

U.S. Department of the Interior BUREAU OF LAND MANAGEMENT

Sundry Print Reports
04/07/2021

Well Name: NAILED IT FED COM Well Location: T26S / R30E / SEC 36 / County or Parish/State: EDDY /

LOT 4 / 32.0010604 / -103.8419219

Well Number: 225H Type of Well: CONVENTIONAL GAS Allottee or Tribe Name:

WELL

Lease Number: NMNM138850 Unit or CA Name: Unit or CA Number:

US Well Number: 3001546884 Well Status: Approved Application for Operator: TAP ROCK

Permit to Drill OPERATING LLC

## **Notice of Intent**

Type of Submission: Notice of Intent

Type of Action Other

Date Sundry Submitted: 03/22/2021 Time Sundry Submitted: 09:09

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 225H to the Nailed it Fed Com 121H. Previous approved SHL: 330 FSL, 434 FWL of Section 36, T26S, R30E New proposed SHL: 330 FSL, 489 FWL of Section 36, T26S, R30E Previous approved BHL: 2464 FSL, 1170 FWL of Section 25, T26S, R30E New proposed BHL: 2464 FSL, 660 FWL of Section 25, T26S, R30E Previously Approved Depth and Formation: 16002 ft, Purple Sage Wolfcamp New proposed Depth and Formation: 13893 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\_121H\_Sundry\_Attachments\_20210322090637.pdf

Page 1 of 2

eived by OCD: 4/16/2021 1:59:34 PM Well Name: NAILED IT FED COM Well Location: T26S / R30E / SEC 36 /

LOT 4 / 32.0010604 / -103.8419219

County or Parish/State: Page 2 of

Well Number: 225H Type of Well: CONVENTIONAL GAS

WELL

Allottee or Tribe Name:

Lease Number: NMNM138850 **Unit or CA Name: Unit or CA Number:** 

**US Well Number:** 3001546884 Well Status: Approved Application for **Operator:** TAP ROCK

**OPERATING LLC** Permit to Drill

## **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: RAMSEY** Signed on: MAR 22, 2021 09:09 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: 04/07/2021

Signature: Chris Walls

Page 2 of 2

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

X

AMENDED REPORT

SHL & BHL CHANGE

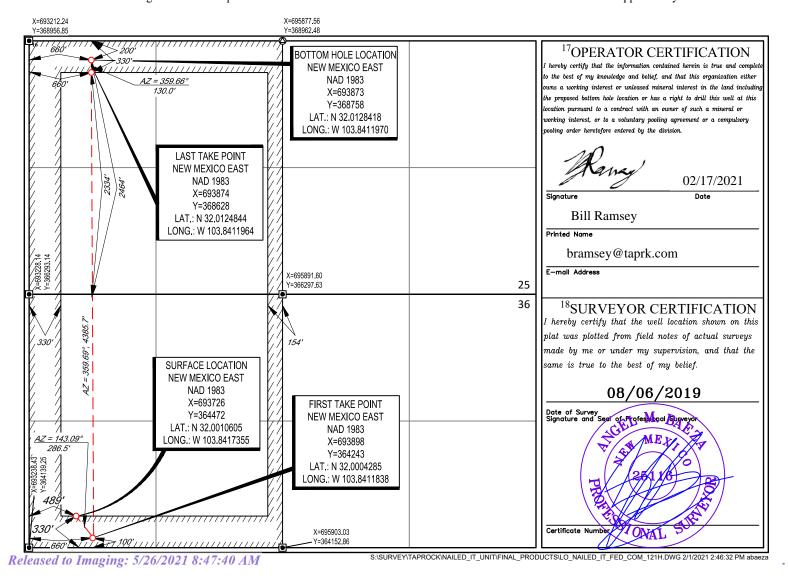
### WELL LOCATION AND ACREAGE DEDICATION PLAT

	<sup>1</sup> API Number 30-015-46884		<sup>3</sup> Pool Name WC 015 G 06 S242630A;Bone S	Spring
<sup>4</sup> Property Code 327308			operty Name IT FED COM	<sup>6</sup> Well Number 121H
<sup>7</sup> OGRID №. 372043			perator Name OPERATING, LLC.	<sup>9</sup> Elevation 3008'

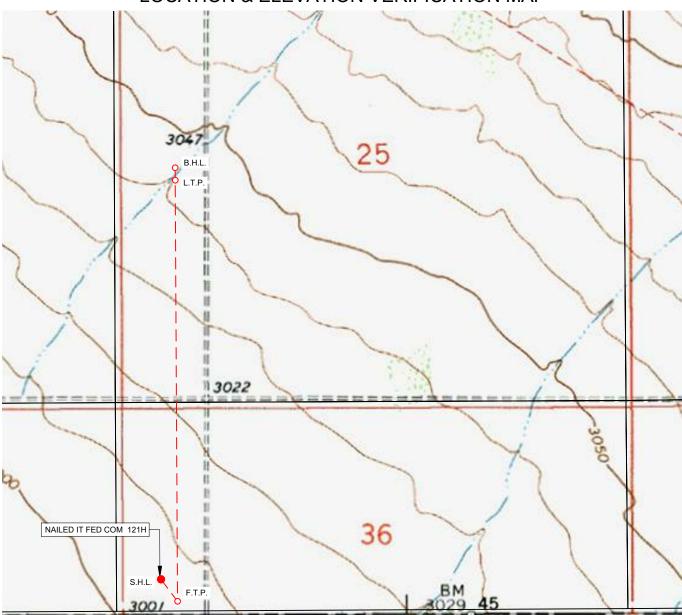
<sup>10</sup>Surface Location

UL or lot no.	Section 36	Township 26-S	Range 30-E	Lot Idn —	Feet from the 330'	North/South line SOUTH	Feet from the 489'	East/West line WEST	EDDY
			11]	Bottom Ho	le Location If <b>D</b>	Different From Su	rface		
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	25	26-S	30-E	-	2464'	SOUTH	660'	WEST	EDDY
<sup>12</sup> Dedicated Acres	<sup>13</sup> Joint or 1	Infill 14Co	nsolidation Co	de <sup>15</sup> Ord	er No.				

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.



## **LOCATION & ELEVATION VERIFICATION MAP**





LEASE NAME & WELL NO.: NAILED IT FED COM 121H

 SECTION
 36
 TWP
 26-S
 RGE
 30-E
 SURVEY
 N.M.P.M.

 COUNTY
 EDDY
 STATE
 NM
 ELEVATION
 3008'

 DESCRIPTION
 330' FSL & 489' FWL

LATITUDE N 32.0010605 LONGITUDE W 103.8417355



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.



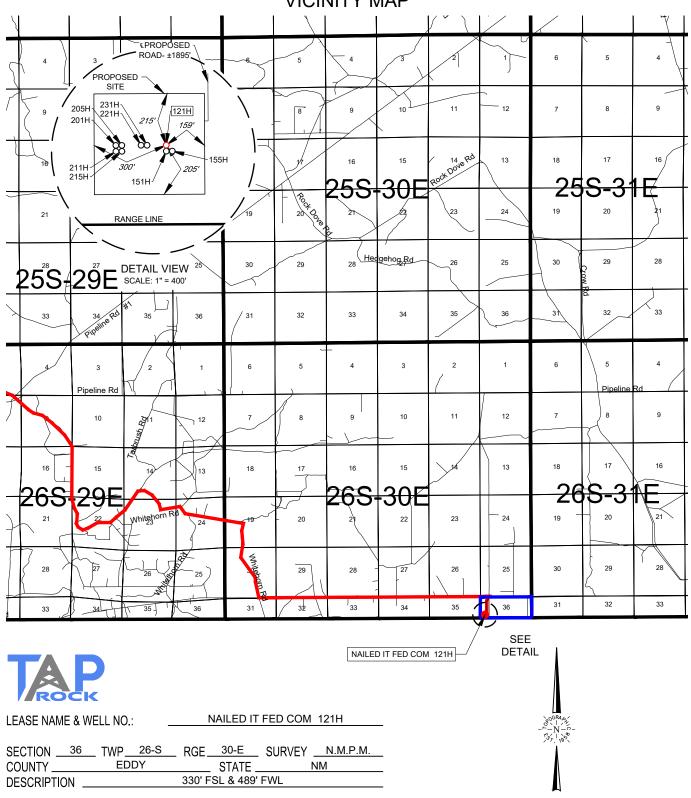
1400 EVERMAN PARKWAY, Ste. 146 • FT. WORTH, TEXAS 76140

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



### **DISTANCE & DIRECTION**

FROM INT. OF US-285 & COUNTY RD 720, 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 NORTHEAST (LEFT) ON LEASE RD. ±5.5 MILES, THENCE EAST (LEFT) ON STATE LINE RD. ±4.5, THENCE SOUTH ON A PROPOSED RD. ±1893 FEET TO A POINT ±189 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 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.



5000'

10000

10000

SCALE: 1"

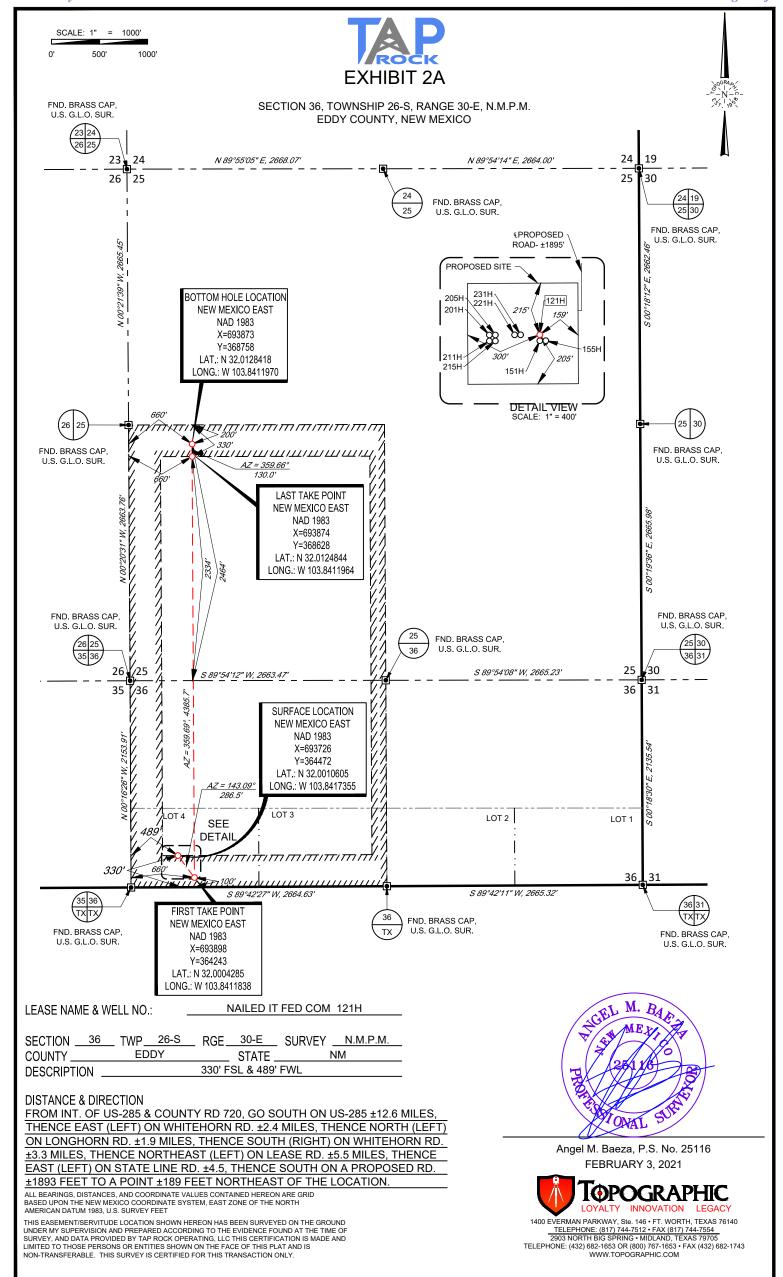
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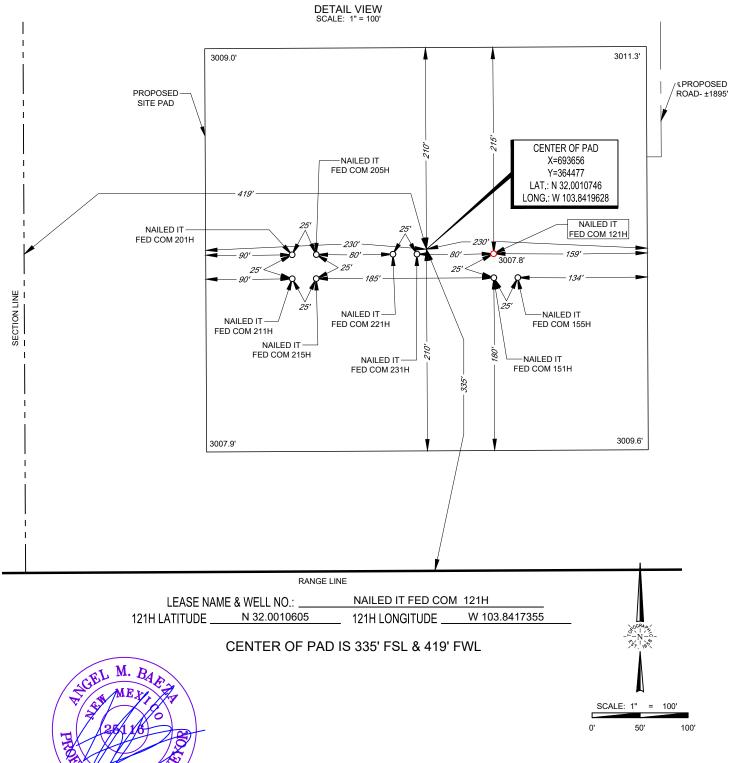
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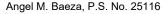
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#### SECTION 36. TOWNSHIP 26-S. RANGE 30-E. N.M.P.M. EDDY COUNTY, NEW MEXICO





ONAL

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.



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 District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

## State of New Mexico Energy, Minerals and Natural Resources Department

Submit Original to Appropriate District Office

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

Date: 2/17/2021	GAS CAPTURE PLAN		
☐ Original	Operator & OGRID No.:	372043	
	New location/ New name		

This Gas Capture Plan outlines actions to be taken by the Operator to reduce well/production facility flaring/venting for new completion (new drill, recomplete 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 #121H	30-015- 46884	4 Sec 36 T.26S. R.30E	330' FSL 489' FWL	+/- 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

Released to Imaging: 5/26/2021 8:47:40 AM

- Received by OCD: 4/16/2021 1:59:34 PM

  O Gas flared would be minimal, but might be uneconomical to operate when gas volume declines
  - NGL Removal On lease
    - o Plants are expensive, residue gas is still flared, and uneconomical to operate when gas volume declines



Elevation above Sea Level: 3008'

### **DRILLING PROGRAM**

#### 1. Estimated Tops

Formation	TVD	MD	Lithologies	Bearing
Quaternary Deposits	0	0	Surface	None
Rustler Anhydrite	823	823		Salt
Salado	1375	1375	Salt	Salt
Base Salt	3418	3418		Salt
Lamar	3624	3624	Limestone	None
Bell Canyon	3645	3646	Sandstone	Hydrocarbons
Cherry Canyon	4834	4839	Sandstone	Hydrocarbons
Brushy Canyon	5788	5797	Sandstone	Hydrocarbons
Bone Spring	7555	7568	Limestone	Hydrocarbons
КОР	8949	8962	Sandstone	Hydrocarbons
2nd Bone Spring Sand	9128	9145	Sandstone	Hydrocarbons
TD	9538	13893	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 nippled 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:



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, 1<sup>st</sup> intermediate and cementing 1<sup>st</sup> 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.



### 4. Casing & Cement

All Casing will be new.

Name	Hole Size	Casing Size	Standard	Tapered	Top MD	<b>Bottom MD</b>	Top TVD	BTM TVD	Grade	Weight	Thread	Collapse	Burst	Tension
Surface	17 1/2	13 3/8	API	No	0	898	0	898	J-55	54.5	BUTT	1.13	1.15	1.6
1st Intermediate	12 1/4	9 5/8	API	No	0	3649	0	3649	J-55	40	BUTT	1.13	1.15	1.6
Production	8 1/2	5 1/2	NON API	No	0	13893	0	9538	P-110	20	TXP	1.13	1.15	1.6

Name	Туре	Top MD	Sacks	Yield	Cu. Ft	Weight	Excess	Cement	Additives
Surface	Tail	0	924	1.35	1247	14.8	100%	С	5% NCI + LCM
1st Intermediate	Lead	0	692	2.18	1509	12.7	65%	С	Bentonite + 1% CaCL2 + 8% NaCl + LCM
1st intermediate	Tail	2649	284	1.33	377	14.8	65%	С	5% NaCl + LCM
Production	Tail	3149	1986	1.71	3397	14.2	25%	Н	Fluid Loss + Dispersant + Retarder + LCM

### 5. Mud Program

Name	Тор	Bottom	Туре	Mud Weight	Visc	Fluid Loss
Surface	0	898	FW Spud Mud	8.30	28	NC
Intermediate	898	3649	Brine Water	10.00	30-32	NC
Production	3649	13893	Cut Brine	9.00	28-40	<10

Name	Тор	Bottom	Туре	Mud Weight	Visc	Fluid Loss
Surface	0	898	FW Spud Mud	8.30	28	NC
Intermediate	898	3649	Brine Water	10.00	30-32	NC
Production	3649	13893	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.



## 7. <u>Down Hole Conditions</u>

No abnormal pressure or temperature is expected. Maximum expected bottom hole pressure is  $\approx 4,465$  psi. Expected bottom hole temperature is  $\approx 170^{\circ}$  F.

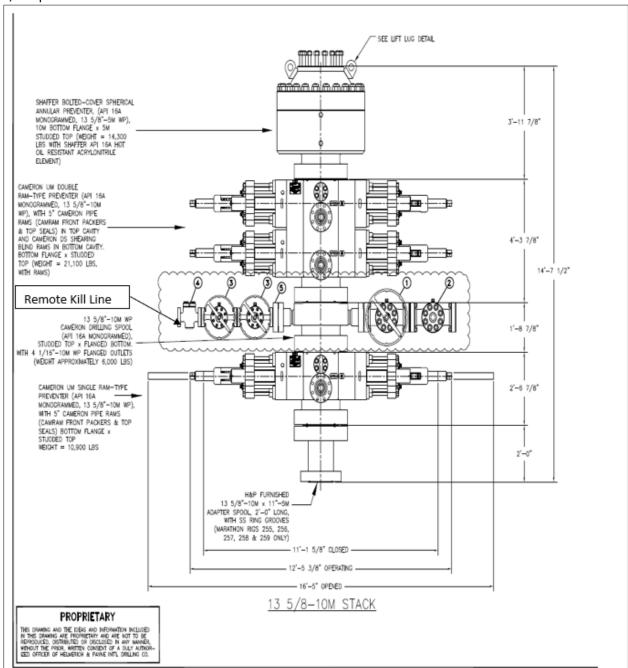
Tap Rock does not anticipate that there will be enough H2S from the surface to the Wolfcamp formations to meet the BLM's Onshore Order 6 requirements for the submission of an "H2S Drilling Operation Plan" or "Public Protection Plan" for drilling and completing this well. Tap Rock has an H2S safety package 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

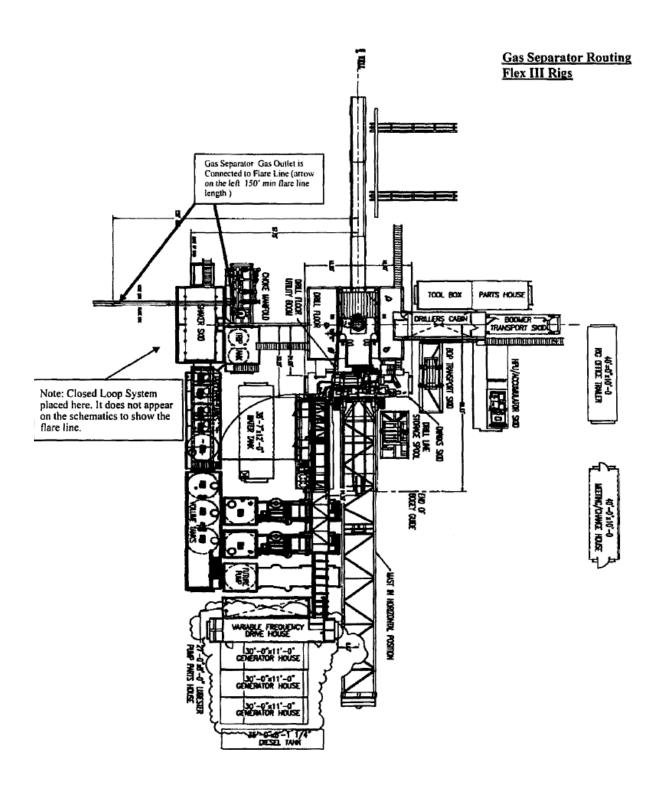
Road and location construction will begin after BLM approval of APD. Anticipated spud date as soon as approved. Drilling expected to take 30 days. If production casing is run an additional 60 days will be required to complete and construct surface facilities.



## 5,000 psi BOP Stack

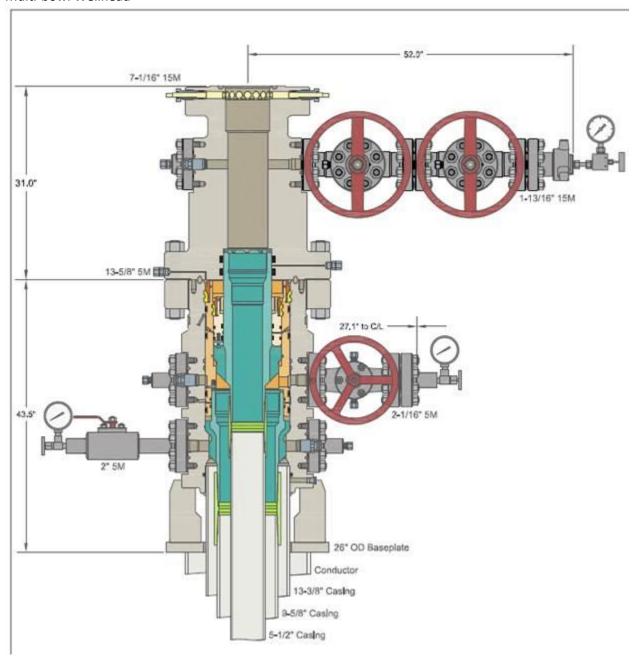






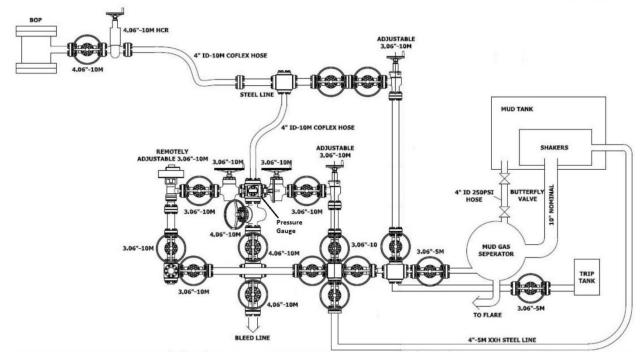


## Multi-bowl Wellhead





## 10M Choke Layout





# Casing and Tubing Performance Data

## PIPE BODY DATA

### **GEOMETRY**

Outside Diameter					
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		
		PE	RFORMANCE		
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		
		CONN	NECTION DA	TA	
TYPE: BTC		(	GEOMETRY		
Coupling Reg OD	14.375 in	Threads per in	5	Thread turns make up	1
		PE	RFORMANCE		
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



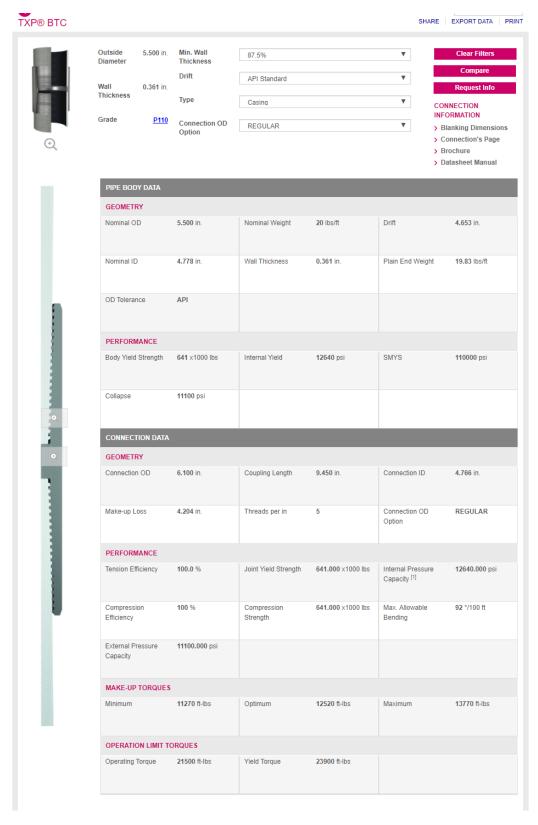
# Casing and Tubing Performance Data

## 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		
		PEF	RFORMANCE		
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		
		CONN	ECTION DA	TA	
TYPE: BTC		G	SEOMETRY		
Coupling Reg OD	10.625 in	Threads per in	5	Thread turns make up	1
		PEF	RFORMANCE		
Steel Grade	J55	Coupling Min Yield	55,000 psi	Coupling Min Ultimate	75,000 psi
Joint Strength	714,000 <b>I</b> bs			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)



# Tap Rock Operating, LLC.

Eddy County, NM (NAD83) Nailed It Fed Com 121H

OH

Plan: Plan #1

# **Standard Planning Report**

15 February, 2021

 Database:
 EDM 5000.1 Single User Db

 Company:
 Tap Rock Operating, LLC.

 Project:
 Eddy County, NM (NAD83)

 Site:
 Nailed It Fed Com

 Well:
 121H

 Wellbore:
 OH

 Design:
 Plan #1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:

Well 121H

WELL @ 3033.0usft (25' RKB) WELL @ 3033.0usft (25' RKB)

Grid

Minimum Curvature

Project Eddy County, NM (NAD83)

Map System:US State Plane 1983Geo Datum:North American Datum 1983Map Zone:New Mexico Eastern Zone

System Datum:

Mean Sea Level

Site Nailed It Fed Com

Northing: 364,471.20 usft Site Position: 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 121H **Well Position** Latitude: +N/-S 0.5 usft Northing: 364,471.75 usft 32° 0' 3.818 N +E/-W 105.0 usft Easting: 693,726.03 usft Longitude: 103° 50' 30.248 W **Position Uncertainty** 2.0 usft Wellhead Elevation: **Ground Level:** 3,008.0 usft

Wellbore ОН Magnetics **Model Name** Sample Date Declination Dip Angle Field Strength (nT) (°) (°) IGRF2015 2/14/2021 6.67 59.77 47,405

Design Plan #1 **Audit Notes:** Version: Phase: PLAN Tie On Depth: 0.0 Vertical Section: Depth From (TVD) +N/-S +E/-W Direction (usft) (usft) (usft) (°) 359.69 0.0 0.0 0.0

lan 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	
3,300.0	0.00	0.00	3,300.0	0.0	0.0	0.00	0.00	0.00	0.00	
3,633.3	5.00	169.00	3,632.9	-14.3	2.8	1.50	1.50	0.00	169.00	
6,933.3	5.00	169.00	6,920.4	-296.6	57.7	0.00	0.00	0.00	0.00	
7,266.7	0.00	0.00	7,253.3	-310.9	60.4	1.50	-1.50	0.00	180.00	
8,962.4	0.00	0.00	8,949.0	-310.9	60.4	0.00	0.00	0.00	0.00	
9,860.1	89.76	7.98	9,522.0	254.2	139.6	10.00	10.00	0.00	7.98	
10,274.8	89.77	359.69	9,523.7	667.6	167.3	2.00	0.00	-2.00	-89.98	
13,763.7	89.77	359.69	9,538.0	4,156.5	148.2	0.00	0.00	0.00	0.00	LTP_NIF.121H
13,893.7	89.77	359.69	9,538.5	4,286.5	147.5	0.00	0.00	0.00	0.00	PBHL_NIF.121H

Database: EDM 5000.1 Single User Db Company: Tap Rock Operating, LLC.

Project: Eddy County, NM (NAD83)

Nailed It Fed Com

 Well:
 121H

 Wellbore:
 OH

 Design:
 Plan #1

Site:

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:

Well 121H WELL @ 3033.0usft (25' RKB) WELL @ 3033.0usft (25' RKB)

ed 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
823.0	0.00	0.00	823.0	0.0	0.0	0.0	0.00	0.00	0.00
Rustler Anh									
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
1,200.0	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	
1,300.0	0.00						0.00		0.00
1,375.0	0.00	0.00	1,375.0	0.0	0.0	0.0	0.00	0.00	0.00
Top Salt	0.00	0.00	4 400 0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	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
3,300.0	0.00	0.00	3,300.0	0.0	0.0	0.0	0.00	0.00	0.00
Start Build 1		0.00	0,000.0	0.0	0.0	0.0	0.00	0.00	0.00
3,400.0	1.50	169.00	3,400.0	-1.3	0.2	-1.3	1.50	1.50	0.00
3,418.0	1.77	169.00	3,418.0	-1.8	0.3	-1.8	1.50	1.50	0.00
Base Salt									
3,500.0	3.00	169.00	3,499.9	-5.1	1.0	-5.1	1.50	1.50	0.00
3,600.0	4.50	169.00	3,599.7	-11.6	2.2	-11.6	1.50	1.50	0.00
3,618.4	4.78	169.00	3,618.0	-13.0	2.5	-13.0	1.50	1.50	0.00
Delaware Mo			-,	. 3.0					3.33
3,624.4	4.87	169.00	3,624.0	-13.5	2.6	-13.5	1.50	1.50	0.00
Lamar									
3,633.3	5.00	169.00	3,632.9	-14.3	2.8	-14.3	1.50	1.50	0.00
Start 3300.0	hold at 3633.3 N	1D							
3,645.5	5.00	169.00	3,645.0	-15.3	3.0	-15.3	0.00	0.00	0.00
Bell Canyon									
3,657.5	5.00	169.00	3,657.0	-16.3	3.2	-16.4	0.00	0.00	0.00

Database: EDM 5000.1 Single User Db Company: Tap Rock Operating, LLC.
Project: Eddy County, NM (NAD83)
Site: Nailed It Fed Com

 Well:
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 Plan #1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well 121H

WELL @ 3033.0usft (25' RKB) WELL @ 3033.0usft (25' RKB)

Grid

nned 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)
Ramsey Sand	i								
3,700.0	5.00	169.00	3,699.3	-20.0	3.9	-20.0	0.00	0.00	0.00
3,800.0	5.00	169.00	3,798.9	-28.5	5.5	-28.6	0.00	0.00	0.00
3,900.0	5.00	169.00	3,898.6	-37.1	7.2	-37.1	0.00	0.00	0.00
4,000.0	5.00	169.00	3,998.2	-45.6	8.9	-45.7	0.00	0.00	0.00
4,100.0	5.00	169.00	4,097.8	-54.2	10.5	-54.2	0.00	0.00	0.00
4,200.0	5.00	169.00	4,197.4	-62.7	12.2	-62.8	0.00	0.00	0.00
4,300.0	5.00	169.00	4,297.0	-71.3	13.9	-71.4	0.00	0.00	0.00
4,400.0	5.00	169.00	4,396.7	-79.9	15.5	-79.9	0.00	0.00	0.00
4,500.0	5.00	169.00	4,496.3	-88.4	17.2	-88.5	0.00	0.00	0.00
4,600.0	5.00	169.00	4,595.9	-97.0	18.8	-97.1	0.00	0.00	0.00
4,700.0	5.00	169.00	4,695.5	-105.5	20.5	-105.6	0.00	0.00	0.00
4,800.0	5.00	169.00	4,795.1	-114.1	22.2	-114.2	0.00	0.00	0.00
4,839.0	5.00	169.00	4,834.0	-117.4	22.8	-117.5	0.00	0.00	0.00
Cherry Canyo		109.00	4,634.0	-117.4	22.0	-117.5	0.00	0.00	0.00
4,900.0	5.00	169.00	4,894.8	-122.6	23.8	-122.8	0.00	0.00	0.00
5,000.0	5.00	169.00	4,994.4	-131.2	25.5	-131.3	0.00	0.00	0.00
5,100.0	5.00	169.00	5,094.0	-139.7	27.2	-139.9	0.00	0.00	0.00
5,200.0	5.00	169.00	5,193.6	-148.3	28.8	-148.5	0.00	0.00	0.00
5,300.0	5.00	169.00	5,293.2	-156.9	30.5	-157.0	0.00	0.00	0.00
5,400.0	5.00	169.00	5,392.9	-165.4	32.2	-165.6	0.00	0.00	0.00
5,500.0	5.00	169.00	5,492.5	-174.0	33.8	-174.2	0.00	0.00	0.00
5,600.0	5.00	169.00	5,592.1	-182.5	35.5	-182.7	0.00	0.00	0.00
5,700.0	5.00	169.00	5,691.7	-191.1	37.1	-191.3	0.00	0.00	0.00
5,796.7	5.00	169.00	5,788.0	-199.3	38.7	-199.6	0.00	0.00	0.00
Brushy Cany	on								
5,800.0	5.00	169.00	5,791.3	-199.6	38.8	-199.8	0.00	0.00	0.00
5,900.0	5.00	169.00	5,891.0	-208.2	40.5	-208.4	0.00	0.00	0.00
6,000.0	5.00	169.00	5,990.6	-216.7	42.1	-217.0	0.00	0.00	0.00
6,100.0	5.00	169.00	6,090.2	-225.3	43.8	-225.5	0.00	0.00	0.00
6,200.0	5.00	169.00	6,189.8	-233.9	45.5	-234.1	0.00	0.00	0.00
6,300.0	5.00	169.00	6,289.4	-242.4	47.1	-242.7	0.00	0.00	0.00
6,400.0	5.00	169.00	6,389.0	-251.0	48.8	-251.2	0.00	0.00	0.00
6,500.0	5.00	169.00	6,488.7	-259.5	50.4	-259.8	0.00	0.00	0.00
6,600.0	5.00	169.00	6,588.3	-268.1	52.1	-268.4	0.00	0.00	0.00
6,700.0	5.00	169.00	6,687.9	-276.6	53.8	-276.9	0.00	0.00	0.00
6,800.0	5.00	169.00	6,787.5	-285.2	55.4	-285.5	0.00	0.00	0.00
6,900.0	5.00	169.00	6,887.1	-293.7	57.1	-294.1	0.00	0.00	0.00
6,933.3	5.00	169.00	6,920.4	-296.6	57.7	-296.9	0.00	0.00	0.00
Start Drop -1. 7,000.0	4.00	169.00	6,986.8	-301.7	58.7	-302.0	1.50	-1.50	0.00
7,100.0	2.50	169.00	7,086.6	-307.3	59.7	-307.6	1.50	-1.50	0.00
7,200.0	1.00	169.00	7,186.6	-310.3	60.3	-310.6	1.50	-1.50	0.00
7,266.7	0.00	0.00	7,253.3	-310.9	60.4	-311.2	1.50	-1.50	0.00
	old at 7266.7 M		1,200.0	010.0	50.4	071. <u>Z</u>	1.00	1.00	0.00
7,300.0	0.00	0.00	7,286.6	-310.9	60.4	-311.2	0.00	0.00	0.00
7,400.0	0.00	0.00	7,386.6	-310.9	60.4	-311.2	0.00	0.00	0.00
7,500.0	0.00	0.00	7,486.6	-310.9	60.4	-311.2	0.00	0.00	0.00
7,568.4	0.00	0.00	7,555.0	-310.9	60.4	-311.2	0.00	0.00	0.00
Bone Spring 7,600.0	<b>Lime</b> 0.00	0.00	7,586.6	-310.9	60.4	-311.2	0.00	0.00	0.00
7,665.4 Upper Avalor	0.00	0.00	7,652.0	-310.9	60.4	-311.2	0.00	0.00	0.00

EDM 5000.1 Single User Db Database: Tap Rock Operating, LLC. Company: Project: Eddy County, NM (NAD83) Nailed It Fed Com

Well: 121H ОН Wellbore: Design: Plan #1

Site:

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference: **Survey Calculation Method:**  Well 121H WELL @ 3033.0usft (25' RKB) WELL @ 3033.0usft (25' RKB)

nd Curvey									
ed 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)
7,700.0	0.00	0.00	7,686.6	-310.9	60.4	-311.2	0.00	0.00	0.00
7,800.0	0.00	0.00	7,786.6	-310.9	60.4	-311.2	0.00	0.00	0.00
7,900.0	0.00	0.00	7,886.6	-310.9	60.4	-311.2	0.00	0.00	0.00
8,000.0	0.00	0.00	7,986.6	-310.9	60.4	-311.2	0.00	0.00	0.00
8,055.4	0.00	0.00	8,042.0	-310.9	60.4	-311.2	0.00	0.00	0.00
Middle Aval	on								
8,100.0	0.00	0.00	8,086.6	-310.9	60.4	-311.2	0.00	0.00	0.00
8,200.0	0.00	0.00	8,186.6	-310.9	60.4	-311.2	0.00	0.00	0.00
8,300.0	0.00	0.00	8,286.6	-310.9	60.4	-311.2	0.00	0.00	0.00
8,321.4	0.00	0.00	8,308.0	-310.9	60.4	-311.2	0.00	0.00	0.00
Lower Avale	on								
8,400.0	0.00	0.00	8,386.6	-310.9	60.4	-311.2	0.00	0.00	0.00
8,495.4	0.00	0.00	8,482.0	-310.9	60.4	-311.2	0.00	0.00	0.00
1st Bone Sp	•								
8,500.0	0.00	0.00	8,486.6	-310.9	60.4	-311.2	0.00	0.00	0.00
8,600.0	0.00	0.00	8,586.6	-310.9	60.4	-311.2	0.00	0.00	0.00
8,700.0	0.00	0.00	8,686.6	-310.9	60.4	-311.2	0.00	0.00	0.00
8,800.0	0.00	0.00	8,786.6	-310.9	60.4	-311.2	0.00	0.00	0.00
8,900.0	0.00	0.00	8.886.6	-310.9	60.4	-311.2	0.00	0.00	0.00
8,962.4	0.00	0.00	8,949.0	-310.9	60.4	-311.2	0.00	0.00	0.00
Start Build			,						
8,988.4	2.60	7.98	8,975.0	-310.3	60.5	-310.6	10.00	10.00	0.00
2nd Bone S	pring Carb								
9,000.0	3.76	7.98	8,986.6	-309.6	60.6	-310.0	10.00	10.00	0.00
9,050.0	8.76	7.98	9,036.3	-304.2	61.4	-304.6	10.00	10.00	0.00
9,100.0	13.76	7.98	9,085.3	-294.6	62.7	-294.9	10.00	10.00	0.00
9,144.5	18.20	7.98	9,128.0	-282.5	64.4	-282.8	10.00	10.00	0.00
2nd Bone S	pring Sand								
9,150.0	18.76	7.98	9,133.3	-280.7	64.7	-281.1	10.00	10.00	0.00
9,200.0	23.76	7.98	9,179.8	-262.8	67.2	-263.1	10.00	10.00	0.00
9,250.0	28.76	7.98	9,224.7	-240.9	70.2	-241.3	10.00	10.00	0.00
9,300.0	33.76	7.98	9,267.4	-215.2	73.8	-215.6	10.00	10.00	0.00
9,350.0	38.76	7.98	9,307.7	-185.9	77.9	-186.3	10.00	10.00	0.00
9,400.0	43.76	7.98	9,345.3	-153.3	82.5	-153.7	10.00	10.00	0.00
9,450.0	48.76	7.98	9,379.8	-117.5	87.5	-118.0	10.00	10.00	0.00
9,500.0	53.76	7.98	9,411.1	-78.9	92.9	-79.4	10.00	10.00	0.00
9.550.0	58.75	7.98	9,438.9	-37.7	98.7	-38.3	10.00	10.00	0.00
9,600.0	63.75	7.98	9,462.9	5.7	104.8	5.1	10.00	10.00	0.00
9,650.0	68.75	7.98	9,483.1	51.0	111.1	50.4	10.00	10.00	0.00
9,700.0	73.75	7.98	9,499.1	97.8	117.7	97.2	10.00	10.00	0.00
9,750.0	78.75	7.98	9,511.0	145.9	124.5	145.2	10.00	10.00	0.00
9,800.0	83.75	7.98	9,518.6	194.8	131.3	194.1	10.00	10.00	0.00
9,850.0	88.75	7.98	9,521.9	244.2	138.2	243.5	10.00	10.00	0.00
9,860.1	89.76	7.98	9,522.0	254.2	139.6	253.5	10.00	10.00	0.00
	.00 TFO -89.98								
9,900.0	89.76	7.18	9,522.2	293.8	144.9	293.0	2.00	0.00	-2.00
10,000.0	89.76	5.18	9,522.6	393.2	155.7	392.4	2.00	0.00	-2.00
10,100.0	89.76	3.18	9,523.0	492.9	163.0	492.0	2.00	0.00	-2.00
10,200.0	89.76	1.18	9,523.4	592.8	166.8	591.9	2.00	0.00	-2.00
10,274.8	89.77	359.69	9,523.7	667.6	167.3	666.7	2.00	0.00	-2.00
Start 3488.9	hold at 10274.8	MD							
10,300.0	89.77	359.69	9,523.8	692.8	167.2	691.9	0.00	0.00	0.00
10,400.0	89.77	359.69	9,524.2	792.8	166.7	791.9	0.00	0.00	0.00

EDM 5000.1 Single User Db Database: Company: Tap Rock Operating, LLC. Project: Eddy County, NM (NAD83) Nailed It Fed Com

Well: 121H ОН Wellbore: Design: Plan #1

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WELL @ 3033.0usft (25' RKB)

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)
10,500.0	89.77	359.69	9,524.6	892.8	166.1	891.9	0.00	0.00	0.00
10,600.0	89.77	359.69	9,525.1	992.8	165.6	991.9	0.00	0.00	0.00
10,700.0	89.77	359.69	9,525.5	1,092.8	165.0	1,091.9	0.00	0.00	0.00
10,800.0	89.77	359.69	9,525.9	1,192.8	164.5	1,191.9	0.00	0.00	0.00
10,900.0	89.77	359.69	9,526.3	1,292.8	163.9	1,291.9	0.00	0.00	0.00
11,000.0	89.77	359.69	9,526.7	1,392.8	163.4	1,391.9	0.00	0.00	0.00
11,100.0	89.77	359.69	9,527.1	1,492.8	162.8	1,491.9	0.00	0.00	0.00
11,200.0	89.77	359.69	9,527.5	1,592.8	162.3	1,591.9	0.00	0.00	0.00
11,300.0	89.77	359.69	9,527.9	1,692.8	161.7	1,691.9	0.00	0.00	0.00
11,400.0	89.77	359.69	9,528.3	1,792.8	161.2	1,791.9	0.00	0.00	0.00
11,500.0	89.77	359.69	9,528.7	1,892.8	160.6	1,891.9	0.00	0.00	0.00
11,600.0	89.77	359.69	9,529.1	1,992.8	160.1	1,991.9	0.00	0.00	0.00
11,700.0	89.77	359.69	9,529.6	2,092.8	159.5	2,091.9	0.00	0.00	0.00
11,800.0	89.77	359.69	9,530.0	2,192.8	159.0	2,191.9	0.00	0.00	0.00
11,900.0	89.77	359.69	9,530.4	2,292.8	158.4	2,291.9	0.00	0.00	0.00
12,000.0	89.77	359.69	9,530.8	2,392.8	157.9	2,391.9	0.00	0.00	0.00
12,100.0	89.77	359.69	9,531.2	2,492.8	157.3	2,491.9	0.00	0.00	0.00
12,200.0	89.77	359.69	9,531.6	2,592.8	156.8	2,591.9	0.00	0.00	0.00
12,300.0	89.77	359.69	9,532.0	2,692.8	156.2	2,691.9	0.00	0.00	0.00
12,400.0	89.77	359.69	9,532.4	2,792.8	155.7	2,791.9	0.00	0.00	0.00
12,500.0	89.77	359.69	9,532.8	2,892.8	155.1	2,891.9	0.00	0.00	0.00
12,600.0	89.77	359.69	9,533.2	2,992.8	154.6	2,991.9	0.00	0.00	0.00
12,700.0	89.77	359.69	9,533.6	3,092.8	154.0	3,091.9	0.00	0.00	0.00
12,800.0	89.77	359.69	9,534.1	3,192.8	153.5	3,191.9	0.00	0.00	0.00
12,900.0	89.77	359.69	9,534.5	3,292.8	152.9	3,291.9	0.00	0.00	0.00
13,000.0	89.77	359.69	9,534.9	3,392.8	152.4	3,391.9	0.00	0.00	0.00
13,100.0	89.77	359.69	9,535.3	3,492.8	151.8	3,491.9	0.00	0.00	0.00
13,200.0	89.77	359.69	9,535.7	3,592.8	151.3	3,591.9	0.00	0.00	0.00
13,300.0	89.77	359.69	9,536.1	3,692.8	150.7	3,691.9	0.00	0.00	0.00
13,400.0	89.77	359.69	9,536.5	3,792.8	150.2	3,791.9	0.00	0.00	0.00
13,500.0	89.77	359.69	9,536.9	3,892.8	149.6	3,891.9	0.00	0.00	0.00
13,600.0	89.77	359.69	9,537.3	3,992.8	149.1	3,991.9	0.00	0.00	0.00
13,700.0	89.77	359.69	9,537.7	4,092.8	148.5	4,091.9	0.00	0.00	0.00
13,763.7	89.77	359.69	9,538.0	4,156.5	148.2	4,155.6	0.00	0.00	0.00
13,800.0	89.77	359.69	9,538.1	4,192.8	148.0	4,191.9	0.00	0.00	0.00
13,893.7	89.77	359.69	9,538.5	4,286.5	147.5	4,285.6	0.00	0.00	0.00

Database: EDM 5000.1 Single User Db Company: Tap Rock Operating, LLC.
Project: Eddy County, NM (NAD83)
Site: Nailed It Fed Com

 Well:
 121H

 Wellbore:
 OH

 Design:
 Plan #1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:

Well 121H

WELL @ 3033.0usft (25' RKB) WELL @ 3033.0usft (25' RKB)

Grid

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
FTP_NIF.121H - plan misses target - Point	0.00 t center by 198	0.00 .8usft at 946	9,522.0 1.9usft MD (	-229.1 9387.6 TVD, -	172.1 108.6 N, 88.8	364,242.63 E)	693,898.10	32° 0' 1.543 N	103° 50' 28.262 W
LTP_NIF.121H - plan hits target ce - Point	0.00 nter	0.00	9,538.0	4,156.5	148.2	368,628.24	693,874.22	32° 0' 44.944 N	103° 50' 28.307 W
PBHL_NIF.121H - plan misses target - Point	0.00 t center by 0.1	0.00 usft at 13893	9,538.5 7usft MD (9	4,286.5 538.5 TVD, 42	147.4 286.5 N, 147.5	368,758.25 5 E)	693,873.45	32° 0' 46.230 N	103° 50' 28.309 W

Formations						
	Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
	823.0	823.0	Rustler Anhydrite			
	1,375.0	1,375.0	Top Salt			
	3,418.0	3,418.0	Base Salt			
	3,618.4	3,618.0	Delaware Mountain Gp			
	3,624.4	3,624.0	Lamar			
	3,645.5	3,645.0	Bell Canyon			
	3,657.5	3,657.0	Ramsey Sand			
	4,839.0	4,834.0	Cherry Canyon			
	5,796.7	5,788.0	Brushy Canyon			
	7,568.4	7,555.0	Bone Spring Lime			
	7,665.4	7,652.0	Upper Avalon			
	8,055.4	8,042.0	Middle Avalon			
	8,321.4	8,308.0	Lower Avalon			
	8,495.4	8,482.0	1st Bone Spring Sand			
	8,988.4	8,975.0	2nd Bone Spring Carb			
	9,144.5	9,128.0	2nd Bone Spring Sand			

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coo +N/-S (usft)	rdinates +E/-W (usft)	Comment	
3,300	0 3,300.0	0.0	0.0	Start Build 1.50	
3,633	3 3,632.9	-14.3	2.8	Start 3300.0 hold at 3633.3 MD	
6,933	3 6,920.4	-296.6	57.7	Start Drop -1.50	
7,266	7 7,253.3	-310.9	60.4	Start 1695.7 hold at 7266.7 MD	
8,962	4 8,949.0	-310.9	60.4	Start Build 10.00	
9,860	1 9,522.0	254.2	139.6	Start DLS 2.00 TFO -89.98	
10,274	8 9,523.7	667.6	167.3	Start 3488.9 hold at 10274.8 MD	
13,893	7 9,538.5	4,156.5	148.2	TD at 13893.7	

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

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District III 1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

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 24360

#### **COMMENTS**

Operator:	OGRID:
TAP ROCK OPERATING, LLC	372043
523 Park Point Drive	Action Number:
Golden, CO 80401	24360
	Action Type:
	[C-103] NOI Change of Plans (C-103A)

#### COMMENTS

Created By	Comment	Comment Date
kpickford	KP GEO Review 4/19/2021	4/19/2021

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CONDITIONS

Action 24360

### **CONDITIONS**

Operator:	OGRID:
TAP ROCK OPERATING, LLC	372043
523 Park Point Drive	Action Number:
Golden, CO 80401	24360
	Action Type:
	[C-103] NOI Change of Plans (C-103A)

#### CONDITIONS

Created By	Condition	Condition Date
kpickford	NSP Will require administrative order for non-standard spacing unit prior to production	4/19/2021
kpickford	Adhere to previous NMOCD Conditions of Approval	4/19/2021