

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well PUCKETT 24B-25
Company:	Caerus Oil & Gas	TVD Reference:	30' KB @ 8406.0usft
Project:	Garfield County, CO (UTM 12N)	MD Reference:	30' KB @ 8406.0usft
Site:	S25-T6S-R97W (E25)	North Reference:	True
Well:	PUCKETT 24B-25	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1		

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

Site	S25-T6S-R97W (E25)				
Site Position:		Northing:	14,354,735.00 usft	Latitude:	39.495199
From:	Map	Easting:	2,437,287.30 usft	Longitude:	-108.175536
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16"	Grid Convergence:	1.80 °

Well	PUCKETT 24B-25					
Well Position	+N/-S	0.0 usft	Northing:	14,354,727.20 usft	Latitude:	39.495177
	+E/-W	0.0 usft	Easting:	2,437,297.10 usft	Longitude:	-108.175502
Position Uncertainty		0.0 usft	Wellhead Elevation:	0.0 usft	Ground Level:	8,376.0 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
			(°)	(°)	(nT)
	HDGM	1/7/2016	9.82	65.85	51,889

Design	PLAN #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(usft)	(usft)	(usft)	(°)
	0.0	0.0	0.0	153.71

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
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
300.0	0.00	0.00	300.0	0.0	0.0	0.00	0.00	0.00	0.00	
633.3	10.00	162.00	631.6	-27.6	9.0	3.00	3.00	0.00	162.00	
1,210.2	27.14	153.44	1,176.6	-194.2	83.8	3.00	2.97	-1.48	-13.20	
5,721.8	27.14	153.44	5,191.5	-2,034.7	1,004.0	0.00	0.00	0.00	0.00	
6,626.3	0.00	0.00	6,062.6	-2,222.7	1,098.0	3.00	-3.00	0.00	180.00	
9,565.7	0.00	0.00	9,002.0	-2,222.7	1,098.0	0.00	0.00	0.00	0.00	PUCKETT 24B-25 PE

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Site:	S25-T6S-R97W (E25)	North Reference:	True
Well:	PUCKETT 24B-25	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #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 (°/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	
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	Start Build 3.00
400.0	3.00	162.00	400.0	-2.5	0.8	2.6	3.00	3.00	
500.0	6.00	162.00	499.6	-10.0	3.2	10.4	3.00	3.00	
600.0	9.00	162.00	598.8	-22.4	7.3	23.3	3.00	3.00	
633.3	10.00	162.00	631.6	-27.6	9.0	28.7	3.00	3.00	Start DLS 3.00 TFO -13.20
700.0	11.96	159.80	697.1	-39.6	13.1	41.3	3.00	2.93	
800.0	14.91	157.57	794.3	-61.2	21.6	64.4	3.00	2.96	
900.0	17.88	156.06	890.3	-87.1	32.8	92.6	3.00	2.97	
1,000.0	20.86	154.97	984.6	-117.3	46.5	125.8	3.00	2.98	
1,100.0	23.84	154.15	1,077.1	-151.6	62.9	163.8	3.00	2.98	
1,200.0	26.83	153.50	1,167.4	-190.0	81.8	206.6	3.00	2.99	
1,210.2	27.14	153.44	1,176.6	-194.2	83.8	211.2	3.00	2.99	Start 4511.5 hold at 1210.2 MD
1,300.0	27.14	153.44	1,256.4	-230.8	102.2	252.2	0.00	0.00	
1,400.0	27.14	153.44	1,345.4	-271.6	122.6	297.8	0.00	0.00	
1,500.0	27.14	153.44	1,434.4	-312.4	142.9	343.4	0.00	0.00	
1,600.0	27.14	153.44	1,523.4	-353.2	163.3	389.0	0.00	0.00	
1,700.0	27.14	153.44	1,612.4	-394.0	183.7	434.6	0.00	0.00	
1,800.0	27.14	153.44	1,701.4	-434.8	204.1	480.2	0.00	0.00	
1,900.0	27.14	153.44	1,790.4	-475.6	224.5	525.8	0.00	0.00	
2,000.0	27.14	153.44	1,879.4	-516.4	244.9	571.4	0.00	0.00	
2,100.0	27.14	153.44	1,968.4	-557.2	265.3	617.1	0.00	0.00	
2,200.0	27.14	153.44	2,057.4	-598.0	285.7	662.7	0.00	0.00	
2,300.0	27.14	153.44	2,146.4	-638.8	306.1	708.3	0.00	0.00	
2,400.0	27.14	153.44	2,235.4	-679.6	326.5	753.9	0.00	0.00	
2,500.0	27.14	153.44	2,324.4	-720.4	346.9	799.5	0.00	0.00	
2,600.0	27.14	153.44	2,413.4	-761.1	367.3	845.1	0.00	0.00	
2,700.0	27.14	153.44	2,502.3	-801.9	387.7	890.7	0.00	0.00	
2,800.0	27.14	153.44	2,591.3	-842.7	408.1	936.3	0.00	0.00	
2,900.0	27.14	153.44	2,680.3	-883.5	428.5	981.9	0.00	0.00	
3,000.0	27.14	153.44	2,769.3	-924.3	448.9	1,027.5	0.00	0.00	
3,100.0	27.14	153.44	2,858.3	-965.1	469.3	1,073.1	0.00	0.00	
3,200.0	27.14	153.44	2,947.3	-1,005.9	489.7	1,118.8	0.00	0.00	
3,300.0	27.14	153.44	3,036.3	-1,046.7	510.1	1,164.4	0.00	0.00	
3,400.0	27.14	153.44	3,125.3	-1,087.5	530.5	1,210.0	0.00	0.00	
3,500.0	27.14	153.44	3,214.3	-1,128.3	550.9	1,255.6	0.00	0.00	
3,600.0	27.14	153.44	3,303.3	-1,169.1	571.3	1,301.2	0.00	0.00	
3,700.0	27.14	153.44	3,392.3	-1,209.9	591.7	1,346.8	0.00	0.00	
3,800.0	27.14	153.44	3,481.3	-1,250.7	612.1	1,392.4	0.00	0.00	
3,900.0	27.14	153.44	3,570.3	-1,291.5	632.4	1,438.0	0.00	0.00	
4,000.0	27.14	153.44	3,659.2	-1,332.3	652.8	1,483.6	0.00	0.00	
4,100.0	27.14	153.44	3,748.2	-1,373.1	673.2	1,529.2	0.00	0.00	
4,200.0	27.14	153.44	3,837.2	-1,413.9	693.6	1,574.9	0.00	0.00	
4,300.0	27.14	153.44	3,926.2	-1,454.7	714.0	1,620.5	0.00	0.00	
4,400.0	27.14	153.44	4,015.2	-1,495.5	734.4	1,666.1	0.00	0.00	
4,500.0	27.14	153.44	4,104.2	-1,536.3	754.8	1,711.7	0.00	0.00	
4,600.0	27.14	153.44	4,193.2	-1,577.1	775.2	1,757.3	0.00	0.00	
4,700.0	27.14	153.44	4,282.2	-1,617.9	795.6	1,802.9	0.00	0.00	
4,800.0	27.14	153.44	4,371.2	-1,658.7	816.0	1,848.5	0.00	0.00	
4,900.0	27.14	153.44	4,460.2	-1,699.5	836.4	1,894.1	0.00	0.00	

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Site:	S25-T6S-R97W (E25)	North Reference:	True
Well:	PUCKETT 24B-25	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #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 (°/100u)	Comments / Formations
5,000.0	27.14	153.44	4,549.2	-1,740.2	856.8	1,939.7	0.00	0.00	
5,100.0	27.14	153.44	4,638.2	-1,781.0	877.2	1,985.3	0.00	0.00	
5,200.0	27.14	153.44	4,727.2	-1,821.8	897.6	2,031.0	0.00	0.00	
5,300.0	27.14	153.44	4,816.2	-1,862.6	918.0	2,076.6	0.00	0.00	
5,400.0	27.14	153.44	4,905.1	-1,903.4	938.4	2,122.2	0.00	0.00	
5,500.0	27.14	153.44	4,994.1	-1,944.2	958.8	2,167.8	0.00	0.00	
5,600.0	27.14	153.44	5,083.1	-1,985.0	979.2	2,213.4	0.00	0.00	
5,700.0	27.14	153.44	5,172.1	-2,025.8	999.6	2,259.0	0.00	0.00	
5,721.8	27.14	153.44	5,191.5	-2,034.7	1,004.0	2,268.9	0.00	0.00	Start Drop -3.00
5,800.0	24.79	153.44	5,261.8	-2,065.3	1,019.3	2,303.2	3.00	-3.00	
5,900.0	21.79	153.44	5,353.7	-2,100.7	1,037.0	2,342.7	3.00	-3.00	
6,000.0	18.79	153.44	5,447.5	-2,131.7	1,052.5	2,377.4	3.00	-3.00	
6,100.0	15.79	153.44	5,542.9	-2,158.3	1,065.8	2,407.1	3.00	-3.00	
6,200.0	12.79	153.44	5,639.8	-2,180.4	1,076.8	2,431.8	3.00	-3.00	
6,300.0	9.79	153.44	5,737.9	-2,197.9	1,085.6	2,451.3	3.00	-3.00	
6,400.0	6.79	153.44	5,836.8	-2,210.8	1,092.0	2,465.8	3.00	-3.00	
6,500.0	3.79	153.44	5,936.4	-2,219.0	1,096.2	2,475.0	3.00	-3.00	
6,516.7	3.29	153.44	5,953.0	-2,219.9	1,096.6	2,476.0	3.00	-3.00	OHIO_CREEK
6,600.0	0.79	153.44	6,036.3	-2,222.6	1,097.9	2,479.0	3.00	-3.00	
6,626.3	0.00	0.00	6,062.6	-2,222.7	1,098.0	2,479.2	3.00	-3.00	Start 2939.4 hold at 6626.3 MD
6,700.0	0.00	0.00	6,136.3	-2,222.7	1,098.0	2,479.2	0.00	0.00	
6,790.7	0.00	0.00	6,227.0	-2,222.7	1,098.0	2,479.2	0.00	0.00	WILLIAMS_FORK
6,800.0	0.00	0.00	6,236.3	-2,222.7	1,098.0	2,479.2	0.00	0.00	
6,900.0	0.00	0.00	6,336.3	-2,222.7	1,098.0	2,479.2	0.00	0.00	
7,000.0	0.00	0.00	6,436.3	-2,222.7	1,098.0	2,479.2	0.00	0.00	
7,100.0	0.00	0.00	6,536.3	-2,222.7	1,098.0	2,479.2	0.00	0.00	
7,200.0	0.00	0.00	6,636.3	-2,222.7	1,098.0	2,479.2	0.00	0.00	
7,300.0	0.00	0.00	6,736.3	-2,222.7	1,098.0	2,479.2	0.00	0.00	
7,400.0	0.00	0.00	6,836.3	-2,222.7	1,098.0	2,479.2	0.00	0.00	
7,500.0	0.00	0.00	6,936.3	-2,222.7	1,098.0	2,479.2	0.00	0.00	
7,600.0	0.00	0.00	7,036.3	-2,222.7	1,098.0	2,479.2	0.00	0.00	
7,668.7	0.00	0.00	7,105.0	-2,222.7	1,098.0	2,479.2	0.00	0.00	TOP_GAS
7,700.0	0.00	0.00	7,136.3	-2,222.7	1,098.0	2,479.2	0.00	0.00	
7,800.0	0.00	0.00	7,236.3	-2,222.7	1,098.0	2,479.2	0.00	0.00	
7,900.0	0.00	0.00	7,336.3	-2,222.7	1,098.0	2,479.2	0.00	0.00	
8,000.0	0.00	0.00	7,436.3	-2,222.7	1,098.0	2,479.2	0.00	0.00	
8,100.0	0.00	0.00	7,536.3	-2,222.7	1,098.0	2,479.2	0.00	0.00	
8,200.0	0.00	0.00	7,636.3	-2,222.7	1,098.0	2,479.2	0.00	0.00	
8,300.0	0.00	0.00	7,736.3	-2,222.7	1,098.0	2,479.2	0.00	0.00	
8,400.0	0.00	0.00	7,836.3	-2,222.7	1,098.0	2,479.2	0.00	0.00	
8,500.0	0.00	0.00	7,936.3	-2,222.7	1,098.0	2,479.2	0.00	0.00	
8,600.0	0.00	0.00	8,036.3	-2,222.7	1,098.0	2,479.2	0.00	0.00	
8,700.0	0.00	0.00	8,136.3	-2,222.7	1,098.0	2,479.2	0.00	0.00	
8,800.0	0.00	0.00	8,236.3	-2,222.7	1,098.0	2,479.2	0.00	0.00	
8,900.0	0.00	0.00	8,336.3	-2,222.7	1,098.0	2,479.2	0.00	0.00	
9,000.0	0.00	0.00	8,436.3	-2,222.7	1,098.0	2,479.2	0.00	0.00	
9,100.0	0.00	0.00	8,536.3	-2,222.7	1,098.0	2,479.2	0.00	0.00	
9,145.7	0.00	0.00	8,582.0	-2,222.7	1,098.0	2,479.2	0.00	0.00	CAMEO
9,200.0	0.00	0.00	8,636.3	-2,222.7	1,098.0	2,479.2	0.00	0.00	
9,300.0	0.00	0.00	8,736.3	-2,222.7	1,098.0	2,479.2	0.00	0.00	
9,400.0	0.00	0.00	8,836.3	-2,222.7	1,098.0	2,479.2	0.00	0.00	
9,415.7	0.00	0.00	8,852.0	-2,222.7	1,098.0	2,479.2	0.00	0.00	ROLLINS

Planning Report

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Site:	S25-T6S-R97W (E25)	North Reference:	True
Well:	PUCKETT 24B-25	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #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 (°/100u)	Comments / Formations
9,500.0	0.00	0.00	8,936.3	-2,222.7	1,098.0	2,479.2	0.00	0.00	
9,565.7	0.00	0.00	9,002.0	-2,222.7	1,098.0	2,479.2	0.00	0.00	TD at 9565.7 - TD

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
PUCKETT 24B-25 PBHL			0.00	0.00	9,002.0	-2,222.7	1,098.0	14,352,540.00	2,438,464.30	39.489076	-108.171613
- plan hits target center											
- Circle (radius 50.0)											

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
6,516.7	5,953.0	OHIO_CREEK				
6,790.7	6,227.0	WILLIAMS_FORK				
7,668.7	7,105.0	TOP_GAS				
9,145.7	8,582.0	CAMEO				
9,415.7	8,852.0	ROLLINS				
9,565.7	9,002.0	TD				

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Comment	
300.0	300.0	0.0	0.0	Start Build 3.00	
633.3	631.6	-27.6	9.0	Start DLS 3.00 TFO -13.20	
1,210.2	1,176.6	-194.2	83.8	Start 4511.5 hold at 1210.2 MD	
5,721.8	5,191.5	-2,034.7	1,004.0	Start Drop -3.00	
6,626.3	6,062.6	-2,222.7	1,098.0	Start 2939.4 hold at 6626.3 MD	
9,565.7	9,002.0	-2,222.7	1,098.0	TD at 9565.7	