



GMT Exploration Company, LLC

Elbert County, CO (NAD 83)

Marble-Redstone Pad

MARBLE 6-65 24-12 2HN

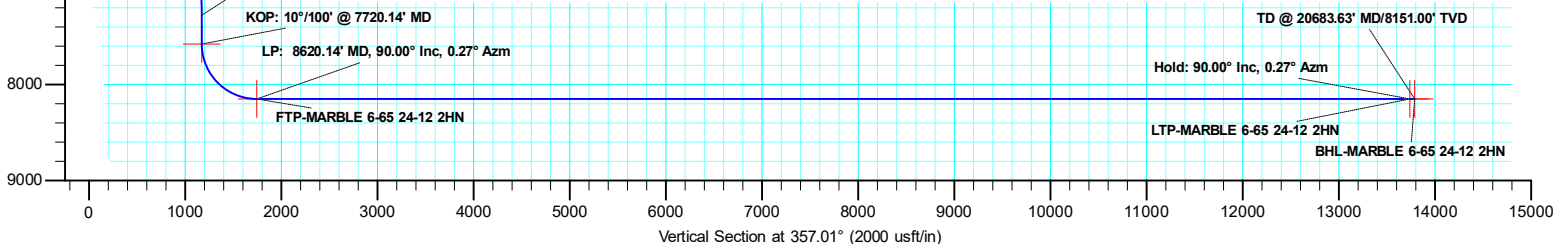
Wellbore #1

Plan: Design #1

Standard Planning Report

24 May, 2019





Database:	Local	Local Co-ordinate Reference:	Well MARBLE 6-65 24-12 2HN
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 2HN	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 2HN					
Well Position	+N/-S	-1,067.41 usft	Northing:	1,612,169.92 usft	Latitude:	39.510866
	+E/-W	-827.10 usft	Easting:	3,248,884.90 usft	Longitude:	-104.617856
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	51,711.56120613

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	357.01

Plan Survey Tool Program	Date	5/24/2019		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	20,683.63	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	
909.19	12.18	325.60	904.61	53.24	-36.46	2.00	2.00	0.00	325.60	
6,810.95	12.18	325.60	6,673.43	1,080.91	-740.23	0.00	0.00	0.00	0.00	
7,420.14	0.00	0.00	7,278.04	1,134.15	-776.69	2.00	-2.00	0.00	180.00	
7,720.14	0.00	0.00	7,578.04	1,134.15	-776.69	0.00	0.00	0.00	0.00	
8,620.14	90.00	0.27	8,151.00	1,707.10	-774.04	10.00	10.00	0.00	0.00	FTP-MARBLE 6-65
20,633.62	90.00	0.27	8,151.00	13,720.46	-718.43	0.00	0.00	0.00	0.00	LTP-MARBLE 6-65
20,683.63	90.00	0.27	8,151.00	13,770.46	-718.20	0.00	0.00	0.00	0.00	BHL-MARBLE 6-65

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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)
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 2HN									
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	325.60	399.98	1.44	-0.99	1.49	2.00	2.00	0.00
500.00	4.00	325.60	499.84	5.76	-3.94	5.96	2.00	2.00	0.00
600.00	6.00	325.60	599.45	12.95	-8.87	13.39	2.00	2.00	0.00
700.00	8.00	325.60	698.70	23.00	-15.75	23.79	2.00	2.00	0.00
800.00	10.00	325.60	797.47	35.91	-24.59	37.14	2.00	2.00	0.00
909.19	12.18	325.60	904.61	53.24	-36.46	55.07	2.00	2.00	0.00
Hold: 12.18° Inc, 325.60° Azm									
1,000.00	12.18	325.60	993.37	69.05	-47.29	71.42	0.00	0.00	0.00
1,100.00	12.18	325.60	1,091.12	86.47	-59.21	89.43	0.00	0.00	0.00
1,200.00	12.18	325.60	1,188.87	103.88	-71.14	107.44	0.00	0.00	0.00
1,300.00	12.18	325.60	1,286.62	121.29	-83.06	125.45	0.00	0.00	0.00
1,400.00	12.18	325.60	1,384.36	138.70	-94.99	143.46	0.00	0.00	0.00
1,500.00	12.18	325.60	1,482.11	156.12	-106.91	161.47	0.00	0.00	0.00
1,600.00	12.18	325.60	1,579.86	173.53	-118.84	179.48	0.00	0.00	0.00
1,700.00	12.18	325.60	1,677.61	190.94	-130.76	197.49	0.00	0.00	0.00
1,800.00	12.18	325.60	1,775.35	208.36	-142.69	215.50	0.00	0.00	0.00
1,900.00	12.18	325.60	1,873.10	225.77	-154.61	233.52	0.00	0.00	0.00
2,000.00	12.18	325.60	1,970.85	243.18	-166.54	251.53	0.00	0.00	0.00
2,100.00	12.18	325.60	2,068.60	260.59	-178.46	269.54	0.00	0.00	0.00
2,200.00	12.18	325.60	2,166.34	278.01	-190.39	287.55	0.00	0.00	0.00
2,300.00	12.18	325.60	2,264.09	295.42	-202.31	305.56	0.00	0.00	0.00
2,400.00	12.18	325.60	2,361.84	312.83	-214.24	323.57	0.00	0.00	0.00
2,500.00	12.18	325.60	2,459.59	330.25	-226.16	341.58	0.00	0.00	0.00
2,600.00	12.18	325.60	2,557.34	347.66	-238.09	359.59	0.00	0.00	0.00
2,700.00	12.18	325.60	2,655.08	365.07	-250.01	377.60	0.00	0.00	0.00
2,800.00	12.18	325.60	2,752.83	382.49	-261.94	395.61	0.00	0.00	0.00
2,900.00	12.18	325.60	2,850.58	399.90	-273.86	413.62	0.00	0.00	0.00
3,000.00	12.18	325.60	2,948.33	417.31	-285.79	431.63	0.00	0.00	0.00
3,100.00	12.18	325.60	3,046.07	434.72	-297.71	449.64	0.00	0.00	0.00
3,200.00	12.18	325.60	3,143.82	452.14	-309.64	467.65	0.00	0.00	0.00
3,300.00	12.18	325.60	3,241.57	469.55	-321.56	485.66	0.00	0.00	0.00
3,400.00	12.18	325.60	3,339.32	486.96	-333.48	503.67	0.00	0.00	0.00
3,500.00	12.18	325.60	3,437.06	504.38	-345.41	521.68	0.00	0.00	0.00
3,600.00	12.18	325.60	3,534.81	521.79	-357.33	539.69	0.00	0.00	0.00
3,700.00	12.18	325.60	3,632.56	539.20	-369.26	557.70	0.00	0.00	0.00
3,800.00	12.18	325.60	3,730.31	556.61	-381.18	575.71	0.00	0.00	0.00
3,900.00	12.18	325.60	3,828.05	574.03	-393.11	593.72	0.00	0.00	0.00
4,000.00	12.18	325.60	3,925.80	591.44	-405.03	611.73	0.00	0.00	0.00
4,100.00	12.18	325.60	4,023.55	608.85	-416.96	629.74	0.00	0.00	0.00
4,200.00	12.18	325.60	4,121.30	626.27	-428.88	647.75	0.00	0.00	0.00
4,300.00	12.18	325.60	4,219.04	643.68	-440.81	665.76	0.00	0.00	0.00
4,400.00	12.18	325.60	4,316.79	661.09	-452.73	683.78	0.00	0.00	0.00
4,500.00	12.18	325.60	4,414.54	678.51	-464.66	701.79	0.00	0.00	0.00
4,600.00	12.18	325.60	4,512.29	695.92	-476.58	719.80	0.00	0.00	0.00
4,700.00	12.18	325.60	4,610.03	713.33	-488.51	737.81	0.00	0.00	0.00
4,800.00	12.18	325.60	4,707.78	730.74	-500.43	755.82	0.00	0.00	0.00
4,900.00	12.18	325.60	4,805.53	748.16	-512.36	773.83	0.00	0.00	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)
5,000.00	12.18	325.60	4,903.28	765.57	-524.28	791.84	0.00	0.00	0.00
5,100.00	12.18	325.60	5,001.02	782.98	-536.21	809.85	0.00	0.00	0.00
5,200.00	12.18	325.60	5,098.77	800.40	-548.13	827.86	0.00	0.00	0.00
5,300.00	12.18	325.60	5,196.52	817.81	-560.06	845.87	0.00	0.00	0.00
5,400.00	12.18	325.60	5,294.27	835.22	-571.98	863.88	0.00	0.00	0.00
5,500.00	12.18	325.60	5,392.01	852.63	-583.91	881.89	0.00	0.00	0.00
5,600.00	12.18	325.60	5,489.76	870.05	-595.83	899.90	0.00	0.00	0.00
5,700.00	12.18	325.60	5,587.51	887.46	-607.76	917.91	0.00	0.00	0.00
5,800.00	12.18	325.60	5,685.26	904.87	-619.68	935.92	0.00	0.00	0.00
5,900.00	12.18	325.60	5,783.01	922.29	-631.61	953.93	0.00	0.00	0.00
6,000.00	12.18	325.60	5,880.75	939.70	-643.53	971.94	0.00	0.00	0.00
6,100.00	12.18	325.60	5,978.50	957.11	-655.46	989.95	0.00	0.00	0.00
6,200.00	12.18	325.60	6,076.25	974.53	-667.38	1,007.96	0.00	0.00	0.00
6,300.00	12.18	325.60	6,174.00	991.94	-679.30	1,025.97	0.00	0.00	0.00
6,400.00	12.18	325.60	6,271.74	1,009.35	-691.23	1,043.98	0.00	0.00	0.00
6,500.00	12.18	325.60	6,369.49	1,026.76	-703.15	1,061.99	0.00	0.00	0.00
6,600.00	12.18	325.60	6,467.24	1,044.18	-715.08	1,080.00	0.00	0.00	0.00
6,700.00	12.18	325.60	6,564.99	1,061.59	-727.00	1,098.01	0.00	0.00	0.00
6,800.00	12.18	325.60	6,662.73	1,079.00	-738.93	1,116.02	0.00	0.00	0.00
6,810.95	12.18	325.60	6,673.43	1,080.91	-740.23	1,118.00	0.00	0.00	0.00
Drop: 2°/100' @ 6810.95' MD									
6,900.00	10.40	325.60	6,760.76	1,095.30	-750.09	1,132.88	2.00	-2.00	0.00
7,000.00	8.40	325.60	6,859.41	1,108.78	-759.32	1,146.82	2.00	-2.00	0.00
7,100.00	6.40	325.60	6,958.57	1,119.41	-766.60	1,157.81	2.00	-2.00	0.00
7,200.00	4.40	325.60	7,058.12	1,127.17	-771.92	1,165.85	2.00	-2.00	0.00
7,300.00	2.40	325.60	7,157.94	1,132.07	-775.27	1,170.91	2.00	-2.00	0.00
7,400.00	0.40	325.60	7,257.91	1,134.09	-776.65	1,173.00	2.00	-2.00	0.00
7,420.14	0.00	0.00	7,278.04	1,134.15	-776.69	1,173.06	2.00	-2.00	0.00
Hold: 0.00° Inc, 0.00° Azm									
7,500.00	0.00	0.00	7,357.91	1,134.15	-776.69	1,173.06	0.00	0.00	0.00
7,600.00	0.00	0.00	7,457.91	1,134.15	-776.69	1,173.06	0.00	0.00	0.00
7,700.00	0.00	0.00	7,557.91	1,134.15	-776.69	1,173.06	0.00	0.00	0.00
7,720.14	0.00	0.00	7,578.04	1,134.15	-776.69	1,173.06	0.00	0.00	0.00
KOP: 10°/100' @ 7720.14' MD - KOP-MARBLE 6-65 24-12 2HN									
7,750.00	2.99	0.27	7,607.89	1,134.93	-776.69	1,173.84	10.00	10.00	0.00
7,800.00	7.99	0.27	7,657.65	1,139.71	-776.67	1,178.61	10.00	10.00	0.00
7,850.00	12.99	0.27	7,706.80	1,148.80	-776.63	1,187.69	10.00	10.00	0.00
7,900.00	17.99	0.27	7,754.97	1,162.15	-776.56	1,201.02	10.00	10.00	0.00
7,950.00	22.99	0.27	7,801.79	1,179.64	-776.48	1,218.48	10.00	10.00	0.00
8,000.00	27.99	0.27	7,846.91	1,201.15	-776.38	1,239.96	10.00	10.00	0.00
8,050.00	32.99	0.27	7,889.98	1,226.51	-776.27	1,265.27	10.00	10.00	0.00
8,100.00	37.99	0.27	7,930.68	1,255.52	-776.13	1,294.24	10.00	10.00	0.00
8,150.00	42.99	0.27	7,968.70	1,287.98	-775.98	1,326.65	10.00	10.00	0.00
8,200.00	47.99	0.27	8,003.74	1,323.62	-775.82	1,362.23	10.00	10.00	0.00
8,250.00	52.99	0.27	8,035.54	1,362.18	-775.64	1,400.73	10.00	10.00	0.00
8,300.00	57.99	0.27	8,063.87	1,403.37	-775.45	1,441.85	10.00	10.00	0.00
8,350.00	62.99	0.27	8,088.49	1,446.86	-775.25	1,485.28	10.00	10.00	0.00
8,400.00	67.99	0.27	8,109.23	1,492.34	-775.04	1,530.68	10.00	10.00	0.00
8,450.00	72.99	0.27	8,125.92	1,539.45	-774.82	1,577.72	10.00	10.00	0.00
8,500.00	77.99	0.27	8,138.45	1,587.84	-774.59	1,626.03	10.00	10.00	0.00
8,550.00	82.99	0.27	8,146.71	1,637.14	-774.37	1,675.25	10.00	10.00	0.00
8,600.00	87.99	0.27	8,150.65	1,686.97	-774.14	1,725.00	10.00	10.00	0.00
8,620.14	90.00	0.27	8,151.00	1,707.10	-774.04	1,745.10	10.00	10.00	0.00
LP: 8620.14' MD, 90.00° Inc, 0.27° Azm - FTP-MARBLE 6-65 24-12 2HN									

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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)
8,700.00	90.00	0.27	8,151.00	1,786.96	-773.67	1,824.83	0.00	0.00	0.00
8,800.00	90.00	0.27	8,151.00	1,886.96	-773.21	1,924.67	0.00	0.00	0.00
8,900.00	90.00	0.27	8,151.00	1,986.96	-772.75	2,024.51	0.00	0.00	0.00
9,000.00	90.00	0.27	8,151.00	2,086.96	-772.28	2,124.35	0.00	0.00	0.00
9,100.00	90.00	0.27	8,151.00	2,186.96	-771.82	2,224.19	0.00	0.00	0.00
9,200.00	90.00	0.27	8,151.00	2,286.96	-771.36	2,324.03	0.00	0.00	0.00
9,300.00	90.00	0.27	8,151.00	2,386.96	-770.89	2,423.87	0.00	0.00	0.00
9,400.00	90.00	0.27	8,151.00	2,486.96	-770.43	2,523.71	0.00	0.00	0.00
9,500.00	90.00	0.27	8,151.00	2,586.95	-769.97	2,623.55	0.00	0.00	0.00
9,600.00	90.00	0.27	8,151.00	2,686.95	-769.51	2,723.39	0.00	0.00	0.00
9,700.00	90.00	0.27	8,151.00	2,786.95	-769.04	2,823.22	0.00	0.00	0.00
9,800.00	90.00	0.27	8,151.00	2,886.95	-768.58	2,923.06	0.00	0.00	0.00
9,900.00	90.00	0.27	8,151.00	2,986.95	-768.12	3,022.90	0.00	0.00	0.00
10,000.00	90.00	0.27	8,151.00	3,086.95	-767.65	3,122.74	0.00	0.00	0.00
10,100.00	90.00	0.27	8,151.00	3,186.95	-767.19	3,222.58	0.00	0.00	0.00
10,200.00	90.00	0.27	8,151.00	3,286.95	-766.73	3,322.42	0.00	0.00	0.00
10,300.00	90.00	0.27	8,151.00	3,386.95	-766.27	3,422.26	0.00	0.00	0.00
10,400.00	90.00	0.27	8,151.00	3,486.94	-765.80	3,522.10	0.00	0.00	0.00
10,500.00	90.00	0.27	8,151.00	3,586.94	-765.34	3,621.94	0.00	0.00	0.00
10,600.00	90.00	0.27	8,151.00	3,686.94	-764.88	3,721.78	0.00	0.00	0.00
10,700.00	90.00	0.27	8,151.00	3,786.94	-764.41	3,821.62	0.00	0.00	0.00
10,800.00	90.00	0.27	8,151.00	3,886.94	-763.95	3,921.45	0.00	0.00	0.00
10,900.00	90.00	0.27	8,151.00	3,986.94	-763.49	4,021.29	0.00	0.00	0.00
11,000.00	90.00	0.27	8,151.00	4,086.94	-763.02	4,121.13	0.00	0.00	0.00
11,100.00	90.00	0.27	8,151.00	4,186.94	-762.56	4,220.97	0.00	0.00	0.00
11,200.00	90.00	0.27	8,151.00	4,286.94	-762.10	4,320.81	0.00	0.00	0.00
11,300.00	90.00	0.27	8,151.00	4,386.94	-761.64	4,420.65	0.00	0.00	0.00
11,400.00	90.00	0.27	8,151.00	4,486.93	-761.17	4,520.49	0.00	0.00	0.00
11,500.00	90.00	0.27	8,151.00	4,586.93	-760.71	4,620.33	0.00	0.00	0.00
11,600.00	90.00	0.27	8,151.00	4,686.93	-760.25	4,720.17	0.00	0.00	0.00
11,700.00	90.00	0.27	8,151.00	4,786.93	-759.78	4,820.01	0.00	0.00	0.00
11,800.00	90.00	0.27	8,151.00	4,886.93	-759.32	4,919.85	0.00	0.00	0.00
11,900.00	90.00	0.27	8,151.00	4,986.93	-758.86	5,019.68	0.00	0.00	0.00
12,000.00	90.00	0.27	8,151.00	5,086.93	-758.40	5,119.52	0.00	0.00	0.00
12,100.00	90.00	0.27	8,151.00	5,186.93	-757.93	5,219.36	0.00	0.00	0.00
12,200.00	90.00	0.27	8,151.00	5,286.93	-757.47	5,319.20	0.00	0.00	0.00
12,300.00	90.00	0.27	8,151.00	5,386.92	-757.01	5,419.04	0.00	0.00	0.00
12,400.00	90.00	0.27	8,151.00	5,486.92	-756.54	5,518.88	0.00	0.00	0.00
12,500.00	90.00	0.27	8,151.00	5,586.92	-756.08	5,618.72	0.00	0.00	0.00
12,600.00	90.00	0.27	8,151.00	5,686.92	-755.62	5,718.56	0.00	0.00	0.00
12,700.00	90.00	0.27	8,151.00	5,786.92	-755.15	5,818.40	0.00	0.00	0.00
12,800.00	90.00	0.27	8,151.00	5,886.92	-754.69	5,918.24	0.00	0.00	0.00
12,900.00	90.00	0.27	8,151.00	5,986.92	-754.23	6,018.08	0.00	0.00	0.00
13,000.00	90.00	0.27	8,151.00	6,086.92	-753.77	6,117.91	0.00	0.00	0.00
13,100.00	90.00	0.27	8,151.00	6,186.92	-753.30	6,217.75	0.00	0.00	0.00
13,200.00	90.00	0.27	8,151.00	6,286.91	-752.84	6,317.59	0.00	0.00	0.00
13,300.00	90.00	0.27	8,151.00	6,386.91	-752.38	6,417.43	0.00	0.00	0.00
13,400.00	90.00	0.27	8,151.00	6,486.91	-751.91	6,517.27	0.00	0.00	0.00
13,500.00	90.00	0.27	8,151.00	6,586.91	-751.45	6,617.11	0.00	0.00	0.00
13,600.00	90.00	0.27	8,151.00	6,686.91	-750.99	6,716.95	0.00	0.00	0.00
13,700.00	90.00	0.27	8,151.00	6,786.91	-750.53	6,816.79	0.00	0.00	0.00
13,800.00	90.00	0.27	8,151.00	6,886.91	-750.06	6,916.63	0.00	0.00	0.00
13,900.00	90.00	0.27	8,151.00	6,986.91	-749.60	7,016.47	0.00	0.00	0.00
14,000.00	90.00	0.27	8,151.00	7,086.91	-749.14	7,116.31	0.00	0.00	0.00

Database:	Local	Local Co-ordinate Reference:	Well MARBLE 6-65 24-12 2HN
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 2HN	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)
14,100.00	90.00	0.27	8,151.00	7,186.91	-748.67	7,216.14	0.00	0.00	0.00
14,200.00	90.00	0.27	8,151.00	7,286.90	-748.21	7,315.98	0.00	0.00	0.00
14,300.00	90.00	0.27	8,151.00	7,386.90	-747.75	7,415.82	0.00	0.00	0.00
14,400.00	90.00	0.27	8,151.00	7,486.90	-747.28	7,515.66	0.00	0.00	0.00
14,500.00	90.00	0.27	8,151.00	7,586.90	-746.82	7,615.50	0.00	0.00	0.00
14,600.00	90.00	0.27	8,151.00	7,686.90	-746.36	7,715.34	0.00	0.00	0.00
14,700.00	90.00	0.27	8,151.00	7,786.90	-745.90	7,815.18	0.00	0.00	0.00
14,800.00	90.00	0.27	8,151.00	7,886.90	-745.43	7,915.02	0.00	0.00	0.00
14,900.00	90.00	0.27	8,151.00	7,986.90	-744.97	8,014.86	0.00	0.00	0.00
15,000.00	90.00	0.27	8,151.00	8,086.90	-744.51	8,114.70	0.00	0.00	0.00
15,100.00	90.00	0.27	8,151.00	8,186.89	-744.04	8,214.54	0.00	0.00	0.00
15,200.00	90.00	0.27	8,151.00	8,286.89	-743.58	8,314.37	0.00	0.00	0.00
15,300.00	90.00	0.27	8,151.00	8,386.89	-743.12	8,414.21	0.00	0.00	0.00
15,400.00	90.00	0.27	8,151.00	8,486.89	-742.66	8,514.05	0.00	0.00	0.00
15,500.00	90.00	0.27	8,151.00	8,586.89	-742.19	8,613.89	0.00	0.00	0.00
15,600.00	90.00	0.27	8,151.00	8,686.89	-741.73	8,713.73	0.00	0.00	0.00
15,700.00	90.00	0.27	8,151.00	8,786.89	-741.27	8,813.57	0.00	0.00	0.00
15,800.00	90.00	0.27	8,151.00	8,886.89	-740.80	8,913.41	0.00	0.00	0.00
15,900.00	90.00	0.27	8,151.00	8,986.89	-740.34	9,013.25	0.00	0.00	0.00
16,000.00	90.00	0.27	8,151.00	9,086.88	-739.88	9,113.09	0.00	0.00	0.00
16,100.00	90.00	0.27	8,151.00	9,186.88	-739.41	9,212.93	0.00	0.00	0.00
16,200.00	90.00	0.27	8,151.00	9,286.88	-738.95	9,312.77	0.00	0.00	0.00
16,300.00	90.00	0.27	8,151.00	9,386.88	-738.49	9,412.60	0.00	0.00	0.00
16,400.00	90.00	0.27	8,151.00	9,486.88	-738.03	9,512.44	0.00	0.00	0.00
16,500.00	90.00	0.27	8,151.00	9,586.88	-737.56	9,612.28	0.00	0.00	0.00
16,600.00	90.00	0.27	8,151.00	9,686.88	-737.10	9,712.12	0.00	0.00	0.00
16,700.00	90.00	0.27	8,151.00	9,786.88	-736.64	9,811.96	0.00	0.00	0.00
16,800.00	90.00	0.27	8,151.00	9,886.88	-736.17	9,911.80	0.00	0.00	0.00
16,900.00	90.00	0.27	8,151.00	9,986.88	-735.71	10,011.64	0.00	0.00	0.00
17,000.00	90.00	0.27	8,151.00	10,086.87	-735.25	10,111.48	0.00	0.00	0.00
17,100.00	90.00	0.27	8,151.00	10,186.87	-734.79	10,211.32	0.00	0.00	0.00
17,200.00	90.00	0.27	8,151.00	10,286.87	-734.32	10,311.16	0.00	0.00	0.00
17,300.00	90.00	0.27	8,151.00	10,386.87	-733.86	10,411.00	0.00	0.00	0.00
17,400.00	90.00	0.27	8,151.00	10,486.87	-733.40	10,510.83	0.00	0.00	0.00
17,500.00	90.00	0.27	8,151.00	10,586.87	-732.93	10,610.67	0.00	0.00	0.00
17,600.00	90.00	0.27	8,151.00	10,686.87	-732.47	10,710.51	0.00	0.00	0.00
17,700.00	90.00	0.27	8,151.00	10,786.87	-732.01	10,810.35	0.00	0.00	0.00
17,800.00	90.00	0.27	8,151.00	10,886.87	-731.55	10,910.19	0.00	0.00	0.00
17,900.00	90.00	0.27	8,151.00	10,986.86	-731.08	11,010.03	0.00	0.00	0.00
18,000.00	90.00	0.27	8,151.00	11,086.86	-730.62	11,109.87	0.00	0.00	0.00
18,100.00	90.00	0.27	8,151.00	11,186.86	-730.16	11,209.71	0.00	0.00	0.00
18,200.00	90.00	0.27	8,151.00	11,286.86	-729.69	11,309.55	0.00	0.00	0.00
18,300.00	90.00	0.27	8,151.00	11,386.86	-729.23	11,409.39	0.00	0.00	0.00
18,400.00	90.00	0.27	8,151.00	11,486.86	-728.77	11,509.23	0.00	0.00	0.00
18,500.00	90.00	0.27	8,151.00	11,586.86	-728.30	11,609.06	0.00	0.00	0.00
18,600.00	90.00	0.27	8,151.00	11,686.86	-727.84	11,708.90	0.00	0.00	0.00
18,700.00	90.00	0.27	8,151.00	11,786.86	-727.38	11,808.74	0.00	0.00	0.00
18,800.00	90.00	0.27	8,151.00	11,886.85	-726.92	11,908.58	0.00	0.00	0.00
18,900.00	90.00	0.27	8,151.00	11,986.85	-726.45	12,008.42	0.00	0.00	0.00
19,000.00	90.00	0.27	8,151.00	12,086.85	-725.99	12,108.26	0.00	0.00	0.00
19,100.00	90.00	0.27	8,151.00	12,186.85	-725.53	12,208.10	0.00	0.00	0.00
19,200.00	90.00	0.27	8,151.00	12,286.85	-725.06	12,307.94	0.00	0.00	0.00
19,300.00	90.00	0.27	8,151.00	12,386.85	-724.60	12,407.78	0.00	0.00	0.00
19,400.00	90.00	0.27	8,151.00	12,486.85	-724.14	12,507.62	0.00	0.00	0.00

Database:	Local	Local Co-ordinate Reference:	Well MARBLE 6-65 24-12 2HN
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 2HN	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)	
19,500.00	90.00	0.27	8,151.00	12,586.85	-723.68	12,607.46	0.00	0.00	0.00	
19,600.00	90.00	0.27	8,151.00	12,686.85	-723.21	12,707.29	0.00	0.00	0.00	
19,700.00	90.00	0.27	8,151.00	12,786.85	-722.75	12,807.13	0.00	0.00	0.00	
19,800.00	90.00	0.27	8,151.00	12,886.84	-722.29	12,906.97	0.00	0.00	0.00	
19,900.00	90.00	0.27	8,151.00	12,986.84	-721.82	13,006.81	0.00	0.00	0.00	
20,000.00	90.00	0.27	8,151.00	13,086.84	-721.36	13,106.65	0.00	0.00	0.00	
20,100.00	90.00	0.27	8,151.00	13,186.84	-720.90	13,206.49	0.00	0.00	0.00	
20,200.00	90.00	0.27	8,151.00	13,286.84	-720.43	13,306.33	0.00	0.00	0.00	
20,300.00	90.00	0.27	8,151.00	13,386.84	-719.97	13,406.17	0.00	0.00	0.00	
20,400.00	90.00	0.27	8,151.00	13,486.84	-719.51	13,506.01	0.00	0.00	0.00	
20,500.00	90.00	0.27	8,151.00	13,586.84	-719.05	13,605.85	0.00	0.00	0.00	
20,600.00	90.00	0.27	8,151.00	13,686.84	-718.58	13,705.69	0.00	0.00	0.00	
20,633.62	90.00	0.27	8,151.00	13,720.46	-718.43	13,739.25	0.00	0.00	0.00	
Hold: 90.00° Inc, 0.27° Azm - LTP-MARBLE 6-65 24-12 2HN										
20,683.63	90.00	0.27	8,151.00	13,770.46	-718.20	13,789.18	0.00	0.00	0.00	
TD @ 20683.63' MD/8151.00' TVD - BHL-MARBLE 6-65 24-12 2HN										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
- hit/miss target										
- Shape										
SHL-MARBLE 6-65 24	0.00	0.00	0.00	0.00	0.00	1,612,169.92	3,248,884.90	39.510866	-104.617856	
- plan hits target center										
- Point										
KOP-MARBLE 6-65 2	0.00	0.00	7,578.04	1,134.15	-776.69	1,613,304.06	3,248,108.21	39.514000	-104.620570	
- plan hits target center										
- Point										
BHL-MARBLE 6-65 24	0.00	0.00	8,151.00	13,770.46	-718.20	1,625,940.38	3,248,166.71	39.548689	-104.619929	
- plan hits target center										
- Point										
LTP-MARBLE 6-65 24	0.00	0.00	8,151.00	13,720.46	-718.43	1,625,890.37	3,248,166.48	39.548552	-104.619932	
- plan hits target center										
- Point										
FTP-MARBLE 6-65 24	0.00	0.00	8,151.00	1,707.10	-774.04	1,613,877.02	3,248,110.86	39.515573	-104.620541	
- plan hits target center										
- Point										

Database:	Local	Local Co-ordinate Reference:	Well MARBLE 6-65 24-12 2HN
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 2HN	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				
1,631.86	1,611.00	Upper Arapahoe				
2,291.72	2,256.00	Laramie - Fox Hills				
2,465.64	2,426.00	Pierre Shale (Base of Fox Hills)				
5,729.15	5,616.00	Sussex Sandstone				
8,126.26	7,951.00	Sharon Springs Shale				
8,181.30	7,991.00	Niobrara				
8,195.92	8,001.00	Niobrara A				
8,433.91	8,121.00	Niobrara B 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	
909.19	904.61	53.24	-36.46	Hold: 12.18° Inc, 325.60° Azm	
6,810.95	6,673.43	1,080.91	-740.23	Drop: 2°/100' @ 6810.95' MD	
7,420.14	7,278.04	1,134.15	-776.69	Hold: 0.00° Inc, 0.00° Azm	
7,720.14	7,578.04	1,134.15	-776.69	KOP: 10°/100' @ 7720.14' MD	
8,620.14	8,151.00	1,707.10	-774.04	LP: 8620.14' MD, 90.00° Inc, 0.27° Azm	
20,633.62	8,151.00	13,720.46	-718.43	Hold: 90.00° Inc, 0.27° Azm	
20,683.63	8,151.00	13,770.46	-718.20	TD @ 20683.63' MD/8151.00' TVD	