

Well Name: SEINFELD FEDERAL UNIT YADA	Well Location: T24S / R35E / SEC 35 / SWSW /	County or Parish/State:
Well Number: 221H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM138891	Unit or CA Name:	Unit or CA Number: NMNM141169X
US Well Number: 3002550985	Well Status: Approved Application for Permit to Drill	Operator: TAP ROCK OPERATING LLC

Notice of Intent

Sundry ID: 2725399

Type of Submission: Notice of Intent	Type of Action: APD Change
Date Sundry Submitted: 04/12/2023	Time Sundry Submitted: 01:02
Date proposed operation will begin: 04/12/2023	

Procedure Description: For the referenced well, Tap Rock requests: 1. To change the referenced well name from Yada Fed Com 221H to: Seinfeld Federal Unit Yada 221H. See attached updated C-102. 2. To change modify OH size and casing/cement design. See attached updated drilling plans. 3. To change the SHL: From: 215' FSL, 1081' FWL, Section 35, T-24S-R35E, Lea County, NM To: 215' FSL, 1033' FWL, Section 35, T-24S-R35E, Lea County, NM See attached updated drilling plans, directional plans, and C-102.

NOI Attachments

Procedure Description

- Seinfeld_Federal_Unit_Yada_221H_Plan_2_20230412130045.pdf
- LO_SEINFELD_FEDERAL_UNIT_YADA_221H_REV1_S_FINAL_20230412130038.pdf
- APD_Drilling_Plan___Yada_Fed_Com_221H_Sundry_04_12_23_20230412130019.pdf

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Conditions of Approval

Additional

Sec_33_24S_35E_NMP_Sundry_2725402_Seinfeld_Federal_Unit_Yada_221H_COAs_20230525144739.pdf

Operator

I certify that the foregoing is true and correct. 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. Electronic submission of Sundry Notices through this system satisfies regulations requiring a

Operator Electronic Signature: JEFFREY TRLICA	Signed on: APR 12, 2023 01:00 PM
Name: TAP ROCK OPERATING LLC	
Title: Regulatory Analyst	
Street Address: 523 PARK POINT DRIVE SUITE 200	
City: GOLDEN	State: CO
Phone: (720) 772-5910	
Email address: JTRLICA@TAPRK.COM	

Field

Representative Name:		
Street Address:		
City:	State:	Zip:
Phone:		
Email address:		

BLM Point of Contact

BLM POC Name: CHRISTOPHER WALLS	BLM POC Title: Petroleum Engineer
BLM POC Phone: 5752342234	BLM POC Email Address: cwalls@blm.gov
Disposition: Approved	Disposition Date: 05/26/2023
Signature: Chris Walls	

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

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

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

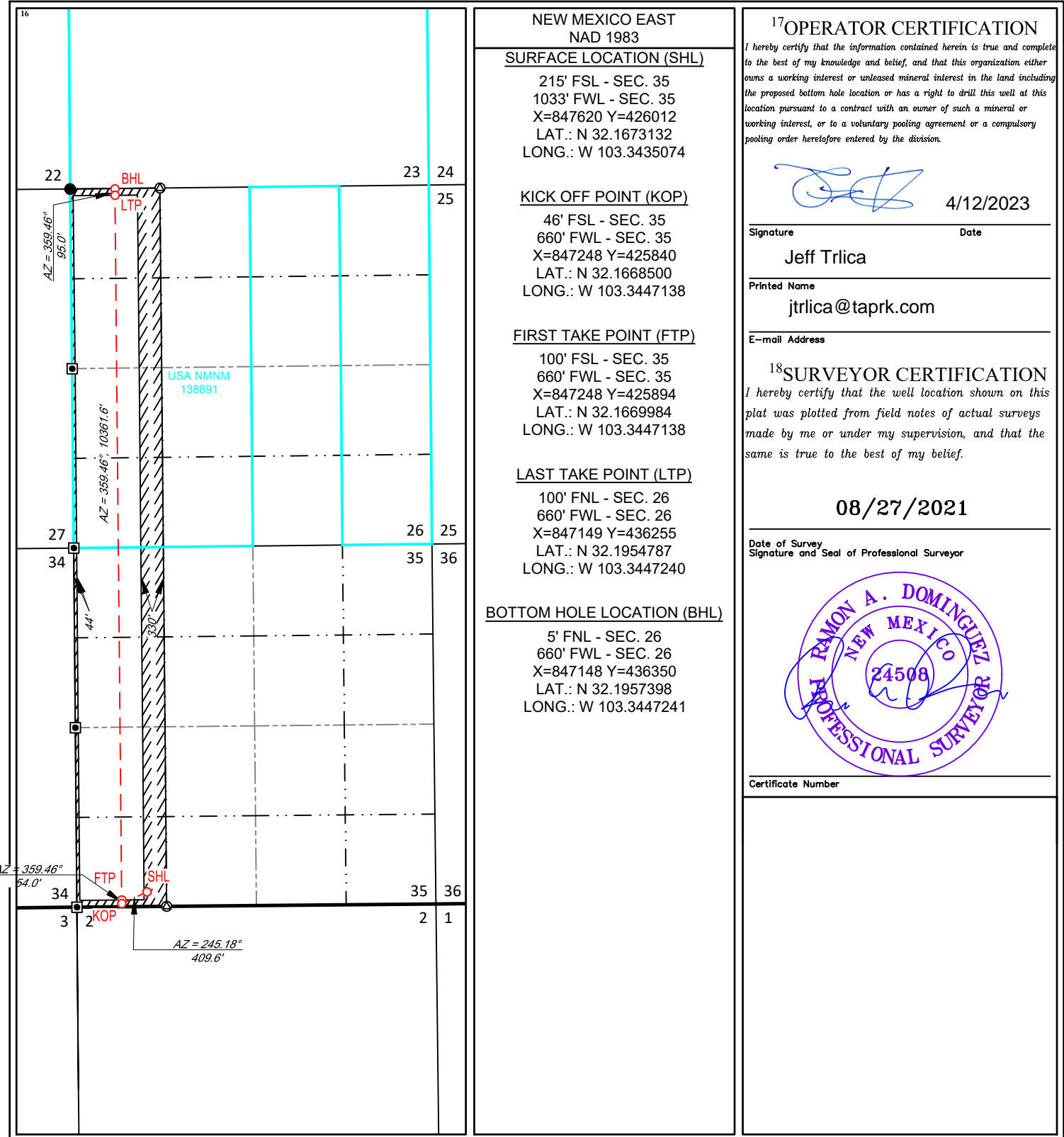
¹ API Number 30-025-50985	² Pool Code 98098	³ Pool Name WC-025 G-09 S243532M:WOLFBONE
⁴ Property Code 333091	⁵ Property Name SEINFELD FEDERAL UNIT YADA	⁶ Well Number 221H
⁷ OGRID No. 372043	⁸ Operator Name TAP ROCK OPERATING, LLC.	⁹ Elevation 3255'

¹⁰ Surface Location									
UL or lot no. M	Section 35	Township 24-S	Range 35-E	Lot Idn -	Feet from the 215'	North/South line SOUTH	Feet from the 1033'	East/West line WEST	County LEA

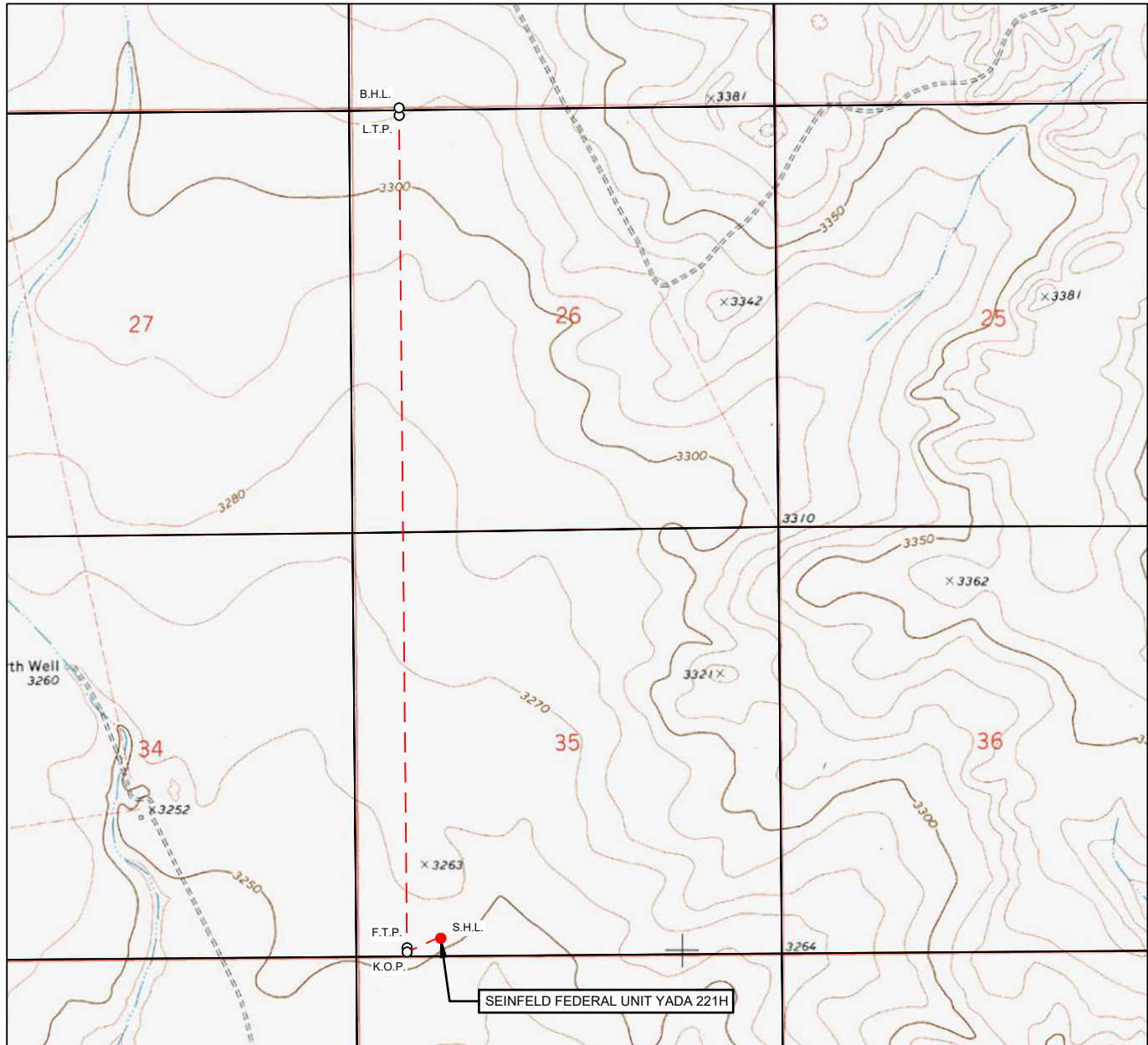
¹¹ Bottom Hole Location If Different From Surface									
UL or lot no. D	Section 26	Township 24-S	Range 35-E	Lot Idn -	Feet from the 5'	North/South line NORTH	Feet from the 660'	East/West line WEST	County LEA

¹² Dedicated Acres 320	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.



LOCATION & ELEVATION VERIFICATION MAP

LEASE NAME & WELL NO.: SEINFELD FEDERAL UNIT YADA 221H

SECTION 35 TWP 24-S RGE 35-E SURVEY N.M.P.M.
 COUNTY LEA STATE NM ELEVATION 3255'
 DESCRIPTION 215' FSL & 1033' FWL

LATITUDE N 32.1673132 LONGITUDE W 103.3435074

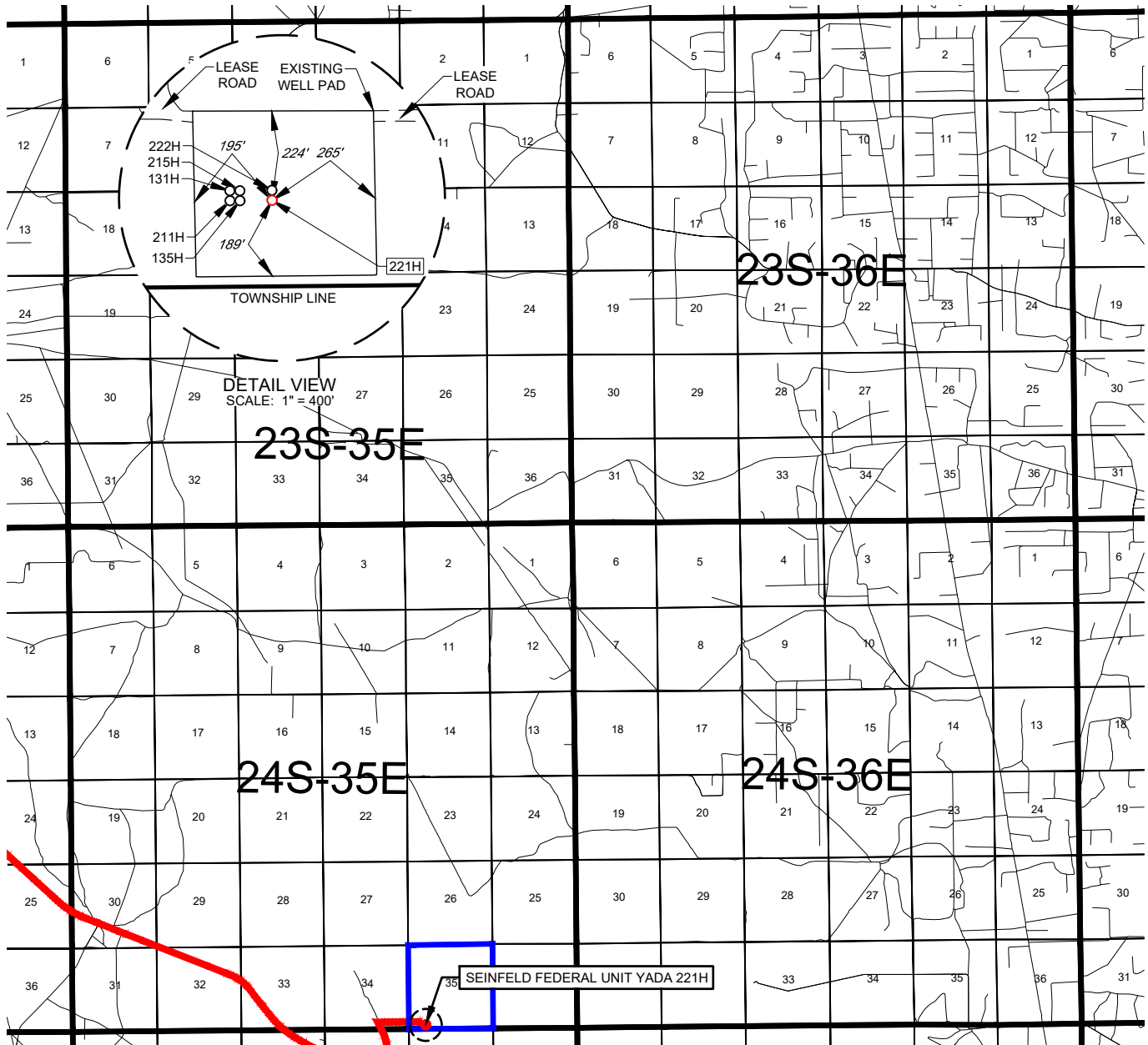
SCALE: 1" = 2000'
 0' 1000' 2000'

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.



481 WINSBROTT ROAD, Ste. 200 • BENBROOK, TEXAS 76126
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 2903 NORTH BIG SPRING • MIDLAND, TEXAS 79705
 TELEPHONE: (432) 682-1653 OR (800) 767-1653 • FAX (432) 682-1743
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EXHIBIT 2
VICINITY MAPLEASE NAME & WELL NO.: SEINFELD FEDERAL UNIT YADA 221HSECTION 35 TWP 24-S RGE 35-E SURVEY N.M.P.M.COUNTY LEA STATE NMDESCRIPTION 215' FSL & 1033' FWL

DISTANCE & DIRECTION

FROM INT. OF DELAWARE BASIN RD. & NM-128, GO EAST ON NM-128
 ±10.4 MILES, THENCE NORTH (LEFT) ON A LEASE RD. ±0.9 MILES,
 THENCE EAST (RIGHT) ON A LEASE RD. ±0.5 MILES TO A POINT ±328
 FEET NORTHWEST OF THE LOCATION.

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
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SCALE: 1" = 10000'

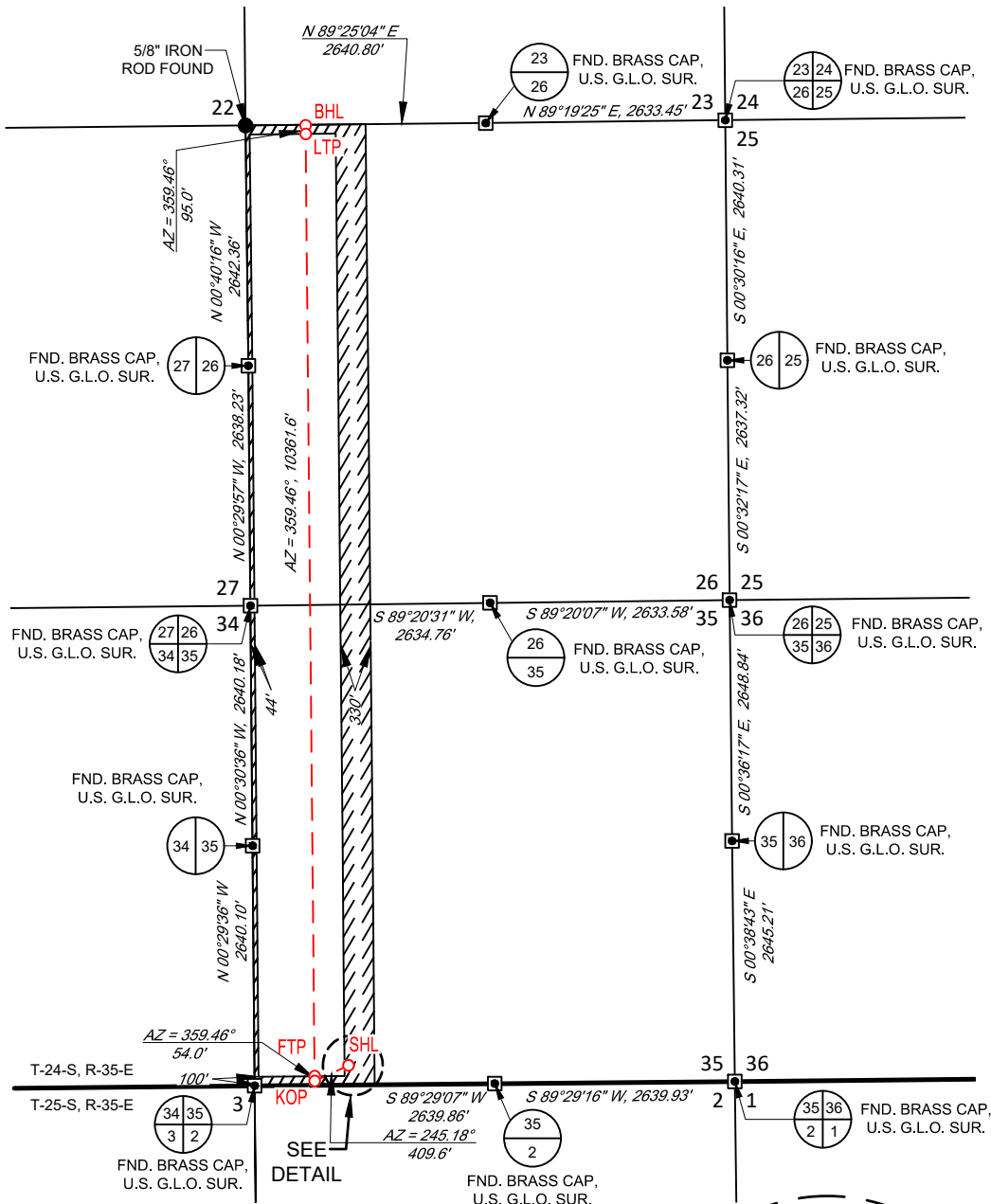
0' 5000' 10000'



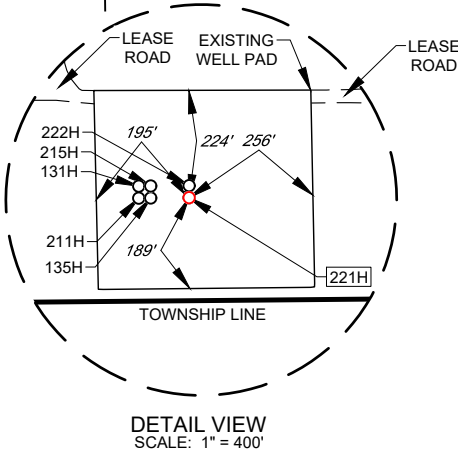
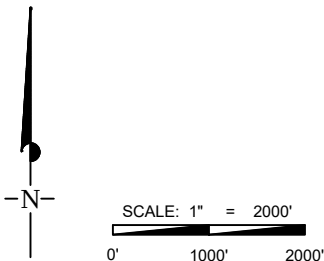
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TAP
ROCK
EXHIBIT 2A

SECTION 35, TOWNSHIP 24-S, RANGE 35-E, N.M.P.M.
LEA COUNTY, NEW MEXICO



NEW MEXICO EAST NAD 1983
<u>SURFACE LOCATION (SHL)</u>
215' FSL - SEC. 35
1033' FWL - SEC. 35
X=847620 Y=426012
LAT.: N 32.1673132
LONG.: W 103.3435074
<u>KICK OFF POINT (KOP)</u>
46' FSL - SEC. 35
660' FWL - SEC. 35
X=847248 Y=425840
LAT.: N 32.1668500
LONG.: W 103.3447138
<u>FIRST TAKE POINT (FTP)</u>
100' FSL - SEC. 35
660' FWL - SEC. 35
X=847248 Y=425894
LAT.: N 32.1669984
LONG.: W 103.3447138
<u>LAST TAKE POINT (LTP)</u>
100' FNL - SEC. 26
660' FWL - SEC. 26
X=847149 Y=436255
LAT.: N 32.1954787
LONG.: W 103.3447240
<u>BOTTOM HOLE LOCATION (BHL)</u>
5' FNL - SEC. 26
660' FWL - SEC. 26
X=847148 Y=436350
LAT.: N 32.1957398
LONG.: W 103.3447241



LEASE NAME & WELL NO.: SEINFELD FEDERAL UNIT YADA 221H

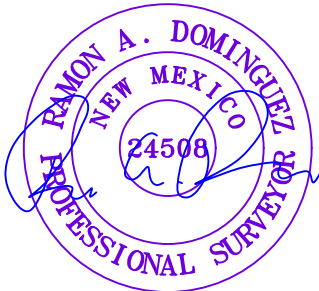
SECTION 35 TWP 24-S RGE 35-E SURVEY N.M.P.M.
COUNTY LEA STATE NM
DESCRIPTION 215' FSL & 1033' FWL

DISTANCE & DIRECTION

FROM INT. OF DELAWARE BASIN RD. & NM-128. GO EAST ON NM-128
±10.4 MILES. THENCE NORTH (LEFT) ON A LEASE RD. ±0.9 MILES.
THENCE EAST (RIGHT) ON A LEASE RD. ±0.5 MILES TO A POINT ±328
FEET NORTHWEST 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
FEET.

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
April 16, 2023

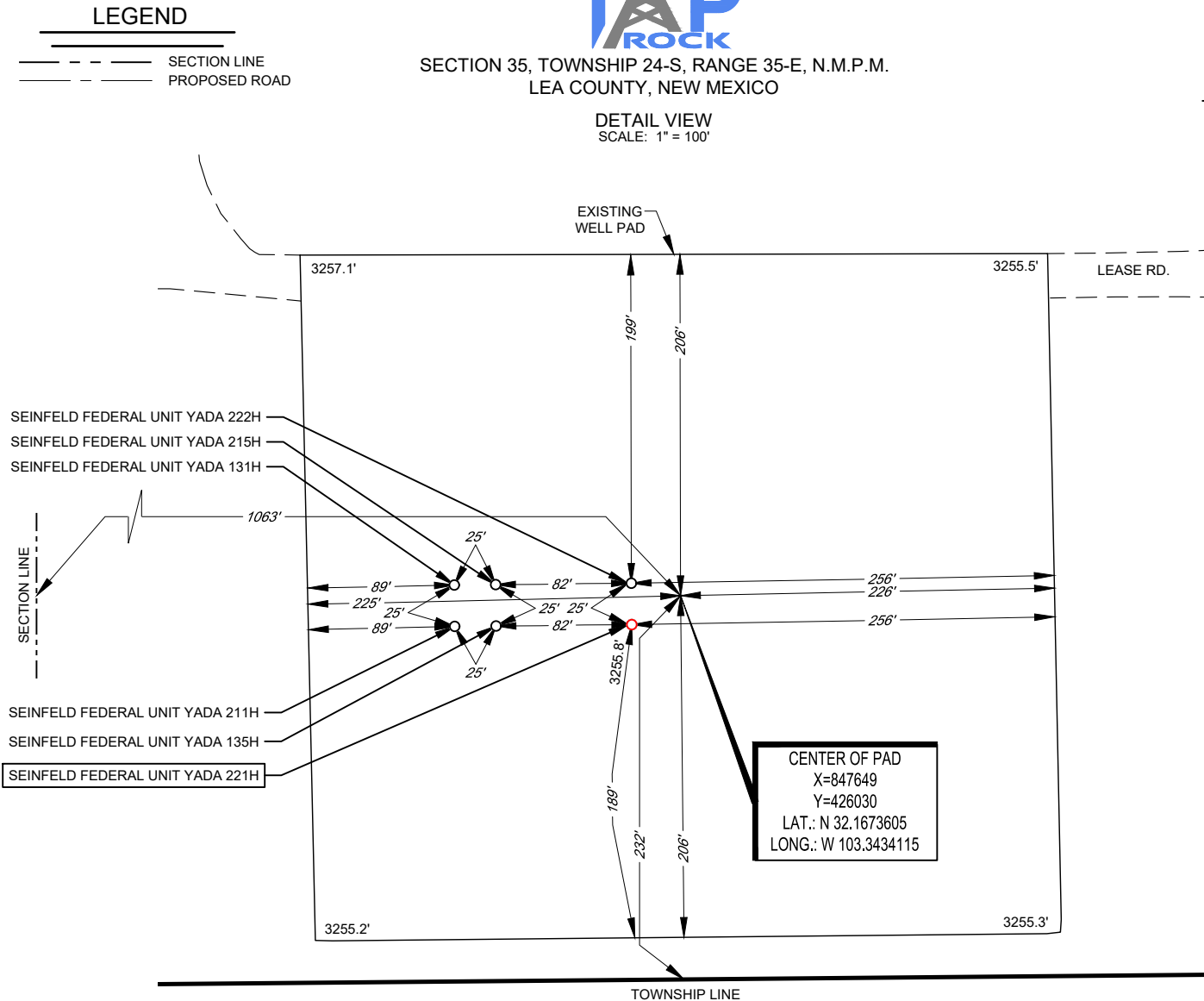


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SECTION 35, TOWNSHIP 24-S, RANGE 35-E, N.M.P.M.
LEA COUNTY, NEW MEXICO

DETAIL VIEW
SCALE: 1" = 100'



LEASE NAME & WELL NO.: SEINFELD FEDERAL UNIT YADA 221H
221H LATITUDE N 32.1673132 221H LONGITUDE W 103.3435074
CENTER OF PAD IS 232' FSL & 1063' FWL



Ramon A Dominguez, P.S. No. 24508

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 NAVD88, 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. ONLY THE DATA SHOWN ABOVE IS BEING CERTIFIED TO, ALL OTHER INFORMATION WAS INTENTIONALLY OMITTED. THIS PLAT IS ONLY INTENDED TO BE USED FOR A PERMIT AND IS NOT A BOUNDARY SURVEY. 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"



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Drilling Operations Plan
Seinfeld Federal Unit Yada #221H
Tap Rock Operating, LLC
SHL 215' FSL & 1033' FWL, Sec. 35
BHL 5' FNL & 660' FWL, Sec. 26
T. 24S., R. 35E Lea County, NM

Elevation above Sea Level: 3255'

DRILLING PROGRAM

1. Estimated Tops

Formation	TVD	MD	Lithologies	Bearing
Quaternary Deposits	0	0	Surface	None
Rustler	590	590	Salt	Salt
Top Salt	1,252	1,252	Salt	Salt
Base Salt	4,935	4,947	Salt	Salt
DMG	5,333	5,347	Sandstone	None
Lamar	5,343	5,357	Sandstone	Hydrocarbons
Bell Canyon	5,371	5,385	Sandstone	Hydrocarbons
Ramsey Sand	5,460	5,474	Sandstone	Hydrocarbons
Cherry Canyon	6,163	6,178	Limestone	Hydrocarbons
Brushy Canyon	7,579	7,593	Sandstone	Hydrocarbons
Bone Spring Lime	8,887	8,901	Carbonate	Hydrocarbons
Upper Avalon	8,959	8,973	Carbonate	Hydrocarbons
Middle Avalon	9,172	9,186	Carbonate	Hydrocarbons
Lower Avalon	9,821	9,836	Carbonate	Hydrocarbons
1st BS Sand	10,100	10,114	Sandstone	Hydrocarbons
2nd BS Carb	10,435	10,449	Carbonate	Hydrocarbons
2nd BS Sand	10,752	10,766	Sandstone	Hydrocarbons
3rd BS Carb	11,224	11,238	Carbonate	Hydrocarbons
3rd BS Sand	11,752	11,767	Sandstone	Hydrocarbons
Wolfcamp	12,052	12,066	Shale	Hydrocarbons
KOP	11976	11991	Carbonate	Hydrocarbons
TD	12398	22826	Carbonate	Hydrocarbons

2. Notable Zones

Wolfcamp B is the formation target.

3. Pressure Control

Pressure Control Equipment (See Schematics):

At 22,826', a 10M pressure control system is required. The BOP stack consisting of 3 rams with 2 pipe rams, 1 blind ram, and 1 annular preventer will be used below surface casing to TD. See attachments for BOP and choke manifold diagrams. Also present will be an accumulator that meets the requirements of Onshore Order #2 for the pressure rating of the BOP stack. A rotating head will also be installed as needed. BOP will be inspected and operated as recommended in Onshore Order #2. A top drive check valve and sub equipped with a full opening valve sized to fit the drill pipe and collars will be available on the rig floor in the open position. The wellhead will be a multi-bowl speed head.



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Tap Rock Operating, LLC
SHL 215' FSL & 1033' FWL, Sec. 35
BHL 5' FNL & 660' FWL, Sec. 26
T. 24S., R. 35E Lea County, NM

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, 10000 psi high, and the annular preventer will be tested to 250 psi low, 5000 psi high. The BOP will be tested in this manner after nipple-up if any break of the stack occurs.

Variance Requests:

Tap Rock requests a variance to run a multi-bowl speed head for setting the Intermediate and Production Strings. Tap Rock requests a variance to drill this well using a co-flex line between the BOP and choke manifold. Certification for proposed co-flex hose is attached. The hose is not required by the manufacturer to be anchored. In the event the specific hose is not available, one of equal or higher rating will be used. Tap Rock requests a variance to have the option of batch drilling this well with other wells on the same pad. In the event that this well is batch drilled, after cementing a casing string, a 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 use a 5000 psi annular BOP on a 10M BOP stack. The annular will be tested to 250 psi low and 5,000 psi high.

4. Casing & Cement

All Casing will be new.

Casing Design:

Section	Drilled Interval			Casing Size	Standard	Tapered	Casing Set Depths				Casing Details					
	Hole Size	Top	Btm				Top MD	Bottom MD	Top TVD	BTM TVD	Grade	Weight	Thread	Collapse	Burst	Tension
Surface	14 3/4	0	950	10 3/4	API	No	0	950	0	950	J-55	45.5	BUTT	1.13	1.15	1.6
Intermediate	9 7/8	950	11891	7 5/8	API	No	0	11891	0	11876	L-80IC	29.7	BUTT	1.13	1.15	1.6
Production	6 3/4	11891	22826	5 1/2	NON API	No	0	11691	0	11676	P-110	20	TXP	1.13	1.15	1.6
				5 1/2	NON API	No	11691	22826	11676	12398	P-110	20	W441	1.13	1.15	1.6

Cement Volumes:

Name	Type	Top MD	Sacks	Yield	Cu. Ft	Weight	Excess	Cement	Additives
Surface	Lead	0	397	1.82	723	13.5	100%	C	5% NCI + LCM
	Tail	650	249	1.34	334	14.8	100%	C	5% NCI + LCM
Intermediate	Lead	0	869	4.29	3730	10.5	65%	C	Bentonite + 1% CaCL2 + 8% NaCl + LCM
	Tail	10891	212	1.67	354	13.2	65%	C	5% NaCl
Production	Tail	11591	853	1.32	1126	14.0	20%	H	Fluid Loss + Dispersant + Retarder

5. Mud Program

Mud Design:

Name	Top	Bottom	Type	Mud Weight	Visc	Fluid Loss
Surface	0	950	FW Spud Mud	8.40	28	NC
Intermediate	950	11891	DBE	9.00	30 - 32	NC
Production	11891	22826	OBM	11.50	50 - 70	< 16



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

6. Cores, Tests, & Logs

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

7. Down Hole Conditions

No abnormal pressure or temperature is expected. Maximum expected bottom hole pressure is $\approx 7,414$ psi. Expected bottom hole temperature is $\approx 195^{\circ}$ F.

Tap Rock does not anticipate that there will be enough H₂S from the surface to the Wolfcamp B 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.

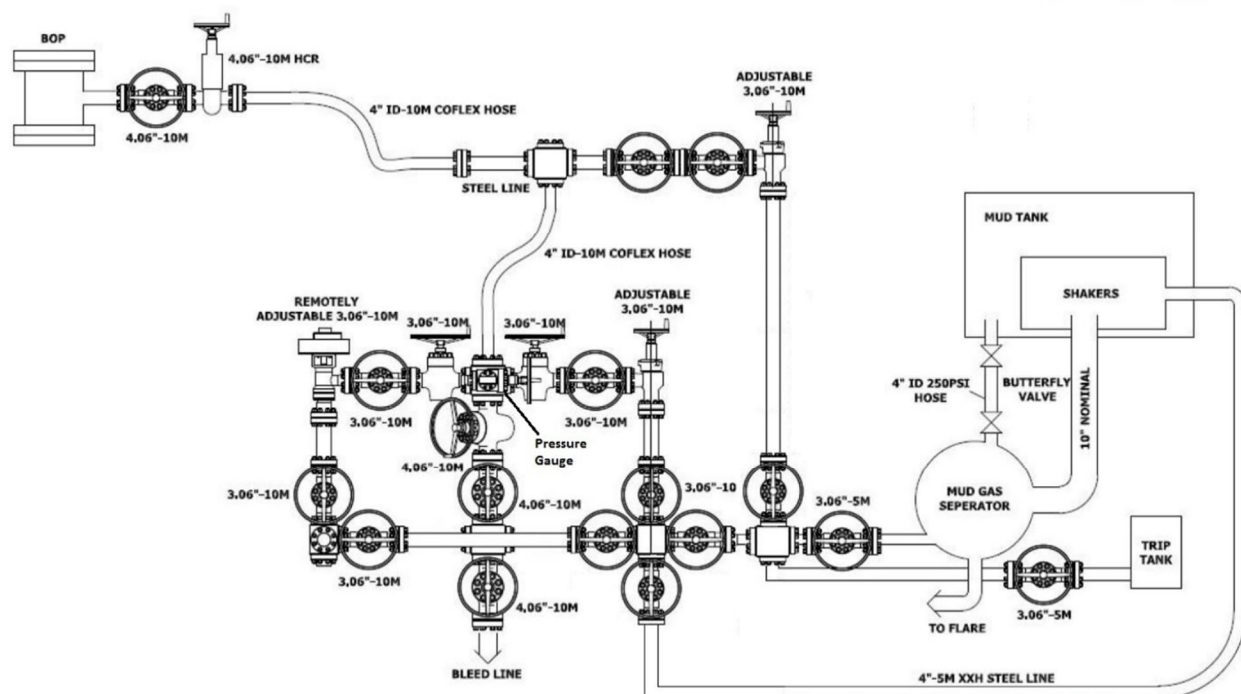
8. Other Information

Road and location have already been constructed. 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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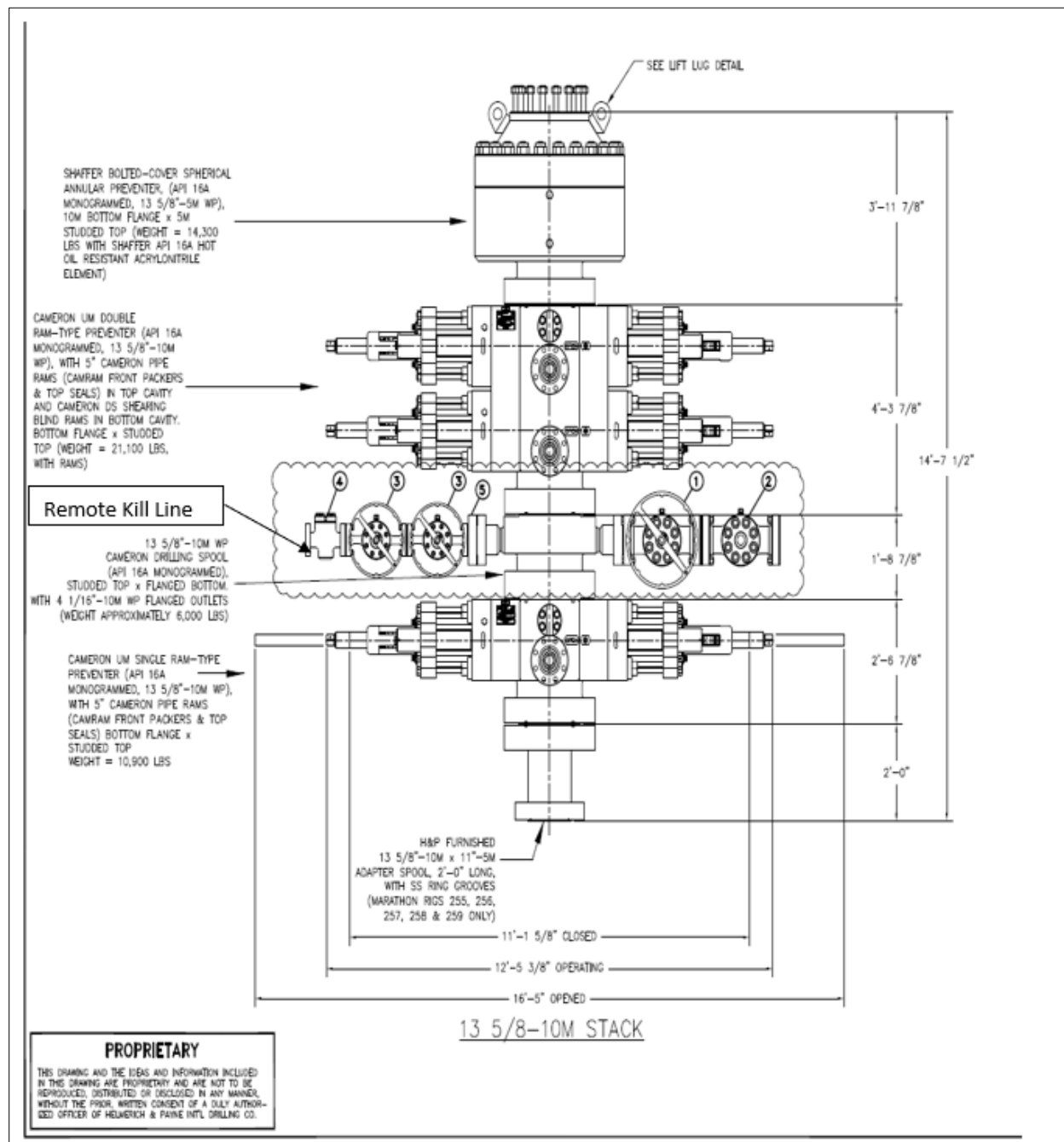
10M Choke Layout

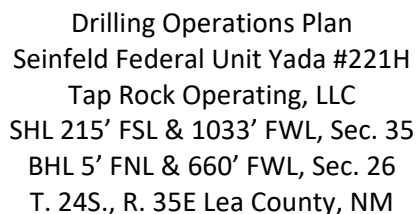




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10M BOP Stack with 5M Annular

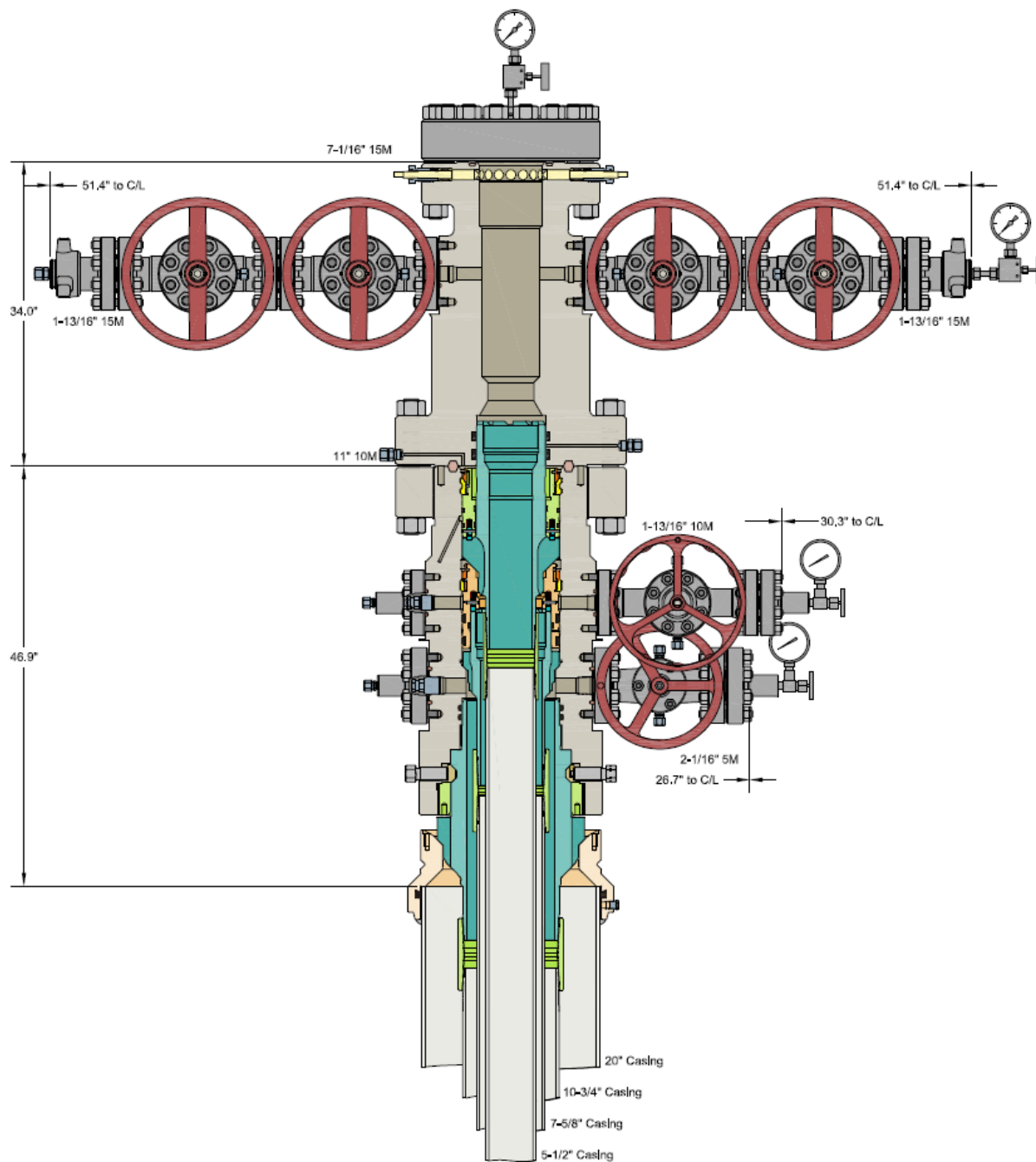






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Multi-bowl Wellhead Design





Tap Rock Resources, LLC

**Lea County, NM (NAD 83 NME)
(Yada Fed Com) Sec-35_T-24-S_R-35-E
Seinfeld Federal Unit Yada #221H**

OWB

Plan: Plan #2

Standard Planning Report

06 April, 2023





Intrepid Planning Report



Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well Seinfeld Federal Unit Yada #221H
Company:	Tap Rock Resources, LLC	TVD Reference:	KB @ 3281.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB @ 3281.0usft
Site:	(Yada Fed Com) Sec-35_T-24-S_R-35-E	North Reference:	Grid
Well:	Seinfeld Federal Unit Yada #221H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	Plan #2		

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	(Yada Fed Com) Sec-35_T-24-S_R-35-E		
Site Position:	Northing:	426,095.00 usft	Latitude: 32° 10' 2.829 N
From: Map	Easting:	851,098.00 usft	Longitude: 103° 19' 56.158 W
Position Uncertainty: 0.0 usft	Slot Radius: 13-3/16 "		Grid Convergence: 0.53 °

Well	Seinfeld Federal Unit Yada #221H		
Well Position	+N/-S	-83.0 usft	Northing: 426,012.00 usft
	+E/-W	-3,478.0 usft	Easting: 847,620.00 usft
Position Uncertainty 0.0 usft			Latitude: 32° 10' 2.326 N
			Longitude: 103° 20' 36.625 W
		Wellhead Elevation:	Ground Level: 3,255.0 usft

Wellbore	OWB				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	10/13/21	6.37	59.99	47,484.62068579

Design	Plan #2			
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	359.45

Plan Survey Tool Program	Date	04/06/23		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	22,826.1	Plan #2 (OWB)	MWD
			OWSG MWD - Standard	



Intrepid Planning Report



Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well Seinfeld Federal Unit Yada #221H
Company:	Tap Rock Resources, LLC	TVD Reference:	KB @ 3281.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB @ 3281.0usft
Site:	(Yada Fed Com) Sec-35_T-24-S_R-35-E	North Reference:	Grid
Well:	Seinfeld Federal Unit Yada #221H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	Plan #2		

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	
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,013.1	5.13	241.93	2,012.4	-10.8	-20.3	1.00	1.00	0.00	241.93	
5,301.5	5.13	241.93	5,287.6	-149.2	-279.7	0.00	0.00	0.00	0.00	
5,814.5	0.00	0.00	5,800.0	-160.0	-300.0	1.00	-1.00	0.00	180.00	
11,991.0	0.00	0.00	11,976.5	-160.0	-300.0	0.00	0.00	0.00	0.00	
12,441.0	45.00	347.45	12,381.6	3.8	-336.5	10.00	10.00	0.00	347.45	
12,908.3	90.50	359.45	12,554.5	422.1	-376.9	10.00	9.74	2.57	16.59	
14,482.7	90.50	359.45	12,540.8	1,996.3	-391.9	0.00	0.00	0.00	0.00	2000'VS (Yada Fed
14,507.8	91.00	359.45	12,540.5	2,021.5	-392.2	2.00	2.00	-0.01	-0.23	
17,483.1	91.00	359.45	12,488.4	4,996.2	-420.7	0.00	0.00	0.00	0.00	5000'VS (Yada Fed
17,508.0	91.50	359.45	12,487.9	5,021.1	-421.0	2.00	2.00	0.00	0.00	
19,483.8	91.50	359.45	12,436.2	6,996.1	-439.9	0.00	0.00	0.00	0.00	
19,508.8	91.00	359.45	12,435.6	7,021.1	-440.2	2.00	-2.00	0.00	-179.99	
20,483.9	91.00	359.45	12,418.6	7,996.0	-449.5	0.00	0.00	0.00	0.00	8000'VS (Yada Fed
20,508.9	90.50	359.45	12,418.3	8,021.0	-449.8	2.00	-2.00	0.00	179.99	
22,826.1	90.50	359.45	12,398.0	10,338.0	-472.0	0.00	0.00	0.00	0.00	PBHL (Yada Fed Cc



Intrepid Planning Report



Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well Seinfeld Federal Unit Yada #221H
Company:	Tap Rock Resources, LLC	TVD Reference:	KB @ 3281.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB @ 3281.0usft
Site:	(Yada Fed Com) Sec-35_T-24-S_R-35-E	North Reference:	Grid
Well:	Seinfeld Federal Unit Yada #221H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	Plan #2		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
NUDGE - Build 1.00									
1,600.0	1.00	241.93	1,600.0	-0.4	-0.8	-0.4	1.00	1.00	0.00
1,700.0	2.00	241.93	1,700.0	-1.6	-3.1	-1.6	1.00	1.00	0.00
1,800.0	3.00	241.93	1,799.9	-3.7	-6.9	-3.6	1.00	1.00	0.00
1,900.0	4.00	241.93	1,899.7	-6.6	-12.3	-6.4	1.00	1.00	0.00
2,000.0	5.00	241.93	1,999.4	-10.3	-19.2	-10.1	1.00	1.00	0.00
2,013.1	5.13	241.93	2,012.4	-10.8	-20.3	-10.6	1.00	1.00	0.00
HOLD - 3288.4 at 2013.1 MD									
2,100.0	5.13	241.93	2,099.0	-14.5	-27.1	-14.2	0.00	0.00	0.00
2,200.0	5.13	241.93	2,198.6	-18.7	-35.0	-18.3	0.00	0.00	0.00
2,300.0	5.13	241.93	2,298.2	-22.9	-42.9	-22.5	0.00	0.00	0.00
2,400.0	5.13	241.93	2,397.8	-27.1	-50.8	-26.6	0.00	0.00	0.00
2,500.0	5.13	241.93	2,497.4	-31.3	-58.7	-30.7	0.00	0.00	0.00
2,600.0	5.13	241.93	2,597.0	-35.5	-66.6	-34.9	0.00	0.00	0.00
2,700.0	5.13	241.93	2,696.6	-39.7	-74.5	-39.0	0.00	0.00	0.00
2,800.0	5.13	241.93	2,796.2	-43.9	-82.4	-43.1	0.00	0.00	0.00
2,900.0	5.13	241.93	2,895.8	-48.1	-90.2	-47.3	0.00	0.00	0.00
3,000.0	5.13	241.93	2,995.4	-52.3	-98.1	-51.4	0.00	0.00	0.00
3,100.0	5.13	241.93	3,095.0	-56.5	-106.0	-55.5	0.00	0.00	0.00
3,200.0	5.13	241.93	3,194.6	-60.8	-113.9	-59.7	0.00	0.00	0.00
3,300.0	5.13	241.93	3,294.2	-65.0	-121.8	-63.8	0.00	0.00	0.00
3,400.0	5.13	241.93	3,393.8	-69.2	-129.7	-67.9	0.00	0.00	0.00
3,500.0	5.13	241.93	3,493.4	-73.4	-137.6	-72.1	0.00	0.00	0.00
3,600.0	5.13	241.93	3,593.0	-77.6	-145.5	-76.2	0.00	0.00	0.00
3,700.0	5.13	241.93	3,692.6	-81.8	-153.4	-80.3	0.00	0.00	0.00
3,800.0	5.13	241.93	3,792.2	-86.0	-161.3	-84.5	0.00	0.00	0.00
3,900.0	5.13	241.93	3,891.8	-90.2	-169.2	-88.6	0.00	0.00	0.00
4,000.0	5.13	241.93	3,991.4	-94.4	-177.0	-92.7	0.00	0.00	0.00
4,100.0	5.13	241.93	4,091.0	-98.6	-184.9	-96.9	0.00	0.00	0.00
4,200.0	5.13	241.93	4,190.6	-102.8	-192.8	-101.0	0.00	0.00	0.00
4,300.0	5.13	241.93	4,290.2	-107.0	-200.7	-105.1	0.00	0.00	0.00
4,400.0	5.13	241.93	4,389.8	-111.3	-208.6	-109.3	0.00	0.00	0.00
4,500.0	5.13	241.93	4,489.3	-115.5	-216.5	-113.4	0.00	0.00	0.00
4,600.0	5.13	241.93	4,588.9	-119.7	-224.4	-117.5	0.00	0.00	0.00
4,700.0	5.13	241.93	4,688.5	-123.9	-232.3	-121.6	0.00	0.00	0.00
4,800.0	5.13	241.93	4,788.1	-128.1	-240.2	-125.8	0.00	0.00	0.00
4,900.0	5.13	241.93	4,887.7	-132.3	-248.1	-129.9	0.00	0.00	0.00
5,000.0	5.13	241.93	4,987.3	-136.5	-256.0	-134.0	0.00	0.00	0.00



Intrepid Planning Report



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Company:	Tap Rock Resources, LLC	TVD Reference:	KB @ 3281.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB @ 3281.0usft
Site:	(Yada Fed Com) Sec-35_T-24-S_R-35-E	North Reference:	Grid
Well:	Seinfeld Federal Unit Yada #221H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	Plan #2		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,100.0	5.13	241.93	5,086.9	-140.7	-263.8	-138.2	0.00	0.00	0.00
5,200.0	5.13	241.93	5,186.5	-144.9	-271.7	-142.3	0.00	0.00	0.00
5,301.5	5.13	241.93	5,287.6	-149.2	-279.7	-146.5	0.00	0.00	0.00
DROP - -1.00									
5,400.0	4.15	241.93	5,385.8	-152.9	-286.8	-150.2	1.00	-1.00	0.00
5,500.0	3.15	241.93	5,485.6	-155.9	-292.4	-153.1	1.00	-1.00	0.00
5,600.0	2.15	241.93	5,585.5	-158.1	-296.5	-155.3	1.00	-1.00	0.00
5,700.0	1.15	241.93	5,685.5	-159.5	-299.0	-156.6	1.00	-1.00	0.00
5,800.0	0.15	241.93	5,785.5	-160.0	-300.0	-157.1	1.00	-1.00	0.00
5,814.5	0.00	0.00	5,800.0	-160.0	-300.0	-157.1	1.00	-1.00	0.00
HOLD - 6176.5 at 5814.5 MD									
5,900.0	0.00	0.00	5,885.5	-160.0	-300.0	-157.1	0.00	0.00	0.00
6,000.0	0.00	0.00	5,985.5	-160.0	-300.0	-157.1	0.00	0.00	0.00
6,100.0	0.00	0.00	6,085.5	-160.0	-300.0	-157.1	0.00	0.00	0.00
6,200.0	0.00	0.00	6,185.5	-160.0	-300.0	-157.1	0.00	0.00	0.00
6,300.0	0.00	0.00	6,285.5	-160.0	-300.0	-157.1	0.00	0.00	0.00
6,400.0	0.00	0.00	6,385.5	-160.0	-300.0	-157.1	0.00	0.00	0.00
6,500.0	0.00	0.00	6,485.5	-160.0	-300.0	-157.1	0.00	0.00	0.00
6,600.0	0.00	0.00	6,585.5	-160.0	-300.0	-157.1	0.00	0.00	0.00
6,700.0	0.00	0.00	6,685.5	-160.0	-300.0	-157.1	0.00	0.00	0.00
6,800.0	0.00	0.00	6,785.5	-160.0	-300.0	-157.1	0.00	0.00	0.00
6,900.0	0.00	0.00	6,885.5	-160.0	-300.0	-157.1	0.00	0.00	0.00
7,000.0	0.00	0.00	6,985.5	-160.0	-300.0	-157.1	0.00	0.00	0.00
7,100.0	0.00	0.00	7,085.5	-160.0	-300.0	-157.1	0.00	0.00	0.00
7,200.0	0.00	0.00	7,185.5	-160.0	-300.0	-157.1	0.00	0.00	0.00
7,300.0	0.00	0.00	7,285.5	-160.0	-300.0	-157.1	0.00	0.00	0.00
7,400.0	0.00	0.00	7,385.5	-160.0	-300.0	-157.1	0.00	0.00	0.00
7,500.0	0.00	0.00	7,485.5	-160.0	-300.0	-157.1	0.00	0.00	0.00
7,600.0	0.00	0.00	7,585.5	-160.0	-300.0	-157.1	0.00	0.00	0.00
7,700.0	0.00	0.00	7,685.5	-160.0	-300.0	-157.1	0.00	0.00	0.00
7,800.0	0.00	0.00	7,785.5	-160.0	-300.0	-157.1	0.00	0.00	0.00
7,900.0	0.00	0.00	7,885.5	-160.0	-300.0	-157.1	0.00	0.00	0.00
8,000.0	0.00	0.00	7,985.5	-160.0	-300.0	-157.1	0.00	0.00	0.00
8,100.0	0.00	0.00	8,085.5	-160.0	-300.0	-157.1	0.00	0.00	0.00
8,200.0	0.00	0.00	8,185.5	-160.0	-300.0	-157.1	0.00	0.00	0.00
8,300.0	0.00	0.00	8,285.5	-160.0	-300.0	-157.1	0.00	0.00	0.00
8,400.0	0.00	0.00	8,385.5	-160.0	-300.0	-157.1	0.00	0.00	0.00
8,500.0	0.00	0.00	8,485.5	-160.0	-300.0	-157.1	0.00	0.00	0.00
8,600.0	0.00	0.00	8,585.5	-160.0	-300.0	-157.1	0.00	0.00	0.00
8,700.0	0.00	0.00	8,685.5	-160.0	-300.0	-157.1	0.00	0.00	0.00
8,800.0	0.00	0.00	8,785.5	-160.0	-300.0	-157.1	0.00	0.00	0.00
8,900.0	0.00	0.00	8,885.5	-160.0	-300.0	-157.1	0.00	0.00	0.00
9,000.0	0.00	0.00	8,985.5	-160.0	-300.0	-157.1	0.00	0.00	0.00
9,100.0	0.00	0.00	9,085.5	-160.0	-300.0	-157.1	0.00	0.00	0.00
9,200.0	0.00	0.00	9,185.5	-160.0	-300.0	-157.1	0.00	0.00	0.00
9,300.0	0.00	0.00	9,285.5	-160.0	-300.0	-157.1	0.00	0.00	0.00
9,400.0	0.00	0.00	9,385.5	-160.0	-300.0	-157.1	0.00	0.00	0.00
9,500.0	0.00	0.00	9,485.5	-160.0	-300.0	-157.1	0.00	0.00	0.00
9,600.0	0.00	0.00	9,585.5	-160.0	-300.0	-157.1	0.00	0.00	0.00
9,700.0	0.00	0.00	9,685.5	-160.0	-300.0	-157.1	0.00	0.00	0.00
9,800.0	0.00	0.00	9,785.5	-160.0	-300.0	-157.1	0.00	0.00	0.00
9,900.0	0.00	0.00	9,885.5	-160.0	-300.0	-157.1	0.00	0.00	0.00
10,000.0	0.00	0.00	9,985.5	-160.0	-300.0	-157.1	0.00	0.00	0.00
10,100.0	0.00	0.00	10,085.5	-160.0	-300.0	-157.1	0.00	0.00	0.00



Intrepid Planning Report



Database: EDM 5000.15 Single User Db
Company: Tap Rock Resources, LLC
Project: Lea County, NM (NAD 83 NME)
Site: (Yada Fed Com) Sec-35_T-24-S_R-35-E
Well: Seinfeld Federal Unit Yada #221H
Wellbore: OWB
Design: Plan #2

Local Co-ordinate Reference: Well Seinfeld Federal Unit Yada #221H
TVD Reference: KB @ 3281.0usft
MD Reference: KB @ 3281.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
10,200.0	0.00	0.00	10,185.5	-160.0	-300.0	-157.1	0.00	0.00	0.00
10,300.0	0.00	0.00	10,285.5	-160.0	-300.0	-157.1	0.00	0.00	0.00
10,400.0	0.00	0.00	10,385.5	-160.0	-300.0	-157.1	0.00	0.00	0.00
10,500.0	0.00	0.00	10,485.5	-160.0	-300.0	-157.1	0.00	0.00	0.00
10,600.0	0.00	0.00	10,585.5	-160.0	-300.0	-157.1	0.00	0.00	0.00
10,700.0	0.00	0.00	10,685.5	-160.0	-300.0	-157.1	0.00	0.00	0.00
10,800.0	0.00	0.00	10,785.5	-160.0	-300.0	-157.1	0.00	0.00	0.00
10,900.0	0.00	0.00	10,885.5	-160.0	-300.0	-157.1	0.00	0.00	0.00
11,000.0	0.00	0.00	10,985.5	-160.0	-300.0	-157.1	0.00	0.00	0.00
11,100.0	0.00	0.00	11,085.5	-160.0	-300.0	-157.1	0.00	0.00	0.00
11,200.0	0.00	0.00	11,185.5	-160.0	-300.0	-157.1	0.00	0.00	0.00
11,300.0	0.00	0.00	11,285.5	-160.0	-300.0	-157.1	0.00	0.00	0.00
11,400.0	0.00	0.00	11,385.5	-160.0	-300.0	-157.1	0.00	0.00	0.00
11,500.0	0.00	0.00	11,485.5	-160.0	-300.0	-157.1	0.00	0.00	0.00
11,600.0	0.00	0.00	11,585.5	-160.0	-300.0	-157.1	0.00	0.00	0.00
11,700.0	0.00	0.00	11,685.5	-160.0	-300.0	-157.1	0.00	0.00	0.00
11,800.0	0.00	0.00	11,785.5	-160.0	-300.0	-157.1	0.00	0.00	0.00
11,900.0	0.00	0.00	11,885.5	-160.0	-300.0	-157.1	0.00	0.00	0.00
11,991.0	0.00	0.00	11,976.5	-160.0	-300.0	-157.1	0.00	0.00	0.00
KOP - Build 10.00									
12,000.0	0.90	347.45	11,985.5	-159.9	-300.0	-157.0	10.00	10.00	0.00
12,050.0	5.90	347.45	12,035.3	-157.0	-300.7	-154.1	10.00	10.00	0.00
12,100.0	10.90	347.45	12,084.8	-149.9	-302.2	-147.0	10.00	10.00	0.00
12,150.0	15.90	347.45	12,133.4	-138.6	-304.8	-135.7	10.00	10.00	0.00
12,200.0	20.90	347.45	12,180.9	-123.2	-308.2	-120.3	10.00	10.00	0.00
12,250.0	25.90	347.45	12,226.7	-103.8	-312.5	-100.8	10.00	10.00	0.00
12,300.0	30.90	347.45	12,270.7	-80.6	-317.7	-77.6	10.00	10.00	0.00
12,350.0	35.90	347.45	12,312.4	-53.8	-323.6	-50.7	10.00	10.00	0.00
12,400.0	40.90	347.45	12,351.6	-23.5	-330.4	-20.3	10.00	10.00	0.00
12,441.0	45.00	347.45	12,381.6	3.8	-336.5	7.0	10.00	10.00	0.00
BLD/TRN - DLS 10.00 TFO 16.59									
12,450.0	45.86	347.81	12,387.9	10.0	-337.8	13.3	10.00	9.59	3.98
12,500.0	50.67	349.62	12,421.2	46.6	-345.1	49.9	10.00	9.63	3.63
12,550.0	55.51	351.21	12,451.2	86.0	-351.7	89.4	10.00	9.68	3.16
12,600.0	60.36	352.61	12,477.8	128.0	-357.7	131.4	10.00	9.71	2.82
12,650.0	65.23	353.89	12,500.6	172.1	-362.9	175.6	10.00	9.74	2.56
12,700.0	70.11	355.07	12,519.6	218.1	-367.3	221.7	10.00	9.76	2.36
12,750.0	75.00	356.18	12,534.6	265.7	-371.0	269.2	10.00	9.77	2.22
12,800.0	79.89	357.24	12,545.4	314.4	-373.8	318.0	10.00	9.78	2.12
12,850.0	84.79	358.27	12,552.1	363.9	-375.7	367.5	10.00	9.79	2.06
12,900.0	89.68	359.28	12,554.5	413.8	-376.8	417.4	10.00	9.79	2.03
12,908.3	90.50	359.45	12,554.5	422.1	-376.9	425.7	10.00	9.79	2.02
EOC - 1574.3 hold at 12908.3 MD									
13,000.0	90.50	359.45	12,553.7	513.8	-377.7	517.4	0.00	0.00	0.00
13,100.0	90.50	359.45	12,552.8	613.8	-378.7	617.4	0.00	0.00	0.00
13,200.0	90.50	359.45	12,552.0	713.8	-379.7	717.4	0.00	0.00	0.00
13,300.0	90.50	359.45	12,551.1	813.8	-380.6	817.4	0.00	0.00	0.00
13,400.0	90.50	359.45	12,550.2	913.8	-381.6	917.4	0.00	0.00	0.00
13,500.0	90.50	359.45	12,549.4	1,013.8	-382.5	1,017.4	0.00	0.00	0.00
13,600.0	90.50	359.45	12,548.5	1,113.8	-383.5	1,117.4	0.00	0.00	0.00
13,700.0	90.50	359.45	12,547.6	1,213.7	-384.4	1,217.4	0.00	0.00	0.00
13,800.0	90.50	359.45	12,546.7	1,313.7	-385.4	1,317.4	0.00	0.00	0.00
13,900.0	90.50	359.45	12,545.9	1,413.7	-386.3	1,417.4	0.00	0.00	0.00



Intrepid Planning Report



Database: EDM 5000.15 Single User Db
Company: Tap Rock Resources, LLC
Project: Lea County, NM (NAD 83 NME)
Site: (Yada Fed Com) Sec-35_T-24-S_R-35-E
Well: Seinfeld Federal Unit Yada #221H
Wellbore: OWB
Design: Plan #2

Local Co-ordinate Reference: Well Seinfeld Federal Unit Yada #221H
TVD Reference: KB @ 3281.0usft
MD Reference: KB @ 3281.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature

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)
14,000.0	90.50	359.45	12,545.0	1,513.7	-387.3	1,517.4	0.00	0.00	0.00
14,100.0	90.50	359.45	12,544.1	1,613.7	-388.3	1,617.4	0.00	0.00	0.00
14,200.0	90.50	359.45	12,543.3	1,713.7	-389.2	1,717.4	0.00	0.00	0.00
14,300.0	90.50	359.45	12,542.4	1,813.7	-390.2	1,817.4	0.00	0.00	0.00
14,400.0	90.50	359.45	12,541.5	1,913.7	-391.1	1,917.3	0.00	0.00	0.00
14,482.7	90.50	359.45	12,540.8	1,996.3	-391.9	2,000.0	0.00	0.00	0.00
Start DLS 2.00 TFO -0.23									
14,507.8	91.00	359.45	12,540.5	2,021.5	-392.2	2,025.2	2.00	2.00	-0.01
Start 2975.3 hold at 14507.8 MD									
14,600.0	91.00	359.45	12,538.9	2,113.7	-393.0	2,117.3	0.00	0.00	0.00
14,700.0	91.00	359.45	12,537.1	2,213.6	-394.0	2,217.3	0.00	0.00	0.00
14,800.0	91.00	359.45	12,535.4	2,313.6	-395.0	2,317.3	0.00	0.00	0.00
14,900.0	91.00	359.45	12,533.6	2,413.6	-395.9	2,417.3	0.00	0.00	0.00
15,000.0	91.00	359.45	12,531.9	2,513.6	-396.9	2,517.3	0.00	0.00	0.00
15,100.0	91.00	359.45	12,530.1	2,613.6	-397.8	2,617.3	0.00	0.00	0.00
15,200.0	91.00	359.45	12,528.4	2,713.5	-398.8	2,717.2	0.00	0.00	0.00
15,300.0	91.00	359.45	12,526.6	2,813.5	-399.8	2,817.2	0.00	0.00	0.00
15,400.0	91.00	359.45	12,524.9	2,913.5	-400.7	2,917.2	0.00	0.00	0.00
15,500.0	91.00	359.45	12,523.1	3,013.5	-401.7	3,017.2	0.00	0.00	0.00
15,600.0	91.00	359.45	12,521.4	3,113.5	-402.6	3,117.2	0.00	0.00	0.00
15,700.0	91.00	359.45	12,519.6	3,213.4	-403.6	3,217.2	0.00	0.00	0.00
15,800.0	91.00	359.45	12,517.9	3,313.4	-404.6	3,317.1	0.00	0.00	0.00
15,900.0	91.00	359.45	12,516.1	3,413.4	-405.5	3,417.1	0.00	0.00	0.00
16,000.0	91.00	359.45	12,514.4	3,513.4	-406.5	3,517.1	0.00	0.00	0.00
16,100.0	91.00	359.45	12,512.6	3,613.4	-407.4	3,617.1	0.00	0.00	0.00
16,200.0	91.00	359.45	12,510.9	3,713.3	-408.4	3,717.1	0.00	0.00	0.00
16,300.0	91.00	359.45	12,509.1	3,813.3	-409.4	3,817.1	0.00	0.00	0.00
16,400.0	91.00	359.45	12,507.4	3,913.3	-410.3	3,917.1	0.00	0.00	0.00
16,500.0	91.00	359.45	12,505.6	4,013.3	-411.3	4,017.0	0.00	0.00	0.00
16,600.0	91.00	359.45	12,503.9	4,113.3	-412.2	4,117.0	0.00	0.00	0.00
16,700.0	91.00	359.45	12,502.1	4,213.2	-413.2	4,217.0	0.00	0.00	0.00
16,800.0	91.00	359.45	12,500.4	4,313.2	-414.2	4,317.0	0.00	0.00	0.00
16,900.0	91.00	359.45	12,498.6	4,413.2	-415.1	4,417.0	0.00	0.00	0.00
17,000.0	91.00	359.45	12,496.9	4,513.2	-416.1	4,517.0	0.00	0.00	0.00
17,100.0	91.00	359.45	12,495.1	4,613.2	-417.0	4,616.9	0.00	0.00	0.00
17,200.0	91.00	359.45	12,493.4	4,713.1	-418.0	4,716.9	0.00	0.00	0.00
17,300.0	91.00	359.45	12,491.6	4,813.1	-419.0	4,816.9	0.00	0.00	0.00
17,400.0	91.00	359.45	12,489.9	4,913.1	-419.9	4,916.9	0.00	0.00	0.00
17,483.1	91.00	359.45	12,488.4	4,996.2	-420.7	5,000.0	0.00	0.00	0.00
Start DLS 2.00 TFO 0.00									
17,508.0	91.50	359.45	12,487.9	5,021.1	-421.0	5,024.9	2.00	2.00	0.00
Start 1975.8 hold at 17508.0 MD									
17,600.0	91.50	359.45	12,485.5	5,113.0	-421.8	5,116.9	0.00	0.00	0.00
17,700.0	91.50	359.45	12,482.9	5,213.0	-422.8	5,216.8	0.00	0.00	0.00
17,800.0	91.50	359.45	12,480.2	5,313.0	-423.8	5,316.8	0.00	0.00	0.00
17,900.0	91.50	359.45	12,477.6	5,412.9	-424.7	5,416.7	0.00	0.00	0.00
18,000.0	91.50	359.45	12,475.0	5,512.9	-425.7	5,516.7	0.00	0.00	0.00
18,100.0	91.50	359.45	12,472.4	5,612.8	-426.6	5,616.7	0.00	0.00	0.00
18,200.0	91.50	359.45	12,469.8	5,712.8	-427.6	5,716.6	0.00	0.00	0.00
18,300.0	91.50	359.45	12,467.2	5,812.8	-428.6	5,816.6	0.00	0.00	0.00
18,400.0	91.50	359.45	12,464.5	5,912.7	-429.5	5,916.6	0.00	0.00	0.00
18,500.0	91.50	359.45	12,461.9	6,012.7	-430.5	6,016.5	0.00	0.00	0.00
18,600.0	91.50	359.45	12,459.3	6,112.6	-431.4	6,116.5	0.00	0.00	0.00



Intrepid Planning Report



Database: EDM 5000.15 Single User Db
Company: Tap Rock Resources, LLC
Project: Lea County, NM (NAD 83 NME)
Site: (Yada Fed Com) Sec-35_T-24-S_R-35-E
Well: Seinfeld Federal Unit Yada #221H
Wellbore: OWB
Design: Plan #2

Local Co-ordinate Reference: Well Seinfeld Federal Unit Yada #221H
TVD Reference: KB @ 3281.0usft
MD Reference: KB @ 3281.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature

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)
18,700.0	91.50	359.45	12,456.7	6,212.6	-432.4	6,216.5	0.00	0.00	0.00
18,800.0	91.50	359.45	12,454.1	6,312.6	-433.4	6,316.4	0.00	0.00	0.00
18,900.0	91.50	359.45	12,451.4	6,412.5	-434.3	6,416.4	0.00	0.00	0.00
19,000.0	91.50	359.45	12,448.8	6,512.5	-435.3	6,516.4	0.00	0.00	0.00
19,100.0	91.50	359.45	12,446.2	6,612.5	-436.2	6,616.3	0.00	0.00	0.00
19,200.0	91.50	359.45	12,443.6	6,712.4	-437.2	6,716.3	0.00	0.00	0.00
19,300.0	91.50	359.45	12,441.0	6,812.4	-438.2	6,816.3	0.00	0.00	0.00
19,400.0	91.50	359.45	12,438.4	6,912.3	-439.1	6,916.2	0.00	0.00	0.00
19,483.8	91.50	359.45	12,436.2	6,996.1	-439.9	7,000.0	0.00	0.00	0.00
Start DLS 2.00 TFO -179.99									
19,508.8	91.00	359.45	12,435.6	7,021.1	-440.2	7,025.0	2.00	-2.00	0.00
Start 975.1 hold at 19508.8 MD									
19,600.0	91.00	359.45	12,434.0	7,112.3	-441.0	7,116.2	0.00	0.00	0.00
19,700.0	91.00	359.45	12,432.3	7,212.3	-442.0	7,216.2	0.00	0.00	0.00
19,800.0	91.00	359.45	12,430.5	7,312.2	-443.0	7,316.2	0.00	0.00	0.00
19,900.0	91.00	359.45	12,428.8	7,412.2	-443.9	7,416.1	0.00	0.00	0.00
20,000.0	91.00	359.45	12,427.0	7,512.2	-444.9	7,516.1	0.00	0.00	0.00
20,100.0	91.00	359.45	12,425.3	7,612.2	-445.8	7,616.1	0.00	0.00	0.00
20,200.0	91.00	359.45	12,423.6	7,712.2	-446.8	7,716.1	0.00	0.00	0.00
20,300.0	91.00	359.45	12,421.8	7,812.1	-447.8	7,816.1	0.00	0.00	0.00
20,400.0	91.00	359.45	12,420.1	7,912.1	-448.7	7,916.1	0.00	0.00	0.00
20,483.9	91.00	359.45	12,418.6	7,996.0	-449.5	8,000.0	0.00	0.00	0.00
Start DLS 2.00 TFO 179.99									
20,508.9	90.50	359.45	12,418.3	8,021.0	-449.8	8,024.9	2.00	-2.00	0.00
Start 2317.2 hold at 20508.9 MD									
20,600.0	90.50	359.45	12,417.5	8,112.1	-450.6	8,116.0	0.00	0.00	0.00
20,700.0	90.50	359.45	12,416.6	8,212.1	-451.6	8,216.0	0.00	0.00	0.00
20,800.0	90.50	359.45	12,415.7	8,312.1	-452.6	8,316.0	0.00	0.00	0.00
20,900.0	90.50	359.45	12,414.9	8,412.1	-453.5	8,416.0	0.00	0.00	0.00
21,000.0	90.50	359.45	12,414.0	8,512.1	-454.5	8,516.0	0.00	0.00	0.00
21,100.0	90.50	359.45	12,413.1	8,612.1	-455.4	8,616.0	0.00	0.00	0.00
21,200.0	90.50	359.45	12,412.2	8,712.0	-456.4	8,716.0	0.00	0.00	0.00
21,300.0	90.50	359.45	12,411.4	8,812.0	-457.4	8,816.0	0.00	0.00	0.00
21,400.0	90.50	359.45	12,410.5	8,912.0	-458.3	8,916.0	0.00	0.00	0.00
21,500.0	90.50	359.45	12,409.6	9,012.0	-459.3	9,016.0	0.00	0.00	0.00
21,600.0	90.50	359.45	12,408.7	9,112.0	-460.2	9,116.0	0.00	0.00	0.00
21,700.0	90.50	359.45	12,407.9	9,212.0	-461.2	9,216.0	0.00	0.00	0.00
21,800.0	90.50	359.45	12,407.0	9,312.0	-462.2	9,316.0	0.00	0.00	0.00
21,900.0	90.50	359.45	12,406.1	9,412.0	-463.1	9,416.0	0.00	0.00	0.00
22,000.0	90.50	359.45	12,405.2	9,512.0	-464.1	9,516.0	0.00	0.00	0.00
22,100.0	90.50	359.45	12,404.4	9,612.0	-465.0	9,616.0	0.00	0.00	0.00
22,200.0	90.50	359.45	12,403.5	9,712.0	-466.0	9,716.0	0.00	0.00	0.00
22,300.0	90.50	359.45	12,402.6	9,812.0	-466.9	9,816.0	0.00	0.00	0.00
22,400.0	90.50	359.45	12,401.7	9,911.9	-467.9	9,916.0	0.00	0.00	0.00
22,500.0	90.50	359.45	12,400.9	10,011.9	-468.9	10,016.0	0.00	0.00	0.00
22,600.0	90.50	359.45	12,400.0	10,111.9	-469.8	10,116.0	0.00	0.00	0.00
22,700.0	90.50	359.45	12,399.1	10,211.9	-470.8	10,216.0	0.00	0.00	0.00
22,800.0	90.50	359.45	12,398.2	10,311.9	-471.7	10,316.0	0.00	0.00	0.00
22,826.1	90.50	359.45	12,398.0	10,338.0	-472.0	10,342.1	0.00	0.00	0.00
TD at 22826.1									



Intrepid Planning Report



Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well Seinfeld Federal Unit Yada #221H
Company:	Tap Rock Resources, LLC	TVD Reference:	KB @ 3281.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB @ 3281.0usft
Site:	(Yada Fed Com) Sec-35_T-24-S_R-35-E	North Reference:	Grid
Well:	Seinfeld Federal Unit Yada #221H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	Plan #2		

Design Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
LTP (Yada Fed Com # - plan misses target center by 0.8usft at 22731.1usft MD (12398.8 TVD, 10243.0 N, -471.1 E) - Point	0.00	0.00	12,398.0	10,243.0	-471.0	436,255.00	847,149.00	32° 11' 43.720 N	103° 20' 41.009 W
PBHL (Yada Fed Com - plan hits target center - Rectangle (sides W100.0 H2,342.1 D30.0)	-0.50	359.45	12,398.0	10,338.0	-472.0	436,350.00	847,148.00	32° 11' 44.660 N	103° 20' 41.011 W
8000'VS (Yada Fed Cc - plan hits target center - Rectangle (sides W100.0 H1,000.0 D30.0)	-1.00	359.45	12,418.6	7,996.0	-449.5	434,008.05	847,170.48	32° 11' 21.485 N	103° 20' 41.000 W
7000'VS (Yada Fed Cc - plan misses target center by 0.1usft at 19483.8usft MD (12436.2 TVD, 6996.1 N, -439.9 E) - Rectangle (sides W100.0 H2,000.0 D30.0)	-1.50	359.45	12,436.1	6,996.1	-439.9	433,008.10	847,180.08	32° 11' 11.590 N	103° 20' 40.995 W
5000'VS (Yada Fed Cc - plan hits target center - Rectangle (sides W100.0 H3,000.0 D30.0)	-1.00	359.45	12,488.4	4,996.2	-420.7	431,008.19	847,199.28	32° 10' 51.800 N	103° 20' 40.985 W
2000'VS (Yada Fed Cc - plan hits target center - Rectangle (sides W100.0 H2,114.0 D30.0)	-0.50	359.45	12,540.8	1,996.3	-391.9	428,008.33	847,228.08	32° 10' 22.115 N	103° 20' 40.971 W
FTP (Yada Fed Com # - plan misses target center by 213.7usft at 12474.5usft MD (12404.6 TVD, 27.6 N, -341.5 E) - Point	0.00	0.00	12,558.0	-118.0	-372.0	425,894.00	847,248.00	32° 10' 1.192 N	103° 20' 40.965 W
KOP (Yada Fed Com # - plan misses target center by 251.4usft at 12447.9usft MD (12386.5 TVD, 8.6 N, -337.5 E) - Point	0.00	0.00	12,558.0	-172.0	-372.0	425,840.00	847,248.00	32° 10' 0.658 N	103° 20' 40.971 W



Intrepid Planning Report



Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well Seinfeld Federal Unit Yada #221H
Company:	Tap Rock Resources, LLC	TVD Reference:	KB @ 3281.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB @ 3281.0usft
Site:	(Yada Fed Com) Sec-35_T-24-S_R-35-E	North Reference:	Grid
Well:	Seinfeld Federal Unit Yada #221H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	Plan #2		

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,031.0	1,031.0	Rustler Anhydrite			
1,252.0	1,252.0	Top Salt			
4,947.4	4,935.0	Base Salt			
5,347.0	5,333.0	Delaware Mountain Gp			
5,357.1	5,343.0	Lamar			
5,385.1	5,371.0	Bell Canyon			
5,474.3	5,460.0	Ramsey Sand			
6,177.5	6,163.0	Cherry Canyon			
7,593.0	7,578.5	Brushy Canyon			
8,901.0	8,886.5	Bone Spring Lime			
8,973.0	8,958.5	Upper Avalon			
9,186.0	9,171.5	Middle Avalon			
9,835.5	9,821.0	Lower Avalon			
10,114.0	10,099.5	1st Bone Spring Sand			
10,449.0	10,434.5	2nd Bone Spring Carb			
10,766.0	10,751.5	2nd Bone Spring Sand			
11,238.0	11,223.5	3rd Bone Spring Carb			
11,766.5	11,752.0	3rd Bone Spring Sand			
12,015.6	12,001.0	3rd BS W Sand			
12,066.3	12,051.5	Wolfcamp A X Sand			
12,094.1	12,079.0	Wolfcamp A Y Sand			
12,141.8	12,125.5	Wolfcamp A Lower			
12,351.9	12,314.0	Wolfcamp A Lower Carb			
12,519.0	12,433.0	Wolfcamp B			

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
1,500.0	1,500.0	0.0	0.0	NUDGE - Build 1.00
2,013.1	2,012.4	-10.8	-20.3	HOLD - 3288.4 at 2013.1 MD
5,301.5	5,287.6	-149.2	-279.7	DROP - -1.00
5,814.5	5,800.0	-160.0	-300.0	HOLD - 6176.5 at 5814.5 MD
11,991.0	11,976.5	-160.0	-300.0	KOP - Build 10.00
12,441.0	12,381.6	3.8	-336.5	BLD/TRN - DLS 10.00 TFO 16.59
12,908.3	12,554.5	422.1	-376.9	EOC - 1574.3 hold at 12908.3 MD
14,482.7	12,540.8	1,996.3	-391.9	Start DLS 2.00 TFO -0.23
14,507.8	12,540.5	2,021.5	-392.2	Start 2975.3 hold at 14507.8 MD
17,483.1	12,488.4	4,996.2	-420.7	Start DLS 2.00 TFO 0.00
17,508.0	12,487.9	5,021.1	-421.0	Start 1975.8 hold at 17508.0 MD
19,483.8	12,436.2	6,996.1	-439.9	Start DLS 2.00 TFO -179.99
19,508.8	12,435.6	7,021.1	-440.2	Start 975.1 hold at 19508.8 MD
20,483.9	12,418.6	7,996.0	-449.5	Start DLS 2.00 TFO 179.99
20,508.9	12,418.3	8,021.0	-449.8	Start 2317.2 hold at 20508.9 MD
22,826.1	12,398.0	10,338.0	-472.0	TD at 22826.1

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Tap Rock Operating LLC
WELL NAME & NO.:	Seinfeld Federal Unit Yada 221H
LOCATION:	Sec 33-24S-35E-NMP
COUNTY:	Lea County, New Mexico

*Previously known as **Yada Fed Com 221H**. Changes approved through engineering via Sundry 2725399 on 05/25/2023. Any previous COAs not addressed within the updated COAs still apply.*

COA

H2S	<input type="radio"/> Yes	<input checked="" type="radio"/> No	
Potash	<input checked="" type="radio"/> None	<input type="radio"/> Secretary	<input type="radio"/> R-111-P
Cave/Karst Potential	<input checked="" type="radio"/> Low	<input type="radio"/> Medium	<input type="radio"/> High
Cave/Karst Potential	<input type="radio"/> Critical		
Variance	<input type="radio"/> None	<input checked="" type="radio"/> Flex Hose	<input type="radio"/> Other
Wellhead	<input type="radio"/> Conventional	<input checked="" type="radio"/> Multibowl	<input type="radio"/> Both
Wellhead Variance	<input type="radio"/> Diverter		
Other	<input type="checkbox"/> 4 String	<input type="checkbox"/> Capitan Reef	<input type="checkbox"/> WIPP
Other	<input checked="" type="checkbox"/> Fluid Filled	<input type="checkbox"/> Pilot Hole	<input type="checkbox"/> Open Annulus
Cementing	<input type="checkbox"/> Contingency Cement Squeeze	<input type="checkbox"/> EchoMeter	<input type="checkbox"/> Primary Cement Squeeze
Special Requirements	<input type="checkbox"/> Water Disposal	<input type="checkbox"/> COM	<input checked="" type="checkbox"/> Unit
Special Requirements	<input type="checkbox"/> Batch Sundry		
Special Requirements Variance	<input type="checkbox"/> Break Testing	<input type="checkbox"/> Offline Cementing	<input checked="" type="checkbox"/> Casing Clearance

A. HYDROGEN SULFIDE

Hydrogen Sulfide (H2S) monitors shall be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the Hydrogen Sulfide area shall meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, provide measured values and formations to the BLM.

B. CASING

1. The **10-3/4** inch surface casing shall be set at approximately 950 feet (a minimum of 25 feet (Lea County) into the Rustler Anhydrite, above the salt, and below usable fresh water) and cemented to the surface.
 - a. If cement does not circulate to the surface, the appropriate BLM office shall

be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.

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

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

2. The minimum required fill of cement behind the **7-5/8** inch intermediate casing is:
 - Cement to surface. If cement does not circulate see B.1.a, c-d above.
3. The minimum required fill of cement behind the **5-1/2** inch production casing is:
 - Cement should tie-back at least **300 feet** into previous casing string due to operator not meeting the 0.422" clearance requirement per OO2. Operator shall provide method of verification.

C. PRESSURE CONTROL

1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).'
2. Operator has proposed a multi-bowl wellhead assembly. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **5000 (5M)** psi.
 - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - c. Manufacturer representative shall install the test plug for the initial BOP test.
 - d. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.

- e. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.

D. SPECIAL REQUIREMENT (S)

Unit Wells

The well sign for a unit well shall include the unit number in addition to the surface and bottom hole lease numbers. This also applies to participating area numbers. If a participating area has not been established, the operator can use the general unit designation, but will replace the unit number with the participating area number when the sign is replaced.

Commercial Well Determination

A commercial well determination shall be submitted after production has been established for at least six months.

GENERAL REQUIREMENTS

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

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

☒ Eddy County

Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220,
(575) 361-2822

☒ Lea County

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

1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
 - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
 - b. When the operator proposes to set surface casing with Spudder Rig
 - Notify the BLM when moving in and removing the Spudder Rig.

- Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
 - BOP/BOPE test to be conducted per Onshore Oil and Gas Order No. 2 as soon as 2nd Rig is rigged up on well.
2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
 3. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

A. CASING

1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.
2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.

5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

B. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.
2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.
3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
 - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.

- b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - c. Manufacturer representative shall install the test plug for the initial BOP test.
 - d. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.
 - e. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
- 5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead cement), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).
 - b. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the cement plug. The BOPE test can be initiated after bumping the cement plug with the casing valve open. (only applies to single stage cement jobs, prior to the cement setting up.)
 - c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer and can be initiated immediately with the casing valve open. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
 - d. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall

have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.

- e. The results of the test shall be reported to the appropriate BLM office.
- f. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
- g. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.
- h. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.

C. DRILLING MUD

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

D. WASTE MATERIAL AND FLUIDS

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

Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

LVO 5/25/2023

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 221239

CONDITIONS

Operator: TAP ROCK OPERATING, LLC 523 Park Point Drive Golden, CO 80401	OGRID: 372043
	Action Number: 221239
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
pkautz	None	6/2/2023