



Well Name: Chevron TR 432-21-597

Surface Location: TR 32-21-597 Pad

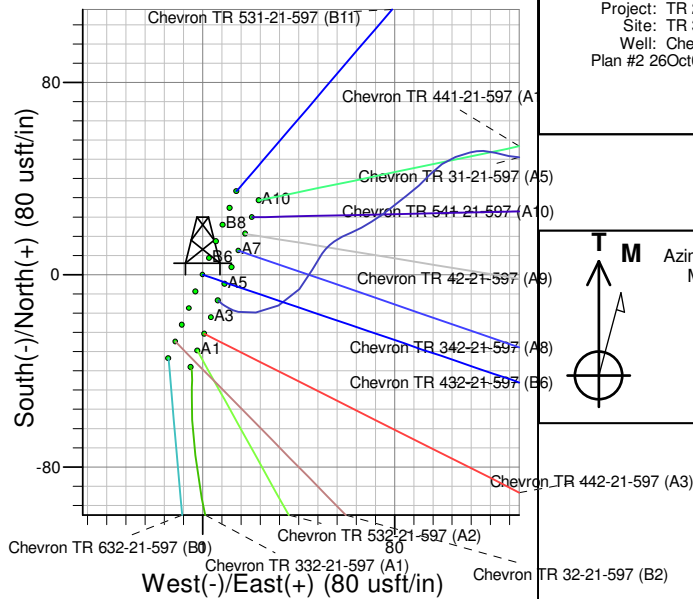
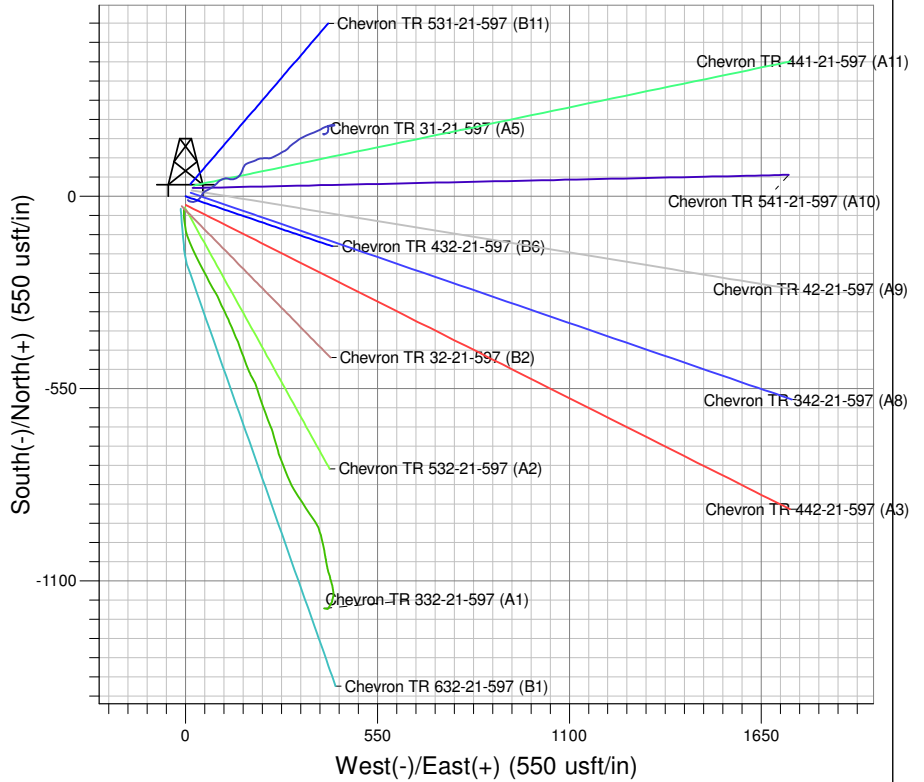
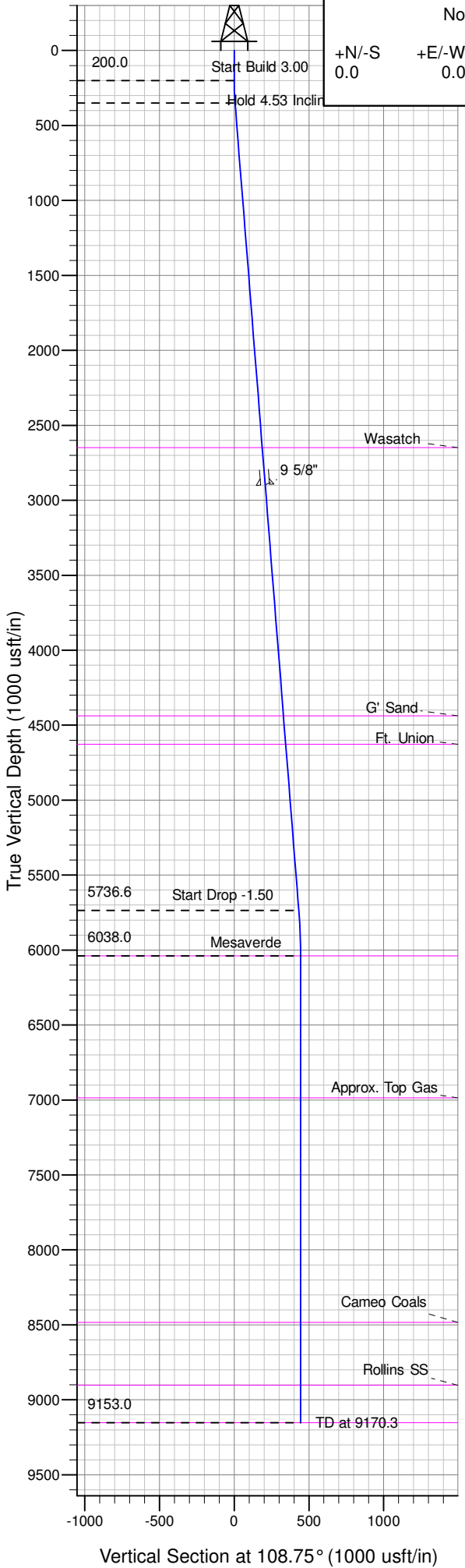
North American Datum 1983 , US State Plane 1983 , Colorado Central Zone

Ground Elevation: 8576.0

Northing Easting Latitude Longitude

1656417.90 2216158.80 39° 36' 9.741 N 108° 16' 56.123 W
KELLY BUSHING @ 8604.0usft (Frontier 10 (28' RKB) jib)

Slot
B6



Project: TR 21-05S-097W
Site: TR 32-21-597 Pad
Well: Chevron TR 432-21-597
Plan #2 26Oct09 kjs

Azimuths to True North
Magnetic North: 11.16°
Magnetic Field
Strength: 52794.5nT
Dip Angle: 65.92°
Date: 3/10/2006
Model: IGRF2005-10

ANNOTATIONS

TVD	MD	Inc	Azi	+N/-S	+E/-W	V Sect	Departure	Annotation
200.0	200.0	0.00	0.00	0.0	0.0	0.0	0.0	Start Build 3.00
350.7	350.9	4.53	108.75	-1.9	5.6	6.0	6.0	Hold 4.53 Inclination
5736.6	5753.6	4.53	108.75	-139.0	409.4	432.3	432.3	Start Drop -1.50
6038.0	6055.3	0.00	0.00	-142.8	420.7	444.2	444.2	Mesaverde
9153.0	9170.3	0.00	0.00	-142.8	420.7	444.2	444.2	TD at 9170.3

PICEANCE HL NAD 83

TR 21-05S-097W

TR 32-21-597 Pad

Chevron TR 432-21-597 - Slot B6

Chevron TR 432-21-597

Plan: Plan #2 26Oct09 kjs

Standard Planning Report - Geographic

03 May, 2010

Williams
Planning Report - Geographic

Database:	Compass R5000 WIN AUTH	Local Co-ordinate Reference:	Well Chevron TR 432-21-597 (B6) - Slot B6
Company:	PICEANCE HL NAD 83	TVD Reference:	KELLY BUSHING @ 8604.0usft (Frontier 10 (28' RKB) jib)
Project:	TR 21-05S-097W	MD Reference:	KELLY BUSHING @ 8604.0usft (Frontier 10 (28' RKB) jib)
Site:	TR 32-21-597 Pad	North Reference:	True
Well:	Chevron TR 432-21-597	Survey Calculation Method:	Minimum Curvature
Wellbore:	Chevron TR 432-21-597		
Design:	Plan #2 26Oct09 kjs		

Project	TR 21-05S-097W, Garfield County, CO, TR 21-05S-097W		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Central Zone		

Site		TR 32-21-597 Pad			
Site Position:		Northing:	1,656,390.50 usft	Latitude:	39° 36' 9.467 N
From:	Map	Easting:	2,216,146.60 usft	Longitude:	108° 16' 56.268 W
Position Uncertainty:	0.0 usft	Slot Radius:	13.200 in	Grid Convergence:	-1.755 °

Well	Chevron TR 432-21-597 - Slot B6					
Well Position	+N/-S	0.0 usft	Northing:	1,656,417.90 usft	Latitude:	39° 36' 9.741 N
	+E/-W	0.0 usft	Easting:	2,216,158.80 usft	Longitude:	108° 16' 56.123 W
Position Uncertainty		0.0 usft	Wellhead Elevation:		Ground Level:	8,576.0 usft

Wellbore	Chevron TR 432-21-597				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2005-10	3/10/2006	11.156	65.919	52,795

Design	Plan #2 26Oct09 kjs			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	108.75

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	0.000	
200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.00	0.000	
350.9	4.53	108.75	350.7	-1.9	5.6	3.00	3.00	0.00	108.748	
5,753.6	4.53	108.75	5,736.6	-139.0	409.4	0.00	0.00	0.00	0.000	
6,055.3	0.00	0.00	6,038.0	-142.8	420.7	1.50	-1.50	0.00	180.000	Mesaverde (25' Radiu
9,170.3	0.00	0.00	9,153.0	-142.8	420.7	0.00	0.00	0.00	0.000	

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Planning Report - Geographic

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Project:	TR 21-05S-097W	MD Reference:	KELLY BUSHING @ 8604.0usft (Frontier 10 (28' RKB) jjb)
Site:	TR 32-21-597 Pad	North Reference:	True
Well:	Chevron TR 432-21-597	Survey Calculation Method:	Minimum Curvature
Wellbore:	Chevron TR 432-21-597		
Design:	Plan #2 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	1,656,417.90	2,216,158.80	39° 36' 9.741 N	108° 16' 56.123 W
200.0	0.00	0.00	200.0	0.0	0.0	1,656,417.90	2,216,158.80	39° 36' 9.741 N	108° 16' 56.123 W
350.9	4.53	108.75	350.7	-1.9	5.6	1,656,415.81	2,216,164.38	39° 36' 9.722 N	108° 16' 56.051 W
5,753.6	4.53	108.75	5,736.6	-139.0	409.4	1,656,266.47	2,216,563.74	39° 36' 8.368 N	108° 16' 50.893 W
6,055.3	0.00	0.00	6,038.0	-142.8	420.7	1,656,262.30	2,216,574.90	39° 36' 8.330 N	108° 16' 50.749 W
9,170.3	0.00	0.00	9,153.0	-142.8	420.7	1,656,262.30	2,216,574.90	39° 36' 8.330 N	108° 16' 50.749 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	5,038.0	-142.8	420.7	1,656,262.30	2,216,574.90	39° 36' 8.330 N	108° 16' 50.749 W
- plan misses target center by 67.0usft at 5058.1usft MD (5043.3 TVD, -121.3 N, 357.4 E)									
- Circle (radius 50.0)									
Mesaverde (25' Radius)	0.00	0.00	6,038.0	-142.8	420.7	1,656,262.30	2,216,574.90	39° 36' 8.330 N	108° 16' 50.749 W
- plan hits target center									
- Circle (radius 25.0)									

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)	
2,906.0	2,897.9	9 5/8"	9.625	14.750	

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
2,656.3	2,649.0	Wasatch				
4,449.9	4,437.0	G' Sand				
4,640.5	4,627.0	Ft. Union				
6,055.3	6,038.0	Mesaverde				
7,002.3	6,985.0	Approx. Top Gas				
8,501.3	8,484.0	Cameo Coals				
8,920.3	8,903.0	Rollins SS				
9,170.3	9,153.0	TD		0.000		

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Well:	Chevron TR 432-21-597	Survey Calculation Method:	Minimum Curvature
Wellbore:	Chevron TR 432-21-597		
Design:	Plan #2 26Oct09 kjs		

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
350.9	350.7	-1.9	5.6	Hold 4.53 Inclination
5,753.6	5,736.6	-139.0	409.4	Start Drop -1.50
6,055.3	6,038.0	-142.8	420.7	Mesaverde
9,170.3	9,153.0	-142.8	420.7	TD at 9170.3