

Form 3160-5
(June 2015)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

SUNDRY NOTICES AND REPORTS ON WELLS
Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

5. Lease Serial No. NMNM0554252

6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE - Other instructions on page 2

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

1. Type of Well

Oil Well Gas Well Other

8. Well Name and No.

THE CONTEST FED COM 132H

2. Name of Operator

TAP ROCK OPERATING, LLC

9. API Well No.

30-025-46675

3a. Address

602 PARK POINT DRIVE, STE 200
GOLDEN, CO 80401

3b. Phone No. (include area code)

(720) 460-3316

10. Field and Pool or Exploratory Area

ALTELOPE RIDGE; WOLFCAMP

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

NWSW / 1402 FSL / 1192 FWL / SEC 9 / T24S / R34E / NMP

11. Country or Parish, State

LEA, NM

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Hydraulic Fracturing	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input checked="" type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

Request to move BHL from 30' FNL and 2306' FWL to 30' FNL and 987' FWL and update TVD to 12279' and MD to 17211'.

SHL is unchanged.

No change to pad or infrastructure is required therefore no new disturbance will occur as a result of this change.

New Plats, Directional Plan, & Drill Plan with Casing and Cement details are attached.

**Carlsbad Field Office
Operator Copy**

All COAs still apply?

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)

CHRISTIAN COMBS

REGULATORY MANAGER
Title

Signature

CCC

Date

02/20/2020

THE SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Alison Young

Title *PE*

Date

03/01/2020

Conditions of approval, if any, are attached. Approval of this notice 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.

Office

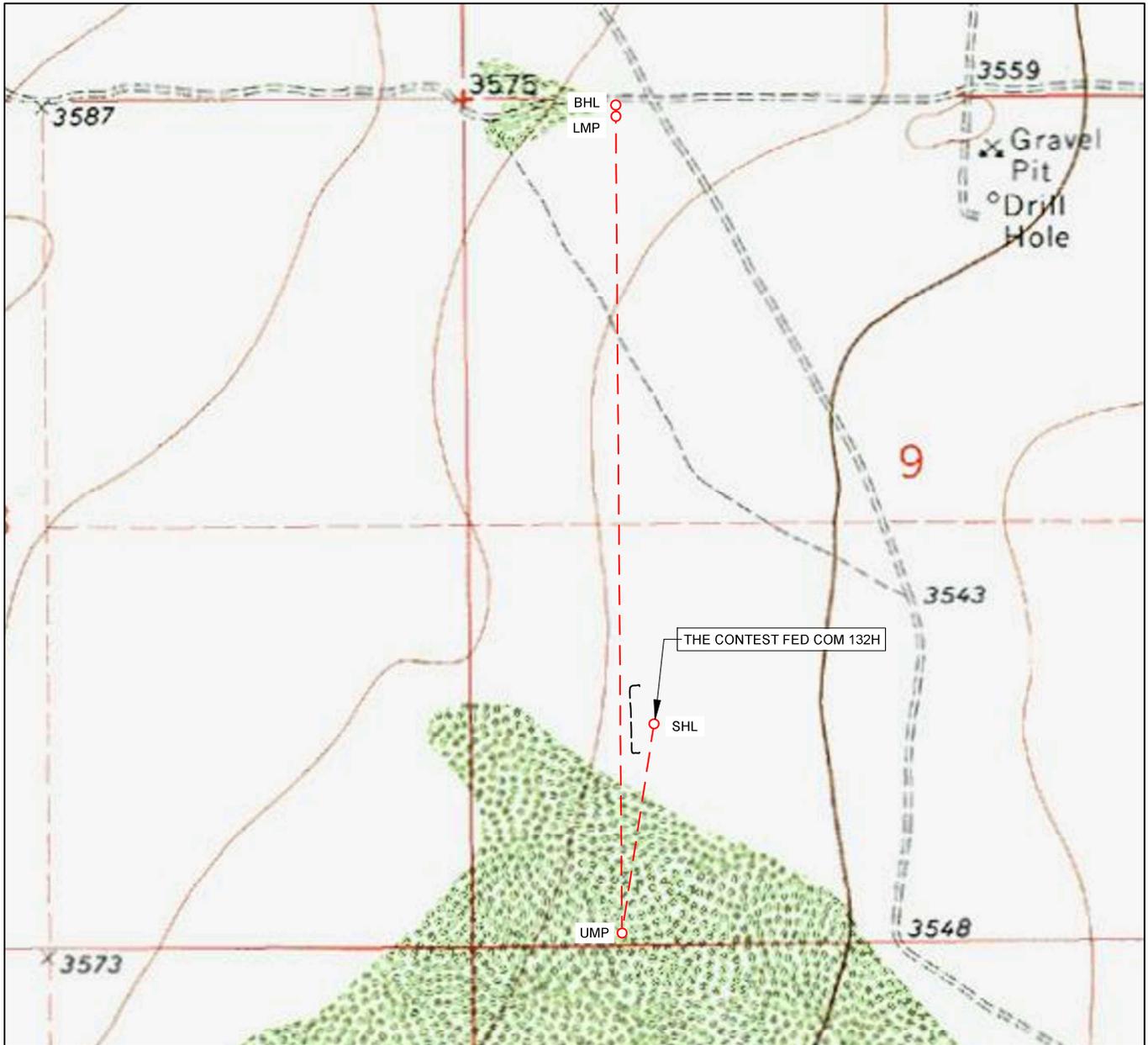
Hobbs

Title 18 U.S.C Section 1001 and Title 43 U.S.C Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

KZ

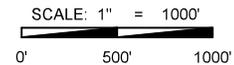
LOCATION & ELEVATION VERIFICATION MAP



LEASE NAME & WELL NO.: THE CONTEST FED COM 132H

SECTION 9 TWP 24-S RGE 34-E SURVEY N.M.P.M.
 COUNTY LEA STATE NM ELEVATION 3562'
 DESCRIPTION 1402' FSL & 1192' FWL

LATITUDE N 32.2286457 LONGITUDE W 103.4795994



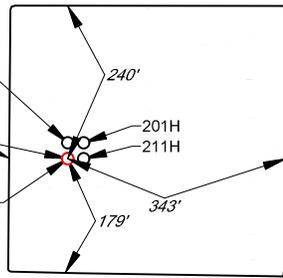
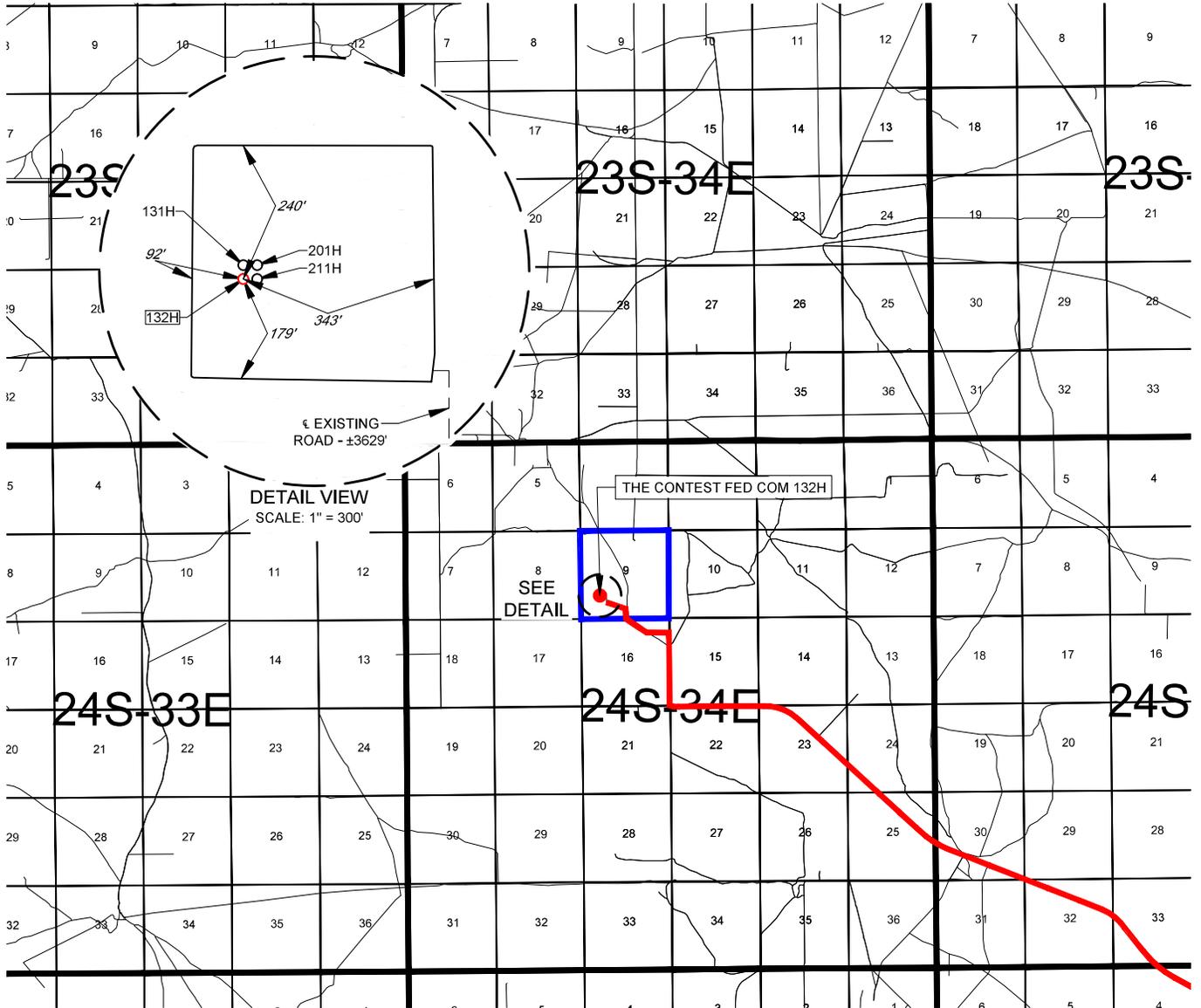
THIS EASEMENT/SERVITUDE LOCATION SHOWN HEREON HAS BEEN SURVEYED ON THE GROUND UNDER MY SUPERVISION AND PREPARED ACCORDING TO THE EVIDENCE FOUND AT THE TIME OF SURVEY, AND DATA PROVIDED BY TAP ROCK OPERATING, LLC. THIS CERTIFICATION IS MADE AND LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF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

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



1400 EVERMAN PARKWAY, Ste. 146 • FT. WORTH, TEXAS 76140
 TELEPHONE: (817) 744-7512 • FAX (817) 744-7554
 2903 NORTH BIG SPRING • MIDLAND, TEXAS 79705
 TELEPHONE: (432) 682-1653 OR (800) 767-1653 • FAX (432) 682-1743
 WWW.TOPOGRAPHIC.COM

EXHIBIT 2
VICINITY MAP



DETAIL VIEW
SCALE: 1" = 300'

SEE
DETAIL

THE CONTEST FED COM 132H



LEASE NAME & WELL NO.: THE CONTEST FED COM 132H

SECTION 9 TWP 24-S RGE 34-E SURVEY N.M.P.M.
 COUNTY LEA STATE NM
 DESCRIPTION 1402' FSL & 1192' FWL

DISTANCE & DIRECTION
 FROM INT. OF NM-128 W & NM-18S, GO WEST ON NM-128 W ±18.0
 MILES, THENCE NORTH (RIGHT) ON COUNTY RD. 2-B ±0.8 MILE,
 THENCE WEST (LEFT) ON COUNTY RD. 2-B ±0.3 MILE, THENCE NORTH
 (RIGHT) ON PROPOSED RD. ±3629 FEET TO A POINT ±378 FEET
 SOUTHEAST OF THE LOCATION.



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



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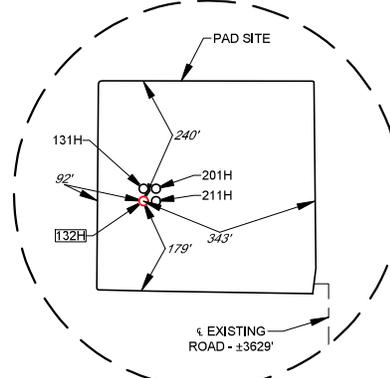
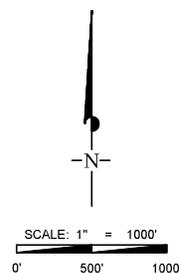
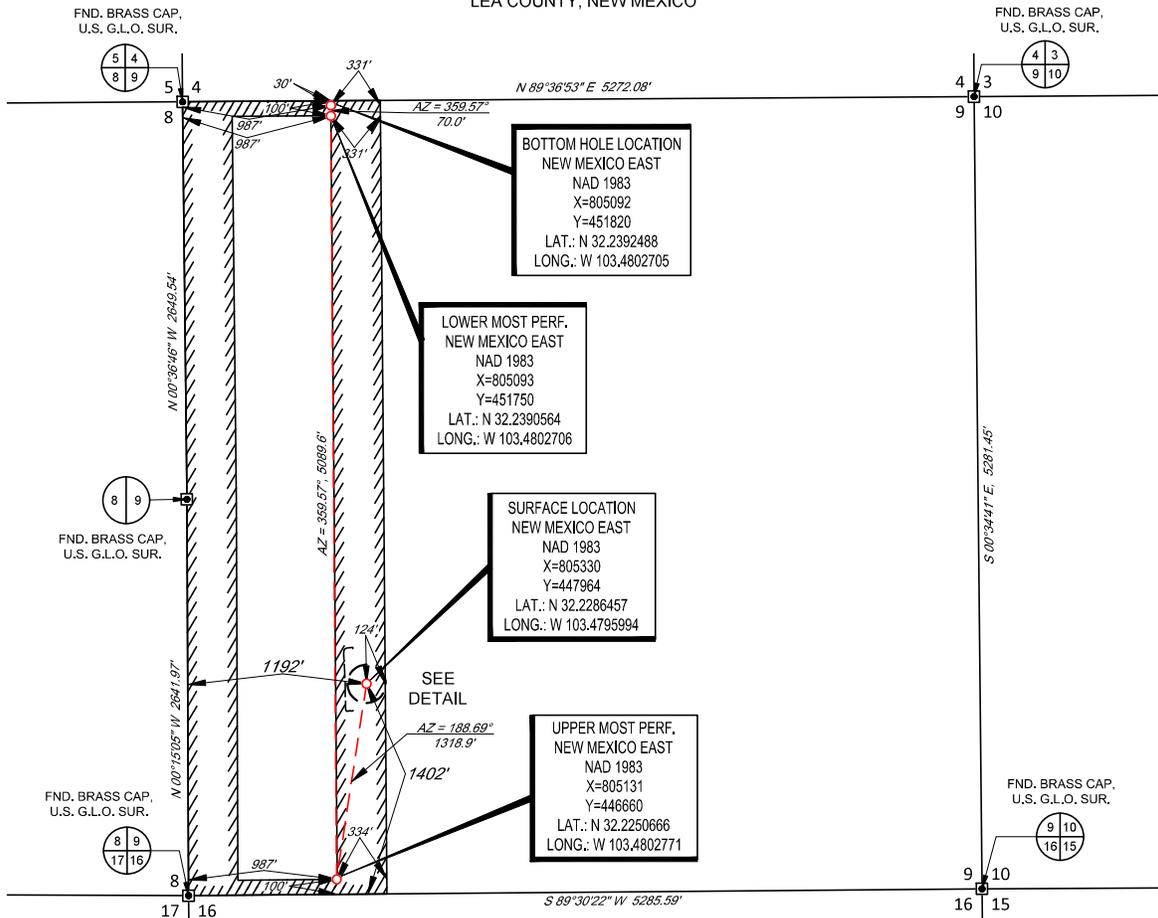
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TAP ROCK

EXHIBIT 2A

SECTION 9, TOWNSHIP 24-S, RANGE 34-E, N.M.P.M.
LEA COUNTY, NEW MEXICO



LEASE NAME & WELL NO.: THE CONTEST FED COM 132H

SECTION 9 TWP 24-S RGE 34-E SURVEY N.M.P.M.
 COUNTY LEA STATE NM
 DESCRIPTION 1402' FSL & 1192' FWL

DISTANCE & DIRECTION
 FROM INT. OF NM-128 W & NM-18S, GO WEST ON NM-128 W ±18.0 MILES, THENCE NORTH (RIGHT) ON COUNTY RD. 2-B ±0.8 MILE, THENCE WEST (LEFT) ON COUNTY RD. 2-B ±0.3 MILE, THENCE NORTH (RIGHT) ON PROPOSED RD. ±3629 FEET TO A POINT ±378 FEET SOUTHEAST OF THE LOCATION.



John Trevor Carnegie

John Trevor Carnegie, P.S. No. 11401

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

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TOPOGRAPHIC
 LOYALTY INNOVATION LEGACY

1400 EVERMAN PARKWAY, Ste. 146 • FT. WORTH, TEXAS 76140
 TELEPHONE: (817) 744-7512 • FAX: (817) 744-7554
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EXHIBIT 2B

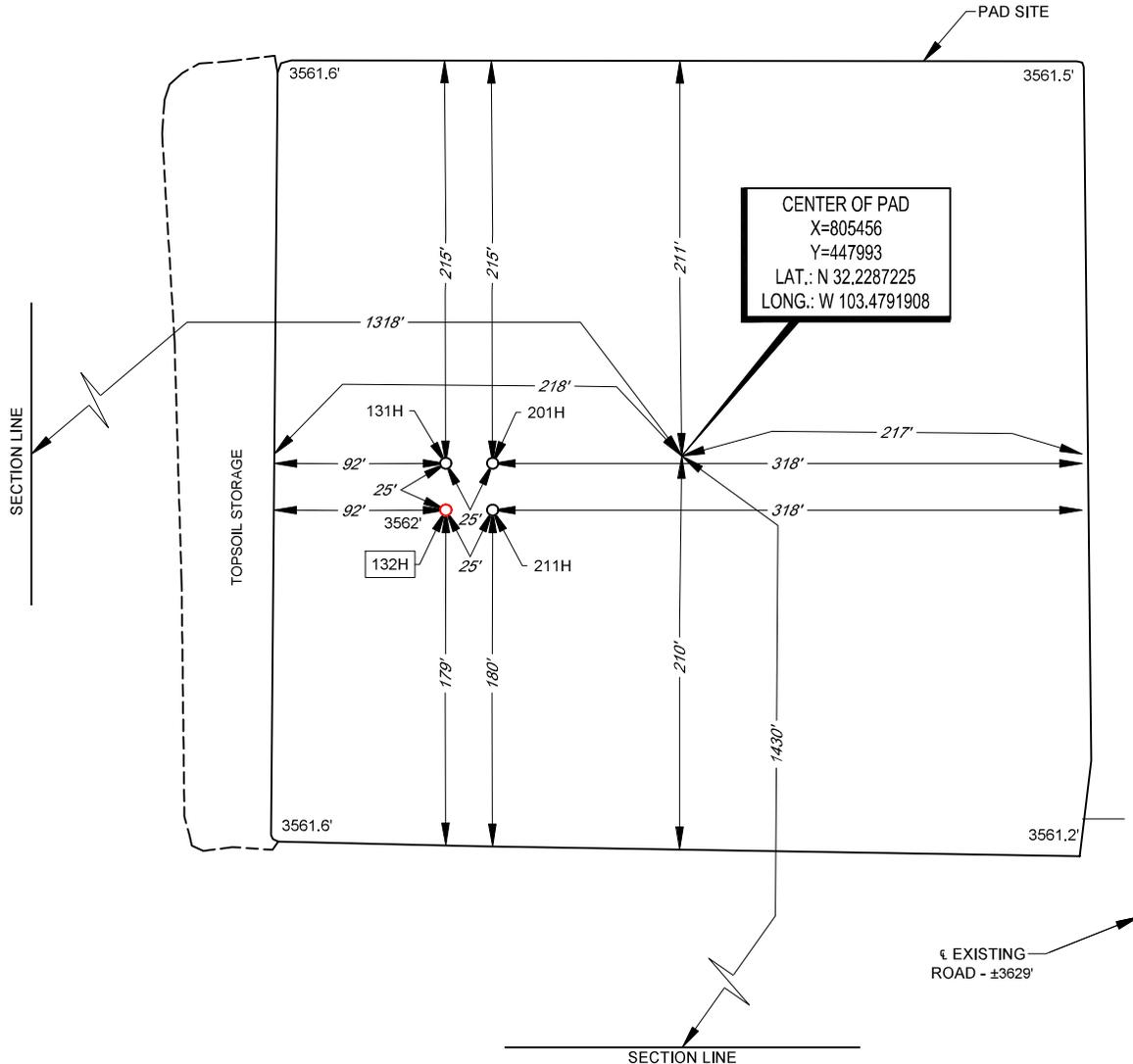


SECTION 9, TOWNSHIP 24-S, RANGE 34-E, N.M.P.M.
LEA COUNTY, NEW MEXICO

LEGEND

- SECTION LINE
- PROPOSED ROAD

DETAIL VIEW
SCALE: 1" = 100'



LEASE NAME & WELL NO.: THE CONTEST FED COM 132H
132H LATITUDE N 32.2286457 132H LONGITUDE W 103.4795994

CENTER OF PAD IS 1430' FSL & 1318' FWL



John Trevor Carnegie, P.S. No. 11401

ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREON ARE GRID BASED UPON THE NEW MEXICO COORDINATE SYSTEM OF 1983, EAST ZONE, U.S. SURVEY FEET. ELEVATIONS USED ARE NAVD83, OBTAINED THROUGH AN OPUS SOLUTION.

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

ORIGINAL DOCUMENT SIZE: 8.5" X 11"



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



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Drilling Operations Plan
The Contest Fed Com 132H
Tap Rock Operating, LLC
SHL 1402' FSL & 1192' FWL, Sec. 9
BHL 30' FNL & 987' FWL, Sec. 9
T. 24S, R. 34E, Lea County, NM

Elevation above Sea Level: 3562'

DRILLING PROGRAM

1. Estimated Tops

Formation	TVD	MD	Lithologies	Bearing
Quaternary Deposits	0	0	Surface	None
Rustler Anhydrite	1195	1199		Salt
Salado	1724	1738	Salt	Salt
Base Salt	5024	5100		Salt
Lamar	5292	5373	Limestone	None
Bell Canyon	5330	5411	Sandstone	Hydrocarbons
Cherry Canyon	6376	6476	Sandstone	Hydrocarbons
Brushy Canyon	7650	7775	Sandstone	Hydrocarbons
Bone Spring	8974	9104	Limestone	Hydrocarbons
1st Bone Spring	9994	10124	Sandstone	Hydrocarbons
2nd Bone Spring	10237	10367	Sandstone	Hydrocarbons
3rd Bone Spring	11021	11151	Sandstone	Hydrocarbons
KOP	11512	11642	Sandstone	Hydrocarbons
Wolfcamp	11868	12026	Shale	Hydrocarbons
TD	12279	17211	Shale	Hydrocarbons

2. Notable Zones

Wolfcamp A is the formation target.

3. Pressure Control

Pressure Control Equipment (See Schematics):

A 15,000', 10,000 psi BOP stack consisting of 3 rams with 2 pipe rams, 1 blind ram, and 1 annular preventer will be used below surface casing to TD. See attachments for BOP and choke manifold diagrams. Also present will be an accumulator that meets the requirements of Onshore Order #2 for the pressure rating of the BOP stack. A rotating head will also be installed as needed. BOP will be inspected and operated as recommended in Onshore Order #2. A top drive check valve and sub equipped with a full opening valve sized to fit the drill pipe and collars will be available on the rig floor in the open position. The wellhead will be a multi-bowl speed head.

BOP Test procedure will be as follows:

After surface casing is set and the BOP is nipped up, the BOP pressure tests will be made with a third party tester to 250 psi low, 5000 psi high, and the annular preventer will be tested to 2,500 psi. The BOP



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will be tested in this manner after nipple-up if any break of the stack occurs. Before drilling out from 7.625" casing shoe, the BOP pressure tests will be made with a third party tester to 250 psi low, 10,000 psi high, and the annular preventer will be tested to 5,000 psi. The BOP will be tested in this manner if passage of allotted time occurs.

Variance Requests:

Tap Rock requests a variance to run a multi-bowl speed head for setting the Intermediate 1, Intermediate 2, and Production Strings. Tap Rock requests a variance to drill this well using a co-flex line between the BOP and choke manifold. Certification for proposed co-flex hose is attached. The hose is not required by the manufacturer to be anchored. In the event the specific hose is not available, one of equal or higher rating will be used. Tap Rock requests a variance to have the option of batch drilling this well with other wells on the same pad. In the event that this well is batch drilled, after drilling surface, 1st intermediate, and 2nd intermediate hole sections and cementing 2nd intermediate casing, a 10M dry hole cap with bleed off valve will be installed. The rig will then walk to another well on the pad. When the rig returns to this well and BOPs are installed, the operator will perform a full BOP test. Tap Rock requests a variance to run 7-5/8" BTC casing inside 9-5/8" BTC casing will be less than the 0.422" stand off regulation. Through conversations with BLM representatives, Tap Rock has received approval for this design as long as the 7-5/8" flush casing was run throughout the entire 300' cement tie back section between 9-5/8" and 7-5/8" casing. Tap Rock requests a variance to use a 5000 psi annular BOP on a 10M BOP stack. The annular will be tested to 250 psi low and 5000 psi high.

Tap Rock requests approval to possibly utilize a spudder rig to drill and set casing for the surface interval on this well. The spudder rig will be possibly utilized in order to reduce cost and save time. The wellhead will be installed and tested as soon as the surface casing is cut off per the existing COAs. A blind flange with the same pressure rating as the wellhead will be installed on the well. Once the spudder rig is removed, Tap Rock will secure the wellhead area by placing a guard rail around the cellar. Pressure will be monitored and a means for intervention will be maintained while the drilling rig is not over the well. Spudder rig operations are expected to take 2-3 days per well. Three wells on the pad will have surface casing set by the spudder rig as a part of this operation. The BLM will be notified 24 hours prior to commencing spudder rig operations. Within 90 days of the departure of the spudder rig, drilling operations will recommence on these wells. This rig will have a BOP stack equal or greater to the pressure rating required in the COAs. The BLM will be notified 24 hours before the larger rig moves on the pre-set wells. Tap Rock will have supervision on the spudder rig to ensure compliance with all BLM and NMOCD regulations.



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 T. 24S, R. 34E, Lea County, NM

4. Casing & Cement

All Casing will be new.

Name	Hole Size	Casing Size	Standard	Tapered	Top MD	Bottom MD	Top TVD	BTM TVD	Grade	Weight	Thread	Collapse	Burst	Tension
Surface	17 1/2	13 3/8	API	No	0	1260	0	1256	J-55	54.5	BUTT	1.13	1.15	1.6
1st Intermediate	12 1/4	9 5/8	API	No	0	5393	0	5312	J-55	40	BUTT	1.13	1.15	1.6
2nd Intermediate	8 3/4	7 5/8	API	No	0	5093	0	5012	P-110	29.7	BUTT	1.13	1.15	1.6
2nd Intermediate	8 3/4	7 5/8	NON API	Yes	5093	11542	5012	11412	P-110	29.7	W-513	1.13	1.15	1.6
Production	6 3/4	5 1/2	NON API	No	0	11342	0	11212	P-110	20	TXP	1.13	1.15	1.6
Production	6 3/4	5	NON API	Yes	11342	17211	11212	12279	P-110	18	W-521	1.13	1.15	1.6

Name	Type	Top MD	Sacks	Yield	Cu. Ft	Weight	Excess	Cement	Additives
Surface	Tail	0	1297	1.35	1750	14.8	100%	C	5% NCI + LCM
1st Intermediate	Lead	0	1023	2.18	2229	12.7	65%	C	Bentonite + 1% CaCL2 + 8% NaCl + LCM
	Tail	4314	419	1.33	557	14.8	65%	C	5% NaCl + LCM
2nd Intermediate	Lead	5093	333	2.22	739	11.5	35%	TXI	Fluid Loss + Dispersant + Retarder + LCM
	Tail	10542	99	1.37	136	13.2	35%	H	Fluid Loss + Dispersant + Retarder + LCM
Production	Tail	11342	691	1.19	823	15.8	25%	H	Fluid Loss + Dispersant + Retarder + LCM

5. Mud Program

Name	Top	Bottom	Type	Mud Weight	Visc	Fluid Loss
Surface	0	1260	FW Spud Mud	8.30	28	NC
Intermediate	1260	5393	Brine Water	10.00	30-32	NC
Intermediate 2	5393	11542	FW/Cut Brine	9.00	30-32	NC
Production	11542	17211	Oil Base Mud	11.00	50-70	<10

Electronic Pason mud monitor system complying with Onshore Order 1 will be used. All necessary mud products (e. g., barite, cedar bark) for weight addition and fluid loss control will always be on site. Mud program is subject to change due to hole conditions. A closed loop system will be used.

6. Cores, Tests, & Logs

- Electric Logging Program: No open-hole logs are planned at this time for the pilot hole.
- GR will be collected while drilling through the MWD tools from 9.625" casing shoe to TD.
- A 2-person mud logging program will be used from 9.625" casing shoe to TD.
- No DSTs or cores are planned at this time.
- CBL w/ CCL from as far as gravity will let it fall to TOC.



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T. 24S, R. 34E, Lea County, NM

7. Down Hole Conditions

No abnormal pressure or temperature is expected. Maximum expected bottom hole pressure is $\approx 7,024$ psi. Expected bottom hole temperature is $\approx 170^\circ$ F.

Tap Rock does not anticipate that there will be enough H₂S from the surface to the Wolfcamp formations to meet the BLM's Onshore Order 6 requirements for the submission of an "H₂S Drilling Operation Plan" or "Public Protection Plan" for drilling and completing this well. Tap Rock has an H₂S safety package on all wells and an "H₂S Drilling Operations Plan" is attached. Adequate flare lines will be installed off the mud/gas separator where gas may be safely flared. All personnel will be familiar with all aspects of safe operation of equipment being used.

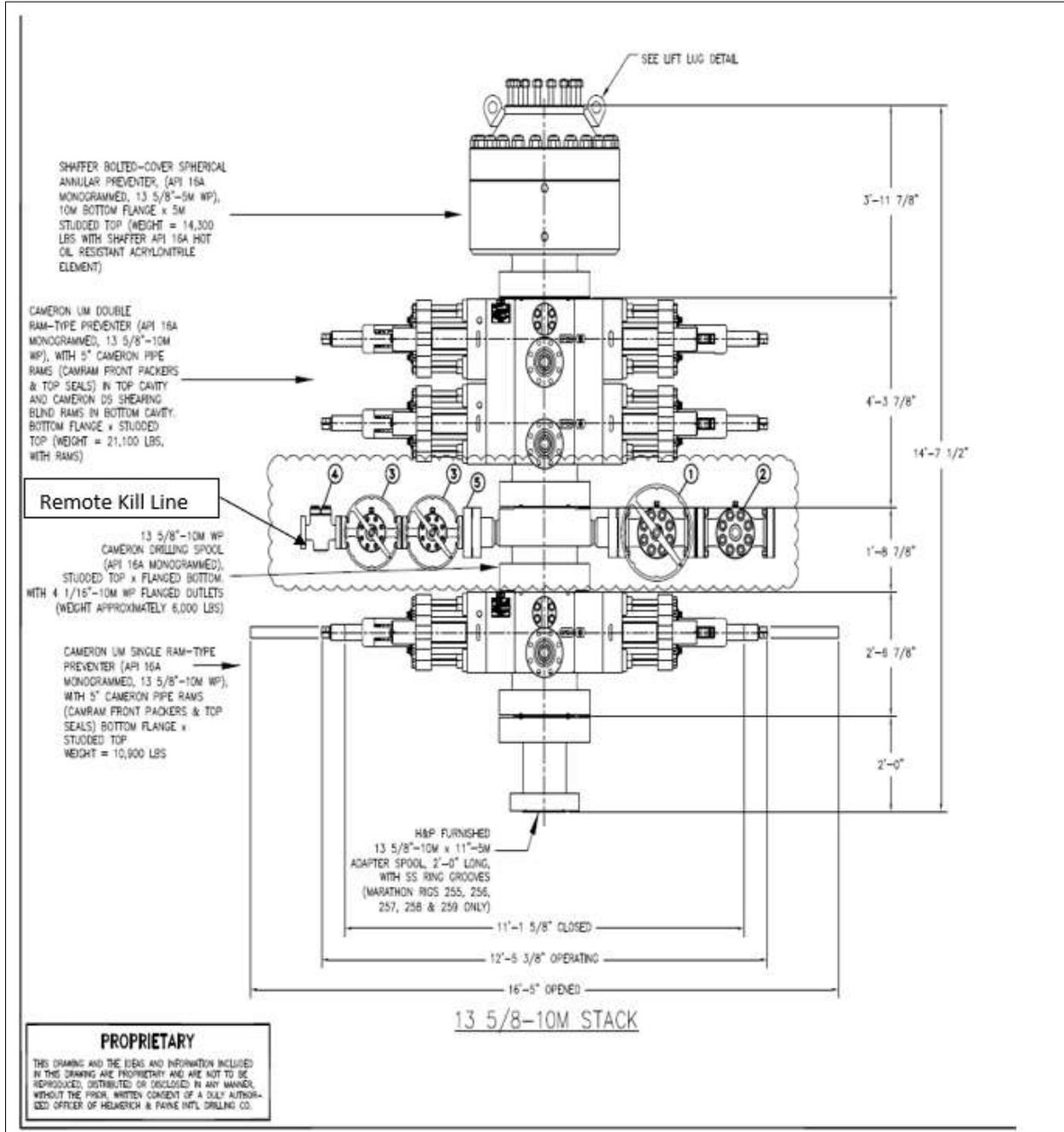
8. Other Information

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



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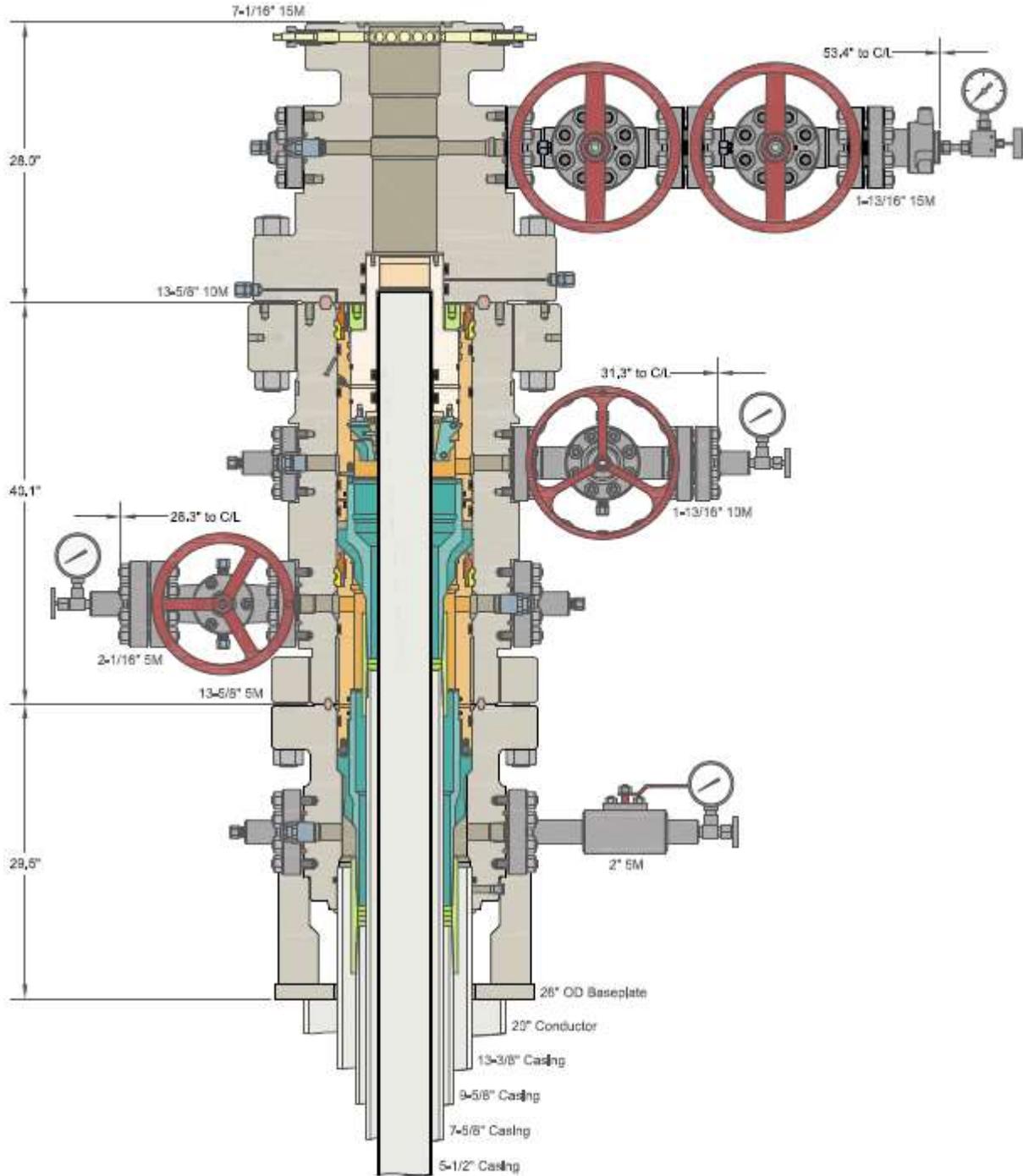
10,000 psi BOP Stack





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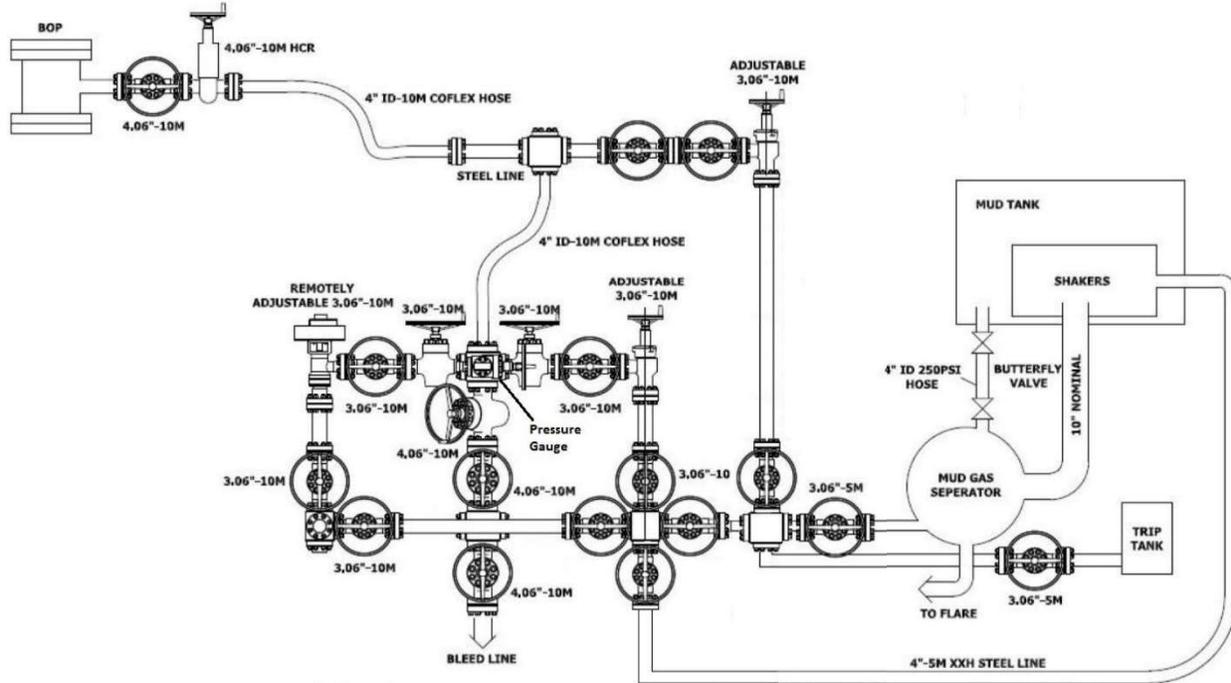
Multi-bowl Wellhead





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T. 24S, R. 34E, Lea County, NM

10M Choke Layout





Tap Rock Resources, LLC

**Lea County, NM (NAD 83 NME)
(Contest Fed) Sec-9_T-24-S_R-34-E
The Contest Fed Com #132H**

OWB

Plan: Plan #3

Standard Planning Report

20 February, 2020





Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well The Contest Fed Com #132H
Company:	Tap Rock Resources, LLC	TVD Reference:	KB @ 3588.0usft (H&P 388)
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB @ 3588.0usft (H&P 388)
Site:	(Contest Fed) Sec-9_T-24-S_R-34-E	North Reference:	Grid
Well:	The Contest Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	Plan #3		

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

Site	(Contest Fed) Sec-9_T-24-S_R-34-E				
Site Position:	Northing:	447,954.00 usft	Latitude:	32° 13' 43.026 N	
From: Map	Easting:	805,330.00 usft	Longitude:	103° 28' 46.561 W	
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.46 °

Well	The Contest Fed Com #132H					
Well Position	+N/-S	10.0 usft	Northing:	447,964.00 usft	Latitude:	32° 13' 43.125 N
	+E/-W	0.0 usft	Easting:	805,330.00 usft	Longitude:	103° 28' 46.560 W
Position Uncertainty		0.0 usft	Wellhead Elevation:		Ground Level:	3,562.0 usft

Wellbore	OWB					
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)	
	IGRF2015	04/24/19	6.71	60.06	47,758.93011983	

Design	Plan #3			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	359.57

Plan Survey Tool Program	Date	02/20/20		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	17,183.0 Plan #3 (OWB)	MWD	
			OWSG MWD - Standard	



Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well The Contest Fed Com #132H
Company:	Tap Rock Resources, LLC	TVD Reference:	KB @ 3588.0usft (H&P 388)
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB @ 3588.0usft (H&P 388)
Site:	(Contest Fed) Sec-9_T-24-S_R-34-E	North Reference:	Grid
Well:	The Contest Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	Plan #3		

Plan Sections

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,250.0	0.00	0.00	1,250.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,916.7	10.00	191.09	1,913.3	-56.9	-11.2	1.50	1.50	0.00	191.09	
5,300.0	10.00	191.09	5,245.2	-633.5	-124.2	0.00	0.00	0.00	0.00	
5,399.5	11.99	191.10	5,342.9	-652.1	-127.8	2.00	2.00	0.01	0.03	
8,529.7	11.99	191.10	8,404.8	-1,290.3	-253.0	0.00	0.00	0.00	0.00	
9,129.3	0.00	0.00	9,000.0	-1,351.6	-265.0	2.00	-2.00	0.00	180.00	
11,641.8	0.00	0.00	11,512.5	-1,351.6	-265.0	0.00	0.00	0.00	0.00	
12,518.3	87.65	5.10	12,085.0	-804.3	-216.2	10.00	10.00	0.00	5.10	
12,794.7	87.65	359.57	12,096.3	-528.5	-204.9	2.00	0.00	-2.00	-90.08	
17,183.0	87.65	359.57	12,276.0	3,856.0	-238.0	0.00	0.00	0.00	0.00	PBHL (The Contest)

Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well The Contest Fed Com #132H
Company:	Tap Rock Resources, LLC	TVD Reference:	KB @ 3588.0usft (H&P 388)
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB @ 3588.0usft (H&P 388)
Site:	(Contest Fed) Sec-9_T-24-S_R-34-E	North Reference:	Grid
Well:	The Contest Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	Plan #3		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,195.0	0.00	0.00	1,195.0	0.0	0.0	0.0	0.00	0.00	0.00	
Rustler Anhydrite										
1,250.0	0.00	0.00	1,250.0	0.0	0.0	0.0	0.00	0.00	0.00	
NUDGE - Build 1.50										
1,725.2	7.13	191.09	1,724.0	-29.0	-5.7	-28.9	1.50	1.50	0.00	
Top Salt										
1,916.7	10.00	191.09	1,913.3	-56.9	-11.2	-56.9	1.50	1.50	0.00	
HOLD - 3383.3 at 1916.7 MD										
5,075.4	10.00	191.09	5,024.0	-595.2	-116.7	-594.3	0.00	0.00	0.00	
Base Salt										
5,300.0	10.00	191.09	5,245.2	-633.5	-124.2	-632.5	0.00	0.00	0.00	
BLD - DLS 2.00 TFO 0.03										
5,347.6	10.95	191.09	5,292.0	-642.0	-125.8	-641.0	2.00	2.00	0.01	
Lamar										
5,349.6	10.99	191.09	5,294.0	-642.4	-125.9	-641.4	2.00	2.00	0.01	
Delaware Mountain Gp										
5,386.3	11.73	191.09	5,330.0	-649.5	-127.3	-648.5	2.00	2.00	0.01	
Bell Canyon										
5,388.4	11.77	191.10	5,332.0	-649.9	-127.4	-648.9	2.00	2.00	0.00	
Ramsey Sand										
5,399.5	11.99	191.10	5,342.9	-652.1	-127.8	-651.1	2.00	2.00	0.00	
HOLD - 3130.2 at 5399.5 MD										
6,455.7	11.99	191.10	6,376.0	-867.4	-170.0	-866.1	0.00	0.00	0.00	
Cherry Canyon										
7,758.1	11.99	191.10	7,650.0	-1,132.9	-222.1	-1,131.2	0.00	0.00	0.00	
Brushy Canyon										
8,529.7	11.99	191.10	8,404.8	-1,290.3	-253.0	-1,288.3	0.00	0.00	0.00	
DROP - -2.00										
9,103.3	0.52	191.10	8,974.0	-1,351.5	-265.0	-1,349.5	2.00	-2.00	0.00	
Bone Spring Lime										
9,129.3	0.00	0.00	9,000.0	-1,351.6	-265.0	-1,349.6	2.00	-2.00	0.00	
HOLD - 2512.5 at 9129.3 MD										
9,171.3	0.00	0.00	9,042.0	-1,351.6	-265.0	-1,349.6	0.00	0.00	0.00	
Upper Avalon										
9,462.3	0.00	0.00	9,333.0	-1,351.6	-265.0	-1,349.6	0.00	0.00	0.00	
Middle Avalon										
9,797.3	0.00	0.00	9,668.0	-1,351.6	-265.0	-1,349.6	0.00	0.00	0.00	
Lower Avalon										
10,123.3	0.00	0.00	9,994.0	-1,351.6	-265.0	-1,349.6	0.00	0.00	0.00	
1st Bone Spring Sand										
10,366.3	0.00	0.00	10,237.0	-1,351.6	-265.0	-1,349.6	0.00	0.00	0.00	
2nd Bone Spring Carb										
10,650.3	0.00	0.00	10,521.0	-1,351.6	-265.0	-1,349.6	0.00	0.00	0.00	
2nd Bone Spring Sand										
11,150.3	0.00	0.00	11,021.0	-1,351.6	-265.0	-1,349.6	0.00	0.00	0.00	
3rd Bone Spring Carb										
11,641.8	0.00	0.00	11,512.5	-1,351.6	-265.0	-1,349.6	0.00	0.00	0.00	
KOP - Build 10.00										
11,694.3	5.26	5.10	11,565.0	-1,349.2	-264.8	-1,347.2	10.00	10.00	0.00	
3rd Bone Spring Sand										



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Site:	(Contest Fed) Sec-9_T-24-S_R-34-E	North Reference:	Grid
Well:	The Contest Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	Plan #3		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
11,943.0	30.12	5.10	11,800.0	-1,274.6	-258.1	-1,272.6	10.00	10.00	0.00
3rd BS W Sand									
12,025.3	38.35	5.10	11,868.0	-1,228.5	-254.0	-1,226.5	10.00	10.00	0.00
Wolfcamp A X Sand									
12,147.4	50.56	5.10	11,955.0	-1,143.4	-246.4	-1,141.6	10.00	10.00	0.00
Wolfcamp A Y Sand									
12,267.4	62.56	5.10	12,021.0	-1,043.9	-237.5	-1,042.1	10.00	10.00	0.00
Wolfcamp A Lower									
12,518.3	87.65	5.10	12,085.0	-804.3	-216.2	-802.7	10.00	10.00	0.00
EOC/TRN - DLS 2.00 TFO -90.08									
12,794.7	87.65	359.57	12,096.3	-528.5	-204.9	-526.9	2.00	0.00	-2.00
Start 4388.3 hold at 12794.7 MD									
14,960.6	87.65	359.57	12,185.0	1,635.6	-221.2	1,637.2	0.00	0.00	0.00
Wolfcamp B									
16,254.9	87.65	359.57	12,238.0	2,928.8	-231.0	2,930.4	0.00	0.00	0.00
Wolfcamp B1									
17,183.0	87.65	359.57	12,276.0	3,856.0	-238.0	3,857.7	0.00	0.00	0.00
TD at 17183.0									

Design Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
FTP (The Contest Fec - hit/miss target - Shape - Point	0.00	0.00	12,085.0	-1,304.0	-199.0	446,660.00	805,131.00	32° 13' 30.237 N	103° 28' 48.998 W
- plan misses target center by 209.9usft at 12131.1usft MD (11944.5 TVD, -1155.8 N, -247.5 E)									
LTP (The Contest Fec - plan misses target center by 2.9usft at 17113.0usft MD (12273.1 TVD, 3786.1 N, -237.5 E) - Point	0.00	0.00	12,276.0	3,786.0	-237.0	451,750.00	805,093.00	32° 14' 20.606 N	103° 28' 48.969 W
PBHL (The Contest Fi - plan hits target center - Rectangle (sides W100.0 H5,160.0 D30.0)	2.35	359.57	12,276.0	3,856.0	-238.0	451,820.00	805,092.00	32° 14' 21.298 N	103° 28' 48.975 W



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Site:	(Contest Fed) Sec-9_T-24-S_R-34-E	North Reference:	Grid
Well:	The Contest Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	Plan #3		

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,195.0	1,195.0	Rustler Anhydrite			
1,725.2	1,724.0	Top Salt			
5,075.4	5,024.0	Base Salt			
5,347.6	5,292.0	Lamar			
5,349.6	5,294.0	Delaware Mountain Gp			
5,386.3	5,330.0	Bell Canyon			
5,388.4	5,332.0	Ramsey Sand			
6,455.7	6,376.0	Cherry Canyon			
7,758.1	7,650.0	Brushy Canyon			
9,103.3	8,974.0	Bone Spring Lime			
9,171.3	9,042.0	Upper Avalon			
9,462.3	9,333.0	Middle Avalon			
9,797.3	9,668.0	Lower Avalon			
10,123.3	9,994.0	1st Bone Spring Sand			
10,366.3	10,237.0	2nd Bone Spring Carb			
10,650.3	10,521.0	2nd Bone Spring Sand			
11,150.3	11,021.0	3rd Bone Spring Carb			
11,694.3	11,565.0	3rd Bone Spring Sand			
11,943.0	11,800.0	3rd BS W Sand			
12,025.3	11,868.0	Wolfcamp A X Sand			
12,147.4	11,955.0	Wolfcamp A Y Sand			
12,267.4	12,021.0	Wolfcamp A Lower			
14,960.6	12,185.0	Wolfcamp B			
16,254.9	12,238.0	Wolfcamp B1			

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
1,250.0	1,250.0	0.0	0.0	NUDGE - Build 1.50
1,916.7	1,913.3	-56.9	-11.2	HOLD - 3383.3 at 1916.7 MD
5,300.0	5,245.2	-633.5	-124.2	BLD - DLS 2.00 TFO 0.03
5,399.5	5,342.9	-652.1	-127.8	HOLD - 3130.2 at 5399.5 MD
8,529.7	8,404.8	-1,290.3	-253.0	DROP - -2.00
9,129.3	9,000.0	-1,351.6	-265.0	HOLD - 2512.5 at 9129.3 MD
11,641.8	11,512.5	-1,351.6	-265.0	KOP - Build 10.00
12,518.3	12,085.0	-804.3	-216.2	EOC/TRN - DLS 2.00 TFO -90.08
12,794.7	12,096.3	-528.5	-204.9	Start 4388.3 hold at 12794.7 MD
17,183.0	12,276.0	3,856.0	-238.0	TD at 17183.0