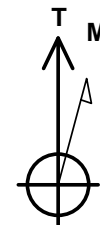


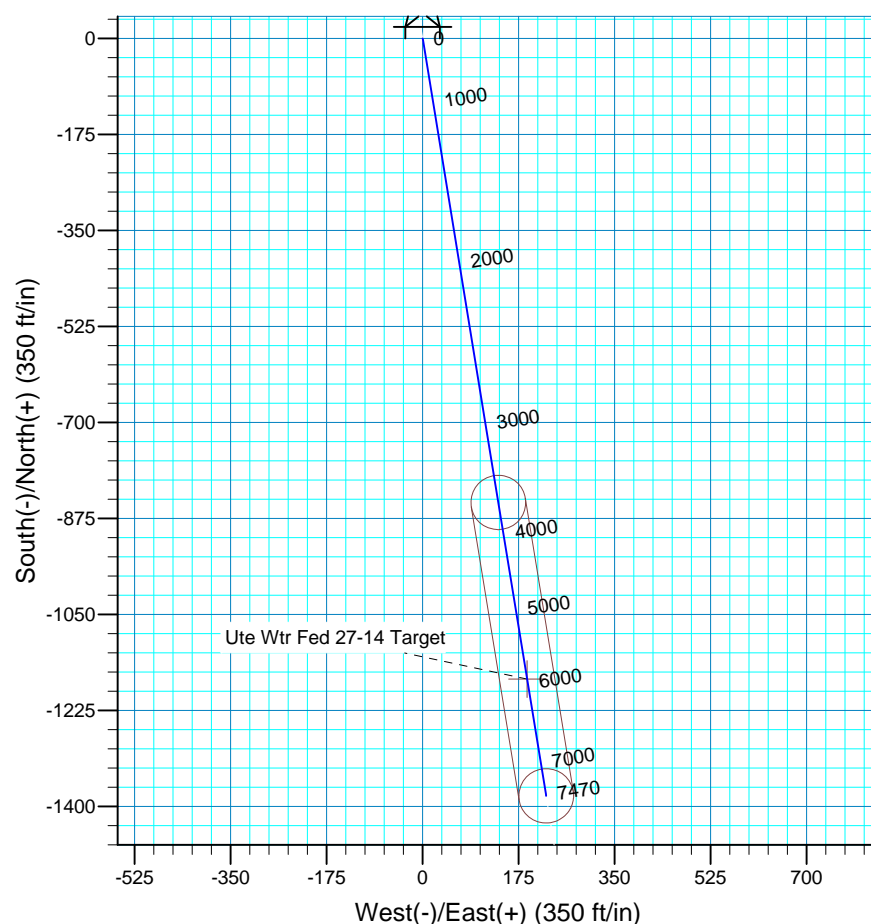
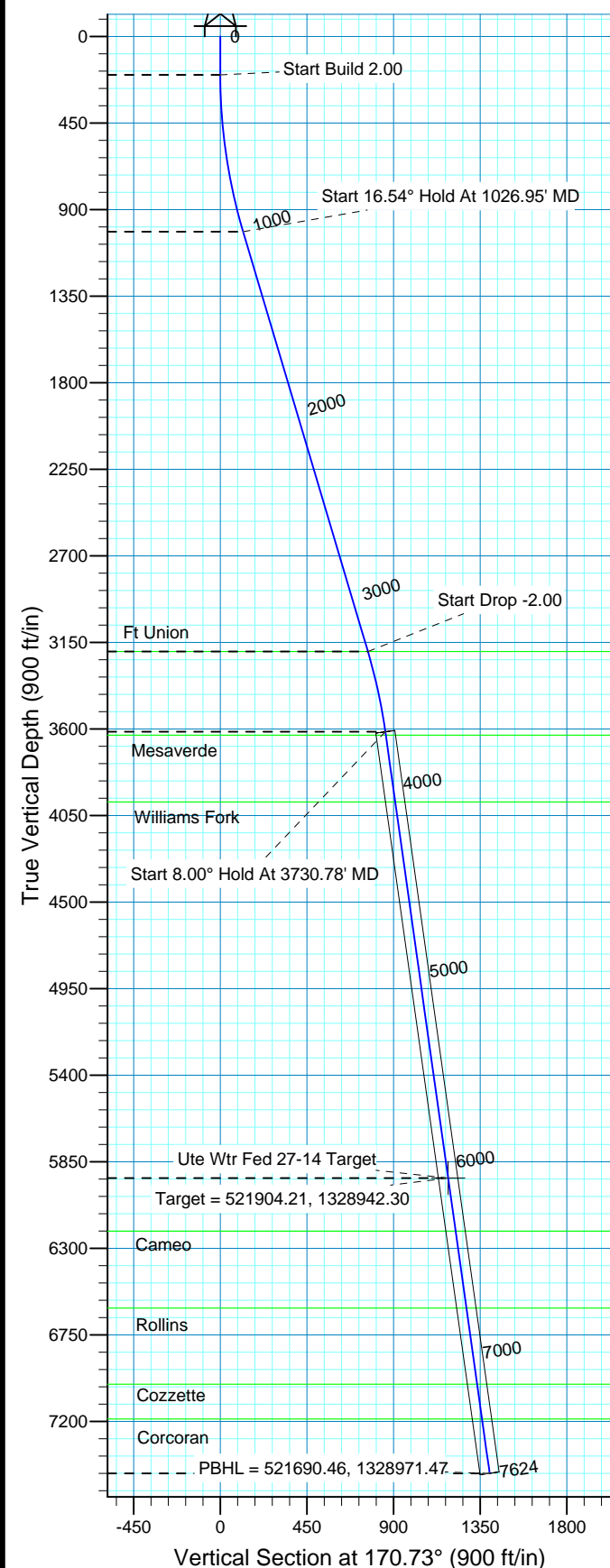
WELL DETAILS: Ute Water Fed 27-14

+N/-S	+E/-W	GL 7208' & RKB 18' @ 7226.00ft (Trinidad 217)	7208.00	Slot
0.00	0.00	Northing 523076.73	Longitude 107° 52' 13.039 W	
		Easting 1328782.31	Latitude 39° 14' 44.022 N	



Azimuths to True North
Magnetic North: 10.43°

Magnetic Field
Strength: 52293.6snT
Dip Angle: 65.60°
Date: 12/31/2009
Model: IGRF2005-10



FORMATION TOP DETAILS

TVDPath	MDPath	Formation
3198.00	3303.63	Ft Union
3633.00	3748.96	Mesaverde
3980.00	4099.37	Williams Fork
6211.00	6352.29	Cameo
6611.00	6756.22	Rollins
7007.00	7156.11	Cozzette
7188.00	7338.89	Corcoran

Plan: Plan #1 (Ute Water Fed 27-14/OH)

Created By: Rex Hall Date: 2010-03-11

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	1026.95	16.54	170.73	1015.52	-116.98	19.08	2.00	170.73	118.53	
4	3303.83	16.54	170.73	3198.19	-756.68	123.44	0.00	0.00	766.68	
5	3730.78	8.00	170.73	3615.00	-846.15	138.03	2.00	180.00	857.33	
6	6073.58	8.00	170.73	5935.00	-1167.95	190.53	0.00	0.00	1183.39	Ute Wtr Fed 27-14 Target
7	7623.67	8.00	170.73	7470.00	-1380.86	225.26	0.00	0.00	1399.12	



OXY USA RMAT

Garfield County, CO NAD27

Ute Water 27-11 Pad

Ute Water Fed 27-14

OH

Plan: Plan #1

Standard Planning Report

30 March, 2010



Database:	EDM 2003.16 Multi-User Db	Local Co-ordinate Reference:	Well Ute Water Fed 27-14
Company:	OXY USA RMAT	TVD Reference:	GL 7208' & RKB 18' @ 7226.00ft (Trinidad 217)
Project:	Garfield County, CO NAD27	MD Reference:	GL 7208' & RKB 18' @ 7226.00ft (Trinidad 217)
Site:	Ute Water 27-11 Pad	North Reference:	True
Well:	Ute Water Fed 27-14	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

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		Ute Water 27-11 Pad, Sec 27 T9S R94W			
Site Position:		Northing:	523,095.84 ft	Latitude:	39° 14' 44.210 N
From:	Map	Easting:	1,328,776.01 ft	Longitude:	107° 52' 13.126 W
Position Uncertainty:	0.00 ft	Slot Radius:	in	Grid Convergence:	-1.49 °

Well	Ute Water Fed 27-14					
Well Position	+N/-S	0.00 ft	Northing:	523,076.73 ft	Latitude:	39° 14' 44.022 N
	+E/-W	0.00 ft	Easting:	1,328,782.31 ft	Longitude:	107° 52' 13.039 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	7,208.00 ft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2005-10	12/31/2009	10.43	65.60	52,294

Design	Plan #1				
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	170.73	

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	
1,026.95	16.54	170.73	1,015.52	-116.98	19.08	2.00	2.00	0.00	170.73	
3,303.83	16.54	170.73	3,198.19	-756.68	123.44	0.00	0.00	0.00	0.00	
3,730.78	8.00	170.73	3,615.00	-846.15	138.03	2.00	-2.00	0.00	180.00	
6,073.58	8.00	170.73	5,935.00	-1,167.95	190.53	0.00	0.00	0.00	0.00	Ute Wtr Fed 27-14 Ta
7,623.67	8.00	170.73	7,470.00	-1,380.86	225.26	0.00	0.00	0.00	0.00	

Database:	EDM 2003.16 Multi-User Db	Local Co-ordinate Reference:	Well Ute Water Fed 27-14
Company:	OXY USA RMAT	TVD Reference:	GL 7208' & RKB 18' @ 7226.00ft (Trinidad 217)
Project:	Garfield County, CO NAD27	MD Reference:	GL 7208' & RKB 18' @ 7226.00ft (Trinidad 217)
Site:	Ute Water 27-11 Pad	North Reference:	True
Well:	Ute Water Fed 27-14	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

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 2.00									
300.00	2.00	170.73	299.98	-1.72	0.28	1.75	2.00	2.00	0.00
400.00	4.00	170.73	399.84	-6.89	1.12	6.98	2.00	2.00	0.00
500.00	6.00	170.73	499.45	-15.49	2.53	15.69	2.00	2.00	0.00
600.00	8.00	170.73	598.70	-27.52	4.49	27.88	2.00	2.00	0.00
700.00	10.00	170.73	697.47	-42.95	7.01	43.52	2.00	2.00	0.00
800.00	12.00	170.73	795.62	-61.79	10.08	62.60	2.00	2.00	0.00
900.00	14.00	170.73	893.06	-83.99	13.70	85.10	2.00	2.00	0.00
1,000.00	16.00	170.73	989.64	-109.53	17.87	110.98	2.00	2.00	0.00
1,026.95	16.54	170.73	1,015.52	-116.98	19.08	118.53	2.00	2.00	0.00
Start 16.54° Hold At 1026.95' MD									
1,100.00	16.54	170.73	1,085.54	-137.50	22.43	139.32	0.00	0.00	0.00
1,200.00	16.54	170.73	1,181.40	-165.60	27.01	167.79	0.00	0.00	0.00
1,300.00	16.54	170.73	1,277.27	-193.70	31.60	196.26	0.00	0.00	0.00
1,400.00	16.54	170.73	1,373.13	-221.79	36.18	224.72	0.00	0.00	0.00
1,500.00	16.54	170.73	1,468.99	-249.89	40.76	253.19	0.00	0.00	0.00
1,600.00	16.54	170.73	1,564.85	-277.98	45.35	281.66	0.00	0.00	0.00
1,700.00	16.54	170.73	1,660.72	-306.08	49.93	310.12	0.00	0.00	0.00
1,800.00	16.54	170.73	1,756.58	-334.17	54.51	338.59	0.00	0.00	0.00
1,900.00	16.54	170.73	1,852.44	-362.27	59.10	367.06	0.00	0.00	0.00
2,000.00	16.54	170.73	1,948.30	-390.36	63.68	395.52	0.00	0.00	0.00
2,100.00	16.54	170.73	2,044.17	-418.46	68.26	423.99	0.00	0.00	0.00
2,200.00	16.54	170.73	2,140.03	-446.56	72.85	452.46	0.00	0.00	0.00
2,300.00	16.54	170.73	2,235.89	-474.65	77.43	480.93	0.00	0.00	0.00
2,400.00	16.54	170.73	2,331.75	-502.75	82.01	509.39	0.00	0.00	0.00
2,500.00	16.54	170.73	2,427.62	-530.84	86.60	537.86	0.00	0.00	0.00
2,600.00	16.54	170.73	2,523.48	-558.94	91.18	566.33	0.00	0.00	0.00
2,700.00	16.54	170.73	2,619.34	-587.03	95.76	594.79	0.00	0.00	0.00
2,800.00	16.54	170.73	2,715.21	-615.13	100.35	623.26	0.00	0.00	0.00
2,900.00	16.54	170.73	2,811.07	-643.22	104.93	651.73	0.00	0.00	0.00
3,000.00	16.54	170.73	2,906.93	-671.32	109.51	680.19	0.00	0.00	0.00
3,100.00	16.54	170.73	3,002.79	-699.41	114.10	708.66	0.00	0.00	0.00
3,200.00	16.54	170.73	3,098.66	-727.51	118.68	737.13	0.00	0.00	0.00
3,300.00	16.54	170.73	3,194.52	-755.61	123.26	765.59	0.00	0.00	0.00
3,303.63	16.54	170.73	3,198.00	-756.63	123.43	766.63	0.00	0.00	0.00
Ft Union									
3,303.83	16.54	170.73	3,198.19	-756.68	123.44	766.68	0.00	0.00	0.00
Start Drop -2.00									
3,400.00	14.62	170.73	3,290.82	-782.17	127.60	792.51	2.00	-2.00	0.00
3,500.00	12.62	170.73	3,388.01	-805.40	131.39	816.05	2.00	-2.00	0.00
3,600.00	10.62	170.73	3,485.95	-825.27	134.63	836.18	2.00	-2.00	0.00
3,700.00	8.62	170.73	3,584.54	-841.76	137.32	852.88	2.00	-2.00	0.00
3,730.78	8.00	170.73	3,615.00	-846.15	138.03	857.33	2.00	-2.00	0.00
Start 8.00° Hold At 3730.78' MD									
3,748.96	8.00	170.73	3,633.00	-848.64	138.44	859.86	0.00	0.00	0.00
Mesaverde									
3,800.00	8.00	170.73	3,683.55	-855.65	139.58	866.96	0.00	0.00	0.00
3,900.00	8.00	170.73	3,782.57	-869.39	141.82	880.88	0.00	0.00	0.00
4,000.00	8.00	170.73	3,881.60	-883.13	144.07	894.80	0.00	0.00	0.00
4,099.37	8.00	170.73	3,980.00	-896.77	146.29	908.63	0.00	0.00	0.00

Database:	EDM 2003.16 Multi-User Db	Local Co-ordinate Reference:	Well Ute Water Fed 27-14
Company:	OXY USA RMAT	TVD Reference:	GL 7208' & RKB 18' @ 7226.00ft (Trinidad 217)
Project:	Garfield County, CO NAD27	MD Reference:	GL 7208' & RKB 18' @ 7226.00ft (Trinidad 217)
Site:	Ute Water 27-11 Pad	North Reference:	True
Well:	Ute Water Fed 27-14	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

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)
Williams Fork									
4,100.00	8.00	170.73	3,980.63	-896.86	146.31	908.72	0.00	0.00	0.00
4,200.00	8.00	170.73	4,079.66	-910.60	148.55	922.63	0.00	0.00	0.00
4,300.00	8.00	170.73	4,178.68	-924.33	150.79	936.55	0.00	0.00	0.00
4,400.00	8.00	170.73	4,277.71	-938.07	153.03	950.47	0.00	0.00	0.00
4,500.00	8.00	170.73	4,376.74	-951.80	155.27	964.39	0.00	0.00	0.00
4,600.00	8.00	170.73	4,475.76	-965.54	157.51	978.30	0.00	0.00	0.00
4,700.00	8.00	170.73	4,574.79	-979.28	159.75	992.22	0.00	0.00	0.00
4,800.00	8.00	170.73	4,673.82	-993.01	161.99	1,006.14	0.00	0.00	0.00
4,900.00	8.00	170.73	4,772.84	-1,006.75	164.23	1,020.06	0.00	0.00	0.00
5,000.00	8.00	170.73	4,871.87	-1,020.48	166.47	1,033.97	0.00	0.00	0.00
5,100.00	8.00	170.73	4,970.90	-1,034.22	168.71	1,047.89	0.00	0.00	0.00
5,200.00	8.00	170.73	5,069.92	-1,047.95	170.95	1,061.81	0.00	0.00	0.00
5,300.00	8.00	170.73	5,168.95	-1,061.69	173.20	1,075.72	0.00	0.00	0.00
5,400.00	8.00	170.73	5,267.98	-1,075.43	175.44	1,089.64	0.00	0.00	0.00
5,500.00	8.00	170.73	5,367.00	-1,089.16	177.68	1,103.56	0.00	0.00	0.00
5,600.00	8.00	170.73	5,466.03	-1,102.90	179.92	1,117.48	0.00	0.00	0.00
5,700.00	8.00	170.73	5,565.06	-1,116.63	182.16	1,131.39	0.00	0.00	0.00
5,800.00	8.00	170.73	5,664.08	-1,130.37	184.40	1,145.31	0.00	0.00	0.00
5,900.00	8.00	170.73	5,763.11	-1,144.11	186.64	1,159.23	0.00	0.00	0.00
6,000.00	8.00	170.73	5,862.14	-1,157.84	188.88	1,173.15	0.00	0.00	0.00
6,073.58	8.00	170.73	5,935.00	-1,167.95	190.53	1,183.39	0.00	0.00	0.00
Target = 521904.21, 1328942.30 - Ute Wtr Fed 27-14 Target									
6,100.00	8.00	170.73	5,961.16	-1,171.58	191.12	1,187.06	0.00	0.00	0.00
6,200.00	8.00	170.73	6,060.19	-1,185.31	193.36	1,200.98	0.00	0.00	0.00
6,300.00	8.00	170.73	6,159.22	-1,199.05	195.60	1,214.90	0.00	0.00	0.00
6,352.29	8.00	170.73	6,211.00	-1,206.23	196.77	1,222.18	0.00	0.00	0.00
Cameo									
6,400.00	8.00	170.73	6,258.24	-1,212.78	197.84	1,228.82	0.00	0.00	0.00
6,500.00	8.00	170.73	6,357.27	-1,226.52	200.08	1,242.73	0.00	0.00	0.00
6,600.00	8.00	170.73	6,456.30	-1,240.26	202.32	1,256.65	0.00	0.00	0.00
6,700.00	8.00	170.73	6,555.33	-1,253.99	204.57	1,270.57	0.00	0.00	0.00
6,756.22	8.00	170.73	6,611.00	-1,261.71	205.83	1,278.39	0.00	0.00	0.00
Rollins									
6,800.00	8.00	170.73	6,654.35	-1,267.73	206.81	1,284.48	0.00	0.00	0.00
6,900.00	8.00	170.73	6,753.38	-1,281.46	209.05	1,298.40	0.00	0.00	0.00
7,000.00	8.00	170.73	6,852.41	-1,295.20	211.29	1,312.32	0.00	0.00	0.00
7,100.00	8.00	170.73	6,951.43	-1,308.93	213.53	1,326.24	0.00	0.00	0.00
7,156.11	8.00	170.73	7,007.00	-1,316.64	214.79	1,334.05	0.00	0.00	0.00
Cozzette									
7,200.00	8.00	170.73	7,050.46	-1,322.67	215.77	1,340.15	0.00	0.00	0.00
7,300.00	8.00	170.73	7,149.49	-1,336.41	218.01	1,354.07	0.00	0.00	0.00
7,338.89	8.00	170.73	7,188.00	-1,341.75	218.88	1,359.48	0.00	0.00	0.00
Corcoran									
7,400.00	8.00	170.73	7,248.51	-1,350.14	220.25	1,367.99	0.00	0.00	0.00
7,500.00	8.00	170.73	7,347.54	-1,363.88	222.49	1,381.91	0.00	0.00	0.00
7,600.00	8.00	170.73	7,446.57	-1,377.61	224.73	1,395.82	0.00	0.00	0.00
7,623.67	8.00	170.73	7,470.00	-1,380.86	225.26	1,399.12	0.00	0.00	0.00
PBHL = 521690.46, 1328971.47									

Database:	EDM 2003.16 Multi-User Db	Local Co-ordinate Reference:	Well Ute Water Fed 27-14
Company:	OXY USA RMAT	TVD Reference:	GL 7208' & RKB 18' @ 7226.00ft (Trinidad 217)
Project:	Garfield County, CO NAD27	MD Reference:	GL 7208' & RKB 18' @ 7226.00ft (Trinidad 217)
Site:	Ute Water 27-11 Pad	North Reference:	True
Well:	Ute Water Fed 27-14	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)		
Ute Wtr Fed 27-14 Target - plan hits target center - Circle (radius 50.00)	-8.00	170.73	5,935.00	-1,167.95	190.53	521,904.21	1,328,942.30	39° 14' 32.478 N	107° 52' 10.618 W

Formations						
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction	
(ft)	(ft)			(°)	(°)	
3,303.63	3,198.00	Ft Union		0.00		
3,748.96	3,633.00	Mesaverde		0.00		
4,099.37	3,980.00	Williams Fork		0.00		
6,352.29	6,211.00	Cameo		0.00		
6,756.22	6,611.00	Rollins		0.00		
7,156.11	7,007.00	Cozzette		0.00		
7,338.89	7,188.00	Corcoran		0.00		

Plan Annotations				
Measured Depth	Vertical Depth	Local Coordinates		Comment
(ft)	(ft)	+N/-S (ft)	+E/-W (ft)	
200.00	200.00	0.00	0.00	Start Build 2.00
1,026.95	1,015.52	-116.98	19.08	Start 16.54° Hold At 1026.95' MD
3,303.83	3,198.19	-756.68	123.44	Start Drop -2.00
3,730.78	3,615.00	-846.15	138.03	Start 8.00° Hold At 3730.78' MD
6,073.58	5,935.00	-1,167.95	190.53	Target = 521904.21, 1328942.30
7,623.67	7,470.00	-1,380.86	225.26	PBHL = 521690.46, 1328971.47