

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

Rec'd 05/26/2020 - NMOCD

Form C-104
Revised August 1, 2011

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

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 25-45844	⁵ Pool Name TRIPLE X, BONE SPRING, WEST	⁶ Pool Code 96674
⁷ Property Code 325171	⁸ Property Name ZEUS STATE	⁹ Well Number 173H

II. ¹⁰ Surface Location

Ul 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		593	SOUTH	1877	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		26	NORTH	2317	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
11/20/19	3/8/2020	14671'	14590'	9835'-14504'	
²⁷ Hole Size	²⁸ Casing & Tubing Size	²⁹ Depth Set	³⁰ Sacks Cement		
17 1/2"	13 3/8"	1314'	1160		
12 1/4"	9 5/8"	5313'	1560		
8 3/4"	5 1/2"	14642'	2095		

V. Well Test Data

³¹ Date New Oil	³² Gas Delivery Date	³³ Test Date	³⁴ Test Length	³⁵ Tbg. Pressure	³⁶ Csg. Pressure
3/8/2020	3/10/2020	3/28/2020	24 hrs		616
³⁷ Choke Size	³⁸ Oil	³⁹ Water	⁴⁰ Gas	⁴¹ Test Method	
46/64	1150	1914	1959	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
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WELL COMPLETION OR RECOMPLETION REPORT AND LOG

4. Reason for filing: <input checked="" type="checkbox"/> COMPLETION REPORT (Fill in boxes #1 through #31 for State and Fee wells only) <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)	5. Lease Name or Unit Agreement Name ZEUS STATE 6. Well Number: #173H
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7. Type of Completion:
 NEW WELL
 WORKOVER
 DEEPENING
 PLUGBACK
 DIFFERENT RESERVOIR
 OTHER

8. Name of Operator TAP ROCK OPERATING, LLC	9. OGRID 372043
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10. Address of Operator 602 PARK POINT DRIVE, SUITE 200, GOLDEN, CO	11. Pool name or Wildcat [96674] TRIPLE X, BONE SPRING, WEST
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12. Location	Unit Ltr	Section	Township	Range	Lot	Feet from the	N/S Line	Feet from the	E/W Line	County
Surface:	O	09	24S	33E		593	FSL	1877	FEL	LEA
BH:	B	09	24S	33E		26	FNL	2317	FEL	LEA

13. Date Spudded 11/20/19	14. Date T.D. Reached 12/2/19	15. Date Rig Released 12/4/19	16. Date Completed (Ready to Produce) 3/8/2020	17. Elevations (DF and RKB, RT, GR, etc.) 3617 GL
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18. Total Measured Depth of Well 14671'	19. Plug Back Measured Depth 14590'	20. Was Directional Survey Made? YES	21. Type Electric and Other Logs Run GR
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22. Producing Interval(s), of this completion - Top, Bottom, Name
9835' - 14504', 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	1314'	17.5	1160 SKS	NA
9.625	40	5313'	12.25	1560 SKS	NA
5.5	20	14642'	6.75	2095 SKS	NA

24. LINER RECORD				25. TUBING RECORD			
SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	SIZE	DEPTH SET	PACKER SET

26. Perforation record (interval, size, and number) 9835' to 14504', .39 inch holes, 936 total shots	27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC. <table border="1" style="width:100%; border-collapse: collapse; text-align: center;"> <tr> <th>DEPTH INTERVAL</th> <th>AMOUNT AND KIND MATERIAL USED</th> </tr> <tr> <td>9835' - 14504'</td> <td>12,164,270 lbs 100 mesh sand.</td> </tr> </table>	DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED	9835' - 14504'	12,164,270 lbs 100 mesh sand.
DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED				
9835' - 14504'	12,164,270 lbs 100 mesh sand.				

28. PRODUCTION

Date First Production 3/8/2020	Production Method (<i>Flowing, gas lift, pumping - Size and type pump</i>) Flowing	Well Status (<i>Prod. or Shut-in</i>) Producing
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Date of Test 3/28/2020	Hours Tested 24 hrs	Choke Size 46/64	Prod'n For Test Period	Oil - Bbl 1150	Gas - MCF 1959	Water - Bbl. 1914	Gas - Oil Ratio 1.703
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Flow Tubing Press. 0	Casing Pressure 616	Calculated 24-Hour Rate	Oil - Bbl. 1150	Gas - MCF 1959	Water - Bbl. 1914	Oil Gravity - API - (<i>Corr.</i>)
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29. Disposition of Gas (<i>Sold, used for fuel, vented, etc.</i>) Sold	30. Test Witnessed By N/A
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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:
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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 **Bill Ramsey** Title **Regulatory Analyst** Date _____

E-mail Address **bramsey@taprk.com**

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 30-025-45844		² Pool Code 96674		³ Pool Name TRIPLE X; BONE SPRING, WEST	
⁴ Property Code 325171		⁵ Property Name ZEUS STATE			⁶ Well Number 173H
⁷ OGRID No. 372043		⁸ Operator Name TAP ROCK OPERATING, LLC.			⁹ Elevation 3617'

¹⁰Surface Location

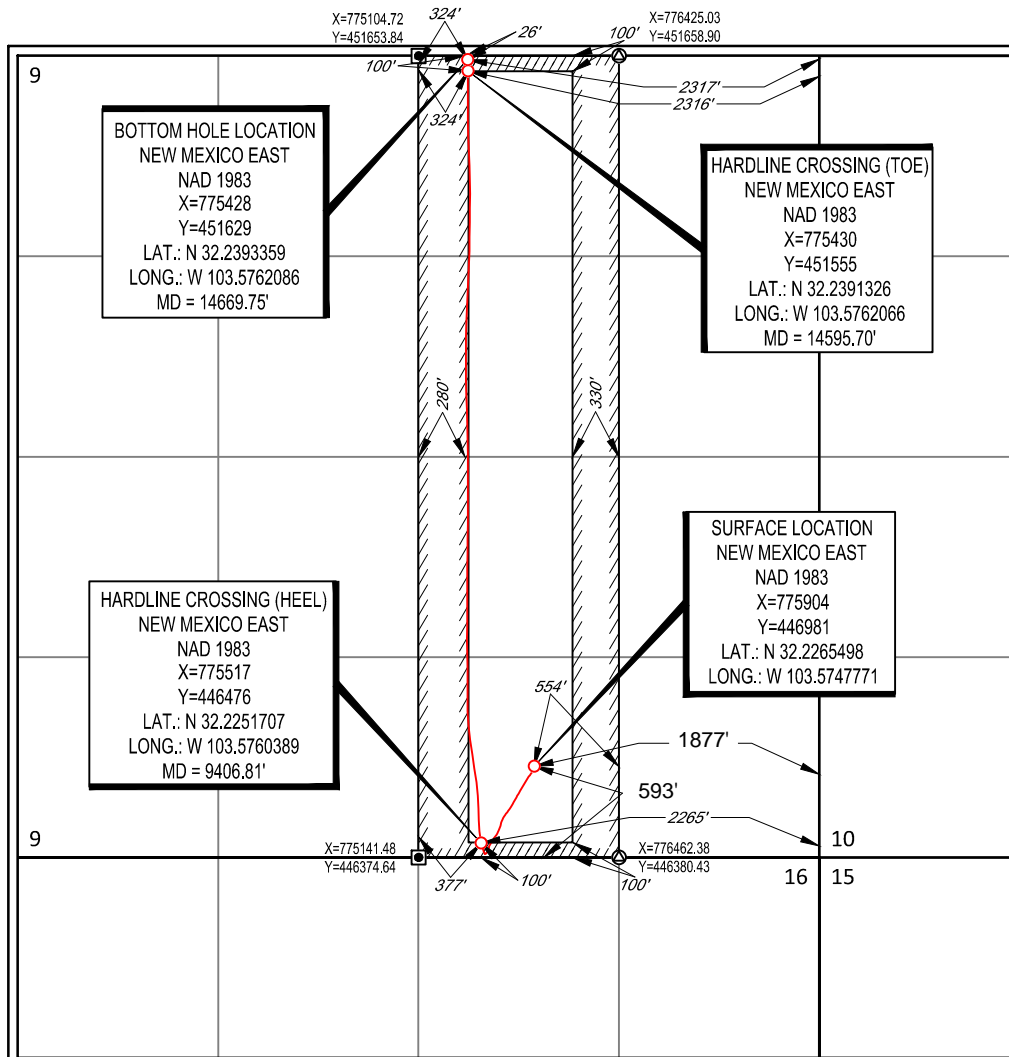
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
0	9	24-S	33-E	-	593'	SOUTH	1877'	EAST	LEA

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	-	26'	NORTH	2317'	EAST	LEA

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



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 3/24/2020
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.

09/24/2019
Date of Survey

W. Ramsey
Signature and Seal of Professional Surveyor

REGISTERED PROFESSIONAL SURVEYOR
NEW MEXICO
11401

W. Ramsey
Certificate Number



Tap Rock Resources, LLC

Lea County, NM (NAD 83 NME)
(Zeus State) Sec-9_T24-S_R-33-E
Zeus Unit State #173H

OWB

Design: AWB

Standard Survey Report

04 December, 2019





Operator: Taprock Resources LLC
Well Name: Zeus Unit State #173H
County: Lea
State: New Mexico
Rig Name: H&P 388
API Number: 30-025-45844

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: 9072.5' MD – 14606' MD
Projection to Bit: 14671' MD
Dates Performed: 11/20/2019 – 12/03/2019
Type of Survey: MWD

Sincerely,

A handwritten signature in blue ink, appearing to read "James Burlison".

James Burlison
Vice President of MWD Operations
Intrepid Directional Drilling Specialists





Company:	Tap Rock Resources, LLC	Local Co-ordinate Reference:	Well Zeus Unit State #173H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB @ 3643.5usft (H&P 388)
Site:	(Zeus State) Sec-9_T24-S_R-33-E	MD Reference:	KB @ 3643.5usft (H&P 388)
Well:	Zeus Unit State #173H	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 #173H					
Well Position	+N/-S	0.0 usft	Northing:	446,981.00 usft	Latitude:	32° 13' 35.583 N
	+E/-W	0.0 usft	Easting:	775,904.00 usft	Longitude:	103° 34' 29.196 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level:	3,617.0 usft

Wellbore	OWB				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	10/26/19	6.70	60.03	47,695.32339788

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	12/04/19			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
140.6	8,983.0	Gyro Svys (OWB)	Standard Keeper 104	Standard Wireline Keeper ver 1.0.4	
9,072.5	14,671.0	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	
140.6	0.58	197.78	140.6	-0.7	-0.2	-0.7	0.41	0.41	0.00	
235.0	0.67	199.15	235.0	-1.7	-0.5	-1.7	0.10	0.10	1.45	
329.4	0.77	199.85	329.4	-2.8	-0.9	-2.8	0.11	0.11	0.74	
423.8	0.98	191.80	423.8	-4.2	-1.3	-4.1	0.26	0.22	-8.53	
518.2	1.00	167.70	518.2	-5.8	-1.3	-5.7	0.44	0.02	-25.53	
612.6	0.68	184.52	612.5	-7.1	-1.2	-7.1	0.42	-0.34	17.82	
707.0	0.49	245.27	706.9	-7.8	-1.6	-7.8	0.65	-0.20	64.35	
801.4	1.10	252.22	801.3	-8.3	-2.8	-8.3	0.65	0.65	7.36	
895.8	1.20	255.62	895.7	-8.8	-4.6	-8.8	0.13	0.11	3.60	



Company:	Tap Rock Resources, LLC	Local Co-ordinate Reference:	Well Zeus Unit State #173H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB @ 3643.5usft (H&P 388)
Site:	(Zeus State) Sec-9_T24-S_R-33-E	MD Reference:	KB @ 3643.5usft (H&P 388)
Well:	Zeus Unit State #173H	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)
990.2	1.20	258.88	990.1	-9.2	-6.6	-9.2	0.07	0.00	3.45
1,084.6	1.19	260.49	1,084.5	-9.6	-8.5	-9.5	0.04	-0.01	1.71
1,179.0	1.13	257.63	1,178.9	-10.0	-10.4	-9.9	0.09	-0.06	-3.03
1,264.2	1.24	254.92	1,264.0	-10.4	-12.1	-10.3	0.14	0.13	-3.19
Rustler Anhydrite									
1,273.4	1.25	254.65	1,273.2	-10.4	-12.3	-10.3	0.14	0.13	-2.88
1,367.8	1.81	243.14	1,367.6	-11.4	-14.6	-11.3	0.67	0.59	-12.19
1,462.2	2.78	226.60	1,461.9	-13.6	-17.6	-13.5	1.23	1.03	-17.52
1,556.6	4.57	228.29	1,556.1	-17.7	-22.1	-17.5	1.90	1.90	1.79
1,651.0	6.20	228.33	1,650.1	-23.6	-28.7	-23.4	1.73	1.73	0.04
1,745.4	8.86	226.89	1,743.7	-32.0	-37.8	-31.7	2.82	2.82	-1.53
1,768.0	8.93	225.80	1,766.0	-34.4	-40.3	-34.1	0.80	0.30	-4.82
Top Salt									
1,839.8	9.16	222.45	1,836.9	-42.5	-48.2	-42.1	0.80	0.32	-4.67
1,934.2	8.39	217.84	1,930.2	-53.4	-57.5	-53.0	1.10	-0.82	-4.88
2,028.6	7.66	218.29	2,023.7	-63.8	-65.6	-63.4	0.78	-0.77	0.48
2,123.0	7.16	220.45	2,117.3	-73.2	-73.3	-72.7	0.61	-0.53	2.29
2,217.4	7.18	211.73	2,211.0	-82.7	-80.2	-82.2	1.15	0.02	-9.24
2,311.8	7.62	209.87	2,304.6	-93.2	-86.5	-92.6	0.53	0.47	-1.97
2,406.2	7.57	209.85	2,398.2	-104.0	-92.7	-103.3	0.05	-0.05	-0.02
2,500.6	7.23	209.38	2,491.8	-114.6	-98.7	-113.9	0.37	-0.36	-0.50
2,595.0	7.78	209.12	2,585.4	-125.3	-104.7	-124.6	0.58	0.58	-0.28
2,689.4	8.24	210.06	2,678.8	-136.8	-111.2	-136.0	0.51	0.49	1.00
2,783.8	7.47	209.99	2,772.4	-147.9	-117.7	-147.1	0.82	-0.82	-0.07
2,878.2	7.20	209.98	2,866.0	-158.4	-123.7	-157.5	0.29	-0.29	-0.01
2,972.6	7.74	210.18	2,959.6	-169.0	-129.8	-168.1	0.57	0.57	0.21
3,067.0	7.86	209.34	3,053.1	-180.1	-136.2	-179.1	0.18	0.13	-0.89
3,161.4	7.16	211.39	3,146.7	-190.8	-142.4	-189.7	0.79	-0.74	2.17
3,255.8	6.49	209.34	3,240.4	-200.4	-148.1	-199.4	0.76	-0.71	-2.17
3,350.2	7.06	208.92	3,334.2	-210.2	-153.5	-209.1	0.61	0.60	-0.44
3,444.6	8.03	207.28	3,427.7	-221.1	-159.3	-220.0	1.05	1.03	-1.74
3,539.0	7.14	209.99	3,521.3	-232.0	-165.3	-230.9	1.02	-0.94	2.87
3,633.4	7.41	209.31	3,615.0	-242.4	-171.2	-241.2	0.30	0.29	-0.72
3,727.8	8.34	209.72	3,708.5	-253.7	-177.6	-252.4	0.99	0.99	0.43
3,822.2	7.80	210.83	3,801.9	-265.1	-184.3	-263.8	0.60	-0.57	1.18
3,916.6	8.13	213.93	3,895.4	-276.2	-191.3	-274.8	0.57	0.35	3.28
4,011.0	8.82	216.96	3,988.8	-287.5	-199.3	-286.1	0.87	0.73	3.21
4,105.4	7.99	217.00	4,082.2	-298.5	-207.6	-297.0	0.88	-0.88	0.04
4,199.8	7.42	216.58	4,175.7	-308.7	-215.2	-307.1	0.61	-0.60	-0.44
4,294.2	7.60	217.46	4,269.3	-318.5	-222.7	-316.9	0.23	0.19	0.93
4,388.6	7.14	217.81	4,362.9	-328.1	-230.0	-326.4	0.49	-0.49	0.37
4,483.0	6.01	208.73	4,456.7	-337.1	-236.0	-335.4	1.62	-1.20	-9.62
4,577.4	6.87	205.05	4,550.5	-346.5	-240.8	-344.8	1.01	0.91	-3.90



Company:	Tap Rock Resources, LLC	Local Co-ordinate Reference:	Well Zeus Unit State #173H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB @ 3643.5usft (H&P 388)
Site:	(Zeus State) Sec-9_T24-S_R-33-E	MD Reference:	KB @ 3643.5usft (H&P 388)
Well:	Zeus Unit State #173H	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)
4,671.8	7.20	207.86	4,644.2	-356.9	-245.9	-355.1	0.50	0.35	2.98
4,766.2	6.32	200.27	4,738.0	-367.0	-250.5	-365.2	1.33	-0.93	-8.04
4,860.6	6.38	191.88	4,831.8	-377.0	-253.4	-375.1	0.98	0.06	-8.89
4,955.0	6.68	193.50	4,925.6	-387.4	-255.7	-385.6	0.37	0.32	1.72
5,001.8	6.80	194.96	4,972.0	-392.8	-257.1	-390.9	0.44	0.25	3.13
Base Salt									
5,049.4	6.92	196.40	5,019.3	-398.2	-258.6	-396.4	0.44	0.26	3.02
5,143.8	7.42	203.32	5,113.0	-409.3	-262.7	-407.4	1.06	0.53	7.33
5,238.2	6.32	201.54	5,206.7	-419.7	-267.0	-417.8	1.19	-1.17	-1.89
5,251.6	6.24	201.54	5,220.0	-421.1	-267.5	-419.2	0.57	-0.57	0.00
Delaware Mountain Gp									
5,259.6	6.20	201.54	5,228.0	-421.9	-267.8	-420.0	0.57	-0.57	0.00
Lamar									
5,284.8	6.05	201.54	5,253.0	-424.4	-268.8	-422.5	0.57	-0.57	0.00
Bell Canyon									
5,303.9	5.94	201.54	5,272.0	-426.2	-269.6	-424.3	0.57	-0.57	0.00
Ramsey Sand									
5,332.6	5.78	201.54	5,300.6	-429.0	-270.6	-427.0	0.57	-0.57	0.00
5,427.0	5.82	207.28	5,394.5	-437.6	-274.6	-435.7	0.62	0.04	6.08
5,521.4	7.56	210.22	5,488.2	-447.3	-279.9	-445.3	1.88	1.84	3.11
5,615.8	8.47	213.34	5,581.7	-458.4	-286.8	-456.4	1.07	0.96	3.31
5,710.2	8.11	214.34	5,675.1	-469.7	-294.4	-467.6	0.41	-0.38	1.06
5,804.6	7.98	214.46	5,768.6	-480.6	-301.9	-478.5	0.14	-0.14	0.13
5,899.0	8.16	214.59	5,862.1	-491.6	-309.4	-489.3	0.19	0.19	0.14
5,993.4	8.62	213.55	5,955.4	-503.0	-317.1	-500.7	0.51	0.49	-1.10
6,087.8	8.40	211.07	6,048.8	-514.8	-324.6	-512.4	0.45	-0.23	-2.63
6,182.2	6.75	206.75	6,142.4	-525.6	-330.6	-523.3	1.85	-1.75	-4.58
6,228.1	5.89	206.72	6,188.0	-530.2	-332.9	-527.8	1.88	-1.88	-0.07
Cherry Canyon									
6,276.6	4.98	206.67	6,236.3	-534.3	-335.0	-531.8	1.88	-1.87	-0.10
6,371.0	2.99	193.85	6,330.5	-540.3	-337.4	-537.9	2.30	-2.11	-13.58
6,465.4	0.98	171.20	6,424.8	-543.5	-337.9	-541.1	2.25	-2.13	-23.99
6,559.8	0.92	157.69	6,519.2	-545.0	-337.4	-542.6	0.25	-0.06	-14.31
6,654.2	0.99	163.47	6,613.6	-546.5	-336.9	-544.1	0.13	0.07	6.12
6,748.6	0.92	165.42	6,708.0	-548.0	-336.5	-545.6	0.08	-0.07	2.07
6,843.0	0.94	194.08	6,802.3	-549.5	-336.5	-547.1	0.49	0.02	30.36
6,937.4	0.83	221.93	6,896.7	-550.7	-337.1	-548.3	0.47	-0.12	29.50
7,031.8	0.74	224.26	6,991.1	-551.7	-338.0	-549.3	0.10	-0.10	2.47
7,126.2	0.74	219.27	7,085.5	-552.6	-338.8	-550.2	0.07	0.00	-5.29
7,220.6	0.97	211.03	7,179.9	-553.8	-339.6	-551.3	0.28	0.24	-8.73
7,315.0	1.02	206.82	7,274.3	-555.2	-340.4	-552.7	0.09	0.05	-4.46
7,409.4	1.00	199.43	7,368.7	-556.7	-341.1	-554.3	0.14	-0.02	-7.83
7,503.8	0.89	200.75	7,463.1	-558.2	-341.6	-555.7	0.12	-0.12	1.40
7,598.2	0.93	202.17	7,557.4	-559.6	-342.2	-557.1	0.05	0.04	1.50
7,692.6	1.28	206.83	7,651.8	-561.2	-342.9	-558.8	0.38	0.37	4.94

Company:	Tap Rock Resources, LLC	Local Co-ordinate Reference:	Well Zeus Unit State #173H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB @ 3643.5usft (H&P 388)
Site:	(Zeus State) Sec-9_T24-S_R-33-E	MD Reference:	KB @ 3643.5usft (H&P 388)
Well:	Zeus Unit State #173H	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)
7,738.8	1.23	203.68	7,698.0	-562.1	-343.4	-559.7	0.19	-0.11	-6.82
Brushy Canyon									
7,787.0	1.18	200.11	7,746.2	-563.1	-343.7	-560.6	0.19	-0.10	-7.40
7,881.4	0.94	203.59	7,840.6	-564.7	-344.4	-562.2	0.26	-0.25	3.69
7,975.8	0.78	191.61	7,935.0	-566.0	-344.8	-563.6	0.25	-0.17	-12.69
8,070.2	0.94	191.44	8,029.4	-567.4	-345.1	-564.9	0.17	0.17	-0.18
8,164.6	1.18	196.95	8,123.8	-569.1	-345.5	-566.6	0.28	0.25	5.84
8,259.0	1.28	220.89	8,218.1	-570.8	-346.5	-568.3	0.55	0.11	25.36
8,353.4	1.45	225.35	8,312.5	-572.5	-348.1	-570.0	0.21	0.18	4.72
8,447.8	1.53	218.12	8,406.9	-574.3	-349.7	-571.8	0.22	0.08	-7.66
8,542.2	1.66	217.87	8,501.2	-576.4	-351.3	-573.8	0.14	0.14	-0.26
8,636.6	1.84	215.13	8,595.6	-578.7	-353.0	-576.2	0.21	0.19	-2.90
8,731.0	1.85	229.30	8,689.9	-580.9	-355.0	-578.4	0.48	0.01	15.01
8,825.4	1.25	241.86	8,784.3	-582.4	-357.1	-579.8	0.73	-0.64	13.31
8,919.8	1.02	290.11	8,878.7	-582.6	-358.8	-580.0	1.01	-0.24	51.11
8,983.0	1.03	301.54	8,941.9	-582.1	-359.8	-579.5	0.32	0.02	18.09
9,142.0	1.58	296.50	9,100.8	-580.4	-363.0	-577.8	0.35	0.35	-3.17
9,164.2	3.95	327.79	9,123.0	-579.6	-363.7	-577.0	12.31	10.70	141.07
Bone Spring Lime									
9,237.0	12.79	340.01	9,195.0	-569.9	-367.8	-567.2	12.31	12.13	16.78
9,301.9	21.26	342.70	9,257.0	-551.9	-373.7	-549.2	13.10	13.04	4.14
Upper Avalon									
9,332.0	25.19	343.35	9,284.6	-540.5	-377.2	-537.8	13.10	13.07	2.16
9,406.7	34.15	346.76	9,349.5	-504.8	-386.6	-502.0	12.20	12.00	4.56
FTP @ 9406.7'MD, 100'FSL & 377.2'FWL									
9,426.0	36.48	347.39	9,365.2	-493.9	-389.1	-491.1	12.20	12.06	3.28
9,521.0	44.84	355.66	9,437.3	-432.8	-397.8	-430.0	10.45	8.80	8.71
9,616.0	52.09	358.38	9,500.2	-361.9	-401.4	-359.0	7.93	7.63	2.86
9,687.6	58.42	358.58	9,541.0	-303.1	-402.9	-300.2	8.84	8.84	0.28
Middle Avalon									
9,710.0	60.40	358.64	9,552.4	-283.8	-403.4	-280.9	8.84	8.84	0.26
9,805.0	65.71	355.57	9,595.5	-199.3	-407.7	-196.3	6.29	5.59	-3.23
9,900.0	71.65	351.96	9,630.0	-111.4	-417.4	-108.4	7.18	6.25	-3.80
9,994.0	80.62	351.08	9,652.5	-21.2	-430.9	-18.1	9.59	9.54	-0.94
10,089.0	84.09	351.61	9,665.1	71.9	-445.0	75.1	3.69	3.65	0.56
10,185.0	88.44	352.05	9,671.4	166.7	-458.6	170.0	4.55	4.53	0.46
10,280.0	89.89	354.69	9,672.8	261.0	-469.6	264.4	3.17	1.53	2.78
10,374.0	89.85	358.82	9,673.0	354.9	-474.9	358.2	4.39	-0.04	4.39
10,469.0	91.30	0.58	9,672.0	449.8	-475.4	453.2	2.40	1.53	1.85
10,564.0	90.81	0.05	9,670.3	544.8	-474.9	548.2	0.76	-0.52	-0.56
10,659.0	90.07	358.91	9,669.5	639.8	-475.8	643.2	1.43	-0.78	-1.20
10,753.0	91.82	358.82	9,668.0	733.8	-477.6	737.2	1.86	1.86	-0.10
10,848.0	91.16	359.70	9,665.5	828.7	-478.8	832.1	1.16	-0.69	0.93
10,943.0	89.80	0.75	9,664.7	923.7	-478.5	927.1	1.81	-1.43	1.11



Company:	Tap Rock Resources, LLC	Local Co-ordinate Reference:	Well Zeus Unit State #173H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB @ 3643.5usft (H&P 388)
Site:	(Zeus State) Sec-9_T24-S_R-33-E	MD Reference:	KB @ 3643.5usft (H&P 388)
Well:	Zeus Unit State #173H	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)	
11,038.0	91.34	0.14	9,663.8	1,018.7	-477.7	1,022.1	1.74	1.62	-0.64	
11,132.0	89.41	359.79	9,663.2	1,112.7	-477.8	1,116.1	2.09	-2.05	-0.37	
11,227.0	89.19	0.58	9,664.3	1,207.7	-477.5	1,211.1	0.86	-0.23	0.83	
11,322.0	89.76	0.23	9,665.2	1,302.7	-476.8	1,306.1	0.70	0.60	-0.37	
11,416.0	88.00	0.40	9,667.0	1,396.7	-476.3	1,400.0	1.88	-1.87	0.18	
11,511.0	89.19	1.02	9,669.4	1,491.6	-475.1	1,495.0	1.41	1.25	0.65	
11,606.0	87.34	0.75	9,672.2	1,586.6	-473.7	1,589.9	1.97	-1.95	-0.28	
11,701.0	87.25	0.23	9,676.7	1,681.5	-472.8	1,684.8	0.55	-0.09	-0.55	
11,796.0	87.74	359.61	9,680.9	1,776.4	-473.0	1,779.7	0.83	0.52	-0.65	
11,890.0	88.35	359.87	9,684.1	1,870.3	-473.4	1,873.7	0.71	0.65	0.28	
11,985.0	88.62	359.61	9,686.6	1,965.3	-473.8	1,968.6	0.39	0.28	-0.27	
12,080.0	91.43	0.23	9,686.6	2,060.3	-474.0	2,063.6	3.03	2.96	0.65	
12,174.0	89.19	358.91	9,686.1	2,154.3	-474.7	2,157.6	2.77	-2.38	-1.40	
12,269.0	88.40	358.20	9,688.0	2,249.2	-477.1	2,252.6	1.12	-0.83	-0.75	
12,364.0	89.63	357.68	9,689.7	2,344.1	-480.5	2,347.5	1.41	1.29	-0.55	
12,459.0	88.48	358.82	9,691.2	2,439.1	-483.4	2,442.5	1.70	-1.21	1.20	
12,554.0	86.46	358.82	9,695.4	2,534.0	-485.3	2,537.4	2.13	-2.13	0.00	
12,648.0	89.14	359.79	9,699.1	2,627.9	-486.5	2,631.3	3.03	2.85	1.03	
12,743.0	92.70	0.14	9,697.5	2,722.8	-486.5	2,726.3	3.77	3.75	0.37	
12,838.0	95.47	0.93	9,690.8	2,817.6	-485.6	2,821.0	3.03	2.92	0.83	
12,933.0	94.24	1.98	9,682.7	2,912.2	-483.2	2,915.6	1.70	-1.29	1.11	
13,027.0	90.46	2.25	9,678.9	3,006.1	-479.8	3,009.4	4.03	-4.02	0.29	
13,122.0	91.03	2.60	9,677.6	3,101.0	-475.8	3,104.3	0.70	0.60	0.37	
13,217.0	93.10	2.77	9,674.2	3,195.8	-471.3	3,199.1	2.19	2.18	0.18	
13,312.0	91.96	2.33	9,670.0	3,290.6	-467.1	3,293.9	1.29	-1.20	-0.46	
13,407.0	90.02	1.37	9,668.4	3,385.5	-464.0	3,388.8	2.28	-2.04	-1.01	
13,501.0	90.20	0.75	9,668.2	3,479.5	-462.3	3,482.7	0.69	0.19	-0.66	
13,596.0	90.55	0.58	9,667.6	3,574.5	-461.2	3,577.7	0.41	0.37	-0.18	
13,691.0	93.19	0.93	9,664.5	3,669.4	-459.9	3,672.6	2.80	2.78	0.37	
13,786.0	89.93	359.87	9,661.9	3,764.4	-459.3	3,767.6	3.61	-3.43	-1.12	
13,881.0	85.76	358.56	9,665.5	3,859.3	-460.6	3,862.5	4.60	-4.39	-1.38	
13,975.0	85.27	357.85	9,672.8	3,953.0	-463.5	3,956.2	0.92	-0.52	-0.76	
14,070.0	88.70	357.85	9,677.8	4,047.7	-467.1	4,051.0	3.61	3.61	0.00	
14,165.0	90.29	357.50	9,678.6	4,142.7	-470.9	4,145.9	1.71	1.67	-0.37	
14,260.0	91.52	359.96	9,677.1	4,237.6	-473.0	4,240.9	2.89	1.29	2.59	
14,355.0	90.77	0.05	9,675.2	4,332.6	-473.0	4,335.9	0.80	-0.79	0.09	
14,449.0	91.03	359.61	9,673.8	4,426.6	-473.3	4,429.9	0.54	0.28	-0.47	
14,544.0	92.57	359.79	9,670.8	4,521.5	-473.8	4,524.8	1.63	1.62	0.19	
14,596.6	92.20	359.19	9,668.6	4,574.1	-474.3	4,577.4	1.35	-0.71	-1.15	
LTP @ 14596.6'MD, 100'FNL & 324.5'FWL										
14,606.0	92.13	359.08	9,668.2	4,583.5	-474.4	4,586.7	1.35	-0.71	-1.14	
LAST SVY										
14,671.0	92.13	359.08	9,665.8	4,648.4	-475.4	4,651.7	0.00	0.00	0.00	
Projection to TD @ 14671'MD, 25.7'FNL & 328.9'FWL										



Company:	Tap Rock Resources, LLC	Local Co-ordinate Reference:	Well Zeus Unit State #173H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB @ 3643.5usft (H&P 388)
Site:	(Zeus State) Sec-9_T24-S_R-33-E	MD Reference:	KB @ 3643.5usft (H&P 388)
Well:	Zeus Unit State #173H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	AWB	Database:	EDM 5000.15 Single User Db

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)
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Target Name	- hit/miss target	- Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
FTP (Zeus Unit State	- actual wellpath misses target center by 224.2usft at 9616.0usft MD (9500.2 TVD, -361.9 N, -401.4 E)	- Point	0.00	0.00	9,670.0	-505.0	-432.0	446,476.00	775,472.00	32° 13' 30.616 N	103° 34' 34.266 W
LTP (Zeus Unit State :	- actual wellpath misses target center by 26.1usft at 14595.4usft MD (9668.6 TVD, 4572.9 N, -474.2 E)	- Point	0.00	0.00	9,694.0	4,574.0	-468.0	451,555.00	775,436.00	32° 14' 20.876 N	103° 34' 34.268 W
PBHL (Zeus Unit Stat:	- actual wellpath misses target center by 28.7usft at 14665.4usft MD (9666.0 TVD, 4642.9 N, -475.4 E)	- Rectangle (sides W100.0 H5,175.0 D30.0)	0.30	359.59	9,694.0	4,644.0	-469.0	451,625.00	775,435.00	32° 14' 21.569 N	103° 34' 34.274 W

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,264.2	1,264.0	Rustler Anhydrite			
1,768.0	1,766.0	Top Salt			
5,001.8	4,972.0	Base Salt			
5,251.6	5,220.0	Delaware Mountain Gp			
5,259.6	5,228.0	Lamar			
5,284.8	5,253.0	Bell Canyon			
5,303.9	5,272.0	Ramsey Sand			
6,228.1	6,188.0	Cherry Canyon			
7,738.8	7,698.0	Brushy Canyon			
9,164.2	9,123.0	Bone Spring Lime			
9,301.9	9,257.0	Upper Avalon			
9,687.6	9,541.0	Middle Avalon			

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
9,406.7	9,349.5	-504.8	-386.6	FTP @ 9406.7'MD, 100'FSL & 377.2'FWL
14,596.6	9,668.6	4,574.1	-474.3	LTP @ 14596.6'MD, 100'FNL & 324.5'FWL
14,606.0	9,668.2	4,583.5	-474.4	LAST SVY
14,671.0	9,665.8	4,648.4	-475.4	Projection to TD @ 14671'MD, 25.7'FNL & 328.9'FWL

Checked By: _____ Approved By: _____ Date: _____