



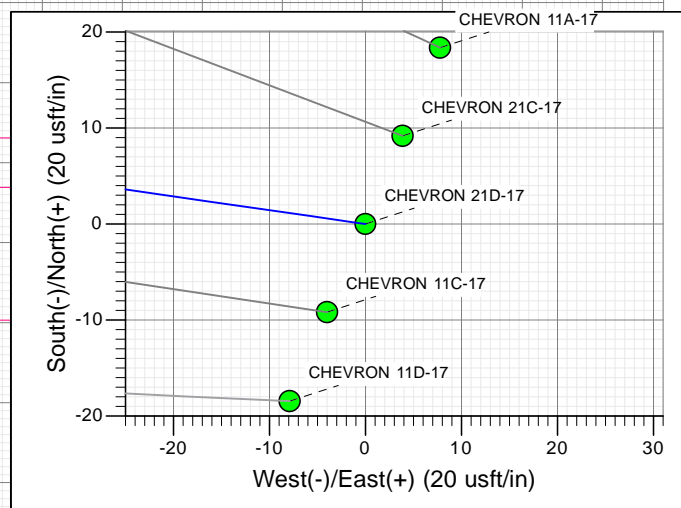
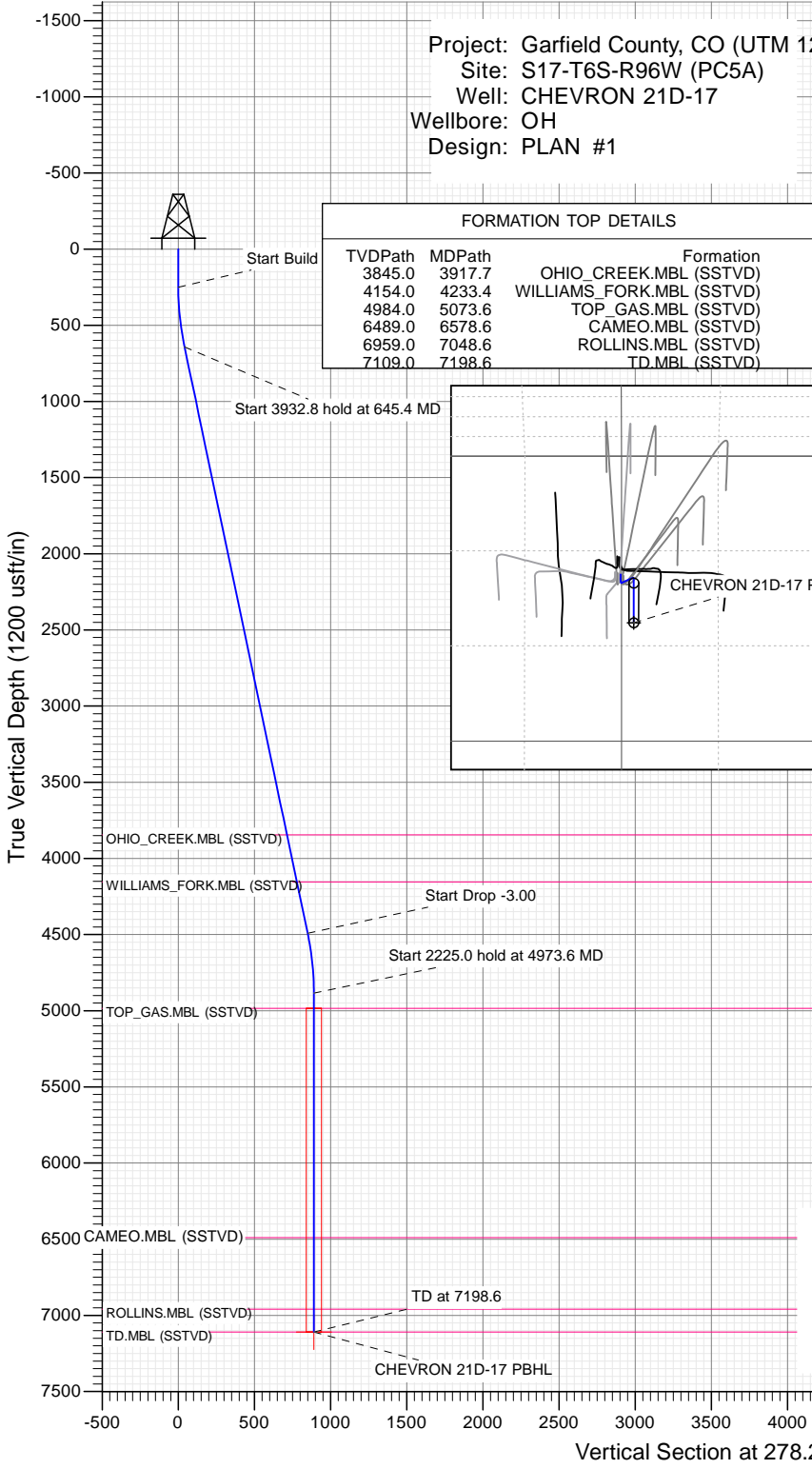
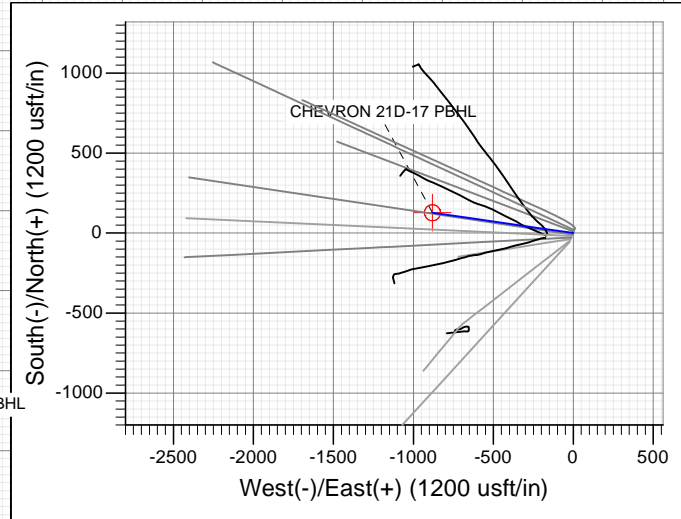
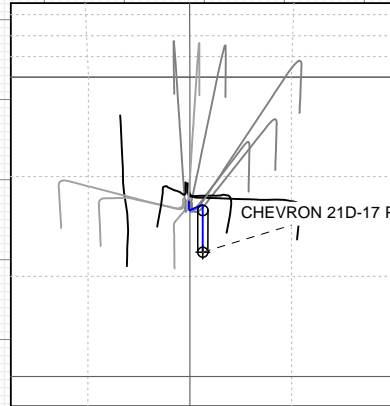
SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	250.0	0.00	0.00	250.0	0.0	0.0	0.00	0.00	0.0	
3	645.4	11.86	278.22	642.6	5.8	-40.4	3.00	278.22	40.8	
4	4578.2	11.86	278.22	4491.4	121.4	-840.5	0.00	0.00	849.2	
5	4973.6	0.00	0.00	4884.0	127.3	-880.9	3.00	180.00	890.0	
6	7198.6	0.00	0.00	7109.0	127.3	-880.9	0.00	0.00	890.0	CHEVRON 21D-17 PBHL

Project: Garfield County, CO (UTM 12
 Site: S17-T6S-R96W (PC5A)
 Well: CHEVRON 21D-17
 Wellbore: OH
 Design: PLAN #1

Name	Type	TD	Target	No Target (Freehand)	Azimuth	Origin	Type	N/S	E/W	From	TVD	+N/-S	+E/-W	Latitude	Longitude
CHEVRON 21D-17 PBHL					278.22	Slot		0.0	0.0	0.0	7109.0	127.3	-880.9	39.528617	-108.132121

FORMATION TOP DETAILS			
TVDPath	MDPath	Formation	
3845.0	3917.7	OHIO_CREEK.MBL (SSTVD)	
4154.0	4233.4	WILLIAMS_FORK.MBL (SSTVD)	
4984.0	5073.6	TOP_GAS.MBL (SSTVD)	
6489.0	6578.6	CAMEO.MBL (SSTVD)	
6959.0	7048.6	ROLLINS.MBL (SSTVD)	
7109.0	7198.6	TD.MBL (SSTVD)	



T M
 Azimuths to True North
 Magnetic North: 9.82°
 Magnetic Field
 Strength: 51888.8snT
 Dip Angle: 65.93°
 Date: 11/10/2015
 Model: HDGM

CASING DETAILS
 No casing data is available



WELL DETAILS: CHEVRON 21D-17

Ground Level: 5583.0
 +N/-S 0.0 +E/-W 0.0 Northing 14367193.90 Easting 2450034.50 Latitude 39.528268 Longitude -108.128999



Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well CHEVRON 21D-17
Company:	Caerus Oil & Gas	TVD Reference:	30' KB @ 5613.0usft
Project:	Garfield County, CO (UTM 12N)	MD Reference:	30' KB @ 5613.0usft
Site:	S17-T6S-R96W (PC5A)	North Reference:	True
Well:	CHEVRON 21D-17	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 S17-T6S-R96W (PC5A)			
Site Position:		Northing:	14,367,212.50 usft
From:	Map	Easting:	2,450,041.70 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16"
		Latitude:	39.528318
		Longitude:	-108.128972
		Grid Convergence:	1.83 °

Well CHEVRON 21D-17			
Well Position	+N/-S	0.0 usft	Northing:
	+E/-W	0.0 usft	Easting:
Position Uncertainty		0.0 usft	Wellhead Elevation:
			0.0 usft
			Latitude:
			39.528268
			Longitude:
			-108.128999
			Ground Level:
			5,583.0 usft

Wellbore OH					
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
			(°)	(°)	(nT)
	HDGM	11/10/2015	9.82	65.93	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	278.22

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	
250.0	0.00	0.00	250.0	0.0	0.0	0.00	0.00	0.00	0.00	
645.4	11.86	278.22	642.6	5.8	-40.4	3.00	3.00	0.00	278.22	
4,578.2	11.86	278.22	4,491.4	121.4	-840.5	0.00	0.00	0.00	0.00	
4,973.6	0.00	0.00	4,884.0	127.3	-880.9	3.00	-3.00	0.00	180.00	
7,198.6	0.00	0.00	7,109.0	127.3	-880.9	0.00	0.00	0.00	0.00	CHEVRON 21D-17 P

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well CHEVRON 21D-17
Company:	Caerus Oil & Gas	TVD Reference:	30' KB @ 5613.0usft
Project:	Garfield County, CO (UTM 12N)	MD Reference:	30' KB @ 5613.0usft
Site:	S17-T6S-R96W (PC5A)	North Reference:	True
Well:	CHEVRON 21D-17	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	
250.0	0.00	0.00	250.0	0.0	0.0	0.0	0.00	0.00	Start Build 3.00
300.0	1.50	278.22	300.0	0.1	-0.6	0.7	3.00	3.00	
400.0	4.50	278.22	399.8	0.8	-5.8	5.9	3.00	3.00	
500.0	7.50	278.22	499.3	2.3	-16.2	16.3	3.00	3.00	
600.0	10.50	278.22	598.0	4.6	-31.7	32.0	3.00	3.00	
645.4	11.86	278.22	642.6	5.8	-40.4	40.8	3.00	3.00	Start 3932.8 hold at 645.4 MD
700.0	11.86	278.22	696.0	7.4	-51.5	52.0	0.00	0.00	
800.0	11.86	278.22	793.9	10.4	-71.8	72.6	0.00	0.00	
900.0	11.86	278.22	891.7	13.3	-92.2	93.1	0.00	0.00	
1,000.0	11.86	278.22	989.6	16.3	-112.5	113.7	0.00	0.00	
1,100.0	11.86	278.22	1,087.5	19.2	-132.9	134.2	0.00	0.00	
1,200.0	11.86	278.22	1,185.3	22.1	-153.2	154.8	0.00	0.00	
1,300.0	11.86	278.22	1,283.2	25.1	-173.5	175.3	0.00	0.00	
1,400.0	11.86	278.22	1,381.1	28.0	-193.9	195.9	0.00	0.00	
1,500.0	11.86	278.22	1,478.9	31.0	-214.2	216.5	0.00	0.00	
1,600.0	11.86	278.22	1,576.8	33.9	-234.6	237.0	0.00	0.00	
1,700.0	11.86	278.22	1,674.7	36.8	-254.9	257.6	0.00	0.00	
1,800.0	11.86	278.22	1,772.5	39.8	-275.3	278.1	0.00	0.00	
1,900.0	11.86	278.22	1,870.4	42.7	-295.6	298.7	0.00	0.00	
2,000.0	11.86	278.22	1,968.3	45.7	-316.0	319.2	0.00	0.00	
2,100.0	11.86	278.22	2,066.1	48.6	-336.3	339.8	0.00	0.00	
2,200.0	11.86	278.22	2,164.0	51.5	-356.7	360.4	0.00	0.00	
2,300.0	11.86	278.22	2,261.8	54.5	-377.0	380.9	0.00	0.00	
2,400.0	11.86	278.22	2,359.7	57.4	-397.3	401.5	0.00	0.00	
2,500.0	11.86	278.22	2,457.6	60.3	-417.7	422.0	0.00	0.00	
2,600.0	11.86	278.22	2,555.4	63.3	-438.0	442.6	0.00	0.00	
2,700.0	11.86	278.22	2,653.3	66.2	-458.4	463.1	0.00	0.00	
2,800.0	11.86	278.22	2,751.2	69.2	-478.7	483.7	0.00	0.00	
2,900.0	11.86	278.22	2,849.0	72.1	-499.1	504.3	0.00	0.00	
3,000.0	11.86	278.22	2,946.9	75.0	-519.4	524.8	0.00	0.00	
3,100.0	11.86	278.22	3,044.8	78.0	-539.8	545.4	0.00	0.00	
3,200.0	11.86	278.22	3,142.6	80.9	-560.1	565.9	0.00	0.00	
3,300.0	11.86	278.22	3,240.5	83.9	-580.5	586.5	0.00	0.00	
3,400.0	11.86	278.22	3,338.4	86.8	-600.8	607.0	0.00	0.00	
3,500.0	11.86	278.22	3,436.2	89.7	-621.2	627.6	0.00	0.00	
3,600.0	11.86	278.22	3,534.1	92.7	-641.5	648.2	0.00	0.00	
3,700.0	11.86	278.22	3,631.9	95.6	-661.8	668.7	0.00	0.00	
3,800.0	11.86	278.22	3,729.8	98.6	-682.2	689.3	0.00	0.00	
3,900.0	11.86	278.22	3,827.7	101.5	-702.5	709.8	0.00	0.00	
3,917.7	11.86	278.22	3,845.0	102.0	-706.1	713.5	0.00	0.00	OHIO_CREEK.MBL (SSTVD)
4,000.0	11.86	278.22	3,925.5	104.4	-722.9	730.4	0.00	0.00	
4,100.0	11.86	278.22	4,023.4	107.4	-743.2	750.9	0.00	0.00	
4,200.0	11.86	278.22	4,121.3	110.3	-763.6	771.5	0.00	0.00	
4,233.4	11.86	278.22	4,154.0	111.3	-770.4	778.4	0.00	0.00	WILLIAMS_FORK.MBL (SSTVD)
4,300.0	11.86	278.22	4,219.1	113.3	-783.9	792.1	0.00	0.00	
4,400.0	11.86	278.22	4,317.0	116.2	-804.3	812.6	0.00	0.00	
4,500.0	11.86	278.22	4,414.9	119.1	-824.6	833.2	0.00	0.00	
4,578.2	11.86	278.22	4,491.4	121.4	-840.5	849.2	0.00	0.00	Start Drop -3.00
4,600.0	11.21	278.22	4,512.7	122.1	-844.8	853.6	3.00	-3.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well CHEVRON 21D-17
Company:	Caerus Oil & Gas	TVD Reference:	30' KB @ 5613.0usft
Project:	Garfield County, CO (UTM 12N)	MD Reference:	30' KB @ 5613.0usft
Site:	S17-T6S-R96W (PC5A)	North Reference:	True
Well:	CHEVRON 21D-17	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
4,700.0	8.21	278.22	4,611.3	124.5	-861.5	870.5	3.00	-3.00	
4,800.0	5.21	278.22	4,710.6	126.1	-873.1	882.1	3.00	-3.00	
4,900.0	2.21	278.22	4,810.4	127.1	-879.5	888.6	3.00	-3.00	
4,973.6	0.00	0.00	4,884.0	127.3	-880.9	890.0	3.00	-3.00	Start 2225.0 hold at 4973.6 MD
5,000.0	0.00	0.00	4,910.4	127.3	-880.9	890.0	0.00	0.00	
5,073.6	0.00	0.00	4,984.0	127.3	-880.9	890.0	0.00	0.00	TOP_GAS.MBL (SSTVD)
5,100.0	0.00	0.00	5,010.4	127.3	-880.9	890.0	0.00	0.00	
5,200.0	0.00	0.00	5,110.4	127.3	-880.9	890.0	0.00	0.00	
5,300.0	0.00	0.00	5,210.4	127.3	-880.9	890.0	0.00	0.00	
5,400.0	0.00	0.00	5,310.4	127.3	-880.9	890.0	0.00	0.00	
5,500.0	0.00	0.00	5,410.4	127.3	-880.9	890.0	0.00	0.00	
5,600.0	0.00	0.00	5,510.4	127.3	-880.9	890.0	0.00	0.00	
5,700.0	0.00	0.00	5,610.4	127.3	-880.9	890.0	0.00	0.00	
5,800.0	0.00	0.00	5,710.4	127.3	-880.9	890.0	0.00	0.00	
5,900.0	0.00	0.00	5,810.4	127.3	-880.9	890.0	0.00	0.00	
6,000.0	0.00	0.00	5,910.4	127.3	-880.9	890.0	0.00	0.00	
6,100.0	0.00	0.00	6,010.4	127.3	-880.9	890.0	0.00	0.00	
6,200.0	0.00	0.00	6,110.4	127.3	-880.9	890.0	0.00	0.00	
6,300.0	0.00	0.00	6,210.4	127.3	-880.9	890.0	0.00	0.00	
6,400.0	0.00	0.00	6,310.4	127.3	-880.9	890.0	0.00	0.00	
6,500.0	0.00	0.00	6,410.4	127.3	-880.9	890.0	0.00	0.00	
6,578.6	0.00	0.00	6,489.0	127.3	-880.9	890.0	0.00	0.00	CAMEO.MBL (SSTVD)
6,600.0	0.00	0.00	6,510.4	127.3	-880.9	890.0	0.00	0.00	
6,700.0	0.00	0.00	6,610.4	127.3	-880.9	890.0	0.00	0.00	
6,800.0	0.00	0.00	6,710.4	127.3	-880.9	890.0	0.00	0.00	
6,900.0	0.00	0.00	6,810.4	127.3	-880.9	890.0	0.00	0.00	
7,000.0	0.00	0.00	6,910.4	127.3	-880.9	890.0	0.00	0.00	
7,048.6	0.00	0.00	6,959.0	127.3	-880.9	890.0	0.00	0.00	ROLLINS.MBL (SSTVD)
7,100.0	0.00	0.00	7,010.4	127.3	-880.9	890.0	0.00	0.00	
7,198.6	0.00	0.00	7,109.0	127.3	-880.9	890.0	0.00	0.00	TD at 7198.6 - TD.MBL (SSTVD)

Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
CHEVRON 21D-17 PBH - hit/miss target - Shape - Circle (radius 50.0)	0.00	0.00	7,109.0	127.3	-880.9	14,367,293.00	2,449,150.00	39.528617	-108.132121

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well CHEVRON 21D-17
Company:	Caerus Oil & Gas	TVD Reference:	30' KB @ 5613.0usft
Project:	Garfield County, CO (UTM 12N)	MD Reference:	30' KB @ 5613.0usft
Site:	S17-T6S-R96W (PC5A)	North Reference:	True
Well:	CHEVRON 21D-17	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1		

Formations					
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,917.7	3,845.0	OHIO_CREEK.MBL (SSTVD)		0.00	
4,233.4	4,154.0	WILLIAMS_FORK.MBL (SSTVD)		0.00	
5,073.6	4,984.0	TOP_GAS.MBL (SSTVD)		0.00	
6,578.6	6,489.0	CAMEO.MBL (SSTVD)		0.00	
7,048.6	6,959.0	ROLLINS.MBL (SSTVD)		0.00	
7,198.6	7,109.0	TD.MBL (SSTVD)		0.00	

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment	
		+N/-S (usft)	+E/-W (usft)		
250.0	250.0	0.0	0.0	Start Build 3.00	
645.4	642.6	5.8	-40.4	Start 3932.8 hold at 645.4 MD	
4,578.2	4,491.4	121.4	-840.5	Start Drop -3.00	
4,973.6	4,884.0	127.3	-880.9	Start 2225.0 hold at 4973.6 MD	
7,198.6	7,109.0	127.3	-880.9	TD at 7198.6	