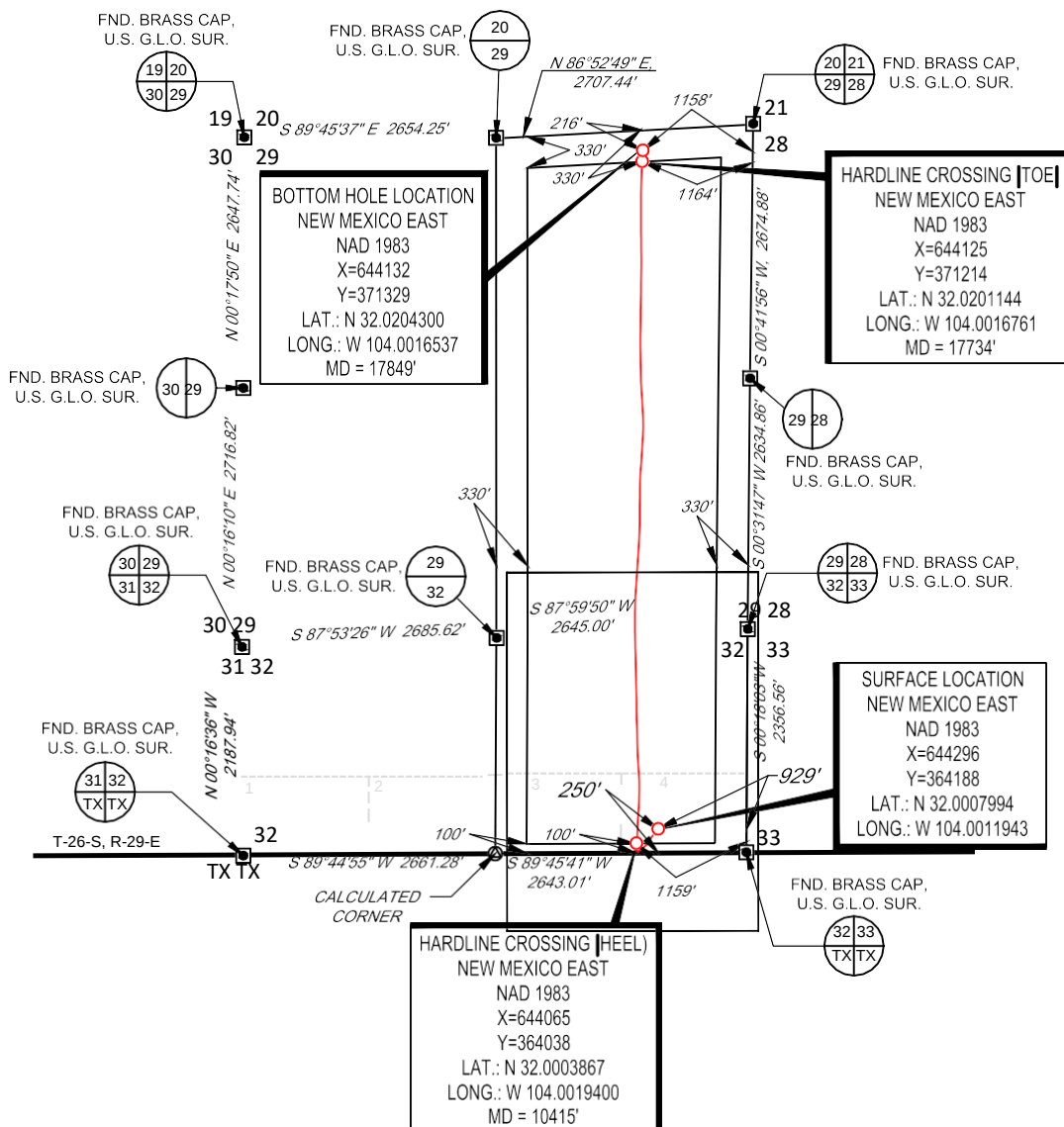


SCALE: 1" = 2000'

0' 1000' 2000'

SECTION 32, TOWNSHIP 26-S, RANGE 29-E, N.M.P.M.
EDDY COUNTY, NEW MEXICO



LEASE NAME & WELL NO.: MONEY GRAHAM FED COM 246H

SECTION 32 TWP 26-S RGE 29-E SURVEY N.M.P.M.

COUNTY EDDY STATE NM ELEVATION 2866'

DESCRIPTION 250' FSL & 929' FEL

INTERNAL
PRE-COMPLETION
PLAT



TOPOGRAPHIC
LOYALTY INNOVATION LEGACY

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

MONEY GRAHAM
FED COM 246H
PRE-COMPLETION

DATE: 01/02/20

FILE: C:\MONEY_GRAHAM_FED_COM_246H

DRAWN BY: GJU

SHEET: 2 OF 2

REVISION:

NOTES:

1. ORIGINAL DOCUMENT SIZE: 8.5" X 11"
2. ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREIN ARE GRID BASED UPON THE NEW MEXICO COORDINATE SYSTEM OF 1983, EAST ZONE, U.S. SURVEY FEET.
3. THIS WELL LOCATION SHOWN HEREON HAS BEEN SURVEYED ON THE GROUND UNDER MY SUPERVISION AND PREPARED ACCORDING TO THE EVIDENCE FOUND AT THE TIME OF SURVEY, AND DATA PROVIDED BY TAP ROCK OPERATING, LLC. THIS CERTIFICATION IS MADE AND LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS PLAT AND IS NON-TRANSFERABLE. THIS SURVEY IS CERTIFIED FOR THIS TRANSACTION ONLY.



Tap Rock Resources, LLC

**Eddy County, NM (NAD 83 NME)
(Money Graham) Sec-32_T-26-S_R-29-E
Money Graham Fed Com #246H**

OWB

Design: AWB

Standard Survey Report

02 January, 2020





Operator: Taprock Resources LLC
Well Name: Money Graham Fed Com #246H
County: Eddy
State: New Mexico
Rig Name: H&P 245
API Number: 30-015-46222

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: 655' MD – 17779' MD
Projection to Bit: 17851' MD
Dates Performed: 10/19/2019 – 10/26/2019 & 12/24/2019 – 01/02/2020
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 #246H
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 #246H	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 #246H					
Well Position	+N/-S	0.0 usft	Northing:	364,188.00 usft	Latitude:	32° 0' 2.873 N
	+E/-W	0.0 usft	Easting:	644,296.00 usft	Longitude:	104° 0' 4.299 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	47,526.24433246

Design	AWB			
Audit Notes:				
Version:	1.0	Phase:	ACTUAL	Tie On Depth:
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	0.51

Survey Program	Date	01/02/20		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
26.0	605.0	Invictus MWD (OWB)	MWD	OWSG MWD - Standard
724.0	17,851.0	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
106.0	0.80	223.76	106.0	-0.4	-0.4	-0.4	1.00	1.00	0.00
196.0	0.60	131.76	196.0	-1.2	-0.5	-1.2	1.13	-0.22	-102.22
282.0	0.50	132.76	282.0	-1.7	0.1	-1.7	0.12	-0.12	1.16
377.0	0.50	129.76	377.0	-2.3	0.8	-2.3	0.03	0.00	-3.16
503.0	0.70	110.76	503.0	-2.9	1.9	-2.9	0.22	0.16	-15.08
507.0	0.69	110.20	507.0	-2.9	2.0	-2.9	0.28	-0.22	-13.91
Rustler Anhydrite									
605.0	0.50	90.76	605.0	-3.1	2.9	-3.1	0.28	-0.19	-19.84

Company:	Tap Rock Resources, LLC	Local Co-ordinate Reference:	Well Money Graham Fed Com #246H
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 #246H	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)
682.0	1.54	120.60	682.0	-3.7	4.2	-3.6	1.47	1.35	38.72
Top Salt									
749.0	2.51	125.54	748.9	-5.0	6.1	-4.9	1.47	1.45	7.38
843.0	0.40	75.18	842.9	-6.1	8.1	-6.0	2.42	-2.24	-53.57
935.0	1.71	314.77	934.9	-5.0	7.5	-5.0	2.11	1.42	-130.88
1,029.0	2.02	301.85	1,028.8	-3.2	5.1	-3.1	0.55	0.33	-13.74
1,145.0	1.85	276.53	1,144.8	-1.9	1.5	-1.9	0.74	-0.15	-21.83
1,240.0	1.67	291.56	1,239.7	-1.2	-1.4	-1.2	0.52	-0.19	15.82
1,334.0	1.49	272.32	1,333.7	-0.6	-3.8	-0.7	0.59	-0.19	-20.47
1,427.0	1.14	295.61	1,426.7	-0.2	-5.9	-0.2	0.68	-0.38	25.04
1,520.0	1.67	282.25	1,519.6	0.5	-8.0	0.4	0.67	0.57	-14.37
1,614.0	1.89	302.55	1,613.6	1.6	-10.7	1.5	0.71	0.23	21.60
1,707.0	1.76	287.08	1,706.5	2.9	-13.4	2.7	0.55	-0.14	-16.63
1,801.0	1.58	284.36	1,800.5	3.6	-16.0	3.5	0.21	-0.19	-2.89
1,895.0	1.19	274.07	1,894.5	4.0	-18.2	3.8	0.49	-0.41	-10.95
1,989.0	0.97	305.80	1,988.5	4.5	-19.8	4.4	0.67	-0.23	33.76
2,083.0	0.40	71.57	2,082.4	5.1	-20.2	4.9	1.33	-0.61	133.80
2,177.0	0.92	111.04	2,176.4	4.9	-19.2	4.8	0.70	0.55	41.99
2,271.0	0.92	113.85	2,270.4	4.4	-17.8	4.2	0.05	0.00	2.99
2,364.0	2.11	103.39	2,363.4	3.7	-15.4	3.5	1.31	1.28	-11.25
2,392.6	2.50	103.75	2,392.0	3.4	-14.3	3.3	1.35	1.35	1.27
Base Salt									
2,458.0	3.38	104.27	2,457.3	2.6	-11.0	2.5	1.35	1.35	0.79
2,553.0	3.16	107.43	2,552.1	1.1	-5.8	1.1	0.30	-0.23	3.33
2,646.0	2.24	118.16	2,645.0	-0.5	-1.8	-0.5	1.12	-0.99	11.54
2,733.0	1.26	98.18	2,732.0	-1.5	0.7	-1.5	1.31	-1.13	-22.96
Delaware Mountain Gp									
2,740.0	1.19	95.22	2,739.0	-1.5	0.8	-1.5	1.31	-0.95	-42.37
2,834.0	0.79	64.37	2,833.0	-1.3	2.4	-1.3	0.69	-0.43	-32.82
2,848.0	0.67	66.87	2,847.0	-1.2	2.5	-1.2	0.85	-0.82	17.84
Bell Canyon - Lamar									
2,861.0	0.57	70.08	2,860.0	-1.2	2.7	-1.1	0.85	-0.81	24.73
2,888.0	0.66	84.61	2,887.0	-1.1	2.9	-1.1	0.66	0.33	53.76
Ramsey Sand									
2,927.0	0.84	98.82	2,926.0	-1.1	3.4	-1.1	0.66	0.46	36.46
3,021.0	0.57	84.14	3,020.0	-1.2	4.6	-1.1	0.34	-0.29	-15.62
3,115.0	0.48	128.17	3,114.0	-1.4	5.4	-1.3	0.43	-0.10	46.84
3,208.0	1.71	253.95	3,206.9	-2.0	4.3	-2.0	2.18	1.32	135.25
3,303.0	3.47	238.04	3,301.8	-3.9	0.5	-3.9	1.98	1.85	-16.75
3,397.0	6.37	232.50	3,395.5	-8.6	-6.0	-8.6	3.12	3.09	-5.89
3,490.0	8.66	230.57	3,487.7	-16.2	-15.5	-16.3	2.48	2.46	-2.08
3,584.0	8.04	228.02	3,580.7	-25.1	-25.9	-25.3	0.77	-0.66	-2.71
3,678.0	7.47	223.98	3,673.8	-33.9	-35.0	-34.2	0.84	-0.61	-4.30
3,772.0	7.30	225.21	3,767.0	-42.5	-43.5	-42.9	0.25	-0.18	1.31

Company:	Tap Rock Resources, LLC	Local Co-ordinate Reference:	Well Money Graham Fed Com #246H
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 #246H	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)
3,866.0	7.03	220.11	3,860.3	-51.1	-51.4	-51.5	0.73	-0.29	-5.43
3,867.7	7.03	220.11	3,862.0	-51.2	-51.6	-51.7	0.00	0.00	0.00
Cherry Canyon									
3,959.0	7.12	220.55	3,952.6	-59.8	-58.8	-60.3	0.12	0.10	0.48
4,053.0	7.43	220.20	4,045.8	-68.9	-66.5	-69.5	0.33	0.33	-0.37
4,147.0	7.21	218.79	4,139.1	-78.1	-74.2	-78.8	0.30	-0.23	-1.50
4,241.0	7.34	213.17	4,232.3	-87.7	-81.1	-88.5	0.77	0.14	-5.98
4,335.0	7.30	214.04	4,325.6	-97.7	-87.8	-98.5	0.13	-0.04	0.93
4,429.0	6.90	214.48	4,418.8	-107.3	-94.3	-108.2	0.43	-0.43	0.47
4,523.0	6.81	210.35	4,512.2	-116.8	-100.3	-117.7	0.53	-0.10	-4.39
4,616.0	7.03	211.41	4,604.5	-126.4	-106.1	-127.3	0.27	0.24	1.14
4,711.0	6.68	210.09	4,698.8	-136.1	-111.9	-137.1	0.40	-0.37	-1.39
4,804.0	6.95	208.24	4,791.2	-145.8	-117.3	-146.8	0.37	0.29	-1.99
4,850.2	7.10	213.48	4,837.0	-150.6	-120.1	-151.7	1.42	0.31	11.34
Brushy Canyon									
4,897.0	7.30	218.53	4,883.4	-155.4	-123.6	-156.5	1.42	0.44	10.80
4,990.0	7.65	231.01	4,975.7	-163.9	-132.1	-165.0	1.78	0.38	13.42
5,083.0	7.08	229.86	5,067.9	-171.5	-141.3	-172.7	0.63	-0.61	-1.24
5,177.0	6.99	225.56	5,161.2	-179.2	-149.8	-180.5	0.57	-0.10	-4.57
5,271.0	6.24	234.43	5,254.6	-186.2	-158.0	-187.6	1.35	-0.80	9.44
5,365.0	4.48	235.93	5,348.1	-191.2	-165.2	-192.7	1.88	-1.87	1.60
5,458.0	4.13	237.42	5,440.9	-195.0	-171.1	-196.6	0.40	-0.38	1.60
5,551.0	3.56	232.85	5,533.7	-198.6	-176.2	-200.2	0.70	-0.61	-4.91
5,645.0	3.96	229.78	5,627.5	-202.5	-181.0	-204.1	0.48	0.43	-3.27
5,739.0	3.60	225.65	5,721.3	-206.6	-185.6	-208.3	0.48	-0.38	-4.39
5,833.0	3.16	235.31	5,815.1	-210.2	-189.8	-211.8	0.76	-0.47	10.28
5,926.0	2.90	237.07	5,908.0	-212.9	-193.9	-214.6	0.30	-0.28	1.89
6,020.0	1.93	275.74	6,001.9	-214.0	-197.5	-215.8	1.96	-1.03	41.14
6,113.0	1.93	275.48	6,094.8	-213.7	-200.6	-215.5	0.01	0.00	-0.28
6,207.0	0.70	258.17	6,188.8	-213.7	-202.7	-215.5	1.36	-1.31	-18.41
6,300.0	0.48	245.86	6,281.8	-214.0	-203.6	-215.8	0.27	-0.24	-13.24
6,394.0	0.84	238.57	6,375.8	-214.5	-204.6	-216.3	0.39	0.38	-7.76
6,445.2	0.77	257.50	6,427.0	-214.8	-205.2	-216.6	0.53	-0.13	36.96
Bone Spring Lime									
6,488.0	0.79	274.25	6,469.8	-214.8	-205.8	-216.6	0.53	0.04	39.15
6,582.0	1.54	256.14	6,563.8	-215.0	-207.7	-216.9	0.88	0.80	-19.27
6,676.0	1.67	267.39	6,657.7	-215.4	-210.3	-217.3	0.36	0.14	11.97
6,769.0	1.19	243.31	6,750.7	-215.9	-212.5	-217.8	0.82	-0.52	-25.89
6,863.0	1.36	250.43	6,844.7	-216.7	-214.4	-218.6	0.25	0.18	7.57
6,957.0	0.75	271.88	6,938.7	-217.1	-216.1	-219.0	0.76	-0.65	22.82
7,050.0	0.18	195.94	7,031.7	-217.2	-216.7	-219.1	0.78	-0.61	-81.66
7,144.0	1.45	187.41	7,125.7	-218.5	-216.9	-220.4	1.35	1.35	-9.07
7,238.0	2.37	165.62	7,219.6	-221.6	-216.6	-223.5	1.23	0.98	-23.18
7,331.0	1.63	121.85	7,312.5	-224.1	-215.0	-226.0	1.76	-0.80	-47.06

Company:	Tap Rock Resources, LLC	Local Co-ordinate Reference:	Well Money Graham Fed Com #246H
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 #246H	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)
7,370.5	1.44	117.18	7,352.0	-224.7	-214.1	-226.6	0.58	-0.49	-11.84
1st Bone Spring Sand									
7,425.0	1.19	108.31	7,406.5	-225.1	-212.9	-227.0	0.58	-0.45	-16.26
7,518.0	0.97	79.92	7,499.5	-225.3	-211.3	-227.2	0.61	-0.24	-30.53
7,612.0	0.84	68.50	7,593.5	-224.9	-209.8	-226.8	0.24	-0.14	-12.15
7,706.0	0.53	11.02	7,687.5	-224.2	-209.1	-226.1	0.76	-0.33	-61.15
7,800.0	1.14	343.16	7,781.5	-222.9	-209.3	-224.8	0.76	0.65	-29.64
7,893.0	1.01	335.42	7,874.5	-221.3	-209.9	-223.1	0.21	-0.14	-8.32
7,950.5	0.70	306.98	7,932.0	-220.6	-210.4	-222.5	0.90	-0.53	-49.41
2nd Bone Spring Sand									
7,986.0	0.66	280.31	7,967.5	-220.4	-210.8	-222.3	0.90	-0.12	-75.24
8,080.0	0.48	325.31	8,061.4	-220.0	-211.5	-221.9	0.50	-0.19	47.87
8,173.0	1.19	302.90	8,154.4	-219.2	-212.6	-221.1	0.83	0.76	-24.10
8,267.0	1.27	292.00	8,248.4	-218.3	-214.3	-220.2	0.26	0.09	-11.60
8,360.0	1.14	293.41	8,341.4	-217.5	-216.1	-219.4	0.14	-0.14	1.52
8,453.0	1.36	266.60	8,434.4	-217.2	-218.1	-219.1	0.66	0.24	-28.83
8,546.0	1.23	243.22	8,527.3	-217.7	-220.1	-219.7	0.58	-0.14	-25.14
8,639.0	0.35	184.69	8,620.3	-218.5	-221.0	-220.4	1.17	-0.95	-62.94
8,733.0	0.66	202.09	8,714.3	-219.2	-221.2	-221.2	0.36	0.33	18.51
8,827.0	1.01	189.87	8,808.3	-220.6	-221.6	-222.5	0.42	0.37	-13.00
8,920.0	1.41	207.89	8,901.3	-222.4	-222.3	-224.3	0.59	0.43	19.38
9,014.0	1.63	216.86	8,995.3	-224.5	-223.6	-226.5	0.34	0.23	9.54
9,107.0	0.88	247.62	9,088.3	-225.8	-225.0	-227.8	1.06	-0.81	33.08
9,182.8	0.57	275.77	9,164.0	-226.0	-226.0	-228.0	0.61	-0.41	37.15
3rd Bone Spring Sand									
9,201.0	0.53	286.64	9,182.2	-226.0	-226.1	-228.0	0.61	-0.22	59.60
9,295.0	0.57	261.07	9,276.2	-225.9	-227.0	-227.9	0.26	0.04	-27.20
9,388.0	0.53	265.72	9,369.2	-226.0	-227.9	-228.0	0.06	-0.04	5.00
9,440.8	0.77	255.74	9,422.0	-226.1	-228.5	-228.1	0.50	0.46	-18.92
3rd BS W Sand									
9,482.0	0.97	251.49	9,463.2	-226.3	-229.1	-228.3	0.50	0.48	-10.30
9,530.8	1.01	236.37	9,512.0	-226.7	-229.8	-228.7	0.54	0.08	-31.00
Wolfcamp A									
9,575.0	1.10	224.33	9,556.2	-227.2	-230.5	-229.2	0.54	0.20	-27.22
9,640.8	1.04	222.81	9,622.0	-228.1	-231.3	-230.1	0.11	-0.10	-2.31
Wolfcamp A Y Sand									
9,668.0	1.01	222.13	9,649.2	-228.4	-231.6	-230.5	0.11	-0.10	-2.51
9,761.0	1.27	215.71	9,742.2	-229.9	-232.8	-231.9	0.31	0.28	-6.90
9,770.8	1.25	218.00	9,752.0	-230.0	-232.9	-232.1	0.54	-0.18	23.32
Wolfcamp A Fat									
9,855.0	1.19	239.44	9,836.2	-231.2	-234.2	-233.3	0.54	-0.07	25.47
9,948.0	0.70	258.96	9,929.1	-231.8	-235.6	-233.9	0.62	-0.53	20.99
9,992.0	0.79	267.57	9,973.1	-231.9	-236.2	-234.0	0.33	0.20	19.57
10,030.9	0.76	277.23	10,012.0	-231.9	-236.7	-234.0	0.35	-0.09	24.87

Company:	Tap Rock Resources, LLC	Local Co-ordinate Reference:	Well Money Graham Fed Com #246H
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 #246H	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)
Wolfcamp B									
10,095.0	0.75	294.20	10,076.1	-231.6	-237.5	-233.7	0.35	-0.01	26.45
10,188.0	4.75	356.25	10,169.0	-227.5	-238.3	-229.6	4.78	4.30	66.72
10,281.0	18.07	8.38	10,260.0	-209.3	-236.5	-211.4	14.48	14.32	13.04
10,374.0	29.85	4.60	10,344.8	-171.9	-232.5	-173.9	12.77	12.67	-4.06
10,417.6	31.62	5.21	10,382.3	-149.7	-230.6	-151.7	4.12	4.06	1.40
FTP @ 10417.6'MD, 100'FSL & 1159.1'FEL									
10,467.0	33.63	5.83	10,423.9	-123.2	-228.0	-125.2	4.12	4.07	1.26
10,560.0	41.10	4.16	10,497.8	-67.0	-223.2	-69.0	8.11	8.03	-1.80
10,592.7	43.41	3.19	10,522.0	-45.0	-221.8	-47.0	7.34	7.07	-2.96
Wolfcamp B2									
10,653.0	47.69	1.61	10,564.2	-2.0	-220.0	-4.0	7.34	7.10	-2.63
10,747.0	54.81	1.61	10,623.0	71.2	-217.9	69.3	7.57	7.57	0.00
10,840.0	62.33	4.34	10,671.5	150.4	-213.7	148.5	8.46	8.09	2.94
10,934.0	69.45	4.25	10,709.8	235.9	-207.3	234.0	7.57	7.57	-0.10
11,026.0	76.75	1.00	10,736.6	323.7	-203.3	321.9	8.62	7.93	-3.53
11,119.0	92.18	1.08	10,745.5	416.0	-201.7	414.2	16.59	16.59	0.09
11,212.0	89.54	358.10	10,744.1	509.0	-202.3	507.2	4.28	-2.84	-3.20
11,305.0	87.43	356.43	10,746.6	601.8	-206.8	600.0	2.89	-2.27	-1.80
11,398.0	87.56	355.99	10,750.6	694.5	-212.9	692.6	0.49	0.14	-0.47
11,491.0	86.33	357.39	10,755.6	787.3	-218.3	785.3	2.00	-1.32	1.51
11,585.0	87.16	357.75	10,760.9	881.0	-222.2	879.0	0.96	0.88	0.38
11,679.0	90.81	0.12	10,762.6	975.0	-224.0	972.9	4.63	3.88	2.52
11,772.0	89.45	358.89	10,762.4	1,068.0	-224.8	1,065.9	1.97	-1.46	-1.32
11,865.0	88.22	357.66	10,764.3	1,160.9	-227.6	1,158.8	1.87	-1.32	-1.32
11,959.0	91.12	0.12	10,764.8	1,254.9	-229.4	1,252.8	4.05	3.09	2.62
12,052.0	90.29	359.06	10,763.7	1,347.8	-230.1	1,345.7	1.45	-0.89	-1.14
12,145.0	89.93	358.80	10,763.5	1,440.8	-231.8	1,438.7	0.48	-0.39	-0.28
12,238.0	88.00	357.83	10,765.2	1,533.8	-234.5	1,531.6	2.32	-2.08	-1.04
12,330.0	91.52	358.98	10,765.6	1,625.7	-237.1	1,623.5	4.03	3.83	1.25
12,423.0	91.56	359.59	10,763.1	1,718.7	-238.3	1,716.5	0.66	0.04	0.66
12,516.0	87.38	358.01	10,763.9	1,811.6	-240.2	1,809.4	4.80	-4.49	-1.70
12,609.0	85.71	358.36	10,769.5	1,904.4	-243.2	1,902.2	1.83	-1.80	0.38
12,702.0	88.18	358.80	10,774.5	1,997.2	-245.5	1,995.0	2.70	2.66	0.47
12,795.0	89.80	0.03	10,776.1	2,090.2	-246.4	2,087.9	2.19	1.74	1.32
12,889.0	90.51	359.42	10,775.9	2,184.2	-246.9	2,181.9	1.00	0.76	-0.65
12,982.0	90.68	0.47	10,774.9	2,277.2	-246.9	2,274.9	1.14	0.18	1.13
13,075.0	88.84	1.00	10,775.3	2,370.2	-245.8	2,367.9	2.06	-1.98	0.57
13,169.0	91.74	3.63	10,774.8	2,464.1	-242.0	2,461.8	4.16	3.09	2.80
13,263.0	89.01	4.07	10,774.2	2,557.9	-235.6	2,555.7	2.94	-2.90	0.47
13,356.0	90.55	4.16	10,774.5	2,650.6	-229.0	2,648.5	1.66	1.66	0.10
13,450.0	88.84	3.63	10,775.0	2,744.4	-222.6	2,742.3	1.90	-1.82	-0.56
13,544.0	88.62	4.42	10,777.1	2,838.1	-216.0	2,836.1	0.87	-0.23	0.84
13,637.0	90.86	3.63	10,777.6	2,930.9	-209.5	2,928.9	2.55	2.41	-0.85

Company:	Tap Rock Resources, LLC	Local Co-ordinate Reference:	Well Money Graham Fed Com #246H
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 #246H	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)
13,731.0	90.77	2.58	10,776.2	3,024.8	-204.4	3,022.8	1.12	-0.10	-1.12
13,824.0	88.66	3.19	10,776.7	3,117.6	-199.7	3,115.7	2.36	-2.27	0.66
13,917.0	87.08	359.85	10,780.1	3,210.5	-197.2	3,208.6	3.97	-1.70	-3.59
14,011.0	90.24	0.91	10,782.3	3,304.5	-196.6	3,302.6	3.55	3.36	1.13
14,105.0	88.79	0.03	10,783.1	3,398.5	-195.8	3,396.6	1.80	-1.54	-0.94
14,199.0	90.55	0.21	10,783.7	3,492.5	-195.6	3,490.6	1.88	1.87	0.19
14,292.0	89.98	0.47	10,783.2	3,585.5	-195.1	3,583.6	0.67	-0.61	0.28
14,385.0	89.93	1.70	10,783.3	3,678.4	-193.3	3,676.6	1.32	-0.05	1.32
14,479.0	89.27	4.95	10,784.0	3,772.3	-187.9	3,770.5	3.53	-0.70	3.46
14,572.0	87.56	3.90	10,786.5	3,865.0	-180.7	3,863.2	2.16	-1.84	-1.13
14,666.0	88.97	3.37	10,789.4	3,958.7	-174.7	3,957.0	1.60	1.50	-0.56
14,760.0	89.01	3.55	10,791.0	4,052.5	-169.1	4,050.9	0.20	0.04	0.19
14,853.0	86.99	3.28	10,794.3	4,145.3	-163.5	4,143.7	2.19	-2.17	-0.29
14,947.0	88.35	1.26	10,798.1	4,239.2	-159.8	4,237.6	2.59	1.45	-2.15
15,040.0	91.65	357.22	10,798.1	4,332.1	-161.0	4,330.5	5.61	3.55	-4.34
15,134.0	92.26	356.95	10,794.9	4,425.9	-165.8	4,424.3	0.71	0.65	-0.29
15,228.0	91.87	356.08	10,791.5	4,519.7	-171.5	4,518.0	1.01	-0.41	-0.93
15,322.0	92.66	356.34	10,787.8	4,613.4	-177.7	4,611.7	0.88	0.84	0.28
15,415.0	91.38	357.66	10,784.5	4,706.2	-182.6	4,704.4	1.98	-1.38	1.42
15,508.0	90.02	359.59	10,783.4	4,799.2	-184.8	4,797.4	2.54	-1.46	2.08
15,602.0	83.74	358.18	10,788.5	4,893.0	-186.7	4,891.1	6.85	-6.68	-1.50
15,695.0	89.45	359.15	10,794.0	4,985.8	-188.8	4,983.9	6.23	6.14	1.04
15,789.0	93.32	359.50	10,791.8	5,079.7	-189.9	5,077.8	4.13	4.12	0.37
15,883.0	90.55	0.38	10,788.6	5,173.6	-190.0	5,171.7	3.09	-2.95	0.94
15,976.0	90.37	1.26	10,787.8	5,266.6	-188.7	5,264.7	0.97	-0.19	0.95
16,070.0	88.84	0.38	10,788.5	5,360.6	-187.3	5,358.7	1.88	-1.63	-0.94
16,163.0	89.19	0.91	10,790.1	5,453.6	-186.3	5,451.7	0.68	0.38	0.57
16,257.0	88.66	1.17	10,791.8	5,547.6	-184.6	5,545.7	0.63	-0.56	0.28
16,350.0	88.66	0.38	10,794.0	5,640.5	-183.3	5,638.7	0.85	0.00	-0.85
16,443.0	89.19	0.56	10,795.8	5,733.5	-182.6	5,731.6	0.60	0.57	0.19
16,536.0	90.20	0.65	10,796.3	5,826.5	-181.6	5,824.6	1.09	1.09	0.10
16,630.0	89.89	0.56	10,796.2	5,920.5	-180.6	5,918.6	0.34	-0.33	-0.10
16,723.0	89.23	359.77	10,796.9	6,013.5	-180.3	6,011.6	1.11	-0.71	-0.85
16,817.0	88.75	359.15	10,798.6	6,107.5	-181.2	6,105.6	0.83	-0.51	-0.66
16,910.0	90.37	359.68	10,799.3	6,200.5	-182.2	6,198.6	1.83	1.74	0.57
17,003.0	91.47	359.85	10,797.8	6,293.4	-182.5	6,291.6	1.20	1.18	0.18
17,097.0	91.96	0.03	10,795.0	6,387.4	-182.6	6,385.5	0.56	0.52	0.19
17,191.0	92.35	359.85	10,791.4	6,481.3	-182.7	6,479.4	0.46	0.41	-0.19
17,285.0	88.70	0.03	10,790.6	6,575.3	-182.8	6,573.4	3.89	-3.88	0.19
17,378.0	88.22	359.85	10,793.1	6,668.3	-182.9	6,666.4	0.55	-0.52	-0.19
17,471.0	90.42	1.35	10,794.2	6,761.3	-182.0	6,759.4	2.86	2.37	1.61
17,565.0	87.96	2.40	10,795.5	6,855.2	-178.9	6,853.3	2.85	-2.62	1.12
17,658.0	87.56	2.49	10,799.1	6,948.0	-174.9	6,946.2	0.44	-0.43	0.10

Company:	Tap Rock Resources, LLC	Local Co-ordinate Reference:	Well Money Graham Fed Com #246H
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 #246H	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)	
17,737.1	87.90	3.45	10,802.3	7,027.0	-170.8	7,025.2	1.28	0.43	1.21	
LTP @ 17737.1'MD, 330'FNL & 1164'FEL										
17,752.0	87.96	3.63	10,802.8	7,041.8	-169.9	7,040.0	1.28	0.43	1.21	
17,779.0	87.47	3.19	10,803.9	7,068.8	-168.3	7,067.0	2.44	-1.81	-1.63	
LAST SVY										
17,851.0	87.47	3.19	10,807.1	7,140.6	-164.3	7,138.8	0.00	0.00	0.00	
Projection to TD @ 17851'MD, 216.2'FNL & 1158.7'FEL										

Design Targets										
Target Name	- hit/miss target	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 246.6usft at 10660.4usft MD (10569.1 TVD, 3.4 N, -219.8 E)	0.00	0.00	10,761.0	-150.0	-241.0	364,038.00	644,055.00	32° 0' 1.396 N	104° 0' 7.104 W
- Shape	- Point									
LTP (Money Graham)	- actual wellpath misses target center by 17.8usft at 17736.5usft MD (10802.2 TVD, 7026.3 N, -170.9 E)	0.00	0.00	10,819.0	7,026.0	-177.0	371,214.00	644,119.00	32° 1' 12.409 N	104° 0' 6.105 W
- Shape	- Point									
PBHL (Money Graham)	- actual wellpath misses target center by 22.7usft at 17851.0usft MD (10807.1 TVD, 7140.6 N, -164.3 E)	0.50	0.51	10,819.0	7,156.0	-176.0	371,344.00	644,120.00	32° 1' 13.696 N	104° 0' 6.088 W
- Shape	- Rectangle (sides W100.0 H7,307.0 D20.0)									

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
507.0	507.0	Rustler Anhydrite				
682.0	682.0	Top Salt				
2,392.6	2,392.0	Base Salt				
2,733.0	2,732.0	Delaware Mountain Gp				
2,848.0	2,847.0	Bell Canyon				
2,848.0	2,847.0	Lamar				
2,888.0	2,887.0	Ramsey Sand				
3,867.7	3,862.0	Cherry Canyon				
4,850.2	4,837.0	Brushy Canyon				
6,445.2	6,427.0	Bone Spring Lime				
7,370.5	7,352.0	1st Bone Spring Sand				
7,950.5	7,932.0	2nd Bone Spring Sand				
9,182.8	9,164.0	3rd Bone Spring Sand				
9,440.8	9,422.0	3rd BS W Sand				
9,530.8	9,512.0	Wolfcamp A				
9,640.8	9,622.0	Wolfcamp A Y Sand				
9,770.8	9,752.0	Wolfcamp A Fat				
10,030.9	10,012.0	Wolfcamp B				
10,592.7	10,522.0	Wolfcamp B2				



Company:	Tap Rock Resources, LLC	Local Co-ordinate Reference:	Well Money Graham Fed Com #246H
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 #246H	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)	
10,417.6	10,382.3	-149.7	-230.6	FTP @ 10417.6'MD, 100'FSL & 1159.1'FEL
17,737.1	10,802.3	7,027.0	-170.8	LTP @ 17737.1'MD, 330'FNL & 1164'FEL
17,779.0	10,803.9	7,068.8	-168.3	LAST SVY
17,851.0	10,807.1	7,140.6	-164.3	Projection to TD @ 17851'MD, 216.2'FNL & 1158.7'FEL

Checked By: _____	Approved By: _____	Date: _____
-------------------	--------------------	-------------