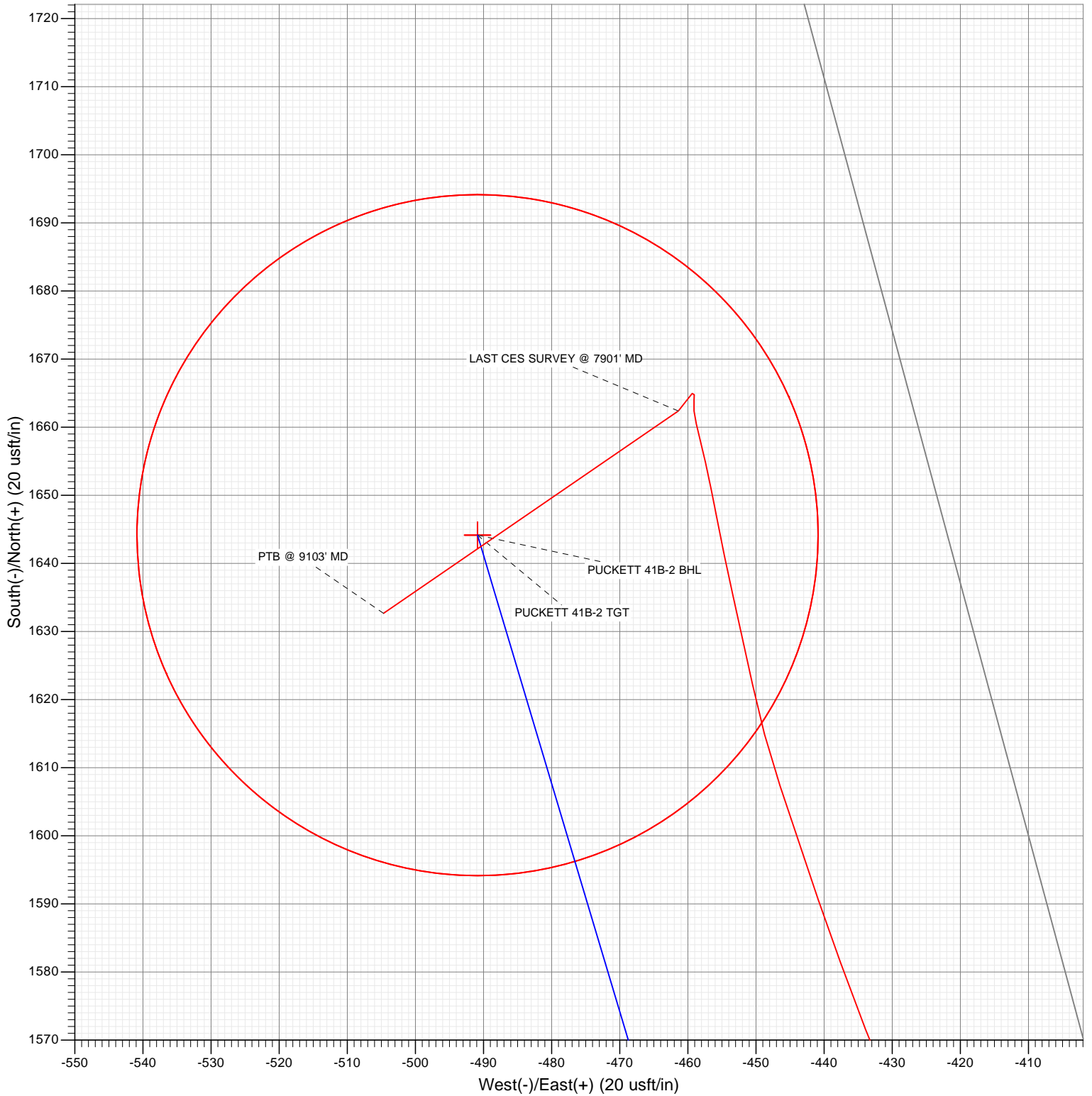




SECTION DETAILS

No plan data is available



WELL DETAILS: PUCKETT 41B-2

+N/-S	+E/-W	Northing	Ground Level:	8477.0	Latitude	Longitude
0.0	0.0	609351.85	Easting	1243668.06	39.475853	-108.179675



Survey Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 41B-2
Project:	Garfield County, CO	TVD Reference:	30' KB @ 8507.0usft (H&P 330)
Site:	S2-T7S-R97W (Mesa H2)	MD Reference:	30' KB @ 8507.0usft (H&P 330)
Well:	PUCKETT 41B-2	North Reference:	True
Wellbore:	DD	Survey Calculation Method:	Minimum Curvature
Design:	FINAL	Database:	USA EDM 5000 Multi Users DB

Project	Garfield County, CO		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	Colorado Central 502		

Site		S2-T7S-R97W (Mesa H2)			
Site Position:		Northing:	609,295.74 usft	Latitude:	39.475700
From:	Lat/Long	Easting:	1,243,680.53 usft	Longitude:	-108.179625
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	-1.69 °

Well	PUCKETT 41B-2					
Well Position	+N/-S	0.0 usft	Northing:	609,351.85 usft	Latitude:	39.475853
	+E/-W	0.0 usft	Easting:	1,243,668.06 usft	Longitude:	-108.179675
Position Uncertainty		0.0 usft	Wellhead Elevation:	0.0 usft	Ground Level:	8,477.0 usft

Wellbore	DD				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	5/20/2015	9.87	65.82	51,943

Design	FINAL				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.0	0.0	0.0	338.84	

Survey Program	Date	5/29/2015			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
183.0	9,103.0	Survey #1 (DD)	ISCWSA MWD	MWD - Standard	

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	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00		
183.0	2.70	323.00	182.9	3.4	-2.6	4.1	1.48	1.48		
276.0	7.30	342.90	275.6	10.8	-5.7	12.2	5.21	4.95		
306.0	9.20	340.10	305.2	14.9	-7.0	16.5	6.47	6.33		
398.0	13.30	344.30	395.5	32.0	-12.4	34.3	4.54	4.46		
490.0	13.80	343.30	484.9	52.7	-18.4	55.8	0.60	0.54		
582.0	15.60	340.70	573.9	74.9	-25.7	79.1	2.08	1.96		
676.0	13.20	340.50	664.9	97.0	-33.4	102.5	2.55	-2.55		
771.0	12.00	339.80	757.6	116.5	-40.4	123.2	1.27	-1.26		
865.0	12.30	341.00	849.5	135.1	-47.1	143.0	0.42	0.32		
960.0	12.70	345.00	942.3	154.8	-53.1	163.5	1.00	0.42		
1,054.0	12.90	347.50	1,033.9	175.0	-58.0	184.1	0.63	0.21		
1,148.0	13.10	344.10	1,125.5	195.5	-63.2	205.1	0.84	0.21		

Survey Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 41B-2
Project:	Garfield County, CO	TVD Reference:	30' KB @ 8507.0usft (H&P 330)
Site:	S2-T7S-R97W (Mesa H2)	MD Reference:	30' KB @ 8507.0usft (H&P 330)
Well:	PUCKETT 41B-2	North Reference:	True
Wellbore:	DD	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
1,243.0	13.60	339.50	1,218.0	216.3	-70.1	227.0	1.24	0.53	
1,337.0	13.20	342.60	1,309.4	236.9	-77.2	248.8	0.87	-0.43	
1,432.0	13.50	348.40	1,401.9	258.1	-82.6	270.5	1.44	0.32	
1,526.0	13.50	346.50	1,493.3	279.5	-87.4	292.2	0.47	0.00	
1,621.0	15.00	342.80	1,585.3	302.0	-93.6	315.5	1.85	1.58	
1,715.0	15.00	347.40	1,676.1	325.5	-99.9	339.6	1.27	0.00	
1,810.0	15.80	347.70	1,767.7	350.2	-105.3	364.6	0.85	0.84	
1,904.0	15.40	341.20	1,858.3	374.5	-112.1	389.7	1.91	-0.43	
1,999.0	15.50	345.50	1,949.8	398.7	-119.3	414.9	1.21	0.11	
2,093.0	15.40	346.90	2,040.4	423.0	-125.3	439.7	0.41	-0.11	
2,188.0	16.70	344.50	2,131.7	448.5	-131.8	465.8	1.54	1.37	
2,282.0	14.90	344.40	2,222.2	473.1	-138.6	491.3	1.92	-1.91	
2,377.0	14.50	346.20	2,314.1	496.4	-144.8	515.2	0.64	-0.42	
2,465.0	14.50	346.00	2,399.3	517.8	-150.1	537.1	0.06	0.00	
2,606.0	13.90	343.30	2,536.0	551.2	-159.2	571.5	0.63	-0.43	
2,700.0	13.10	339.10	2,627.4	571.9	-166.2	593.4	1.35	-0.85	
2,795.0	13.80	339.40	2,719.8	592.6	-174.1	615.5	0.74	0.74	
2,891.0	13.60	338.00	2,813.0	613.8	-182.3	638.2	0.40	-0.21	
2,985.0	13.80	347.40	2,904.4	635.0	-188.9	660.4	2.38	0.21	
3,080.0	12.50	345.30	2,996.9	656.0	-194.0	681.8	1.46	-1.37	
3,174.0	13.40	352.20	3,088.5	676.6	-198.1	702.5	1.90	0.96	
3,269.0	12.00	348.70	3,181.2	697.2	-201.5	722.9	1.68	-1.47	
3,364.0	13.50	351.80	3,273.8	717.9	-205.0	743.5	1.73	1.58	
3,458.0	15.30	353.60	3,364.9	741.1	-207.9	766.2	1.97	1.91	
3,553.0	14.90	353.00	3,456.6	765.6	-210.8	790.1	0.45	-0.42	
3,647.0	15.80	343.80	3,547.2	789.9	-215.9	814.6	2.76	0.96	
3,742.0	16.10	342.20	3,638.6	814.9	-223.5	840.6	0.56	0.32	
3,837.0	15.60	342.40	3,730.0	839.6	-231.4	866.5	0.53	-0.53	
3,931.0	14.60	340.80	3,820.7	862.8	-239.1	891.0	1.15	-1.06	
4,026.0	15.90	341.60	3,912.4	886.5	-247.2	915.9	1.39	1.37	
4,120.0	15.30	342.10	4,002.9	910.5	-255.0	941.2	0.65	-0.64	
4,215.0	14.70	341.30	4,094.7	933.9	-262.8	965.7	0.67	-0.63	
4,309.0	14.30	340.70	4,185.7	956.1	-270.4	989.3	0.45	-0.43	
4,404.0	13.80	341.70	4,277.8	977.9	-277.9	1,012.3	0.59	-0.53	
4,498.0	13.00	340.70	4,369.3	998.6	-284.9	1,034.1	0.89	-0.85	
4,593.0	13.80	347.00	4,461.7	1,019.7	-290.9	1,056.0	1.75	0.84	
4,688.0	15.60	348.50	4,553.6	1,043.3	-296.0	1,079.8	1.94	1.89	
4,782.0	14.60	347.60	4,644.3	1,067.2	-301.1	1,103.9	1.09	-1.06	
4,877.0	14.30	347.90	4,736.3	1,090.4	-306.1	1,127.4	0.33	-0.32	
4,971.0	13.30	345.80	4,827.6	1,112.2	-311.2	1,149.6	1.19	-1.06	
5,066.0	14.30	345.70	4,919.9	1,134.2	-316.8	1,172.1	1.05	1.05	
5,160.0	13.50	345.30	5,011.1	1,156.0	-322.5	1,194.5	0.86	-0.85	
5,255.0	12.20	344.60	5,103.7	1,176.4	-327.9	1,215.5	1.38	-1.37	
5,349.0	14.60	347.40	5,195.2	1,197.6	-333.2	1,237.1	2.64	2.55	
5,444.0	14.60	346.10	5,287.1	1,220.9	-338.6	1,260.8	0.34	0.00	
5,538.0	13.50	345.00	5,378.3	1,243.0	-344.3	1,283.5	1.20	-1.17	
5,633.0	15.30	347.50	5,470.3	1,265.9	-349.9	1,306.9	2.00	1.89	
5,728.0	16.00	349.00	5,561.8	1,291.0	-355.1	1,332.2	0.85	0.74	
5,822.0	15.20	349.10	5,652.3	1,315.8	-359.9	1,357.1	0.85	-0.85	
5,917.0	14.20	350.00	5,744.2	1,339.6	-364.3	1,380.7	1.08	-1.05	
6,011.0	13.10	348.30	5,835.6	1,361.3	-368.5	1,402.6	1.25	-1.17	
6,106.0	14.60	354.60	5,927.8	1,383.8	-371.8	1,424.7	2.24	1.58	
6,200.0	16.80	351.30	6,018.3	1,409.0	-374.9	1,449.4	2.52	2.34	

Survey Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 41B-2
Project:	Garfield County, CO	TVD Reference:	30' KB @ 8507.0usft (H&P 330)
Site:	S2-T7S-R97W (Mesa H2)	MD Reference:	30' KB @ 8507.0usft (H&P 330)
Well:	PUCKETT 41B-2	North Reference:	True
Wellbore:	DD	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
6,295.0	16.90	342.60	6,109.2	1,435.8	-381.2	1,476.6	2.65	0.11	
6,389.0	15.90	340.70	6,199.4	1,461.0	-389.5	1,503.1	1.21	-1.06	
6,484.0	15.00	339.70	6,291.0	1,484.8	-398.1	1,528.4	0.99	-0.95	
6,578.0	14.70	337.50	6,381.8	1,507.2	-406.8	1,552.5	0.68	-0.32	
6,673.0	14.60	337.20	6,473.7	1,529.4	-416.1	1,576.5	0.13	-0.11	
6,767.0	14.40	336.30	6,564.7	1,551.0	-425.4	1,600.0	0.32	-0.21	
6,861.0	13.10	338.90	6,656.0	1,571.7	-433.9	1,622.3	1.53	-1.38	
6,956.0	11.60	341.10	6,748.8	1,590.7	-440.9	1,642.6	1.65	-1.58	
7,051.0	9.70	341.90	6,842.2	1,607.4	-446.5	1,660.2	2.01	-2.00	
7,146.0	9.00	347.90	6,935.9	1,622.3	-450.5	1,675.5	1.26	-0.74	
7,240.0	7.40	347.40	7,029.0	1,635.3	-453.4	1,688.7	1.70	-1.70	
7,334.0	6.10	349.30	7,122.3	1,646.2	-455.6	1,699.6	1.40	-1.38	
7,429.0	4.60	347.10	7,216.9	1,654.8	-457.4	1,708.4	1.59	-1.58	
7,523.0	2.50	346.20	7,310.7	1,660.5	-458.7	1,714.1	2.23	-2.23	
7,618.0	1.80	5.70	7,405.7	1,664.0	-459.1	1,717.5	1.06	-0.74	
7,713.0	0.80	217.20	7,500.6	1,665.0	-459.3	1,718.5	2.65	-1.05	
7,807.0	1.00	220.40	7,594.6	1,663.8	-460.3	1,717.8	0.22	0.21	
7,901.0	1.20	215.80	7,688.6	1,662.4	-461.4	1,716.9	0.23	0.21	LAST CES SURVEY @ 7901' MD
9,103.0	3.90	241.50	8,889.3	1,632.7	-504.7	1,704.8	0.24	0.22	PTB @ 9103' MD

Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
PUCKETT 41B-2 BHL	0.00	0.00	8,919.0	1,644.2	-490.9	611,009.77	1,243,225.90	39.480367	-108.181414
- hit/miss target									
- Shape									
- actual wellpath misses target center by 34.7usft at 9103.0usft MD (8889.3 TVD, 1632.7 N, -504.7 E)									
- Circle (radius 50.0)									
PUCKETT 41B-2 TGT	0.00	0.00	7,369.0	1,644.2	-490.9	611,009.77	1,243,225.90	39.480367	-108.181414
- actual wellpath misses target center by 36.8usft at 7580.8usft MD (7368.4 TVD, 1662.8 N, -459.1 E)									
- Point									

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Comment
7,901.0	7,688.6	1,662.4	-461.4	LAST CES SURVEY @ 7901' MD
9,103.0	8,889.3	1,632.7	-504.7	PTB @ 9103' MD

Checked By: _____ Approved By: _____ Date: _____