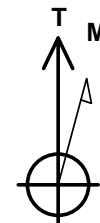


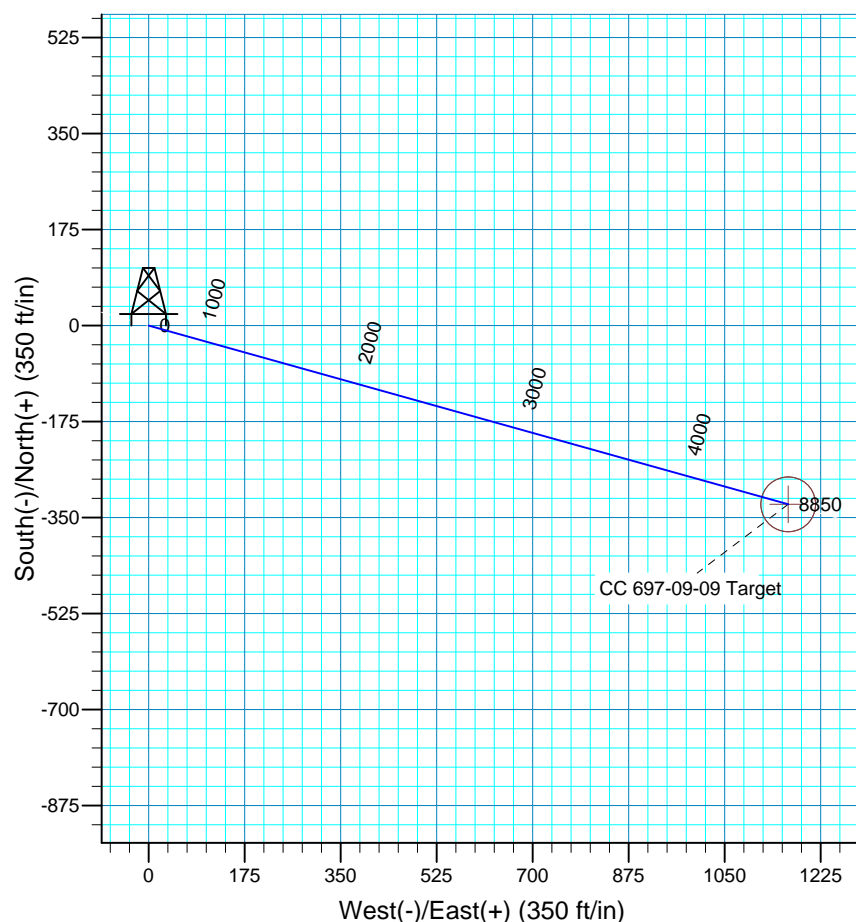
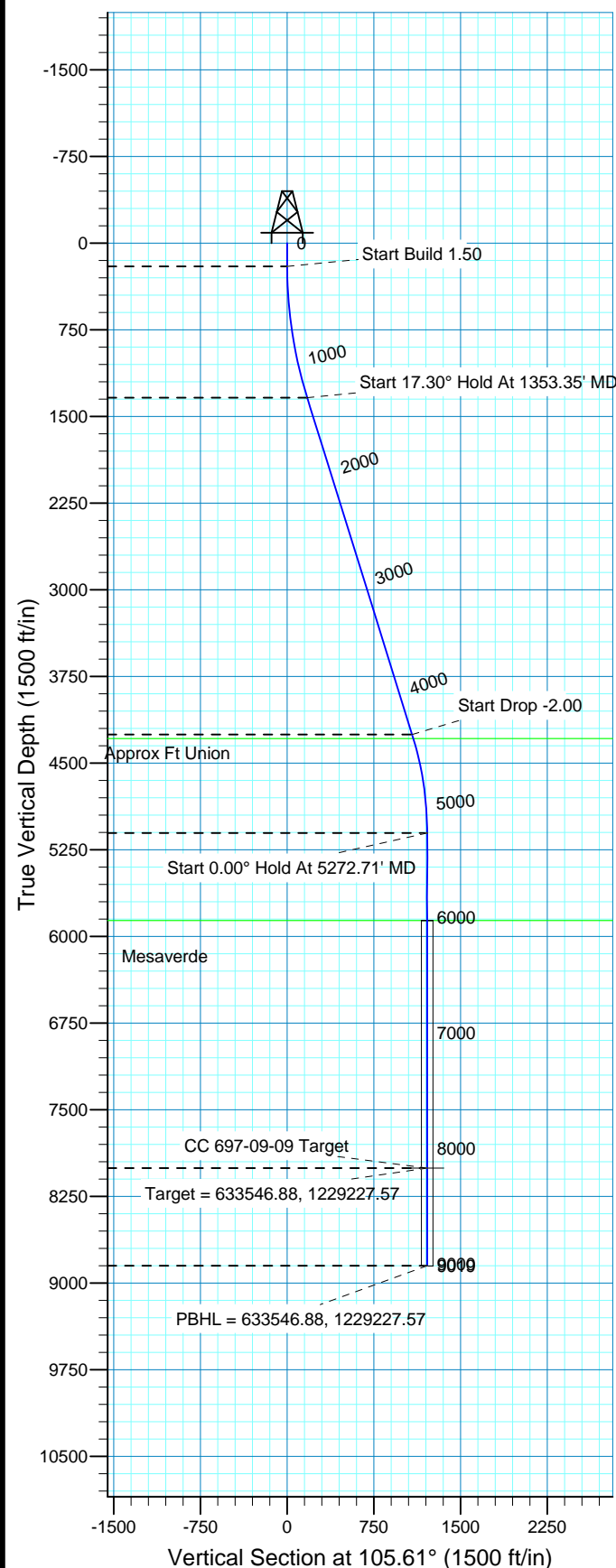
WELL DETAILS: CC 697-09-09

GL 8411' & RKB 30' @ 8441.00ft 8411.00
+N/-S +E/-W Northing Easting Latitude Longitude Slot
0.00 0.00 633907.74 1228071.89 39° 32' 31.072 N 108° 14' 15.071 W



Azimuths to True North
Magnetic North: 10.79°

Magnetic Field
Strength: 52514.9snT
Dip Angle: 65.81°
Date: 2008/10/15
Model: IGRF2005-10



FORMATION TOP DETAILS

TVDPath MDPPath Formation
4286.00 4443.17 Approx Ft Union
5861.00 6029.71 Mesaverde

Plan: Plan #2 (CC 697-09-09/OH)

Created By: Rex Hall Date: 2010-06-24

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	1353.35	17.30	105.61	1335.90	-46.51	166.43	1.50	105.61	172.81	
4	4407.70	17.30	105.61	4252.07	-290.99	1041.21	0.00	0.00	1081.10	
5	5272.71	0.00	0.00	5104.00	-325.88	1166.03	2.00	180.00	1210.71	
6	8172.71	0.00	0.00	8004.00	-325.88	1166.03	0.00	0.00	1210.71	CC 697-09-09 Target
7	9018.71	0.00	0.00	8850.00	-325.88	1166.03	0.00	0.00	1210.71	



OXY USA RMAT

Garfield County, CO NAD27

Cascade Creek 608-41 Pad

CC 697-09-09

OH

Plan: Plan #2

Standard Planning Report

24 June, 2010



Database:	EDM 2003.16 Multi-User Db	Local Co-ordinate Reference:	Well CC 697-09-09
Company:	OXY USA RMAT	TVD Reference:	GL 8411' & RKB 30' @ 8441.00ft
Project:	Garfield County, CO NAD27	MD Reference:	GL 8411' & RKB 30' @ 8441.00ft
Site:	Cascade Creek 608-41 Pad	North Reference:	True
Well:	CC 697-09-09	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 608-41 Pad, SEction 8 T6S R97W		
Site Position:		Northing:	633,966.94 ft
From:	Map	Easting:	1,228,168.67 ft
Position Uncertainty:	0.00 ft	Slot Radius:	in
		Latitude:	39° 32' 31.685 N
		Longitude:	108° 14' 13.859 W
		Grid Convergence:	-1.73 °

Well	CC 697-09-09,		
Well Position	+N/-S	0.00 ft	Northing:
	+E/-W	0.00 ft	Easting:
Position Uncertainty	0.00 ft		Wellhead Elevation:
			Latitude:
			Longitude:
			Ground Level:

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
			(°)	(°)	(nT)
	IGRF2005-10	2008/10/15	10.79	65.81	52,515

Design	Plan #2			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(ft)	(ft)	(ft)	(°)
	0.00	0.00	0.00	105.61

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	
1,353.35	17.30	105.61	1,335.90	-46.51	166.43	1.50	1.50	0.00	105.61	
4,407.70	17.30	105.61	4,252.07	-290.99	1,041.21	0.00	0.00	0.00	0.00	
5,272.71	0.00	0.00	5,104.00	-325.88	1,166.03	2.00	-2.00	0.00	180.00	
8,172.71	0.00	0.00	8,004.00	-325.88	1,166.03	0.00	0.00	0.00	0.00	CC 697-09-09 Target
9,018.71	0.00	0.00	8,850.00	-325.88	1,166.03	0.00	0.00	0.00	0.00	

Database:	EDM 2003.16 Multi-User Db	Local Co-ordinate Reference:	Well CC 697-09-09
Company:	OXY USA RMAT	TVD Reference:	GL 8411' & RKB 30' @ 8441.00ft
Project:	Garfield County, CO NAD27	MD Reference:	GL 8411' & RKB 30' @ 8441.00ft
Site:	Cascade Creek 608-41 Pad	North Reference:	True
Well:	CC 697-09-09	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	105.61	299.99	-0.35	1.26	1.31	1.50	1.50	0.00
400.00	3.00	105.61	399.91	-1.41	5.04	5.23	1.50	1.50	0.00
500.00	4.50	105.61	499.69	-3.17	11.34	11.77	1.50	1.50	0.00
600.00	6.00	105.61	599.27	-5.63	20.15	20.92	1.50	1.50	0.00
700.00	7.50	105.61	698.57	-8.80	31.47	32.68	1.50	1.50	0.00
800.00	9.00	105.61	797.54	-12.66	45.29	47.03	1.50	1.50	0.00
900.00	10.50	105.61	896.09	-17.22	61.60	63.96	1.50	1.50	0.00
1,000.00	12.00	105.61	994.16	-22.47	80.39	83.47	1.50	1.50	0.00
1,100.00	13.50	105.61	1,091.70	-28.41	101.64	105.54	1.50	1.50	0.00
1,200.00	15.00	105.61	1,188.62	-35.03	125.35	130.15	1.50	1.50	0.00
1,300.00	16.50	105.61	1,284.86	-42.34	151.49	157.30	1.50	1.50	0.00
1,353.35	17.30	105.61	1,335.90	-46.51	166.43	172.81	1.50	1.50	0.00
Start 17.30° Hold At 1353.35' MD									
1,400.00	17.30	105.61	1,380.44	-50.25	179.79	186.68	0.00	0.00	0.00
1,500.00	17.30	105.61	1,475.92	-58.25	208.43	216.42	0.00	0.00	0.00
1,600.00	17.30	105.61	1,571.40	-66.26	237.07	246.15	0.00	0.00	0.00
1,700.00	17.30	105.61	1,666.87	-74.26	265.71	275.89	0.00	0.00	0.00
1,800.00	17.30	105.61	1,762.35	-82.26	294.35	305.63	0.00	0.00	0.00
1,900.00	17.30	105.61	1,857.82	-90.27	322.99	335.37	0.00	0.00	0.00
2,000.00	17.30	105.61	1,953.30	-98.27	351.63	365.11	0.00	0.00	0.00
2,100.00	17.30	105.61	2,048.78	-106.28	380.27	394.84	0.00	0.00	0.00
2,200.00	17.30	105.61	2,144.25	-114.28	408.91	424.58	0.00	0.00	0.00
2,300.00	17.30	105.61	2,239.73	-122.29	437.55	454.32	0.00	0.00	0.00
2,400.00	17.30	105.61	2,335.20	-130.29	466.19	484.06	0.00	0.00	0.00
2,500.00	17.30	105.61	2,430.68	-138.29	494.83	513.80	0.00	0.00	0.00
2,600.00	17.30	105.61	2,526.16	-146.30	523.47	543.53	0.00	0.00	0.00
2,700.00	17.30	105.61	2,621.63	-154.30	552.11	573.27	0.00	0.00	0.00
2,800.00	17.30	105.61	2,717.11	-162.31	580.76	603.01	0.00	0.00	0.00
2,900.00	17.30	105.61	2,812.58	-170.31	609.40	632.75	0.00	0.00	0.00
3,000.00	17.30	105.61	2,908.06	-178.32	638.04	662.48	0.00	0.00	0.00
3,100.00	17.30	105.61	3,003.54	-186.32	666.68	692.22	0.00	0.00	0.00
3,200.00	17.30	105.61	3,099.01	-194.32	695.32	721.96	0.00	0.00	0.00
3,300.00	17.30	105.61	3,194.49	-202.33	723.96	751.70	0.00	0.00	0.00
3,400.00	17.30	105.61	3,289.96	-210.33	752.60	781.44	0.00	0.00	0.00
3,500.00	17.30	105.61	3,385.44	-218.34	781.24	811.17	0.00	0.00	0.00
3,600.00	17.30	105.61	3,480.91	-226.34	809.88	840.91	0.00	0.00	0.00
3,700.00	17.30	105.61	3,576.39	-234.35	838.52	870.65	0.00	0.00	0.00
3,800.00	17.30	105.61	3,671.87	-242.35	867.16	900.39	0.00	0.00	0.00
3,900.00	17.30	105.61	3,767.34	-250.35	895.80	930.13	0.00	0.00	0.00
4,000.00	17.30	105.61	3,862.82	-258.36	924.44	959.86	0.00	0.00	0.00
4,100.00	17.30	105.61	3,958.29	-266.36	953.08	989.60	0.00	0.00	0.00
4,200.00	17.30	105.61	4,053.77	-274.37	981.72	1,019.34	0.00	0.00	0.00
4,300.00	17.30	105.61	4,149.25	-282.37	1,010.36	1,049.08	0.00	0.00	0.00
4,400.00	17.30	105.61	4,244.72	-290.38	1,039.00	1,078.82	0.00	0.00	0.00
4,407.70	17.30	105.61	4,252.07	-290.99	1,041.21	1,081.10	0.00	0.00	0.00
Start Drop -2.00									
4,443.17	16.59	105.61	4,286.00	-293.77	1,051.16	1,091.44	2.00	-2.00	0.00
Approx Ft Union									
4,500.00	15.45	105.61	4,340.63	-298.00	1,066.27	1,107.13	2.00	-2.00	0.00

Database:	EDM 2003.16 Multi-User Db	Local Co-ordinate Reference:	Well CC 697-09-09
Company:	OXY USA RMAT	TVD Reference:	GL 8411' & RKB 30' @ 8441.00ft
Project:	Garfield County, CO NAD27	MD Reference:	GL 8411' & RKB 30' @ 8441.00ft
Site:	Cascade Creek 608-41 Pad	North Reference:	True
Well:	CC 697-09-09	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	13.45	105.61	4,437.46	-304.71	1,090.31	1,132.09	2.00	-2.00	0.00
4,700.00	11.45	105.61	4,535.10	-310.52	1,111.08	1,153.65	2.00	-2.00	0.00
4,800.00	9.45	105.61	4,633.43	-315.40	1,128.55	1,171.80	2.00	-2.00	0.00
4,900.00	7.45	105.61	4,732.34	-319.36	1,142.71	1,186.50	2.00	-2.00	0.00
5,000.00	5.45	105.61	4,831.70	-322.38	1,153.54	1,197.74	2.00	-2.00	0.00
5,100.00	3.45	105.61	4,931.39	-324.47	1,161.02	1,205.50	2.00	-2.00	0.00
5,200.00	1.45	105.61	5,031.30	-325.63	1,165.14	1,209.79	2.00	-2.00	0.00
5,272.71	0.00	0.00	5,104.00	-325.88	1,166.03	1,210.71	2.00	-2.00	0.00
Start 0.00° Hold At 5272.71' MD									
5,300.00	0.00	0.00	5,131.29	-325.88	1,166.03	1,210.71	0.00	0.00	0.00
5,400.00	0.00	0.00	5,231.29	-325.88	1,166.03	1,210.71	0.00	0.00	0.00
5,500.00	0.00	0.00	5,331.29	-325.88	1,166.03	1,210.71	0.00	0.00	0.00
5,600.00	0.00	0.00	5,431.29	-325.88	1,166.03	1,210.71	0.00	0.00	0.00
5,700.00	0.00	0.00	5,531.29	-325.88	1,166.03	1,210.71	0.00	0.00	0.00
5,800.00	0.00	0.00	5,631.29	-325.88	1,166.03	1,210.71	0.00	0.00	0.00
5,900.00	0.00	0.00	5,731.29	-325.88	1,166.03	1,210.71	0.00	0.00	0.00
6,000.00	0.00	0.00	5,831.29	-325.88	1,166.03	1,210.71	0.00	0.00	0.00
6,029.71	0.00	0.00	5,861.00	-325.88	1,166.03	1,210.71	0.00	0.00	0.00
Mesaverde									
6,100.00	0.00	0.00	5,931.29	-325.88	1,166.03	1,210.71	0.00	0.00	0.00
6,200.00	0.00	0.00	6,031.29	-325.88	1,166.03	1,210.71	0.00	0.00	0.00
6,300.00	0.00	0.00	6,131.29	-325.88	1,166.03	1,210.71	0.00	0.00	0.00
6,400.00	0.00	0.00	6,231.29	-325.88	1,166.03	1,210.71	0.00	0.00	0.00
6,500.00	0.00	0.00	6,331.29	-325.88	1,166.03	1,210.71	0.00	0.00	0.00
6,600.00	0.00	0.00	6,431.29	-325.88	1,166.03	1,210.71	0.00	0.00	0.00
6,700.00	0.00	0.00	6,531.29	-325.88	1,166.03	1,210.71	0.00	0.00	0.00
6,800.00	0.00	0.00	6,631.29	-325.88	1,166.03	1,210.71	0.00	0.00	0.00
6,900.00	0.00	0.00	6,731.29	-325.88	1,166.03	1,210.71	0.00	0.00	0.00
7,000.00	0.00	0.00	6,831.29	-325.88	1,166.03	1,210.71	0.00	0.00	0.00
7,100.00	0.00	0.00	6,931.29	-325.88	1,166.03	1,210.71	0.00	0.00	0.00
7,200.00	0.00	0.00	7,031.29	-325.88	1,166.03	1,210.71	0.00	0.00	0.00
7,300.00	0.00	0.00	7,131.29	-325.88	1,166.03	1,210.71	0.00	0.00	0.00
7,400.00	0.00	0.00	7,231.29	-325.88	1,166.03	1,210.71	0.00	0.00	0.00
7,500.00	0.00	0.00	7,331.29	-325.88	1,166.03	1,210.71	0.00	0.00	0.00
7,600.00	0.00	0.00	7,431.29	-325.88	1,166.03	1,210.71	0.00	0.00	0.00
7,700.00	0.00	0.00	7,531.29	-325.88	1,166.03	1,210.71	0.00	0.00	0.00
7,800.00	0.00	0.00	7,631.29	-325.88	1,166.03	1,210.71	0.00	0.00	0.00
7,900.00	0.00	0.00	7,731.29	-325.88	1,166.03	1,210.71	0.00	0.00	0.00
8,000.00	0.00	0.00	7,831.29	-325.88	1,166.03	1,210.71	0.00	0.00	0.00
8,100.00	0.00	0.00	7,931.29	-325.88	1,166.03	1,210.71	0.00	0.00	0.00
8,172.71	0.00	0.00	8,004.00	-325.88	1,166.03	1,210.71	0.00	0.00	0.00
Target = 633546.88, 1229227.57 - CC 697-09-09 Target									
8,200.00	0.00	0.00	8,031.29	-325.88	1,166.03	1,210.71	0.00	0.00	0.00
8,300.00	0.00	0.00	8,131.29	-325.88	1,166.03	1,210.71	0.00	0.00	0.00
8,400.00	0.00	0.00	8,231.29	-325.88	1,166.03	1,210.71	0.00	0.00	0.00
8,500.00	0.00	0.00	8,331.29	-325.88	1,166.03	1,210.71	0.00	0.00	0.00
8,600.00	0.00	0.00	8,431.29	-325.88	1,166.03	1,210.71	0.00	0.00	0.00
8,700.00	0.00	0.00	8,531.29	-325.88	1,166.03	1,210.71	0.00	0.00	0.00
8,800.00	0.00	0.00	8,631.29	-325.88	1,166.03	1,210.71	0.00	0.00	0.00
8,900.00	0.00	0.00	8,731.29	-325.88	1,166.03	1,210.71	0.00	0.00	0.00
9,000.00	0.00	0.00	8,831.29	-325.88	1,166.03	1,210.71	0.00	0.00	0.00
9,018.71	0.00	0.00	8,850.00	-325.88	1,166.03	1,210.71	0.00	0.00	0.00
PBHL = 633546.88, 1229227.57									

Database:	EDM 2003.16 Multi-User Db	Local Co-ordinate Reference:	Well CC 697-09-09
Company:	OXY USA RMAT	TVD Reference:	GL 8411' & RKB 30' @ 8441.00ft
Project:	Garfield County, CO NAD27	MD Reference:	GL 8411' & RKB 30' @ 8441.00ft
Site:	Cascade Creek 608-41 Pad	North Reference:	True
Well:	CC 697-09-09	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)

Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
CC 697-09-09 Target	0.00	108.77	8,004.00	-325.88	1,166.03	633,546.88	1,229,227.57	39° 32' 27.851 N	108° 14' 0.187 W
- hit/miss target									
- Shape									
- plan hits target center									
- Circle (radius 50.00)									

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
4,443.17	4,286.00	Approx Ft Union		0.00		
6,029.71	5,861.00	Mesaverde		0.00		

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
200.00	200.00	0.00	0.00	Start Build 1.50	
1,353.35	1,335.90	-46.51	166.43	Start 17.30° Hold At 1353.35' MD	
4,407.70	4,252.07	-290.99	1,041.21	Start Drop -2.00	
5,272.71	5,104.00	-325.88	1,166.03	Start 0.00° Hold At 5272.71' MD	
8,172.71	8,004.00	-325.88	1,166.03	Target = 633546.88, 1229227.57	
9,018.71	8,850.00	-325.88	1,166.03	PBHL = 633546.88, 1229227.57	