

U.S. Department of the Interior BUREAU OF LAND MANAGEMENT Sundry Print Reports
05/01/2023

Well Name: SEINFELD FEDERAL Well Location: T24S / R35E / SEC 35 / County or Parish/State:

UNIT YADA SWSE /

Well Number: 224H Type of Well: OIL WELL Allottee or Tribe Name:

Lease Number: NMNM138896 Unit or CA Name: Unit or CA Number:

NMNM141169X

US Well Number: 3002550988 Well Status: Approved Application for Operator: TAP ROCK

Permit to Drill OPERATING LLC

Notice of Intent

Sundry ID: 2725409

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 04/12/2023 Time Sundry Submitted: 01:11

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 224H to: Seinfeld Federal Unit Yada 224H. 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: 247' FSL, 1393' FEL, Section 35, T-24S-R35E, Lea County, NM To: 248' FSL, 1441' FEL, Section 35, T-24S-R35E, Lea County, NM See attached updated drilling plans, directional plans, and C-102.

*This sundry has already been approved by OCD; resubmitting to include BLM COAs

NOI Attachments

Procedure Description

Seinfeld_Federal_Unit_Yada_224H_Plan_2_20230412131053.pdf

LO_SEINFELD_FEDERAL_UNIT_YADA_224H_REV1_S_FINAL_20230412131048.pdf

 $APD_Drilling_Plan___Yada_Fed_Com_224H_Sundry_04_12_23_20230412131038.pdf$

eived by OCD: 5/4/2023 7:23:36 AM Well Name: SEINFELD FEDERAL

UNIT YADA

Well Location: T24S / R35E / SEC 35 /

SWSE /

Well Number: 224H

Type of Well: OIL WELL

County or Parish/State:

Allottee or Tribe Name:

Page 2 of

Lease Number: NMNM138896

Unit or CA Name:

Unit or CA Number:

NMNM141169X

US Well Number: 3002550988

Well Status: Approved Application for

Permit to Drill

Operator: TAP ROCK OPERATING LLC

Conditions of Approval

Additional

Sec_25_24S_35E_NMP__Sundry_2725409_Seinfeld_Federal_Unit_Yada_224H_Lea_Tap_Rock_COAs_20230428140 323.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 01:10 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: 04/28/2023

Signature: Chris Walls

Page 2 of 2

<u>District I</u> 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 Prione: (5/5) /48-1285 Fax: (5/5) /48-9/20 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

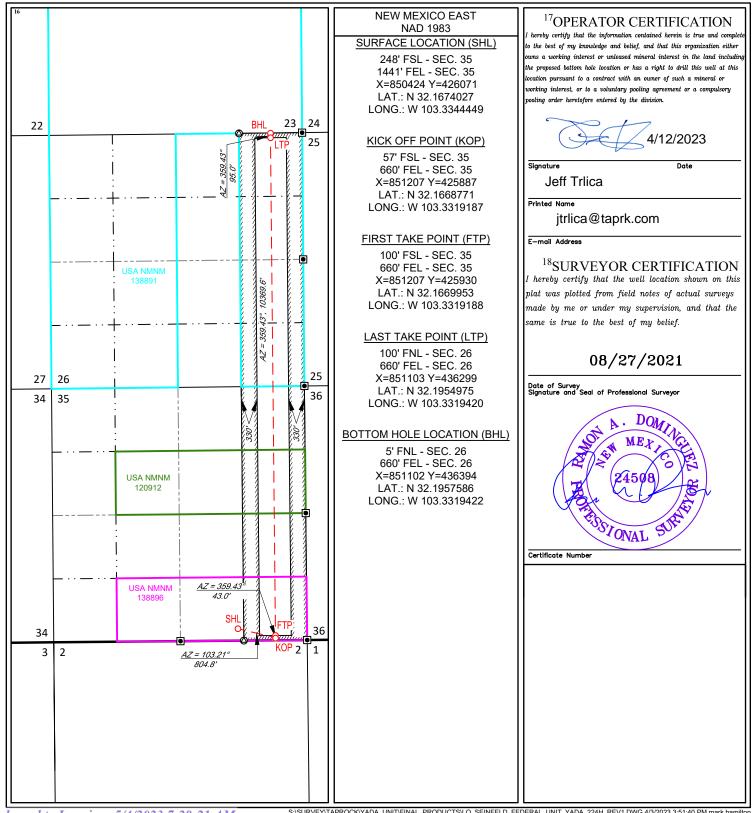
WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Numbe	er	² Pool Code	³ Pool Name				
30-025-509	88	98098	WC-025 G-09 S243532M:WOLFB0	ONE			
⁴ Property Code		⁵ Pr	roperty Name ⁶ Well Num				
333091		SEINFELD FE	DERAL UNIT YADA	224H			
⁷ OGRID No.		⁸ O _I	perator Name	⁹ Elevation			
372043 TAP ROCK			OPERATING, LLC.	3270'			

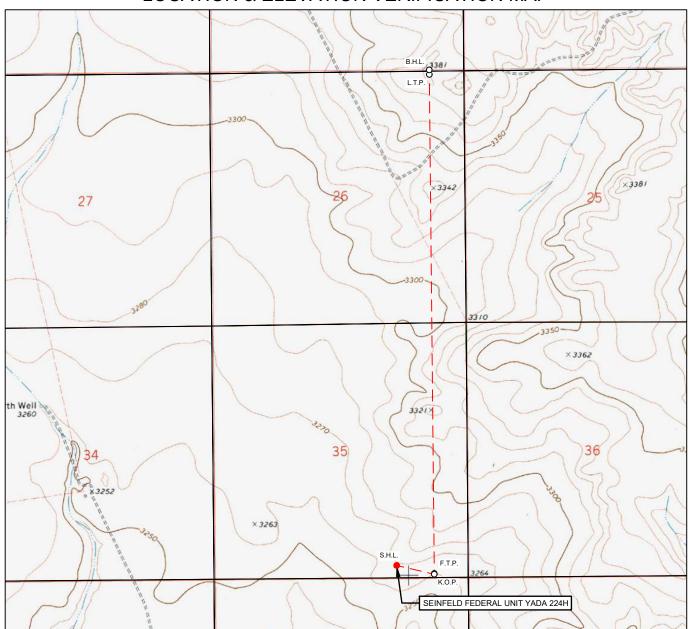
10 Surface Location

	UL or lot no.	Section 35	Township 24-S	35-E	1				EAST	LEA
٠				Bottom Ho	le Location If I	Different From Su	rface			
	UL or lot no.	Section Township		Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
	A	$A \qquad \left \begin{array}{c c} 26 & 24-S & 35-E \end{array} \right $		-	5'	NORTH	660'	EAST	LEA	
1	12Dedicated Acres	¹³ Joint or l	Infill 14Co	onsolidation Co	de ¹⁵ Ord	er No.				
١	320				- 1					

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.:

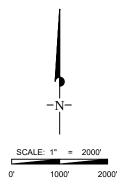
SEINFELD FEDERAL UNIT YADA 224H

 SECTION
 35
 TWP
 24-S
 RGE
 35-E
 SURVEY
 N.M.P.M.

 COUNTY
 LEA
 STATE
 NM
 ELEVATION
 3270'

 DESCRIPTION
 248' FSL & 1441' FEL

LATITUDE _____ N 32.1674027 ____ LONGITUDE ____ W 103.3344449

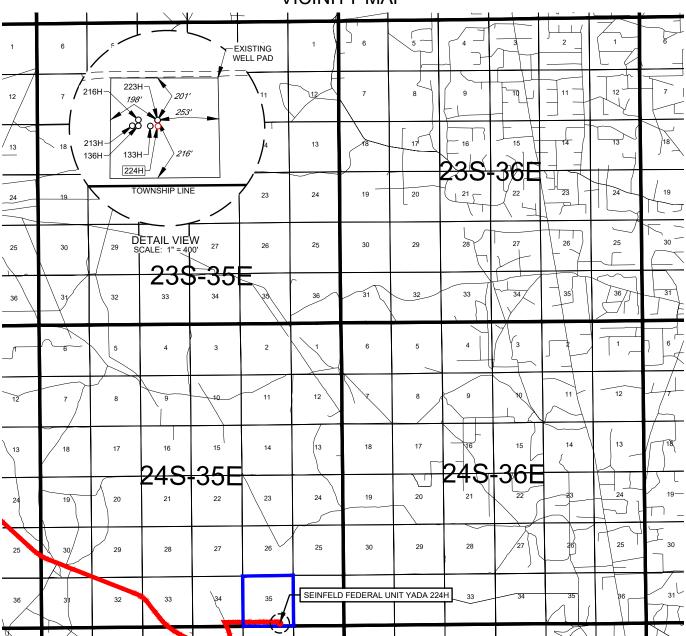


THIS EASEMENT/SERVITUDE LOCATION SHOWN HEREON HAS BEEN SURVEYED ON THE GROUND UNDER MY SUPERVISION AND PREPARED ACCORDING TO THE EVIDENCE FOUND AT THE TIME OF SURVEY, AND DATA PROVIDED BY TAP ROCK OPERATING, LLC. THIS CERTIFICATION IS MADE AND LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF 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 WINSCOTT ROAD, Ste. 200 • BENBROOK, TEXAS 76126 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





LEASE NAME & WELL NO.: SEINFELD FEDERAL UNIT YADA 224H

 SECTION
 35
 TWP
 24-S
 RGE
 35-E
 SURVEY
 N.M.P.M.

 COUNTY
 LEA
 STATE
 NM

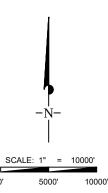
 DESCRIPTION
 248' FSL & 1441' FEL

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. 1.1 MILES TO A POINT ±215 FEET NORTH 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 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.

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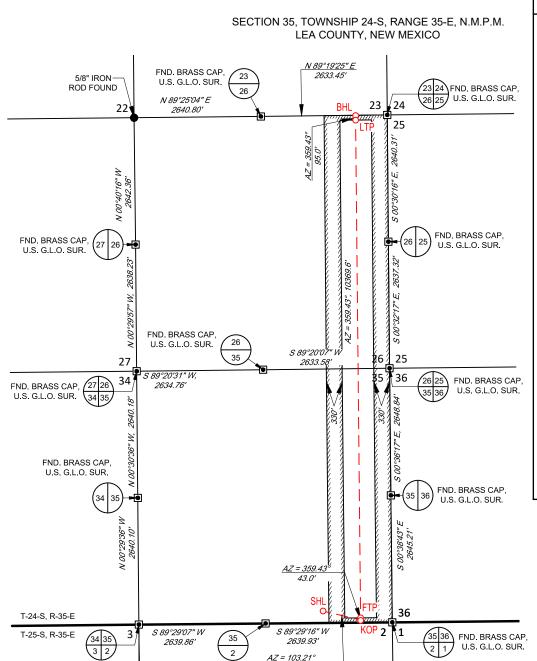
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NEW MEXICO EAST NAD 1983

SURFACE LOCATION (SHL)

248' FSL - SEC. 35 1441' FEL - SEC. 35 X=850424 Y=426071 LAT.: N 32.1674027 LONG.: W 103.3344449

KICK OFF POINT (KOP)

57' FSL - SEC. 35 660' FEL - SEC. 35 X=851207 Y=425887 LAT.: N 32.1668771 LONG.: W 103.3319187

FIRST TAKE POINT (FTP)

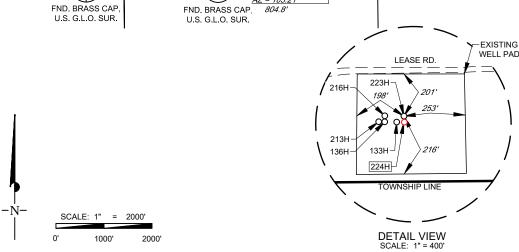
100' FSL - SEC. 35 660' FEL - SEC. 35 X=851207 Y=425930 LAT.: N 32.1669953 LONG.: W 103.3319188

LAST TAKE POINT (LTP)

100' FNL - SEC. 26 660' FEL - SEC. 26 X=851103 Y=436299 LAT.: N 32.1954975 LONG.: W 103.3319420

BOTTOM HOLE LOCATION (BHL)

5' FNL - SEC. 26 660' FEL - SEC. 26 X=851102 Y=436394 LAT.: N 32.1957586 LONG.: W 103.3319422



LEASE NAME & WELL NO .:

FND. BRASS CAP U.S. G.L.O. SUR.

SEINFELD FEDERAL UNIT YADA 224H

SECTION __35__ TWP_ 24-S 35-E _ SURVEY N.M.P.M. RGE COUNTY. LEA STATE NM 248' FSL & 1441' FEL DESCRIPTION

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. 1.1 MILES TO A POINT ±215 FEET NORTH 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



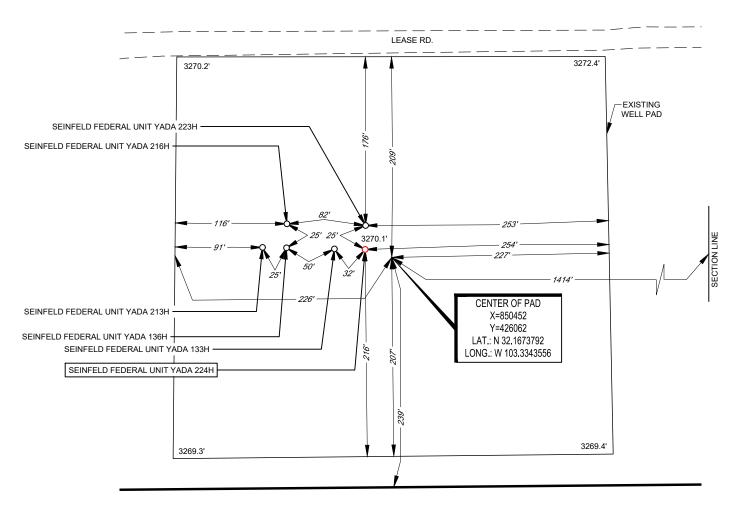
TELEPHONE: (817) 744-7512 • FAX (817) 744-7554 2903 NORTH BIG SPRING • MIDLAND, TEXAS 79705 TELEPHONE: (432) 68 682-1653 OR (800) 767-1653 • WWW.TOPOGRAPHIC.COM 3 • FAX (432) 682-1743 SECTION LINE

PROPOSED ROAD

EXHIBIT 2B SECTION 35. TOWNSHIP 24-S. RANGE 35-E. N.M.P.M. LEA COUNTY, NEW MEXICO

Page 7 of 32

DETAIL VIEW SCALE: 1" = 100'



LEASE NAME & WELL NO.: SEINFELD FEDERAL UNIT YADA 224H 224H LATITUDE _ N 32.1674027 224H LONGITUDE

CENTER OF PAD IS 239' FSL & 1414' FEL



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.





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Elevation above Sea Level: 3270'

DRILLING PROGRAM

1. Estimated Tops

Formation	TVD	MD	Lithologies	Bearing
Quaternary Deposits	0	0	Surface	None
Rustler	590	590	Salt	Salt
Top Salt	1,387	1,387	Salt	Salt
Base Salt	4,825	4,853	Salt	Salt
DMG	5,223	5,255	Sandstone	None
Lamar	5,233	5,265	Sandstone	Hydrocarbons
Bell Canyon	5,261	5,293	Sandstone	Hydrocarbons
Ramsey Sand	5,350	5,383	Sandstone	Hydrocarbons
Cherry Canyon	6,053	6,093	Limestone	Hydrocarbons
Brushy Canyon	7,469	7,513	Sandstone	Hydrocarbons
Bone Spring Lime	8,777	8,821	Carbonate	Hydrocarbons
Upper Avalon	8,849	8,893	Carbonate	Hydrocarbons
Middle Avalon	9,062	9,106	Carbonate	Hydrocarbons
Lower Avalon	9,711	9,756	Carbonate	Hydrocarbons
1st BS Sand	9,990	10,034	Sandstone	Hydrocarbons
2nd BS Carb	10,325	10,369	Carbonate	Hydrocarbons
2nd BS Sand	10,642	10,686	Sandstone	Hydrocarbons
3rd BS Carb	11,114	11,158	Carbonate	Hydrocarbons
3rd BS Sand	11,642	11,687	Sandstone	Hydrocarbons
Wolfcamp	11,942	11,987	Shale	Hydrocarbons
КОР	11,853	11,898	Carbonate	Hydrocarbons
TD	12,218	22,762	Carbonate	Hydrocarbons

2. Notable Zones

Wolfcamp B is the formation target.

3. Pressure Control

Pressure Control Equipment (See Schematics):

At 22,762', 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.



BOP Test procedure will be as follows:

After surface casing is set and the BOP is nippled up, the BOP pressure tests will be made with a third party tester to 250 psi low, 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	Canada ad	Tapered	Casing Set Depths				Casing Details						
	Hole Size	Тор	Btm	Size	Standard	rapereu	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	11798	7 5/8	API	No	0	11798	0	11753	L-80IC	29.7	BUTT	1.13	1.15	1.6
Dunduntinu	6 3/4	11700	22762	5 1/2	NON API	No	0	11598	0	11553	P-110	20	TXP	1.13	1.15	1.6
Production	0 3/4	3/4 11798	11798 22762	5 1/2	NON API	No	11598	22762	11553	12218	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%	С	5% NCI + LCM
Surface	Tail	650	249	1.34	334	14.8	100%	С	5% NCI + LCM
Intermediate	Lead	0	862	4.29	3697	10.5	65%	С	Bentonite + 1% CaCL2 + 8% NaCl + LCM
Intermediate	Tail	10798	212	1.67	354	13.2	65%	С	5% NaCl
Production	Tail	11498	855	1.32	1129	14.0	20%	Н	Fluid Loss + Dispersant + Retarder

5. Mud Program

Mud Design:

Name	Тор	Bottom	Type	Mud Weight	Visc	Fluid Loss
Surface	0	950	FW Spud Mud	8.40	28	NC
Intermediate	950	11798	DBE	9.00	30 - 32	NC
Production	11798	22762	OBM	11.50	50 - 70	< 16



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 7,306 psi. Expected bottom hole temperature is \approx 195° F.

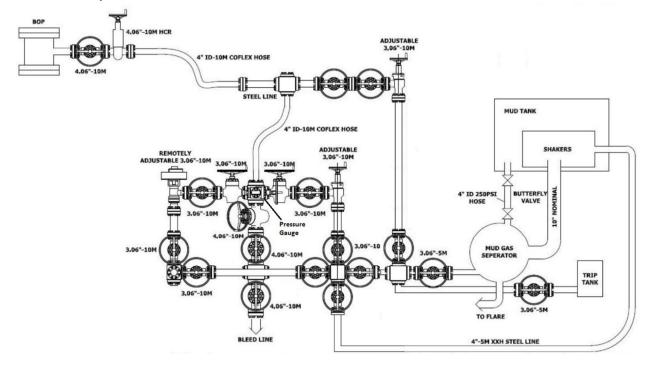
Tap Rock does not anticipate that there will be enough H2S from the surface to the Wolfcamp B formations to meet the BLM's Onshore Order 6 requirements for the submission of an "H2S Drilling Operation Plan" or "Public Protection Plan" for drilling and completing this well. Tap Rock has an H2S safety 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.

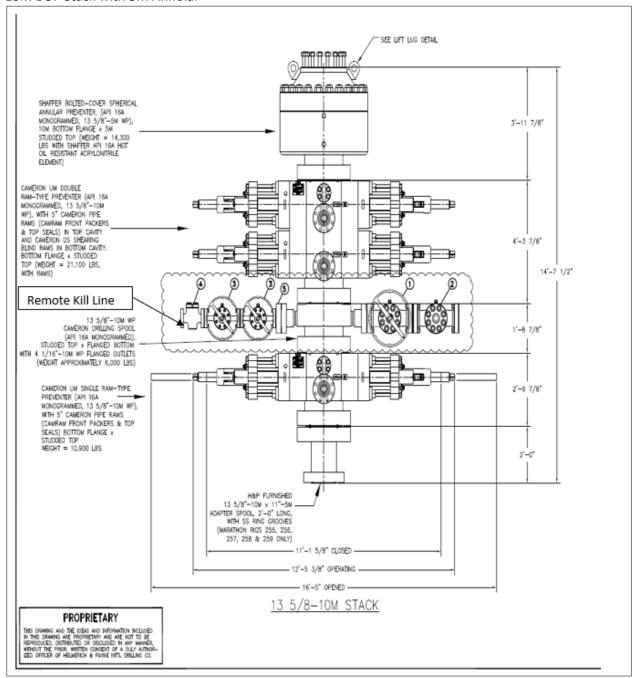


10M Choke Layout

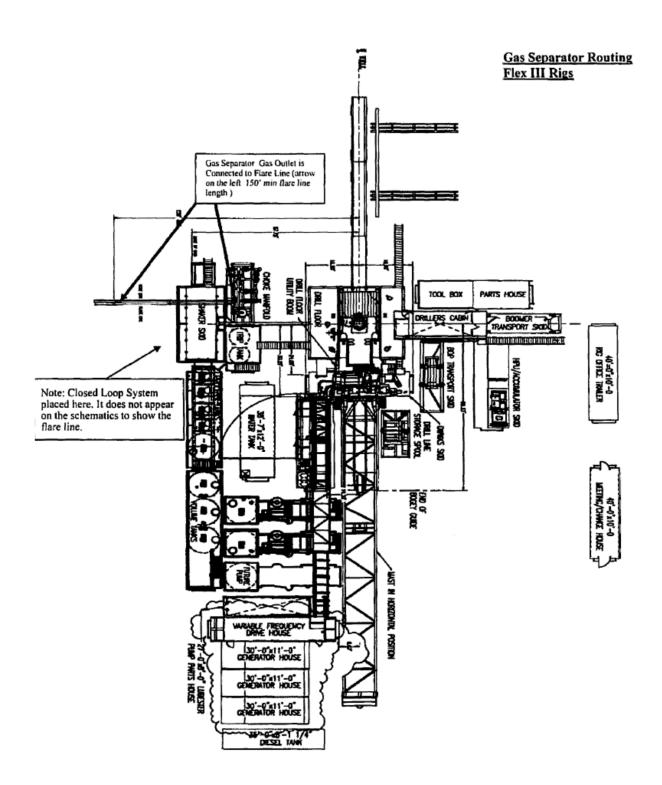




10M BOP Stack with 5M Annular

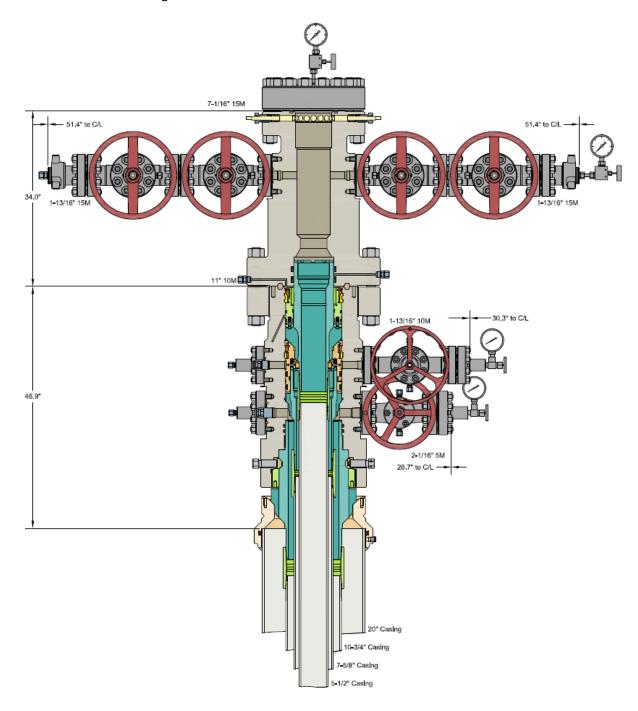








Multi-bowl Wellhead Design





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 #224H

OWB

Plan: Plan #2

Standard Planning Report

06 April, 2023





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 #224H

Wellbore: OWB
Design: Plan #2

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:

Well Seinfeld Federal Unit Yada #224H

KB @ 3296.0usft KB @ 3296.0usft

359.43

Grid

Minimum Curvature

Project Lea County, NM (NAD 83 NME)

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

System Datum: Mean Sea Level

0.0

Site (Yada Fed Com) Sec-35_T-24-S_R-35-E

Site Position: Northing: 426,095.00 usft 32° 10' 2.829 N Latitude: From: Мар 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 #224H

 Well Position
 +N/-S
 -24.0 usft
 Northing:
 426,071.00 usft
 Latitude:
 32° 10′ 2.654 N

 +E/-W
 -674.0 usft
 Easting:
 850,424.00 usft
 Longitude:
 103° 20′ 4.001 W

Position Uncertainty 0.0 usft Wellhead Elevation: Ground Level: 3,270.0 usft

OWB Wellbore Sample Date Declination **Dip Angle** Field Strength Magnetics **Model Name** (°) (°) (nT) 10/14/21 47.485.18894127 IGRF2015 6.36 59.99

Design Plan #2 **Audit Notes:** Version: Phase: **PLAN** Tie On Depth: 0.0 **Vertical Section:** Depth From (TVD) +N/-S +E/-W Direction (usft) (usft) (usft) (°)

0.0

0.0

Plan Survey Tool Program
Date 04/06/23

Depth From (usft)
Depth To (usft)
Survey (Wellbore)
Tool Name
Remarks

1 0.0 22,762.0 Plan #2 (OWB)

OWSG MWD - Standard



IntrepidPlanning Report



Database: ED Company: Tap Project: Lea Site: (Ya

EDM 5000.15 Single User Db 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 #224H

Wellbore: OWB
Design: Plan #2

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well Seinfeld Federal Unit Yada #224H

KB @ 3296.0usft KB @ 3296.0usft

Grid

Plan Sections	s									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	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	
2,303.9	8.04	106.29	2,301.3	-15.8	54.0	1.00	1.00	0.00	106.29	
6,341.0	8.04	106.29	6,298.7	-174.2	596.0	0.00	0.00	0.00	0.00	
7,144.9	0.00	0.00	7,100.0	-190.0	650.0	1.00	-1.00	0.00	180.00	
11,897.9	0.00	0.00	11,853.0	-190.0	650.0	0.00	0.00	0.00	0.00	
12,347.9	45.00	20.00	12,258.1	-32.3	707.4	10.00	10.00	0.00	20.00	
12,842.5	91.50	1.05	12,437.8	406.8	776.0	10.00	9.40	-3.83	-25.29	
12,923.6	91.50	359.43	12,435.7	487.8	776.4	2.00	0.00	-2.00	-89.96	
14,444.1	91.50	359.43	12,395.9	2,007.7	761.2	0.00	0.00	0.00	0.00	2000'VS (Yada Fed
14,459.1	91.80	359.43	12,395.4	2,022.7	761.0	2.00	2.00	-0.01	-0.18	
16,945.2	91.80	359.43	12,317.3	4,507.5	736.2	0.00	0.00	0.00	0.00	4500'VS (Yada Fed
16,960.4	91.50	359.43	12,316.9	4,522.6	736.0	2.00	-2.00	0.00	180.00	
18,445.8	91.50	359.43	12,278.0	6,007.5	721.2	0.00	0.00	0.00	0.00	6000'VS (Yada Fed
18,470.9	91.00	359.43	12,277.5	6,032.5	720.9	2.00	-2.00	0.00	-180.00	
20,946.1	91.00	359.43	12,234.4	8,507.3	696.2	0.00	0.00	0.00	0.00	8500'VS (Yada Fed
20,971.2	90.50	359.43	12,234.1	8,532.3	695.9	2.00	-2.00	0.00	180.00	
22,762.0	90.50	359.43	12,218.5	10,323.0	678.0	0.00	0.00	0.00	0.00	PBHL (Yada Fed Cc



Intrepid **Planning Report**



EDM 5000.15 Single User Db Database: Company: Tap Rock Resources, LLC Project: Site:

Lea County, NM (NAD 83 NME) (Yada Fed Com) Sec-35_T-24-S_R-35-E

Seinfeld Federal Unit Yada #224H

OWB Wellbore: Design: Plan #2 **Local Co-ordinate Reference:**

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well Seinfeld Federal Unit Yada #224H

KB @ 3296.0usft KB @ 3296.0usft

Grid

Design.	Flail #Z								
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 NUDGE - B	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	1.00	106.29	1,600.0	-0.2	0.8	-0.3	1.00	1.00	0.00
1,700.0	2.00	106.29	1,700.0	-1.0	3.4	-1.0	1.00	1.00	0.00
1,800.0	3.00	106.29	1,799.9	-2.2	7.5	-2.3	1.00	1.00	0.00
1,900.0	4.00	106.29	1,899.7	-3.9	13.4	-4.0	1.00	1.00	0.00
2,000.0	5.00	106.29	1,999.4	-6.1	20.9	-6.3	1.00	1.00	0.00
2,100.0	6.00	106.29	2,098.9	-8.8	30.1	-9.1	1.00	1.00	0.00
2,200.0	7.00	106.29	2,198.3	-12.0	41.0	-12.4	1.00	1.00	0.00
2,303.9	8.04	106.29	2,301.3	-15.8	54.0	-16.3	1.00	1.00	0.00
	7.1 at 2303.9 M								
2,400.0	8.04	106.29	2,396.4	-19.6	66.9	-20.2	0.00	0.00	0.00
2,500.0	8.04	106.29	2,495.4	-23.5	80.4	-24.3	0.00	0.00	0.00
2,600.0	8.04	106.29	2,594.5	-27.4	93.8	-28.3	0.00	0.00	0.00
2,700.0	8.04	106.29	2,693.5	-31.3	107.2	-32.4	0.00	0.00	0.00
2,800.0	8.04	106.29	2,792.5	-35.3	120.6	-36.5	0.00	0.00	0.00
2,900.0	8.04	106.29	2,891.5	-39.2	134.1	-40.5	0.00	0.00	0.00
3,000.0	8.04	106.29	2,990.5	-43.1	147.5	-44.6	0.00	0.00	0.00
3,100.0	8.04	106.29	3,089.5	-47.0	160.9	-48.6	0.00	0.00	0.00
3,200.0	8.04	106.29	3,188.6	-51.0	174.3	-52.7	0.00	0.00	0.00
3,300.0	8.04	106.29	3,287.6	-54.9	187.8	-56.7	0.00	0.00	0.00
3,400.0	8.04	106.29	3,386.6	-58.8	201.2	-60.8	0.00	0.00	0.00
3,500.0	8.04	106.29	3,485.6	-62.7	214.6	-64.9	0.00	0.00	0.00
3,600.0	8.04	106.29	3,584.6	-66.7	228.0	-68.9	0.00	0.00	0.00
3,700.0	8.04	106.29	3,683.6	-70.6	241.4	-73.0	0.00	0.00	0.00
3,800.0	8.04	106.29	3,782.7	-74.5	254.9	-77.0	0.00	0.00	0.00
3,900.0	8.04	106.29	3,881.7	-78.4	268.3	-81.1	0.00	0.00	0.00
4,000.0	8.04	106.29	3,980.7	-82.3	281.7	-85.1	0.00	0.00	0.00
4,100.0	8.04	106.29	4,079.7	-86.3	295.1	-89.2	0.00	0.00	0.00
4,200.0	8.04	106.29	4,178.7	-90.2	308.6	-93.3	0.00	0.00	0.00
4,300.0	8.04	106.29	4,277.7	-94.1	322.0	-97.3	0.00	0.00	0.00
4,400.0	8.04	106.29	4,376.8	-98.0	335.4	-101.4	0.00	0.00	0.00
4,500.0	8.04	106.29	4,475.8	-102.0	348.8	-105.4	0.00	0.00	0.00
4,600.0	8.04	106.29	4,574.8	-105.9	362.3	-109.5	0.00	0.00	0.00
4,700.0	8.04	106.29	4,673.8	-109.8	375.7	-113.5	0.00	0.00	0.00
4,800.0	8.04	106.29	4,772.8	-113.7	389.1	-117.6	0.00	0.00	0.00
4,900.0	8.04	106.29	4,871.9	-117.7	402.5	-121.7	0.00	0.00	0.00
5,000.0	8.04	106.29	4,970.9	-121.6	415.9	-125.7	0.00	0.00	0.00
5,100.0	8.04	106.29	5,069.9	-125.5	429.4	-129.8	0.00	0.00	0.00



IntrepidPlanning Report



Database: Company: Project: Site:

Well:

EDM 5000.15 Single User Db 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 #224H

Wellbore: OWB
Design: Plan #2

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well Seinfeld Federal Unit Yada #224H

KB @ 3296.0usft KB @ 3296.0usft

Grid

Design:	Plan #2												
Planned Survey	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)				
5,200.0	8.04	106.29	5,168.9	-129.4	442.8	-133.8	0.00	0.00	0.00				
5,300.0	8.04	106.29	5,267.9	-133.4	456.2	-137.9	0.00	0.00	0.00				
5,400.0	8.04	106.29	5,366.9	-137.3	469.6	-141.9	0.00	0.00	0.00				
5,500.0	8.04	106.29	5,466.0	-141.2	483.1	-146.0	0.00	0.00	0.00				
5,600.0	8.04	106.29	5,565.0	-145.1	496.5	-150.1	0.00	0.00	0.00				
5,700.0	8.04	106.29	5,664.0	-149.1	509.9	-154.1	0.00	0.00	0.00				
5,800.0	8.04	106.29	5,763.0	-153.0	523.3	-158.2	0.00	0.00	0.00				
5,900.0	8.04	106.29	5,862.0	-156.9	536.8	-162.2	0.00	0.00	0.00				
6,000.0	8.04	106.29	5,961.0	-160.8	550.2	-166.3	0.00	0.00	0.00				
6,100.0	8.04	106.29	6,060.1	-164.7	563.6	-170.3	0.00	0.00	0.00				
6,200.0	8.04	106.29	6,159.1	-168.7	577.0	-174.4	0.00	0.00	0.00				
6,300.0	8.04	106.29	6,258.1	-172.6	590.4	-178.5	0.00	0.00	0.00				
6,341.0	8.04	106.29	6,298.7	-174.2	596.0	-180.1	0.00	0.00	0.00				
6,400.0	7.45	106.29	6,357.2	-176.4	603.6	-182.4	1.00	-1.00	0.00				
6,500.0	6.45	106.29	6,456.4	-179.8	615.2	-185.9	1.00	-1.00	0.00				
6,600.0	5.45	106.29	6,555.9	-182.7	625.1	-188.9	1.00	-1.00	0.00				
6,700.0	4.45	106.29	6,655.5	-185.2	633.4	-191.4	1.00	-1.00	0.00				
6,800.0	3.45	106.29	6,755.3	-187.1	640.0	-193.4	1.00	-1.00	0.00				
6,900.0 7,000.0 7,100.0 7,144.9 HOLD - 475	2.45 1.45 0.45 0.00 3.0 at 7144.9 N	106.29 106.29 106.29 0.00	6,855.1 6,955.1 7,055.1 7,100.0	-188.5 -189.5 -190.0 -190.0	645.0 648.2 649.8 650.0	-194.9 -195.9 -196.4 -196.5	1.00 1.00 1.00 1.00	-1.00 -1.00 -1.00 -1.00	0.00 0.00 0.00 0.00				
7,200.0	0.00	0.00	7,155.1	-190.0	650.0	-196.5	0.00	0.00	0.00				
7,300.0	0.00	0.00	7,255.1	-190.0	650.0	-196.5	0.00	0.00	0.00				
7,400.0	0.00	0.00	7,355.1	-190.0	650.0	-196.5	0.00	0.00	0.00				
7,500.0	0.00	0.00	7,455.1	-190.0	650.0	-196.5	0.00	0.00	0.00				
7,600.0	0.00	0.00	7,555.1	-190.0	650.0	-196.5	0.00	0.00	0.00				
7,700.0	0.00	0.00	7,655.1	-190.0	650.0	-196.5	0.00	0.00	0.00				
7,800.0	0.00	0.00	7,755.1	-190.0	650.0	-196.5	0.00	0.00	0.00				
7,900.0	0.00	0.00	7,855.1	-190.0	650.0	-196.5	0.00	0.00	0.00				
8,000.0	0.00	0.00	7,955.1	-190.0	650.0	-196.5	0.00	0.00	0.00				
8,100.0	0.00	0.00	8,055.1	-190.0	650.0	-196.5	0.00	0.00	0.00				
8,200.0	0.00	0.00	8,155.1	-190.0	650.0	-196.5	0.00	0.00	0.00				
8,300.0 8,400.0 8,500.0 8,600.0 8,700.0	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	8,255.1 8,355.1 8,455.1 8,555.1 8,655.1	-190.0 -190.0 -190.0 -190.0 -190.0	650.0 650.0 650.0 650.0	-196.5 -196.5 -196.5 -196.5 -196.5	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00				
8,800.0	0.00	0.00	8,755.1	-190.0	650.0	-196.5	0.00	0.00	0.00				
8,900.0	0.00	0.00	8,855.1	-190.0	650.0	-196.5	0.00	0.00	0.00				
9,000.0	0.00	0.00	8,955.1	-190.0	650.0	-196.5	0.00	0.00	0.00				
9,100.0	0.00	0.00	9,055.1	-190.0	650.0	-196.5	0.00	0.00	0.00				
9,200.0	0.00	0.00	9,155.1	-190.0	650.0	-196.5	0.00	0.00	0.00				
9,300.0 9,400.0 9,500.0 9,600.0 9,700.0	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	9,255.1 9,355.1 9,455.1 9,555.1 9,655.1	-190.0 -190.0 -190.0 -190.0 -190.0	650.0 650.0 650.0 650.0	-196.5 -196.5 -196.5 -196.5 -196.5	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00				
9,800.0	0.00	0.00	9,755.1	-190.0	650.0	-196.5	0.00	0.00	0.00				
9,900.0	0.00	0.00	9,855.1	-190.0	650.0	-196.5	0.00	0.00	0.00				
10,000.0	0.00	0.00	9,955.1	-190.0	650.0	-196.5	0.00	0.00	0.00				
10,100.0	0.00	0.00	10,055.1	-190.0	650.0	-196.5	0.00	0.00	0.00				



IntrepidPlanning Report



Database: ED Company: Ta Project: Le Site: (You

EDM 5000.15 Single User Db 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 #224H

Wellbore: OWB
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Survey Calculation Method:

Well Seinfeld Federal Unit Yada #224H

KB @ 3296.0usft

KB @ 3296.0usft Grid

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)
10,200.0	0.00	0.00	10,155.1	-190.0	650.0	-196.5	0.00	0.00	0.00
10,300.0	0.00	0.00	10,255.1	-190.0	650.0	-196.5	0.00	0.00	0.00
10,400.0	0.00	0.00	10,355.1	-190.0	650.0	-196.5	0.00	0.00	0.00
10,500.0	0.00	0.00	10,455.1	-190.0	650.0	-196.5	0.00	0.00	0.00
10,600.0	0.00	0.00	10,555.1	-190.0	650.0	-196.5	0.00	0.00	0.00
10,700.0	0.00	0.00	10,655.1	-190.0	650.0	-196.5	0.00	0.00	0.00
10,800.0	0.00	0.00	10,755.1	-190.0	650.0	-196.5	0.00	0.00	0.00
10,900.0	0.00	0.00	10,855.1	-190.0	650.0	-196.5	0.00	0.00	0.00
11,000.0	0.00	0.00	10,955.1	-190.0	650.0	-196.5	0.00	0.00	0.00
11,100.0	0.00	0.00	11,055.1	-190.0	650.0	-196.5	0.00	0.00	0.00
11,200.0	0.00	0.00	11,155.1	-190.0	650.0	-196.5	0.00	0.00	0.00
11,300.0	0.00	0.00	11,255.1	-190.0	650.0	-196.5	0.00	0.00	0.00
11,400.0	0.00	0.00	11,355.1	-190.0	650.0	-196.5	0.00	0.00	0.00
11,500.0	0.00	0.00	11,455.1	-190.0	650.0	-196.5	0.00	0.00	0.00
11,600.0	0.00	0.00	11,555.1	-190.0	650.0	-196.5	0.00	0.00	0.00
11,700.0	0.00	0.00	11,655.1	-190.0	650.0	-196.5	0.00	0.00	0.00
11,800.0	0.00	0.00	11,755.1	-190.0	650.0	-196.5	0.00	0.00	0.00
11,897.9	0.00	0.00	11,853.0	-190.0	650.0	-196.5	0.00	0.00	0.00
KOP - Build									
11,900.0	0.21	20.00	11,855.1	-190.0	650.0	-196.5	10.00	10.00	0.00
11,950.0	5.21	20.00	11,905.0	-187.8	650.8	-194.2	10.00	10.00	0.00
12,000.0	10.21	20.00	11,954.5	-181.5	653.1	-188.0	10.00	10.00	0.00
12,050.0	15.21	20.00	12,003.3	-171.2	656.9	-177.7	10.00	10.00	0.00
12,100.0	20.21	20.00	12,050.9	-156.9	662.1	-163.4	10.00	10.00	0.00
12,150.0	25.21	20.00	12,097.0	-138.7	668.7	-145.4	10.00	10.00	0.00
12,200.0	30.21	20.00	12,141.3	-116.9	676.6	-123.6	10.00	10.00	0.00
12,250.0	35.21	20.00	12,183.3	-91.5	685.8	-98.3	10.00	10.00	0.00
12,300.0	40.21	20.00	12,222.9	-62.8	696.3	-69.7	10.00	10.00	0.00
12,347.9	45.00	20.00	12,258.1	-32.3	707.4	-39.3	10.00	10.00	0.00
	DLS 10.00 TF	O -25.29	,						
12,350.0	45.19	19.88	12,259.6	-30.9	707.9	-38.0	10.00	9.04	-6.02
12,400.0	49.75	17.09	12,293.4	4.0	719.5	-3.2	10.00	9.12	-5.57
12,450.0	54.36	14.66	12,324.1	41.9	730.3	34.7	10.00	9.24	-4.87
12,500.0	59.02	12.49	12,351.6	82.5	740.1	75.2	10.00	9.32	-4.33
12,550.0	63.72	10.53	12,375.5	125.5	748.8	118.1	10.00	9.39	-3.93
12,600.0	68.44	8.72	12,395.8	170.6	756.4	163.0	10.00	9.44	-3.62
12,650.0	73.18	7.02	12,412.2	217.3	762.9	209.7	10.00	9.47	-3.39
12,700.0	77.93	5.41	12,424.7	265.5	768.1	257.8	10.00	9.50	-3.22
12,750.0	82.68	3.86	12,433.1	314.6	772.1	306.9	10.00	9.52	-3.11
12,800.0	87.45	2.33	12,437.4	364.3	774.8	356.6	10.00	9.53	-3.05
12,842.5	91.50	1.05	12,437.8	406.8	776.0	399.0	10.00	9.53	-3.02
	DLS 2.00 TFO	-89.96							
12,900.0	91.50	359.90	12,436.3	464.2	776.5	456.5	2.00	0.00	-2.00
12,923.6	91.50	359.43	12,435.7	487.8	776.4	480.1	2.00	0.00	-2.00
Start 1520.5	hold at 12923	3.6 MD							
13,000.0 13,100.0 13,200.0 13,300.0 13,400.0	91.50 91.50 91.50 91.50 91.50	359.43 359.43 359.43 359.43	12,433.7 12,431.1 12,428.5 12,425.8 12,423.2	564.2 664.2 764.1 864.1 964.0	775.6 774.6 773.6 772.6 771.6	556.5 656.4 756.4 856.4 956.3	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
13,500.0	91.50	359.43	12,420.6	1,064.0	770.6	1,056.3	0.00	0.00	0.00
13,600.0	91.50	359.43	12,418.0	1,164.0	769.6	1,156.2	0.00	0.00	0.00
13,700.0	91.50	359.43	12,415.4	1,263.9	768.6	1,256.2	0.00	0.00	0.00



IntrepidPlanning 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

(Yada Fed Com) Sec-35_T-24-S_R-35-E Seinfeld Federal Unit Yada #224H

Wellbore: OWB
Design: Plan #2

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:

Well Seinfeld Federal Unit Yada #224H KB @ 3296.0usft

KB @ 3296.0usft KB @ 3296.0usft

Grid Minimum Curvature

elibore. esign:	Plan #2								
anned Survey									
Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Vertical Section	Dogleg Rate	Build Rate	Turn Rate
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(°/100usft)	(°/100usft)	(°/100usft)
13,800.0 13,900.0		359.43 359.43	12,412.7 12,410.1	1,363.9 1,463.8	767.6 766.6	1,356.2 1,456.1	0.00 0.00	0.00 0.00	0.00 0.00
14,000.0		359.43	12,407.5	1,563.8	765.6	1,556.1	0.00	0.00	0.00
14,100.0		359.43	12,404.9	1,663.8	764.6	1,656.1	0.00	0.00	0.00
14,200.0		359.43	12,402.3	1,763.7	763.6	1,756.0	0.00	0.00	0.00
14,300.0		359.43	12,399.7	1,863.7	762.6	1,856.0	0.00	0.00	0.00
14,400.0	0 91.50	359.43	12,397.0	1,963.6	761.6	1,956.0	0.00	0.00	0.00
14,444.		359.43	12,395.9	2,007.7	761.2	2,000.0	0.00	0.00	0.00
	S 2.00 TFO -0.18	050.40	40.005.4	0.000.7	704.0	0.045.0	0.00	0.00	0.04
14,459.		359.43	12,395.4	2,022.7	761.0	2,015.0	2.00	2.00	-0.01
14,500.0	36.1 hold at 1445 9 0 91.80	359.43	12,394.2	2,063.6	760.6	2,055.9	0.00	0.00	0.00
14,600.0		359.43 359.43	12,394.2	2,063.6	759.6	2,055.9	0.00	0.00	0.00
14,700.0		359.43	12,387.9	2,263.5	758.6	2,255.8	0.00	0.00	0.00
14,800.0		359.43	12,384.7	2,363.4	757.6	2,355.8	0.00	0.00	0.00
14,900.0		359.43	12,381.6	2,463.4	756.6	2,455.7	0.00	0.00	0.00
15,000.0		359.43	12,378.4	2,563.3	755.6	2,555.7	0.00	0.00	0.00
15,100.0		359.43	12,375.3	2,663.3	754.6	2,655.6	0.00	0.00	0.00
15,200.	91.80	359.43	12,372.2	2,763.2	753.6	2,755.6	0.00	0.00	0.00
15,300.0	0 91.80	359.43	12,369.0	2,863.2	752.6	2,855.5	0.00	0.00	0.00
15,400.0		359.43	12,365.9	2,963.1	751.6	2,955.5	0.00	0.00	0.00
15,500.0	91.80	359.43	12,362.7	3,063.1	750.6	3,055.4	0.00	0.00	0.00
15,600.0		359.43	12,359.6	3,163.0	749.6	3,155.4	0.00	0.00	0.00
15,700.0	91.80	359.43	12,356.4	3,262.9	748.6	3,255.3	0.00	0.00	0.00
15,800.0		359.43	12,353.3	3,362.9	747.6	3,355.3	0.00	0.00	0.00
15,900.0		359.43	12,350.2	3,462.8	746.6	3,455.2	0.00	0.00	0.00
16,000.0		359.43	12,347.0	3,562.8	745.6	3,555.2	0.00	0.00	0.00
16,100.0		359.43	12,343.9	3,662.7	744.6	3,655.1	0.00	0.00	0.00
16,200.0		359.43	12,340.7	3,762.7	743.6	3,755.1	0.00	0.00	0.00
16,300.0		359.43	12,337.6	3,862.6	742.6	3,855.0	0.00	0.00	0.00
16,400.0		359.43	12,334.4	3,962.6	741.6	3,955.0	0.00	0.00	0.00
16,500.0 16,600.0		359.43 359.43	12,331.3 12,328.2	4,062.5 4,162.5	740.6 739.6	4,054.9 4,154.9	0.00 0.00	0.00 0.00	0.00 0.00
16,700.0		359.43 359.43	12,326.2	4,162.5 4,262.4	739.6	4,154.9	0.00	0.00	0.00
16,800.		359.43	12,321.9				0.00	0.00	0.00
16,800.0 16,900.0		359.43 359.43	12,321.9 12,318.7	4,362.3 4,462.3	737.6 736.6	4,354.8 4,454.7	0.00	0.00	0.00
16,945.		359.43	12,317.3	4,402.3	736.2	4,500.0	0.00	0.00	0.00
	S 2.00 TFO 180.0		,55	.,500		.,500.0	0.00	3.30	0.00
16,960.4		359.43	12,316.9	4,522.6	736.0	4,515.1	2.00	-2.00	0.00
Start 148	35.5 hold at 16960	0.4 MD							
17,000.0	91.50	359.43	12,315.8	4,562.2	735.6	4,554.7	0.00	0.00	0.00
17,100.0	0 91.50	359.43	12,313.2	4,662.2	734.6	4,654.7	0.00	0.00	0.00
17,200.0		359.43	12,310.6	4,762.2	733.6	4,754.6	0.00	0.00	0.00
17,300.0	0 91.50	359.43	12,308.0	4,862.1	732.6	4,854.6	0.00	0.00	0.00
17,400.0		359.43	12,305.4	4,962.1	731.6	4,954.6	0.00	0.00	0.00
17,500.0	0 91.50	359.43	12,302.8	5,062.1	730.6	5,054.5	0.00	0.00	0.00
17,600.0		359.43	12,300.2	5,162.0	729.6	5,154.5	0.00	0.00	0.00
17,700.0		359.43	12,297.5	5,262.0	728.6	5,254.5	0.00	0.00	0.00
17,800.0		359.43	12,294.9	5,361.9	727.6	5,354.4	0.00	0.00	0.00
17,900.0		359.43	12,292.3	5,461.9	726.6	5,454.4	0.00	0.00	0.00
18,000.0	0 91.50	359.43	12,289.7	5,561.9	725.6	5,554.4	0.00	0.00	0.00
18,100.0		359.43	12,287.1	5,661.8	724.6	5,654.3	0.00	0.00	0.00
18,200.0	0 91.50	359.43	12,284.5	5,761.8	723.6	5,754.3	0.00	0.00	0.00



Intrepid **Planning Report**



EDM 5000.15 Single User Db Database: Company: Project: Site:

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 #224H

Wellbore: OWB Design: Plan #2 **Local Co-ordinate Reference:**

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well Seinfeld Federal Unit Yada #224H

KB @ 3296.0usft KB @ 3296.0usft

Grid

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)
18,300.0 18,400.0 18,445.8 Start DLS 2	91.50 91.50 91.50 91.50	359.43 359.43 359.43	12,281.8 12,279.2 12,278.0	5,861.7 5,961.7 6,007.5	722.6 721.6 721.2	5,854.3 5,954.2 6,000.0	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00
18,470.9	91.00	359.43	12,277.5	6,032.5	720.9	6,025.1	2.00	-2.00	0.00
Start 2475.3	3 hold at 1847	0.9 MD							
18,500.0 18,600.0 18,700.0 18,800.0	91.00 91.00 91.00 91.00	359.43 359.43 359.43 359.43	12,277.0 12,275.2 12,273.5 12,271.8	6,061.7 6,161.6 6,261.6 6,361.6	720.6 719.6 718.6 717.6	6,054.2 6,154.2 6,254.2 6,354.2	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00
18,900.0 19,000.0 19,100.0 19,200.0 19,300.0	91.00 91.00 91.00 91.00 91.00	359.43 359.43 359.43 359.43 359.43	12,270.0 12,268.3 12,266.5 12,264.8 12,263.1	6,461.6 6,561.6 6,661.5 6,761.5 6,861.5	716.6 715.6 714.6 713.6 712.6	6,454.1 6,554.1 6,654.1 6,754.1 6,854.1	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
19,400.0 19,500.0 19,600.0 19,700.0 19,800.0	91.00 91.00 91.00 91.00 91.00	359.43 359.43 359.43 359.43 359.43	12,261.3 12,259.6 12,257.8 12,256.1 12,254.3	6,961.5 7,061.5 7,161.4 7,261.4 7,361.4	711.6 710.6 709.6 708.6 707.6	6,954.1 7,054.0 7,154.0 7,254.0 7,354.0	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
19,900.0 20,000.0 20,100.0 20,200.0 20,300.0	91.00 91.00 91.00 91.00 91.00	359.43 359.43 359.43 359.43 359.43	12,252.6 12,250.9 12,249.1 12,247.4 12,245.6	7,461.4 7,561.4 7,661.3 7,761.3 7,861.3	706.6 705.6 704.6 703.6 702.6	7,454.0 7,554.0 7,654.0 7,753.9 7,853.9	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
20,400.0 20,500.0 20,600.0 20,700.0 20,800.0	91.00 91.00 91.00 91.00 91.00	359.43 359.43 359.43 359.43 359.43	12,243.9 12,242.2 12,240.4 12,238.7 12,236.9	7,961.3 8,061.3 8,161.2 8,261.2 8,361.2	701.6 700.6 699.6 698.6 697.6	7,953.9 8,053.9 8,153.9 8,253.9 8,353.9	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
20,900.0 20,946.1	91.00 91.00	359.43 359.43	12,235.2 12,234.4	8,461.2 8,507.3	696.6 696.2	8,453.8 8,500.0	0.00 0.00	0.00 0.00	0.00 0.00
Start DLS 2	.00 TFO 180.0	0							
20,971.2	90.50	359.43	12,234.1	8,532.3	695.9	8,525.0	2.00	-2.00	0.00
Start 1790.8 21,000.0 21,100.0	90.50 90.50	359.43 359.43	12,233.8 12,233.0	8,561.2 8,661.2	695.6 694.6	8,553.8 8,653.8	0.00 0.00	0.00 0.00	0.00 0.00
21,200.0 21,300.0 21,400.0 21,500.0 21,600.0	90.50 90.50 90.50 90.50 90.50	359.43 359.43 359.43 359.43 359.43	12,232.1 12,231.2 12,230.4 12,229.5 12,228.6	8,761.2 8,861.1 8,961.1 9,061.1 9,161.1	693.6 692.6 691.6 690.6 689.6	8,753.8 8,853.8 8,953.8 9,053.8 9,153.8	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00 0.00
21,700.0 21,800.0 21,900.0 22,000.0 22,100.0	90.50 90.50 90.50 90.50 90.50	359.43 359.43 359.43 359.43 359.43	12,227.8 12,226.9 12,226.0 12,225.2 12,224.3	9,261.1 9,361.1 9,461.1 9,561.1 9,661.1	688.6 687.6 686.6 685.6 684.6	9,253.8 9,353.8 9,453.8 9,553.8 9,653.8	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
22,200.0 22,300.0 22,400.0 22,500.0 22,600.0 22,700.0	90.50 90.50 90.50 90.50 90.50	359.43 359.43 359.43 359.43 359.43	12,223.4 12,222.6 12,221.7 12,220.8 12,220.0 12,219.1	9,761.1 9,861.1 9,961.0 10,061.0 10,161.0 10,261.0	683.6 682.6 681.6 680.6 679.6	9,753.8 9,853.8 9,953.8 10,053.8 10,153.8 10,253.8	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00 0.00
22,700.0	90.50	309.43	12,219.1	10,201.0	0.010	10,253.8	0.00	0.00	0.00



IntrepidPlanning 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 #224H

Wellbore: OWB
Design: Plan #2

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well Seinfeld Federal Unit Yada #224H

KB @ 3296.0usft KB @ 3296.0usft

Grid

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)
22,762.0	90.50	359.43	12,218.5	10,323.0	678.0	10,315.7	0.00	0.00	0.00
TD at 2276	2.0								

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
PBHL (Yada Fed Com - plan hits target of - Rectangle (sides	enter		12,218.5 O)	10,323.0	678.0	436,394.00	851,102.00	32° 11' 44.733 N	103° 19' 54.996 W
8500'VS (Yada Fed C - plan hits target o - Rectangle (sides	enter		12,234.4	8,507.3	696.2	434,578.30	851,120.17	32° 11' 26.766 N	103° 19' 54.981 W
6000'VS (Yada Fed C - plan hits target o - Rectangle (sides	enter		12,278.0	6,007.5	721.2	432,078.50	851,145.18	32° 11' 2.029 N	103° 19' 54.961 W
LTP (Yada Fed Com a - plan misses targ - Point			12,306.9 2666.2usft	10,228.0 MD (12219.4	679.0 TVD, 10227	436,299.00 .2 N, 679.0 E)	851,103.00	32° 11′ 43.793 N	103° 19' 54.994 W
4500'VS (Yada Fed C - plan hits target o - Rectangle (sides	enter		12,317.3	4,507.5	736.2	430,578.50	851,160.19	32° 10′ 47.186 N	103° 19' 54.949 W
2000'VS (Yada Fed C - plan hits target o - Rectangle (sides	enter		12,395.9 O)	2,007.7	761.2	428,078.70	851,185.20	32° 10' 22.449 N	103° 19' 54.928 W
KOP (Yada Fed Com - plan misses targ - Point			12,487.0 12400.0usf	-184.0 t MD (12293.	783.0 4 TVD, 4.0 N	425,887.00 , 719.5 E)	851,207.00	32° 10′ 0.761 N	103° 19' 54.912 W
FTP (Yada Fed Com : - plan misses targ - Point			12,487.0 12422.7usf	-141.0 t MD (12307.	783.0 8 TVD, 20.9	425,930.00 N, 724.5 E)	851,207.00	32° 10′ 1.186 N	103° 19' 54.907 W



IntrepidPlanning 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 #224H

Wellbore: OWB
Design: Plan #2

Local Co-ordinate Reference: TVD Reference: MD Reference: North Reference: Survey Calculation Method: Well Seinfeld Federal Unit Yada #224H KB @ 3296.0usft KB @ 3296.0usft

Grid Minimum Curvature

nations						
	Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
	1,166.0	1,166.0	Rustler Anhydrite			
	1,387.0	1,387.0	Top Salt			
	4,852.7	4,825.0	Base Salt			
	5,254.6	5,223.0	Delaware Mountain Gp			
	5,264.7	5,233.0	Lamar			
	5,293.0	5,261.0	Bell Canyon			
	5,382.9	5,350.0	Ramsey Sand			
	6,092.9	6,053.0	Cherry Canyon			
	7,513.4	7,468.5	Brushy Canyon			
	8,821.4	8,776.5	Bone Spring Lime			
	8,893.4	8,848.5	Upper Avalon			
	9,106.4	9,061.5	Middle Avalon			
	9,755.9	9,711.0	Lower Avalon			
	10,034.4	9,989.5	1st Bone Spring Sand			
	10,369.4	10,324.5	2nd Bone Spring Carb			
	10,686.4	10,641.5	2nd Bone Spring Sand			
	11,158.4	11,113.5	3rd Bone Spring Carb			
	11,686.9	11,642.0	3rd Bone Spring Sand			
	11,936.0	11,891.0	3rd BS W Sand			
	11,986.8	11,941.5	Wolfcamp A X Sand			
	12,014.8	11,969.0	Wolfcamp A Y Sand			
	12,062.7	12,015.5	Wolfcamp A Lower			
	12,275.7	12,204.0	Wolfcamp A Lower Carb			
	12,448.1	12,323.0	Wolfcamp B			

Plan Annotations					
De	asured epth usft)	Vertical Depth (usft)	Local Coord +N/-S (usft)	dinates +E/-W (usft)	Comment
1 1 1 1 1 1 1 1 1 1 1 2	1,500.0 2,303.9 6,341.0 7,144.9 1,897.9 2,347.9 2,842.5 2,923.6 4,444.1 4,459.1 6,945.2 6,960.4 8,445.8 8,470.9 0,946.1 0,971.2	1,500.0 2,301.3 6,298.7 7,100.0 11,853.0 12,258.1 12,435.7 12,395.9 12,395.4 12,317.3 12,316.9 12,278.0 12,277.5 12,234.4	0.0 -15.8 -174.2 -190.0 -190.0 -32.3 406.8 487.8 2,007.7 2,022.7 4,507.5 4,522.6 6,007.5 6,032.5 8,507.3 8,532.3	0.0 54.0 596.0 650.0 650.0 707.4 776.0 776.4 761.2 761.0 736.2 736.0 721.2 720.9 696.2 695.9	NUDGE - Build 1.00 HOLD - 4037.1 at 2303.9 MD DROP1.00 HOLD - 4753.0 at 7144.9 MD KOP - Build 10.00 BLD/TRN - DLS 10.00 TFO -25.29 EOC/TRN -DLS 2.00 TFO -89.96 Start 1520.5 hold at 12923.6 MD Start DLS 2.00 TFO -0.18 Start 2486.1 hold at 14459.1 MD Start DLS 2.00 TFO 180.00 Start 1485.5 hold at 16960.4 MD Start DLS 2.00 TFO -180.00 Start 2475.3 hold at 18470.9 MD Start DLS 2.00 TFO 180.00 Start DLS 2.00 TFO 180.00 Start DLS 2.00 TFO 180.00 Start 1790.8 hold at 20971.2 MD
	2,762.0	12,234.1	10,323.0	678.0	TD at 22762.0

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME: Tap Rock Operating LLC
WELL NAME & NO.: Seinfeld Federal Unit Yada 224H
LOCATION: Sec 35-24S-35E-NMP

COUNTY: Lea County, New Mexico

Previously known as **Yada Fed Com 224H**. Changes approved through engineering via **Sundry 2725409** on 04/28/2023. Any previous COAs not addressed within the updated COAs still apply.

COA

H2S	O Yes	No	
Potash	None	© Secretary	© R-111-P
Cave/Karst Potential	• Low	O Medium	C High
Cave/Karst Potential	Critical Critical		
Variance	O None	• Flex Hose	Other
Wellhead	Conventional	Multibowl	O Both
Wellhead Variance	O Diverter		
Other	□ 4 String	☐ Capitan Reef	□WIPP
Other	☐ Fluid Filled	☐ Pilot Hole	☐ Open Annulus
Cementing	☐ Contingency	☐ EchoMeter	☐ Primary Cement
_	Cement Squeeze		Squeeze
Special Requirements	☐ Water Disposal	□ СОМ	✓ Unit
Special Requirements	☐ Batch Sundry		
Special Requirements	☐ Break Testing	□ Offline	☐ Casing
Variance		Cementing	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 **933** 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. **Set depth adjusted per BLM geologist.**

- 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.
- 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 **200 feet** into previous casing string. 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. casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be 10,000 (10M) psi. Variance is approved to use a 5000 (5M) Annular which shall be tested to 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 CountyCall 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 intergrity 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 intergrity 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.

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

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 213451

CONDITIONS

Operator:	OGRID:
TAP ROCK OPERATING, LLC	372043
523 Park Point Drive	Action Number:
Golden, CO 80401	213451
	Action Type:
	[C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By		Condition Date
pkautz	None	5/4/2023