Form 3160-3 FORM APPROVED OMB No. 1004-0137 (June 2015) Expires: January 31, 2018 **UNITED STATES** DEPARTMENT OF THE INTERIOR 5 Lease Serial No. NMNM094589 BUREAU OF LAND MANAGEMENT APPLICATION FOR PERMIT TO DRILL OR REENTER 6. If Indian, Allotee or Tribe Name 7. If Unit or CA Agreement, Name and No. **✓** DRILL REENTER 1a. Type of work: 1b. Type of Well: Oil Well ✓ Gas Well Other 8. Lease Name and Well No. 1c. Type of Completion: Hydraulic Fracturing ✓ Single Zone Multiple Zone OE FED COM 232H 2. Name of Operator 9. API Well No. TAP ROCK OPERATING LLC 3a. Address 3b. Phone No. (include area code) 10. Field and Pool, or Exploratory 602 Park Point Drive Suite 200, Golden, CO 80401 (720) 460-3316 PURPLE SAGE 4. Location of Well (Report location clearly and in accordance with any State requirements.\*) 11. Sec., T. R. M. or Blk. and Survey or Area SEC 8/T25S/R26E/NMP At surface NWNW / 404 FNL / 1192 FWL / LAT 32.1502396 / LONG -104.3204079 At proposed prod. zone SESW / 200 FSL / 1980 FWL / LAT 32.1234271 / LONG -104.317055 14. Distance in miles and direction from nearest town or post office\* 12. County or Parish 13 State **EDDY** NM 4 miles 15. Distance from proposed\* 16. No of acres in lease 17. Spacing Unit dedicated to this well 1192 feet location to nearest property or lease line, ft. 640.0 (Also to nearest drig. unit line, if any) 18. Distance from proposed location\* 19. Proposed Depth 20. BLM/BIA Bond No. in file to nearest well, drilling, completed, 25 feet 9119 feet / 19209 feet FED: NMB001443 applied for, on this lease, ft. 21. Elevations (Show whether DF, KDB, RT, GL, etc.) 22. Approximate date work will start\* 23. Estimated duration 3372 feet 02/01/2021 90 days 24. Attachments The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, and the Hydraulic Fracturing rule per 43 CFR 3162.3-3 (as applicable) 1. Well plat certified by a registered surveyor. 4. Bond to cover the operations unless covered by an existing bond on file (see 2. A Drilling Plan. Item 20 above) 3. A Surface Use Plan (if the location is on National Forest System Lands, the 5. Operator certification. 6. Such other site specific information and/or plans as may be requested by the SUPO must be filed with the appropriate Forest Service Office). 25. Signature Name (Printed/Typed) Date (Electronic Submission) BRIAN WOOD / Ph: (720) 460-3316 12/07/2020 Title President Approved by (Signature) Date Name (Printed/Typed) 07/30/2021 (Electronic Submission) Cody Layton / Ph: (575) 234-5959 Title Office Assistant Field Manager Lands & Minerals Carlsbad Field Office

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon. Conditions of approval, if any, are attached.

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



\*(Instructions on page 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 1000 Rio Brazos Road, Aztec, NM 87410 Phone: (505) 334-6178 Fax: (505) 334-6170 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

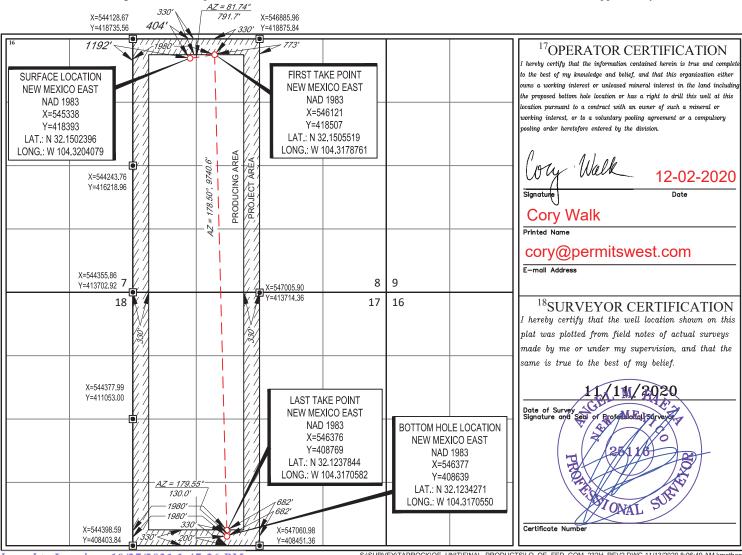
WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number 30-015- 49008		<sup>2</sup> Pool Code 98220 PURPLE SAGE; WOLFCA		AMP (GAS)	
331668		5 <sub>Pr</sub>	<sup>6</sup> Well Number 232H		
<sup>7</sup> OGRID No.		OE FED COM  *Operator Name			
372043		3372'			

<sup>10</sup>Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	8	25-S	26-E	-	404'	NORTH	1192'	WEST	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
N	17	25-S	26-E	-	200'	SOUTH	1980'	WEST	EDDY
<sup>12</sup> Dedicated Acres	<sup>13</sup> Joint or l	Infill 14Co	nsolidation Co	de <sup>15</sup> Ord	er No.	,			
640									

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.



Released to Imaging: 10/27/2021 1:47:26 PM

S:\SURVEY\TAPROCK\OE\_UNIT\FINAL\_PRODUCTS\LO\_OE\_FED\_COM\_232H\_REV2.DWG 11/13/2020 8:06:49 AM kmath

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

Submit Electronically Via E-permitting

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

## NATURAL GAS MANAGEMENT PLAN

This Natural Gas Management Plan must be submitted with each Application for Permit to Drill (APD) for a new or recompleted well.

## Section 1 – Plan Description Effective May 25, 2021

**I. Operator:** \_\_\_\_\_Tap Rock Operating LLC\_\_\_\_\_**OGRID:** \_\_\_\_\_372043\_\_\_\_\_**Date:** \_08/06/2021\_

II. Type: ⊠ Original □ Amendment due to □ 19.15.27.9.D(6)(a) NMAC □ 19.15.27.9.D(6)(b) NMAC □ Other.									
If Other, please describe	»:								
III. Well(s): Provide the be recompleted from a s					f wells pr	oposed	to be drill	led or	proposed to
Well Name	API	ULSTR	F	Footages		ated SL/D	Anticipat Gas MCF/D		Anticipated Produced Water
OE Fed Com #232H		Sec 8, T25S R 26E	399 FNL,	, 1092 FWL	1084		3817	1	1558
IV. Central Delivery Point Name:OE Fed CDP [See 19.15.27.9(D)(1) NMAC]  V. Anticipated Schedule: Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.  Well Name									
OE Fed Com #232H		10/14/22	10/30/22	12/1/22		3/11/2	3	3/11/2	23
OL 1 cd Colli #23211		10/14/22	10/30/22	12/1/22		3/11/2	.5	3/11/	23
VI. Separation Equipment:   Attach a complete description of how Operator will size separation equipment to optimize gas capture.  VII. Operational Practices:   Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F of 19.15.27.8 NMAC.  VIII. Best Management Practices:   Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.									

## Section 2 – Enhanced Plan EFFECTIVE APRIL 1, 2022

Beginning April 1, 2022, an operator that is not in compliance with its statewide natural gas capture requirement for the applicable reporting area must complete this section.

🖾 Operator certifies that it is not required to complete this section because Operator is in compliance with its statewide natural gas capture requirement for the applicable reporting area.

### IX. Anticipated Natural Gas Production:

Well	API	Anticipated Average Natural Gas Rate MCF/D	Anticipated Volume of Natural Gas for the First Year MCF

#### X. Natural Gas Gathering System (NGGS):

Operator	System	ULSTR of Tie-in	Anticipated Gathering	Available Maximum Daily Capacity
	-		Start Date	of System Segment Tie-in

XI. Map.   Attach an accurate and legible map depicting the location of the well(s), the anticipated pipeline route(s) connecting the
production operations to the existing or planned interconnect of the natural gas gathering system(s), and the maximum daily capacity of
the segment or portion of the natural gas gathering system(s) to which the well(s) will be connected.

XII. Line Capacity. The natural	gas gathering system 🗆 w	vill □ will not have	capacity to gather	100% of the anticipated	natural gas
production volume from the well p	prior to the date of first pro	oduction.			

XIII. Line Pressure. Operator $\square$ does $\square$ does not anticipate that its existing well(s) connected to the same segment, or portion, of	f the
natural gas gathering system(s) described above will continue to meet anticipated increases in line pressure caused by the new well-	(s).

_									
1 1	Attach (	Onaratar	'a nlan	to monogo	nroduction	in recnance	to the inc	creased line p	raccure

XIV.	Confidentiality:  Operator asserts confidentiality pursuant to Section 71-2-8 NMSA 1978 for the information provided	lin
Section	n 2 as provided in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and attaches a full description of the specific information	ion
for wl	nich confidentiality is asserted and the basis for such assertion.	

(i)

# Section 3 - Certifications <u>Effective May 25, 2021</u>

Operator certifies that, after reasonable inquiry and based on the available information at the time of submittal: 🗵 Operator will be able to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system: or ☐ Operator will not be able to connect to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system. If Operator checks this box, Operator will select one of the following: Well Shut-In. ☐ Operator will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection D of 19.15.27.9 NMAC; or Venting and Flaring Plan. 

Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential alternative beneficial uses for the natural gas until a natural gas gathering system is available, including: power generation on lease; (a) **(b)** power generation for grid; compression on lease; (c) (d) liquids removal on lease; reinjection for underground storage; (e) **(f)** reinjection for temporary storage; **(g)** reinjection for enhanced oil recovery; fuel cell production; and (h)

## **Section 4 - Notices**

1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:

other alternative beneficial uses approved by the division.

- (a) Operator becomes aware that the natural gas gathering system it planned to connect the well(s) to has become unavailable or will not have capacity to transport one hundred percent of the production from the well(s), no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised venting and flaring plan containing the information specified in Paragraph (5) of Subsection D of 19.15.27.9 NMAC; or
- (b) Operator becomes aware that it has, cumulatively for the year, become out of compliance with its baseline natural gas capture rate or natural gas capture requirement, no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised Natural Gas Management Plan for each well it plans to spud during the next 90 days containing the information specified in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and shall file an update for each Natural Gas Management Plan until Operator is back in compliance with its baseline natural gas capture rate or natural gas capture requirement.
- 2. OCD may deny or conditionally approve an APD if Operator does not make a certification, fails to submit an adequate venting and flaring plan which includes alternative beneficial uses for the anticipated volume of natural gas produced, or if OCD determines that Operator will not have adequate natural gas takeaway capacity at the time a well will be spud.

I certify that, after reasonable inquiry, the statements in and attached to this Natural Gas Management Plan are true and correct to the best of my knowledge and acknowledge that a false statement may be subject to civil and criminal penalties under the Oil and Gas Act.

Signature:
Printed Name: Christian Combs
Title: EHS & Regulatory Manager
E-mail Address: <a href="mailto:ccombs@taprk.com">ccombs@taprk.com</a>
Date: 10/19/2021
Phone: 720-360-4028
OIL CONSERVATION DIVISION
(Only applicable when submitted as a standalone form)
Approved By:
Title:
Approval Date:
Conditions of Approval:

VI. **Separation Equipment:** Attach a complete description of how Operator will size separation equipment to optimize gas capture:

Each surface facility design includes the following process equipment: 3-phase separators (1 separator per well), a sales gas scrubber, one or two 3-phase heater treaters, a vapor recovery tower (VRT), a VRU compressor, multiple water and oil tanks, as well as flare knockouts (HP & LP), and flares (HP & LP). All process vessels will be sized to separate oil, water, gas based upon typical/historical & predicted well performance. Each process vessel will be fitted with an appropriately sized PSV as per ASME code requirements to mitigate vessel rupture and loss of containment. Additionally, the process vessels will be fitted with pressure transmitters tied to the facility control system which will allow operations to monitor pressures and when necessary, shut-in the facility to avoid vessel over-pressure and the potential vent of natural gas. Natural gas will preferentially be sold to pipeline, and only during upset/emergency conditions will gas be directed to the HP flare system. Flash gas from both the 3-phase heater treater and the VRT will be recompressed using a VRU compressor and this gas will also preferentially be directed to the gas sales pipeline. Oil tanks & water tanks will be fitted with 16 oz thief hatches as well as PVRVs to protect the tanks from rupture/collapse. Additionally, the tank vapor outlets and tank vapor capture system will be sized to keep tank pressures below 12 oz. The tank vapor capture system will include a tank vapor blower & knockout as well as a lowpressure flare and knockout. Tank vapors will preferentially be directed to the VRU and the sales gas pipeline. Only during process upsets/emergency conditions will tank vapors be directed to the LP flare system.

VII. **Operational Practices:** Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F of 19.15.27.8 NMAC. ← See attached reg for requirements.

- During drilling operations- Gas meters will be installed at the shakers and Volume
  Totalizers will be installed on the pits. In the event that elevated gas levels, or a pit
  gain are observed, returns will be diverted to a gas buster. Gas coming off the gas
  buster will be combusted at the flare stack. A 10' or taller flare will be located at
  least 100' from the SHL.
- During completions operations, including stimulation and frac plug drill out operations, hydrocarbon production to surface is minimized. When gas production does occur, gas will be combusted at a flare stack. A 10' or taller flare will be located at least 100' from the SHL.
- During production operations, all process vessels (separators, heater treaters, VRTs, Tanks) will recompress (where necessary) and route gas outlets into the natural gas gathering pipeline. Gas will preferentially be routed to natural gas gathering pipeline and the flare system will be used only during emergency, malfunction, or if the gas does not meet pipeline specifications. In the event of flaring off-specification gas, operations will pull gas samples twice a week and will also route gas back to pipeline as soon as the gas meets specification. Exceptions to this will include only those qualified exceptions per the regulation 19.15.27.8 Subsection D.

• To comply with state performance standards, separation and storage equipment will be designed to handle the maximum anticipated throughput and pressure to minimize waste and reduce the likelihood of venting gas to atmosphere. Additionally, each storage atmospheric tank (Oil & Water) will be fitted with a level transmitter to facilitate gauging of the tank without opening of the thief hatch. Any gas collected through the tank vent system is expected to be recompressed and routed to sales. However, in the event of an emergency, the tank vapor capture system will be designed to combust the gas using a flare stack fitted with a continuous or automatic ignitor. The flare stack will be properly anchored and will be located a minimum of 100 feet from the well and storage tanks. Operators will conduct weekly AVO inspections. These AVO inspection records will be stored for the required 5-year period and will be made available upon Division request.

VIII. **Best Management Practices:** Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.

• When performing routine or preventive maintenance on a vessel or tank, initially all inlet valves are closed, and the vessel or tank is allowed to depressurize through the normal outlet connections to gas sales and/or liquid tanks. Once the vessel or tank is depressurized to lowest acceptable sales outlet pressure, usually around 20 psig, a temporary low-pressure flowline is connected from the vessel or tank to the Vapor Recovery Unit (VRU) for further pressure reduction. Once depressurized to less than 1-2 psig, the remaining natural gas in the vessel or tank is vented to atmosphere through a controlled pressure relief valve. Once the vessel or tank is depressurized to atmospheric pressure, the vessel or tank can be safely opened, and maintenance performed.



Elevation above Sea Level: 3372'

#### **DRILLING PROGRAM**

#### 1. Estimated Tops

Formation	TVD	MD	Lithologies	Bearing
Quaternary Deposits	0	0	Surface	None
Rustler Anhydrite	415	415		Salt
Salado	860	860	Salt	Salt
Base Salt	1590	1594		Salt
Lamar	1800	1809	Limestone	None
Bell Canyon	1850	1860	Sandstone	Hydrocarbons
Cherry Canyon	2810	2845	Sandstone	Hydrocarbons
Brushy Canyon	3660	3718	Sandstone	Hydrocarbons
Bone Spring	5315	5401	Limestone	Hydrocarbons
1st Bone Spring	6255	6341	Sandstone	Hydrocarbons
2nd Bone Spring	6515	6601	Sandstone	Hydrocarbons
3rd Bone Spring	7075	7161	Sandstone	Hydrocarbons
КОР	8607	8693	Sandstone	Hydrocarbons
Wolfcamp B	8655	8741	Shale	Hydrocarbons
TD	9119	19209	Shale	Hydrocarbons

#### 2. Notable Zones

Wolfcamp B 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, Intermediate 2, 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 2nd intermediate hole sections and cementing 2nd 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 a variance to run 7-5/8" BTC casing inside 9-5/8" BTC casing will be less than the 0.422" stand off regulation. Through conversations with BLM representatives, Tap Rock has received approval for this design as long as the 7-5/8" flush casing was run throughout the entire 300' cement tie back section between 9-5/8" and 7-5/8" casing.

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	<b>Hole Size</b>	<b>Casing Size</b>	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	490	0	490	J-55	54.5	BUTT	1.13	1.15	1.6
1st Intermediate	12 1/4	9 5/8	API	No	0	1829	0	1820	J-55	40	BUTT	1.13	1.15	1.6
2nd Intermediate	8 3/4	75/8	API	No	0	1529	0	1520	P-110	29.7	BUTT	1.13	1.15	1.6
2nd Intermediate	8 3/4	75/8	NON API	Yes	1529	8593	1520	8507	P-110	29.7	W-513	1.13	1.15	1.6
Production	6 3/4	5 1/2	NON API	No	0	8393	0	8307	P-110	20	TXP	1.13	1.15	1.6
Production	6 3/4	5 1/2	NON API	Yes	8393	19209	8307	9119	P-110	20	W-441	1.13	1.15	1.6

Name	Туре	Top MD	Sacks	Yield	Cu. Ft	Weight	Excess	Cement	Additives
Surface	Tail	0	504	1.35	681	14.8	100%	С	5% NCI + LCM
1 st Internediate	Lead	0	435	1.74	756	13.5	65%	С	Bentonite + 1% CaCL2 + 8% NaCl + LCM
1st Intermediate	Tail	1463	142	1.33	189	14.8	65%	С	5% NaCl + LCM
2nd Internediate	Lead	1529	370	2.22	822	11.5	35%	TXI	Fluid Loss + Dispersant + Retarder + LCM
2nd Intermediate	Tail	7593	99	1.37	136	13.2	35%	Н	Fluid Loss + Dispersant + Retarder + LCM
Production	Tail	7893	1036	1.14	1181	14.5	25%	Н	Fluid Loss + Dispersant + Retarder + LCM

#### 5. Mud Program

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.

Name	Тор	Bottom	Туре	Mud Weight	Visc	Fluid Loss
Surface	0	490	FW Spud Mud	8.30	28	NC
Intermediate	490	1829	Brine Water	10.00	30-32	NC
Intermediate 2	1829	8593	FW/Cut Brine	9.00	30-32	NC
Production	8593	19209	Oil Base Mud	11.50	50-70	<10

#### 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. Down Hole Conditions

No abnormal pressure or temperature is expected. Maximum expected bottom hole pressure is  $\approx 5,490$  psi. Expected bottom hole temperature is  $\approx 160^{\circ}$  F.

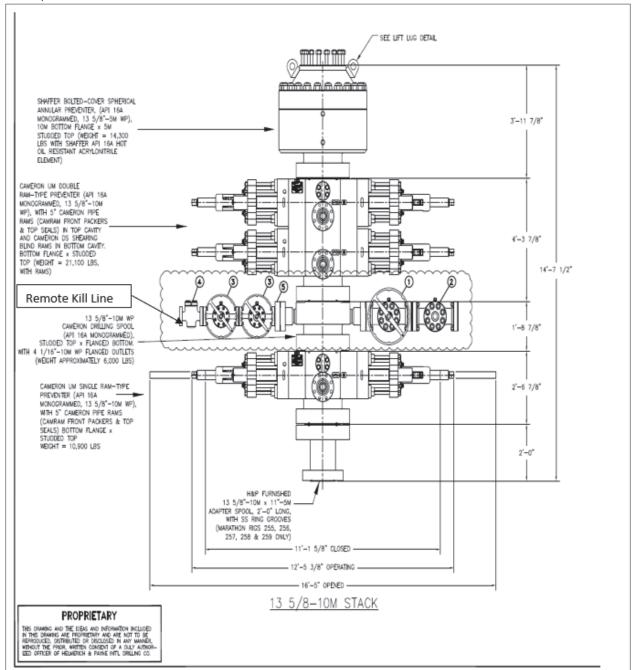
Tap Rock does not anticipate that there will be enough H2S from the surface to the Wolfcamp formations to meet the BLM's Onshore Order 6 requirements for the submission of an "H2S Drilling Operation Plan" or "Public Protection Plan" for drilling and completing this well. Tap Rock has an H2S safety package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

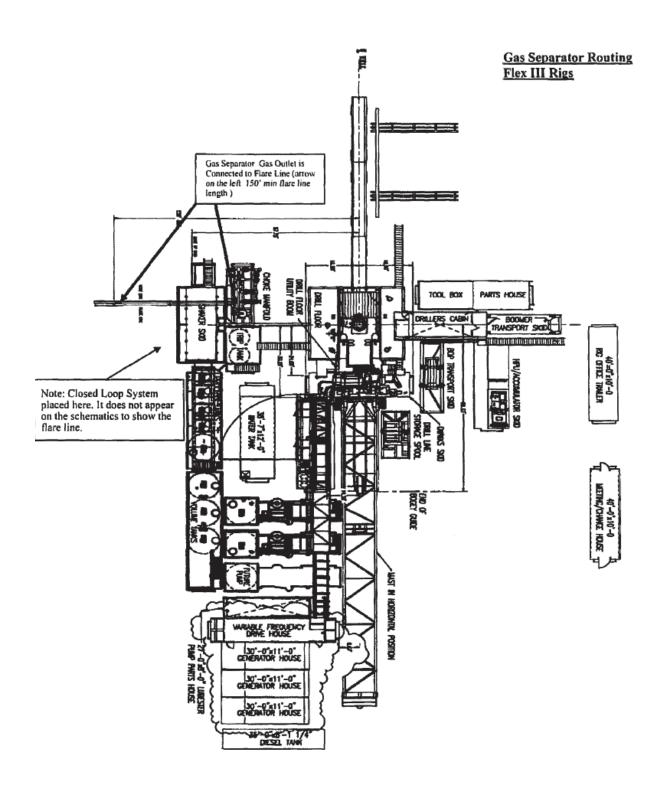
Road and location construction will begin after BLM approval of APD. Anticipated spud date as soon as approved. Drilling expected to take 30 days. If production casing is run an additional 60 days will be required to complete and construct surface facilities.



#### 5,000 psi BOP Stack

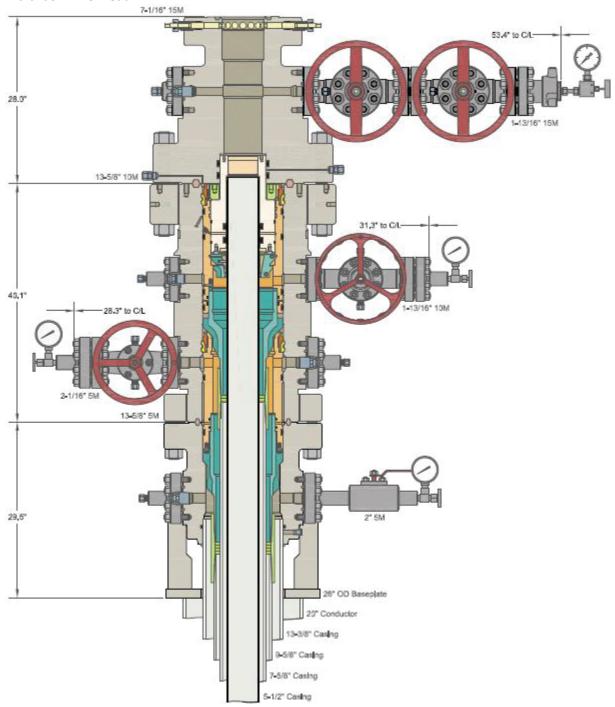






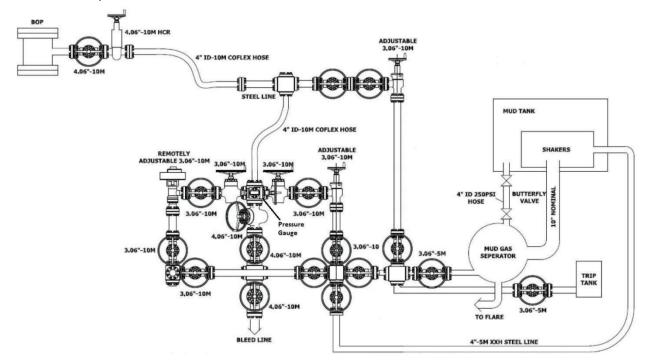


#### Multi-bowl Wellhead





## 10M Choke Layout



## **Tap Rock Operating, LLC.**

Eddy County, NM (NAD83) OE Fed Com 232H

OH

Plan: Plan #1

## **Standard Planning Report**

09 October, 2020

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

OE Fed Com

IGRF2015

Well: 232H Wellbore: OH Design: Plan #1

Site:

**Local Co-ordinate Reference:** 

**TVD Reference:** MD Reference: North Reference:

**Survey Calculation Method:** 

Well 232H

WELL @ 3400.0usft (26' RKB) WELL @ 3400.0usft (26' RKB)

Minimum Curvature

59.84

47,476

Project Eddy County, NM (NAD83)

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

System Datum:

Mean Sea Level

OE Fed Com Site

Northing: 418,417.76 usft Site Position: Latitude: 32° 9' 1.110 N From: Lat/Long Easting: 545,157.69 usft Longitude: 104° 19' 15.562 W **Position Uncertainty:** 2.0 usft Slot Radius: 13-3/16 " **Grid Convergence:** 0.01

Well 232H

**Well Position** 

+N/-S -25.0 usft Northing: 418,392.78 usft Latitude: 32° 9' 0.863 N +E/-W 80.0 usft Easting: 545,237.69 usft Longitude: 104° 19' 14.632 W **Position Uncertainty** 2.0 usft Wellhead Elevation: **Ground Level:** 3,374.0 usft

6.94

Wellbore ОН Magnetics **Model Name** Sample Date Declination Dip Angle Field Strength (nT) (°) (°)

10/8/2020

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) (°) 178.50 0.0 0.0 0.0

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	
875.0	0.00	0.00	875.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,741.7	13.00	60.00	1,734.2	48.9	84.8	1.50	1.50	0.00	60.00	
4,541.7	13.00	60.00	4,462.5	363.9	630.3	0.00	0.00	0.00	0.00	
5,408.3	0.00	0.00	5,321.7	412.8	715.0	1.50	-1.50	0.00	180.00	
8,693.6	0.00	0.00	8,607.0	412.8	715.0	0.00	0.00	0.00	0.00	
9,597.3	90.36	167.60	9,180.0	-150.3	838.9	10.00	10.00	0.00	167.60	
10,142.4	90.36	178.50	9,176.6	-690.7	904.7	2.00	0.00	2.00	89.95	
19,078.6	90.36	178.50	9,120.0	-9,623.6	1,138.1	0.00	0.00	0.00	0.00 l	_TP_OE.232H
19,208.6	90.36	178.50	9,119.2	-9,753.5	1,141.5	0.00	0.00	0.00	0.00	PBHL_OE.232H

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

Project: Eddy County, NM (NAD83)

OE Fed Com

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Well 232H

WELL @ 3400.0usft (26' RKB) WELL @ 3400.0usft (26' RKB)

Grid

ned 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	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0		0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0		0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0		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
415.0	0.00	0.00	415.0	0.0	0.0	0.0	0.00	0.00	0.00
Rustler Ani		0.00	110.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	•	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0		0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0		0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0		0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
860.0	0.00	0.00	860.0	0.0	0.0	0.0	0.00	0.00	0.00
Top Salt									
875.0	0.00	0.00	875.0	0.0	0.0	0.0	0.00	0.00	0.00
Start Build	1.50								
900.0		60.00	900.0	0.0	0.1	0.0	1.50	1.50	0.00
1,000.0		60.00	1,000.0	1.0	1.8	-1.0	1.50	1.50	0.00
1,100.0	3.38	60.00	1,099.9	3.3	5.7	-3.2	1.50	1.50	0.00
4.000.0	4.00	00.00	4.400.0	0.0	40.0	0.0	4.50	4.50	0.00
1,200.0		60.00	1,199.6	6.9	12.0	-6.6	1.50	1.50	0.00
1,300.0		60.00	1,299.1	11.8	20.5	-11.3	1.50	1.50	0.00
1,400.0		60.00	1,398.3	18.0	31.2	-17.2	1.50	1.50	0.00
1,500.0		60.00	1,497.2	25.5	44.2	-24.3	1.50	1.50	0.00
1,594.2	10.79	60.00	1,590.0	33.8	58.5	-32.2	1.50	1.50	0.00
Base Salt									
1,600.0	10.88	60.00	1,595.7	34.3	59.4	-32.7	1.50	1.50	0.00
1,700.0		60.00	1,693.6	44.4	76.9	-42.3	1.50	1.50	0.00
1,741.7		60.00	1,734.2	48.9	84.8	-46.7	1.50	1.50	0.00
	0 hold at 1741.7 N		,						
1,800.0		60.00	1,791.1	55.5	96.1	-53.0	0.00	0.00	0.00
1,804.0		60.00	1,795.0	56.0	96.9	-53.4	0.00	0.00	0.00
,	Mountain Gp	00.00	1,700.0	00.0	00.0	00.1	0.00	0.00	0.00
	•								
1,809.1	13.00	60.00	1,800.0	56.5	97.9	-54.0	0.00	0.00	0.00
Lamar									
1,860.5	13.00	60.00	1,850.0	62.3	107.9	-59.5	0.00	0.00	0.00
Bell Canyo	n								
1,900.0		60.00	1,888.5	66.8	115.6	-63.7	0.00	0.00	0.00
1,906.6		60.00	1,895.0	67.5	116.9	-64.4	0.00	0.00	0.00
Ramsey Sa									
2,000.0		60.00	1,986.0	78.0	135.1	-74.4	0.00	0.00	0.00
2,100.0		60.00	2,083.4	89.3	154.6	-85.2	0.00	0.00	0.00
2,200.0		60.00	2,180.8	100.5	174.1	-95.9	0.00	0.00	0.00
2,300.0		60.00	2,278.3	111.7	193.6	-106.6	0.00	0.00	0.00
2,400.0		60.00	2,375.7	123.0	213.0	-117.4	0.00	0.00	0.00
2,500.0	13.00	60.00	2,473.1	134.2	232.5	-128.1	0.00	0.00	0.00
2,600.0	13.00	60.00	2,570.6	145.5	252.0	-138.8	0.00	0.00	0.00
2,700.0		60.00	2,668.0	156.7	271.5	-149.6	0.00	0.00	0.00
2,800.0	13.00	60.00	2,765.5	168.0	291.0	-160.3	0.00	0.00	0.00
2,845.7	13.00	60.00	2,810.0	173.1	299.9	-165.2	0.00	0.00	0.00
Cherry Can	nyon								
2,900.0	•	60.00	2,862.9	179.2	310.4	-171.0	0.00	0.00	0.00
3,000.0		60.00	2,960.3	190.5	329.9	-181.8	0.00	0.00	0.00
3,100.0		60.00	3,057.8	201.7	349.4	-192.5	0.00	0.00	0.00
3,200.0	13.00	60.00	3,155.2	213.0	368.9	-203.2	0.00	0.00	0.00

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WELL @ 3400.0usft (26' RKB) WELL @ 3400.0usft (26' RKB)

Grid

ned 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)
3,300.0 3,400.0	13.00 13.00	60.00 60.00	3,252.6 3,350.1	224.2 235.5	388.4 407.8	-214.0 -224.7	0.00 0.00	0.00 0.00	0.00 0.00
3,500.0	13.00	60.00	3,447.5	246.7	427.3	-235.4	0.00	0.00	0.00
3,600.0 3,700.0	13.00 13.00	60.00 60.00	3,545.0 3,642.4	258.0 269.2	446.8 466.3	-246.2 -256.9	0.00 0.00	0.00 0.00	0.00 0.00
3,718.1	13.00	60.00	3,660.0	271.2	469.8	-258.9	0.00	0.00	0.00
Brushy Car									
3,800.0	13.00	60.00	3,739.8	280.5	485.8	-267.6	0.00	0.00	0.00
3,900.0 4,000.0	13.00 13.00	60.00 60.00	3,837.3 3,934.7	291.7 303.0	505.3 524.7	-278.4 -289.1	0.00 0.00	0.00 0.00	0.00 0.00
4,100.0	13.00	60.00	4,032.1	314.2	524.7 544.2	-209.1	0.00	0.00	0.00
4,200.0	13.00	60.00	4,129.6	325.5	563.7	-310.6	0.00	0.00	0.00
4,300.0	13.00	60.00	4,227.0	336.7	583.2	-321.3	0.00	0.00	0.00
4,400.0	13.00	60.00	4,324.5	347.9	602.7	-332.1	0.00	0.00	0.00
4,500.0	13.00	60.00	4,421.9	359.2	622.1	-342.8	0.00	0.00	0.00
4,541.7	13.00	60.00	4,462.5	363.9	630.3	-347.3	0.00	0.00	0.00
Start Drop									
4,600.0	12.13	60.00	4,519.4	370.2	641.2	-353.3	1.50	-1.50	0.00
4,700.0	10.63	60.00	4,617.5	380.1	658.3	-362.7	1.50	-1.50	0.00
4,800.0	9.13	60.00	4,716.0	388.7	673.2	-370.9	1.50	-1.50	0.00
4,900.0	7.63	60.00	4,814.9	395.9	685.8	-377.9	1.50	-1.50	0.00
5,000.0	6.13	60.00	4,914.2	401.9	696.2	-383.6	1.50	-1.50	0.00
5,100.0	4.63	60.00	5,013.7	406.6	704.3	-388.0	1.50	-1.50	0.00
5,200.0	3.13	60.00	5,113.5	410.0	710.1	-391.3	1.50	-1.50	0.00
5,300.0	1.63	60.00	5,213.4	412.1 412.8	713.7	-393.2	1.50	-1.50	0.00
5,401.6 Bone Sprin	0.10 a Lime	60.00	5,315.0	412.0	715.0	-394.0	1.50	-1.50	0.00
5,408.3	0.00	0.00	5,321.7	412.8	715.0	-394.0	1.50	-1.50	0.00
Start 3285.	3 hold at 5408.3 N	/ID							
5,500.0	0.00	0.00	5,413.4	412.8	715.0	-394.0	0.00	0.00	0.00
5,511.6	0.00	0.00	5,425.0	412.8	715.0	-394.0	0.00	0.00	0.00
Upper Aval									
5,600.0	0.00	0.00	5,513.4	412.8	715.0	-394.0	0.00	0.00	0.00
5,700.0 5,800.0	0.00 0.00	0.00 0.00	5,613.4 5,713.4	412.8 412.8	715.0 715.0	-394.0 -394.0	0.00 0.00	0.00 0.00	0.00 0.00
5,851.6	0.00	0.00	5,713.4 5,765.0	412.8	715.0	-394.0	0.00	0.00	0.00
Middle Ava		0.00	5,7 55.5	. 12.0	7 10.0	30 1.0	0.00	0.00	0.00
5,900.0	0.00	0.00	5,813.4	412.8	715.0	-394.0	0.00	0.00	0.00
6,000.0	0.00	0.00	5,913.4	412.8	715.0	-394.0	0.00	0.00	0.00
6,100.0	0.00	0.00	6,013.4	412.8	715.0	-394.0	0.00	0.00	0.00
6,161.6	0.00	0.00	6,075.0	412.8	715.0	-394.0	0.00	0.00	0.00
Lower Aval									
6,200.0	0.00	0.00	6,113.4	412.8	715.0	-394.0	0.00	0.00	0.00
6,300.0	0.00	0.00	6,213.4	412.8	715.0	-394.0	0.00	0.00	0.00
6,341.6	0.00	0.00	6,255.0	412.8	715.0	-394.0	0.00	0.00	0.00
1st Bone S			0.515.1						
6,400.0	0.00	0.00	6,313.4	412.8	715.0	-394.0	0.00	0.00	0.00
6,500.0	0.00	0.00	6,413.4	412.8	715.0	-394.0	0.00	0.00	0.00
6,600.0 6,601.6	0.00 0.00	0.00 0.00	6,513.4 6,515.0	412.8 412.8	715.0 715.0	-394.0 -394.0	0.00 0.00	0.00 0.00	0.00 0.00
2nd Bone S		0.00	5,010.0	712.0	7 10.0	304.0	0.00	0.00	0.00
	. •	0.00	6 642 4	440.0	715.0	204.0	0.00	0.00	0.00
6,700.0	0.00 0.00	0.00 0.00	6,613.4 6,713.4	412.8 412.8	715.0 715.0	-394.0 -394.0	0.00 0.00	0.00 0.00	0.00 0.00

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Measured Depth (usft)	Inclinat	ion	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
6,900 7,000	.0	0.00	0.00	6,813.4 6,913.4	412.8 412.8	715.0 715.0	-394.0 -394.0	0.00	0.00	0.00 0.00
7,091	.6 e Spring Sand	0.00	0.00	7,005.0	412.8	715.0	-394.0	0.00	0.00	0.00
7,100		0.00	0.00	7,013.4	412.8	715.0	-394.0	0.00	0.00	0.00
7,161		0.00	0.00	7,015.4	412.8	715.0	-394.0	0.00	0.00	0.00
	Spring Carb									
7,200		0.00	0.00	7,113.4	412.8	715.0	-394.0	0.00	0.00	0.00
7,300 7,400		0.00	0.00 0.00	7,213.4 7,313.4	412.8 412.8	715.0 715.0	-394.0 -394.0	0.00 0.00	0.00 0.00	0.00 0.00
7,500		0.00	0.00	7,413.4	412.8	715.0	-394.0	0.00	0.00	0.00
7,600		0.00	0.00	7,513.4	412.8	715.0	-394.0	0.00	0.00	0.00
7,700		0.00	0.00	7,613.4	412.8	715.0	-394.0	0.00	0.00	0.00
7,800 7,900		0.00	0.00 0.00	7,713.4 7,813.4	412.8 412.8	715.0 715.0	-394.0 -394.0	0.00 0.00	0.00 0.00	0.00 0.00
8,000	.0	0.00	0.00	7,913.4	412.8	715.0	-394.0	0.00	0.00	0.00
8,100		0.00	0.00	8,013.4	412.8	715.0	-394.0	0.00	0.00	0.00
8,116		0.00	0.00	8,030.0	412.8	715.0	-394.0	0.00	0.00	0.00
3rd Bone 8.200	Spring Sand	0.00	0.00	8,113.4	412.8	715.0	-394.0	0.00	0.00	0.00
8,300		0.00	0.00	8,213.4	412.8	715.0	-394.0	0.00	0.00	0.00
8,366	.6	0.00	0.00	8,280.0	412.8	715.0	-394.0	0.00	0.00	0.00
3rd BS W		0.00	0.00	0.040.4	440.0	745.0	0040	0.00	0.00	0.00
8,400 8,481		0.00	0.00 0.00	8,313.4 8,395.0	412.8 412.8	715.0 715.0	-394.0 -394.0	0.00 0.00	0.00 0.00	0.00 0.00
	p A X Sand	0.00	0.00	0,000.0			000	0.00	0.00	0.00
8,500 8,516		0.00	0.00 0.00	8,413.4 8,430.0	412.8 412.8	715.0 715.0	-394.0 -394.0	0.00 0.00	0.00 0.00	0.00 0.00
	p A Y Sand			2,12212						
8,586	.6	0.00	0.00	8,500.0	412.8	715.0	-394.0	0.00	0.00	0.00
	p A Lower			2,222.2						
8,600 8,693		0.00	0.00 0.00	8,513.4 8,607.0	412.8 412.8	715.0 715.0	-394.0 -394.0	0.00 0.00	0.00 0.00	0.00 0.00
Start Bui	ld 10.00			,						
8,700 8,741		0.64 4.81	167.60 167.60	8,613.4 8,655.0	412.8 410.9	715.1 715.5	-393.9 -392.0	10.00 10.00	10.00 10.00	0.00 0.00
Wolfcam				•						
8,750	.0	5.64	167.60	8,663.3	410.1	715.6	-391.2	10.00	10.00	0.00
8,800		0.64	167.60	8,712.8	403.2	717.2	-384.3	10.00	10.00	0.00
8,850	.0 1	5.64	167.60	8,761.5	392.1	719.6	-373.1	10.00	10.00	0.00
8,900		0.64	167.60	8,809.0	376.9	722.9	-357.9	10.00	10.00	0.00
8,950	.0 2	25.64	167.60	8,854.9	357.7	727.2	-338.6	10.00	10.00	0.00
9,000		0.64	167.60	8,899.0	334.7	732.2	-315.4	10.00	10.00	0.00
9,050		5.64	167.60	8,940.9	308.0	738.1	-288.6	10.00	10.00	0.00
9,100		0.64	167.60	8,980.2 9.015.0	277.9	744.7 751.7	-258.3	10.00	10.00	0.00
9,147 Wolfcam		5.40	167.60	9,015.0	246.1	751.7	-226.4	10.00	10.00	0.00
9,150		5.64	167.60	9,016.7	244.5	752.1	-224.7	10.00	10.00	0.00
9,200		0.64	167.60	9,050.0	208.1	760.0	-188.2	10.00	10.00	0.00
9,200		5.64 5.64	167.60	9,080.0	169.1	760.0	-100.2 -148.9	10.00	10.00	0.00
9,300		0.63	167.60	9,106.4	127.6	777.8	-140.9	10.00	10.00	0.00
9,350		5.63	167.60	9,129.0	84.1	787.3	-63.4	10.00	10.00	0.00
9,400		0.63	167.60	9,147.6	38.8	797.3	-17.9	10.00	10.00	0.00

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annec	d Survey									
	Management			Vantinal			Vertical	Dawlan	D:Ld	Tours
	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)
	9,450.0	75.63	167.60	9,162.1	-7.9	807.6	29.1	10.00	10.00	0.00
	9,500.0	80.63	167.60	9,172.4	-55.7	818.1	77.1	10.00	10.00	0.00
	9,550.0	85.63	167.60	9,178.3	-104.2	828.7	125.8	10.00	10.00	0.00
	9,597.3	90.36	167.60	9,180.0	-150.3	838.9	172.2	10.00	10.00	0.00
				3,100.0	100.0	000.0	172.2	10.00	10.00	0.00
		3'MD, 90.36°INC,		0.400.0	450.0	000.4	474.0	0.00	0.00	0.00
	9,600.0	90.36	167.65	9,180.0	-153.0	839.4	174.9	2.00	0.00	2.00
	9,700.0	90.36	169.65	9,179.4	-251.0	859.1	273.4	2.00	0.00	2.00
	9,800.0	90.36	171.65	9,178.7	-349.7	875.4	372.5	2.00	0.00	2.00
	9,900.0	90.36	173.65	9,178.1	-448.9	888.1	472.0	2.00	0.00	2.00
	10,000.0	90.36	175.65	9,177.5	-548.4	897.5	571.7	2.00	0.00	2.00
	10,100.0	90.36	177.65	9,176.8	-648.2	903.3	671.7	2.00	0.00	2.00
	10,100.0	30.30	177.00	3,170.0	-040.2	303.3	07 1.7	2.00	0.00	
	10,142.4	90.36	178.50	9,176.6	-690.7	904.7	714.1	2.00	0.00	2.00
	Start 8936.2	hold at 10142.4	MD							
	10,200.0	90.36	178.50	9,176.2	-748.2	906.2	771.7	0.00	0.00	0.00
	10,300.0	90.36	178.50	9.175.6	-848.2	908.8	871.7	0.00	0.00	0.00
	10,400.0	90.36	178.50	9.174.9	-948.1	911.4	971.7	0.00	0.00	0.00
	10,500.0	90.36	178.50	9,174.3	-1,048.1	914.1	1,071.7	0.00	0.00	0.00
	10,300.0	90.50	170.50	9,174.5	-1,040.1	314.1	1,071.7	0.00	0.00	0.00
	10,600.0	90.36	178.50	9,173.7	-1,148.1	916.7	1,171.7	0.00	0.00	0.00
	10,700.0	90.36	178.50	9,173.0	-1,248.0	919.3	1,271.7	0.00	0.00	0.00
	10,800.0	90.36	178.50	9,172.4	-1,348.0	921.9	1,371.6	0.00	0.00	0.00
	10,900.0	90.36	178.50	9,171.8	-1,447.9	924.5	1,471.6	0.00	0.00	0.00
	11,000.0	90.36	178.50	9,171.1	-1,547.9	927.1	1,571.6	0.00	0.00	0.00
	11,100.0	90.36	178.50	9,170.5	-1,647.9	929.7	1,671.6	0.00	0.00	0.00
	11,200.0	90.36	178.50	9,169.9	-1,747.8	932.3	1,771.6	0.00	0.00	0.00
	11,300.0	90.36	178.50	9,169.2	-1,847.8	934.9	1,871.6	0.00	0.00	0.00
	11,400.0	90.36	178.50	9,168.6	-1,947.8	937.6	1,971.6	0.00	0.00	0.00
	11,500.0	90.36	178.50	9,168.0	-2,047.7	940.2	2,071.6	0.00	0.00	0.00
	44 000 0	90.36	470.50	0.407.0	0.447.7	040.0	0.474.0	0.00	0.00	0.00
	11,600.0		178.50	9,167.3	-2,147.7	942.8	2,171.6	0.00	0.00	
	11,700.0	90.36	178.50	9,166.7	-2,247.7	945.4	2,271.6	0.00	0.00	0.00
	11,800.0	90.36	178.50	9,166.1	-2,347.6	948.0	2,371.6	0.00	0.00	0.00
	11,900.0	90.36	178.50	9,165.4	-2,447.6	950.6	2,471.6	0.00	0.00	0.00
	12,000.0	90.36	178.50	9,164.8	-2,547.5	953.2	2,571.6	0.00	0.00	0.00
	12,100.0	90.36	178.50	9,164.2	-2,647.5	955.8	2,671.6	0.00	0.00	0.00
	12,200.0	90.36	178.50	9,163.5	-2,747.5	958.5	2,771.6	0.00	0.00	0.00
	12,300.0	90.36	178.50	9,162.9	-2,847.4	961.1	2,871.6	0.00	0.00	0.00
	12,400.0	90.36	178.50	9,162.3	-2,947.4	963.7	2,971.6	0.00	0.00	0.00
	12,500.0	90.36	178.50	9,161.6	-3,047.4	966.3	3,071.6	0.00	0.00	0.00
	12,600.0	90.36	178.50	9,161.0	-3,147.3	968.9	3,171.6	0.00	0.00	0.00
	12,700.0	90.36	178.50	9,160.4	-3,247.3	971.5	3,271.6	0.00	0.00	0.00
	12,800.0	90.36	178.50	9,159.7	-3,347.3	974.1	3,371.6	0.00	0.00	0.00
	12,900.0	90.36	178.50	9,159.1	-3,447.2	976.7	3,471.6	0.00	0.00	0.00
	13,000.0	90.36	178.50	9,158.5	-3,547.2	979.3	3,571.6	0.00	0.00	0.00
							2 074 0			
	13,100.0	90.36	178.50	9,157.8	-3,647.1	982.0	3,671.6	0.00	0.00	0.00
	13,200.0	90.36	178.50	9,157.2	-3,747.1	984.6	3,771.6	0.00	0.00	0.00
	13,300.0	90.36	178.50	9,156.6	-3,847.1	987.2	3,871.6	0.00	0.00	0.00
	13,400.0	90.36	178.50	9,155.9	-3,947.0	989.8	3,971.6	0.00	0.00	0.00
	13,500.0	90.36	178.50	9,155.3	-4,047.0	992.4	4,071.6	0.00	0.00	0.00
	13,600.0	90.36	178.50	9,154.7	-4,147.0	995.0	4,171.6	0.00	0.00	0.00
	13,700.0	90.36	178.50	9,154.7	-4,147.0 -4,246.9	997.6	4,171.6	0.00	0.00	0.00
	13,800.0	90.36	178.50	9,153.4	-4,346.9	1,000.2	4,371.6	0.00	0.00	0.00
	13,900.0	90.36	178.50	9,152.8	-4,446.9	1,002.9	4,471.6	0.00	0.00	0.00
	14,000.0	90.36	178.50	9,152.1	-4,546.8	1,005.5	4,571.6	0.00	0.00	0.00
	,									

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

Project: Eddy County, NM (NAD83)

OE Fed Com

Well: 232H
Wellbore: OH
Design: Plan #1

Site:

Local Co-ordinate Reference:

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

Well 232H WELL @ 340

WELL @ 3400.0usft (26' RKB) WELL @ 3400.0usft (26' 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)
	(°)	(°)		, ,		` '	,	, ,	, ,
14,200.0	90.36	178.50	9,150.9	-4,746.8	1,010.7	4,771.6	0.00	0.00	0.00
14,300.0	90.36	178.50	9,150.2	-4,846.7	1,013.3	4,871.6	0.00	0.00	0.00
14,400.0	90.36	178.50	9,149.6	-4,946.7	1,015.9	4,971.6	0.00	0.00	0.00
14,500.0	90.36	178.50	9,149.0	-5,046.6	1,018.5	5,071.6	0.00	0.00	0.00
14,600.0	90.36	178.50	9,148.3	-5,146.6	1,021.1	5,171.6	0.00	0.00	0.00
14,700.0	90.36	178.50	9,147.7	-5,246.6	1,023.8	5,271.6	0.00	0.00	0.00
14,800.0	90.36	178.50	9,147.1	-5,346.5	1,026.4	5,371.6	0.00	0.00	0.00
14,900.0	90.36	178.50	9,146.4	-5,446.5	1,029.0	5,471.6	0.00	0.00	0.00
15,000.0	90.36	178.50	9,145.8	-5,546.5	1,023.6	5,571.6	0.00	0.00	0.00
15,100.0	90.36	178.50	9,145.2	-5,646.4	1,034.2	5,671.6	0.00	0.00	0.00
15,200.0	90.36	178.50	9,144.5	-5,746.4	1,036.8	5,771.6	0.00	0.00	0.00
15,300.0	90.36	178.50	9,143.9	-5,846.4	1,039.4	5,871.6	0.00	0.00	0.00
15,400.0	90.36	178.50	9,143.3	-5,946.3	1,042.0	5,971.6	0.00	0.00	0.00
15,500.0	90.36	178.50	9,142.6	-6,046.3	1,044.6	6,071.6	0.00	0.00	0.00
15 600 0	00.30	170 50	9.142.0	6 1 4 6 0	1.047.0	6 171 6	0.00	0.00	0.00
15,600.0	90.36	178.50	-,	-6,146.2	1,047.3	6,171.6	0.00	0.00	0.00
15,700.0	90.36	178.50	9,141.4	-6,246.2	1,049.9	6,271.6	0.00	0.00	0.00
15,800.0	90.36	178.50	9,140.7	-6,346.2	1,052.5	6,371.5	0.00	0.00	0.00
15,900.0	90.36	178.50	9,140.1	-6,446.1	1,055.1	6,471.5	0.00	0.00	0.00
16,000.0	90.36	178.50	9,139.5	-6,546.1	1,057.7	6,571.5	0.00	0.00	0.00
16,100.0	90.36	178.50	9,138.8	-6,646.1	1,060.3	6,671.5	0.00	0.00	0.00
16,200.0	90.36	178.50	9,138.2	-6,746.0	1,062.9	6,771.5	0.00	0.00	0.00
16,300.0	90.36	178.50	9,137.6	-6,846.0	1,065.5	6,871.5	0.00	0.00	0.00
16,400.0	90.36	178.50	9,137.0	-6,946.0	1,068.2	6,971.5	0.00	0.00	0.00
16,500.0	90.36	178.50	9,136.3	-7,045.9	1,070.8	7,071.5	0.00	0.00	0.00
16,600.0	90.36	178.50	9,135.7	-7,145.9	1,073.4	7,171.5	0.00	0.00	0.00
16,700.0	90.36	178.50	9,135.1	-7,245.8	1,076.0	7,271.5	0.00	0.00	0.00
16,800.0	90.36	178.50	9,134.4	-7,345.8	1,078.6	7,371.5	0.00	0.00	0.00
16,900.0	90.36	178.50	9,133.8	-7,445.8	1,081.2	7,471.5	0.00	0.00	0.00
17,000.0	90.36	178.50	9,133.2	-7,545.7	1,083.8	7,571.5	0.00	0.00	0.00
17,100.0	90.36	178.50	9,132.5	-7,645.7	1,086.4	7,671.5	0.00	0.00	0.00
17,200.0	90.36	178.50	9,131.9	-7,745.7	1,089.0	7,771.5	0.00	0.00	0.00
17,300.0	90.36	178.50	9,131.3	-7,845.6	1,091.7	7,871.5	0.00	0.00	0.00
17,400.0	90.36	178.50	9,130.6	-7,945.6	1,094.3	7,971.5	0.00	0.00	0.00
17,500.0	90.36	178.50	9,130.0	-8,045.6	1,096.9	8,071.5	0.00	0.00	0.00
17,600.0	90.36	178.50	9,129.4	-8,145.5	1,099.5	8,171.5	0.00	0.00	0.00
17,700.0	90.36	178.50	9,128.7	-8,245.5	1,102.1	8,271.5	0.00	0.00	0.00
17,800.0	90.36	178.50	9,128.1	-8,345.5	1,104.7	8,371.5	0.00	0.00	0.00
17,900.0	90.36	178.50	9,127.5	-8,445.4	1,107.3	8,471.5	0.00	0.00	0.00
18,000.0	90.36	178.50	9,126.8	-8,545.4	1,109.9	8,571.5	0.00	0.00	0.00
18,100.0	90.36	178.50	9,126.2	-8,645.3	1,112.6	8,671.5	0.00	0.00	0.00
18,200.0	90.36	178.50	9,125.6	-8,745.3	1,115.2	8,771.5	0.00	0.00	0.00
18,300.0	90.36	178.50	9,124.9	-8,845.3	1,117.8	8,871.5	0.00	0.00	0.00
18,400.0	90.36	178.50	9,124.3	-8,945.2	1,117.0	8,971.5	0.00	0.00	0.00
18,500.0	90.36	178.50	9,123.7	-9,045.2	1,120.4	9,071.5	0.00	0.00	0.00
18,600.0	90.36	178.50	9,123.0	-9,145.2	1,125.6	9,171.5	0.00	0.00	0.00
18,700.0	90.36	178.50	9,122.4	-9,245.1	1,128.2	9,271.5	0.00	0.00	0.00
18,800.0	90.36	178.50	9,121.8	-9,345.1	1,130.8	9,371.5	0.00	0.00	0.00
18,900.0	90.36	178.50	9,121.1	-9,445.1	1,133.5	9,471.5	0.00	0.00	0.00
19,000.0	90.36	178.50	9,120.5	-9,545.0	1,136.1	9,571.5	0.00	0.00	0.00
19,078.6	90.36	178.50	9,120.0	-9,623.6	1,138.1	9,650.1	0.00	0.00	0.00
19,100.0	90.36	178.50	9,120.0	-9,645.0	1,138.7	9,671.5	0.00	0.00	0.00
19,208.6	90.36	178.50	9,119.2	-9,753.5	1,130.7	9,780.1	0.00	0.00	0.00
TD at 19208.6		170.50	۵,۱۱۵.۷	-0,100.0	1,141.3	3,700.1	0.00	0.00	0.00
111 21 14708 (	1								

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

 Well:
 232H

 Wellbore:
 OH

 Design:
 Plan #1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well 232H

WELL @ 3400.0usft (26' RKB) WELL @ 3400.0usft (26' 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
PBHL_OE.232H - plan misses targe - Point	0.00 t center by 2.4เ	0.00 usft at 19208.	9,119.2 6usft MD (9	-9,753.6 119.2 TVD, -9	1,139.1 753.5 N, 1141	408,639.19 .5 E)	546,376.82	32° 7' 24.338 N	104° 19' 1.398 W
LTP_OE.232H - plan hits target ce - Point	0.00 nter	0.00	9,120.0	-9,623.6	1,138.1	408,769.16	546,375.81	32° 7' 25.624 N	104° 19' 1.410 W
FTP_OE.232H - plan misses targe - Point	0.00 t center by 112	0.00 .1usft at 936	9,180.0 1.3usft MD (9	113.7 9133.5 TVD, 7	883.5 4.0 N, 789.5 I	418,506.50 ≣)	546,121.21	32° 9' 1.987 N	104° 19' 4.354 W

ormations						
	Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
	415.0	415.0	Rustler Anhydrite			
	860.0	860.0	Top Salt			
	1,594.2	1,590.0	Base Salt			
	1,804.0	1,795.0	Delaware Mountain Gp			
	1,809.1	1,800.0	Lamar			
	1,860.5	1,850.0	Bell Canyon			
	1,906.6	1,895.0	Ramsey Sand			
	2,845.7	2,810.0	Cherry Canyon			
	3,718.1	3,660.0	Brushy Canyon			
	5,401.6	5,315.0	Bone Spring Lime			
	5,511.6	5,425.0	Upper Avalon			
	5,851.6	5,765.0	Middle Avalon			
	6,161.6	6,075.0	Lower Avalon			
	6,341.6	6,255.0	1st Bone Spring Sand			
	6,601.6	6,515.0	2nd Bone Spring Carb			
	7,091.6	7,005.0	2nd Bone Spring Sand			
	7,161.6	7,075.0	3rd Bone Spring Carb			
	8,116.6	8,030.0	3rd Bone Spring Sand			
	8,366.6	8,280.0	3rd BS W Sand			
	8,481.6	8,395.0	Wolfcamp A X Sand			
	8,516.6	8,430.0	Wolfcamp A Y Sand			
	8,586.6	8,500.0	Wolfcamp A Lower			
	8,741.7	8,655.0	Wolfcamp B			
	9,147.6	9,015.0	Wolfcamp B1			

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 Well:
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 Design:
 Plan #1

Local Co-ordinate Reference:

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

Well 232H WELL @ 3400.0usft (26' RKB) WELL @ 3400.0usft (26' RKB)

Grid

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coord	+E/-W	Comment	
875.0	875.0	(usft) 0.0	(usft) 0.0	Start Build 1.50	
1,741.7	1,734.2	48.9	84.8	Start 2800.0 hold at 1741.7 MD	
4,541.7	4,462.5	363.9	630.3	Start Drop -1.50	
5,408.3	5,321.7	412.8	715.0	Start 3285.3 hold at 5408.3 MD	
8,693.6	8,607.0	412.8	715.0	Start Build 10.00	
9,597.3	9,180.0	-150.3	838.9	EOC - 9597.3'MD, 90.36°INC, 167.60°AZI	
10,142.4	9,176.6	-690.7	904.7	Start 8936.2 hold at 10142.4 MD	
19,208.6	9,119.2	-9,623.6	1,138.1	TD at 19208.6	



#### Hydrogen Sulfide Drilling

#### **Operations Plan**

#### **Tap Rock Resources**

#### 1 H2S safety instructions to the following:

- Characteristics of H2S
- Physical effects and hazards
- Principal and operation of H2S detectors, warning system and briefing areas
- Evacuation procedures, routes and first aid
- Proper use of safety equipment & life support systems
- Essential personnel meeting medical evaluation criteria will receive additional training on the proper use of 30min pressure demand air packs

#### 2 H2S Detection and Alarm Systems:

- H2S sensor/detectors to be located on the drilling rig floor, in the base of the sub structure / cellar area, on the mud pits in the shale shaker area. Additional H2S detectors may be placed as deemed necessary
- An audio alarm system will be installed on the derrick floor and in the doghouse

#### 3 Windsocks and / Wind Streamers:

- Windsocks at mud pit area should be high enough to be visible
- Windsock on the rig floor and / top of doghouse should be high enough to be visible

#### 4 Condition Flags and Signs:

- Warning sign on access road to location
- Flags to be displayed on sign at entrance to location
  - Green Flag Normal Safe Operation Condition
  - Yellow Flag Potential Pressure and Danger
  - Red Flag Danger (H2S present in dangerous concentrations) Only H2S trained personnel admitted on location

#### 5 Well Control Equipment:

See Drilling Operations Plan Schematics

#### 6 Communication:

- While working under masks chalkboards will be used for communications
- Hand signals will be used where chalk board is inappropriate
- Two way radio will be used to communicate off location in case of emergency help is required.
   In most cases cellular telephones will be available at most drilling foreman's trailer or living quarters.



## 7 Drilling Stem Testing:

• No DST cores are planned at this time

8 Drilling contractor supervisor will be required to be familiar with the effects H2S has on tubulars good and other mechanical equipment

9 If H2S is encountered, mud system will be altered if necessary to maintain control of formation. A mud gas separator will be brought into service along with H2S scavengers if necessary

#### 11 Emergency Contacts

Emergency Contacts			
Carlsbad Police Department	575.887.7551	911	
Carlsbad Medical Center	575.887.4100	911	
Eddy County Fire Service	575.628.5450	911	
Eddy County Sherriff	575.887.7551	911	
Lea County Fire Service	575.391.2983	911	
Lea County Sherriff	575.396.3611	911	
Jal Police Department	575.395.2121	911	
Jal Fire Department	575.395.2221	911	
Tap Rock Resources	720.772.5090		

**Briefing Area** 0

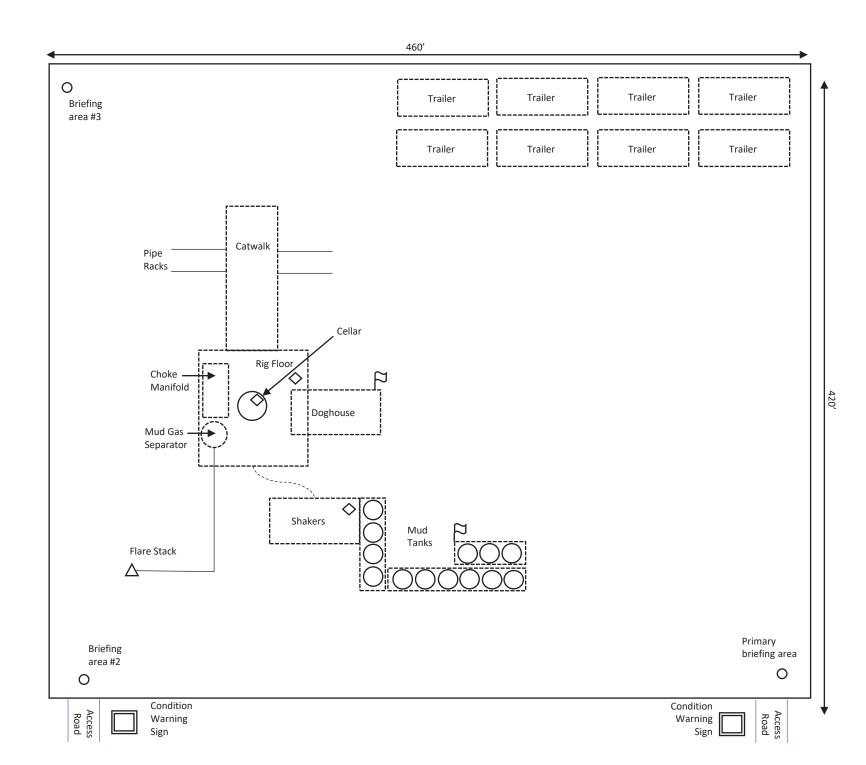
Current Well

Flare Stack

H2S Monitor

Wind Indicator

Mud Gas Separator





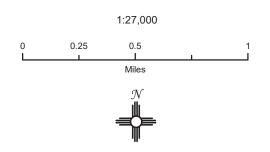
Received by OCD: 10/20/2021 9:54:13 AM

OE Fed Com W2 Pad H2S Contingency Plan: 2 Mile Radius Map

LLC

Sec. 8, Township 25S, Range 26E Eddy County, New Mexico



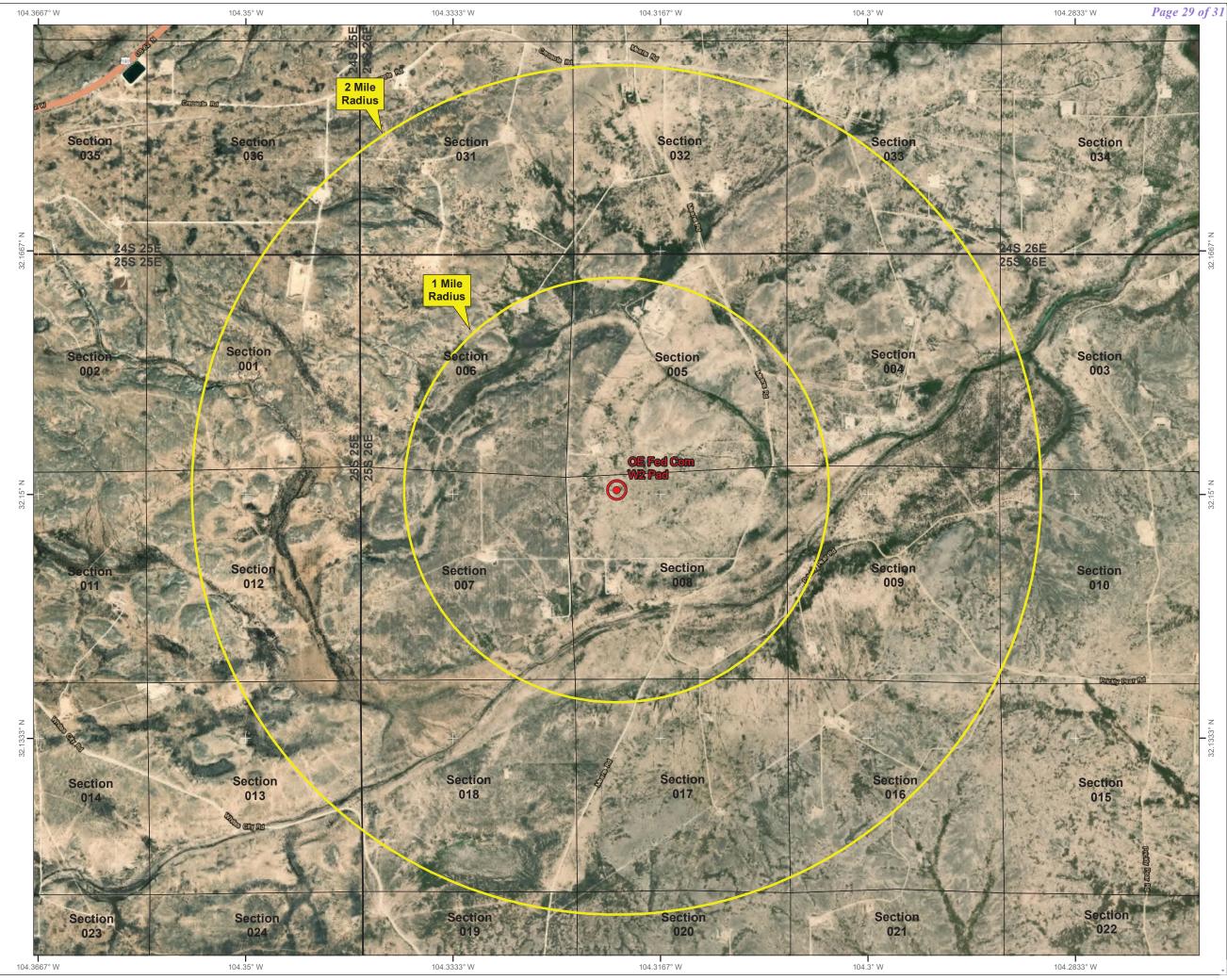


NAD 1983 New Mexico State Plane East FIPS 3001 Feet



Prepared by Permits West, Inc., December 2, 2020 for Tap Rock Operating, LLC





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

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 56887

#### **COMMENTS**

Operator:		OGRID:	
	ROCK OPERATING, LLC	372043	
523 P	Park Point Drive	Action Number:	
Golde	en, CO 80401	56887	
		Action Type:	
		[C-101] BLM - Federal/Indian Land Lease (Form 3160-3)	

#### COMMENTS

Created By	Comment	Comment Date
kpickford	KP GEO Review 10/21/2021	10/21/2021

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

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CONDITIONS

Action 56887

#### **CONDITIONS**

Operator:	OGRID:
TAP ROCK OPERATING, LLC	372043
523 Park Point Drive	Action Number:
Golden, CO 80401	56887
	Action Type:
	[C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

#### CONDITIONS

Created	Condition	Condition
Ву		Date
kpickford	Notify OCD 24 hours prior to casing & cement	10/21/2021
kpickford	Will require a File As Drilled C-102 and a Directional Survey with the C-104	10/21/2021
	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string	10/21/2021
kpickford	Cement is required to circulate on both surface and intermediate1 strings of casing	10/21/2021
	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system	10/21/2021