

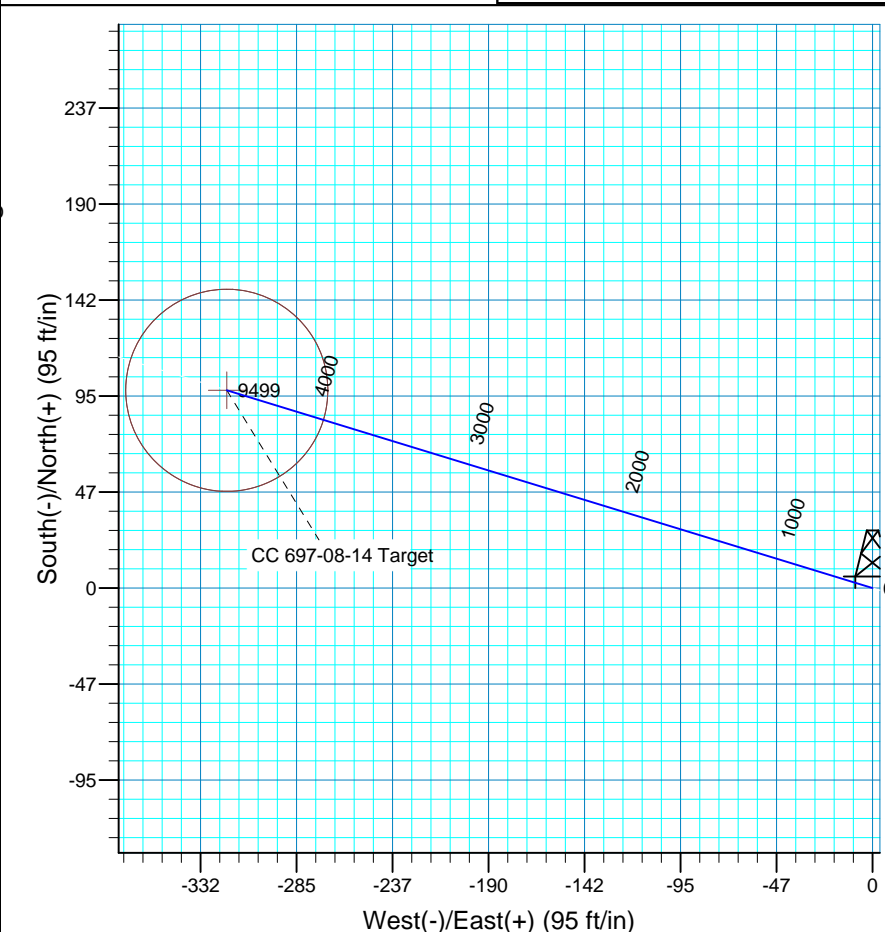
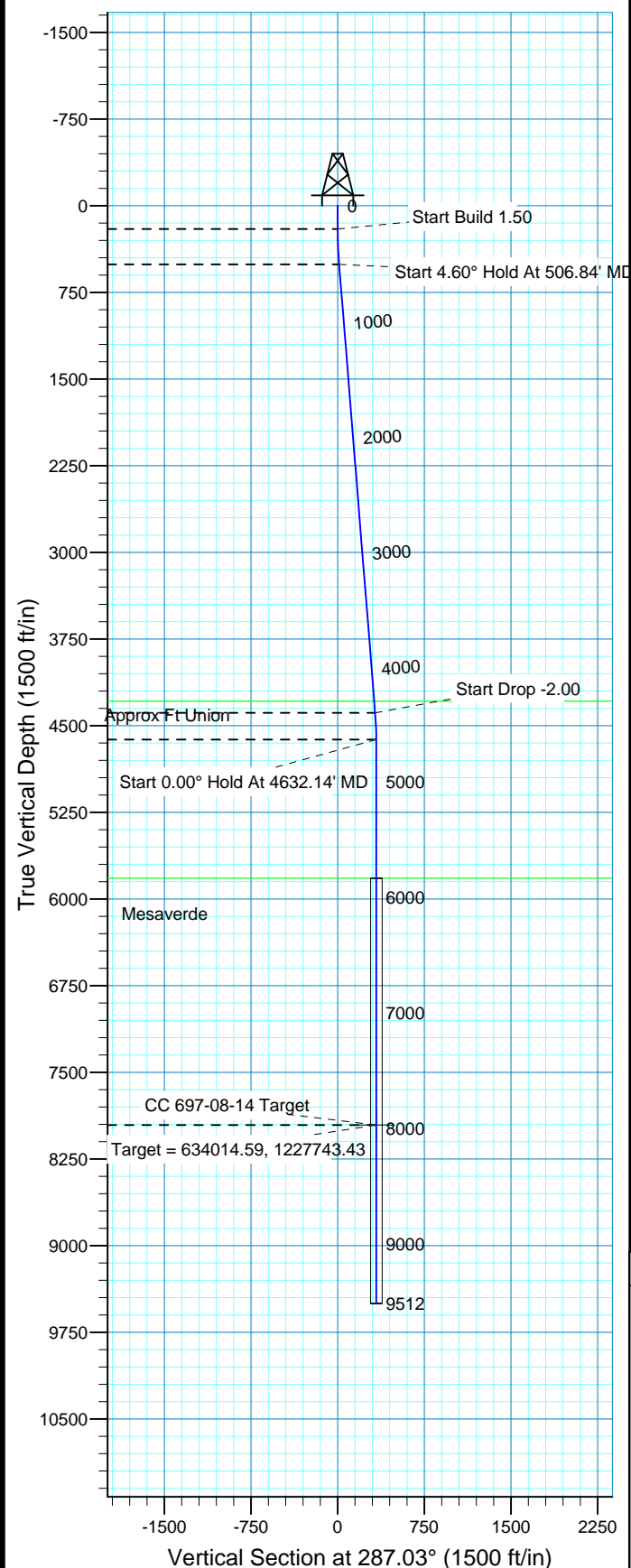
WELL DETAILS: CC 697-08-14

GL 8411' & RKB 30' @ 8441.00ft 8411.00
+N/-S +E/-W Northing Easting Latitude Longitude Slot
0.00 0.00 633907.14 1228059.80 39° 32' 31.062 N 108° 14' 15.225 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 MDPATH Formation
4286.00 4298.56 Approx Ft Union
5819.00 5832.14 Mesaverde

Plan: Plan #3 (CC 697-08-14/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	506.84	4.60	287.03	506.51	3.61	-11.78	1.50	287.03	12.32	
4	4402.01	4.60	287.03	4389.12	95.16	-310.63	0.00	0.00	324.88	
5	4632.14	0.00	0.00	4619.00	97.86	-319.47	2.00	180.00	334.12	
6	7968.14	0.00	0.00	7955.00	97.86	-319.47	0.00	0.00	334.12	CC 697-08-14 Target
7	9512.14	0.00	0.00	9499.00	97.86	-319.47	0.00	0.00	334.12	



OXY USA RMAT

**Garfield County, CO NAD27
Cascade Creek 608-41 Pad
CC 697-08-14
OH**

Plan: Plan #3

Standard Planning Report

24 June, 2010



Database:	EDM 2003.16 Multi-User Db	Local Co-ordinate Reference:	Well CC 697-08-14
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 697-08-14	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #3		

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 697-08-14,		
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 #3			
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	287.03

Plan Sections										
Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Dogleg Rate	Build Rate	Turn Rate	TFO	Target
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(°/100ft)	(°/100ft)	(°/100ft)	(°)	
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	
506.84	4.60	287.03	506.51	3.61	-11.78	1.50	1.50	0.00	287.03	
4,402.01	4.60	287.03	4,389.12	95.16	-310.63	0.00	0.00	0.00	0.00	
4,632.14	0.00	0.00	4,619.00	97.86	-319.47	2.00	-2.00	0.00	180.00	
7,968.14	0.00	0.00	7,955.00	97.86	-319.47	0.00	0.00	0.00	0.00	CC 697-08-14 Target
9,512.14	0.00	0.00	9,499.00	97.86	-319.47	0.00	0.00	0.00	0.00	

Database:	EDM 2003.16 Multi-User Db	Local Co-ordinate Reference:	Well CC 697-08-14
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 697-08-14	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #3		

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	287.03	299.99	0.38	-1.25	1.31	1.50	1.50	0.00
400.00	3.00	287.03	399.91	1.53	-5.01	5.23	1.50	1.50	0.00
500.00	4.50	287.03	499.69	3.45	-11.26	11.77	1.50	1.50	0.00
506.84	4.60	287.03	506.51	3.61	-11.78	12.32	1.50	1.50	0.00
Start 4.60° Hold At 506.84' MD									
600.00	4.60	287.03	599.37	5.80	-18.93	19.79	0.00	0.00	0.00
700.00	4.60	287.03	699.05	8.15	-26.60	27.82	0.00	0.00	0.00
800.00	4.60	287.03	798.72	10.50	-34.27	35.84	0.00	0.00	0.00
900.00	4.60	287.03	898.40	12.85	-41.94	43.87	0.00	0.00	0.00
1,000.00	4.60	287.03	998.08	15.20	-49.62	51.89	0.00	0.00	0.00
1,100.00	4.60	287.03	1,097.76	17.55	-57.29	59.92	0.00	0.00	0.00
1,200.00	4.60	287.03	1,197.43	19.90	-64.96	67.94	0.00	0.00	0.00
1,300.00	4.60	287.03	1,297.11	22.25	-72.63	75.96	0.00	0.00	0.00
1,400.00	4.60	287.03	1,396.79	24.60	-80.31	83.99	0.00	0.00	0.00
1,500.00	4.60	287.03	1,496.47	26.95	-87.98	92.01	0.00	0.00	0.00
1,600.00	4.60	287.03	1,596.14	29.30	-95.65	100.04	0.00	0.00	0.00
1,700.00	4.60	287.03	1,695.82	31.65	-103.32	108.06	0.00	0.00	0.00
1,800.00	4.60	287.03	1,795.50	34.00	-110.99	116.09	0.00	0.00	0.00
1,900.00	4.60	287.03	1,895.18	36.35	-118.67	124.11	0.00	0.00	0.00
2,000.00	4.60	287.03	1,994.86	38.70	-126.34	132.13	0.00	0.00	0.00
2,100.00	4.60	287.03	2,094.53	41.05	-134.01	140.16	0.00	0.00	0.00
2,200.00	4.60	287.03	2,194.21	43.40	-141.68	148.18	0.00	0.00	0.00
2,300.00	4.60	287.03	2,293.89	45.75	-149.36	156.21	0.00	0.00	0.00
2,400.00	4.60	287.03	2,393.57	48.10	-157.03	164.23	0.00	0.00	0.00
2,500.00	4.60	287.03	2,493.24	50.45	-164.70	172.26	0.00	0.00	0.00
2,600.00	4.60	287.03	2,592.92	52.80	-172.37	180.28	0.00	0.00	0.00
2,700.00	4.60	287.03	2,692.60	55.15	-180.05	188.31	0.00	0.00	0.00
2,800.00	4.60	287.03	2,792.28	57.50	-187.72	196.33	0.00	0.00	0.00
2,900.00	4.60	287.03	2,891.95	59.86	-195.39	204.35	0.00	0.00	0.00
3,000.00	4.60	287.03	2,991.63	62.21	-203.06	212.38	0.00	0.00	0.00
3,100.00	4.60	287.03	3,091.31	64.56	-210.74	220.40	0.00	0.00	0.00
3,200.00	4.60	287.03	3,190.99	66.91	-218.41	228.43	0.00	0.00	0.00
3,300.00	4.60	287.03	3,290.66	69.26	-226.08	236.45	0.00	0.00	0.00
3,400.00	4.60	287.03	3,390.34	71.61	-233.75	244.48	0.00	0.00	0.00
3,500.00	4.60	287.03	3,490.02	73.96	-241.43	252.50	0.00	0.00	0.00
3,600.00	4.60	287.03	3,589.70	76.31	-249.10	260.53	0.00	0.00	0.00
3,700.00	4.60	287.03	3,689.37	78.66	-256.77	268.55	0.00	0.00	0.00
3,800.00	4.60	287.03	3,789.05	81.01	-264.44	276.57	0.00	0.00	0.00
3,900.00	4.60	287.03	3,888.73	83.36	-272.12	284.60	0.00	0.00	0.00
4,000.00	4.60	287.03	3,988.41	85.71	-279.79	292.62	0.00	0.00	0.00
4,100.00	4.60	287.03	4,088.08	88.06	-287.46	300.65	0.00	0.00	0.00
4,200.00	4.60	287.03	4,187.76	90.41	-295.13	308.67	0.00	0.00	0.00
4,298.56	4.60	287.03	4,286.00	92.73	-302.70	316.58	0.00	0.00	0.00
Approx Ft Union									
4,300.00	4.60	287.03	4,287.44	92.76	-302.81	316.70	0.00	0.00	0.00
4,400.00	4.60	287.03	4,387.12	95.11	-310.48	324.72	0.00	0.00	0.00
4,402.01	4.60	287.03	4,389.12	95.16	-310.63	324.88	0.00	0.00	0.00
Start Drop -2.00									
4,500.00	2.64	287.03	4,486.91	96.97	-316.55	331.07	2.00	-2.00	0.00

Database:	EDM 2003.16 Multi-User Db	Local Co-ordinate Reference:	Well CC 697-08-14
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 697-08-14	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #3		

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	0.64	287.03	4,586.86	97.81	-319.29	333.94	2.00	-2.00	0.00
4,632.14	0.00	0.00	4,619.00	97.86	-319.47	334.12	2.00	-2.00	0.00
Start 0.00° Hold At 4632.14' MD									
4,700.00	0.00	0.00	4,686.86	97.86	-319.47	334.12	0.00	0.00	0.00
4,800.00	0.00	0.00	4,786.86	97.86	-319.47	334.12	0.00	0.00	0.00
4,900.00	0.00	0.00	4,886.86	97.86	-319.47	334.12	0.00	0.00	0.00
5,000.00	0.00	0.00	4,986.86	97.86	-319.47	334.12	0.00	0.00	0.00
5,100.00	0.00	0.00	5,086.86	97.86	-319.47	334.12	0.00	0.00	0.00
5,200.00	0.00	0.00	5,186.86	97.86	-319.47	334.12	0.00	0.00	0.00
5,300.00	0.00	0.00	5,286.86	97.86	-319.47	334.12	0.00	0.00	0.00
5,400.00	0.00	0.00	5,386.86	97.86	-319.47	334.12	0.00	0.00	0.00
5,500.00	0.00	0.00	5,486.86	97.86	-319.47	334.12	0.00	0.00	0.00
5,600.00	0.00	0.00	5,586.86	97.86	-319.47	334.12	0.00	0.00	0.00
5,700.00	0.00	0.00	5,686.86	97.86	-319.47	334.12	0.00	0.00	0.00
5,800.00	0.00	0.00	5,786.86	97.86	-319.47	334.12	0.00	0.00	0.00
5,832.14	0.00	0.00	5,819.00	97.86	-319.47	334.12	0.00	0.00	0.00
Mesaverde									
5,900.00	0.00	0.00	5,886.86	97.86	-319.47	334.12	0.00	0.00	0.00
6,000.00	0.00	0.00	5,986.86	97.86	-319.47	334.12	0.00	0.00	0.00
6,100.00	0.00	0.00	6,086.86	97.86	-319.47	334.12	0.00	0.00	0.00
6,200.00	0.00	0.00	6,186.86	97.86	-319.47	334.12	0.00	0.00	0.00
6,300.00	0.00	0.00	6,286.86	97.86	-319.47	334.12	0.00	0.00	0.00
6,400.00	0.00	0.00	6,386.86	97.86	-319.47	334.12	0.00	0.00	0.00
6,500.00	0.00	0.00	6,486.86	97.86	-319.47	334.12	0.00	0.00	0.00
6,600.00	0.00	0.00	6,586.86	97.86	-319.47	334.12	0.00	0.00	0.00
6,700.00	0.00	0.00	6,686.86	97.86	-319.47	334.12	0.00	0.00	0.00
6,800.00	0.00	0.00	6,786.86	97.86	-319.47	334.12	0.00	0.00	0.00
6,900.00	0.00	0.00	6,886.86	97.86	-319.47	334.12	0.00	0.00	0.00
7,000.00	0.00	0.00	6,986.86	97.86	-319.47	334.12	0.00	0.00	0.00
7,100.00	0.00	0.00	7,086.86	97.86	-319.47	334.12	0.00	0.00	0.00
7,200.00	0.00	0.00	7,186.86	97.86	-319.47	334.12	0.00	0.00	0.00
7,300.00	0.00	0.00	7,286.86	97.86	-319.47	334.12	0.00	0.00	0.00
7,400.00	0.00	0.00	7,386.86	97.86	-319.47	334.12	0.00	0.00	0.00
7,500.00	0.00	0.00	7,486.86	97.86	-319.47	334.12	0.00	0.00	0.00
7,600.00	0.00	0.00	7,586.86	97.86	-319.47	334.12	0.00	0.00	0.00
7,700.00	0.00	0.00	7,686.86	97.86	-319.47	334.12	0.00	0.00	0.00
7,800.00	0.00	0.00	7,786.86	97.86	-319.47	334.12	0.00	0.00	0.00
7,900.00	0.00	0.00	7,886.86	97.86	-319.47	334.12	0.00	0.00	0.00
7,968.14	0.00	0.00	7,955.00	97.86	-319.47	334.12	0.00	0.00	0.00
Target = 634014.59, 1227743.43 - CC 697-08-14 Target									
8,000.00	0.00	0.00	7,986.86	97.86	-319.47	334.12	0.00	0.00	0.00
8,100.00	0.00	0.00	8,086.86	97.86	-319.47	334.12	0.00	0.00	0.00
8,200.00	0.00	0.00	8,186.86	97.86	-319.47	334.12	0.00	0.00	0.00
8,300.00	0.00	0.00	8,286.86	97.86	-319.47	334.12	0.00	0.00	0.00
8,400.00	0.00	0.00	8,386.86	97.86	-319.47	334.12	0.00	0.00	0.00
8,500.00	0.00	0.00	8,486.86	97.86	-319.47	334.12	0.00	0.00	0.00
8,600.00	0.00	0.00	8,586.86	97.86	-319.47	334.12	0.00	0.00	0.00
8,700.00	0.00	0.00	8,686.86	97.86	-319.47	334.12	0.00	0.00	0.00
8,800.00	0.00	0.00	8,786.86	97.86	-319.47	334.12	0.00	0.00	0.00
8,900.00	0.00	0.00	8,886.86	97.86	-319.47	334.12	0.00	0.00	0.00
9,000.00	0.00	0.00	8,986.86	97.86	-319.47	334.12	0.00	0.00	0.00
9,100.00	0.00	0.00	9,086.86	97.86	-319.47	334.12	0.00	0.00	0.00
9,200.00	0.00	0.00	9,186.86	97.86	-319.47	334.12	0.00	0.00	0.00

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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 697-08-14	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #3		

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	9,286.86	97.86	-319.47	334.12	0.00	0.00	0.00
9,400.00	0.00	0.00	9,386.86	97.86	-319.47	334.12	0.00	0.00	0.00
9,500.00	0.00	0.00	9,486.86	97.86	-319.47	334.12	0.00	0.00	0.00
9,512.14	0.00	0.00	9,499.00	97.86	-319.47	334.12	0.00	0.00	0.00
PBHL = 634014.59, 1227743.43									

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 697-08-14 Target	0.00	0.00	7,955.00	97.86	-319.47	634,014.59	1,227,743.43	39° 32' 32.029 N	108° 14' 19.303 W
- plan hits target center									
- Circle (radius 50.00)									

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
4,298.56	4,286.00	Approx Ft Union		0.00	
5,832.14	5,819.00	Mesaverde		0.00	

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Comment
200.00	200.00	0.00	0.00	Start Build 1.50
506.84	506.51	3.61	-11.78	Start 4.60° Hold At 506.84' MD
4,402.01	4,389.12	95.16	-310.63	Start Drop -2.00
4,632.14	4,619.00	97.86	-319.47	Start 0.00° Hold At 4632.14' MD
7,968.14	7,955.00	97.86	-319.47	Target = 634014.59, 1227743.43
9,512.14	9,499.00	97.86	-319.47	PBHL = 634014.59, 1227743.43