TAP ROCK RESOURCES

Tap Rock Resources, LLC

Lea County, NM (NAD 83 NME)
(Poseidon) Sec-9_T-24-E_R-33-E
Poseidon State Com #201H

OWB

Design: AWB

Standard Survey Report

21 October, 2019

INTREPID

TAP ROCK

Operator:	Taprock Resources LLC
Well Name:	Poseidon State Com #201H
County:	Lea
State:	New Mexico
Rig Name:	H&P 388
API Number:	30-025-45971

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:	1364' MD – 22729' MD
Projection to Bit:	22798' MD
Dates Performed:	08/20/2019 – 08/28/2019 & 10/10/2019 – 10/21/2019
Type of Survey:	MWD

Sincerely,

James Burleson
Vice President of MWD Operations
Intrepid Directional Drilling Specialists

INTREPID

Company:	Tap Rock Resources, LLC	**Local Co-ordinate Reference:**	Well Poseidon State Com #201H
Project:	Lea County, NM (NAD 83 NME)	**TVD Reference:**	KB @ 3636.0usft (H&P 388)
Site:	(Poseidon) Sec-9_T-24-E_R-33-E	**MD Reference:**	KB @ 3636.0usft (H&P 388)
Well:	Poseidon State Com #201H	**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	(Poseidon) Sec-9_T-24-E_R-33-E				
Site Position:		**Northing:**	446,745.00 usft	**Latitude:**	32° 13' 33.403 N
From:	Map	**Easting:**	773,665.00 usft	**Longitude:**	103° 34' 55.279 W
Position Uncertainty:	0.0 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.40 °

Well	Poseidon State Com #201H					
Well Position	**+N/-S**	0.0 usft	**Northing:**	446,716.00 usft	**Latitude:**	32° 13' 33.109 N
	+E/-W	0.0 usft	**Easting:**	773,770.00 usft	**Longitude:**	103° 34' 54.059 W
Position Uncertainty		0.0 usft	**Wellhead Elevation:**	usft	**Ground Level:**	3,610.0 usft

Wellbore	OWB

Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	IGRF2015	08/24/19	6.72	60.03	47,711.99880444

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	359.58

Survey Program **Date** 10/21/19

From (usft)	**To (usft)**	**Survey (Wellbore)**	**Tool Name**	**Description**
26.0	1,292.0	Invictus MWD (OWB)	MWD	OWSG MWD - Standard
1,364.0	22,798.0	Intrepid MWD (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
26.0	0.00	0.00	26.0	0.0	0.0	0.0	0.00	0.00	0.00
102.0	0.60	270.38	102.0	0.0	-0.4	0.0	0.79	0.79	0.00
188.0	0.40	274.38	188.0	0.0	-1.1	0.0	0.24	-0.23	4.65
276.0	1.00	245.38	276.0	-0.3	-2.2	-0.3	0.77	0.68	-32.95
366.0	0.90	252.38	366.0	-0.8	-3.5	-0.8	0.17	-0.11	7.78
461.0	0.80	252.38	461.0	-1.2	-4.9	-1.2	0.11	-0.11	0.00
555.0	0.70	269.38	555.0	-1.4	-6.1	-1.4	0.26	-0.11	18.09
650.0	0.30	239.38	650.0	-1.6	-6.9	-1.5	0.49	-0.42	-31.58
744.0	0.30	258.38	744.0	-1.7	-7.3	-1.7	0.11	0.00	20.21

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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)
839.0	0.40	228.38	839.0	-2.0	-7.8	-2.0	0.22	0.11	-31.58
933.0	0.20	253.38	932.9	-2.3	-8.2	-2.2	0.25	-0.21	26.60
1,028.0	0.20	289.38	1,027.9	-2.3	-8.5	-2.2	0.13	0.00	37.89
1,122.0	0.60	261.38	1,121.9	-2.3	-9.2	-2.2	0.46	0.43	-29.79
1,217.0	0.50	302.38	1,216.9	-2.1	-10.0	-2.1	0.42	-0.11	43.16
1,286.1	0.77	260.44	1,286.0	-2.1	-10.7	-2.0	0.75	0.38	-60.73
Rustler Anhydrite									
1,292.0	0.80	258.38	1,291.9	-2.1	-10.8	-2.0	0.75	0.58	-34.67
1,364.0	0.62	253.20	1,363.9	-2.3	-11.7	-2.2	0.27	-0.25	-7.19
1,459.0	0.53	281.07	1,458.9	-2.4	-12.6	-2.3	0.31	-0.09	29.34
1,553.0	0.53	294.43	1,552.9	-2.1	-13.4	-2.0	0.13	0.00	14.21
1,648.0	0.40	290.73	1,647.9	-1.8	-14.1	-1.7	0.14	-0.14	-3.89
1,742.0	0.44	292.05	1,741.9	-1.5	-14.8	-1.4	0.04	0.04	1.40
1,796.1	0.42	298.14	1,796.0	-1.4	-15.1	-1.3	0.10	-0.05	11.27
Top Salt									
1,837.0	0.40	303.21	1,836.9	-1.2	-15.4	-1.1	0.10	-0.04	12.38
1,931.0	0.31	324.84	1,930.9	-0.8	-15.8	-0.7	0.17	-0.10	23.01
2,025.0	0.53	287.57	2,024.9	-0.5	-16.4	-0.4	0.36	0.23	-39.65
2,120.0	1.49	260.06	2,119.9	-0.6	-18.0	-0.4	1.10	1.01	-28.96
2,215.0	3.34	258.65	2,214.8	-1.3	-21.9	-1.2	1.95	1.95	-1.48
2,309.0	4.57	257.78	2,308.6	-2.7	-28.3	-2.5	1.31	1.31	-0.93
2,403.0	5.98	257.60	2,402.2	-4.5	-36.7	-4.2	1.50	1.50	-0.19
2,498.0	7.65	257.60	2,496.5	-6.9	-47.7	-6.6	1.76	1.76	0.00
2,592.0	8.75	255.05	2,589.5	-10.1	-60.8	-9.7	1.23	1.17	-2.71
2,687.0	8.44	256.11	2,683.5	-13.7	-74.5	-13.1	0.37	-0.33	1.12
2,782.0	8.44	253.64	2,777.4	-17.3	-88.0	-16.6	0.38	0.00	-2.60
2,876.0	8.53	252.59	2,870.4	-21.3	-101.2	-20.6	0.19	0.10	-1.12
2,971.0	8.22	255.31	2,964.4	-25.2	-114.5	-24.3	0.53	-0.33	2.86
3,066.0	8.22	254.35	3,058.4	-28.7	-127.6	-27.8	0.14	0.00	-1.01
3,161.0	8.13	254.00	3,152.5	-32.4	-140.6	-31.4	0.11	-0.09	-0.37
3,256.0	8.18	252.33	3,246.5	-36.3	-153.5	-35.2	0.25	0.05	-1.76
3,350.0	8.79	249.86	3,339.5	-40.8	-166.6	-39.6	0.76	0.65	-2.63
3,445.0	8.09	252.41	3,433.4	-45.3	-179.8	-44.0	0.84	-0.74	2.68
3,540.0	8.31	250.30	3,527.5	-49.7	-192.7	-48.2	0.39	0.23	-2.22
3,634.0	8.31	252.15	3,620.5	-54.0	-205.5	-52.5	0.28	0.00	1.97
3,729.0	7.47	252.50	3,714.6	-58.0	-217.9	-56.4	0.89	-0.88	0.37
3,824.0	7.69	250.57	3,808.8	-62.0	-229.8	-60.3	0.35	0.23	-2.03
3,919.0	9.14	251.53	3,902.7	-66.5	-243.0	-64.7	1.53	1.53	1.01
4,014.0	9.76	251.62	3,996.4	-71.4	-257.8	-69.5	0.65	0.65	0.09
4,109.0	8.92	252.15	4,090.2	-76.2	-272.4	-74.2	0.89	-0.88	0.56
4,203.0	8.09	252.77	4,183.2	-80.4	-285.7	-78.3	0.89	-0.88	0.66
4,298.0	8.31	251.71	4,277.2	-84.5	-298.6	-82.3	0.28	0.23	-1.12
4,392.0	8.70	250.66	4,370.1	-89.0	-311.7	-86.7	0.45	0.41	-1.12

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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)
4,487.0	6.95	244.15	4,464.3	-93.9	-323.7	-91.5	2.06	-1.84	-6.85
4,582.0	6.86	239.67	4,558.6	-99.3	-333.8	-96.8	0.57	-0.09	-4.72
4,676.0	7.87	242.31	4,651.8	-105.1	-344.3	-102.6	1.13	1.07	2.81
4,770.0	7.91	237.74	4,744.9	-111.5	-355.5	-108.9	0.67	0.04	-4.86
4,865.0	8.84	231.67	4,838.9	-119.5	-366.7	-116.9	1.35	0.98	-6.39
4,942.9	7.82	227.82	4,916.0	-126.8	-375.4	-124.1	1.49	-1.31	-4.94
Base Salt									
4,960.0	7.60	226.84	4,932.9	-128.4	-377.0	-125.6	1.49	-1.28	-5.74
5,054.0	8.66	237.38	5,026.0	-136.4	-387.5	-133.6	1.94	1.13	11.21
5,149.0	7.60	238.97	5,120.0	-143.5	-399.0	-140.6	1.14	-1.12	1.67
5,195.4	6.89	238.84	5,166.0	-146.5	-404.0	-143.6	1.53	-1.53	-0.29
Delaware Mountain Gp									
5,205.4	6.73	238.80	5,176.0	-147.2	-405.0	-144.2	1.53	-1.53	-0.33
Lamar									
5,209.0	6.68	238.79	5,179.6	-147.4	-405.3	-144.4	1.53	-1.53	-0.34
5,225.6	6.59	238.94	5,196.0	-148.4	-407.0	-145.4	0.55	-0.54	0.93
Bell Canyon									
5,245.7	6.48	239.14	5,216.0	-149.6	-408.9	-146.6	0.55	-0.54	0.96
Ramsey Sand									
5,322.0	6.07	239.93	5,291.9	-153.8	-416.1	-150.7	0.55	-0.54	1.04
5,416.0	7.21	249.43	5,385.2	-158.3	-426.0	-155.2	1.68	1.21	10.11
5,511.0	9.41	252.15	5,479.2	-162.8	-438.9	-159.6	2.35	2.32	2.86
5,605.0	10.24	252.41	5,571.8	-167.7	-454.2	-164.4	0.88	0.88	0.28
5,700.0	9.89	254.00	5,665.4	-172.5	-470.1	-169.1	0.47	-0.37	1.67
5,794.0	9.76	253.73	5,758.0	-177.0	-485.5	-173.4	0.15	-0.14	-0.29
5,888.0	9.80	254.26	5,850.6	-181.4	-500.9	-177.7	0.10	0.04	0.56
5,983.0	9.85	254.79	5,944.2	-185.7	-516.5	-181.9	0.11	0.05	0.56
6,077.0	9.49	254.26	6,036.9	-189.9	-531.7	-186.0	0.39	-0.38	-0.56
6,162.2	9.34	254.57	6,121.0	-193.6	-545.1	-189.6	0.19	-0.18	0.37
Cherry Canyon									
6,172.0	9.32	254.61	6,130.6	-194.1	-546.7	-190.1	0.19	-0.18	0.37
6,266.0	9.23	255.49	6,223.4	-198.0	-561.3	-193.9	0.18	-0.10	0.94
6,361.0	8.92	255.23	6,317.2	-201.8	-575.8	-197.5	0.33	-0.33	-0.27
6,456.0	8.79	255.93	6,411.1	-205.4	-589.9	-201.1	0.18	-0.14	0.74
6,550.0	8.92	255.75	6,504.0	-208.9	-604.0	-204.5	0.14	0.14	-0.19
6,645.0	9.10	255.40	6,597.8	-212.6	-618.4	-208.1	0.20	0.19	-0.37
6,739.0	9.14	254.35	6,690.6	-216.5	-632.8	-211.9	0.18	0.04	-1.12
6,834.0	8.92	254.44	6,784.4	-220.5	-647.1	-215.8	0.23	-0.23	0.09
6,928.0	8.62	253.20	6,877.3	-224.5	-660.9	-219.7	0.38	-0.32	-1.32
7,023.0	8.62	253.12	6,971.2	-228.7	-674.5	-223.7	0.01	0.00	-0.08
7,118.0	8.48	254.61	7,065.2	-232.6	-688.1	-227.5	0.28	-0.15	1.57
7,212.0	8.35	254.17	7,158.2	-236.3	-701.3	-231.1	0.15	-0.14	-0.47
7,307.0	8.40	254.08	7,252.2	-240.1	-714.6	-234.8	0.05	0.05	-0.09
7,402.0	8.31	253.38	7,346.2	-243.9	-727.9	-238.6	0.14	-0.09	-0.74
7,496.0	8.22	254.00	7,439.2	-247.7	-740.9	-242.3	0.13	-0.10	0.66

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7,591.0	8.26	252.33	7,533.2	-251.7	-753.9	-246.1	0.26	0.04	-1.76
7,686.0	8.00	253.47	7,627.2	-255.6	-766.7	-250.0	0.32	-0.27	1.20
7,710.0	7.69	253.18	7,651.0	-256.6	-769.9	-250.9	1.31	-1.30	-1.22
Brushy Canyon									
7,781.0	6.77	252.15	7,721.5	-259.2	-778.4	-253.5	1.31	-1.29	-1.45
7,876.0	6.59	250.92	7,815.8	-262.7	-788.9	-256.9	0.24	-0.19	-1.29
7,971.0	6.20	249.16	7,910.2	-266.3	-798.8	-260.5	0.46	-0.41	-1.85
8,066.0	6.24	249.34	8,004.7	-270.0	-808.5	-264.1	0.05	0.04	0.19
8,160.0	5.58	247.93	8,098.2	-273.5	-817.5	-267.5	0.72	-0.70	-1.50
8,255.0	5.27	248.46	8,192.7	-276.8	-825.8	-270.8	0.33	-0.33	0.56
8,349.0	4.66	244.42	8,286.4	-280.1	-833.3	-274.0	0.75	-0.65	-4.30
8,444.0	6.20	249.95	8,381.0	-283.5	-841.6	-277.3	1.71	1.62	5.82
8,539.0	6.33	248.63	8,475.4	-287.2	-851.3	-280.9	0.20	0.14	-1.39
8,633.0	6.11	250.74	8,568.8	-290.7	-860.8	-284.4	0.34	-0.23	2.24
8,727.0	5.76	250.04	8,662.3	-294.0	-870.0	-287.6	0.38	-0.37	-0.74
8,822.0	5.45	249.69	8,756.9	-297.2	-878.7	-290.7	0.33	-0.33	-0.37
8,916.0	5.14	250.30	8,850.5	-300.1	-886.8	-293.6	0.34	-0.33	0.65
9,011.0	4.79	251.53	8,945.1	-302.8	-894.6	-296.3	0.39	-0.37	1.29
9,105.0	4.44	248.11	9,038.8	-305.4	-901.7	-298.8	0.47	-0.37	-3.64
9,167.4	4.07	248.38	9,101.0	-307.1	-906.0	-300.5	0.60	-0.60	0.44
Bone Spring Lime									
9,200.0	3.87	248.55	9,133.6	-308.0	-908.1	-301.3	0.60	-0.60	0.51
9,294.0	3.43	245.03	9,227.4	-310.3	-913.6	-303.6	0.53	-0.47	-3.74
9,307.6	3.30	245.33	9,241.0	-310.6	-914.3	-303.9	0.98	-0.97	2.19
Upper Avalon									
9,389.0	2.51	247.76	9,322.2	-312.3	-918.1	-305.6	0.98	-0.97	2.99
9,484.0	2.37	235.98	9,417.2	-314.2	-921.7	-307.4	0.55	-0.15	-12.40
9,578.0	2.07	236.07	9,511.1	-316.2	-924.7	-309.4	0.32	-0.32	0.10
9,616.9	1.79	232.91	9,550.0	-317.0	-925.7	-310.2	0.76	-0.71	-8.12
Middle Avalon									
9,673.0	1.41	226.22	9,606.0	-318.0	-926.9	-311.2	0.76	-0.68	-11.93
9,768.0	1.76	211.72	9,701.0	-320.0	-928.6	-313.2	0.56	0.37	-15.26
9,863.0	1.71	251.62	9,796.0	-321.7	-930.7	-314.9	1.25	-0.05	42.00
9,947.1	2.03	248.60	9,880.0	-322.7	-933.2	-315.8	0.40	0.38	-3.59
Lower Avalon									
9,958.0	2.07	248.28	9,890.9	-322.8	-933.6	-316.0	0.40	0.38	-2.96
10,053.0	1.89	250.57	9,985.9	-324.0	-936.7	-317.1	0.21	-0.19	2.41
10,147.0	2.33	259.62	10,079.8	-324.8	-940.0	-317.9	0.59	0.47	9.63
10,208.3	2.61	260.58	10,141.0	-325.3	-942.6	-318.4	0.47	0.46	1.57
1st Bone Spring Sand									
10,242.0	2.77	261.03	10,174.7	-325.5	-944.2	-318.6	0.47	0.46	1.32
10,337.0	2.20	283.18	10,269.6	-325.5	-948.2	-318.5	1.16	-0.60	23.32
10,432.0	2.07	288.10	10,364.5	-324.5	-951.6	-317.5	0.24	-0.14	5.18
10,526.0	1.80	291.61	10,458.5	-323.4	-954.6	-316.4	0.31	-0.29	3.73

Company:	Tap Rock Resources, LLC	**Local Co-ordinate Reference:**	Well Poseidon State Com #201H
Project:	Lea County, NM (NAD 83 NME)	**TVD Reference:**	KB @ 3636.0usft (H&P 388)
Site:	(Poseidon) Sec-9_T-24-E_R-33-E	**MD Reference:**	KB @ 3636.0usft (H&P 388)
Well:	Poseidon State Com #201H	**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)
10,528.5	1.80	291.61	10,461.0	-323.4	-954.7	-316.4	0.00	0.00	0.00
2nd Bone Spring Carb									
10,622.0	1.71	291.44	10,554.4	-322.4	-957.4	-315.3	0.10	-0.10	-0.18
10,716.0	0.92	307.43	10,648.4	-321.4	-959.3	-314.4	0.92	-0.84	17.01
10,811.0	0.48	306.99	10,743.4	-320.7	-960.2	-313.6	0.46	-0.46	-0.46
10,905.0	1.67	198.80	10,837.4	-321.8	-960.9	-314.7	2.00	1.27	-115.10
10,908.6	1.62	197.60	10,841.0	-321.9	-961.0	-314.8	1.79	-1.52	-33.38
2nd Bone Spring Sand									
11,000.0	0.92	122.51	10,932.4	-323.5	-960.7	-316.4	1.79	-0.76	-82.15
11,094.0	1.98	53.17	11,026.4	-322.9	-958.8	-315.9	1.98	1.13	-73.77
11,189.0	1.98	43.67	11,121.3	-320.7	-956.4	-313.7	0.35	0.00	-10.00
11,284.0	1.89	39.63	11,216.2	-318.3	-954.2	-311.3	0.17	-0.09	-4.25
11,379.0	1.76	31.98	11,311.2	-315.9	-952.5	-308.9	0.29	-0.14	-8.05
11,453.8	0.88	26.45	11,386.0	-314.4	-951.6	-307.4	1.18	-1.17	-7.39
3rd Bone Spring Carb									
11,473.0	0.66	22.67	11,405.2	-314.2	-951.5	-307.2	1.18	-1.16	-19.70
11,568.0	0.40	36.29	11,500.2	-313.4	-951.1	-306.4	0.30	-0.27	14.34
11,662.0	0.48	262.96	11,594.2	-313.2	-951.3	-306.2	0.86	0.09	-141.84
11,757.0	0.57	283.09	11,689.2	-313.1	-952.1	-306.1	0.21	0.09	21.19
11,844.0	0.70	266.56	11,776.2	-313.1	-953.1	-306.1	0.26	0.15	-19.00
11,971.0	0.53	304.09	11,903.2	-312.8	-954.3	-305.8	0.34	-0.13	29.55
12,066.0	5.32	343.73	11,998.0	-308.3	-955.9	-301.3	5.18	5.04	41.73
12,069.0	5.77	345.89	12,001.0	-308.0	-956.0	-301.0	16.61	15.10	71.69
3rd Bone Spring Sand									
12,161.0	20.70	3.24	12,090.3	-287.2	-956.2	-280.2	16.61	16.23	18.87
12,241.7	31.75	7.54	12,162.6	-251.8	-952.6	-244.8	13.88	13.69	5.32
FTP @ 12241.7'MD, 100'FSL & 315.7'FWL									
12,255.0	33.58	7.99	12,173.8	-244.7	-951.6	-237.7	13.88	13.76	3.42
12,350.0	40.53	7.73	12,249.6	-188.0	-943.8	-181.1	7.32	7.32	-0.27
12,406.0	44.16	3.55	12,291.0	-150.4	-940.2	-143.5	8.20	6.48	-7.46
3rd BS W Sand									
12,445.0	46.77	0.96	12,318.3	-122.7	-939.1	-115.8	8.20	6.69	-6.65
12,515.8	48.64	357.55	12,366.0	-70.3	-939.8	-63.4	4.43	2.64	-4.81
Wolfcamp A X Sand									
12,539.0	49.27	356.48	12,381.2	-52.9	-940.7	-46.0	4.43	2.73	-4.63
12,634.0	58.33	355.16	12,437.3	23.5	-946.3	30.4	9.60	9.54	-1.39
12,729.0	70.29	350.41	12,478.4	108.2	-957.2	115.2	13.37	12.59	-5.00
12,794.1	78.28	354.81	12,496.0	170.3	-965.3	177.3	13.90	12.28	6.76
Wolfcamp A Y Sand									
12,824.0	81.98	356.74	12,501.1	199.7	-967.4	206.8	13.90	12.36	6.45
12,919.0	87.78	3.86	12,509.6	294.2	-966.9	301.3	9.64	6.11	7.49
13,000.0	89.32	4.47	12,511.7	374.9	-961.0	382.0	2.04	1.90	0.75
13,095.0	89.63	4.47	12,512.5	469.7	-953.6	476.6	0.33	0.33	0.00
13,190.0	90.20	4.83	12,512.7	564.3	-945.9	571.3	0.71	0.60	0.38
13,285.0	90.77	4.74	12,511.9	659.0	-938.0	665.9	0.61	0.60	-0.09

Company:	Tap Rock Resources, LLC	**Local Co-ordinate Reference:**	Well Poseidon State Com #201H
Project:	Lea County, NM (NAD 83 NME)	**TVD Reference:**	KB @ 3636.0usft (H&P 388)
Site:	(Poseidon) Sec-9_T-24-E_R-33-E	**MD Reference:**	KB @ 3636.0usft (H&P 388)
Well:	Poseidon State Com #201H	**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)
13,380.0	90.46	3.60	12,510.9	753.7	-931.1	760.6	1.24	-0.33	-1.20
13,475.0	90.55	1.13	12,510.0	848.7	-927.2	855.4	2.60	0.09	-2.60
13,570.0	90.81	359.99	12,508.9	943.6	-926.2	950.4	1.23	0.27	-1.20
13,664.0	89.85	359.99	12,508.3	1,037.6	-926.2	1,044.4	1.02	-1.02	0.00
13,759.0	89.80	0.52	12,508.6	1,132.6	-925.8	1,139.4	0.56	-0.05	0.56
13,854.0	89.58	0.26	12,509.1	1,227.6	-925.2	1,234.4	0.36	-0.23	-0.27
13,949.0	90.11	0.34	12,509.4	1,322.6	-924.7	1,329.4	0.56	0.56	0.08
14,044.0	89.27	358.06	12,509.9	1,417.6	-926.0	1,424.4	2.56	-0.88	-2.40
14,138.0	89.14	357.53	12,511.2	1,511.5	-929.6	1,518.3	0.58	-0.14	-0.56
14,233.0	89.36	357.62	12,512.5	1,606.4	-933.6	1,613.2	0.25	0.23	0.09
14,328.0	90.11	357.88	12,512.9	1,701.4	-937.4	1,708.2	0.84	0.79	0.27
14,423.0	90.02	357.97	12,512.8	1,796.3	-940.8	1,803.2	0.13	-0.09	0.09
14,518.0	89.98	357.79	12,512.8	1,891.2	-944.3	1,898.1	0.19	-0.04	-0.19
14,612.0	90.24	357.27	12,512.6	1,985.2	-948.4	1,992.0	0.62	0.28	-0.55
14,707.0	89.89	358.76	12,512.5	2,080.1	-951.7	2,087.0	1.61	-0.37	1.57
14,802.0	89.54	359.11	12,513.0	2,175.1	-953.4	2,182.0	0.52	-0.37	0.37
14,897.0	90.15	359.20	12,513.2	2,270.1	-954.8	2,277.0	0.65	0.64	0.09
14,992.0	90.55	358.76	12,512.7	2,365.0	-956.5	2,372.0	0.63	0.42	-0.46
15,087.0	91.12	358.94	12,511.3	2,460.0	-958.4	2,467.0	0.63	0.60	0.19
15,181.0	89.63	0.34	12,510.7	2,554.0	-959.0	2,561.0	2.17	-1.59	1.49
15,276.0	90.11	0.61	12,510.9	2,649.0	-958.2	2,656.0	0.58	0.51	0.28
15,370.0	89.93	0.26	12,510.8	2,743.0	-957.5	2,749.9	0.42	-0.19	-0.37
15,465.0	89.71	359.73	12,511.1	2,838.0	-957.5	2,844.9	0.60	-0.23	-0.56
15,559.0	90.07	359.64	12,511.3	2,932.0	-958.0	2,938.9	0.39	0.38	-0.10
15,654.0	90.07	359.73	12,511.2	3,027.0	-958.6	3,033.9	0.09	0.00	0.09
15,749.0	90.11	359.73	12,511.1	3,122.0	-959.0	3,128.9	0.04	0.04	0.00
15,844.0	90.46	359.64	12,510.6	3,217.0	-959.5	3,223.9	0.38	0.37	-0.09
15,939.0	90.20	359.99	12,510.0	3,312.0	-959.8	3,318.9	0.46	-0.27	0.37
16,033.0	90.07	359.64	12,509.8	3,406.0	-960.1	3,412.9	0.40	-0.14	-0.37
16,128.0	89.80	359.46	12,509.9	3,501.0	-960.9	3,507.9	0.34	-0.28	-0.19
16,223.0	90.20	359.20	12,509.9	3,596.0	-962.0	3,602.9	0.50	0.42	-0.27
16,318.0	90.37	359.20	12,509.5	3,691.0	-963.3	3,697.9	0.18	0.18	0.00
16,413.0	90.73	358.85	12,508.5	3,785.9	-964.9	3,792.9	0.53	0.38	-0.37
16,507.0	88.40	358.67	12,509.3	3,879.9	-967.0	3,886.9	2.49	-2.48	-0.19
16,602.0	88.75	358.41	12,511.6	3,974.9	-969.4	3,981.9	0.46	0.37	-0.27
16,697.0	89.27	358.15	12,513.3	4,069.8	-972.3	4,076.8	0.61	0.55	-0.27
16,791.0	89.76	357.79	12,514.1	4,163.7	-975.6	4,170.8	0.65	0.52	-0.38
16,886.0	89.58	359.73	12,514.6	4,258.7	-977.6	4,265.8	2.05	-0.19	2.04
16,981.0	89.63	0.26	12,515.3	4,353.7	-977.6	4,360.8	0.56	0.05	0.56
17,075.0	90.15	0.69	12,515.4	4,447.7	-976.9	4,454.7	0.72	0.55	0.46
17,170.0	90.02	0.78	12,515.3	4,542.7	-975.6	4,549.7	0.17	-0.14	0.09
17,265.0	90.07	0.43	12,515.2	4,637.7	-974.6	4,644.7	0.37	0.05	-0.37
17,360.0	90.51	0.34	12,514.7	4,732.7	-974.0	4,739.7	0.47	0.46	-0.09

Company:	Tap Rock Resources, LLC	**Local Co-ordinate Reference:**	Well Poseidon State Com #201H
Project:	Lea County, NM (NAD 83 NME)	**TVD Reference:**	KB @ 3636.0usft (H&P 388)
Site:	(Poseidon) Sec-9_T-24-E_R-33-E	**MD Reference:**	KB @ 3636.0usft (H&P 388)
Well:	Poseidon State Com #201H	**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)
17,454.0	91.34	0.87	12,513.2	4,826.7	-973.0	4,833.7	1.05	0.88	0.56
17,549.0	89.63	0.52	12,512.4	4,921.7	-971.9	4,928.6	1.84	-1.80	-0.37
17,644.0	89.63	0.43	12,513.0	5,016.6	-971.1	5,023.6	0.09	0.00	-0.09
17,739.0	89.41	0.26	12,513.8	5,111.6	-970.5	5,118.6	0.29	-0.23	-0.18
17,833.0	89.49	0.17	12,514.7	5,205.6	-970.2	5,212.6	0.13	0.09	-0.10
17,928.0	89.76	359.99	12,515.4	5,300.6	-970.0	5,307.6	0.34	0.28	-0.19
18,024.0	90.02	359.90	12,515.5	5,396.6	-970.1	5,403.6	0.29	0.27	-0.09
18,119.0	89.80	359.90	12,515.7	5,491.6	-970.3	5,498.6	0.23	-0.23	0.00
18,214.0	89.32	359.55	12,516.4	5,586.6	-970.7	5,593.6	0.63	-0.51	-0.37
18,309.0	88.75	358.94	12,518.0	5,681.6	-972.0	5,688.6	0.88	-0.60	-0.64
18,403.0	87.69	358.41	12,520.9	5,775.5	-974.2	5,782.5	1.26	-1.13	-0.56
18,498.0	89.58	357.97	12,523.2	5,870.5	-977.2	5,877.5	2.04	1.99	-0.46
18,593.0	90.68	359.11	12,523.0	5,965.4	-979.6	5,972.4	1.67	1.16	1.20
18,688.0	90.81	359.99	12,521.7	6,060.4	-980.3	6,067.4	0.94	0.14	0.93
18,783.0	90.99	0.17	12,520.3	6,155.4	-980.2	6,162.4	0.27	0.19	0.19
18,877.0	91.47	0.17	12,518.2	6,249.4	-979.9	6,256.4	0.51	0.51	0.00
18,972.0	90.46	359.55	12,516.6	6,344.4	-980.1	6,351.4	1.25	-1.06	-0.65
19,066.0	89.49	0.17	12,516.7	6,438.4	-980.4	6,445.4	1.22	-1.03	0.66
19,161.0	89.32	359.90	12,517.7	6,533.4	-980.3	6,540.4	0.34	-0.18	-0.28
19,255.0	89.45	359.11	12,518.7	6,627.3	-981.1	6,634.4	0.85	0.14	-0.84
19,350.0	89.14	359.03	12,519.8	6,722.3	-982.7	6,729.3	0.34	-0.33	-0.08
19,444.0	91.56	358.41	12,519.3	6,816.3	-984.8	6,823.3	2.66	2.57	-0.66
19,539.0	90.73	357.62	12,517.4	6,911.2	-988.1	6,918.3	1.21	-0.87	-0.83
19,633.0	91.56	358.94	12,515.5	7,005.2	-990.9	7,012.2	1.66	0.88	1.40
19,728.0	91.60	358.94	12,512.9	7,100.1	-992.6	7,107.2	0.04	0.04	0.00
19,823.0	91.56	357.88	12,510.3	7,195.0	-995.3	7,202.1	1.12	-0.04	-1.12
19,917.0	90.90	358.59	12,508.2	7,289.0	-998.2	7,296.1	1.03	-0.70	0.76
20,012.0	90.55	358.76	12,507.0	7,383.9	-1,000.4	7,391.1	0.41	-0.37	0.18
20,107.0	90.81	358.15	12,505.9	7,478.9	-1,002.9	7,486.0	0.70	0.27	-0.64
20,201.0	89.93	359.90	12,505.3	7,572.9	-1,004.5	7,580.0	2.08	-0.94	1.86
20,296.0	89.93	0.26	12,505.4	7,667.9	-1,004.4	7,675.0	0.38	0.00	0.38
20,391.0	90.55	0.34	12,505.0	7,762.9	-1,003.9	7,770.0	0.66	0.65	0.08
20,485.0	91.52	359.55	12,503.3	7,856.8	-1,004.0	7,864.0	1.33	1.03	-0.84
20,580.0	92.00	359.73	12,500.4	7,951.8	-1,004.6	7,958.9	0.54	0.51	0.19
20,675.0	90.33	359.29	12,498.5	8,046.8	-1,005.4	8,053.9	1.82	-1.76	-0.46
20,769.0	89.89	359.46	12,498.3	8,140.8	-1,006.4	8,147.9	0.50	-0.47	0.18
20,864.0	89.32	359.03	12,498.9	8,235.8	-1,007.7	8,242.9	0.75	-0.60	-0.45
20,959.0	89.32	358.50	12,500.1	8,330.7	-1,009.7	8,337.9	0.56	0.00	-0.56
21,054.0	90.59	359.90	12,500.1	8,425.7	-1,011.0	8,432.9	1.99	1.34	1.47
21,149.0	91.43	359.73	12,498.5	8,520.7	-1,011.3	8,527.9	0.90	0.88	-0.18
21,244.0	93.36	359.20	12,494.5	8,615.6	-1,012.2	8,622.8	2.11	2.03	-0.56
21,338.0	91.16	359.73	12,490.8	8,709.5	-1,013.1	8,716.7	2.41	-2.34	0.56
21,433.0	90.46	359.29	12,489.5	8,804.5	-1,013.9	8,811.7	0.87	-0.74	-0.46

Company:	Tap Rock Resources, LLC	**Local Co-ordinate Reference:**	Well Poseidon State Com #201H
Project:	Lea County, NM (NAD 83 NME)	**TVD Reference:**	KB @ 3636.0usft (H&P 388)
Site:	(Poseidon) Sec-9_T-24-E_R-33-E	**MD Reference:**	KB @ 3636.0usft (H&P 388)
Well:	Poseidon State Com #201H	**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)
21,528.0	87.78	359.38	12,490.9	8,899.5	-1,015.0	8,906.7	2.82	-2.82	0.09
21,623.0	86.68	358.23	12,495.5	8,994.3	-1,017.0	9,001.6	1.67	-1.16	-1.21
21,718.0	87.87	358.85	12,500.0	9,089.2	-1,019.4	9,096.4	1.41	1.25	0.65
21,813.0	88.35	359.11	12,503.2	9,184.1	-1,021.1	9,191.4	0.57	0.51	0.27
21,908.0	89.27	2.89	12,505.1	9,279.1	-1,019.5	9,286.3	4.09	0.97	3.98
22,003.0	92.44	1.49	12,503.7	9,374.0	-1,015.8	9,381.2	3.65	3.34	-1.47
22,098.0	94.99	0.96	12,497.6	9,468.8	-1,013.8	9,475.9	2.74	2.68	-0.56
22,193.0	90.73	1.57	12,492.8	9,563.6	-1,011.7	9,570.8	4.53	-4.48	0.64
22,287.0	89.10	0.87	12,493.0	9,657.6	-1,009.7	9,664.7	1.89	-1.73	-0.74
22,382.0	87.52	0.78	12,495.8	9,752.5	-1,008.3	9,759.6	1.67	-1.66	-0.09
22,477.0	90.07	0.26	12,497.8	9,847.5	-1,007.5	9,854.6	2.74	2.68	-0.55
22,572.0	88.70	0.26	12,498.8	9,942.5	-1,007.0	9,949.6	1.44	-1.44	0.00
22,666.0	88.92	0.26	12,500.7	10,036.5	-1,006.6	10,043.6	0.23	0.23	0.00
22,728.2	88.84	359.99	12,501.9	10,098.6	-1,006.5	10,105.7	0.45	-0.13	-0.43
LTP @ 22728.2'MD, 100'FNL & 337.8'FWL									
22,729.0	88.84	359.99	12,502.0	10,099.4	-1,006.5	10,106.5	0.45	-0.13	-0.43
LAST SVY									
22,798.0	88.84	359.99	12,503.4	10,168.4	-1,006.5	10,175.5	0.00	0.00	0.00
Projection to TD @ 22798'MD, 30.2'FNL & 338.4'FWL									

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
PBHL (Poseidon Stat	-0.61	359.58	12,485.0	10,169.0	-1,014.0	456,885.00	772,756.00	32° 15' 13.803 N	103° 35' 5.038 W
- actual wellpath misses target center by 19.8usft at 22798.0usft MD (12503.4 TVD, 10168.4 N, -1006.5 E)									
- Rectangle (sides W100.0 H4,176.3 D30.0)									
LTP (Poseidon State	0.00	0.00	12,485.0	10,099.0	-1,013.0	456,815.00	772,757.00	32° 15' 13.110 N	103° 35' 5.032 W
- actual wellpath misses target center by 18.2usft at 22728.2usft MD (12501.9 TVD, 10098.7 N, -1006.5 E)									
- Point									
6000'VS (Poseidon St	0.00	359.58	12,529.0	5,993.0	-983.3	452,709.00	772,786.71	32° 14' 32.479 N	103° 35' 5.019 W
- actual wellpath misses target center by 7.2usft at 18620.5usft MD (12522.6 TVD, 5992.9 N, -979.9 E)									
- Rectangle (sides W100.0 H6,245.0 D30.0)									
FTP (Poseidon State	0.00	0.00	12,529.0	-252.0	-937.0	446,464.00	772,833.00	32° 13' 30.680 N	103° 35' 4.987 W
- actual wellpath misses target center by 242.6usft at 12491.2usft MD (12349.6 TVD, -88.7 N, -939.2 E)									
- Point									

Company:	Tap Rock Resources, LLC	**Local Co-ordinate Reference:**	Well Poseidon State Com #201H
Project:	Lea County, NM (NAD 83 NME)	**TVD Reference:**	KB @ 3636.0usft (H&P 388)
Site:	(Poseidon) Sec-9_T-24-E_R-33-E	**MD Reference:**	KB @ 3636.0usft (H&P 388)
Well:	Poseidon State Com #201H	**North Reference:**	Grid
Wellbore:	OWB	**Survey Calculation Method:**	Minimum Curvature
Design:	AWB	**Database:**	EDM 5000.15 Single User Db

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,286.1	1,286.0	Rustler Anhydrite			
1,796.1	1,796.0	Top Salt			
4,942.9	4,916.0	Base Salt			
5,195.4	5,166.0	Delaware Mountain Gp			
5,205.4	5,176.0	Lamar			
5,225.6	5,196.0	Bell Canyon			
5,245.7	5,216.0	Ramsey Sand			
6,162.2	6,121.0	Cherry Canyon			
7,710.0	7,651.0	Brushy Canyon			
9,167.4	9,101.0	Bone Spring Lime			
9,307.6	9,241.0	Upper Avalon			
9,616.9	9,550.0	Middle Avalon			
9,947.1	9,880.0	Lower Avalon			
10,208.3	10,141.0	1st Bone Spring Sand			
10,528.5	10,461.0	2nd Bone Spring Carb			
10,908.6	10,841.0	2nd Bone Spring Sand			
11,453.8	11,386.0	3rd Bone Spring Carb			
12,069.0	12,001.0	3rd Bone Spring Sand			
12,406.0	12,291.0	3rd BS W Sand			
12,515.8	12,366.0	Wolfcamp A X Sand			
12,794.1	12,496.0	Wolfcamp A Y Sand			

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
12,241.7	12,162.6	-251.8	-952.6	FTP @ 12241.7'MD, 100'FSL & 315.7'FWL
22,728.2	12,501.9	10,098.6	-1,006.5	LTP @ 22728.2'MD, 100'FNL & 337.8'FWL
22,729.0	12,502.0	10,099.4	-1,006.5	LAST SVY
22,798.0	12,503.4	10,168.4	-1,006.5	Projection to TD @ 22798'MD, 30.2'FNL & 338.4'FWL

Checked By: _____ Approved By: _____ Date: _____