



## Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well PUCKETT 21D-1
<b>Company:</b>	Caerus Oil & Gas	<b>TVD Reference:</b>	30' KB @ 8358.6usft (H&P 330)
<b>Project:</b>	Garfield County, CO (UTM 12N)	<b>MD Reference:</b>	30' KB @ 8358.6usft (H&P 330)
<b>Site:</b>	S1-T7S-R97W (MESA E1-797)	<b>North Reference:</b>	True
<b>Well:</b>	PUCKETT 21D-1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	PLAN #2		

<b>Project</b>	Garfield County, CO (UTM 12N)		
<b>Map System:</b>	Universal Transverse Mercator (US Survey Feet)	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	NAD 1927 - Western US		
<b>Map Zone:</b>	Zone 12N (114 W to 108 W)		

Site		S1-T7S-R97W (MESA E1-797)			
Site Position:		Northing:	14,347,813.50 usft	Latitude:	39.476123
From:	Map	Easting:	2,438,328.90 usft	Longitude:	-108.172618
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	1.80 °

Well	PUCKETT 21D-1					
Well Position	+N/-S	0.0 usft	Northing:	14,347,823.10 usft	Latitude:	39.476147
	+E/-W	0.0 usft	Easting:	2,438,345.20 usft	Longitude:	-108.172559
Position Uncertainty		0.0 usft	Wellhead Elevation:	0.0 usft	Ground Level:	8,328.6 usft

<b>Wellbore</b>	OH				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination</b>	<b>Dip Angle</b>	<b>Field Strength</b>
			(°)	(°)	(nT)
	HDGM	6/26/2015	9.85	65.82	51,931

<b>Design</b>	PLAN #2				
<b>Audit Notes:</b>					
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.0	
<b>Vertical Section:</b>	<b>Depth From (TVD)</b>	<b>+N/-S</b>	<b>+E/-W</b>	<b>Direction</b>	
	(usft)	(usft)	(usft)	(°)	
	0.0	0.0	0.0	35.47	

<b>Plan Sections</b>										
<b>Measured Depth</b>	<b>Inclination</b>	<b>Azimuth</b>	<b>Vertical Depth</b>	<b>+N/-S</b>	<b>+E/-W</b>	<b>Dogleg Rate</b>	<b>Build Rate</b>	<b>Turn Rate</b>	<b>TFO</b>	<b>Target</b>
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(°/100usft)	(°/100usft)	(°/100usft)	(°)	
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.00	0.00	
501.0	9.03	35.47	499.7	19.3	13.7	3.00	3.00	0.00	35.47	
6,596.6	9.03	35.47	6,519.9	798.3	568.9	0.00	0.00	0.00	0.00	
6,897.6	0.00	0.00	6,819.6	817.6	582.6	3.00	-3.00	0.00	180.00	
9,017.6	0.00	0.00	8,939.6	817.6	582.6	0.00	0.00	0.00	0.00	PUCKETT 21D-1 PBH

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<b>Site:</b>	S1-T7S-R97W (MESA E1-797)	<b>North Reference:</b>	True
<b>Well:</b>	PUCKETT 21D-1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	PLAN #2		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100u)	Comments / Formations
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	KOP @ 200'
300.0	3.00	35.47	300.0	2.1	1.5	2.6	3.00	3.00	
400.0	6.00	35.47	399.6	8.5	6.1	10.5	3.00	3.00	
500.0	9.00	35.47	498.8	19.1	13.6	23.5	3.00	3.00	
501.0	9.03	35.47	499.7	19.3	13.7	23.7	3.00	3.00	EOB; INC=9.03°
600.0	9.03	35.47	597.5	31.9	22.8	39.2	0.00	0.00	
700.0	9.03	35.47	696.3	44.7	31.9	54.9	0.00	0.00	
800.0	9.03	35.47	795.1	57.5	41.0	70.6	0.00	0.00	
900.0	9.03	35.47	893.8	70.3	50.1	86.3	0.00	0.00	
1,000.0	9.03	35.47	992.6	83.1	59.2	102.0	0.00	0.00	
1,100.0	9.03	35.47	1,091.3	95.8	68.3	117.7	0.00	0.00	
1,200.0	9.03	35.47	1,190.1	108.6	77.4	133.4	0.00	0.00	
1,300.0	9.03	35.47	1,288.9	121.4	86.5	149.1	0.00	0.00	
1,400.0	9.03	35.47	1,387.6	134.2	95.6	164.8	0.00	0.00	
1,500.0	9.03	35.47	1,486.4	147.0	104.7	180.5	0.00	0.00	
1,600.0	9.03	35.47	1,585.1	159.7	113.8	196.1	0.00	0.00	
1,700.0	9.03	35.47	1,683.9	172.5	122.9	211.8	0.00	0.00	
1,800.0	9.03	35.47	1,782.7	185.3	132.0	227.5	0.00	0.00	
1,900.0	9.03	35.47	1,881.4	198.1	141.2	243.2	0.00	0.00	
2,000.0	9.03	35.47	1,980.2	210.9	150.3	258.9	0.00	0.00	
2,100.0	9.03	35.47	2,078.9	223.6	159.4	274.6	0.00	0.00	
2,200.0	9.03	35.47	2,177.7	236.4	168.5	290.3	0.00	0.00	
2,300.0	9.03	35.47	2,276.5	249.2	177.6	306.0	0.00	0.00	
2,400.0	9.03	35.47	2,375.2	262.0	186.7	321.7	0.00	0.00	
2,500.0	9.03	35.47	2,474.0	274.8	195.8	337.4	0.00	0.00	
2,600.0	9.03	35.47	2,572.7	287.5	204.9	353.1	0.00	0.00	
2,700.0	9.03	35.47	2,671.5	300.3	214.0	368.8	0.00	0.00	
2,800.0	9.03	35.47	2,770.3	313.1	223.1	384.5	0.00	0.00	
2,900.0	9.03	35.47	2,869.0	325.9	232.2	400.2	0.00	0.00	
3,000.0	9.03	35.47	2,967.8	338.7	241.3	415.9	0.00	0.00	
3,100.0	9.03	35.47	3,066.5	351.4	250.4	431.6	0.00	0.00	
3,200.0	9.03	35.47	3,165.3	364.2	259.6	447.2	0.00	0.00	
3,300.0	9.03	35.47	3,264.1	377.0	268.7	462.9	0.00	0.00	
3,400.0	9.03	35.47	3,362.8	389.8	277.8	478.6	0.00	0.00	
3,500.0	9.03	35.47	3,461.6	402.6	286.9	494.3	0.00	0.00	
3,600.0	9.03	35.47	3,560.4	415.4	296.0	510.0	0.00	0.00	
3,700.0	9.03	35.47	3,659.1	428.1	305.1	525.7	0.00	0.00	
3,800.0	9.03	35.47	3,757.9	440.9	314.2	541.4	0.00	0.00	
3,900.0	9.03	35.47	3,856.6	453.7	323.3	557.1	0.00	0.00	
4,000.0	9.03	35.47	3,955.4	466.5	332.4	572.8	0.00	0.00	
4,100.0	9.03	35.47	4,054.2	479.3	341.5	588.5	0.00	0.00	
4,200.0	9.03	35.47	4,152.9	492.0	350.6	604.2	0.00	0.00	
4,300.0	9.03	35.47	4,251.7	504.8	359.7	619.9	0.00	0.00	
4,391.0	9.03	35.47	4,341.6	516.5	368.0	634.2	0.00	0.00	WASATCH_G_ZONE.MBL (SSTVD)
4,400.0	9.03	35.47	4,350.4	517.6	368.8	635.6	0.00	0.00	
4,500.0	9.03	35.47	4,449.2	530.4	378.0	651.3	0.00	0.00	
4,600.0	9.03	35.47	4,548.0	543.2	387.1	667.0	0.00	0.00	
4,690.8	9.03	35.47	4,637.6	554.8	395.3	681.2	0.00	0.00	FORT_UNION.MBL (SSTVD)
4,700.0	9.03	35.47	4,646.7	555.9	396.2	682.7	0.00	0.00	
4,800.0	9.03	35.47	4,745.5	568.7	405.3	698.3	0.00	0.00	

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<b>Project:</b>	Garfield County, CO (UTM 12N)	<b>MD Reference:</b>	30' KB @ 8358.6usft (H&P 330)
<b>Site:</b>	S1-T7S-R97W (MESA E1-797)	<b>North Reference:</b>	True
<b>Well:</b>	PUCKETT 21D-1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	PLAN #2		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100u)	Comments / Formations
4,900.0	9.03	35.47	4,844.2	581.5	414.4	714.0	0.00	0.00	
5,000.0	9.03	35.47	4,943.0	594.3	423.5	729.7	0.00	0.00	
5,100.0	9.03	35.47	5,041.8	607.1	432.6	745.4	0.00	0.00	
5,200.0	9.03	35.47	5,140.5	619.8	441.7	761.1	0.00	0.00	
5,300.0	9.03	35.47	5,239.3	632.6	450.8	776.8	0.00	0.00	
5,400.0	9.03	35.47	5,338.0	645.4	459.9	792.5	0.00	0.00	
5,500.0	9.03	35.47	5,436.8	658.2	469.0	808.2	0.00	0.00	
5,600.0	9.03	35.47	5,535.6	671.0	478.1	823.9	0.00	0.00	
5,700.0	9.03	35.47	5,634.3	683.7	487.2	839.6	0.00	0.00	
5,800.0	9.03	35.47	5,733.1	696.5	496.4	855.3	0.00	0.00	
5,900.0	9.03	35.47	5,831.9	709.3	505.5	871.0	0.00	0.00	
5,939.2	9.03	35.47	5,870.6	714.3	509.0	877.1	0.00	0.00	OHIO_CREEK.MBL (SSTVD)
6,000.0	9.03	35.47	5,930.6	722.1	514.6	886.7	0.00	0.00	
6,100.0	9.03	35.47	6,029.4	734.9	523.7	902.4	0.00	0.00	
6,145.8	9.03	35.47	6,074.6	740.7	527.9	909.6	0.00	0.00	WILLIAMS_FORK.MBL (SSTVD)
6,200.0	9.03	35.47	6,128.1	747.6	532.8	918.1	0.00	0.00	
6,300.0	9.03	35.47	6,226.9	760.4	541.9	933.8	0.00	0.00	
6,400.0	9.03	35.47	6,325.7	773.2	551.0	949.5	0.00	0.00	
6,500.0	9.03	35.47	6,424.4	786.0	560.1	965.1	0.00	0.00	
6,596.6	9.03	35.47	6,519.9	798.3	568.9	980.3	0.00	0.00	Start Drop -3.00
6,600.0	8.93	35.47	6,523.2	798.8	569.2	980.8	3.00	-3.00	
6,700.0	5.93	35.47	6,622.3	809.3	576.7	993.8	3.00	-3.00	
6,800.0	2.93	35.47	6,722.0	815.6	581.2	1,001.5	3.00	-3.00	
6,897.6	0.00	0.00	6,819.6	817.6	582.6	1,004.0	3.00	-3.00	EOD; INC=0°
6,900.0	0.00	0.00	6,822.0	817.6	582.6	1,004.0	0.00	0.00	
6,997.6	0.00	0.00	6,919.6	817.6	582.6	1,004.0	0.00	0.00	TOP_GAS.MBL (SSTVD)
7,000.0	0.00	0.00	6,922.0	817.6	582.6	1,004.0	0.00	0.00	
7,100.0	0.00	0.00	7,022.0	817.6	582.6	1,004.0	0.00	0.00	
7,200.0	0.00	0.00	7,122.0	817.6	582.6	1,004.0	0.00	0.00	
7,300.0	0.00	0.00	7,222.0	817.6	582.6	1,004.0	0.00	0.00	
7,400.0	0.00	0.00	7,322.0	817.6	582.6	1,004.0	0.00	0.00	
7,500.0	0.00	0.00	7,422.0	817.6	582.6	1,004.0	0.00	0.00	
7,600.0	0.00	0.00	7,522.0	817.6	582.6	1,004.0	0.00	0.00	
7,700.0	0.00	0.00	7,622.0	817.6	582.6	1,004.0	0.00	0.00	
7,800.0	0.00	0.00	7,722.0	817.6	582.6	1,004.0	0.00	0.00	
7,900.0	0.00	0.00	7,822.0	817.6	582.6	1,004.0	0.00	0.00	
8,000.0	0.00	0.00	7,922.0	817.6	582.6	1,004.0	0.00	0.00	
8,100.0	0.00	0.00	8,022.0	817.6	582.6	1,004.0	0.00	0.00	
8,200.0	0.00	0.00	8,122.0	817.6	582.6	1,004.0	0.00	0.00	
8,300.0	0.00	0.00	8,222.0	817.6	582.6	1,004.0	0.00	0.00	
8,400.0	0.00	0.00	8,322.0	817.6	582.6	1,004.0	0.00	0.00	
8,500.0	0.00	0.00	8,422.0	817.6	582.6	1,004.0	0.00	0.00	
8,600.0	0.00	0.00	8,522.0	817.6	582.6	1,004.0	0.00	0.00	
8,700.0	0.00	0.00	8,622.0	817.6	582.6	1,004.0	0.00	0.00	
8,767.6	0.00	0.00	8,689.6	817.6	582.6	1,004.0	0.00	0.00	ROLLINS.MBL (SSTVD)
8,800.0	0.00	0.00	8,722.0	817.6	582.6	1,004.0	0.00	0.00	
8,900.0	0.00	0.00	8,822.0	817.6	582.6	1,004.0	0.00	0.00	
9,000.0	0.00	0.00	8,922.0	817.6	582.6	1,004.0	0.00	0.00	
9,017.6	0.00	0.00	8,939.6	817.6	582.6	1,004.0	0.00	0.00	TD at 9017.6 - TD.MBL (SSTVD) - PUCKETT 2

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<b>Well:</b>	PUCKETT 21D-1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	PLAN #2		

Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
- Shape									
PUCKETT 21D-1 PBHL	0.00	0.00	8,939.6	817.6	582.6	14,348,658.60	2,438,901.90	39.478391	-108.170496
- plan hits target center									
- Circle (radius 50.0)									

Formations						
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction	
(usft)	(usft)			(°)	(°)	
4,391.0	4,341.6	WASATCH_G_ZONE.MBL (SSTVD)		0.00		
4,690.8	4,637.6	FORT_UNION.MBL (SSTVD)		0.00		
5,939.2	5,870.6	OHIO_CREEK.MBL (SSTVD)		0.00		
6,145.8	6,074.6	WILLIAMS_FORK.MBL (SSTVD)		0.00		
6,997.6	6,919.6	TOP_GAS.MBL (SSTVD)		0.00		
8,767.6	8,689.6	ROLLINS.MBL (SSTVD)		0.00		
9,017.6	8,939.6	TD.MBL (SSTVD)		0.00		

Plan Annotations					
Measured Depth	Vertical Depth	Local Coordinates			
(usft)	(usft)	+N/-S	+E/-W	Comment	
(usft)	(usft)	(usft)	(usft)		
200.0	200.0	0.0	0.0	KOP @ 200'	
501.0	499.7	19.3	13.7	EOB; INC=9.03°	
6,596.6	6,519.9	798.3	568.9	Start Drop -3.00	
6,897.6	6,819.6	817.6	582.6	EOD; INC=0°	
9,017.6	8,939.6	817.6	582.6	TD at 9017.6	