

Well Name: NAILED IT FED COM	Well Location: T26S / R30E / SEC 36 / LOT 2 / 32.002085 / -103.8329603	County or Parish/State: EDDY / NM
Well Number: 154H	Type of Well: CONVENTIONAL GAS WELL	Allottee or Tribe Name:
Lease Number: NMNM138850	Unit or CA Name:	Unit or CA Number:
US Well Number: 3001546876	Well Status: Approved Application for Permit to Drill	Operator: TAP ROCK OPERATING LLC

Notice of Intent

Type of Submission: Notice of Intent

Type of Action Other

Date Sundry Submitted: 03/22/2021

Time Sundry Submitted: 09:42

Date proposed operation will begin: 03/22/2021

Procedure Description: Tap Rock is requesting permission to change the Name, SHL, BHL depth/formation, and casing design for this well. Tap Rock is requesting the well name be changed from the Nailed it Fed Com 223H to the Nailed it Fed Com 154H. Previous approved SHL: 701 FSL, 2120 FEL of Section 36, T26S, R30E New proposed SHL: 736 FSL, 1945 FEL of Section 36, T26S, R30E Previous approved BHL: 2465 FSL, 2430 FEL of Section 25, T26S, R30E New proposed BHL: 2466 FSL, 331 FEL of Section 25, T26S, R30E Previously Approved Depth and Formation: 16010 ft, Purple Sage Wolfcamp New proposed Depth and Formation: 14683 ft, Bonespring A three-string design will be employed instead of the previously approved four string. The new drilling plan detailing this plan is attached for review. No additional surface is to be disturbed by this sundry.

Surface Disturbance

Is any additional surface disturbance proposed?: No

NOI Attachments

Procedure Description

Nailed_It_Fed_Com_154H_Sundry_Attachments_20210218204432.pdf

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Operator Certification

I certify that the foregoing is true and correct. Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction. Electronic submission of Sundry Notices through this system satisfies regulations requiring a submission of Form 3160-5 or a Sundry Notice.

Operator Electronic Signature: BILL RAMSEY	Signed on: MAR 22, 2021 09:42 AM
Name: TAP ROCK OPERATING LLC	
Title: Regulatory Analyst	
Street Address: 523 PARK POINT DRIVE SUITE 200	
City: GOLDEN	State: CO
Phone: (720) 360-4028	
Email address: BRAMSEY@TAPRK.COM	

Field Representative

Representative Name:		
Street Address:		
City:	State:	Zip:
Phone:		
Email address:		

BLM Point of Contact

BLM POC Name: CHRISTOPHER WALLS	BLM POC Title: Petroleum Engineer
BLM POC Phone: 5752342234	BLM POC Email Address: cwalls@blm.gov
Disposition: Approved	Disposition Date: 04/21/2021
Signature: Chris Walls	

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 Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 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
SHL & BHL
CHANGE

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-46876	² Pool Code 98319	³ Pool Name WC 015 G 06 S242630A; Bone Spring
⁴ Property Code	⁵ Property Name NAILED IT FED COM	⁶ Well Number 154H
⁷ OGRID No. 372043	⁸ Operator Name TAP ROCK OPERATING, LLC.	⁹ Elevation 3031'

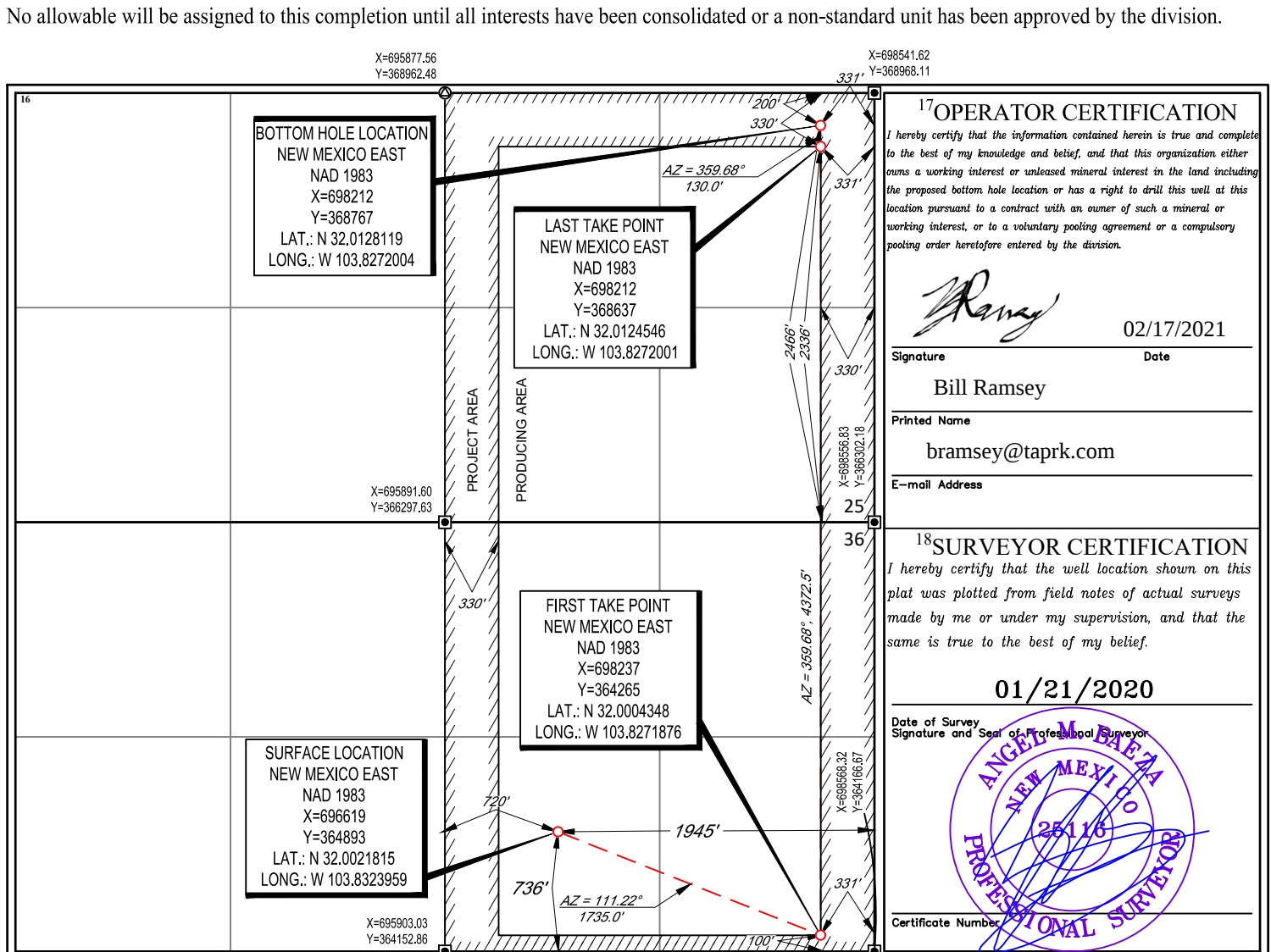
¹⁰Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
2	36	26-S	30-E	-	736'	SOUTH	1945'	EAST	EDDY

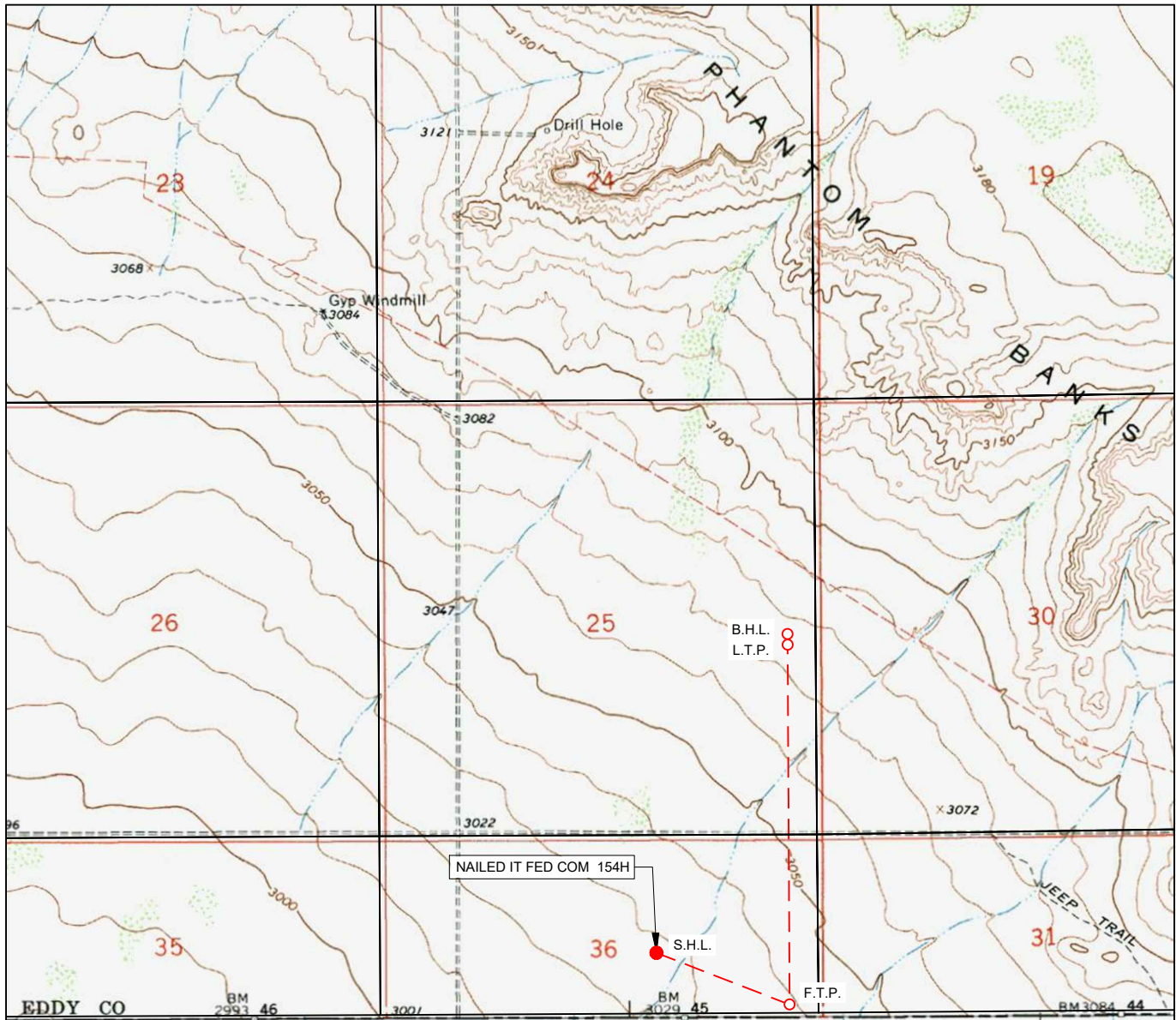
¹¹Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	25	26-S	30-E	-	2466'	SOUTH	331'	EAST	EDDY

¹² Dedicated Acres	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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LOCATION & ELEVATION VERIFICATION MAP

LEASE NAME & WELL NO.: NAILED IT FED COM 154H

SECTION 36 TWP 26-S RGE 30-E SURVEY N.M.P.M.
 COUNTY EDDY STATE NM ELEVATION 3031'
 DESCRIPTION 736' FSL & 1945' FEL

LATITUDE N 32.0021815 LONGITUDE W 103.8323959

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

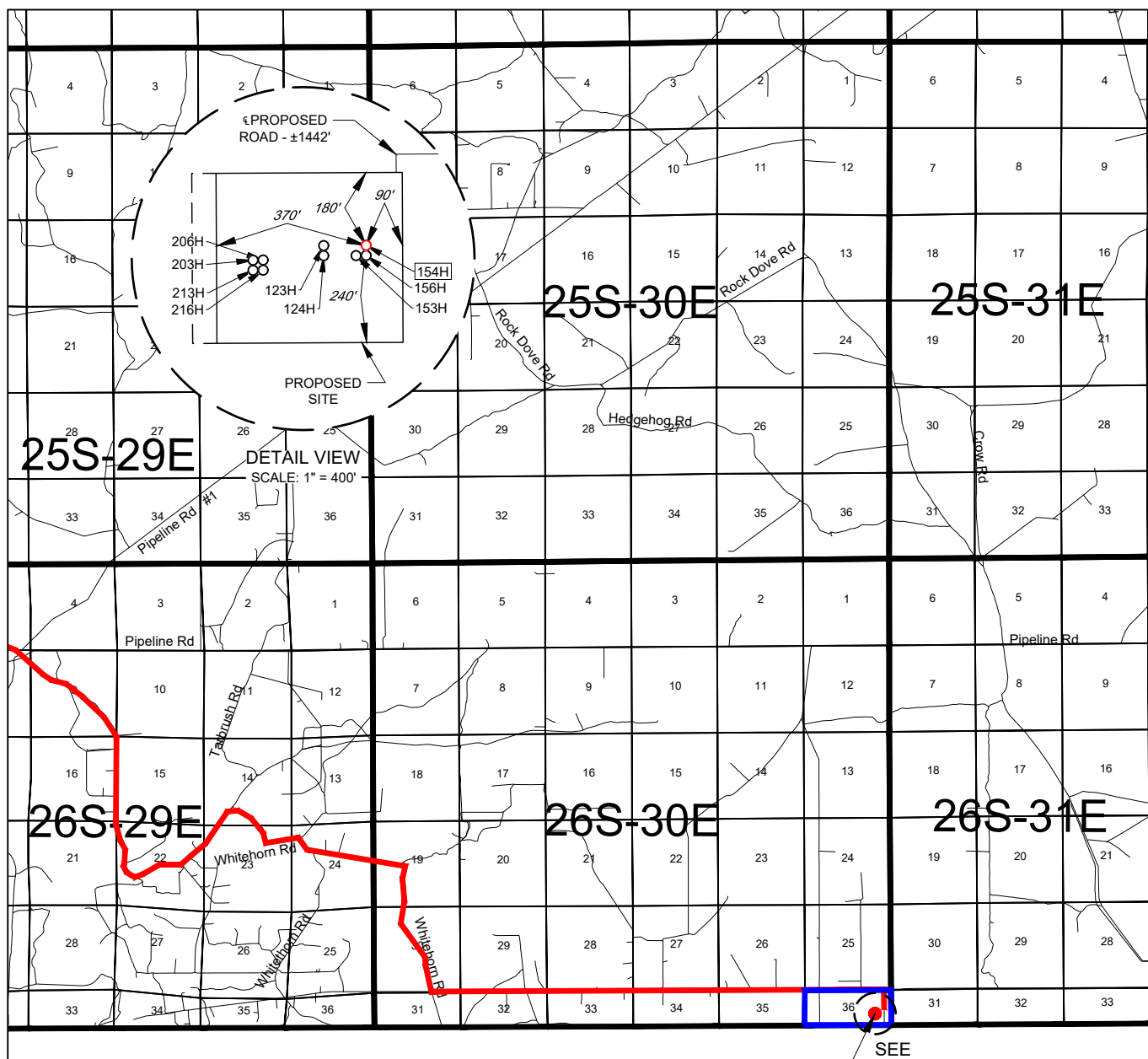
THIS EASEMENT/SERVITUDE LOCATION SHOWN HEREON HAS BEEN SURVEYED ON THE GROUND UNDER MY SUPERVISION AND PREPARED ACCORDING TO THE EVIDENCE FOUND AT THE TIME OF SURVEY, AND DATA PROVIDED BY TAP ROCK OPERATING, LLC. THIS CERTIFICATION IS MADE AND LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF 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, EAST ZONE OF THE NORTH AMERICAN DATUM 1983, U.S. SURVEY FEET.



TOPOGRAPHIC
 LOYALTY INNOVATION LEGACY

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 2903 NORTH BIG SPRING • MIDLAND, TEXAS 79705
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EXHIBIT 2
VICINITY MAP

NAILED IT FED COM 154H

SEE DETAIL

LEASE NAME & WELL NO.: NAILED IT FED COM 154HSECTION 36 TWP 26-S RGE 30-E SURVEY N.M.P.M.COUNTY EDDY STATE NMDESCRIPTION 736' FSL & 1945' FEL

DISTANCE & DIRECTION

FROM INT. OF US-285 & COUNTY RD 396, GO SOUTH ON US-285 ± 12.6 MILES,
 THENCE EAST (LEFT) ON WHITEHORN RD. ± 2.4 MILES, THENCE NORTH (LEFT) ON
 LONGHORN RD. ± 1.9 MILES, THENCE SOUTH (RIGHT) ON WHITEHORN RD. ± 3.3
 MILES, THENCE WEST (RIGHT) ON PROPOSED RD. ± 3.0 MILES, THENCE EAST
 (LEFT) ON STATE LINE RD. ± 7.0 MILES, THENCE SOUTH (RIGHT) ON A LEASE RD.
 ± 0.2 MILES, THENCE WEST (RIGHT) ON PROPOSED RD. ± 1442 FEET TO A POINT
 ± 195 FEET NORTHEAST 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
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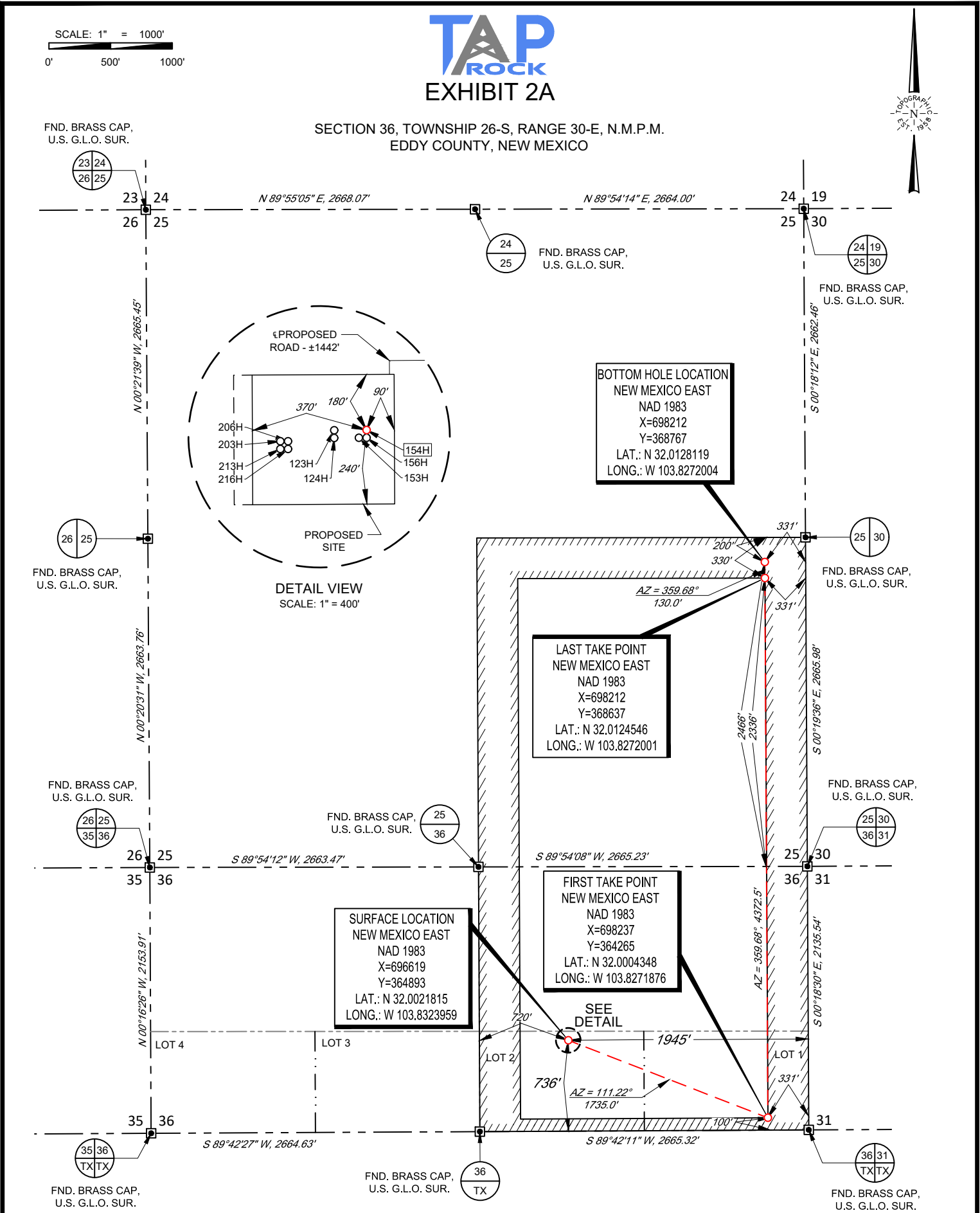
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SCALE: 1" = 10000'
 0' 5000' 10000'



LEASE NAME & WELL NO.: NAILED IT FED COM 154H

SECTION 36 TWP 26-S RGE 30-E SURVEY N.M.P.M.
COUNTY EDDY STATE NM
DESCRIPTION 736' FSL & 1945' FEL

DISTANCE & DIRECTION
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±0.2 MILES, THENCE WEST (RIGHT) ON PROPOSED RD. ±1442 FEET TO A POINT
±195 FEET NORTHEAST OF THE LOCATION.

ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREON ARE GRID
BASED UPON THE NEW MEXICO COORDINATE SYSTEM, EAST ZONE OF THE NORTH
AMERICAN DATUM 1983, 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 2, 2021

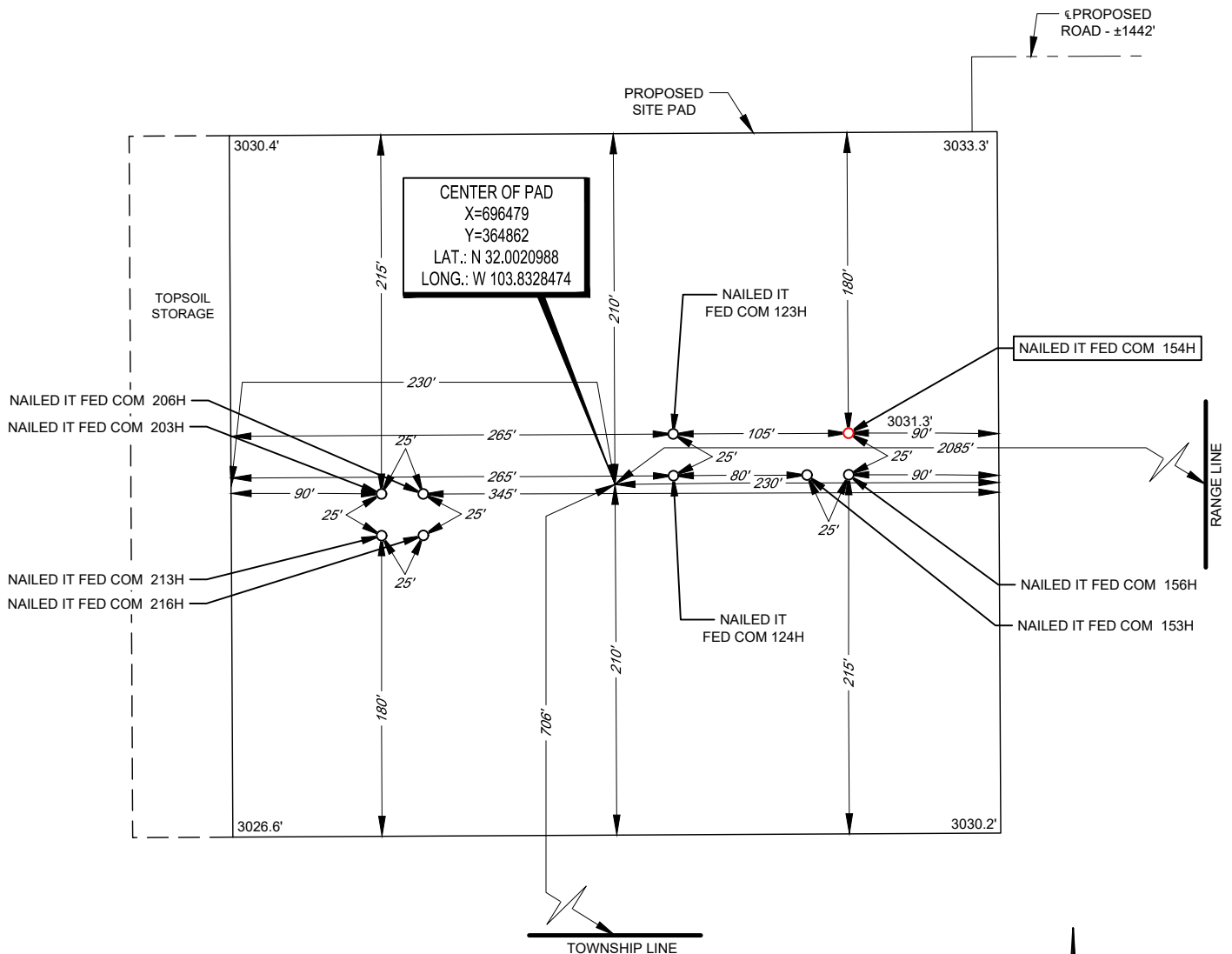
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EXHIBIT 2B



SECTION 36, TOWNSHIP 26-S, RANGE 30-E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

DETAIL VIEW
SCALE: 1" = 100'



LEASE NAME & WELL NO.: NAILED IT FED COM 154H
154H LATITUDE N 32.0021815 154H LONGITUDE W 103.8323959

CENTER OF PAD IS 706' FSL & 2085' FEL



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. 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"

Released to Imaging: 5/27/2021 9:42:07 AM

S:\SURVEY\TAPROCK\NAILED_IT_UNIT\FINAL_PRODUCTS\LO_NAILED_IT_FED_COM_154H.DWG 2/2/2021 11:25:11 AM abaeza



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District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

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

Submit Original
to Appropriate
District Office

GAS CAPTURE PLAN

Date: 2/17/2021

☐ Original Operator & OGRID No.: 372043
☒ Amended - Reason for Amendment: New location/name change.

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
Nailed It Fed Com #154H	30-015-46876	2 Sec 36 T.26S. R.30E	736' FSL 1945' FEL	+/- 1,600	21 days	Gas will be flared for ~21 days during flowback before being turned to the TB. Time est. depends on sales connect and well cleanup.

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 Salt Creek Midstream and will be connected to Salt Creek Midstream low/high pressure gathering system located in Eddy County, New Mexico. It will require ~15,000' of pipeline to connect the facility to low/high pressure gathering system. Tap Rock Operating, LLC provides (periodically) to Salt Creek Midstream 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 Salt Creek Midstream have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at Salt Creek Midstream Processing Plant located in Reeves County, Texas. 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 Salt Creek Midstream's 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



Drilling Operations Plan
 Nailed It Fed Com 154H
 Tap Rock Operating, LLC
 SHL 736' FSL & 1945' FEL, Sec. 36
 BHL 2466' FSL & 331' FEL, Sec. 25
 T. 26S., R. 30E, Eddy County, NM

Elevation above Sea Level: 3031'

DRILLING PROGRAM

1. Estimated Tops

Formation	TVD	MD	Lithologies	Bearing
Quaternary Deposits	0	0	Surface	None
Rustler Anhydrite	846	846		Salt
Salado	1398	1399	Salt	Salt
Base Salt	3441	3528		Salt
Lamar	3647	3745	Limestone	None
Bell Canyon	3668	3767	Sandstone	Hydrocarbons
Cherry Canyon	4857	5017	Sandstone	Hydrocarbons
Brushy Canyon	5811	6020	Sandstone	Hydrocarbons
Bone Spring	7578	7838	Limestone	Hydrocarbons
KOP	9519	9778	Sandstone	Hydrocarbons
3rd Bone Spring Carb	9742	10008	Sandstone	Hydrocarbons
TD	10100	14683	Shale	Hydrocarbons

2. Notable Zones

Bone Springs is the target formation.

3. Pressure Control

Pressure Control Equipment (See Schematics):

A 15,000', 5,000 psi BOP stack consisting of 3 rams with 2 pipe rams, 1 blind ram, and 1 annular preventer will be used below surface casing to TD. See attachments for BOP and choke manifold diagrams. Also present will be an accumulator that meets the requirements of Onshore Order #2 for the pressure rating of the BOP stack. A rotating head will also be installed as needed. BOP will be inspected and operated as recommended in Onshore Order #2. A top drive check valve and sub equipped with a full opening valve sized to fit the drill pipe and collars will be available on the rig floor in the open position. The wellhead will be a multi-bowl speed head.

BOP Test procedure will be as follows:

After surface casing is set and the BOP is nipped up, the BOP pressure tests will be made with a third party tester to 250 psi low, 5000 psi high, and the annular preventer will be tested to 2,500 psi. The BOP will be tested in this manner after nipple-up if any break of the stack occurs.

Variance Requests:



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Tap Rock requests a variance to run a multi-bowl speed head for setting the Intermediate 1, and Production Strings. Tap Rock requests a variance to drill this well using a co-flex line between the BOP and choke manifold. Certification for proposed co-flex hose is attached. The hose is not required by the manufacturer to be anchored. In the event the specific hose is not available, one of equal or higher rating will be used. Tap Rock requests a variance to have the option of batch drilling this well with other wells on the same pad. In the event that this well is batch drilled, after drilling surface, 1st intermediate and cementing 1st intermediate casing, a 10M dry hole cap with bleed off valve will be installed. The rig will then walk to another well on the pad. When the rig returns to this well and BOPs are installed, the operator will perform a full BOP test.

Tap Rock requests approval to possibly utilize a spudder rig to drill and set casing for the surface interval on this well. The spudder rig will be possibly utilized in order to reduce cost and save time. The wellhead will be installed and tested as soon as the surface casing is cut off per the existing COAs. A blind flange with the same pressure rating as the wellhead will be installed on the well. Once the spudder rig is removed, Tap Rock will secure the wellhead area by placing a guard rail around the cellar. Pressure will be monitored and a means for intervention will be maintained while the drilling rig is not over the well. Spudder rig operations are expected to take 2-3 days per well. Three wells on the pad will have surface casing set by the spudder rig as a part of this operation. The BLM will be notified 24 hours prior to commencing spudder rig operations. Within 90 days of the departure of the spudder rig, drilling operations will recommence on these wells. This rig will have a BOP stack equal or greater to the pressure rating required in the COAs. The BLM will be notified 24 hours before the larger rig moves on the pre-set wells. Tap Rock will have supervision on the spudder rig to ensure compliance with all BLM and NMOCD regulations.



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4. Casing & Cement

All Casing will be new.

Name	Hole Size	Casing Size	Standard	Tapered	Top MD	Bottom MD	Top TVD	BTM TVD	Grade	Weight	Thread	Collapse	Burst	Tension
Surface	17 1/2	13 3/8	API	No	0	921	0	921	J-55	54.5	BUTT	1.13	1.15	1.6
1st Intermediate	12 1/4	9 5/8	API	No	0	3770	0	3672	J-55	40	BUTT	1.13	1.15	1.6
Production	8 1/2	5 1/2	NON API	No	0	14683	0	10100	P-110	20	TXP	1.13	1.15	1.6

Name	Type	Top MD	Sacks	Yield	Cu. Ft	Weight	Excess	Cement	Additives
Surface	Tail	0	948	1.35	1279	14.8	100%	C	5% NCI + LCM
1st Intermediate	Lead	0	715	2.18	1558	12.7	65%	C	Bentonite + 1% CaCL2 + 8% NaCl + LCM
	Tail	2770	293	1.33	390	14.8	65%	C	5% NaCl + LCM
Production	Tail	3270	2110	1.71	3608	14.2	25%	H	Fluid Loss + Dispersant + Retarder + LCM

5. Mud Program

Name	Top	Bottom	Type	Mud Weight	Visc	Fluid Loss
Surface	0	921	FW Spud Mud	8.30	28	NC
Intermediate	921	3770	Brine Water	10.00	30-32	NC
Production	3770	14683	Cut Brine	9.00	28-40	<10

Name	Top	Bottom	Type	Mud Weight	Visc	Fluid Loss
Surface	0	921	FW Spud Mud	8.30	28	NC
Intermediate	921	3770	Brine Water	10.00	30-32	NC
Production	3770	14683	Oil Based Mud	9.00	40-60	<10

Tap Rock requests the option to run cut brine or OBM in the production interval.

Electronic Pason mud monitor system complying with Onshore Order 1 will be used. All necessary mud products (e. g., barite, cedar bark) for weight addition and fluid loss control will always be on site. Mud program is subject to change due to hole conditions. A closed loop system will be used.

6. Cores, Tests, & Logs

- Electric Logging Program: No open-hole logs are planned at this time for the pilot hole.
- GR will be collected while drilling through the MWD tools from 9.625" casing shoe to TD.
- A 2-person mud logging program will be used from 9.625" casing shoe to TD.
- No DSTs or cores are planned at this time.
- CBL w/ CCL from as far as gravity will let it fall to TOC.



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7. Down Hole Conditions

No abnormal pressure or temperature is expected. Maximum expected bottom hole pressure is $\approx 4,727$ psi. Expected bottom hole temperature is $\approx 170^{\circ}$ F.

Tap Rock does not anticipate that there will be enough H₂S from the surface to the Wolfcamp formations to meet the BLM's Onshore Order 6 requirements for the submission of an "H₂S Drilling Operation Plan" or "Public Protection Plan" for drilling and completing this well. Tap Rock has an H₂S safety package on all wells and an "H₂S Drilling Operations Plan" is attached. Adequate flare lines will be installed off the mud/gas separator where gas may be safely flared. All personnel will be familiar with all aspects of safe operation of equipment being used.

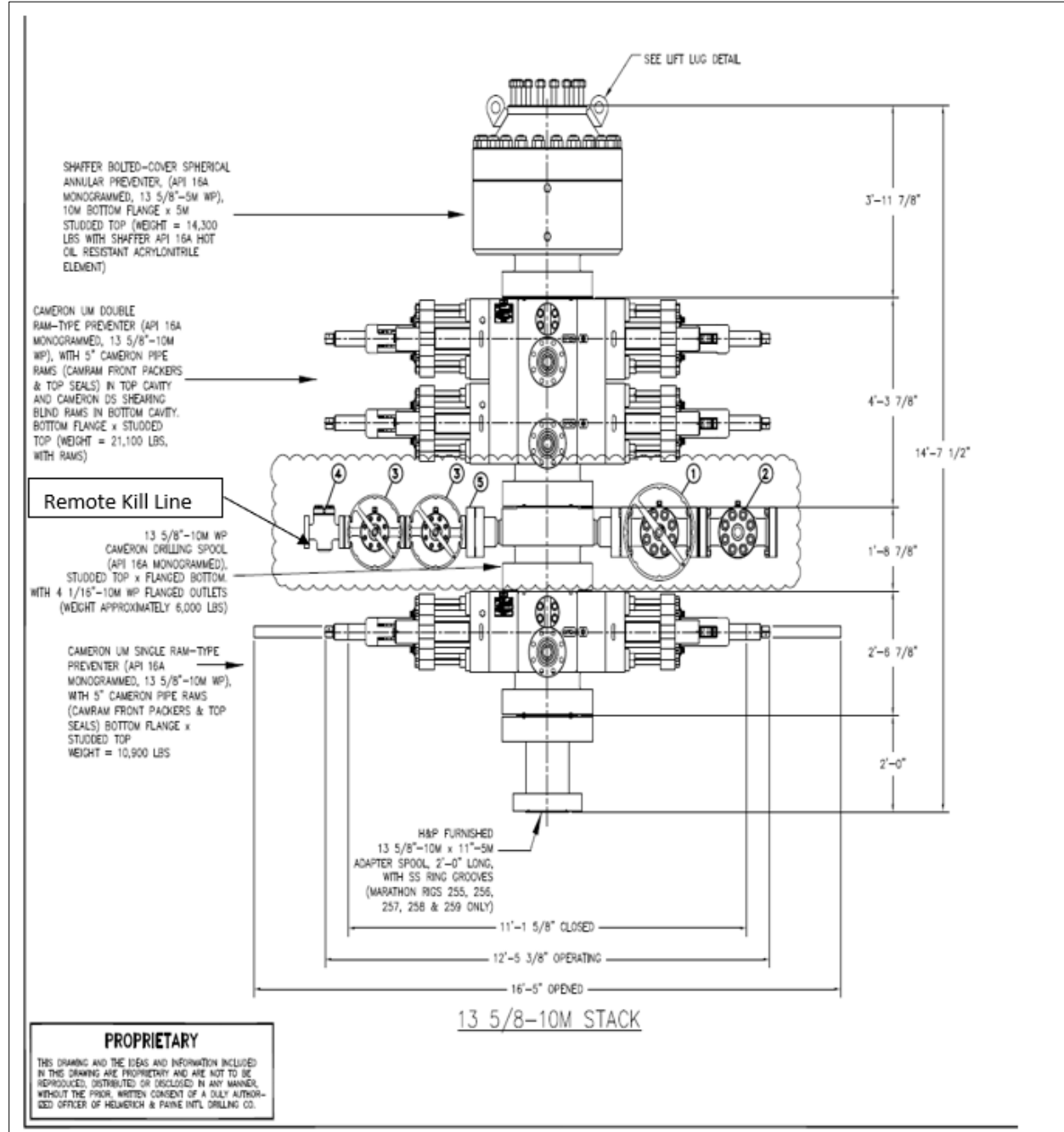
8. Other

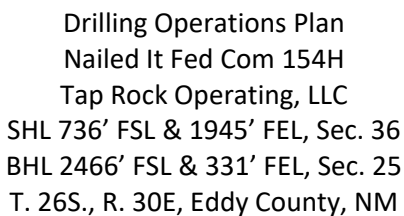
Road and location construction will begin after BLM approval of APD. Anticipated spud date as soon as approved. Drilling expected to take 30 days. If production casing is run an additional 60 days will be required to complete and construct surface facilities.



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5,000 psi BOP Stack

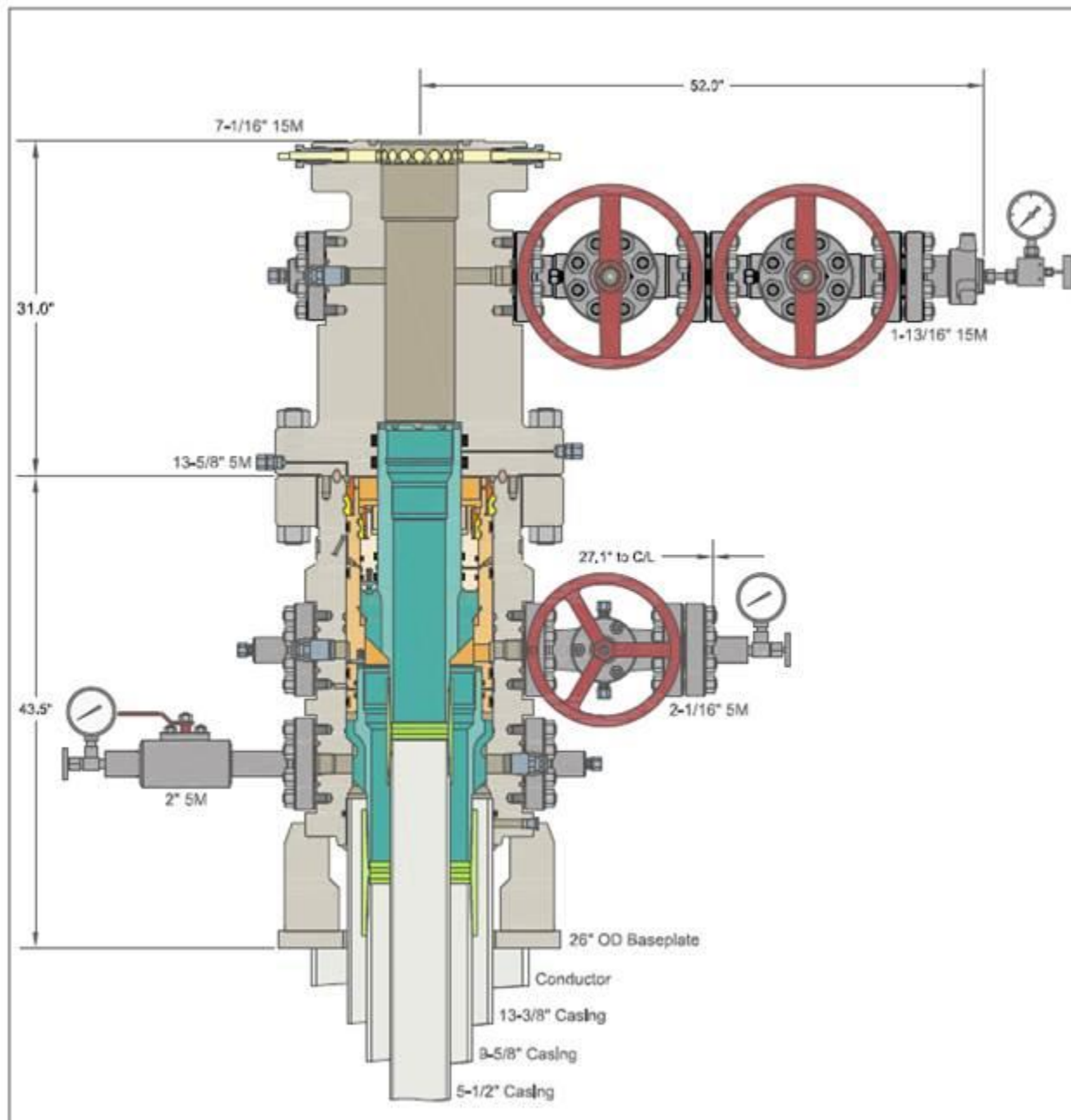






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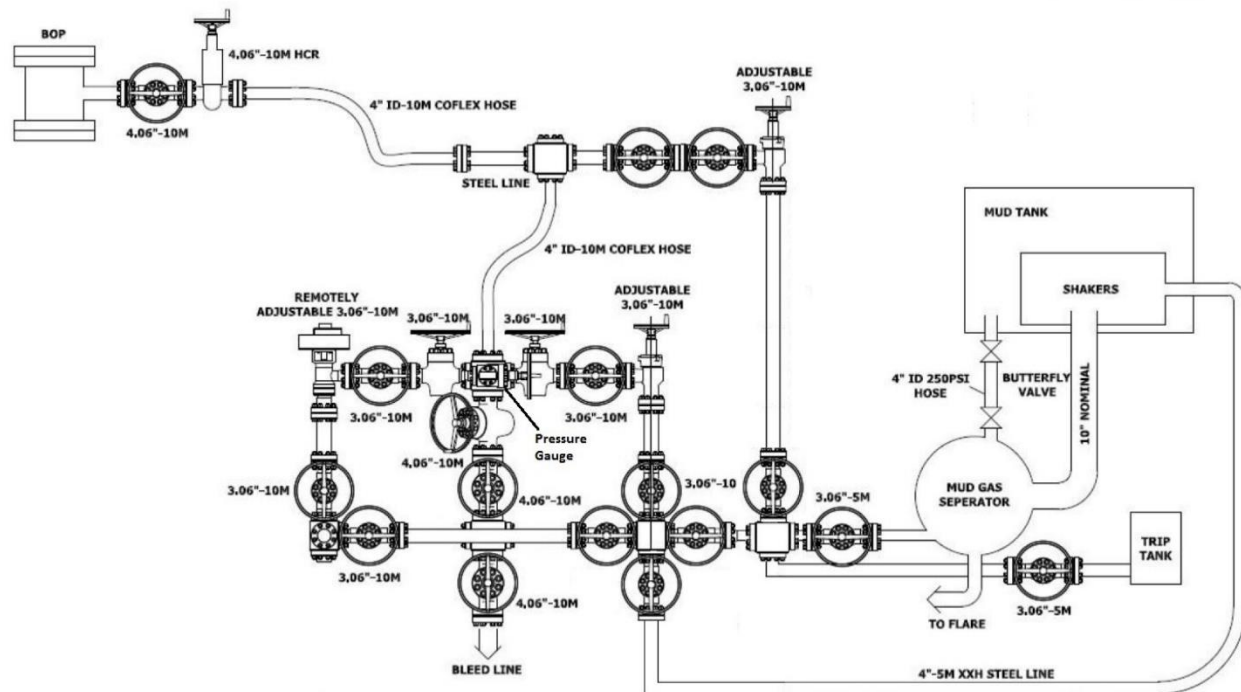
Multi-bowl Wellhead





Drilling Operations Plan
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 T. 26S., R. 30E, Eddy County, NM

10M Choke Layout





Casing and Tubing Performance Data

PIPE BODY DATA

GEOMETRY

Outside Diameter	13.375 in	Wall Thickness	0.380 in	API Drift Diameter	12.459 in
Nominal Weight	54.50 lbs/ft	Nominal ID	12.615 in	Alternative Drift Diameter	n.a.
Plain End Weight	52.79 lbs/ft	Nominal cross section	15.513 in		

PERFORMANCE

Steel Grade	J55	Minimum Yield	55,000 psi	Minimum Ultimate	75,000 psi
Tension Yield	853,000 in	Internal Pressure Yield	2,730 psi	Collapse Pressure	1,130 psi
Available Seamless	Yes	Available Welded	Yes		

CONNECTION DATA

TYPE: BTC

GEOMETRY

Coupling Reg OD	14.375 in	Threads per in	5	Thread turns make up	1
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PERFORMANCE

Steel Grade	J55	Coupling Min Yield	55,000 psi	Coupling Min Ultimate	75,000 psi
Joint Strength	909,000 lbs			Internal Pressure Resistance	2,730 psi



Casing and Tubing Performance Data

PIPE BODY DATA

GEOMETRY

Outside Diameter	9.625 in	Wall Thickness	0.395 in	API Drift Diameter	8.679 in
Nominal Weight	40.00 lbs/ft	Nominal ID	8.835 in	Alternative Drift Diameter	8.75 in
Plain End Weight	38.97 lbs/ft	Nominal cross section	11.454 in		

PERFORMANCE

Steel Grade	J55	Minimum Yield	55,000 psi	Minimum Ultimate	75,000 psi
Tension Yield	630,000 in	Internal Pressure Yield	3,950 psi	Collapse Pressure	2,570 psi
Available Seamless	Yes	Available Welded	Yes		

CONNECTION DATA

TYPE: BTC

GEOMETRY

Coupling Reg OD	10.625 in	Threads per in	5	Thread turns make up	1
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PERFORMANCE

Steel Grade	J55	Coupling Min Yield	55,000 psi	Coupling Min Ultimate	75,000 psi
Joint Strength	714,000 lbs			Internal Pressure Resistance	3,950 psi

5.5", 20#, P-110, TXP connection (modified buttress connection that provides a torque rating of nearly 24000ft-lbs)



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Outside Diameter	5.500 in.	Min. Wall Thickness	87.5%	
		Drift	API Standard	
Wall Thickness	0.361 in.	Type	Casing	
Grade	P110	Connection OD Option	REGULAR	

PIPE BODY DATA

GEOMETRY

Nominal OD	5.500 in.	Nominal Weight	20 lbs/ft	Drift	4.653 in.
Nominal ID	4.778 in.	Wall Thickness	0.361 in.	Plain End Weight	19.83 lbs/ft
OD Tolerance	API				

PERFORMANCE

Body Yield Strength	641 x1000 lbs	Internal Yield	12640 psi	SMYS	110000 psi
Collapse	11100 psi				

CONNECTION DATA

GEOMETRY

Connection OD	6.100 in.	Coupling Length	9.450 in.	Connection ID	4.766 in.
Make-up Loss	4.204 in.	Threads per in	5	Connection OD Option	REGULAR

PERFORMANCE

Tension Efficiency	100.0 %	Joint Yield Strength	641.000 x1000 lbs	Internal Pressure Capacity ^[1]	12640.000 psi
Compression Efficiency	100 %	Compression Strength	641.000 x1000 lbs	Max. Allowable Bending	92 °/100 ft
External Pressure Capacity	11100.000 psi				

MAKE-UP TORQUES

Minimum	11270 ft-lbs	Optimum	12520 ft-lbs	Maximum	13770 ft-lbs
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OPERATION LIMIT TORQUES

Operating Torque	21500 ft-lbs	Yield Torque	23900 ft-lbs		
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[Clear Filters](#)

[Compare](#)

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CONNECTION INFORMATION
[> Blanking Dimensions](#)
[> Connection's Page](#)
[> Brochure](#)
[> Datasheet Manual](#)

Tap Rock Operating, LLC.

Eddy County, NM (NAD83)

Nailed It Fed Com

154H

OH

Plan: Plan #1

Standard Planning Report

15 February, 2021

Planning Report

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well 154H
Company:	Tap Rock Operating, LLC.	TVD Reference:	WELL @ 3056.0usft (25' RKB)
Project:	Eddy County, NM (NAD83)	MD Reference:	WELL @ 3056.0usft (25' RKB)
Site:	Nailed It Fed Com	North Reference:	Grid
Well:	154H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Project	Eddy 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	Nailed It Fed Com				
Site Position:		Northing:	364,471.20 usft	Latitude:	32° 0' 3.817 N
From:	Lat/Long	Easting:	693,621.04 usft	Longitude:	103° 50' 31.467 W
Position Uncertainty:	2.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.26 °

Well	154H					
Well Position	+N/-S	421.6 usft	Northing:	364,892.83 usft	Latitude:	32° 0' 7.853 N
	+E/-W	2,998.3 usft	Easting:	696,619.32 usft	Longitude:	103° 49' 56.625 W
Position Uncertainty		2.0 usft	Wellhead Elevation:		Ground Level:	3,031.0 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	2/14/2021	6.66	59.77	47,407

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	359.68

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	
950.0	0.00	0.00	950.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,150.0	18.00	113.50	2,130.4	-74.5	171.4	1.50	1.50	0.00	113.50	
6,650.0	18.00	113.50	6,410.1	-629.0	1,446.7	0.00	0.00	0.00	0.00	
7,850.0	0.00	0.00	7,590.5	-703.6	1,618.1	1.50	-1.50	-9.46	-180.00	
9,778.5	0.00	0.00	9,519.0	-703.6	1,618.1	0.00	0.00	0.00	0.00	
10,677.4	89.88	359.68	10,092.0	-131.8	1,614.9	10.00	10.00	0.00	359.68	
10,727.9	89.88	359.68	10,092.1	-81.3	1,614.7	0.01	0.00	0.00	-53.49	
14,553.9	89.88	359.68	10,100.0	3,744.6	1,593.1	0.00	0.00	0.00	0.00	LTP_NIF.154H
14,683.8	89.88	359.68	10,100.3	3,874.6	1,592.4	0.00	0.00	0.00	0.00	PBHL_NIF.154H

Planning Report

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well 154H
Company:	Tap Rock Operating, LLC.	TVD Reference:	WELL @ 3056.0usft (25' RKB)
Project:	Eddy County, NM (NAD83)	MD Reference:	WELL @ 3056.0usft (25' RKB)
Site:	Nailed It Fed Com	North Reference:	Grid
Well:	154H	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
846.0	0.00	0.00	846.0	0.0	0.0	0.0	0.00	0.00	0.00
Rustler Anhydrite									
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
950.0	0.00	0.00	950.0	0.0	0.0	0.0	0.00	0.00	0.00
Start Build 1.50									
1,000.0	0.75	113.50	1,000.0	-0.1	0.3	-0.1	1.50	1.50	0.00
1,100.0	2.25	113.50	1,100.0	-1.2	2.7	-1.2	1.50	1.50	0.00
1,200.0	3.75	113.50	1,199.8	-3.3	7.5	-3.3	1.50	1.50	0.00
1,300.0	5.25	113.50	1,299.5	-6.4	14.7	-6.5	1.50	1.50	0.00
1,399.0	6.74	113.50	1,398.0	-10.5	24.2	-10.6	1.50	1.50	0.00
Top Salt									
1,400.0	6.75	113.50	1,399.0	-10.6	24.3	-10.7	1.50	1.50	0.00
1,500.0	8.25	113.50	1,498.1	-15.8	36.3	-16.0	1.50	1.50	0.00
1,600.0	9.75	113.50	1,596.9	-22.0	50.6	-22.3	1.50	1.50	0.00
1,700.0	11.25	113.50	1,695.2	-29.3	67.3	-29.6	1.50	1.50	0.00
1,800.0	12.75	113.50	1,793.0	-37.6	86.4	-38.0	1.50	1.50	0.00
1,900.0	14.25	113.50	1,890.2	-46.9	107.8	-47.5	1.50	1.50	0.00
2,000.0	15.75	113.50	1,986.8	-57.2	131.5	-57.9	1.50	1.50	0.00
2,100.0	17.25	113.50	2,082.7	-68.5	157.6	-69.4	1.50	1.50	0.00
2,150.0	18.00	113.50	2,130.4	-74.5	171.4	-75.5	1.50	1.50	0.00
Start 4500.0 hold at 2150.0 MD									
2,200.0	18.00	113.50	2,177.9	-80.7	185.6	-81.7	0.00	0.00	0.00
2,300.0	18.00	113.50	2,273.0	-93.0	214.0	-94.2	0.00	0.00	0.00
2,400.0	18.00	113.50	2,368.1	-105.4	242.3	-106.7	0.00	0.00	0.00
2,500.0	18.00	113.50	2,463.2	-117.7	270.6	-119.2	0.00	0.00	0.00
2,600.0	18.00	113.50	2,558.3	-130.0	299.0	-131.7	0.00	0.00	0.00
2,700.0	18.00	113.50	2,653.4	-142.3	327.3	-144.1	0.00	0.00	0.00
2,800.0	18.00	113.50	2,748.5	-154.6	355.6	-156.6	0.00	0.00	0.00
2,900.0	18.00	113.50	2,843.7	-167.0	384.0	-169.1	0.00	0.00	0.00
3,000.0	18.00	113.50	2,938.8	-179.3	412.3	-181.6	0.00	0.00	0.00
3,100.0	18.00	113.50	3,033.9	-191.6	440.7	-194.1	0.00	0.00	0.00
3,200.0	18.00	113.50	3,129.0	-203.9	469.0	-206.5	0.00	0.00	0.00
3,300.0	18.00	113.50	3,224.1	-216.2	497.3	-219.0	0.00	0.00	0.00
3,400.0	18.00	113.50	3,319.2	-228.6	525.7	-231.5	0.00	0.00	0.00
3,500.0	18.00	113.50	3,414.3	-240.9	554.0	-244.0	0.00	0.00	0.00
3,528.1	18.00	113.50	3,441.0	-244.4	562.0	-247.5	0.00	0.00	0.00
Base Salt									
3,600.0	18.00	113.50	3,509.4	-253.2	582.4	-256.5	0.00	0.00	0.00
3,700.0	18.00	113.50	3,604.5	-265.5	610.7	-268.9	0.00	0.00	0.00
3,738.4	18.00	113.50	3,641.0	-270.3	621.6	-273.7	0.00	0.00	0.00
Delaware Mountain Gp									
3,744.7	18.00	113.50	3,647.0	-271.0	623.4	-274.5	0.00	0.00	0.00
Lamar									
3,766.8	18.00	113.50	3,668.0	-273.8	629.6	-277.3	0.00	0.00	0.00

Planning Report

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Project:	Eddy County, NM (NAD83)	MD Reference:	WELL @ 3056.0usft (25' RKB)
Site:	Nailed It Fed Com	North Reference:	Grid
Well:	154H	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)
Bell Canyon									
3,779.4	18.00	113.50	3,680.0	-275.3	633.2	-278.9	0.00	0.00	0.00
Ramsey Sand									
3,800.0	18.00	113.50	3,699.6	-277.9	639.0	-281.4	0.00	0.00	0.00
3,900.0	18.00	113.50	3,794.7	-290.2	667.4	-293.9	0.00	0.00	0.00
4,000.0	18.00	113.50	3,889.8	-302.5	695.7	-306.4	0.00	0.00	0.00
4,100.0	18.00	113.50	3,984.9	-314.8	724.0	-318.9	0.00	0.00	0.00
4,200.0	18.00	113.50	4,080.0	-327.1	752.4	-331.3	0.00	0.00	0.00
4,300.0	18.00	113.50	4,175.1	-339.5	780.7	-343.8	0.00	0.00	0.00
4,400.0	18.00	113.50	4,270.2	-351.8	809.1	-356.3	0.00	0.00	0.00
4,500.0	18.00	113.50	4,365.3	-364.1	837.4	-368.8	0.00	0.00	0.00
4,600.0	18.00	113.50	4,460.4	-376.4	865.7	-381.3	0.00	0.00	0.00
4,700.0	18.00	113.50	4,555.6	-388.8	894.1	-393.7	0.00	0.00	0.00
4,800.0	18.00	113.50	4,650.7	-401.1	922.4	-406.2	0.00	0.00	0.00
4,900.0	18.00	113.50	4,745.8	-413.4	950.8	-418.7	0.00	0.00	0.00
5,000.0	18.00	113.50	4,840.9	-425.7	979.1	-431.2	0.00	0.00	0.00
5,017.0	18.00	113.50	4,857.0	-427.8	983.9	-433.3	0.00	0.00	0.00
Cherry Canyon									
5,100.0	18.00	113.50	4,936.0	-438.0	1,007.4	-443.7	0.00	0.00	0.00
5,200.0	18.00	113.50	5,031.1	-450.4	1,035.8	-456.1	0.00	0.00	0.00
5,300.0	18.00	113.50	5,126.2	-462.7	1,064.1	-468.6	0.00	0.00	0.00
5,400.0	18.00	113.50	5,221.3	-475.0	1,092.5	-481.1	0.00	0.00	0.00
5,500.0	18.00	113.50	5,316.4	-487.3	1,120.8	-493.6	0.00	0.00	0.00
5,600.0	18.00	113.50	5,411.5	-499.7	1,149.1	-506.1	0.00	0.00	0.00
5,700.0	18.00	113.50	5,506.6	-512.0	1,177.5	-518.5	0.00	0.00	0.00
5,800.0	18.00	113.50	5,601.7	-524.3	1,205.8	-531.0	0.00	0.00	0.00
5,900.0	18.00	113.50	5,696.8	-536.6	1,234.1	-543.5	0.00	0.00	0.00
6,000.0	18.00	113.50	5,791.9	-548.9	1,262.5	-556.0	0.00	0.00	0.00
6,020.1	18.00	113.50	5,811.0	-551.4	1,268.2	-558.5	0.00	0.00	0.00
Brushy Canyon									
6,100.0	18.00	113.50	5,887.0	-561.3	1,290.8	-568.5	0.00	0.00	0.00
6,200.0	18.00	113.50	5,982.1	-573.6	1,319.2	-580.9	0.00	0.00	0.00
6,300.0	18.00	113.50	6,077.2	-585.9	1,347.5	-593.4	0.00	0.00	0.00
6,400.0	18.00	113.50	6,172.3	-598.2	1,375.8	-605.9	0.00	0.00	0.00
6,500.0	18.00	113.50	6,267.5	-610.6	1,404.2	-618.4	0.00	0.00	0.00
6,600.0	18.00	113.50	6,362.6	-622.9	1,432.5	-630.9	0.00	0.00	0.00
6,650.0	18.00	113.50	6,410.1	-629.0	1,446.7	-637.1	0.00	0.00	0.00
Start DLS 1.50 TFO -180.00									
6,700.0	17.25	113.50	6,457.8	-635.1	1,460.6	-643.2	1.50	-1.50	0.00
6,800.0	15.75	113.50	6,553.6	-646.4	1,486.6	-654.7	1.50	-1.50	0.00
6,900.0	14.25	113.50	6,650.2	-656.7	1,510.4	-665.1	1.50	-1.50	0.00
7,000.0	12.75	113.50	6,747.5	-666.0	1,531.8	-674.6	1.50	-1.50	0.00
7,100.0	11.25	113.50	6,845.3	-674.3	1,550.8	-683.0	1.50	-1.50	0.00
7,200.0	9.75	113.50	6,943.6	-681.6	1,567.5	-690.3	1.50	-1.50	0.00
7,300.0	8.25	113.50	7,042.4	-687.8	1,581.9	-696.6	1.50	-1.50	0.00
7,400.0	6.75	113.50	7,141.5	-693.0	1,593.9	-701.9	1.50	-1.50	0.00
7,500.0	5.25	113.50	7,241.0	-697.2	1,603.4	-706.1	1.50	-1.50	0.00
7,600.0	3.75	113.50	7,340.6	-700.3	1,610.6	-709.3	1.50	-1.50	0.00
7,700.0	2.25	113.50	7,440.5	-702.4	1,615.4	-711.4	1.50	-1.50	0.00
7,800.0	0.75	113.50	7,540.5	-703.5	1,617.8	-712.5	1.50	-1.50	0.00
7,837.5	0.19	113.50	7,578.0	-703.6	1,618.1	-712.6	1.50	-1.50	0.00
Bone Spring Lime									
7,850.0	0.00	0.00	7,590.5	-703.6	1,618.1	-712.6	1.50	-1.50	-910.16

Planning Report

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well 154H
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Project:	Eddy County, NM (NAD83)	MD Reference:	WELL @ 3056.0usft (25' RKB)
Site:	Nailed It Fed Com	North Reference:	Grid
Well:	154H	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 1928.5 hold at 7850.0 MD									
7,900.0	0.00	0.00	7,640.5	-703.6	1,618.1	-712.6	0.00	0.00	0.00
7,934.5	0.00	0.00	7,675.0	-703.6	1,618.1	-712.6	0.00	0.00	0.00
Upper Avalon									
8,000.0	0.00	0.00	7,740.5	-703.6	1,618.1	-712.6	0.00	0.00	0.00
8,100.0	0.00	0.00	7,840.5	-703.6	1,618.1	-712.6	0.00	0.00	0.00
8,200.0	0.00	0.00	7,940.5	-703.6	1,618.1	-712.6	0.00	0.00	0.00
8,300.0	0.00	0.00	8,040.5	-703.6	1,618.1	-712.6	0.00	0.00	0.00
8,324.5	0.00	0.00	8,065.0	-703.6	1,618.1	-712.6	0.00	0.00	0.00
Middle Avalon									
8,400.0	0.00	0.00	8,140.5	-703.6	1,618.1	-712.6	0.00	0.00	0.00
8,500.0	0.00	0.00	8,240.5	-703.6	1,618.1	-712.6	0.00	0.00	0.00
8,590.5	0.00	0.00	8,331.0	-703.6	1,618.1	-712.6	0.00	0.00	0.00
Lower Avalon									
8,600.0	0.00	0.00	8,340.5	-703.6	1,618.1	-712.6	0.00	0.00	0.00
8,700.0	0.00	0.00	8,440.5	-703.6	1,618.1	-712.6	0.00	0.00	0.00
8,764.5	0.00	0.00	8,505.0	-703.6	1,618.1	-712.6	0.00	0.00	0.00
1st Bone Spring Sand									
8,800.0	0.00	0.00	8,540.5	-703.6	1,618.1	-712.6	0.00	0.00	0.00
8,900.0	0.00	0.00	8,640.5	-703.6	1,618.1	-712.6	0.00	0.00	0.00
9,000.0	0.00	0.00	8,740.5	-703.6	1,618.1	-712.6	0.00	0.00	0.00
9,100.0	0.00	0.00	8,840.5	-703.6	1,618.1	-712.6	0.00	0.00	0.00
9,200.0	0.00	0.00	8,940.5	-703.6	1,618.1	-712.6	0.00	0.00	0.00
9,257.5	0.00	0.00	8,998.0	-703.6	1,618.1	-712.6	0.00	0.00	0.00
2nd Bone Spring Carb									
9,300.0	0.00	0.00	9,040.5	-703.6	1,618.1	-712.6	0.00	0.00	0.00
9,400.0	0.00	0.00	9,140.5	-703.6	1,618.1	-712.6	0.00	0.00	0.00
9,410.5	0.00	0.00	9,151.0	-703.6	1,618.1	-712.6	0.00	0.00	0.00
2nd Bone Spring Sand									
9,500.0	0.00	0.00	9,240.5	-703.6	1,618.1	-712.6	0.00	0.00	0.00
9,600.0	0.00	0.00	9,340.5	-703.6	1,618.1	-712.6	0.00	0.00	0.00
9,700.0	0.00	0.00	9,440.5	-703.6	1,618.1	-712.6	0.00	0.00	0.00
9,778.5	0.00	0.00	9,519.0	-703.6	1,618.1	-712.6	0.00	0.00	0.00
Start Build 10.00									
9,800.0	2.15	359.68	9,540.5	-703.2	1,618.1	-712.2	10.00	10.00	-1.49
9,850.0	7.15	359.68	9,590.3	-699.1	1,618.1	-708.2	10.00	10.00	0.00
9,900.0	12.15	359.68	9,639.6	-690.8	1,618.1	-699.8	10.00	10.00	0.00
9,950.0	17.15	359.68	9,687.9	-678.1	1,618.0	-687.1	10.00	10.00	0.00
10,000.0	22.15	359.68	9,735.0	-661.3	1,617.9	-670.3	10.00	10.00	0.00
10,007.6	22.90	359.68	9,742.0	-658.4	1,617.9	-667.4	10.00	10.00	0.00
3rd Bone Spring Carb									
10,050.0	27.14	359.68	9,780.4	-640.5	1,617.8	-649.5	10.00	10.00	0.00
10,100.0	32.14	359.68	9,823.9	-615.7	1,617.6	-624.8	10.00	10.00	0.00
10,150.0	37.14	359.68	9,865.0	-587.3	1,617.5	-596.4	10.00	10.00	0.00
10,200.0	42.14	359.68	9,903.5	-555.4	1,617.3	-564.5	10.00	10.00	0.00
10,250.0	47.14	359.68	9,939.0	-520.3	1,617.1	-529.3	10.00	10.00	0.00
10,300.0	52.14	359.68	9,971.4	-482.2	1,616.9	-491.3	10.00	10.00	0.00
10,350.0	57.14	359.68	10,000.3	-441.5	1,616.7	-450.5	10.00	10.00	0.00
10,400.0	62.14	359.68	10,025.6	-398.3	1,616.4	-407.4	10.00	10.00	0.00
10,450.0	67.14	359.68	10,047.0	-353.2	1,616.2	-362.2	10.00	10.00	0.00
10,500.0	72.14	359.68	10,064.4	-306.3	1,615.9	-315.3	10.00	10.00	0.00
10,550.0	77.14	359.68	10,077.6	-258.1	1,615.6	-267.1	10.00	10.00	0.00
10,600.0	82.14	359.68	10,086.6	-208.9	1,615.4	-218.0	10.00	10.00	0.00

Planning Report

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well 154H
Company:	Tap Rock Operating, LLC.	TVD Reference:	WELL @ 3056.0usft (25' RKB)
Project:	Eddy County, NM (NAD83)	MD Reference:	WELL @ 3056.0usft (25' RKB)
Site:	Nailed It Fed Com	North Reference:	Grid
Well:	154H	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)
10,650.0	87.14	359.68	10,091.3	-159.2	1,615.1	-168.2	10.00	10.00	0.00
10,677.4	89.88	359.68	10,092.0	-131.8	1,614.9	-140.8	10.00	10.00	0.00
EOC - 10677.4'MD, 89.88°INC, 359.68°AZI									
10,700.0	89.88	359.68	10,092.0	-109.2	1,614.8	-118.2	0.01	0.00	0.00
10,727.9	89.88	359.68	10,092.1	-81.3	1,614.7	-90.3	0.01	0.00	0.00
10,800.0	89.88	359.68	10,092.3	-9.2	1,614.2	-18.2	0.00	0.00	0.00
10,900.0	89.88	359.68	10,092.5	90.8	1,613.7	81.8	0.00	0.00	0.00
11,000.0	89.88	359.68	10,092.7	190.8	1,613.1	181.8	0.00	0.00	0.00
11,100.0	89.88	359.68	10,092.9	290.8	1,612.6	281.8	0.00	0.00	0.00
11,200.0	89.88	359.68	10,093.1	390.8	1,612.0	381.8	0.00	0.00	0.00
11,300.0	89.88	359.68	10,093.3	490.8	1,611.4	481.8	0.00	0.00	0.00
11,400.0	89.88	359.68	10,093.5	590.8	1,610.9	581.8	0.00	0.00	0.00
11,500.0	89.88	359.68	10,093.7	690.8	1,610.3	681.8	0.00	0.00	0.00
11,600.0	89.88	359.68	10,093.9	790.8	1,609.7	781.8	0.00	0.00	0.00
11,700.0	89.88	359.68	10,094.1	890.8	1,609.2	881.8	0.00	0.00	0.00
11,800.0	89.88	359.68	10,094.3	990.8	1,608.6	981.8	0.00	0.00	0.00
11,900.0	89.88	359.68	10,094.5	1,090.8	1,608.1	1,081.8	0.00	0.00	0.00
12,000.0	89.88	359.68	10,094.7	1,190.8	1,607.5	1,181.8	0.00	0.00	0.00
12,100.0	89.88	359.68	10,094.9	1,290.8	1,606.9	1,281.8	0.00	0.00	0.00
12,200.0	89.88	359.68	10,095.1	1,390.8	1,606.4	1,381.8	0.00	0.00	0.00
12,300.0	89.88	359.68	10,095.3	1,490.8	1,605.8	1,481.8	0.00	0.00	0.00
12,400.0	89.88	359.68	10,095.6	1,590.8	1,605.2	1,581.8	0.00	0.00	0.00
12,500.0	89.88	359.68	10,095.8	1,690.8	1,604.7	1,681.8	0.00	0.00	0.00
12,600.0	89.88	359.68	10,096.0	1,790.8	1,604.1	1,781.8	0.00	0.00	0.00
12,700.0	89.88	359.68	10,096.2	1,890.8	1,603.6	1,881.8	0.00	0.00	0.00
12,800.0	89.88	359.68	10,096.4	1,990.8	1,603.0	1,981.8	0.00	0.00	0.00
12,900.0	89.88	359.68	10,096.6	2,090.8	1,602.4	2,081.8	0.00	0.00	0.00
13,000.0	89.88	359.68	10,096.8	2,190.8	1,601.9	2,181.8	0.00	0.00	0.00
13,100.0	89.88	359.68	10,097.0	2,290.8	1,601.3	2,281.8	0.00	0.00	0.00
13,200.0	89.88	359.68	10,097.2	2,390.8	1,600.7	2,381.8	0.00	0.00	0.00
13,300.0	89.88	359.68	10,097.4	2,490.8	1,600.2	2,481.8	0.00	0.00	0.00
13,400.0	89.88	359.68	10,097.6	2,590.8	1,599.6	2,581.8	0.00	0.00	0.00
13,500.0	89.88	359.68	10,097.8	2,690.8	1,599.1	2,681.8	0.00	0.00	0.00
13,600.0	89.88	359.68	10,098.0	2,790.8	1,598.5	2,781.8	0.00	0.00	0.00
13,700.0	89.88	359.68	10,098.2	2,890.8	1,597.9	2,881.8	0.00	0.00	0.00
13,800.0	89.88	359.68	10,098.4	2,990.8	1,597.4	2,981.8	0.00	0.00	0.00
13,900.0	89.88	359.68	10,098.7	3,090.8	1,596.8	3,081.8	0.00	0.00	0.00
14,000.0	89.88	359.68	10,098.9	3,190.8	1,596.2	3,181.8	0.00	0.00	0.00
14,100.0	89.88	359.68	10,099.1	3,290.7	1,595.7	3,281.8	0.00	0.00	0.00
14,200.0	89.88	359.68	10,099.3	3,390.7	1,595.1	3,381.8	0.00	0.00	0.00
14,300.0	89.88	359.68	10,099.5	3,490.7	1,594.6	3,481.8	0.00	0.00	0.00
14,400.0	89.88	359.68	10,099.7	3,590.7	1,594.0	3,581.8	0.00	0.00	0.00
14,500.0	89.88	359.68	10,099.9	3,690.7	1,593.4	3,681.8	0.00	0.00	0.00
14,553.9	89.88	359.68	10,100.0	3,744.6	1,593.1	3,735.6	0.00	0.00	0.00
14,600.0	89.88	359.68	10,100.1	3,790.7	1,592.9	3,781.8	0.00	0.00	0.00
14,683.8	89.88	359.68	10,100.3	3,874.5	1,592.4	3,865.6	0.00	0.00	0.00
TD at 14683.8									

Planning Report

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well 154H
Company:	Tap Rock Operating, LLC.	TVD Reference:	WELL @ 3056.0usft (25' RKB)
Project:	Eddy County, NM (NAD83)	MD Reference:	WELL @ 3056.0usft (25' RKB)
Site:	Nailed It Fed Com	North Reference:	Grid
Well:	154H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Design Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
FTP_NIF.154H	0.00	0.00	10,092.0	-627.9	1,617.5	364,264.95	698,236.79	32° 0' 1.565 N	103° 49' 37.875 W
- plan misses target center by 185.7usft at 10267.1usft MD (9950.5 TVD, -507.6 N, 1617.0 E)									
- Point									
LTP_NIF.154H	0.00	0.00	10,100.0	3,744.6	1,593.1	368,637.43	698,212.45	32° 0' 44.837 N	103° 49' 37.920 W
- plan hits target center									
- Point									
PBHL_NIF.154H	0.00	0.00	10,101.0	3,874.6	1,592.4	368,767.41	698,211.74	32° 0' 46.123 N	103° 49' 37.921 W
- plan misses target center by 0.7usft at 14683.8usft MD (10100.3 TVD, 3874.5 N, 1592.4 E)									
- Point									

Formations						
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction	
(usft)	(usft)			(°)	(°)	
846.0	846.0	Rustler Anhydrite				
1,399.0	1,398.0	Top Salt				
3,528.1	3,441.0	Base Salt				
3,738.4	3,641.0	Delaware Mountain Gp				
3,744.7	3,647.0	Lamar				
3,766.8	3,668.0	Bell Canyon				
3,779.4	3,680.0	Ramsey Sand				
5,017.0	4,857.0	Cherry Canyon				
6,020.1	5,811.0	Brushy Canyon				
7,837.5	7,578.0	Bone Spring Lime				
7,934.5	7,675.0	Upper Avalon				
8,324.5	8,065.0	Middle Avalon				
8,590.5	8,331.0	Lower Avalon				
8,764.5	8,505.0	1st Bone Spring Sand				
9,257.5	8,998.0	2nd Bone Spring Carb				
9,410.5	9,151.0	2nd Bone Spring Sand				
10,007.6	9,742.0	3rd Bone Spring Carb				

Plan Annotations					
Measured Depth	Vertical Depth	Local Coordinates			
(usft)	(usft)	+N/-S	+E/-W	Comment	
(usft)	(usft)	(usft)	(usft)		
950.0	950.0	0.0	0.0	Start Build 1.50	
2,150.0	2,130.4	-74.5	171.4	Start 4500.0 hold at 2150.0 MD	
6,650.0	6,410.1	-629.0	1,446.7	Start DLS 1.50 TFO -180.00	
7,850.0	7,590.5	-703.6	1,618.1	Start 1928.5 hold at 7850.0 MD	
9,778.5	9,519.0	-703.6	1,618.1	Start Build 10.00	
10,677.4	10,092.0	-131.8	1,614.9	EOC - 10677.4MD, 89.88°INC, 359.68°AZI	
14,683.8	10,100.3	-81.3	1,614.7	TD at 14683.8	

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

COMMENTS

Action 24943

COMMENTS

Operator: TAP ROCK OPERATING, LLC 523 Park Point Drive Golden, CO 80401	OGRID: 372043
	Action Number: 24943
	Action Type: [C-103] NOI Change of Plans (C-103A)

COMMENTS

Created By	Comment	Comment Date
kpickford	KP GEO Review 4/22/2021	4/22/2021

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

Action 24943

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Operator: TAP ROCK OPERATING, LLC 523 Park Point Drive Golden, CO 80401	OGRID: 372043
	Action Number: 24943
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CONDITIONS

Created By	Condition	Condition Date
kpickford	Adhere to previous NMOCD Conditions of Approval	4/22/2021