



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	200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.0	
3	932.0	21.96	222.41	914.2	-102.3	-93.5	3.00	222.41	138.6	
4	4497.3	21.96	222.41	4220.8	-1086.6	-992.7	0.00	0.00	1471.8	
5	5229.3	0.00	0.00	4935.0	-1189.0	-1086.2	3.00	180.00	1610.4	
6	7355.3	0.00	0.00	7061.0	-1189.0	-1086.2	0.00	0.00	1610.4	CHEVRON 22E-17 PBHL

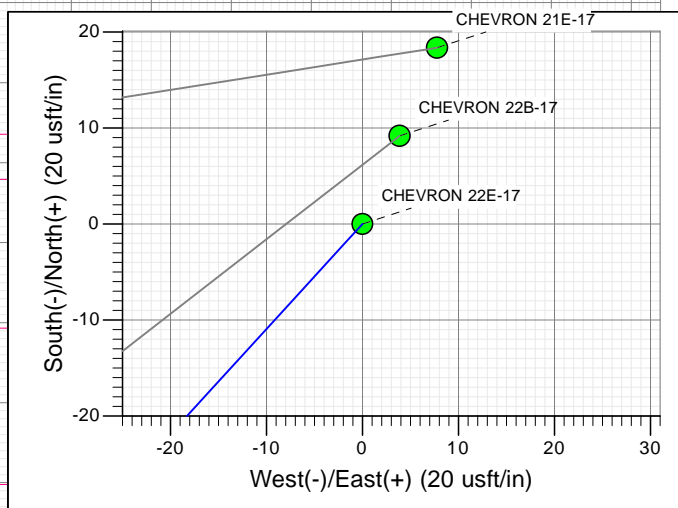
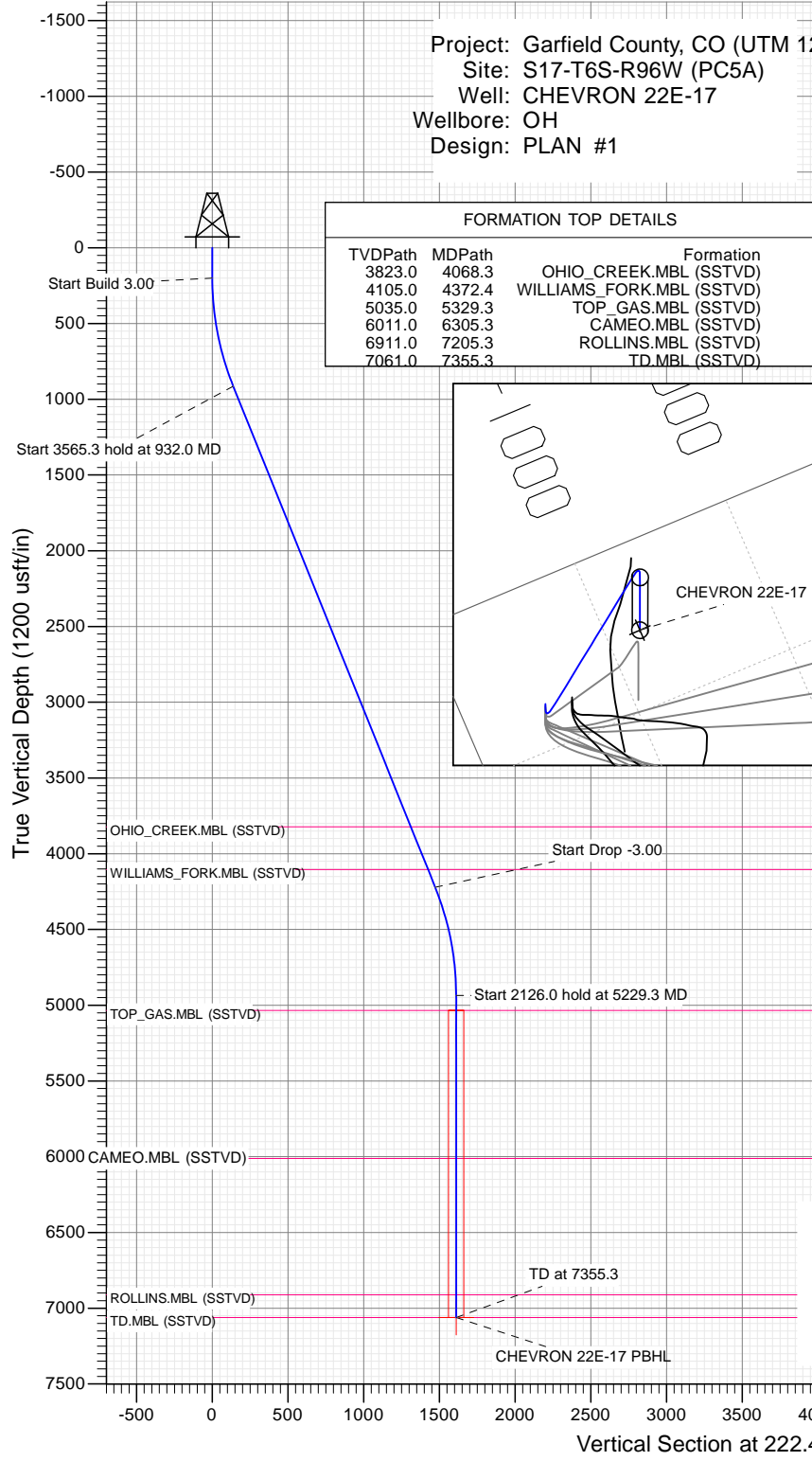
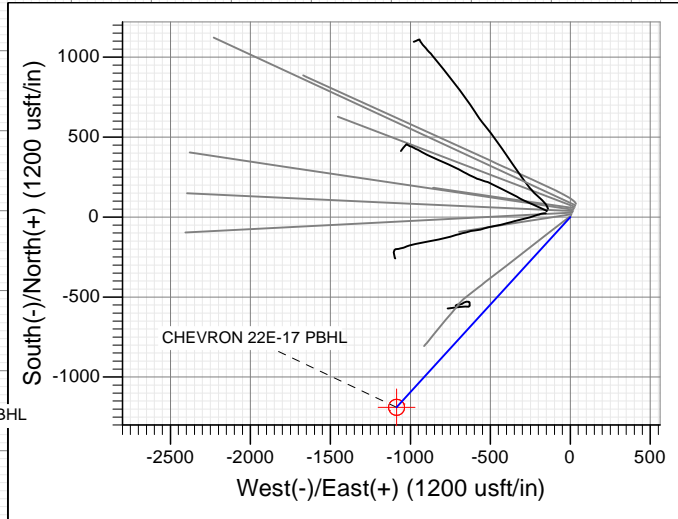
Project: Garfield County, CO (UTM 12  
 Site: S17-T6S-R96W (PC5A)  
 Well: CHEVRON 22E-17  
 Wellbore: OH  
 Design: PLAN #1

PLAN #1  
 CHEVRON 22E-17  
 15XXX LR  
 30 KB @ 5613.0usft  
 Ground Level @ 5583.0  
 NAD 1927 - Western US  
 Well CHEVRON 22E-17, True North

Type	Target	Azimuth	Origin	N/S	E/W	From
TD	No Target (Freehand)	222.41	Type Slot	0.0	0.0	TVD
Name		TVD	+N/-S	+E/-W	Latitude	Longitude
CHEVRON 22E-17 PBHL		7061.0	-1189.0	-1086.2	39.524853	-108.132932

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
3823.0	4068.3	OHIO_CREEK.MBL (SSTVD)
4105.0	4372.4	WILLIAMS_FORK.MBL (SSTVD)
5035.0	5329.3	TOP_GAS.MBL (SSTVD)
6011.0	6305.3	CAMEO.MBL (SSTVD)
6911.0	7205.3	ROLLINS.MBL (SSTVD)
7061.0	7355.3	TD.MBL (SSTVD)



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 22E-17

		Ground Level: 5583.0			
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	14367138.00	2450012.70	39.528116	-108.129083



## Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well CHEVRON 22E-17
<b>Company:</b>	Caerus Oil & Gas	<b>TVD Reference:</b>	30' KB @ 5613.0usft
<b>Project:</b>	Garfield County, CO (UTM 12N)	<b>MD Reference:</b>	30' KB @ 5613.0usft
<b>Site:</b>	S17-T6S-R96W (PC5A)	<b>North Reference:</b>	True
<b>Well:</b>	CHEVRON 22E-17	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	PLAN #1		

<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)		

<b>Site</b> S17-T6S-R96W (PC5A)			
<b>Site Position:</b>		<b>Northing:</b>	14,367,212.50 usft
<b>From:</b>	Map	<b>Easting:</b>	2,450,041.70 usft
<b>Position Uncertainty:</b>	0.0 usft	<b>Slot Radius:</b>	13-3/16"
		<b>Latitude:</b>	39.528318
		<b>Longitude:</b>	-108.128972
		<b>Grid Convergence:</b>	1.83 °

<b>Well</b> CHEVRON 22E-17			
<b>Well Position</b>	<b>+N/-S</b>	0.0 usft	<b>Northing:</b>
	<b>+E/-W</b>	0.0 usft	<b>Easting:</b>
			14,367,138.00 usft
			<b>Latitude:</b>
			39.528116
			<b>Longitude:</b>
			-108.129083
<b>Position Uncertainty</b>		0.0 usft	<b>Wellhead Elevation:</b>
			0.0 usft
			<b>Ground Level:</b>
			5,583.0 usft

<b>Wellbore</b> OH					
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	11/10/2015	9.82	65.93	51,889

<b>Design</b> PLAN #1				
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	222.41

<b>Plan Sections</b>										
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	
200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.00	0.00	
932.0	21.96	222.41	914.2	-102.3	-93.5	3.00	3.00	0.00	222.41	
4,497.3	21.96	222.41	4,220.8	-1,086.6	-992.7	0.00	0.00	0.00	0.00	
5,229.3	0.00	0.00	4,935.0	-1,189.0	-1,086.2	3.00	-3.00	0.00	180.00	
7,355.3	0.00	0.00	7,061.0	-1,189.0	-1,086.2	0.00	0.00	0.00	0.00	CHEVRON 22E-17 PI

## Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well CHEVRON 22E-17
<b>Company:</b>	Caerus Oil & Gas	<b>TVD Reference:</b>	30' KB @ 5613.0usft
<b>Project:</b>	Garfield County, CO (UTM 12N)	<b>MD Reference:</b>	30' KB @ 5613.0usft
<b>Site:</b>	S17-T6S-R96W (PC5A)	<b>North Reference:</b>	True
<b>Well:</b>	CHEVRON 22E-17	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	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	Start Build 3.00
300.0	3.00	222.41	300.0	-1.9	-1.8	2.6	3.00	3.00	
400.0	6.00	222.41	399.6	-7.7	-7.1	10.5	3.00	3.00	
500.0	9.00	222.41	498.8	-17.4	-15.9	23.5	3.00	3.00	
600.0	12.00	222.41	597.1	-30.8	-28.1	41.7	3.00	3.00	
700.0	15.00	222.41	694.3	-48.0	-43.9	65.1	3.00	3.00	
800.0	18.00	222.41	790.2	-69.0	-63.0	93.5	3.00	3.00	
900.0	21.00	222.41	884.4	-93.7	-85.6	126.9	3.00	3.00	
932.0	21.96	222.41	914.2	-102.3	-93.5	138.6	3.00	3.00	Start 3565.3 hold at 932.0 MD
1,000.0	21.96	222.41	977.3	-121.1	-110.6	164.0	0.00	0.00	
1,100.0	21.96	222.41	1,070.0	-148.7	-135.8	201.4	0.00	0.00	
1,200.0	21.96	222.41	1,162.8	-176.3	-161.1	238.8	0.00	0.00	
1,300.0	21.96	222.41	1,255.5	-203.9	-186.3	276.2	0.00	0.00	
1,400.0	21.96	222.41	1,348.3	-231.5	-211.5	313.6	0.00	0.00	
1,500.0	21.96	222.41	1,441.0	-259.1	-236.7	351.0	0.00	0.00	
1,600.0	21.96	222.41	1,533.7	-286.7	-262.0	388.4	0.00	0.00	
1,700.0	21.96	222.41	1,626.5	-314.3	-287.2	425.8	0.00	0.00	
1,800.0	21.96	222.41	1,719.2	-342.0	-312.4	463.2	0.00	0.00	
1,900.0	21.96	222.41	1,812.0	-369.6	-337.6	500.6	0.00	0.00	
2,000.0	21.96	222.41	1,904.7	-397.2	-362.8	538.0	0.00	0.00	
2,100.0	21.96	222.41	1,997.5	-424.8	-388.1	575.4	0.00	0.00	
2,200.0	21.96	222.41	2,090.2	-452.4	-413.3	612.8	0.00	0.00	
2,300.0	21.96	222.41	2,183.0	-480.0	-438.5	650.1	0.00	0.00	
2,400.0	21.96	222.41	2,275.7	-507.6	-463.7	687.5	0.00	0.00	
2,500.0	21.96	222.41	2,368.4	-535.2	-489.0	724.9	0.00	0.00	
2,600.0	21.96	222.41	2,461.2	-562.8	-514.2	762.3	0.00	0.00	
2,700.0	21.96	222.41	2,553.9	-590.4	-539.4	799.7	0.00	0.00	
2,800.0	21.96	222.41	2,646.7	-618.0	-564.6	837.1	0.00	0.00	
2,900.0	21.96	222.41	2,739.4	-645.7	-589.8	874.5	0.00	0.00	
3,000.0	21.96	222.41	2,832.2	-673.3	-615.1	911.9	0.00	0.00	
3,100.0	21.96	222.41	2,924.9	-700.9	-640.3	949.3	0.00	0.00	
3,200.0	21.96	222.41	3,017.7	-728.5	-665.5	986.7	0.00	0.00	
3,300.0	21.96	222.41	3,110.4	-756.1	-690.7	1,024.1	0.00	0.00	
3,400.0	21.96	222.41	3,203.1	-783.7	-716.0	1,061.5	0.00	0.00	
3,500.0	21.96	222.41	3,295.9	-811.3	-741.2	1,098.9	0.00	0.00	
3,600.0	21.96	222.41	3,388.6	-838.9	-766.4	1,136.3	0.00	0.00	
3,700.0	21.96	222.41	3,481.4	-866.5	-791.6	1,173.7	0.00	0.00	
3,800.0	21.96	222.41	3,574.1	-894.1	-816.9	1,211.1	0.00	0.00	
3,900.0	21.96	222.41	3,666.9	-921.7	-842.1	1,248.5	0.00	0.00	
4,000.0	21.96	222.41	3,759.6	-949.4	-867.3	1,285.9	0.00	0.00	
4,068.3	21.96	222.41	3,823.0	-968.2	-884.5	1,311.4	0.00	0.00	OHIO_CREEK.MBL (SSTVD)
4,100.0	21.96	222.41	3,852.4	-977.0	-892.5	1,323.3	0.00	0.00	
4,200.0	21.96	222.41	3,945.1	-1,004.6	-917.7	1,360.7	0.00	0.00	
4,300.0	21.96	222.41	4,037.8	-1,032.2	-943.0	1,398.1	0.00	0.00	
4,372.4	21.96	222.41	4,105.0	-1,052.2	-961.2	1,425.1	0.00	0.00	WILLIAMS_FORK.MBL (SSTVD)
4,400.0	21.96	222.41	4,130.6	-1,059.8	-968.2	1,435.5	0.00	0.00	
4,497.3	21.96	222.41	4,220.8	-1,086.6	-992.7	1,471.8	0.00	0.00	Start Drop -3.00
4,500.0	21.88	222.41	4,223.3	-1,087.4	-993.4	1,472.9	3.00	-3.00	
4,600.0	18.88	222.41	4,317.1	-1,113.1	-1,016.9	1,507.7	3.00	-3.00	
4,700.0	15.88	222.41	4,412.5	-1,135.2	-1,037.0	1,537.5	3.00	-3.00	

## Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well CHEVRON 22E-17
<b>Company:</b>	Caerus Oil & Gas	<b>TVD Reference:</b>	30' KB @ 5613.0usft
<b>Project:</b>	Garfield County, CO (UTM 12N)	<b>MD Reference:</b>	30' KB @ 5613.0usft
<b>Site:</b>	S17-T6S-R96W (PC5A)	<b>North Reference:</b>	True
<b>Well:</b>	CHEVRON 22E-17	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	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
4,800.0	12.88	222.41	4,509.3	-1,153.5	-1,053.8	1,562.4	3.00	-3.00	
4,900.0	9.88	222.41	4,607.4	-1,168.0	-1,067.1	1,582.1	3.00	-3.00	
5,000.0	6.88	222.41	4,706.3	-1,178.8	-1,076.9	1,596.7	3.00	-3.00	
5,100.0	3.88	222.41	4,805.8	-1,185.7	-1,083.2	1,606.0	3.00	-3.00	
5,200.0	0.88	222.41	4,905.7	-1,188.8	-1,086.0	1,610.2	3.00	-3.00	
5,229.3	0.00	0.00	4,935.0	-1,189.0	-1,086.2	1,610.4	3.00	-3.00	Start 2126.0 hold at 5229.3 MD
5,300.0	0.00	0.00	5,005.7	-1,189.0	-1,086.2	1,610.4	0.00	0.00	
5,329.3	0.00	0.00	5,035.0	-1,189.0	-1,086.2	1,610.4	0.00	0.00	TOP_GAS.MBL (SSTVD)
5,400.0	0.00	0.00	5,105.7	-1,189.0	-1,086.2	1,610.4	0.00	0.00	
5,500.0	0.00	0.00	5,205.7	-1,189.0	-1,086.2	1,610.4	0.00	0.00	
5,600.0	0.00	0.00	5,305.7	-1,189.0	-1,086.2	1,610.4	0.00	0.00	
5,700.0	0.00	0.00	5,405.7	-1,189.0	-1,086.2	1,610.4	0.00	0.00	
5,800.0	0.00	0.00	5,505.7	-1,189.0	-1,086.2	1,610.4	0.00	0.00	
5,900.0	0.00	0.00	5,605.7	-1,189.0	-1,086.2	1,610.4	0.00	0.00	
6,000.0	0.00	0.00	5,705.7	-1,189.0	-1,086.2	1,610.4	0.00	0.00	
6,100.0	0.00	0.00	5,805.7	-1,189.0	-1,086.2	1,610.4	0.00	0.00	
6,200.0	0.00	0.00	5,905.7	-1,189.0	-1,086.2	1,610.4	0.00	0.00	
6,300.0	0.00	0.00	6,005.7	-1,189.0	-1,086.2	1,610.4	0.00	0.00	
6,305.3	0.00	0.00	6,011.0	-1,189.0	-1,086.2	1,610.4	0.00	0.00	CAMEO.MBL (SSTVD)
6,400.0	0.00	0.00	6,105.7	-1,189.0	-1,086.2	1,610.4	0.00	0.00	
6,500.0	0.00	0.00	6,205.7	-1,189.0	-1,086.2	1,610.4	0.00	0.00	
6,600.0	0.00	0.00	6,305.7	-1,189.0	-1,086.2	1,610.4	0.00	0.00	
6,700.0	0.00	0.00	6,405.7	-1,189.0	-1,086.2	1,610.4	0.00	0.00	
6,800.0	0.00	0.00	6,505.7	-1,189.0	-1,086.2	1,610.4	0.00	0.00	
6,900.0	0.00	0.00	6,605.7	-1,189.0	-1,086.2	1,610.4	0.00	0.00	
7,000.0	0.00	0.00	6,705.7	-1,189.0	-1,086.2	1,610.4	0.00	0.00	
7,100.0	0.00	0.00	6,805.7	-1,189.0	-1,086.2	1,610.4	0.00	0.00	
7,200.0	0.00	0.00	6,905.7	-1,189.0	-1,086.2	1,610.4	0.00	0.00	
7,205.3	0.00	0.00	6,911.0	-1,189.0	-1,086.2	1,610.4	0.00	0.00	ROLLINS.MBL (SSTVD)
7,300.0	0.00	0.00	7,005.7	-1,189.0	-1,086.2	1,610.4	0.00	0.00	
7,355.3	0.00	0.00	7,061.0	-1,189.0	-1,086.2	1,610.4	0.00	0.00	TD at 7355.3 - 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 22E-17 PBH - hit/miss target - Shape - Circle (radius 50.0)	0.00	0.00	7,061.0	-1,189.0	-1,086.2	14,365,915.00	2,448,965.00	39.524853	-108.132932

## Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well CHEVRON 22E-17
<b>Company:</b>	Caerus Oil & Gas	<b>TVD Reference:</b>	30' KB @ 5613.0usft
<b>Project:</b>	Garfield County, CO (UTM 12N)	<b>MD Reference:</b>	30' KB @ 5613.0usft
<b>Site:</b>	S17-T6S-R96W (PC5A)	<b>North Reference:</b>	True
<b>Well:</b>	CHEVRON 22E-17	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	PLAN #1		

Formations					
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
4,068.3	3,823.0	OHIO_CREEK.MBL (SSTVD)		0.00	
4,372.4	4,105.0	WILLIAMS_FORK.MBL (SSTVD)		0.00	
5,329.3	5,035.0	TOP_GAS.MBL (SSTVD)		0.00	
6,305.3	6,011.0	CAMEO.MBL (SSTVD)		0.00	
7,205.3	6,911.0	ROLLINS.MBL (SSTVD)		0.00	
7,355.3	7,061.0	TD.MBL (SSTVD)		0.00	

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment	
		+N/-S (usft)	+E/-W (usft)		
200.0	200.0	0.0	0.0	Start Build 3.00	
932.0	914.2	-102.3	-93.5	Start 3565.3 hold at 932.0 MD	
4,497.3	4,220.8	-1,086.6	-992.7	Start Drop -3.00	
5,229.3	4,935.0	-1,189.0	-1,086.2	Start 2126.0 hold at 5229.3 MD	
7,355.3	7,061.0	-1,189.0	-1,086.2	TD at 7355.3	