.58	12,462.9	64.9	-111.1	65.7	2.00	0.00	-2.00
Start 9505.4 hold at 13223.6 MD									
13,300.0	90.01	359.58	12,462.9	141.2	-111.7	142.0	0.00	0.00	0.00
13,400.0	90.01	359.58	12,462.9	241.2	-112.4	242.0	0.00	0.00	0.00
13,500.0	90.01	359.58	12,462.9	341.2	-113.1	342.0	0.00	0.00	0.00
13,600.0	90.01	359.58	12,462.9	441.2	-113.8	442.0	0.00	0.00	0.00
13,700.0	90.01	359.58	12,462.8	541.2	-114.6	542.0	0.00	0.00	0.00
13,800.0	90.01	359.58	12,462.8	641.2	-115.3	642.0	0.00	0.00	0.00
13,900.0	90.01	359.58	12,462.8	741.2	-116.0	742.0	0.00	0.00	0.00
14,000.0	90.01	359.58	12,462.8	841.2	-116.7	842.0	0.00	0.00	0.00
14,100.0	90.01	359.58	12,462.8	941.2	-117.5	942.0	0.00	0.00	0.00
14,200.0	90.01	359.58	12,462.7	1,041.2	-118.2	1,042.0	0.00	0.00	0.00
14,300.0	90.01	359.58	12,462.7	1,141.2	-118.9	1,142.0	0.00	0.00	0.00
14,400.0	90.01	359.58	12,462.7	1,241.2	-119.6	1,242.0	0.00	0.00	0.00
14,500.0	90.01	359.58	12,462.7	1,341.2	-120.4	1,342.0	0.00	0.00	0.00
14,600.0	90.01	359.58	12,462.7	1,441.2	-121.1	1,442.0	0.00	0.00	0.00
14,700.0	90.01	359.58	12,462.6	1,541.2	-121.8	1,542.0	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well 201H
Company:	Tap Rock Operating, LLC.	TVD Reference:	RKB @ 3560.0usft (26' RKB)
Project:	Lea County, NM (NAD83)	MD Reference:	RKB @ 3560.0usft (26' RKB)
Site:	Apollo State COM	North Reference:	Grid
Well:	201H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #2		

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)
14,800.0	90.01	359.58	12,462.6	1,641.2	-122.5	1,642.0	0.00	0.00	0.00
14,900.0	90.01	359.58	12,462.6	1,741.2	-123.3	1,742.0	0.00	0.00	0.00
15,000.0	90.01	359.58	12,462.6	1,841.2	-124.0	1,842.0	0.00	0.00	0.00
15,100.0	90.01	359.58	12,462.5	1,941.2	-124.7	1,942.0	0.00	0.00	0.00
15,200.0	90.01	359.58	12,462.5	2,041.2	-125.4	2,042.0	0.00	0.00	0.00
15,300.0	90.01	359.58	12,462.5	2,141.2	-126.2	2,142.0	0.00	0.00	0.00
15,400.0	90.01	359.58	12,462.5	2,241.2	-126.9	2,242.0	0.00	0.00	0.00
15,500.0	90.01	359.58	12,462.5	2,341.2	-127.6	2,342.0	0.00	0.00	0.00
15,600.0	90.01	359.58	12,462.4	2,441.2	-128.3	2,442.0	0.00	0.00	0.00
15,700.0	90.01	359.58	12,462.4	2,541.2	-129.1	2,542.0	0.00	0.00	0.00
15,800.0	90.01	359.58	12,462.4	2,641.2	-129.8	2,642.0	0.00	0.00	0.00
15,900.0	90.01	359.58	12,462.4	2,741.1	-130.5	2,742.0	0.00	0.00	0.00
16,000.0	90.01	359.58	12,462.4	2,841.1	-131.2	2,842.0	0.00	0.00	0.00
16,100.0	90.01	359.58	12,462.3	2,941.1	-132.0	2,942.0	0.00	0.00	0.00
16,200.0	90.01	359.58	12,462.3	3,041.1	-132.7	3,042.0	0.00	0.00	0.00
16,300.0	90.01	359.58	12,462.3	3,141.1	-133.4	3,142.0	0.00	0.00	0.00
16,400.0	90.01	359.58	12,462.3	3,241.1	-134.1	3,242.0	0.00	0.00	0.00
16,500.0	90.01	359.58	12,462.3	3,341.1	-134.9	3,342.0	0.00	0.00	0.00
16,600.0	90.01	359.58	12,462.2	3,441.1	-135.6	3,442.0	0.00	0.00	0.00
16,700.0	90.01	359.58	12,462.2	3,541.1	-136.3	3,542.0	0.00	0.00	0.00
16,800.0	90.01	359.58	12,462.2	3,641.1	-137.0	3,642.0	0.00	0.00	0.00
16,900.0	90.01	359.58	12,462.2	3,741.1	-137.8	3,742.0	0.00	0.00	0.00
17,000.0	90.01	359.58	12,462.2	3,841.1	-138.5	3,842.0	0.00	0.00	0.00
17,100.0	90.01	359.58	12,462.1	3,941.1	-139.2	3,942.0	0.00	0.00	0.00
17,200.0	90.01	359.58	12,462.1	4,041.1	-139.9	4,042.0	0.00	0.00	0.00
17,300.0	90.01	359.58	12,462.1	4,141.1	-140.6	4,142.0	0.00	0.00	0.00
17,400.0	90.01	359.58	12,462.1	4,241.1	-141.4	4,242.0	0.00	0.00	0.00
17,500.0	90.01	359.58	12,462.1	4,341.1	-142.1	4,342.0	0.00	0.00	0.00
17,600.0	90.01	359.58	12,462.0	4,441.1	-142.8	4,442.0	0.00	0.00	0.00
17,700.0	90.01	359.58	12,462.0	4,541.1	-143.5	4,542.0	0.00	0.00	0.00
17,800.0	90.01	359.58	12,462.0	4,641.1	-144.3	4,642.0	0.00	0.00	0.00
17,900.0	90.01	359.58	12,462.0	4,741.1	-145.0	4,742.0	0.00	0.00	0.00
18,000.0	90.01	359.58	12,462.0	4,841.1	-145.7	4,842.0	0.00	0.00	0.00
18,100.0	90.01	359.58	12,461.9	4,941.1	-146.4	4,942.0	0.00	0.00	0.00
18,200.0	90.01	359.58	12,461.9	5,041.1	-147.2	5,042.0	0.00	0.00	0.00
18,300.0	90.01	359.58	12,461.9	5,141.1	-147.9	5,142.0	0.00	0.00	0.00
18,400.0	90.01	359.58	12,461.9	5,241.1	-148.6	5,242.0	0.00	0.00	0.00
18,500.0	90.01	359.58	12,461.9	5,341.1	-149.3	5,342.0	0.00	0.00	0.00
18,600.0	90.01	359.58	12,461.8	5,441.1	-150.1	5,442.0	0.00	0.00	0.00
18,700.0	90.01	359.58	12,461.8	5,541.1	-150.8	5,542.0	0.00	0.00	0.00
18,800.0	90.01	359.58	12,461.8	5,641.1	-151.5	5,642.0	0.00	0.00	0.00
18,900.0	90.01	359.58	12,461.8	5,741.1	-152.2	5,742.0	0.00	0.00	0.00
19,000.0	90.01	359.58	12,461.8	5,841.1	-153.0	5,842.0	0.00	0.00	0.00
19,100.0	90.01	359.58	12,461.7	5,941.1	-153.7	5,942.0	0.00	0.00	0.00
19,200.0	90.01	359.58	12,461.7	6,041.1	-154.4	6,042.0	0.00	0.00	0.00
19,300.0	90.01	359.58	12,461.7	6,141.1	-155.1	6,142.0	0.00	0.00	0.00
19,400.0	90.01	359.58	12,461.7	6,241.1	-155.9	6,242.0	0.00	0.00	0.00
19,500.0	90.01	359.58	12,461.7	6,341.1	-156.6	6,342.0	0.00	0.00	0.00
19,600.0	90.01	359.58	12,461.6	6,441.1	-157.3	6,442.0	0.00	0.00	0.00
19,700.0	90.01	359.58	12,461.6	6,541.0	-158.0	6,542.0	0.00	0.00	0.00
19,800.0	90.01	359.58	12,461.6	6,641.0	-158.8	6,642.0	0.00	0.00	0.00
19,900.0	90.01	359.58	12,461.6	6,741.0	-159.5	6,742.0	0.00	0.00	0.00
20,000.0	90.01	359.58	12,461.6	6,841.0	-160.2	6,842.0	0.00	0.00	0.00
20,100.0	90.01	359.58	12,461.5	6,941.0	-160.9	6,942.0	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well 201H
Company:	Tap Rock Operating, LLC.	TVD Reference:	RKB @ 3560.0usft (26' RKB)
Project:	Lea County, NM (NAD83)	MD Reference:	RKB @ 3560.0usft (26' RKB)
Site:	Apollo State COM	North Reference:	Grid
Well:	201H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #2		

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)	
20,200.0	90.01	359.58	12,461.5	7,041.0	-161.7	7,042.0	0.00	0.00	0.00	
20,300.0	90.01	359.58	12,461.5	7,141.0	-162.4	7,142.0	0.00	0.00	0.00	
20,400.0	90.01	359.58	12,461.5	7,241.0	-163.1	7,242.0	0.00	0.00	0.00	
20,500.0	90.01	359.58	12,461.5	7,341.0	-163.8	7,342.0	0.00	0.00	0.00	
20,600.0	90.01	359.58	12,461.4	7,441.0	-164.6	7,442.0	0.00	0.00	0.00	
20,700.0	90.01	359.58	12,461.4	7,541.0	-165.3	7,542.0	0.00	0.00	0.00	
20,800.0	90.01	359.58	12,461.4	7,641.0	-166.0	7,642.0	0.00	0.00	0.00	
20,900.0	90.01	359.58	12,461.4	7,741.0	-166.7	7,742.0	0.00	0.00	0.00	
21,000.0	90.01	359.58	12,461.4	7,841.0	-167.5	7,842.0	0.00	0.00	0.00	
21,100.0	90.01	359.58	12,461.3	7,941.0	-168.2	7,942.0	0.00	0.00	0.00	
21,200.0	90.01	359.58	12,461.3	8,041.0	-168.9	8,042.0	0.00	0.00	0.00	
21,300.0	90.01	359.58	12,461.3	8,141.0	-169.6	8,142.0	0.00	0.00	0.00	
21,400.0	90.01	359.58	12,461.3	8,241.0	-170.4	8,242.0	0.00	0.00	0.00	
21,500.0	90.01	359.58	12,461.2	8,341.0	-171.1	8,342.0	0.00	0.00	0.00	
21,600.0	90.01	359.58	12,461.2	8,441.0	-171.8	8,442.0	0.00	0.00	0.00	
21,700.0	90.01	359.58	12,461.2	8,541.0	-172.5	8,542.0	0.00	0.00	0.00	
21,800.0	90.01	359.58	12,461.2	8,641.0	-173.3	8,642.0	0.00	0.00	0.00	
21,900.0	90.01	359.58	12,461.2	8,741.0	-174.0	8,742.0	0.00	0.00	0.00	
22,000.0	90.01	359.58	12,461.1	8,841.0	-174.7	8,842.0	0.00	0.00	0.00	
22,100.0	90.01	359.58	12,461.1	8,941.0	-175.4	8,942.0	0.00	0.00	0.00	
22,200.0	90.01	359.58	12,461.1	9,041.0	-176.2	9,042.0	0.00	0.00	0.00	
22,300.0	90.01	359.58	12,461.1	9,141.0	-176.9	9,142.0	0.00	0.00	0.00	
22,400.0	90.01	359.58	12,461.1	9,241.0	-177.6	9,242.0	0.00	0.00	0.00	
22,500.0	90.01	359.58	12,461.0	9,341.0	-178.3	9,342.0	0.00	0.00	0.00	
22,600.0	90.01	359.58	12,461.0	9,441.0	-179.1	9,442.0	0.00	0.00	0.00	
22,700.0	90.01	359.58	12,461.0	9,541.0	-179.8	9,542.0	0.00	0.00	0.00	
22,729.0	90.01	359.58	12,461.0	9,570.0	-180.0	9,571.1	0.00	0.00	0.00	
22,799.0	90.01	359.58	12,461.0	9,640.0	-180.5	9,641.0	0.00	0.00	0.00	
TD at 22799.0										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
PBHL_A.201H	0.00	0.01	12,461.0	9,640.0	-180.0	446,334.00	772,834.00	32° 13' 29.394 N	103° 35' 4.986 W	
- hit/miss target										
- Shape										
- plan misses target center by 0.5usft at 22799.0usft MD (12461.0 TVD, 9640.0 N, -180.5 E)										
- Point										
LTP_A.201H	0.00	0.00	12,461.0	9,570.0	-180.0	446,264.00	772,834.00	32° 13' 28.701 N	103° 35' 4.992 W	
- plan hits target center										
- Point										
FTP_A.201H	0.00	0.00	12,463.0	-789.0	-104.0	435,905.00	772,910.00	32° 11' 46.191 N	103° 35' 4.947 W	
- plan misses target center by 195.9usft at 12451.6usft MD (12324.9 TVD, -670.5 N, -176.6 E)										
- Point										

Planning Report

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well 201H
Company:	Tap Rock Operating, LLC.	TVD Reference:	RKB @ 3560.0usft (26' RKB)
Project:	Lea County, NM (NAD83)	MD Reference:	RKB @ 3560.0usft (26' RKB)
Site:	Apollo State COM	North Reference:	Grid
Well:	201H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #2		

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
1,164.0	1,164.0	Rustler Anhydrite				
1,655.0	1,655.0	Top Salt				
4,930.7	4,910.0	Base Salt				
5,152.4	5,129.0	Delaware Mountain Gp				
5,173.7	5,150.0	Lamar				
5,215.2	5,191.0	Bell Canyon				
5,247.6	5,223.0	Ramsey Sand				
6,210.4	6,174.0	Cherry Canyon				
7,706.9	7,652.0	Brushy Canyon				
9,186.7	9,119.0	Bone Spring Lime				
9,290.7	9,223.0	Upper Avalon				
9,515.7	9,448.0	Middle Avalon				
9,884.7	9,817.0	Lower Avalon				
10,181.7	10,114.0	1st Bone Spring Sand				
10,447.7	10,380.0	2nd Bone Spring Carb				
10,855.7	10,788.0	2nd Bone Spring Sand				
11,391.7	11,324.0	3rd Bone Spring Carb				
11,987.7	11,920.0	3rd Bone Spring Sand				
12,305.7	12,217.0	3rd BS W Sand				
12,353.4	12,255.0	Wolfcamp A X Sand				
12,629.2	12,418.0	Wolfcamp A Y Sand				

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
2,850.0	2,850.0	0.0	0.0	Start Build 1.50	
3,450.0	3,447.5	-45.8	-10.6	Start 5100.0 hold at 3450.0 MD	
8,550.0	8,484.7	-823.2	-190.0	Start DLS 1.50 TFO 180.00	
9,150.0	9,082.3	-869.0	-200.6	Start 2807.7 hold at 9150.0 MD	
11,957.7	11,890.0	-869.0	-200.6	Start Build 10.00	
12,857.9	12,463.0	-300.1	-131.8	Start DLS 2.00 TFO -89.99	
13,223.6	12,462.9	64.9	-111.1	Start 9505.4 hold at 13223.6 MD	
22,799.0	12,461.0	9,570.0	-180.0	TD at 22799.0	

District I

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District II

811 S. First St., Artesia, NM 88210
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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

CONDITIONS

Action 20289

CONDITIONS OF APPROVAL

Operator:	OGRID:	Action Number:	Action Type:
TAP ROCK OPERATING, LLC Suite 200 Golden, CO80401	372043	20289	C-103A
523 Park Point Drive			

OCD Reviewer	Condition
pkautz	None