

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. 30-025-47426
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 182H
9. OGRID Number 372043
10. Pool name or Wildcat Triple X; Bone Spring, West
4. Well Location Unit Letter <u>N</u> : <u>816</u> feet from the <u>South</u> line and <u>2135</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.) 3537 GR

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

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐
 TEMPORARILY ABANDON ☐ CHANGE PLANS ☒
 PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐
 DOWNHOLE COMMINGLE ☐
 CLOSED-LOOP SYSTEM ☐
 OTHER: ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
 COMMENCE DRILLING OPNS. ☐ P AND A ☐
 CASING/CEMENT JOB ☐
 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 and the BHL for the Apollo State Com 182H. Due to this change the directional drilling plan has changed and is attached for detail.

Previously approved SHL: 816 FSL, 2135 FWL of Section 21, T24S, R33E

New proposed SHL: 855 FSL, 2265 FWL of Section 21, T24S, R33E

Previous approved BHL: 30 FNL, 1650 FWL of Section 16, T24S, R33E

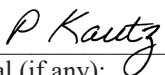
New proposed BHL: 30 FNL, 2308 FWL of Section 16, T24S, R33E

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

SIGNATURE  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:  TITLE _____ DATE 03/19/2021
 Conditions of Approval (if any): _____

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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 30-025-47426	² Pool Code 96674	³ Pool Name TRIPLE X;BONE SPRING, WEST
⁴ Property Code 328891	⁵ Property Name APOLLO STATE COM	
⁷ OGRID No. #372043	⁸ Operator Name TAP ROCK OPERATING, LLC.	⁶ Well Number 182H ⁹ Elevation 3537'

¹⁰Surface Location

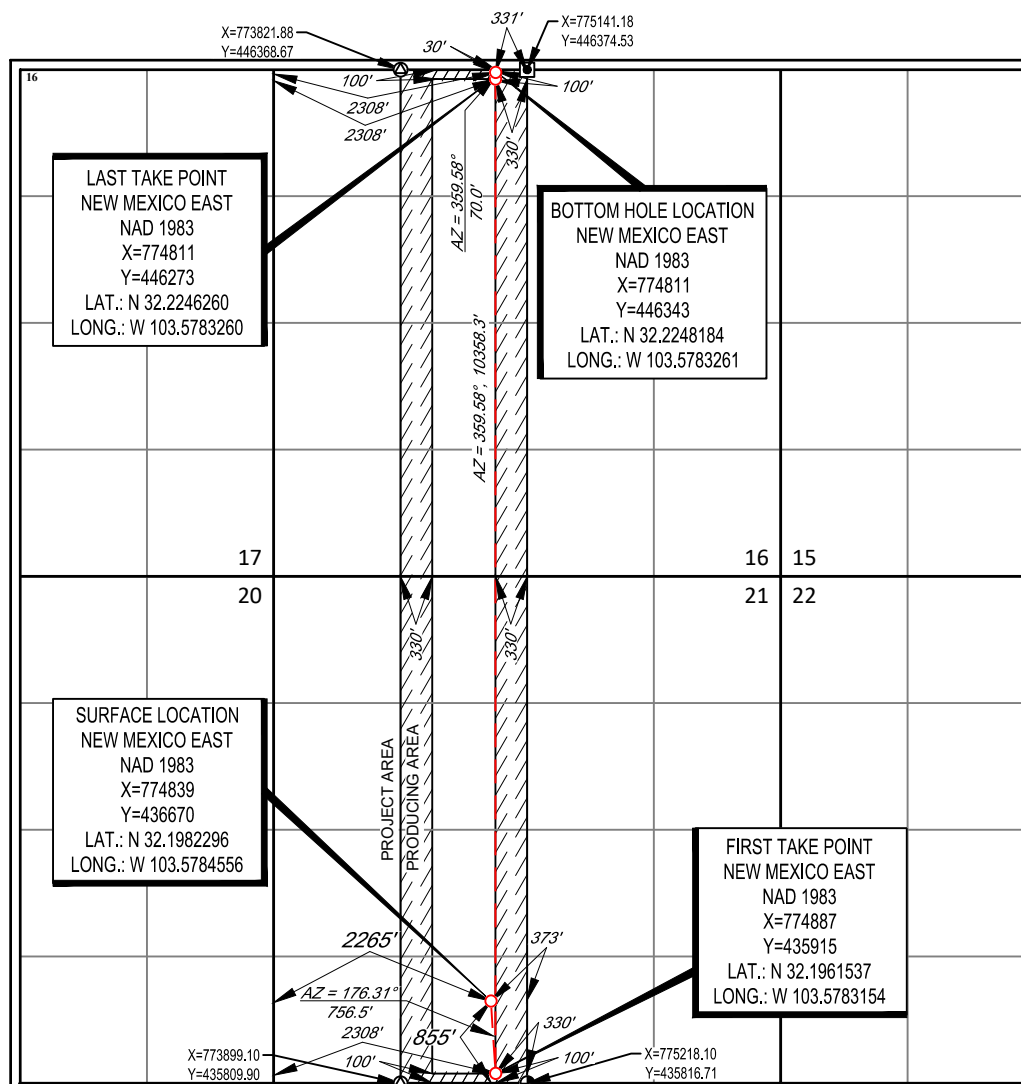
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	21	24-S	33-E	—	855'	SOUTH	2265'	WEST	LEA

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
C	16	24-S	33-E	—	30'	NORTH	2308'	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.



¹⁷OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Randy

3/9/2021

Signature _____

Date _____

Bill Ramsey

Printed Name _____

bramsey@taprk.com

F-mail Address

18 SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true to the best of my belief.

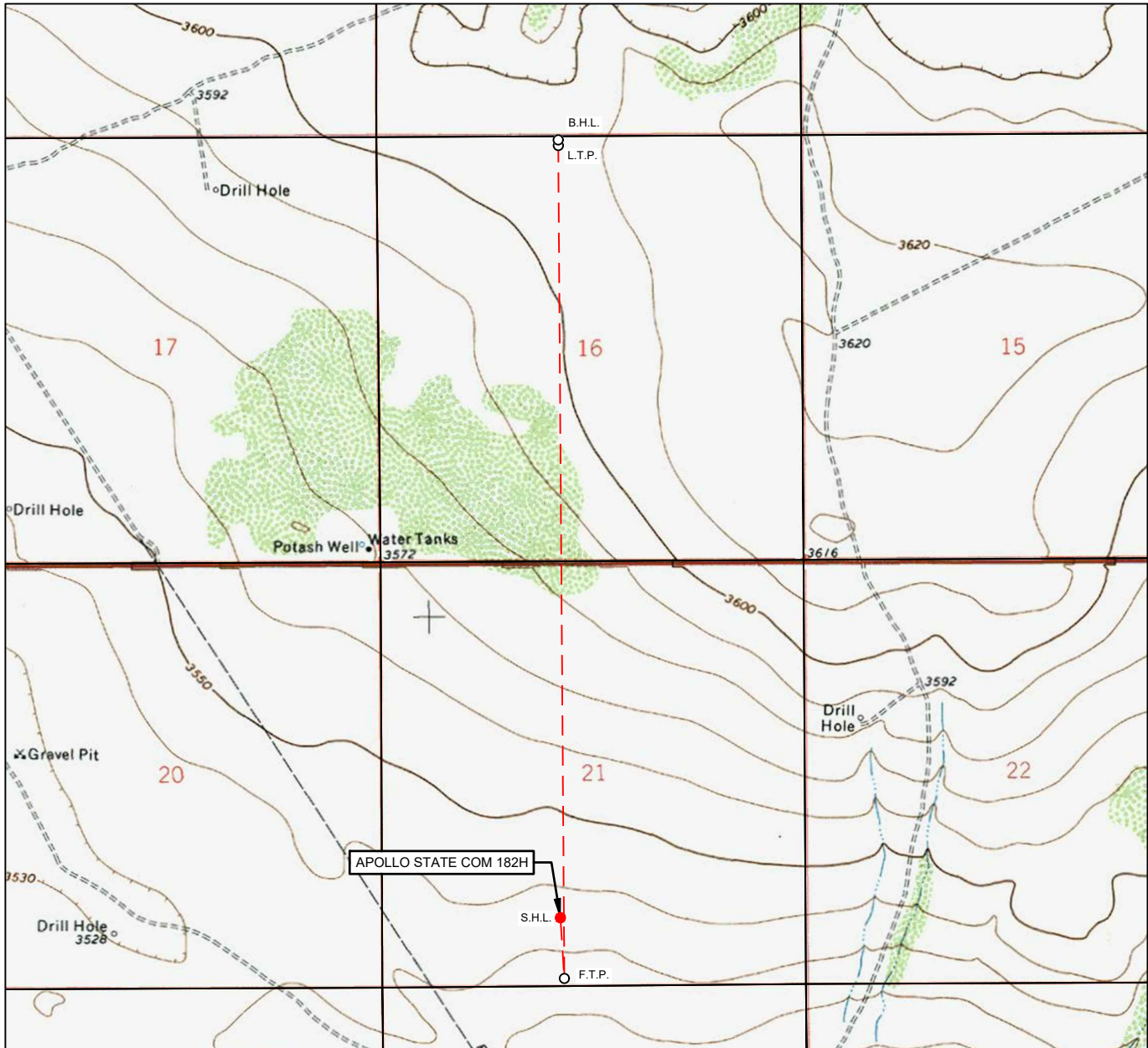
11/30/2020

Date of Survey 11/1/2017

Date of Survey _____
Signature and Seal of Professional Surveyor _____

Certificate Number

LOCATION & ELEVATION VERIFICATION MAP

LEASE NAME & WELL NO.: APOLLO STATE COM 182H

SECTION 21 TWP 24-S RGE 33-E SURVEY N.M.P.M.
 COUNTY LEA STATE NM ELEVATION 3537'
 DESCRIPTION 855' FSL & 2265' FWL

LATITUDE N 32.1982296 LONGITUDE W 103.5784556

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

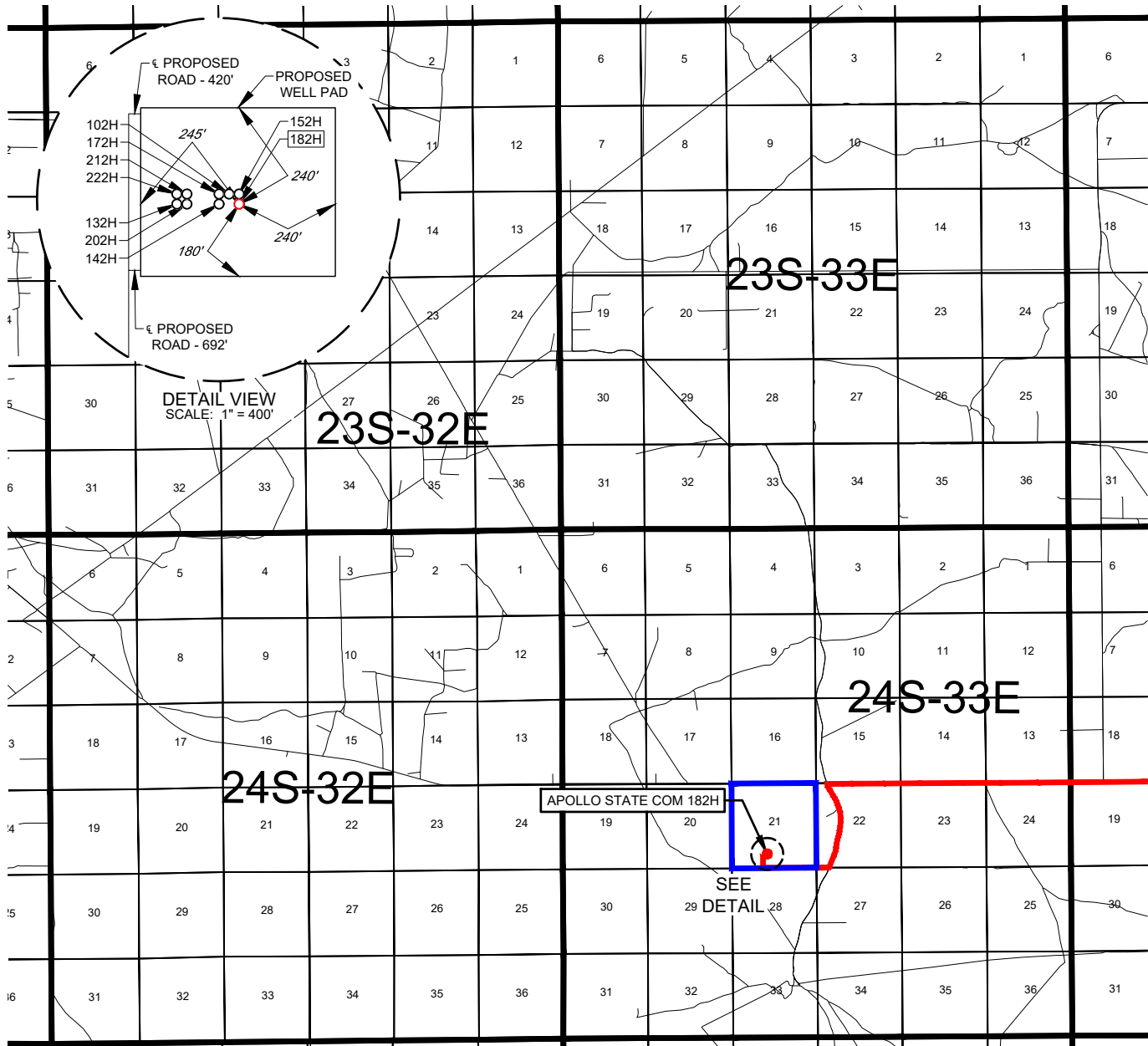
THIS EASEMENT/SERVITUDE LOCATION SHOWN HEREON HAS BEEN SURVEYED ON THE GROUND UNDER MY SUPERVISION AND PREPARED ACCORDING TO THE EVIDENCE FOUND AT THE TIME OF SURVEY, AND DATA PROVIDED BY TAP ROCK OPERATING, LLC. THIS CERTIFICATION IS MADE AND LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF 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 182HSECTION 21 TWP 24-S RGE 33-E SURVEY N.M.P.M.COUNTY LEA STATE NMDESCRIPTION 855' FSL & 2265' 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. ±0.7 MILES, THENCE
 NORTHWEST (RIGHT) ON A PROPOSED RD. ±692 FEET TO A POINT ±295
 FEET SOUTHWEST 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.

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 MEXICO COORDINATE SYSTEM OF 1983, EAST ZONE, U.S. SURVEY FEET.



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

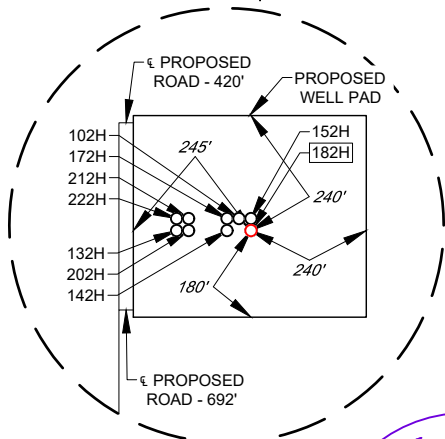
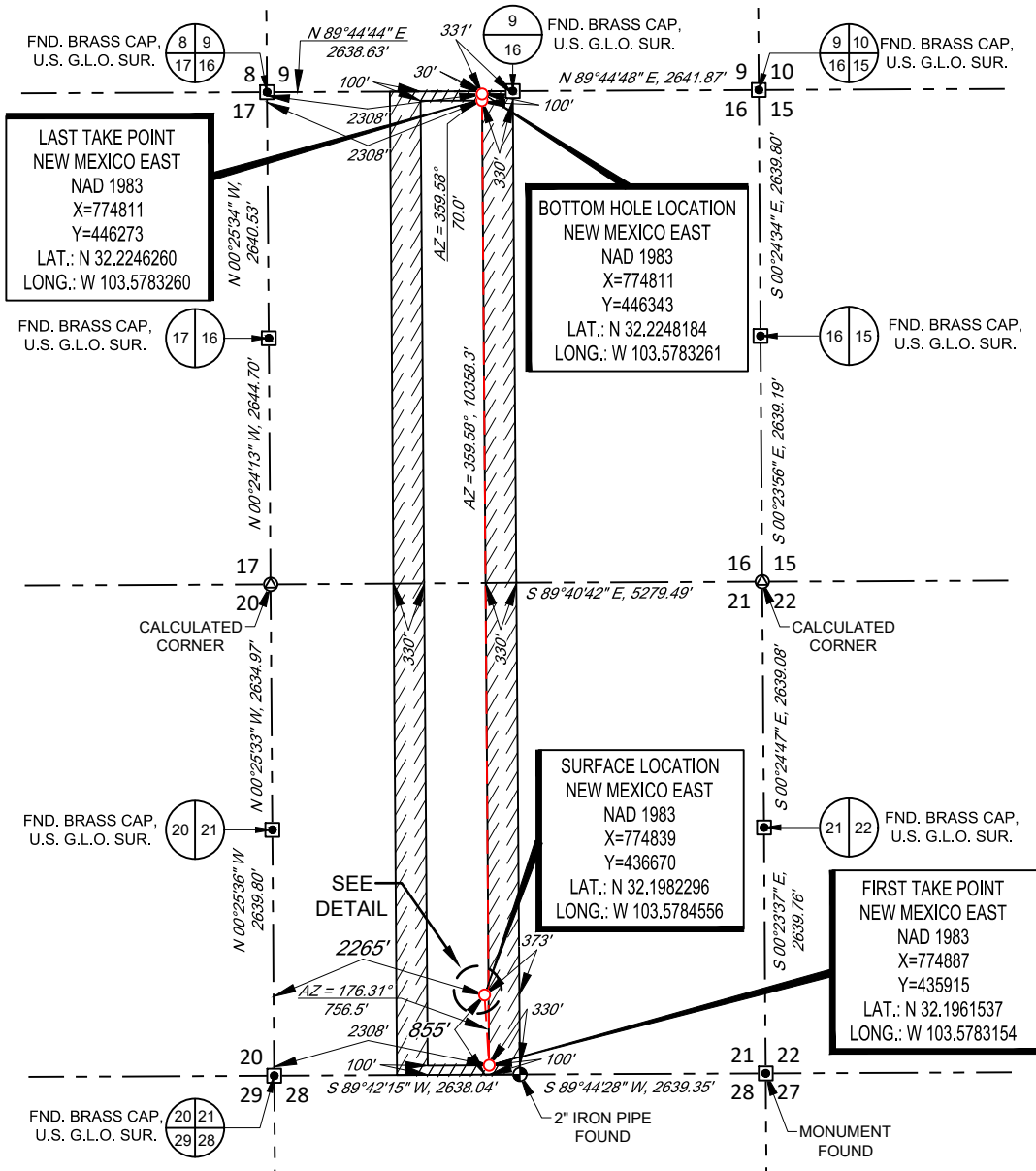


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 WWW.TOPOGRAPHIC.COM

TAP
ROCK
EXHIBIT 2A

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



LEASE NAME & WELL NO.: _____ APOLLO STATE COM 182H

SECTION 21 TWP 24-S RGE 33-E SURVEY N.M.P.M.
COUNTY LEA STATE NM
DESCRIPTION 855' FSL & 2265' 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. ±0.7 MILES, THENCE
NORTHWEST (RIGHT) ON A PROPOSED RD. ±692 FEET TO A POINT
±295 FEET SOUTHWEST 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.



Angel M. Baeza, P.S. No. 25116
February 20, 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
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WWW.TOPOGRAPHIC.COM

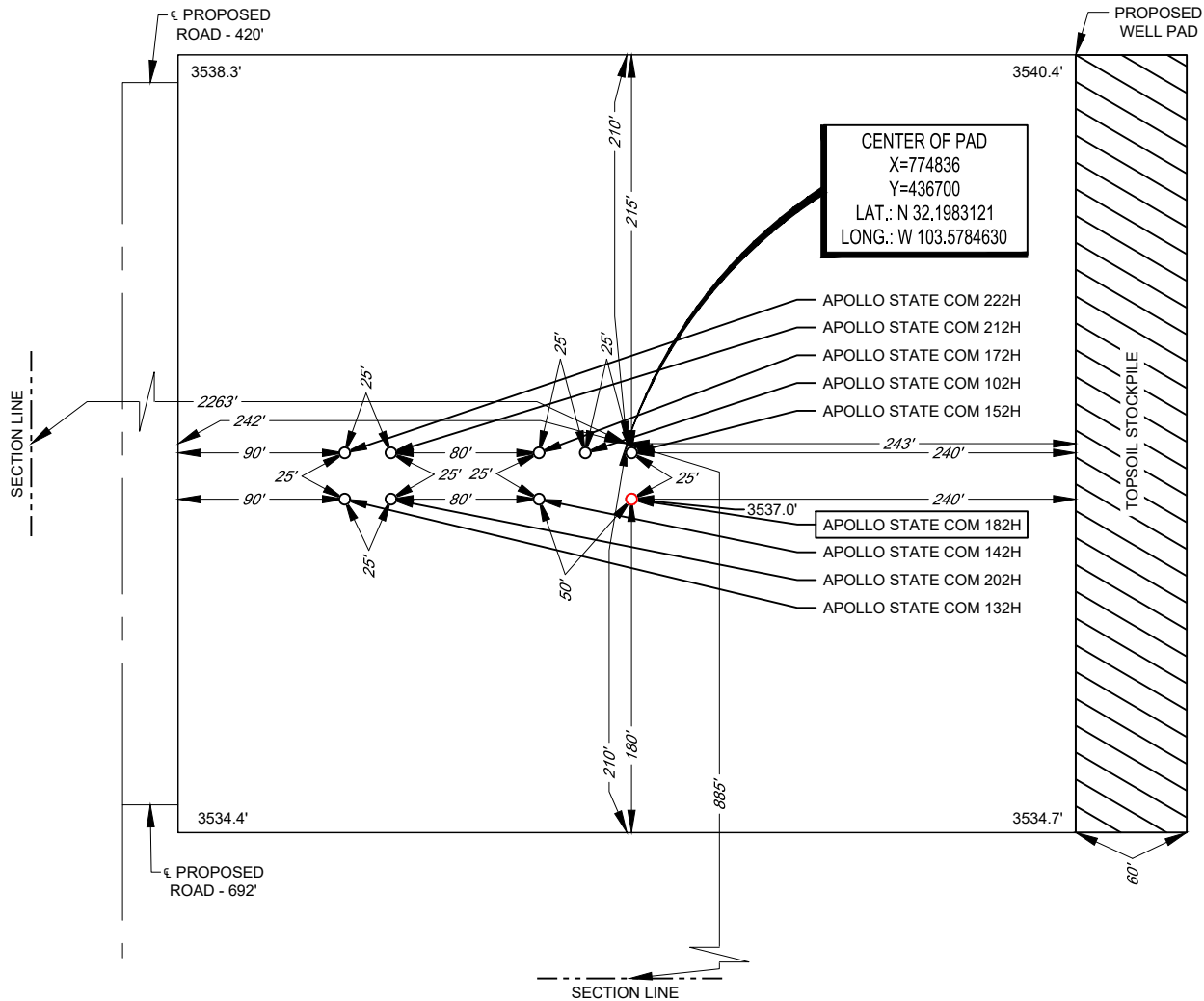
EXHIBIT 2B



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

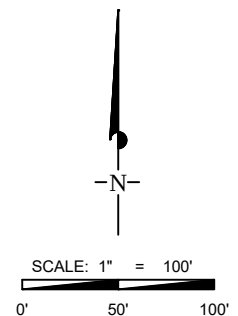


LEASE NAME & WELL NO.: APOLLO STATE COM 182H
182H LATITUDE N 32.1982296 182H LONGITUDE W 103.5784556

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"



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WWW.TOPOGRAPHIC.COM

Tap Rock Operating, LLC.

Lea County, NM (NAD83)

Apollo State COM

182H

OH

Plan: Plan #2

Standard Planning Report

02 March, 2021

Planning Report

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well 182H
Company:	Tap Rock Operating, LLC.	TVD Reference:	RKB @ 3563.0usft (26' RKB)
Project:	Lea County, NM (NAD83)	MD Reference:	RKB @ 3563.0usft (26' RKB)
Site:	Apollo State COM	North Reference:	Grid
Well:	182H	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	182H					
Well Position	+N/-S	41.2 usft	Northing:	436,670.00 usft	Latitude:	32° 11' 53.627 N
	+E/-W	1,690.4 usft	Easting:	774,839.00 usft	Longitude:	103° 34' 42.436 W
Position Uncertainty	2.0 usft		Wellhead Elevation:		Ground Level:	3,537.0 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	
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,733.3	6.50	174.00	1,732.4	-24.4	2.6	1.50	1.50	0.00	174.00	
8,733.3	6.50	174.00	8,687.4	-812.5	85.4	0.00	0.00	0.00	0.00	
9,166.7	0.00	0.00	9,119.8	-836.9	88.0	1.50	-1.50	0.00	180.00	
9,423.9	0.00	0.00	9,377.0	-836.9	88.0	0.00	0.00	0.00	0.00	
10,324.0	90.01	356.10	9,950.0	-265.1	49.0	10.00	10.00	0.00	356.10	
10,498.2	90.01	359.58	9,950.0	-91.1	42.4	2.00	0.00	2.00	89.97	
20,192.6	90.01	359.58	9,948.0	9,603.0	-28.0	0.00	0.00	0.00	0.00	LTP_A.182H
20,262.6	90.01	359.58	9,948.0	9,673.0	-28.5	0.00	0.00	0.00	0.00	PBHL_A.182H

Planning Report

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well 182H
Company:	Tap Rock Operating, LLC.	TVD Reference:	RKB @ 3563.0usft (26' RKB)
Project:	Lea County, NM (NAD83)	MD Reference:	RKB @ 3563.0usft (26' RKB)
Site:	Apollo State COM	North Reference:	Grid
Well:	182H	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
1,160.0	0.00	0.00	1,160.0	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
Start Build 1.50									
1,400.0	1.50	174.00	1,400.0	-1.3	0.1	-1.3	1.50	1.50	0.00
1,500.0	3.00	174.00	1,499.9	-5.2	0.5	-5.2	1.50	1.50	0.00
1,600.0	4.50	174.00	1,599.7	-11.7	1.2	-11.7	1.50	1.50	0.00
1,651.5	5.27	174.00	1,651.0	-16.1	1.7	-16.1	1.50	1.50	0.00
Top Salt									
1,700.0	6.00	174.00	1,699.3	-20.8	2.2	-20.8	1.50	1.50	0.00
1,733.3	6.50	174.00	1,732.4	-24.4	2.6	-24.4	1.50	1.50	0.00
Start 7000.0 hold at 1733.3 MD									
1,800.0	6.50	174.00	1,798.6	-31.9	3.4	-31.9	0.00	0.00	0.00
1,900.0	6.50	174.00	1,898.0	-43.2	4.5	-43.2	0.00	0.00	0.00
2,000.0	6.50	174.00	1,997.4	-54.4	5.7	-54.5	0.00	0.00	0.00
2,100.0	6.50	174.00	2,096.7	-65.7	6.9	-65.7	0.00	0.00	0.00
2,200.0	6.50	174.00	2,196.1	-77.0	8.1	-77.0	0.00	0.00	0.00
2,300.0	6.50	174.00	2,295.4	-88.2	9.3	-88.3	0.00	0.00	0.00
2,400.0	6.50	174.00	2,394.8	-99.5	10.5	-99.5	0.00	0.00	0.00
2,500.0	6.50	174.00	2,494.1	-110.7	11.6	-110.8	0.00	0.00	0.00
2,600.0	6.50	174.00	2,593.5	-122.0	12.8	-122.1	0.00	0.00	0.00
2,700.0	6.50	174.00	2,692.9	-133.2	14.0	-133.3	0.00	0.00	0.00
2,800.0	6.50	174.00	2,792.2	-144.5	15.2	-144.6	0.00	0.00	0.00
2,900.0	6.50	174.00	2,891.6	-155.8	16.4	-155.9	0.00	0.00	0.00
3,000.0	6.50	174.00	2,990.9	-167.0	17.6	-167.1	0.00	0.00	0.00
3,100.0	6.50	174.00	3,090.3	-178.3	18.7	-178.4	0.00	0.00	0.00
3,200.0	6.50	174.00	3,189.6	-189.5	19.9	-189.7	0.00	0.00	0.00
3,300.0	6.50	174.00	3,289.0	-200.8	21.1	-200.9	0.00	0.00	0.00
3,400.0	6.50	174.00	3,388.4	-212.1	22.3	-212.2	0.00	0.00	0.00
3,500.0	6.50	174.00	3,487.7	-223.3	23.5	-223.5	0.00	0.00	0.00
3,600.0	6.50	174.00	3,587.1	-234.6	24.7	-234.7	0.00	0.00	0.00
3,700.0	6.50	174.00	3,686.4	-245.8	25.8	-246.0	0.00	0.00	0.00
3,800.0	6.50	174.00	3,785.8	-257.1	27.0	-257.3	0.00	0.00	0.00
3,900.0	6.50	174.00	3,885.1	-268.3	28.2	-268.5	0.00	0.00	0.00
4,000.0	6.50	174.00	3,984.5	-279.6	29.4	-279.8	0.00	0.00	0.00
4,100.0	6.50	174.00	4,083.9	-290.9	30.6	-291.1	0.00	0.00	0.00
4,200.0	6.50	174.00	4,183.2	-302.1	31.8	-302.3	0.00	0.00	0.00
4,300.0	6.50	174.00	4,282.6	-313.4	32.9	-313.6	0.00	0.00	0.00
4,400.0	6.50	174.00	4,381.9	-324.6	34.1	-324.9	0.00	0.00	0.00
4,500.0	6.50	174.00	4,481.3	-335.9	35.3	-336.1	0.00	0.00	0.00
4,600.0	6.50	174.00	4,580.6	-347.2	36.5	-347.4	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well 182H
Company:	Tap Rock Operating, LLC.	TVD Reference:	RKB @ 3563.0usft (26' RKB)
Project:	Lea County, NM (NAD83)	MD Reference:	RKB @ 3563.0usft (26' RKB)
Site:	Apollo State COM	North Reference:	Grid
Well:	182H	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)
4,700.0	6.50	174.00	4,680.0	-358.4	37.7	-358.7	0.00	0.00	0.00
4,800.0	6.50	174.00	4,779.4	-369.7	38.9	-369.9	0.00	0.00	0.00
4,900.0	6.50	174.00	4,878.7	-380.9	40.0	-381.2	0.00	0.00	0.00
4,927.5	6.50	174.00	4,906.0	-384.0	40.4	-384.3	0.00	0.00	0.00
Base Salt									
5,000.0	6.50	174.00	4,978.1	-392.2	41.2	-392.5	0.00	0.00	0.00
5,100.0	6.50	174.00	5,077.4	-403.4	42.4	-403.7	0.00	0.00	0.00
5,147.9	6.50	174.00	5,125.0	-408.8	43.0	-409.1	0.00	0.00	0.00
Delaware Mountain Gp									
5,169.0	6.50	174.00	5,146.0	-411.2	43.2	-411.5	0.00	0.00	0.00
Lamar									
5,200.0	6.50	174.00	5,176.8	-414.7	43.6	-415.0	0.00	0.00	0.00
5,210.3	6.50	174.00	5,187.0	-415.9	43.7	-416.2	0.00	0.00	0.00
Bell Canyon									
5,242.5	6.50	174.00	5,219.0	-419.5	44.1	-419.8	0.00	0.00	0.00
Ramsey Sand									
5,300.0	6.50	174.00	5,276.1	-426.0	44.8	-426.3	0.00	0.00	0.00
5,400.0	6.50	174.00	5,375.5	-437.2	46.0	-437.5	0.00	0.00	0.00
5,500.0	6.50	174.00	5,474.9	-448.5	47.1	-448.8	0.00	0.00	0.00
5,600.0	6.50	174.00	5,574.2	-459.7	48.3	-460.1	0.00	0.00	0.00
5,700.0	6.50	174.00	5,673.6	-471.0	49.5	-471.3	0.00	0.00	0.00
5,800.0	6.50	174.00	5,772.9	-482.3	50.7	-482.6	0.00	0.00	0.00
5,900.0	6.50	174.00	5,872.3	-493.5	51.9	-493.9	0.00	0.00	0.00
6,000.0	6.50	174.00	5,971.6	-504.8	53.1	-505.1	0.00	0.00	0.00
6,100.0	6.50	174.00	6,071.0	-516.0	54.2	-516.4	0.00	0.00	0.00
6,199.6	6.50	174.00	6,170.0	-527.2	55.4	-527.6	0.00	0.00	0.00
Cherry Canyon									
6,200.0	6.50	174.00	6,170.4	-527.3	55.4	-527.7	0.00	0.00	0.00
6,300.0	6.50	174.00	6,269.7	-538.5	56.6	-538.9	0.00	0.00	0.00
6,400.0	6.50	174.00	6,369.1	-549.8	57.8	-550.2	0.00	0.00	0.00
6,500.0	6.50	174.00	6,468.4	-561.1	59.0	-561.5	0.00	0.00	0.00
6,600.0	6.50	174.00	6,567.8	-572.3	60.2	-572.7	0.00	0.00	0.00
6,700.0	6.50	174.00	6,667.1	-583.6	61.3	-584.0	0.00	0.00	0.00
6,800.0	6.50	174.00	6,766.5	-594.8	62.5	-595.3	0.00	0.00	0.00
6,900.0	6.50	174.00	6,865.9	-606.1	63.7	-606.5	0.00	0.00	0.00
7,000.0	6.50	174.00	6,965.2	-617.4	64.9	-617.8	0.00	0.00	0.00
7,100.0	6.50	174.00	7,064.6	-628.6	66.1	-629.1	0.00	0.00	0.00
7,200.0	6.50	174.00	7,163.9	-639.9	67.3	-640.3	0.00	0.00	0.00
7,300.0	6.50	174.00	7,263.3	-651.1	68.4	-651.6	0.00	0.00	0.00
7,400.0	6.50	174.00	7,362.6	-662.4	69.6	-662.9	0.00	0.00	0.00
7,500.0	6.50	174.00	7,462.0	-673.6	70.8	-674.1	0.00	0.00	0.00
7,600.0	6.50	174.00	7,561.4	-684.9	72.0	-685.4	0.00	0.00	0.00
7,687.2	6.50	174.00	7,648.0	-694.7	73.0	-695.2	0.00	0.00	0.00
Brushy Canyon									
7,700.0	6.50	174.00	7,660.7	-696.2	73.2	-696.7	0.00	0.00	0.00
7,800.0	6.50	174.00	7,760.1	-707.4	74.4	-707.9	0.00	0.00	0.00
7,900.0	6.50	174.00	7,859.4	-718.7	75.5	-719.2	0.00	0.00	0.00
8,000.0	6.50	174.00	7,958.8	-729.9	76.7	-730.5	0.00	0.00	0.00
8,100.0	6.50	174.00	8,058.1	-741.2	77.9	-741.7	0.00	0.00	0.00
8,200.0	6.50	174.00	8,157.5	-752.5	79.1	-753.0	0.00	0.00	0.00
8,300.0	6.50	174.00	8,256.9	-763.7	80.3	-764.3	0.00	0.00	0.00
8,400.0	6.50	174.00	8,356.2	-775.0	81.5	-775.5	0.00	0.00	0.00
8,500.0	6.50	174.00	8,455.6	-786.2	82.6	-786.8	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well 182H
Company:	Tap Rock Operating, LLC.	TVD Reference:	RKB @ 3563.0usft (26' RKB)
Project:	Lea County, NM (NAD83)	MD Reference:	RKB @ 3563.0usft (26' RKB)
Site:	Apollo State COM	North Reference:	Grid
Well:	182H	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)
8,600.0	6.50	174.00	8,554.9	-797.5	83.8	-798.1	0.00	0.00	0.00
8,700.0	6.50	174.00	8,654.3	-808.7	85.0	-809.3	0.00	0.00	0.00
8,733.3	6.50	174.00	8,687.4	-812.5	85.4	-813.1	0.00	0.00	0.00
Start Drop -1.50									
8,800.0	5.50	174.00	8,753.7	-819.4	86.1	-820.0	1.50	-1.50	0.00
8,900.0	4.00	174.00	8,853.4	-827.7	87.0	-828.3	1.50	-1.50	0.00
9,000.0	2.50	174.00	8,953.2	-833.3	87.6	-833.9	1.50	-1.50	0.00
9,100.0	1.00	174.00	9,053.1	-836.3	87.9	-837.0	1.50	-1.50	0.00
9,161.9	0.07	174.00	9,115.0	-836.9	88.0	-837.5	1.50	-1.50	0.00
Bone Spring Lime									
9,166.7	0.00	0.00	9,119.8	-836.9	88.0	-837.5	1.50	-1.50	0.00
Start 257.2 hold at 9166.7 MD									
9,200.0	0.00	0.00	9,153.1	-836.9	88.0	-837.5	0.00	0.00	0.00
9,265.9	0.00	0.00	9,219.0	-836.9	88.0	-837.5	0.00	0.00	0.00
Upper Avalon									
9,300.0	0.00	0.00	9,253.1	-836.9	88.0	-837.5	0.00	0.00	0.00
9,400.0	0.00	0.00	9,353.1	-836.9	88.0	-837.5	0.00	0.00	0.00
9,423.9	0.00	0.00	9,377.0	-836.9	88.0	-837.5	0.00	0.00	0.00
Start Build 10.00									
9,450.0	2.61	356.10	9,403.1	-836.3	87.9	-836.9	10.00	10.00	0.00
9,491.0	6.71	356.10	9,444.0	-833.0	87.7	-833.6	10.00	10.00	0.00
Middle Avalon									
9,500.0	7.61	356.10	9,452.9	-831.9	87.6	-832.5	10.00	10.00	0.00
9,550.0	12.61	356.10	9,502.1	-823.1	87.0	-823.7	10.00	10.00	0.00
9,600.0	17.61	356.10	9,550.4	-810.1	86.1	-810.7	10.00	10.00	0.00
9,650.0	22.61	356.10	9,597.3	-793.0	85.0	-793.6	10.00	10.00	0.00
9,700.0	27.61	356.10	9,642.6	-771.8	83.5	-772.4	10.00	10.00	0.00
9,750.0	32.61	356.10	9,685.8	-746.8	81.8	-747.4	10.00	10.00	0.00
9,800.0	37.61	356.10	9,726.7	-718.1	79.9	-718.7	10.00	10.00	0.00
9,850.0	42.61	356.10	9,764.9	-686.0	77.7	-686.5	10.00	10.00	0.00
9,900.0	47.61	356.10	9,800.2	-650.6	75.3	-651.2	10.00	10.00	0.00
9,919.3	49.54	356.10	9,813.0	-636.2	74.3	-636.7	10.00	10.00	0.00
Lower Avalon									
9,950.0	52.61	356.10	9,832.3	-612.4	72.7	-612.9	10.00	10.00	0.00
10,000.0	57.61	356.10	9,860.9	-571.5	69.9	-572.0	10.00	10.00	0.00
10,050.0	62.61	356.10	9,885.8	-528.2	66.9	-528.7	10.00	10.00	0.00
10,100.0	67.61	356.10	9,906.8	-483.0	63.8	-483.5	10.00	10.00	0.00
10,150.0	72.61	356.10	9,923.8	-436.1	60.6	-436.5	10.00	10.00	0.00
10,200.0	77.61	356.10	9,936.7	-387.9	57.4	-388.3	10.00	10.00	0.00
10,250.0	82.61	356.10	9,945.2	-338.8	54.0	-339.2	10.00	10.00	0.00
10,300.0	87.61	356.10	9,949.5	-289.1	50.6	-289.5	10.00	10.00	0.00
10,324.0	90.01	356.10	9,950.0	-265.1	49.0	-265.5	10.00	10.00	0.00
Start DLS 2.00 TFO 89.97									
10,400.0	90.01	357.62	9,950.0	-189.3	44.8	-189.6	2.00	0.00	2.00
10,498.2	90.01	359.58	9,950.0	-91.1	42.4	-91.4	2.00	0.00	2.00
Start 9694.4 hold at 10498.2 MD									
10,500.0	90.01	359.58	9,950.0	-89.3	42.4	-89.6	0.00	0.00	0.00
10,600.0	90.01	359.58	9,949.9	10.7	41.7	10.4	0.00	0.00	0.00
10,700.0	90.01	359.58	9,949.9	110.7	41.0	110.4	0.00	0.00	0.00
10,800.0	90.01	359.58	9,949.9	210.7	40.2	210.4	0.00	0.00	0.00
10,900.0	90.01	359.58	9,949.9	310.7	39.5	310.4	0.00	0.00	0.00
11,000.0	90.01	359.58	9,949.9	410.7	38.8	410.4	0.00	0.00	0.00
11,100.0	90.01	359.58	9,949.8	510.7	38.1	510.4	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well 182H
Company:	Tap Rock Operating, LLC.	TVD Reference:	RKB @ 3563.0usft (26' RKB)
Project:	Lea County, NM (NAD83)	MD Reference:	RKB @ 3563.0usft (26' RKB)
Site:	Apollo State COM	North Reference:	Grid
Well:	182H	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)
11,200.0	90.01	359.58	9,949.8	610.7	37.3	610.4	0.00	0.00	0.00
11,300.0	90.01	359.58	9,949.8	710.7	36.6	710.4	0.00	0.00	0.00
11,400.0	90.01	359.58	9,949.8	810.7	35.9	810.4	0.00	0.00	0.00
11,500.0	90.01	359.58	9,949.8	910.7	35.1	910.4	0.00	0.00	0.00
11,600.0	90.01	359.58	9,949.7	1,010.7	34.4	1,010.4	0.00	0.00	0.00
11,700.0	90.01	359.58	9,949.7	1,110.6	33.7	1,110.4	0.00	0.00	0.00
11,800.0	90.01	359.58	9,949.7	1,210.6	33.0	1,210.4	0.00	0.00	0.00
11,900.0	90.01	359.58	9,949.7	1,310.6	32.2	1,310.4	0.00	0.00	0.00
12,000.0	90.01	359.58	9,949.7	1,410.6	31.5	1,410.4	0.00	0.00	0.00
12,100.0	90.01	359.58	9,949.6	1,510.6	30.8	1,510.4	0.00	0.00	0.00
12,200.0	90.01	359.58	9,949.6	1,610.6	30.1	1,610.4	0.00	0.00	0.00
12,300.0	90.01	359.58	9,949.6	1,710.6	29.3	1,710.4	0.00	0.00	0.00
12,400.0	90.01	359.58	9,949.6	1,810.6	28.6	1,810.4	0.00	0.00	0.00
12,500.0	90.01	359.58	9,949.6	1,910.6	27.9	1,910.4	0.00	0.00	0.00
12,600.0	90.01	359.58	9,949.5	2,010.6	27.2	2,010.4	0.00	0.00	0.00
12,700.0	90.01	359.58	9,949.5	2,110.6	26.4	2,110.4	0.00	0.00	0.00
12,800.0	90.01	359.58	9,949.5	2,210.6	25.7	2,210.4	0.00	0.00	0.00
12,900.0	90.01	359.58	9,949.5	2,310.6	25.0	2,310.4	0.00	0.00	0.00
13,000.0	90.01	359.58	9,949.5	2,410.6	24.3	2,410.4	0.00	0.00	0.00
13,100.0	90.01	359.58	9,949.4	2,510.6	23.5	2,510.4	0.00	0.00	0.00
13,200.0	90.01	359.58	9,949.4	2,610.6	22.8	2,610.4	0.00	0.00	0.00
13,300.0	90.01	359.58	9,949.4	2,710.6	22.1	2,710.4	0.00	0.00	0.00
13,400.0	90.01	359.58	9,949.4	2,810.6	21.3	2,810.4	0.00	0.00	0.00
13,500.0	90.01	359.58	9,949.4	2,910.6	20.6	2,910.4	0.00	0.00	0.00
13,600.0	90.01	359.58	9,949.3	3,010.6	19.9	3,010.4	0.00	0.00	0.00
13,700.0	90.01	359.58	9,949.3	3,110.6	19.2	3,110.4	0.00	0.00	0.00
13,800.0	90.01	359.58	9,949.3	3,210.6	18.4	3,210.4	0.00	0.00	0.00
13,900.0	90.01	359.58	9,949.3	3,310.6	17.7	3,310.4	0.00	0.00	0.00
14,000.0	90.01	359.58	9,949.3	3,410.6	17.0	3,410.4	0.00	0.00	0.00
14,100.0	90.01	359.58	9,949.2	3,510.6	16.3	3,510.4	0.00	0.00	0.00
14,200.0	90.01	359.58	9,949.2	3,610.6	15.5	3,610.4	0.00	0.00	0.00
14,300.0	90.01	359.58	9,949.2	3,710.6	14.8	3,710.4	0.00	0.00	0.00
14,400.0	90.01	359.58	9,949.2	3,810.6	14.1	3,810.4	0.00	0.00	0.00
14,500.0	90.01	359.58	9,949.2	3,910.6	13.4	3,910.4	0.00	0.00	0.00
14,600.0	90.01	359.58	9,949.1	4,010.6	12.6	4,010.4	0.00	0.00	0.00
14,700.0	90.01	359.58	9,949.1	4,110.6	11.9	4,110.4	0.00	0.00	0.00
14,800.0	90.01	359.58	9,949.1	4,210.6	11.2	4,210.4	0.00	0.00	0.00
14,900.0	90.01	359.58	9,949.1	4,310.6	10.4	4,310.4	0.00	0.00	0.00
15,000.0	90.01	359.58	9,949.1	4,410.6	9.7	4,410.4	0.00	0.00	0.00
15,100.0	90.01	359.58	9,949.0	4,510.6	9.0	4,510.4	0.00	0.00	0.00
15,200.0	90.01	359.58	9,949.0	4,610.6	8.3	4,610.4	0.00	0.00	0.00
15,300.0	90.01	359.58	9,949.0	4,710.6	7.5	4,710.4	0.00	0.00	0.00
15,400.0	90.01	359.58	9,949.0	4,810.6	6.8	4,810.4	0.00	0.00	0.00
15,500.0	90.01	359.58	9,949.0	4,910.5	6.1	4,910.4	0.00	0.00	0.00
15,600.0	90.01	359.58	9,948.9	5,010.5	5.4	5,010.4	0.00	0.00	0.00
15,700.0	90.01	359.58	9,948.9	5,110.5	4.6	5,110.4	0.00	0.00	0.00
15,800.0	90.01	359.58	9,948.9	5,210.5	3.9	5,210.4	0.00	0.00	0.00
15,900.0	90.01	359.58	9,948.9	5,310.5	3.2	5,310.4	0.00	0.00	0.00
16,000.0	90.01	359.58	9,948.9	5,410.5	2.5	5,410.4	0.00	0.00	0.00
16,100.0	90.01	359.58	9,948.8	5,510.5	1.7	5,510.4	0.00	0.00	0.00
16,200.0	90.01	359.58	9,948.8	5,610.5	1.0	5,610.4	0.00	0.00	0.00
16,300.0	90.01	359.58	9,948.8	5,710.5	0.3	5,710.4	0.00	0.00	0.00
16,400.0	90.01	359.58	9,948.8	5,810.5	-0.4	5,810.4	0.00	0.00	0.00
16,500.0	90.01	359.58	9,948.7	5,910.5	-1.2	5,910.4	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well 182H
Company:	Tap Rock Operating, LLC.	TVD Reference:	RKB @ 3563.0usft (26' RKB)
Project:	Lea County, NM (NAD83)	MD Reference:	RKB @ 3563.0usft (26' RKB)
Site:	Apollo State COM	North Reference:	Grid
Well:	182H	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)	
16,600.0	90.01	359.58	9,948.7	6,010.5	-1.9	6,010.4	0.00	0.00	0.00	
16,700.0	90.01	359.58	9,948.7	6,110.5	-2.6	6,110.4	0.00	0.00	0.00	
16,800.0	90.01	359.58	9,948.7	6,210.5	-3.4	6,210.4	0.00	0.00	0.00	
16,900.0	90.01	359.58	9,948.7	6,310.5	-4.1	6,310.4	0.00	0.00	0.00	
17,000.0	90.01	359.58	9,948.6	6,410.5	-4.8	6,410.4	0.00	0.00	0.00	
17,100.0	90.01	359.58	9,948.6	6,510.5	-5.5	6,510.4	0.00	0.00	0.00	
17,200.0	90.01	359.58	9,948.6	6,610.5	-6.3	6,610.4	0.00	0.00	0.00	
17,300.0	90.01	359.58	9,948.6	6,710.5	-7.0	6,710.4	0.00	0.00	0.00	
17,400.0	90.01	359.58	9,948.6	6,810.5	-7.7	6,810.4	0.00	0.00	0.00	
17,500.0	90.01	359.58	9,948.5	6,910.5	-8.4	6,910.4	0.00	0.00	0.00	
17,600.0	90.01	359.58	9,948.5	7,010.5	-9.2	7,010.4	0.00	0.00	0.00	
17,700.0	90.01	359.58	9,948.5	7,110.5	-9.9	7,110.4	0.00	0.00	0.00	
17,800.0	90.01	359.58	9,948.5	7,210.5	-10.6	7,210.4	0.00	0.00	0.00	
17,900.0	90.01	359.58	9,948.5	7,310.5	-11.3	7,310.4	0.00	0.00	0.00	
18,000.0	90.01	359.58	9,948.4	7,410.5	-12.1	7,410.4	0.00	0.00	0.00	
18,100.0	90.01	359.58	9,948.4	7,510.5	-12.8	7,510.4	0.00	0.00	0.00	
18,200.0	90.01	359.58	9,948.4	7,610.5	-13.5	7,610.4	0.00	0.00	0.00	
18,300.0	90.01	359.58	9,948.4	7,710.5	-14.3	7,710.4	0.00	0.00	0.00	
18,400.0	90.01	359.58	9,948.4	7,810.5	-15.0	7,810.4	0.00	0.00	0.00	
18,500.0	90.01	359.58	9,948.3	7,910.5	-15.7	7,910.4	0.00	0.00	0.00	
18,600.0	90.01	359.58	9,948.3	8,010.5	-16.4	8,010.4	0.00	0.00	0.00	
18,700.0	90.01	359.58	9,948.3	8,110.5	-17.2	8,110.4	0.00	0.00	0.00	
18,800.0	90.01	359.58	9,948.3	8,210.5	-17.9	8,210.4	0.00	0.00	0.00	
18,900.0	90.01	359.58	9,948.3	8,310.5	-18.6	8,310.4	0.00	0.00	0.00	
19,000.0	90.01	359.58	9,948.2	8,410.5	-19.3	8,410.4	0.00	0.00	0.00	
19,100.0	90.01	359.58	9,948.2	8,510.5	-20.1	8,510.4	0.00	0.00	0.00	
19,200.0	90.01	359.58	9,948.2	8,610.5	-20.8	8,610.4	0.00	0.00	0.00	
19,300.0	90.01	359.58	9,948.2	8,710.4	-21.5	8,710.4	0.00	0.00	0.00	
19,400.0	90.01	359.58	9,948.2	8,810.4	-22.2	8,810.4	0.00	0.00	0.00	
19,500.0	90.01	359.58	9,948.1	8,910.4	-23.0	8,910.4	0.00	0.00	0.00	
19,600.0	90.01	359.58	9,948.1	9,010.4	-23.7	9,010.4	0.00	0.00	0.00	
19,700.0	90.01	359.58	9,948.1	9,110.4	-24.4	9,110.4	0.00	0.00	0.00	
19,800.0	90.01	359.58	9,948.1	9,210.4	-25.1	9,210.4	0.00	0.00	0.00	
19,900.0	90.01	359.58	9,948.1	9,310.4	-25.9	9,310.4	0.00	0.00	0.00	
20,000.0	90.01	359.58	9,948.0	9,410.4	-26.6	9,410.4	0.00	0.00	0.00	
20,100.0	90.01	359.58	9,948.0	9,510.4	-27.3	9,510.4	0.00	0.00	0.00	
20,192.6	90.01	359.58	9,948.0	9,603.0	-28.0	9,602.9	0.00	0.00	0.00	
20,200.0	90.01	359.58	9,948.0	9,610.4	-28.1	9,610.4	0.00	0.00	0.00	
20,262.6	90.01	359.58	9,948.0	9,673.0	-28.5	9,672.9	0.00	0.00	0.00	
TD at 20262.6 MD										

Planning Report

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well 182H
Company:	Tap Rock Operating, LLC.	TVD Reference:	RKB @ 3563.0usft (26' RKB)
Project:	Lea County, NM (NAD83)	MD Reference:	RKB @ 3563.0usft (26' RKB)
Site:	Apollo State COM	North Reference:	Grid
Well:	182H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #2		

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_A.182H	0.00	0.00	9,948.0	9,673.0	-28.0	446,343.00	774,811.00	32° 13' 29.346 N	103° 34' 41.972 W
- plan misses target center by 0.5usft at 20262.6usft MD (9948.0 TVD, 9673.0 N, -28.5 E)									
- Point									
LTP_A.182H	0.00	0.00	9,948.0	9,603.0	-28.0	446,273.00	774,811.00	32° 13' 28.653 N	103° 34' 41.977 W
- plan hits target center									
- Point									
FTP_A.182H	0.00	0.00	9,950.0	-755.0	48.0	435,915.00	774,887.00	32° 11' 46.153 N	103° 34' 41.940 W
- plan misses target center by 183.2usft at 9919.3usft MD (9813.0 TVD, -636.2 N, 74.3 E)									
- Point									

Formations						
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction	
(usft)	(usft)			(°)	(°)	
1,160.0	1,160.0	Rustler Anhydrite				
1,651.5	1,651.0	Top Salt				
4,927.5	4,906.0	Base Salt				
5,147.9	5,125.0	Delaware Mountain Gp				
5,169.0	5,146.0	Lamar				
5,210.3	5,187.0	Bell Canyon				
5,242.5	5,219.0	Ramsey Sand				
6,199.6	6,170.0	Cherry Canyon				
7,687.2	7,648.0	Brushy Canyon				
9,161.9	9,115.0	Bone Spring Lime				
9,265.9	9,219.0	Upper Avalon				
9,491.0	9,444.0	Middle Avalon				
9,919.3	9,813.0	Lower Avalon				

Plan Annotations					
Measured Depth	Vertical Depth	Local Coordinates			
(usft)	(usft)	+N/-S (usft)	+E/-W (usft)	Comment	
1,300.0	1,300.0	0.0	0.0	Start Build 1.50	
1,733.3	1,732.4	-24.4	2.6	Start 7000.0 hold at 1733.3 MD	
8,733.3	8,687.4	-812.5	85.4	Start Drop -1.50	
9,166.7	9,119.8	-836.9	88.0	Start 257.2 hold at 9166.7 MD	
9,423.9	9,377.0	-836.9	88.0	Start Build 10.00	
10,324.0	9,950.0	-265.1	49.0	Start DLS 2.00 TFO 89.97	
10,498.2	9,950.0	-91.1	42.4	Start 9694.4 hold at 10498.2 MD	
20,262.6	9,948.0	9,603.0	-28.0	TD at 20262.6 MD	

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Phone:(575) 748-1283 Fax:(575) 748-9720
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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 20291

CONDITIONS OF APPROVAL

Operator:	OGRID:	Action Number:	Action Type:
TAP ROCK OPERATING, LLC Suite 200 Golden, CO80401	372043	20291	C-103A
523 Park Point Drive			
OCD Reviewer	Condition		
pkautz	None		