

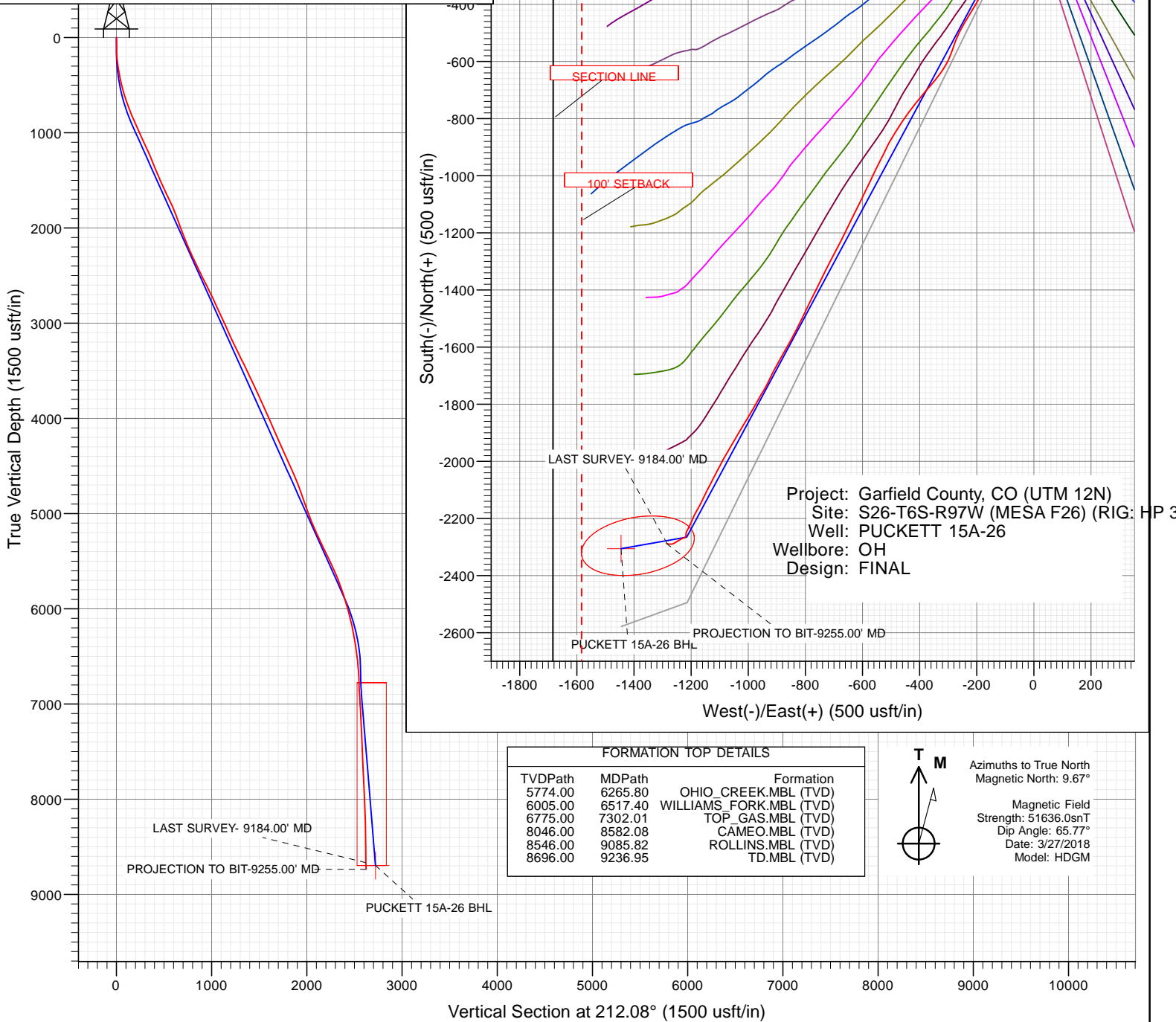


SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	140.00	0.00	0.00	140.00	0.00	0.00	0.00	0.00	0.00	
3	947.18	24.22	208.21	923.36	-148.09	-79.44	3.00	208.21	167.67	
4	6394.79	24.22	208.21	5891.64	-2117.09	-1135.71	0.00	0.00	2397.01	
5	7201.97	0.00	0.00	6675.00	-2265.18	-1215.15	3.00	180.00	2564.67	
6	7435.03	6.99	260.00	6907.48	-2267.65	-1229.14	3.00	260.00	2574.19	
7	9236.95	6.99	260.00	8696.00	-2305.73	-1445.15	0.00	0.00	2721.18	PUCKETT 15A-26 BHL

FINAL
PUCKETT 15A-26
XXX16; LR
30' KB @ 8322.00ft
Ground Level @ 8322.00
NAD 1927 - Western US
Well PUCKETT 15A-26, True North

Type	Target	Azimuth	Origin Type	N/S	E/W	From TVD
User	No Target (Freehand)	212.08	Spot	0.00	0.00	0.00
Name	PUCKETT 15A-26 BHL	TVD	+N/-S	+E/-W	Latitude	Longitude
		8696.00	-2305.73	-1445.15	39.488614	-108.192599



WELL DETAILS: PUCKETT 15A-26

+N/-S	+E/-W	Northing	Ground Level:	8322.00	Latitude	Longitude
0.00	0.00	14354512.70	Easting	2433169.20	39.494943	-108.190140



Cathedral Energy Services

Survey Report

Company:	Caerus Oil & Gas	Local Co-ordinate Reference:	Well PUCKETT 15A-26
Project:	Garfield County, CO (UTM 12N)	TVD Reference:	30' KB @ 8352.00usft
Site:	S26-T6S-R97W (MESA F26) (RIG: HP 330)	MD Reference:	30' KB @ 8352.00usft
Well:	PUCKETT 15A-26	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	FINAL	Database:	USA EDM 5000 Multi Users DB

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		S26-T6S-R97W (MESA F26) (RIG: HP 330), Gravity = 0.9975g			
Site Position:		Northing:	14,354,512.70 usft	Latitude:	39.494943
From:	Map	Easting:	2,433,169.20 usft	Longitude:	-108.190140
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16"	Grid Convergence:	1.79 °

Well	PUCKETT 15A-26					
Well Position	+N/-S	0.00 usft	Northing:	14,354,512.70 usft	Latitude:	39.494943
	+E/-W	0.00 usft	Easting:	2,433,169.20 usft	Longitude:	-108.190140
Position Uncertainty		0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level:	8,322.00 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	3/27/2018	9.67	65.77	51,636.00000000

Design	FINAL				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.00	0.00	0.00	212.08	

Survey Program	Date	4/5/2018			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
142.00	2,451.00	Survey #1 (OH)	INC+TREND	Inclinometer + known azi trend	
2,621.00	9,255.00	Survey #2 (OH)	MWD+HDGM	OWSG MWD + HDGM	

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usf)	Build Rate (°/100u)	Formations / Comments
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
142.00	1.67	201.62	141.98	-1.92	-0.76	2.03	1.18	1.18	
171.00	2.81	215.42	170.96	-2.90	-1.33	3.16	4.32	3.93	
202.00	3.96	211.99	201.90	-4.42	-2.34	4.99	3.77	3.71	
232.00	5.49	212.79	231.80	-6.51	-3.66	7.46	5.10	5.10	
292.00	7.95	214.19	291.38	-12.35	-7.55	14.48	4.11	4.10	
383.00	10.99	208.22	381.13	-25.21	-15.19	29.42	3.51	3.34	
473.00	13.62	204.44	469.06	-42.42	-23.63	48.49	3.05	2.92	
563.00	15.65	202.68	556.14	-63.27	-32.70	70.97	2.31	2.26	
657.00	17.89	205.23	646.13	-88.03	-43.74	97.82	2.51	2.38	
752.00	20.57	205.23	735.83	-116.33	-57.08	128.88	2.82	2.82	
846.00	22.81	205.75	823.16	-147.68	-72.04	163.39	2.39	2.38	

Cathedral Energy Services

Survey Report

Company:	Caerus Oil & Gas	Local Co-ordinate Reference:	Well PUCKETT 15A-26
Project:	Garfield County, CO (UTM 12N)	TVD Reference:	30' KB @ 8352.00usft
Site:	S26-T6S-R97W (MESA F26) (RIG: HP 330)	MD Reference:	30' KB @ 8352.00usft
Well:	PUCKETT 15A-26	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	FINAL	Database:	USA EDM 5000 Multi Users DB

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usf)	Build Rate (°/100u)	Formations / Comments
940.00	23.69	208.13	909.53	-180.75	-88.86	200.34	1.37	0.94	
1,035.00	24.96	208.65	996.10	-215.17	-107.46	239.39	1.36	1.34	
1,129.00	25.58	205.93	1,081.10	-250.83	-125.85	279.37	1.40	0.66	
1,223.00	24.57	205.67	1,166.24	-286.69	-143.19	318.97	1.08	-1.07	
1,318.00	23.16	206.63	1,253.12	-321.20	-160.12	357.19	1.54	-1.48	
1,412.00	22.19	208.83	1,339.85	-353.27	-176.96	393.32	1.37	-1.03	
1,506.00	22.24	209.89	1,426.88	-384.25	-194.39	428.82	0.43	0.05	
1,601.00	24.04	210.85	1,514.23	-416.45	-213.27	466.13	1.94	1.89	
1,695.00	25.53	211.91	1,599.57	-450.08	-233.80	505.53	1.65	1.59	
1,789.00	26.15	208.30	1,684.18	-485.52	-254.33	546.46	1.80	0.66	
1,883.00	23.82	201.27	1,769.39	-521.46	-271.04	585.79	4.01	-2.48	
1,978.00	21.49	199.16	1,857.06	-555.78	-283.71	621.60	2.60	-2.45	
2,073.00	20.08	202.94	1,945.88	-587.24	-295.78	654.66	2.05	-1.48	
2,167.00	20.52	210.94	2,034.06	-616.23	-310.54	687.07	2.99	0.47	
2,261.00	21.97	216.83	2,121.68	-644.44	-329.56	721.07	2.74	1.54	
2,356.00	23.77	219.82	2,209.21	-673.38	-352.47	757.76	2.25	1.89	
2,451.00	25.40	220.70	2,295.59	-703.53	-378.02	796.88	1.76	1.72	
2,621.00	25.93	217.80	2,448.83	-760.54	-424.58	869.91	0.80	0.31	
2,715.00	25.97	215.25	2,533.35	-793.59	-449.06	910.91	1.19	0.04	
2,810.00	26.81	212.26	2,618.45	-828.70	-472.50	953.11	1.65	0.88	
2,904.00	26.06	211.38	2,702.63	-864.25	-494.56	994.95	0.90	-0.80	
2,998.00	25.01	206.28	2,787.45	-899.70	-514.12	1,035.37	2.59	-1.12	
3,092.00	25.18	206.63	2,872.58	-935.39	-531.88	1,075.05	0.24	0.18	
3,187.00	24.65	206.81	2,958.74	-971.14	-549.87	1,114.89	0.56	-0.56	
3,281.00	23.91	204.52	3,044.42	-1,005.97	-566.62	1,153.30	1.27	-0.79	
3,376.00	24.74	206.37	3,130.99	-1,041.29	-583.44	1,192.16	1.19	0.87	
3,470.00	26.02	205.23	3,215.92	-1,077.57	-600.97	1,232.21	1.46	1.36	
3,565.00	26.54	207.42	3,301.10	-1,115.26	-619.62	1,274.05	1.16	0.55	
3,659.00	26.72	205.67	3,385.13	-1,152.95	-638.45	1,315.98	0.86	0.19	
3,754.00	25.62	206.90	3,470.39	-1,190.52	-656.99	1,357.67	1.29	-1.16	
3,848.00	25.23	205.75	3,555.29	-1,226.69	-674.89	1,397.82	0.67	-0.41	
3,943.00	25.49	208.04	3,641.13	-1,262.97	-693.30	1,438.33	1.07	0.27	
4,037.00	25.01	207.25	3,726.15	-1,298.48	-711.90	1,478.31	0.62	-0.51	
4,132.00	24.61	207.25	3,812.39	-1,333.92	-730.16	1,518.03	0.42	-0.42	
4,226.00	24.04	205.49	3,898.04	-1,368.61	-747.36	1,556.55	0.98	-0.61	
4,320.00	24.21	207.25	3,983.83	-1,403.03	-764.42	1,594.78	0.79	0.18	
4,415.00	23.47	205.40	4,070.73	-1,437.43	-781.46	1,632.98	1.11	-0.78	
4,510.00	23.73	205.40	4,157.78	-1,471.79	-797.77	1,670.76	0.27	0.27	
4,604.00	24.17	207.16	4,243.69	-1,506.00	-814.67	1,708.72	0.89	0.47	
4,698.00	24.70	206.72	4,329.27	-1,540.66	-832.28	1,747.44	0.60	0.56	
4,793.00	23.95	208.57	4,415.84	-1,575.33	-850.43	1,786.45	1.13	-0.79	
4,887.00	24.52	209.89	4,501.55	-1,608.99	-869.27	1,824.99	0.84	0.61	
4,982.00	23.34	209.09	4,588.38	-1,642.53	-888.25	1,863.48	1.29	-1.24	
5,076.00	21.84	208.39	4,675.17	-1,674.19	-905.62	1,899.53	1.62	-1.60	
5,171.00	19.42	205.32	4,764.07	-1,704.01	-920.78	1,932.85	2.79	-2.55	
5,265.00	19.42	208.65	4,852.73	-1,731.85	-934.95	1,963.97	1.18	0.00	
5,360.00	19.73	209.97	4,942.24	-1,759.61	-950.53	1,995.76	0.57	0.33	
5,454.00	20.92	209.27	5,030.38	-1,787.99	-966.67	2,028.38	1.29	1.27	
5,548.00	22.68	210.24	5,117.66	-1,818.29	-984.00	2,063.25	1.91	1.87	
5,643.00	24.26	211.38	5,204.80	-1,850.78	-1,003.39	2,101.08	1.73	1.66	
5,737.00	25.75	211.29	5,289.98	-1,884.71	-1,024.05	2,140.81	1.59	1.59	
5,831.00	25.80	209.09	5,374.63	-1,920.04	-1,044.60	2,181.65	1.02	0.05	
5,926.00	26.10	211.20	5,460.06	-1,955.98	-1,065.48	2,223.19	1.02	0.32	

Cathedral Energy Services

Survey Report

Company:	Caerus Oil & Gas	Local Co-ordinate Reference:	Well PUCKETT 15A-26
Project:	Garfield County, CO (UTM 12N)	TVD Reference:	30' KB @ 8352.00usft
Site:	S26-T6S-R97W (MESA F26) (RIG: HP 330)	MD Reference:	30' KB @ 8352.00usft
Well:	PUCKETT 15A-26	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	FINAL	Database:	USA EDM 5000 Multi Users DB

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usf)	Build Rate (°/100u)	Formations / Comments
6,020.00	24.61	208.74	5,545.00	-1,990.83	-1,085.60	2,263.41	1.94	-1.59	
6,115.00	23.16	208.04	5,631.87	-2,024.67	-1,103.90	2,301.80	1.56	-1.53	
6,209.00	20.83	206.90	5,719.02	-2,055.89	-1,120.15	2,336.89	2.52	-2.48	
6,303.00	19.12	207.69	5,807.36	-2,084.43	-1,134.87	2,368.88	1.84	-1.82	
6,398.00	17.36	206.02	5,897.58	-2,110.94	-1,148.31	2,398.49	1.93	-1.85	
6,492.00	15.91	205.93	5,987.65	-2,135.13	-1,160.10	2,425.25	1.54	-1.54	
6,587.00	14.63	208.30	6,079.29	-2,157.41	-1,171.48	2,450.17	1.50	-1.35	
6,681.00	12.13	209.53	6,170.73	-2,176.46	-1,181.98	2,471.88	2.68	-2.66	
6,775.00	10.55	204.00	6,262.90	-2,192.91	-1,190.35	2,490.27	2.04	-1.68	
6,870.00	9.19	204.96	6,356.49	-2,207.74	-1,197.09	2,506.41	1.44	-1.43	
6,965.00	7.52	204.88	6,450.48	-2,220.26	-1,202.90	2,520.10	1.76	-1.76	
7,059.00	6.64	204.61	6,543.76	-2,230.78	-1,207.76	2,531.60	0.94	-0.94	
7,153.00	4.26	210.94	6,637.33	-2,238.71	-1,211.81	2,540.48	2.61	-2.53	
7,247.00	2.51	204.70	6,731.16	-2,243.58	-1,214.47	2,546.01	1.90	-1.86	
7,342.00	2.11	206.46	6,826.09	-2,247.03	-1,216.12	2,549.81	0.43	-0.42	
7,436.00	3.69	189.76	6,919.96	-2,251.56	-1,217.40	2,554.33	1.89	1.68	
7,530.00	4.35	178.16	7,013.73	-2,258.11	-1,217.80	2,560.09	1.11	0.70	
7,624.00	2.59	210.94	7,107.57	-2,263.49	-1,218.78	2,565.17	2.75	-1.87	
7,718.00	3.25	240.65	7,201.45	-2,266.62	-1,222.19	2,569.64	1.73	0.70	
7,813.00	2.73	252.34	7,296.32	-2,268.63	-1,226.70	2,573.73	0.84	-0.55	
7,907.00	3.25	245.66	7,390.19	-2,270.41	-1,231.26	2,577.66	0.67	0.55	
8,190.00	2.86	237.48	7,672.79	-2,277.51	-1,244.52	2,590.72	0.21	-0.14	
8,471.00	3.12	237.66	7,953.41	-2,285.37	-1,256.89	2,603.95	0.09	0.09	
8,753.00	2.20	267.54	8,235.11	-2,289.70	-1,268.78	2,613.94	0.58	-0.33	
9,034.00	1.89	279.49	8,515.94	-2,289.17	-1,278.74	2,618.78	0.19	-0.11	
9,184.00	2.15	285.82	8,665.84	-2,288.00	-1,283.89	2,620.51	0.23	0.17	LAST SURVEY- 9184.00' MD
9,255.00	2.15	285.82	8,736.79	-2,287.27	-1,286.45	2,621.26	0.00	0.00	PROJECTION TO BIT-9255.00' MD

Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
PUCKETT 15A-26 BHL	0.00	0.00	8,696.00	-2,305.73	-1,445.15	14,352,163.00	2,431,796.70	39.488614	-108.195259
- hit/miss target									
- Shape									
- actual wellpath misses target center by 161.09usft at 9219.78usft MD (8701.59 TVD, -2287.63 N, -1285.18 E)									
- Ellipse (radii L200.00 W100.00 on 260.00 azi)									

Design Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
9,184.00	8,665.84	-2,288.00	-1,283.89	LAST SURVEY- 9184.00' MD	
9,255.00	8,736.79	-2,287.27	-1,286.45	PROJECTION TO BIT-9255.00' MD	

Checked By: _____ Approved By: _____ Date: _____