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.: NMNM63016

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.: DOUBLE STAMP FED COM 135H

2. Name of Operator: TAP ROCK OPERATING LLC

9. API Well No.:

3a. Address: 602 PARK POINT DRIVE SUITE 200, GOLDEN, CO 8040

3b. Phone No. *(include area code)*: (720) 460-3316

10. Field and Pool, or Exploratory: SALT LAKE/WOLFCAMP

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

At surface: SESW / 433 FSL / 1949 FWL / LAT 32.5671177 / LONG -103.7391436

At proposed prod. zone: NWNW / 5 FNL / 1254 FWL / LAT 32.5949542 / LONG -103.7413953

11. Sec., T. R. M. or Blk. and Survey or Area: SEC 14/T20S/R32E/NMP

14. Distance in miles and direction from nearest town or post office*: 20 miles

12. County or Parish: LEA

13. State: NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any): 433 feet

16. No of acres in lease:

17. Spacing Unit dedicated to this well: 640.0

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.: 25 feet

19. Proposed Depth: 10823 feet / 21244 feet

20. BLM/BIA Bond No. in file: FED: NMB105800930

21. Elevations (Show whether DF, KDB, RT, GL, etc.): 3532 feet

22. Approximate date work will start*: 03/01/2024

23. Estimated duration: 60 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.
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
(Electronic Submission)	BRIAN WOOD / Ph: (720) 460-3316	06/12/2023

Title: Permitting Agent

Approved by *(Signature)*	Name *(Printed/Typed)*	Date
(Electronic Submission)	CODY LAYTON / Ph: (575) 234-5959	11/22/2024

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.

APPROVED WITH CONDITIONS

(Continued on page 2)

*(Instructions on page 2)

Approval Date: 11/22/2024

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
30-025-54013	53560	SALT LAKE; WOLFCAMP

[4]Property Code	[5]Property Name	[6]Well Number
336539	DOUBLE STAMP FED COM	135H

[7]OGRID No.	[8]Operator Name	[9]Elevation
#372043	TAP ROCK OPERATING, LLC.	3532'

[10]Surface Location

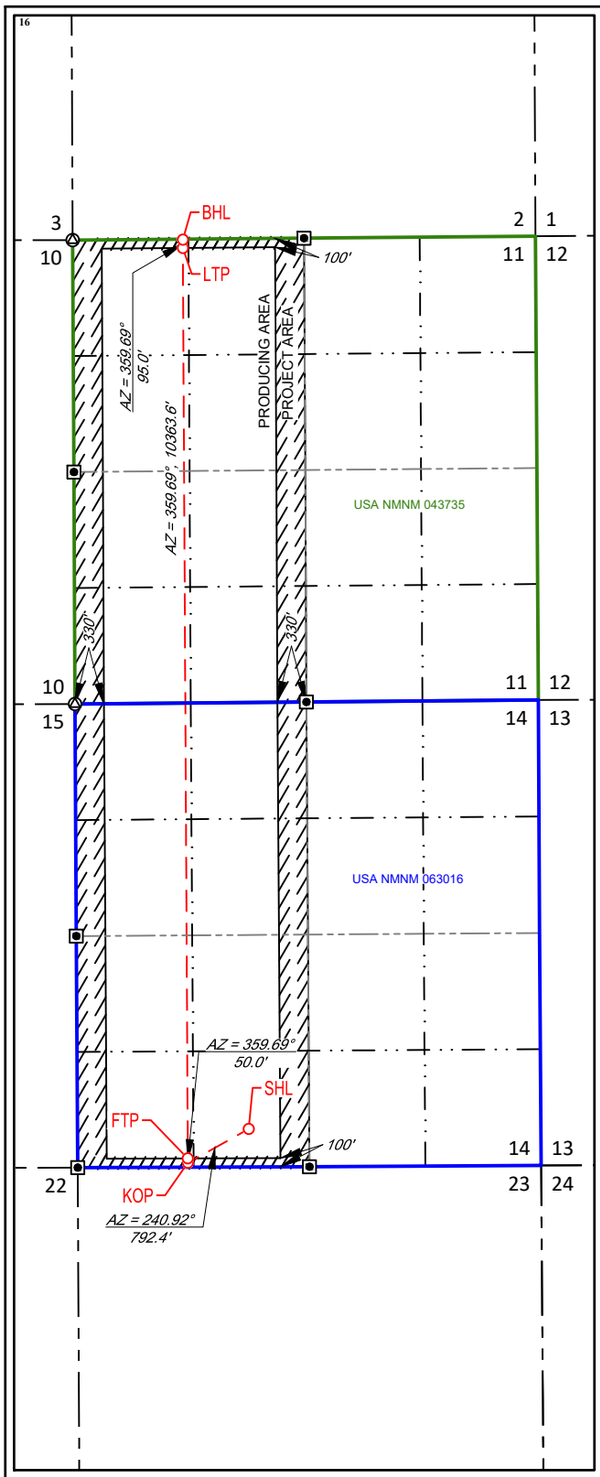
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	14	20-S	32-E	-	433'	SOUTH	1949'	WEST	LEA

[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
D	11	20-S	32-E	-	5'	NORTH	1254'	WEST	LEA

[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.



NEW MEXICO EAST
NAD 1983

SURFACE LOCATION (SHL)
433' FSL - SEC. 14
1949' FWL - SEC. 14
X=724388 Y=570559
LAT.: N 32.5671177
LONG.: W 103.7391436

KICK OFF POINT (KOP)
50' FSL - SEC. 14
1254' FWL - SEC. 14
X=723695 Y=570174
LAT.: N 32.5660697
LONG.: W 103.7413984

FIRST TAKE POINT (FTP)
100' FSL - SEC. 14
1254' FWL - SEC. 14
X=723695 Y=570224
LAT.: N 32.5662071
LONG.: W 103.7413984

LAST TAKE POINT (LTP)
100' FNL - SEC. 11
1254' FWL - SEC. 11
X=723638 Y=580587
LAT.: N 32.5946931
LONG.: W 103.7413953

BOTTOM HOLE LOCATION (BHL)
5' FNL - SEC. 11
1254' FWL - SEC. 11
X=723638 Y=580682
LAT.: N 32.5949542
LONG.: W 103.7413953

[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 — 06-09-23
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.

04/04/2023
Date of Survey
Signature and Seal of Professional Surveyor

RAMON DOMINGUEZ
NEW MEXICO
24508
PROFESSIONAL SURVEYOR

6/2/2023 10:56:59 AM
Certificate Number

-N-

S:\SURVEY\TAPROCK\DOUBLE_STAMP_UNIT\FINAL_PRODUCTS\LO_DOUBLE_STAMP_FED_COM_135H_REV2.DWG 6/2/2023 10:56:59 AM 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:** 3725043 **Date:** 11/18/2024

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 BBL/D
SEE ATTACHED						

IV. Central Delivery Point Name: DOUBLE STAMP E2 CTB [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
SEE ATTACHED						

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: William Ramsey
Printed Name: Bill Ramsey
Title: Sr. Environmental & Regulatory Specialist
E-mail Address: bramsey@taprk.com
Date: 11/18/2024
Phone: (720) 238-2787

OIL CONSERVATION DIVISION **(Only applicable when submitted as a standalone form)**
Approved By:
Title:
Approval Date:
Conditions of Approval:

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 BBL/D
DOUBLE STAMP FED COM 111H	TBD	N Sec 14 20-S 32-E	574' FSL / 1590' FWL	515	810	1770
DOUBLE STAMP FED COM 112H	TBD	N Sec 14 20-S 32-E	573' FSL / 1720' FWL	515	810	1770
DOUBLE STAMP FED COM 115H	TBD	N Sec 14 20-S 32-E	574' FSL / 1615' FWL	515	810	1770
DOUBLE STAMP FED COM 121H	TBD	N Sec 14 20-S 32-E	549' FSL / 1589' FWL	515	810	1770
DOUBLE STAMP FED COM 122H	TBD	N Sec 14 20-S 32-E	549' FSL / 1694' FWL	515	810	1770
DOUBLE STAMP FED COM 125H	TBD	N Sec 14 20-S 32-E	549' FSL / 1614' FWL	515	810	1770
DOUBLE STAMP FED COM 127H	TBD	N Sec 14 20-S 32-E	548' FSL / 1719' FWL	515	810	1770
DOUBLE STAMP FED COM 131H	TBD	N Sec 14 20-S 32-E	408' FSL / 1924' FWL	515	810	1770
DOUBLE STAMP FED COM 132H	TBD	N Sec 14 20-S 32-E	408' FSL / 1974' FWL	515	810	1770
DOUBLE STAMP FED COM 135H	TBD	N Sec 14 20-S 32-E	433' FSL / 1949' FWL	515	810	1770
DOUBLE STAMP FED COM 151H	TBD	N Sec 14 20-S 32-E	433' FSL / 1924' FWL	515	810	1770
DOUBLE STAMP FED COM 152H	TBD	N Sec 14 20-S 32-E	433' FSL / 1974' FWL	515	810	1770
DOUBLE STAMP FED COM 171H	TBD	N Sec 14 20-S 32-E	573' FSL / 1800' FWL	515	810	1770
DOUBLE STAMP FED COM 172H	TBD	N Sec 14 20-S 32-E	548' FSL / 1799' FWL	515	810	1770

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 Flowback Date	First Production Date
DOUBLE STAMP FED COM 111H	TBD	04/14/2025	06/24/2025	08/22/2025	09/04/2025	09/22/2025
DOUBLE STAMP FED COM 112H	TBD	04/14/2025	06/24/2025	08/22/2025	09/04/2025	09/22/2025
DOUBLE STAMP FED COM 115H	TBD	TBD	TBD	TBD	TBD	TBD
DOUBLE STAMP FED COM 121H	TBD	04/14/2025	06/24/2025	08/22/2025	09/04/2025	09/22/2025
DOUBLE STAMP FED COM 122H	TBD	04/14/2025	06/24/2025	08/22/2025	09/04/2025	09/22/2025
DOUBLE STAMP FED COM 125H	TBD	TBD	TBD	TBD	TBD	TBD
DOUBLE STAMP FED COM 127H	TBD	TBD	TBD	TBD	TBD	TBD
DOUBLE STAMP FED COM 131H	TBD	12/01/2026	02/01/2027	03/01/2027	03/15/2027	04/01/2027
DOUBLE STAMP FED COM 132H	TBD	12/01/2026	02/01/2027	03/01/2027	03/15/2027	04/01/2027
DOUBLE STAMP FED COM 135H	TBD	12/01/2026	02/01/2027	03/01/2027	03/15/2027	04/01/2027
DOUBLE STAMP FED COM 151H	TBD	TBD	TBD	TBD	TBD	TBD
DOUBLE STAMP FED COM 152H	TBD	TBD	TBD	TBD	TBD	TBD
DOUBLE STAMP FED COM 171H	TBD	TBD	TBD	TBD	TBD	TBD
DOUBLE STAMP FED COM 172H	TBD	TBD	TBD	TBD	TBD	TBD

Tap Rock Operating Natural Gas Management Plan

VI. **Separation Equipment:**

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 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 will be recompressed using a VRU compressor and this gas will also preferentially be directed to the gas sales pipeline. High-pressure steel oil tanks & water tanks will be fitted with 40 oz thief hatches as well as PRVs 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:**

- 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 emergencies as mentioned in the BLM Waste Prevention Rule.

- 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:**

- 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.

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

Drilling Plan Data Report
11/22/2024

APD ID: 10400092796
Submission Date: 06/12/2023

Operator Name: TAP ROCK OPERATING LLC

Well Name: DOUBLE STAMP FED COM
Well Number: 135H

Well Type: OIL WELL
Well Work Type: Drill

Highlighted data reflects the most recent changes

Show Final Text

Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical	Measured Depth	Lithologies	Mineral Resources	Producing Formatio
14549925	QUATERNARY	3532	0	0	OTHER : None	NONE	N
14549926	RUSTLER ANHYDRITE	2477	1055	1055	ANHYDRITE	NONE	N
14549927	TOP SALT	2117	1415	1415	SALT	OTHER : Salt	N
14549928	YATES	1012	2520	2520	SANDSTONE	NONE	N
14549942	CAPITAN REEF	572	2960	2960	OTHER : Carbonate	NONE	N
14549930	LAMAR	-1263	4795	4837	SANDSTONE	NATURAL GAS, OIL	N
14549929	DELAWARE	-1263	4795	4837	SANDSTONE	NONE	N
14549931	BELL CANYON	-1348	4880	4923	SANDSTONE	NATURAL GAS, OIL	N
14549932	CHERRY CANYON	-1538	5070	5116	SANDSTONE	NATURAL GAS, OIL	N
14549933	BRUSHY CANYON	-2398	5930	5988	SANDSTONE	NATURAL GAS, OIL	N
14549934	BONE SPRING LIME	-4258	7790	7849	LIMESTONE	NATURAL GAS, OIL	N
14549935	AVALON SAND	-4343	7875	7934	OTHER : Upper - Carbonate	NATURAL GAS, OIL	N
14549937	AVALON SAND	-5053	8585	8644	OTHER : Lower - Carbonate	NATURAL GAS, OIL	N
14549938	BONE SPRING 1ST	-5308	8840	8899	SANDSTONE	NATURAL GAS, OIL	N
14549936	AVALON SAND	-5628	9160	9219	OTHER : Middle - Carbonate	NATURAL GAS, OIL	N
14549939	BONE SPRING 2ND	-5628	9160	9219	OTHER : Carbonate	NATURAL GAS, OIL	N
14549924	BONE SPRING 2ND	-5853	9385	9444	SANDSTONE	NATURAL GAS, OIL	N

Operator Name: TAP ROCK OPERATING LLC

Well Name: DOUBLE STAMP FED COM **Well Number:** 135H

Formation ID	Formation Name	Elevation	True Vertical	Measured Depth	Lithologies	Mineral Resources	Producing Formatio
14549922	BONE SPRING 3RD	-6553	10085	10144	OTHER : Carbonate	NATURAL GAS, OIL	N
14549923	BONE SPRING 3RD	-6938	10470	10530	SANDSTONE	NATURAL GAS, OIL	N
14549941	WOLFCAMP	-7298	10830	10982	OTHER : A	NATURAL GAS, OIL	Y

Section 2 - Blowout Prevention

Pressure Rating (PSI): 5M **Rating Depth:** 15000

Equipment: At 21,244', 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 43 CFR 3172 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 43 CFR 3172. 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.

Requesting Variance? YES

Variance request: 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. If 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.

Testing Procedure: After surface casing is set and the BOP is nipped up, the BOP pressure tests will be made with a third party tester to 250 psi low, 5000 psi high, and the annular preventer will be tested to 250 psi low, 2500 psi high.

Choke Diagram Attachment:

Choke_Diagram_032918_20230611142927.pdf

BOP Diagram Attachment:

5M_BOP_Stack_20240723091121.pdf

Section 3 - Casing

Casing ID	String Type	Hole Size	Csg Size	Condition	Standard	Tapered String	Top Set MD	Bottom Set MD	Top Set TVD	Bottom Set TVD	Top Set MSL	Bottom Set MSL	Calculated casing length MD	Grade	Weight	Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
1	SURFACE	20	16.0	NEW	API	N	0	1080	0	1080	3532	2452	1080	J-55	75	BUTT	1.13	1.15	DRY	1.6	DRY	1.6

Operator Name: TAP ROCK OPERATING LLC

Well Name: DOUBLE STAMP FED COM **Well Number:** 135H

Casing ID	String Type	Hole Size	Csg Size	Condition	Standard	Tapered String	Top Set MD	Bottom Set MD	Top Set TVD	Bottom Set TVD	Top Set MSL	Bottom Set MSL	Calculated casing length MD	Grade	Weight	Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
2	INTERMEDIATE	14.75	11.75	NEW	API	N	0	2620	0	2570	3531	962	2620	J-55	47	BUTT	1.13	1.15	DRY	1.6	DRY	1.6
3	INTERMEDIATE	11	8.625	NEW	API	N	0	4687	0	4645	3531	-1113	4687	J-55	32	BUTT	1.13	1.15	DRY	1.6	DRY	1.6
4	PRODUCTION	7.875	5.5	NEW	NON API	N	0	21244	0	10823	3531	-7291	21244	P-110	20	OTHER - Geoconn	1.13	1.15	DRY	1.6	DRY	1.6

Casing Attachments

Casing ID: 1 **String** SURFACE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Casing_Design_Assumptions_20230611143004.pdf

Casing ID: 2 **String** INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Casing_Design_Assumptions_20230611143024.pdf

Operator Name: TAP ROCK OPERATING LLC

Well Name: DOUBLE STAMP FED COM **Well Number:** 135H

Casing Attachments

Casing ID: 3 **String** INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Casing_Design_Assumptions_20230611143058.pdf

Casing ID: 4 **String** PRODUCTION

Inspection Document:

Spec Document:

5.5in_Casing_Spec_20240723091203.pdf

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Casing_Design_Assumptions_20230611143133.pdf

Section 4 - Cement

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	780	623	1.72	13.5	1072	75	Class C	5% NCI + LCM
SURFACE	Tail		780	1110	310	1.33	1.48	412	75	Class C	5% NCI + LCM
INTERMEDIATE	Lead		0	1920	417	2.72	11	1135	65	Class C	Bentonite + 1% CaCL2 + 10% NaCl + LCM +1% MgO
INTERMEDIATE	Tail		1920	2620	265	1.72	13.5	455	50	Class C	Bentonite + 1% CaCL2 + 10% NaCl + LCM +1% MgO

Operator Name: TAP ROCK OPERATING LLC

Well Name: DOUBLE STAMP FED COM **Well Number:** 135H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
INTERMEDIATE	Lead		0	3687	419	2.72	11	1141	65	Class C	Bentonite + 1% CaCL2 + 8% NaCL + LCM
INTERMEDIATE	Tail		3687	4687	192	1.72	13.5	331	30	Class C	5% NaCL + LCM
PRODUCTION	Lead		5187	9905	268	3.38	10.5	905	0	Class C	Fluid Loss + Dispersant + Retarder + LCM
PRODUCTION	Tail		9905	21244	2394	1.44	13.2	3447	20	Class H	Fluid Loss + Dispersant + Retarder + LCM

Section 5 - Circulating Medium

Mud System Type: Closed

Will an air or gas system be Used? NO

Description of the equipment for the circulating system in accordance with Onshore Order #2:

Diagram of the equipment for the circulating system in accordance with Onshore Order #2:

Describe what will be on location to control well or mitigate other conditions: 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.

Describe the mud monitoring system utilized: Electronic Pason mud monitor system complying with 43 CFR 3172 will be used.

Circulating Medium Table

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	PH	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
0	1080	OTHER : Fresh Water Spud Mud	8.4	8.4							
1080	2620	OTHER : Brine Water	10	10							
2620	4687	OTHER : Fresh Water/Cut Brine	9	9							

Operator Name: TAP ROCK OPERATING LLC

Well Name: DOUBLE STAMP FED COM **Well Number:** 135H

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	PH	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
4687	21244	OTHER : Fresh Water/Cut Brine	9	9							

Section 6 - Test, Logging, Coring

List of production tests including testing procedures, equipment and safety measures:

Electric Logging Program: No open-hole logs are planned at this time. 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. C

List of open and cased hole logs run in the well:

GAMMA RAY LOG,MUD LOG/GEOLOGICAL LITHOLOGY LOG,

Coring operation description for the well:

No DSTs or cores are planned at this time.

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 5065 **Anticipated Surface Pressure:** 2662

Anticipated Bottom Hole Temperature(F): 160

Anticipated abnormal pressures, temperatures, or potential geologic hazards? NO

Describe:

Contingency Plans geoharzards description:

Contingency Plans geohazards

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations

DS_W2_H2S_Plan_20230611143434.pdf

Operator Name: TAP ROCK OPERATING LLC

Well Name: DOUBLE STAMP FED COM **Well Number:** 135H

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

DS_135H_Directional_Plan_REDC_20230611144253.pdf

Other proposed operations facets description:

Other proposed operations facets attachment:

DS_135H_Anticollision_Report_20230611143648.pdf
Wellhead_Diagram_4string_20230611143706.pdf
CoFlex_Certs_Rev_20240723091238.pdf
DS_135H_Drill_Plan_Rev2_20240917101620.pdf
DS_WBD_Q111_Rev_20241014101854.pdf

Other Variance attachment:

TAP ROCK RESOURCES

Azimuths to Grid North
True North: -0.32°
Magnetic North: 6.10°

Magnetic Field
Strength: 47519.0nT
Dip Angle: 60.27°
Date: 04/25/2023
Model: IGRF2015

To convert a Magnetic Direction to a Grid Direction, Add 6.10°

Tap Rock Resources, LLC
Project: Lea County, NM (NAD 83 NME)
Site: (Double Stamp Fed) Sec-14_T-20-S_R-32-E
Well: Double Stamp Fed Com #135H
Wellbore: OWB
Design: Plan #1
Lat: 32° 34' 1.623 N
Long: 103° 44' 20.915 W
Pad GL: 3532.0
KB: KB @ 3558.0usft

INTREPID

WELL DETAILS: Double Stamp Fed Com #135H

3532.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	570559.00	724388.00	32° 34' 1.623 N	103° 44' 20.915 W

SECTION DETAILS

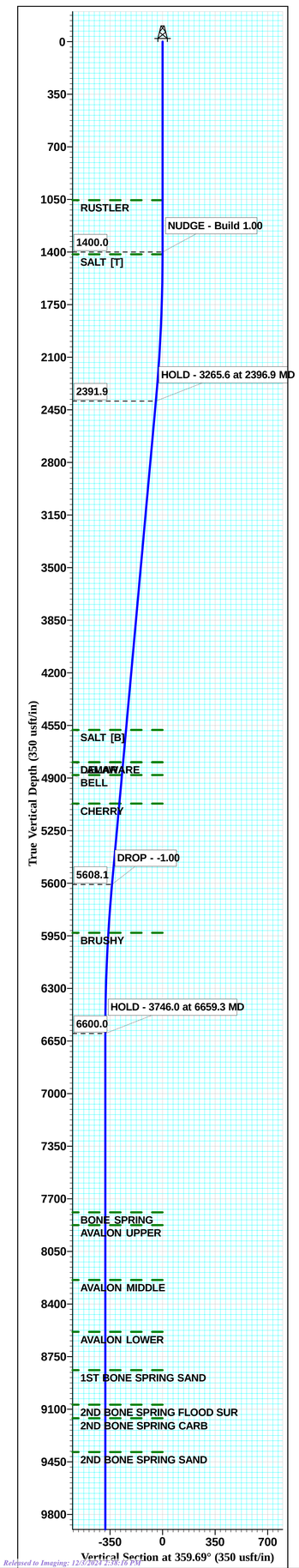
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
1400.0	0.00	0.00	1400.0	0.0	0.0	0.00	0.00	0.0	NUDGE - Build 1.00
2396.9	9.97	238.57	2391.9	-45.1	-73.8	1.00	238.57	-44.7	HOLD - 3265.6 at 2396.9 MD
5662.5	9.97	238.57	5608.1	-339.9	-556.2	0.00	0.00	-336.9	DROP - -1.00
6659.3	0.00	0.00	6600.0	-385.0	-630.0	1.00	180.00	-381.6	HOLD - 3746.0 at 6659.3 MD
10405.3	0.00	0.00	10346.0	-385.0	-630.0	0.00	0.00	-381.6	KOP - Build 10.00
11310.8	90.55	354.60	10918.9	190.9	-684.4	10.00	354.60	194.6	EOC/TRN - DLS 2.00 TFO 89.99
11565.2	90.55	359.69	10916.5	444.8	-697.1	2.00	89.99	448.6	Start 9678.8 hold at 11565.2 MD
21244.0	90.55	359.69	10823.8	10123.0	-750.0	0.00	0.00	10126.9	TD at 21244.0

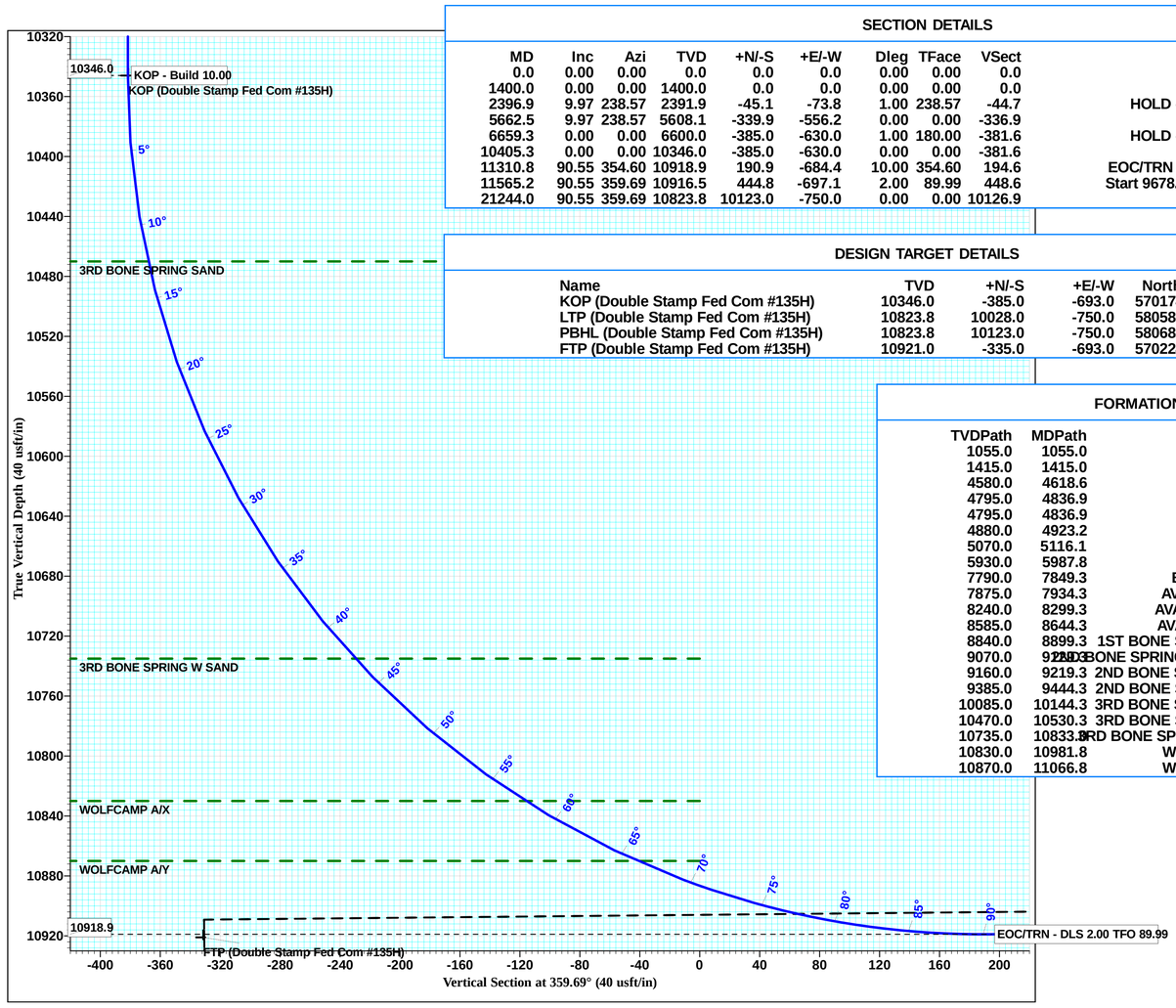
DESIGN TARGET DETAILS

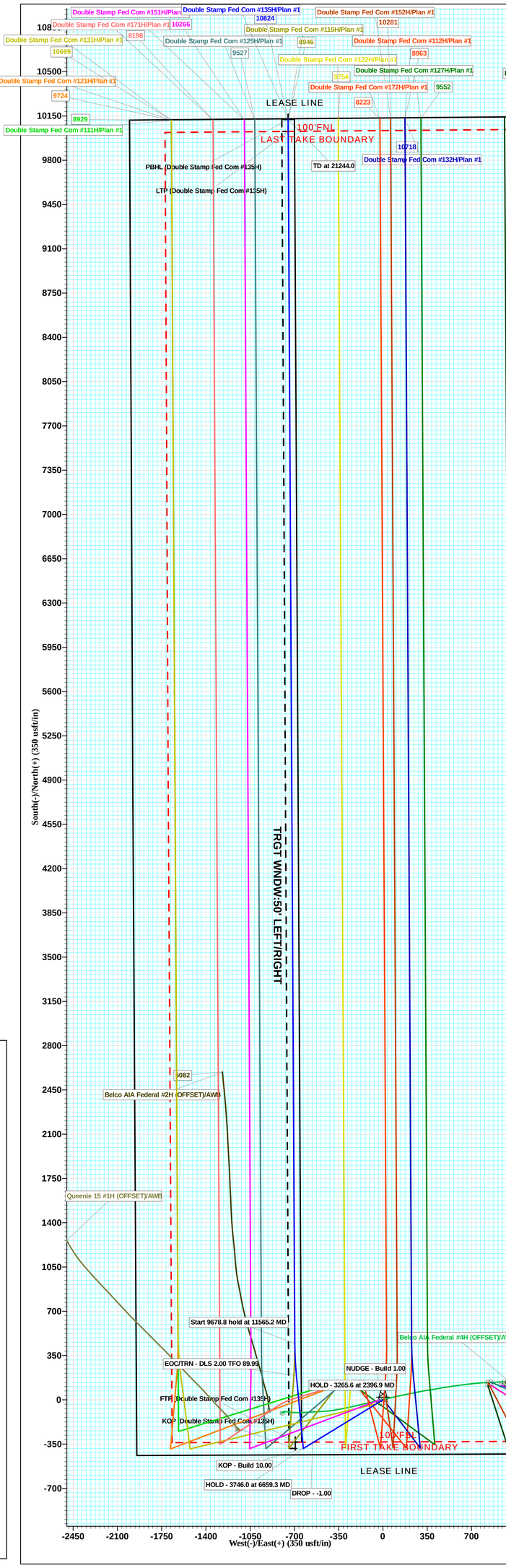
Name	TVD	+N/-S	+E/-W	Northing	Easting
KOP (Double Stamp Fed Com #135H)	10346.0	-385.0	-693.0	570174.00	723695.00
LTP (Double Stamp Fed Com #135H)	10823.8	10028.0	-750.0	580587.00	723638.00
PBHL (Double Stamp Fed Com #135H)	10823.8	10123.0	-750.0	580682.00	723638.00
FTP (Double Stamp Fed Com #135H)	10921.0	-335.0	-693.0	570224.00	723695.00

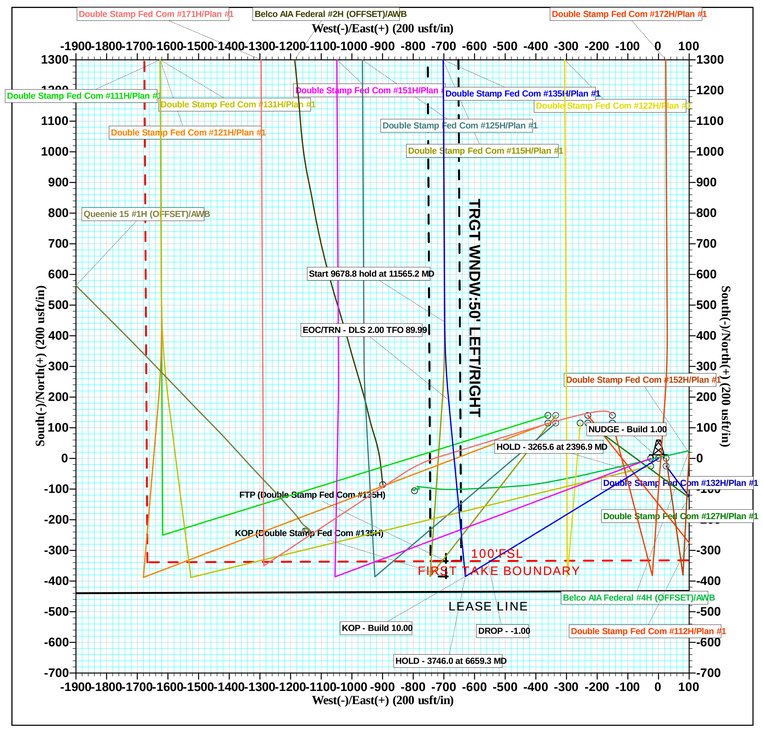
FORMATIONS

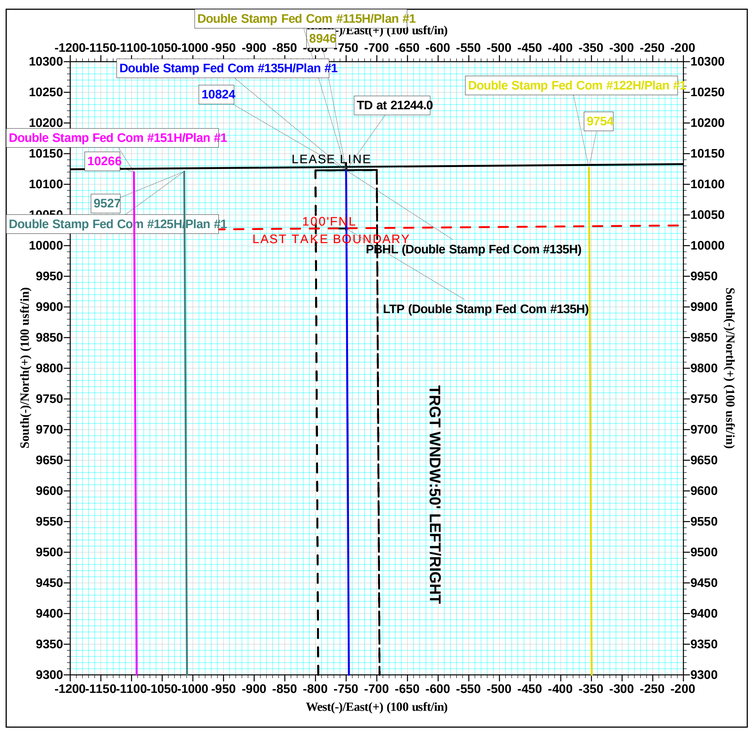
TVDPath	MDPath	Formation
1055.0	1055.0	RUSTLER
1415.0	1415.0	SALT [T]
4580.0	4618.6	SALT [B]
4795.0	4836.9	DELAWARE
4795.0	4836.9	LAMAR
4880.0	4923.2	BELL
5070.0	5116.1	CHERRY
5930.0	5987.8	BRUSHY
7790.0	7849.3	BONE SPRING
7875.0	7934.3	AVALON UPPER
8240.0	8299.3	AVALON MIDDLE
8585.0	8644.3	AVALON LOWER
8840.0	8899.3	1ST BONE SPRING SAND
9070.0	9129.3	2ND BONE SPRING FLOOD SUR
9160.0	9219.3	2ND BONE SPRING CARB
9385.0	9444.3	2ND BONE SPRING SAND
10085.0	10144.3	3RD BONE SPRING CARB
10470.0	10530.3	3RD BONE SPRING SAND
10735.0	10833.8	3RD BONE SPRING W SAND
10830.0	10981.8	WOLFCAMP A/X
10870.0	11066.8	WOLFCAMP A/Y

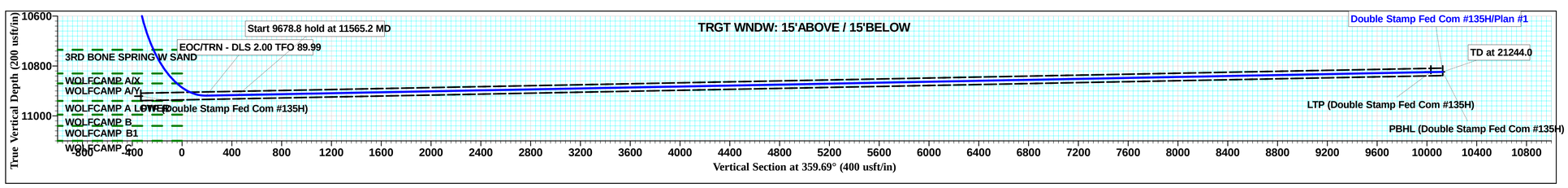












Tap Rock Resources, LLC

Lea County, NM (NAD 83 NME)
(Double Stamp Fed) Sec-14_T-20-S_R-32-E
Double Stamp Fed Com #135H

OWB

Plan: Plan #1

Standard Planning Report

03 May, 2023

Intrepid
Planning Report

Database:	EDM 5000.15 Single User Db	**Local Co-ordinate Reference:**	Well Double Stamp Fed Com #135H
Company:	Tap Rock Resources, LLC	**TVD Reference:**	KB @ 3558.0usft
Project:	Lea County, NM (NAD 83 NME)	**MD Reference:**	KB @ 3558.0usft
Site:	(Double Stamp Fed) Sec-14_T-20-S_R-32-E	**North Reference:**	Grid
Well:	Double Stamp Fed Com #135H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OWB		
Design:	Plan #1		

Project Lea 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 (Double Stamp Fed) Sec-14_T-20-S_R-32-E

Site Position:		**Northing:**	570,699.00 usft	**Latitude:**	32° 34' 3.028 N
From:	Map	**Easting:**	724,028.00 usft	**Longitude:**	103° 44' 25.113 W
Position Uncertainty:	0.0 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.32 °

Well Double Stamp Fed Com #135H

Well Position	**+N/-S**	-140.0 usft	**Northing:**	570,559.00 usft	**Latitude:**	32° 34' 1.623 N
	+E/-W	360.0 usft	**Easting:**	724,388.00 usft	**Longitude:**	103° 44' 20.915 W
Position Uncertainty		0.0 usft	**Wellhead Elevation:**		**Ground Level:**	3,532.0 usft

Wellbore OWB

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	04/25/23	6.42	60.27	47,519.00303080

Design Plan #1

Audit Notes:

Version:	**Phase:**	PROTOTYPE	**Tie On Depth:**	0.0

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	359.69

Plan Survey Tool Program **Date** 05/03/23

	Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	21,244.0	Plan #1 (OWB)	MWD	
				OWSG MWD - Standard	

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	
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,396.9	9.97	238.57	2,391.9	-45.1	-73.8	1.00	1.00	0.00	238.57	
5,662.5	9.97	238.57	5,608.1	-339.9	-556.2	0.00	0.00	0.00	0.00	
6,659.3	0.00	0.00	6,600.0	-385.0	-630.0	1.00	-1.00	0.00	180.00	
10,405.3	0.00	0.00	10,346.0	-385.0	-630.0	0.00	0.00	0.00	0.00	
11,310.8	90.55	354.60	10,918.9	190.9	-684.4	10.00	10.00	0.00	354.60	
11,565.2	90.55	359.69	10,916.5	444.8	-697.1	2.00	0.00	2.00	89.99	
21,244.0	90.55	359.69	10,823.8	10,123.0	-750.0	0.00	0.00	0.00	0.00	PBHL (Double Stam

Intrepid
Planning Report

Database:	EDM 5000.15 Single User Db	**Local Co-ordinate Reference:**	Well Double Stamp Fed Com #135H
Company:	Tap Rock Resources, LLC	**TVD Reference:**	KB @ 3558.0usft
Project:	Lea County, NM (NAD 83 NME)	**MD Reference:**	KB @ 3558.0usft
Site:	(Double Stamp Fed) Sec-14_T-20-S_R-32-E	**North Reference:**	Grid
Well:	Double Stamp Fed Com #135H	**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
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
NUDGE - Build 1.00									
1,500.0	1.00	238.57	1,500.0	-0.5	-0.7	-0.5	1.00	1.00	0.00
1,600.0	2.00	238.57	1,600.0	-1.8	-3.0	-1.8	1.00	1.00	0.00
1,700.0	3.00	238.57	1,699.9	-4.1	-6.7	-4.1	1.00	1.00	0.00
1,800.0	4.00	238.57	1,799.7	-7.3	-11.9	-7.2	1.00	1.00	0.00
1,900.0	5.00	238.57	1,899.4	-11.4	-18.6	-11.3	1.00	1.00	0.00
2,000.0	6.00	238.57	1,998.9	-16.4	-26.8	-16.2	1.00	1.00	0.00
2,100.0	7.00	238.57	2,098.3	-22.3	-36.4	-22.1	1.00	1.00	0.00
2,200.0	8.00	238.57	2,197.4	-29.1	-47.6	-28.8	1.00	1.00	0.00
2,300.0	9.00	238.57	2,296.3	-36.8	-60.2	-36.5	1.00	1.00	0.00
2,396.9	9.97	238.57	2,391.9	-45.1	-73.8	-44.7	1.00	1.00	0.00
HOLD - 3265.6 at 2396.9 MD									
2,400.0	9.97	238.57	2,394.9	-45.4	-74.3	-45.0	0.00	0.00	0.00
2,500.0	9.97	238.57	2,493.4	-54.4	-89.0	-53.9	0.00	0.00	0.00
2,600.0	9.97	238.57	2,591.9	-63.4	-103.8	-62.9	0.00	0.00	0.00
2,700.0	9.97	238.57	2,690.4	-72.5	-118.6	-71.8	0.00	0.00	0.00
2,800.0	9.97	238.57	2,788.9	-81.5	-133.4	-80.8	0.00	0.00	0.00
2,900.0	9.97	238.57	2,887.4	-90.5	-148.1	-89.7	0.00	0.00	0.00
3,000.0	9.97	238.57	2,985.9	-99.6	-162.9	-98.7	0.00	0.00	0.00
3,100.0	9.97	238.57	3,084.4	-108.6	-177.7	-107.6	0.00	0.00	0.00
3,200.0	9.97	238.57	3,182.9	-117.6	-192.4	-116.6	0.00	0.00	0.00
3,300.0	9.97	238.57	3,281.3	-126.6	-207.2	-125.5	0.00	0.00	0.00
3,400.0	9.97	238.57	3,379.8	-135.7	-222.0	-134.5	0.00	0.00	0.00
3,500.0	9.97	238.57	3,478.3	-144.7	-236.8	-143.4	0.00	0.00	0.00
3,600.0	9.97	238.57	3,576.8	-153.7	-251.5	-152.4	0.00	0.00	0.00
3,700.0	9.97	238.57	3,675.3	-162.7	-266.3	-161.3	0.00	0.00	0.00
3,800.0	9.97	238.57	3,773.8	-171.8	-281.1	-170.2	0.00	0.00	0.00
3,900.0	9.97	238.57	3,872.3	-180.8	-295.8	-179.2	0.00	0.00	0.00
4,000.0	9.97	238.57	3,970.8	-189.8	-310.6	-188.1	0.00	0.00	0.00
4,100.0	9.97	238.57	4,069.3	-198.8	-325.4	-197.1	0.00	0.00	0.00
4,200.0	9.97	238.57	4,167.8	-207.9	-340.2	-206.0	0.00	0.00	0.00
4,300.0	9.97	238.57	4,266.2	-216.9	-354.9	-215.0	0.00	0.00	0.00
4,400.0	9.97	238.57	4,364.7	-225.9	-369.7	-223.9	0.00	0.00	0.00
4,500.0	9.97	238.57	4,463.2	-235.0	-384.5	-232.9	0.00	0.00	0.00
4,600.0	9.97	238.57	4,561.7	-244.0	-399.2	-241.8	0.00	0.00	0.00
4,700.0	9.97	238.57	4,660.2	-253.0	-414.0	-250.8	0.00	0.00	0.00
4,800.0	9.97	238.57	4,758.7	-262.0	-428.8	-259.7	0.00	0.00	0.00
4,900.0	9.97	238.57	4,857.2	-271.1	-443.6	-268.7	0.00	0.00	0.00

Intrepid
Planning Report

Database:	EDM 5000.15 Single User Db	**Local Co-ordinate Reference:**	Well Double Stamp Fed Com #135H
Company:	Tap Rock Resources, LLC	**TVD Reference:**	KB @ 3558.0usft
Project:	Lea County, NM (NAD 83 NME)	**MD Reference:**	KB @ 3558.0usft
Site:	(Double Stamp Fed) Sec-14_T-20-S_R-32-E	**North Reference:**	Grid
Well:	Double Stamp Fed Com #135H	**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)
5,000.0	9.97	238.57	4,955.7	-280.1	-458.3	-277.6	0.00	0.00	0.00
5,100.0	9.97	238.57	5,054.2	-289.1	-473.1	-286.6	0.00	0.00	0.00
5,200.0	9.97	238.57	5,152.7	-298.1	-487.9	-295.5	0.00	0.00	0.00
5,300.0	9.97	238.57	5,251.1	-307.2	-502.6	-304.4	0.00	0.00	0.00
5,400.0	9.97	238.57	5,349.6	-316.2	-517.4	-313.4	0.00	0.00	0.00
5,500.0	9.97	238.57	5,448.1	-325.2	-532.2	-322.3	0.00	0.00	0.00
5,600.0	9.97	238.57	5,546.6	-334.3	-547.0	-331.3	0.00	0.00	0.00
5,662.5	9.97	238.57	5,608.1	-339.9	-556.2	-336.9	0.00	0.00	0.00
DROP - -1.00									
5,700.0	9.59	238.57	5,645.1	-343.2	-561.6	-340.2	1.00	-1.00	0.00
5,800.0	8.59	238.57	5,743.9	-351.5	-575.1	-348.3	1.00	-1.00	0.00
5,900.0	7.59	238.57	5,842.9	-358.8	-587.1	-355.6	1.00	-1.00	0.00
6,000.0	6.59	238.57	5,942.1	-365.2	-597.7	-362.0	1.00	-1.00	0.00
6,100.0	5.59	238.57	6,041.5	-370.8	-606.7	-367.5	1.00	-1.00	0.00
6,200.0	4.59	238.57	6,141.1	-375.4	-614.3	-372.1	1.00	-1.00	0.00
6,300.0	3.59	238.57	6,240.9	-379.1	-620.4	-375.8	1.00	-1.00	0.00
6,400.0	2.59	238.57	6,340.7	-381.9	-625.0	-378.6	1.00	-1.00	0.00
6,500.0	1.59	238.57	6,440.7	-383.8	-628.1	-380.4	1.00	-1.00	0.00
6,600.0	0.59	238.57	6,540.7	-384.8	-629.7	-381.4	1.00	-1.00	0.00
6,659.3	0.00	0.00	6,600.0	-385.0	-630.0	-381.6	1.00	-1.00	0.00
HOLD - 3746.0 at 6659.3 MD									
6,700.0	0.00	0.00	6,640.7	-385.0	-630.0	-381.6	0.00	0.00	0.00
6,800.0	0.00	0.00	6,740.7	-385.0	-630.0	-381.6	0.00	0.00	0.00
6,900.0	0.00	0.00	6,840.7	-385.0	-630.0	-381.6	0.00	0.00	0.00
7,000.0	0.00	0.00	6,940.7	-385.0	-630.0	-381.6	0.00	0.00	0.00
7,100.0	0.00	0.00	7,040.7	-385.0	-630.0	-381.6	0.00	0.00	0.00
7,200.0	0.00	0.00	7,140.7	-385.0	-630.0	-381.6	0.00	0.00	0.00
7,300.0	0.00	0.00	7,240.7	-385.0	-630.0	-381.6	0.00	0.00	0.00
7,400.0	0.00	0.00	7,340.7	-385.0	-630.0	-381.6	0.00	0.00	0.00
7,500.0	0.00	0.00	7,440.7	-385.0	-630.0	-381.6	0.00	0.00	0.00
7,600.0	0.00	0.00	7,540.7	-385.0	-630.0	-381.6	0.00	0.00	0.00
7,700.0	0.00	0.00	7,640.7	-385.0	-630.0	-381.6	0.00	0.00	0.00
7,800.0	0.00	0.00	7,740.7	-385.0	-630.0	-381.6	0.00	0.00	0.00
7,900.0	0.00	0.00	7,840.7	-385.0	-630.0	-381.6	0.00	0.00	0.00
8,000.0	0.00	0.00	7,940.7	-385.0	-630.0	-381.6	0.00	0.00	0.00
8,100.0	0.00	0.00	8,040.7	-385.0	-630.0	-381.6	0.00	0.00	0.00
8,200.0	0.00	0.00	8,140.7	-385.0	-630.0	-381.6	0.00	0.00	0.00
8,300.0	0.00	0.00	8,240.7	-385.0	-630.0	-381.6	0.00	0.00	0.00
8,400.0	0.00	0.00	8,340.7	-385.0	-630.0	-381.6	0.00	0.00	0.00
8,500.0	0.00	0.00	8,440.7	-385.0	-630.0	-381.6	0.00	0.00	0.00
8,600.0	0.00	0.00	8,540.7	-385.0	-630.0	-381.6	0.00	0.00	0.00
8,700.0	0.00	0.00	8,640.7	-385.0	-630.0	-381.6	0.00	0.00	0.00
8,800.0	0.00	0.00	8,740.7	-385.0	-630.0	-381.6	0.00	0.00	0.00
8,900.0	0.00	0.00	8,840.7	-385.0	-630.0	-381.6	0.00	0.00	0.00
9,000.0	0.00	0.00	8,940.7	-385.0	-630.0	-381.6	0.00	0.00	0.00
9,100.0	0.00	0.00	9,040.7	-385.0	-630.0	-381.6	0.00	0.00	0.00
9,200.0	0.00	0.00	9,140.7	-385.0	-630.0	-381.6	0.00	0.00	0.00
9,300.0	0.00	0.00	9,240.7	-385.0	-630.0	-381.6	0.00	0.00	0.00
9,400.0	0.00	0.00	9,340.7	-385.0	-630.0	-381.6	0.00	0.00	0.00
9,500.0	0.00	0.00	9,440.7	-385.0	-630.0	-381.6	0.00	0.00	0.00
9,600.0	0.00	0.00	9,540.7	-385.0	-630.0	-381.6	0.00	0.00	0.00
9,700.0	0.00	0.00	9,640.7	-385.0	-630.0	-381.6	0.00	0.00	0.00
9,800.0	0.00	0.00	9,740.7	-385.0	-630.0	-381.6	0.00	0.00	0.00
9,900.0	0.00	0.00	9,840.7	-385.0	-630.0	-381.6	0.00	0.00	0.00

Intrepid
Planning Report

Database:	EDM 5000.15 Single User Db	**Local Co-ordinate Reference:**	Well Double Stamp Fed Com #135H
Company:	Tap Rock Resources, LLC	**TVD Reference:**	KB @ 3558.0usft
Project:	Lea County, NM (NAD 83 NME)	**MD Reference:**	KB @ 3558.0usft
Site:	(Double Stamp Fed) Sec-14_T-20-S_R-32-E	**North Reference:**	Grid
Well:	Double Stamp Fed Com #135H	**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)
10,000.0	0.00	0.00	9,940.7	-385.0	-630.0	-381.6	0.00	0.00	0.00
10,100.0	0.00	0.00	10,040.7	-385.0	-630.0	-381.6	0.00	0.00	0.00
10,200.0	0.00	0.00	10,140.7	-385.0	-630.0	-381.6	0.00	0.00	0.00
10,300.0	0.00	0.00	10,240.7	-385.0	-630.0	-381.6	0.00	0.00	0.00
10,405.3	0.00	0.00	10,346.0	-385.0	-630.0	-381.6	0.00	0.00	0.00
KOP - Build 10.00									
10,450.0	4.47	354.60	10,390.6	-383.3	-630.2	-379.9	10.00	10.00	0.00
10,500.0	9.47	354.60	10,440.2	-377.2	-630.7	-373.8	10.00	10.00	0.00
10,550.0	14.47	354.60	10,489.1	-366.9	-631.7	-363.5	10.00	10.00	0.00
10,600.0	19.47	354.60	10,536.9	-352.4	-633.1	-349.0	10.00	10.00	0.00
10,650.0	24.47	354.60	10,583.3	-333.8	-634.8	-330.3	10.00	10.00	0.00
10,700.0	29.47	354.60	10,627.8	-311.2	-637.0	-307.8	10.00	10.00	0.00
10,750.0	34.47	354.60	10,670.2	-284.9	-639.5	-281.4	10.00	10.00	0.00
10,800.0	39.47	354.60	10,710.2	-255.0	-642.3	-251.5	10.00	10.00	0.00
10,850.0	44.47	354.60	10,747.3	-221.7	-645.4	-218.2	10.00	10.00	0.00
10,900.0	49.47	354.60	10,781.5	-185.3	-648.9	-181.8	10.00	10.00	0.00
10,950.0	54.47	354.60	10,812.3	-146.1	-652.6	-142.6	10.00	10.00	0.00
11,000.0	59.47	354.60	10,839.5	-104.4	-656.5	-100.8	10.00	10.00	0.00
11,050.0	64.47	354.60	10,863.0	-60.5	-660.7	-56.9	10.00	10.00	0.00
11,100.0	69.47	354.60	10,882.6	-14.7	-665.0	-11.1	10.00	10.00	0.00
11,150.0	74.47	354.60	10,898.0	32.6	-669.5	36.3	10.00	10.00	0.00
11,200.0	79.47	354.60	10,909.3	81.1	-674.1	84.8	10.00	10.00	0.00
11,250.0	84.47	354.60	10,916.3	130.4	-678.7	134.1	10.00	10.00	0.00
11,300.0	89.47	354.60	10,918.9	180.1	-683.4	183.8	10.00	10.00	0.00
11,310.8	90.55	354.60	10,918.9	190.9	-684.4	194.6	10.00	10.00	0.00
EOC/TRN - DLS 2.00 TFO 89.99									
11,400.0	90.55	356.38	10,918.1	279.8	-691.4	283.5	2.00	0.00	2.00
11,500.0	90.55	358.38	10,917.1	379.6	-696.0	383.4	2.00	0.00	2.00
11,565.2	90.55	359.69	10,916.5	444.8	-697.1	448.6	2.00	0.00	2.00
Start 9678.8 hold at 11565.2 MD									
11,600.0	90.55	359.69	10,916.2	479.6	-697.3	483.4	0.00	0.00	0.00
11,700.0	90.55	359.69	10,915.2	579.6	-697.8	583.4	0.00	0.00	0.00
11,800.0	90.55	359.69	10,914.2	679.6	-698.4	683.4	0.00	0.00	0.00
11,900.0	90.55	359.69	10,913.3	779.6	-698.9	783.4	0.00	0.00	0.00
12,000.0	90.55	359.69	10,912.3	879.6	-699.5	883.4	0.00	0.00	0.00
12,100.0	90.55	359.69	10,911.4	979.6	-700.0	983.4	0.00	0.00	0.00
12,200.0	90.55	359.69	10,910.4	1,079.6	-700.6	1,083.4	0.00	0.00	0.00
12,300.0	90.55	359.69	10,909.5	1,179.6	-701.1	1,183.4	0.00	0.00	0.00
12,400.0	90.55	359.69	10,908.5	1,279.6	-701.7	1,283.4	0.00	0.00	0.00
12,500.0	90.55	359.69	10,907.5	1,379.6	-702.2	1,383.4	0.00	0.00	0.00
12,600.0	90.55	359.69	10,906.6	1,479.6	-702.8	1,483.3	0.00	0.00	0.00
12,700.0	90.55	359.69	10,905.6	1,579.6	-703.3	1,583.3	0.00	0.00	0.00
12,800.0	90.55	359.69	10,904.7	1,679.6	-703.9	1,683.3	0.00	0.00	0.00
12,900.0	90.55	359.69	10,903.7	1,779.5	-704.4	1,783.3	0.00	0.00	0.00
13,000.0	90.55	359.69	10,902.7	1,879.5	-704.9	1,883.3	0.00	0.00	0.00
13,100.0	90.55	359.69	10,901.8	1,979.5	-705.5	1,983.3	0.00	0.00	0.00
13,200.0	90.55	359.69	10,900.8	2,079.5	-706.0	2,083.3	0.00	0.00	0.00
13,300.0	90.55	359.69	10,899.9	2,179.5	-706.6	2,183.3	0.00	0.00	0.00
13,400.0	90.55	359.69	10,898.9	2,279.5	-707.1	2,283.3	0.00	0.00	0.00
13,500.0	90.55	359.69	10,898.0	2,379.5	-707.7	2,383.3	0.00	0.00	0.00
13,600.0	90.55	359.69	10,897.0	2,479.5	-708.2	2,483.3	0.00	0.00	0.00
13,700.0	90.55	359.69	10,896.0	2,579.5	-708.8	2,583.3	0.00	0.00	0.00
13,800.0	90.55	359.69	10,895.1	2,679.5	-709.3	2,683.3	0.00	0.00	0.00

Intrepid
Planning Report

Database:	EDM 5000.15 Single User Db	**Local Co-ordinate Reference:**	Well Double Stamp Fed Com #135H
Company:	Tap Rock Resources, LLC	**TVD Reference:**	KB @ 3558.0usft
Project:	Lea County, NM (NAD 83 NME)	**MD Reference:**	KB @ 3558.0usft
Site:	(Double Stamp Fed) Sec-14_T-20-S_R-32-E	**North Reference:**	Grid
Well:	Double Stamp Fed Com #135H	**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)
13,900.0	90.55	359.69	10,894.1	2,779.5	-709.9	2,783.3	0.00	0.00	0.00
14,000.0	90.55	359.69	10,893.2	2,879.5	-710.4	2,883.3	0.00	0.00	0.00
14,100.0	90.55	359.69	10,892.2	2,979.5	-711.0	2,983.3	0.00	0.00	0.00
14,200.0	90.55	359.69	10,891.3	3,079.5	-711.5	3,083.3	0.00	0.00	0.00
14,300.0	90.55	359.69	10,890.3	3,179.5	-712.1	3,183.3	0.00	0.00	0.00
14,400.0	90.55	359.69	10,889.3	3,279.5	-712.6	3,283.3	0.00	0.00	0.00
14,500.0	90.55	359.69	10,888.4	3,379.5	-713.1	3,383.3	0.00	0.00	0.00
14,600.0	90.55	359.69	10,887.4	3,479.4	-713.7	3,483.3	0.00	0.00	0.00
14,700.0	90.55	359.69	10,886.5	3,579.4	-714.2	3,583.3	0.00	0.00	0.00
14,800.0	90.55	359.69	10,885.5	3,679.4	-714.8	3,683.2	0.00	0.00	0.00
14,900.0	90.55	359.69	10,884.5	3,779.4	-715.3	3,783.2	0.00	0.00	0.00
15,000.0	90.55	359.69	10,883.6	3,879.4	-715.9	3,883.2	0.00	0.00	0.00
15,100.0	90.55	359.69	10,882.6	3,979.4	-716.4	3,983.2	0.00	0.00	0.00
15,200.0	90.55	359.69	10,881.7	4,079.4	-717.0	4,083.2	0.00	0.00	0.00
15,300.0	90.55	359.69	10,880.7	4,179.4	-717.5	4,183.2	0.00	0.00	0.00
15,400.0	90.55	359.69	10,879.8	4,279.4	-718.1	4,283.2	0.00	0.00	0.00
15,500.0	90.55	359.69	10,878.8	4,379.4	-718.6	4,383.2	0.00	0.00	0.00
15,600.0	90.55	359.69	10,877.8	4,479.4	-719.2	4,483.2	0.00	0.00	0.00
15,700.0	90.55	359.69	10,876.9	4,579.4	-719.7	4,583.2	0.00	0.00	0.00
15,800.0	90.55	359.69	10,875.9	4,679.4	-720.3	4,683.2	0.00	0.00	0.00
15,900.0	90.55	359.69	10,875.0	4,779.4	-720.8	4,783.2	0.00	0.00	0.00
16,000.0	90.55	359.69	10,874.0	4,879.4	-721.3	4,883.2	0.00	0.00	0.00
16,100.0	90.55	359.69	10,873.1	4,979.4	-721.9	4,983.2	0.00	0.00	0.00
16,200.0	90.55	359.69	10,872.1	5,079.3	-722.4	5,083.2	0.00	0.00	0.00
16,300.0	90.55	359.69	10,871.1	5,179.3	-723.0	5,183.2	0.00	0.00	0.00
16,400.0	90.55	359.69	10,870.2	5,279.3	-723.5	5,283.2	0.00	0.00	0.00
16,500.0	90.55	359.69	10,869.2	5,379.3	-724.1	5,383.2	0.00	0.00	0.00
16,600.0	90.55	359.69	10,868.3	5,479.3	-724.6	5,483.2	0.00	0.00	0.00
16,700.0	90.55	359.69	10,867.3	5,579.3	-725.2	5,583.2	0.00	0.00	0.00
16,800.0	90.55	359.69	10,866.4	5,679.3	-725.7	5,683.2	0.00	0.00	0.00
16,900.0	90.55	359.69	10,865.4	5,779.3	-726.3	5,783.2	0.00	0.00	0.00
17,000.0	90.55	359.69	10,864.4	5,879.3	-726.8	5,883.1	0.00	0.00	0.00
17,100.0	90.55	359.69	10,863.5	5,979.3	-727.4	5,983.1	0.00	0.00	0.00
17,200.0	90.55	359.69	10,862.5	6,079.3	-727.9	6,083.1	0.00	0.00	0.00
17,300.0	90.55	359.69	10,861.6	6,179.3	-728.4	6,183.1	0.00	0.00	0.00
17,400.0	90.55	359.69	10,860.6	6,279.3	-729.0	6,283.1	0.00	0.00	0.00
17,500.0	90.55	359.69	10,859.6	6,379.3	-729.5	6,383.1	0.00	0.00	0.00
17,600.0	90.55	359.69	10,858.7	6,479.3	-730.1	6,483.1	0.00	0.00	0.00
17,700.0	90.55	359.69	10,857.7	6,579.3	-730.6	6,583.1	0.00	0.00	0.00
17,800.0	90.55	359.69	10,856.8	6,679.3	-731.2	6,683.1	0.00	0.00	0.00
17,900.0	90.55	359.69	10,855.8	6,779.2	-731.7	6,783.1	0.00	0.00	0.00
18,000.0	90.55	359.69	10,854.9	6,879.2	-732.3	6,883.1	0.00	0.00	0.00
18,100.0	90.55	359.69	10,853.9	6,979.2	-732.8	6,983.1	0.00	0.00	0.00
18,200.0	90.55	359.69	10,852.9	7,079.2	-733.4	7,083.1	0.00	0.00	0.00
18,300.0	90.55	359.69	10,852.0	7,179.2	-733.9	7,183.1	0.00	0.00	0.00
18,400.0	90.55	359.69	10,851.0	7,279.2	-734.5	7,283.1	0.00	0.00	0.00
18,500.0	90.55	359.69	10,850.1	7,379.2	-735.0	7,383.1	0.00	0.00	0.00
18,600.0	90.55	359.69	10,849.1	7,479.2	-735.6	7,483.1	0.00	0.00	0.00
18,700.0	90.55	359.69	10,848.2	7,579.2	-736.1	7,583.1	0.00	0.00	0.00
18,800.0	90.55	359.69	10,847.2	7,679.2	-736.6	7,683.1	0.00	0.00	0.00
18,900.0	90.55	359.69	10,846.2	7,779.2	-737.2	7,783.1	0.00	0.00	0.00
19,000.0	90.55	359.69	10,845.3	7,879.2	-737.7	7,883.1	0.00	0.00	0.00
19,100.0	90.55	359.69	10,844.3	7,979.2	-738.3	7,983.1	0.00	0.00	0.00
19,200.0	90.55	359.69	10,843.4	8,079.2	-738.8	8,083.0	0.00	0.00	0.00

Intrepid
Planning Report

Database:	EDM 5000.15 Single User Db	**Local Co-ordinate Reference:**	Well Double Stamp Fed Com #135H
Company:	Tap Rock Resources, LLC	**TVD Reference:**	KB @ 3558.0usft
Project:	Lea County, NM (NAD 83 NME)	**MD Reference:**	KB @ 3558.0usft
Site:	(Double Stamp Fed) Sec-14_T-20-S_R-32-E	**North Reference:**	Grid
Well:	Double Stamp Fed Com #135H	**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)
19,300.0	90.55	359.69	10,842.4	8,179.2	-739.4	8,183.0	0.00	0.00	0.00
19,400.0	90.55	359.69	10,841.4	8,279.2	-739.9	8,283.0	0.00	0.00	0.00
19,500.0	90.55	359.69	10,840.5	8,379.1	-740.5	8,383.0	0.00	0.00	0.00
19,600.0	90.55	359.69	10,839.5	8,479.1	-741.0	8,483.0	0.00	0.00	0.00
19,700.0	90.55	359.69	10,838.6	8,579.1	-741.6	8,583.0	0.00	0.00	0.00
19,800.0	90.55	359.69	10,837.6	8,679.1	-742.1	8,683.0	0.00	0.00	0.00
19,900.0	90.55	359.69	10,836.7	8,779.1	-742.7	8,783.0	0.00	0.00	0.00
20,000.0	90.55	359.69	10,835.7	8,879.1	-743.2	8,883.0	0.00	0.00	0.00
20,100.0	90.55	359.69	10,834.7	8,979.1	-743.7	8,983.0	0.00	0.00	0.00
20,200.0	90.55	359.69	10,833.8	9,079.1	-744.3	9,083.0	0.00	0.00	0.00
20,300.0	90.55	359.69	10,832.8	9,179.1	-744.8	9,183.0	0.00	0.00	0.00
20,400.0	90.55	359.69	10,831.9	9,279.1	-745.4	9,283.0	0.00	0.00	0.00
20,500.0	90.55	359.69	10,830.9	9,379.1	-745.9	9,383.0	0.00	0.00	0.00
20,600.0	90.55	359.69	10,830.0	9,479.1	-746.5	9,483.0	0.00	0.00	0.00
20,700.0	90.55	359.69	10,829.0	9,579.1	-747.0	9,583.0	0.00	0.00	0.00
20,800.0	90.55	359.69	10,828.0	9,679.1	-747.6	9,683.0	0.00	0.00	0.00
20,900.0	90.55	359.69	10,827.1	9,779.1	-748.1	9,783.0	0.00	0.00	0.00
21,000.0	90.55	359.69	10,826.1	9,879.1	-748.7	9,883.0	0.00	0.00	0.00
21,100.0	90.55	359.69	10,825.2	9,979.1	-749.2	9,983.0	0.00	0.00	0.00
21,200.0	90.55	359.69	10,824.2	10,079.0	-749.8	10,083.0	0.00	0.00	0.00
21,244.0	90.55	359.69	10,823.8	10,123.0	-750.0	10,126.9	0.00	0.00	0.00
TD at 21244.0									

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
KOP (Double Stamp F	0.00	0.00	10,346.0	-385.0	-693.0	570,174.00	723,695.00	32° 33' 57.852 N	103° 44' 29.038 W
- plan misses target center by 63.0usft at 10405.6usft MD (10346.2 TVD, -385.0 N, -630.0 E)									
- Point									
LTP (Double Stamp Fe	0.00	0.00	10,823.8	10,028.0	-750.0	580,587.00	723,638.00	32° 35' 40.891 N	103° 44' 29.027 W
- plan misses target center by 1.0usft at 21149.0usft MD (10824.7 TVD, 10028.0 N, -749.5 E)									
- Point									
PBHL (Double Stamp I	-0.55	359.69	10,823.8	10,123.0	-750.0	580,682.00	723,638.00	32° 35' 41.831 N	103° 44' 29.021 W
- plan hits target center									
- Rectangle (sides W100.0 H10,458.0 D30.0)									
FTP (Double Stamp Fe	0.00	0.00	10,921.0	-335.0	-693.0	570,224.00	723,695.00	32° 33' 58.347 N	103° 44' 29.035 W
- plan misses target center by 208.7usft at 10889.3usft MD (10774.4 TVD, -193.3 N, -648.1 E)									
- Point									

Intrepid
Planning Report

Database:	EDM 5000.15 Single User Db	**Local Co-ordinate Reference:**	Well Double Stamp Fed Com #135H
Company:	Tap Rock Resources, LLC	**TVD Reference:**	KB @ 3558.0usft
Project:	Lea County, NM (NAD 83 NME)	**MD Reference:**	KB @ 3558.0usft
Site:	(Double Stamp Fed) Sec-14_T-20-S_R-32-E	**North Reference:**	Grid
Well:	Double Stamp Fed Com #135H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OWB		
Design:	Plan #1		

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,055.0	1,055.0	RUSTLER			
1,415.0	1,415.0	SALT [T]			
4,618.6	4,580.0	SALT [B]			
4,836.9	4,795.0	DELAWARE			
4,836.9	4,795.0	LAMAR			
4,923.2	4,880.0	BELL			
5,116.1	5,070.0	CHERRY			
5,987.8	5,930.0	BRUSHY			
7,849.3	7,790.0	BONE SPRING			
7,934.3	7,875.0	AVALON UPPER			
8,299.3	8,240.0	AVALON MIDDLE			
8,644.3	8,585.0	AVALON LOWER			
8,899.3	8,840.0	1ST BONE SPRING SAND			
9,129.3	9,070.0	2ND BONE SPRING FLOOD SUR			
9,219.3	9,160.0	2ND BONE SPRING CARB			
9,444.3	9,385.0	2ND BONE SPRING SAND			
10,144.3	10,085.0	3RD BONE SPRING CARB			
10,530.3	10,470.0	3RD BONE SPRING SAND			
10,833.0	10,735.0	3RD BONE SPRING W SAND			
10,981.8	10,830.0	WOLFCAMP A/X			
11,066.8	10,870.0	WOLFCAMP A/Y			

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
1,400.0	1,400.0	0.0	0.0	NUDGE - Build 1.00
2,396.9	2,391.9	-45.1	-73.8	HOLD - 3265.6 at 2396.9 MD
5,662.5	5,608.1	-339.9	-556.2	DROP - -1.00
6,659.3	6,600.0	-385.0	-630.0	HOLD - 3746.0 at 6659.3 MD
10,405.3	10,346.0	-385.0	-630.0	KOP - Build 10.00
11,310.8	10,918.9	190.9	-684.4	EOC/TRN - DLS 2.00 TFO 89.99
11,565.2	10,916.5	444.8	-697.1	Start 9678.8 hold at 11565.2 MD
21,244.0	10,823.8	10,123.0	-750.0	TD at 21244.0

PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Tap Rock Operating LLC
WELL NAME & NO.:	Double Stamp Fed Com 135H
LOCATION:	Sec 14-20S-32E-NMP
COUNTY:	Lea County, New Mexico

COA

H_2S	○ No		◉ Yes	
Potash / WIPP	○ None	○ Secretary	◉ R-111-Q	☐ Open Annulus
	4-String Design: Open 2nd Int x Production Casing (ICP 2 above Relief Zone)			☐ WIPP
Cave / Karst	○ Low	◉ Medium	○ High	○ Critical
Wellhead	○ Conventional	◉ Multibowl	○ Both	○ Diverter
Cementing	☐ Primary Squeeze	☐ Cont. Squeeze	☐ EchoMeter	☐ DV Tool
Special Req	☐ Capitan Reef	☐ Water Disposal	☑ COM	☐ Unit
Waste Prev.	○ Self-Certification	○ Waste Min. Plan	◉ APD Submitted prior to 06/10/2024	
Additional Language	☑ Flex Hose	☐ Casing Clearance	☐ Pilot Hole	☐ Break Testing
	☑ Four-String	☐ Offline Cementing	☑ Fluid-Filled	

A. HYDROGEN SULFIDE

A Hydrogen Sulfide (H2S) Drilling Plan shall be activated 500 feet prior to drilling into the **Bone Springs & Delaware** formations. As a result, the Hydrogen Sulfide area must meet all requirements from 43 CFR 3176, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.

APD is within the R-111-Q defined boundary. Operator must follow all procedures and requirements listed within the updated order.

B. CASING

1. The **16** inch surface casing shall be set at approximately **1080** feet (a minimum of 25 feet (Lea County) into the Rustler Anhydrite, above the salt, and below usable fresh water) and cemented to the surface.

    a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic-type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.

Approval Date: 11/22/2024

b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8 hours** or **500 pounds compressive strength**, whichever is greater. (This is to include the lead cement)
c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
d. If cement falls back, remedial cementing will be done prior to drilling out that string.

Intermediate casing must be kept fluid filled to meet BLM minimum collapse requirement.

2. The minimum required fill of cement behind the **11-3/4** inch intermediate casing is:

- Cement to surface. If cement does not circulate see B.1.a, c-d above. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst, Capitan Reef, or potash.**

Intermediate casing must be kept fluid filled to meet BLM minimum collapse requirement.

3. The minimum required fill of cement behind the **8-5/8** inch intermediate casing (**set at 4550' per BLM geologist)** is:

- Cement should tie-back **500 feet** into the previous casing but not higher than USGS Marker Bed No. 126. **Operator must verify top of cement per R-111-Q requirements.** Submit results to the BLM. If cement does not circulate, contact the appropriate BLM office. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst, Capitan Reef, or potash.**

4. The minimum required fill of cement behind the **5-1/2** inch production casing is:

- Cement should tie-back **500 feet** into the previous casing but not higher than USGS Marker Bed No. 126. **Operator must verify top of cement per R-111-Q requirements.** Submit results to the BLM. If cement does not circulate, contact the appropriate BLM office. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst, Capitan Reef, or potash.**

C. PRESSURE CONTROL

1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).

2. Operator has proposed a multi-bowl wellhead assembly. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **5000 (5M)** psi.

a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.

b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
c. Manufacturer representative shall install the test plug for the initial BOP test.
d. If the cement does not circulate and one-inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
e. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172 must be followed.

D. SPECIAL REQUIREMENT (S)

Communitization Agreement

- The operator will submit a Communitization Agreement to the Santa Fe Office, 301 Dinosaur Trail Santa Fe, New Mexico 87508, at least 90 days before the anticipated date of first production from a well subject to a spacing order issued by the New Mexico Oil Conservation Division. The Communitization Agreement will include the signatures of all working interest owners in all Federal and Indian leases subject to the Communitization Agreement (i.e., operating rights owners and lessees of record), or certification that the operator has obtained the written signatures of all such owners and will make those signatures available to the BLM immediately upon request.
- The operator will submit an as-drilled survey well plat of the well completion, but are not limited to, those specified in 43 CFR 3171 and 3172.
- If the operator does not comply with this condition of approval, the BLM may take enforcement actions that include, but are not limited to, those specified in 43 CFR 3163.1.
- In addition, the well sign shall include the surface and bottom hole lease numbers. When the Communitization Agreement number is known, it shall also be on the sign.

GENERAL REQUIREMENTS

The BLM is to be notified in advance for a representative to witness:

a. Spudding well (minimum of 24 hours)
b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
c. BOPE tests (minimum of 4 hours)

Contact Lea County Petroleum Engineering Inspection Staff:

Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575) 689-5981

1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
    a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
    b. When the operator proposes to set surface casing with Spudder Rig
        i. Notify the BLM when moving in and removing the Spudder Rig.
        ii. Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
        iii. BOP/BOPE test to be conducted per **43 CFR 3172** as soon as 2nd Rig is rigged up on well.
2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
3. For intervals in which cement to surface is required, cement to surface should be verified with a visual check and density or pH check to differentiate cement from spacer and drilling mud. The results should be documented in the driller's log and daily reports.

A. CASING

1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.
2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following

conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends of both lead and tail cement, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.

3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
8. Whenever a casing string is cemented in the R-111-Q potash area, the NMOCD requirements shall be followed.

B. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in **43 CFR 3172**.
2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.

3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
    i. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
    ii. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
    iii. Manufacturer representative shall install the test plug for the initial BOP test.
    iv. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172.6(b)(9) must be followed.
    v. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
    i. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead cement), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).
    ii. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the cement plug. The BOPE test can be initiated after bumping the cement plug with the casing valve open. (only applies to single stage cement jobs, prior to the cement setting up.)
    iii. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer and can be initiated immediately with the casing valve open. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to **43 CFR 3172** with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for 8 hours or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).

iv. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.
v. The results of the test shall be reported to the appropriate BLM office.
vi. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
vii. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.
viii. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per **43 CFR 3172**.

C. DRILLING MUD

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the Wolfcamp formation, and shall be used until production casing is run and cemented.

D. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area. Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

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

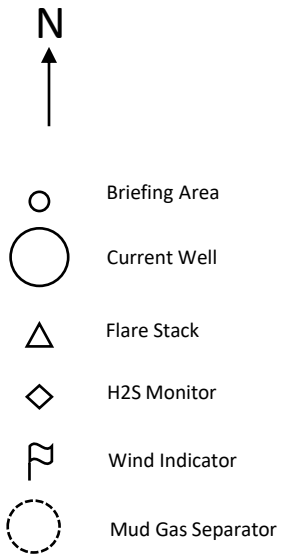
8 Drilling contractor supervisor will be required to be familiar with the effects H2S has on tubulars good and other mechanical equipment

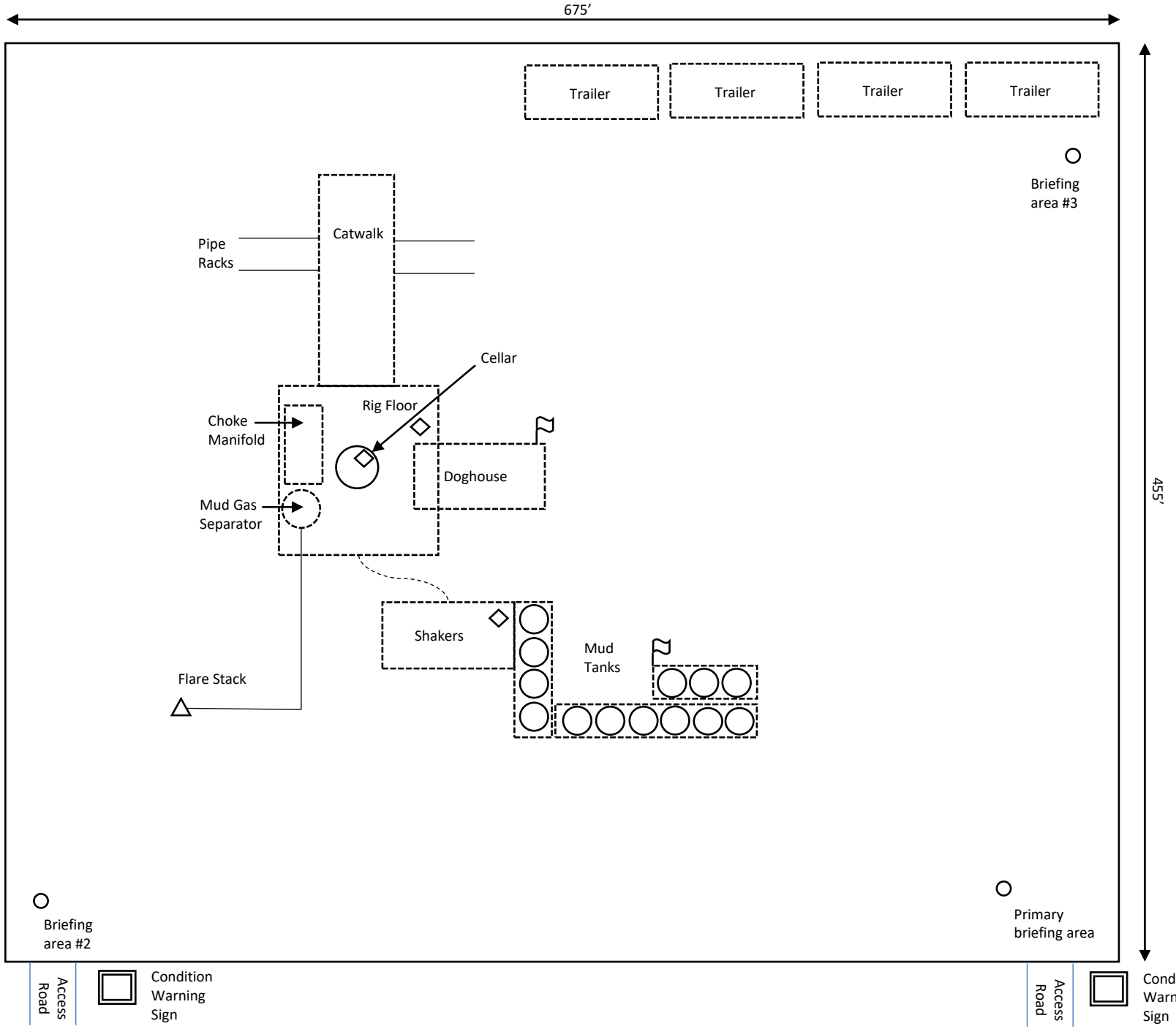
9 If H2S is encountered, mud system will be altered if necessary to maintain control of formation. A mud gas separator will be brought into service along with H2S scavengers if necessary

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
Double Stamp Fed Com
W2 Pad
Tap Rock Operating, LLC
14-20S-32E
Lea County, NM





Tap Rock Operating LLC

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

Sec. 14, Township 20S, Range 32E
Lea County, New Mexico

Well Pad Location

1:27,000

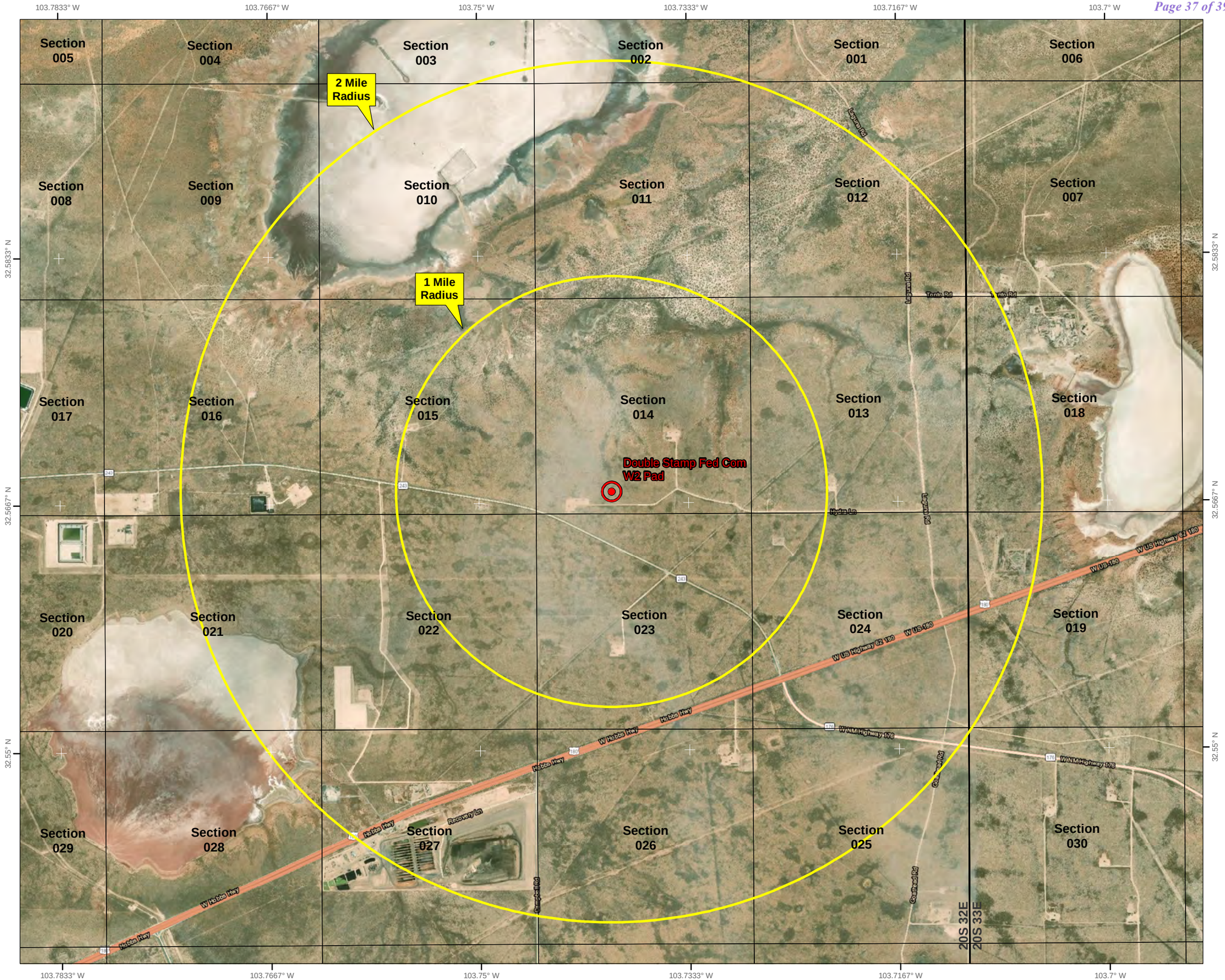
0 0.25 0.5 1
Miles

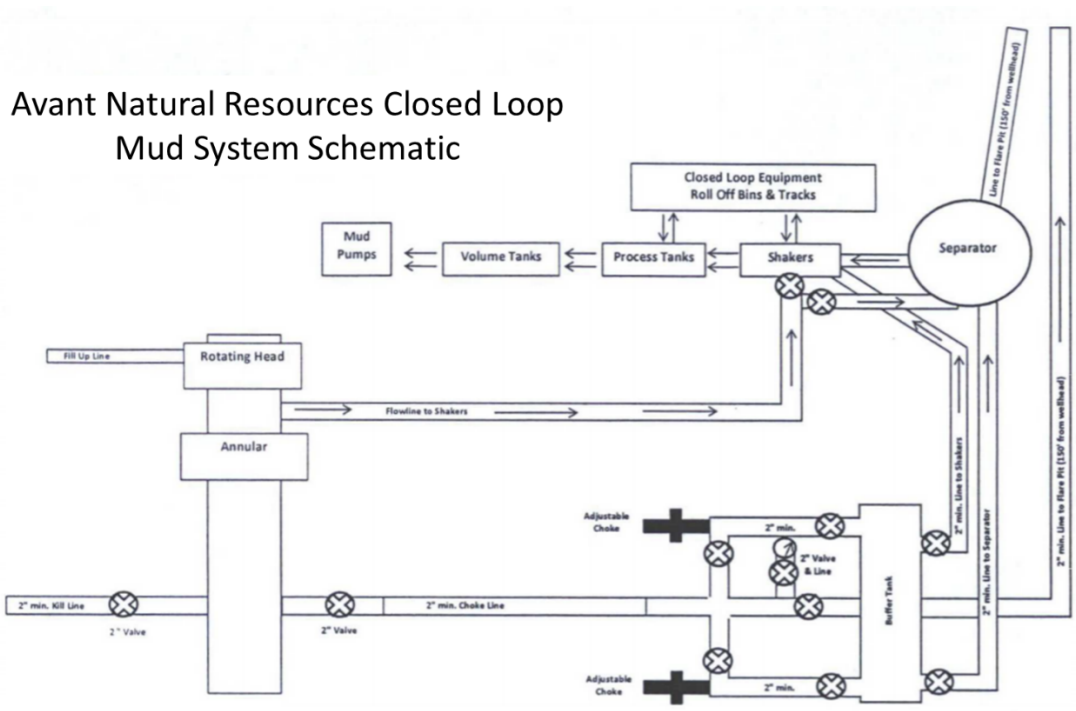
N

NAD 1983 New Mexico State Plane East
FIPS 3001 Feet

PERMITS WEST

Prepared by Permits West, Inc., May 25, 2023
for Tap Rock Operating, LLC




Avant Natural Resources Closed Loop
Mud System Schematic
Closed Loop Equipment
Roll Off Bins & Tracks
Mud
Pumps
Volume Tanks
Process Tanks
Shakers
Separator
Line to Flare Pit (150' from wellhead)
Fill Up Line
Rotating Head
Flowline to Shakers
Annular
Adjustable
Choke
2" min.
2" Valve
& Line
Buffer Tank
2" min. Line to Shakers
2" min. Line to Separator
2" min. Line to Flare Pit (150' from wellhead)
2" min. Kill Line
2" Valve
2" Valve
2" min. Choke Line
Adjustable
Choke
2" min.

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
https://www.emnrd.nm.gov/ocd/contact-us

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

CONDITIONS

Operator:	OGRID:
TAP ROCK OPERATING, LLC 523 Park Point Drive Golden, CO 80401	372043
	Action Number: 406064
	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

CONDITIONS

Created By	Condition	Condition Date
bwood	Cement is required to circulate on both surface and intermediate1 strings of casing.	11/23/2024
bwood	If cement does not circulate on any string, a Cement Bond Log (CBL) is required for that string of casing.	11/23/2024
pkautz	EFFECTIVE DATE FOR SUBMITTING TO OCD THE NEW FORM C-102 WAS 08/01/2024. PLEASE SUBMIT THE C-102 ON NEW FORM.	12/3/2024
pkautz	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.	12/3/2024
pkautz	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.	12/3/2024
pkautz	File As Drilled C-102 and a directional Survey with C-104 completion packet.	12/3/2024