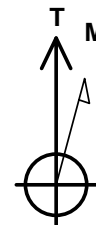


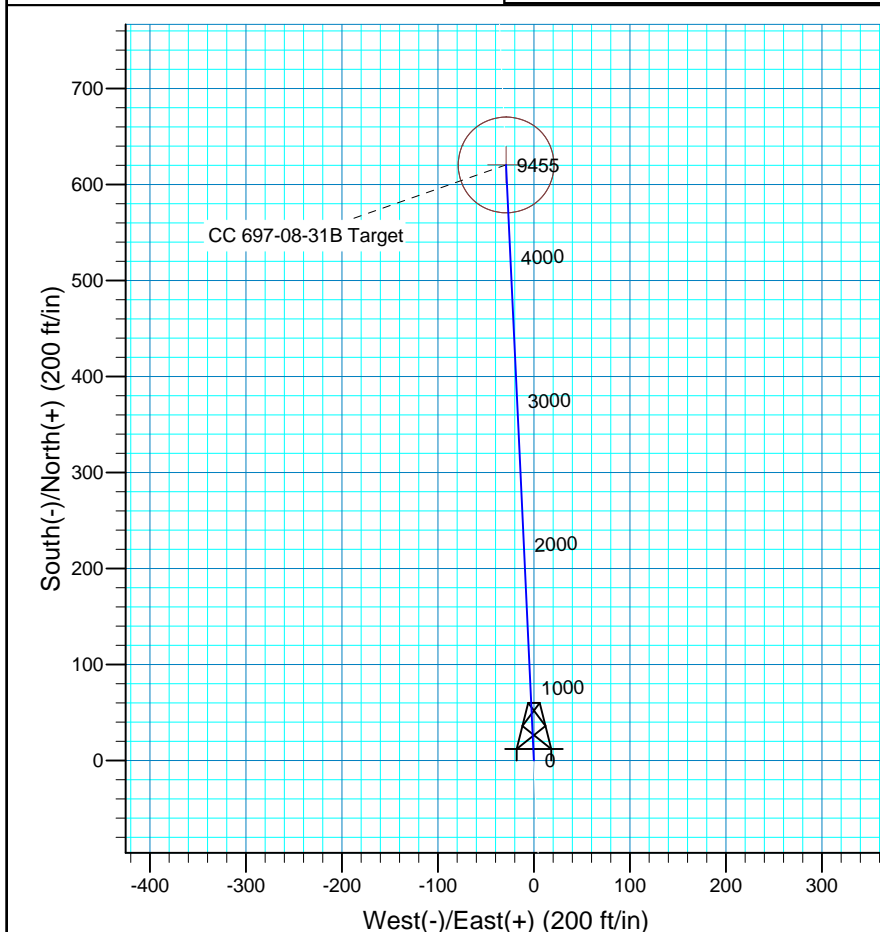
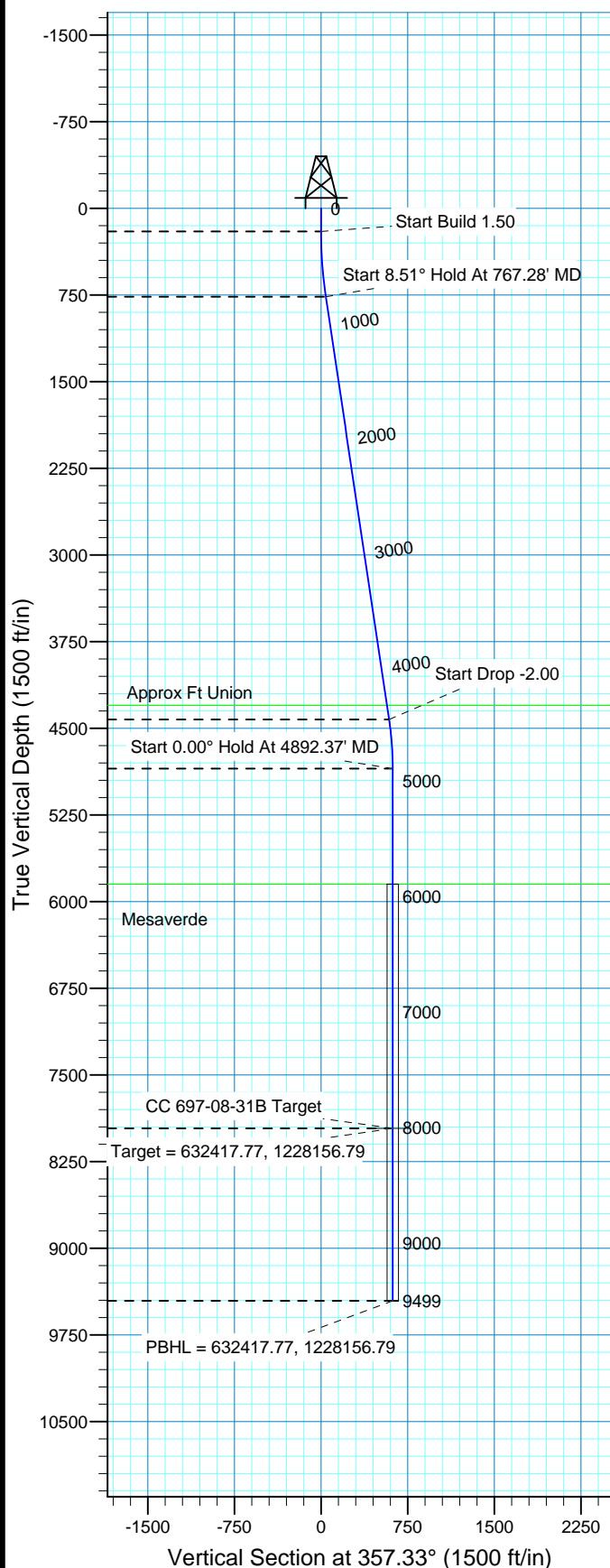
WELL DETAILS: Cascade Creek 697-08-31B

+N/-S	+E/-W	GL 8425' & RKB 30' @ 8455.00ft	8425.00	Latitude	Longitude	Slot
0.00	0.00	Northing	Easting	39° 32' 10.246 N	108° 14' 13.046 W	
		631796.85	1228167.01			



Azimuths to True North
Magnetic North: 10.77°

Magnetic Field
Strength: 52502.4snT
Dip Angle: 65.80°
Date: 2008/11/19
Model: IGRF2005-10



FORMATION TOP DETAILS

TVDP	MD	Path	Formation
4300.00	4341.43		Approx Ft Union
5848.00	5892.37		Mesaverde

Plan: Plan #2 (Cascade Creek 697-08-31B/OH)

Created By: Rex Hall Date: 2010-06-15

PROJECT DETAILS: Garfield County, CO NAD27

Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: Colorado Central 502

System Datum: Mean Sea Level
Local North: No north reference data is available

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	200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	
3	767.28	8.51	357.33	765.19	42.00	-1.96	1.50	357.33	42.05	
4	4466.91	8.51	357.33	4424.10	588.83	-27.46	0.00	0.00	589.47	
5	4892.37	0.00	0.00	4848.00	620.33	-28.93	2.00	180.00	621.01	
6	8006.37	0.00	0.00	7962.00	620.33	-28.93	0.00	0.00	621.01	CC 697-08-31B Target
7	9499.37	0.00	0.00	9455.00	620.33	-28.93	0.00	0.00	621.01	



OXY USA RMAT

**Garfield County, CO NAD27
Cascade Creek 608-43-31 Pad
Cascade Creek 697-08-31B
OH**

Plan: Plan #2

Standard Planning Report

15 June, 2010



Database:	EDM 2003.16 Multi-User Db	Local Co-ordinate Reference:	Well Cascade Creek 697-08-31B
Company:	OXY USA RMAT	TVD Reference:	GL 8425' & RKB 30' @ 8455.00ft
Project:	Garfield County, CO NAD27	MD Reference:	GL 8425' & RKB 30' @ 8455.00ft
Site:	Cascade Creek 608-43-31 Pad	North Reference:	True
Well:	Cascade Creek 697-08-31B	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #2		

Project	Garfield County, CO NAD27		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	Colorado Central 502		

Site		Cascade Creek 608-43-31 Pad, Sec 8 T6S R97W			
Site Position:		Northing:	39.54 ft	Latitude:	37° 37' 28.115 N
From:	Map	Easting:	-108.24 ft	Longitude:	112° 24' 37.715 W
Position Uncertainty:	0.00 ft	Slot Radius:	in	Grid Convergence:	-4.36 °

Well	Cascade Creek 697-08-31B,					
Well Position	+N/-S	0.00 ft	Northing:	631,796.85 ft	Latitude:	39° 32' 10.246 N
	+E/-W	0.00 ft	Easting:	1,228,167.01 ft	Longitude:	108° 14' 13.046 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	8,425.00 ft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2005-10	2008/11/19	10.77	65.80	52,502

Design	Plan #2			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	357.33

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	
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00	
767.28	8.51	357.33	765.19	42.00	-1.96	1.50	1.50	0.00	357.33	
4,466.91	8.51	357.33	4,424.10	588.83	-27.46	0.00	0.00	0.00	0.00	
4,892.37	0.00	0.00	4,848.00	620.33	-28.93	2.00	-2.00	0.00	180.00	
8,006.37	0.00	0.00	7,962.00	620.33	-28.93	0.00	0.00	0.00	0.00	CC 697-08-31B Target
9,499.37	0.00	0.00	9,455.00	620.33	-28.93	0.00	0.00	0.00	0.00	

Database:	EDM 2003.16 Multi-User Db	Local Co-ordinate Reference:	Well Cascade Creek 697-08-31B
Company:	OXY USA RMAT	TVD Reference:	GL 8425' & RKB 30' @ 8455.00ft
Project:	Garfield County, CO NAD27	MD Reference:	GL 8425' & RKB 30' @ 8455.00ft
Site:	Cascade Creek 608-43-31 Pad	North Reference:	True
Well:	Cascade Creek 697-08-31B	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #2		

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
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 1.50									
300.00	1.50	357.33	299.99	1.31	-0.06	1.31	1.50	1.50	0.00
400.00	3.00	357.33	399.91	5.23	-0.24	5.23	1.50	1.50	0.00
500.00	4.50	357.33	499.69	11.76	-0.55	11.77	1.50	1.50	0.00
600.00	6.00	357.33	599.27	20.90	-0.97	20.92	1.50	1.50	0.00
700.00	7.50	357.33	698.57	32.64	-1.52	32.68	1.50	1.50	0.00
767.28	8.51	357.33	765.19	42.00	-1.96	42.05	1.50	1.50	0.00
Start 8.51° Hold At 767.28' MD									
800.00	8.51	357.33	797.56	46.84	-2.18	46.89	0.00	0.00	0.00
900.00	8.51	357.33	896.46	61.62	-2.87	61.69	0.00	0.00	0.00
1,000.00	8.51	357.33	995.36	76.40	-3.56	76.48	0.00	0.00	0.00
1,100.00	8.51	357.33	1,094.25	91.18	-4.25	91.28	0.00	0.00	0.00
1,200.00	8.51	357.33	1,193.15	105.96	-4.94	106.08	0.00	0.00	0.00
1,300.00	8.51	357.33	1,292.05	120.74	-5.63	120.87	0.00	0.00	0.00
1,400.00	8.51	357.33	1,390.95	135.52	-6.32	135.67	0.00	0.00	0.00
1,500.00	8.51	357.33	1,489.85	150.30	-7.01	150.47	0.00	0.00	0.00
1,600.00	8.51	357.33	1,588.75	165.08	-7.70	165.26	0.00	0.00	0.00
1,700.00	8.51	357.33	1,687.65	179.86	-8.39	180.06	0.00	0.00	0.00
1,800.00	8.51	357.33	1,786.55	194.64	-9.08	194.86	0.00	0.00	0.00
1,900.00	8.51	357.33	1,885.45	209.42	-9.77	209.65	0.00	0.00	0.00
2,000.00	8.51	357.33	1,984.35	224.21	-10.45	224.45	0.00	0.00	0.00
2,100.00	8.51	357.33	2,083.25	238.99	-11.14	239.25	0.00	0.00	0.00
2,200.00	8.51	357.33	2,182.15	253.77	-11.83	254.04	0.00	0.00	0.00
2,300.00	8.51	357.33	2,281.05	268.55	-12.52	268.84	0.00	0.00	0.00
2,400.00	8.51	357.33	2,379.94	283.33	-13.21	283.64	0.00	0.00	0.00
2,500.00	8.51	357.33	2,478.84	298.11	-13.90	298.43	0.00	0.00	0.00
2,600.00	8.51	357.33	2,577.74	312.89	-14.59	313.23	0.00	0.00	0.00
2,700.00	8.51	357.33	2,676.64	327.67	-15.28	328.03	0.00	0.00	0.00
2,800.00	8.51	357.33	2,775.54	342.45	-15.97	342.82	0.00	0.00	0.00
2,900.00	8.51	357.33	2,874.44	357.23	-16.66	357.62	0.00	0.00	0.00
3,000.00	8.51	357.33	2,973.34	372.01	-17.35	372.42	0.00	0.00	0.00
3,100.00	8.51	357.33	3,072.24	386.79	-18.04	387.21	0.00	0.00	0.00
3,200.00	8.51	357.33	3,171.14	401.57	-18.72	402.01	0.00	0.00	0.00
3,300.00	8.51	357.33	3,270.04	416.35	-19.41	416.81	0.00	0.00	0.00
3,400.00	8.51	357.33	3,368.94	431.13	-20.10	431.60	0.00	0.00	0.00
3,500.00	8.51	357.33	3,467.84	445.92	-20.79	446.40	0.00	0.00	0.00
3,600.00	8.51	357.33	3,566.74	460.70	-21.48	461.20	0.00	0.00	0.00
3,700.00	8.51	357.33	3,665.63	475.48	-22.17	475.99	0.00	0.00	0.00
3,800.00	8.51	357.33	3,764.53	490.26	-22.86	490.79	0.00	0.00	0.00
3,900.00	8.51	357.33	3,863.43	505.04	-23.55	505.59	0.00	0.00	0.00
4,000.00	8.51	357.33	3,962.33	519.82	-24.24	520.38	0.00	0.00	0.00
4,100.00	8.51	357.33	4,061.23	534.60	-24.93	535.18	0.00	0.00	0.00
4,200.00	8.51	357.33	4,160.13	549.38	-25.62	549.98	0.00	0.00	0.00
4,300.00	8.51	357.33	4,259.03	564.16	-26.31	564.77	0.00	0.00	0.00
4,341.43	8.51	357.33	4,300.00	570.28	-26.59	570.90	0.00	0.00	0.00
Approx Ft Union									
4,400.00	8.51	357.33	4,357.93	578.94	-27.00	579.57	0.00	0.00	0.00
4,466.91	8.51	357.33	4,424.10	588.83	-27.46	589.47	0.00	0.00	0.00
Start Drop -2.00									
4,500.00	7.85	357.33	4,456.86	593.53	-27.68	594.18	2.00	-2.00	0.00

Database:	EDM 2003.16 Multi-User Db	Local Co-ordinate Reference:	Well Cascade Creek 697-08-31B
Company:	OXY USA RMAT	TVD Reference:	GL 8425' & RKB 30' @ 8455.00ft
Project:	Garfield County, CO NAD27	MD Reference:	GL 8425' & RKB 30' @ 8455.00ft
Site:	Cascade Creek 608-43-31 Pad	North Reference:	True
Well:	Cascade Creek 697-08-31B	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #2		

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)
4,600.00	5.85	357.33	4,556.14	605.44	-28.23	606.10	2.00	-2.00	0.00
4,700.00	3.85	357.33	4,655.77	613.88	-28.62	614.55	2.00	-2.00	0.00
4,800.00	1.85	357.33	4,755.65	618.84	-28.86	619.52	2.00	-2.00	0.00
4,892.37	0.00	0.00	4,848.00	620.33	-28.93	621.01	2.00	-2.00	0.00
Start 0.00° Hold At 4892.37' MD									
4,900.00	0.00	0.00	4,855.63	620.33	-28.93	621.01	0.00	0.00	0.00
5,000.00	0.00	0.00	4,955.63	620.33	-28.93	621.01	0.00	0.00	0.00
5,100.00	0.00	0.00	5,055.63	620.33	-28.93	621.01	0.00	0.00	0.00
5,200.00	0.00	0.00	5,155.63	620.33	-28.93	621.01	0.00	0.00	0.00
5,300.00	0.00	0.00	5,255.63	620.33	-28.93	621.01	0.00	0.00	0.00
5,400.00	0.00	0.00	5,355.63	620.33	-28.93	621.01	0.00	0.00	0.00
5,500.00	0.00	0.00	5,455.63	620.33	-28.93	621.01	0.00	0.00	0.00
5,600.00	0.00	0.00	5,555.63	620.33	-28.93	621.01	0.00	0.00	0.00
5,700.00	0.00	0.00	5,655.63	620.33	-28.93	621.01	0.00	0.00	0.00
5,800.00	0.00	0.00	5,755.63	620.33	-28.93	621.01	0.00	0.00	0.00
5,892.37	0.00	0.00	5,848.00	620.33	-28.93	621.01	0.00	0.00	0.00
Mesaverde									
5,900.00	0.00	0.00	5,855.63	620.33	-28.93	621.01	0.00	0.00	0.00
6,000.00	0.00	0.00	5,955.63	620.33	-28.93	621.01	0.00	0.00	0.00
6,100.00	0.00	0.00	6,055.63	620.33	-28.93	621.01	0.00	0.00	0.00
6,200.00	0.00	0.00	6,155.63	620.33	-28.93	621.01	0.00	0.00	0.00
6,300.00	0.00	0.00	6,255.63	620.33	-28.93	621.01	0.00	0.00	0.00
6,400.00	0.00	0.00	6,355.63	620.33	-28.93	621.01	0.00	0.00	0.00
6,500.00	0.00	0.00	6,455.63	620.33	-28.93	621.01	0.00	0.00	0.00
6,600.00	0.00	0.00	6,555.63	620.33	-28.93	621.01	0.00	0.00	0.00
6,700.00	0.00	0.00	6,655.63	620.33	-28.93	621.01	0.00	0.00	0.00
6,800.00	0.00	0.00	6,755.63	620.33	-28.93	621.01	0.00	0.00	0.00
6,900.00	0.00	0.00	6,855.63	620.33	-28.93	621.01	0.00	0.00	0.00
7,000.00	0.00	0.00	6,955.63	620.33	-28.93	621.01	0.00	0.00	0.00
7,100.00	0.00	0.00	7,055.63	620.33	-28.93	621.01	0.00	0.00	0.00
7,200.00	0.00	0.00	7,155.63	620.33	-28.93	621.01	0.00	0.00	0.00
7,300.00	0.00	0.00	7,255.63	620.33	-28.93	621.01	0.00	0.00	0.00
7,400.00	0.00	0.00	7,355.63	620.33	-28.93	621.01	0.00	0.00	0.00
7,500.00	0.00	0.00	7,455.63	620.33	-28.93	621.01	0.00	0.00	0.00
7,600.00	0.00	0.00	7,555.63	620.33	-28.93	621.01	0.00	0.00	0.00
7,700.00	0.00	0.00	7,655.63	620.33	-28.93	621.01	0.00	0.00	0.00
7,800.00	0.00	0.00	7,755.63	620.33	-28.93	621.01	0.00	0.00	0.00
7,900.00	0.00	0.00	7,855.63	620.33	-28.93	621.01	0.00	0.00	0.00
8,000.00	0.00	0.00	7,955.63	620.33	-28.93	621.01	0.00	0.00	0.00
8,006.37	0.00	0.00	7,962.00	620.33	-28.93	621.01	0.00	0.00	0.00
Target = 632417.77, 1228156.79 - CC 697-08-31B Target									
8,100.00	0.00	0.00	8,055.63	620.33	-28.93	621.01	0.00	0.00	0.00
8,200.00	0.00	0.00	8,155.63	620.33	-28.93	621.01	0.00	0.00	0.00
8,300.00	0.00	0.00	8,255.63	620.33	-28.93	621.01	0.00	0.00	0.00
8,400.00	0.00	0.00	8,355.63	620.33	-28.93	621.01	0.00	0.00	0.00
8,500.00	0.00	0.00	8,455.63	620.33	-28.93	621.01	0.00	0.00	0.00
8,600.00	0.00	0.00	8,555.63	620.33	-28.93	621.01	0.00	0.00	0.00
8,700.00	0.00	0.00	8,655.63	620.33	-28.93	621.01	0.00	0.00	0.00
8,800.00	0.00	0.00	8,755.63	620.33	-28.93	621.01	0.00	0.00	0.00
8,900.00	0.00	0.00	8,855.63	620.33	-28.93	621.01	0.00	0.00	0.00
9,000.00	0.00	0.00	8,955.63	620.33	-28.93	621.01	0.00	0.00	0.00
9,100.00	0.00	0.00	9,055.63	620.33	-28.93	621.01	0.00	0.00	0.00
9,200.00	0.00	0.00	9,155.63	620.33	-28.93	621.01	0.00	0.00	0.00

Database:	EDM 2003.16 Multi-User Db	Local Co-ordinate Reference:	Well Cascade Creek 697-08-31B
Company:	OXY USA RMAT	TVD Reference:	GL 8425' & RKB 30' @ 8455.00ft
Project:	Garfield County, CO NAD27	MD Reference:	GL 8425' & RKB 30' @ 8455.00ft
Site:	Cascade Creek 608-43-31 Pad	North Reference:	True
Well:	Cascade Creek 697-08-31B	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #2		

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)
9,300.00	0.00	0.00	9,255.63	620.33	-28.93	621.01	0.00	0.00	0.00
9,400.00	0.00	0.00	9,355.63	620.33	-28.93	621.01	0.00	0.00	0.00
9,499.37	0.00	0.00	9,455.00	620.33	-28.93	621.01	0.00	0.00	0.00
PBHL = 632417.77, 1228156.79									

Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- hit/miss target									
- Shape									
CC 697-08-31B Target	0.00	357.56	7,962.00	620.33	-28.93	632,417.77	1,228,156.79	39° 32' 16.377 N	108° 14' 13.415 W
- plan hits target center									
- Circle (radius 50.00)									

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
4,341.43	4,300.00	Approx Ft Union		0.00	
5,892.37	5,848.00	Mesaverde		0.00	

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
200.00	200.00	0.00	0.00	Start Build 1.50
767.28	765.19	42.00	-1.96	Start 8.51° Hold At 767.28' MD
4,466.91	4,424.10	588.83	-27.46	Start Drop -2.00
4,892.37	4,848.00	620.33	-28.93	Start 0.00° Hold At 4892.37' MD
8,006.37	7,962.00	620.33	-28.93	Target = 632417.77, 1228156.79
9,499.37	9,455.00	620.33	-28.93	PBHL = 632417.77, 1228156.79