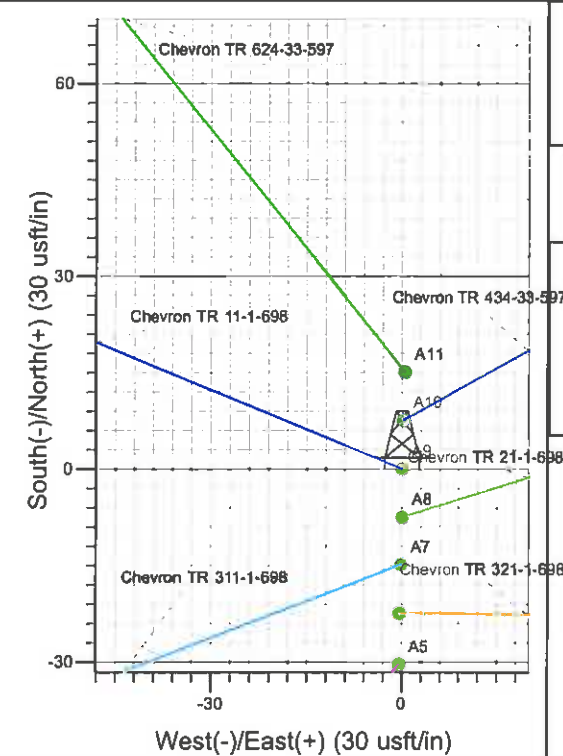
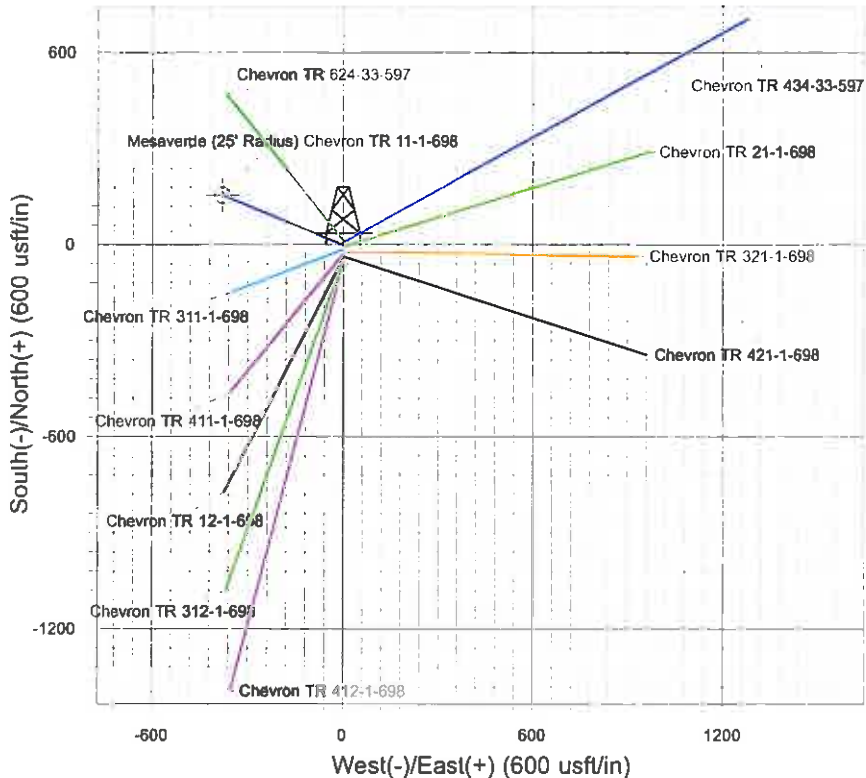
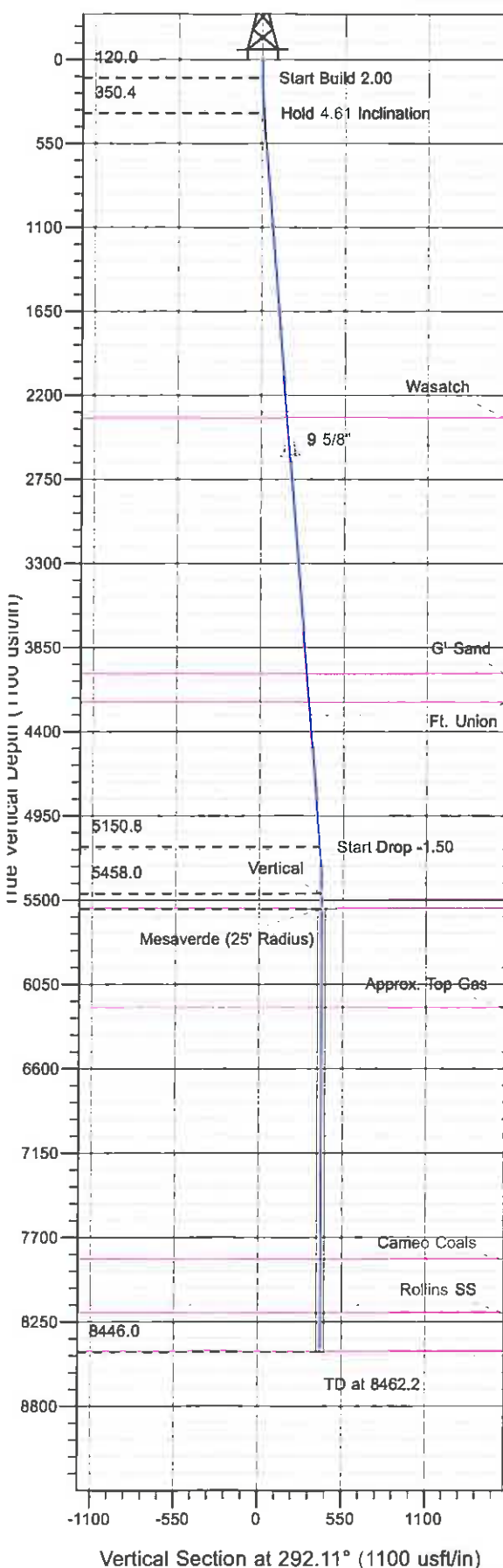




Surface Location: Chevron TR 11-1-698 Pad  
 North American Datum 1983 , US State Plane 1983 , Colorado Central Zone  
 Ground Elevation: 8284.0  
 +N/-S +E/-W Northing Easting Latitude Longitude Slot  
 0.0 0.0 1641499.00 2214882.40 39° 33' 41.975 N 108° 17' 6.581 W A9  
 KELLY BUSHING @ 8308.0usft (H&P 278 (24' RKB) kjs)



Project: TR 01-06S-098W  
 Site: Chevron TR 11-1-698 Pad  
 Well: Chevron TR 11-1-698  
 Plan #2 19May11 kjs

M Azimuths to True North  
 Magnetic North: 10.89°  
 Magnetic Field  
 Strength: 52580.9snT  
 Dip Angle: 65.83°  
 Date: 3/5/2008  
 Model: IGRF2005-10

#### ANNOTATIONS

TVD	MD	Inc	Azi	+N/-S	+E/-W	VSec	Departure	Annotation
120.0	120.0	0.00	0.00	0.0	0.0	0.0	0.0	Start Build 2.00
350.4	350.7	4.61	292.11	3.5	-8.6	9.3	9.3	Hold 4.61 Inclination
5150.8	5166.6	4.61	292.11	149.3	-367.4	396.6	396.6	Start Drop -1.50
5458.0	5474.2	0.00	0.00	154.0	-378.9	409.0	409.0	Vertical
5558.0	5574.2	0.00	0.00	154.0	-378.9	409.0	409.0	Mesaverde
8446.0	8462.2	0.00	0.00	154.0	-378.9	409.0	409.0	TD at 8462.2

# **PICEANCE HL NAD 83**

**TR 01-06S-098W**

**Chevron TR 11-1-698 Pad**

**Chevron TR 11-1-698 - Slot A9**

**Wellbore #1**

**Plan: Plan #2 19May11 kjs**

## **Standard Planning Report - Geographic**

**16 June, 2011**

**Williams**  
Planning Report - Geographic

<b>Database:</b>	Compass R5000 WIN AUTH	<b>Local Co-ordinate Reference:</b>	Well Chevron TR 11-1-698 - Slot A9
<b>Company:</b>	PICEANCE HL NAD 83	<b>TVD Reference:</b>	KELLY BUSHING @ 8308.0usft (H&P 278 (24' RKB) kjs)
<b>Project:</b>	TR 01-06S-098W	<b>MD Reference:</b>	KELLY BUSHING @ 8308.0usft (H&P 278 (24' RKB) kjs)
<b>Site:</b>	Chevron TR 11-1-698 Pad	<b>North Reference:</b>	True
<b>Well:</b>	Chevron TR 11-1-698	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #2 19May11 kjs		

<b>Project</b>	TR 01-06S-098W, Garfield County, CO, TR 01-06S-098W		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	Colorado Central Zone		

<b>Site</b>	Chevron TR 11-1-698 Pad		
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<b>Site Position:</b>		<b>Northing:</b>	1,641,468.60 usft	<b>Latitude:</b>	39° 33' 41.675 N
<b>From:</b>	Map	<b>Easting:</b>	2,214,881.00 usft	<b>Longitude:</b>	108° 17' 6.587 W
<b>Position Uncertainty:</b>	0.0 usft	<b>Slot Radius:</b>	0.000 in	<b>Grid Convergence:</b>	-1.757 °

<b>Well</b>	Chevron TR 11-1-698 - Slot A9				
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<b>Well Position</b>	<b>+N/-S</b>	0.0 usft	<b>Northing:</b>	1,641,499.00 usft	<b>Latitude:</b>	39° 33' 41.975 N
	<b>+E/-W</b>	0.0 usft	<b>Easting:</b>	2,214,882.40 usft	<b>Longitude:</b>	108° 17' 6.581 W
<b>Position Uncertainty</b>		0.0 usft	<b>Wellhead Elevation:</b>		<b>Ground Level:</b>	8,284.0 usft

<b>Wellbore</b>	Wellbore #1				
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2005-10	3/5/2008	10.892	65.835	52,581

<b>Design</b>	Plan #2 19May11 kjs				
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**Audit Notes:**

<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.0
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Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	292.11

<b>Plan Sections</b>										
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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	0.000	
120.0	0.00	0.00	120.0	0.0	0.0	0.00	0.00	0.00	0.000	
350.7	4.61	292.11	350.4	3.5	-8.6	2.00	2.00	0.00	292.113	
5,166.6	4.61	292.11	5,150.8	149.3	-367.4	0.00	0.00	0.00	0.000	
5,474.2	0.00	0.00	5,458.0	154.0	-378.9	1.50	-1.50	0.00	180.000	
5,574.2	0.00	0.00	5,558.0	154.0	-378.9	0.00	0.00	0.00	0.000	Mesaverde (25' Radi
8,462.2	0.00	0.00	8,446.0	154.0	-378.9	0.00	0.00	0.00	0.000	

**Williams**  
Planning Report - Geographic

<b>Database:</b>	Compass R5000 WIN AUTH	<b>Local Co-ordinate Reference:</b>	Well Chevron TR 11-1-698 - Slot A9
<b>Company:</b>	PICEANCE HL NAD 83	<b>TVD Reference:</b>	KELLY BUSHING @ 8308.0usft (H&P 278 (24' RKB) kjs)
<b>Project:</b>	TR 01-06S-098W	<b>MD Reference:</b>	KELLY BUSHING @ 8308.0usft (H&P 278 (24' RKB) kjs)
<b>Site:</b>	Chevron TR 11-1-698 Pad	<b>North Reference:</b>	True
<b>Well:</b>	Chevron TR 11-1-698	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #2 19May11 kjs		

**Planned Survey**

Measured Depth (usft)	Inclination (")	Azimuth (")	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
0.0	0.00	0.00	0.0	0.0	0.0	1,641,499.00	2,214,882.40	39° 33' 41.975 N	108° 17' 6.581 W
120.0	0.00	0.00	120.0	0.0	0.0	1,641,499.00	2,214,882.40	39° 33' 41.975 N	108° 17' 6.581 W
<b>Start Build 2.00</b>									
350.7	4.61	292.11	350.4	3.5	-8.6	1,641,502.75	2,214,873.91	39° 33' 42.010 N	108° 17' 6.690 W
<b>Hold 4.61 Inclination</b>									
2,354.7	4.61	292.11	2,348.0	64.2	-157.9	1,641,567.98	2,214,726.52	39° 33' 42.610 N	108° 17' 8.597 W
<b>Wasatch</b>									
2,605.0	4.61	292.11	2,597.4	71.7	-176.6	1,641,576.12	2,214,708.11	39° 33' 42.685 N	108° 17' 8.835 W
<b>9 5/8"</b>									
4,037.2	4.61	292.11	4,025.0	115.1	-283.3	1,641,622.73	2,214,602.78	39° 33' 43.113 N	108° 17' 10.198 W
<b>G' Sand</b>									
4,223.8	4.61	292.11	4,211.0	120.8	-297.2	1,641,628.80	2,214,589.06	39° 33' 43.169 N	108° 17' 10.375 W
<b>Ft. Union</b>									
5,166.6	4.61	292.11	5,150.8	149.3	-367.4	1,641,659.49	2,214,519.71	39° 33' 43.451 N	108° 17' 11.272 W
<b>Start Drop -1.50</b>									
5,474.2	0.00	0.00	5,458.0	154.0	-378.9	1,641,664.50	2,214,508.40	39° 33' 43.497 N	108° 17' 11.419 W
<b>Vertical</b>									
5,574.2	0.00	0.00	5,558.0	154.0	-378.9	1,641,664.50	2,214,508.40	39° 33' 43.497 N	108° 17' 11.419 W
<b>Mesaverde - Mesaverde</b>									
6,219.2	0.00	0.00	6,203.0	154.0	-378.9	1,641,664.50	2,214,508.40	39° 33' 43.497 N	108° 17' 11.419 W
<b>Approx. Top Gas</b>									
7,861.2	0.00	0.00	7,845.0	154.0	-378.9	1,641,664.50	2,214,508.40	39° 33' 43.497 N	108° 17' 11.419 W
<b>Cameo Coals</b>									
8,212.2	0.00	0.00	8,196.0	154.0	-378.9	1,641,664.50	2,214,508.40	39° 33' 43.497 N	108° 17' 11.419 W
<b>Rollins SS</b>									
8,462.2	0.00	0.00	8,446.0	154.0	-378.9	1,641,664.50	2,214,508.40	39° 33' 43.497 N	108° 17' 11.419 W
<b>TD at 8462.2 - TD</b>									

**Design Targets**

Target Name	Dip Angle (")	Dip Dir. (")	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
Mesaverde (25' Radius)	0.00	0.00	5,558.0	154.0	-378.9	1,641,664.50	2,214,508.40	39° 33' 43.497 N	108° 17' 11.419 W
- plan hits target center									
- Circle (radius 25.0)									

**Casing Points**

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)
2,605.0	2,597.4	9 5/8"	9.625	14.750

**Williams**  
Planning Report - Geographic

<b>Database:</b>	Compass R5000 WIN AUTH	<b>Local Co-ordinate Reference:</b>	Well Chevron TR 11-1-698 - Slot A9
<b>Company:</b>	PICEANCE HL NAD 83	<b>TVD Reference:</b>	KELLY BUSHING @ 8308.0usft (H&P 278 (24' RKB) kjs)
<b>Project:</b>	TR 01-06S-098W	<b>MD Reference:</b>	KELLY BUSHING @ 8308.0usft (H&P 278 (24' RKB) kjs)
<b>Site:</b>	Chevron TR 11-1-698 Pad	<b>North Reference:</b>	True
<b>Well:</b>	Chevron TR 11-1-698	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #2 19May11 kjs		

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
2,354.7	2,348.0	Wasatch				
4,037.2	4,025.0	G' Sand				
4,223.8	4,211.0	Fl. Union				
5,574.2	5,558.0	Mesaverde				
6,219.2	6,203.0	Approx. Top Gas				
7,861.2	7,845.0	Cameo Coals				
8,212.2	8,196.0	Rollins SS				
8,462.2	8,446.0	TD				

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
120.0	120.0	0.0	0.0	Start Build 2.00	
350.7	350.4	3.5	-8.6	Hold 4.61 Inclination	
5,166.6	5,150.8	149.3	-367.4	Start Drop -1.50	
5,474.2	5,458.0	154.0	-378.9	Vertical	
5,574.2	5,558.0	154.0	-378.9	Mesaverde	
8,462.2	8,446.0	154.0	-378.9	TD at 8462.2	