

Submit a Copy To Appropriate District
Office
District I – (575) 393-6161
1625 N. French Dr., Hobbs, NM 88240
District II – (575) 748-1283
811 S. First St., Artesia, NM 88210
District III – (505) 334-6178
1000 Rio Brazos Rd., Aztec, NM 87410
District IV – (505) 476-3460
1220 S. St. Francis Dr., Santa Fe, NM
87505

State of New Mexico
Energy, Minerals and Natural Resources

Form C-103
Revised July 18, 2013

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

WELL API NO. 30-025-48280
5. Indicate Type of Lease STATE ☐ FEE ☒
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name Mandelbaum Fee
8. Well Number 142H
9. OGRID Number 372043
10. Pool name or Wildcat Red Hills; Bone Spring, North
4. Well Location Unit Letter <u>N</u> : 1055 feet from the <u>South</u> line and 2610 feet from the <u>West</u> line Section <u>11</u> Township <u>24S</u> Range <u>34E</u> NMPM County <u>LEA</u>
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3484

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐
TEMPORARILY ABANDON ☐ CHANGE PLANS ☒
PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐
DOWNHOLE COMMINGLE ☐
CLOSED-LOOP SYSTEM ☐
OTHER: Surface Hole ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ P AND A ☐
CASING/CEMENT JOB ☐
OTHER: ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Tap Rock Operating is requesting permission to move the surface hole on the Mandelbaum Fee 142H.

The previously approved SHL: 1055 FSL, 2610 FWL, Section 11, T24S, R34E, LEA County
New Requested SHL: 1029 FSL, 2542 FEL, Section 11, T24S, R34E, LEA County

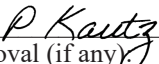
Tap Rock does not plan on changing Bottom Hole Location. Please see the attached Drill Plan and plat for more details on this sundry.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE  TITLE Regulatory Analyst DATE 5/27/2021

Type or print name Bill Ramsey E-mail address: bramsey@taprk.com PHONE: 720-238-2787

For State Use Only

APPROVED BY:  TITLE _____ DATE 06/02/2021
Conditions of Approval (if any) _____

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
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811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
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Phone: (505) 334-6178 Fax: (505) 334-6170
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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 30-025-48280	² Pool Code 96434	³ Pool Name RED HILLS:BONE SPRING. NORTH
⁴ Property Code 329919	⁵ Property Name MANDELBAUM FEE	⁶ Well Number 142H
⁷ OGRID No. #372043	⁸ Operator Name TAP ROCK OPERATING, LLC.	⁹ Elevation 3484'

¹⁰Surface Location

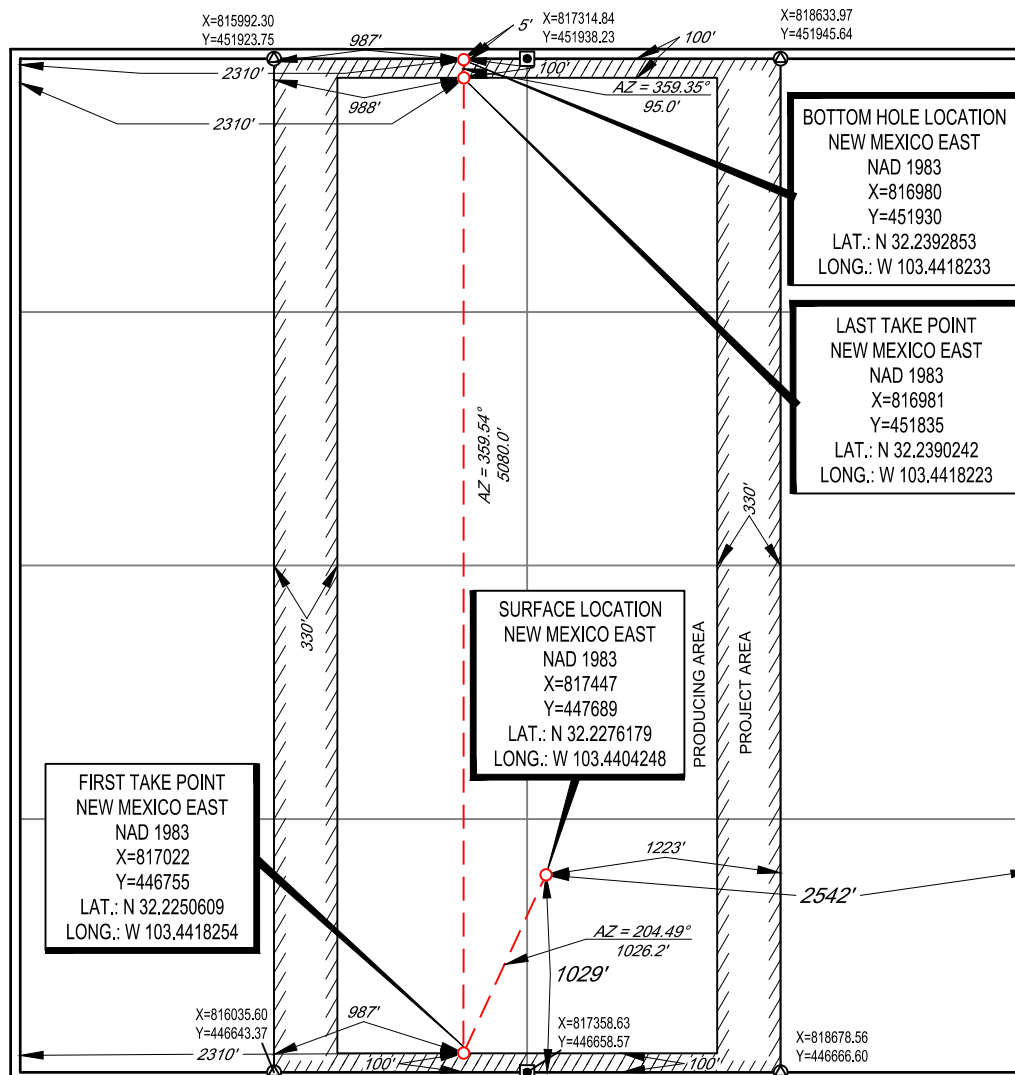
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N O	11	24-S	34-E	-	1029'	SOUTH	2542'	EAST	LEA

¹¹Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	11	24-S	34-E	-	5'	NORTH	2310'	WEST	LEA

¹² Dedicated Acres 320	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
--------------------------------------	-------------------------------	----------------------------------	-------------------------

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.

¹⁷OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Bill Ramsey 5/27/2021
Signature Date

Bill Ramsey
Printed Name

bramsey@taprk.com
E-mail Address

¹⁸SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true to the best of my belief.

11/16/2020

Date of Survey
Signature and Seal of Professional Surveyor

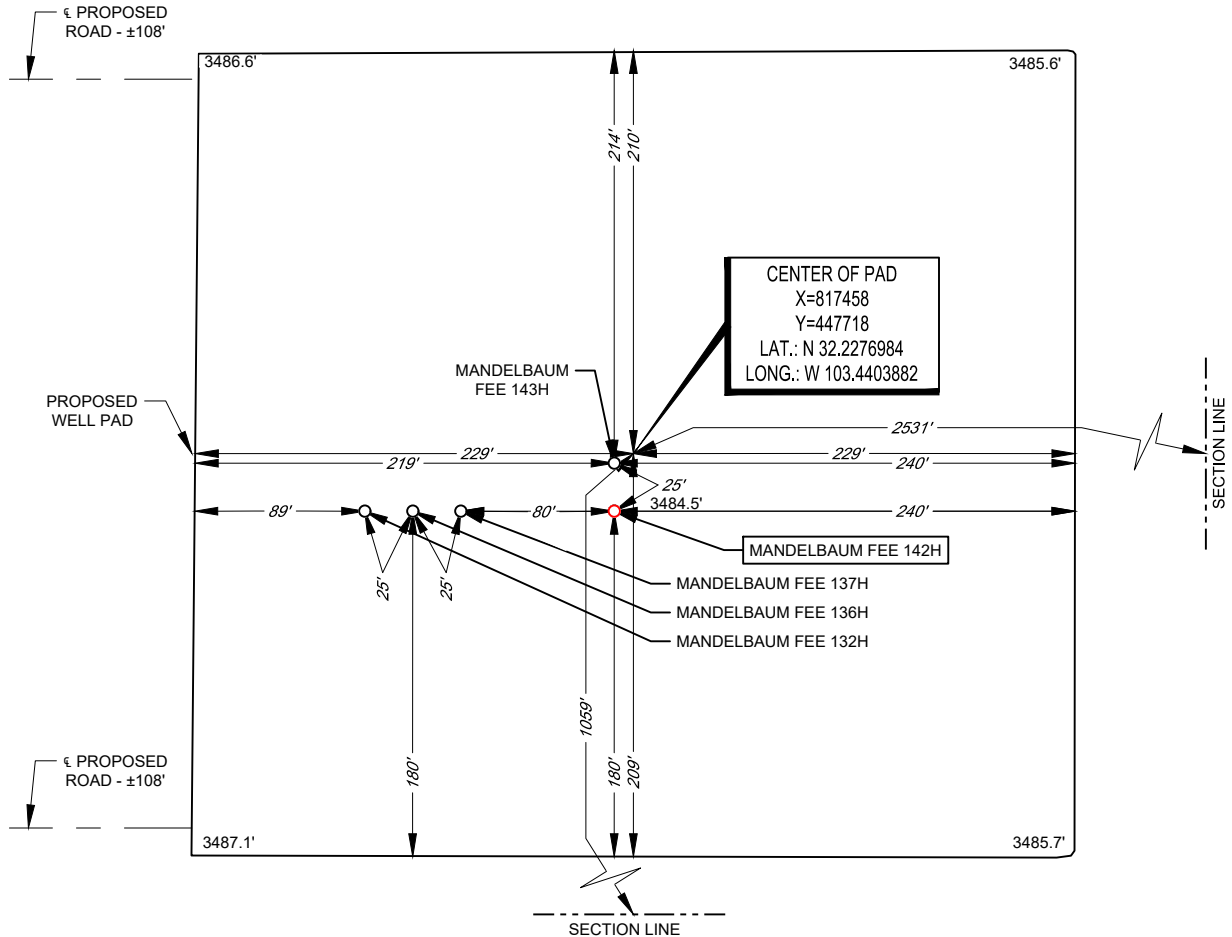
ANGEL M. DIAZ
NEW MEXICO
PROFESSIONAL SURVEYOR
Certificate Number



SECTION 11, TOWNSHIP 24-S, RANGE 34-E, N.M.P.M.
LEA COUNTY, NEW MEXICO

LEGEND

----- SECTION LINE
----- PROPOSED ROAD

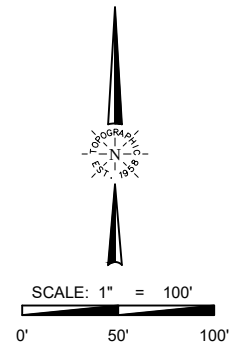


LEASE NAME & WELL NO.: _____ MANDELBAUM FEE 142H
142H LATITUDE _____ N 32.2276179 _____ 142H LONGITUDE _____ W 103.4404248

CENTER OF PAD IS 1059' FSL & 2531' FEL



Angel M. Baeza, P.S. No. 25116



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"



TOPOGRAPHIC
LOYALTY INNOVATION LEGACY

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



Tap Rock Resources, LLC

**Lea County, NM (NAD 83 NME)
(Mandelbaum Fee) Sec-11_T-24-S_R-34-E
Mandelbaum Fee #142H**

OWB

Plan: Plan #2

Standard Planning Report

27 May, 2021





Intrepid Planning Report



Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well Mandelbaum Fee #142H
Company:	Tap Rock Resources, LLC	TVD Reference:	KB @ 3510.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB @ 3510.0usft
Site:	(Mandelbaum Fee) Sec-11_T-24-S_R-34-E	North Reference:	Grid
Well:	Mandelbaum Fee #142H	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		(Mandelbaum Fee) Sec-11_T-24-S_R-34-E			
Site Position:		Northing:	447,689.00 usft	Latitude:	32° 13' 39.436 N
From:	Map	Easting:	817,367.00 usft	Longitude:	103° 26' 26.465 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.48 °

Well	Mandelbaum Fee #142H					
Well Position	+N/-S	0.0 usft	Northing:	447,689.00 usft	Latitude:	32° 13' 39.429 N
	+E/-W	80.0 usft	Easting:	817,447.00 usft	Longitude:	103° 26' 25.534 W
Position Uncertainty	0.0 usft		Wellhead Elevation:		Ground Level:	3,484.0 usft

Wellbore	OWB				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	12/03/20	6.51	60.04	47,597.12813338

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	359.54	

Plan Survey Tool Program	Date	05/27/21			
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.0	15,498.6	Plan #2 (OWB)	MWD	
			OWSG MWD - Standard		



Intrepid Planning Report



Database: EDM 5000.15 Single User Db
Company: Tap Rock Resources, LLC
Project: Lea County, NM (NAD 83 NME)
Site: (Mandelbaum Fee) Sec-11_T-24-S_R-34-E
Well: Mandelbaum Fee #142H
Wellbore: OWB
Design: Plan #2

Local Co-ordinate Reference: Well Mandelbaum Fee #142H
TVD Reference: KB @ 3510.0usft
MD Reference: KB @ 3510.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature

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	
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,800.0	6.00	203.00	1,798.9	-28.9	-12.3	1.00	1.00	0.00	203.00	
5,300.0	6.00	203.00	5,279.7	-365.7	-155.2	0.00	0.00	0.00	0.00	
5,950.4	12.50	203.60	5,921.3	-461.6	-196.7	1.00	1.00	0.09	1.15	
7,956.2	12.50	203.60	7,879.6	-859.5	-370.6	0.00	0.00	0.00	0.00	
9,206.5	0.00	0.00	9,120.0	-984.0	-425.0	1.00	-1.00	0.00	180.00	
9,934.5	0.00	0.00	9,848.0	-984.0	-425.0	0.00	0.00	0.00	0.00	
10,875.6	94.10	359.54	10,419.5	-370.1	-429.9	10.00	10.00	-0.05	359.54	
15,498.6	94.10	359.54	10,088.7	4,241.0	-467.0	0.00	0.00	0.00	0.00	PBHL (Mandelbaum)



Intrepid Planning Report



Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well Mandelbaum Fee #142H
Company:	Tap Rock Resources, LLC	TVD Reference:	KB @ 3510.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB @ 3510.0usft
Site:	(Mandelbaum Fee) Sec-11_T-24-S_R-34-E	North Reference:	Grid
Well:	Mandelbaum Fee #142H	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
1,080.0	0.00	0.00	1,080.0	0.0	0.0	0.0	0.00	0.00	0.00
Rustler Anhydrite									
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
1,275.0	0.75	203.00	1,275.0	-0.5	-0.2	-0.5	1.00	1.00	0.00
Top Salt									
1,300.0	1.00	203.00	1,300.0	-0.8	-0.3	-0.8	1.00	1.00	0.00
1,400.0	2.00	203.00	1,400.0	-3.2	-1.4	-3.2	1.00	1.00	0.00
1,500.0	3.00	203.00	1,499.9	-7.2	-3.1	-7.2	1.00	1.00	0.00
1,600.0	4.00	203.00	1,599.7	-12.8	-5.5	-12.8	1.00	1.00	0.00
1,700.0	5.00	203.00	1,699.4	-20.1	-8.5	-20.0	1.00	1.00	0.00
1,800.0	6.00	203.00	1,798.9	-28.9	-12.3	-28.8	1.00	1.00	0.00
1,900.0	6.00	203.00	1,898.4	-38.5	-16.3	-38.4	0.00	0.00	0.00
2,000.0	6.00	203.00	1,997.8	-48.1	-20.4	-48.0	0.00	0.00	0.00
2,100.0	6.00	203.00	2,097.3	-57.8	-24.5	-57.6	0.00	0.00	0.00
2,200.0	6.00	203.00	2,196.7	-67.4	-28.6	-67.1	0.00	0.00	0.00
2,300.0	6.00	203.00	2,296.2	-77.0	-32.7	-76.7	0.00	0.00	0.00
2,400.0	6.00	203.00	2,395.6	-86.6	-36.8	-86.3	0.00	0.00	0.00
2,500.0	6.00	203.00	2,495.1	-96.2	-40.9	-95.9	0.00	0.00	0.00
2,600.0	6.00	203.00	2,594.5	-105.9	-44.9	-105.5	0.00	0.00	0.00
2,700.0	6.00	203.00	2,694.0	-115.5	-49.0	-115.1	0.00	0.00	0.00
2,800.0	6.00	203.00	2,793.4	-125.1	-53.1	-124.7	0.00	0.00	0.00
2,900.0	6.00	203.00	2,892.9	-134.7	-57.2	-134.3	0.00	0.00	0.00
3,000.0	6.00	203.00	2,992.3	-144.4	-61.3	-143.9	0.00	0.00	0.00
3,100.0	6.00	203.00	3,091.8	-154.0	-65.4	-153.4	0.00	0.00	0.00
3,200.0	6.00	203.00	3,191.2	-163.6	-69.4	-163.0	0.00	0.00	0.00
3,300.0	6.00	203.00	3,290.7	-173.2	-73.5	-172.6	0.00	0.00	0.00
3,400.0	6.00	203.00	3,390.1	-182.8	-77.6	-182.2	0.00	0.00	0.00
3,500.0	6.00	203.00	3,489.6	-192.5	-81.7	-191.8	0.00	0.00	0.00
3,600.0	6.00	203.00	3,589.0	-202.1	-85.8	-201.4	0.00	0.00	0.00
3,700.0	6.00	203.00	3,688.5	-211.7	-89.9	-211.0	0.00	0.00	0.00
3,800.0	6.00	203.00	3,787.9	-221.3	-93.9	-220.6	0.00	0.00	0.00
3,900.0	6.00	203.00	3,887.4	-231.0	-98.0	-230.2	0.00	0.00	0.00
4,000.0	6.00	203.00	3,986.9	-240.6	-102.1	-239.7	0.00	0.00	0.00
4,100.0	6.00	203.00	4,086.3	-250.2	-106.2	-249.3	0.00	0.00	0.00
4,200.0	6.00	203.00	4,185.8	-259.8	-110.3	-258.9	0.00	0.00	0.00
4,300.0	6.00	203.00	4,285.2	-269.4	-114.4	-268.5	0.00	0.00	0.00
4,400.0	6.00	203.00	4,384.7	-279.1	-118.5	-278.1	0.00	0.00	0.00
4,500.0	6.00	203.00	4,484.1	-288.7	-122.5	-287.7	0.00	0.00	0.00
4,600.0	6.00	203.00	4,583.6	-298.3	-126.6	-297.3	0.00	0.00	0.00
4,700.0	6.00	203.00	4,683.0	-307.9	-130.7	-306.9	0.00	0.00	0.00
4,800.0	6.00	203.00	4,782.5	-317.5	-134.8	-316.5	0.00	0.00	0.00
4,900.0	6.00	203.00	4,881.9	-327.2	-138.9	-326.0	0.00	0.00	0.00



Intrepid Planning Report



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Local Co-ordinate Reference: Well Mandelbaum Fee #142H
TVD Reference: KB @ 3510.0usft
MD Reference: KB @ 3510.0usft
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)
5,000.0	6.00	203.00	4,981.4	-336.8	-143.0	-335.6	0.00	0.00	0.00
5,100.0	6.00	203.00	5,080.8	-346.4	-147.0	-345.2	0.00	0.00	0.00
5,124.3	6.00	203.00	5,105.0	-348.8	-148.0	-347.6	0.00	0.00	0.00
Base Salt									
5,200.0	6.00	203.00	5,180.3	-356.0	-151.1	-354.8	0.00	0.00	0.00
5,300.0	6.00	203.00	5,279.7	-365.7	-155.2	-364.4	0.00	0.00	0.00
5,400.0	7.00	203.16	5,379.1	-376.1	-159.7	-374.8	1.00	1.00	0.16
5,486.6	7.87	203.27	5,465.0	-386.4	-164.1	-385.0	1.00	1.00	0.13
Delaware Mountain Gp									
5,491.7	7.92	203.28	5,470.0	-387.0	-164.3	-385.7	1.00	1.00	0.11
Lamar									
5,500.0	8.00	203.29	5,478.2	-388.1	-164.8	-386.7	1.00	1.00	0.11
5,511.9	8.12	203.30	5,490.0	-389.6	-165.5	-388.3	1.00	1.00	0.11
Ramsey Sand									
5,542.2	8.42	203.33	5,520.0	-393.6	-167.2	-392.2	1.00	1.00	0.10
Bell Canyon									
5,600.0	9.00	203.39	5,577.1	-401.6	-170.7	-400.3	1.00	1.00	0.09
5,700.0	10.00	203.46	5,675.8	-416.8	-177.2	-415.3	1.00	1.00	0.08
5,800.0	11.00	203.53	5,774.1	-433.5	-184.5	-432.0	1.00	1.00	0.06
5,900.0	12.00	203.58	5,872.1	-451.8	-192.4	-450.2	1.00	1.00	0.05
5,950.4	12.50	203.60	5,921.3	-461.6	-196.7	-460.0	1.00	1.00	0.05
6,000.0	12.50	203.60	5,969.7	-471.4	-201.0	-469.8	0.00	0.00	0.00
6,100.0	12.50	203.60	6,067.4	-491.2	-209.7	-489.5	0.00	0.00	0.00
6,200.0	12.50	203.60	6,165.0	-511.1	-218.4	-509.3	0.00	0.00	0.00
6,300.0	12.50	203.60	6,262.6	-530.9	-227.0	-529.1	0.00	0.00	0.00
6,400.0	12.50	203.60	6,360.3	-550.8	-235.7	-548.8	0.00	0.00	0.00
6,415.1	12.50	203.60	6,375.0	-553.8	-237.0	-551.8	0.00	0.00	0.00
Cherry Canyon									
6,500.0	12.50	203.60	6,457.9	-570.6	-244.4	-568.6	0.00	0.00	0.00
6,600.0	12.50	203.60	6,555.5	-590.4	-253.0	-588.4	0.00	0.00	0.00
6,700.0	12.50	203.60	6,653.1	-610.3	-261.7	-608.2	0.00	0.00	0.00
6,800.0	12.50	203.60	6,750.8	-630.1	-270.4	-627.9	0.00	0.00	0.00
6,900.0	12.50	203.60	6,848.4	-649.9	-279.0	-647.7	0.00	0.00	0.00
7,000.0	12.50	203.60	6,946.0	-669.8	-287.7	-667.5	0.00	0.00	0.00
7,100.0	12.50	203.60	7,043.7	-689.6	-296.4	-687.2	0.00	0.00	0.00
7,200.0	12.50	203.60	7,141.3	-709.5	-305.0	-707.0	0.00	0.00	0.00
7,300.0	12.50	203.60	7,238.9	-729.3	-313.7	-726.8	0.00	0.00	0.00
7,400.0	12.50	203.60	7,336.5	-749.1	-322.4	-746.5	0.00	0.00	0.00
7,500.0	12.50	203.60	7,434.2	-769.0	-331.0	-766.3	0.00	0.00	0.00
7,600.0	12.50	203.60	7,531.8	-788.8	-339.7	-786.1	0.00	0.00	0.00
7,700.0	12.50	203.60	7,629.4	-808.7	-348.4	-805.8	0.00	0.00	0.00
7,800.0	12.50	203.60	7,727.1	-828.5	-357.1	-825.6	0.00	0.00	0.00
7,885.0	12.50	203.60	7,810.0	-845.3	-364.4	-842.4	0.00	0.00	0.00
Brushy Canyon									
7,900.0	12.50	203.60	7,824.7	-848.3	-365.7	-845.4	0.00	0.00	0.00
7,956.2	12.50	203.60	7,879.6	-859.5	-370.6	-856.5	0.00	0.00	0.00
8,000.0	12.07	203.60	7,922.4	-868.0	-374.3	-865.0	1.00	-1.00	0.00
8,100.0	11.07	203.60	8,020.3	-886.4	-382.4	-883.3	1.00	-1.00	0.00
8,200.0	10.07	203.60	8,118.6	-903.2	-389.7	-900.0	1.00	-1.00	0.00
8,300.0	9.07	203.60	8,217.2	-918.4	-396.3	-915.2	1.00	-1.00	0.00
8,400.0	8.07	203.60	8,316.1	-932.1	-402.3	-928.8	1.00	-1.00	0.00
8,500.0	7.07	203.60	8,415.2	-944.1	-407.6	-940.8	1.00	-1.00	0.00
8,600.0	6.07	203.60	8,514.6	-954.6	-412.2	-951.3	1.00	-1.00	0.00



Intrepid Planning Report



Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well Mandelbaum Fee #142H
Company:	Tap Rock Resources, LLC	TVD Reference:	KB @ 3510.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB @ 3510.0usft
Site:	(Mandelbaum Fee) Sec-11_T-24-S_R-34-E	North Reference:	Grid
Well:	Mandelbaum Fee #142H	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)
8,700.0	5.07	203.60	8,614.1	-963.5	-416.0	-960.1	1.00	-1.00	0.00
8,800.0	4.07	203.60	8,713.8	-970.8	-419.2	-967.4	1.00	-1.00	0.00
8,900.0	3.07	203.60	8,813.6	-976.5	-421.7	-973.1	1.00	-1.00	0.00
9,000.0	2.07	203.60	8,913.5	-980.6	-423.5	-977.2	1.00	-1.00	0.00
9,100.0	1.07	203.60	9,013.5	-983.1	-424.6	-979.7	1.00	-1.00	0.00
9,206.5	0.00	0.00	9,120.0	-984.0	-425.0	-980.6	1.00	-1.00	0.00
9,281.5	0.00	0.00	9,195.0	-984.0	-425.0	-980.6	0.00	0.00	0.00
Bone Spring Lime									
9,300.0	0.00	0.00	9,213.5	-984.0	-425.0	-980.6	0.00	0.00	0.00
9,306.5	0.00	0.00	9,220.0	-984.0	-425.0	-980.6	0.00	0.00	0.00
Upper Avalon									
9,400.0	0.00	0.00	9,313.5	-984.0	-425.0	-980.6	0.00	0.00	0.00
9,500.0	0.00	0.00	9,413.5	-984.0	-425.0	-980.6	0.00	0.00	0.00
9,556.5	0.00	0.00	9,470.0	-984.0	-425.0	-980.6	0.00	0.00	0.00
Middle Avalon									
9,600.0	0.00	0.00	9,513.5	-984.0	-425.0	-980.6	0.00	0.00	0.00
9,700.0	0.00	0.00	9,613.5	-984.0	-425.0	-980.6	0.00	0.00	0.00
9,800.0	0.00	0.00	9,713.5	-984.0	-425.0	-980.6	0.00	0.00	0.00
9,900.0	0.00	0.00	9,813.5	-984.0	-425.0	-980.6	0.00	0.00	0.00
9,934.5	0.00	0.00	9,848.0	-984.0	-425.0	-980.6	0.00	0.00	0.00
9,950.0	1.55	359.54	9,863.5	-983.8	-425.0	-980.3	10.00	10.00	0.00
9,966.6	3.20	359.54	9,880.0	-983.1	-425.0	-979.7	10.00	10.00	0.00
Lower Avalon									
10,000.0	6.55	359.54	9,913.3	-980.3	-425.0	-976.8	10.00	10.00	0.00
10,050.0	11.55	359.54	9,962.7	-972.4	-425.1	-969.0	10.00	10.00	0.00
10,100.0	16.55	359.54	10,011.2	-960.3	-425.2	-956.8	10.00	10.00	0.00
10,150.0	21.55	359.54	10,058.4	-944.0	-425.3	-940.5	10.00	10.00	0.00
10,200.0	26.55	359.54	10,104.1	-923.6	-425.5	-920.2	10.00	10.00	0.00
10,250.0	31.55	359.54	10,147.8	-899.3	-425.7	-895.9	10.00	10.00	0.00
10,300.0	36.55	359.54	10,189.2	-871.4	-425.9	-867.9	10.00	10.00	0.00
10,339.4	40.49	359.54	10,220.0	-846.8	-426.1	-843.4	10.00	10.00	0.00
1st Bone Spring Sand									
10,350.0	41.55	359.54	10,228.0	-839.9	-426.2	-836.4	10.00	10.00	0.00
10,400.0	46.55	359.54	10,263.9	-805.1	-426.4	-801.7	10.00	10.00	0.00
10,450.0	51.55	359.54	10,296.7	-767.4	-426.7	-763.9	10.00	10.00	0.00
10,500.0	56.55	359.54	10,326.0	-726.9	-427.1	-723.5	10.00	10.00	0.00
10,550.0	61.55	359.54	10,351.7	-684.0	-427.4	-680.6	10.00	10.00	0.00
10,600.0	66.55	359.54	10,373.6	-639.1	-427.8	-635.6	10.00	10.00	0.00
10,650.0	71.55	359.54	10,391.5	-592.4	-428.1	-589.0	10.00	10.00	0.00
10,700.0	76.55	359.54	10,405.2	-544.4	-428.5	-540.9	10.00	10.00	0.00
10,750.0	81.55	359.54	10,414.7	-495.3	-428.9	-491.8	10.00	10.00	0.00
10,800.0	86.55	359.54	10,419.9	-445.6	-429.3	-442.1	10.00	10.00	0.00
10,850.0	91.55	359.54	10,420.7	-395.6	-429.7	-392.1	10.00	10.00	0.00
10,875.6	94.10	359.54	10,419.5	-370.1	-429.9	-366.6	10.00	10.00	0.00
10,900.0	94.10	359.54	10,417.7	-345.7	-430.1	-342.2	0.00	0.00	0.00
11,000.0	94.10	359.54	10,410.6	-246.0	-430.9	-242.5	0.00	0.00	0.00
11,100.0	94.10	359.54	10,403.4	-146.2	-431.7	-142.8	0.00	0.00	0.00
11,200.0	94.10	359.54	10,396.3	-46.5	-432.5	-43.0	0.00	0.00	0.00
11,300.0	94.10	359.54	10,389.1	53.3	-433.3	56.7	0.00	0.00	0.00
11,400.0	94.10	359.54	10,382.0	153.0	-434.1	156.5	0.00	0.00	0.00
11,500.0	94.10	359.54	10,374.8	252.7	-434.9	256.2	0.00	0.00	0.00
11,600.0	94.10	359.54	10,367.7	352.5	-435.7	356.0	0.00	0.00	0.00
11,700.0	94.10	359.54	10,360.5	452.2	-436.5	455.7	0.00	0.00	0.00



Intrepid Planning Report



Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well Mandelbaum Fee #142H
Company:	Tap Rock Resources, LLC	TVD Reference:	KB @ 3510.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB @ 3510.0usft
Site:	(Mandelbaum Fee) Sec-11_T-24-S_R-34-E	North Reference:	Grid
Well:	Mandelbaum Fee #142H	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)
11,800.0	94.10	359.54	10,353.4	552.0	-437.3	555.5	0.00	0.00	0.00
11,900.0	94.10	359.54	10,346.2	651.7	-438.1	655.2	0.00	0.00	0.00
12,000.0	94.10	359.54	10,339.0	751.4	-438.9	754.9	0.00	0.00	0.00
12,100.0	94.10	359.54	10,331.9	851.2	-439.8	854.7	0.00	0.00	0.00
12,200.0	94.10	359.54	10,324.7	950.9	-440.6	954.4	0.00	0.00	0.00
12,300.0	94.10	359.54	10,317.6	1,050.7	-441.4	1,054.2	0.00	0.00	0.00
12,400.0	94.10	359.54	10,310.4	1,150.4	-442.2	1,153.9	0.00	0.00	0.00
12,500.0	94.10	359.54	10,303.3	1,250.1	-443.0	1,253.7	0.00	0.00	0.00
12,600.0	94.10	359.54	10,296.1	1,349.9	-443.8	1,353.4	0.00	0.00	0.00
12,700.0	94.10	359.54	10,289.0	1,449.6	-444.6	1,453.1	0.00	0.00	0.00
12,800.0	94.10	359.54	10,281.8	1,549.4	-445.4	1,552.9	0.00	0.00	0.00
12,900.0	94.10	359.54	10,274.7	1,649.1	-446.2	1,652.6	0.00	0.00	0.00
13,000.0	94.10	359.54	10,267.5	1,748.8	-447.0	1,752.4	0.00	0.00	0.00
13,100.0	94.10	359.54	10,260.3	1,848.6	-447.8	1,852.1	0.00	0.00	0.00
13,200.0	94.10	359.54	10,253.2	1,948.3	-448.6	1,951.9	0.00	0.00	0.00
13,300.0	94.10	359.54	10,246.0	2,048.1	-449.4	2,051.6	0.00	0.00	0.00
13,400.0	94.10	359.54	10,238.9	2,147.8	-450.2	2,151.4	0.00	0.00	0.00
13,500.0	94.10	359.54	10,231.7	2,247.5	-451.0	2,251.1	0.00	0.00	0.00
13,600.0	94.10	359.54	10,224.6	2,347.3	-451.8	2,350.8	0.00	0.00	0.00
13,700.0	94.10	359.54	10,217.4	2,447.0	-452.6	2,450.6	0.00	0.00	0.00
13,800.0	94.10	359.54	10,210.3	2,546.8	-453.4	2,550.3	0.00	0.00	0.00
13,900.0	94.10	359.54	10,203.1	2,646.5	-454.2	2,650.1	0.00	0.00	0.00
14,000.0	94.10	359.54	10,196.0	2,746.3	-455.0	2,749.8	0.00	0.00	0.00
14,100.0	94.10	359.54	10,188.8	2,846.0	-455.8	2,849.6	0.00	0.00	0.00
14,200.0	94.10	359.54	10,181.7	2,945.7	-456.6	2,949.3	0.00	0.00	0.00
14,300.0	94.10	359.54	10,174.5	3,045.5	-457.4	3,049.0	0.00	0.00	0.00
14,400.0	94.10	359.54	10,167.3	3,145.2	-458.2	3,148.8	0.00	0.00	0.00
14,500.0	94.10	359.54	10,160.2	3,245.0	-459.0	3,248.5	0.00	0.00	0.00
14,600.0	94.10	359.54	10,153.0	3,344.7	-459.8	3,348.3	0.00	0.00	0.00
14,700.0	94.10	359.54	10,145.9	3,444.4	-460.6	3,448.0	0.00	0.00	0.00
14,800.0	94.10	359.54	10,138.7	3,544.2	-461.4	3,547.8	0.00	0.00	0.00
14,900.0	94.10	359.54	10,131.6	3,643.9	-462.2	3,647.5	0.00	0.00	0.00
15,000.0	94.10	359.54	10,124.4	3,743.7	-463.0	3,747.3	0.00	0.00	0.00
15,100.0	94.10	359.54	10,117.3	3,843.4	-463.8	3,847.0	0.00	0.00	0.00
15,200.0	94.10	359.54	10,110.1	3,943.1	-464.6	3,946.7	0.00	0.00	0.00
15,300.0	94.10	359.54	10,103.0	4,042.9	-465.4	4,046.5	0.00	0.00	0.00
15,400.0	94.10	359.54	10,095.8	4,142.6	-466.2	4,146.2	0.00	0.00	0.00
15,498.6	94.10	359.54	10,088.7	4,241.0	-467.0	4,244.6	0.00	0.00	0.00



Intrepid Planning Report



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Company:	Tap Rock Resources, LLC	TVD Reference:	KB @ 3510.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB @ 3510.0usft
Site:	(Mandelbaum Fee) Sec-11_T-24-S_R-34-E	North Reference:	Grid
Well:	Mandelbaum Fee #142H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	Plan #2		

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
LTP (Mandelbaum Fe - plan misses target center by 7.8usft at 15400.0usft MD (10095.8 TVD, 4142.6 N, -466.2 E) - Point	0.00	0.00	10,088.7	4,146.0	-466.0	451,835.00	816,981.00	32° 14' 20.491 N	103° 26' 30.558 W
PBHL (Mandelbaum F - plan hits target center - Rectangle (sides W100.0 H5,175.0 D30.0)	-4.10	359.54	10,088.7	4,241.0	-467.0	451,930.00	816,980.00	32° 14' 21.431 N	103° 26' 30.560 W
FTP (Mandelbaum Fe - plan misses target center by 182.4usft at 10400.0usft MD (10263.9 TVD, -805.1 N, -426.4 E) - Point	0.00	0.00	10,393.0	-934.0	-425.0	446,755.00	817,022.00	32° 13' 30.222 N	103° 26' 30.571 W

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,080.0	1,080.0	Rustler Anhydrite			
1,275.0	1,275.0	Top Salt			
5,124.3	5,105.0	Base Salt			
5,486.6	5,465.0	Delaware Mountain Gp			
5,491.7	5,470.0	Lamar			
5,511.9	5,490.0	Ramsey Sand			
5,542.2	5,520.0	Bell Canyon			
6,415.1	6,375.0	Cherry Canyon			
7,885.0	7,810.0	Brushy Canyon			
9,281.5	9,195.0	Bone Spring Lime			
9,306.5	9,220.0	Upper Avalon			
9,556.5	9,470.0	Middle Avalon			
9,966.6	9,880.0	Lower Avalon			
10,339.4	10,220.0	1st Bone Spring Sand			

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
1,200.0	1,200.0	0.0	0.0	NUDGE - Build 1.00
1,800.0	1,798.9	-28.9	-12.3	HOLD - 3500.0 at 1800.0 MD
5,300.0	5,279.7	-365.7	-155.2	BLD - DLS 1.00 TFO 1.15
5,950.4	5,921.3	-461.6	-196.7	HOLD - 2005.9 at 5950.4 MD
7,956.2	7,879.6	-859.5	-370.6	DROP - -1.00
9,206.5	9,120.0	-984.0	-425.0	HOLD - 728.0 at 9206.5 MD
9,934.5	9,848.0	-984.0	-425.0	KOP - DLS 10.00 TFO 359.54
10,875.6	10,419.5	-370.1	-429.9	EOC - 4623.1 hold at 10875.6 MD
15,498.6	10,088.7	4,241.0	-467.0	TD at 15498.6

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 29845

CONDITIONS

Operator: TAP ROCK OPERATING, LLC 523 Park Point Drive Golden, CO 80401	OGRID: 372043
	Action Number: 29845
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
pkautz	None	6/2/2021