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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

EMNRD-OCD ARTESIA FORM C-102
REC'D: 5/12/2020 Revised August 1, 2011
Submit one copy to appropriate
District Office

☐ AMENDED REPORT
As Drilled

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-46219	² Pool Code 98220	³ Pool Name PURPLE SAGE, WOLFCAMP (GAS)
⁴ Property Code 326031	⁵ Property Name MONEY GRAM FED COM	⁶ Well Number 214H
⁷ OGRID No. 372043	⁸ Operator Name TAP ROCK OPERATING, LLC.	⁹ Elevation 2866'

¹⁰Surface Location

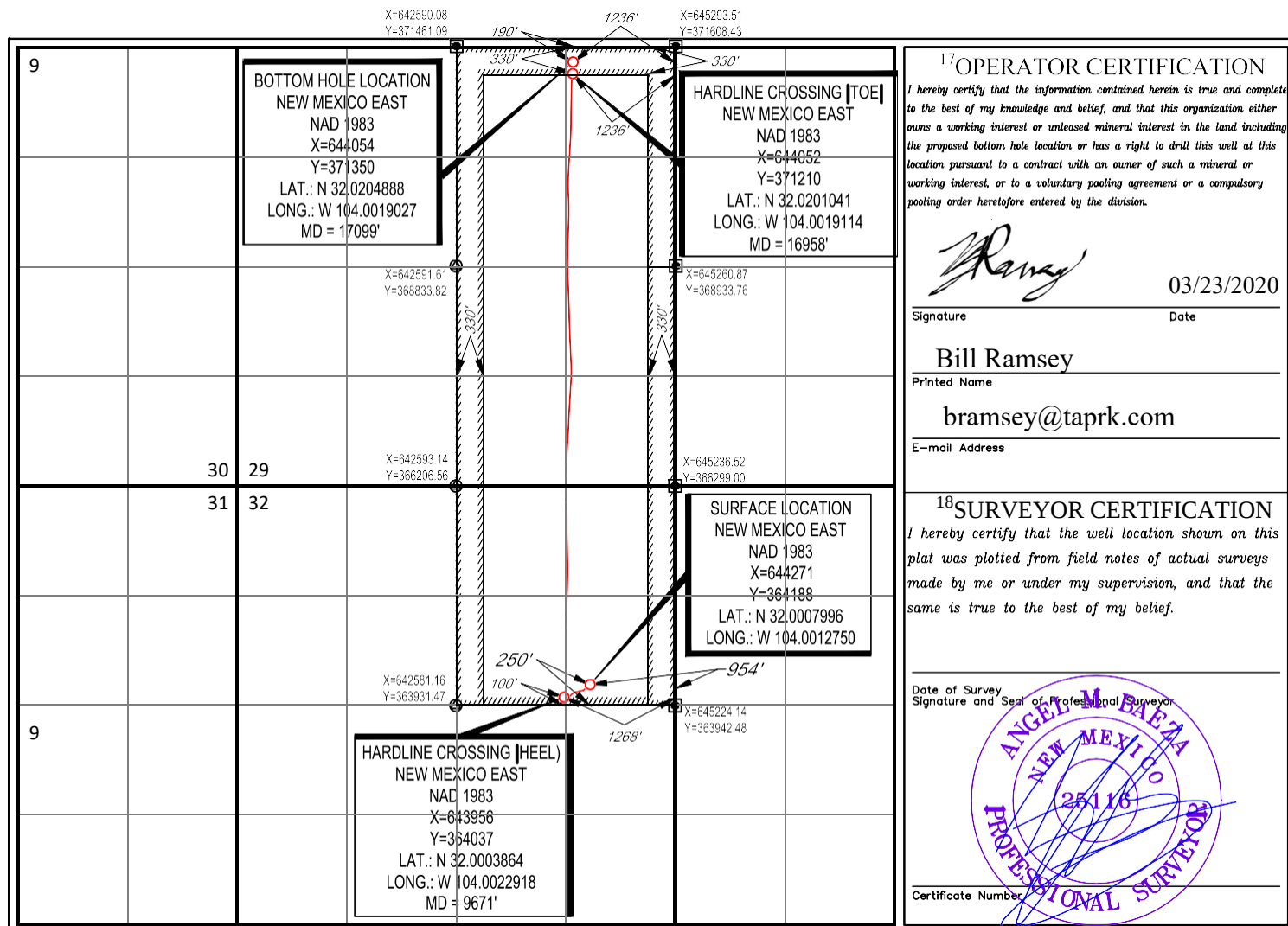
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	32	26-S	29-E	-	250'	SOUTH	954'	EAST	EDDY

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
A	29	26-S	29-E	-	190'	NORTH	1236'	EAST	EDDY

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.





Tap Rock Resources, LLC

**Eddy County, NM (NAD 83 NME)
(Money Graham) Sec-32_T-26-S_R-29-E
Money Graham Fed Com #214H**

OWB

Design: AWB

Standard Survey Report

13 December, 2019





Operator: Taprock Resources LLC
Well Name: Money Graham Fed Com #214H
County: Eddy
State: New Mexico
Rig Name: H&P 245
API Number: 30-015-46219

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: 702' MD – 17008' MD
Projection to Bit: 17100' MD
Dates Performed: 10/27/2019 – 12/15/2019
Type of Survey: MWD

Sincerely,

A handwritten signature in blue ink, appearing to read "Jim", with a stylized flourish at the end.

James Burleson
Vice President of MWD Operations
Intrepid Directional Drilling Specialists



Company:	Tap Rock Resources, LLC	Local Co-ordinate Reference:	Well Money Graham Fed Com #214H
Project:	Eddy County, NM (NAD 83 NME)	TVD Reference:	KB @ 2892.0usft (H&P 245)
Site:	(Money Graham) Sec-32_T-26-S_R-29-E	MD Reference:	KB @ 2892.0usft (H&P 245)
Well:	Money Graham Fed Com #214H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	AWB	Database:	EDM 5000.15 Single User Db

Project	Eddy 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		(Money Graham) Sec-32_T-26-S_R-29-E				
Site Position:		Northing:	364,259.00 usft	Latitude:	32° 0' 3.571 N	
From:	Map	Easting:	644,466.00 usft	Longitude:	104° 0' 2.323 W	
Position Uncertainty:		0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.18 °

Well	Money Graham Fed Com #214H					
Well Position	+N/-S	0.0 usft	Northing:	364,188.00 usft	Latitude:	32° 0' 2.874 N
	+E/-W	0.0 usft	Easting:	644,271.00 usft	Longitude:	104° 0' 4.590 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level:	2,866.0 usft

Wellbore	OWB				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	10/13/19	6.88	59.76	47,526.23587445

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	0.51	

Survey Program	Date	12/13/19			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
26.0	571.0	Invictus MWD (OWB)	MWD	OWSG MWD - Standard	
702.0	17,100.0	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	
84.0	0.40	341.76	84.0	0.2	-0.1	0.2	0.69	0.69	0.00	
170.0	0.40	10.76	170.0	0.8	-0.1	0.8	0.23	0.00	33.72	
256.0	0.50	4.76	256.0	1.4	0.0	1.4	0.13	0.12	-6.98	
351.0	0.50	320.76	351.0	2.2	-0.2	2.2	0.39	0.00	-46.32	
445.0	0.40	310.76	445.0	2.7	-0.7	2.7	0.13	-0.11	-10.64	
507.0	0.33	327.47	507.0	3.0	-1.0	3.0	0.20	-0.11	26.94	
Rustler Anhydrite										
571.0	0.30	350.76	571.0	3.3	-1.1	3.3	0.20	-0.05	36.41	

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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)
682.0	0.75	120.76	682.0	3.2	-0.6	3.2	0.87	0.40	117.10
Top Salt									
702.0	0.92	123.34	702.0	3.1	-0.3	3.1	0.87	0.85	12.90
796.0	1.32	179.94	796.0	1.6	0.3	1.6	1.19	0.43	60.21
888.0	3.30	218.26	887.9	-1.6	-1.3	-1.6	2.62	2.15	41.65
982.0	4.22	224.77	981.7	-6.1	-5.4	-6.2	1.08	0.98	6.93
1,076.0	4.00	227.58	1,075.4	-10.8	-10.3	-10.9	0.32	-0.23	2.99
1,160.0	3.56	228.11	1,159.3	-14.5	-14.4	-14.6	0.53	-0.52	0.63
1,254.0	3.12	227.05	1,253.1	-18.2	-18.4	-18.4	0.47	-0.47	-1.13
1,349.0	2.95	230.39	1,348.0	-21.5	-22.2	-21.7	0.26	-0.18	3.52
1,442.0	2.73	235.05	1,440.9	-24.3	-25.9	-24.6	0.34	-0.24	5.01
1,535.0	2.55	229.86	1,533.8	-26.9	-29.3	-27.2	0.32	-0.19	-5.58
1,628.0	2.37	229.78	1,626.7	-29.5	-32.3	-29.8	0.19	-0.19	-0.09
1,722.0	2.51	231.36	1,720.6	-32.0	-35.4	-32.4	0.17	0.15	1.68
1,816.0	2.42	240.67	1,814.5	-34.3	-38.7	-34.6	0.44	-0.10	9.90
1,909.0	2.24	241.47	1,907.4	-36.1	-42.1	-36.5	0.20	-0.19	0.86
2,004.0	2.11	246.21	2,002.4	-37.7	-45.3	-38.1	0.23	-0.14	4.99
2,098.0	1.93	236.46	2,096.3	-39.3	-48.2	-39.7	0.41	-0.19	-10.37
2,191.0	2.51	232.33	2,189.2	-41.4	-51.1	-41.9	0.65	0.62	-4.44
2,285.0	2.95	239.88	2,283.1	-43.9	-54.8	-44.4	0.60	0.47	8.03
2,379.0	2.68	231.09	2,377.0	-46.5	-58.6	-47.0	0.54	-0.29	-9.35
2,394.0	2.50	227.72	2,392.0	-46.9	-59.1	-47.4	1.55	-1.18	-22.43
Base Salt									
2,473.0	1.80	200.33	2,470.9	-49.2	-60.9	-49.8	1.55	-0.89	-34.68
2,567.0	3.21	222.92	2,564.8	-52.5	-63.2	-53.1	1.80	1.50	24.03
2,661.0	3.81	232.94	2,658.7	-56.4	-67.4	-57.0	0.91	0.64	10.66
2,734.5	3.24	232.22	2,732.0	-59.1	-71.0	-59.7	0.78	-0.78	-0.98
Delaware Mountain Gp									
2,755.0	3.08	231.97	2,752.5	-59.8	-71.9	-60.4	0.78	-0.78	-1.21
2,842.0	2.55	229.95	2,839.4	-62.5	-75.2	-63.1	0.62	-0.61	-2.32
2,849.6	2.50	229.75	2,847.0	-62.7	-75.5	-63.4	0.64	-0.63	-2.58
Bell Canyon - Lamar									
2,889.6	2.25	228.58	2,887.0	-63.8	-76.8	-64.5	0.64	-0.62	-2.92
Ramsey Sand									
2,927.0	2.02	227.23	2,924.3	-64.7	-77.8	-65.4	0.64	-0.62	-3.62
3,022.0	3.25	246.39	3,019.2	-66.9	-81.5	-67.7	1.58	1.29	20.17
3,115.0	5.71	256.58	3,111.9	-69.1	-88.4	-69.8	2.77	2.65	10.96
3,209.0	6.86	257.46	3,205.4	-71.4	-98.4	-72.2	1.23	1.22	0.94
3,303.0	6.33	257.11	3,298.7	-73.7	-109.0	-74.7	0.57	-0.56	-0.37
3,397.0	6.29	256.41	3,392.2	-76.1	-119.0	-77.2	0.09	-0.04	-0.74
3,491.0	6.07	258.25	3,485.6	-78.3	-128.9	-79.5	0.31	-0.23	1.96
3,584.0	5.58	258.17	3,578.2	-80.3	-138.1	-81.5	0.53	-0.53	-0.09
3,678.0	5.19	257.99	3,671.7	-82.1	-146.8	-83.4	0.42	-0.41	-0.19
3,772.0	5.14	257.46	3,765.4	-83.9	-155.0	-85.3	0.07	-0.05	-0.56

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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)
3,866.0	5.01	257.11	3,859.0	-85.7	-163.1	-87.2	0.14	-0.14	-0.37
3,869.0	5.01	257.11	3,862.0	-85.8	-163.4	-87.2	0.00	0.00	0.00
Cherry Canyon									
3,959.0	4.92	257.81	3,951.6	-87.5	-171.0	-89.0	0.12	-0.10	0.78
4,053.0	4.88	256.93	4,045.3	-89.2	-178.8	-90.8	0.09	-0.04	-0.94
4,147.0	5.01	252.54	4,138.9	-91.3	-186.6	-93.0	0.43	0.14	-4.67
4,241.0	5.32	242.17	4,232.6	-94.6	-194.4	-96.3	1.04	0.33	-11.03
4,335.0	5.14	237.42	4,326.2	-98.9	-201.8	-100.7	0.50	-0.19	-5.05
4,429.0	6.42	230.83	4,419.7	-104.5	-209.4	-106.4	1.53	1.36	-7.01
4,523.0	6.37	229.69	4,513.1	-111.2	-217.5	-113.1	0.15	-0.05	-1.21
4,617.0	6.46	227.93	4,606.5	-118.1	-225.4	-120.1	0.23	0.10	-1.87
4,711.0	6.20	229.51	4,699.9	-124.9	-233.2	-127.0	0.33	-0.28	1.68
4,804.0	6.33	228.37	4,792.4	-131.6	-240.8	-133.8	0.19	0.14	-1.23
4,848.9	6.59	228.81	4,837.0	-135.0	-244.6	-137.1	0.58	0.57	0.99
Brushy Canyon									
4,897.0	6.86	229.25	4,884.8	-138.6	-248.9	-140.9	0.58	0.57	0.91
4,990.0	6.51	228.28	4,977.1	-145.8	-257.0	-148.1	0.40	-0.38	-1.04
5,083.0	6.24	226.88	5,069.6	-152.7	-264.6	-155.1	0.33	-0.29	-1.51
5,177.0	6.11	226.26	5,163.0	-159.7	-272.0	-162.1	0.16	-0.14	-0.66
5,271.0	5.89	226.09	5,256.5	-166.5	-279.1	-169.0	0.23	-0.23	-0.18
5,365.0	5.19	222.22	5,350.1	-173.0	-285.4	-175.5	0.84	-0.74	-4.12
5,458.0	5.10	218.17	5,442.7	-179.4	-290.8	-181.9	0.40	-0.10	-4.35
5,551.0	5.05	215.36	5,535.3	-185.9	-295.7	-188.6	0.27	-0.05	-3.02
5,645.0	4.22	210.70	5,629.0	-192.3	-299.9	-195.0	0.97	-0.88	-4.96
5,739.0	2.29	206.49	5,722.9	-196.9	-302.5	-199.6	2.07	-2.05	-4.48
5,833.0	1.98	202.79	5,816.8	-200.1	-303.9	-202.8	0.36	-0.33	-3.94
5,926.0	2.11	197.87	5,909.7	-203.2	-305.1	-205.9	0.23	0.14	-5.29
6,020.0	2.46	202.62	6,003.7	-206.7	-306.4	-209.5	0.42	0.37	5.05
6,113.0	2.55	208.51	6,096.6	-210.4	-308.1	-213.1	0.29	0.10	6.33
6,207.0	1.85	192.51	6,190.5	-213.7	-309.5	-216.5	0.98	-0.74	-17.02
6,300.0	1.85	185.04	6,283.5	-216.7	-309.9	-219.4	0.26	0.00	-8.03
6,394.0	1.93	178.01	6,377.4	-219.8	-310.0	-222.5	0.26	0.09	-7.48
6,443.6	1.41	173.34	6,427.0	-221.2	-309.9	-224.0	1.07	-1.04	-9.42
Bone Spring Lime									
6,488.0	0.97	165.00	6,471.4	-222.1	-309.7	-224.9	1.07	-1.00	-18.78
6,582.0	1.76	145.75	6,565.4	-224.1	-308.7	-226.8	0.96	0.84	-20.48
6,676.0	1.76	151.64	6,659.3	-226.6	-307.2	-229.3	0.19	0.00	6.27
6,769.0	1.41	125.98	6,752.3	-228.5	-305.6	-231.2	0.84	-0.38	-27.59
6,864.0	1.10	135.12	6,847.3	-229.8	-304.0	-232.5	0.39	-0.33	9.62
6,957.0	1.19	180.29	6,940.2	-231.4	-303.4	-234.1	0.95	0.10	48.57
7,050.0	1.76	208.86	7,033.2	-233.6	-304.1	-236.3	0.98	0.61	30.72
7,144.0	0.92	211.41	7,127.2	-235.5	-305.2	-238.2	0.90	-0.89	2.71
7,238.0	1.45	204.90	7,221.2	-237.3	-306.1	-240.0	0.58	0.56	-6.93
7,331.0	1.05	180.82	7,314.1	-239.2	-306.6	-241.9	0.70	-0.43	-25.89

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7,368.9	1.19	181.66	7,352.0	-239.9	-306.6	-242.6	0.39	0.38	2.21
1st Bone Spring Sand									
7,425.0	1.41	182.58	7,408.1	-241.2	-306.7	-243.9	0.39	0.38	1.65
7,518.0	0.40	31.93	7,501.1	-242.1	-306.5	-244.8	1.90	-1.09	-161.99
7,612.0	1.76	8.38	7,595.1	-240.4	-306.2	-243.1	1.49	1.45	-25.05
7,706.0	2.20	336.74	7,689.0	-237.3	-306.7	-240.0	1.23	0.47	-33.66
7,800.0	2.64	327.69	7,783.0	-233.8	-308.5	-236.5	0.62	0.47	-9.63
7,893.0	1.63	339.64	7,875.9	-230.7	-310.1	-233.5	1.18	-1.09	12.85
7,949.1	1.54	337.13	7,932.0	-229.3	-310.7	-232.0	0.20	-0.15	-4.47
2nd Bone Spring Sand									
7,986.0	1.49	335.33	7,968.9	-228.4	-311.1	-231.2	0.20	-0.15	-4.89
8,080.0	2.11	308.79	8,062.8	-226.2	-313.0	-229.0	1.09	0.66	-28.23
8,173.0	1.49	301.50	8,155.8	-224.5	-315.3	-227.3	0.71	-0.67	-7.84
8,267.0	1.71	288.14	8,249.7	-223.4	-317.7	-226.2	0.46	0.23	-14.21
8,360.0	1.76	278.73	8,342.7	-222.8	-320.4	-225.6	0.31	0.05	-10.12
8,453.0	1.58	275.48	8,435.6	-222.4	-323.1	-225.3	0.22	-0.19	-3.49
8,546.0	1.27	262.65	8,528.6	-222.4	-325.4	-225.3	0.48	-0.33	-13.80
8,639.0	1.54	239.62	8,621.6	-223.2	-327.5	-226.1	0.67	0.29	-24.76
8,733.0	1.89	226.00	8,715.5	-224.9	-329.7	-227.9	0.57	0.37	-14.49
8,827.0	0.97	207.10	8,809.5	-226.7	-331.2	-229.6	1.09	-0.98	-20.11
8,920.0	0.09	43.45	8,902.5	-227.4	-331.5	-230.3	1.14	-0.95	-175.97
9,013.0	0.26	272.40	8,995.5	-227.3	-331.7	-230.2	0.35	0.18	-140.91
9,107.0	0.44	235.58	9,089.5	-227.5	-332.2	-230.4	0.30	0.19	-39.17
9,191.5	0.58	223.10	9,174.0	-228.0	-332.7	-230.9	0.21	0.17	-14.77
3rd Bone Spring Sand									
9,232.0	0.66	219.14	9,214.5	-228.3	-333.0	-231.3	0.21	0.19	-9.78
9,352.0	0.75	207.54	9,334.5	-229.6	-333.8	-232.5	0.14	0.08	-9.67
9,445.0	8.18	2.40	9,427.2	-223.5	-333.8	-226.4	9.53	7.99	166.52
9,449.9	8.65	3.56	9,432.0	-222.8	-333.8	-225.7	10.39	9.79	23.93
3rd BS W Sand									
9,539.0	17.67	13.57	9,518.7	-202.9	-330.2	-205.8	10.39	10.11	11.23
9,542.4	18.01	13.83	9,522.0	-201.8	-329.9	-204.8	10.03	9.76	7.52
Wolfcamp A									
9,631.0	26.73	18.31	9,603.8	-169.6	-320.4	-172.4	10.03	9.85	5.06
9,662.8	28.80	16.70	9,632.0	-155.4	-315.9	-158.2	6.91	6.49	-5.07
Wolfcamp A Y Sand									
9,672.8	29.45	16.24	9,640.7	-150.8	-314.6	-153.6	6.91	6.53	-4.63
FTP @ 9672.8'MD, 100'FSL & 1268.6'FEL									
9,725.0	32.88	14.09	9,685.4	-124.7	-307.5	-127.5	6.91	6.57	-4.11
9,808.2	40.62	8.65	9,752.0	-75.9	-297.9	-78.6	10.08	9.30	-6.54
Wolfcamp A Fat									
9,818.0	41.54	8.12	9,759.4	-69.6	-297.0	-72.2	10.08	9.44	-5.37
9,911.0	54.42	0.47	9,821.6	-0.9	-292.3	-3.5	15.12	13.85	-8.23
10,004.0	69.49	358.45	9,865.2	80.9	-293.2	78.3	16.32	16.20	-2.17

Company:	Tap Rock Resources, LLC	Local Co-ordinate Reference:	Well Money Graham Fed Com #214H
Project:	Eddy County, NM (NAD 83 NME)	TVD Reference:	KB @ 2892.0usft (H&P 245)
Site:	(Money Graham) Sec-32_T-26-S_R-29-E	MD Reference:	KB @ 2892.0usft (H&P 245)
Well:	Money Graham Fed Com #214H	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)
10,098.0	74.42	359.33	9,894.3	170.3	-294.9	167.6	5.32	5.24	0.94
10,191.0	84.40	0.73	9,911.3	261.6	-294.8	258.9	10.83	10.73	1.51
10,284.0	90.29	1.00	9,915.6	354.4	-293.4	351.8	6.34	6.33	0.29
10,377.0	89.19	2.14	9,916.1	447.4	-290.9	444.8	1.70	-1.18	1.23
10,469.0	86.55	1.79	9,919.5	539.3	-287.7	536.7	2.89	-2.87	-0.38
10,562.0	86.33	1.44	9,925.3	632.0	-285.1	629.5	0.44	-0.24	-0.38
10,656.0	87.56	1.70	9,930.3	725.9	-282.6	723.3	1.34	1.31	0.28
10,749.0	88.09	1.61	9,933.8	818.8	-279.9	816.2	0.58	0.57	-0.10
10,843.0	87.34	2.32	9,937.5	912.6	-276.7	910.1	1.10	-0.80	0.76
10,937.0	86.51	0.82	9,942.6	1,006.5	-274.1	1,004.0	1.82	-0.88	-1.60
11,029.0	88.26	0.91	9,946.8	1,098.3	-272.7	1,095.9	1.90	1.90	0.10
11,122.0	90.33	359.59	9,947.9	1,191.3	-272.3	1,188.9	2.64	2.23	-1.42
11,215.0	91.30	358.80	9,946.6	1,284.3	-273.6	1,281.8	1.35	1.04	-0.85
11,308.0	91.03	358.89	9,944.7	1,377.3	-275.5	1,374.8	0.31	-0.29	0.10
11,401.0	89.76	357.75	9,944.1	1,470.2	-278.2	1,467.7	1.84	-1.37	-1.23
11,494.0	88.57	358.80	9,945.4	1,563.2	-281.0	1,560.6	1.71	-1.28	1.13
11,588.0	89.41	0.73	9,947.1	1,657.1	-281.4	1,654.6	2.24	0.89	2.05
11,681.0	87.38	359.77	9,949.7	1,750.1	-281.0	1,747.5	2.41	-2.18	-1.03
11,775.0	85.63	357.39	9,955.4	1,843.9	-283.3	1,841.3	3.14	-1.86	-2.53
11,868.0	88.09	356.87	9,960.5	1,936.6	-287.9	1,934.0	2.70	2.65	-0.56
11,961.0	90.24	358.54	9,961.9	2,029.5	-291.7	2,026.9	2.93	2.31	1.80
12,054.0	87.82	359.42	9,963.4	2,122.5	-293.3	2,119.8	2.77	-2.60	0.95
12,147.0	89.89	2.05	9,965.3	2,215.5	-292.1	2,212.8	3.60	2.23	2.83
12,240.0	89.89	1.26	9,965.5	2,308.4	-289.4	2,305.8	0.85	0.00	-0.85
12,332.0	92.00	2.05	9,964.0	2,400.4	-286.8	2,397.7	2.45	2.29	0.86
12,426.0	92.13	2.93	9,960.6	2,494.2	-282.7	2,491.6	0.95	0.14	0.94
12,519.0	93.45	2.75	9,956.1	2,587.0	-278.1	2,584.4	1.43	1.42	-0.19
12,612.0	92.88	3.90	9,950.9	2,679.7	-272.7	2,677.2	1.38	-0.61	1.24
12,705.0	89.89	3.46	9,948.7	2,772.5	-266.8	2,770.0	3.25	-3.22	-0.47
12,798.0	88.09	2.93	9,950.3	2,865.3	-261.6	2,862.9	2.02	-1.94	-0.57
12,891.0	87.25	2.84	9,954.1	2,958.1	-256.9	2,955.7	0.91	-0.90	-0.10
12,984.0	86.64	3.11	9,959.0	3,050.8	-252.1	3,048.5	0.72	-0.66	0.29
13,078.0	86.33	2.84	9,964.8	3,144.5	-247.2	3,142.2	0.44	-0.33	-0.29
13,172.0	87.34	4.07	9,970.0	3,238.2	-241.5	3,235.9	1.69	1.07	1.31
13,265.0	87.38	3.37	9,974.3	3,330.9	-235.5	3,328.7	0.75	0.04	-0.75
13,359.0	86.95	3.19	9,978.9	3,424.7	-230.1	3,422.5	0.50	-0.46	-0.19
13,452.0	87.12	0.38	9,983.7	3,517.5	-227.3	3,515.3	3.02	0.18	-3.02
13,547.0	87.78	356.95	9,988.0	3,612.3	-229.5	3,610.2	3.67	0.69	-3.61
13,640.0	90.64	357.39	9,989.3	3,705.2	-234.1	3,703.0	3.11	3.08	0.47
13,734.0	93.14	357.66	9,986.2	3,799.1	-238.1	3,796.8	2.68	2.66	0.29
13,827.0	94.02	357.66	9,980.3	3,891.8	-241.9	3,889.5	0.95	0.95	0.00
13,920.0	87.82	357.83	9,978.9	3,984.7	-245.6	3,982.3	6.67	-6.67	0.18
14,014.0	89.32	357.83	9,981.2	4,078.6	-249.1	4,076.2	1.60	1.60	0.00
14,107.0	88.92	358.71	9,982.6	4,171.5	-251.9	4,169.1	1.04	-0.43	0.95

Company:	Tap Rock Resources, LLC	Local Co-ordinate Reference:	Well Money Graham Fed Com #214H
Project:	Eddy County, NM (NAD 83 NME)	TVD Reference:	KB @ 2892.0usft (H&P 245)
Site:	(Money Graham) Sec-32_T-26-S_R-29-E	MD Reference:	KB @ 2892.0usft (H&P 245)
Well:	Money Graham Fed Com #214H	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)
14,201.0	88.75	357.75	9,984.5	4,265.5	-254.8	4,263.0	1.04	-0.18	-1.02
14,295.0	88.97	357.92	9,986.4	4,359.4	-258.4	4,356.9	0.30	0.23	0.18
14,388.0	89.76	358.01	9,987.4	4,452.3	-261.7	4,449.8	0.85	0.85	0.10
14,482.0	90.11	358.10	9,987.5	4,546.2	-264.9	4,543.7	0.38	0.37	0.10
14,575.0	89.63	356.95	9,987.8	4,639.2	-268.9	4,636.6	1.34	-0.52	-1.24
14,669.0	88.53	357.75	9,989.3	4,733.0	-273.2	4,730.4	1.45	-1.17	0.85
14,762.0	89.01	0.65	9,991.3	4,826.0	-274.5	4,823.4	3.16	0.52	3.12
14,858.0	88.31	1.52	9,993.5	4,922.0	-272.7	4,919.3	1.16	-0.73	0.91
14,951.0	90.42	1.44	9,994.5	5,014.9	-270.3	5,012.3	2.27	2.27	-0.09
15,045.0	91.25	1.96	9,993.2	5,108.9	-267.5	5,106.3	1.04	0.88	0.55
15,138.0	91.56	2.40	9,990.9	5,201.8	-264.0	5,199.2	0.58	0.33	0.47
15,232.0	91.38	1.61	9,988.5	5,295.7	-260.7	5,293.1	0.86	-0.19	-0.84
15,326.0	91.21	1.79	9,986.4	5,389.6	-257.9	5,387.1	0.26	-0.18	0.19
15,419.0	89.14	358.62	9,986.1	5,482.6	-257.6	5,480.1	4.07	-2.23	-3.41
15,512.0	89.05	358.62	9,987.5	5,575.6	-259.8	5,573.0	0.10	-0.10	0.00
15,606.0	87.08	356.43	9,990.7	5,669.4	-263.9	5,666.8	3.13	-2.10	-2.33
15,699.0	88.88	0.21	9,994.0	5,762.3	-266.6	5,759.7	4.50	1.94	4.06
15,793.0	89.32	2.67	9,995.5	5,856.2	-264.2	5,853.7	2.66	0.47	2.62
15,887.0	90.20	3.55	9,995.9	5,950.1	-259.1	5,947.6	1.32	0.94	0.94
15,981.0	89.36	3.11	9,996.2	6,043.9	-253.7	6,041.4	1.01	-0.89	-0.47
16,074.0	90.20	3.46	9,996.6	6,136.8	-248.3	6,134.3	0.98	0.90	0.38
16,167.0	89.32	3.72	9,997.0	6,229.6	-242.5	6,227.2	0.99	-0.95	0.28
16,261.0	89.32	3.72	9,998.1	6,323.4	-236.4	6,321.0	0.00	0.00	0.00
16,354.0	88.84	1.88	9,999.6	6,416.3	-231.9	6,413.9	2.04	-0.52	-1.98
16,447.0	87.25	359.06	10,002.8	6,509.2	-231.1	6,506.9	3.48	-1.71	-3.03
16,541.0	88.48	0.65	10,006.3	6,603.1	-231.4	6,600.8	2.14	1.31	1.69
16,634.0	89.14	1.26	10,008.2	6,696.1	-229.8	6,693.8	0.97	0.71	0.66
16,727.0	88.97	1.26	10,009.7	6,789.1	-227.8	6,786.8	0.18	-0.18	0.00
16,821.0	90.11	2.23	10,010.5	6,883.0	-224.9	6,880.7	1.59	1.21	1.03
16,914.0	91.03	2.93	10,009.6	6,975.9	-220.7	6,973.7	1.24	0.99	0.75
16,960.4	89.55	1.84	10,009.3	7,022.3	-218.8	7,020.0	3.95	-3.18	-2.34
LTP @ 16960.4'MD, 330'FNL & 1237.4'FEL									
17,008.0	88.04	0.73	10,010.3	7,069.8	-217.7	7,067.6	3.95	-3.18	-2.34
LAST SVY									
17,100.0	88.04	0.73	10,013.5	7,161.8	-216.5	7,159.6	0.00	0.00	0.00
Projection to TD @ 17100'MD, 190.8'FNL & 1236.2'FEL									

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Project:	Eddy County, NM (NAD 83 NME)	TVD Reference:	KB @ 2892.0usft (H&P 245)
Site:	(Money Graham) Sec-32_T-26-S_R-29-E	MD Reference:	KB @ 2892.0usft (H&P 245)
Well:	Money Graham Fed Com #214H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	AWB	Database:	EDM 5000.15 Single User Db

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
FTP (Money Graham - actual wellpath misses target center by 180.9usft at 9874.1usft MD (9798.7 TVD, -29.9 N, -293.2 E) - Point	0.00	0.00	9,933.0	-151.0	-300.0	364,037.00	643,971.00	32° 0' 1.389 N	104° 0' 8.079 W
LTP (Money Graham - actual wellpath misses target center by 18.6usft at 16958.4usft MD (10009.3 TVD, 7020.2 N, -218.8 E) - Point	0.00	0.00	10,016.4	7,021.0	-236.0	371,209.00	644,035.00	32° 1' 12.363 N	104° 0' 7.081 W
PBHL (Money Graham - actual wellpath misses target center by 18.6usft at 17090.1usft MD (10013.1 TVD, 7151.9 N, -216.7 E) - Rectangle (sides W100.0 H7,303.0 D20.0)	0.70	0.51	10,016.4	7,152.0	-235.0	371,340.00	644,036.00	32° 1' 13.659 N	104° 0' 7.064 W

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
507.0	507.0	Rustler Anhydrite			
682.0	682.0	Top Salt			
2,394.0	2,392.0	Base Salt			
2,734.5	2,732.0	Delaware Mountain Gp			
2,849.6	2,847.0	Bell Canyon			
2,849.6	2,847.0	Lamar			
2,889.6	2,887.0	Ramsey Sand			
3,869.0	3,862.0	Cherry Canyon			
4,848.9	4,837.0	Brushy Canyon			
6,443.6	6,427.0	Bone Spring Lime			
7,368.9	7,352.0	1st Bone Spring Sand			
7,949.1	7,932.0	2nd Bone Spring Sand			
9,191.5	9,174.0	3rd Bone Spring Sand			
9,449.9	9,432.0	3rd BS W Sand			
9,542.4	9,522.0	Wolfcamp A			
9,662.8	9,632.0	Wolfcamp A Y Sand			
9,808.2	9,752.0	Wolfcamp A Fat			

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
9,672.8	9,640.7	-150.8	-314.6	FTP @ 9672.8'MD, 100'FSL & 1268.6'FEL
16,960.4	10,009.3	7,022.3	-218.8	LTP @ 16960.4'MD, 330'FNL & 1237.4'FEL
17,008.0	10,010.3	7,069.8	-217.7	LAST SVY
17,100.0	10,013.5	7,161.8	-216.5	Projection to TD @ 17100'MD, 190.8'FNL & 1236.2'FEL

Checked By: _____ Approved By: _____ Date: _____