

Well Name: WTG FED COM	Well Location: T26S / R29E / SEC 27 / NWNW / 32.0198507 / -103.9787472	County or Parish/State: EDDY / NM
Well Number: 231H	Type of Well: CONVENTIONAL GAS WELL	Allottee or Tribe Name:
Lease Number: NMNM038636, NMNM38636	Unit or CA Name:	Unit or CA Number:
US Well Number: 3001547855	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: 03/09/2021

Time Sundry Submitted: 10:08

Date proposed operation will begin: 03/09/2021

Procedure Description: Tap Rock is requesting permission to change the Name, BHL, depth/formation, and casing design for this well. Tap Rock is requesting the well name be changed from the WTG Fed Com 231H to the WTG Fed Com 121H. Previous approved BHL: 30 FSL, 750 FWL of Section 34, T26S, R29E New proposed BHL: 30 FSL, 331 FWL of Section 34, T26S, R29E Previously Approved Depth and Formation: 18147 ft, Wolfcamp New proposed Depth and Formation: 15919 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

WTG_Fed_Com_121H_Sundry_Attachments_20210309100546.pdf

Received by OCD: 4/23/2021 10:35:56 AM

Page 2 of 30

Well Name: WTG FED COM	Well Location: T26S / R29E / SEC 27 / NWNW / 32.0198507 / -103.9787472	County or Parish/State: EDDY / NM
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US Well Number: 3001547855	Well Status: Approved Application for Permit to Drill	Operator: TAP ROCK OPERATING LLC

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 09, 2021 10:06 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	

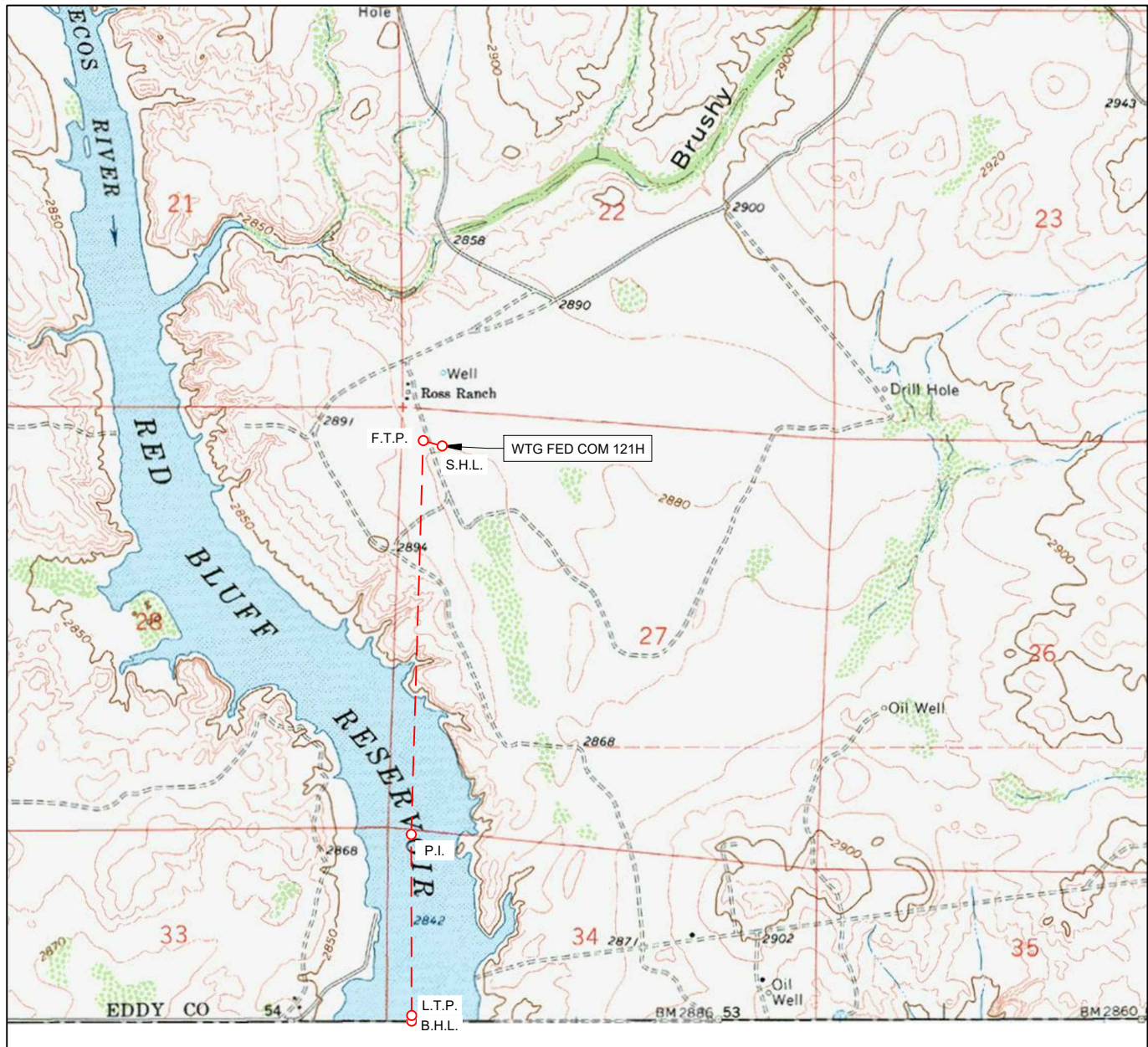
Field Representative

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: 04/23/2021
Signature: Chris Walls	

LOCATION & ELEVATION VERIFICATION MAP



LEASE NAME & WELL NO.: WTG FED COM 121H

SECTION 27 TWP 26-S RGE 29-E SURVEY N.M.P.M.
 COUNTY EDDY STATE NM ELEVATION 2883'
 DESCRIPTION 380' FNL & 568' FWL

LATITUDE N 32.0198507 LONGITUDE W 103.9787472

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

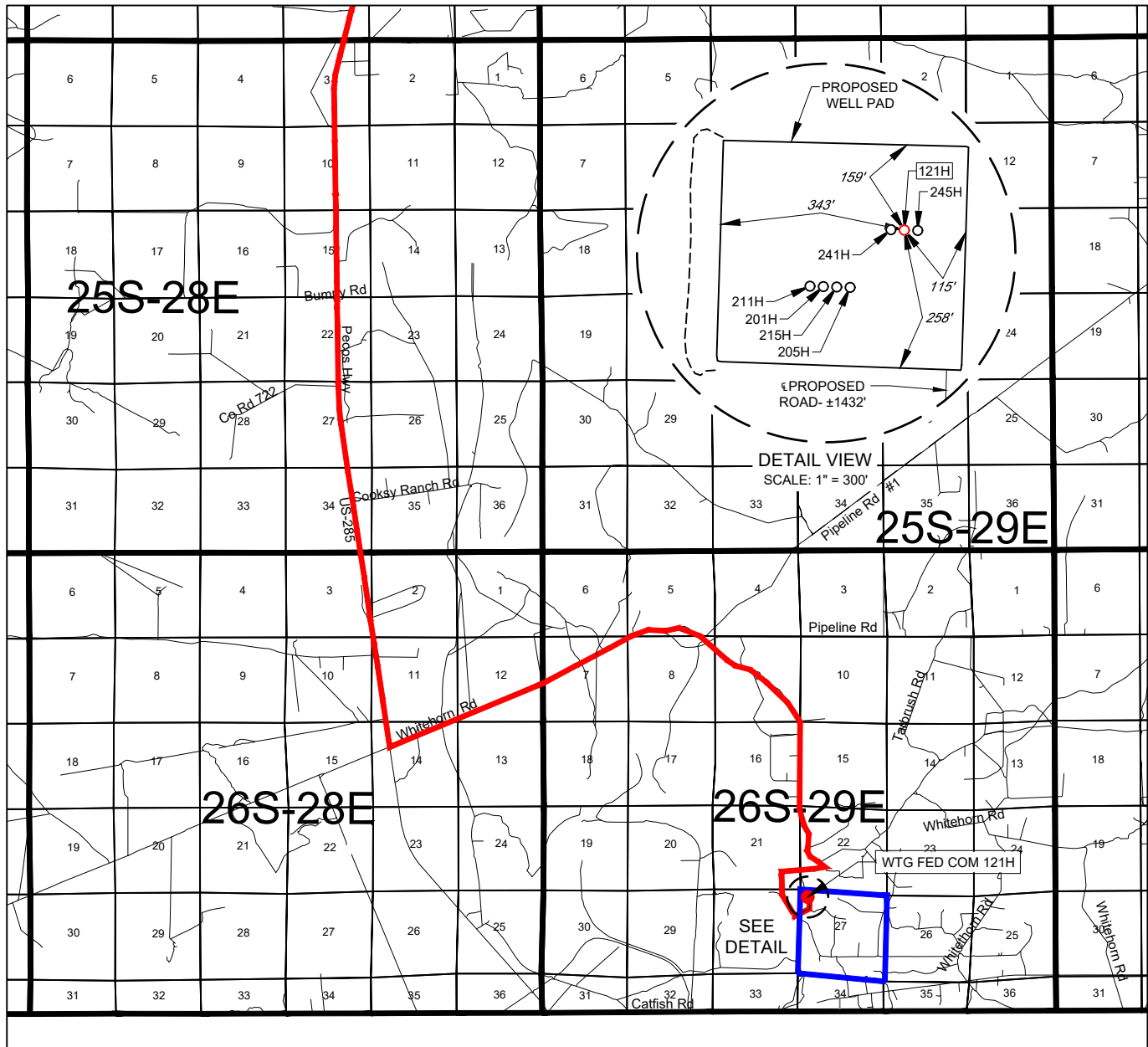
THIS EASEMENT/SERVITUDE LOCATION SHOWN HEREON HAS BEEN SURVEYED ON THE GROUND UNDER MY SUPERVISION AND PREPARED ACCORDING TO THE EVIDENCE FOUND AT THE TIME OF SURVEY, AND DATA PROVIDED BY TAP ROCK OPERATING, LLC. THIS CERTIFICATION IS MADE AND LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF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



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 LOYALTY INNOVATION LEGACY

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 2903 NORTH BIG SPRING • MIDLAND, TEXAS 79705
 TELEPHONE: (432) 682-1653 OR (800) 767-1653 • FAX (432) 682-1743
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EXHIBIT 2
VICINITY MAPLEASE NAME & WELL NO.: WTG FED COM 121HSECTION 27 TWP 26-S RGE 29-E SURVEY N.M.P.M.COUNTY EDDY STATE NMDESCRIPTION 380' FNL & 568' FWL

DISTANCE & DIRECTION

FROM INT. OF US-285 & BLACK RIVER VILLAGE RD., 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 PROPOSED RD.
 ±1432 FEET TO A POINT ±274 FEET SOUTHEAST OF THE LOCATION.

THIS EASEMENT/SERVITUDE LOCATION SHOWN HEREON HAS BEEN SURVEYED ON THE GROUND UNDER MY
 SUPERVISION AND PREPARED ACCORDING TO THE EVIDENCE FOUND AT THE TIME OF SURVEY, AND DATA
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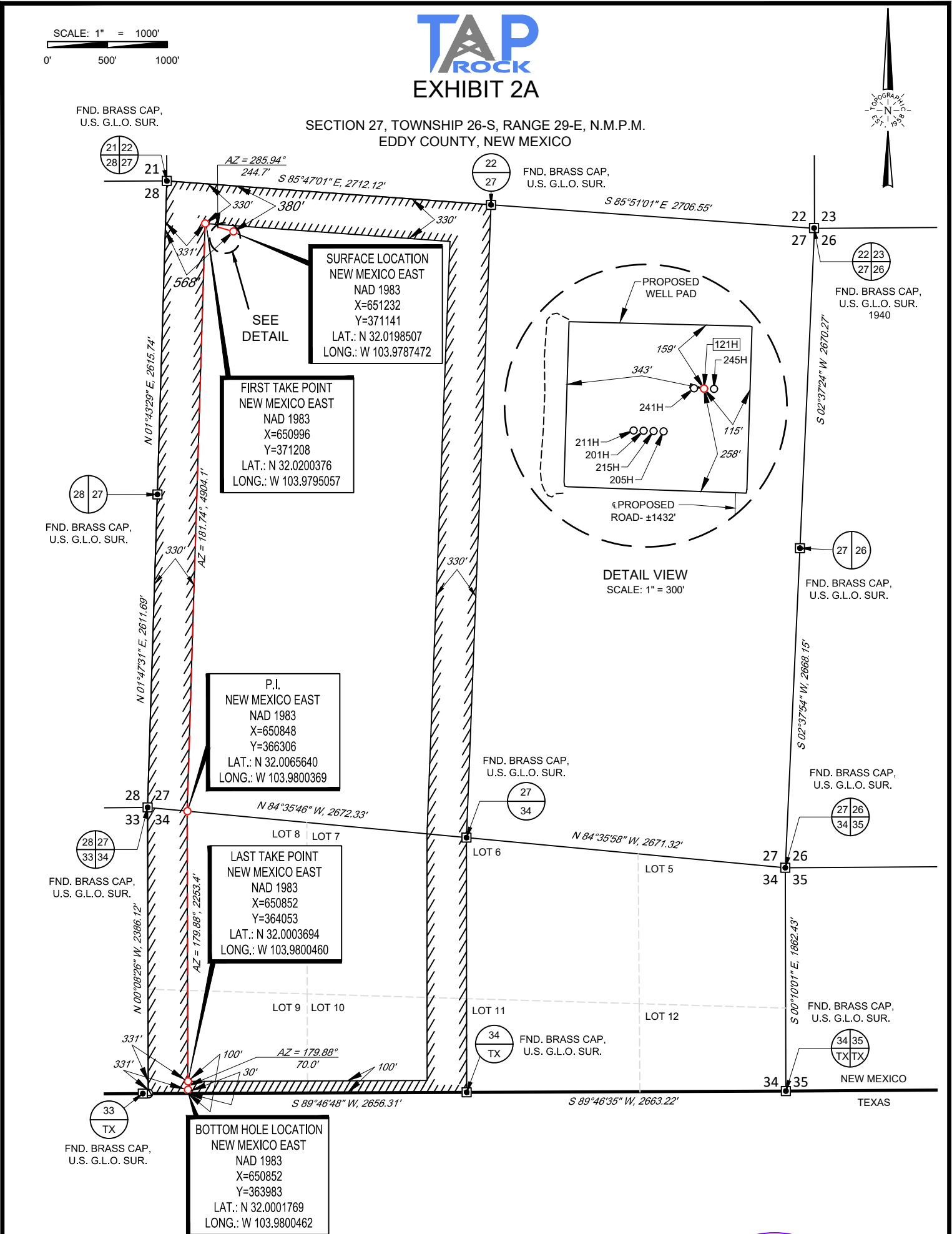


SCALE: 1" = 10000'
 0' 5000' 10000'



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LEASE NAME & WELL NO.: WTG FED COM 121H

SECTION 27 TWP 26-S RGE 29-E SURVEY N.M.P.M.
COUNTY EDDY STATE NM
DESCRIPTION 380' FNL & 568' FWL

DISTANCE & DIRECTION
FROM INT. OF US-285 & BLACK RIVER VILLAGE RD., 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 PROPOSED RD.
±1432 FEET TO A POINT ±274 FEET SOUTHEAST OF THE LOCATION.

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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 4, 2021

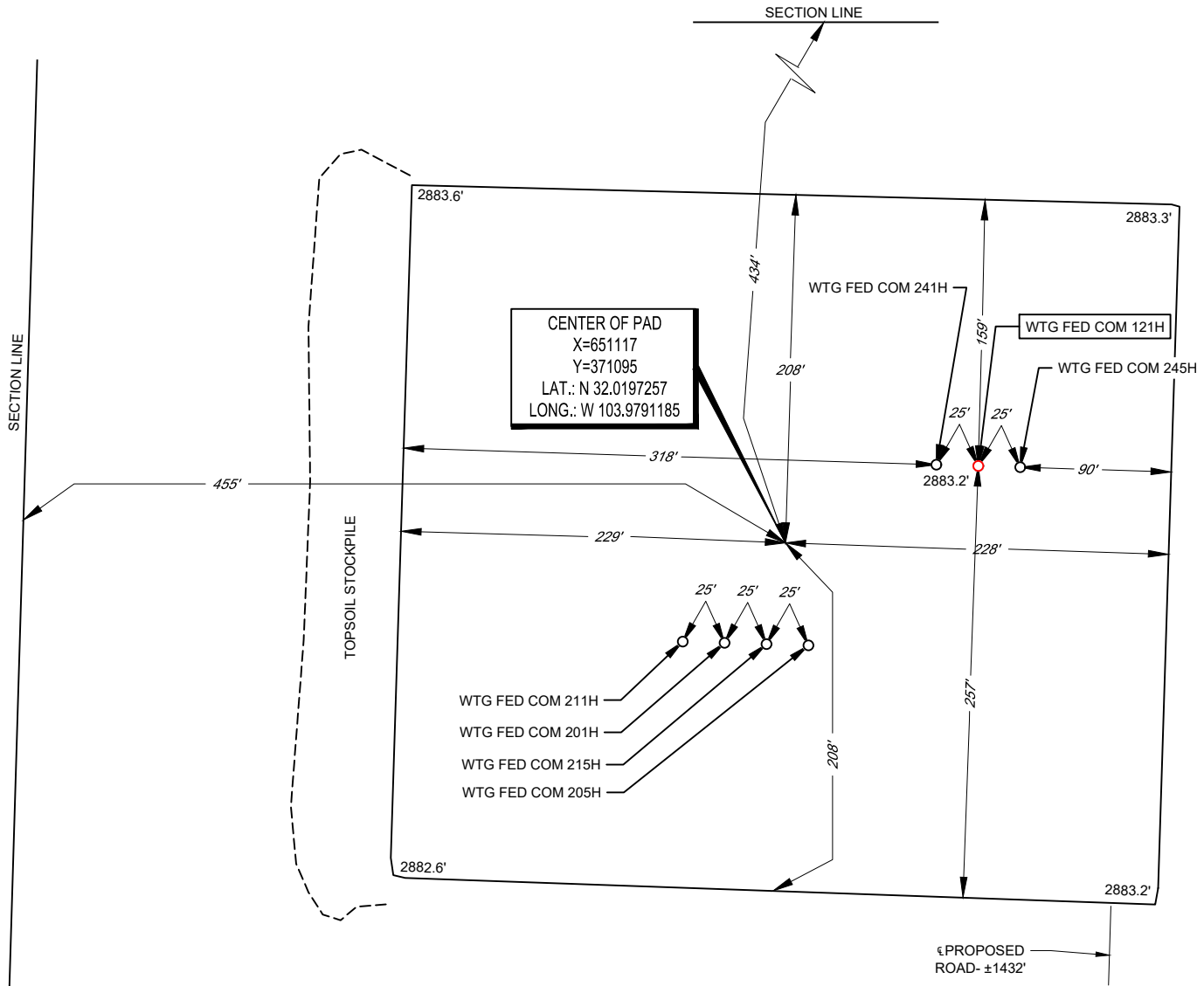
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EXHIBIT 2B



SECTION 27, TOWNSHIP 26-S, RANGE 29-E, N.M.P.M.
EDDY COUNTY, NEW MEXICO



LEASE NAME & WELL NO.: WTG FED COM 121H
121H LATITUDE N 32.0198507 121H LONGITUDE W 103.9787472
CENTER OF PAD IS 434' FNL & 455' FWL



Angel M. Baeza, P.S. No. 25116

ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREON ARE GRID BASED UPON THE NEW MEXICO COORDINATE SYSTEM OF 1983, EAST ZONE, U.S. SURVEY FEET. ELEVATIONS USED ARE NAVD88, OBTAINED THROUGH AN OPUS SOLUTION.

THIS PROPOSED PAD SITE LOCATION SHOWN HEREON HAS BEEN SURVEYED ON THE GROUND UNDER MY SUPERVISION AND PREPARED ACCORDING TO THE EVIDENCE FOUND AT THE TIME OF SURVEY, AND DATA PROVIDED BY TAP ROCK OPERATING, LLC. 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"



SCALE: 1" = 100'
0' 50' 100'



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

Submit Original
to Appropriate
District Office

GAS CAPTURE PLAN

Date: 2/17/21

☐ Original Operator & OGRID No.: 372043
☒ Amended - Reason for Amendment: 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, 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
WTG Fed Com 121H	30-015-47855	UL D Sec 27 T26S R29E	380' FNL 568' FWL	+/- 3,750	21 days	Gas will be flared for ~21 days on flowback before turning into 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 ~5000' of pipeline to connect the facility to low/high pressure gathering system. Tap Rock Operating, LLC provides (periodically) to Gas Transporter 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 Pecos, 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 the midstream side at that time. Based on current information, it is Tap Rock'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
 WTG Fed Com 121H
 Tap Rock Operating, LLC
 SHL 380' FNL & 568' FWL, Sec. 27
 BHL 30' FSL & 331' FWL, Sec. 34
 T. 26S., R. 29E, Eddy County, NM

Elevation above Sea Level: 2883'

DRILLING PROGRAM

1. Estimated Tops

Formation	TVD	MD	Lithologies	Bearing
Quaternary Deposits	0	0	Surface	None
Rustler Anhydrite	538	538		Salt
Salado	947	947	Salt	Salt
Base Salt	2841	2844		Salt
Lamar	3039	3043	Limestone	None
Bell Canyon	3077	3082	Sandstone	Hydrocarbons
Cherry Canyon	3767	3775	Sandstone	Hydrocarbons
Brushy Canyon	5060	5075	Sandstone	Hydrocarbons
Bone Spring	6641	6660	Limestone	Hydrocarbons
KOP	8067	8085	Sandstone	Hydrocarbons
2nd Bone Spring Sand	8268	8291	Sandstone	Hydrocarbons
TD	8590	15919	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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T. 26S., R. 29E, Eddy County, NM

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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T. 26S., R. 29E, Eddy County, NM

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	613	0	613	J-55	54.5	BUTT	1.13	1.15	1.6
1st Intermediate	12 1/4	9 5/8	API	No	0	3068	0	3064	J-55	40	BUTT	1.13	1.15	1.6
Production	8 1/2	5 1/2	NON API	No	0	15919	0	8590	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	631	1.35	852	14.8	100%	C	5% NCI + LCM
1st Intermediate	Lead	0	582	2.18	1268	12.7	65%	C	Bentonite + 1% CaCL2 + 8% NaCl + LCM
	Tail	2068	238	1.33	317	14.8	65%	C	5% NaCl + LCM
Production	Tail	2568	2468	1.71	4220	14.2	25%	H	Fluid Loss + Dispersant + Retarder + LCM

5. Mud Program

Name	Top	Bottom	Type	Mud Weight	Visc	Fluid Loss
Surface	0	613	FW Spud Mud	8.30	28	NC
Intermediate	613	3068	Brine Water	10.00	30-32	NC
Production	3068	15919	Cut Brine	9.00	28-40	<10

Name	Top	Bottom	Type	Mud Weight	Visc	Fluid Loss
Surface	0	613	FW Spud Mud	8.30	28	NC
Intermediate	613	3068	Brine Water	10.00	30-32	NC
Production	3068	15919	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 $\approx 4,020$ 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.

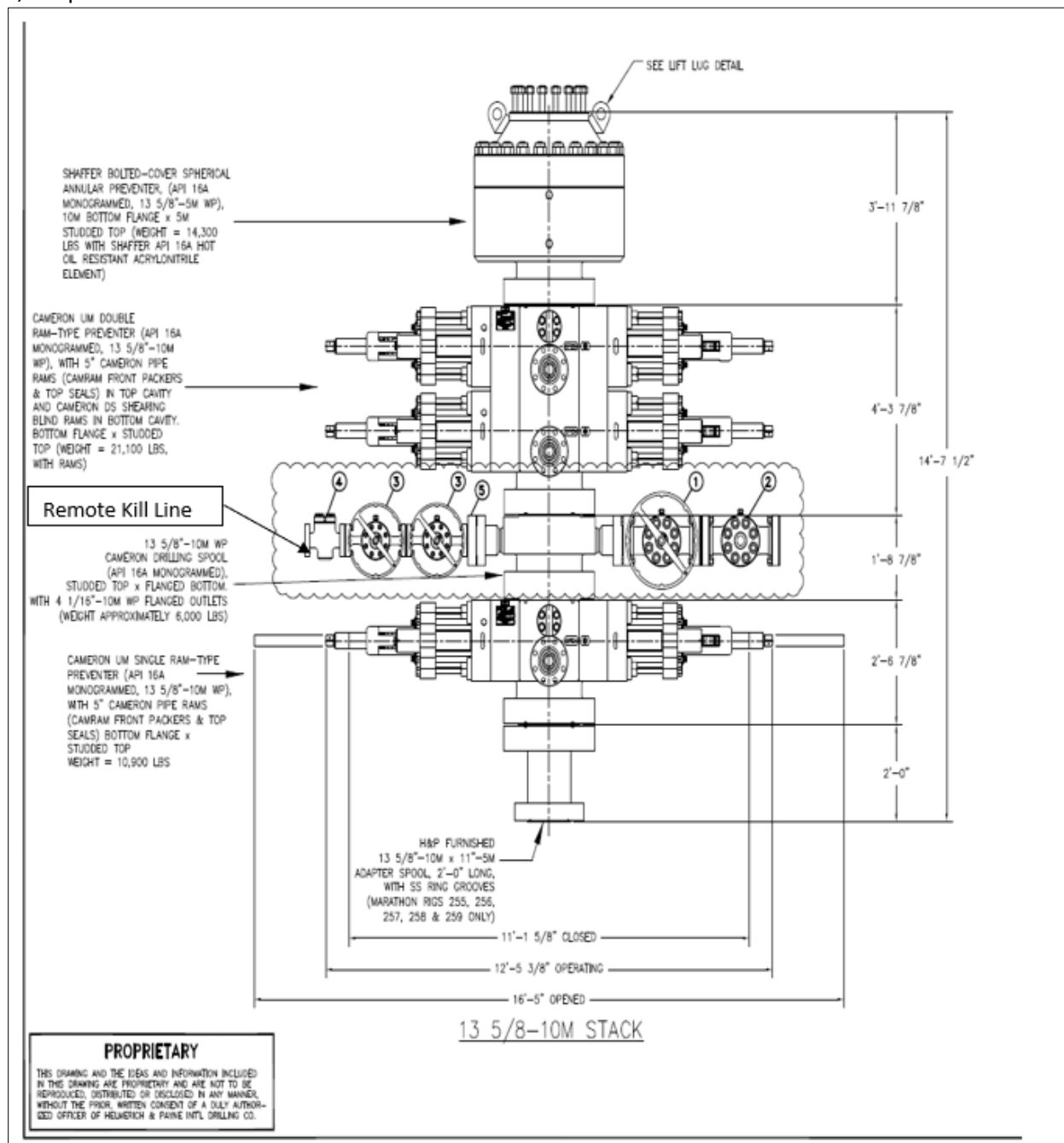
8. Other

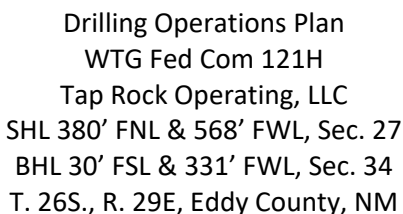
Road and location construction will begin after BLM approval of APD. Anticipated spud date as soon as approved. Drilling expected to take 30 days. If production casing is run an additional 60 days will be required to complete and construct surface facilities.



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5,000 psi BOP Stack

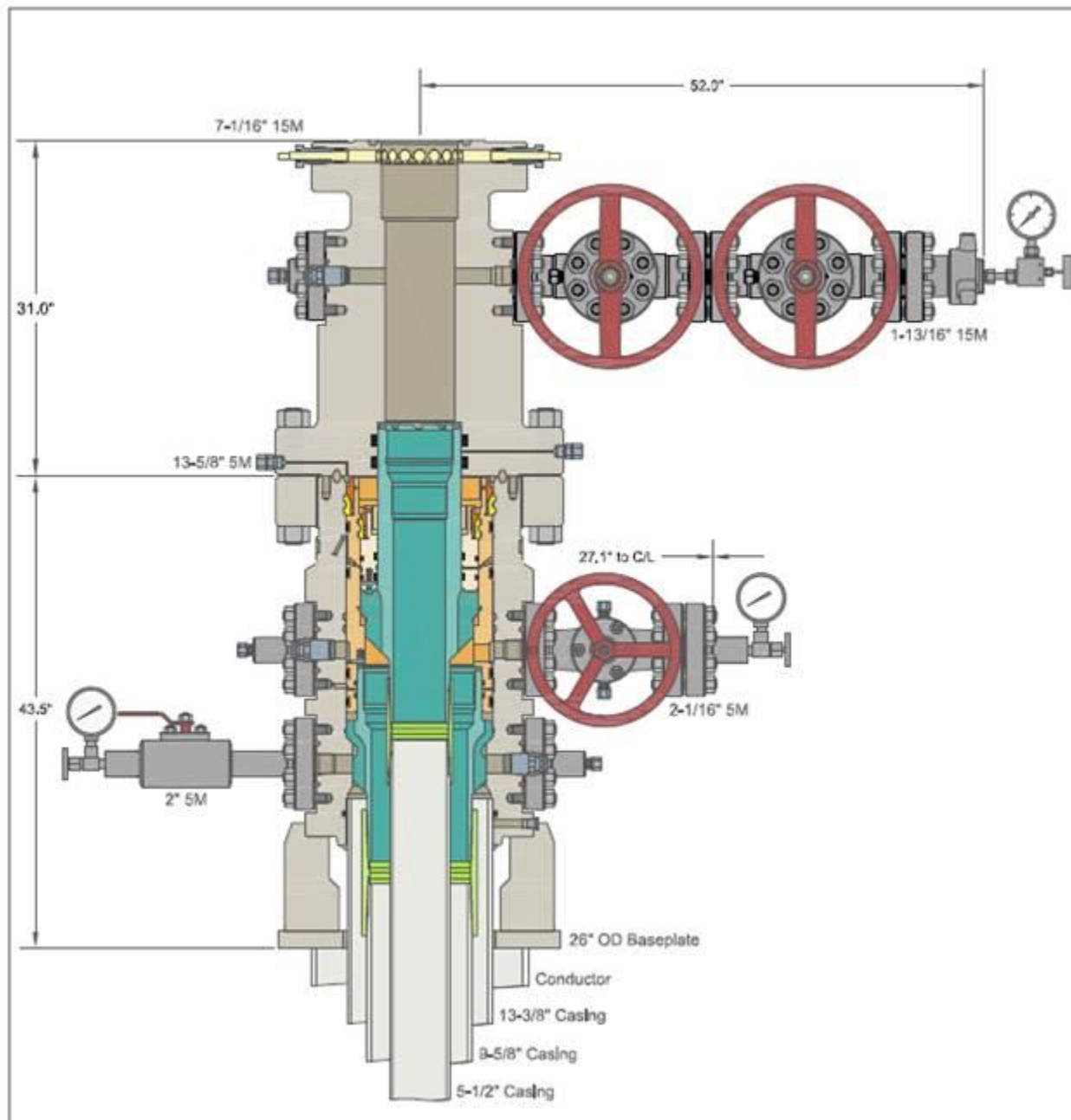






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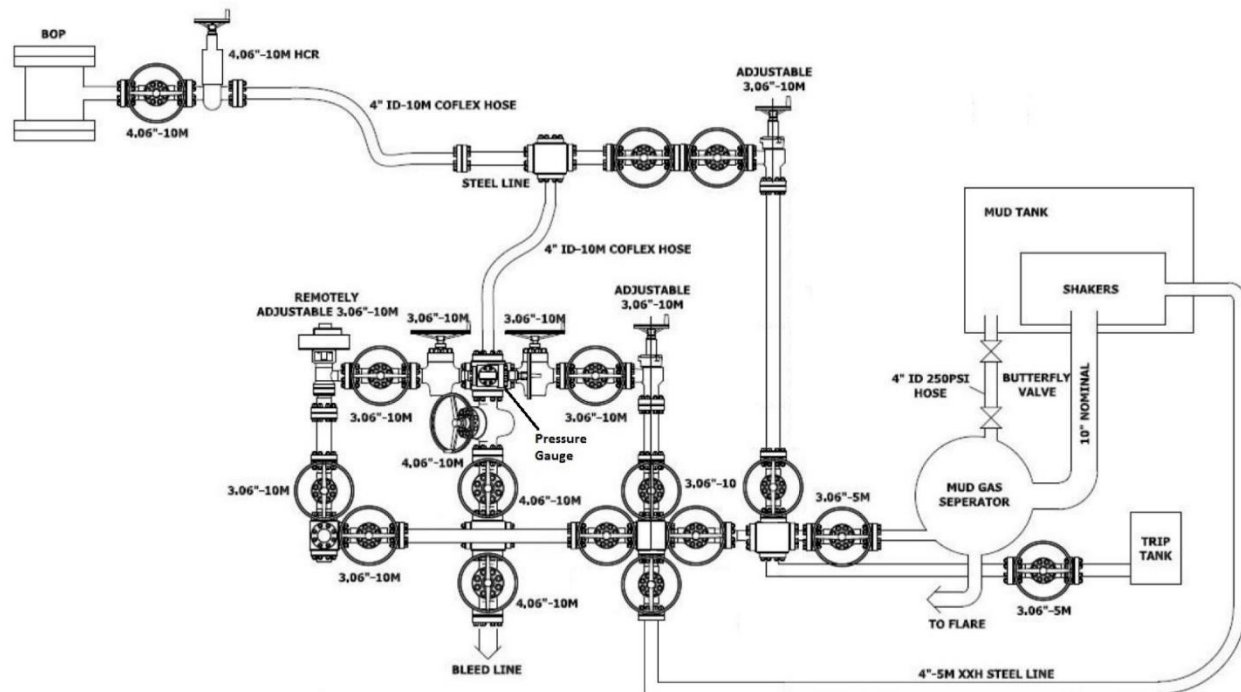
Multi-bowl Wellhead





Drilling Operations Plan
WTG Fed Com 121H
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T. 26S., R. 29E, 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	

Clear Filters

Compare

Request Info

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

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
OPERATION LIMIT TORQUES					
Operating Torque	21500 ft-lbs	Yield Torque	23900 ft-lbs		



Tap Rock Resources, LLC

**Eddy County, NM (NAD 83 NME)
(WTG Fed) Sec-27_T26-S_R-29-E
WTG Fed Com #121H**

OWB

Plan: Plan #1

Standard Planning Report

13 February, 2021





Intrepid Planning Report



Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well WTG Fed Com #121H
Company:	Tap Rock Resources, LLC	TVD Reference:	KB @ 2909.0usft
Project:	Eddy County, NM (NAD 83 NME)	MD Reference:	KB @ 2909.0usft
Site:	(WTG Fed) Sec-27_T26-S_R-29-E	North Reference:	Grid
Well:	WTG Fed Com #121H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	Plan #1		

Project	Eddy County, NM (NAD 83 NME)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	(WTG Fed) Sec-27_T26-S_R-29-E		
Site Position:		Northing:	371,035.00 usft
From:	Map	Easting:	651,080.00 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 1' 10.419 N
		Longitude:	103° 58' 45.255 W
		Grid Convergence:	0.19 °

Well	WTG Fed Com #121H		
Well Position	+N/-S	106.0 usft	Northing:
	+E/-W	152.0 usft	Easting:
Position Uncertainty	0.0 usft		Wellhead Elevation:
			Latitude:
			Longitude:
			Ground Level:

Wellbore	OWB				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	02/12/21	6.73	59.76	47,403.65609373

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	181.14

Plan Survey Tool Program	Date	02/13/21		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	15,919.6 Plan #1 (OWB)	MWD	
			OWSG MWD - Standard	



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Wellbore:	OWB		
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	
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,400.1	6.00	336.19	2,399.4	19.2	-8.5	1.50	1.50	0.00	336.19	
5,553.6	6.00	336.19	5,535.6	320.8	-141.5	0.00	0.00	0.00	0.00	
5,953.7	0.00	0.00	5,935.0	340.0	-150.0	1.50	-1.50	0.00	180.00	
8,085.8	0.00	0.00	8,067.1	340.0	-150.0	0.00	0.00	0.00	0.00	
8,990.0	90.42	187.85	8,640.0	-231.7	-228.8	10.00	10.00	0.00	187.85	
9,296.2	90.41	181.73	8,637.8	-536.6	-254.4	2.00	0.00	-2.00	-90.05	
13,596.6	90.41	181.73	8,606.9	-4,835.0	-384.0	0.00	0.00	0.00	0.00	P.I. (WTG Fed Corr
13,689.8	90.42	179.86	8,606.2	-4,928.2	-385.3	2.00	0.01	-2.00	-89.84	
15,919.7	90.42	179.86	8,590.0	-7,158.0	-380.0	0.00	0.00	0.00	0.00	PBHL (WTG Fed C



Intrepid Planning Report



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Site:	(WTG Fed) Sec-27_T26-S_R-29-E	North Reference:	Grid
Well:	WTG Fed Com #121H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
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
538.0	0.00	0.00	538.0	0.0	0.0	0.0	0.00	0.00	0.00
Rustler Anhydrite									
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
947.0	0.00	0.00	947.0	0.0	0.0	0.0	0.00	0.00	0.00
Top Salt									
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	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	1.50	336.19	2,100.0	1.2	-0.5	-1.2	1.50	1.50	0.00
2,200.0	3.00	336.19	2,199.9	4.8	-2.1	-4.7	1.50	1.50	0.00
2,300.0	4.50	336.19	2,299.7	10.8	-4.8	-10.7	1.50	1.50	0.00
2,400.1	6.00	336.19	2,399.4	19.2	-8.5	-19.0	1.50	1.50	0.00
2,500.0	6.00	336.19	2,498.7	28.7	-12.7	-28.5	0.00	0.00	0.00
2,600.0	6.00	336.19	2,598.2	38.3	-16.9	-37.9	0.00	0.00	0.00
2,700.0	6.00	336.19	2,697.6	47.8	-21.1	-47.4	0.00	0.00	0.00
2,800.0	6.00	336.19	2,797.1	57.4	-25.3	-56.9	0.00	0.00	0.00
2,844.2	6.00	336.19	2,841.0	61.6	-27.2	-61.1	0.00	0.00	0.00
Base Salt									
2,900.0	6.00	336.19	2,896.5	67.0	-29.5	-66.4	0.00	0.00	0.00
3,000.0	6.00	336.19	2,996.0	76.5	-33.8	-75.9	0.00	0.00	0.00
3,038.2	6.00	336.19	3,034.0	80.2	-35.4	-79.5	0.00	0.00	0.00
Delaware Mountain									
3,043.3	6.00	336.19	3,039.0	80.7	-35.6	-80.0	0.00	0.00	0.00
Lamar									
3,081.5	6.00	336.19	3,077.0	84.3	-37.2	-83.6	0.00	0.00	0.00
Bell Canyon									
3,096.5	6.00	336.19	3,092.0	85.8	-37.8	-85.0	0.00	0.00	0.00
Ramsey Sand									
3,100.0	6.00	336.19	3,095.4	86.1	-38.0	-85.3	0.00	0.00	0.00
3,200.0	6.00	336.19	3,194.9	95.7	-42.2	-94.8	0.00	0.00	0.00
3,300.0	6.00	336.19	3,294.3	105.2	-46.4	-104.3	0.00	0.00	0.00
3,400.0	6.00	336.19	3,393.8	114.8	-50.7	-113.8	0.00	0.00	0.00
3,500.0	6.00	336.19	3,493.2	124.4	-54.9	-123.3	0.00	0.00	0.00
3,600.0	6.00	336.19	3,592.7	133.9	-59.1	-132.7	0.00	0.00	0.00
3,700.0	6.00	336.19	3,692.1	143.5	-63.3	-142.2	0.00	0.00	0.00
3,775.3	6.00	336.19	3,767.0	150.7	-66.5	-149.4	0.00	0.00	0.00



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Site:	(WTG Fed) Sec-27_T26-S_R-29-E	North Reference:	Grid
Well:	WTG Fed Com #121H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
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)
Cherry Canyon									
3,800.0	6.00	336.19	3,791.6	153.1	-67.5	-151.7	0.00	0.00	0.00
3,900.0	6.00	336.19	3,891.0	162.6	-71.8	-161.2	0.00	0.00	0.00
4,000.0	6.00	336.19	3,990.5	172.2	-76.0	-170.7	0.00	0.00	0.00
4,100.0	6.00	336.19	4,090.0	181.8	-80.2	-180.1	0.00	0.00	0.00
4,200.0	6.00	336.19	4,189.4	191.3	-84.4	-189.6	0.00	0.00	0.00
4,300.0	6.00	336.19	4,288.9	200.9	-88.6	-199.1	0.00	0.00	0.00
4,400.0	6.00	336.19	4,388.3	210.5	-92.9	-208.6	0.00	0.00	0.00
4,500.0	6.00	336.19	4,487.8	220.0	-97.1	-218.1	0.00	0.00	0.00
4,600.0	6.00	336.19	4,587.2	229.6	-101.3	-227.6	0.00	0.00	0.00
4,700.0	6.00	336.19	4,686.7	239.2	-105.5	-237.0	0.00	0.00	0.00
4,800.0	6.00	336.19	4,786.1	248.7	-109.7	-246.5	0.00	0.00	0.00
4,900.0	6.00	336.19	4,885.6	258.3	-114.0	-256.0	0.00	0.00	0.00
5,000.0	6.00	336.19	4,985.0	267.9	-118.2	-265.5	0.00	0.00	0.00
5,075.4	6.00	336.19	5,060.0	275.1	-121.4	-272.6	0.00	0.00	0.00
Brushy Canyon									
5,100.0	6.00	336.19	5,084.5	277.4	-122.4	-275.0	0.00	0.00	0.00
5,200.0	6.00	336.19	5,183.9	287.0	-126.6	-284.4	0.00	0.00	0.00
5,300.0	6.00	336.19	5,283.4	296.6	-130.8	-293.9	0.00	0.00	0.00
5,400.0	6.00	336.19	5,382.8	306.1	-135.1	-303.4	0.00	0.00	0.00
5,500.0	6.00	336.19	5,482.3	315.7	-139.3	-312.9	0.00	0.00	0.00
5,553.6	6.00	336.19	5,535.6	320.8	-141.5	-318.0	0.00	0.00	0.00
5,600.0	5.31	336.19	5,581.8	325.0	-143.4	-322.1	1.50	-1.50	0.00
5,700.0	3.81	336.19	5,681.4	332.3	-146.6	-329.3	1.50	-1.50	0.00
5,800.0	2.31	336.19	5,781.3	337.2	-148.8	-334.1	1.50	-1.50	0.00
5,900.0	0.81	336.19	5,881.3	339.7	-149.8	-336.6	1.50	-1.50	0.00
5,953.7	0.00	0.00	5,935.0	340.0	-150.0	-336.9	1.50	-1.50	0.00
6,000.0	0.00	0.00	5,981.3	340.0	-150.0	-336.9	0.00	0.00	0.00
6,100.0	0.00	0.00	6,081.3	340.0	-150.0	-336.9	0.00	0.00	0.00
6,200.0	0.00	0.00	6,181.3	340.0	-150.0	-336.9	0.00	0.00	0.00
6,300.0	0.00	0.00	6,281.3	340.0	-150.0	-336.9	0.00	0.00	0.00
6,400.0	0.00	0.00	6,381.3	340.0	-150.0	-336.9	0.00	0.00	0.00
6,500.0	0.00	0.00	6,481.3	340.0	-150.0	-336.9	0.00	0.00	0.00
6,600.0	0.00	0.00	6,581.3	340.0	-150.0	-336.9	0.00	0.00	0.00
6,659.7	0.00	0.00	6,641.0	340.0	-150.0	-336.9	0.00	0.00	0.00
Bone Spring Lime									
6,700.0	0.00	0.00	6,681.3	340.0	-150.0	-336.9	0.00	0.00	0.00
6,727.7	0.00	0.00	6,709.0	340.0	-150.0	-336.9	0.00	0.00	0.00
Upper Avalon									
6,800.0	0.00	0.00	6,781.3	340.0	-150.0	-336.9	0.00	0.00	0.00
6,900.0	0.00	0.00	6,881.3	340.0	-150.0	-336.9	0.00	0.00	0.00
7,000.0	0.00	0.00	6,981.3	340.0	-150.0	-336.9	0.00	0.00	0.00
7,100.0	0.00	0.00	7,081.3	340.0	-150.0	-336.9	0.00	0.00	0.00
7,139.7	0.00	0.00	7,121.0	340.0	-150.0	-336.9	0.00	0.00	0.00
Middle Avalon									
7,200.0	0.00	0.00	7,181.3	340.0	-150.0	-336.9	0.00	0.00	0.00
7,300.0	0.00	0.00	7,281.3	340.0	-150.0	-336.9	0.00	0.00	0.00
7,350.7	0.00	0.00	7,332.0	340.0	-150.0	-336.9	0.00	0.00	0.00
Lower Avalon									
7,400.0	0.00	0.00	7,381.3	340.0	-150.0	-336.9	0.00	0.00	0.00
7,500.0	0.00	0.00	7,481.3	340.0	-150.0	-336.9	0.00	0.00	0.00
7,586.7	0.00	0.00	7,568.0	340.0	-150.0	-336.9	0.00	0.00	0.00
1st Bone Spring Sand									



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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)
7,600.0	0.00	0.00	7,581.3	340.0	-150.0	-336.9	0.00	0.00	0.00
7,700.0	0.00	0.00	7,681.3	340.0	-150.0	-336.9	0.00	0.00	0.00
7,800.0	0.00	0.00	7,781.3	340.0	-150.0	-336.9	0.00	0.00	0.00
7,900.0	0.00	0.00	7,881.3	340.0	-150.0	-336.9	0.00	0.00	0.00
7,973.7	0.00	0.00	7,955.0	340.0	-150.0	-336.9	0.00	0.00	0.00
2nd Bone Spring Carb									
8,000.0	0.00	0.00	7,981.3	340.0	-150.0	-336.9	0.00	0.00	0.00
8,085.8	0.00	0.00	8,067.1	340.0	-150.0	-336.9	0.00	0.00	0.00
8,100.0	1.42	187.85	8,081.2	339.8	-150.0	-336.8	10.00	10.00	0.00
8,150.0	6.42	187.85	8,131.1	336.4	-150.5	-333.4	10.00	10.00	0.00
8,200.0	11.42	187.85	8,180.5	328.8	-151.5	-325.7	10.00	10.00	0.00
8,250.0	16.42	187.85	8,229.0	316.9	-153.2	-313.8	10.00	10.00	0.00
8,291.1	20.53	187.85	8,268.0	304.0	-155.0	-300.8	10.00	10.00	0.00
2nd Bone Spring Sand									
8,300.0	21.42	187.85	8,276.3	300.8	-155.4	-297.7	10.00	10.00	0.00
8,350.0	26.42	187.85	8,322.0	280.7	-158.2	-277.5	10.00	10.00	0.00
8,400.0	31.42	187.85	8,365.7	256.8	-161.5	-253.5	10.00	10.00	0.00
8,450.0	36.42	187.85	8,407.2	229.2	-165.3	-225.8	10.00	10.00	0.00
8,500.0	41.42	187.85	8,446.1	198.1	-169.6	-194.7	10.00	10.00	0.00
8,550.0	46.42	187.85	8,482.1	163.7	-174.3	-160.2	10.00	10.00	0.00
8,600.0	51.42	187.85	8,515.0	126.4	-179.4	-122.8	10.00	10.00	0.00
8,650.0	56.42	187.85	8,544.4	86.4	-185.0	-82.7	10.00	10.00	0.00
8,700.0	61.42	187.85	8,570.2	44.0	-190.8	-40.2	10.00	10.00	0.00
8,750.0	66.42	187.85	8,592.2	-0.5	-196.9	4.4	10.00	10.00	0.00
8,800.0	71.42	187.85	8,610.2	-46.7	-203.3	50.7	10.00	10.00	0.00
8,850.0	76.42	187.85	8,624.0	-94.3	-209.9	98.4	10.00	10.00	0.00
8,900.0	81.42	187.85	8,633.6	-142.9	-216.6	147.1	10.00	10.00	0.00
8,950.0	86.42	187.85	8,638.9	-192.1	-223.4	196.5	10.00	10.00	0.00
8,990.0	90.42	187.85	8,640.0	-231.7	-228.8	236.3	10.00	10.00	0.00
9,000.0	90.42	187.65	8,640.0	-241.6	-230.2	246.1	2.00	0.00	-2.00
9,100.0	90.42	185.65	8,639.2	-340.9	-241.8	345.7	2.00	0.00	-2.00
9,200.0	90.41	183.65	8,638.5	-440.6	-249.9	445.5	2.00	0.00	-2.00
9,296.2	90.41	181.73	8,637.8	-536.6	-254.4	541.6	2.00	0.00	-2.00
9,300.0	90.41	181.73	8,637.8	-540.5	-254.5	545.4	0.00	0.00	0.00
9,400.0	90.41	181.73	8,637.1	-640.4	-257.5	645.4	0.00	0.00	0.00
9,500.0	90.41	181.73	8,636.4	-740.4	-260.5	745.4	0.00	0.00	0.00
9,600.0	90.41	181.73	8,635.6	-840.3	-263.5	845.4	0.00	0.00	0.00
9,700.0	90.41	181.73	8,634.9	-940.3	-266.5	945.4	0.00	0.00	0.00
9,800.0	90.41	181.73	8,634.2	-1,040.2	-269.6	1,045.4	0.00	0.00	0.00
9,900.0	90.41	181.73	8,633.5	-1,140.2	-272.6	1,145.4	0.00	0.00	0.00
10,000.0	90.41	181.73	8,632.8	-1,240.1	-275.6	1,245.4	0.00	0.00	0.00
10,100.0	90.41	181.73	8,632.0	-1,340.1	-278.6	1,345.4	0.00	0.00	0.00
10,200.0	90.41	181.73	8,631.3	-1,440.0	-281.6	1,445.4	0.00	0.00	0.00
10,300.0	90.41	181.73	8,630.6	-1,540.0	-284.6	1,545.4	0.00	0.00	0.00
10,400.0	90.41	181.73	8,629.9	-1,639.9	-287.6	1,645.3	0.00	0.00	0.00
10,500.0	90.41	181.73	8,629.2	-1,739.9	-290.7	1,745.3	0.00	0.00	0.00
10,600.0	90.41	181.73	8,628.4	-1,839.9	-293.7	1,845.3	0.00	0.00	0.00
10,700.0	90.41	181.73	8,627.7	-1,939.8	-296.7	1,945.3	0.00	0.00	0.00
10,800.0	90.41	181.73	8,627.0	-2,039.8	-299.7	2,045.3	0.00	0.00	0.00
10,900.0	90.41	181.73	8,626.3	-2,139.7	-302.7	2,145.3	0.00	0.00	0.00
11,000.0	90.41	181.73	8,625.6	-2,239.7	-305.7	2,245.3	0.00	0.00	0.00
11,100.0	90.41	181.73	8,624.8	-2,339.6	-308.7	2,345.3	0.00	0.00	0.00
11,200.0	90.41	181.73	8,624.1	-2,439.6	-311.8	2,445.3	0.00	0.00	0.00
11,300.0	90.41	181.73	8,623.4	-2,539.5	-314.8	2,545.3	0.00	0.00	0.00



Intrepid Planning Report



Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well WTG Fed Com #121H
Company:	Tap Rock Resources, LLC	TVD Reference:	KB @ 2909.0usft
Project:	Eddy County, NM (NAD 83 NME)	MD Reference:	KB @ 2909.0usft
Site:	(WTG Fed) Sec-27_T26-S_R-29-E	North Reference:	Grid
Well:	WTG Fed Com #121H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
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)
11,400.0	90.41	181.73	8,622.7	-2,639.5	-317.8	2,645.3	0.00	0.00	0.00
11,500.0	90.41	181.73	8,622.0	-2,739.4	-320.8	2,745.3	0.00	0.00	0.00
11,600.0	90.41	181.73	8,621.3	-2,839.4	-323.8	2,845.3	0.00	0.00	0.00
11,700.0	90.41	181.73	8,620.5	-2,939.3	-326.8	2,945.2	0.00	0.00	0.00
11,800.0	90.41	181.73	8,619.8	-3,039.3	-329.8	3,045.2	0.00	0.00	0.00
11,900.0	90.41	181.73	8,619.1	-3,139.2	-332.9	3,145.2	0.00	0.00	0.00
12,000.0	90.41	181.73	8,618.4	-3,239.2	-335.9	3,245.2	0.00	0.00	0.00
12,100.0	90.41	181.73	8,617.7	-3,339.1	-338.9	3,345.2	0.00	0.00	0.00
12,200.0	90.41	181.73	8,616.9	-3,439.1	-341.9	3,445.2	0.00	0.00	0.00
12,300.0	90.41	181.73	8,616.2	-3,539.0	-344.9	3,545.2	0.00	0.00	0.00
12,400.0	90.41	181.73	8,615.5	-3,639.0	-347.9	3,645.2	0.00	0.00	0.00
12,500.0	90.41	181.73	8,614.8	-3,738.9	-350.9	3,745.2	0.00	0.00	0.00
12,600.0	90.41	181.73	8,614.1	-3,838.9	-354.0	3,845.2	0.00	0.00	0.00
12,700.0	90.41	181.73	8,613.3	-3,938.8	-357.0	3,945.2	0.00	0.00	0.00
12,800.0	90.41	181.73	8,612.6	-4,038.8	-360.0	4,045.2	0.00	0.00	0.00
12,900.0	90.41	181.73	8,611.9	-4,138.7	-363.0	4,145.1	0.00	0.00	0.00
13,000.0	90.41	181.73	8,611.2	-4,238.7	-366.0	4,245.1	0.00	0.00	0.00
13,100.0	90.41	181.73	8,610.5	-4,338.7	-369.0	4,345.1	0.00	0.00	0.00
13,200.0	90.41	181.73	8,609.8	-4,438.6	-372.0	4,445.1	0.00	0.00	0.00
13,300.0	90.41	181.73	8,609.0	-4,538.6	-375.1	4,545.1	0.00	0.00	0.00
13,400.0	90.41	181.73	8,608.3	-4,638.5	-378.1	4,645.1	0.00	0.00	0.00
13,500.0	90.41	181.73	8,607.6	-4,738.5	-381.1	4,745.1	0.00	0.00	0.00
13,596.6	90.41	181.73	8,606.9	-4,835.0	-384.0	4,841.7	0.00	0.00	0.00
13,600.0	90.41	181.66	8,606.9	-4,838.4	-384.1	4,845.1	2.00	0.01	-2.00
13,689.8	90.42	179.86	8,606.2	-4,928.2	-385.3	4,934.8	2.00	0.01	-2.00
13,700.0	90.42	179.86	8,606.2	-4,938.4	-385.3	4,945.1	0.00	0.00	0.00
13,800.0	90.42	179.86	8,605.4	-5,038.4	-385.0	5,045.1	0.00	0.00	0.00
13,900.0	90.42	179.86	8,604.7	-5,138.4	-384.8	5,145.0	0.00	0.00	0.00
14,000.0	90.42	179.86	8,604.0	-5,238.4	-384.6	5,245.0	0.00	0.00	0.00
14,100.0	90.42	179.86	8,603.2	-5,338.4	-384.3	5,345.0	0.00	0.00	0.00
14,200.0	90.42	179.86	8,602.5	-5,438.4	-384.1	5,444.9	0.00	0.00	0.00
14,300.0	90.42	179.86	8,601.8	-5,538.4	-383.8	5,544.9	0.00	0.00	0.00
14,400.0	90.42	179.86	8,601.1	-5,638.4	-383.6	5,644.9	0.00	0.00	0.00
14,500.0	90.42	179.86	8,600.3	-5,738.4	-383.4	5,744.9	0.00	0.00	0.00
14,600.0	90.42	179.86	8,599.6	-5,838.4	-383.1	5,844.8	0.00	0.00	0.00
14,700.0	90.42	179.86	8,598.9	-5,938.4	-382.9	5,944.8	0.00	0.00	0.00
14,800.0	90.42	179.86	8,598.1	-6,038.4	-382.7	6,044.8	0.00	0.00	0.00
14,900.0	90.42	179.86	8,597.4	-6,138.4	-382.4	6,144.8	0.00	0.00	0.00
15,000.0	90.42	179.86	8,596.7	-6,238.4	-382.2	6,244.7	0.00	0.00	0.00
15,100.0	90.42	179.86	8,596.0	-6,338.4	-381.9	6,344.7	0.00	0.00	0.00
15,200.0	90.42	179.86	8,595.2	-6,438.4	-381.7	6,444.7	0.00	0.00	0.00
15,300.0	90.42	179.86	8,594.5	-6,538.3	-381.5	6,544.6	0.00	0.00	0.00
15,400.0	90.42	179.86	8,593.8	-6,638.3	-381.2	6,644.6	0.00	0.00	0.00
15,500.0	90.42	179.86	8,593.1	-6,738.3	-381.0	6,744.6	0.00	0.00	0.00
15,600.0	90.42	179.86	8,592.3	-6,838.3	-380.8	6,844.6	0.00	0.00	0.00
15,700.0	90.42	179.86	8,591.6	-6,938.3	-380.5	6,944.5	0.00	0.00	0.00
15,800.0	90.42	179.86	8,590.9	-7,038.3	-380.3	7,044.5	0.00	0.00	0.00
15,900.0	90.42	179.86	8,590.1	-7,138.3	-380.0	7,144.5	0.00	0.00	0.00
15,919.7	90.42	179.86	8,590.0	-7,158.0	-380.0	7,164.1	0.00	0.00	0.00



Intrepid Planning Report



Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well WTG Fed Com #121H
Company:	Tap Rock Resources, LLC	TVD Reference:	KB @ 2909.0usft
Project:	Eddy County, NM (NAD 83 NME)	MD Reference:	KB @ 2909.0usft
Site:	(WTG Fed) Sec-27_T26-S_R-29-E	North Reference:	Grid
Well:	WTG Fed Com #121H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	Plan #1		

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 (WTG Fed Corr - plan hits target center - Rectangle (sides W100.0 H2,323.1 D30.0)	-0.42	179.86	8,590.0	-7,158.0	-380.0	363,983.00	650,852.00	32° 0' 0.639 N	103° 58' 48.171 W
LTP (WTG Fed Com # - plan misses target center by 0.5usft at 15849.7usft MD (8590.5 TVD, -7088.0 N, -380.2 E) - Point	0.00	0.00	8,590.0	-7,088.0	-380.0	364,053.00	650,852.00	32° 0' 1.332 N	103° 58' 48.168 W
P.I. (WTG Fed Com # - plan hits target center - Rectangle (sides W100.0 H4,904.0 D30.0)	-0.42	181.73	8,606.9	-4,835.0	-384.0	366,306.00	650,848.00	32° 0' 23.628 N	103° 58' 48.129 W
FTP (WTG Fed Com # - plan misses target center by 84.4usft at 8715.8usft MD (8577.6 TVD, 30.2 N, -192.7 E) - Point	0.00	0.00	8,640.0	67.0	-236.0	371,208.00	650,996.00	32° 1' 12.134 N	103° 58' 46.224 W

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
538.0	538.0	Rustler Anhydrite			
947.0	947.0	Top Salt			
2,844.2	2,841.0	Base Salt			
3,038.2	3,034.0	Delaware Mountain			
3,043.3	3,039.0	Lamar			
3,081.5	3,077.0	Bell Canyon			
3,096.5	3,092.0	Ramsey Sand			
3,775.3	3,767.0	Cherry Canyon			
5,075.4	5,060.0	Brushy Canyon			
6,659.7	6,641.0	Bone Spring Lime			
6,727.7	6,709.0	Upper Avalon			
7,139.7	7,121.0	Middle Avalon			
7,350.7	7,332.0	Lower Avalon			
7,586.7	7,568.0	1st Bone Spring Sand			
7,973.7	7,955.0	2nd Bone Spring Carb			
8,291.1	8,268.0	2nd Bone Spring Sand			

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
2,000.0	2,000.0	0.0	0.0	NUDGE - Build 1.50
2,400.1	2,399.4	19.2	-8.5	HOLD - 3153.5 at 2400.1 MD
5,553.6	5,535.6	320.8	-141.5	DROP - -1.50
5,953.7	5,935.0	340.0	-150.0	HOLD - 2132.1 at 5953.7 MD
8,085.8	8,067.1	340.0	-150.0	KOP - Build 10.00
8,990.0	8,640.0	-231.7	-228.8	EOC/TRN - DLS 2.00 TFO -90.05
9,296.2	8,637.8	-536.6	-254.4	Start 4300.4 hold at 9296.2 MD
13,596.6	8,606.9	-4,835.0	-384.0	Start DLS 2.00 TFO -89.84
13,689.8	8,606.2	-4,928.2	-385.3	Start 2229.9 hold at 13689.8 MD
15,919.7	8,590.0	-7,158.0	-380.0	TD at 15919.7

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 25370

COMMENTS

Operator: TAP ROCK OPERATING, LLC 523 Park Point Drive Golden, CO 80401	OGRID: 372043
	Action Number: 25370
	Action Type: [C-103] NOI Change of Plans (C-103A)

COMMENTS

Created By	Comment	Comment Date
kpickford	KP GEO Review 4/26/2021	4/26/2021

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CONDITIONS

Action 25370

CONDITIONS

Operator: TAP ROCK OPERATING, LLC 523 Park Point Drive Golden, CO 80401	OGRID: 372043
	Action Number: 25370
	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	4/26/2021
kpickford	Adhere to previous NMOCD Conditions of Approval	4/26/2021