

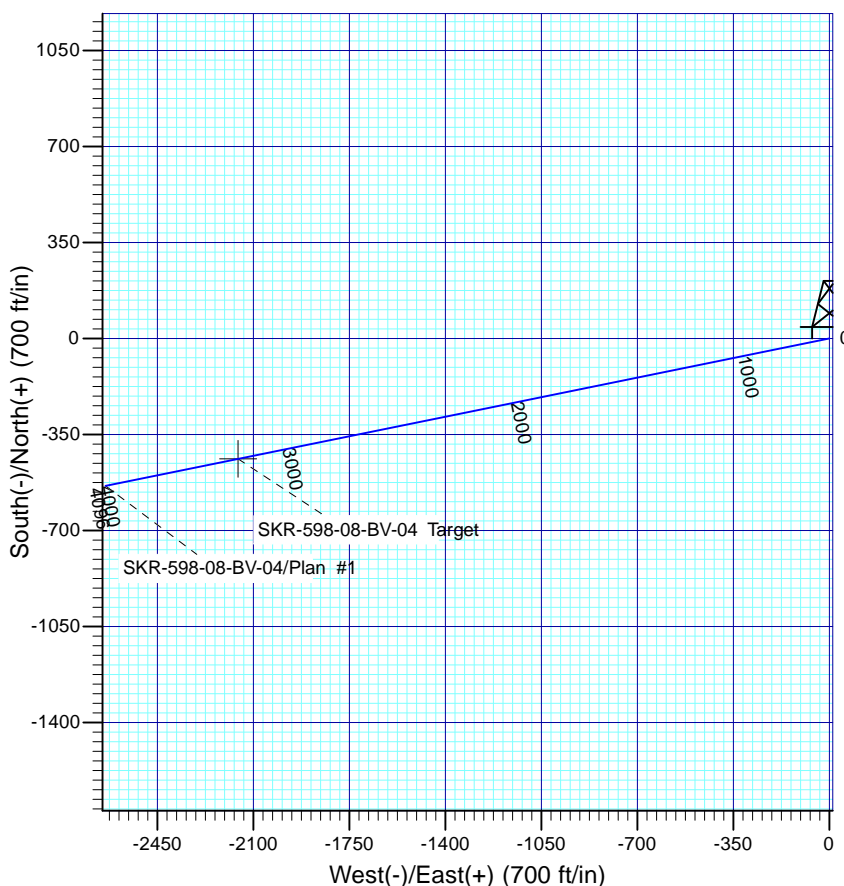
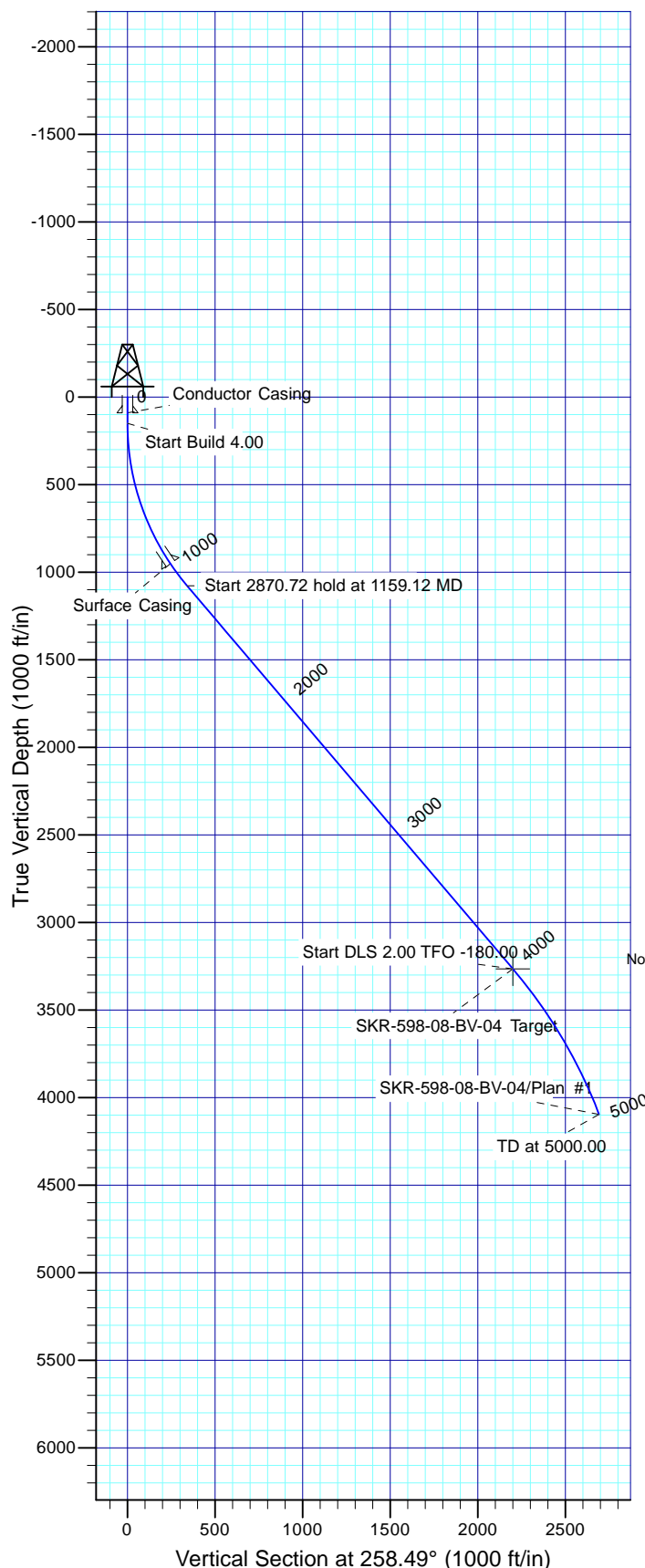
Well Details: SKR-598-08-BV-04

TVD Reference: GL 6549.60 & RKB 12.5' @ 6562.106 Ground Level: 6549.60
 +N/-S +E/-W Northing Easting Latitude Longitude Slot
 0.00 0.00 1664477.99 2179231.49 39° 37' 17.922 N 108° 24' 50.976 W



Azimuths to True North
Magnetic North: 10.28°

Magnetic Field
Strength: 52111.0nT
Dip Angle: 65.73°
Date: 5/2/2013
Model: IGRF200510



FORMATION TOP DETAILS

No formation data is available

Plan: Plan #1

16:56, May 02 2013
Created By: Janie Collins

PROJECT DETAILS: Garfield County, CO (NAD83)

Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: Colorado Central Zone
System Datum: Mean Sea Level

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	150.00	0.00	0.00	150.00	0.00	0.00	0.00	0.00	0.00	
3	1159.12	40.36	258.49	1077.70	-68.04	-334.15	4.00	258.49	341.00	
4	4029.85	40.36	258.49	3265.00	-439.00	-2156.00	0.00	0.00	2200.24	SKR-598-08-BV-04 Target
5	5000.00	20.96	258.49	4095.52	-537.25	-2638.51	2.00	-180.00	2692.65	



Chevron

**Garfield County, CO (NAD83)
Skinner Ridge Field
SKR-598-08-BV-04**

OH

Plan: Plan #1

Standard Planning Report

02 May, 2013



Scientific Drilling



Database:	Grand Junction District	Local Co-ordinate Reference:	Well SKR-598-08-BV-04
Company:	Chevron	TVD Reference:	GL 6549.60 & RKB 12.5' @ 6562.10ft
Project:	Garfield County, CO (NAD83)	MD Reference:	GL 6549.60 & RKB 12.5' @ 6562.10ft
Site:	Skinner Ridge Field	North Reference:	True
Well:	SKR-598-08-BV-04	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Project	Garfield County, CO (NAD83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Central Zone		

Site		Skinner Ridge Field			
Site Position: From:		Northing:	1,664,493.63 usft	Latitude:	39° 37' 18.075 N
	Lat/Long	Easting:	2,179,228.12 usft	Longitude:	108° 24' 51.026 W
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	Grid Convergence:	-1.84

Well	SKR-598-08-BV-04					
Well Position	+N/-S	-15.53 ft	Northing:	1,664,477.98 usft	Latitude:	39° 37' 17.922 N
	+E/-W	3.87 ft	Easting:	2,179,231.49 usft	Longitude:	108° 24' 50.976 W
Position Uncertainty		0.00 ft	Wellhead Elevation:		Ground Level:	6,549.60 ft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	5/2/2013	10.28	65.73	52,111

Design	Plan #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	258.49

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
150.00	0.00	0.00	150.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,159.12	40.36	258.49	1,077.70	-68.04	-334.15	4.00	4.00	0.00	258.49	
4,029.85	40.36	258.49	3,265.00	-439.00	-2,156.00	0.00	0.00	0.00	0.00	SKR-598-08-BV-04 T
5,000.00	20.96	258.49	4,095.52	-537.25	-2,638.51	2.00	-2.00	0.00	-180.00	



Database:	Grand Junction District	Local Co-ordinate Reference:	Well SKR-598-08-BV-04
Company:	Chevron	TVD Reference:	GL 6549.60 & RKB 12.5' @ 6562.10ft
Project:	Garfield County, CO (NAD83)	MD Reference:	GL 6549.60 & RKB 12.5' @ 6562.10ft
Site:	Skinner Ridge Field	North Reference:	True
Well:	SKR-598-08-BV-04	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey									
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)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
90.00	0.00	0.00	90.00	0.00	0.00	0.00	0.00	0.00	0.00
Conductor Casing									
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
150.00	0.00	0.00	150.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 4.00									
200.00	2.00	258.49	199.99	-0.17	-0.86	0.87	4.00	4.00	0.00
300.00	6.00	258.49	299.73	-1.57	-7.69	7.85	4.00	4.00	0.00
400.00	10.00	258.49	398.73	-4.34	-21.32	21.76	4.00	4.00	0.00
500.00	14.00	258.49	496.53	-8.49	-41.69	42.55	4.00	4.00	0.00
600.00	18.00	258.49	592.63	-13.99	-68.70	70.11	4.00	4.00	0.00
700.00	22.00	258.49	686.58	-20.81	-102.20	104.30	4.00	4.00	0.00
800.00	26.00	258.49	777.92	-28.92	-142.05	144.97	4.00	4.00	0.00
900.00	30.00	258.49	866.20	-38.29	-188.05	191.90	4.00	4.00	0.00
1,000.00	34.00	258.49	950.98	-48.86	-239.96	244.89	4.00	4.00	0.00
Surface Casing									
1,100.00	38.00	258.49	1,031.87	-60.59	-297.55	303.65	4.00	4.00	0.00
1,159.12	40.36	258.49	1,077.70	-68.04	-334.15	341.00	4.00	4.00	0.00
Start 2870.72 hold at 1159.12 MD									
1,200.00	40.36	258.49	1,108.84	-73.32	-360.09	367.48	0.00	0.00	0.00
1,300.00	40.36	258.49	1,185.03	-86.24	-423.55	432.24	0.00	0.00	0.00
1,400.00	40.36	258.49	1,261.23	-99.16	-487.01	497.01	0.00	0.00	0.00
1,500.00	40.36	258.49	1,337.42	-112.09	-550.48	561.77	0.00	0.00	0.00
1,600.00	40.36	258.49	1,413.61	-125.01	-613.94	626.54	0.00	0.00	0.00
1,700.00	40.36	258.49	1,489.81	-137.93	-677.40	691.30	0.00	0.00	0.00
1,800.00	40.36	258.49	1,566.00	-150.85	-740.87	756.07	0.00	0.00	0.00
1,900.00	40.36	258.49	1,642.20	-163.78	-804.33	820.84	0.00	0.00	0.00
2,000.00	40.36	258.49	1,718.39	-176.70	-867.79	885.60	0.00	0.00	0.00
2,100.00	40.36	258.49	1,794.58	-189.62	-931.26	950.37	0.00	0.00	0.00
2,200.00	40.36	258.49	1,870.78	-202.54	-994.72	1,015.13	0.00	0.00	0.00
2,300.00	40.36	258.49	1,946.97	-215.46	-1,058.18	1,079.90	0.00	0.00	0.00
2,400.00	40.36	258.49	2,023.16	-228.39	-1,121.65	1,144.66	0.00	0.00	0.00
2,500.00	40.36	258.49	2,099.36	-241.31	-1,185.11	1,209.43	0.00	0.00	0.00
2,600.00	40.36	258.49	2,175.55	-254.23	-1,248.57	1,274.19	0.00	0.00	0.00
2,700.00	40.36	258.49	2,251.74	-267.15	-1,312.04	1,338.96	0.00	0.00	0.00
2,800.00	40.36	258.49	2,327.94	-280.08	-1,375.50	1,403.72	0.00	0.00	0.00
2,900.00	40.36	258.49	2,404.13	-293.00	-1,438.96	1,468.49	0.00	0.00	0.00
3,000.00	40.36	258.49	2,480.32	-305.92	-1,502.43	1,533.25	0.00	0.00	0.00
3,100.00	40.36	258.49	2,556.52	-318.84	-1,565.89	1,598.02	0.00	0.00	0.00
3,200.00	40.36	258.49	2,632.71	-331.77	-1,629.35	1,662.79	0.00	0.00	0.00
3,300.00	40.36	258.49	2,708.90	-344.69	-1,692.82	1,727.55	0.00	0.00	0.00
3,400.00	40.36	258.49	2,785.10	-357.61	-1,756.28	1,792.32	0.00	0.00	0.00
3,500.00	40.36	258.49	2,861.29	-370.53	-1,819.74	1,857.08	0.00	0.00	0.00
3,600.00	40.36	258.49	2,937.48	-383.45	-1,883.20	1,921.85	0.00	0.00	0.00
3,700.00	40.36	258.49	3,013.68	-396.38	-1,946.67	1,986.61	0.00	0.00	0.00
3,800.00	40.36	258.49	3,089.87	-409.30	-2,010.13	2,051.38	0.00	0.00	0.00
3,900.00	40.36	258.49	3,166.06	-422.22	-2,073.59	2,116.14	0.00	0.00	0.00
4,000.00	40.36	258.49	3,242.26	-435.14	-2,137.06	2,180.91	0.00	0.00	0.00
4,029.85	40.36	258.49	3,265.00	-439.00	-2,156.00	2,200.24	0.00	0.00	0.00
Start DLS 2.00 TFO -180.00 - SKR-598-08-BV-04 Target									
4,100.00	38.96	258.49	3,319.00	-447.93	-2,199.87	2,245.02	2.00	-2.00	0.00
4,200.00	36.96	258.49	3,397.84	-460.21	-2,260.15	2,306.53	2.00	-2.00	0.00
4,300.00	34.96	258.49	3,478.78	-471.92	-2,317.69	2,365.25	2.00	-2.00	0.00
4,400.00	32.96	258.49	3,561.71	-483.07	-2,372.43	2,421.11	2.00	-2.00	0.00



Database:	Grand Junction District	Local Co-ordinate Reference:	Well SKR-598-08-BV-04
Company:	Chevron	TVD Reference:	GL 6549.60 & RKB 12.5' @ 6562.10ft
Project:	Garfield County, CO (NAD83)	MD Reference:	GL 6549.60 & RKB 12.5' @ 6562.10ft
Site:	Skinner Ridge Field	North Reference:	True
Well:	SKR-598-08-BV-04	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey									
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)
4,500.00	30.96	258.49	3,646.55	-493.63	-2,424.30	2,474.04	2.00	-2.00	0.00
4,600.00	28.96	258.49	3,733.18	-503.60	-2,473.23	2,523.98	2.00	-2.00	0.00
4,700.00	26.96	258.49	3,821.50	-512.95	-2,519.18	2,570.87	2.00	-2.00	0.00
4,800.00	24.96	258.49	3,911.41	-521.68	-2,562.07	2,614.64	2.00	-2.00	0.00
4,900.00	22.96	258.49	4,002.78	-529.79	-2,601.86	2,655.25	2.00	-2.00	0.00
5,000.00	20.96	258.49	4,095.52	-537.25	-2,638.51	2,692.65	2.00	-2.00	0.00
TD at 5000.00									

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
SKR-598-08-BV-04 Targ - plan hits target center - Point	0.00	0.00	3,265.00	-439.00	-2,156.00	1,664,108.36	2,177,062.52	39° 37' 13.582 N	108° 25' 18.529 W

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)	
90.00	90.00	Conductor Casing	16.000	16.000	
1,000.00	950.98	Surface Casing	8.625	12.250	

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
150.00	150.00	0.00	0.00	Start Build 4.00
1,159.12	1,077.70	-68.04	-334.15	Start 2870.72 hold at 1159.12 MD
4,029.85	3,265.00	-439.00	-2,156.00	Start DLS 2.00 TFO -180.00
5,000.00	4,095.52	-537.25	-2,638.51	TD at 5000.00