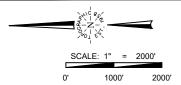
Form 3160-3 (June 2015)				FORM OMB N	o. 1004-	0137		
UNITED STATES	S			Expires: January 31, 2018				
DEPARTMENT OF THE II				5. Lease Serial No. NMNM116017				
BUREAU OF LAND MANA					Til	. N		
APPLICATION FOR PERMIT TO D	RILL OR	REENIER		6. If Indian, Allotee	or Tribe	e Name		
	EENTER			7. If Unit or CA Ago	eement,	Name and No.		
	ther	_		8. Lease Name and	Well No	١.		
1c. Type of Completion: Hydraulic Fracturing Si	ngle Zone	Multiple Zone		BEER 30 FED CC	M			
				213H				
2. Name of Operator TAP ROCK OPERATING LLC				9. API Well No. <b>30-</b>	015-	57257		
3a. Address 1700 LINCOLN ST SUITE 4700, DENVER, CO 80203	3b. Phone N (720) 460-3	No. <i>(include area cod</i> 3316	e)	10. Field and Pool, PURPLE SAGE/W	_	-		
<ol> <li>Location of Well (Report location clearly and in accordance v At surface NESE / 2008 FSL / 310 FEL / LAT 32.15712</li> </ol>	-	1 /		11. Sec., T. R. M. or SEC 3/T25S/R25E		d Survey or Are		
At proposed prod. zone NWSW / 2420 FSL / 5 FWL / LA			95527					
14. Distance in miles and direction from nearest town or post offine the miles.				12. County or Parisl	a	13. State NM		
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig, unit line, if any)	16. No of a	16. No of acres in lease 17. Space 1283.09		cing Unit dedicated to this well				
18. Distance from proposed location*	19. Propose	ed Depth	20. BLM	/BIA Bond No. in file				
to nearest well, drilling, completed, applied for, on this lease, ft.	8024 feet /	18730 feet	FED: NN	IMB105800930				
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3590 feet	22. Approximate date work will start* 11/01/2025			23. Estimated duration 60 days				
	24. Attac	chments						
The following, completed in accordance with the requirements of (as applicable)	f Onshore Oil	and Gas Order No. 1	, and the I	Hydraulic Fracturing r	ule per 4	43 CFR 3162.3-3		
Well plat certified by a registered surveyor.     A Drilling Plan.		4. Bond to cover the Item 20 above).	e operation	ns unless covered by an	n existing	g bond on file (se		
3. A Surface Use Plan (if the location is on National Forest Syster SUPO must be filed with the appropriate Forest Service Office		5. Operator certific	rmation and/or plans as	may be	requested by the			
25. Signature	<b>I</b>	e (Printed/Typed)			Date			
(Electronic Submission)	BRIAI	N WOOD / Ph: (72	0) 460-33	316	03/04/	2025		
Title Permitting Agent								
Approved by (Signature) (Electronic Submission)		e (Printed/Typed) Y LAYTON / Ph: (5	75) 234-5	959	Date 09/08/	2025		
Title Assistant Field Manager Lands & Minerals	Office	e bad Field Office						
Application approval does not warrant or certify that the applicar applicant to conduct operations thereon.  Conditions of approval, if any, are attached.	I		nose rights	in the subject lease w	hich wo	uld entitle the		
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, n of the United States any false, fictitious or fraudulent statements					iny depa	artment or agenc		
		The second secon						



\*(Instructions on page 2)

C-102	CD. 7/13/	2023 0.34	.37 AM	5	State of Nev	v Mexico			Revise	ed July 9, 2024
Submit Electronic			Energy, Minerals & Natural Resources Department							
Via OCD Permitt	ing		(	OIL CO	NSERVAT	TON DIVIS	SION	Submittal	X Initial Submittal	
								Type:	Amended Report	
									As Drilled	
		V	-	OCATIO:			EDICATION	PLAT		
	) <b>-015-</b> 5	7257		98220	Pool N		LE SAGE; V	VOLFC/		
	37758		Property Name		FED COM				213H	
OGRID No.	372043	3	Operator Name		P ROCK OF	PERATING, L	LC.		Ground Level Elev	3590'
Surface Owner:	State Fee	Tribal X Federa	1			Mineral Owner:	State X Fee Tribal X	Federal		
					Surface	Location				
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the N/S	Feet from the E/W	Latitude		Longitude	County
	3	25-S	25-E	-	2008' S	310' E	N 32.15712	84   W 1	04.3762072	EDDY
		l	1		Bottom Ho	le Location		·		
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the N/S	Feet from the E/W	Latitude		Longitude	County
L	4	25-S	25-S	-	2420' S	5' W	N 32.15834	68   W 1	04.4095527	EDDY
									-	
1283.09		ning Well Defi	-	(30-015-	xxxxx)	Overlapping Spacing Unit (Y/N)  Consolidated Code  C				
Order Numbers		!				Well Setbacks are under Common Ownership:    X Yes   No				
					Viola Off D	oint (VOD)				
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the N/S	oint (KOP) Feet from the E/W	Latitude		Longitude	County
1	3	25-S	25-E	-	2425' S	50' E	N 32.15827	21   W 1	04.3753475	EDDY
					First Tales	Point (FTP)				
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the N/S	Feet from the E/W	Latitude		Longitude	County
ı	3	25-S	25-E	_	2425' S	330' E	N 32.15827	42   W 1	04.3762524	EDDY
·				<u> </u>						
UL or lot no.	Section	Township	Range	Lot Idn	Last Take	Point (LTP) Feet from the E/W	Latitude		Longitude	County
L	4	25-S	25-S	-	2421' S	330' W	N 32.15834	46 W 1	04.4085018	EDDY
				_						
Unitized Area or A	rea of Uniform l	ntrest		Spacing Unity	Type X Horizont	al Vertical	Ground F	loor Elevation		
I hereby certij best of my kn that this orga in the land in	fy that the in owledge and nization eith ucluding the	belief; and, i er owns a wo proposed botto	f the well is o rking interest m hole location	i vertical or o or unleased r i or has a ri	complete to the directional well, nineral interest ght to drill this wrking interest					
well at this location pursuant to a contract with an owner of a working interest or unleased mineral interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.  If this well is a horizontal well, I further certify that this organization has						2/508				
received The c unleased mine any part of th pooling order	ral interest ne well's com	in each tract pleted interva	(in the target	pool or forme	merest or ution) in which d a compulsory	2/17/2025 12:17:52 PM				
Cory	Walk			03-03-2	25		2/17/2	2025 12:17:52	MILLINIAN SULLINIA	
Signature	Cory Wa	alk	Date			Signature and Seal of	of Professional Surveyor	Date	e	
Print Name	cory@pe	ermitswe	est.com			Certificate Number	Date of	Survey 11/18/2024		
E-mail Address	- '							,		

<u>C-102</u>	State of New Mexico Energy, Minerals & Natural Resources Department					ment		Revised July 9, 202		
Submit Electronically Via OCD Permitting			SERVATI(				Submittal Type:	Amended Report		
Property Name and Well Number		BE	ER 30 FED	) COM 21	3H			As Drilled		
SURFACE LOCATION (SHL)  NEW MEXICO EAST NAD 1983  X=528070 Y=420901  LAT.: N 32.1571284  LONG:: W 104.3762072  NAD 1927  X=486887 Y=420844  LAT.: N 32.1570113  LONG:: W 104.3757051  2008' FSL 310' FEL  KICK OFF POINT (KOP)  NEW MEXICO EAST NAD 1983  X=528336 Y=421317  LAT.: N 32.1582721  LONG:: W 104.3753475  NAD 1927  X=487154 Y=421260  LAT.: N 32.1581550  LONG:: W 104.3748454  2425' FSL 50' FEL  FIRST TAKE POINT (FTP)  NEW MEXICO EAST NAD 1983  X=528056 Y=421318  LAT.: N 32.1581571  LONG:: W 104.3762524  NAD 1927  X=486874 Y=421261  LAT.: N 32.1581571  LONG:: W 104.3757503  2425' FSL 330' FEL  BLM PERF. POINT (BPP1)  NEW MEXICO EAST NAD 1983  X=525730 Y=421325  LAT.: N 32.1582914  LONG:: W 104.3837703  NAD 1927  X=484547 Y=421269  LAT.: N 32.1582914  LONG:: W 104.3837703  NAD 1927  X=484547 Y=421269  LAT.: N 32.1581744  LONG:: W 104.3832679  2420' FSL 2614' FWL	NAD27 X=48 NAD27 X=479318.34 Y=424271.92 NAD83 X=517894.85 Y=424345.38 T-24-S, R-25-E 32 33 NAD83 X=520500.63 Y=424328.48 3	T-25-S, R-25-E 5 7 4 (///0/14/100/3///// 19/2///// 19/2///// 4 3 ///16/14/10/13///// 33 2 OSA ONANA OSA OSA OSA OSA OSA OSA OSA OSA OSA OS	270':  YNWN 80  AZ = 270.18°  325.2' 275'	OS OF SHL FTP SHL FTP SHL	2425' 2008' -2425' -2420' -2420' -2420' -2420'		NAD83 X=528380.69 Y=418802.21  NAD83 X=528380.69 Y=418802.21  SUI  I hard wade same same same same same same same sam	BLM PERF. POINT (BPP2)  NEW MEXICO EAST NAD 1983  X=523116 Y=421333 LAT.: N 32.1583101 LONG.: W 104.3922165 NAD 1927  X=481933 Y=421277 LAT.: N 32.1581933 LONG.: W 104.3917139 2431' FSL 0' FWL  LAST TAKE POINT (LTP)  NEW MEXICO EAST NAD 1983  X=518076 Y=421349 LAT.: N 32.1583446 LONG.: W 104.4085018 NAD 1927  X=476894 Y=421293 LAT.: N 32.1582282 LONG.: W 104.4079987 2421' FSL 330' FWL  TOM HOLE LOCATION (BHL)  NEW MEXICO EAST NAD 1983  X=517751 Y=421350 LAT.: N 32.1583468 LONG.: W 104.4095527 NAD 1927  X=476569 Y=421294 LAT.: N 32.1582304 LONG.: W 104.4090495 2420' FSL 5' FWL  RVEYORS CERTIFICATION  by certify that the well location shown on this mas plotted from field notes of actual surveys by me or under my supervision, and that the ist we and correct to the best of my belief.  BY 104.4090495 2420' FSL 5' FWL  DOMNO  D		



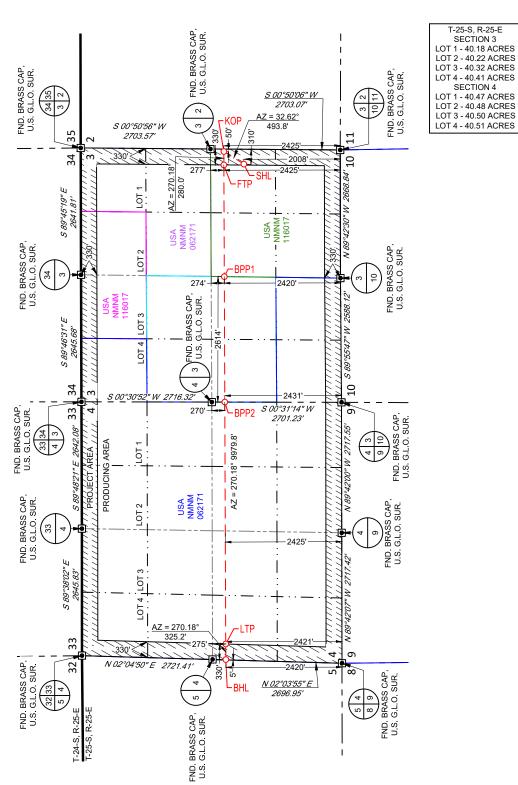


SECTION 3, TOWNSHIP 25-S, RANGE 25-E, N.M.P.M. EDDY COUNTY, NEW MEXICO

T-25-S, R-25-E

SECTION 3

LOT 4 - 40.51 ACRES



**SURFACE LOCATION (SHL)** 

NEW MEXICO EAST NAD 1983 X=528070 Y=420901 LAT.: N 32.1571284 LONG.: W 104.3762072 2008' FSL 310' FEL

#### KICK OFF POINT (KOP)

NEW MEXICO EAST NAD 1983 X=528336 Y=421317 LAT.: N 32.1582721 LONG.: W 104.3753475 2425' FSL 50' FEL

#### **FIRST TAKE POINT (FTP)**

**NEW MEXICO EAST** NAD 1983 X=528056 Y=421318 LAT.: N 32.1582742 LONG.: W 104.3762524 2425' FSL 330' FEL

# **BLM PERF. POINT (BPP1)**

**NEW MEXICO EAST** NAD 1983 X=525730 Y=421325 LAT.: N 32.1582914 LONG.: W 104.3837703 2420' FSL 2614' FWL

#### **BLM PERF. POINT (BPP2)**

NEW MEXICO EAST NAD 1983 X=523116 Y=421333 LAT.: N 32.1583101 LONG.: W 104.3922165 2431' FSL 0' FWL

## LAST TAKE POINT (LTP)

NEW MEXICO EAST NAD 1983 X=518076 Y=421349 LAT.: N 32.1583446 LONG.: W 104.4085018 2421' FSL 330' FWL

### **BOTTOM HOLE LOCATION (BHL) NEW MEXICO EAST**

NAD 1983 X=517751 Y=421350 LAT.: N 32.1583468 LONG.: W 104.4095527 2420' FSL 5' FWL

LEASE NAME & WELL NO .: BEER 30 FED COM 213H

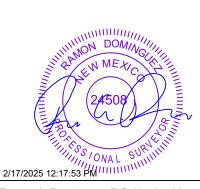
\_ TWP\_ 25-S SECTION \_ RGE\_ 25-E SURVEY N.M.P.M. **EDDY** COUNTY STATE NM 2008' FSL & 310' FEL DESCRIPTION

## **DISTANCE & DIRECTION**

FROM INT. OF BLACK RIVER VILLAGE RD. C.R. 720 & US-180 W/US-62 W. GO SOUTHWEST ON US-180 W/US-62 W ±4.3 MILES, THENCE EAST (LEFT) ON CREOSOTE ±2324 FEET, THENCE SOUTH (RIGHT) ON A PROPOSED RD. ±1549 FEET, THENCE SOUTH ON A PROPOSED RD ±1726 FEET, THENCE ±242 FEET TO A POINT ±200 FEET SOUTHWEST OF THE LOCATION.

ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREON ARE GRID BASED UPON THE NEW MEXICO COORDINATE SYSTEM OF 1983, EAST ZONE, U.S. SURVEY

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



Ramon A. Dominguez, P.S. No. 24508



481 WINSCOTT ROAD, Ste. 200 • BENBROOK, TEXAS 76126 TELEPHONE: (432) 682-1653 OR (800) 767-1653 • WWW.TOPOGRAPHIC.COM

# 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 LL	C OGRID:	372043	Date:	_2/20/2025				
II. Type: $\square$ Original $\square$ Amendment due to $\square$ 19.15.27.9.D(6)(a) NMAC $\square$ 19.15.27.9.D(6)(b) NMAC $\square$ 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	Α	ULSTR	Footages	Anticipated	Anticipated	Anticipated				
	ΡI			Oil BBL/D	Gas MCF/D	Produced Water				
						BBL/D				
BEER 30 Fed Com 202H		1, 3, 25S, 25E	1347 FNL, 748 FEL	939	3571	5149				
BEER 30 Fed Com 204H		I, 3, 25S, 25E	2007 FSL, 280 FEL	939	3571	5149				
BEER 30 Fed Com 211H		1, 3, 25S, 25E	1347 FNL, 778 FEL	939	3571	5149				
BEER 30 Fed Com 213H		I, 3, 25S, 25E	2008 FSL, 310 FEL	939	3571	5149				
IV. Central Delivery Point Name: BEER 30 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	Well Name API		TD Reached	Completion	Initial Flow	First Production
			Date	Commencement Date	Back Date	Date
BEER 30 Fed Com 202H		11/1/2025	1/20/2026	2/1/2026	3/1/2026	3/1/2026
BEER 30 Fed Com 204H		11/1/2025	1/20/2026	2/1/2026	3/1/2026	3/1/2026
BEER 30 Fed Com 211H		11/1/2025	1/20/2026	2/1/2026	3/1/2026	3/1/2026
BEER 30 Fed Com 213H		11/1/2025	1/20/2026	2/1/2026	3/1/2026	3/1/2026

- 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 <u>EFFECTIVE APRIL 1, 2022</u>

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

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

## IX. Anticipated Natural Gas Production:

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

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

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

XI. Map. $\square$ 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 $\square$ will $\square$ will not have capacity to gather 100% of the ant	icipated natural gas
production volume from the well prior to the date of first production.	

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

$\overline{}$	1 4 1 🔿		1 .		1	•		.1	. 1	1.	
	L Affach ( )	nerator c	nlan to	manage	production	in reci	nonce to	the	increased	line	nrecentre
_	I Attach O	perator s	pran u	manage	production	III I Co	ponse to	uic	mercasea	IIIIC	pressure

XIV. Confidentiality: $\sqcup$ Operator asserts confidentiality pursuant to Section 71-2-8 NMSA 1978 for the information provide	ed 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 of the	ation
for which confidentiality is asserted and the basis for such assertion.	

(h)

# Section 3 - Certifications Effective May 25, 2021

	<del></del>
Operator certifies that, at	fter reasonable inquiry and based on the available information at the time of submittal:
one hundred percent of	to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering
hundred percent of the arinto account the current a	able to connect to a natural gas gathering system in the general area with sufficient capacity to transport one nticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system. box, Operator will select one of the following:
Well Shut-In. □ Operate D of 19.15.27.9 NMAC;	or will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection or
Venting and Flaring Pl	an. □ Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential
alternative beneficial use	es for the natural gas until a natural gas gathering system is available, including:
(a)	power generation on lease;
<b>(b)</b>	power generation for grid;
(c)	compression on lease;
( <b>d</b> )	liquids removal on lease;
(e)	reinjection for underground storage;
( <b>f</b> )	reinjection for temporary storage;
(g)	reinjection for enhanced oil recovery:

# **Section 4 - Notices**

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

other alternative beneficial uses approved by the division.

fuel cell production; and

- (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: BR
Printed Name: Bill Ramsey
Title: Sr. Environmental and Regulatory Specialist
E-mail Address: <u>brmasey@taprk.com</u>
Date: 2/20/2025
Phone: 720-238-2787
OIL CONSERVATION DIVISION
(Only applicable when submitted as a standalone form)
Approved By:
Title:
Approval Date:
Conditions of Approval:



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

#### **VII. Operational Practices:**

- 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.



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

Well Name: BEER 30 FED COM

# **Drilling Plan Data Report**

09/08/2025

**APD ID:** 10400103924

**Submission Date:** 03/04/2025

Highlighted data reflects the most recent changes

Operator Name: TAP ROCK OPERATING LLC

Well Number: 213H

Well Type: CONVENTIONAL GAS WELL

Well Work Type: Drill

**Show Final Text** 

# **Section 1 - Geologic Formations**

Formation ID	Formation Name	Elevation	True Vertical	Measured Depth	Lithologies	Mineral Resources	Producing Formatio
16351491	QUATERNARY	3590	0	0	OTHER : None	NONE	N
16351492	RUSTLER	3461	129	129	ANHYDRITE	NONE	N
16351493	TOP SALT	2389	1201	1202	SALT	OTHER : Salt	N
16351494	BASE OF SALT	2213	1377	1379	SALT	OTHER : Salt	N
16351495	DELAWARE	2030	1560	1562	OTHER, SANDSTONE : Mountain Group	NONE	N
16351496	LAMAR	2024	1566	1568	SANDSTONE	NATURAL GAS, OIL	N
16351497	BELL CANYON	1967	1623	1625	SANDSTONE	NATURAL GAS, OIL	N
16351498	RAMSEY SAND	1916	1674	1676	SANDSTONE	NATURAL GAS, OIL	N
16351499	CHERRY CANYON	976	2614	2619	LIMESTONE	NATURAL GAS, OIL	N
16351500	BRUSHY CANYON	201	3389	3396	SANDSTONE	NATURAL GAS, OIL	N
16351501	BONE SPRING LIME	-1540	5130	5141	OTHER : Carbonate	NATURAL GAS, OIL	N
16351502	AVALON SAND	-1652	5242	5254	OTHER : Upper - Carbonate	NATURAL GAS, OIL	N
16351503	AVALON SAND	-1919	5509	5521	OTHER : Middle - Carbonate	NATURAL GAS, OIL	N
16351504	BONE SPRING 1ST	-2413	6003	6017	SANDSTONE	NATURAL GAS, OIL	N
16351505	BONE SPRING 2ND	-2734	6324	6339	OTHER : Carbonate	NATURAL GAS, OIL	N
16351506	BONE SPRING 2ND	-2974	6564	6579	SANDSTONE	NATURAL GAS, OIL	N
16351507	BONE SPRING 3RD	-4226	7816	7834	SANDSTONE	NATURAL GAS, OIL	N

Well Name: BEER 30 FED COM Well Number: 213H

	Formation			True Vertical	Measured		Mineral Resources	Producing
	ID	Formation Name	Elevation		Depth	Lithologies		Formatio
Ī	16351508	WOLFCAMP	-4588	8178	8230	OTHER, SHALE : A	NATURAL GAS, OIL	Y

#### **Section 2 - Blowout Prevention**

Pressure Rating (PSI): 5M Rating Depth: 25000

**Equipment:** At 18,730', 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. Tap Rock Operating requests to only test BOP connection breaks after rig walks per the procedures and stipulations set forth in the "BOP Shell Test Procedure" document emailed to the BLM on 8/11/22.

**Testing Procedure:** 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.

#### **Choke Diagram Attachment:**

5M\_Choke\_Diagram\_20250304084141.pdf

## **BOP Diagram Attachment:**

5M\_BOP\_Diagram\_20250304084148.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	14.7 5	11.75	NEW	API	N	0	450	0	450	3590	3140	450	J-55	42	BUTT	1.13	1.15	DRY	1.6	DRY	1.6
2	INTERMED IATE	11	8.625	NEW	API	N	0	1618	0	1616	3611	1974	1618	J-55	32	BUTT	1.13	1.15	DRY	1.6	DRY	1.6

Well Name: BEER 30 FED COM Well Number: 213H

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
3	PRODUCTI ON	7.87 5	5.5	NEW	NON API	N	0	18730	0	8024	3611	-4434	18730	P- 110	20	OTHER - TXP	1.13	1.15	DRY	1.6	DRY	1.6

RFACE
F

**Inspection Document:** 

**Spec Document:** 

**Tapered String Spec:** 

Casing Design Assumptions and Worksheet(s):

Casing\_Design\_Assumptions\_20250304084220.pdf

Casing ID: 2 String INTERMEDIATE

**Inspection Document:** 

**Spec Document:** 

**Tapered String Spec:** 

Casing Design Assumptions and Worksheet(s):

Casing\_Design\_Assumptions\_20250304084248.pdf

Well Name: BEER 30 FED COM Well Number: 213H

## **Casing Attachments**

Casing ID: 3

String

**PRODUCTION** 

**Inspection Document:** 

**Spec Document:** 

5.5in\_TXP\_Casing\_Spec\_20250304084357.PDF

**Tapered String Spec:** 

Casing Design Assumptions and Worksheet(s):

 $Casing\_Design\_Assumptions\_20250304084410.pdf$ 

# **Section 4 - Cement**

String Type	Lead/Tail	Stage Tool Depth	Тор МD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	0	0	0	0	0	0	None	None
SURFACE	Tail		0	450	470	1.33	14.8	625	100	Class C	5% NCI + LCM
INTERMEDIATE	Lead		0	1118	154	2.7	11	416	75	Class C	Bentonite + 1% CaCL2 + 8% NaCl + LCM
INTERMEDIATE	Tail		1118	1618	124	1.33	14.8	165	30	Class C	5% NaCl + LCM
PRODUCTION	Lead		1418	7843	397	3.35	10.5	1332	20	Class C	Fluid Loss + Dispersant + Retarder + LCM
PRODUCTION	Tail		7843	1873 0	2186	1.63	13.2	3563	20	Class H	Fluid Loss + Dispersant + Retarder + LCM

Well Name: BEER 30 FED COM Well Number: 213H

# **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 43 CFR 3172:

Diagram of the equipment for the circulating system in accordance with 43 CFR 3172:

**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 (Ibs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	Hd	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
0	450	OTHER : Fresh Water Spud Mud	8.4	8.4							
450	1618	OTHER : Salt- Saturated Mud	10	10							
1618	1873 0	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. CBL w/ CCL from as far as gravity will let it fall to TOC.

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

CEMENT BOND LOG, GAMMA RAY LOG, MUD LOG/GEOLOGICAL LITHOLOGY LOG,

Coring operation description for the well:

No DSTs or cores are planned at this time.

Well Name: BEER 30 FED COM Well Number: 213H

# **Section 7 - Pressure**

Anticipated Bottom Hole Pressure: 3755 Anticipated Surface Pressure: 1918

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

Beer30\_S2\_H2S\_Plan\_20250304084610.pdf

# **Section 8 - Other Information**

Proposed horizontal/directional/multi-lateral plan submission:

Beer30\_213H\_Directional\_Plan\_20250304084623.pdf

Other proposed operations facets description:

Other proposed operations facets attachment:

Beer30\_213H\_Drill\_Plan\_20250304084634.pdf

Beer30\_213H\_Anticollision\_Report\_20250304084644.pdf

Wellhead\_Diagram\_3T\_20250304084652.pdf

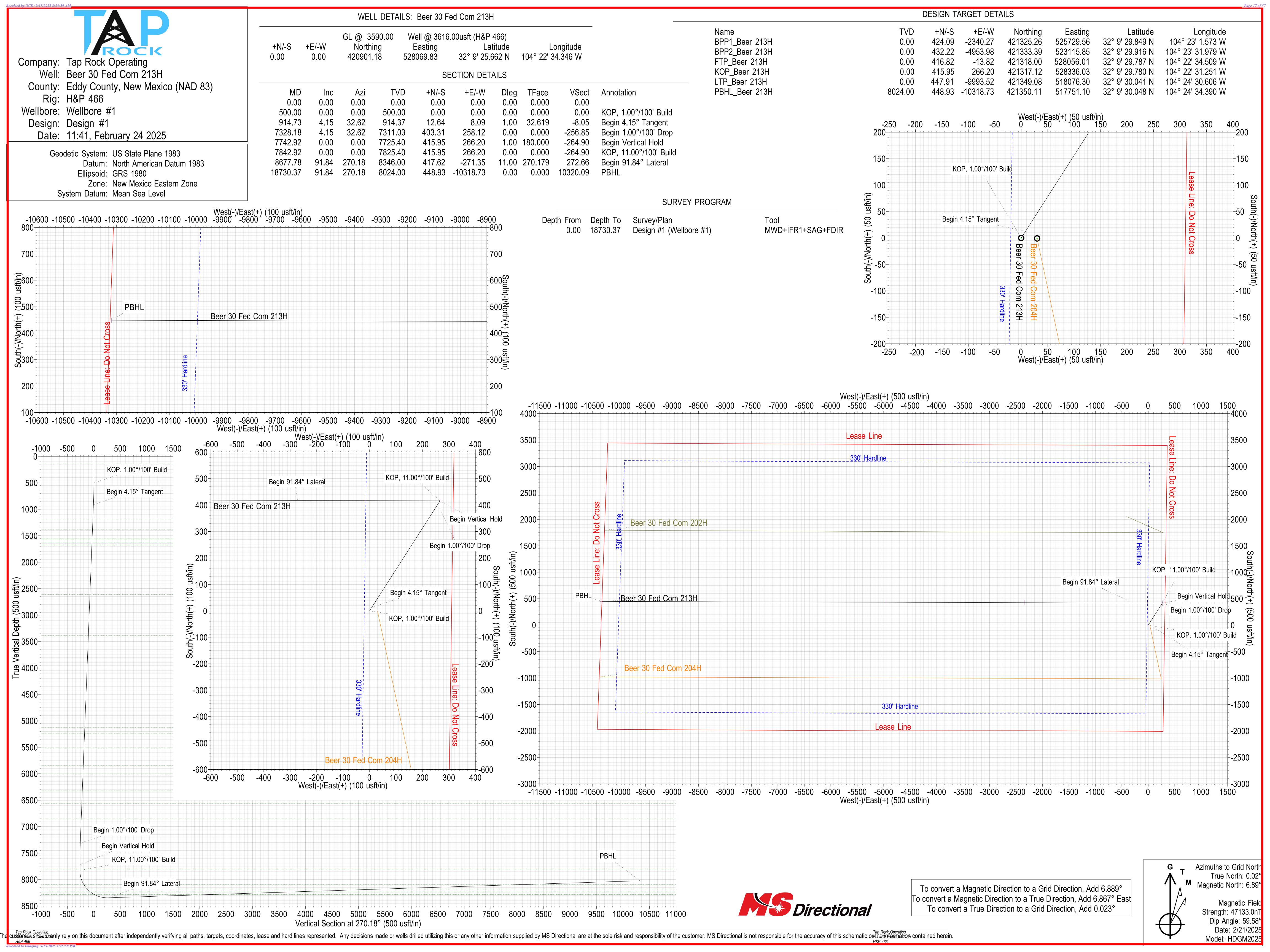
CoFlex\_Certs\_20250304084654.pdf

BOP\_Shell\_Test\_Procedure\_20250304084705.pdf

Beer30\_WMP\_20250304084706.pdf

Other Variance request(s)?:

**Other Variance attachment:** 





# **Tap Rock Operating**

Eddy County, New Mexico (NAD 83) Beer 30 Fed Com (202H, 204H, 211H, 213H) Beer 30 Fed Com 213H

Wellbore #1

Plan: Design #1

# **Standard Planning Report**

24 February, 2025







#### Planning Report



Database: Company: TRG\_EDMConroe
Tap Rock Operating

 Project:
 Eddy County, New Mexico (NAD 83)

 Site:
 Beer 30 Fed Com (202H, 204H, 211H, 213H)

Well: Beer 30 Fed Com 213H

Wellbore: Wellbore #1
Design: Design #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

**Survey Calculation Method:** 

Well Beer 30 Fed Com 213H

Well @ 3616.00usft (H&P 466) Well @ 3616.00usft (H&P 466)

Grid

Minimum Curvature

Project Eddy County, New Mexico (NAD 83)

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

System Datum:

Mean Sea Level

**Site** Beer 30 Fed Com (202H, 204H, 211H, 213H)

 Site Position:
 Northing:
 422,953.99 usft
 Latitude:
 32° 9' 45.976 N

 From:
 Lat/Long
 Easting:
 527,662.37 usft
 Longitude:
 104° 22' 39.096 W

Position Uncertainty: 0.00 usft Slot Radius: 13-3/16 "

Well Beer 30 Fed Com 213H

 Well Position
 +N/-S
 0.00 usft
 Northing:
 420,901.18 usfl
 Latitude:
 32° 9' 25.662 N

 +E/-W
 0.00 usft
 Easting:
 528,069.83 usfl
 Longitude:
 104° 22' 34.346 W

Position Uncertainty 0.00 usft Wellhead Elevation: usft Ground Level: 3,590.00 usft 3,590.00 usft

Grid Convergence: -0.023 °

Wellbore #1

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

 HDGM2025
 2/21/2025
 6.867
 59.583
 47,133.00

Design #1

Audit Notes:

Version:Phase:PLANTie On Depth:0.00

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

 0.00
 0.00
 0.00
 0.00
 270.18

Plan Survey Tool Program Date 2/21/2025

Depth From Depth To

(usft) (usft) Survey (Wellbore) Tool Name Remarks

1 0.00 18,730.37 Design #1 (Wellbore #1) MWD+IFR1+SAG+FDIR

OWSG MWD + IFR1 + Sag

Plan Section	s									
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
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.000	
914.73	4.15	32.62	914.37	12.64	8.09	1.00	1.00	0.00	32.619	
7,328.18	4.15	32.62	7,311.03	403.31	258.12	0.00	0.00	0.00	0.000	
7,742.92	0.00	0.00	7,725.40	415.95	266.20	1.00	-1.00	0.00	180.000	
7,842.92	0.00	0.00	7,825.40	415.95	266.20	0.00	0.00	0.00	0.000	
8,677.78	91.84	270.18	8,346.00	417.62	-271.35	11.00	11.00	0.00	270.179	
18,730.37	91.84	270.18	8,024.00	448.93	-10,318.73	0.00	0.00	0.00	0.000 F	BHL_Beer 213H

# ROCK

### **Planning Report**



Database: TRG\_EDMConroe Company: Tap Rock Operating

 Project:
 Eddy County, New Mexico (NAD 83)

 Site:
 Beer 30 Fed Com (202H, 204H, 211H, 213H)

Well: Beer 30 Fed Com 213H

Wellbore: Wellbore #1
Design: Design #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well Beer 30 Fed Com 213H Well @ 3616.00usft (H&P 466) Well @ 3616.00usft (H&P 466)

nned Survey									
ilieu oui vey									
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)
0.00 100.00 129.00	0.00	0.00 0.00 0.00	0.00 100.00 129.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00
Rustler 200.00 300.00		0.00 0.00	200.00 300.00	0.00 0.00	0.00	0.00	0.00	0.00 0.00	0.00 0.00
400.00 500.00	0.00	0.00 0.00	400.00 500.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00
<b>KOP, 1.00</b> 600.00 700.00		32.62 32.62	599.99 699.96	0.74 2.94	0.47 1.88	-0.47 -1.87	1.00 1.00	1.00 1.00	0.00 0.00
800.00 900.00 914.73	4.00	32.62 32.62 32.62	799.86 899.68 914.37	6.61 11.76 12.64	4.23 7.52 8.09	-4.21 -7.49 -8.05	1.00 1.00 1.00	1.00 1.00 1.00	0.00 0.00 0.00
	5° Tangent	32.02	914.37	12.04	0.09	-0.03	1.00	1.00	0.00
1,000.00 1,100.00 1,200.00	4.15	32.62 32.62 32.62	999.41 1,099.15 1,198.89	17.83 23.92 30.01	11.41 15.31 19.21	-11.36 -15.24 -19.11	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00
1,202.11 <b>Top Salt</b>	4.15	32.62	1,201.00	30.14	19.29	-19.20	0.00	0.00	0.00
1,300.00 1,378.58 <b>Base Sali</b>	4.15	32.62 32.62	1,298.63 1,377.00	36.11 40.89	23.11 26.17	-22.99 -26.04	0.00 0.00	0.00 0.00	0.00 0.00
1,400.00 1,500.00	4.15	32.62 32.62	1,398.37 1,498.11	42.20 48.29	27.01 30.90	-26.87 -30.75	0.00 0.00	0.00 0.00	0.00 0.00
1,562.06		32.62	1,560.00	52.07	33.32	-33.16	0.00	0.00	0.00
Delaware 1,568.07 Lamar	Mountain Gp 4.15	32.62	1,566.00	52.44	33.56	-33.39	0.00	0.00	0.00
1,600.00 1,625.22	4.15	32.62 32.62	1,597.84 1,623.00	54.38 55.92	34.80 35.79	-34.63 -35.61	0.00 0.00	0.00 0.00	0.00 0.00
Bell Cany 1,676.36		32.62	1,674.00	59.03	37.78	-37.59	0.00	0.00	0.00
Ramsey S	Sand								
1,700.00 1,800.00 1,900.00 2,000.00 2,100.00	4.15 4.15 4.15	32.62 32.62 32.62 32.62 32.62	1,697.58 1,797.32 1,897.06 1,996.80 2,096.53	60.47 66.56 72.65 78.75 84.84	38.70 42.60 46.50 50.40 54.30	-38.51 -42.39 -46.27 -50.15 -54.03	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
2,200.00 2,300.00 2,400.00 2,500.00 2,600.00	4.15 4.15 4.15	32.62 32.62 32.62 32.62 32.62	2,196.27 2,296.01 2,395.75 2,495.49 2,595.22	90.93 97.02 103.11 109.20 115.29	58.19 62.09 65.99 69.89 73.79	-57.91 -61.79 -65.67 -69.55 -73.43	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
2,618.82		32.62	2,614.00	116.44	74.52	-74.16	0.00	0.00	0.00
2,700.00	•	32.62	2,694.96	121.39	77.69	-77.30	0.00	0.00	0.00
2,700.00 2,800.00 2,900.00 3,000.00	4.15 4.15	32.62 32.62 32.62 32.62	2,694.96 2,794.70 2,894.44 2,994.18	121.39 127.48 133.57 139.66	81.58 85.48 89.38	-77.30 -81.18 -85.06 -88.94	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00
3,100.00 3,200.00 3,300.00	4.15	32.62 32.62 32.62	3,093.92 3,193.65 3,293.39	145.75 151.84 157.93	93.28 97.18 101.08	-92.82 -96.70 -100.58	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00

# TAP

### **Planning Report**



Database: TRG\_EDMConroe Tap Rock Operating

 Project:
 Eddy County, New Mexico (NAD 83)

 Site:
 Beer 30 Fed Com (202H, 204H, 211H, 213H)

Well: Beer 30 Fed Com 213H

Wellbore: Wellbore #1
Design: Design #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

**Survey Calculation Method:** 

Well Beer 30 Fed Com 213H Well @ 3616.00usft (H&P 466) Well @ 3616.00usft (H&P 466)

Design	:	Design #1								
Planne	ed Survey									
	Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
	3,395.86	4.15	32.62	3,389.00	163.77	104.81	-104.30	0.00	0.00	0.00
	Brushy Ca	nyon								
	3,400.00	4.15	32.62	3,393.13	164.03	104.98	-104.46	0.00	0.00	0.00
	3,500.00	4.15	32.62	3,492.87	170.12	108.87	-108.34	0.00	0.00	0.00
	3,600.00	4.15	32.62	3,592.61	176.21	112.77	-112.22	0.00	0.00	0.00
	3,700.00 3,800.00	4.15 4.15	32.62 32.62	3,692.34 3,792.08	182.30 188.39	116.67 120.57	-116.10 -119.98	0.00 0.00	0.00 0.00	0.00 0.00
	3,900.00	4.15	32.62	3,891.82	194.48	124.47	-123.86	0.00	0.00	0.00
	4,000.00	4.15	32.62	3,991.56	200.57	128.37	-127.74	0.00	0.00	0.00
	4,100.00	4.15	32.62	4,091.30	206.67	132.27	-131.62	0.00	0.00	0.00
	4,200.00	4.15	32.62	4,191.04	212.76	136.16	-135.49	0.00	0.00	0.00
	4,300.00	4.15	32.62	4,290.77	218.85	140.06	-139.37	0.00	0.00	0.00
	4,400.00	4.15	32.62	4,390.51	224.94	143.96	-143.25	0.00	0.00	0.00
	4,500.00	4.15	32.62	4,490.25	231.03	147.86 151.76	-147.13	0.00	0.00 0.00	0.00
	4,600.00 4,700.00	4.15 4.15	32.62 32.62	4,589.99 4,689.73	237.12 243.22	151.76	-151.01 -154.89	0.00 0.00	0.00	0.00 0.00
	4,800.00	4.15	32.62	4,789.46	249.31	159.55	-158.77	0.00	0.00	0.00
	4,900.00	4.15	32.62	4,889.20	255.40	163.45	-162.65	0.00	0.00	0.00
	5,000.00	4.15	32.62	4,988.94	261.49	167.35	-166.53	0.00	0.00	0.00
	5,100.00	4.15	32.62	5,088.68	267.58	171.25	-170.41	0.00	0.00	0.00
	5,141.43	4.15	32.62	5,130.00	270.10	172.87	-172.02	0.00	0.00	0.00
	<b>Bone Sprir</b> 5,200.00	4.15	32.62	5,188.42	273.67	175.15	-174.29	0.00	0.00	0.00
	5,253.72	4.15	32.62	5,242.00	276.94	177.24	-176.37	0.00	0.00	0.00
	Upper Aval	lon								
	5,300.00	4.15	32.62	5,288.15	279.76	179.05	-178.17	0.00	0.00	0.00
	5,400.00	4.15	32.62	5,387.89	285.86	182.95	-182.05	0.00	0.00	0.00
	5,500.00	4.15	32.62	5,487.63	291.95	186.84	-185.93	0.00	0.00	0.00
	5,521.43 <b>Middle Ava</b>	4.15	32.62	5,509.00	293.25	187.68	-186.76	0.00	0.00	0.00
	5,600.00	4.15	32.62	5,587.37	298.04	190.74	-189.81	0.00	0.00	0.00
	5.700.00	4.15	32.62	5,687.11	304.13	194.64	-193.68	0.00	0.00	0.00
	5,800.00	4.15	32.62	5,786.85	310.22	198.54	-197.56	0.00	0.00	0.00
	5,861.32	4.15	32.62	5,848.00	313.96	200.93	-199.94	0.00	0.00	0.00
	Lower Ava		22.22	5 000 50	040.04	000.44	004.44	0.00	0.00	0.00
	5,900.00 6,000.00	4.15 4.15	32.62 32.62	5,886.58 5,986.32	316.31 322.40	202.44 206.34	-201.44 -205.32	0.00 0.00	0.00 0.00	0.00 0.00
	6,016.72	4.15	32.62	6,003.00	323.42	206.99	-205.97	0.00	0.00	0.00
		pring Sand	32.02	6,003.00	323.42	200.99	-205.97	0.00	0.00	0.00
	6.100.00	4.15	32.62	6,086.06	328.50	210.24	-209.20	0.00	0.00	0.00
	6,200.00	4.15	32.62	6,185.80	334.59	214.13	-213.08	0.00	0.00	0.00
	6,300.00	4.15	32.62	6,285.54	340.68	218.03	-216.96	0.00	0.00	0.00
	6,338.57	4.15	32.62	6,324.00	343.03	219.54	-218.46	0.00	0.00	0.00
		Spring Carb			A 4 = ==					
	6,400.00	4.15 4.15	32.62	6,385.27	346.77	221.93	-220.84 -224.72	0.00	0.00	0.00 0.00
	6,500.00 6,579.20	4.15 4.15	32.62 32.62	6,485.01 6,564.00	352.86 357.69	225.83 228.92	-224.72 -227.79	0.00 0.00	0.00 0.00	0.00
		Spring Sand	32.02	0,001.00	331.00			0.00	0.00	3.00
	6,600.00	4.15	32.62	6,584.75	358.95	229.73	-228.60	0.00	0.00	0.00
	6,700.00	4.15	32.62	6,684.49	365.04	233.63	-232.48	0.00	0.00	0.00
	6,800.00	4.15	32.62	6,784.23	371.14	237.52	-236.36	0.00	0.00	0.00
	6,866.95	4.15	32.62	6,851.00	375.21	240.13	-238.95	0.00	0.00	0.00
	3rd Bone S	pring Carb								

# Planning Report





Database: TRG\_EDMConroe Tap Rock Operating

 Project:
 Eddy County, New Mexico (NAD 83)

 Site:
 Beer 30 Fed Com (202H, 204H, 211H, 213H)

Well: Beer 30 Fed Com 213H

Wellbore: Wellbore #1

Design: Design #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

**Survey Calculation Method:** 

Well Beer 30 Fed Com 213H Well @ 3616.00usft (H&P 466) Well @ 3616.00usft (H&P 466)

Palmed Survey	esign:	Design #1								
Depth   Inclination   Azimuth   Custh   (usth)	Planned Survey									
7,000.00 4.15 32.62 6,983.70 383.32 245.32 -244.12 0.00 0.00 0.00 0.00 7,100.00 4.15 32.62 7,083.44 389.41 249.22 -248.00 0.00 0.00 0.00 0.00 7,300.00 4.15 32.62 7,183.18 395.50 253.12 -251.87 0.00 0.00 0.00 0.00 7,300.00 4.15 32.62 7,311.03 403.31 256.12 -256.85 0.00 0.00 0.00 0.00 7,328.18 4.15 32.62 7,311.03 403.31 256.12 -256.85 0.00 0.00 0.00 0.00 7,328.18 4.15 32.62 7,311.03 403.31 256.12 -256.85 0.00 0.00 0.00 0.00 7,328.18 4.15 32.62 7,382.69 407.31 250.67 259.39 1.00 -1.00 0.00 7,500.00 2.43 32.62 7,482.55 411.61 256.34 32.62 1.00 -1.00 0.00 7,500.00 1.43 32.62 7,882.48 415.81 256.12 -266.85 1.00 -1.00 0.00 7,700.00 0.43 32.62 7,882.48 415.81 256.12 -264.90 1.00 -1.00 0.00 7,700.00 0.43 32.62 7,882.48 415.81 256.12 -264.90 1.00 -1.00 0.00 7,725.00 0.00 7,725.40 414.55 256.20 264.90 1.00 -1.00 0.00 7,725.40 414.55 256.20 264.90 1.00 -1.00 0.00 7,725.40 414.55 256.20 264.90 0.00 0.00 7,725.40 415.95 266.20 -264.90 0.00 0.00 0.00 7,835.52 0.00 0.00 7,835.52 0.00 0.00 7,835.50 0.00 0.00 7,835.50 0.00 0.00 7,835.50 0.00 0.00 7,835.50 0.00 0.00 0.00 7,835.50 0.00 0.00 0.00 7,835.50 0.00 0.00 7,835.50 0.00 0.00 0.00 0.00 0.00 0.00 0.00	Depth			Depth			Section	Rate	Rate	Rate
7,300.00	7,000.00	4.15	32.62	6,983.70	383.32	245.32	-244.12	0.00	0.00	0.00
7,400.00 3,43 32,62 7,882,69 407.31 260,67 -259.39 1,00 -1.00 0.00   7,500.00 2,43 32,62 7,882,55 411,61 263,43 -262,13 1,00 -1.00 0.00   7,600.00 1,43 32,62 7,582,50 414,45 265,24 -263,94 1,00 -1.00 0.00   7,700.00 0,43 32,62 7,582,50 414,45 265,24 -263,94 1,00 -1.00 0.00   7,702,00 0,043 32,62 7,582,48 415,81 266,12 -264,81 1,00 -1.00 0.00   7,742,92 0,00 0,00 7,725,40 415,95 266,20 -264,90 1,00 -1.00 0.00   7,800,00 0,00 0,00 7,725,40 415,95 266,20 -264,90 0,00 0,00 0,00   7,833,52 0,00 0,00 7,816,00 415,95 266,20 -264,90 0,00 0,00 0,00   7,842,92 0,00 0,00 7,825,40 415,95 266,20 -264,90 0,00 0,00 0,00   800,00 0,78 270,18 7,832,48 415,95 266,20 -264,90 0,00 0,00 0,00   800,00 0,78 270,18 7,832,48 415,95 266,16 -264,85 11,00 11,00 0,00   7,930,00 1,78 270,18 7,832,48 415,95 266,16 -264,85 11,00 11,00 0,00   7,930,00 1,78 270,18 7,832,48 415,95 266,16 -264,85 11,00 11,00 0,00   7,930,00 17,28 270,18 7,832,47 415,96 263,08 -261,77 11,00 11,00 0,00   8,050,00 17,28 270,18 7,891,73 415,98 255,23 -253,93 11,00 11,00 0,00   8,050,00 2,278 270,18 7,891,71 416,10 242,70 -241,39 11,00 11,00 0,00   8,125,12 31,04 270,18 8,072,17 416,14 204,04 -202,73 11,00 11,00 0,00   8,125,12 31,04 270,18 8,072,17 416,13 191,61 199,30 11,00 11,00 0,00   8,125,12 31,04 270,18 8,15,16 416,31 148,52 -147,21 11,00 11,00 0,00   8,125,12 31,04 270,18 8,15,16 416,31 148,52 -147,21 11,00 11,00 0,00   8,200,00 39,28 270,18 8,155,16 416,31 148,52 -147,21 11,00 11,00 0,00   8,200,00 44,78 270,18 8,152,29 416,62 115,06 113,75 11,00 11,00 0,00   8,300,00 52,8 270,18 8,256,09 416,68 32,6 -36,95 11,00 11,00 0,00   8,300,00 52,8 270,18 8,256,09 416,68 32,6 -36,95 11,00 11,00 0,00   8,400,00 61,28 270,18 8,256,09 416,68 32,6 -36,95 11,00 11,00 0,00   8,400,00 61,28 270,18 8,256,09 416,68 32,6 -36,95 11,00 11,00 0,00   8,550,00 77,78 270,18 8,346,00 416,81 194,61 146,79 4.37 5,68 11,00 11,00 0,00   8,500,00 91,84 270,18 8,346,00 416,83 -43,355,00 59,71 10,00 11,00 0,00   8,600,00 91,84 270,18 8,346,00 416,83 -43,355,8 418,80 -43,355,8 418,80 -593,40	7,300.00	4.15	32.62	7,282.92	401.59	257.02	-255.75	0.00	0.00	0.00
7,500.00										
7,700.00 0.43 32.62 7,682.48 415.81 266.12 284.81 1.00 -1.00 0.00    Figure   Figure				7,482.55						
Regin Vertical Hold   7,800.00	7,700.00	0.43	32.62	7,682.48	415.81	266.12	-264.81	1.00	-1.00	0.00
7,800.00 0.00 0.00 7,816.00 415.95 266.20 -264.90 0.00 0.00 0.00 0.00  3rd Bone Spring Sand  7,842.92 0.00 0.00 7,825.40 415.95 266.20 -264.90 0.00 0.00 0.00  KOP, 11.00*/100* Build  7,850.00 0.78 270.18 7,832.48 415.95 266.60 -264.90 0.00 0.00 0.00  7,950.00 1.78 270.18 7,832.48 415.95 266.16 -264.85 11.00 11.00 0.00  7,950.00 1.78 270.18 7,882.37 415.96 263.08 -261.77 11.00 11.00 0.00  8,050.00 17.8 270.18 7,931.73 415.98 255.23 -253.39 11.00 11.00 0.00  8,050.00 17.28 270.18 7,930.11 416.02 242.70 -241.39 11.00 11.00 0.00  8,050.00 2.78 270.18 8,027.07 416.07 225.58 -224.27 11.00 11.00 0.00  8,100.00 28.28 270.18 8,027.07 416.01 225.58 224.71 11.00 11.00 0.00  8,125.12 31.04 270.18 8,094.00 416.18 191.61 -190.30 11.00 11.00 0.00  3rd BS W Sand  8,150.00 33.78 270.18 8,115.00 416.22 178.27 -176.97 11.00 11.00 0.00  8,200.00 39.28 270.18 8,155.16 416.31 145.52 -147.21 11.00 11.00 0.00  8,230.24 42.61 270.18 8,175.01 416.38 128.71 -127.40 11.00 11.00 0.00  Wolfcamp A X Sand  8,250.00 44.78 270.18 8,192.29 416.42 115.06 -113.75 11.00 11.00 0.00  8,300.00 50.28 270.18 8,226.03 416.53 78.19 -76.89 11.00 11.00 0.00  8,300.00 50.28 270.18 8,226.03 416.53 78.19 -76.89 11.00 11.00 0.00  8,300.00 50.28 270.18 8,226.03 416.53 78.19 -76.89 11.00 11.00 0.00  Wolfcamp A Y Sand  8,350.00 55.78 270.18 8,226.09 416.66 38.26 -36.95 11.00 11.00 0.00  8,400.00 61.28 270.18 8,226.09 416.66 38.26 -36.95 11.00 11.00 0.00  8,400.00 66.78 270.18 8,226.09 416.66 38.26 -36.95 11.00 11.00 0.00  8,550.00 88.78 270.18 8,342.99 416.79 -4.37 5.68 11.00 11.00 0.00  8,550.00 88.78 270.18 8,342.99 416.79 -4.37 5.68 11.00 11.00 0.00  8,650.00 88.78 270.18 8,342.99 416.79 -4.37 5.68 11.00 11.00 0.00  8,550.00 91.84 270.18 8,342.99 417.98 -19.371 195.02 11.00 11.00 0.00  8,600.00 89.84 270.18 8,342.99 417.98 -19.371 195.02 11.00 11.00 0.00  8,600.00 91.84 270.18 8,342.99 417.98 -293.55 294.86 0.00 0.00 0.00  8,900.00 91.84 270.18 8,334.84 418.94 -693.35 694.66 0.00 0.00 0.00  9,000.00 91.84 270.18 8,332.48 418.94 -693.35 694.66 0.00 0.00 0.00	· ·		0.00	1,120.40	410.00	200.20	-204.50	1.00	-1.00	0.00
7,842.92         0.00         0.00         7,825.40         415.95         266.20         -264.90         0.00         0.00         0.00           KOP, 11.00°/100° Build         7,800.00         0.78         270.18         7,832.48         415.95         266.16         -264.85         11.00         11.00         0.00           7,900.00         6,28         270.18         7,882.37         415.96         263.08         -261.77         11.00         11.00         0.00           7,900.00         11.78         270.18         7,931.73         415.98         255.23         -253.93         11.00         11.00         0.00           8,000.00         17.28         270.18         7,980.11         416.02         242.70         -241.39         11.00         11.00         0.00           8,100.00         28.28         270.18         8,027.07         416.07         225.58         -224.27         11.00         11.00         0.00           3rd BS W Sand         8,150.00         33.78         270.18         8,115.00         416.22         178.27         -176.97         11.00         11.00         0.00           8.230.24         42.61         270.18         8,178.00         416.22         178.27 <th< td=""><td>7,800.00 7,833.52</td><td>0.00 0.00</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>	7,800.00 7,833.52	0.00 0.00								
ROP, 11.00°/100° Build   7,850.00	3rd Bone S	pring Sand								
7,850.00 0.78 270.18 7,832.48 415.95 266.16 -264.85 11.00 11.00 0.00 7,950.00 6.28 270.18 7,882.37 415.96 263.08 -261.77 11.00 11.00 0.00 7,950.00 11.78 270.18 7,931.73 415.96 263.08 -261.77 11.00 11.00 0.00 8,000.00 17.28 270.18 7,931.73 415.98 255.23 -263.93 11.00 11.00 0.00 8,000.00 17.28 270.18 7,980.11 416.02 242.70 -241.39 11.00 11.00 0.00 8,100.00 28.28 270.18 8,027.07 416.07 225.58 -224.27 11.00 11.00 0.00 8,100.00 28.28 270.18 8,072.17 416.14 204.04 -202.73 11.00 11.00 0.00 8,125.12 31.04 270.18 8,094.00 416.18 191.61 -190.30 11.00 11.00 0.00 8,125.12 31.04 270.18 8,094.00 416.18 191.61 -190.30 11.00 11.00 0.00 8,200.00 33.78 270.18 8,155.16 416.31 148.52 -147.21 11.00 11.00 0.00 8,200.00 39.28 270.18 8,155.16 416.31 148.52 -147.21 11.00 11.00 0.00 8,200.00 39.28 270.18 8,155.16 416.31 148.52 -147.21 11.00 11.00 0.00 8,200.00 44.78 270.18 8,192.29 416.42 115.06 -113.75 11.00 11.00 0.00 8,317.52 52.21 270.18 8,226.03 416.53 78.19 -76.89 11.00 11.00 0.00 8,317.52 52.21 270.18 8,237.00 416.58 64.54 -63.23 11.00 11.00 0.00 8,317.52 52.21 270.18 8,266.03 416.58 64.54 -63.23 11.00 11.00 0.00 8,408.05 62.16 270.18 8,266.00 416.58 64.54 -63.23 11.00 11.00 0.00 8,408.05 62.16 270.18 8,266.00 416.58 64.54 -63.23 11.00 11.00 0.00 8,408.05 62.16 270.18 8,266.00 416.58 64.54 -63.23 11.00 11.00 0.00 8,408.05 62.16 270.18 8,266.00 416.58 64.54 -63.23 11.00 11.00 0.00 8,408.05 62.16 270.18 8,266.00 416.59 -43.75 5.68 11.00 11.00 0.00 8,500.00 72.28 270.18 8,326.00 416.59 -49.30 50.61 11.00 11.00 0.00 8,500.00 72.28 270.18 8,326.03 416.59 -49.30 50.61 11.00 11.00 0.00 8,500.00 66.78 270.18 8,326.03 416.59 -49.30 50.61 11.00 11.00 0.00 8,500.00 83.28 270.18 8,346.00 417.62 -271.35 272.266 11.00 11.00 0.00 8,600.00 83.28 270.18 8,346.00 417.62 -271.35 297.266 11.00 11.00 0.00 8,600.00 83.28 270.18 8,346.00 417.62 -271.35 294.86 0.00 0.00 0.00 0.00 8,600.00 91.84 270.18 8,346.00 417.62 -271.35 294.86 0.00 0.00 0.00 0.00 8,600.00 91.84 270.18 8,334.60 417.63 -271.35 449.47 0.00 0.00 0.00 0.00 91.84 270.18 8,335.68 418.63 -			0.00	7,825.40	415.95	266.20	-264.90	0.00	0.00	0.00
8,050.00 22.78 270.18 8,027.07 416.07 225.58 -224.27 11.00 11.00 0.00 8,100.00 28.28 270.18 8,072.17 416.14 204.04 -202.73 11.00 11.00 0.00 0.00 8,125.12 31.04 270.18 8,094.00 416.18 191.61 -190.30 11.00 11.00 0.00 0.00 3rd BS W Sand 8,155.00 33.78 270.18 8,115.00 416.22 178.27 -176.97 11.00 11.00 10.00 0.00 8,200.00 39.28 270.18 8,155.16 416.31 148.52 -147.21 11.00 11.00 0.00 0.00 8,230.24 42.61 270.18 8,178.00 416.38 128.71 -127.40 11.00 11.00 0.00 0.00 Wolfcamp A X Sand 8,250.00 44.78 270.18 8,192.29 416.42 115.06 -113.75 11.00 11.00 0.00 8,317.52 52.21 270.18 8,237.00 416.58 64.54 -63.23 11.00 11.00 0.00 0.00 8,317.52 52.21 270.18 8,237.00 416.58 64.54 -63.23 11.00 11.00 0.00 0.00 8,300.00 55.78 270.18 8,256.09 416.66 38.26 -36.95 11.00 11.00 0.00 0.00 8,408.05 62.16 270.18 8,282.19 416.79 -4.37 5.68 11.00 11.00 0.00 8,408.05 62.16 270.18 8,282.19 416.79 -4.37 5.68 11.00 11.00 0.00 0.00 8,408.05 62.16 270.18 8,280.00 416.81 -11.46 12.76 11.00 11.00 0.00 8,500.00 72.28 270.18 8,334.46 417.23 -144.41 145.72 11.00 11.00 0.00 8,500.00 77.78 270.18 8,334.46 417.23 -144.41 145.72 11.00 11.00 0.00 8,650.00 83.28 270.18 8,345.09 417.38 -193.71 195.02 11.00 11.00 0.00 8,650.00 83.78 270.18 8,346.09 417.38 -193.71 195.02 11.00 11.00 0.00 8,650.00 83.78 270.18 8,346.65 417.69 -293.55 294.86 0.00 0.00 0.00 0.00 8,650.00 91.84 270.18 8,346.09 417.69 -293.55 294.86 0.00 0.00 0.00 0.00 8,650.00 91.84 270.18 8,346.09 417.69 -293.55 294.86 0.00 0.00 0.00 0.00 8,600.00 91.84 270.18 8,345.09 417.69 -293.55 294.86 0.00 0.00 0.00 0.00 8,000.00 91.84 270.18 8,333.68 418.31 -493.45 494.76 0.00 0.00 0.00 0.00 9,000.00 91.84 270.18 8,335.68 418.81 -493.45 693.45 694.66 0.00 0.00 0.00 0.00 9,000.00 91.84 270.18 8,335.68 418.83 -493.35 694.66 0.00 0.00 0.00 0.00 9,000.00 91.84 270.18 8,335.68 418.94 -693.35 694.66 0.00 0.00 0.00 0.00 0.00 9,000.00 91.84 270.18 8,335.68 418.94 -693.35 694.66 0.00 0.00 0.00 0.00 0.00 9,000.00 91.84 270.18 8,335.68 418.94 -693.35 694.66 0.00 0.00 0.00 0.00 0.00 0.00 9,000.00 91.84 270.18 8,335.68 418.94	7,850.00 7,900.00 7,950.00	0.78 6.28 11.78	270.18 270.18	7,882.37 7,931.73	415.96 415.98	263.08 255.23	-261.77 -253.93	11.00 11.00	11.00 11.00	0.00 0.00
8,125.12 31.04 270.18 8,094.00 416.18 191.61 -190.30 11.00 11.00 0.00  3rd BS W Sand  8,150.00 33.78 270.18 8,115.00 416.22 178.27 -176.97 11.00 11.00 0.00  8,200.00 39.28 270.18 8,155.16 416.31 148.52 -147.21 11.00 11.00 0.00  8,230.24 42.61 270.18 8,178.00 416.38 128.71 -127.40 11.00 11.00 0.00  Wolfcamp A X Sand  8,250.00 44.78 270.18 8,192.29 416.42 115.06 -113.75 11.00 11.00 0.00  8,300.00 50.28 270.18 8,226.03 416.53 78.19 -76.89 11.00 11.00 0.00  8,317.52 52.21 270.18 8,237.00 416.58 64.54 -63.23 11.00 11.00 0.00  Wolfcamp A Y Sand  8,350.00 55.78 270.18 8,256.09 416.66 38.26 -36.95 11.00 11.00 0.00  8,400.00 61.28 270.18 8,286.00 416.81 -11.46 12.76 11.00 11.00 0.00  Wolfcamp A Lower  8,450.00 66.78 270.18 8,304.07 416.93 -49.30 50.61 11.00 11.00 0.00  Wolfcamp A Lower  8,450.00 72.28 270.18 8,334.64 417.23 -144.41 145.72 11.00 11.00 0.00  8,600.00 33.28 270.18 8,344.69 417.38 -193.71 195.02 11.00 11.00 0.00  8,600.00 83.28 270.18 8,344.69 417.38 -193.71 195.02 11.00 11.00 0.00  8,600.00 83.28 270.18 8,346.00 417.62 -271.35 272.66 11.00 11.00 0.00  8,600.00 91.84 270.18 8,345.29 417.69 -293.55 294.86 0.00 0.00 0.00  8,900.00 91.84 270.18 8,345.29 417.69 -293.55 294.86 0.00 0.00 0.00  8,900.00 91.84 270.18 8,334.89 418.31 -493.45 494.76 0.00 0.00  8,900.00 91.84 270.18 8,335.68 418.61 -493.45 494.76 0.00 0.00  8,900.00 91.84 270.18 8,335.68 418.61 -493.45 494.76 0.00 0.00 0.00  9,000.00 91.84 270.18 8,335.68 418.61 -493.45 494.76 0.00 0.00 0.00  9,000.00 91.84 270.18 8,335.68 418.61 -493.45 494.76 0.00 0.00 0.00  9,000.00 91.84 270.18 8,335.68 418.61 -493.45 494.76 0.00 0.00 0.00  9,000.00 91.84 270.18 8,335.68 418.61 -493.45 494.76 0.00 0.00 0.00	8,050.00	22.78	270.18	8,027.07	416.07	225.58	-224.27	11.00	11.00	0.00
8,150.00 33.78 270.18 8,115.00 416.22 178.27 -176.97 11.00 11.00 0.00 8,200.00 39.28 270.18 8,155.16 416.31 148.52 -147.21 11.00 11.00 0.00 0.00 8,230.24 42.61 270.18 8,178.00 416.38 128.71 -127.40 11.00 11.00 0.00 0.00 0.00 0.00 0.00	8,125.12	31.04								
Wolfcamp A X Sand           8,250.00         44,78         270.18         8,192.29         416.42         115.06         -113.75         11.00         11.00         0.00           8,300.00         50.28         270.18         8,226.03         416.53         78.19         -76.89         11.00         11.00         0.00           Wolfcamp A Y Sand           8,350.00         55.78         270.18         8,256.09         416.66         38.26         -36.95         11.00         11.00         0.00           8,400.00         61.28         270.18         8,282.19         416.79         -4.37         5.68         11.00         11.00         0.00           Wolfcamp A Lower           8,450.00         66.78         270.18         8,304.07         416.93         -49.30         50.61         11.00         11.00         0.00           8,500.00         72.28         270.18         8,321.55         417.08         -96.12         97.43         11.00         11.00         0.00           8,550.00         77.78         270.18         8,334.66         417.23         -144.41         145.72         11.00         11.00         0.00           8,650.00 <td< td=""><td>8,150.00</td><td>33.78</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	8,150.00	33.78								
8,300.00 50.28 270.18 8,226.03 416.53 78.19 -76.89 11.00 11.00 0.00 8,317.52 52.21 270.18 8,237.00 416.58 64.54 -63.23 11.00 11.00 0.00 0.00	·		270.18	8,178.00	416.38	128.71	-127.40	11.00	11.00	0.00
8,350.00 55.78 270.18 8,256.09 416.66 38.26 -36.95 11.00 11.00 0.00 8,400.00 61.28 270.18 8,282.19 416.79 -4.37 5.68 11.00 11.00 0.00 8,408.05 62.16 270.18 8,286.00 416.81 -11.46 12.76 11.00 11.00 0.00  Wolfcamp A Lower  8,450.00 66.78 270.18 8,304.07 416.93 -49.30 50.61 11.00 11.00 0.00 8,500.00 72.28 270.18 8,321.55 417.08 -96.12 97.43 11.00 11.00 0.00 8,550.00 77.78 270.18 8,334.46 417.23 -144.41 145.72 11.00 11.00 0.00 8,600.00 83.28 270.18 8,342.69 417.38 -193.71 195.02 11.00 11.00 0.00 8,650.00 88.78 270.18 8,346.15 417.54 -243.57 244.88 11.00 11.00 0.00 8,677.78 91.84 270.18 8,346.00 417.62 -271.35 272.66 11.00 11.00 0.00  Begin 91.84° Lateral 8,700.00 91.84 270.18 8,345.29 417.69 -293.55 294.86 0.00 0.00 0.00 8,900.00 91.84 270.18 8,348.09 418.00 -393.50 394.81 0.00 0.00 9,000.00 91.84 270.18 8,338.88 418.31 -493.45 494.76 0.00 0.00 0.00 9,000.00 91.84 270.18 8,335.68 418.63 -593.40 594.71 0.00 0.00 0.00 9,100.00 91.84 270.18 8,332.48 418.94 -693.35 694.66 0.00 0.00 0.00	8,300.00 8,317.52	50.28 52.21	270.18	8,226.03	416.53	78.19	-76.89	11.00	11.00	0.00
8,400.00       61.28       270.18       8,282.19       416.79       -4.37       5.68       11.00       11.00       0.00         8,408.05       62.16       270.18       8,286.00       416.81       -11.46       12.76       11.00       11.00       0.00         Wolfcamp A Lower         8,450.00       66.78       270.18       8,304.07       416.93       -49.30       50.61       11.00       11.00       0.00         8,500.00       72.28       270.18       8,321.55       417.08       -96.12       97.43       11.00       11.00       0.00         8,550.00       77.78       270.18       8,334.46       417.23       -144.41       145.72       11.00       11.00       0.00         8,600.00       83.28       270.18       8,342.69       417.38       -193.71       195.02       11.00       11.00       0.00         8,650.00       88.78       270.18       8,346.15       417.54       -243.57       244.88       11.00       11.00       0.00         8,677.78       91.84       270.18       8,345.29       417.69       -293.55       294.86       0.00       0.00       0.00         8,800.00       91.84       270.18<	•		070.40	0.050.00	110.00	00.00	00.05	44.00	44.00	2.22
Wolfcamp A Lower           8,450.00         66.78         270.18         8,304.07         416.93         -49.30         50.61         11.00         11.00         0.00           8,500.00         72.28         270.18         8,321.55         417.08         -96.12         97.43         11.00         11.00         0.00           8,550.00         77.78         270.18         8,334.46         417.23         -144.41         145.72         11.00         11.00         0.00           8,600.00         83.28         270.18         8,342.69         417.38         -193.71         195.02         11.00         11.00         0.00           8,650.00         88.78         270.18         8,346.15         417.54         -243.57         244.88         11.00         11.00         0.00           8,677.78         91.84         270.18         8,346.00         417.62         -271.35         272.66         11.00         11.00         0.00           8,800.00         91.84         270.18         8,345.29         417.69         -293.55         294.86         0.00         0.00         0.00           8,900.00         91.84         270.18         8,338.88         418.00         -393.50         394	8,400.00	61.28	270.18	8,282.19	416.79	-4.37	5.68	11.00	11.00	0.00
8,500.00       72.28       270.18       8,321.55       417.08       -96.12       97.43       11.00       11.00       0.00         8,550.00       77.78       270.18       8,334.46       417.23       -144.41       145.72       11.00       11.00       0.00         8,600.00       83.28       270.18       8,342.69       417.38       -193.71       195.02       11.00       11.00       0.00         8,650.00       88.78       270.18       8,346.15       417.54       -243.57       244.88       11.00       11.00       0.00         8,677.78       91.84       270.18       8,346.00       417.62       -271.35       272.66       11.00       11.00       0.00         Begin 91.84° Lateral         8,700.00       91.84       270.18       8,345.29       417.69       -293.55       294.86       0.00       0.00       0.00         8,800.00       91.84       270.18       8,342.09       418.00       -393.50       394.81       0.00       0.00       0.00         9,000.00       91.84       270.18       8,335.68       418.63       -593.40       594.71       0.00       0.00       0.00         9,100.00       91.84 <td< td=""><td>Wolfcamp A</td><td>A Lower</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	Wolfcamp A	A Lower								
8,650.00       88.78       270.18       8,346.15       417.54       -243.57       244.88       11.00       11.00       0.00         8,677.78       91.84       270.18       8,346.00       417.62       -271.35       272.66       11.00       11.00       0.00         Begin 91.84° Lateral         8,700.00       91.84       270.18       8,345.29       417.69       -293.55       294.86       0.00       0.00       0.00         8,800.00       91.84       270.18       8,342.09       418.00       -393.50       394.81       0.00       0.00       0.00         8,900.00       91.84       270.18       8,338.88       418.31       -493.45       494.76       0.00       0.00       0.00         9,000.00       91.84       270.18       8,335.68       418.63       -593.40       594.71       0.00       0.00       0.00         9,100.00       91.84       270.18       8,332.48       418.94       -693.35       694.66       0.00       0.00       0.00	8,500.00	72.28	270.18	8,321.55	417.08	-96.12	97.43	11.00	11.00	0.00
Begin 91.84° Lateral         8,700.00       91.84       270.18       8,345.29       417.69       -293.55       294.86       0.00       0.00       0.00         8,800.00       91.84       270.18       8,342.09       418.00       -393.50       394.81       0.00       0.00       0.00         8,900.00       91.84       270.18       8,338.88       418.31       -493.45       494.76       0.00       0.00       0.00         9,000.00       91.84       270.18       8,335.68       418.63       -593.40       594.71       0.00       0.00       0.00         9,100.00       91.84       270.18       8,332.48       418.94       -693.35       694.66       0.00       0.00       0.00	8,650.00	88.78	270.18	8,346.15	417.54	-243.57	244.88	11.00	11.00	0.00
8,800.00       91.84       270.18       8,342.09       418.00       -393.50       394.81       0.00       0.00       0.00         8,900.00       91.84       270.18       8,338.88       418.31       -493.45       494.76       0.00       0.00       0.00         9,000.00       91.84       270.18       8,335.68       418.63       -593.40       594.71       0.00       0.00       0.00         9,100.00       91.84       270.18       8,332.48       418.94       -693.35       694.66       0.00       0.00       0.00	Begin 91.84			,						
9,000.00 91.84 270.18 8,335.68 418.63 -593.40 594.71 0.00 0.00 0.00 9,100.00 91.84 270.18 8,332.48 418.94 -693.35 694.66 0.00 0.00 0.00										
9,300.00 91.84 270.18 8,326.07 419.56 -893.24 894.56 0.00 0.00 0.00	9,000.00 9,100.00 9,200.00	91.84 91.84 91.84	270.18 270.18 270.18	8,335.68 8,332.48 8,329.27	418.63 418.94 419.25	-593.40 -693.35 -793.29	594.71 694.66 794.61	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00
9,400.00 91.84 270.18 8,322.87 419.87 -993.19 994.50 0.00 0.00 0.00										

# ROCK

## **Planning Report**



Database: TRG\_EDMConroe Company: Tap Rock Operating

 Project:
 Eddy County, New Mexico (NAD 83)

 Site:
 Beer 30 Fed Com (202H, 204H, 211H, 213H)

Well: Beer 30 Fed Com 213H

Wellbore: Wellbore #1
Design: Design #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

**Survey Calculation Method:** 

Well Beer 30 Fed Com 213H Well @ 3616.00usft (H&P 466) Well @ 3616.00usft (H&P 466)

Grid

Design.	Design #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)
9,500.00 9,600.00 9,700.00 9,800.00	91.84 91.84 91.84 91.84	270.18 270.18 270.18 270.18	8,319.66 8,316.46 8,313.26 8,310.05	420.18 420.49 420.81 421.12	-1,093.14 -1,193.09 -1,293.03 -1,392.98	1,094.45 1,194.40 1,294.35 1,394.30	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00
9,900.00 10,000.00 10,100.00 10,200.00 10,300.00	91.84 91.84 91.84 91.84	270.18 270.18 270.18 270.18 270.18	8,306.85 8,303.65 8,300.44 8,297.24 8,294.04	421.43 421.74 422.05 422.36 422.68	-1,492.93 -1,592.88 -1,692.83 -1,792.78 -1,892.72	1,494.25 1,594.20 1,694.14 1,794.09 1,894.04	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
10,400.00 10,500.00 10,600.00 10,700.00 10,800.00	91.84 91.84 91.84 91.84	270.18 270.18 270.18 270.18 270.18	8,290.84 8,287.63 8,284.43 8,281.23 8,278.02	422.99 423.30 423.61 423.92 424.23	-1,992.67 -2,092.62 -2,192.57 -2,292.52 -2,392.46	1,993.99 2,093.94 2,193.89 2,293.84 2,393.79	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
10,900.00 11,000.00 11,100.00 11,200.00 11,300.00	91.84 91.84 91.84 91.84	270.18 270.18 270.18 270.18 270.18	8,274.82 8,271.62 8,268.41 8,265.21 8,262.01	424.54 424.86 425.17 425.48 425.79	-2,492.41 -2,592.36 -2,692.31 -2,792.26 -2,892.21	2,493.73 2,593.68 2,693.63 2,793.58 2,893.53	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
11,400.00 11,500.00 11,600.00 11,700.00 11,800.00	91.84 91.84 91.84 91.84	270.18 270.18 270.18 270.18 270.18	8,258.80 8,255.60 8,252.40 8,249.19 8,245.99	426.10 426.41 426.72 427.04 427.35	-2,992.15 -3,092.10 -3,192.05 -3,292.00 -3,391.95	2,993.48 3,093.43 3,193.38 3,293.32 3,393.27	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
11,900.00 12,000.00 12,100.00 12,200.00 12,300.00	91.84 91.84 91.84 91.84	270.18 270.18 270.18 270.18 270.18	8,242.79 8,239.58 8,236.38 8,233.18 8,229.98	427.66 427.97 428.28 428.59 428.90	-3,491.89 -3,591.84 -3,691.79 -3,791.74 -3,891.69	3,493.22 3,593.17 3,693.12 3,793.07 3,893.02	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
12,400.00 12,500.00 12,600.00 12,700.00 12,800.00	91.84 91.84 91.84 91.84	270.18 270.18 270.18 270.18 270.18	8,226.77 8,223.57 8,220.37 8,217.16 8,213.96	429.22 429.53 429.84 430.15 430.46	-3,991.64 -4,091.58 -4,191.53 -4,291.48 -4,391.43	3,992.96 4,092.91 4,192.86 4,292.81 4,392.76	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
12,900.00 13,000.00 13,100.00 13,200.00 13,300.00	91.84 91.84 91.84 91.84	270.18 270.18 270.18 270.18 270.18	8,210.76 8,207.55 8,204.35 8,201.15 8,197.94	430.77 431.09 431.40 431.71 432.02	-4,491.38 -4,591.33 -4,691.27 -4,791.22 -4,891.17	4,492.71 4,592.66 4,692.61 4,792.55 4,892.50	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
13,400.00 13,500.00 13,600.00 13,700.00 13,800.00	91.84 91.84 91.84 91.84	270.18 270.18 270.18 270.18 270.18	8,194.74 8,191.54 8,188.33 8,185.13 8,181.93	432.33 432.64 432.95 433.27 433.58	-4,991.12 -5,091.07 -5,191.01 -5,290.96 -5,390.91	4,992.45 5,092.40 5,192.35 5,292.30 5,392.25	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
13,900.00 14,000.00 14,100.00 14,200.00 14,300.00	91.84 91.84 91.84 91.84	270.18 270.18 270.18 270.18 270.18	8,178.72 8,175.52 8,172.32 8,169.12 8,165.91	433.89 434.20 434.51 434.82 435.13	-5,490.86 -5,590.81 -5,690.76 -5,790.70 -5,890.65	5,492.20 5,592.14 5,692.09 5,792.04 5,891.99	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
14,400.00 14,500.00 14,600.00 14,700.00 14,800.00	91.84 91.84 91.84 91.84 91.84	270.18 270.18 270.18 270.18 270.18	8,162.71 8,159.51 8,156.30 8,153.10 8,149.90	435.45 435.76 436.07 436.38 436.69	-5,990.60 -6,090.55 -6,190.50 -6,290.44 -6,390.39	5,991.94 6,091.89 6,191.84 6,291.78 6,391.73	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00

# TAP ROCK

Site:

### **Planning Report**



Database: TF Company: Ta Project: Ec

TRG\_EDMConroe
Tap Rock Operating

Eddy County, New Mexico (NAD 83) Beer 30 Fed Com (202H, 204H, 211H, 213H)

Well: Beer 30 Fed Com 213H

Wellbore: Wellbore #1
Design: Design #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well Beer 30 Fed Com 213H Well @ 3616.00usft (H&P 466) Well @ 3616.00usft (H&P 466)

Grid

Design.	Design #1								
Planned Survey									
Measured Depth (usft)	Inclination Azimuth De		Vertical clination Azimuth Depth +N/-S +E/-W (°) (°) (usft) (usft) (usft)				Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
14,900.00 15,000.00 15,100.00 15,200.00 15,300.00	91.84 91.84 91.84 91.84	270.18 270.18 270.18 270.18 270.18	8,146.69 8,143.49 8,140.29 8,137.08 8,133.88	437.00 437.31 437.63 437.94 438.25	-6,490.34 -6,590.29 -6,690.24 -6,790.19 -6,890.13	6,491.68 6,591.63 6,691.58 6,791.53 6,891.48	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
15,400.00 15,500.00 15,600.00 15,700.00 15,800.00	91.84 91.84 91.84 91.84	270.18 270.18 270.18 270.18 270.18	8,130.68 8,127.47 8,124.27 8,121.07 8,117.86	438.56 438.87 439.18 439.50 439.81	-6,990.08 -7,090.03 -7,189.98 -7,289.93 -7,389.87	6,991.43 7,091.37 7,191.32 7,291.27 7,391.22	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
15,900.00 16,000.00 16,100.00 16,200.00 16,300.00	91.84 91.84 91.84 91.84	270.18 270.18 270.18 270.18 270.18	8,114.66 8,111.46 8,108.26 8,105.05 8,101.85	440.12 440.43 440.74 441.05 441.36	-7,489.82 -7,589.77 -7,689.72 -7,789.67 -7,889.62	7,491.17 7,591.12 7,691.07 7,791.01 7,890.96	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
16,400.00 16,500.00 16,600.00 16,700.00 16,800.00	91.84 91.84 91.84 91.84	270.18 270.18 270.18 270.18 270.18	8,098.65 8,095.44 8,092.24 8,089.04 8,085.83	441.68 441.99 442.30 442.61 442.92	-7,989.56 -8,089.51 -8,189.46 -8,289.41 -8,389.36	7,990.91 8,090.86 8,190.81 8,290.76 8,390.71	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
16,900.00 17,000.00 17,100.00 17,200.00 17,300.00	91.84 91.84 91.84 91.84	270.18 270.18 270.18 270.18 270.18	8,082.63 8,079.43 8,076.22 8,073.02 8,069.82	443.23 443.54 443.86 444.17 444.48	-8,489.31 -8,589.25 -8,689.20 -8,789.15 -8,889.10	8,490.66 8,590.60 8,690.55 8,790.50 8,890.45	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
17,400.00 17,500.00 17,600.00 17,700.00 17,800.00	91.84 91.84 91.84 91.84	270.18 270.18 270.18 270.18 270.18	8,066.61 8,063.41 8,060.21 8,057.00 8,053.80	444.79 445.10 445.41 445.72 446.04	-8,989.05 -9,088.99 -9,188.94 -9,288.89 -9,388.84	8,990.40 9,090.35 9,190.30 9,290.25 9,390.19	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
17,900.00 18,000.00 18,100.00 18,200.00 18,300.00	91.84 91.84 91.84 91.84	270.18 270.18 270.18 270.18 270.18	8,050.60 8,047.40 8,044.19 8,040.99 8,037.79	446.35 446.66 446.97 447.28 447.59	-9,488.79 -9,588.74 -9,688.68 -9,788.63 -9,888.58	9,490.14 9,590.09 9,690.04 9,789.99 9,889.94	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
18,400.00 18,500.00 18,600.00 18,700.00 18,730.37	91.84 91.84 91.84 91.84 91.84	270.18 270.18 270.18 270.18 270.18	8,034.58 8,031.38 8,028.18 8,024.97 8,024.00	447.91 448.22 448.53 448.84 448.93	-9,988.53 -10,088.48 -10,188.42 -10,288.37 -10,318.73	9,989.89 10,089.83 10,189.78 10,289.73 10,320.09	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
PBHL									



# TAP ROCK

### **Planning Report**



Database: TRG\_EDMConroe Tap Rock Operating

 Project:
 Eddy County, New Mexico (NAD 83)

 Site:
 Beer 30 Fed Com (202H, 204H, 211H, 213H)

Well: Beer 30 Fed Com 213H

Wellbore: Wellbore #1
Design: Design #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

**Survey Calculation Method:** 

Well Beer 30 Fed Com 213H Well @ 3616.00usft (H&P 466) Well @ 3616.00usft (H&P 466)

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_Beer 213H - plan misses targ - Point	0.00 get center by		0.00 at 0.00usft	415.95 MD (0.00 T\	266.20 /D, 0.00 N, 0	421,317.12 0.00 E)	528,336.03	32° 9' 29.780 N	104° 22' 31.251 W
LTP_Beer 213H - plan misses targ - Point	0.00 get center by		0.00 t at 18662.3		-9,993.52 3026.18 TVD	421,349.08 , 448.72 N, -1025	518,076.31 0.75 E)	32° 9' 30.041 N	104° 24' 30.606 W
FTP_Beer 213H - plan misses targ - Point	0.00 get center by		0.00 at 0.00usft	416.82 MD (0.00 T\	-13.82 /D, 0.00 N, 0	421,318.00 0.00 E)	528,056.01	32° 9' 29.787 N	104° 22' 34.509 W
BPP2 Beer 213H - plan misses targ - Point	0.00 get center by		0.00 t at 0.00usf		-4,953.98 TVD, 0.00 N,	421,333.39 0.00 E)	523,115.85	32° 9' 29.916 N	104° 23' 31.979 W
BPP1_Beer 213H - plan misses targ - Point	0.00 get center by		0.00 t at 0.00usf	424.09 t MD (0.00 1	,	421,325.26 0.00 E)	525,729.56	32° 9' 29.849 N	104° 23' 1.573 W
PBHL_Beer 213H - plan hits target of Point	0.00 center	360.00	8,024.00	448.93	-10,318.73	421,350.11	517,751.10	32° 9' 30.048 N	104° 24' 34.390 W

Formations						
	Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
	129.00	129.00	Rustler			
	1,202.11	1,201.00	Top Salt			
	1,378.58	1,377.00	Base Salt			
	1,562.06	1,560.00	Delaware Mountain Gp			
	1,568.07	1,566.00	Lamar			
	1,625.22	1,623.00	Bell Canyon			
	1,676.36	1,674.00	Ramsey Sand			
	2,618.82	2,614.00	Cherry Canyon			
	3,395.86	3,389.00	Brushy Canyon			
	5,141.43	5,130.00	Bone Spring Lime			
	5,253.72	5,242.00	Upper Avalon			
	5,521.43	5,509.00	Middle Avalon			
	5,861.32	5,848.00	Lower Avalon			
	6,016.72	6,003.00	1st Bone Spring Sand			
	6,338.57	6,324.00	2nd Bone Spring Carb			
	6,579.20	6,564.00	2nd Bone Spring Sand			
	6,866.95	6,851.00	3rd Bone Spring Carb			
	7,833.52	7,816.00	3rd Bone Spring Sand			
	8,125.12	8,094.00	3rd BS W Sand			
	8,230.24	8,178.00	Wolfcamp A X Sand			
	8,317.52	8,237.00	Wolfcamp A Y Sand			
	8,408.05	8,286.00	Wolfcamp A Lower			





### **Planning Report**



Database: TRG\_EDMConroe Tap Rock Operating

 Project:
 Eddy County, New Mexico (NAD 83)

 Site:
 Beer 30 Fed Com (202H, 204H, 211H, 213H)

Well: Beer 30 Fed Com 213H

Wellbore: Wellbore #1
Design: Design #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

**Survey Calculation Method:** 

Well Beer 30 Fed Com 213H Well @ 3616.00usft (H&P 466) Well @ 3616.00usft (H&P 466)

Grid

Plan Annota	tions				
	Measured Depth	Vertical Depth	Local Coor	dinates +E/-W	
	(usft)	(usft)	(usft)	(usft)	Comment
	500.00	500.00	0.00	0.00	KOP, 1.00°/100' Build
	914.73	914.37	12.64	8.09	Begin 4.15° Tangent
	7,328.18	7,311.03	403.31	258.12	Begin 1.00°/100' Drop
	7,742.92	7,725.40	415.95	266.20	Begin Vertical Hold
	7,842.92	7,825.40	415.95	266.20	KOP, 11.00°/100' Build
	8,677.78	8,346.00	417.62	-271.35	Begin 91.84° Lateral
	18,730.37	8,024.00	448.93	-10,318.73	PBHL

Form 3160-3 FORM APPROVED OMB No. 1004-0137 (June 2015) Expires: January 31, 2018 **UNITED STATES** DEPARTMENT OF THE INTERIOR 5. Lease Serial No. NMNM116017 BUREAU OF LAND MANAGEMENT APPLICATION FOR PERMIT TO DRILL OR REENTER 6. If Indian, Allotee or Tribe Name 7. If Unit or CA Agreement, Name and No. ✓ DRILL REENTER 1a. Type of work: 1b. Type of Well: Oil Well ✓ Gas Well Other 8. Lease Name and Well No. 1c. Type of Completion: Hydraulic Fracturing ✓ Single Zone Multiple Zone BEER 30 FED COM 213H 2. Name of Operator 9. API Well No. TAP ROCK OPERATING LLC 3a. Address 3b. Phone No. (include area code) 10. Field and Pool, or Exploratory 1700 LINCOLN ST SUITE 4700, DENVER, CO 80203 (720) 460-3316 PURPLE SAGE/WOLFCAMP GAS 4. Location of Well (Report location clearly and in accordance with any State requirements.\*) 11. Sec., T. R. M. or Blk. and Survey or Area SEC 3/T25S/R25E/NMP At surface NESE / 2008 FSL / 310 FEL / LAT 32.1571284 / LONG -104.3762072 At proposed prod. zone NWSW / 2420 FSL / 5 FWL / LAT 32.1583468 / LONG -104.4095527 14. Distance in miles and direction from nearest town or post office\* 12. County or Parish 13 State **EDDY** NM 1 miles 15. Distance from proposed\* 16. No of acres in lease 17. Spacing Unit dedicated to this well 310 feet location to nearest property or lease line, ft. 1283.09 (Also to nearest drig. unit line, if any) 18. Distance from proposed location\* 19. Proposed Depth 20. BLM/BIA Bond No. in file to nearest well, drilling, completed, 30 feet 8024 feet / 18730 feet FED: NMB105800930 applied for, on this lease, ft. 21. Elevations (Show whether DF, KDB, RT, GL, etc.) 22. Approximate date work will start\* 23. Estimated duration 3590 feet 11/01/2025 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. 4. Bond to cover the operations unless covered by an existing bond on file (see 2. A Drilling Plan. Item 20 above) 3. A Surface Use Plan (if the location is on National Forest System Lands, the 5. Operator certification. 6. Such other site specific information and/or plans as may be requested by the SUPO must be filed with the appropriate Forest Service Office). 25. Signature Name (Printed/Typed) Date BRIAN WOOD / Ph: (720) 460-3316 (Electronic Submission) 03/04/2025 Title Permitting Agent Approved by (Signature) Date Name (Printed/Typed) 09/08/2025 (Electronic Submission) CODY LAYTON / Ph: (575) 234-5959 Title Office Assistant Field Manager Lands & Minerals Carlsbad Field Office Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon. Conditions of approval, if any, are attached. Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction



#### **INSTRUCTIONS**

GENERAL: This form is designed for submitting proposals to perform certain well operations, as indicated on Federal and Indian lands and leases for action by appropriate Federal agencies, pursuant to applicable Federal laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from local Federal offices.

ITEM I: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable Federal regulations concerning subsequent work proposals or reports on the well.

ITEM 4: Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local Federal offices for specific instructions.

ITEM 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on the reverse side, showing the roads to, and the surveyed location of, the wen, and any other required information, should be furnished when required by Federal agency offices.

ITEMS 15 AND 18: If well is to be, or has been directionany drilled, give distances for subsurface location of hole in any present or objective productive zone.

ITEM 22: Consult applicable Federal regulations, or appropriate officials, concerning approval of the proposal before operations are started.

ITEM 24: If the proposal will involve hydraulic fracturing operations, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state or tribal regulatory agencies and from local BLM offices.

#### **NOTICES**

The Privacy Act of 1974 and regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 25 U.S.C. 396; 43 CFR 3160

PRINCIPAL PURPOSES: The information will be used to: (1) process and evaluate your application for a permit to drill a new oil, gas, or service wen or to reenter a plugged and abandoned well; and (2) document, for administrative use, information for the management, disposal and use of National Resource Lands and resources including (a) analyzing your proposal to discover and extract the Federal or Indian resources encountered; (b) reviewing procedures and equipment and the projected impact on the land involved; and (c) evaluating the effects of the proposed operation on the surface and subsurface water and other environmental impacts.

ROUTINE USE: Information from the record and/or the record win be transferred to appropriate Federal, State, and local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecution, in connection with congressional inquiries and for regulatory responsibilities.

EFFECT OF NOT PROVIDING INFORMATION: Filing of this application and disclosure of the information is mandatory only if you elect to initiate a drilling or reentry operation on an oil and gas lease.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM conects this information to anow evaluation of the technical, safety, and environmental factors involved with drilling for oil and/or gas on Federal and Indian oil and gas leases. This information will be used to analyze and approve applications. Response to this request is mandatory only if the operator elects to initiate drilling or reentry operations on an oil and gas lease. The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

**BURDEN HOURS STATEMENT:** Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Conection Clearance Officer (WO-630), 1849 C Street, N.W., Mail Stop 401 LS, Washington, D.C. 20240.

(Form 3160-3, page 2)

# **Additional Operator Remarks**

#### **Location of Well**

0. SHL: NESE / 2008 FSL / 310 FEL / TWSP: 25S / RANGE: 25E / SECTION: 3 / LAT: 32.1571284 / LONG: -104.3762072 ( TVD: 0 feet, MD: 0 feet )
PPP: NESW / 2420 FSL / 2614 FWL / TWSP: 25S / RANGE: 25E / SECTION: 3 / LAT: 32.1582914 / LONG: -104.3837703 ( TVD: 8277 feet, MD: 10827 feet )
PPP: NESE / 2425 FSL / 330 FEL / TWSP: 25S / RANGE: 25E / SECTION: 3 / LAT: 32.1582742 / LONG: -104.3762524 ( TVD: 8346 feet, MD: 8678 feet )
BHL: NWSW / 2420 FSL / 5 FWL / TWSP: 25S / RANGE: 25E / SECTION: 4 / LAT: 32.1583468 / LONG: -104.4095527 ( TVD: 8024 feet, MD: 18730 feet )

### **BLM Point of Contact**

Name: TENILLE C MOLINA Title: Land Law Examiner Phone: (575) 234-2224

Email: TCMOLINA@BLM.GOV

# **Review and Appeal Rights**

A person contesting a decision shall request a State Director review. This request must be filed within 20 working days of receipt of the Notice with the appropriate State Director (see 43 CFR 3165.3). The State Director review decision may be appealed to the Interior Board of Land Appeals, 801 North Quincy Street, Suite 300, Arlington, VA 22203 (see 43 CFR 3165.4). Contact the above listed Bureau of Land Management office for further information.

# PECOS DISTRICT SURFACE USE CONDITIONS OF APPROVAL

OPERATOR'S NAME: Tap Rock Operating, LLC

LEASE NO.: | NMNM62171, NMNM116017

COUNTY: Eddy County, New Mexico

Wells:

Beer 30 Fed Com 202H

Beer 30 Fed Com 204H

Beer 30 Fed Com 211H

Beer 30 Fed Com 213H

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#### 3. GENERAL PROVISIONS

The failure of the operator to comply with these requirements may result in the assessment of liquidated damages or penalties pursuant to 43 CFR 3163.1 or 3163.2. A copy of these conditions of approval shall be present on the location during construction, drilling and reclamation activity. Any request for a variance shall be submitted to the Authorized Officer on Form 3160-5, Sundry Notices and Report on Wells.

#### ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES

Any cultural resource (historic or prehistoric site or object) discovered by the operator, or any person working on the operator's behalf, on the public or federal land shall be immediately reported to the Authorized Officer. The operator shall suspend all operations in the immediate area (within 100ft) of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer, in conjunction with a BLM Cultural Resource Specialist, to determine appropriate actions to prevent the loss of significant scientific values. The operator shall be responsible for the cost of evaluation and any decision as to the proper mitigation measures will be made by the Authorized Officer after consulting with the operator.

Traditional Cultural Properties (TCPs) are protected by NHPA as codified in 36 CFR 800 for possessing traditional, religious, and cultural significance tied to a certain group of individuals. Though there are currently no designated TCPs within the project area or within a mile of the project area, but it is possible for a TCP to be designated after the approval of this project. If a TCP is designated in the project area after the project's approval, the BLM Authorized Officer will notify the operator of the following conditions and the duration for which these conditions are required.

- 1. Temporary halting of all construction, drilling, and production activities to lower noise.
- 2. Temporary shut-off of all artificial lights at night.

The operator is hereby obligated to comply with procedures established in the Native American Graves Protection and Repatriation Act (NAGPRA), specifically NAGPRA Subpart B regarding discoveries, to protect human remains, associated funerary objects, sacred objects, and objects of cultural patrimony discovered during project work. If any human skeletal remains, funerary objects, sacred objects, or objects of cultural patrimony are discovered at any time during construction, all construction activities shall halt and a BLM-CFO Authorized Officer will be notified immediately. The BLM will then be required to be notified, in writing, within 24 hours of the discovery. The written notification should include the geographic location by county and state, the contents of the discovery, and the steps taken to protect said discovery. You must also include any potential threats to the discovery and a conformation that all activity within 100ft of the discovery has ceased and work will not resume until written certification is issued. All work on the entire project must halt for a minimum of 3 days and work cannot resume until an Authorized Officer grants permission to do so.

Any paleontological resource discovered by the operator, or any person working on the operator's behalf, on public or Federal land shall be immediately reported to the Authorized Officer. The operator shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. The operator will be responsible for the cost of evaluation and any decision as to the proper mitigation measures will be made by the Authorized Officer after consulting with the operator.

#### RANGELAND RESOURCES

#### 1.1.1. Cattleguards

Where a permanent cattleguard is approved, an appropriately sized cattleguard(s) sufficient to carry out the project shall be installed and maintained at fence crossing(s). Any existing cattleguard(s) on the access road shall be repaired or replaced if they are damaged or have deteriorated beyond practical use. The operator shall be responsible for the condition of the existing cattleguard(s) that are in place and are utilized during lease operations. A gate shall be constructed on one side of the cattleguard and fastened securely to H-braces.

#### 1.1.2. Fence Requirement

Where entry granted across a fence line, the fence must be braced and tied off on both sides of the passageway prior to cutting. Once the work is completed, the fence will be restored to its prior condition, or better. The operator shall notify the private surface landowner or the grazing allotment holder prior to crossing any fence(s).

#### 1.1.3. Livestock Watering Requirement

Any damage to structures that provide water to livestock throughout the life of the well, caused by operations from the well site, must be immediately corrected by the operator. The operator must notify the BLM office (575-234-5972) and the private surface landowner or the grazing allotment holder if any damage occurs to structures that provide water to livestock.

#### NOXIOUS WEEDS

The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, pads, associated pipeline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA, New Mexico Department of Agriculture, and BLM requirements and policies.

#### 1.3.1 African Rue (Peganum harmala)

Spraying: The spraying of African Rue must be completed by a licensed or certified applicator. In order to attempt to kill or remove African Rue the proper mix of chemical is needed. The mix consists of 2% Arsenal (Imazapyr) and 2% Roundup (Glyphosate) along with a nonionic surfactant. Any other chemicals or combinations shall be approved by the BLM Noxious Weeds Coordinator prior to treatment. African Rue shall be sprayed in connection to any dirt working activities or disturbances to the site being sprayed. Spraying of African Rue shall be done on immature plants at initial growth through flowering and mature plants between budding and flowering stages. Spraying shall not be conducted after flowering when plant is fruiting. This will ensure optimal intake of chemical and decrease chances of developing herbicide resistance. After spraying, the operator or necessary parties must contact the Carlsbad Field Office to inspect the effectiveness of the application treatment to the plant species. No ground disturbing activities can take place until the inspection by the authorized officer is complete. The operator may contact the Environmental Protection Department or the BLM Noxious Weed Coordinator at (575) 234-5972 or BLM NM CFO NoxiousWeeds@blm.gov.

Management Practices: In addition to spraying for African Rue, good management practices should be followed. All equipment should be washed off using a power washer in a designated containment area. The containment area shall be berned to allow for containment of the seed to prevent it from entering any open areas of the nearby landscape. The containment area shall be excavated near or adjacent to the well pad at a depth of three feet and just large enough to get equipment inside it to be washed off. This will allow all seeds to be in a centrally located area that can be treated at a later date if the need arises.

## LIGHT POLLUTION

#### 1.1.4. Downfacing

All permanent lighting will be pointed straight down at the ground in order to prevent light spill beyond the edge of approved surface disturbance.

#### 1.1.5. Shielding

All permanent lighting will use full cutoff luminaires, which are fully shielded (i.e., not emitting direct or indirect light above an imaginary horizontal plane passing through the lowest part of the light source).

#### 1.1.6. Lighting Color

Lighting shall be 3,500 Kelvin or less (Warm White) except during drilling, completion, and workover operations. No bluish-white lighting shall be used in permanent outdoor lighting.

# 4. SPECIAL REQUIREMENTS

#### **WATERSHED**

The entire well pad(s) will be bermed to prevent oil, salt, and other chemical contaminants from leaving the well pad. The compacted berm shall be constructed at a minimum of 12 inches with impermeable mineral material (e.g. caliche). Topsoil shall not be used to construct the berm. No waterflow from the uphill side(s) of the pad shall be allowed to enter the well pad. The integrity of the berm shall be maintained around the surfaced pad throughout the life of the well and around the downsized pad after interim reclamation has been completed. Any water erosion that may occur due to the construction of the well pad during the life of the well will be immediately corrected and proper measures will be taken to prevent future erosion. Stockpiling of topsoil is required. The topsoil shall be stockpiled in an appropriate location with wattles (minimum 9" height) surrounding the stockpiled soil to prevent soil loss due to water/wind erosion. The wattles are to be maintained throughout the life of the project. If fluid collects within the bermed area, the fluid must be vacuumed into a safe container and disposed of properly at a state approved facility.

Any water erosion that may occur due to the construction of the well pad and during the life of the well pad will be immediately corrected and proper measures will be taken to prevent future erosion.

#### 1.1.7. Tank Battery

Tank battery locations will be lined and bermed. A 20-mil permanent liner will be installed with a 4 oz. felt backing to prevent tears or punctures. Secondary containment holding capacity must be large enough to contain 1 ½ times the content of the largest tank or 24-hourproduction, whichever is greater (displaced volume from all tanks within the berms MUST be subtracted from total volume of containment in calculating holding capacity). Automatic shut off, check valves, or similar systems will be installed for tanks to minimize the effects of catastrophic line failures used in production or drilling. Rock check dams are to be placed and maintained on the southern section of the tank battery to reduce erosion.

#### 1.1.8. Buried/Surface Line(s)

When crossing ephemeral drainages (marked and unmarked), the pipeline(s) will be buried to a minimum depth of 48 inches from the top of pipe to ground level. In ephemeral flow paths, rivers, and streams excess soil is to be compacted, contoured, and level to ground surface, allowing water to flow in its natural state. Erosion control methods such as gabions and/or rock aprons should be placed on both up and downstream sides of the pipeline crossing. In addition, curled (plastic and weed free) wood/straw fiber wattles/logs and/or silt fences should be placed on the downstream side for sediment control during construction and maintained until soils and vegetation have stabilized. Water bars should be placed within the ROW to divert and dissipate surface runoff. A pipeline access road is not permitted to cross these ephemeral drainages. Traffic should be diverted to a preexisting route. Additional seeding may be required in floodplains and drainages to restore energy dissipating vegetation. Any water erosion that may occur due to construction or during the life of the pipeline system will be immediately corrected within two weeks and proper measures will be taken to prevent erosion. Any spills or leaks from the proposed pipeline must be reported to BLM immediately.

Prior to pipeline installation/construction a leak detection plan will be developed. The method(s) could incorporate gauges to detect pressure drops, situating valves and lines so they can be visually inspected periodically or installing electronic sensors to alarm when a leak is present. The leak detection plan will incorporate an automatic shut off system that will be installed for proposed pipelines to minimize the effects of an undesirable event.

## CAVE/KARST

## 1.1.9. General Construction

- No blasting
- The BLM, Carlsbad Field Office, will be informed immediately if any subsurface drainage channels, cave passages, or voids are penetrated during construction, and no additional construction shall occur until clearance has been issued by the Authorized Officer.
- All linear surface disturbance activities will avoid sinkholes and other karst features to lessen the
  possibility of encountering near surface voids during construction, minimize changes to runoff, and
  prevent untimely leaks and spills from entering the karst drainage system.
- This is a sensitive area and all spills or leaks will be reported to the BLM immediately for their immediate and proper treatment, as defined in NTL 3A for Major Undesirable Events.

## 1.1.10. Pad Construction

- The pad will be constructed and leveled by adding the necessary fill and caliche. No blasting will be used for any construction or leveling activities.
- The entire perimeter of the well pad will be bermed to prevent oil, salt, and other chemical contaminants from leaving the well pad.
- The compacted berm shall be constructed at a minimum of 12 inches high with impermeable mineral material (e.g., caliche).
- No water flow from the uphill side(s) of the pad shall be allowed to enter the well pad.
- The topsoil stockpile shall be located outside the bermed well pad.
- Topsoil, either from the well pad or surrounding area, shall not be used to construct the berm.
- No storm drains, tubing or openings shall be placed in the berm.
- If fluid collects within the bermed area, the fluid must be vacuumed into a safe container and disposed of properly at a state approved facility.
- The integrity of the berm shall be maintained around the surfaced pad throughout the life of the well and around the downsized pad after interim reclamation has been completed.
- Any access road entering the well pad shall be constructed so that the integrity of the berm height surrounding the well pad is not compromised (i.e. an access road crossing the berm cannot be lower than the berm height).
- Following a rain event, all fluids will be vacuumed off of the pad and hauled off-site and disposed at a
  proper disposal facility.

## 1.1.11. Road Construction

- Turnout ditches and drainage leadoffs will not be constructed in such a manner as to alter the natural flow of water into or out of cave or karst features.
- Special restoration stipulations or realignment may be required if subsurface features are discovered during construction.

## 1.1.12. Buried Pipeline/Cable Construction

• Rerouting of the buried line(s) may be required if a subsurface void is encountered during construction to minimize the potential subsidence/collapse of the feature(s) as well as the possibility of leaks/spills entering the karst drainage system.

## 1.1.13. Production Mitigation

- Tank battery locations and facilities will be bermed and lined with a 20-mil thick permanent liner that has a 4 oz. felt backing, or equivalent, to prevent tears or punctures. Secondary containment holding capacity must be large enough to contain 1 ½ times the content of the largest tank or 24-hour production, whichever is greater (displaced volume from all tanks within the berms MUST be subtracted from total volume of containment in calculating holding capacity).
- Implementation of a leak detection system to provide an early alert to operators when a leak has occurred.
- Automatic shut off, check values, or similar systems will be installed for pipelines and tanks to minimize
  the effects of catastrophic line failures used in production or drilling.

## 1.1.14. Residual and Cumulative Mitigation

The operator will perform annual pressure monitoring on all casing annuli. If the test results indicate a casing failure has occurred, contact a BLM Engineer immediately, and take remedial action to correct the problem.

## 1.1.15. Plugging and Abandonment Mitigation

Upon well abandonment in high cave karst areas, additional plugging conditions of approval may be required. The BLM will assess the situation and work with the operator to ensure proper plugging of the wellbore.

## **WILDLIFE**

## 2.3.2 Texas Hornshell Mussel

Oil and Gas and Associated Infrastructure Mitigation Measures for Zone D – CCA Boundary Requirements:

- Provide CEHMM with the permit, lease, or other authorization form BLM, if applicable.
- Provide CEHMM with plats or other electronic media describing the new surface disturbance for the project.

Oil and Gas Zone D - CCA Boundary requirements.

- Implement erosion control measures in accordance with the Reasonable and Prudent Practices for Stabilization ("RAPPS")
- Comply with SPCC requirements in accordance with 40 CFR Part 112;
- Comply with the United States Army Corp of Engineers (USACE) Nationwide 12 General Permit, where applicable;
- Utilize technologies (like underground borings for pipelines), where feasible;
- Educate personnel, agents, contractors, and subcontractors about the requirements of conservation measures, COAs, Stips and provide direction in accordance with the Permit.

## VISUAL RESOURCE MANAGEMENT

# 2.5.2 VRM III Facility Requirement

- All above-ground structures that are not subject to safety requirements will be camouflaged in accordance with techniques discussed in the 2011 BLM Environmental Color and Camouflage Mitigation Field Test report.
- The high-pressure flare will be no taller than 30 feet tall which will run for less than one hour per year.
- The low-pressure flare will be no taller than 16 feet.
- Tanks will be no taller than 16 feet tall with a small header system on top of them (no taller than 5 feet tall).
- Light towers will be compliant with the most recent night sky responsible outdoor lighting standards from DarkSky International, DarkSky New Mexico, the Dark for the Park Alliance, and all applicable laws, guidance, and regulations.
  - o All light should have a clear purpose.

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- Lighting should be targeted so that it only falls where it is needed. This will be done with shielding and careful aiming of lights.
- o Lights should be no brighter than necessary for safe operations.
- Lighting should be controlled. It will only be on when it is needed (e.g., with motion detectors or timers).
- Lighting should be warm colored.
- VRT will be no taller than 25 feet.
- The pipeline route and associated construction vehicles will follow existing roads or rights-of-ways unless otherwise approved by the Approving Officer.
- Ground disturbance and removal of vegetation will be kept at a bare minimum.
- All other above ground structures will be no taller than 8 feet.

# 5. CONSTRUCTION REQUIREMENTS

## 5.1. CONSTRUCTION NOTIFICATION

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Carlsbad Field Office at BLM\_NM\_CFO\_Construction\_Reclamation@blm.gov at least 3 working days prior to commencing construction of the access road and/or well pad.

When construction operations are being conducted on this well, the operator shall have the approved APD and COAs on the well site and they shall be made available upon request by the Authorized Officer.

## 5.2. TOPSOIL

The operator shall strip the topsoil (the A horizon) from the entire well pad area and stockpile the topsoil along the edge of the well pad as depicted in the APD. No more than the top 6 inches of topsoil shall be removed. All the stockpiled topsoil will be redistributed over the interim reclamation areas. Topsoil shall not be used for berming the pad or facilities. For final reclamation, the topsoil shall be spread over the entire pad area for seeding preparation.

Other subsoil (the B horizon and below) stockpiles must be completely segregated from the topsoil stockpile. Large rocks or subsoil clods (not evident in the surrounding terrain) must be buried within the approved area for interim and final reclamation.

## CLOSED LOOP SYSTEM

Tanks are required for drilling operations: No reserve pits will be used for drill cuttings. The operator shall properly dispose of drilling contents at an authorized disposal site.

# FEDERAL MINERAL PIT

Payment shall be made to the BLM prior to removal of any federal mineral materials. Call the Carlsbad Field Office at (575) 234-5972.

## WELL PAD & SURFACING

Any surfacing material used to surface the well pad will be removed at the time of interim and final reclamation.

## EXCLOSURE FENCING (CELLARS & PITS)

The operator will install and maintain exclosure fencing for all open well cellars to prevent access to public, livestock, and large forms of wildlife before and after drilling operations until the well cellar is free of fluids and the operator initiates backfilling. (For examples of exclosure fencing design, refer to BLM's Oil and Gas Gold Book, Exclosure Fence Illustrations, Figure 1, Page 18.)

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The operator will also install and maintain mesh netting for all open well cellars to prevent access to smaller wildlife before and after drilling operations until the well cellar is free of fluids and the operator. Use a maximum netting mesh size of 1 ½ inches. The netting must not have holes or gaps.

## ON LEASE ACESS ROAD

#### 5.2.1. Road Width

The access road shall have a driving surface that creates the smallest possible surface disturbance and does not exceed fourteen (14) feet in width. The maximum width of surface disturbance, when constructing the access road, shall not exceed twenty-five (25) feet.

## 5.2.2. Surfacing

Surfacing material is not required on the new access road driving surface. If the operator elects to surface the new access road or pad, the surfacing material may be required to be removed at the time of reclamation.

Where possible, no improvements will be made on the unsurfaced access road other than to remove vegetation as necessary, road irregularities, safety issues, or to fill low areas that may sustain standing water.

The Authorized Officer reserves the right to require surfacing of any portion of the access road at any time deemed necessary. Surfacing may be required in the event the road deteriorates, erodes, road traffic increases, or it is determined to be beneficial for future field development. The surfacing depth and type of material will be determined at the time of notification.

## 5.2.3. Crowning

Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

## 5.2.4. Ditching

Ditching shall be required on both sides of the road.

## 5.2.5. Turnouts

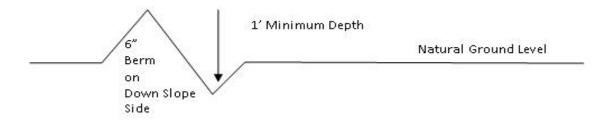
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall conform to Figure 1; cross section and plans for typical road construction.

# 5.2.6. Drainage

Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill outsloping and insloping, leadoff ditches, culvert installation, and low water crossings).

A typical lead-off ditch has a minimum depth of 1 foot below and a berm of 6 inches above natural ground level. The berm shall be on the down-slope side of the lead-off ditch.

## **Cross Section of a Typical Lead-off Ditch**



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All lead-off ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval are variable for lead-off ditches and shall be determined according to the formula for spacing intervals of lead-off ditches, but may be amended depending upon existing soil types and centerline road slope (in %);

# Formula for Spacing Interval of Lead-off Ditches

Example - On a 4% road slope that is 400 feet long, the water flow shall drain water into a lead-off ditch. Spacing interval shall be determined by the following formula:

400 foot road with 4% road slope: 
$$\underline{400'}$$
 + 100' = 200' lead-off ditch interval

## 3.7.6 **Public Access**

Public access on this road shall not be restricted by the operator without specific written approval granted by the Authorized Officer.

# **Construction Steps**

- 1. Salvage topsoil
- 3. Redistribute topsoil
- 2. Construct road
- 4. Revegetate slopes

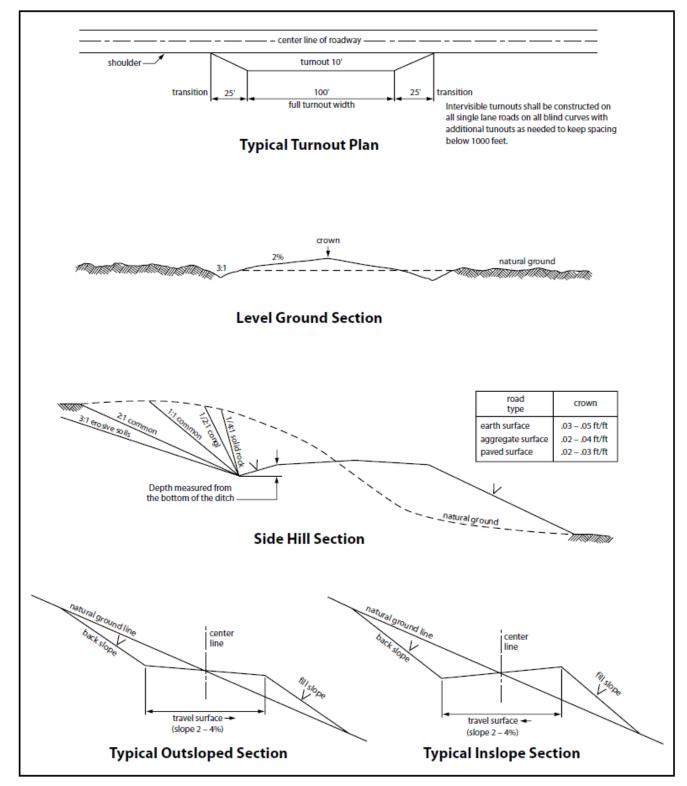


Figure 1. Cross-sections and plans for typical road sections representative of BLM resource or FS local and higher-class roads.

# 4. PIPELINES

- The BLM, Carlsbad Field Office, will be informed immediately if any subsurface drainage channels, passages, or voids are intersected by trenching, and no pipe will be laid in the trench at that point until clearance has been issued by the Authorized Officer.
- A leak detection plan <u>will be submitted to the BLM Carlsbad Field Office for approval</u> prior to pipeline installation. The method could incorporate gauges to detect pressure drops, situating values and lines so they can be visually inspected periodically or installing electronic sensors to alarm when a leak is present. The leak detection plan will incorporate an automatic shut off system that will be installed for proposed pipelines to minimize the effects of an undesirable event.
- Regular monitoring is required to quickly identify leaks for their immediate and proper treatment.
- All spills or leaks will be reported to the BLM immediately for their immediate and proper treatment.

## 4.1 BURIED PIPELINES

A copy of the application (APD, or Sundry Notice) and attachments, including conditions of approval, survey plat and/or map, will be on location during construction. BLM personnel may request a copy of your permit during construction to ensure compliance with all stipulations.

Operator agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

- 1. The Operator shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this APD.
- 2. The Operator shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the operator shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 et seq. (1982) with regards to any toxic substances that are used, generated by or stored on the pipeline corridor or on facilities authorized under this APD. (See 40 CFR Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.
- 3. The operator agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C.6901, et seq.) on the Pipeline corridor (unless the release or threatened release is wholly unrelated to the operator's activity on the pipeline corridor), or resulting from the activity of the Operator on the pipeline corridor. This agreement applies without regard to whether a release is caused by the operator, its agent, or unrelated third parties.
- 4. If, during any phase of the construction, operation, maintenance, or termination of the pipeline, any oil or other pollutant is discharged from the pipeline system, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil or other pollutant, wherever found, shall be the responsibility of operator, regardless of fault. Upon failure of operator to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all damages resulting therefrom, on the Federal lands, the Authorized Officer may take such measures as he deems necessary to control and clean up the discharge and restore the area, including where appropriate, the aquatic environment and

- fish and wildlife habitats, at the full expense of the operator. Such action by the Authorized Officer shall not relieve operator of any responsibility as provided herein.
- 5. All construction and maintenance activity will be confined to the authorized pipeline corridor.
- 6. The pipeline will be buried with a minimum cover of 36 inches between the top of the pipe and ground level.
- 7. The maximum allowable disturbance for construction in this pipeline corridor will be 30 feet:
  - Blading of vegetation within the pipeline corridor will be allowed: maximum width of blading operations will not exceed <u>20</u> feet. The trench is included in this area. (*Blading is defined as the complete removal of brush and ground vegetation*.)
  - Clearing of brush species within the pipeline corridor will be allowed: maximum width of clearing operations will not exceed 30 feet. The trench and bladed area are included in this area. (Clearing is defined as the removal of brush while leaving ground vegetation (grasses, weeds, etc.) intact. Clearing is best accomplished by holding the blade 4 to 6 inches above the ground surface.)
  - The remaining area of the pipeline corridor (if any) shall only be disturbed by compressing the vegetation. (Compressing can be caused by vehicle tires, placement of equipment, etc.)
- 8. The operator shall stockpile an adequate amount of topsoil where blading is allowed. The topsoil to be stripped is approximately \_\_\_6\_\_ inches in depth. The topsoil will be segregated from other spoil piles from trench construction. The topsoil will be evenly distributed over the bladed area for the preparation of seeding.
- 9. Vegetation, soil, and rocks left as a result of construction or maintenance activity will be randomly scattered on this pipeline corridor and will not be left in rows, piles, or berms, unless otherwise approved by the Authorized Officer. The entire pipeline corridor shall be recontoured to match the surrounding landscape. The backfilled soil shall be compacted, and a 6-inch berm will be left over the ditch line to allow for settling back to grade.
- 10. The pipeline will be identified by signs at the point of origin and completion of the pipeline corridor and at all road crossings. At a minimum, signs will state the operator's name, BLM serial number, and the product being transported. All signs and information thereon will be posted in a permanent, conspicuous manner, and will be maintained in a legible condition for the life of the pipeline.
- 11. The operator shall not use the pipeline route as a road for purposes other than routine maintenance as determined necessary by the Authorized Officer in consultation with the operator before maintenance begins. The operator will take whatever steps are necessary to ensure that the pipeline route is not used as a roadway. As determined necessary during the life of the pipeline, the Authorized Officer may ask the operator to construct temporary deterrence structures.
- 12. The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes associated roads, pipeline corridor and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.
- 13. <u>Escape Ramps</u> The operator will construct and maintain pipeline/utility trenches [that are not otherwise fenced, screened, or netted] to prevent livestock, wildlife, and humans from becoming entrapped. At a minimum, the operator will construct and maintain escape ramps, ladders, or other methods of avian and terrestrial wildlife escape in the trenches according to the following criteria:

- a. Any trench left open for eight (8) hours or less is not required to have escape ramps; however, before the trench is backfilled, the contractor/operator shall inspect the trench for wildlife, remove all trapped wildlife, and release them alive at least 100 yards from the trench.
- b. For trenches left open for eight (8) hours or more, earthen escape ramps (built at no more than a 30-degree slope and spaced no more than 500 feet apart) shall be placed in the trench. Before the trench is backfilled, the contractor/operator shall inspect the trench for wildlife, remove all trapped wildlife, and release them alive at least 100 yards from the trench.

# 14. Special Stipulations:

## **Karst:**

- The BLM, Carlsbad Field Office, will be informed immediately if any subsurface drainage channels, passages, or voids are intersected by trenching, and no pipe will be laid in the trench at that point until clearance has been issued by the Authorized Officer.
- If a void is encountered, alignments may be rerouted to avoid the karst feature and lessen the potential of subsidence or collapse of karst features, buildup of toxic or combustible gas, or other possible impacts to cave and karst resources from the buried pipeline.
- Special restoration stipulations or realignment may be required at such intersections, if any.
- A leak detection plan will be submitted to the BLM Carlsbad Field Office for approval prior to pipeline installation. The method could incorporate gauges to detect pressure drops, situating values and lines so they can be visually inspected periodically or installing electronic sensors to alarm when a leak is present. The leak detection plan will incorporate an automatic shut off system that will be installed for proposed pipelines to minimize the effects of an undesirable event.
- Regular monitoring is required to quickly identify leaks for their immediate and proper treatment.
- All spills or leaks will be reported to the BLM immediately for their immediate and proper treatment.

# 4.2 RANGELAND MITIGATION FOR PIPELINES

## 4.5.1 Fence Requirement

Where entry is granted across a fence line, the fence must be braced and tied off on both sides of the passageway with H-braces prior to cutting. Once the work is completed, the fence will be restored to its prior condition, or better. The operator shall notify the private surface landowner or the grazing allotment operator prior to crossing any fence(s).

# 4.5.2 Cattleguards

An appropriately sized cattleguard(s) sufficient to carry out the project shall be installed and maintained at road-fence crossing(s). Any existing cattleguard(s) on the access road shall be repaired or replaced if they are damaged or have deteriorated beyond practical use. The operator shall be responsible for the condition of the existing cattleguard(s) that are in place and are utilized during lease operations. A gate shall be constructed on one side of the cattleguard and fastened securely to H-braces.

## 4.5.3 Livestock Watering Requirement

Structures that provide water to livestock, such as windmills, pipelines, drinking troughs, and earthen reservoirs, will be avoided by moving the proposed action.

Any damage to structures that provide water to livestock throughout the life of the well, caused by operations from the well site, must be immediately corrected by the operator. The operator must notify the BLM office (575-234-5972) and the private surface landowner or the grazing allotment operator if any damage occurs to structures that provide water to livestock.

• Livestock operators will be contacted, and adequate crossing facilities will be provided as needed to ensure livestock are not prevented from reaching water sources because of the open trench.

- Wildlife and livestock trails will remain open and passable by adding soft plugs (areas where the
  trench is excavated and replaced with minimal compaction) during the construction phase. Soft
  plugs with ramps on either side will be left at all well-defined livestock and wildlife trails along
  the open trench to allow passage across the trench and provide a means of escape for livestock and
  wildlife that may enter the trench.
- Trenches will be backfilled as soon as feasible to minimize the amount of open trench. The Operator will avoid leaving trenches open overnight to the extent possible and open trenches that cannot be backfilled immediately will have escape ramps (wooden) placed at no more than 2,500 feet intervals and sloped no more than 45 degrees.

# 5. PRODUCTION (POST DRILLING)

# 5.1 WELL STRUCTURES & FACILITIES

## 5.1.1 Placement of Production Facilities

Production facilities must be placed on the well pad to allow for maximum interim recontouring and revegetation of the well location.

# 5.1.2 Exclosure Netting (Open-top Tanks)

Immediately following active drilling or completion operations, the operator will take actions necessary to prevent wildlife and livestock access, including avian wildlife, to all open-topped tanks that contain or have the potential to contain salinity sufficient to cause harm to wildlife or livestock, hydrocarbons, or Resource Conservation and Recovery Act of 1976-exempt hazardous substances. At a minimum, the operator will net, screen, or cover open-topped tanks to exclude wildlife and livestock and prevent mortality. If the operator uses netting, the operator will cover and secure the open portion of the tank to prevent wildlife entry. The operator will net, screen, or cover the tanks until the operator removes the tanks from the location or the tanks no longer contain substances that could be harmful to wildlife or livestock. Use a maximum netting mesh size of 1 ½ inches. The netting must not be in contact with fluids and must not have holes or gaps.

## 5.1.3. Chemical and Fuel Secondary Containment and Exclosure Screening

The operator will prevent all hazardous, poisonous, flammable, and toxic substances from coming into contact with soil and water. At a minimum, the operator will install and maintain an impervious secondary containment system for any tank or barrel containing hazardous, poisonous, flammable, or toxic substances sufficient to contain the contents of the tank or barrel and any drips, leaks, and anticipated precipitation. The operator will dispose of fluids within the containment system that do not meet applicable state or U. S. Environmental Protection Agency livestock water standards in accordance with state law; the operator must not drain the fluids to the soil or ground. The operator will design, construct, and maintain all secondary containment systems to prevent wildlife and livestock exposure to harmful substances. At a minimum, the operator will install effective wildlife and livestock exclosure systems such as fencing, netting, expanded metal mesh, lids, and grate covers. Use a maximum netting mesh size of 1 ½ inches.

## 5.1.4. Open-Vent Exhaust Stack Exclosures

The operator will construct, modify, equip, and maintain all open-vent exhaust stacks on production equipment to prevent birds and bats from entering, and to discourage perching, roosting, and nesting. (*Recommended exclosure structures on open-vent exhaust stacks are in the shape of a cone.*) Production equipment includes, but may not be limited to, tanks, heater-treaters, separators, dehydrators, flare stacks, in-line units, and compressor mufflers.

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## 5.1.5. Containment Structures

Proposed production facilities such as storage tanks and other vessels will have a secondary containment structure that is constructed to hold the capacity of 1.5 times the largest tank, plus freeboard to account for precipitation, unless more stringent protective requirements are deemed necessary.

# 6. RECLAMATION

Stipulations required by the Authorized Officer on specific actions may differ from the following general guidelines

## 6.1 ROAD AND SITE RECLAMATION

Any roads constructed during the life of the well will have the caliche removed or linear burial. If contaminants are indicated then testing will be required for chlorides and applicable contaminate anomalies for final disposal determination (disposed of in a manner approved by the Authorized Officer within Federal, State and Local statutes, regulations, and ordinances) and seeded to the specifications in sections 6.5 and 6.6.

## **6.2 EROSION CONTROL**

Install erosion control berms, windrows, and hummocks. Windrows must be level and constructed perpendicular to down-slope drainage; steeper slopes will require greater windrow density. Topsoil between windrows must be ripped to a depth of at least 12", unless bedrock is encountered. Any large boulders pulled up during ripping must be deep-buried on location. Ripping must be perpendicular to down-slope. The surface must be left rough in order to catch and contain rainfall on-site. Any trenches resulting from erosion cause by run-off shall be addressed immediately.

# 6.3 INTERIM RECLAMATION

During the life of the development, all disturbed areas not needed for active support of production operations must undergo interim reclamation in order to minimize the environmental impacts of development on other resources and uses.

Within six (6) months of well completion, operators must work with BLM surface protection specialists (BLM\_NM\_CFO\_Construction\_Reclamation@blm.gov) to devise the best strategies to reduce the size of the location. Interim reclamation must allow for remedial well operations, as well as safe and efficient removal of oil and gas.

During reclamation, the removal of caliche and any other surface material is required. Removed caliche that is free of contaminants may be used for road repairs, fire walls or for building other roads and locations. In order to operate the well or complete workover operations, it may be necessary to drive, park and operate on restored interim vegetation within the previously disturbed area. Disturbing revegetated areas for production or workover operations will be allowed. If there is significant disturbance and loss of vegetation, the area will need to be revegetated. Communicate with the appropriate BLM office for any exceptions/exemptions if needed.

All disturbed areas after they have been satisfactorily prepared need to be reseeded with the seed mixture provided in section 6.6.

Upon completion of interim reclamation, the operator shall submit a Sundry Notice, Subsequent Report of Reclamation (Form 3160-5).

#### 6.4 FINAL ABANDONMENT & RECLAMATION

Prior to surface abandonment, the operator shall submit a Notice of Intent Sundry Notice and reclamation plan.

At final abandonment, well locations, production facilities, and access roads must undergo "final" reclamation so that the character and productivity of the land are restored.

Earthwork for final reclamation must be completed within six (6) months of well plugging. All pads, pits, facility locations and roads must be reclaimed to a satisfactory revegetated, safe, and stable condition, unless an agreement is made with the landowner or BLM to keep the road and/or pad intact.

After all disturbed areas have been satisfactorily prepared, these areas need to be revegetated with the seed mixture provided below. Seeding will be accomplished by drilling on the contour whenever practical or by other approved methods. Seeding may need to be repeated until revegetation is successful, as determined by the BLM. After earthwork and seeding is completed, the operator is required to submit a Sundry Notice, Subsequent Report of Reclamation.

Operators shall contact a BLM surface protection specialist prior to surface abandonment operations for site specific objectives (BLM\_NM\_CFO\_Construction\_Reclamation@blm.gov).

# 6.5 SEEDING TECHNIQUES

Seeds shall be hydro-seeded, mechanically drilled, or broadcast, with the broadcast-seeded area raked, ripped or dragged to aid in covering the seed. The seed mixture shall be evenly and uniformly planted over the disturbed area.

## 6.6 SOIL SPECIFIC SEED MIXTURE

The lessee/permitee shall seed all disturbed areas with the seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed (PLS)\* per acre. There shall be no primary or secondary noxious weeds in the seed mixture. Seed will be tested and the viability testing of seed will be done in accordance with State law(s) and within nine (9) months prior to purchase. Commercial seed will be either certified or registered seed. The seed container will be tagged in accordance with State law(s) and available for inspection by the Authorized Officer.

Seed land application will be accomplished by mechanical planting using a drill equipped with a depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture will be evenly and uniformly planted over the disturbed area. Smaller/heavier seeds tend to drop the bottom of the drill and are planted first; the operator shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed will be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre are to be doubled. The seeding will be repeated until a satisfactory BLM or Soil Conservation

District stand is established as determined by the Authorized Officer. Evaluation of growth will not be made before completion of at least one full growing season after seeding or until several months of precipitation have occurred, enabling a full four months of growth, with one or more seed generations being established.

# **Seed Mixture 3, for Shallow Sites**

Species to be planted in pounds of pure live seed\* per acre:

<u>Species</u>	<u>lb/acre</u>
Plains Bristlegrass (Setaria macrostachya)	1.0
Green Sprangletop (Leptochloa dubia)	2.0
Sideoats Grama (Bouteloua curtipendula)	5.0

<sup>\*</sup>Pounds of pure live seed:

Pounds of seed x percent purity x percent germination = pounds pure live seed



# 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
  - o Green Flag Normal Safe Operation Condition
  - o 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

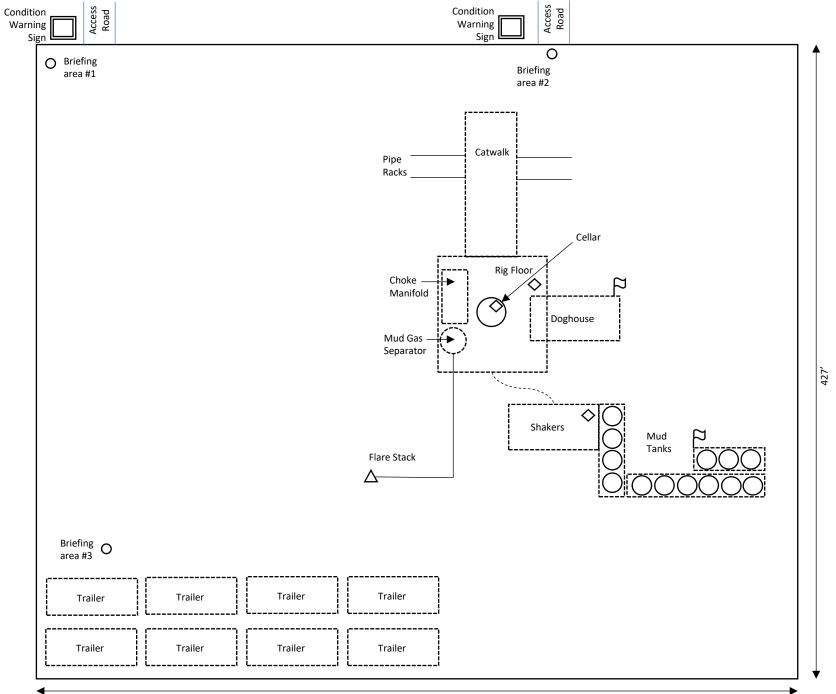
Emergency Contacts			
Carlsbad Police Department	575.887.7551	911	
Carlsbad Medical Center	575.887.4100	911	
Eddy County Fire Service	575.628.5450	911	
Eddy County Sherriff	575.887.7551	911	
Lea County Fire Service	575.391.2983	911	
Lea County Sherriff	575.396.3611	911	
Jal Police Department	575.395.2121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

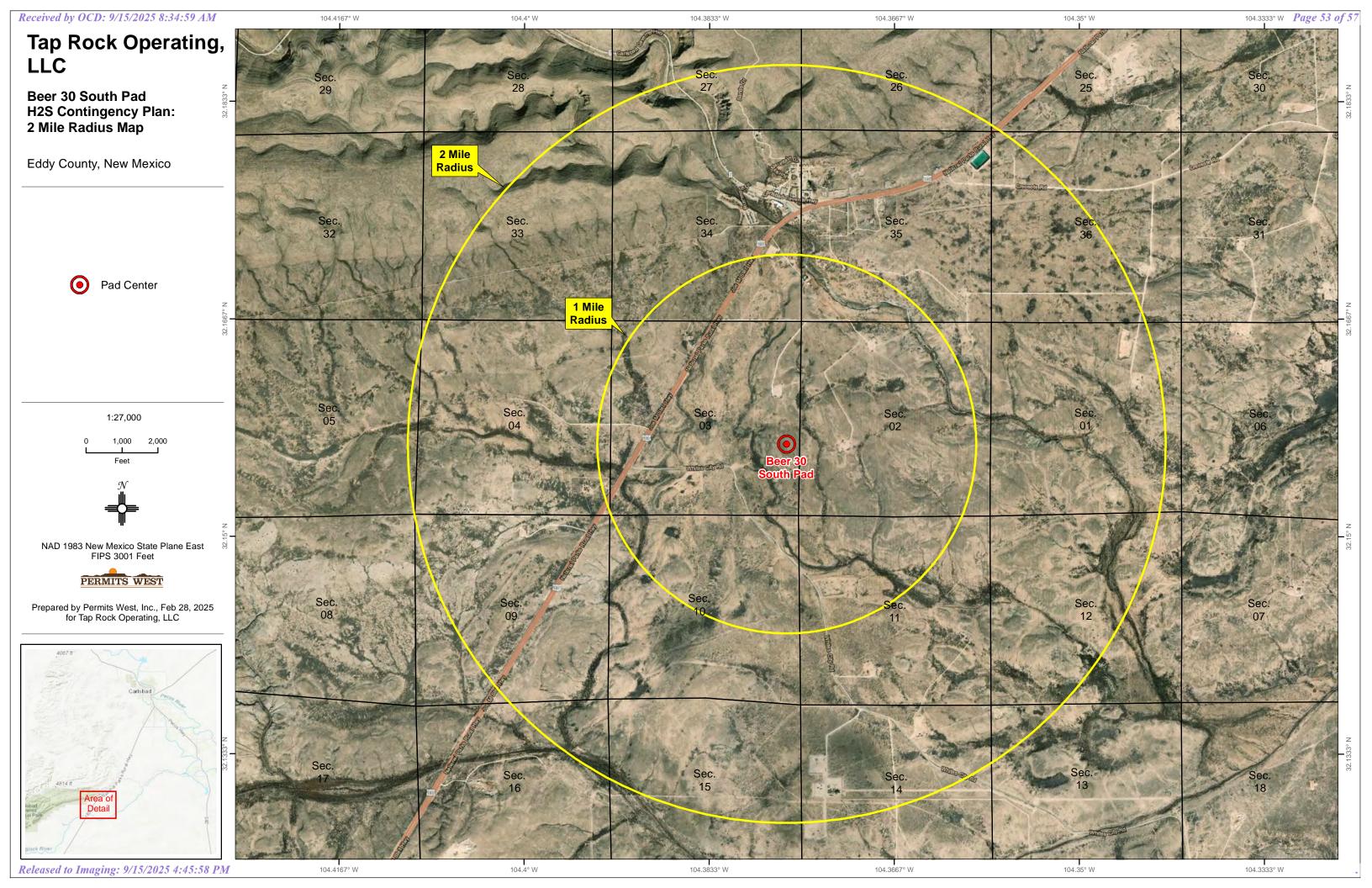
Rig Diagram
Beer 30
South Well Pad
Tap Rock Operating, LLC
3-25S-25E
Eddy County, NM

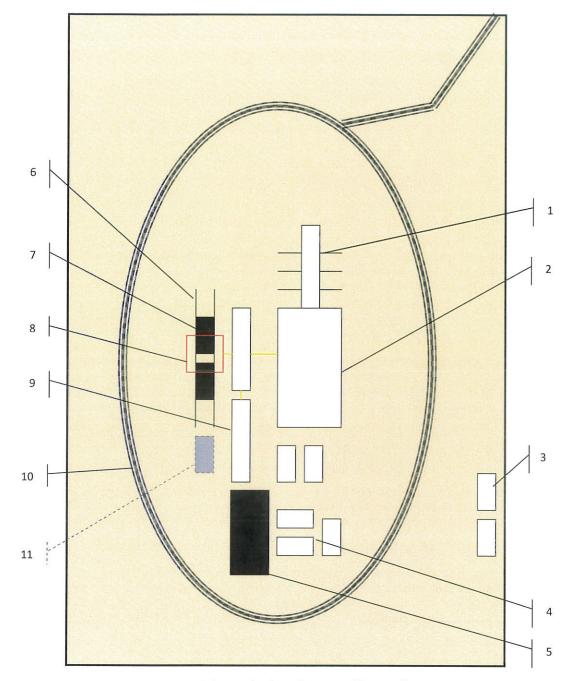


- O Briefing Area
- Current Well
- ↑ Flare Stack
- → H2S Monitor
- ( ) Mud Gas Separator







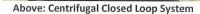


Schematic Closed Loop Drilling Rig\*

- 1. Pipe Rack
- 2. Drill Rig
- 3. House Trailers/ Offices
- 4. Generator/Fuel/Storage
- 5. Overflow-Frac Tank
- 6. Skids
- 7. Roll Offs
- 8. Hopper or Centrifuge
- 9. Mud Tanks
- 10. Loop Drive
- 11. Generator (only for use with centrifuge)

\*Not drawn to scale: Closed loop system requires at least 30 feet beyond mud tanks. Ideally 60 feet would be available









Closed Loop Drilling System: Mud tanks to right (1)

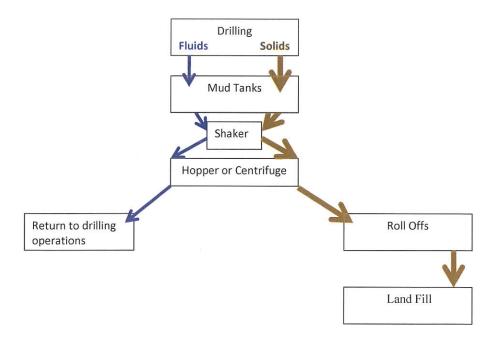
Hopper in air to settle out solids (2)

Water return pipe (3)

Shaker between hopper and mud tanks (4)

Roll offs on skids (5)

# Flow Chart for Drilling Fluids and Solids



Photos Courtesy of Gandy Corporation Oil Field Service



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

ACKNOWLEDGMENTS

Action 505817

# **ACKNOWLEDGMENTS**

Operator:	OGRID:
TAP ROCK OPERATING, LLC	372043
1700 Lincoln St	Action Number:
Denver, CO 80203	505817
	Action Type:
	[C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

## **ACKNOWLEDGMENTS**

I hereby certify that no additives containing PFAS chemicals will be added to the completion or recompletion of this well.

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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 505817

## **CONDITIONS**

Operator:	OGRID:
TAP ROCK OPERATING, LLC	372043
1700 Lincoln St	Action Number:
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## CONDITIONS

Created By	Condition	Condition Date
bwood	Cement is required to circulate on both surface and intermediate1 strings of casing.	9/15/2025
bwood	If cement does not circulate on any string, a Cement Bond Log (CBL) is required for that string of casing.	9/15/2025
ward.rikala	Notify the OCD 24 hours prior to casing & cement.	9/15/2025
ward.rikala	File As Drilled C-102 and a directional Survey with C-104 completion packet.	9/15/2025
ward.rikala	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.	9/15/2025
ward.rikala	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.	9/15/2025