

Chevron USA

Piceance

SKR-698-09-BV (New)

SKR-698-09-BV-03 - Slot 3

698-9-50

Plan: Plan #1

Sperry Drilling Services

Proposal Report

05 May, 2009

Well Coordinates: 1,636,126.57 N, 2,201,467.32 E (39° 32' 44.80" N, 108° 19' 55.65" W)

Ground Level: 5,863.50 ft

Local Coordinate Origin:

Centered on Well SKR-698-09-BV-03 (Slot 3) - Slot Slot 3

Viewing Datum:

RKB @ 5888.5ft (RKB)

TVDs to System:

N

North Reference:

Grid

Unit System:

API - US Survey Feet

Version: 2003.16 Build: 431

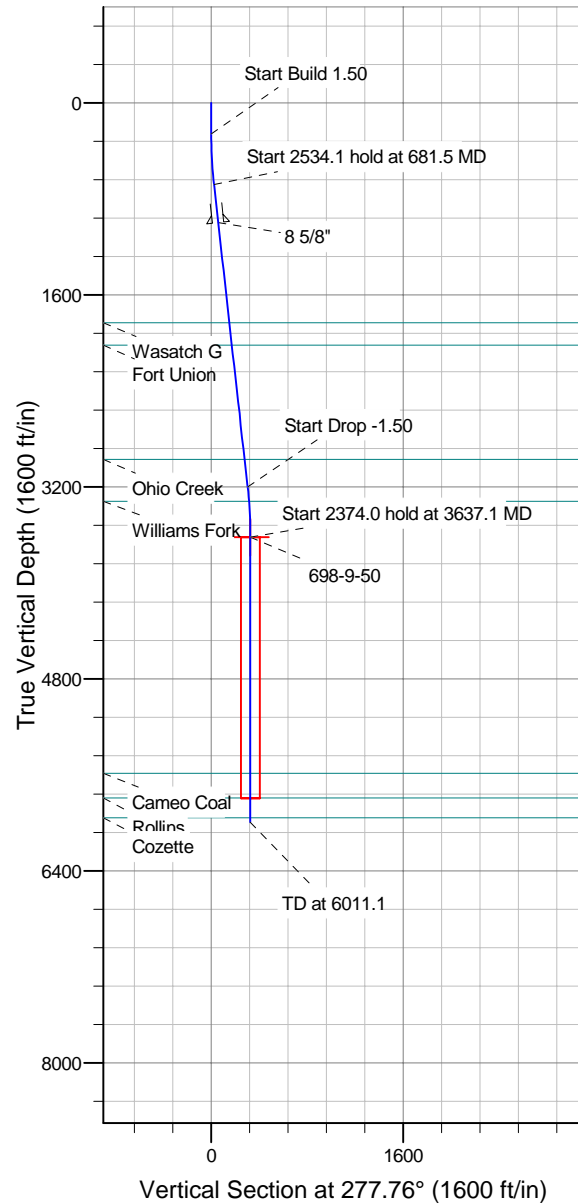
HALLIBURTON

Project: Piceance
Site: SKR-698-09-BV (New)
Well: SKR-698-09-BV-03
Wellbore: 698-9-50
Plan: Plan #1

Chevron USA

HALLIBURTON

Drilling and Formation
Evaluation



SECTION DETAILS

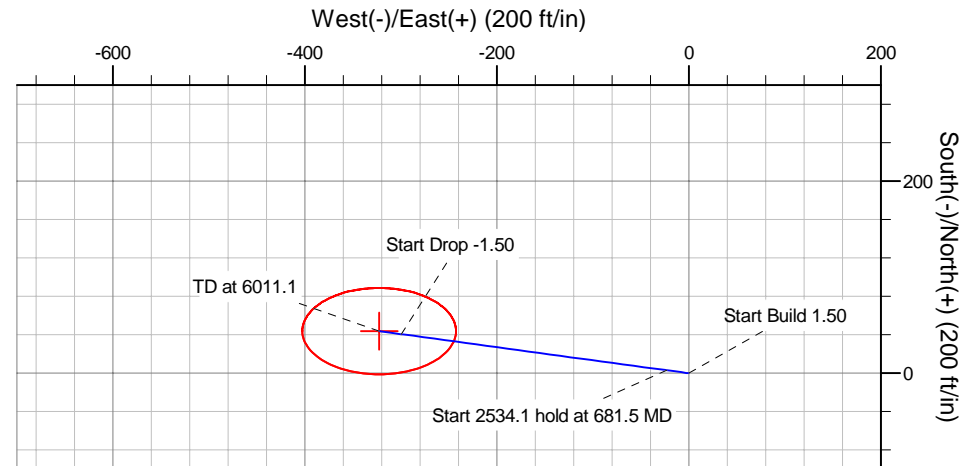
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	260.0	0.00	0.00	260.0	0.0	0.0	0.00	0.00	0.0	
3	681.5	6.32	277.76	680.7	3.1	-23.0	1.50	277.76	23.2	
4	3215.6	6.32	277.76	3199.3	40.8	-299.5	0.00	0.00	302.3	
5	3637.1	0.00	0.00	3620.0	43.9	-322.6	1.50	180.00	325.5	698-9-50
6	6011.1	0.00	0.00	5994.0	43.9	-322.6	0.00	0.00	325.5	

WELL DETAILS: SKR-698-09-BV-03

+N/-S	+E/-W	Northing	Ground Level:	Easting	Latitude	Longitude	Slot
0.0	0.0	1636126.57	5863.5	2201467.32	39° 32' 44.804 N	108° 19' 55.654 W	Slot 3

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
698-9-50	3620.0	43.9	-322.6	1636170.50	2201144.76	Ellipse (Radii: L45.0 W80.0)



Plan Report for SKR-698-09-BV-03 - Plan #1

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	Toolface Azimuth (°)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
100.0	0.00	0.00	100.0	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	0.0	0.00	0.00	0.00	0.00
260.0	0.00	0.00	260.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
Start Build 1.50										
300.0	0.60	277.76	300.0	0.0	-0.2	0.2	1.50	1.50	0.00	277.76
400.0	2.10	277.76	400.0	0.3	-2.5	2.6	1.50	1.50	0.00	0.00
500.0	3.60	277.76	499.8	1.0	-7.5	7.5	1.50	1.50	0.00	0.00
600.0	5.10	277.76	599.6	2.0	-15.0	15.1	1.50	1.50	0.00	0.00
681.5	6.32	277.76	680.7	3.1	-23.0	23.2	1.50	1.50	0.00	0.00
Start 2534.1 hold at 681.5 MD										
700.0	6.32	277.76	699.0	3.4	-25.0	25.3	0.00	0.00	0.00	180.00
800.0	6.32	277.76	798.4	4.9	-36.0	36.3	0.00	0.00	0.00	0.00
900.0	6.32	277.76	897.8	6.4	-46.9	47.3	0.00	0.00	0.00	0.00
1,000.0	6.32	277.76	997.2	7.9	-57.8	58.3	0.00	0.00	0.00	0.00
8 5/8"										
1,100.0	6.32	277.76	1,096.6	9.4	-68.7	69.3	0.00	0.00	0.00	0.00
1,200.0	6.32	277.76	1,196.0	10.8	-79.6	80.3	0.00	0.00	0.00	0.00
1,300.0	6.32	277.76	1,295.4	12.3	-90.5	91.3	0.00	0.00	0.00	0.00
1,400.0	6.32	277.76	1,394.8	13.8	-101.4	102.4	0.00	0.00	0.00	0.00
1,500.0	6.32	277.76	1,494.2	15.3	-112.3	113.4	0.00	0.00	0.00	0.00
1,600.0	6.32	277.76	1,593.6	16.8	-123.2	124.4	0.00	0.00	0.00	0.00
1,700.0	6.32	277.76	1,693.0	18.3	-134.2	135.4	0.00	0.00	0.00	0.00
1,800.0	6.32	277.76	1,792.3	19.8	-145.1	146.4	0.00	0.00	0.00	0.00
1,840.4	6.32	277.76	1,832.5	20.4	-149.5	150.9	0.00	0.00	0.00	0.00
Wasatch G										
1,900.0	6.32	277.76	1,891.7	21.2	-156.0	157.4	0.00	0.00	0.00	0.00
2,000.0	6.32	277.76	1,991.1	22.7	-166.9	168.4	0.00	0.00	0.00	0.00
2,028.5	6.32	277.76	2,019.5	23.2	-170.0	171.6	0.00	0.00	0.00	0.00
Fort Union										
2,100.0	6.32	277.76	2,090.5	24.2	-177.8	179.4	0.00	0.00	0.00	0.00
2,200.0	6.32	277.76	2,189.9	25.7	-188.7	190.5	0.00	0.00	0.00	0.00
2,300.0	6.32	277.76	2,289.3	27.2	-199.6	201.5	0.00	0.00	0.00	0.00
2,400.0	6.32	277.76	2,388.7	28.7	-210.5	212.5	0.00	0.00	0.00	0.00
2,500.0	6.32	277.76	2,488.1	30.2	-221.5	223.5	0.00	0.00	0.00	0.00
2,600.0	6.32	277.76	2,587.5	31.6	-232.4	234.5	0.00	0.00	0.00	0.00
2,700.0	6.32	277.76	2,686.9	33.1	-243.3	245.5	0.00	0.00	0.00	0.00
2,800.0	6.32	277.76	2,786.3	34.6	-254.2	256.5	0.00	0.00	0.00	0.00
2,900.0	6.32	277.76	2,885.7	36.1	-265.1	267.5	0.00	0.00	0.00	0.00
2,986.4	6.32	277.76	2,971.5	37.4	-274.5	277.1	0.00	0.00	0.00	0.00
Ohio Creek										
3,000.0	6.32	277.76	2,985.0	37.6	-276.0	278.6	0.00	0.00	0.00	0.00
3,100.0	6.32	277.76	3,084.4	39.1	-286.9	289.6	0.00	0.00	0.00	0.00
3,200.0	6.32	277.76	3,183.8	40.6	-297.8	300.6	0.00	0.00	0.00	0.00
3,215.6	6.32	277.76	3,199.3	40.8	-299.5	302.3	0.00	0.00	0.00	0.00
Start Drop -1.50										
3,300.0	5.06	277.76	3,283.3	41.9	-307.8	310.7	1.50	-1.50	0.00	180.00
3,337.3	4.50	277.76	3,320.5	42.3	-310.9	313.8	1.50	-1.50	0.00	180.00
Williams Fork										
3,400.0	3.56	277.76	3,383.0	42.9	-315.3	318.2	1.50	-1.50	0.00	-180.00
3,500.0	2.06	277.76	3,482.9	43.6	-320.1	323.1	1.50	-1.50	0.00	180.00
3,600.0	0.56	277.76	3,582.9	43.9	-322.4	325.4	1.50	-1.50	0.00	180.00
3,637.1	0.00	0.00	3,620.0	43.9	-322.6	325.5	1.50	-1.50	0.00	180.00
Start 2374.0 hold at 3637.1 MD - 698-9-50										
3,700.0	0.00	0.00	3,682.9	43.9	-322.6	325.5	0.00	0.00	0.00	0.00
3,800.0	0.00	0.00	3,782.9	43.9	-322.6	325.5	0.00	0.00	0.00	0.00
3,900.0	0.00	0.00	3,882.9	43.9	-322.6	325.5	0.00	0.00	0.00	0.00
4,000.0	0.00	0.00	3,982.9	43.9	-322.6	325.5	0.00	0.00	0.00	0.00

Plan Report for SKR-698-09-BV-03 - Plan #1

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	Toolface Azimuth (°)
4,100.0	0.00	0.00	4,082.9	43.9	-322.6	325.5	0.00	0.00	0.00	0.00
4,200.0	0.00	0.00	4,182.9	43.9	-322.6	325.5	0.00	0.00	0.00	0.00
4,300.0	0.00	0.00	4,282.9	43.9	-322.6	325.5	0.00	0.00	0.00	0.00
4,400.0	0.00	0.00	4,382.9	43.9	-322.6	325.5	0.00	0.00	0.00	0.00
4,500.0	0.00	0.00	4,482.9	43.9	-322.6	325.5	0.00	0.00	0.00	0.00
4,600.0	0.00	0.00	4,582.9	43.9	-322.6	325.5	0.00	0.00	0.00	0.00
4,700.0	0.00	0.00	4,682.9	43.9	-322.6	325.5	0.00	0.00	0.00	0.00
4,800.0	0.00	0.00	4,782.9	43.9	-322.6	325.5	0.00	0.00	0.00	0.00
4,900.0	0.00	0.00	4,882.9	43.9	-322.6	325.5	0.00	0.00	0.00	0.00
5,000.0	0.00	0.00	4,982.9	43.9	-322.6	325.5	0.00	0.00	0.00	0.00
5,100.0	0.00	0.00	5,082.9	43.9	-322.6	325.5	0.00	0.00	0.00	0.00
5,200.0	0.00	0.00	5,182.9	43.9	-322.6	325.5	0.00	0.00	0.00	0.00
5,300.0	0.00	0.00	5,282.9	43.9	-322.6	325.5	0.00	0.00	0.00	0.00
5,400.0	0.00	0.00	5,382.9	43.9	-322.6	325.5	0.00	0.00	0.00	0.00
5,500.0	0.00	0.00	5,482.9	43.9	-322.6	325.5	0.00	0.00	0.00	0.00
5,600.0	0.00	0.00	5,582.9	43.9	-322.6	325.5	0.00	0.00	0.00	0.00
5,605.6	0.00	0.00	5,588.5	43.9	-322.6	325.5	0.00	0.00	0.00	0.00
Cameo Coal										
5,700.0	0.00	0.00	5,682.9	43.9	-322.6	325.5	0.00	0.00	0.00	0.00
5,800.0	0.00	0.00	5,782.9	43.9	-322.6	325.5	0.00	0.00	0.00	0.00
5,810.6	0.00	0.00	5,793.5	43.9	-322.6	325.5	0.00	0.00	0.00	0.00
Rollins										
5,900.0	0.00	0.00	5,882.9	43.9	-322.6	325.5	0.00	0.00	0.00	0.00
5,974.6	0.00	0.00	5,957.5	43.9	-322.6	325.5	0.00	0.00	0.00	0.00
Cozette										
6,000.0	0.00	0.00	5,982.9	43.9	-322.6	325.5	0.00	0.00	0.00	0.00
6,011.1	0.00	0.00	5,994.0	43.9	-322.6	325.5	0.00	0.00	0.00	0.00
TD at 6011.1										

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
260.0	260.0	0.0	0.0	Start Build 1.50
681.5	680.7	3.1	-23.0	Start 2534.1 hold at 681.5 MD
3,215.6	3,199.3	40.8	-299.5	Start Drop -1.50
3,637.1	3,620.0	43.9	-322.6	Start 2374.0 hold at 3637.1 MD
6,011.1	5,994.0	43.9	-322.6	TD at 6011.1

Vertical Section Information

Angle Type	Target	Azimuth (°)	Origin Type	Origin		Start TVD (ft)
				+N/-S (ft)	+E/-W (ft)	
Target	698-9-50	277.76	Slot	0.0	0.0	0.0

Survey tool program

From (ft)	To (ft)	Survey/Plan	Survey Tool
0.0	6,011.1	Plan #1	MWD

Plan Report for SKR-698-09-BV-03 - Plan #1**Casing Details**

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
1,000.0	997.2	8 5/8"	8-5/8	12-1/4

Formation Details

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,840.4	1,832.5	Wasatch G			
2,028.5	2,019.5	Fort Union			
2,986.4	2,971.5	Ohio Creek			
3,337.3	3,320.5	Williams Fork			
5,605.6	5,588.5	Cameo Coal			
5,810.6	5,793.5	Rollins			
5,974.6	5,957.5	Cozette			

Targets associated with this wellbore

Target Name	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Shape
698-9-50	3,620.0	43.9	-322.6	Ellipse

North Reference Sheet for SKR-698-09-BV (New) - SKR-698-09-BV-03 - 698-9-50

All data is in US Feet unless otherwise stated. Directions and Coordinates are relative to Grid North Reference.
 Vertical Depths are relative to RKB @ 5888.5ft (RKB). Northing and Easting are relative to SKR-698-09-BV-03 (Slot 3) - Slot Slot 3
 Coordinate System is US State Plane 1983, Colorado Central Zone using datum North American Datum 1983, ellipsoid GRS 1980
 Projection method is Lambert Conformal Conic (2 parallel)
 Central Meridian is -105.50°, Longitude Origin:0° 0' 0.000 E°, Latitude Origin:39° 45' 0.000 N°
 False Easting: 3,000,000.00ft, False Northing: 1,000,000.00ft, Scale Reduction: 0.99996598

Grid Coordinates of Well: 1,636,126.57 ft N, 2,201,467.32 ft E
 Geographical Coordinates of Well: 39° 32' 44.80" N, 108° 19' 55.65" W
 Grid Convergence at Surface is: -1.79°

Based upon Minimum Curvature type calculations, at a Measured Depth of 6,011.12ft
 the Bottom Hole Displacement is 325.54ft in the Direction of 277.76° (Grid).

Magnetic Convergence at surface is: -12.62° (10 April 2009, , BGGM2007)

