

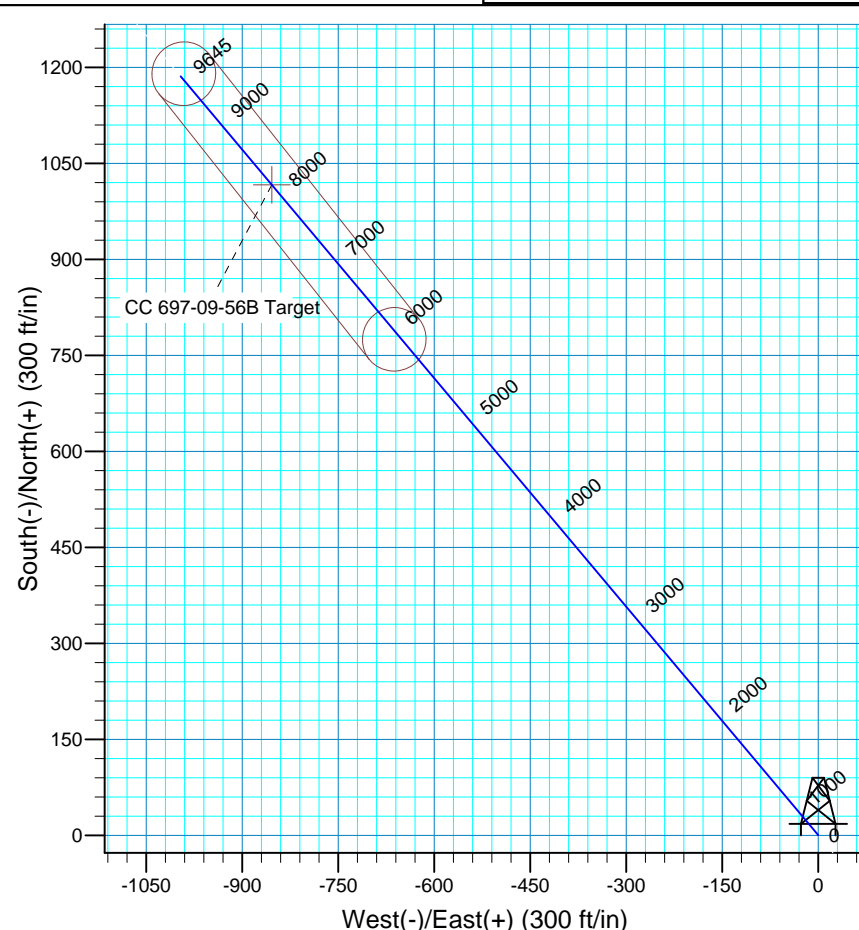
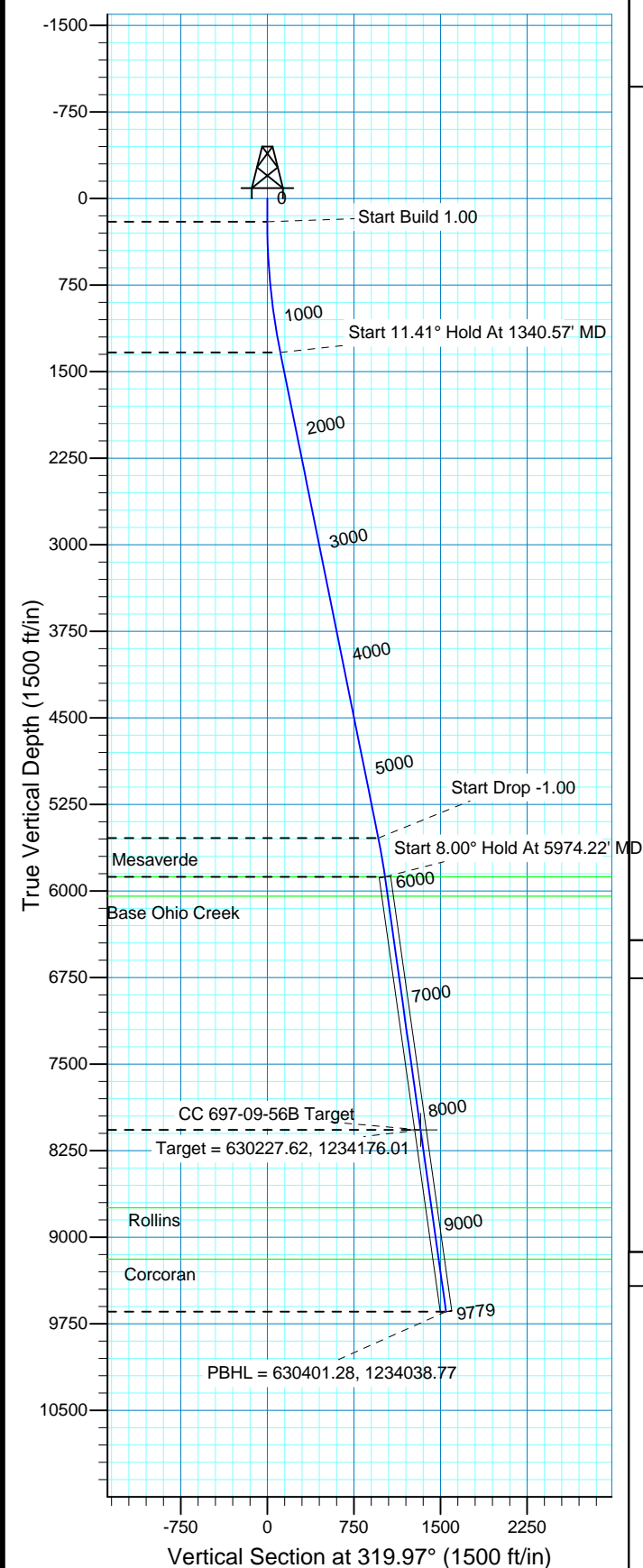
WELL DETAILS: CC 697-09-56B

GL 8348' & RKB 30' @ 8378.00ft 8348.00
+N/-S +E/-W Northing Easting Latitude Longitude Slot
0.00 0.00 629185.91 1234999.24 39° 31' 46.477 N 108° 12' 44.885 W A



Azimuths to True North
Magnetic North: 10.78°

Magnetic Field
Strength: 52517.6snT
Dip Angle: 65.81°
Date: 9/24/2008
Model: IGRF2005-10



FORMATION TOP DETAILS

TVDP	MD	Path	Formation
5877.00	5974.22		Mesaverde
6045.00	6143.87		Base Ohio Creek
8745.00	8870.41		Rollins
9190.00	9319.78		Corcoran

Plan: Plan #2 (CC 697-09-56B/OH)

Created By: Rex Hall Date: 2010-01-27

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	1340.57	11.41	319.97	1333.05	86.64	-72.78	1.00	319.97	113.15	
4	5633.65	11.41	319.97	5541.35	736.72	-618.82	0.00	0.00	962.13	
5	5974.22	8.00	319.97	5877.00	780.67	-655.73	1.00	180.00	1019.52	
6	8188.77	8.00	319.97	8070.00	1016.67	-853.96	0.00	0.00	1327.73	CC 697-09-56B Target
7	9779.25	8.00	319.97	9645.00	1186.16	-996.33	0.00	0.00	1549.08	



OXY USA RMAT

**Garfield County, CO NAD27
Cascade Creek 697-15-01 Pad
CC 697-09-56B - Slot A
OH**

Plan: Plan #2

Standard Planning Report

27 January, 2010



Database:	EDM 2003.16 Multi-User Db	Local Co-ordinate Reference:	Well CC 697-09-56B - Slot A
Company:	OXY USA RMAT	TVD Reference:	GL 8348' & RKB 30' @ 8378.00ft
Project:	Garfield County, CO NAD27	MD Reference:	GL 8348' & RKB 30' @ 8378.00ft
Site:	Cascade Creek 697-15-01 Pad	North Reference:	True
Well:	CC 697-09-56B	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 697-15-01 Pad, Sec 15 T6S R97W			
Site Position:		Northing:	629,156.96 ft	Latitude:	39° 31' 46.180 N
From:	Map	Easting:	1,234,961.93 ft	Longitude:	108° 12' 45.350 W
Position Uncertainty:	0.00 ft	Slot Radius:	in	Grid Convergence:	-1.71 °

Well	CC 697-09-56B - Slot A, 261' FNL 635' FWL					
Well Position	+N/-S	0.00 ft	Northing:	629,185.91 ft	Latitude:	39° 31' 46.477 N
	+E/-W	0.00 ft	Easting:	1,234,999.24 ft	Longitude:	108° 12' 44.885 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	8,348.00 ft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2005-10	9/24/2008	10.78	65.81	52,518

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	319.97

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	
1,340.57	11.41	319.97	1,333.05	86.64	-72.78	1.00	1.00	0.00	319.97	
5,633.65	11.41	319.97	5,541.35	736.72	-618.82	0.00	0.00	0.00	0.00	
5,974.22	8.00	319.97	5,877.00	780.67	-655.73	1.00	-1.00	0.00	180.00	
8,188.77	8.00	319.97	8,070.00	1,016.67	-853.96	0.00	0.00	0.00	0.00	CC 697-09-56B Target
9,779.25	8.00	319.97	9,645.00	1,186.16	-996.33	0.00	0.00	0.00	0.00	

Database:	EDM 2003.16 Multi-User Db	Local Co-ordinate Reference:	Well CC 697-09-56B - Slot A
Company:	OXY USA RMAT	TVD Reference:	GL 8348' & RKB 30' @ 8378.00ft
Project:	Garfield County, CO NAD27	MD Reference:	GL 8348' & RKB 30' @ 8378.00ft
Site:	Cascade Creek 697-15-01 Pad	North Reference:	True
Well:	CC 697-09-56B	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 1.00									
300.00	1.00	319.97	299.99	0.67	-0.56	0.87	1.00	1.00	0.00
400.00	2.00	319.97	399.96	2.67	-2.24	3.49	1.00	1.00	0.00
500.00	3.00	319.97	499.86	6.01	-5.05	7.85	1.00	1.00	0.00
600.00	4.00	319.97	599.68	10.69	-8.98	13.96	1.00	1.00	0.00
700.00	5.00	319.97	699.37	16.69	-14.02	21.80	1.00	1.00	0.00
800.00	6.00	319.97	798.90	24.03	-20.19	31.39	1.00	1.00	0.00
900.00	7.00	319.97	898.26	32.70	-27.47	42.71	1.00	1.00	0.00
1,000.00	8.00	319.97	997.40	42.70	-35.86	55.76	1.00	1.00	0.00
1,100.00	9.00	319.97	1,096.30	54.01	-45.37	70.54	1.00	1.00	0.00
1,200.00	10.00	319.97	1,194.93	66.65	-55.99	87.05	1.00	1.00	0.00
1,300.00	11.00	319.97	1,293.26	80.61	-67.71	105.27	1.00	1.00	0.00
1,340.57	11.41	319.97	1,333.05	86.64	-72.78	113.15	1.00	1.00	0.00
Start 11.41° Hold At 1340.57' MD									
1,400.00	11.41	319.97	1,391.31	95.64	-80.33	124.90	0.00	0.00	0.00
1,500.00	11.41	319.97	1,489.33	110.78	-93.05	144.68	0.00	0.00	0.00
1,600.00	11.41	319.97	1,587.36	125.93	-105.77	164.45	0.00	0.00	0.00
1,700.00	11.41	319.97	1,685.38	141.07	-118.49	184.23	0.00	0.00	0.00
1,800.00	11.41	319.97	1,783.41	156.21	-131.21	204.01	0.00	0.00	0.00
1,900.00	11.41	319.97	1,881.43	171.35	-143.93	223.78	0.00	0.00	0.00
2,000.00	11.41	319.97	1,979.46	186.50	-156.65	243.56	0.00	0.00	0.00
2,100.00	11.41	319.97	2,077.48	201.64	-169.37	263.33	0.00	0.00	0.00
2,200.00	11.41	319.97	2,175.51	216.78	-182.09	283.11	0.00	0.00	0.00
2,300.00	11.41	319.97	2,273.53	231.92	-194.81	302.88	0.00	0.00	0.00
2,400.00	11.41	319.97	2,371.56	247.07	-207.53	322.66	0.00	0.00	0.00
2,500.00	11.41	319.97	2,469.58	262.21	-220.24	342.43	0.00	0.00	0.00
2,600.00	11.41	319.97	2,567.61	277.35	-232.96	362.21	0.00	0.00	0.00
2,700.00	11.41	319.97	2,665.64	292.49	-245.68	381.99	0.00	0.00	0.00
2,800.00	11.41	319.97	2,763.66	307.64	-258.40	401.76	0.00	0.00	0.00
2,900.00	11.41	319.97	2,861.69	322.78	-271.12	421.54	0.00	0.00	0.00
3,000.00	11.41	319.97	2,959.71	337.92	-283.84	441.31	0.00	0.00	0.00
3,100.00	11.41	319.97	3,057.74	353.06	-296.56	461.09	0.00	0.00	0.00
3,200.00	11.41	319.97	3,155.76	368.21	-309.28	480.86	0.00	0.00	0.00
3,300.00	11.41	319.97	3,253.79	383.35	-322.00	500.64	0.00	0.00	0.00
3,400.00	11.41	319.97	3,351.81	398.49	-334.72	520.41	0.00	0.00	0.00
3,500.00	11.41	319.97	3,449.84	413.63	-347.44	540.19	0.00	0.00	0.00
3,600.00	11.41	319.97	3,547.86	428.78	-360.15	559.96	0.00	0.00	0.00
3,700.00	11.41	319.97	3,645.89	443.92	-372.87	579.74	0.00	0.00	0.00
3,800.00	11.41	319.97	3,743.91	459.06	-385.59	599.52	0.00	0.00	0.00
3,900.00	11.41	319.97	3,841.94	474.20	-398.31	619.29	0.00	0.00	0.00
4,000.00	11.41	319.97	3,939.96	489.35	-411.03	639.07	0.00	0.00	0.00
4,100.00	11.41	319.97	4,037.99	504.49	-423.75	658.84	0.00	0.00	0.00
4,200.00	11.41	319.97	4,136.01	519.63	-436.47	678.62	0.00	0.00	0.00
4,300.00	11.41	319.97	4,234.04	534.77	-449.19	698.39	0.00	0.00	0.00
4,400.00	11.41	319.97	4,332.06	549.92	-461.91	718.17	0.00	0.00	0.00
4,500.00	11.41	319.97	4,430.09	565.06	-474.63	737.94	0.00	0.00	0.00
4,600.00	11.41	319.97	4,528.11	580.20	-487.35	757.72	0.00	0.00	0.00
4,700.00	11.41	319.97	4,626.14	595.34	-500.07	777.50	0.00	0.00	0.00
4,800.00	11.41	319.97	4,724.16	610.49	-512.78	797.27	0.00	0.00	0.00
4,900.00	11.41	319.97	4,822.19	625.63	-525.50	817.05	0.00	0.00	0.00

Database:	EDM 2003.16 Multi-User Db	Local Co-ordinate Reference:	Well CC 697-09-56B - Slot A
Company:	OXY USA RMAT	TVD Reference:	GL 8348' & RKB 30' @ 8378.00ft
Project:	Garfield County, CO NAD27	MD Reference:	GL 8348' & RKB 30' @ 8378.00ft
Site:	Cascade Creek 697-15-01 Pad	North Reference:	True
Well:	CC 697-09-56B	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)
5,000.00	11.41	319.97	4,920.21	640.77	-538.22	836.82	0.00	0.00	0.00
5,100.00	11.41	319.97	5,018.24	655.91	-550.94	856.60	0.00	0.00	0.00
5,200.00	11.41	319.97	5,116.26	671.06	-563.66	876.37	0.00	0.00	0.00
5,300.00	11.41	319.97	5,214.29	686.20	-576.38	896.15	0.00	0.00	0.00
5,400.00	11.41	319.97	5,312.31	701.34	-589.10	915.92	0.00	0.00	0.00
5,500.00	11.41	319.97	5,410.34	716.48	-601.82	935.70	0.00	0.00	0.00
5,600.00	11.41	319.97	5,508.36	731.63	-614.54	955.48	0.00	0.00	0.00
5,633.65	11.41	319.97	5,541.35	736.72	-618.82	962.13	0.00	0.00	0.00
Start Drop -1.00									
5,700.00	10.74	319.97	5,606.46	746.48	-627.01	974.87	1.00	-1.00	0.00
5,800.00	9.74	319.97	5,704.87	760.10	-638.45	992.66	1.00	-1.00	0.00
5,900.00	8.74	319.97	5,803.57	772.39	-648.78	1,008.72	1.00	-1.00	0.00
5,974.22	8.00	319.97	5,877.00	780.67	-655.73	1,019.52	1.00	-1.00	0.00
Start 8.00° Hold At 5974.22' MD - Mesaverde									
6,000.00	8.00	319.97	5,902.53	783.41	-658.04	1,023.11	0.00	0.00	0.00
6,100.00	8.00	319.97	6,001.55	794.07	-666.99	1,037.03	0.00	0.00	0.00
6,143.87	8.00	319.97	6,045.00	798.75	-670.92	1,043.13	0.00	0.00	0.00
Base Ohio Creek									
6,200.00	8.00	319.97	6,100.58	804.73	-675.94	1,050.94	0.00	0.00	0.00
6,300.00	8.00	319.97	6,199.61	815.39	-684.89	1,064.86	0.00	0.00	0.00
6,400.00	8.00	319.97	6,298.63	826.04	-693.84	1,078.78	0.00	0.00	0.00
6,500.00	8.00	319.97	6,397.66	836.70	-702.79	1,092.70	0.00	0.00	0.00
6,600.00	8.00	319.97	6,496.69	847.36	-711.74	1,106.61	0.00	0.00	0.00
6,700.00	8.00	319.97	6,595.72	858.01	-720.70	1,120.53	0.00	0.00	0.00
6,800.00	8.00	319.97	6,694.74	868.67	-729.65	1,134.45	0.00	0.00	0.00
6,900.00	8.00	319.97	6,793.77	879.33	-738.60	1,148.36	0.00	0.00	0.00
7,000.00	8.00	319.97	6,892.80	889.98	-747.55	1,162.28	0.00	0.00	0.00
7,100.00	8.00	319.97	6,991.82	900.64	-756.50	1,176.20	0.00	0.00	0.00
7,200.00	8.00	319.97	7,090.85	911.30	-765.45	1,190.12	0.00	0.00	0.00
7,300.00	8.00	319.97	7,189.88	921.95	-774.40	1,204.03	0.00	0.00	0.00
7,400.00	8.00	319.97	7,288.90	932.61	-783.35	1,217.95	0.00	0.00	0.00
7,500.00	8.00	319.97	7,387.93	943.27	-792.31	1,231.87	0.00	0.00	0.00
7,600.00	8.00	319.97	7,486.96	953.92	-801.26	1,245.79	0.00	0.00	0.00
7,700.00	8.00	319.97	7,585.98	964.58	-810.21	1,259.70	0.00	0.00	0.00
7,800.00	8.00	319.97	7,685.01	975.24	-819.16	1,273.62	0.00	0.00	0.00
7,900.00	8.00	319.97	7,784.04	985.89	-828.11	1,287.54	0.00	0.00	0.00
8,000.00	8.00	319.97	7,883.06	996.55	-837.06	1,301.46	0.00	0.00	0.00
8,100.00	8.00	319.97	7,982.09	1,007.21	-846.01	1,315.37	0.00	0.00	0.00
8,188.77	8.00	319.97	8,070.00	1,016.67	-853.96	1,327.73	0.00	0.00	0.00
Target = 630227.62, 1234176.01 - CC 697-09-56B Target									
8,200.00	8.00	319.97	8,081.12	1,017.86	-854.96	1,329.29	0.00	0.00	0.00
8,300.00	8.00	319.97	8,180.14	1,028.52	-863.92	1,343.21	0.00	0.00	0.00
8,400.00	8.00	319.97	8,279.17	1,039.18	-872.87	1,357.12	0.00	0.00	0.00
8,500.00	8.00	319.97	8,378.20	1,049.83	-881.82	1,371.04	0.00	0.00	0.00
8,600.00	8.00	319.97	8,477.22	1,060.49	-890.77	1,384.96	0.00	0.00	0.00
8,700.00	8.00	319.97	8,576.25	1,071.15	-899.72	1,398.88	0.00	0.00	0.00
8,800.00	8.00	319.97	8,675.28	1,081.80	-908.67	1,412.79	0.00	0.00	0.00
8,870.41	8.00	319.97	8,745.00	1,089.31	-914.97	1,422.59	0.00	0.00	0.00
Rollins									
8,900.00	8.00	319.97	8,774.30	1,092.46	-917.62	1,426.71	0.00	0.00	0.00
9,000.00	8.00	319.97	8,873.33	1,103.12	-926.57	1,440.63	0.00	0.00	0.00
9,100.00	8.00	319.97	8,972.36	1,113.77	-935.53	1,454.55	0.00	0.00	0.00
9,200.00	8.00	319.97	9,071.39	1,124.43	-944.48	1,468.46	0.00	0.00	0.00

Database:	EDM 2003.16 Multi-User Db	Local Co-ordinate Reference:	Well CC 697-09-56B - Slot A
Company:	OXY USA RMAT	TVD Reference:	GL 8348' & RKB 30' @ 8378.00ft
Project:	Garfield County, CO NAD27	MD Reference:	GL 8348' & RKB 30' @ 8378.00ft
Site:	Cascade Creek 697-15-01 Pad	North Reference:	True
Well:	CC 697-09-56B	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	8.00	319.97	9,170.41	1,135.09	-953.43	1,482.38	0.00	0.00	0.00
9,319.78	8.00	319.97	9,190.00	1,137.20	-955.20	1,485.13	0.00	0.00	0.00
Corcoran									
9,400.00	8.00	319.97	9,269.44	1,145.74	-962.38	1,496.30	0.00	0.00	0.00
9,500.00	8.00	319.97	9,368.47	1,156.40	-971.33	1,510.21	0.00	0.00	0.00
9,600.00	8.00	319.97	9,467.49	1,167.06	-980.28	1,524.13	0.00	0.00	0.00
9,700.00	8.00	319.97	9,566.52	1,177.72	-989.23	1,538.05	0.00	0.00	0.00
9,779.25	8.00	319.97	9,645.00	1,186.16	-996.33	1,549.08	0.00	0.00	0.00
PBHL = 630401.28, 1234038.77									

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 697-09-56B Target	-8.00	321.61	8,070.00	1,016.67	-853.96	630,227.62	1,234,176.01	39° 31' 56.525 N	108° 12' 55.784 W
- plan hits target center									
- Circle (radius 50.00)									

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
5,974.22	5,877.00	Mesaverde		0.00	
6,143.87	6,045.00	Base Ohio Creek		0.00	
8,870.41	8,745.00	Rollins		0.00	
9,319.78	9,190.00	Corcoran		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 1.00
1,340.57	1,333.05	86.64	-72.78	Start 11.41° Hold At 1340.57' MD
5,633.65	5,541.35	736.72	-618.82	Start Drop -1.00
5,974.22	5,877.00	780.67	-655.73	Start 8.00° Hold At 5974.22' MD
8,188.77	8,070.00	1,016.67	-853.96	Target = 630227.62, 1234176.01
9,779.25	9,645.00	1,186.16	-996.33	PBHL = 630401.28, 1234038.77