

District I
1625 N. French Dr., Hobbs, NM 88240

District II
811 S. First St., Artesia, NM 88210

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

District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources

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

Rec'd 05/26/2020 - NMOCD

Form C-104
Revised August 1, 2011

Submit one copy to appropriate District Office

AMENDED REPORT

I. REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT

¹ Operator name and Address TAP ROCK OPERATING, LLC 602 PARK POINT DRIVE, SUITE 200 GOLDEN, CO 80401		² OGRID Number 372043
		³ Reason for Filing Code/ Effective Date NW
⁴ API Number 30 - 0 25-45845	⁵ Pool Name TRIPLE X, BONE SPRING, WEST	⁶ Pool Code 96674
⁷ Property Code 325171	⁸ Property Name ZEUS STATE	⁹ Well Number 186H

II. ¹⁰ Surface Location

UI or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South Line	Feet from the	East/West line	County
O	09	24S	33E		587	SOUTH	1852	EAST	LEA

¹¹ Bottom Hole Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	09	24S	33E		37	NORTH	1955	EAST	LEA
¹² Lse Code S	¹³ Producing Method Code F	¹⁴ Gas Connection Date 3/10/2020	¹⁵ C-129 Permit Number	¹⁶ C-129 Effective Date	¹⁷ C-129 Expiration Date				

III. Oil and Gas Transporters

¹⁸ Transporter OGRID	¹⁹ Transporter Name and Address	²⁰ O/G/W
214754	ENLINK MIDSTREAM OPERATING,LP 1722 ROUTH ST. SUITE 1300 DALLAS, TX 75201	O
371960	LUCID ENERGY GROUP 3100 MCKINNON ST #800 DALLAS, TX 75201	G

IV. Well Completion Data

²¹ Spud Date	²² Ready Date	²³ TD	²⁴ PBTD	²⁵ Perforations	²⁶ DHC, MC
11/7/19	3/7/2020	14870'	14804'	10075'-14717'	
²⁷ Hole Size	²⁸ Casing & Tubing Size	²⁹ Depth Set	³⁰ Sacks Cement		
17 1/2"	13 3/8"	1317'	1225		
12 1/4"	9 5/8"	5305'	1360		
8 3/4"	5 1/2"	14856'	2220		

V. Well Test Data

³¹ Date New Oil	³² Gas Delivery Date	³³ Test Date	³⁴ Test Length	³⁵ Tbg. Pressure	³⁶ Csg. Pressure
3/7/2020	3/10/2020	3/17/2020	24 hrs		190
³⁷ Choke Size	³⁸ Oil	³⁹ Water	⁴⁰ Gas	⁴¹ Test Method	
46/64	150	1505	402	Flowing	

⁴² I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

Signature: *Ramsey*

Printed name:
Bill Ramsey


Title:
Regulatory Analyst

E-mail Address:
bramsey@taprk.com

Date:
5/26/2020

Phone:
720-360-4028

OIL CONSERVATION DIVISION	
Approved by:	Patricia Martinez
Title:	LM II
Approval Date:	6/18/2020

Submit To Appropriate District Office Two Copies District I 1625 N. French Dr., Hobbs, NM 88240 District II 811 S. First St., Artesia, NM 88210 District III 1000 Rio Brazos Rd., Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505		State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505				Form C-105 Revised April 3, 2017				
		1. WELL API NO.		30-025-45845						
		2. Type of Lease		<input checked="" type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/> FED/INDIAN						
		3. State Oil & Gas Lease No.								
WELL COMPLETION OR RECOMPLETION REPORT AND LOG										
4. Reason for filing:					5. Lease Name or Unit Agreement Name					
<input checked="" type="checkbox"/> COMPLETION REPORT (Fill in boxes #1 through #31 for State and Fee wells only)					ZEUS STATE					
<input type="checkbox"/> C-144 CLOSURE ATTACHMENT (Fill in boxes #1 through #9, #15 Date Rig Released and #32 and/or #33; attach this and the plat to the C-144 closure report in accordance with 19.15.17.13.K NMAC)					6. Well Number:					
					186H					
7. Type of Completion:										
<input checked="" type="checkbox"/> NEW WELL <input type="checkbox"/> WORKOVER <input type="checkbox"/> DEEPENING <input type="checkbox"/> PLUGBACK <input type="checkbox"/> DIFFERENT RESERVOIR <input type="checkbox"/> OTHER										
8. Name of Operator					9. OGRID					
TAP ROCK OPERATING, LLC					372043					
10. Address of Operator					11. Pool name or Wildcat					
602 PARK POINT DRIVE, SUITE 200, GOLDEN, CO					TRIPLE X, BONE SPRING WEST					
12. Location	Unit Ltr	Section	Township	Range	Lot	Feet from the	N/S Line	Feet from the	E/W Line	County
Surface:	O	9	24-S	33-E	-	587	SOUTH	1852	EAST	LEA
BH:	B	9	24-S	33-E	-	37	NORTH	1955	EAST	LEA
13. Date Spudded	14. Date T.D. Reached	15. Date Rig Released			16. Date Completed (Ready to Produce)			17. Elevations (DF and RKB, RT, GR, etc.)		
11/7/2019	11/18/2019	11/20/2019			3/7/2020			3617 GR		
18. Total Measured Depth of Well			19. Plug Back Measured Depth		20. Was Directional Survey Made?		21. Type Electric and Other Logs Run			
14870			14804		YES		GR			
22. Producing Interval(s), of this completion - Top, Bottom, Name										
10075' - 14717' Avalon Shale										
23. CASING RECORD (Report all strings set in well)										
CASING SIZE		WEIGHT LB./FT.		DEPTH SET		HOLE SIZE		CEMENTING RECORD		AMOUNT PULLED
13.375		54.5		1317		17.5		1225 sks		NA
9.625		40		5305		12.25		1360 sks		NA
5.5		20		14856		8.75		2220 sks		NA
24. LINER RECORD										
SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	25. TUBING RECORD					
					SIZE	DEPTH SET	PACKER SET			
26. Perforation record (interval, size, and number)					27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC.					
10075' to 14717', 3 spf at .39 inch holes with 936 total shots					DEPTH INTERVAL		AMOUNT AND KIND MATERIAL USED			
					10075' - 14717'		12,162,710 lbs 100 mesh sand.			
28. PRODUCTION										
Date First Production		Production Method (<i>Flowing, gas lift, pumping - Size and type pump</i>)				Well Status (<i>Prod. or Shut-in</i>)				
3/7/2020		Flowing				Producing				
Date of Test	Hours Tested	Choke Size	Prod'n For Test Period	Oil - Bbl	Gas - MCF	Water - Bbl.	Gas - Oil Ratio			
3/17/2020	24 hrs	46/64		150	402	1505	2.68			
Flow Tubing Press.	Casing Pressure	Calculated 24-Hour Rate	Oil - Bbl.	Gas - MCF	Water - Bbl.	Oil Gravity - API - (<i>Corr.</i>)				
0	190		150	402	1505					
29. Disposition of Gas (<i>Sold, used for fuel, vented, etc.</i>)							30. Test Witnessed By			
Sold										
31. List Attachments										
Directional Survey, GR										
32. If a temporary pit was used at the well, attach a plat with the location of the temporary pit.							33. Rig Release Date:			
34. If an on-site burial was used at the well, report the exact location of the on-site burial:										
Latitude			Longitude			NAD83				
I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief										
Signature	Printed Name			Title			Date			
	Bill Ramsey			Regulatory Analyst			4/9/2020			
E-mail Address bramsey@t+										

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
AS-DRILLED

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-025-45845		² Pool Code 96674		³ Pool Name TRIPLE X, BONE SPRING, WEST	
⁴ Property Code 325171		⁵ Property Name ZEUS STATE			⁶ Well Number 186H
⁷ OGRID No. 372043		⁸ Operator Name TAP ROCK OPERATING, LLC.			⁹ Elevation 3617'

¹⁰Surface Location

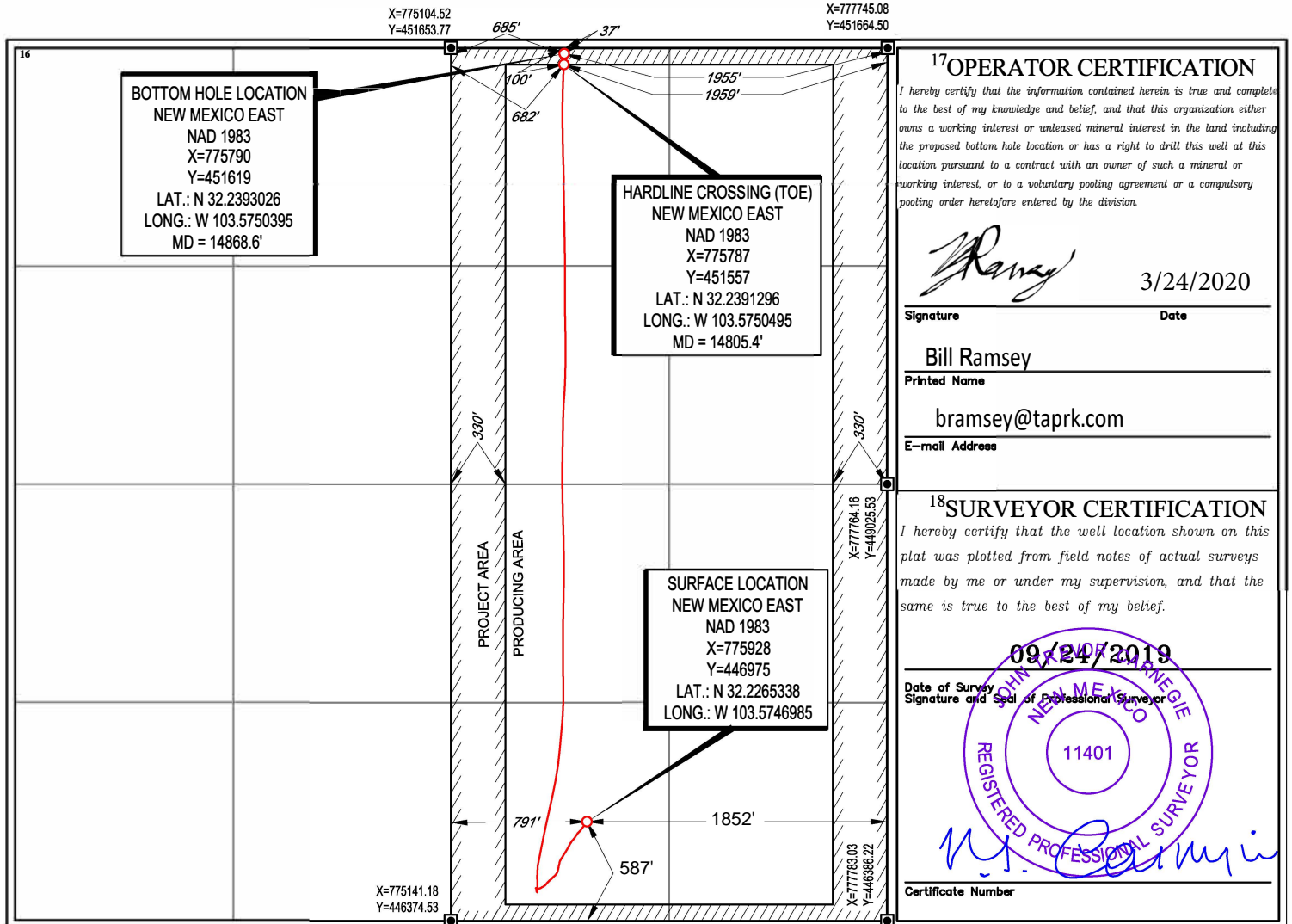
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
0	9	24-S	33-E	-	587'	SOUTH	1852'	EAST	LEA

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
B	9	24-S	33-E	-	37'	NORTH	1955'	EAST	LEA

¹² Dedicated Acres	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.





Tap Rock Resources, LLC

Lea County, NM (NAD 83 NME)
(Zeus State) Sec-9_T24-S_R-33-E
Zeus Unit State #186H

OWB

Design: AWB

Standard Survey Report

19 November, 2019





Operator: Taprock Resources LLC
Well Name: Zeus Unit State #186H
County: Lea
State: New Mexico
Rig Name: H&P 388
API Number: 30-025-45845

Intrepid Directional Drilling Specialists certifies that the surveys performed on the above referenced well are true and correct MWD surveys, data provided as follows:

Surveyor: Intrepid Directional Drilling Specialists
Survey Depths: 9428' MD – 14804' MD
Projection to Bit: 14870' MD
Dates Performed: 11/06/2019 – 11/19/2019
Type of Survey: MWD

Sincerely,

A handwritten signature in blue ink, appearing to read "Jim", written over a light blue horizontal line.

James Burlison
Vice President of MWD Operations
Intrepid Directional Drilling Specialists





Company:	Tap Rock Resources, LLC	Local Co-ordinate Reference:	Well Zeus Unit State #186H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB @ 3644.0usft (H&P 388)
Site:	(Zeus State) Sec-9_T24-S_R-33-E	MD Reference:	KB @ 3644.0usft (H&P 388)
Well:	Zeus Unit State #186H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	AWB	Database:	EDM 5000.15 Single User Db

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	(Zeus State) Sec-9_T24-S_R-33-E				
Site Position:		Northing:	447,193.00 usft	Latitude:	32° 13' 37.575 N
From:	Map	Easting:	777,416.00 usft	Longitude:	103° 34' 11.577 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.41 °

Well	Zeus Unit State #186H					
Well Position	+N/-S	0.0 usft	Northing:	446,975.00 usft	Latitude:	32° 13' 35.522 N
	+E/-W	0.0 usft	Easting:	775,928.00 usft	Longitude:	103° 34' 28.917 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level:	3,618.0 usft

Wellbore	OWB				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	10/26/19	6.70	60.03	47,695.31774767

Design	AWB				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.0	0.0	0.0	359.59	

Survey Program	Date	11/19/19			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
44.6	9,334.0	Gyro Svys (OWB)	GYRO-NS	OWSG Gyrocompass Gyro	
9,428.0	14,870.0	Intrepid MWD Crv/Lat (OWB)	MWD	OWSG MWD - Standard	

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	
44.6	0.14	92.81	44.6	0.0	0.1	0.0	0.31	0.31	0.00	
139.4	0.55	192.18	139.4	-0.5	0.1	-0.5	0.62	0.43	104.83	
234.2	0.70	196.19	234.2	-1.5	-0.2	-1.5	0.16	0.16	4.23	
328.9	0.72	187.60	328.9	-2.6	-0.4	-2.6	0.11	0.02	-9.06	
423.7	0.77	184.66	423.7	-3.8	-0.6	-3.8	0.07	0.05	-3.10	
518.5	0.82	178.77	518.5	-5.1	-0.6	-5.1	0.10	0.05	-6.21	
613.3	0.80	176.60	613.3	-6.5	-0.5	-6.5	0.04	-0.02	-2.29	
708.1	0.76	179.41	708.1	-7.8	-0.5	-7.8	0.06	-0.04	2.96	
802.9	0.63	193.74	802.8	-8.9	-0.6	-8.9	0.23	-0.14	15.12	



Company:	Tap Rock Resources, LLC	Local Co-ordinate Reference:	Well Zeus Unit State #186H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB @ 3644.0usft (H&P 388)
Site:	(Zeus State) Sec-9_T24-S_R-33-E	MD Reference:	KB @ 3644.0usft (H&P 388)
Well:	Zeus Unit State #186H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	AWB	Database:	EDM 5000.15 Single User Db

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)
897.7	0.73	243.87	897.6	-9.7	-1.3	-9.7	0.62	0.11	52.89
992.5	0.70	233.57	992.4	-10.3	-2.3	-10.3	0.14	-0.03	-10.87
1,087.3	0.86	246.07	1,087.2	-10.9	-3.4	-10.9	0.25	0.17	13.19
1,182.1	0.82	221.29	1,182.0	-11.7	-4.5	-11.7	0.38	-0.04	-26.14
1,264.1	0.61	256.12	1,264.0	-12.3	-5.3	-12.2	0.58	-0.26	42.46
Rustler Anhydrite									
1,276.8	0.60	263.09	1,276.8	-12.3	-5.4	-12.2	0.58	-0.05	54.65
1,371.6	0.28	266.21	1,371.5	-12.4	-6.2	-12.3	0.34	-0.34	3.29
1,466.4	0.09	154.25	1,466.3	-12.4	-6.4	-12.4	0.34	-0.20	-118.11
1,561.2	0.38	337.94	1,561.1	-12.2	-6.4	-12.2	0.50	0.31	-186.00
1,656.0	0.77	277.80	1,655.9	-11.8	-7.2	-11.8	0.70	0.41	-63.45
1,750.8	0.91	229.15	1,750.7	-12.2	-8.4	-12.2	0.74	0.15	-51.32
1,766.1	1.20	227.38	1,766.0	-12.4	-8.6	-12.4	1.94	1.92	-11.55
Top Salt									
1,845.6	2.74	224.33	1,845.4	-14.4	-10.5	-14.3	1.94	1.93	-3.84
1,940.4	4.47	212.06	1,940.0	-19.1	-14.1	-19.0	1.99	1.83	-12.94
2,035.2	6.08	218.81	2,034.4	-26.2	-19.2	-26.0	1.82	1.70	7.12
2,130.0	6.10	213.31	2,128.7	-34.3	-25.1	-34.1	0.62	0.02	-5.80
2,224.7	6.94	217.16	2,222.8	-43.0	-31.3	-42.8	1.00	0.89	4.06
2,319.5	7.09	220.48	2,316.9	-52.1	-38.6	-51.8	0.46	0.16	3.50
2,414.3	7.05	227.51	2,411.0	-60.4	-46.7	-60.1	0.91	-0.04	7.42
2,509.1	6.72	223.29	2,505.1	-68.4	-54.8	-68.0	0.64	-0.35	-4.45
2,603.9	6.42	207.61	2,599.3	-77.1	-61.0	-76.7	1.91	-0.32	-16.54
2,698.7	6.30	217.12	2,693.5	-86.0	-66.6	-85.5	1.12	-0.13	10.03
2,793.5	6.09	218.08	2,787.7	-94.1	-72.9	-93.6	0.25	-0.22	1.01
2,888.3	5.85	215.66	2,882.0	-102.0	-78.8	-101.4	0.37	-0.25	-2.55
2,983.1	5.50	217.47	2,976.3	-109.5	-84.4	-108.9	0.41	-0.37	1.91
3,077.9	5.20	216.43	3,070.7	-116.6	-89.7	-115.9	0.33	-0.32	-1.10
3,172.6	6.75	215.57	3,165.0	-124.5	-95.5	-123.9	1.64	1.64	-0.91
3,267.4	7.08	206.47	3,259.1	-134.3	-101.3	-133.6	1.21	0.35	-9.60
3,362.2	6.79	210.20	3,353.2	-144.4	-106.7	-143.6	0.56	-0.31	3.94
3,457.0	6.22	209.55	3,447.4	-153.7	-112.1	-152.9	0.61	-0.60	-0.69
3,551.8	5.81	207.90	3,541.6	-162.4	-116.9	-161.6	0.47	-0.43	-1.74
3,646.6	5.71	208.76	3,635.9	-170.8	-121.4	-169.9	0.14	-0.11	0.91
3,741.4	6.26	212.77	3,730.2	-179.3	-126.4	-178.3	0.73	0.58	4.23
3,836.2	5.58	214.45	3,824.5	-187.4	-131.9	-186.5	0.74	-0.72	1.77
3,931.0	5.22	212.78	3,918.9	-194.8	-136.8	-193.8	0.41	-0.38	-1.76
4,025.8	5.02	214.18	4,013.3	-201.9	-141.5	-200.9	0.25	-0.21	1.48
4,120.5	5.02	209.90	4,107.7	-208.9	-145.9	-207.9	0.40	0.00	-4.52
4,215.3	5.13	211.02	4,202.1	-216.1	-150.1	-215.1	0.16	0.12	1.18
4,310.1	4.75	216.85	4,296.6	-222.9	-154.6	-221.8	0.66	-0.40	6.15
4,404.9	5.90	212.20	4,390.9	-230.2	-159.6	-229.0	1.29	1.21	-4.91
4,499.7	5.54	194.64	4,485.3	-238.7	-163.3	-237.5	1.88	-0.38	-18.53

Company:	Tap Rock Resources, LLC	Local Co-ordinate Reference:	Well Zeus Unit State #186H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB @ 3644.0usft (H&P 388)
Site:	(Zeus State) Sec-9_T24-S_R-33-E	MD Reference:	KB @ 3644.0usft (H&P 388)
Well:	Zeus Unit State #186H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	AWB	Database:	EDM 5000.15 Single User Db

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)
4,594.5	5.90	188.37	4,579.6	-248.0	-165.2	-246.8	0.76	0.38	-6.61
4,689.3	6.26	195.75	4,673.8	-257.8	-167.3	-256.6	0.91	0.38	7.79
4,784.1	6.90	190.29	4,768.0	-268.3	-169.7	-267.1	0.94	0.68	-5.76
4,878.9	7.89	191.16	4,862.0	-280.3	-172.0	-279.1	1.05	1.04	0.92
4,973.7	8.26	195.80	4,955.9	-293.3	-175.1	-292.0	0.79	0.39	4.90
4,990.0	8.10	197.25	4,972.0	-295.5	-175.8	-294.2	1.59	-0.96	8.92
Base Salt									
5,068.4	7.43	205.05	5,049.8	-305.4	-179.6	-304.1	1.59	-0.86	9.93
5,163.2	6.92	218.86	5,143.8	-315.4	-185.8	-314.0	1.89	-0.54	14.57
5,239.9	6.45	221.95	5,220.0	-322.2	-191.5	-320.8	0.77	-0.61	4.02
Delaware Mountain Gp									
5,248.0	6.40	222.30	5,228.0	-322.8	-192.1	-321.4	0.77	-0.60	4.35
Lamar									
5,258.0	6.34	222.74	5,238.0	-323.7	-192.9	-322.3	0.77	-0.60	4.42
5,273.2	6.38	223.30	5,253.0	-324.9	-194.0	-323.5	0.49	0.26	3.72
Bell Canyon									
5,292.3	6.43	224.00	5,272.0	-326.4	-195.5	-325.0	0.49	0.27	3.67
Ramsey Sand									
5,352.8	6.60	226.15	5,332.2	-331.3	-200.4	-329.8	0.49	0.28	3.55
5,447.6	6.67	226.26	5,426.3	-338.9	-208.3	-337.4	0.08	0.07	0.12
5,542.4	6.58	228.14	5,520.5	-346.3	-216.3	-344.7	0.25	-0.09	1.98
5,637.2	6.70	230.85	5,614.6	-353.4	-224.6	-351.8	0.35	0.13	2.86
5,732.0	6.59	223.27	5,708.8	-360.8	-232.7	-359.2	0.93	-0.12	-8.00
5,826.8	6.44	219.18	5,803.0	-368.9	-239.7	-367.2	0.51	-0.16	-4.31
5,921.6	6.79	222.58	5,897.1	-377.2	-246.9	-375.4	0.55	0.37	3.59
6,016.3	5.20	230.07	5,991.4	-384.1	-254.0	-382.2	1.87	-1.68	7.90
6,111.1	4.27	234.39	6,085.9	-388.9	-260.1	-387.0	1.05	-0.98	4.56
6,205.9	3.78	249.56	6,180.4	-392.0	-265.9	-390.1	1.23	-0.52	16.00
6,213.5	3.70	248.94	6,188.0	-392.2	-266.4	-390.3	1.22	-1.10	-8.21
Cherry Canyon									
6,300.7	2.78	239.16	6,275.0	-394.3	-270.8	-392.3	1.22	-1.05	-11.21
6,395.5	3.01	234.21	6,369.7	-396.9	-274.8	-394.9	0.36	0.24	-5.22
6,490.3	1.96	240.67	6,464.4	-399.2	-278.3	-397.2	1.14	-1.11	6.82
6,585.1	1.46	261.84	6,559.2	-400.1	-280.9	-398.1	0.84	-0.53	22.33
6,679.9	1.57	220.49	6,653.9	-401.3	-282.9	-399.3	1.13	0.12	-43.62
6,774.7	1.52	270.78	6,748.7	-402.3	-285.0	-400.2	1.39	-0.05	53.05
6,869.5	1.68	262.88	6,843.4	-402.4	-287.6	-400.4	0.29	0.17	-8.33
6,964.2	1.83	257.24	6,938.2	-402.9	-290.5	-400.8	0.24	0.16	-5.95
7,059.0	1.35	262.45	7,032.9	-403.4	-293.1	-401.3	0.53	-0.51	5.50
7,153.8	1.48	271.51	7,127.7	-403.5	-295.4	-401.4	0.27	0.14	9.56
7,248.6	1.49	266.87	7,222.5	-403.6	-297.9	-401.4	0.13	0.01	-4.90
7,343.4	1.44	272.79	7,317.2	-403.6	-300.3	-401.4	0.17	-0.05	6.25
7,438.2	1.44	270.52	7,412.0	-403.5	-302.7	-401.3	0.06	0.00	-2.39
7,533.0	1.75	294.13	7,506.7	-402.9	-305.2	-400.7	0.76	0.33	24.91
7,627.8	1.75	302.66	7,601.5	-401.5	-307.7	-399.3	0.27	0.00	9.00

Company:	Tap Rock Resources, LLC	Local Co-ordinate Reference:	Well Zeus Unit State #186H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB @ 3644.0usft (H&P 388)
Site:	(Zeus State) Sec-9_T24-S_R-33-E	MD Reference:	KB @ 3644.0usft (H&P 388)
Well:	Zeus Unit State #186H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	AWB	Database:	EDM 5000.15 Single User Db

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)	
7,722.6	0.84	21.12	7,696.2	-400.1	-308.7	-397.9	1.88	-0.96	82.77	
7,724.3	0.83	21.90	7,698.0	-400.1	-308.7	-397.9	0.85	-0.54	44.45	
Brushy Canyon										
7,817.4	0.69	83.38	7,791.0	-399.4	-307.9	-397.2	0.85	-0.15	66.08	
7,912.1	0.80	102.37	7,885.8	-399.5	-306.7	-397.3	0.28	0.12	20.03	
8,006.9	0.78	114.72	7,980.6	-399.9	-305.4	-397.7	0.18	-0.02	13.03	
8,101.7	0.88	173.65	8,075.4	-400.9	-304.8	-398.7	0.87	0.11	62.17	
8,196.5	0.63	144.47	8,170.2	-402.0	-304.4	-399.8	0.48	-0.26	-30.78	
8,291.3	0.78	198.99	8,264.9	-403.0	-304.3	-400.9	0.70	0.16	57.52	
8,386.1	0.93	193.02	8,359.7	-404.4	-304.7	-402.2	0.18	0.16	-6.30	
8,480.9	1.01	186.79	8,454.5	-406.0	-304.9	-403.8	0.14	0.08	-6.57	
8,575.7	1.23	191.18	8,549.3	-407.8	-305.2	-405.6	0.25	0.23	4.63	
8,670.5	1.39	186.73	8,644.0	-409.9	-305.6	-407.8	0.20	0.17	-4.69	
8,765.3	1.29	180.43	8,738.8	-412.2	-305.7	-410.0	0.19	-0.11	-6.65	
8,860.0	1.34	155.51	8,833.6	-414.2	-305.3	-412.0	0.60	0.05	-26.29	
8,954.8	1.49	160.94	8,928.3	-416.4	-304.4	-414.2	0.21	0.16	5.73	
9,049.6	1.33	165.61	9,023.1	-418.6	-303.7	-416.5	0.21	-0.17	4.93	
9,144.4	1.16	176.45	9,117.8	-420.7	-303.4	-418.5	0.31	-0.18	11.44	
9,149.6	1.17	175.66	9,123.0	-420.8	-303.4	-418.6	0.34	0.15	-15.36	
Bone Spring Lime										
9,239.2	1.33	163.56	9,212.6	-422.7	-303.0	-420.5	0.34	0.18	-13.50	
9,283.6	1.18	155.32	9,257.0	-423.6	-302.7	-421.4	0.53	-0.35	-18.55	
Upper Avalon										
9,334.0	1.04	143.32	9,307.4	-424.4	-302.2	-422.2	0.53	-0.27	-23.82	
Tie to Gyro										
9,428.0	1.49	135.58	9,401.4	-426.0	-300.8	-423.8	0.51	0.48	-8.23	
9,523.0	3.43	11.04	9,496.3	-424.1	-299.4	-421.9	4.68	2.04	-131.09	
9,568.0	8.87	4.75	9,541.0	-419.3	-298.9	-417.1	12.17	12.10	-13.99	
Middle Avalon										
9,618.0	14.95	3.13	9,589.9	-409.0	-298.2	-406.8	12.17	12.15	-3.24	
9,713.0	23.25	355.74	9,679.6	-378.0	-298.9	-375.8	9.08	8.74	-7.78	
9,807.0	35.21	358.56	9,761.5	-332.2	-301.0	-330.1	12.80	12.72	3.00	
9,902.0	50.29	8.05	9,831.2	-268.2	-296.5	-266.1	17.22	15.87	9.99	
9,997.0	62.15	11.56	9,883.9	-190.6	-282.9	-188.6	12.85	12.48	3.69	
10,052.0	65.85	11.40	9,908.0	-142.2	-273.1	-140.2	6.74	6.73	-0.28	
Lower Avalon										
10,091.0	68.48	11.30	9,923.1	-106.9	-266.0	-105.0	6.74	6.73	-0.27	
10,186.0	74.11	12.35	9,953.6	-18.9	-247.6	-17.1	6.02	5.93	1.11	
10,281.0	77.63	12.44	9,976.8	71.1	-227.8	72.7	3.71	3.71	0.09	
10,375.0	79.69	12.62	9,995.3	161.0	-207.8	162.5	2.20	2.19	0.19	
10,470.0	81.19	11.12	10,011.0	252.7	-188.6	254.0	2.22	1.58	-1.58	
10,565.0	81.58	7.70	10,025.3	345.3	-173.2	346.6	3.58	0.41	-3.60	
10,660.0	85.67	4.44	10,035.8	439.2	-163.2	440.3	5.49	4.31	-3.43	
10,754.0	87.91	5.59	10,041.1	532.7	-155.0	533.8	2.68	2.38	1.22	



Company:	Tap Rock Resources, LLC	Local Co-ordinate Reference:	Well Zeus Unit State #186H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB @ 3644.0usft (H&P 388)
Site:	(Zeus State) Sec-9_T24-S_R-33-E	MD Reference:	KB @ 3644.0usft (H&P 388)
Well:	Zeus Unit State #186H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	AWB	Database:	EDM 5000.15 Single User Db

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)	
10,849.0	88.92	4.00	10,043.7	627.3	-147.1	628.3	1.98	1.06	-1.67	
10,944.0	89.05	1.54	10,045.4	722.2	-142.5	723.2	2.59	0.14	-2.59	
11,039.0	86.42	359.35	10,049.1	817.1	-141.8	818.1	3.60	-2.77	-2.31	
11,133.0	86.15	359.08	10,055.2	910.9	-143.0	911.9	0.41	-0.29	-0.29	
11,228.0	87.47	359.87	10,060.5	1,005.7	-143.9	1,006.7	1.62	1.39	0.83	
11,323.0	87.78	0.14	10,064.5	1,100.6	-143.9	1,101.6	0.43	0.33	0.28	
11,418.0	88.57	0.67	10,067.5	1,195.6	-143.2	1,196.6	1.00	0.83	0.56	
11,512.0	89.32	1.10	10,069.2	1,289.6	-141.8	1,290.5	0.92	0.80	0.46	
11,607.0	90.20	1.37	10,069.6	1,384.5	-139.7	1,385.5	0.97	0.93	0.28	
11,702.0	93.10	0.31	10,066.9	1,479.5	-138.3	1,480.4	3.25	3.05	-1.12	
11,797.0	91.52	359.35	10,063.1	1,574.4	-138.6	1,575.3	1.95	-1.66	-1.01	
11,891.0	91.78	359.08	10,060.3	1,668.3	-139.9	1,669.3	0.40	0.28	-0.29	
11,986.0	88.97	357.76	10,059.7	1,763.3	-142.5	1,764.3	3.27	-2.96	-1.39	
12,081.0	87.52	358.73	10,062.6	1,858.2	-145.4	1,859.2	1.84	-1.53	1.02	
12,176.0	87.82	359.17	10,066.5	1,953.1	-147.2	1,954.1	0.56	0.32	0.46	
12,270.0	88.35	359.61	10,069.6	2,047.0	-148.2	2,048.1	0.73	0.56	0.47	
12,365.0	88.66	0.05	10,072.1	2,142.0	-148.5	2,143.0	0.57	0.33	0.46	
12,460.0	89.54	0.75	10,073.6	2,237.0	-147.8	2,238.0	1.18	0.93	0.74	
12,555.0	89.71	1.28	10,074.2	2,332.0	-146.1	2,333.0	0.59	0.18	0.56	
12,649.0	91.08	1.90	10,073.6	2,425.9	-143.5	2,426.9	1.60	1.46	0.66	
12,744.0	91.78	2.69	10,071.2	2,520.8	-139.7	2,521.8	1.11	0.74	0.83	
12,839.0	93.76	3.57	10,066.6	2,615.6	-134.5	2,616.5	2.28	2.08	0.93	
12,934.0	92.57	2.07	10,061.4	2,710.3	-129.9	2,711.2	2.01	-1.25	-1.58	
13,028.0	93.14	0.14	10,056.7	2,804.2	-128.1	2,805.0	2.14	0.61	-2.05	
13,123.0	92.44	358.82	10,052.1	2,899.1	-128.9	2,899.9	1.57	-0.74	-1.39	
13,218.0	90.95	359.17	10,049.3	2,994.0	-130.6	2,994.8	1.61	-1.57	0.37	
13,313.0	94.07	359.70	10,045.1	3,088.9	-131.5	3,089.7	3.33	3.28	0.56	
13,408.0	89.93	359.87	10,041.8	3,183.8	-131.9	3,184.7	4.36	-4.36	0.18	
13,502.0	91.08	359.96	10,041.0	3,277.8	-132.0	3,278.7	1.23	1.22	0.10	
13,597.0	87.52	359.08	10,042.1	3,372.8	-132.8	3,373.6	3.86	-3.75	-0.93	
13,692.0	88.31	359.26	10,045.6	3,467.7	-134.2	3,468.6	0.85	0.83	0.19	
13,787.0	89.98	359.35	10,047.0	3,562.7	-135.3	3,563.6	1.76	1.76	0.09	
13,882.0	89.32	358.91	10,047.6	3,657.7	-136.8	3,658.6	0.83	-0.69	-0.46	
13,976.0	90.81	359.00	10,047.5	3,751.6	-138.5	3,752.5	1.59	1.59	0.10	
14,071.0	90.07	358.64	10,046.7	3,846.6	-140.4	3,847.5	0.87	-0.78	-0.38	
14,166.0	88.75	358.38	10,047.7	3,941.6	-142.9	3,942.5	1.42	-1.39	-0.27	
14,261.0	86.86	358.29	10,051.3	4,036.5	-145.7	4,037.4	1.99	-1.99	-0.09	
14,355.0	87.60	359.00	10,055.9	4,130.3	-147.9	4,131.3	1.09	0.79	0.76	
14,450.0	88.92	359.87	10,058.8	4,225.3	-148.8	4,226.2	1.66	1.39	0.92	
14,545.0	90.33	0.75	10,059.4	4,320.3	-148.3	4,321.2	1.75	1.48	0.93	
14,640.0	92.13	1.37	10,057.4	4,415.2	-146.6	4,416.2	2.00	1.89	0.65	
14,735.0	93.80	2.07	10,052.4	4,510.1	-143.7	4,511.0	1.91	1.76	0.74	
14,804.0	95.03	2.42	10,047.1	4,578.8	-141.0	4,579.7	1.85	1.78	0.51	

Company:	Tap Rock Resources, LLC	Local Co-ordinate Reference:	Well Zeus Unit State #186H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB @ 3644.0usft (H&P 388)
Site:	(Zeus State) Sec-9_T24-S_R-33-E	MD Reference:	KB @ 3644.0usft (H&P 388)
Well:	Zeus Unit State #186H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	AWB	Database:	EDM 5000.15 Single User Db

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)
LAST SVY									
14,806.7	95.03	2.42	10,046.9	4,581.5	-140.9	4,582.4	0.00	0.00	0.00
LTP @ 14806.7'MD, 100'FNL & 638.4'FEL									
14,870.0	95.03	2.42	10,041.3	4,644.5	-138.2	4,645.4	0.00	0.00	0.00
Projection to TD @ 14870'MD, 37'FNL & 635.3'FEL									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
FTP (Zeus Unit State)	0.00	0.00	10,037.0	-498.0	-126.0	446,477.00	775,802.00	32° 13' 30.603 N	103° 34' 30.424 W
- hit/miss target - actual wellpath misses target center by 352.5usft at 9902.0usft MD (9831.2 TVD, -268.2 N, -296.5 E)									
- Shape - Point									
PBHL (Zeus Unit State)	0.40	359.59	10,068.0	4,651.0	-163.0	451,626.00	775,765.00	32° 14' 21.556 N	103° 34' 30.432 W
- actual wellpath misses target center by 37.0usft at 14870.0usft MD (10041.3 TVD, 4644.5 N, -138.2 E)									
- Rectangle (sides W100.0 H5,175.0 D35.0)									
LTP (Zeus Unit State)	0.00	0.00	10,068.0	4,581.0	-162.0	451,556.00	775,766.00	32° 14' 20.863 N	103° 34' 30.426 W
- actual wellpath misses target center by 29.7usft at 14803.8usft MD (10047.2 TVD, 4578.6 N, -141.0 E)									
- Point									

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
1,264.1	1,264.0	Rustler Anhydrite				
1,766.1	1,766.0	Top Salt				
4,990.0	4,972.0	Base Salt				
5,239.9	5,220.0	Delaware Mountain Gp				
5,248.0	5,228.0	Lamar				
5,273.2	5,253.0	Bell Canyon				
5,292.3	5,272.0	Ramsey Sand				
6,213.5	6,188.0	Cherry Canyon				
7,724.3	7,698.0	Brushy Canyon				
9,149.6	9,123.0	Bone Spring Lime				
9,283.6	9,257.0	Upper Avalon				
9,568.0	9,541.0	Middle Avalon				
10,052.0	9,908.0	Lower Avalon				



Company:	Tap Rock Resources, LLC	Local Co-ordinate Reference:	Well Zeus Unit State #186H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB @ 3644.0usft (H&P 388)
Site:	(Zeus State) Sec-9_T24-S_R-33-E	MD Reference:	KB @ 3644.0usft (H&P 388)
Well:	Zeus Unit State #186H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	AWB	Database:	EDM 5000.15 Single User Db

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
9,334.0	9,307.4	-424.4	-302.2	Tie to Gyro
14,804.0	10,047.1	4,578.8	-141.0	LAST SVY
14,806.7	10,046.9	4,581.5	-140.9	LTP @ 14806.7'MD, 100'FNL & 638.4'FEL
14,870.0	10,041.3	4,644.5	-138.2	Projection to TD @ 14870'MD, 37'FNL & 635.3'FEL

Checked By: _____ Approved By: _____ Date: _____