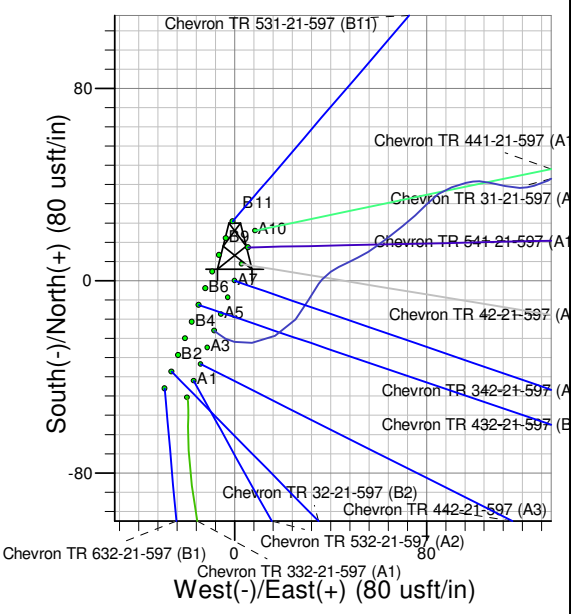
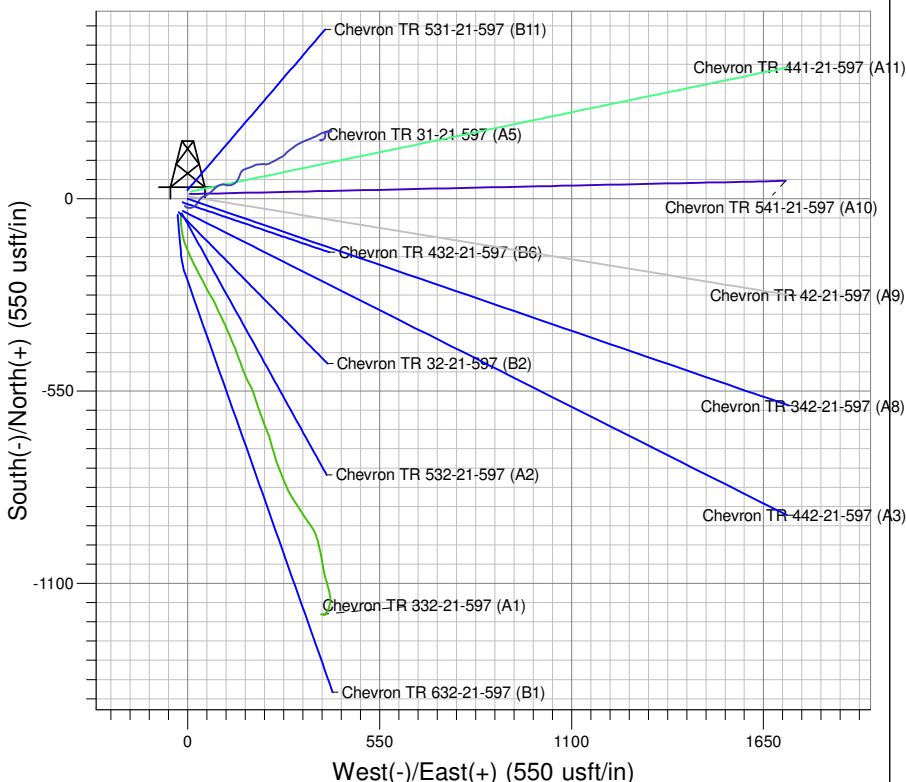


Well Name: Chevron TR 342-21-597  
 Surface Location: TR 32-21-597 Pad  
 North American Datum 1983 , US State Plane 1983 , Colorado Central Zone  
 Ground Elevation: 8576.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1656427.50	2216174.00	39° 36' 9.841 N	108° 16' 55.933 W	A8

KELLY BUSHING @ 8604.0usft (Frontier 10 (28' RKB) jib)



Project: TR 21-05S-097W  
 Site: TR 32-21-597 Pad  
 Well: Chevron TR 342-21-597  
 Plan #1 26Oct09 kjs

Azimuths to True North  
 Magnetic North: 10.68°  
 Magnetic Field  
 Strength: 52442.0nT  
 Dip Angle: 65.83°  
 Date: 10/26/2009  
 Model: IGRF2005-10

ANNOTATIONS									
TVD	MD	Inc	Azi	+N/-S	+E/-W	VSection	Departure	Annotation	
120.0	120.0	0.00	0.00	0.0	0.0	0.0	0.0	Start Build 2.00	
1151.1	1174.8	21.10	108.94	-62.3	181.6	192.0	192.0	Hold 21.1 Inc	
4711.2	4990.6	21.10	108.94	-508.0	1480.7	1565.4	1565.4	Start Drop -1.50	
6086.0	6397.0	0.00	0.00	-591.1	1722.8	1821.4	1821.4	Vertical	
9198.0	9509.0	0.00	0.00	-591.1	1722.8	1821.4	1821.4	TD at 9509	

# **PICEANCE HL NAD 83**

**TR 21-05S-097W**

**TR 32-21-597 Pad**

**Chevron TR 342-21-597 - Slot A8**

**Wellbore #1**

**Plan: Plan #1 26Oct09 kjs**

## **Standard Planning Report - Geographic**

**03 May, 2010**

**Williams**  
Planning Report - Geographic

<b>Database:</b>	Compass R5000 WIN AUTH	<b>Local Co-ordinate Reference:</b>	Well Chevron TR 342-21-597 (A8) - Slot A8
<b>Company:</b>	PICEANCE HL NAD 83	<b>TVD Reference:</b>	KELLY BUSHING @ 8604.0usft (Frontier 10 (28' RKB) jib)
<b>Project:</b>	TR 21-05S-097W	<b>MD Reference:</b>	KELLY BUSHING @ 8604.0usft (Frontier 10 (28' RKB) jib)
<b>Site:</b>	TR 32-21-597 Pad	<b>North Reference:</b>	True
<b>Well:</b>	Chevron TR 342-21-597	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 26Oct09 kjs		

<b>Project</b>	TR 21-05S-097W, Garfield County, CO, TR 21-05S-097W		
<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>	TR 32-21-597 Pad		
<b>Site Position:</b>		<b>Northing:</b>	1,656,390.50 usft
<b>From:</b>	Map	<b>Easting:</b>	2,216,146.60 usft
<b>Position Uncertainty:</b>	0.0 usft	<b>Slot Radius:</b>	13.200 in
		<b>Latitude:</b>	39° 36' 9.467 N
		<b>Longitude:</b>	108° 16' 56.268 W
		<b>Grid Convergence:</b>	-1.755 °

<b>Well</b>	Chevron TR 342-21-597 - Slot A8		
<b>Well Position</b>	<b>+N/-S</b>	0.0 usft	<b>Northing:</b>
	<b>+E/-W</b>	0.0 usft	<b>Easting:</b>
<b>Position Uncertainty</b>	0.0 usft		<b>Wellhead Elevation:</b>
			<b>Latitude:</b>
			<b>Longitude:</b>
			<b>Ground Level:</b>

<b>Wellbore</b>	Wellbore #1				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2005-10	10/26/2009	10.682	65.828	52,442

<b>Design</b>	Plan #1 26Oct09 kjs			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (°)</b>
	0.0	0.0	0.0	108.94

<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	0.000	
120.0	0.00	0.00	120.0	0.0	0.0	0.00	0.00	0.00	0.000	
1,174.8	21.10	108.94	1,151.1	-62.3	181.6	2.00	2.00	0.00	108.938	
4,990.6	21.10	108.94	4,711.2	-508.0	1,480.7	0.00	0.00	0.00	0.000	
6,397.0	0.00	0.00	6,086.0	-591.1	1,722.8	1.50	-1.50	0.00	180.000	Mesaverde (25' Radiu
9,509.0	0.00	0.00	9,198.0	-591.1	1,722.8	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 342-21-597 (A8) - Slot A8
<b>Company:</b>	PICEANCE HL NAD 83	<b>TVD Reference:</b>	KELLY BUSHING @ 8604.0usft (Frontier 10 (28' RKB) jib)
<b>Project:</b>	TR 21-05S-097W	<b>MD Reference:</b>	KELLY BUSHING @ 8604.0usft (Frontier 10 (28' RKB) jib)
<b>Site:</b>	TR 32-21-597 Pad	<b>North Reference:</b>	True
<b>Well:</b>	Chevron TR 342-21-597	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 26Oct09 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	1,656,427.50	2,216,174.00	39° 36' 9.841 N	108° 16' 55.933 W
120.0	0.00	0.00	120.0	0.0	0.0	1,656,427.50	2,216,174.00	39° 36' 9.841 N	108° 16' 55.933 W
1,174.8	21.10	108.94	1,151.1	-62.3	181.6	1,656,359.65	2,216,353.61	39° 36' 9.225 N	108° 16' 53.613 W
4,990.6	21.10	108.94	4,711.2	-508.0	1,480.7	1,655,874.35	2,217,638.42	39° 36' 4.819 N	108° 16' 37.016 W
6,397.0	0.00	0.00	6,086.0	-591.1	1,722.8	1,655,783.90	2,217,877.90	39° 36' 3.998 N	108° 16' 33.922 W
9,509.0	0.00	0.00	9,198.0	-591.1	1,722.8	1,655,783.90	2,217,877.90	39° 36' 3.998 N	108° 16' 33.922 W

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 (50' Radius)	0.00	0.00	6,086.0	-591.1	1,722.8	1,655,783.90	2,217,877.90	39° 36' 3.998 N	108° 16' 33.922 W
- plan hits target center									
- Circle (radius 50.0)									
Mesaverde (25' Radius)	0.00	0.00	6,086.0	-591.1	1,722.8	1,655,783.90	2,217,877.90	39° 36' 3.998 N	108° 16' 33.922 W
- plan hits target center									
- Circle (radius 25.0)									

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)	
3,082.0	2,930.5	9 5/8"	9.625	14.750	

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
2,831.7	2,697.0	Wasatch				
4,742.8	4,480.0	G' Sand				
4,947.5	4,671.0	Ft. Union				
6,397.0	6,086.0	Mesaverde				
7,341.0	7,030.0	Approx. Top Gas				
8,838.0	8,527.0	Cameo Coals				
9,259.0	8,948.0	Rollins SS				

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Comment
120.0	120.0	0.0	0.0	Start Build 2.00
1,174.8	1,151.1	-62.3	181.6	Hold 21.1 Inc
4,990.6	4,711.2	-508.0	1,480.7	Start Drop -1.50
6,397.0	6,086.0	-591.1	1,722.8	Vertical
9,509.0	9,198.0	-591.1	1,722.8	TD at 9509