



GMT Exploration Company, LLC

Elbert County, CO (NAD 83)

Marble-Redstone Pad

MARBLE 6-65 24-12 1HN

Wellbore #1

Plan: Design #1

Standard Planning Report

24 May, 2019



Project: Elbert County, CO (NAD 83)
Site: Marble-Redstone Pad
Well: MARBLE 6-65 24-12 1HN
Wellbore: Wellbore #1
Design: Design #1

GMT Exploration Company, LLC

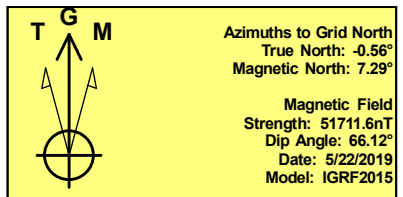
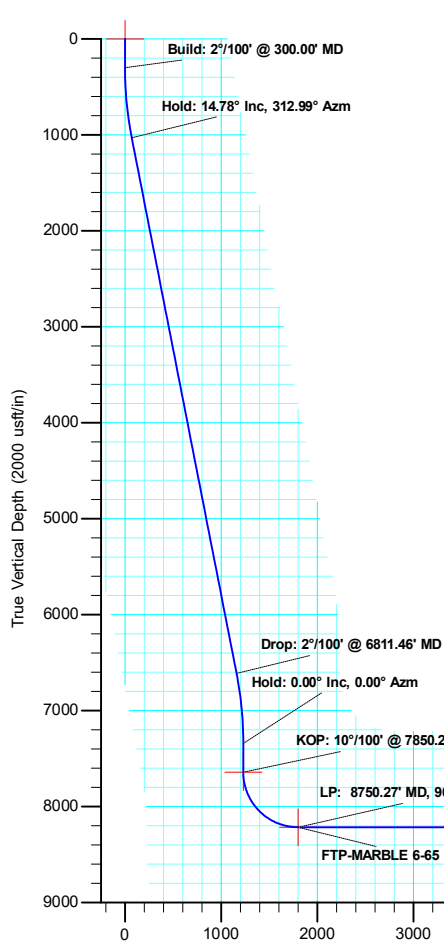
Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: Colorado Central Zone
System Datum: Mean Sea Level

WELL DETAILS: MARBLE 6-65 24-12 1HN

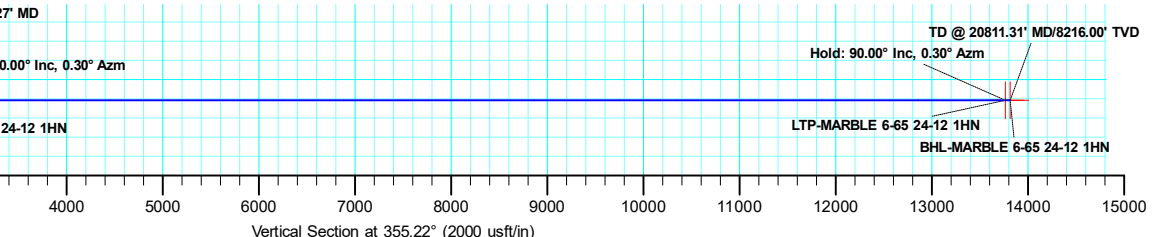
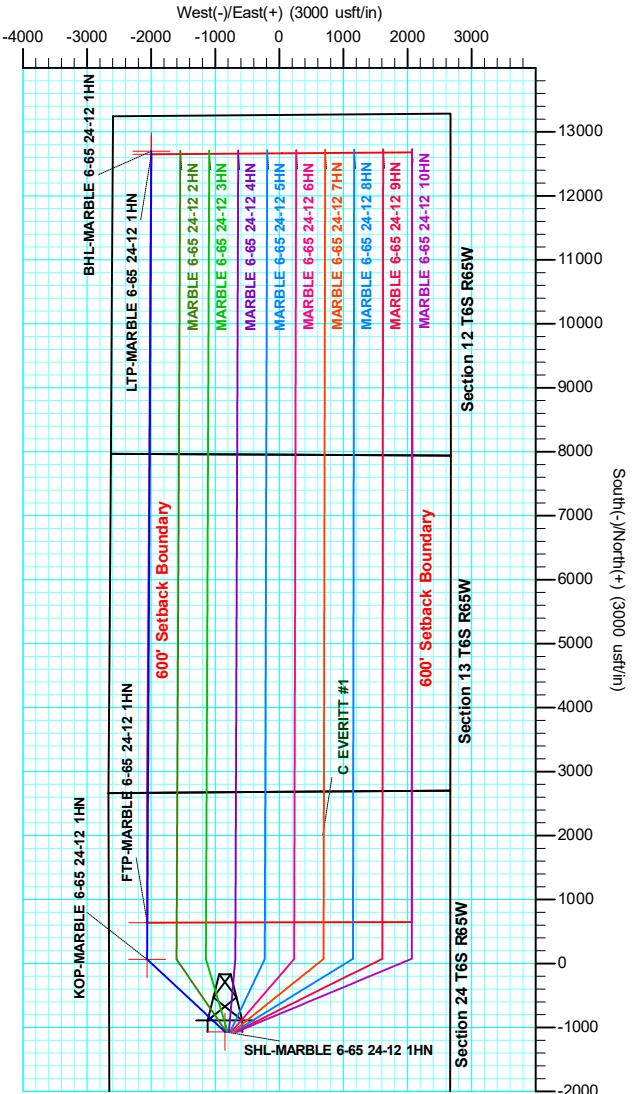
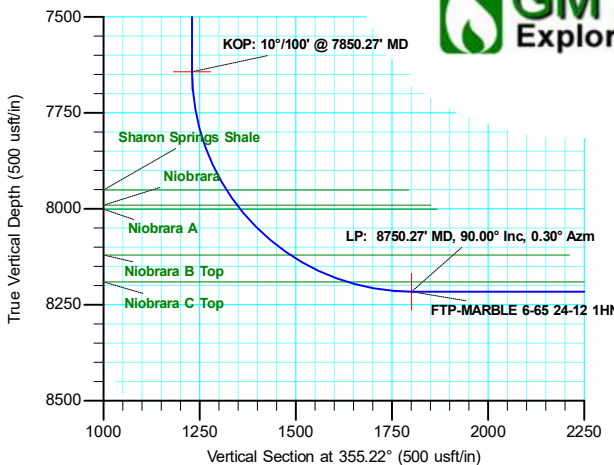
+N/-S	+E/-W	Northing	Ground Level:	6276.00	Latitude	Longitude
-1067.41	-847.10	1612169.92	Easting	3248864.90	39.510866	-104.617927

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
0.00	0.00	0.00	0.00	-1067.41	-847.10	0.00	0.00	0.00	
300.00	0.00	0.00	300.00	-1067.41	-847.10	0.00	0.00	0.00	
1038.81	14.78	312.99	1030.65	-1002.81	-916.40	2.00	312.99	70.15	
6811.46	14.78	312.99	6612.40	1.10	-1993.32	0.00	0.00	1160.24	
7550.27	0.00	0.00	7343.04	65.70	-2062.62	2.00	180.00	1230.39	
7850.27	0.00	0.00	7643.04	65.70	-2062.62	0.00	0.00	1230.39	
8750.27	90.00	0.30	8216.00	638.65	-2059.67	10.00	0.00	1801.10	FTP-MARBLE 6-65 24-12 1HN
20761.31	90.00	0.30	8216.00	12649.53	-1997.67	0.00	0.00	13765.11	LTP-MARBLE 6-65 24-12 1HN
20811.31	90.00	0.30	8216.00	12699.53	-1997.41	0.00	0.00	13814.91	BHL-MARBLE 6-65 24-12 1HN



SHL: 1526 FSL/ 1808 FWL Sec. 24
FTP: 2029 FNL/ 600 FWL Sec. 24
LTP: 600 FNL/ 600 FWL Sec. 12
BHL: 550 FNL/ 600 FWL Sec. 12



Database:	Local	Local Co-ordinate Reference:	Well MARBLE 6-65 24-12 1HN
Company:	GMT Exploration Company, LLC	TVD Reference:	KB @ 6296.00usft
Project:	Elbert County, CO (NAD 83)	MD Reference:	KB @ 6296.00usft
Site:	Marble-Redstone Pad	North Reference:	Grid
Well:	MARBLE 6-65 24-12 1HN	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Project	Elbert County, CO (NAD 83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Central Zone		

Site		Marble-Redstone Pad			
Site Position:		Northing:	1,613,237.32 usft	Latitude:	39.513774
From:	Lat/Long	Easting:	3,249,712.00 usft	Longitude:	-104.614888
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.56 °

Well	MARBLE 6-65 24-12 1HN					
Well Position	+N/-S	-1,067.41 usft	Northing:	1,612,169.92 usft	Latitude:	39.510866
	+E/-W	-847.10 usft	Easting:	3,248,864.90 usft	Longitude:	-104.617927
Position Uncertainty	0.00 usft		Wellhead Elevation:		Ground Level:	6,276.00 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	5/22/2019	7.85	66.12	51,711.55403011

Design	Design #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	355.22

Plan Survey Tool Program	Date	5/24/2019		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	20,811.31	Design #1 (Wellbore #1)	MWD
				OWSG MWD - Standard

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,038.81	14.78	312.99	1,030.65	64.60	-69.30	2.00	2.00	0.00	312.99	
6,811.46	14.78	312.99	6,612.40	1,068.51	-1,146.23	0.00	0.00	0.00	0.00	
7,550.27	0.00	0.00	7,343.04	1,133.11	-1,215.53	2.00	-2.00	0.00	180.00	
7,850.27	0.00	0.00	7,643.04	1,133.11	-1,215.53	0.00	0.00	0.00	0.00	
8,750.27	90.00	0.30	8,216.00	1,706.06	-1,212.57	10.00	10.00	0.00	0.00	FTP-MARBLE 6-65
20,761.31	90.00	0.30	8,216.00	13,716.94	-1,150.57	0.00	0.00	0.00	0.00	LTP-MARBLE 6-65
20,811.31	90.00	0.30	8,216.00	13,766.94	-1,150.31	0.00	0.00	0.00	0.00	BHL-MARBLE 6-65

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Site:	Marble-Redstone Pad	North Reference:	Grid
Well:	MARBLE 6-65 24-12 1HN	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned 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)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SHL-MARBLE 6-65 24-12 1HN									
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
Build: 2°/100' @ 300.00' MD									
400.00	2.00	312.99	399.98	1.19	-1.28	1.29	2.00	2.00	0.00
500.00	4.00	312.99	499.84	4.76	-5.10	5.17	2.00	2.00	0.00
600.00	6.00	312.99	599.45	10.70	-11.48	11.62	2.00	2.00	0.00
700.00	8.00	312.99	698.70	19.01	-20.39	20.64	2.00	2.00	0.00
800.00	10.00	312.99	797.47	29.68	-31.84	32.22	2.00	2.00	0.00
900.00	12.00	312.99	895.62	42.69	-45.79	46.35	2.00	2.00	0.00
1,000.00	14.00	312.99	993.06	58.03	-62.25	63.01	2.00	2.00	0.00
1,038.81	14.78	312.99	1,030.65	64.60	-69.30	70.15	2.00	2.00	0.00
Hold: 14.78° Inc, 312.99° Azm									
1,100.00	14.78	312.99	1,089.81	75.24	-80.72	81.70	0.00	0.00	0.00
1,200.00	14.78	312.99	1,186.51	92.63	-99.37	100.59	0.00	0.00	0.00
1,300.00	14.78	312.99	1,283.20	110.02	-118.03	119.47	0.00	0.00	0.00
1,400.00	14.78	312.99	1,379.89	127.41	-136.68	138.35	0.00	0.00	0.00
1,500.00	14.78	312.99	1,476.59	144.81	-155.34	157.24	0.00	0.00	0.00
1,600.00	14.78	312.99	1,573.28	162.20	-173.99	176.12	0.00	0.00	0.00
1,700.00	14.78	312.99	1,669.97	179.59	-192.65	195.00	0.00	0.00	0.00
1,800.00	14.78	312.99	1,766.66	196.98	-211.30	213.89	0.00	0.00	0.00
1,900.00	14.78	312.99	1,863.36	214.37	-229.96	232.77	0.00	0.00	0.00
2,000.00	14.78	312.99	1,960.05	231.76	-248.62	251.66	0.00	0.00	0.00
2,100.00	14.78	312.99	2,056.74	249.15	-267.27	270.54	0.00	0.00	0.00
2,200.00	14.78	312.99	2,153.44	266.54	-285.93	289.42	0.00	0.00	0.00
2,300.00	14.78	312.99	2,250.13	283.93	-304.58	308.31	0.00	0.00	0.00
2,400.00	14.78	312.99	2,346.82	301.32	-323.24	327.19	0.00	0.00	0.00
2,500.00	14.78	312.99	2,443.52	318.71	-341.89	346.07	0.00	0.00	0.00
2,600.00	14.78	312.99	2,540.21	336.10	-360.55	364.96	0.00	0.00	0.00
2,700.00	14.78	312.99	2,636.90	353.49	-379.21	383.84	0.00	0.00	0.00
2,800.00	14.78	312.99	2,733.59	370.89	-397.86	402.73	0.00	0.00	0.00
2,900.00	14.78	312.99	2,830.29	388.28	-416.52	421.61	0.00	0.00	0.00
3,000.00	14.78	312.99	2,926.98	405.67	-435.17	440.49	0.00	0.00	0.00
3,100.00	14.78	312.99	3,023.67	423.06	-453.83	459.38	0.00	0.00	0.00
3,200.00	14.78	312.99	3,120.37	440.45	-472.48	478.26	0.00	0.00	0.00
3,300.00	14.78	312.99	3,217.06	457.84	-491.14	497.14	0.00	0.00	0.00
3,400.00	14.78	312.99	3,313.75	475.23	-509.80	516.03	0.00	0.00	0.00
3,500.00	14.78	312.99	3,410.45	492.62	-528.45	534.91	0.00	0.00	0.00
3,600.00	14.78	312.99	3,507.14	510.01	-547.11	553.80	0.00	0.00	0.00
3,700.00	14.78	312.99	3,603.83	527.40	-565.76	572.68	0.00	0.00	0.00
3,800.00	14.78	312.99	3,700.52	544.79	-584.42	591.56	0.00	0.00	0.00
3,900.00	14.78	312.99	3,797.22	562.18	-603.07	610.45	0.00	0.00	0.00
4,000.00	14.78	312.99	3,893.91	579.57	-621.73	629.33	0.00	0.00	0.00
4,100.00	14.78	312.99	3,990.60	596.96	-640.38	648.21	0.00	0.00	0.00
4,200.00	14.78	312.99	4,087.30	614.36	-659.04	667.10	0.00	0.00	0.00
4,300.00	14.78	312.99	4,183.99	631.75	-677.70	685.98	0.00	0.00	0.00
4,400.00	14.78	312.99	4,280.68	649.14	-696.35	704.87	0.00	0.00	0.00
4,500.00	14.78	312.99	4,377.37	666.53	-715.01	723.75	0.00	0.00	0.00
4,600.00	14.78	312.99	4,474.07	683.92	-733.66	742.63	0.00	0.00	0.00
4,700.00	14.78	312.99	4,570.76	701.31	-752.32	761.52	0.00	0.00	0.00
4,800.00	14.78	312.99	4,667.45	718.70	-770.97	780.40	0.00	0.00	0.00

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Well:	MARBLE 6-65 24-12 1HN	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned 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)
4,900.00	14.78	312.99	4,764.15	736.09	-789.63	799.28	0.00	0.00	0.00
5,000.00	14.78	312.99	4,860.84	753.48	-808.29	818.17	0.00	0.00	0.00
5,100.00	14.78	312.99	4,957.53	770.87	-826.94	837.05	0.00	0.00	0.00
5,200.00	14.78	312.99	5,054.23	788.26	-845.60	855.94	0.00	0.00	0.00
5,300.00	14.78	312.99	5,150.92	805.65	-864.25	874.82	0.00	0.00	0.00
5,400.00	14.78	312.99	5,247.61	823.04	-882.91	893.70	0.00	0.00	0.00
5,500.00	14.78	312.99	5,344.30	840.44	-901.56	912.59	0.00	0.00	0.00
5,600.00	14.78	312.99	5,441.00	857.83	-920.22	931.47	0.00	0.00	0.00
5,700.00	14.78	312.99	5,537.69	875.22	-938.88	950.35	0.00	0.00	0.00
5,800.00	14.78	312.99	5,634.38	892.61	-957.53	969.24	0.00	0.00	0.00
5,900.00	14.78	312.99	5,731.08	910.00	-976.19	988.12	0.00	0.00	0.00
6,000.00	14.78	312.99	5,827.77	927.39	-994.84	1,007.01	0.00	0.00	0.00
6,100.00	14.78	312.99	5,924.46	944.78	-1,013.50	1,025.89	0.00	0.00	0.00
6,200.00	14.78	312.99	6,021.15	962.17	-1,032.15	1,044.77	0.00	0.00	0.00
6,300.00	14.78	312.99	6,117.85	979.56	-1,050.81	1,063.66	0.00	0.00	0.00
6,400.00	14.78	312.99	6,214.54	996.95	-1,069.47	1,082.54	0.00	0.00	0.00
6,500.00	14.78	312.99	6,311.23	1,014.34	-1,088.12	1,101.42	0.00	0.00	0.00
6,600.00	14.78	312.99	6,407.93	1,031.73	-1,106.78	1,120.31	0.00	0.00	0.00
6,700.00	14.78	312.99	6,504.62	1,049.12	-1,125.43	1,139.19	0.00	0.00	0.00
6,800.00	14.78	312.99	6,601.31	1,066.52	-1,144.09	1,158.08	0.00	0.00	0.00
6,811.46	14.78	312.99	6,612.40	1,068.51	-1,146.23	1,160.24	0.00	0.00	0.00
Drop: 2°/100' @ 6811.46' MD									
6,900.00	13.01	312.99	6,698.34	1,083.00	-1,161.77	1,175.98	2.00	-2.00	0.00
7,000.00	11.01	312.99	6,796.15	1,097.18	-1,176.99	1,191.38	2.00	-2.00	0.00
7,100.00	9.01	312.99	6,894.62	1,109.03	-1,189.70	1,204.24	2.00	-2.00	0.00
7,200.00	7.01	312.99	6,993.64	1,118.53	-1,199.88	1,214.55	2.00	-2.00	0.00
7,300.00	5.01	312.99	7,093.09	1,125.66	-1,207.53	1,222.30	2.00	-2.00	0.00
7,400.00	3.01	312.99	7,192.84	1,130.42	-1,212.64	1,227.47	2.00	-2.00	0.00
7,500.00	1.01	312.99	7,292.77	1,132.81	-1,215.20	1,230.06	2.00	-2.00	0.00
7,550.27	0.00	0.00	7,343.04	1,133.11	-1,215.53	1,230.39	2.00	-2.00	0.00
Hold: 0.00° Inc, 0.00° Azm									
7,600.00	0.00	0.00	7,392.77	1,133.11	-1,215.53	1,230.39	0.00	0.00	0.00
7,700.00	0.00	0.00	7,492.77	1,133.11	-1,215.53	1,230.39	0.00	0.00	0.00
7,800.00	0.00	0.00	7,592.77	1,133.11	-1,215.53	1,230.39	0.00	0.00	0.00
7,850.27	0.00	0.00	7,643.04	1,133.11	-1,215.53	1,230.39	0.00	0.00	0.00
KOP: 10°/100' @ 7850.27' MD - KOP-MARBLE 6-65 24-12 1HN									
7,900.00	4.97	0.30	7,692.71	1,135.27	-1,215.51	1,232.53	10.00	10.00	0.00
7,950.00	9.97	0.30	7,742.27	1,141.77	-1,215.48	1,239.01	10.00	10.00	0.00
8,000.00	14.97	0.30	7,791.07	1,152.56	-1,215.43	1,249.76	10.00	10.00	0.00
8,050.00	19.97	0.30	7,838.75	1,167.57	-1,215.35	1,264.71	10.00	10.00	0.00
8,100.00	24.97	0.30	7,884.94	1,186.68	-1,215.25	1,283.74	10.00	10.00	0.00
8,150.00	29.97	0.30	7,929.29	1,209.73	-1,215.13	1,306.71	10.00	10.00	0.00
8,200.00	34.97	0.30	7,971.46	1,236.57	-1,214.99	1,333.44	10.00	10.00	0.00
8,250.00	39.97	0.30	8,011.12	1,266.98	-1,214.83	1,363.73	10.00	10.00	0.00
8,300.00	44.97	0.30	8,047.99	1,300.73	-1,214.66	1,397.35	10.00	10.00	0.00
8,350.00	49.97	0.30	8,081.78	1,337.57	-1,214.47	1,434.05	10.00	10.00	0.00
8,400.00	54.97	0.30	8,112.23	1,377.21	-1,214.27	1,473.53	10.00	10.00	0.00
8,450.00	59.97	0.30	8,139.10	1,419.35	-1,214.05	1,515.51	10.00	10.00	0.00
8,500.00	64.97	0.30	8,162.20	1,463.67	-1,213.82	1,559.66	10.00	10.00	0.00
8,550.00	69.97	0.30	8,181.35	1,509.84	-1,213.58	1,605.65	10.00	10.00	0.00
8,600.00	74.97	0.30	8,196.41	1,557.51	-1,213.33	1,653.13	10.00	10.00	0.00
8,650.00	79.97	0.30	8,207.25	1,606.30	-1,213.08	1,701.73	10.00	10.00	0.00
8,700.00	84.97	0.30	8,213.80	1,655.85	-1,212.83	1,751.09	10.00	10.00	0.00



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Wellbore:	Wellbore #1		
Design:	Design #1		

Planned 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)	
8,750.27	90.00	0.30	8,216.00	1,706.06	-1,212.57	1,801.10	10.00	10.00	0.00	
LP: 8750.27' MD, 90.00° Inc, 0.30° Azm - FTP-MARBLE 6-65 24-12 1HN										
8,800.00	90.00	0.30	8,216.00	1,755.79	-1,212.31	1,850.63	0.00	0.00	0.00	
8,900.00	90.00	0.30	8,216.00	1,855.79	-1,211.80	1,950.24	0.00	0.00	0.00	
9,000.00	90.00	0.30	8,216.00	1,955.79	-1,211.28	2,049.85	0.00	0.00	0.00	
9,100.00	90.00	0.30	8,216.00	2,055.78	-1,210.76	2,149.46	0.00	0.00	0.00	
9,200.00	90.00	0.30	8,216.00	2,155.78	-1,210.25	2,249.07	0.00	0.00	0.00	
9,300.00	90.00	0.30	8,216.00	2,255.78	-1,209.73	2,348.68	0.00	0.00	0.00	
9,400.00	90.00	0.30	8,216.00	2,355.78	-1,209.21	2,448.29	0.00	0.00	0.00	
9,500.00	90.00	0.30	8,216.00	2,455.78	-1,208.70	2,547.89	0.00	0.00	0.00	
9,600.00	90.00	0.30	8,216.00	2,555.78	-1,208.18	2,647.50	0.00	0.00	0.00	
9,700.00	90.00	0.30	8,216.00	2,655.78	-1,207.67	2,747.11	0.00	0.00	0.00	
9,800.00	90.00	0.30	8,216.00	2,755.77	-1,207.15	2,846.72	0.00	0.00	0.00	
9,900.00	90.00	0.30	8,216.00	2,855.77	-1,206.63	2,946.33	0.00	0.00	0.00	
10,000.00	90.00	0.30	8,216.00	2,955.77	-1,206.12	3,045.94	0.00	0.00	0.00	
10,100.00	90.00	0.30	8,216.00	3,055.77	-1,205.60	3,145.54	0.00	0.00	0.00	
10,200.00	90.00	0.30	8,216.00	3,155.77	-1,205.08	3,245.15	0.00	0.00	0.00	
10,300.00	90.00	0.30	8,216.00	3,255.77	-1,204.57	3,344.76	0.00	0.00	0.00	
10,400.00	90.00	0.30	8,216.00	3,355.77	-1,204.05	3,444.37	0.00	0.00	0.00	
10,500.00	90.00	0.30	8,216.00	3,455.77	-1,203.54	3,543.98	0.00	0.00	0.00	
10,600.00	90.00	0.30	8,216.00	3,555.76	-1,203.02	3,643.59	0.00	0.00	0.00	
10,700.00	90.00	0.30	8,216.00	3,655.76	-1,202.50	3,743.19	0.00	0.00	0.00	
10,800.00	90.00	0.30	8,216.00	3,755.76	-1,201.99	3,842.80	0.00	0.00	0.00	
10,900.00	90.00	0.30	8,216.00	3,855.76	-1,201.47	3,942.41	0.00	0.00	0.00	
11,000.00	90.00	0.30	8,216.00	3,955.76	-1,200.96	4,042.02	0.00	0.00	0.00	
11,100.00	90.00	0.30	8,216.00	4,055.76	-1,200.44	4,141.63	0.00	0.00	0.00	
11,200.00	90.00	0.30	8,216.00	4,155.76	-1,199.92	4,241.24	0.00	0.00	0.00	
11,300.00	90.00	0.30	8,216.00	4,255.75	-1,199.41	4,340.85	0.00	0.00	0.00	
11,400.00	90.00	0.30	8,216.00	4,355.75	-1,198.89	4,440.45	0.00	0.00	0.00	
11,500.00	90.00	0.30	8,216.00	4,455.75	-1,198.37	4,540.06	0.00	0.00	0.00	
11,600.00	90.00	0.30	8,216.00	4,555.75	-1,197.86	4,639.67	0.00	0.00	0.00	
11,700.00	90.00	0.30	8,216.00	4,655.75	-1,197.34	4,739.28	0.00	0.00	0.00	
11,800.00	90.00	0.30	8,216.00	4,755.75	-1,196.83	4,838.89	0.00	0.00	0.00	
11,900.00	90.00	0.30	8,216.00	4,855.75	-1,196.31	4,938.50	0.00	0.00	0.00	
12,000.00	90.00	0.30	8,216.00	4,955.75	-1,195.79	5,038.10	0.00	0.00	0.00	
12,100.00	90.00	0.30	8,216.00	5,055.74	-1,195.28	5,137.71	0.00	0.00	0.00	
12,200.00	90.00	0.30	8,216.00	5,155.74	-1,194.76	5,237.32	0.00	0.00	0.00	
12,300.00	90.00	0.30	8,216.00	5,255.74	-1,194.24	5,336.93	0.00	0.00	0.00	
12,400.00	90.00	0.30	8,216.00	5,355.74	-1,193.73	5,436.54	0.00	0.00	0.00	
12,500.00	90.00	0.30	8,216.00	5,455.74	-1,193.21	5,536.15	0.00	0.00	0.00	
12,600.00	90.00	0.30	8,216.00	5,555.74	-1,192.70	5,635.76	0.00	0.00	0.00	
12,700.00	90.00	0.30	8,216.00	5,655.74	-1,192.18	5,735.36	0.00	0.00	0.00	
12,800.00	90.00	0.30	8,216.00	5,755.73	-1,191.66	5,834.97	0.00	0.00	0.00	
12,900.00	90.00	0.30	8,216.00	5,855.73	-1,191.15	5,934.58	0.00	0.00	0.00	
13,000.00	90.00	0.30	8,216.00	5,955.73	-1,190.63	6,034.19	0.00	0.00	0.00	
13,100.00	90.00	0.30	8,216.00	6,055.73	-1,190.12	6,133.80	0.00	0.00	0.00	
13,200.00	90.00	0.30	8,216.00	6,155.73	-1,189.60	6,233.41	0.00	0.00	0.00	
13,300.00	90.00	0.30	8,216.00	6,255.73	-1,189.08	6,333.01	0.00	0.00	0.00	
13,400.00	90.00	0.30	8,216.00	6,355.73	-1,188.57	6,432.62	0.00	0.00	0.00	
13,500.00	90.00	0.30	8,216.00	6,455.73	-1,188.05	6,532.23	0.00	0.00	0.00	
13,600.00	90.00	0.30	8,216.00	6,555.72	-1,187.53	6,631.84	0.00	0.00	0.00	
13,700.00	90.00	0.30	8,216.00	6,655.72	-1,187.02	6,731.45	0.00	0.00	0.00	
13,800.00	90.00	0.30	8,216.00	6,755.72	-1,186.50	6,831.06	0.00	0.00	0.00	
13,900.00	90.00	0.30	8,216.00	6,855.72	-1,185.99	6,930.66	0.00	0.00	0.00	

Database:	Local	Local Co-ordinate Reference:	Well MARBLE 6-65 24-12 1HN
Company:	GMT Exploration Company, LLC	TVD Reference:	KB @ 6296.00usft
Project:	Elbert County, CO (NAD 83)	MD Reference:	KB @ 6296.00usft
Site:	Marble-Redstone Pad	North Reference:	Grid
Well:	MARBLE 6-65 24-12 1HN	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned 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)
14,000.00	90.00	0.30	8,216.00	6,955.72	-1,185.47	7,030.27	0.00	0.00	0.00
14,100.00	90.00	0.30	8,216.00	7,055.72	-1,184.95	7,129.88	0.00	0.00	0.00
14,200.00	90.00	0.30	8,216.00	7,155.72	-1,184.44	7,229.49	0.00	0.00	0.00
14,300.00	90.00	0.30	8,216.00	7,255.71	-1,183.92	7,329.10	0.00	0.00	0.00
14,400.00	90.00	0.30	8,216.00	7,355.71	-1,183.40	7,428.71	0.00	0.00	0.00
14,500.00	90.00	0.30	8,216.00	7,455.71	-1,182.89	7,528.32	0.00	0.00	0.00
14,600.00	90.00	0.30	8,216.00	7,555.71	-1,182.37	7,627.92	0.00	0.00	0.00
14,700.00	90.00	0.30	8,216.00	7,655.71	-1,181.86	7,727.53	0.00	0.00	0.00
14,800.00	90.00	0.30	8,216.00	7,755.71	-1,181.34	7,827.14	0.00	0.00	0.00
14,900.00	90.00	0.30	8,216.00	7,855.71	-1,180.82	7,926.75	0.00	0.00	0.00
15,000.00	90.00	0.30	8,216.00	7,955.71	-1,180.31	8,026.36	0.00	0.00	0.00
15,100.00	90.00	0.30	8,216.00	8,055.70	-1,179.79	8,125.97	0.00	0.00	0.00
15,200.00	90.00	0.30	8,216.00	8,155.70	-1,179.28	8,225.57	0.00	0.00	0.00
15,300.00	90.00	0.30	8,216.00	8,255.70	-1,178.76	8,325.18	0.00	0.00	0.00
15,400.00	90.00	0.30	8,216.00	8,355.70	-1,178.24	8,424.79	0.00	0.00	0.00
15,500.00	90.00	0.30	8,216.00	8,455.70	-1,177.73	8,524.40	0.00	0.00	0.00
15,600.00	90.00	0.30	8,216.00	8,555.70	-1,177.21	8,624.01	0.00	0.00	0.00
15,700.00	90.00	0.30	8,216.00	8,655.70	-1,176.69	8,723.62	0.00	0.00	0.00
15,800.00	90.00	0.30	8,216.00	8,755.69	-1,176.18	8,823.22	0.00	0.00	0.00
15,900.00	90.00	0.30	8,216.00	8,855.69	-1,175.66	8,922.83	0.00	0.00	0.00
16,000.00	90.00	0.30	8,216.00	8,955.69	-1,175.15	9,022.44	0.00	0.00	0.00
16,100.00	90.00	0.30	8,216.00	9,055.69	-1,174.63	9,122.05	0.00	0.00	0.00
16,200.00	90.00	0.30	8,216.00	9,155.69	-1,174.11	9,221.66	0.00	0.00	0.00
16,300.00	90.00	0.30	8,216.00	9,255.69	-1,173.60	9,321.27	0.00	0.00	0.00
16,400.00	90.00	0.30	8,216.00	9,355.69	-1,173.08	9,420.88	0.00	0.00	0.00
16,500.00	90.00	0.30	8,216.00	9,455.69	-1,172.56	9,520.48	0.00	0.00	0.00
16,600.00	90.00	0.30	8,216.00	9,555.68	-1,172.05	9,620.09	0.00	0.00	0.00
16,700.00	90.00	0.30	8,216.00	9,655.68	-1,171.53	9,719.70	0.00	0.00	0.00
16,800.00	90.00	0.30	8,216.00	9,755.68	-1,171.02	9,819.31	0.00	0.00	0.00
16,900.00	90.00	0.30	8,216.00	9,855.68	-1,170.50	9,918.92	0.00	0.00	0.00
17,000.00	90.00	0.30	8,216.00	9,955.68	-1,169.98	10,018.53	0.00	0.00	0.00
17,100.00	90.00	0.30	8,216.00	10,055.68	-1,169.47	10,118.13	0.00	0.00	0.00
17,200.00	90.00	0.30	8,216.00	10,155.68	-1,168.95	10,217.74	0.00	0.00	0.00
17,300.00	90.00	0.30	8,216.00	10,255.67	-1,168.44	10,317.35	0.00	0.00	0.00
17,400.00	90.00	0.30	8,216.00	10,355.67	-1,167.92	10,416.96	0.00	0.00	0.00
17,500.00	90.00	0.30	8,216.00	10,455.67	-1,167.40	10,516.57	0.00	0.00	0.00
17,600.00	90.00	0.30	8,216.00	10,555.67	-1,166.89	10,616.18	0.00	0.00	0.00
17,700.00	90.00	0.30	8,216.00	10,655.67	-1,166.37	10,715.79	0.00	0.00	0.00
17,800.00	90.00	0.30	8,216.00	10,755.67	-1,165.85	10,815.39	0.00	0.00	0.00
17,900.00	90.00	0.30	8,216.00	10,855.67	-1,165.34	10,915.00	0.00	0.00	0.00
18,000.00	90.00	0.30	8,216.00	10,955.67	-1,164.82	11,014.61	0.00	0.00	0.00
18,100.00	90.00	0.30	8,216.00	11,055.66	-1,164.31	11,114.22	0.00	0.00	0.00
18,200.00	90.00	0.30	8,216.00	11,155.66	-1,163.79	11,213.83	0.00	0.00	0.00
18,300.00	90.00	0.30	8,216.00	11,255.66	-1,163.27	11,313.44	0.00	0.00	0.00
18,400.00	90.00	0.30	8,216.00	11,355.66	-1,162.76	11,413.04	0.00	0.00	0.00
18,500.00	90.00	0.30	8,216.00	11,455.66	-1,162.24	11,512.65	0.00	0.00	0.00
18,600.00	90.00	0.30	8,216.00	11,555.66	-1,161.72	11,612.26	0.00	0.00	0.00
18,700.00	90.00	0.30	8,216.00	11,655.66	-1,161.21	11,711.87	0.00	0.00	0.00
18,800.00	90.00	0.30	8,216.00	11,755.65	-1,160.69	11,811.48	0.00	0.00	0.00
18,900.00	90.00	0.30	8,216.00	11,855.65	-1,160.18	11,911.09	0.00	0.00	0.00
19,000.00	90.00	0.30	8,216.00	11,955.65	-1,159.66	12,010.69	0.00	0.00	0.00
19,100.00	90.00	0.30	8,216.00	12,055.65	-1,159.14	12,110.30	0.00	0.00	0.00
19,200.00	90.00	0.30	8,216.00	12,155.65	-1,158.63	12,209.91	0.00	0.00	0.00
19,300.00	90.00	0.30	8,216.00	12,255.65	-1,158.11	12,309.52	0.00	0.00	0.00

Database:	Local	Local Co-ordinate Reference:	Well MARBLE 6-65 24-12 1HN
Company:	GMT Exploration Company, LLC	TVD Reference:	KB @ 6296.00usft
Project:	Elbert County, CO (NAD 83)	MD Reference:	KB @ 6296.00usft
Site:	Marble-Redstone Pad	North Reference:	Grid
Well:	MARBLE 6-65 24-12 1HN	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned 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)
19,400.00	90.00	0.30	8,216.00	12,355.65	-1,157.60	12,409.13	0.00	0.00	0.00
19,500.00	90.00	0.30	8,216.00	12,455.65	-1,157.08	12,508.74	0.00	0.00	0.00
19,600.00	90.00	0.30	8,216.00	12,555.64	-1,156.56	12,608.35	0.00	0.00	0.00
19,700.00	90.00	0.30	8,216.00	12,655.64	-1,156.05	12,707.95	0.00	0.00	0.00
19,800.00	90.00	0.30	8,216.00	12,755.64	-1,155.53	12,807.56	0.00	0.00	0.00
19,900.00	90.00	0.30	8,216.00	12,855.64	-1,155.01	12,907.17	0.00	0.00	0.00
20,000.00	90.00	0.30	8,216.00	12,955.64	-1,154.50	13,006.78	0.00	0.00	0.00
20,100.00	90.00	0.30	8,216.00	13,055.64	-1,153.98	13,106.39	0.00	0.00	0.00
20,200.00	90.00	0.30	8,216.00	13,155.64	-1,153.47	13,206.00	0.00	0.00	0.00
20,300.00	90.00	0.30	8,216.00	13,255.63	-1,152.95	13,305.60	0.00	0.00	0.00
20,400.00	90.00	0.30	8,216.00	13,355.63	-1,152.43	13,405.21	0.00	0.00	0.00
20,500.00	90.00	0.30	8,216.00	13,455.63	-1,151.92	13,504.82	0.00	0.00	0.00
20,600.00	90.00	0.30	8,216.00	13,555.63	-1,151.40	13,604.43	0.00	0.00	0.00
20,700.00	90.00	0.30	8,216.00	13,655.63	-1,150.88	13,704.04	0.00	0.00	0.00
20,761.31	90.00	0.30	8,216.00	13,716.94	-1,150.57	13,765.11	0.00	0.00	0.00
Hold: 90.00° Inc, 0.30° Azm - LTP-MARBLE 6-65 24-12 1HN									
20,800.00	90.00	0.30	8,216.00	13,755.63	-1,150.37	13,803.65	0.00	0.00	0.00
20,811.31	90.00	0.30	8,216.00	13,766.94	-1,150.31	13,814.91	0.00	0.00	0.00
TD @ 20811.31' MD/8216.00' TVD - BHL-MARBLE 6-65 24-12 1HN									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
SHL-MARBLE 6-65 24 - plan hits target center - Point	0.00	0.00	0.00	0.00	0.00	1,612,169.92	3,248,864.90	39.510866	-104.617927
KOP-MARBLE 6-65 2 - plan hits target center - Point	0.00	0.00	7,643.04	1,133.11	-1,215.53	1,613,303.03	3,247,649.38	39.514009	-104.622197
LTP-MARBLE 6-65 24 - plan hits target center - Point	0.00	0.00	8,216.00	13,716.94	-1,150.57	1,625,886.85	3,247,714.33	39.548554	-104.621535
BHL-MARBLE 6-65 24 - plan hits target center - Point	0.00	0.00	8,216.00	13,766.94	-1,150.31	1,625,936.86	3,247,714.59	39.548691	-104.621532
FTP-MARBLE 6-65 24 - plan hits target center - Point	0.00	0.00	8,216.00	1,706.06	-1,212.57	1,613,875.98	3,247,652.33	39.515582	-104.622166

Database:	Local	Local Co-ordinate Reference:	Well MARBLE 6-65 24-12 1HN
Company:	GMT Exploration Company, LLC	TVD Reference:	KB @ 6296.00usft
Project:	Elbert County, CO (NAD 83)	MD Reference:	KB @ 6296.00usft
Site:	Marble-Redstone Pad	North Reference:	Grid
Well:	MARBLE 6-65 24-12 1HN	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
511.19	511.00	Denver				
1,639.01	1,611.00	Upper Arapahoe				
2,306.07	2,256.00	Laramie - Fox Hills				
2,481.89	2,426.00	Pierre Shale (Base of Fox Hills)				
5,780.99	5,616.00	Sussex Sandstone				
8,175.40	7,951.00	Sharon Springs Shale				
8,224.22	7,991.00	Niobrara				
8,236.91	8,001.00	Niobrara A				
8,415.59	8,121.00	Niobrara B Top				
8,580.39	8,191.00	Niobrara C Top				

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
300.00	300.00	0.00	0.00	Build: 2°/100' @ 300.00' MD	
1,038.81	1,030.65	64.60	-69.30	Hold: 14.78° Inc, 312.99° Azm	
6,811.46	6,612.40	1,068.51	-1,146.23	Drop: 2°/100' @ 6811.46' MD	
7,550.27	7,343.04	1,133.11	-1,215.53	Hold: 0.00° Inc, 0.00° Azm	
7,850.27	7,643.04	1,133.11	-1,215.53	KOP: 10°/100' @ 7850.27' MD	
8,750.27	8,216.00	1,706.06	-1,212.57	LP: 8750.27' MD, 90.00° Inc, 0.30° Azm	
20,761.31	8,216.00	13,716.94	-1,150.57	Hold: 90.00° Inc, 0.30° Azm	
20,811.31	8,216.00	13,766.94	-1,150.31	TD @ 20811.31' MD/8216.00' TVD	