

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 276244

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

1. Operator Name and Address TAP ROCK OPERATING, LLC 602 Park Point Drive Golden, CO 80401		2. OGRID Number 372043
		3. API Number 30-025-46661
4. Property Code 325410	5. Property Name HYPERION STATE	6. Well No. 215H

7. Surface Location

UL - Lot D	Section 20	Township 24S	Range 33E	Lot Idn D	Feet From 497	N/S Line N	Feet From 565	E/W Line W	County Lea
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8. Proposed Bottom Hole Location

UL - Lot M	Section 20	Township 24S	Range 33E	Lot Idn M	Feet From 5	N/S Line S	Feet From 990	E/W Line W	County Lea
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9. Pool Information

WC-025 G-09 S243310P;UPPER WOLFCAMP	98135
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Additional Well Information

11. Work Type New Well	12. Well Type OIL	13. Cable/Rotary	14. Lease Type State	15. Ground Level Elevation 3538
16. Multiple N	17. Proposed Depth 17750	18. Formation Wolfcamp	19. Contractor	20. Spud Date 1/1/2019
Depth to Ground water		Distance from nearest fresh water well		Distance to nearest surface water

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

21. Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surf	17.5	13.375	54.5	1250	965	0
Int1	12.25	9.625	40	5100	1600	0
Int2	8.75	7.625	29.7	12050	520	4000
Prod	6.75	5.5	20	11800	0	11000
Prod	6.75	5	20	17750	670	11000

Casing/Cement Program: Additional Comments

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22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Annular	5000	1500	
Double Ram	10000	5000	
Blind	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	Approved By:	Paul F Kautz
Title:	Regulatory Manager	Title:	Geologist
Email Address:	ccombs@taprk.com	Approved Date:	12/26/2019
Date:	12/25/2019	Phone:	720-360-4028
		Expiration Date: 12/26/2021	
		Conditions of Approval Attached	

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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		² Pool Code	³ Pool Name
⁴ Property Code	⁵ Property Name HYPERION STATE		⁶ Well Number 215H
⁷ OGRID No.	⁸ Operator Name TAP ROCK OPERATING, LLC.		⁹ Elevation 3538'

¹⁰Surface Location

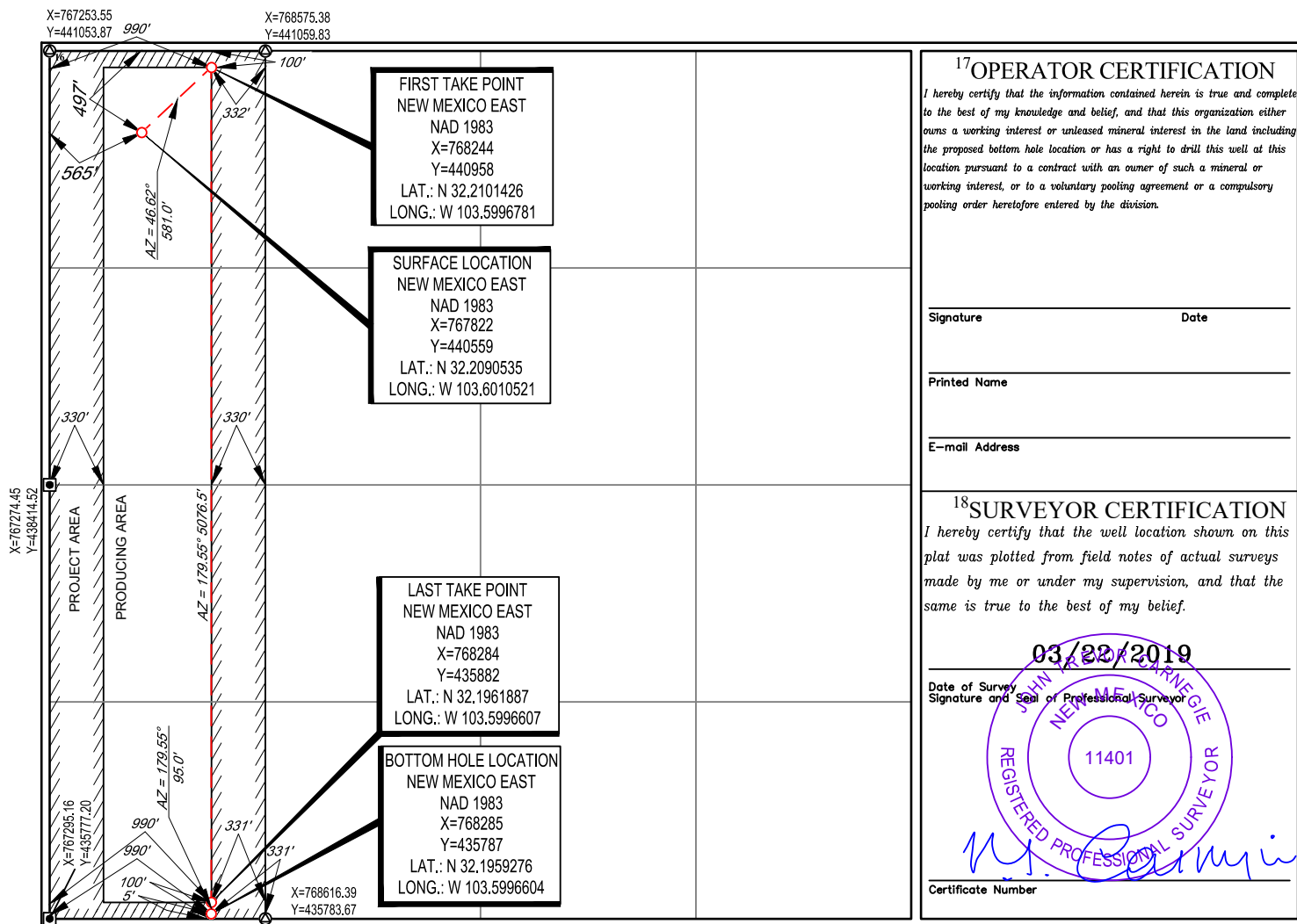
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	20	24-S	33-E	—	497'	NORTH	565'	WEST	LEA

¹¹Bottom Hole Location If Different From Surface

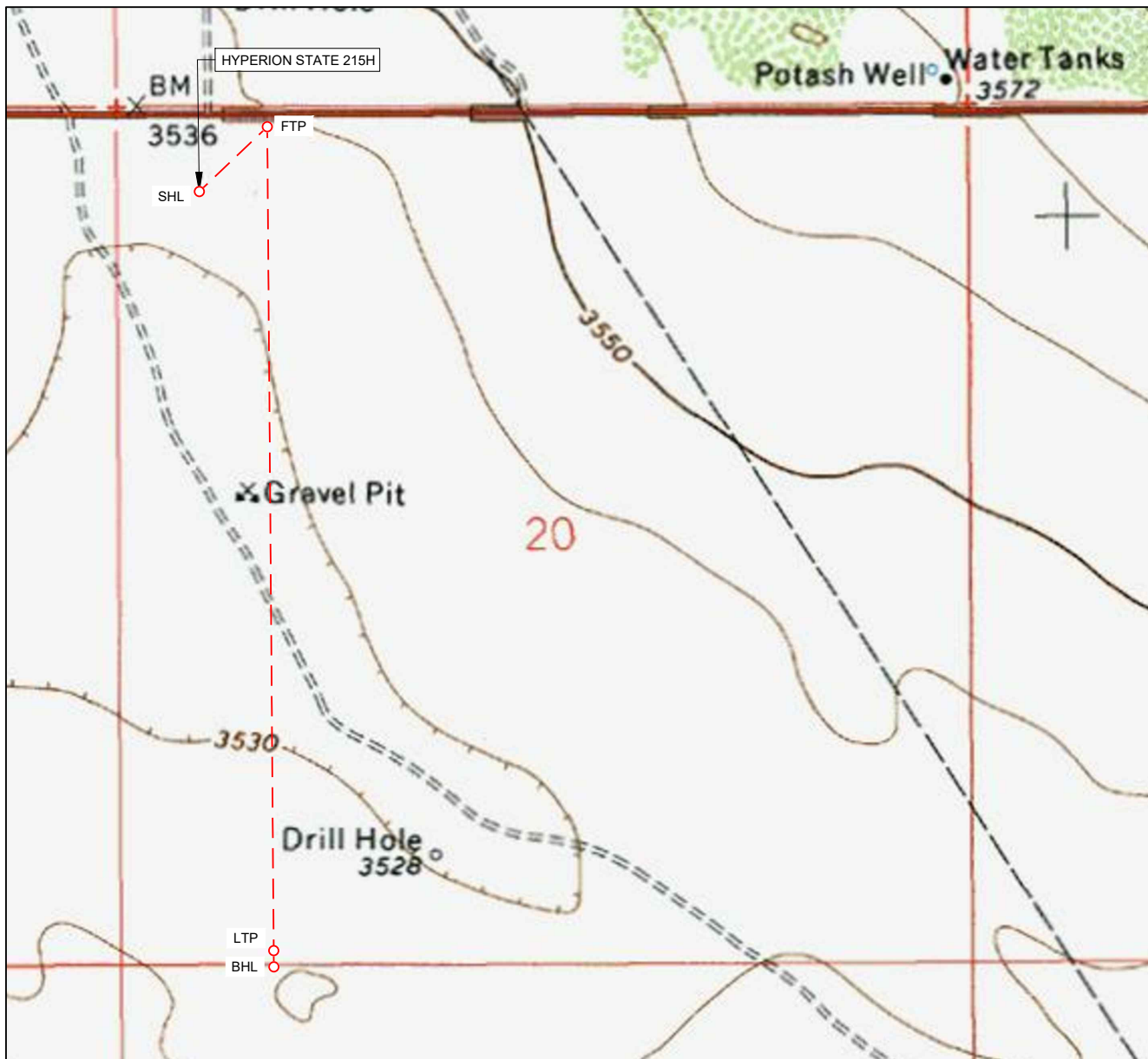
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	20	24-S	33-E	-	5'	SOUTH	990'	WEST	LEA

¹² Dedicated Acres	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.: HYPERION STATE 215H

SECTION 20 TWP 24-S RGE 33-E SURVEY N.M.P.M.
 COUNTY LEA STATE NM ELEVATION 3538'
 DESCRIPTION 497' FNL & 565' FWL

LATITUDE N 32.2090535 LONGITUDE W 103.6010521

SCALE: 1" = 1000'
 0' 500' 1000'

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.

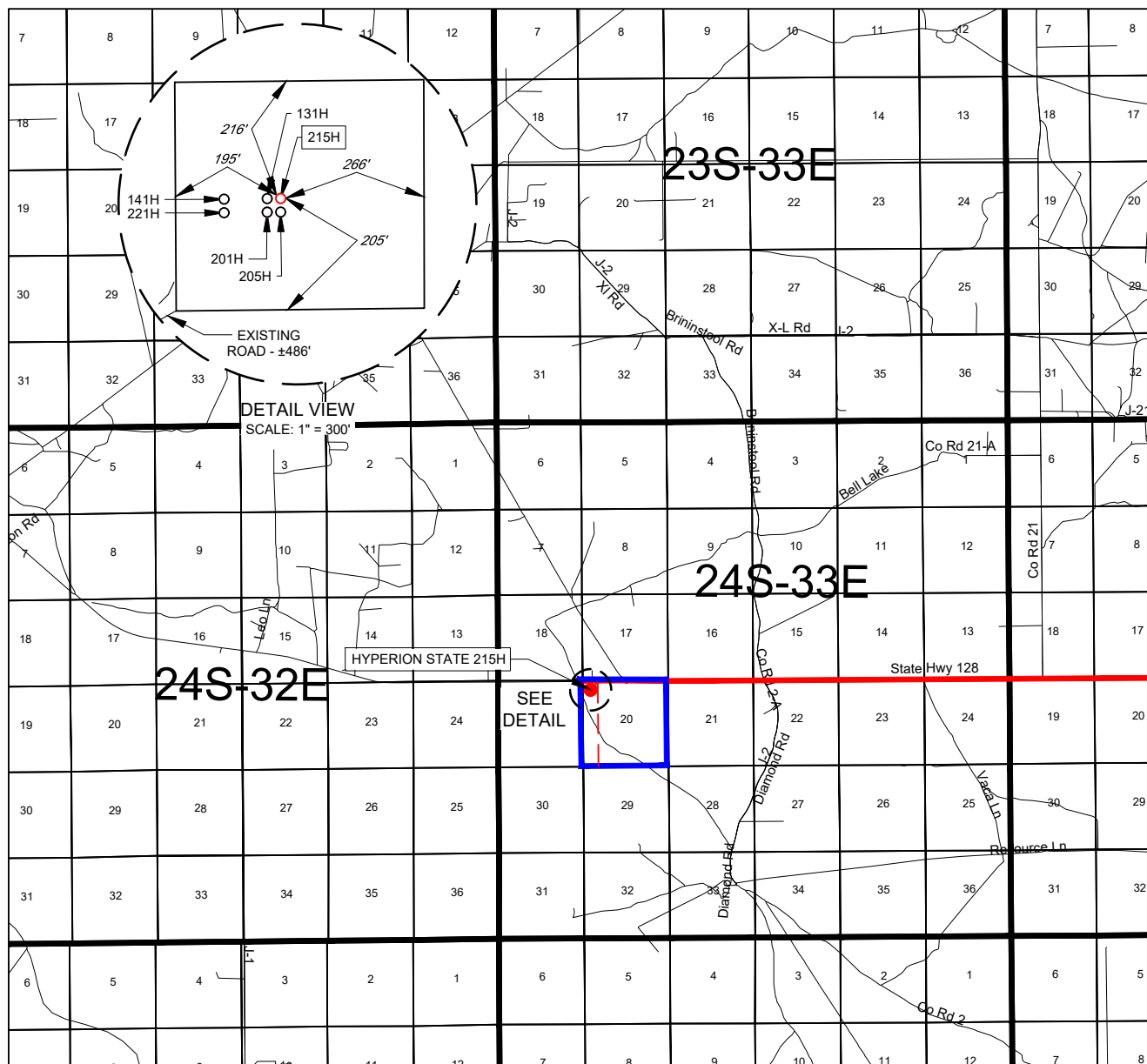
ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREON ARE GRID BASED UPON THE NEW MEXICO COORDINATE SYSTEM OF 1983, EAST ZONE, U.S. SURVEY FEET.



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 MAP

LEASE NAME & WELL NO.: _____ HYPERION STATE 215H

SECTION 20 TWP 24-S RGE 33-E SURVEY N.M.P.M.
 COUNTY _____ LEA _____ STATE NM
 DESCRIPTION 497' FNL & 565' FWL

DISTANCE & DIRECTION

FROM INT. OF NM-128 & DELAWARE BASIN RD., GO WEST ON
 NM-128 ± 5.4 MILES, THENCE SOUTH (LEFT) ON A LEASE RD. ± 880
 FEET, THENCE NORTHEAST (LEFT) ON A EXISTING RD. ± 486 FEET
 TO A POINT ± 316 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.

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'

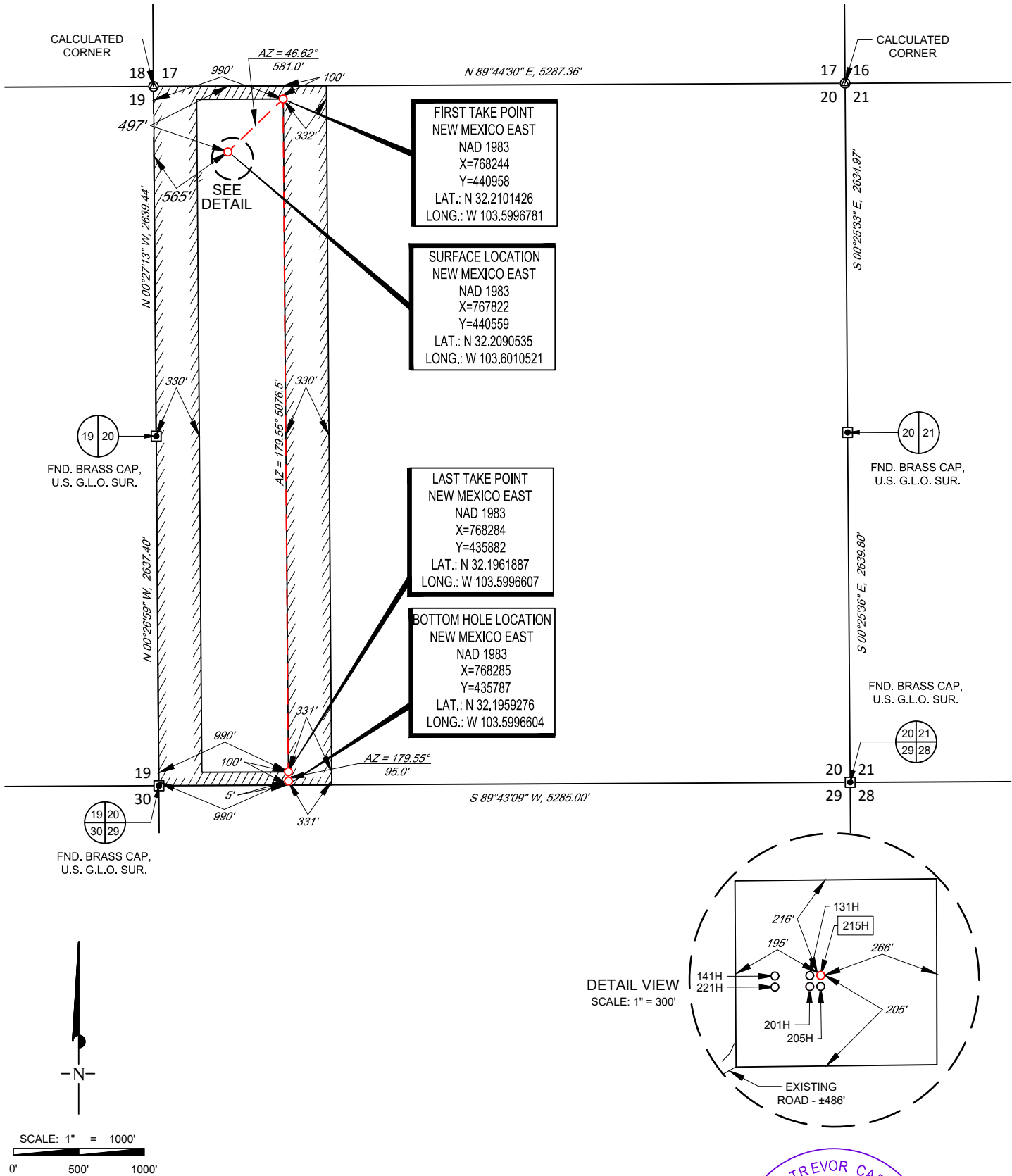


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TAP
ROCK
EXHIBIT 2A

SECTION 20, TOWNSHIP 24-S, RANGE 33-E, N.M.P.M.
LEA COUNTY, NEW MEXICO



LEASE NAME & WELL NO.: _____ HYPERION STATE 215H

SECTION 20 TWP 24-S RGE 33-E SURVEY N.M.P.M.
COUNTY LEA STATE NM
DESCRIPTION 497' FNL & 565' FWL

DISTANCE & DIRECTION
FROM INT. OF NM-128 & DELAWARE BASIN RD., GO WEST ON NM-128
±5.4 MILES, THENCE SOUTH (LEFT) ON A LEASE RD. ±880 FEET,
THENCE NORTHEAST (LEFT) ON A EXISTING RD. ±486 FEET TO A
POINT ±316 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.



John Trevor Carnegie, P.S. No. 11401



TOPOGRAPHIC
LOYALTY INNOVATION LEGACY

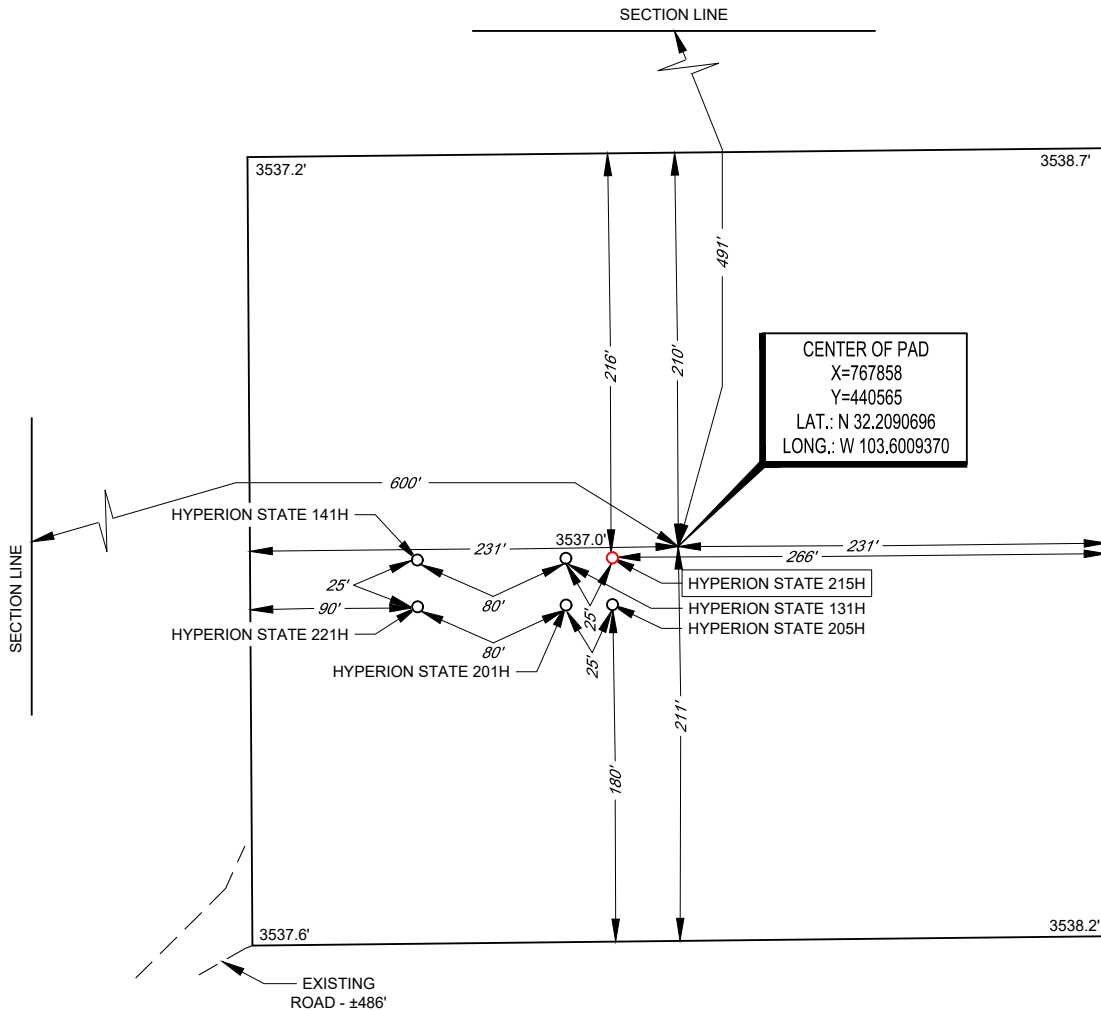
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EXHIBIT 2B



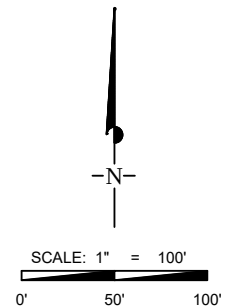
SECTION 20, TOWNSHIP 24-S, RANGE 33-E, N.M.P.M.
LEA COUNTY, NEW MEXICO

DETAIL VIEW
SCALE: 1" = 100'



LEASE NAME & WELL NO.: HYPERION STATE 215H
215H LATITUDE N 32.2090535 215H LONGITUDE W 103.6010521

CENTER OF PAD IS 491' FNL & 600' FWL



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 TAPROCK. 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.



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

GAS CAPTURE PLAN

Date: 12/26/2019

☒ 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 (ULSTR)	Footages	Expected MCF/D	Flared or Vented	Comments
HYPERION STATE #215H	30-025-46661	D-20-24S-33E	0497N 0565W	3	Flared	

Gathering System and Pipeline Notification

Well(s) will be connected to a production facility after flowback operations are complete, if gas transporter system is in place. The gas produced from production facility is dedicated to LUCID ENERGY DELAWARE, LLC and will be connected to LUCID ENERGY DELAWARE, LLC High Pressure gathering system located in Lea County, New Mexico. It will require 500' of pipeline to connect the facility to High 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. 13, 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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Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

Form APD Comments

Permit 276244

PERMIT COMMENTS

Operator Name and Address: TAP ROCK OPERATING, LLC [372043] 602 Park Point Drive Golden, CO 80401	API Number: 30-025-46661
	Well: HYPERION STATE #215H

Created By	Comment	Comment Date
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Santa Fe, NM 87505

Form APD Conditions

Permit 276244

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address: TAP ROCK OPERATING, LLC [372043] 602 Park Point Drive Golden, CO 80401	API Number: 30-025-46661
	Well: HYPERION STATE #215H

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

Tap Rock Operating, LLC.

Lea County, NM (NAD83)

Hyperion State

215H

OH

Plan: Plan #1

Standard Planning Report

24 December, 2019

Planning Report

Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well 215H
Company:	Tap Rock Operating, LLC.	TVD Reference:	WELL @ 3564.0usft (26' RKB)
Project:	Lea County, NM (NAD83)	MD Reference:	WELL @ 3564.0usft (26' RKB)
Site:	Hyperion State	North Reference:	Grid
Well:	215H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

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		Hyperion State			
Site Position:		Northing:	440,534.01 usft	Latitude:	32° 12' 32.350 N
From:	Lat/Long	Easting:	767,717.98 usft	Longitude:	103° 36' 5.001 W
Position Uncertainty:	5.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.39 °

Well	215H					
Well Position	+N/-S	25.2 usft	Northing:	440,559.24 usft	Latitude:	32° 12' 32.593 N
	+E/-W	104.1 usft	Easting:	767,822.07 usft	Longitude:	103° 36' 3.788 W
Position Uncertainty		2.0 usft	Wellhead Elevation:		Ground Level:	3,538.0 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	12/23/2019	6.69	60.01	47,666.52570578

Design	Plan #1				
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	179.55	

Plan Survey Tool Program	Date	12/24/2019			
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.0	17,753.8	Plan #1 (OH)	MWD	
			MWD - Standard		

Planning Report

Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well 215H
Company:	Tap Rock Operating, LLC.	TVD Reference:	WELL @ 3564.0usft (26' RKB)
Project:	Lea County, NM (NAD83)	MD Reference:	WELL @ 3564.0usft (26' RKB)
Site:	Hyperion State	North Reference:	Grid
Well:	215H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

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	
3,200.0	0.00	0.00	3,200.0	0.0	0.0	0.00	0.00	0.00	0.00	
3,600.0	6.00	32.00	3,599.3	17.7	11.1	1.50	1.50	0.00	32.00	
8,600.0	6.00	32.00	8,571.9	461.0	288.0	0.00	0.00	0.00	0.00	
9,000.0	0.00	0.00	8,971.1	478.7	299.1	1.50	-1.50	0.00	180.00	
12,166.0	0.00	0.00	12,137.1	478.7	299.1	0.00	0.00	0.00	0.00	
13,070.3	90.44	170.70	12,710.0	-91.0	392.4	10.00	10.00	0.00	170.70	
13,513.0	90.44	179.55	12,706.6	-531.6	430.0	2.00	0.00	2.00	89.99	
17,658.8	90.44	179.55	12,675.0	-4,677.2	462.3	0.00	0.00	0.00	0.00	LTP_H.215H
17,753.8	90.44	179.55	12,674.3	-4,772.2	463.0	0.00	0.00	0.00	0.00	PBHL_H.215H

Planning Report

Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well 215H
Company:	Tap Rock Operating, LLC.	TVD Reference:	WELL @ 3564.0usft (26' RKB)
Project:	Lea County, NM (NAD83)	MD Reference:	WELL @ 3564.0usft (26' RKB)
Site:	Hyperion State	North Reference:	Grid
Well:	215H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	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
1,175.0	0.00	0.00	1,175.0	0.0	0.0	0.0	0.00	0.00	0.00
Rustler Anhyd									
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
1,520.0	0.00	0.00	1,520.0	0.0	0.0	0.0	0.00	0.00	0.00
Top Salt									
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	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
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	0.00
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	0.00
3,100.0	0.00	0.00	3,100.0	0.0	0.0	0.0	0.00	0.00	0.00
3,200.0	0.00	0.00	3,200.0	0.0	0.0	0.0	0.00	0.00	0.00
Start Build 1.50									
3,300.0	1.50	32.00	3,300.0	1.1	0.7	-1.1	1.50	1.50	0.00
3,400.0	3.00	32.00	3,399.9	4.4	2.8	-4.4	1.50	1.50	0.00
3,500.0	4.50	32.00	3,499.7	10.0	6.2	-9.9	1.50	1.50	0.00
3,600.0	6.00	32.00	3,599.3	17.7	11.1	-17.7	1.50	1.50	0.00
Start 5000.0 hold at 3600.0 MD									
3,700.0	6.00	32.00	3,698.7	26.6	16.6	-26.5	0.00	0.00	0.00
3,800.0	6.00	32.00	3,798.2	35.5	22.2	-35.3	0.00	0.00	0.00
3,900.0	6.00	32.00	3,897.6	44.3	27.7	-44.1	0.00	0.00	0.00
4,000.0	6.00	32.00	3,997.1	53.2	33.2	-52.9	0.00	0.00	0.00
4,100.0	6.00	32.00	4,096.5	62.1	38.8	-61.8	0.00	0.00	0.00
4,200.0	6.00	32.00	4,196.0	70.9	44.3	-70.6	0.00	0.00	0.00
4,300.0	6.00	32.00	4,295.4	79.8	49.9	-79.4	0.00	0.00	0.00
4,400.0	6.00	32.00	4,394.9	88.7	55.4	-88.2	0.00	0.00	0.00
4,500.0	6.00	32.00	4,494.3	97.5	60.9	-97.0	0.00	0.00	0.00
4,600.0	6.00	32.00	4,593.8	106.4	66.5	-105.9	0.00	0.00	0.00
4,700.0	6.00	32.00	4,693.2	115.3	72.0	-114.7	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well 215H
Company:	Tap Rock Operating, LLC.	TVD Reference:	WELL @ 3564.0usft (26' RKB)
Project:	Lea County, NM (NAD83)	MD Reference:	WELL @ 3564.0usft (26' RKB)
Site:	Hyperion State	North Reference:	Grid
Well:	215H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	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)	
4,792.3	6.00	32.00	4,785.0	123.4	77.1	-122.8	0.00	0.00	0.00	
Base Salt										
4,800.0	6.00	32.00	4,792.7	124.1	77.6	-123.5	0.00	0.00	0.00	
4,900.0	6.00	32.00	4,892.1	133.0	83.1	-132.3	0.00	0.00	0.00	
5,000.0	6.00	32.00	4,991.6	141.8	88.6	-141.1	0.00	0.00	0.00	
5,033.6	6.00	32.00	5,025.0	144.8	90.5	-144.1	0.00	0.00	0.00	
Diwre Mntn Grp										
5,043.6	6.00	32.00	5,035.0	145.7	91.1	-145.0	0.00	0.00	0.00	
Lamar										
5,058.7	6.00	32.00	5,050.0	147.1	91.9	-146.3	0.00	0.00	0.00	
Bell Canyon										
5,073.8	6.00	32.00	5,065.0	148.4	92.7	-147.7	0.00	0.00	0.00	
Ramsey Snd										
5,100.0	6.00	32.00	5,091.1	150.7	94.2	-150.0	0.00	0.00	0.00	
5,200.0	6.00	32.00	5,190.5	159.6	99.7	-158.8	0.00	0.00	0.00	
5,300.0	6.00	32.00	5,290.0	168.4	105.3	-167.6	0.00	0.00	0.00	
5,400.0	6.00	32.00	5,389.4	177.3	110.8	-176.4	0.00	0.00	0.00	
5,500.0	6.00	32.00	5,488.9	186.2	116.3	-185.3	0.00	0.00	0.00	
5,600.0	6.00	32.00	5,588.3	195.0	121.9	-194.1	0.00	0.00	0.00	
5,700.0	6.00	32.00	5,687.8	203.9	127.4	-202.9	0.00	0.00	0.00	
5,800.0	6.00	32.00	5,787.2	212.8	133.0	-211.7	0.00	0.00	0.00	
5,900.0	6.00	32.00	5,886.7	221.6	138.5	-220.5	0.00	0.00	0.00	
5,973.7	6.00	32.00	5,960.0	228.2	142.6	-227.0	0.00	0.00	0.00	
Cherry Cnyn										
6,000.0	6.00	32.00	5,986.1	230.5	144.0	-229.4	0.00	0.00	0.00	
6,100.0	6.00	32.00	6,085.6	239.4	149.6	-238.2	0.00	0.00	0.00	
6,200.0	6.00	32.00	6,185.0	248.2	155.1	-247.0	0.00	0.00	0.00	
6,300.0	6.00	32.00	6,284.5	257.1	160.6	-255.8	0.00	0.00	0.00	
6,400.0	6.00	32.00	6,383.9	266.0	166.2	-264.6	0.00	0.00	0.00	
6,500.0	6.00	32.00	6,483.4	274.8	171.7	-273.5	0.00	0.00	0.00	
6,600.0	6.00	32.00	6,582.8	283.7	177.3	-282.3	0.00	0.00	0.00	
6,700.0	6.00	32.00	6,682.3	292.5	182.8	-291.1	0.00	0.00	0.00	
6,800.0	6.00	32.00	6,781.7	301.4	188.3	-299.9	0.00	0.00	0.00	
6,900.0	6.00	32.00	6,881.2	310.3	193.9	-308.7	0.00	0.00	0.00	
7,000.0	6.00	32.00	6,980.6	319.1	199.4	-317.6	0.00	0.00	0.00	
7,100.0	6.00	32.00	7,080.1	328.0	205.0	-326.4	0.00	0.00	0.00	
7,200.0	6.00	32.00	7,179.5	336.9	210.5	-335.2	0.00	0.00	0.00	
7,300.0	6.00	32.00	7,279.0	345.7	216.0	-344.0	0.00	0.00	0.00	
7,400.0	6.00	32.00	7,378.5	354.6	221.6	-352.8	0.00	0.00	0.00	
7,436.7	6.00	32.00	7,415.0	357.9	223.6	-356.1	0.00	0.00	0.00	
Brushy Cnyn										
7,500.0	6.00	32.00	7,477.9	363.5	227.1	-361.7	0.00	0.00	0.00	
7,600.0	6.00	32.00	7,577.4	372.3	232.7	-370.5	0.00	0.00	0.00	
7,700.0	6.00	32.00	7,676.8	381.2	238.2	-379.3	0.00	0.00	0.00	
7,800.0	6.00	32.00	7,776.3	390.1	243.7	-388.1	0.00	0.00	0.00	
7,900.0	6.00	32.00	7,875.7	398.9	249.3	-396.9	0.00	0.00	0.00	
8,000.0	6.00	32.00	7,975.2	407.8	254.8	-405.8	0.00	0.00	0.00	
8,100.0	6.00	32.00	8,074.6	416.6	260.4	-414.6	0.00	0.00	0.00	
8,200.0	6.00	32.00	8,174.1	425.5	265.9	-423.4	0.00	0.00	0.00	
8,300.0	6.00	32.00	8,273.5	434.4	271.4	-432.2	0.00	0.00	0.00	
8,400.0	6.00	32.00	8,373.0	443.2	277.0	-441.1	0.00	0.00	0.00	
8,500.0	6.00	32.00	8,472.4	452.1	282.5	-449.9	0.00	0.00	0.00	
8,600.0	6.00	32.00	8,571.9	461.0	288.0	-458.7	0.00	0.00	0.00	

Planning Report

Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well 215H
Company:	Tap Rock Operating, LLC.	TVD Reference:	WELL @ 3564.0usft (26' RKB)
Project:	Lea County, NM (NAD83)	MD Reference:	WELL @ 3564.0usft (26' RKB)
Site:	Hyperion State	North Reference:	Grid
Well:	215H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	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)	
Start Drop -1.50										
8,700.0	4.50	32.00	8,671.5	468.7	292.9	-466.4	1.50	-1.50	0.00	
8,800.0	3.00	32.00	8,771.2	474.3	296.4	-471.9	1.50	-1.50	0.00	
8,900.0	1.50	32.00	8,871.2	477.6	298.4	-475.2	1.50	-1.50	0.00	
9,000.0	0.00	0.00	8,971.1	478.7	299.1	-476.4	1.50	-1.50	0.00	
Start 3166.0 hold at 9000.0 MD										
9,068.9	0.00	0.00	9,040.0	478.7	299.1	-476.4	0.00	0.00	0.00	
BS Lime										
9,100.0	0.00	0.00	9,071.1	478.7	299.1	-476.4	0.00	0.00	0.00	
9,200.0	0.00	0.00	9,171.1	478.7	299.1	-476.4	0.00	0.00	0.00	
9,233.9	0.00	0.00	9,205.0	478.7	299.1	-476.4	0.00	0.00	0.00	
Upper Avalon										
9,300.0	0.00	0.00	9,271.1	478.7	299.1	-476.4	0.00	0.00	0.00	
9,400.0	0.00	0.00	9,371.1	478.7	299.1	-476.4	0.00	0.00	0.00	
9,468.9	0.00	0.00	9,440.0	478.7	299.1	-476.4	0.00	0.00	0.00	
Middle Avalon										
9,500.0	0.00	0.00	9,471.1	478.7	299.1	-476.4	0.00	0.00	0.00	
9,600.0	0.00	0.00	9,571.1	478.7	299.1	-476.4	0.00	0.00	0.00	
9,700.0	0.00	0.00	9,671.1	478.7	299.1	-476.4	0.00	0.00	0.00	
9,800.0	0.00	0.00	9,771.1	478.7	299.1	-476.4	0.00	0.00	0.00	
9,838.9	0.00	0.00	9,810.0	478.7	299.1	-476.4	0.00	0.00	0.00	
Lower Avalon										
9,900.0	0.00	0.00	9,871.1	478.7	299.1	-476.4	0.00	0.00	0.00	
10,000.0	0.00	0.00	9,971.1	478.7	299.1	-476.4	0.00	0.00	0.00	
10,098.9	0.00	0.00	10,070.0	478.7	299.1	-476.4	0.00	0.00	0.00	
1st BS Sand										
10,100.0	0.00	0.00	10,071.1	478.7	299.1	-476.4	0.00	0.00	0.00	
10,200.0	0.00	0.00	10,171.1	478.7	299.1	-476.4	0.00	0.00	0.00	
10,300.0	0.00	0.00	10,271.1	478.7	299.1	-476.4	0.00	0.00	0.00	
10,400.0	0.00	0.00	10,371.1	478.7	299.1	-476.4	0.00	0.00	0.00	
10,423.9	0.00	0.00	10,395.0	478.7	299.1	-476.4	0.00	0.00	0.00	
2nd BS Carb										
10,500.0	0.00	0.00	10,471.1	478.7	299.1	-476.4	0.00	0.00	0.00	
10,600.0	0.00	0.00	10,571.1	478.7	299.1	-476.4	0.00	0.00	0.00	
10,700.0	0.00	0.00	10,671.1	478.7	299.1	-476.4	0.00	0.00	0.00	
10,748.9	0.00	0.00	10,720.0	478.7	299.1	-476.4	0.00	0.00	0.00	
2nd BS Sand										
10,800.0	0.00	0.00	10,771.1	478.7	299.1	-476.4	0.00	0.00	0.00	
10,900.0	0.00	0.00	10,871.1	478.7	299.1	-476.4	0.00	0.00	0.00	
11,000.0	0.00	0.00	10,971.1	478.7	299.1	-476.4	0.00	0.00	0.00	
11,100.0	0.00	0.00	11,071.1	478.7	299.1	-476.4	0.00	0.00	0.00	
11,200.0	0.00	0.00	11,171.1	478.7	299.1	-476.4	0.00	0.00	0.00	
11,300.0	0.00	0.00	11,271.1	478.7	299.1	-476.4	0.00	0.00	0.00	
11,323.9	0.00	0.00	11,295.0	478.7	299.1	-476.4	0.00	0.00	0.00	
3rd BS Carb										
11,400.0	0.00	0.00	11,371.1	478.7	299.1	-476.4	0.00	0.00	0.00	
11,500.0	0.00	0.00	11,471.1	478.7	299.1	-476.4	0.00	0.00	0.00	
11,600.0	0.00	0.00	11,571.1	478.7	299.1	-476.4	0.00	0.00	0.00	
11,700.0	0.00	0.00	11,671.1	478.7	299.1	-476.4	0.00	0.00	0.00	
11,800.0	0.00	0.00	11,771.1	478.7	299.1	-476.4	0.00	0.00	0.00	
11,900.0	0.00	0.00	11,871.1	478.7	299.1	-476.4	0.00	0.00	0.00	
11,933.9	0.00	0.00	11,905.0	478.7	299.1	-476.4	0.00	0.00	0.00	
3rd BS Sand										

Planning Report

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Project:	Lea County, NM (NAD83)	MD Reference:	WELL @ 3564.0usft (26' RKB)
Site:	Hyperion State	North Reference:	Grid
Well:	215H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	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)
12,000.0	0.00	0.00	11,971.1	478.7	299.1	-476.4	0.00	0.00	0.00
12,100.0	0.00	0.00	12,071.1	478.7	299.1	-476.4	0.00	0.00	0.00
12,166.0	0.00	0.00	12,137.1	478.7	299.1	-476.4	0.00	0.00	0.00
Start Build 10.00									
12,200.0	3.41	170.70	12,171.1	477.7	299.3	-475.4	10.00	10.00	0.00
12,250.0	8.41	170.70	12,220.8	472.6	300.1	-470.3	10.00	10.00	0.00
12,274.5	10.86	170.70	12,245.0	468.6	300.8	-466.2	10.00	10.00	0.00
3rd BS W Sand									
12,300.0	13.41	170.70	12,269.9	463.3	301.7	-460.9	10.00	10.00	0.00
12,350.0	18.41	170.70	12,318.0	449.8	303.9	-447.4	10.00	10.00	0.00
12,362.7	19.68	170.70	12,330.0	445.7	304.5	-443.3	10.00	10.00	0.00
WCA X Sand									
12,400.0	23.41	170.70	12,364.7	432.2	306.8	-429.8	10.00	10.00	0.00
12,450.0	28.41	170.70	12,409.7	410.6	310.3	-408.2	10.00	10.00	0.00
12,485.1	31.92	170.70	12,440.0	393.2	313.1	-390.8	10.00	10.00	0.00
WCA Y Sand									
12,500.0	33.41	170.70	12,452.5	385.3	314.4	-382.8	10.00	10.00	0.00
12,550.0	38.41	170.70	12,493.0	356.4	319.2	-353.9	10.00	10.00	0.00
12,600.0	43.41	170.70	12,530.8	324.1	324.5	-321.5	10.00	10.00	0.00
12,605.8	43.99	170.70	12,535.0	320.1	325.1	-317.5	10.00	10.00	0.00
WCA Lwr									
12,650.0	48.41	170.70	12,565.6	288.6	330.3	-286.0	10.00	10.00	0.00
12,700.0	53.41	170.70	12,597.1	250.4	336.5	-247.7	10.00	10.00	0.00
12,750.0	58.41	170.70	12,625.1	209.5	343.2	-206.8	10.00	10.00	0.00
12,800.0	63.41	170.70	12,649.4	166.4	350.3	-163.6	10.00	10.00	0.00
12,850.0	68.41	170.70	12,669.8	121.4	357.7	-118.6	10.00	10.00	0.00
12,900.0	73.41	170.70	12,686.2	74.8	365.3	-71.9	10.00	10.00	0.00
12,950.0	78.41	170.70	12,698.3	26.9	373.1	-24.0	10.00	10.00	0.00
13,000.0	83.41	170.70	12,706.2	-21.8	381.1	24.8	10.00	10.00	0.00
13,050.0	88.41	170.70	12,709.8	-71.0	389.2	74.0	10.00	10.00	0.00
13,070.3	90.44	170.70	12,710.0	-91.0	392.4	94.1	10.00	10.00	0.00
Start DLS 2.00 TFO 89.99									
13,100.0	90.44	171.29	12,709.8	-120.4	397.1	123.5	2.00	0.00	2.00
13,200.0	90.44	173.29	12,709.0	-219.4	410.5	222.7	2.00	0.00	2.00
13,300.0	90.44	175.29	12,708.2	-318.9	420.4	322.2	2.00	0.00	2.00
13,400.0	90.44	177.29	12,707.5	-418.7	426.9	422.1	2.00	0.00	2.00
13,500.0	90.44	179.29	12,706.7	-518.7	429.9	522.0	2.00	0.00	2.00
13,513.0	90.44	179.55	12,706.6	-531.6	430.0	535.0	2.00	0.00	2.00
Start 4145.8 hold at 13513.0 MD									
13,600.0	90.44	179.55	12,705.9	-618.7	430.7	622.0	0.00	0.00	0.00
13,700.0	90.44	179.55	12,705.2	-718.7	431.5	722.0	0.00	0.00	0.00
13,800.0	90.44	179.55	12,704.4	-818.7	432.2	822.0	0.00	0.00	0.00
13,900.0	90.44	179.55	12,703.7	-918.6	433.0	922.0	0.00	0.00	0.00
14,000.0	90.44	179.55	12,702.9	-1,018.6	433.8	1,022.0	0.00	0.00	0.00
14,100.0	90.44	179.55	12,702.1	-1,118.6	434.6	1,122.0	0.00	0.00	0.00
14,200.0	90.44	179.55	12,701.4	-1,218.6	435.3	1,222.0	0.00	0.00	0.00
14,300.0	90.44	179.55	12,700.6	-1,318.6	436.1	1,322.0	0.00	0.00	0.00
14,400.0	90.44	179.55	12,699.8	-1,418.6	436.9	1,422.0	0.00	0.00	0.00
14,500.0	90.44	179.55	12,699.1	-1,518.6	437.7	1,522.0	0.00	0.00	0.00
14,600.0	90.44	179.55	12,698.3	-1,618.6	438.5	1,622.0	0.00	0.00	0.00
14,700.0	90.44	179.55	12,697.6	-1,718.6	439.2	1,722.0	0.00	0.00	0.00
14,800.0	90.44	179.55	12,696.8	-1,818.6	440.0	1,822.0	0.00	0.00	0.00
14,900.0	90.44	179.55	12,696.0	-1,918.6	440.8	1,922.0	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well 215H
Company:	Tap Rock Operating, LLC.	TVD Reference:	WELL @ 3564.0usft (26' RKB)
Project:	Lea County, NM (NAD83)	MD Reference:	WELL @ 3564.0usft (26' RKB)
Site:	Hyperion State	North Reference:	Grid
Well:	215H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	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)	
15,000.0	90.44	179.55	12,695.3	-2,018.6	441.6	2,022.0	0.00	0.00	0.00	
15,100.0	90.44	179.55	12,694.5	-2,118.6	442.4	2,122.0	0.00	0.00	0.00	
15,200.0	90.44	179.55	12,693.7	-2,218.6	443.1	2,222.0	0.00	0.00	0.00	
15,300.0	90.44	179.55	12,693.0	-2,318.6	443.9	2,322.0	0.00	0.00	0.00	
15,400.0	90.44	179.55	12,692.2	-2,418.6	444.7	2,422.0	0.00	0.00	0.00	
15,500.0	90.44	179.55	12,691.5	-2,518.6	445.5	2,522.0	0.00	0.00	0.00	
15,600.0	90.44	179.55	12,690.7	-2,618.5	446.3	2,622.0	0.00	0.00	0.00	
15,700.0	90.44	179.55	12,689.9	-2,718.5	447.0	2,722.0	0.00	0.00	0.00	
15,800.0	90.44	179.55	12,689.2	-2,818.5	447.8	2,822.0	0.00	0.00	0.00	
15,900.0	90.44	179.55	12,688.4	-2,918.5	448.6	2,922.0	0.00	0.00	0.00	
16,000.0	90.44	179.55	12,687.6	-3,018.5	449.4	3,022.0	0.00	0.00	0.00	
16,100.0	90.44	179.55	12,686.9	-3,118.5	450.1	3,122.0	0.00	0.00	0.00	
16,200.0	90.44	179.55	12,686.1	-3,218.5	450.9	3,222.0	0.00	0.00	0.00	
16,300.0	90.44	179.55	12,685.4	-3,318.5	451.7	3,322.0	0.00	0.00	0.00	
16,400.0	90.44	179.55	12,684.6	-3,418.5	452.5	3,421.9	0.00	0.00	0.00	
16,500.0	90.44	179.55	12,683.8	-3,518.5	453.3	3,521.9	0.00	0.00	0.00	
16,600.0	90.44	179.55	12,683.1	-3,618.5	454.0	3,621.9	0.00	0.00	0.00	
16,700.0	90.44	179.55	12,682.3	-3,718.5	454.8	3,721.9	0.00	0.00	0.00	
16,800.0	90.44	179.55	12,681.5	-3,818.5	455.6	3,821.9	0.00	0.00	0.00	
16,900.0	90.44	179.55	12,680.8	-3,918.5	456.4	3,921.9	0.00	0.00	0.00	
17,000.0	90.44	179.55	12,680.0	-4,018.5	457.2	4,021.9	0.00	0.00	0.00	
17,100.0	90.44	179.55	12,679.3	-4,118.5	457.9	4,121.9	0.00	0.00	0.00	
17,200.0	90.44	179.55	12,678.5	-4,218.5	458.7	4,221.9	0.00	0.00	0.00	
17,300.0	90.44	179.55	12,677.7	-4,318.4	459.5	4,321.9	0.00	0.00	0.00	
17,400.0	90.44	179.55	12,677.0	-4,418.4	460.3	4,421.9	0.00	0.00	0.00	
17,500.0	90.44	179.55	12,676.2	-4,518.4	461.1	4,521.9	0.00	0.00	0.00	
17,600.0	90.44	179.55	12,675.4	-4,618.4	461.8	4,621.9	0.00	0.00	0.00	
17,658.8	90.44	179.55	12,675.0	-4,677.2	462.3	4,680.7	0.00	0.00	0.00	
Start 95.0 hold at 17658.8 MD										
17,700.0	90.44	179.55	12,674.7	-4,718.4	462.6	4,721.9	0.00	0.00	0.00	
17,753.8	90.44	179.55	12,674.3	-4,772.2	463.0	4,775.7	0.00	0.00	0.00	
TD at 17753.8										

Design Targets										
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
PBHL_H.215H - plan hits target center - Point	0.00	0.00	12,674.3	-4,772.2	463.0	435,787.06	768,285.10	32° 11' 45.339 N	103° 35' 58.777 W	
LTP_H.215H - plan hits target center - Point	0.00	0.00	12,675.0	-4,677.2	462.3	435,882.05	768,284.36	32° 11' 46.279 N	103° 35' 58.779 W	
FTP_H.215H - plan misses target center by 202.6usft at 12668.0usft MD (12577.3 TVD, 275.2 N, 332.5 E) - Point	0.00	0.00	12,710.0	399.1	422.3	440,958.34	768,244.33	32° 12' 36.513 N	103° 35' 58.841 W	

Planning Report

Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well 215H
Company:	Tap Rock Operating, LLC.	TVD Reference:	WELL @ 3564.0usft (26' RKB)
Project:	Lea County, NM (NAD83)	MD Reference:	WELL @ 3564.0usft (26' RKB)
Site:	Hyperion State	North Reference:	Grid
Well:	215H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
1,175.0	1,175.0	Rustler Anhyd				
1,520.0	1,520.0	Top Salt				
4,792.3	4,785.0	Base Salt				
5,033.6	5,025.0	Dlwre Mntn Grp				
5,043.6	5,035.0	Lamar				
5,058.7	5,050.0	Bell Canyon				
5,073.8	5,065.0	Ramsey Snd				
5,973.7	5,960.0	Cherry Cnyn				
7,436.7	7,415.0	Brushy Cnyn				
9,068.9	9,040.0	BS Lime				
9,233.9	9,205.0	Upper Avalon				
9,468.9	9,440.0	Middle Avalon				
9,838.9	9,810.0	Lower Avalon				
10,098.9	10,070.0	1st BS Sand				
10,423.9	10,395.0	2nd BS Carb				
10,748.9	10,720.0	2nd BS Sand				
11,323.9	11,295.0	3rd BS Carb				
11,933.9	11,905.0	3rd BS Sand				
12,274.5	12,245.0	3rd BS W Sand				
12,362.7	12,330.0	WCA X Sand				
12,485.1	12,440.0	WCA Y Sand				
12,605.8	12,535.0	WCA Lwr				

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
3,200.0	3,200.0	0.0	0.0	Start Build 1.50	
3,600.0	3,599.3	17.7	11.1	Start 5000.0 hold at 3600.0 MD	
8,600.0	8,571.9	461.0	288.0	Start Drop -1.50	
9,000.0	8,971.1	478.7	299.1	Start 3166.0 hold at 9000.0 MD	
12,166.0	12,137.1	478.7	299.1	Start Build 10.00	
13,070.3	12,710.0	-91.0	392.4	Start DLS 2.00 TFO 89.99	
13,513.0	12,706.6	-531.6	430.0	Start 4145.8 hold at 13513.0 MD	
17,658.8	12,675.0	-4,677.2	462.3	Start 95.0 hold at 17658.8 MD	
17,753.8	12,674.3	-4,772.2	463.0	TD at 17753.8	