Form 3160-3
(June 2015)

FORM APPROVED
OMB No. 1004-0137
Expires: January 31, 2018

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.

6. If Indian, Allotee or Tribe Name

1a. Type of work: ☐ DRILL ☐ REENTER

1b. Type of Well: ☐ Oil Well ☐ Gas Well ☐ Other

1c. Type of Completion: ☐ Hydraulic Fracturing ☐ Single Zone ☐ Multiple Zone

7. If Unit or CA Agreement, Name and No.

8. Lease Name and Well No.

2. Name of Operator

9. API Well No.
30-015-53314

3a. Address

3b. Phone No. *(include area code)*

10. Field and Pool, or Exploratory
COTTONWOOD DRAW;BONE SPRING

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*

At surface

At proposed prod. zone

11. Sec., T. R. M. or Blk. and Survey or Area

14. Distance in miles and direction from nearest town or post office*

12. County or Parish

13. State

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No of acres in lease	17. Spacing Unit dedicated to this well
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth	20. BLM/BIA Bond No. in file
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approximate date work will start*	23. Estimated duration

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.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification.
6. Such other site specific information and/or plans as may be requested by the BLM.

25. Signature	Name *(Printed/Typed)*	Date
Title		
Approved by *(Signature)*	Name *(Printed/Typed)*	Date
Title	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.

APPROVED WITH CONDITIONS

(Continued on page 2)

*(Instructions on page 2)

Approval Date: 01/12/2023

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources
Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

FORM C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

☐ **AMENDED REPORT**

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1]API Number	[2]Pool Code	[3]Pool Name
30-015- 53314	97494	~~WILDCAT G-04 S252621C;BONE SPRING~~ COTTONWOOD DRAW;BONE SPRING

[4]Property Code	[5]Property Name	[6]Well Number
333731	COLD SNACK FED COM	151H

[7]OGRID No.	[8]Operator Name	[9]Elevation
372043	TAP ROCK OPERATING, LLC.	3462'

[10]Surface Location

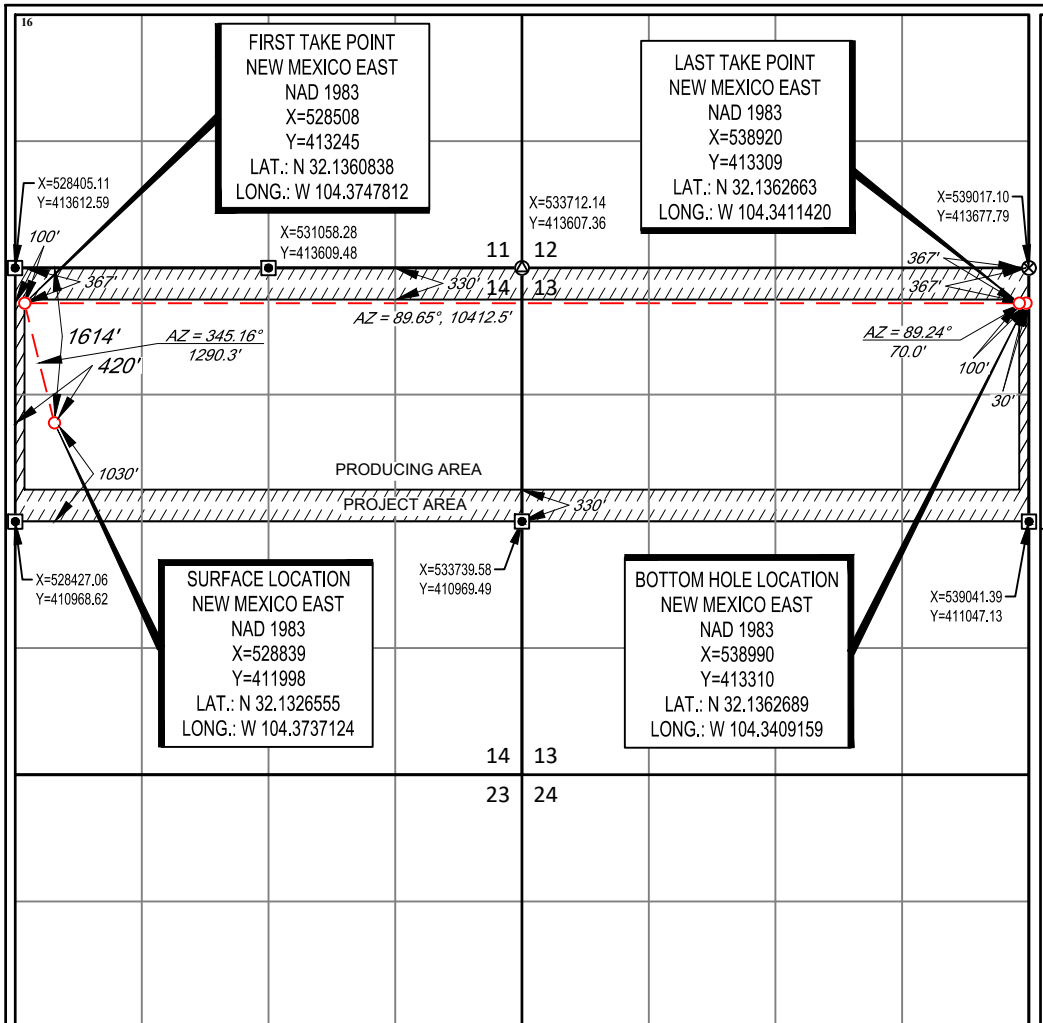
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	14	25-S	25-E	–	1614'	NORTH	420'	WEST	EDDY

[11]Bottom 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
A	13	25-S	25-E	–	367'	NORTH	30'	EAST	EDDY

[12]Dedicated Acres	[13]Joint or Infill	[14]Consolidation Code	[15]Order 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.



[17]OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Cory Walk — 06-11-22
Signature — Date

Cory Walk
Printed Name

cory@permitswest.com
E-mail Address

[18]SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true to the best of my belief.

05/17/2022
Date of Survey
Signature and Seal of Professional Surveyor

RAMON A. DOMINGUEZ NEW MEXICO 24508 PROFESSIONAL SURVEYOR

Certificate Number

S:\SURVEY\TAPROCK\COLD_SNACK_UNIT\FINAL_PRODUCTS\LO_COLD_SNACK_FED_COM_151H_REV2.DWG 5/25/2022 2:07:12 PM kmatheny

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:** _1/18/23

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 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	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water
Cold Snack Fed Com 151H		Sec 14 T25S R25E	1614 FNL, 420 FWL	1500	3500	2347

IV. Central Delivery Point Name: ___Cold Snack Fed Com 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	API	Spud Date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
Cold Snack Fed Com 151H		3/11/23	4/30/23	7/10/23	10/20/23	10/20/23

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 Start Date	Available Maximum Daily Capacity 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 ☐ will ☐ will not have capacity to gather 100% of the anticipated natural gas production volume from the well prior to the date of first production.

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

☐ Attach Operator's plan to manage production in response to the increased line pressure.

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

Section 3 - Certifications

Effective May 25, 2021

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:

- **(a)** power generation on lease;
- **(b)** power generation for grid;
- **(c)** compression on lease;
- **(d)** liquids removal on lease;
- **(e)** reinjection for underground storage;
- **(f)** reinjection for temporary storage;
- **(g)** reinjection for enhanced oil recovery;
- **(h)** fuel cell production; and
- **(i)** other alternative beneficial uses approved by the division.

Section 4 - Notices

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

(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: Jeff Trlica
Title: Regulatory Analyst
E-mail Address: jtrlica@taprk.com
Date: 1/18/2023
Phone: 720-772-5910

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 low-pressure 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.

Drilling Operations Plan
Cold Snack Fed Com #151H
Tap Rock Operating, LLC
SHL 1614' FNL & 420' FWL, Sec. 14
BHL 367' FNL & 30' FEL, Sec. 13
T. 25S., R. 25E Eddy County, NM

Elevation above Sea Level: 3462'

DRILLING PROGRAM

1. Estimated Tops

Formation	TVD	MD	Lithologies	Bearing
Quaternary Deposits	0	0	Surface	None
Top Salt	414	414	Salt	Salt
Base Salt	1240	1240	Salt	Salt
DMG	1410	1410	Sandstone	None
Lamar	1420	1420	Sandstone	Hydrocarbons
Bell Canyon	1480	1480	Sandstone	Hydrocarbons
Ramsey Sand	1525	1525	Sandstone	Hydrocarbons
Cherry Canyon	2350	2363	Limestone	Hydrocarbons
Brushy Canyon	3270	3319	Sandstone	Hydrocarbons
Bone Spring Lime	4960	5074	Carbonate	Hydrocarbons
Upper Avalon	5020	5136	Carbonate	Hydrocarbons
Middle Avalon	5325	5453	Carbonate	Hydrocarbons
1st BS Sand	5815	5962	Sandstone	Hydrocarbons
2nd BS Carb	6025	6178	Carbonate	Hydrocarbons
2nd BS Sand	6395	6552	Sandstone	Hydrocarbons
3rd BS Carb	6685	6842	Carbonate	Hydrocarbons
KOP	6671	6828	Carbonate	Hydrocarbons
TD	7505	17675	Carbonate	Hydrocarbons

2. Notable Zones

3rd Bone Spring Carb is the formation target.

3. Pressure Control

Pressure Control Equipment (See Schematics):
At 17,675', a 5M pressure control system is required. The 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.

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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 250 psi low, 2500 psi high. 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 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 cementing a casing string, a 5M 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.

4. Casing & Cement

All Casing will be new.
Casing Design:

Section	Drilled Interval			Casing Size	Standard	Tapered	Casing Set Depths				Casing Details					
	Hole Size	Top	Btm				Top MD	Bottom MD	Top TVD	BTM TVD	Grade	Weight	Thread	Collapse	Burst	Tension
Surface	17 1/2	0	350	13 3/8	API	No	0	350	0	350	J-55	54.5	BUTT	1.13	1.15	1.6
Intermediate	12 1/4	350	1470	9 5/8	API	No	0	1470	0	1470	J-55	40	BUTT	1.13	1.15	1.6
Production	8 3/4	1470	6828	5 1/2	NON API	No	0	6528	0	6371	P-110	20	TXP	1.13	1.15	1.6
	6 3/4	6828	17675	5 1/2	NON API	No	6528	17675	6371	7505	P-110	20	W441	1.13	1.15	1.6

Cement Volumes:

Name	Type	Top MD	Sacks	Yield	Cu. Ft	Weight	Excess	Cement	Additives
Surface	Tail	0	366	1.33	486	14.8	100%	C	5% NCl + LCM
Intermediate	Lead	0	172	3.21	551	11.0	65%	C	Bentonite + 1% CaCL2 + 8% NaCl + LCM
	Tail	1170	117	1.33	155	14.8	65%	C	5% NaCl + LCM
Production	Lead	1270	406	4.13	1677	10.5	20%	H	Fluid Loss + Dispersant + Retarder + LCM
	Tail	6828	998	1.63	1627	13.2	20%	H	Fluid Loss + Dispersant + Retarder + LCM

5. Mud Program

Mud Design:

Name	Top	Bottom	Type	Mud Weight	Visc	Fluid Loss
Surface	0	350	FW Spud Mud	8.40	28	NC
Intermediate	350	1470	Brine Water	10.00	27-30	NC
Production	1470	17675	FW/Cut Brine	9.00	27-30	NC

Electronic Pason mud monitor system complying with Onshore Order 1 will be used. All necessary mud products (i.e., barite, pac) 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.

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T. 25S., R. 25E Eddy County, NM

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 KOP to TD.
- A 2-person mud logging program will be used from KOP 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 ≈ 3,512 psi. Expected bottom hole temperature is ≈165˚ F.

Tap Rock does not anticipate that there will be enough H2S from the surface to the 3rd Bone Spring Carb 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 15 days. If production casing is run an additional 60 days will be required to complete and construct surface facilities.

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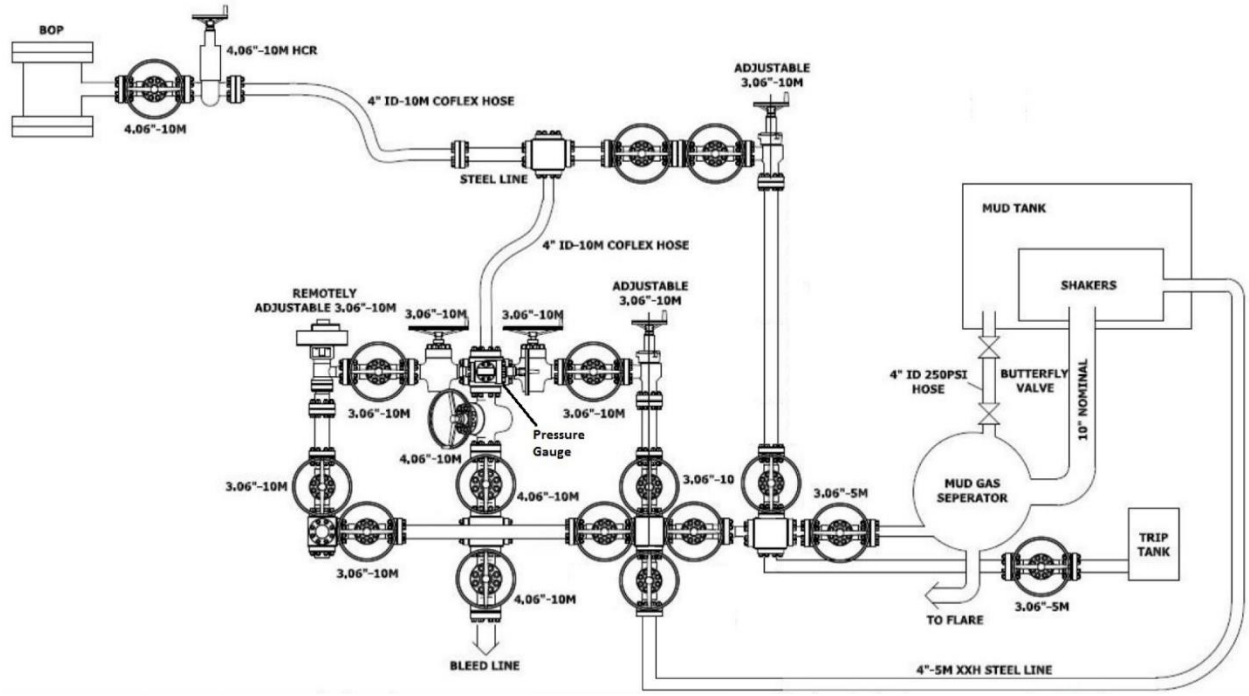
10M Choke Layout



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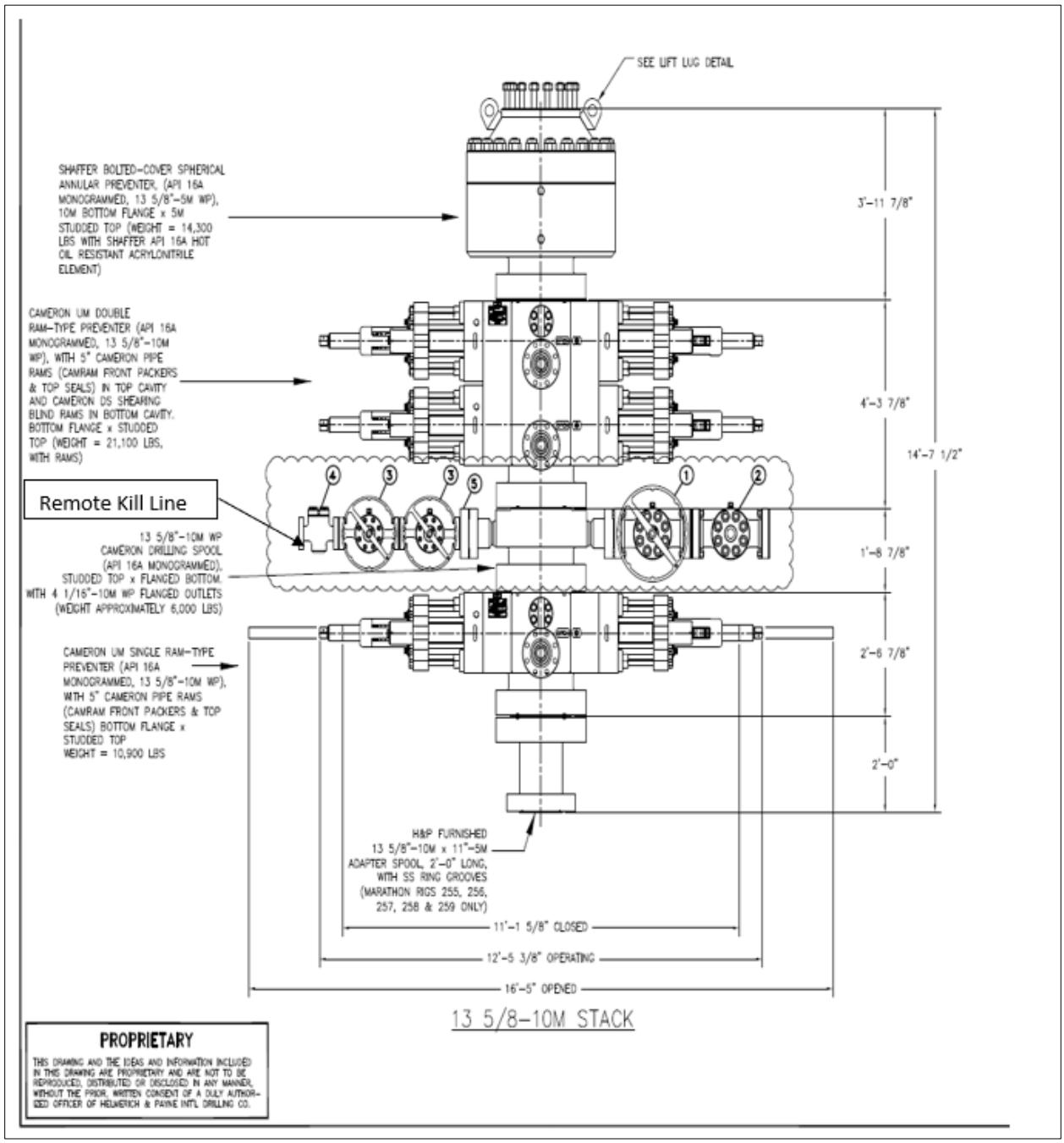
10,000 psi BOP Stack



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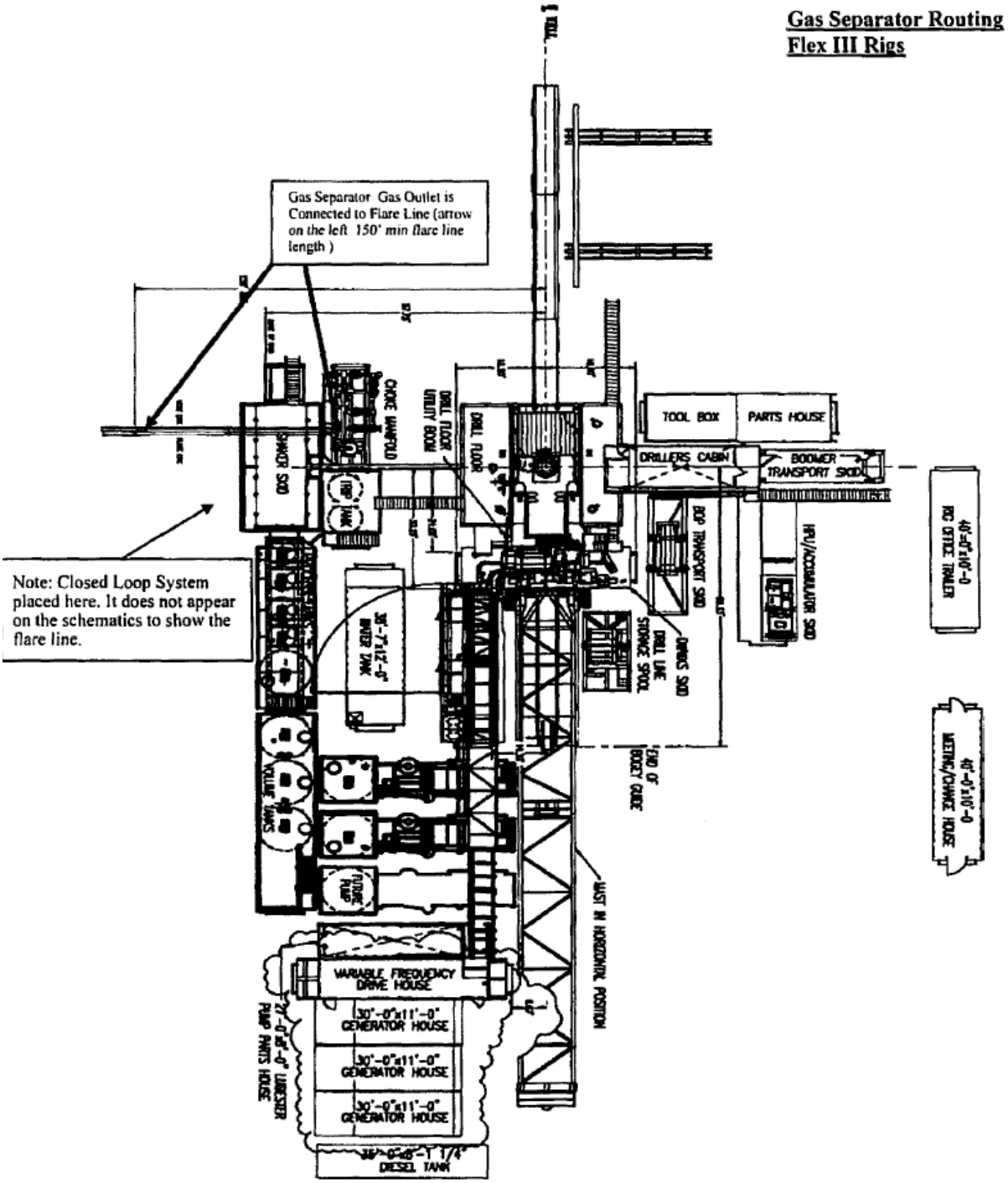

Drilling Operations Plan
Cold Snack Fed Com #151H
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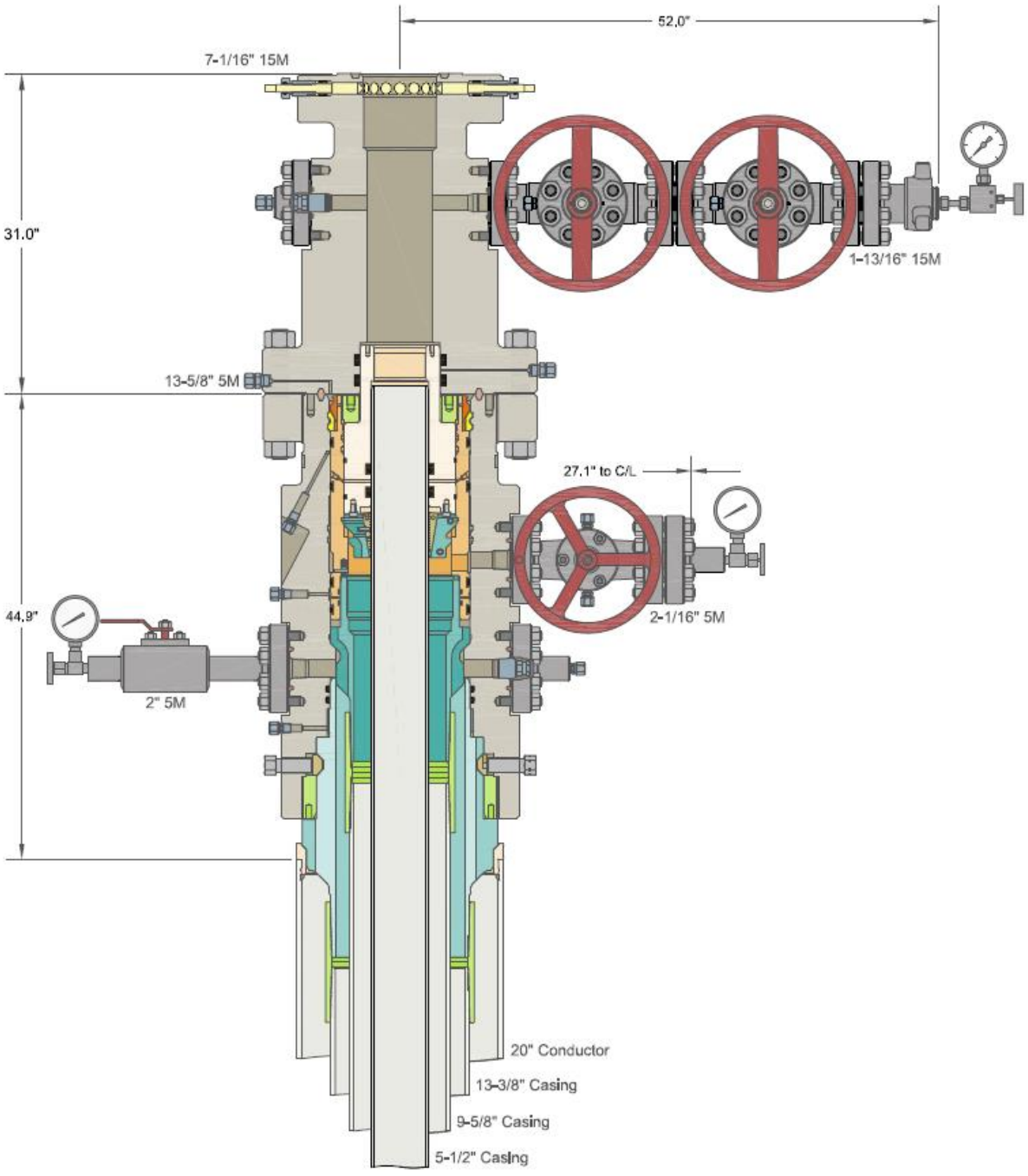
Multi-bowl Wellhead Design



Tap Rock Resources, LLC

Eddy County, NM (NAD 83 NME)
(Cold Snack Fee) Sec-14_T-25-S_R-25-E
Cold Snack Fee #151H

OWB

Plan: Plan #1

Standard Planning Report

26 May, 2022

Intrepid
Planning Report

Database:	EDM 5000.15 Single User Db	**Local Co-ordinate Reference:**	Well Cold Snack Fee #151H
Company:	Tap Rock Resources, LLC	**TVD Reference:**	KB @ 3488.0usft
Project:	Eddy County, NM (NAD 83 NME)	**MD Reference:**	KB @ 3488.0usft
Site:	(Cold Snack Fee) Sec-14_T-25-S_R-25-E	**North Reference:**	Grid
Well:	Cold Snack Fee #151H	**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 (Cold Snack Fee) Sec-14_T-25-S_R-25-E

Site Position:		**Northing:**	411,998.00 usft	**Latitude:**	32° 7' 57.558 N
From:	Map	**Easting:**	528,839.00 usft	**Longitude:**	104° 22' 25.359 W
Position Uncertainty:	0.0 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	-0.02 °

Well Cold Snack Fee #151H

Well Position	**+N/-S**	0.0 usft	**Northing:**	411,998.00 usft	**Latitude:**	32° 7' 57.558 N
	+E/-W	0.0 usft	**Easting:**	528,839.00 usft	**Longitude:**	104° 22' 25.359 W
Position Uncertainty		0.0 usft	**Wellhead Elevation:**		**Ground Level:**	3,462.0 usft

Wellbore OWB

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	05/24/22	6.78	59.79	47,293.89895214

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	82.64

Plan Survey Tool Program **Date** 05/26/22

	Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	17,675.2	Plan #1 (OWB)	MWD OWSG MWD - Standard	

Intrepid
Planning Report

Database:	EDM 5000.15 Single User Db	**Local Co-ordinate Reference:**	Well Cold Snack Fee #151H
Company:	Tap Rock Resources, LLC	**TVD Reference:**	KB @ 3488.0usft
Project:	Eddy County, NM (NAD 83 NME)	**MD Reference:**	KB @ 3488.0usft
Site:	(Cold Snack Fee) Sec-14_T-25-S_R-25-E	**North Reference:**	Grid
Well:	Cold Snack Fee #151H	**Survey Calculation Method:**	Minimum Curvature
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	
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,300.0	1.00	270.00	1,300.0	0.0	-0.9	1.00	1.00	0.00	270.00	
1,500.0	1.00	270.00	1,500.0	0.0	-4.4	0.00	0.00	0.00	0.00	
2,270.6	15.67	343.26	2,260.7	100.3	-41.3	2.00	1.90	9.51	76.74	
5,973.7	15.67	343.26	5,826.3	1,058.0	-329.3	0.00	0.00	0.00	0.00	
6,757.2	0.00	360.00	6,600.0	1,160.0	-360.0	2.00	-2.00	0.00	180.00	
6,828.2	0.00	360.00	6,671.0	1,160.0	-360.0	0.00	0.00	0.00	360.00	
7,713.2	88.50	82.80	7,243.8	1,229.9	193.6	10.00	10.00	0.00	82.80	
8,055.3	88.50	89.65	7,252.7	1,252.5	534.6	2.00	0.00	2.00	90.11	
17,675.2	88.50	89.65	7,505.0	1,312.0	10,151.0	0.00	0.00	0.00	0.00	PBHL (Cold Snack F

Intrepid
Planning Report

Database:	EDM 5000.15 Single User Db	**Local Co-ordinate Reference:**	Well Cold Snack Fee #151H
Company:	Tap Rock Resources, LLC	**TVD Reference:**	KB @ 3488.0usft
Project:	Eddy County, NM (NAD 83 NME)	**MD Reference:**	KB @ 3488.0usft
Site:	(Cold Snack Fee) Sec-14_T-25-S_R-25-E	**North Reference:**	Grid
Well:	Cold Snack Fee #151H	**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
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
DRIFT WEST - Build 1.00									
1,300.0	1.00	270.00	1,300.0	0.0	-0.9	-0.9	1.00	1.00	0.00
HOLD - 200.0 at 1300.0 MD									
1,400.0	1.00	270.00	1,400.0	0.0	-2.6	-2.6	0.00	0.00	0.00
1,500.0	1.00	270.00	1,500.0	0.0	-4.4	-4.3	0.00	0.00	0.00
NUDGE - DLS 2.00 TFO 76.74									
1,600.0	2.43	323.15	1,599.9	1.7	-6.5	-6.2	2.00	1.43	53.17
1,700.0	4.34	333.80	1,699.7	6.8	-9.5	-8.5	2.00	1.91	10.64
1,800.0	6.30	337.89	1,799.3	15.3	-13.2	-11.1	2.00	1.96	4.09
1,900.0	8.29	340.03	1,898.5	27.1	-17.7	-14.1	2.00	1.98	2.15
2,000.0	10.27	341.36	1,997.2	42.4	-23.0	-17.4	2.00	1.99	1.32
2,100.0	12.27	342.25	2,095.2	60.9	-29.1	-21.1	2.00	1.99	0.90
2,200.0	14.26	342.90	2,192.6	82.8	-36.0	-25.1	2.00	1.99	0.65
2,270.6	15.67	343.26	2,260.7	100.3	-41.3	-28.1	2.00	2.00	0.51
HOLD - 3703.1 at 2270.6 MD									
2,300.0	15.67	343.26	2,289.1	107.9	-43.6	-29.4	0.00	0.00	0.00
2,400.0	15.67	343.26	2,385.4	133.7	-51.3	-33.8	0.00	0.00	0.00
2,500.0	15.67	343.26	2,481.7	159.6	-59.1	-38.2	0.00	0.00	0.00
2,600.0	15.67	343.26	2,577.9	185.5	-66.9	-42.6	0.00	0.00	0.00
2,700.0	15.67	343.26	2,674.2	211.3	-74.7	-47.0	0.00	0.00	0.00
2,800.0	15.67	343.26	2,770.5	237.2	-82.5	-51.4	0.00	0.00	0.00
2,900.0	15.67	343.26	2,866.8	263.1	-90.2	-55.8	0.00	0.00	0.00
3,000.0	15.67	343.26	2,963.1	288.9	-98.0	-60.2	0.00	0.00	0.00
3,100.0	15.67	343.26	3,059.4	314.8	-105.8	-64.6	0.00	0.00	0.00
3,200.0	15.67	343.26	3,155.6	340.6	-113.6	-69.0	0.00	0.00	0.00
3,300.0	15.67	343.26	3,251.9	366.5	-121.4	-73.4	0.00	0.00	0.00
3,400.0	15.67	343.26	3,348.2	392.4	-129.1	-77.8	0.00	0.00	0.00
3,500.0	15.67	343.26	3,444.5	418.2	-136.9	-82.2	0.00	0.00	0.00
3,600.0	15.67	343.26	3,540.8	444.1	-144.7	-86.6	0.00	0.00	0.00
3,700.0	15.67	343.26	3,637.1	470.0	-152.5	-91.0	0.00	0.00	0.00
3,800.0	15.67	343.26	3,733.3	495.8	-160.2	-95.4	0.00	0.00	0.00
3,900.0	15.67	343.26	3,829.6	521.7	-168.0	-99.8	0.00	0.00	0.00
4,000.0	15.67	343.26	3,925.9	547.6	-175.8	-104.2	0.00	0.00	0.00
4,100.0	15.67	343.26	4,022.2	573.4	-183.6	-108.6	0.00	0.00	0.00
4,200.0	15.67	343.26	4,118.5	599.3	-191.4	-113.0	0.00	0.00	0.00
4,300.0	15.67	343.26	4,214.8	625.2	-199.1	-117.4	0.00	0.00	0.00
4,400.0	15.67	343.26	4,311.0	651.0	-206.9	-121.8	0.00	0.00	0.00
4,500.0	15.67	343.26	4,407.3	676.9	-214.7	-126.2	0.00	0.00	0.00
4,600.0	15.67	343.26	4,503.6	702.7	-222.5	-130.6	0.00	0.00	0.00
4,700.0	15.67	343.26	4,599.9	728.6	-230.3	-135.0	0.00	0.00	0.00
4,800.0	15.67	343.26	4,696.2	754.5	-238.0	-139.4	0.00	0.00	0.00

Intrepid
Planning Report

Database:	EDM 5000.15 Single User Db	**Local Co-ordinate Reference:**	Well Cold Snack Fee #151H
Company:	Tap Rock Resources, LLC	**TVD Reference:**	KB @ 3488.0usft
Project:	Eddy County, NM (NAD 83 NME)	**MD Reference:**	KB @ 3488.0usft
Site:	(Cold Snack Fee) Sec-14_T-25-S_R-25-E	**North Reference:**	Grid
Well:	Cold Snack Fee #151H	**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)
4,900.0	15.67	343.26	4,792.5	780.3	-245.8	-143.8	0.00	0.00	0.00
5,000.0	15.67	343.26	4,888.7	806.2	-253.6	-148.2	0.00	0.00	0.00
5,100.0	15.67	343.26	4,985.0	832.1	-261.4	-152.6	0.00	0.00	0.00
5,200.0	15.67	343.26	5,081.3	857.9	-269.2	-157.0	0.00	0.00	0.00
5,300.0	15.67	343.26	5,177.6	883.8	-276.9	-161.4	0.00	0.00	0.00
5,400.0	15.67	343.26	5,273.9	909.7	-284.7	-165.8	0.00	0.00	0.00
5,500.0	15.67	343.26	5,370.2	935.5	-292.5	-170.2	0.00	0.00	0.00
5,600.0	15.67	343.26	5,466.4	961.4	-300.3	-174.6	0.00	0.00	0.00
5,700.0	15.67	343.26	5,562.7	987.3	-308.0	-179.0	0.00	0.00	0.00
5,800.0	15.67	343.26	5,659.0	1,013.1	-315.8	-183.4	0.00	0.00	0.00
5,900.0	15.67	343.26	5,755.3	1,039.0	-323.6	-187.8	0.00	0.00	0.00
5,973.7	15.67	343.26	5,826.3	1,058.0	-329.3	-191.0	0.00	0.00	0.00
DROP - -2.00									
6,000.0	15.14	343.26	5,851.6	1,064.7	-331.3	-192.1	2.00	-2.00	0.00
6,100.0	13.14	343.26	5,948.6	1,088.1	-338.4	-196.1	2.00	-2.00	0.00
6,200.0	11.14	343.26	6,046.3	1,108.3	-344.4	-199.5	2.00	-2.00	0.00
6,300.0	9.14	343.26	6,144.8	1,125.1	-349.5	-202.4	2.00	-2.00	0.00
6,400.0	7.14	343.26	6,243.7	1,138.7	-353.6	-204.7	2.00	-2.00	0.00
6,500.0	5.14	343.26	6,343.2	1,149.0	-356.7	-206.5	2.00	-2.00	0.00
6,600.0	3.14	343.26	6,442.9	1,155.9	-358.8	-207.6	2.00	-2.00	0.00
6,700.0	1.14	343.26	6,542.8	1,159.5	-359.8	-208.2	2.00	-2.00	0.00
6,757.2	0.00	360.00	6,600.0	1,160.0	-360.0	-208.3	2.00	-2.00	0.00
HOLD - 71.0 at 6757.2 MD									
6,800.0	0.00	0.00	6,642.8	1,160.0	-360.0	-208.3	0.00	0.00	0.00
6,828.2	0.00	0.00	6,671.0	1,160.0	-360.0	-208.3	0.00	0.00	0.00
KOP - Build 10.00									
6,850.0	2.18	82.80	6,692.8	1,160.1	-359.6	-207.9	10.00	10.00	0.00
6,900.0	7.18	82.80	6,742.6	1,160.6	-355.5	-203.8	10.00	10.00	0.00
6,950.0	12.18	82.80	6,791.9	1,161.6	-347.2	-195.4	10.00	10.00	0.00
7,000.0	17.18	82.80	6,840.3	1,163.2	-334.6	-182.8	10.00	10.00	0.00
7,050.0	22.18	82.80	6,887.3	1,165.3	-317.9	-165.9	10.00	10.00	0.00
7,100.0	27.18	82.80	6,932.7	1,167.9	-297.2	-145.1	10.00	10.00	0.00
7,150.0	32.18	82.80	6,976.2	1,171.0	-272.7	-120.3	10.00	10.00	0.00
7,200.0	37.18	82.80	7,017.3	1,174.6	-244.4	-91.9	10.00	10.00	0.00
7,250.0	42.18	82.80	7,055.7	1,178.6	-212.8	-59.9	10.00	10.00	0.00
7,300.0	47.18	82.80	7,091.3	1,183.0	-177.9	-24.8	10.00	10.00	0.00
7,350.0	52.18	82.80	7,123.6	1,187.8	-140.1	13.3	10.00	10.00	0.00
7,400.0	57.18	82.80	7,152.5	1,192.9	-99.6	54.1	10.00	10.00	0.00
7,450.0	62.18	82.80	7,177.7	1,198.3	-56.8	97.2	10.00	10.00	0.00
7,500.0	67.18	82.80	7,199.1	1,204.0	-12.0	142.4	10.00	10.00	0.00
7,550.0	72.18	82.80	7,216.5	1,209.8	34.5	189.3	10.00	10.00	0.00
7,600.0	77.18	82.80	7,229.7	1,215.9	82.3	237.5	10.00	10.00	0.00
7,650.0	82.18	82.80	7,238.6	1,222.0	131.1	286.7	10.00	10.00	0.00
7,700.0	87.18	82.80	7,243.3	1,228.3	180.5	336.5	10.00	10.00	0.00
7,713.2	88.50	82.80	7,243.8	1,229.9	193.6	349.6	10.00	10.00	0.00
EOC/TRN - DLS 2.00 TFO 90.11									
7,800.0	88.50	84.54	7,246.0	1,239.5	279.8	436.4	2.00	0.00	2.00
7,900.0	88.50	86.54	7,248.7	1,247.3	379.5	536.2	2.00	0.00	2.00
8,000.0	88.50	88.54	7,251.3	1,251.6	479.3	635.8	2.00	0.00	2.00
8,055.3	88.50	89.65	7,252.7	1,252.5	534.6	690.8	2.00	0.00	2.00
Start 9619.9 hold at 8055.3 MD									
8,100.0	88.50	89.65	7,253.9	1,252.7	579.3	735.1	0.00	0.00	0.00
8,200.0	88.50	89.65	7,256.5	1,253.3	679.3	834.3	0.00	0.00	0.00

Intrepid
Planning Report

Database:	EDM 5000.15 Single User Db	**Local Co-ordinate Reference:**	Well Cold Snack Fee #151H
Company:	Tap Rock Resources, LLC	**TVD Reference:**	KB @ 3488.0usft
Project:	Eddy County, NM (NAD 83 NME)	**MD Reference:**	KB @ 3488.0usft
Site:	(Cold Snack Fee) Sec-14_T-25-S_R-25-E	**North Reference:**	Grid
Well:	Cold Snack Fee #151H	**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)
8,300.0	88.50	89.65	7,259.2	1,254.0	779.2	933.5	0.00	0.00	0.00
8,400.0	88.50	89.65	7,261.8	1,254.6	879.2	1,032.8	0.00	0.00	0.00
8,500.0	88.50	89.65	7,264.4	1,255.2	979.2	1,132.0	0.00	0.00	0.00
8,600.0	88.50	89.65	7,267.0	1,255.8	1,079.1	1,231.2	0.00	0.00	0.00
8,700.0	88.50	89.65	7,269.6	1,256.4	1,179.1	1,330.4	0.00	0.00	0.00
8,800.0	88.50	89.65	7,272.3	1,257.1	1,279.1	1,429.6	0.00	0.00	0.00
8,900.0	88.50	89.65	7,274.9	1,257.7	1,379.0	1,528.9	0.00	0.00	0.00
9,000.0	88.50	89.65	7,277.5	1,258.3	1,479.0	1,628.1	0.00	0.00	0.00
9,100.0	88.50	89.65	7,280.1	1,258.9	1,578.9	1,727.3	0.00	0.00	0.00
9,200.0	88.50	89.65	7,282.8	1,259.5	1,678.9	1,826.5	0.00	0.00	0.00
9,300.0	88.50	89.65	7,285.4	1,260.2	1,778.9	1,925.7	0.00	0.00	0.00
9,400.0	88.50	89.65	7,288.0	1,260.8	1,878.8	2,024.9	0.00	0.00	0.00
9,500.0	88.50	89.65	7,290.6	1,261.4	1,978.8	2,124.2	0.00	0.00	0.00
9,600.0	88.50	89.65	7,293.2	1,262.0	2,078.8	2,223.4	0.00	0.00	0.00
9,700.0	88.50	89.65	7,295.9	1,262.6	2,178.7	2,322.6	0.00	0.00	0.00
9,800.0	88.50	89.65	7,298.5	1,263.3	2,278.7	2,421.8	0.00	0.00	0.00
9,900.0	88.50	89.65	7,301.1	1,263.9	2,378.7	2,521.0	0.00	0.00	0.00
10,000.0	88.50	89.65	7,303.7	1,264.5	2,478.6	2,620.3	0.00	0.00	0.00
10,100.0	88.50	89.65	7,306.4	1,265.1	2,578.6	2,719.5	0.00	0.00	0.00
10,200.0	88.50	89.65	7,309.0	1,265.7	2,678.5	2,818.7	0.00	0.00	0.00
10,300.0	88.50	89.65	7,311.6	1,266.3	2,778.5	2,917.9	0.00	0.00	0.00
10,400.0	88.50	89.65	7,314.2	1,267.0	2,878.5	3,017.1	0.00	0.00	0.00
10,500.0	88.50	89.65	7,316.8	1,267.6	2,978.4	3,116.3	0.00	0.00	0.00
10,600.0	88.50	89.65	7,319.5	1,268.2	3,078.4	3,215.6	0.00	0.00	0.00
10,700.0	88.50	89.65	7,322.1	1,268.8	3,178.4	3,314.8	0.00	0.00	0.00
10,800.0	88.50	89.65	7,324.7	1,269.4	3,278.3	3,414.0	0.00	0.00	0.00
10,900.0	88.50	89.65	7,327.3	1,270.1	3,378.3	3,513.2	0.00	0.00	0.00
11,000.0	88.50	89.65	7,330.0	1,270.7	3,478.3	3,612.4	0.00	0.00	0.00
11,100.0	88.50	89.65	7,332.6	1,271.3	3,578.2	3,711.7	0.00	0.00	0.00
11,200.0	88.50	89.65	7,335.2	1,271.9	3,678.2	3,810.9	0.00	0.00	0.00
11,300.0	88.50	89.65	7,337.8	1,272.5	3,778.1	3,910.1	0.00	0.00	0.00
11,400.0	88.50	89.65	7,340.5	1,273.2	3,878.1	4,009.3	0.00	0.00	0.00
11,500.0	88.50	89.65	7,343.1	1,273.8	3,978.1	4,108.5	0.00	0.00	0.00
11,600.0	88.50	89.65	7,345.7	1,274.4	4,078.0	4,207.7	0.00	0.00	0.00
11,700.0	88.50	89.65	7,348.3	1,275.0	4,178.0	4,307.0	0.00	0.00	0.00
11,800.0	88.50	89.65	7,350.9	1,275.6	4,278.0	4,406.2	0.00	0.00	0.00
11,900.0	88.50	89.65	7,353.6	1,276.2	4,377.9	4,505.4	0.00	0.00	0.00
12,000.0	88.50	89.65	7,356.2	1,276.9	4,477.9	4,604.6	0.00	0.00	0.00
12,100.0	88.50	89.65	7,358.8	1,277.5	4,577.9	4,703.8	0.00	0.00	0.00
12,200.0	88.50	89.65	7,361.4	1,278.1	4,677.8	4,803.1	0.00	0.00	0.00
12,300.0	88.50	89.65	7,364.1	1,278.7	4,777.8	4,902.3	0.00	0.00	0.00
12,400.0	88.50	89.65	7,366.7	1,279.3	4,877.7	5,001.5	0.00	0.00	0.00
12,500.0	88.50	89.65	7,369.3	1,280.0	4,977.7	5,100.7	0.00	0.00	0.00
12,600.0	88.50	89.65	7,371.9	1,280.6	5,077.7	5,199.9	0.00	0.00	0.00
12,700.0	88.50	89.65	7,374.5	1,281.2	5,177.6	5,299.1	0.00	0.00	0.00
12,800.0	88.50	89.65	7,377.2	1,281.8	5,277.6	5,398.4	0.00	0.00	0.00
12,900.0	88.50	89.65	7,379.8	1,282.4	5,377.6	5,497.6	0.00	0.00	0.00
13,000.0	88.50	89.65	7,382.4	1,283.1	5,477.5	5,596.8	0.00	0.00	0.00
13,100.0	88.50	89.65	7,385.0	1,283.7	5,577.5	5,696.0	0.00	0.00	0.00
13,200.0	88.50	89.65	7,387.7	1,284.3	5,677.5	5,795.2	0.00	0.00	0.00
13,300.0	88.50	89.65	7,390.3	1,284.9	5,777.4	5,894.5	0.00	0.00	0.00
13,400.0	88.50	89.65	7,392.9	1,285.5	5,877.4	5,993.7	0.00	0.00	0.00
13,500.0	88.50	89.65	7,395.5	1,286.2	5,977.3	6,092.9	0.00	0.00	0.00
13,600.0	88.50	89.65	7,398.1	1,286.8	6,077.3	6,192.1	0.00	0.00	0.00

Intrepid
Planning Report

Database:	EDM 5000.15 Single User Db	**Local Co-ordinate Reference:**	Well Cold Snack Fee #151H
Company:	Tap Rock Resources, LLC	**TVD Reference:**	KB @ 3488.0usft
Project:	Eddy County, NM (NAD 83 NME)	**MD Reference:**	KB @ 3488.0usft
Site:	(Cold Snack Fee) Sec-14_T-25-S_R-25-E	**North Reference:**	Grid
Well:	Cold Snack Fee #151H	**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)
13,700.0	88.50	89.65	7,400.8	1,287.4	6,177.3	6,291.3	0.00	0.00	0.00
13,800.0	88.50	89.65	7,403.4	1,288.0	6,277.2	6,390.6	0.00	0.00	0.00
13,900.0	88.50	89.65	7,406.0	1,288.6	6,377.2	6,489.8	0.00	0.00	0.00
14,000.0	88.50	89.65	7,408.6	1,289.2	6,477.2	6,589.0	0.00	0.00	0.00
14,100.0	88.50	89.65	7,411.3	1,289.9	6,577.1	6,688.2	0.00	0.00	0.00
14,200.0	88.50	89.65	7,413.9	1,290.5	6,677.1	6,787.4	0.00	0.00	0.00
14,300.0	88.50	89.65	7,416.5	1,291.1	6,777.1	6,886.6	0.00	0.00	0.00
14,400.0	88.50	89.65	7,419.1	1,291.7	6,877.0	6,985.9	0.00	0.00	0.00
14,500.0	88.50	89.65	7,421.8	1,292.3	6,977.0	7,085.1	0.00	0.00	0.00
14,600.0	88.50	89.65	7,424.4	1,293.0	7,076.9	7,184.3	0.00	0.00	0.00
14,700.0	88.50	89.65	7,427.0	1,293.6	7,176.9	7,283.5	0.00	0.00	0.00
14,800.0	88.50	89.65	7,429.6	1,294.2	7,276.9	7,382.7	0.00	0.00	0.00
14,900.0	88.50	89.65	7,432.2	1,294.8	7,376.8	7,482.0	0.00	0.00	0.00
15,000.0	88.50	89.65	7,434.9	1,295.4	7,476.8	7,581.2	0.00	0.00	0.00
15,100.0	88.50	89.65	7,437.5	1,296.1	7,576.8	7,680.4	0.00	0.00	0.00
15,200.0	88.50	89.65	7,440.1	1,296.7	7,676.7	7,779.6	0.00	0.00	0.00
15,300.0	88.50	89.65	7,442.7	1,297.3	7,776.7	7,878.8	0.00	0.00	0.00
15,400.0	88.50	89.65	7,445.4	1,297.9	7,876.7	7,978.0	0.00	0.00	0.00
15,500.0	88.50	89.65	7,448.0	1,298.5	7,976.6	8,077.3	0.00	0.00	0.00
15,600.0	88.50	89.65	7,450.6	1,299.2	8,076.6	8,176.5	0.00	0.00	0.00
15,700.0	88.50	89.65	7,453.2	1,299.8	8,176.5	8,275.7	0.00	0.00	0.00
15,800.0	88.50	89.65	7,455.8	1,300.4	8,276.5	8,374.9	0.00	0.00	0.00
15,900.0	88.50	89.65	7,458.5	1,301.0	8,376.5	8,474.1	0.00	0.00	0.00
16,000.0	88.50	89.65	7,461.1	1,301.6	8,476.4	8,573.4	0.00	0.00	0.00
16,100.0	88.50	89.65	7,463.7	1,302.2	8,576.4	8,672.6	0.00	0.00	0.00
16,200.0	88.50	89.65	7,466.3	1,302.9	8,676.4	8,771.8	0.00	0.00	0.00
16,300.0	88.50	89.65	7,469.0	1,303.5	8,776.3	8,871.0	0.00	0.00	0.00
16,400.0	88.50	89.65	7,471.6	1,304.1	8,876.3	8,970.2	0.00	0.00	0.00
16,500.0	88.50	89.65	7,474.2	1,304.7	8,976.3	9,069.4	0.00	0.00	0.00
16,600.0	88.50	89.65	7,476.8	1,305.3	9,076.2	9,168.7	0.00	0.00	0.00
16,700.0	88.50	89.65	7,479.4	1,306.0	9,176.2	9,267.9	0.00	0.00	0.00
16,800.0	88.50	89.65	7,482.1	1,306.6	9,276.1	9,367.1	0.00	0.00	0.00
16,900.0	88.50	89.65	7,484.7	1,307.2	9,376.1	9,466.3	0.00	0.00	0.00
17,000.0	88.50	89.65	7,487.3	1,307.8	9,476.1	9,565.5	0.00	0.00	0.00
17,100.0	88.50	89.65	7,489.9	1,308.4	9,576.0	9,664.8	0.00	0.00	0.00
17,200.0	88.50	89.65	7,492.6	1,309.1	9,676.0	9,764.0	0.00	0.00	0.00
17,300.0	88.50	89.65	7,495.2	1,309.7	9,776.0	9,863.2	0.00	0.00	0.00
17,400.0	88.50	89.65	7,497.8	1,310.3	9,875.9	9,962.4	0.00	0.00	0.00
17,500.0	88.50	89.65	7,500.4	1,310.9	9,975.9	10,061.6	0.00	0.00	0.00
17,600.0	88.50	89.65	7,503.1	1,311.5	10,075.9	10,160.9	0.00	0.00	0.00
17,675.2	88.50	89.65	7,505.0	1,312.0	10,151.0	10,235.4	0.00	0.00	0.00
TD at 17675.2									

Intrepid
Planning Report

Database:	EDM 5000.15 Single User Db	**Local Co-ordinate Reference:**	Well Cold Snack Fee #151H
Company:	Tap Rock Resources, LLC	**TVD Reference:**	KB @ 3488.0usft
Project:	Eddy County, NM (NAD 83 NME)	**MD Reference:**	KB @ 3488.0usft
Site:	(Cold Snack Fee) Sec-14_T-25-S_R-25-E	**North Reference:**	Grid
Well:	Cold Snack Fee #151H	**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
FTP (Cold Snack Fee - plan misses target center by 220.8usft at 7300.0usft MD (7091.3 TVD, 1183.0 N, -177.9 E) - Point	0.00	360.00	7,237.0	1,247.0	-331.0	413,245.00	528,508.00	32° 8' 9.897 N	104° 22' 29.214 W
PBHL (Cold Snack Fe - plan hits target center - Rectangle (sides W100.0 H10,482.0 D30.0)	1.50	89.65	7,505.0	1,312.0	10,151.0	413,310.00	538,990.00	32° 8' 10.564 N	104° 20' 27.303 W
LTP (Cold Snack Fee - plan misses target center by 5.5usft at 17600.0usft MD (7503.1 TVD, 1311.5 N, 10075.9 E) - Point	0.00	0.01	7,505.0	1,311.0	10,081.0	413,309.00	538,920.00	32° 8' 10.554 N	104° 20' 28.117 W

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
414.0	414.0	Top Salt			
1,240.0	1,240.0	Base Salt			
1,410.0	1,410.0	Delaware Mountain Gp			
1,420.0	1,420.0	Lamar			
1,480.0	1,480.0	Bell Canyon			
1,525.0	1,525.0	Ramsey Sand			
2,363.3	2,350.0	Cherry Canyon			
3,318.8	3,270.0	Brushy Canyon			
5,074.0	4,960.0	Bone Spring Lime			
5,136.3	5,020.0	Upper Avalon			
5,453.1	5,325.0	Middle/Lower Avalon			
5,962.0	5,815.0	1st Bone Spring Sand			
6,178.2	6,025.0	2nd Bone Spring Carb			
6,552.0	6,395.0	2nd Bone Spring Sand			
6,842.2	6,685.0	3rd Bone Spring Carb			

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
1,200.0	1,200.0	0.0	0.0	DRIFT WEST - Build 1.00
1,300.0	1,300.0	0.0	-0.9	HOLD - 200.0 at 1300.0 MD
1,500.0	1,500.0	0.0	-4.4	NUDGE - DLS 2.00 TFO 76.74
2,270.6	2,260.7	100.3	-41.3	HOLD - 3703.1 at 2270.6 MD
5,973.7	5,826.3	1,058.0	-329.3	DROP - -2.00
6,757.2	6,600.0	1,160.0	-360.0	HOLD - 71.0 at 6757.2 MD
6,828.2	6,671.0	1,160.0	-360.0	KOP - Build 10.00
7,713.2	7,243.8	1,229.9	193.6	EOC/TRN - DLS 2.00 TFO 90.11
8,055.3	7,252.7	1,252.5	534.6	Start 9619.9 hold at 8055.3 MD
17,675.2	7,505.0	1,312.0	10,151.0	TD at 17675.2

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

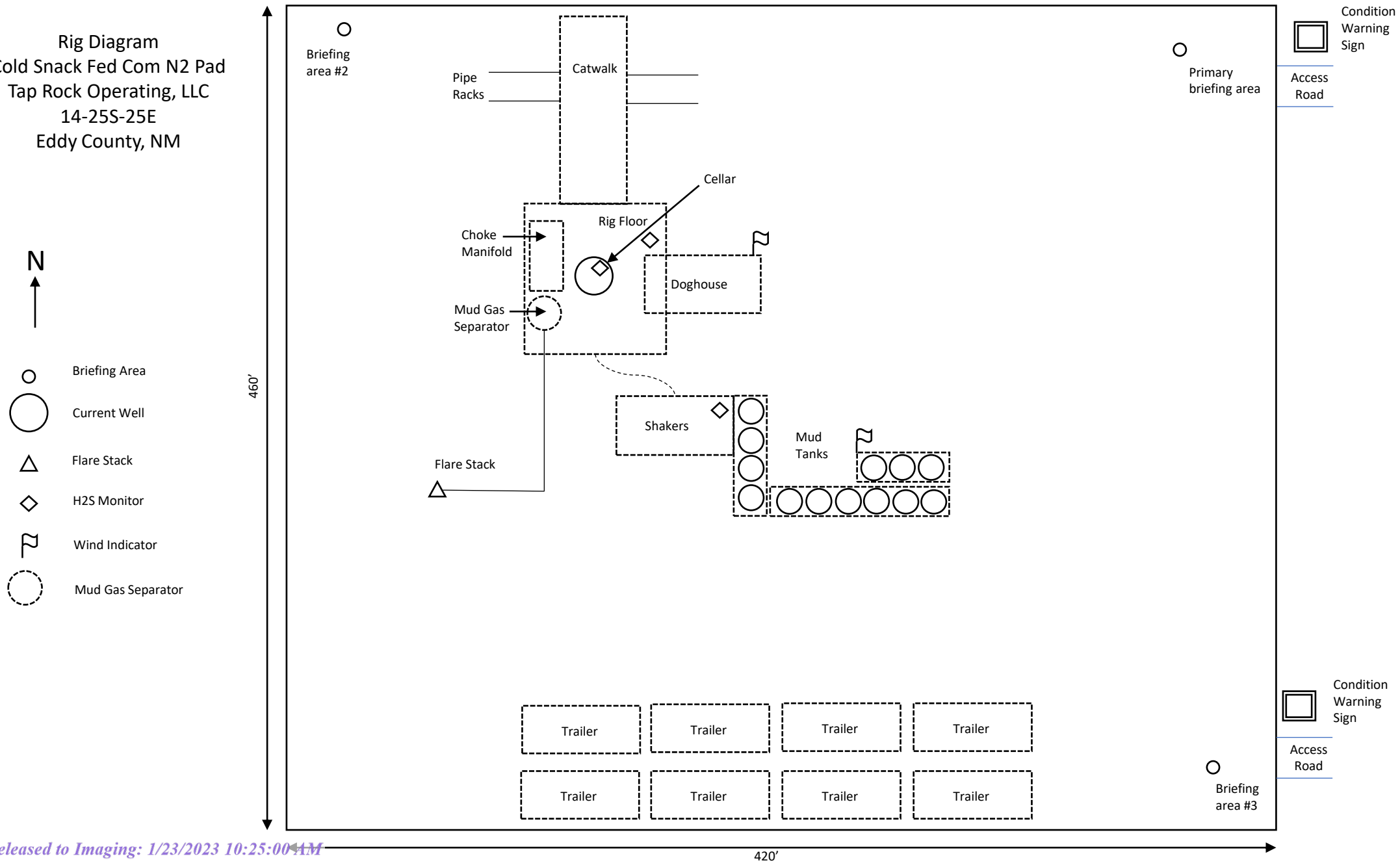
8 Drilling contractor supervisor will be required to be familiar with the effects H2S has on tubulars good and other mechanical equipment

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	

Rig Diagram
Cold Snack Fed Com N2 Pad
Tap Rock Operating, LLC
14-25S-25E
Eddy County, NM



Tap Rock Operating LLC

Cold Snack Fed Com N2 Pad
H2S Contingency Plan:
2 Mile Radius Map

Sec. 14, Township 25S, Range 25E
Eddy County, New Mexico

Well Pad Location

1:27,000

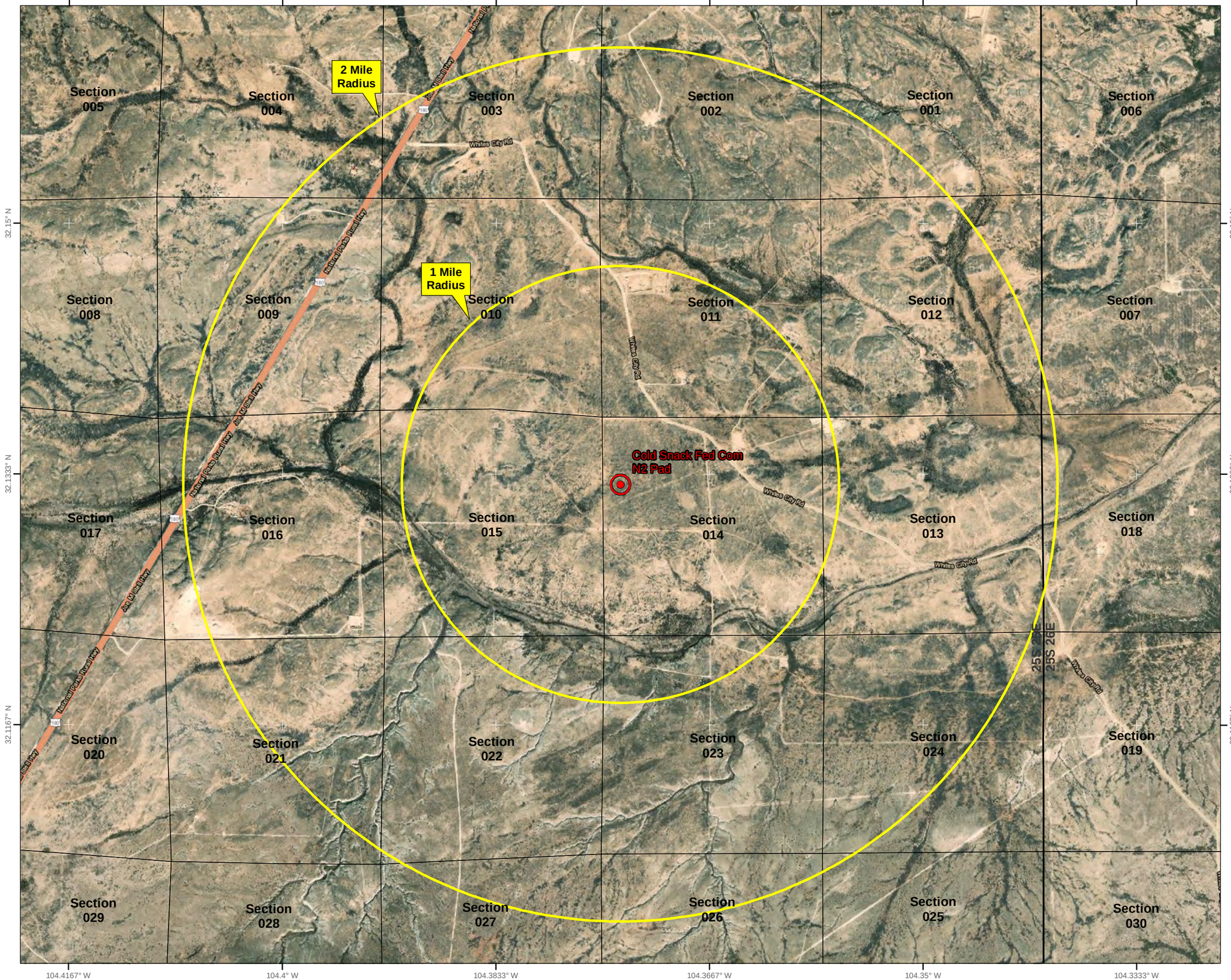
0 0.25 0.5 1
Miles

N

NAD 1983 New Mexico State Plane East
FIPS 3001 Feet

PERMITS WEST

Prepared by Permits West, Inc., June 11, 2022
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
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 178406

COMMENTS

Operator: TAP ROCK OPERATING, LLC 523 Park Point Drive Golden, CO 80401	OGRID: 372043
	Action Number: 178406
	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

COMMENTS

Created By	Comment	Comment Date
kpickford	Defining well 30-015-53315 COLD SNACK FEDERAL COM #152H	1/23/2023

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
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Phone:(575) 748-1283 Fax:(575) 748-9720
District III
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Phone:(505) 334-6178 Fax:(505) 334-6170
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1220 S. St Francis Dr., Santa Fe, NM 87505
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State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 178406

CONDITIONS

Operator: TAP ROCK OPERATING, LLC 523 Park Point Drive Golden, CO 80401	OGRID: 372043
	Action Number: 178406
	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

CONDITIONS

Created By	Condition	Condition Date
kpickford	The correct pool has been noted on the APD. Subsequent sundries and paperwork must reflect this pool.	1/23/2023
kpickford	Notify OCD 24 hours prior to casing & cement	1/23/2023
kpickford	Will require a File As Drilled C-102 and a Directional Survey with the C-104	1/23/2023
kpickford	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	1/23/2023
kpickford	Cement is required to circulate on both surface and intermediate1 strings of casing	1/23/2023
kpickford	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	1/23/2023