<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 District III
1000 Rio Brazos Rd., Aztec, NM 87410

Phone:(505) 334-6178 Fax:(505) 334-6170 District IV

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

Form C-101 August 1, 2011

Permit 309506

	cis Dr., Santa Fe, NN 6-3470 Fax:(505) 476				Jania	re, ivivi o	7 30	3					
		APPLICATIO	N FOR PER	RMIT TO	DRILL, RE	-ENTER, DEE	PEN, I	PLUGBACI	K, OR A	DD A ZO	NE		
1. Operator Nan										2. OG	RID Number		
	ROCK OPERATIN	IG, LLC									372043		
	Park Point Drive									3. API	Number	_	
	len, CO 80401										30-025-4980	7	
4. Property Cod		5. Pro	perty Name	DALIME						6. We	II No. 127H		
3299	919		MANDEL	BAUW F						l l	12/11		
UL - Lot	Section	Township	Range		7. Sur	face Location Feet From		N/S Line	Feet Fr	rom	E/W Line	County	
0	11	24S		4E	O	1029		S	1 66111	2437	E	Lea	
					8. Proposed I	Bottom Hole Loca	ation						
UL - Lot	Section	Township	Range		Lot Idn	Feet From	N/S	S Line	Feet Fron		E/W Line	County	
С	11	24S	;	34E	С	5		N		2640	W	Lea	
					9. Po	ol Information					1		
RED HILLS;B	ONE SPRING, NO	DRIH									96434		
						l Well Information							
11. Work Type	· Mall	12. Well Type OIL		13. Cal	le/Rotary		14. Le	ease Type State			Level Elevation 487		
	New Well OIL 16. Multiple 17. Proposed Depth			18. For			19. Contractor			20. Spud Da			
N		16276	ı	10. F01	Bone Sprin	g	19. 0	ontractor			/1/2022		
Depth to Ground	Depth to Ground water Distance from nearest free						1			Distance to r	nearest surface wate	r	
We will be u	Sing a closed-loo	p system in lieu of l	ined pits		Proposed Cas	ing and Cement	Progra		Sacks	s of Cement	1	Estimated TOC	
Surf	17.5	13.375			4.5		1100		1125			0	
Int1	12.25	9.625			40		5460		1500			0	
Prod	6.75	5.5			20		276			1800	4400		
				Casin	g/Cement Pro	gram: Additional	Comm	nents					
	_	1	W 1: B		Proposed Blo	wout Prevention		am st Pressure		-		,	
	Туре		Working Pre								Manufa	icturer	
	Blind		10000					5000					
	Pipe		10000					5000					
A	nnular		5000					2500					
knowledge ar	nd belief. fy I have complied	mation given above		•				c	DIL CONSI	ERVATION	DIVISION		
Printed Name:	Flectronical	ly filed by Christian	Combs			Approved By:		Paul F Kaut	7				
Title:	Regulatory	<u> </u>	0011100			Title:		Geologist	_				
Email Address:	ccombs@ta					Approved Dat	0:	3/1/2022		1.	Expiration Date: 3/1	/2024	
	2/28/2022	артк.оопі	Phone: 720	360 40	20			oval Attached			-Aprilation Date: 3/ I	-LULT	
Date:	2/28/2022		Pnone: 720	-300-40	40	Conditions	n Appr	ovai Allached					

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

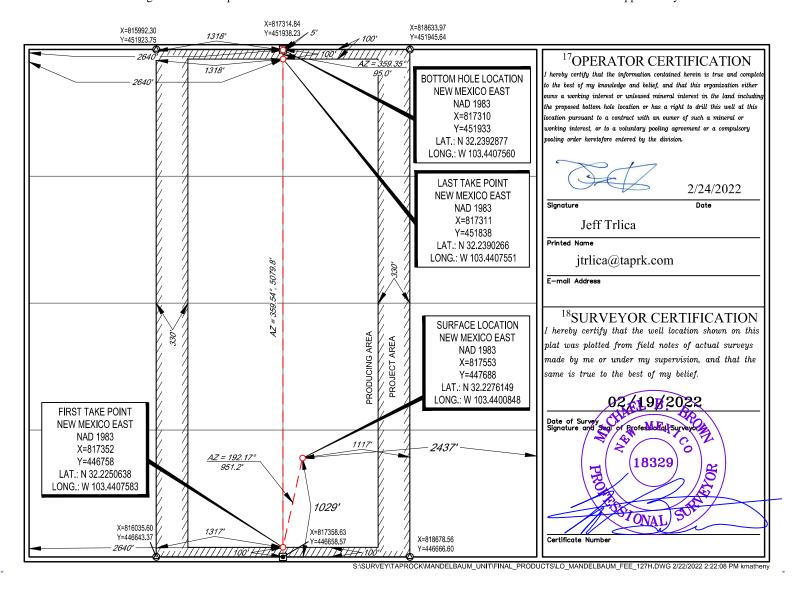
WELL LOCATION AND ACREAGE DEDICATION PLAT

30-025- 49807 Pool Code 96434 RED HILLS; BONE SPRING, NOR				NORTH
roperty Code 329919			Operty Name ELBAUM FEE	⁶ Well Number 127H
ogrid no. 372043		•	operator Name OPERATING, LLC.	°Elevation 3487'

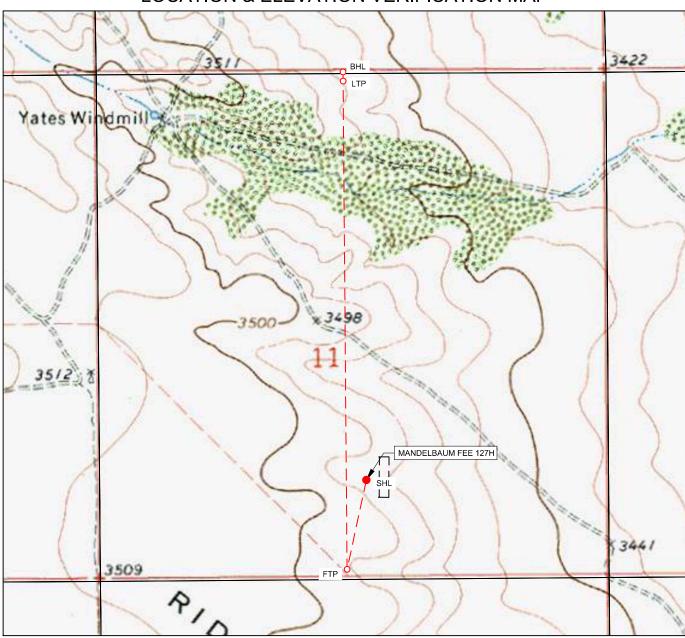
¹⁰Surface Location

UL or lot no.	Section 11	Township 24-S	Range 34-E	Lot Idn —	Feet from the 1029'	North/South line SOUTH	Feet from the 2437'	East/West line EAST	County LEA
			11	Bottom Ho	le Location If I	Different From Su			
UL or lot no.	Section	Township	Range	Lot Idn					· •
C	11	24-S	34–E	_	5'	NORTH	2640'	WEST	LEA
12Dedicated Acres 320	¹³ Joint or l	I Infill ¹⁴ Co	onsolidation Co	de ¹⁵ Ord	er 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.



LOCATION & ELEVATION VERIFICATION MAP





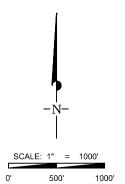
LEASE NAME & WELL NO.: MANDELBAUM FEE 127H

 SECTION
 11
 TWP
 24-S
 RGE
 34-E
 SURVEY
 N.M.P.M.

 COUNTY
 LEA
 STATE
 NM
 ELEVATION
 3487'

 DESCRIPTION
 1029' FSL & 2437' FEL

LATITUDE N 32.2276149 LONGITUDE W 103.4400848



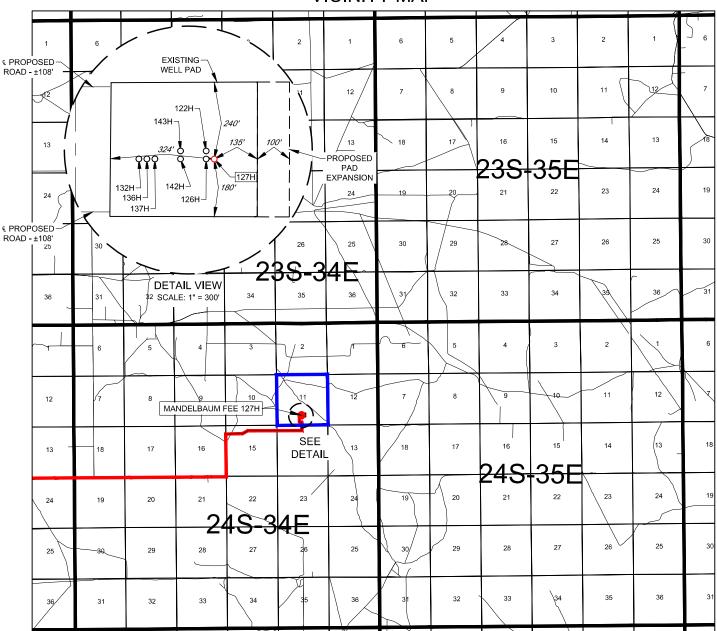
THIS EASEMENT/SERVITUDE LOCATION SHOWN HEREON HAS BEEN SURVEYED ON THE GROUND UNDER MY SUPERVISION AND PREPARED ACCORDING TO THE EVIDENCE FOUND AT THE TIME OF SURVEY, AND DATA PROVIDED BY TAP ROCK OPERATING, LLC. THIS CERTIFICATION IS MADE AND LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF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



TELEPHONE: (817) 744-7521 - FAX (817) 744-754 2903 NORTH BIG SPRING • MIDLAND, TEXAS 79705 TELEPHONE: (432) 682-1653 OR (800) 767-1653 • FAX (432) 682-1743 WWW.TOPOGRAPHIC.COM

EXHIBIT 2 VICINITY MAP





LEASE NAME & WELL NO.: MANDELBAUM FEE 127H

 SECTION
 11
 TWP
 24-S
 RGE
 34-E
 SURVEY
 N.M.P.M.

 COUNTY
 LEA
 STATE
 NM

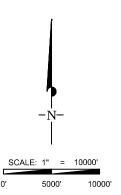
 DESCRIPTION
 1029' FSL & 2437' FEL

DISTANCE & DIRECTION

FROM INT. OF NM-128 & DELAWARE BASIN RD., GO EAST ON NM-128 ±2.6 MILES, THENCE NORTH (LEFT) ON A LEASE RD. ±0.8 MILES, THENCE EAST (RIGHT) ON A PROPOSED RD. ±1.5 MILES, THENCE NORTH (LEFT) ON A PROPOSED RD. ±1660 FEET, THENCE EAST (RIGHT) ON A PROPOSED RD. ±108 FEET TO A POINT ±365 FEET SOUTHWEST OF THE LOCATION.

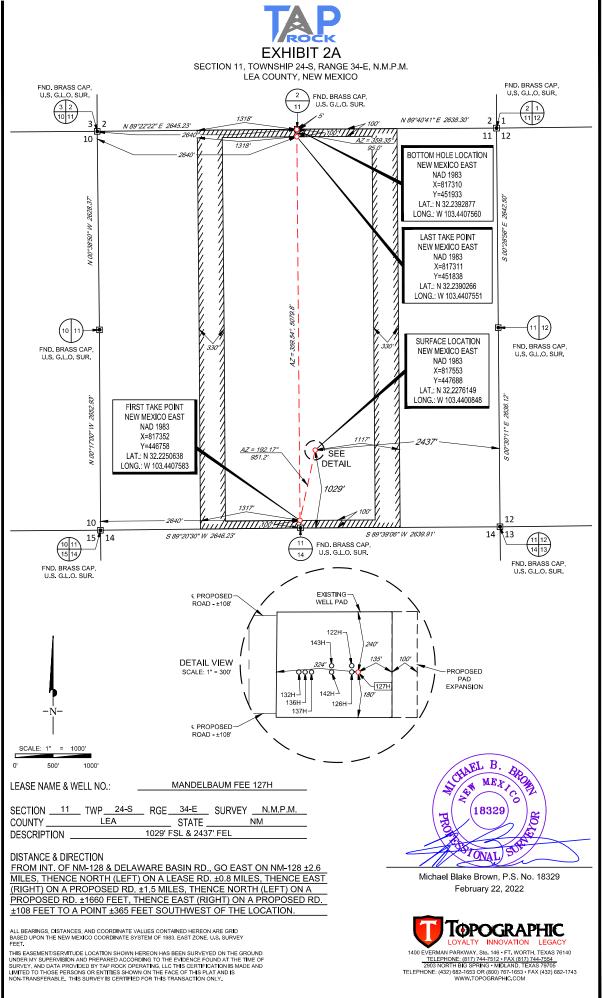
THIS EASEMENT/SERVITUDE LOCATION SHOWN HEREON HAS BEEN SURVEYED ON THE GROUND UNDER MY SUPERVISION AND PREPARED ACCORDING TO THE EVIDENCE FOUND AT THE TIME OF SURVEY, AND DATA PROVIDED BY TAP ROCK OPERATING, LLC. THIS CERTIFICATION IS MADE AND LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF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

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





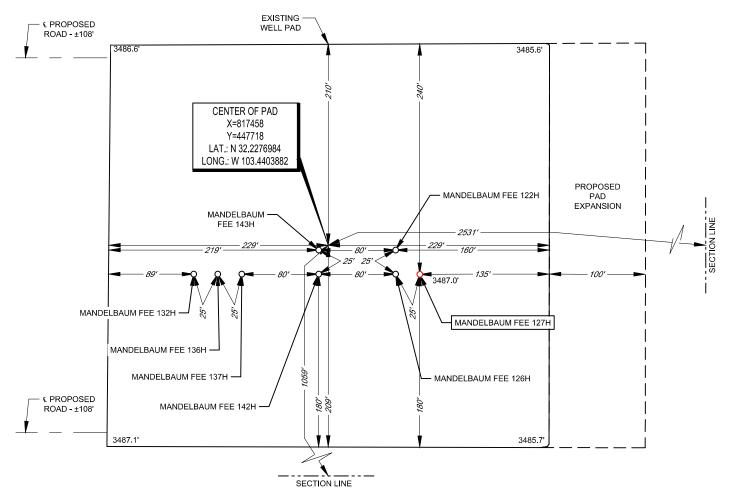
1400 EVERMAN PARKWAY, Ste. 146 - FT. WORTH, TEXAS 76140 TELEPHONE: (817) 744-7512 - FAX (817) 744-7554 2903 NORTH BIG SPRING - MIDLAND, TEXAS 79705 TELEPHONE: (432) 682-1653 OR (800) 767-1653 - FAX (432) 682-1743 WWW.TOP



LEGEND

SECTION LINE
PROPOSED ROAD





 LEASE NAME & WELL NO.:
 MANDELBAUM FEE 127H

 127H LATITUDE
 N 32.2276149
 127H LONGITUDE
 W 103.4400848

CENTER OF PAD IS 1059' FSL & 2531' FEL



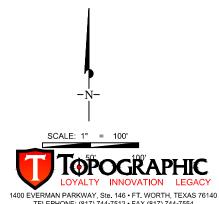
Michael Blake Brown, P.S. No. 18329

February 22, 2022

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.

ARE NAVDBB, 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.



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

Permit 309506

Form APD Conditions

<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

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**

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address:	API Number:						
TAP ROCK OPERATING, LLC [372043]	30-025-49807						
523 Park Point Drive	Well:						
Golden, CO 80401	MANDELBAUM FEE #127H						

OCD Reviewer	Condition
pkautz	Notify OCD 24 hours prior to casing & cement
pkautz	Will require a File As Drilled C-102 and a Directional Survey with the C-104
pkautz	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string
	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system
pkautz	1) SURFACE & INTERMEDIATE CASING - Cement must circulate to surface 2) PRODUCTION CASING - Cement must tie back into intermediate casing
pkautz	The Operator is to notify NMOCD by sundry (Form C-103) within ten (10) days of the well being spud



Tap Rock Resources, LLC

Lea County, NM (NAD 83 NME) (Mandelbaum Fee) Sec-11_T-24-S_R-34-E Mandelbaum Fee #127H

OWB

Plan: Plan #1

Standard Planning Report

24 February, 2022







EDM 5000.15 Single User Db Database: Company: Project:

Tap Rock Resources, LLC Lea County, NM (NAD 83 NME)

(Mandelbaum Fee) Sec-11_T-24-S_R-34-E

Well: Mandelbaum Fee #127H

Wellbore: **OWB** Design: Plan #1 Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well Mandelbaum Fee #127H

KB @ 3513.0usft KB @ 3513.0usft

Grid

Minimum Curvature

Project Lea County, NM (NAD 83 NME)

Map System: Geo Datum:

Map Zone:

Site:

US State Plane 1983 North American Datum 1983 New Mexico Eastern Zone

System Datum:

Mean Sea Level

Site (Mandelbaum Fee) Sec-11_T-24-S_R-34-E

Site Position: From:

Northing: Мар Easting:

447,689.00 usft 817,367.00 usft

Latitude: Longitude:

32° 13' 39.436 N 103° 26' 26.465 W

Position Uncertainty: 0.0 usft Slot Radius: 13-3/16 " **Grid Convergence:** 0.48°

Well Mandelbaum Fee #127H

Well Position +N/-S +E/-W

-1.0 usft Northing: 186.0 usft Easting:

447.688.00 usft 817,553.00 usft

Latitude: Longitude:

32° 13' 39.410 N 103° 26' 24.300 W

Position Uncertainty 0.0 usft Wellhead Elevation: Ground Level: 3,487.0 usft

OWB Wellbore

Declination **Field Strength** Magnetics **Model Name** Sample Date **Dip Angle** (°) (°) (nT) IGRF2015 02/24/22 6.38 60.02 47.470.93108002

Design Plan #1

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 0.0 359.54

Plan Survey Tool Program

Date 02/24/22

Depth From Depth To

(usft) (usft)

Survey (Wellbore)

Tool Name

Remarks

0.0 MWD 16,276.7 Plan #1 (OWB)

OWSG MWD - Standard

Plan Sections Vertical Build Measured Dogleg Turn Depth Inclination **Azimuth** Depth +N/-S +E/-W Rate Rate Rate **TFO** (usft) (usft) (°/100usft) (°/100usft) (°/100usft) (usft) (usft) (°) (°) (°) Target 0.00 0.00 0.0 0.00 0.00 0.0 0.0 0.0 0.00 0.00 2,200.0 0.00 0.00 2,200.0 0.0 0.0 0.00 0.00 0.00 0.00 3,310.2 11.10 199.13 3.303.2 -101.3 -35.11.00 1.00 0.00 199.13 7.583.7 11.10 199.13 7.496.8 -878.7 -304.90.00 0.00 0.00 0.00 0.00 0.00 8,600.0 -980.0 -340.0 1.00 -1.00 0.00 180.00 8,693.8 0.00 10,703.3 -340.0 0.00 0.00 10,609.5 -980.0 0.00 0.00 0.00 10.00 11,644.3 94 10 8.95 11,181.0 -373.6-244.510.00 0.00 8.95 12,113.5 94.10 359.54 11,147.4 92.6 -209.9 2.00 0.00 -2.01 -89.65 -243.0 16,276.7 94.10 359.54 10,849.6 4,245.0 0.00 0.00 0.00 0.00 PBHL (Mandelbaun





Database: E Company: T Project: L Site: (

Well:

EDM 5000.15 Single User Db Tap Rock Resources, LLC Lea County, NM (NAD 83 NME)

(Mandelbaum Fee) Sec-11_T-24-S_R-34-E Mandelbaum Fee #127H

Wellbore: OWB
Design: Plan #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well Mandelbaum Fee #127H

KB @ 3513.0usft KB @ 3513.0usft

Grid

anned 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									
1,000.0	0.00 0.00	0.00 0.00	1,000.0 1,100.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00 0.00	0.00	0.00 0.00
1,100.0	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	0.00		0.00
1,300.0 1,400.0	0.00	0.00 0.00	1,300.0	0.0 0.0	0.0	0.0	0.00	0.00 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
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2.000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	1.00	199.13	2,300.0	-0.8	-0.3	-0.8	1.00	1.00	0.00
2,400.0	2.00	199.13	2,400.0	-3.3	-1.1	-3.3	1.00	1.00	0.00
2,500.0	3.00	199.13	2,499.9	-7.4	-2.6	-7.4	1.00	1.00	0.00
2,600.0	4.00	199.13	2,599.7	-13.2	-4.6	-13.1	1.00	1.00	0.00
2,700.0	5.00 6.00	199.13	2,699.4 2,798.9	-20.6	-7.1 -10.3	-20.5	1.00	1.00	0.00
2,800.0 2,900.0	7.00	199.13 199.13	2,796.9 2,898.3	-29.7 -40.3	-10.3 -14.0	-29.6 -40.2	1.00 1.00	1.00 1.00	0.00 0.00
-									
3,000.0	8.00	199.13	2,997.4	-52.7	-18.3	-52.5	1.00	1.00	0.00
3,100.0	9.00	199.13	3,096.3	-66.6	-23.1	-66.5	1.00	1.00	0.00
3,200.0	10.00	199.13	3,194.9	-82.2	-28.5	-82.0	1.00	1.00	0.00
3,300.0	11.00	199.13	3,293.3	-99.5	-34.5	-99.2	1.00	1.00	0.00
3,310.2	11.10	199.13	3,303.2	-101.3	-35.1	-101.0	1.00	1.00	0.00
3,400.0	11.10	199.13	3,391.4	-117.6	-40.8	-117.3	0.00	0.00	0.00
3,500.0	11.10	199.13	3,489.5	-135.8	-47.1	-135.4	0.00	0.00	0.00
3,600.0	11.10	199.13	3,587.6	-154.0	-53.4	-153.6	0.00	0.00	0.00
3,700.0	11.10	199.13	3,685.8	-172.2	-59.7	-171.7	0.00	0.00	0.00
3,800.0	11.10	199.13	3,783.9	-190.4	-66.1	-189.9	0.00	0.00	0.00
3,900.0	11.10	199.13	3,882.0	-208.6	-72.4	-208.0	0.00	0.00	0.00
4,000.0	11.10	199.13	3,980.2	-226.8	-78.7	-226.1	0.00	0.00	0.00
4,100.0	11.10	199.13	4,078.3	-245.0	-85.0	-244.3	0.00	0.00	0.00
4,200.0	11.10	199.13	4,176.4	-263.2	-91.3	-262.4	0.00	0.00	0.00
4,300.0	11.10	199.13	4,274.5	-281.4	-97.6	-280.6	0.00	0.00	0.00
4,400.0			4,372.7	-299.6		-298.7	0.00		0.00
	11.10	199.13	4,372.7 4,470.8		-103.9	-298.7 -316.8	0.00	0.00 0.00	0.00
4,500.0	11.10	199.13		-317.7	-110.2				
4,600.0 4,700.0	11.10 11.10	199.13 199.13	4,568.9 4,667.1	-335.9 -354.1	-116.5 -122.9	-335.0 -353.1	0.00 0.00	0.00 0.00	0.00 0.00
4,700.0	11.10	199.13	4,067.1	-354.1 -372.3	-122.9 -129.2	-353.1 -371.3	0.00	0.00	0.00
4,900.0	11.10	199.13	4,863.3	-390.5	-135.5	-389.4	0.00	0.00	0.00
5,000.0	11.10	199.13	4,961.4	-408.7	-141.8	-407.5	0.00	0.00	0.00
5,100.0	11.10	199.13	5,059.6	-426.9	-148.1	-425.7	0.00	0.00	0.00
5,200.0	11.10	199.13	5,157.7	-445.1	-154.4	-443.8	0.00	0.00	0.00



Well:

IntrepidPlanning Report



Database: EDM 5000
Company: Tap Rock
Project: Lea Count
Site: (Mandelba

EDM 5000.15 Single User Db Tap Rock Resources, LLC Lea County, NM (NAD 83 NME)

(Mandelbaum Fee) Sec-11_T-24-S_R-34-E

Mandelbaum Fee #127H

Wellbore: OWB
Design: Plan #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well Mandelbaum Fee #127H

KB @ 3513.0usft KB @ 3513.0usft

Grid

Design.	riaii#i								
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)
5,300.0	11.10	199.13	5,255.8	-463.3	-160.7	-462.0	0.00	0.00	0.00
5,400.0	11.10	199.13	5,354.0	-481.5	-167.0	-480.1	0.00	0.00	0.00
5,500.0	11.10	199.13	5,452.1	-499.7	-173.4	-498.2	0.00	0.00	0.00
5,600.0	11.10	199.13	5,550.2	-517.8	-179.7	-516.4	0.00	0.00	0.00
5,700.0	11.10	199.13	5,648.3	-536.0	-186.0	-534.5	0.00	0.00	0.00
5,800.0	11.10	199.13	5,746.5	-554.2	-192.3	-552.7	0.00	0.00	0.00
5,900.0	11.10	199.13	5,844.6	-572.4	-198.6	-570.8	0.00	0.00	0.00
6,000.0	11.10	199.13	5,942.7	-590.6	-204.9	-588.9	0.00	0.00	0.00
6,100.0	11.10	199.13	6,040.9	-608.8	-211.2	-607.1	0.00	0.00	0.00
6,200.0	11.10	199.13	6,139.0	-627.0	-217.5	-625.2	0.00	0.00	0.00
6,300.0	11.10	199.13	6,237.1	-645.2	-223.8	-643.4	0.00	0.00	0.00
6,400.0	11.10	199.13	6,335.2	-663.4	-230.2	-661.5	0.00	0.00	0.00
6,500.0	11.10	199.13	6,433.4	-681.6	-236.5	-679.7	0.00	0.00	0.00
6,600.0	11.10	199.13	6,531.5	-699.8	-242.8	-697.8	0.00	0.00	0.00
6,700.0	11.10	199.13	6,629.6	-718.0	-249.1	-715.9	0.00	0.00	0.00
6,800.0	11.10	199.13	6,727.8	-736.1	-255.4	-734.1	0.00	0.00	0.00
6,900.0	11.10	199.13	6,825.9	-754.3	-261.7	-752.2	0.00	0.00	0.00
7,000.0	11.10	199.13	6,924.0	-772.5	-268.0	-770.4	0.00	0.00	0.00
7,100.0	11.10	199.13	7,022.1	-790.7	-274.3	-788.5	0.00	0.00	0.00
7,200.0	11.10	199.13	7,120.3	-808.9	-280.6	-806.6	0.00	0.00	0.00
7,300.0	11.10	199.13	7,218.4	-827.1	-287.0	-824.8	0.00	0.00	0.00
7,400.0	11.10	199.13	7,316.5	-845.3	-293.3	-842.9	0.00	0.00	0.00
7,500.0	11.10	199.13	7,414.7	-863.5	-299.6	-861.1	0.00	0.00	0.00
7,583.7	11.10	199.13	7,496.8	-878.7	-304.9	-876.2	0.00	0.00	0.00
7,600.0	10.94	199.13	7,512.8	-881.7	-305.9	-879.2	1.00	-1.00	0.00
7,700.0	9.94	199.13	7,611.1	-898.8	-311.8	-896.2	1.00	-1.00	0.00
7,800.0	8.94	199.13	7,709.8	-914.3	-317.2	-911.7	1.00	-1.00	0.00
7,900.0	7.94	199.13	7,808.7	-928.1	-322.0	-925.5	1.00	-1.00	0.00
8,000.0	6.94	199.13	7,907.9	-940.4	-326.2	-937.7	1.00	-1.00	0.00
8,100.0	5.94	199.13	8,007.2	-951.0	-329.9	-948.3	1.00	-1.00	0.00
8,200.0	4.94	199.13	8,106.8	-959.9	-333.0	-957.2	1.00	-1.00	0.00
8,300.0	3.94	199.13	8,206.5	-967.2	-335.6	-964.5	1.00	-1.00	0.00
8,400.0	2.94	199.13	8,306.3	-972.9	-337.5	-970.1	1.00	-1.00	0.00
8,500.0	1.94	199.13	8,406.2	-976.9	-338.9	-974.2	1.00	-1.00	0.00
8,600.0	0.94	199.13	8,506.2	-979.3	-339.7	-976.5	1.00	-1.00	0.00
8,693.8	0.00	0.00	8,600.0	-980.0	-340.0	-977.2	1.00	-1.00	0.00
8,700.0	0.00	0.00	8,606.2	-980.0	-340.0	-977.2	0.00	0.00	0.00
8,800.0	0.00	0.00	8,706.2	-980.0	-340.0	-977.2	0.00	0.00	0.00
8,900.0	0.00	0.00	8,806.2	-980.0	-340.0	-977.2	0.00	0.00	0.00
9,000.0	0.00	0.00	8,906.2	-980.0	-340.0	-977.2	0.00	0.00	0.00
9,100.0	0.00	0.00	9,006.2	-980.0	-340.0	-977.2	0.00	0.00	0.00
9,200.0	0.00	0.00	9,106.2	-980.0	-340.0	-977.2	0.00	0.00	0.00
9,300.0	0.00	0.00	9,206.2	-980.0	-340.0	-977.2	0.00	0.00	0.00
9,400.0	0.00	0.00	9,306.2	-980.0	-340.0	-977.2	0.00	0.00	0.00
9,500.0	0.00	0.00	9,406.2	-980.0	-340.0	-977.2	0.00	0.00	0.00
9,600.0	0.00	0.00	9,506.2	-980.0	-340.0	-977.2	0.00	0.00	0.00
9,700.0	0.00	0.00	9,606.2	-980.0	-340.0	-977.2	0.00	0.00	0.00
9,800.0	0.00	0.00	9,706.2	-980.0	-340.0	-977.2	0.00	0.00	0.00
9,900.0	0.00	0.00	9,806.2	-980.0	-340.0	-977.2	0.00	0.00	0.00
10,000.0	0.00	0.00	9,906.2	-980.0	-340.0	-977.2	0.00	0.00	0.00
10,100.0	0.00	0.00	10,006.2	-980.0	-340.0	-977.2	0.00	0.00	0.00
10,200.0	0.00	0.00	10,106.2	-980.0	-340.0	-977.2	0.00	0.00	0.00
10,300.0	0.00	0.00	10,206.2	-980.0	-340.0	-977.2	0.00	0.00	0.00
10,400.0	0.00	0.00	10,306.2	-980.0	-340.0	-977.2	0.00	0.00	0.00





Database: Company: Project: Site:

Well:

EDM 5000.15 Single User Db Tap Rock Resources, LLC Lea County, NM (NAD 83 NME)

(Mandelbaum Fee) Sec-11_T-24-S_R-34-E Mandelbaum Fee #127H

Wellbore: OWB
Design: Plan #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well Mandelbaum Fee #127H

KB @ 3513.0usft KB @ 3513.0usft

Grid

Design.	FIAII#I								
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)
10,500.0	0.00	0.00	10,406.2	-980.0	-340.0	-977.2	0.00	0.00	0.00
10,600.0	0.00	0.00	10,506.2	-980.0	-340.0	-977.2	0.00	0.00	0.00
10,703.3	0.00	0.00	10,609.5	-980.0	-340.0	-977.2	0.00	0.00	0.00
10,750.0	4.67	8.95	10,656.1	-978.1	-339.7	-975.4	10.00	10.00	0.00
10,800.0	9.67	8.95	10,705.7	-972.0	-338.7	-969.2	10.00	10.00	0.00
10,850.0	14.67	8.95	10,754.6	-961.6	-337.1	-958.8	10.00	10.00	0.00
10,900.0	19.67	8.95	10,802.3	-947.0	-334.8	-944.3	10.00	10.00	0.00
10,950.0	24.67	8.95	10,848.6	-928.4	-331.9	-925.7	10.00	10.00	0.00
11,000.0	29.67	8.95	10,893.1	-905.8	-328.3	-903.1	10.00	10.00	0.00
11,050.0	34.67	8.95	10,935.4	-879.5	-324.2	-876.9	10.00	10.00	0.00
11,100.0	39.67	8.95	10,975.2	-849.7	-319.5	-847.1	10.00	10.00	0.00
11,150.0	44.67	8.95	11,012.3	-816.6	-314.3	-814.0	10.00	10.00	0.00
11,200.0	49.67	8.95	11,046.3	-780.3	-308.6	-777.8	10.00	10.00	0.00
11,250.0	54.67	8.95	11,076.9	-741.3	-302.4	-738.9	10.00	10.00	0.00
11,300.0	59.67	8.95	11,104.0	-699.9	-295.9	-697.5	10.00	10.00	0.00
11,350.0	64.67	8.95	11,127.4	-656.2	-289.0	-653.9	10.00	10.00	0.00
11,400.0	69.67	8.95	11,146.8	-610.7	-281.8	-608.4	10.00	10.00	0.00
11,450.0	74.67	8.95	11.162.1	-563.7	-274.4	-561.5	10.00	10.00	0.00
11,500.0	79.67	8.95	11,173.2	-515.5	-266.9	-513.4	10.00	10.00	0.00
11,550.0	84.67	8.95	11,180.0	-466.6	-259.1	-464.5	10.00	10.00	0.00
11,600.0	89.67	8.95	11,182.4	-417.3	-251.4	-415.3	10.00	10.00	0.00
11,644.3	94.10	8.95	11,181.0	-373.6	-244.5	-371.6	10.00	10.00	0.00
11,700.0	94.11	7.83	11,177.0	-318.6	-236.4	-316.7	2.00	0.01	-2.01
11,800.0	94.11	5.83	11,169.8	-219.6	-224.5	-217.8	2.00	0.01	-2.01
11,900.0	94.11	3.82	11,162.7	-120.2	-216.1	-118.5	2.00	0.00	-2.01
12,000.0	94.11	1.82	11,155.5	-20.6	-211.2	-18.9	2.00	0.00	-2.01
12,100.0	94.10	359.81	11,148.3	79.1	-209.8	80.8	2.00	-0.01	-2.01
12,113.5	94.10	359.54	11,147.4	92.6	-209.9	94.3	2.00	-0.01	-2.01
12,200.0	94.10	359.54	11,141.2	178.9	-210.6	180.6	0.00	0.00	0.00
12,300.0	94.10	359.54	11,134.0	278.6	-211.4	280.3	0.00	0.00	0.00
12,400.0	94.10	359.54	11,126.9	378.4	-212.2	380.0	0.00	0.00	0.00
12,500.0	94.10	359.54	11,119.7	478.1	-213.0	479.8	0.00	0.00	0.00
12,600.0	94.10	359.54	11,112.6	577.8	-213.8	579.5	0.00	0.00	0.00
12,700.0	94.10	359.54	11,105.4	677.6	-214.5	679.3	0.00	0.00	0.00
12,800.0	94.10	359.54	11,098.3	777.3	-215.3	779.0	0.00	0.00	0.00
12,900.0	94.10	359.54	11,091.1	877.1	-216.1	878.8	0.00	0.00	0.00
13,000.0	94.10	359.54	11,084.0	976.8	-216.9	978.5	0.00	0.00	0.00
13,100.0	94.10	359.54	11,076.8	1,076.5	-217.7	1,078.3	0.00	0.00	0.00
13,200.0	94.10	359.54	11,069.7	1,176.3	-218.5	1,178.0	0.00	0.00	0.00
13,300.0	94.10	359.54	11,062.5	1,276.0	-219.3	1,277.7	0.00	0.00	0.00
13,400.0	94.10	359.54	11,055.3	1,375.8	-220.1	1,377.5	0.00	0.00	0.00
13,500.0	94.10	359.54	11,048.2	1,475.5	-220.9	1,477.2	0.00	0.00	0.00
13,600.0	94.10	359.54	11,041.0	1,575.2	-221.7	1,577.0	0.00	0.00	0.00
13,700.0	94.10	359.54	11,033.9	1,675.0	-222.5	1,676.7	0.00	0.00	0.00
13,800.0	94.10	359.54	11,026.7	1,774.7	-223.3	1,776.5	0.00	0.00	0.00
13,900.0	94.10	359.54	11,019.6	1,874.5	-224.1	1,876.2	0.00	0.00	0.00
14,000.0	94.10	359.54	11,012.4	1,974.2	-224.9	1,975.9	0.00	0.00	0.00
14,100.0	94.10	359.54	11,005.3	2,073.9	-225.7	2,075.7	0.00	0.00	0.00
14,200.0	94.10	359.54	10,998.1	2,173.7	-226.5	2,175.4	0.00	0.00	0.00
14,300.0	94.10	359.54	10,991.0	2,273.4	-227.3	2,275.2	0.00	0.00	0.00
14,400.0	94.10	359.54	10,983.8	2,373.2	-228.1	2,374.9	0.00	0.00	0.00
14,500.0	94.10	359.54	10,976.7	2,472.9	-228.9	2,474.7	0.00	0.00	0.00
14,600.0	94.10	359.54	10,969.5	2,572.6	-229.7	2,574.4	0.00	0.00	0.00
14,700.0	94.10	359.54	10,962.4	2,672.4	-230.5	2,674.2	0.00	0.00	0.00





Database: Company: Project:

Site:

Design:

EDM 5000.15 Single User Db Tap Rock Resources, LLC Lea County, NM (NAD 83 NME)

(Mandelbaum Fee) Sec-11_T-24-S_R-34-E

Well: Wellbore:

Mandelbaum Fee #127H OWB Plan #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well Mandelbaum Fee #127H

KB @ 3513.0usft KB @ 3513.0usft

Grid

817,352.00

32° 13' 30.225 N 103° 26' 26.729 W

Minimum Curvature

Planned	Survey
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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)
14,800.0	94.10	359.54	10,955.2	2,772.1	-231.3	2,773.9	0.00	0.00	0.00
14,900.0	94.10	359.54	10,948.1	2,871.9	-232.0	2,873.6	0.00	0.00	0.00
15,000.0	94.10	359.54	10,940.9	2,971.6	-232.8	2,973.4	0.00	0.00	0.00
15,100.0	94.10	359.54	10,933.8	3,071.4	-233.6	3,073.1	0.00	0.00	0.00
15,200.0	94.10	359.54	10,926.6	3,171.1	-234.4	3,172.9	0.00	0.00	0.00
15,300.0	94.10	359.54	10,919.4	3,270.8	-235.2	3,272.6	0.00	0.00	0.00
15,400.0	94.10	359.54	10,912.3	3,370.6	-236.0	3,372.4	0.00	0.00	0.00
15,500.0	94.10	359.54	10,905.1	3,470.3	-236.8	3,472.1	0.00	0.00	0.00
15,600.0	94.10	359.54	10,898.0	3,570.1	-237.6	3,571.8	0.00	0.00	0.00
15,700.0	94.10	359.54	10,890.8	3,669.8	-238.4	3,671.6	0.00	0.00	0.00
15,800.0	94.10	359.54	10,883.7	3,769.5	-239.2	3,771.3	0.00	0.00	0.00
15,900.0	94.10	359.54	10,876.5	3,869.3	-240.0	3,871.1	0.00	0.00	0.00
16,000.0	94.10	359.54	10,869.4	3,969.0	-240.8	3,970.8	0.00	0.00	0.00
16,100.0	94.10	359.54	10,862.2	4,068.8	-241.6	4,070.6	0.00	0.00	0.00
16,200.0	94.10	359.54	10,855.1	4,168.5	-242.4	4,170.3	0.00	0.00	0.00
16,276.7	94.10	359.54	10,849.6	4,245.0	-243.0	4,246.8	0.00	0.00	0.00

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Des	ian	Тэ	ra	ate
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Ta	ra	Δt	N	а	m	Δ

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 targ - Point			10,849.6 6181.9usft	4,150.0 MD (10856.4	-242.0 4 TVD, 4150	451,838.00 .5 N, -242.2 E)	817,311.00	32° 14' 20.494 N	103° 26' 26.715 W
PBHL (Mandelbaum - plan hits target of - Rectangle (side	center		10,849.6	4,245.0	-243.0	451,933.00	817,310.00	32° 14' 21.434 N	103° 26' 26.718 W

FTP (Mandelbaum Fe 0.00 0.00 11,154.0 -930.0 -201.0 446,758.00 - plan misses target center by 211.8usft at 11177.1usft MD (11031.1 TVD, -797.3 N, -311.2 E)

- Point



Well:

IntrepidPlanning 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

Mandelbaum Fee #127H

Wellbore: OWB
Design: Plan #1

Local Co-ordinate Reference: TVD Reference:

MD Reference: North Reference: Survey Calculation Method: Well Mandelbaum Fee #127H

KB @ 3513.0usft KB @ 3513.0usft Grid

ormations						
	Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
	1,015.0	1,015.0	Rustler Anhydrite			
	2,200.0	2,200.0	Top Salt			
	5,375.6	5,330.0	Base Salt			
	5,416.3	5,370.0	Delaware Mountain Gp			
	5,426.5	5,380.0	Lamar			
	5,441.8	5,395.0	Bell Canyon			
	5,503.0	5,455.0	Ramsey Sand			
	6,486.4	6,420.0	Cherry Canyon			
	7,780.0	7,690.0	Brushy Canyon			
	9,258.8	9,165.0	Bone Spring Lime			
	9,313.8	9,220.0	Upper Avalon			
	9,528.8	9,435.0	Middle Avalon			
	9,983.8	9,890.0	Lower Avalon			
	10,328.8	10,235.0	1st Bone Spring Sand			
	10,548.8	10,455.0	2nd Bone Spring Carb FS			
	10,871.2	10,775.0	2nd Bone Spring Sand			

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coor +N/-S (usft)	dinates +E/-W (usft)	Comment
2,200.0	2,200.0	0.0	0.0	NUDGE - Build 1.00
3,310.2	3,303.2	-101.3	-35.1	HOLD - 4273.5 at 3310.2 MD
7,583.7	7,496.8	-878.7	-304.9	DROP1.00
8,693.8	8,600.0	-980.0	-340.0	HOLD - 2009.5 at 8693.8 MD
10,703.3	10,609.5	-980.0	-340.0	KOP - Build 10.00
11,644.3	11,181.0	-373.6	-244.5	EOC/TRN - DLS 2.00 TFO -89.65
12,113.5	11,147.4	92.6	-209.9	Start 4163.2 hold at 12113.5 MD
16,276.7	10,849.6	4,245.0	-243.0	TD at 16276.7

State of New Mexico Energy, Minerals and Natural Resources Department

Submit Electronically Via E-permitting

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

NATURAL GAS MANAGEMENT PLAN

This Natural Gas Management Plan must be submitted with each Application for Permit to Drill (APD) for a new or recompleted well.

		Section <u>E</u>	1 1 – P	lan D May 25	Description 5, 2021	·				-
I. Operator:Tap	p Rock Oper	ating LLC	OG	RID:	372043_		Da	te: _2/28	/2021	· <u> </u>
II. Type: ⊠ Original □] Amendmer	nt due to □ 19.15.2°	7.9.D(6)(a) NMA	AC □ 19.15.27.9.	D(6)(b) N	MAC I	☐ Other.		
If Other, please describe:	:									
III. Well(s): Provide the be recompleted from a si						f wells pr	oposed	to be dri	lled o	or proposed to
Well Name	API	ULSTR		Footages		Anticipated Oil BBL/D		Anticipated Gas MCF/D		Anticipated Produced Water
Mandelbaum Fee #127F	I	Sec 11, T24S R 3	4E 1	1029 FSL, 2437 FEL		710 850				2800
V. Anticipated Schedule proposed to be recomple	e: Provide th	e following information	ation for	each ne	w or recompleted	well or se	et of we	ells propo	sed to	o be drilled or
Well Name	API	Spud Date		eached ate		*		st Production Date		
Mandelbaum Fee #127H		3/19/22	3/27/2	2	6/19/22	6/25/		/22 6/2		5/22
VI. Separation Equipm VII. Operational Pract Subsection A through F of VIII. Best Management during active and planner	ices: ⊠ Atta of 19.15.27.8 t Practices:	ach a complete deso 3 NMAC.	cription o	of the ac	ctions Operator w	vill take to	o comp	ly with t	he red	quirements of

Section 2 – Enhanced Plan EFFECTIVE APRIL 1, 2022

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

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

IX. Anticipated Natural Gas Production:

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

X. Natural Gas Gathering System (NGGS):

Operator	System	ULSTR of Tie-in	Anticipated Gathering Start Date	Available Maximum Daily Capacity of System Segment Tie-in
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XI. Map. Attach an accurate and legible map depicting the location of the well(s), the anticipated pipeline route(s) connecting the
production operations to the existing or planned interconnect of the natural gas gathering system(s), and the maximum daily capacity of
the segment or portion of the natural gas gathering system(s) to which the well(s) will be connected.

XII. Line Capacity. The natural gas gathering system \square will \square will not have capacity to gather 100% of the a	anticipated natural gas
production volume from the well prior to the date of first production.	

XIII. Line Pressure. Operator \square does \square does not anticipate that its existing well(s) connected to the same segment, or portion	n of the
natural gas gathering system(s) described above will continue to meet anticipated increases in line pressure caused by the new	well(s).

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	Attach On	erator′s r	olan to	manage n	roduction	in response	to the inc	reased line r	ressure

XIV.	Confidentiality: Operator asserts confidentiality pursuant to Section 71-2-8 NMSA 1978 for the information provided in
Section	on 2 as provided in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and attaches a full description of the specific information
for w	hich confidentiality is asserted and the basis for such assertion.

Section 3 - Certifications Effective May 25, 2021

	<u>Effective May 25, 2021</u>
Operator certifies that, a	after reasonable inquiry and based on the available information at the time of submittal:
one hundred percent of	to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering
hundred percent of the a into account the current	able to connect to a natural gas gathering system in the general area with sufficient capacity to transport one anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system. box, Operator will select one of the following:
Well Shut-In. ☐ Opera D of 19.15.27.9 NMAC	tor will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection ; or
	Plan. ☐ Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential ses for the natural gas until a natural gas gathering system is available, including:
(a)	power generation on lease;
(b)	power generation for grid;
(c)	compression on lease;
(d)	liquids removal on lease;
(e)	reinjection for underground storage;
(f)	reinjection for temporary storage;
(g)	reinjection for enhanced oil recovery;
(h)	fuel cell production; and
(i)	other alternative beneficial uses approved by the division.

Section 4 - Notices

- 1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:
- (a) Operator becomes aware that the natural gas gathering system it planned to connect the well(s) to has become unavailable or will not have capacity to transport one hundred percent of the production from the well(s), no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised venting and flaring plan containing the information specified in Paragraph (5) of Subsection D of 19.15.27.9 NMAC; or
- (b) Operator becomes aware that it has, cumulatively for the year, become out of compliance with its baseline natural gas capture rate or natural gas capture requirement, no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised Natural Gas Management Plan for each well it plans to spud during the next 90 days containing the information specified in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and shall file an update for each Natural Gas Management Plan until Operator is back in compliance with its baseline natural gas capture rate or natural gas capture requirement.
- 2. OCD may deny or conditionally approve an APD if Operator does not make a certification, fails to submit an adequate venting and flaring plan which includes alternative beneficial uses for the anticipated volume of natural gas produced, or if OCD determines that Operator will not have adequate natural gas takeaway capacity at the time a well will be spud.

I certify that, after reasonable inquiry, the statements in and attached to this Natural Gas Management Plan are true and correct to the best of my knowledge and acknowledge that a false statement may be subject to civil and criminal penalties under the Oil and Gas Act.

Signature:
Printed Name: Jeff Trlica
Title: Regulatory Analyst
E-mail Address: jtrlica@taprk.com
Date: 2/28/2022
Phone: 720-772-5910
OIL CONSERVATION DIVISION (Only applicable when submitted as a standalone form)
Approved By:
Title:
Approval Date:
Conditions of Approval:

VI. **Separation Equipment:** Attach a complete description of how Operator will size separation equipment to optimize gas capture:

Each surface facility design includes the following process equipment: 3-phase separators (1 separator per well), a sales gas scrubber, one or two 3-phase heater treaters, a vapor recovery tower (VRT), a VRU compressor, multiple water and oil tanks, as well as flare knockouts (HP & LP), and flares (HP & LP). All process vessels will be sized to separate oil, water, gas based upon typical/historical & predicted well performance. Each process vessel will be fitted with an appropriately sized PSV as per ASME code requirements to mitigate vessel rupture and loss of containment. Additionally, the process vessels will be fitted with pressure transmitters tied to the facility control system which will allow operations to monitor pressures and when necessary, shut-in the facility to avoid vessel over-pressure and the potential vent of natural gas. Natural gas will preferentially be sold to pipeline, and only during upset/emergency conditions will gas be directed to the HP flare system. Flash gas from both the 3-phase heater treater and the VRT will be recompressed using a VRU compressor and this gas will also preferentially be directed to the gas sales pipeline. Oil tanks & water tanks will be fitted with 16 oz thief hatches as well as PVRVs to protect the tanks from rupture/collapse. Additionally, the tank vapor outlets and tank vapor capture system will be sized to keep tank pressures below 12 oz. The tank vapor capture system will include a tank vapor blower & knockout as well as a lowpressure flare and knockout. Tank vapors will preferentially be directed to the VRU and the sales gas pipeline. Only during process upsets/emergency conditions will tank vapors be directed to the LP flare system.

VII. **Operational Practices:** Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F of 19.15.27.8 NMAC. ← See attached reg for requirements.

- During drilling operations- Gas meters will be installed at the shakers and Volume
 Totalizers will be installed on the pits. In the event that elevated gas levels, or a pit
 gain are observed, returns will be diverted to a gas buster. Gas coming off the gas
 buster will be combusted at the flare stack. A 10' or taller flare will be located at
 least 100' from the SHL.
- During completions operations, including stimulation and frac plug drill out operations, hydrocarbon production to surface is minimized. When gas production does occur, gas will be combusted at a flare stack. A 10' or taller flare will be located at least 100' from the SHL.
- During production operations, all process vessels (separators, heater treaters, VRTs, Tanks) will recompress (where necessary) and route gas outlets into the natural gas gathering pipeline. Gas will preferentially be routed to natural gas gathering pipeline and the flare system will be used only during emergency, malfunction, or if the gas does not meet pipeline specifications. In the event of flaring off-specification gas, operations will pull gas samples twice a week and will also route gas back to pipeline as soon as the gas meets specification. Exceptions to this will include only those qualified exceptions per the regulation 19.15.27.8 Subsection D.

• To comply with state performance standards, separation and storage equipment will be designed to handle the maximum anticipated throughput and pressure to minimize waste and reduce the likelihood of venting gas to atmosphere. Additionally, each storage atmospheric tank (Oil & Water) will be fitted with a level transmitter to facilitate gauging of the tank without opening of the thief hatch. Any gas collected through the tank vent system is expected to be recompressed and routed to sales. However, in the event of an emergency, the tank vapor capture system will be designed to combust the gas using a flare stack fitted with a continuous or automatic ignitor. The flare stack will be properly anchored and will be located a minimum of 100 feet from the well and storage tanks. Operators will conduct weekly AVO inspections. These AVO inspection records will be stored for the required 5-year period and will be made available upon Division request.

VIII. **Best Management Practices:** Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.

• When performing routine or preventive maintenance on a vessel or tank, initially all inlet valves are closed, and the vessel or tank is allowed to depressurize through the normal outlet connections to gas sales and/or liquid tanks. Once the vessel or tank is depressurized to lowest acceptable sales outlet pressure, usually around 20 psig, a temporary low-pressure flowline is connected from the vessel or tank to the Vapor Recovery Unit (VRU) for further pressure reduction. Once depressurized to less than 1-2 psig, the remaining natural gas in the vessel or tank is vented to atmosphere through a controlled pressure relief valve. Once the vessel or tank is depressurized to atmospheric pressure, the vessel or tank can be safely opened, and maintenance performed.