

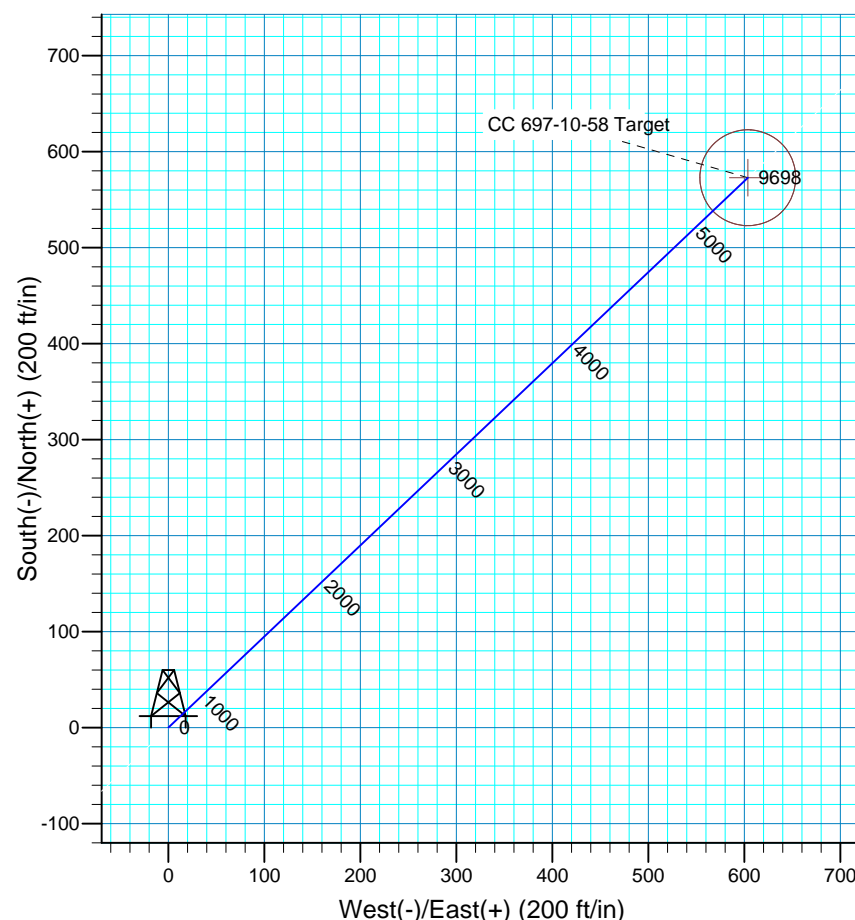
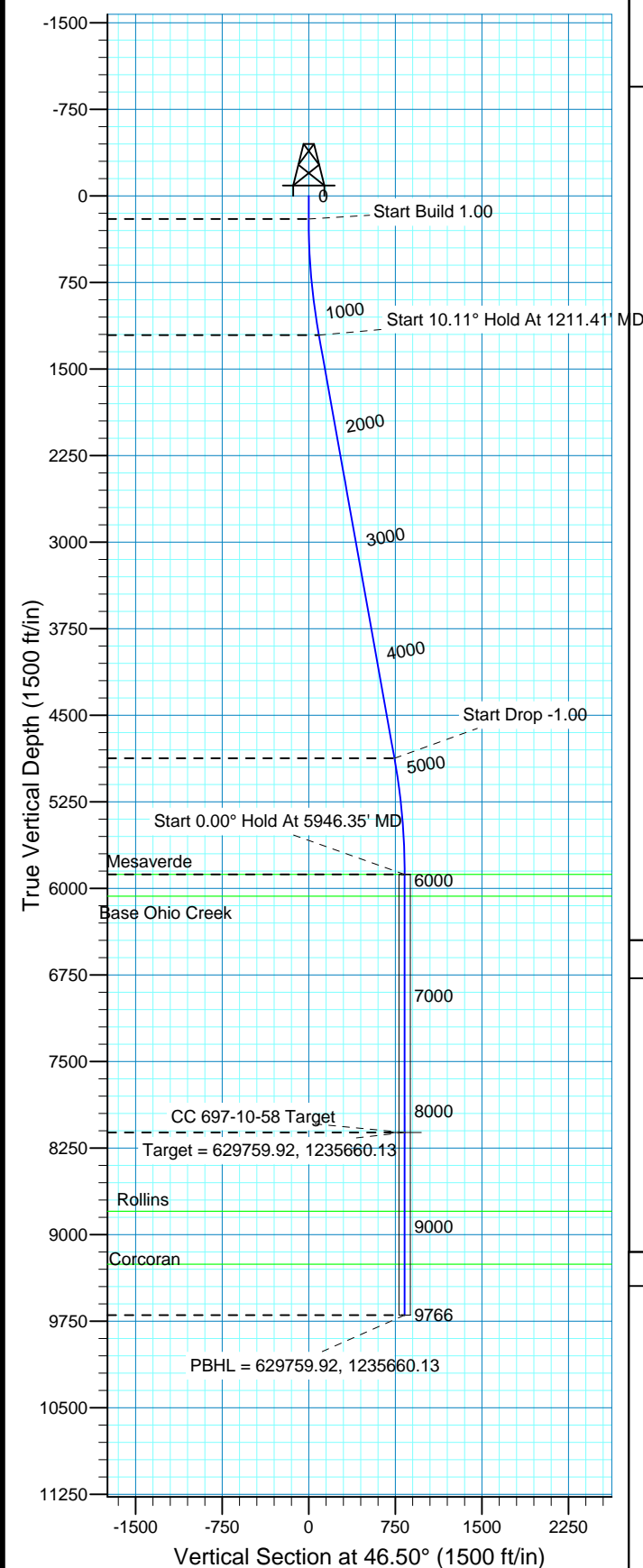
WELL DETAILS: CC 697-10-58

GL 8348' & RKB 30' @ 8378.00ft 8348.00
+N/-S +E/-W Northing Easting Latitude Longitude Slot
0.00 0.00 629205.53 1235039.81 39° 31' 46.683 N 108° 12' 44.375 W E



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

TVDPathMDPath	Formation
5878.005946.35	Mesaverde
6068.006136.35	Base Ohio Creek
8798.008866.35	Rollins
9257.009325.35	Corcoran

Plan: Plan #2 (CC 697-10-58/OH)

Created By: Rex Hall Date: 2010-01-28

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	1211.41	10.11	46.50	1206.16	61.29	64.59	1.00	46.50	89.04	
4	4934.95	10.11	46.50	4871.84	511.38	538.91	0.00	0.00	742.92	
5	5946.35	0.00	0.00	5878.00	572.66	603.50	1.00	180.00	831.96	
6	8183.35	0.00	0.00	8115.00	572.66	603.50	0.00	0.00	831.96	CC 697-10-58 Target
7	9766.35	0.00	0.00	9698.00	572.66	603.50	0.00	0.00	831.96	



OXY USA RMAT

**Garfield County, CO NAD27
Cascade Creek 697-15-01 Pad
CC 697-10-58 - Slot E
OH**

Plan: Plan #2

Standard Planning Report

28 January, 2010



Database:	EDM 2003.16 Multi-User Db	Local Co-ordinate Reference:	Well CC 697-10-58 - Slot E
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 697-10-58	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 697-10-58 - Slot E, 244' FNL 668' FWL					
Well Position	+N/-S	0.00 ft	Northing:	629,205.53 ft	Latitude:	39° 31' 46.683 N
	+E/-W	0.00 ft	Easting:	1,235,039.81 ft	Longitude:	108° 12' 44.375 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:	4.00	
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	0.00	0.00	0.00	46.50	

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	
1,211.41	10.11	46.50	1,206.16	61.29	64.59	1.00	1.00	0.00	46.50	
4,934.95	10.11	46.50	4,871.84	511.38	538.91	0.00	0.00	0.00	0.00	
5,946.35	0.00	0.00	5,878.00	572.66	603.50	1.00	-1.00	0.00	180.00	
8,183.35	0.00	0.00	8,115.00	572.66	603.50	0.00	0.00	0.00	0.00	CC 697-10-58 Target
9,766.35	0.00	0.00	9,698.00	572.66	603.50	0.00	0.00	0.00	0.00	

Database:	EDM 2003.16 Multi-User Db	Local Co-ordinate Reference:	Well CC 697-10-58 - Slot E
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 697-10-58	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
Start 200.00 hold at 0.00 MD									
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	46.50	299.99	0.60	0.63	0.87	1.00	1.00	0.00
400.00	2.00	46.50	399.96	2.40	2.53	3.49	1.00	1.00	0.00
500.00	3.00	46.50	499.86	5.41	5.70	7.85	1.00	1.00	0.00
600.00	4.00	46.50	599.68	9.61	10.12	13.96	1.00	1.00	0.00
700.00	5.00	46.50	699.37	15.01	15.82	21.80	1.00	1.00	0.00
800.00	6.00	46.50	798.90	21.61	22.77	31.39	1.00	1.00	0.00
900.00	7.00	46.50	898.26	29.40	30.98	42.71	1.00	1.00	0.00
1,000.00	8.00	46.50	997.40	38.38	40.45	55.76	1.00	1.00	0.00
1,100.00	9.00	46.50	1,096.30	48.56	51.17	70.54	1.00	1.00	0.00
1,200.00	10.00	46.50	1,194.93	59.92	63.14	87.05	1.00	1.00	0.00
1,211.41	10.11	46.50	1,206.16	61.29	64.59	89.04	1.00	1.00	0.00
Start 10.11° Hold At 1211.41' MD									
1,300.00	10.11	46.50	1,293.38	72.00	75.87	104.59	0.00	0.00	0.00
1,400.00	10.11	46.50	1,391.82	84.08	88.61	122.16	0.00	0.00	0.00
1,500.00	10.11	46.50	1,490.27	96.17	101.35	139.72	0.00	0.00	0.00
1,600.00	10.11	46.50	1,588.72	108.26	114.09	157.28	0.00	0.00	0.00
1,700.00	10.11	46.50	1,687.16	120.35	126.83	174.84	0.00	0.00	0.00
1,800.00	10.11	46.50	1,785.61	132.43	139.57	192.40	0.00	0.00	0.00
1,900.00	10.11	46.50	1,884.05	144.52	152.30	209.96	0.00	0.00	0.00
2,000.00	10.11	46.50	1,982.50	156.61	165.04	227.52	0.00	0.00	0.00
2,100.00	10.11	46.50	2,080.95	168.70	177.78	245.08	0.00	0.00	0.00
2,200.00	10.11	46.50	2,179.39	180.79	190.52	262.64	0.00	0.00	0.00
2,300.00	10.11	46.50	2,277.84	192.87	203.26	280.20	0.00	0.00	0.00
2,400.00	10.11	46.50	2,376.28	204.96	216.00	297.76	0.00	0.00	0.00
2,500.00	10.11	46.50	2,474.73	217.05	228.74	315.32	0.00	0.00	0.00
2,600.00	10.11	46.50	2,573.18	229.14	241.47	332.89	0.00	0.00	0.00
2,700.00	10.11	46.50	2,671.62	241.22	254.21	350.45	0.00	0.00	0.00
2,800.00	10.11	46.50	2,770.07	253.31	266.95	368.01	0.00	0.00	0.00
2,900.00	10.11	46.50	2,868.52	265.40	279.69	385.57	0.00	0.00	0.00
3,000.00	10.11	46.50	2,966.96	277.49	292.43	403.13	0.00	0.00	0.00
3,100.00	10.11	46.50	3,065.41	289.57	305.17	420.69	0.00	0.00	0.00
3,200.00	10.11	46.50	3,163.85	301.66	317.91	438.25	0.00	0.00	0.00
3,300.00	10.11	46.50	3,262.30	313.75	330.64	455.81	0.00	0.00	0.00
3,400.00	10.11	46.50	3,360.75	325.84	343.38	473.37	0.00	0.00	0.00
3,500.00	10.11	46.50	3,459.19	337.92	356.12	490.93	0.00	0.00	0.00
3,600.00	10.11	46.50	3,557.64	350.01	368.86	508.49	0.00	0.00	0.00
3,700.00	10.11	46.50	3,656.08	362.10	381.60	526.05	0.00	0.00	0.00
3,800.00	10.11	46.50	3,754.53	374.19	394.34	543.62	0.00	0.00	0.00
3,900.00	10.11	46.50	3,852.98	386.28	407.07	561.18	0.00	0.00	0.00
4,000.00	10.11	46.50	3,951.42	398.36	419.81	578.74	0.00	0.00	0.00
4,100.00	10.11	46.50	4,049.87	410.45	432.55	596.30	0.00	0.00	0.00
4,200.00	10.11	46.50	4,148.31	422.54	445.29	613.86	0.00	0.00	0.00
4,300.00	10.11	46.50	4,246.76	434.63	458.03	631.42	0.00	0.00	0.00
4,400.00	10.11	46.50	4,345.21	446.71	470.77	648.98	0.00	0.00	0.00
4,500.00	10.11	46.50	4,443.65	458.80	483.51	666.54	0.00	0.00	0.00
4,600.00	10.11	46.50	4,542.10	470.89	496.24	684.10	0.00	0.00	0.00
4,700.00	10.11	46.50	4,640.54	482.98	508.98	701.66	0.00	0.00	0.00
4,800.00	10.11	46.50	4,738.99	495.06	521.72	719.22	0.00	0.00	0.00

Database:	EDM 2003.16 Multi-User Db	Local Co-ordinate Reference:	Well CC 697-10-58 - Slot E
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 697-10-58	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)
4,900.00	10.11	46.50	4,837.44	507.15	534.46	736.78	0.00	0.00	0.00
4,934.95	10.11	46.50	4,871.84	511.38	538.91	742.92	0.00	0.00	0.00
Start Drop -1.00									
5,000.00	9.46	46.50	4,935.94	518.99	546.94	753.98	1.00	-1.00	0.00
5,100.00	8.46	46.50	5,034.72	529.71	558.24	769.56	1.00	-1.00	0.00
5,200.00	7.46	46.50	5,133.76	539.25	568.29	783.42	1.00	-1.00	0.00
5,300.00	6.46	46.50	5,233.02	547.59	577.08	795.54	1.00	-1.00	0.00
5,400.00	5.46	46.50	5,332.48	554.75	584.62	805.93	1.00	-1.00	0.00
5,500.00	4.46	46.50	5,432.10	560.70	590.89	814.58	1.00	-1.00	0.00
5,600.00	3.46	46.50	5,531.86	565.46	595.91	821.49	1.00	-1.00	0.00
5,700.00	2.46	46.50	5,631.72	569.02	599.66	826.66	1.00	-1.00	0.00
5,800.00	1.46	46.50	5,731.66	571.38	602.14	830.09	1.00	-1.00	0.00
5,900.00	0.46	46.50	5,831.65	572.53	603.36	831.77	1.00	-1.00	0.00
5,946.35	0.00	0.00	5,878.00	572.66	603.50	831.96	1.00	-1.00	0.00
Start 0.00° Hold At 5946.35' MD - Mesaverde									
6,000.00	0.00	0.00	5,931.65	572.66	603.50	831.96	0.00	0.00	0.00
6,100.00	0.00	0.00	6,031.65	572.66	603.50	831.96	0.00	0.00	0.00
6,136.35	0.00	0.00	6,068.00	572.66	603.50	831.96	0.00	0.00	0.00
Base Ohio Creek									
6,200.00	0.00	0.00	6,131.65	572.66	603.50	831.96	0.00	0.00	0.00
6,300.00	0.00	0.00	6,231.65	572.66	603.50	831.96	0.00	0.00	0.00
6,400.00	0.00	0.00	6,331.65	572.66	603.50	831.96	0.00	0.00	0.00
6,500.00	0.00	0.00	6,431.65	572.66	603.50	831.96	0.00	0.00	0.00
6,600.00	0.00	0.00	6,531.65	572.66	603.50	831.96	0.00	0.00	0.00
6,700.00	0.00	0.00	6,631.65	572.66	603.50	831.96	0.00	0.00	0.00
6,800.00	0.00	0.00	6,731.65	572.66	603.50	831.96	0.00	0.00	0.00
6,900.00	0.00	0.00	6,831.65	572.66	603.50	831.96	0.00	0.00	0.00
7,000.00	0.00	0.00	6,931.65	572.66	603.50	831.96	0.00	0.00	0.00
7,100.00	0.00	0.00	7,031.65	572.66	603.50	831.96	0.00	0.00	0.00
7,200.00	0.00	0.00	7,131.65	572.66	603.50	831.96	0.00	0.00	0.00
7,300.00	0.00	0.00	7,231.65	572.66	603.50	831.96	0.00	0.00	0.00
7,400.00	0.00	0.00	7,331.65	572.66	603.50	831.96	0.00	0.00	0.00
7,500.00	0.00	0.00	7,431.65	572.66	603.50	831.96	0.00	0.00	0.00
7,600.00	0.00	0.00	7,531.65	572.66	603.50	831.96	0.00	0.00	0.00
7,700.00	0.00	0.00	7,631.65	572.66	603.50	831.96	0.00	0.00	0.00
7,800.00	0.00	0.00	7,731.65	572.66	603.50	831.96	0.00	0.00	0.00
7,900.00	0.00	0.00	7,831.65	572.66	603.50	831.96	0.00	0.00	0.00
8,000.00	0.00	0.00	7,931.65	572.66	603.50	831.96	0.00	0.00	0.00
8,100.00	0.00	0.00	8,031.65	572.66	603.50	831.96	0.00	0.00	0.00
8,183.35	0.00	0.00	8,115.00	572.66	603.50	831.96	0.00	0.00	0.00
Target = 629759.92, 1235660.13 - CC 697-10-58 Target									
8,200.00	0.00	0.00	8,131.65	572.66	603.50	831.96	0.00	0.00	0.00
8,300.00	0.00	0.00	8,231.65	572.66	603.50	831.96	0.00	0.00	0.00
8,400.00	0.00	0.00	8,331.65	572.66	603.50	831.96	0.00	0.00	0.00
8,500.00	0.00	0.00	8,431.65	572.66	603.50	831.96	0.00	0.00	0.00
8,600.00	0.00	0.00	8,531.65	572.66	603.50	831.96	0.00	0.00	0.00
8,700.00	0.00	0.00	8,631.65	572.66	603.50	831.96	0.00	0.00	0.00
8,800.00	0.00	0.00	8,731.65	572.66	603.50	831.96	0.00	0.00	0.00
8,866.35	0.00	0.00	8,798.00	572.66	603.50	831.96	0.00	0.00	0.00
Rollins									
8,900.00	0.00	0.00	8,831.65	572.66	603.50	831.96	0.00	0.00	0.00
9,000.00	0.00	0.00	8,931.65	572.66	603.50	831.96	0.00	0.00	0.00
9,100.00	0.00	0.00	9,031.65	572.66	603.50	831.96	0.00	0.00	0.00

Database:	EDM 2003.16 Multi-User Db	Local Co-ordinate Reference:	Well CC 697-10-58 - Slot E
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 697-10-58	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)
9,200.00	0.00	0.00	9,131.65	572.66	603.50	831.96	0.00	0.00	0.00
9,300.00	0.00	0.00	9,231.65	572.66	603.50	831.96	0.00	0.00	0.00
9,325.35	0.00	0.00	9,257.00	572.66	603.50	831.96	0.00	0.00	0.00
Corcoran									
9,400.00	0.00	0.00	9,331.65	572.66	603.50	831.96	0.00	0.00	0.00
9,500.00	0.00	0.00	9,431.65	572.66	603.50	831.96	0.00	0.00	0.00
9,600.00	0.00	0.00	9,531.65	572.66	603.50	831.96	0.00	0.00	0.00
9,700.00	0.00	0.00	9,631.65	572.66	603.50	831.96	0.00	0.00	0.00
9,766.35	0.00	0.00	9,698.00	572.66	603.50	831.96	0.00	0.00	0.00
PBHL = 629759.92, 1235660.13									

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 697-10-58 Target	0.00	0.00	8,115.00	572.66	603.50	629,759.92	1,235,660.13	39° 31' 52.343 N	108° 12' 36.672 W
- plan hits target center									
- Circle (radius 50.00)									

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
5,946.35	5,878.00	Mesaverde		0.00	
6,136.35	6,068.00	Base Ohio Creek		0.00	
8,866.35	8,798.00	Rollins		0.00	
9,325.35	9,257.00	Corcoran		0.00	

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
0.00	0.00	0.00	0.00	Start 200.00 hold at 0.00 MD
200.00	200.00	0.00	0.00	Start Build 1.00
1,211.41	1,206.16	61.29	64.59	Start 10.11° Hold At 1211.41' MD
4,934.95	4,871.84	511.38	538.91	Start Drop -1.00
5,946.35	5,878.00	572.66	603.50	Start 0.00° Hold At 5946.35' MD
8,183.35	8,115.00	572.66	603.50	Target = 629759.92, 1235660.13
9,766.35	9,698.00	572.66	603.50	PBHL = 629759.92, 1235660.13