

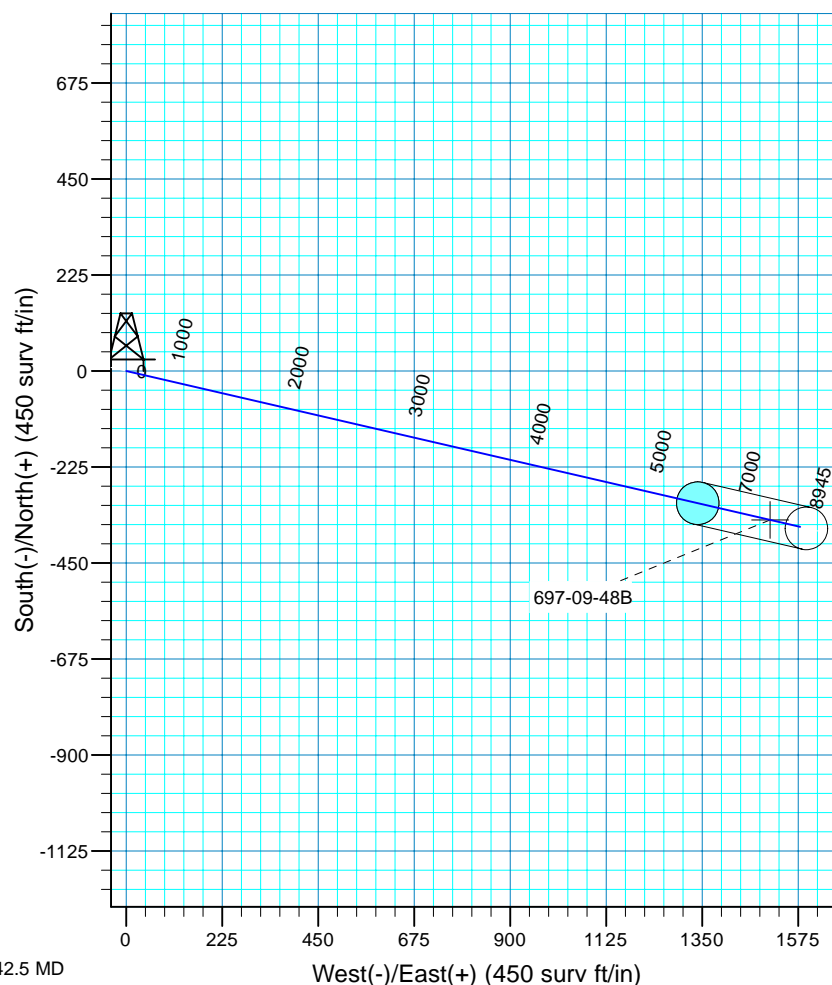
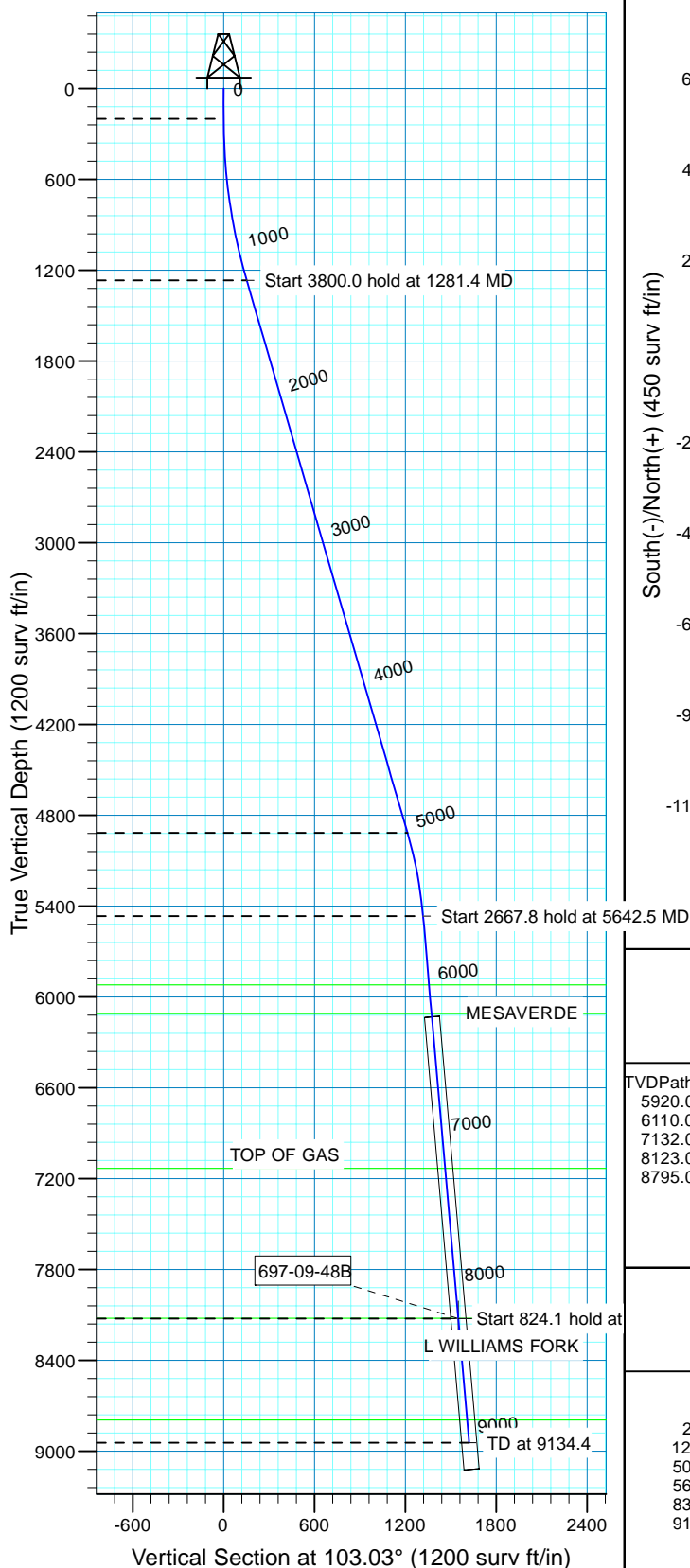


Azimuths to True North
Magnetic North: 10.53°

Magnetic Field
Strength: 52332.0snT
Dip Angle: 65.76°
Date: 9/2/2010
Model: IGRF200510

WELL DETAILS: CASCADE CREEK 697-09-48B

		WELL @ 8410.0surv ft (Original Well Elev)		8380.0		
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	631260.57	1232512.43	39° 32' 6.238 N	108° 13' 17.402 W	CC#697-09-48B



CASCADE CREEK 697-09-48B/CASCADE CREEK 697-0

Created By: Ron Bevans Date: 2010-07-09

PROJECT DETAILS: GRAND VALLEY

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: True

FORMATION TOP DETAILS

TVDPATH	MDPATH	FORMATION
5920.0	6097.9	MESAVERDE
6110.0	6288.6	WILLIAMSFORK
7132.0	7314.5	TOP OF GAS
8123.0	8309.3	L WILLIAMS FORK
8795.0	8983.9	ROLLINS

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	VSec	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.0	
200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.0	
1281.4	16.22	103.03	1267.0	-34.3	148.1	1.50	152.1	
5081.4	16.22	103.03	4915.7	-273.5	1182.3	0.00	1213.6	
5642.5	5.00	103.03	5466.3	-296.8	1282.8	2.00	1316.7	
8310.3	5.00	103.03	8124.0	-349.2	1509.4	0.00	1549.2	697-09-48B
9134.4	5.00	103.03	8945.0	-365.4	1579.3	0.00	1621.1	



OXY USA MID-CON

GRAND VALLEY

CASCADE CREEK 609-33 PAD

CASCADE CREEK 697-09-48B - Slot CC#697-09-48B

CASCADE CREEK 697-09-48B

Plan: PLAN 2

Standard Planning Report - Geographic

03 September, 2010



OXY
Planning Report - Geographic

Database:	HOPSPP	Local Co-ordinate Reference:	Well CASCADE CREEK 697-09-48B - Slot CC#697-09-48B
Company:	OXY USA MID-CON	TVD Reference:	WELL @ 8410.0surv ft (Original Well Elev)
Project:	GRAND VALLEY	MD Reference:	WELL @ 8410.0surv ft (Original Well Elev)
Site:	CASCADE CREEK 609-33 PAD	North Reference:	True
Well:	CASCADE CREEK 697-09-48B	Survey Calculation Method:	Minimum Curvature
Wellbore:	CASCADE CREEK 697-09-48B		
Design:	PLAN 2		

Project	GRAND VALLEY, NORTH AMERICA		
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 609-33 PAD		
Site Position:		Northing:	0.00 surv ft
From:	None	Easting:	0.00 surv ft
Position Uncertainty:	0.0 surv ft	Slot Radius:	0.000 in
		Latitude:	0° 0' 0.000 N
		Longitude:	0° 0' 0.000 E
		Grid Convergence:	0.00 °

Well	CASCADE CREEK 697-09-48B - Slot CC#697-09-48B		
Well Position	+N/-S	0.0 surv ft	Northing: 631,260.57 surv ft
	+E/-W	0.0 surv ft	Easting: 1,232,512.42 surv ft
Position Uncertainty	0.0 surv ft	Wellhead Elevation:	30.0 surv ft
		Latitude:	39° 32' 6.238 N
		Longitude:	108° 13' 17.402 W
		Ground Level:	8,380.0 surv ft

Wellbore	CASCADE CREEK 697-09-48B				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	User Defined	9/2/2010	0.00	0.00	0

Design	PLAN 2			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (surv ft)	+N/-S (surv ft)	+E/-W (surv ft)	Direction (°)
	0.0	0.0	0.0	103.03

Plan Sections										
Measured Depth (surv ft)	Inclination (°)	Azimuth (°)	Vertical Depth (surv ft)	+N/-S (surv ft)	+E/-W (surv ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,281.4	16.22	103.03	1,267.0	-34.3	148.1	1.50	1.50	0.00	103.03	
5,081.4	16.22	103.03	4,915.7	-273.5	1,182.3	0.00	0.00	0.00	0.00	
5,642.5	5.00	103.03	5,466.3	-296.8	1,282.8	2.00	-2.00	0.00	180.00	
8,310.3	5.00	103.03	8,124.0	-349.2	1,509.4	0.00	0.00	0.00	0.00	697-09-48B
9,134.4	5.00	103.03	8,945.0	-365.4	1,579.3	0.00	0.00	0.00	0.00	



OXY

Planning Report - Geographic

Database:	HOPSP	Local Co-ordinate Reference:	Well CASCADE CREEK 697-09-48B - Slot CC#697-09-48B
Company:	OXY USA MID-CON	TVD Reference:	WELL @ 8410.0surv ft (Original Well Elev)
Project:	GRAND VALLEY	MD Reference:	WELL @ 8410.0surv ft (Original Well Elev)
Site:	CASCADE CREEK 609-33 PAD	North Reference:	True
Well:	CASCADE CREEK 697-09-48B	Survey Calculation Method:	Minimum Curvature
Wellbore:	CASCADE CREEK 697-09-48B		
Design:	PLAN 2		

Planned Survey										
Measured Depth (surv ft)	Inclination (°)	Azimuth (°)	Vertical Depth (surv ft)	+N/-S (surv ft)	+E/-W (surv ft)	Map Northing (surv ft)	Map Easting (surv ft)	Latitude	Longitude	
0.0	0.00	0.00	0.0	0.0	0.0	631,260.57	1,232,512.42	39° 32' 6.238 N	108° 13' 17.402 W	
100.0	0.00	0.00	100.0	0.0	0.0	631,260.57	1,232,512.42	39° 32' 6.238 N	108° 13' 17.402 W	
200.0	0.00	0.00	200.0	0.0	0.0	631,260.57	1,232,512.42	39° 32' 6.238 N	108° 13' 17.402 W	
300.0	1.50	103.03	300.0	-0.3	1.3	631,260.24	1,232,513.69	39° 32' 6.235 N	108° 13' 17.386 W	
400.0	3.00	103.03	399.9	-1.2	5.1	631,259.24	1,232,517.49	39° 32' 6.227 N	108° 13' 17.337 W	
500.0	4.50	103.03	499.7	-2.7	11.5	631,257.58	1,232,523.81	39° 32' 6.212 N	108° 13' 17.255 W	
600.0	6.00	103.03	599.3	-4.7	20.4	631,255.25	1,232,532.66	39° 32' 6.192 N	108° 13' 17.142 W	
700.0	7.50	103.03	698.6	-7.4	31.8	631,252.26	1,232,544.03	39° 32' 6.165 N	108° 13' 16.995 W	
800.0	9.00	103.03	797.5	-10.6	45.8	631,248.61	1,232,557.90	39° 32' 6.133 N	108° 13' 16.817 W	
900.0	10.50	103.03	896.1	-14.4	62.3	631,244.30	1,232,574.28	39° 32' 6.096 N	108° 13' 16.606 W	
1,000.0	12.00	103.03	994.2	-18.8	81.3	631,239.33	1,232,593.15	39° 32' 6.052 N	108° 13' 16.364 W	
1,100.0	13.50	103.03	1,091.7	-23.8	102.8	631,233.72	1,232,614.49	39° 32' 6.003 N	108° 13' 16.089 W	
1,200.0	15.00	103.03	1,188.6	-29.3	126.8	631,227.45	1,232,638.29	39° 32' 5.948 N	108° 13' 15.783 W	
1,281.4	16.22	103.03	1,267.0	-34.3	148.1	631,221.88	1,232,659.48	39° 32' 5.899 N	108° 13' 15.511 W	
1,300.0	16.22	103.03	1,284.9	-35.4	153.2	631,220.56	1,232,664.50	39° 32' 5.888 N	108° 13' 15.446 W	
1,400.0	16.22	103.03	1,380.9	-41.7	180.4	631,213.45	1,232,691.52	39° 32' 5.826 N	108° 13' 15.099 W	
1,500.0	16.22	103.03	1,476.9	-48.0	207.6	631,206.34	1,232,718.53	39° 32' 5.763 N	108° 13' 14.752 W	
1,600.0	16.22	103.03	1,572.9	-54.3	234.9	631,199.23	1,232,745.54	39° 32' 5.701 N	108° 13' 14.404 W	
1,700.0	16.22	103.03	1,668.9	-60.6	262.1	631,192.12	1,232,772.56	39° 32' 5.639 N	108° 13' 14.057 W	
1,800.0	16.22	103.03	1,765.0	-66.9	289.3	631,185.02	1,232,799.57	39° 32' 5.577 N	108° 13' 13.709 W	
1,900.0	16.22	103.03	1,861.0	-73.2	316.5	631,177.91	1,232,826.59	39° 32' 5.514 N	108° 13' 13.362 W	
2,000.0	16.22	103.03	1,957.0	-79.5	343.7	631,170.80	1,232,853.60	39° 32' 5.452 N	108° 13' 13.015 W	
2,100.0	16.22	103.03	2,053.0	-85.8	370.9	631,163.69	1,232,880.62	39° 32' 5.390 N	108° 13' 12.667 W	
2,200.0	16.22	103.03	2,149.0	-92.1	398.1	631,156.58	1,232,907.63	39° 32' 5.328 N	108° 13' 12.320 W	
2,300.0	16.22	103.03	2,245.1	-98.4	425.4	631,149.47	1,232,934.65	39° 32' 5.266 N	108° 13' 11.973 W	
2,400.0	16.22	103.03	2,341.1	-104.7	452.6	631,142.37	1,232,961.66	39° 32' 5.203 N	108° 13' 11.625 W	
2,500.0	16.22	103.03	2,437.1	-111.0	479.8	631,135.26	1,232,988.68	39° 32' 5.141 N	108° 13' 11.278 W	
2,600.0	16.22	103.03	2,533.1	-117.3	507.0	631,128.15	1,233,015.69	39° 32' 5.079 N	108° 13' 10.931 W	
2,700.0	16.22	103.03	2,629.1	-123.6	534.2	631,121.04	1,233,042.71	39° 32' 5.017 N	108° 13' 10.583 W	
2,800.0	16.22	103.03	2,725.2	-129.9	561.4	631,113.93	1,233,069.72	39° 32' 4.954 N	108° 13' 10.236 W	
2,900.0	16.22	103.03	2,821.2	-136.2	588.7	631,106.82	1,233,096.74	39° 32' 4.892 N	108° 13' 9.888 W	
3,000.0	16.22	103.03	2,917.2	-142.5	615.9	631,099.71	1,233,123.75	39° 32' 4.830 N	108° 13' 9.541 W	
3,100.0	16.22	103.03	3,013.2	-148.8	643.1	631,092.61	1,233,150.77	39° 32' 4.768 N	108° 13' 9.194 W	
3,200.0	16.22	103.03	3,109.2	-155.1	670.3	631,085.50	1,233,177.78	39° 32' 4.705 N	108° 13' 8.846 W	
3,300.0	16.22	103.03	3,205.3	-161.4	697.5	631,078.39	1,233,204.80	39° 32' 4.643 N	108° 13' 8.499 W	
3,400.0	16.22	103.03	3,301.3	-167.7	724.7	631,071.28	1,233,231.81	39° 32' 4.581 N	108° 13' 8.152 W	
3,500.0	16.22	103.03	3,397.3	-174.0	751.9	631,064.17	1,233,258.83	39° 32' 4.519 N	108° 13' 7.804 W	
3,600.0	16.22	103.03	3,493.3	-180.3	779.2	631,057.06	1,233,285.84	39° 32' 4.457 N	108° 13' 7.457 W	
3,700.0	16.22	103.03	3,589.3	-186.5	806.4	631,049.96	1,233,312.86	39° 32' 4.394 N	108° 13' 7.109 W	
3,800.0	16.22	103.03	3,685.3	-192.8	833.6	631,042.85	1,233,339.87	39° 32' 4.332 N	108° 13' 6.762 W	
3,900.0	16.22	103.03	3,781.4	-199.1	860.8	631,035.74	1,233,366.88	39° 32' 4.270 N	108° 13' 6.415 W	
4,000.0	16.22	103.03	3,877.4	-205.4	888.0	631,028.63	1,233,393.90	39° 32' 4.208 N	108° 13' 6.067 W	
4,100.0	16.22	103.03	3,973.4	-211.7	915.2	631,021.52	1,233,420.91	39° 32' 4.145 N	108° 13' 5.720 W	
4,200.0	16.22	103.03	4,069.4	-218.0	942.5	631,014.41	1,233,447.93	39° 32' 4.083 N	108° 13' 5.373 W	
4,300.0	16.22	103.03	4,165.4	-224.3	969.7	631,007.30	1,233,474.94	39° 32' 4.021 N	108° 13' 5.025 W	
4,400.0	16.22	103.03	4,261.5	-230.6	996.9	631,000.20	1,233,501.96	39° 32' 3.959 N	108° 13' 4.678 W	
4,500.0	16.22	103.03	4,357.5	-236.9	1,024.1	630,993.09	1,233,528.97	39° 32' 3.896 N	108° 13' 4.331 W	
4,600.0	16.22	103.03	4,453.5	-243.2	1,051.3	630,985.98	1,233,555.99	39° 32' 3.834 N	108° 13' 3.983 W	
4,700.0	16.22	103.03	4,549.5	-249.5	1,078.5	630,978.87	1,233,583.00	39° 32' 3.772 N	108° 13' 3.636 W	
4,800.0	16.22	103.03	4,645.5	-255.8	1,105.8	630,971.76	1,233,610.02	39° 32' 3.710 N	108° 13' 3.288 W	
4,900.0	16.22	103.03	4,741.6	-262.1	1,133.0	630,964.65	1,233,637.03	39° 32' 3.647 N	108° 13' 2.941 W	
5,000.0	16.22	103.03	4,837.6	-268.4	1,160.2	630,957.55	1,233,664.05	39° 32' 3.585 N	108° 13' 2.594 W	
5,081.4	16.22	103.03	4,915.7	-273.5	1,182.3	630,951.76	1,233,686.04	39° 32' 3.535 N	108° 13' 2.311 W	
5,100.0	15.85	103.03	4,933.6	-274.7	1,187.3	630,950.45	1,233,691.01	39° 32' 3.523 N	108° 13' 2.247 W	



OXY

Planning Report - Geographic

Database:	HOPSP	Local Co-ordinate Reference:	Well CASCADE CREEK 697-09-48B - Slot CC#697-09-48B
Company:	OXY USA MID-CON	TVD Reference:	WELL @ 8410.0surv ft (Original Well Elev)
Project:	GRAND VALLEY	MD Reference:	WELL @ 8410.0surv ft (Original Well Elev)
Site:	CASCADE CREEK 609-33 PAD	North Reference:	True
Well:	CASCADE CREEK 697-09-48B	Survey Calculation Method:	Minimum Curvature
Wellbore:	CASCADE CREEK 697-09-48B		
Design:	PLAN 2		

Planned Survey										
Measured Depth (surv ft)	Inclination (°)	Azimuth (°)	Vertical Depth (surv ft)	+N/-S (surv ft)	+E/-W (surv ft)	Map Northing (surv ft)	Map Easting (surv ft)	Latitude	Longitude	
5,200.0	13.85	103.03	5,030.3	-280.5	1,212.3	630,943.93	1,233,715.79	39° 32' 3.466 N	108° 13' 1.928 W	
5,300.0	11.85	103.03	5,127.8	-285.5	1,234.0	630,938.27	1,233,737.29	39° 32' 3.416 N	108° 13' 1.652 W	
5,400.0	9.85	103.03	5,226.0	-289.7	1,252.3	630,933.48	1,233,755.50	39° 32' 3.374 N	108° 13' 1.418 W	
5,500.0	7.85	103.03	5,324.8	-293.2	1,267.3	630,929.57	1,233,770.37	39° 32' 3.340 N	108° 13' 1.227 W	
5,600.0	5.85	103.03	5,424.1	-295.9	1,278.9	630,926.53	1,233,781.90	39° 32' 3.314 N	108° 13' 1.078 W	
5,642.5	5.00	103.03	5,466.3	-296.8	1,282.8	630,925.51	1,233,785.78	39° 32' 3.305 N	108° 13' 1.028 W	
5,700.0	5.00	103.03	5,523.6	-297.9	1,287.7	630,924.24	1,233,790.64	39° 32' 3.294 N	108° 13' 0.966 W	
5,800.0	5.00	103.03	5,623.3	-299.9	1,296.2	630,922.02	1,233,799.06	39° 32' 3.274 N	108° 13' 0.858 W	
5,900.0	5.00	103.03	5,722.9	-301.8	1,304.7	630,919.80	1,233,807.49	39° 32' 3.255 N	108° 13' 0.749 W	
6,000.0	5.00	103.03	5,822.5	-303.8	1,313.2	630,917.58	1,233,815.92	39° 32' 3.235 N	108° 13' 0.641 W	
6,097.9	5.00	103.03	5,920.0	-305.7	1,321.5	630,915.41	1,233,824.17	39° 32' 3.216 N	108° 13' 0.535 W	
MESAVERDE										
6,100.0	5.00	103.03	5,922.1	-305.8	1,321.7	630,915.36	1,233,824.35	39° 32' 3.216 N	108° 13' 0.533 W	
6,200.0	5.00	103.03	6,021.7	-307.7	1,330.2	630,913.15	1,233,832.78	39° 32' 3.196 N	108° 13' 0.424 W	
6,288.6	5.00	103.03	6,110.0	-309.5	1,337.7	630,911.18	1,233,840.25	39° 32' 3.179 N	108° 13' 0.328 W	
WILLIAMSFORK										
6,300.0	5.00	103.03	6,121.4	-309.7	1,338.7	630,910.93	1,233,841.21	39° 32' 3.177 N	108° 13' 0.316 W	
6,400.0	5.00	103.03	6,221.0	-311.7	1,347.2	630,908.71	1,233,849.64	39° 32' 3.158 N	108° 13' 0.207 W	
6,500.0	5.00	103.03	6,320.6	-313.6	1,355.6	630,906.49	1,233,858.06	39° 32' 3.138 N	108° 13' 0.099 W	
6,600.0	5.00	103.03	6,420.2	-315.6	1,364.1	630,904.28	1,233,866.49	39° 32' 3.119 N	108° 12' 59.991 W	
6,700.0	5.00	103.03	6,519.8	-317.5	1,372.6	630,902.06	1,233,874.92	39° 32' 3.099 N	108° 12' 59.882 W	
6,800.0	5.00	103.03	6,619.5	-319.5	1,381.1	630,899.84	1,233,883.35	39° 32' 3.080 N	108° 12' 59.774 W	
6,900.0	5.00	103.03	6,719.1	-321.5	1,389.6	630,897.62	1,233,891.78	39° 32' 3.060 N	108° 12' 59.666 W	
7,000.0	5.00	103.03	6,818.7	-323.4	1,398.1	630,895.40	1,233,900.21	39° 32' 3.041 N	108° 12' 59.557 W	
7,100.0	5.00	103.03	6,918.3	-325.4	1,406.6	630,893.19	1,233,908.64	39° 32' 3.022 N	108° 12' 59.449 W	
7,200.0	5.00	103.03	7,017.9	-327.4	1,415.1	630,890.97	1,233,917.07	39° 32' 3.002 N	108° 12' 59.340 W	
7,300.0	5.00	103.03	7,117.6	-329.3	1,423.6	630,888.75	1,233,925.49	39° 32' 2.983 N	108° 12' 59.232 W	
7,314.5	5.00	103.03	7,132.0	-329.6	1,424.8	630,888.43	1,233,926.72	39° 32' 2.980 N	108° 12' 59.216 W	
TOP OF GAS										
7,400.0	5.00	103.03	7,217.2	-331.3	1,432.1	630,886.53	1,233,933.92	39° 32' 2.963 N	108° 12' 59.124 W	
7,500.0	5.00	103.03	7,316.8	-333.3	1,440.6	630,884.32	1,233,942.35	39° 32' 2.944 N	108° 12' 59.015 W	
7,600.0	5.00	103.03	7,416.4	-335.2	1,449.0	630,882.10	1,233,950.78	39° 32' 2.925 N	108° 12' 58.907 W	
7,700.0	5.00	103.03	7,516.0	-337.2	1,457.5	630,879.88	1,233,959.21	39° 32' 2.905 N	108° 12' 58.799 W	
7,800.0	5.00	103.03	7,615.7	-339.2	1,466.0	630,877.66	1,233,967.64	39° 32' 2.886 N	108° 12' 58.690 W	
7,900.0	5.00	103.03	7,715.3	-341.1	1,474.5	630,875.44	1,233,976.07	39° 32' 2.866 N	108° 12' 58.582 W	
8,000.0	5.00	103.03	7,814.9	-343.1	1,483.0	630,873.23	1,233,984.49	39° 32' 2.847 N	108° 12' 58.473 W	
8,100.0	5.00	103.03	7,914.5	-345.0	1,491.5	630,871.01	1,233,992.92	39° 32' 2.827 N	108° 12' 58.365 W	
8,200.0	5.00	103.03	8,014.1	-347.0	1,500.0	630,868.79	1,234,001.35	39° 32' 2.808 N	108° 12' 58.257 W	
8,300.0	5.00	103.03	8,113.8	-349.0	1,508.5	630,866.57	1,234,009.78	39° 32' 2.789 N	108° 12' 58.148 W	
8,309.3	5.00	103.03	8,123.0	-349.2	1,509.3	630,866.37	1,234,010.56	39° 32' 2.787 N	108° 12' 58.138 W	
L WILLIAMS FORK										
8,310.3	5.00	103.03	8,124.0	-349.2	1,509.4	630,866.34	1,234,010.65	39° 32' 2.787 N	108° 12' 58.137 W	
8,400.0	5.00	103.03	8,213.4	-350.9	1,517.0	630,864.35	1,234,018.21	39° 32' 2.769 N	108° 12' 58.040 W	
8,500.0	5.00	103.03	8,313.0	-352.9	1,525.5	630,862.14	1,234,026.64	39° 32' 2.750 N	108° 12' 57.932 W	
8,600.0	5.00	103.03	8,412.6	-354.9	1,534.0	630,859.92	1,234,035.07	39° 32' 2.730 N	108° 12' 57.823 W	
8,700.0	5.00	103.03	8,512.2	-356.8	1,542.5	630,857.70	1,234,043.50	39° 32' 2.711 N	108° 12' 57.715 W	
8,800.0	5.00	103.03	8,611.8	-358.8	1,550.9	630,855.48	1,234,051.92	39° 32' 2.691 N	108° 12' 57.606 W	
8,900.0	5.00	103.03	8,711.5	-360.8	1,559.4	630,853.27	1,234,060.35	39° 32' 2.672 N	108° 12' 57.498 W	
8,983.9	5.00	103.03	8,795.0	-362.4	1,566.6	630,851.41	1,234,067.42	39° 32' 2.656 N	108° 12' 57.407 W	
ROLLINS										
9,000.0	5.00	103.03	8,811.1	-362.7	1,567.9	630,851.05	1,234,068.78	39° 32' 2.653 N	108° 12' 57.390 W	
9,100.0	5.00	103.03	8,910.7	-364.7	1,576.4	630,848.83	1,234,077.21	39° 32' 2.633 N	108° 12' 57.281 W	
9,134.4	5.00	103.03	8,945.0	-365.4	1,579.3	630,848.07	1,234,080.11	39° 32' 2.627 N	108° 12' 57.244 W	



OXY
Planning Report - Geographic

Database:	HOPSP	Local Co-ordinate Reference:	Well CASCADE CREEK 697-09-48B - Slot CC#697-09-48B
Company:	OXY USA MID-CON	TVD Reference:	WELL @ 8410.0surv ft (Original Well Elev)
Project:	GRAND VALLEY	MD Reference:	WELL @ 8410.0surv ft (Original Well Elev)
Site:	CASCADE CREEK 609-33 PAD	North Reference:	True
Well:	CASCADE CREEK 697-09-48B	Survey Calculation Method:	Minimum Curvature
Wellbore:	CASCADE CREEK 697-09-48B		
Design:	PLAN 2		

Design Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(surv ft)	(surv ft)	(surv ft)	(surv ft)	(surv ft)		
697-09-48B	355.00	103.03	8,124.0	-349.2	1,509.4	630,866.34	1,234,010.65	39° 32' 2.787 N	108° 12' 58.137 W
- plan hits target center									
- Circle (radius 50.0)									

Formations						
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction	
(surv ft)	(surv ft)			(°)	(°)	
6,097.9	5,920.0	MESAVERDE		0.00		
6,288.6	6,110.0	WILLIAMSFORK		0.00		
7,314.5	7,132.0	TOP OF GAS		0.00		
8,309.3	8,123.0	L WILLIAMS FORK		0.00		
8,983.9	8,795.0	ROLLINS		0.00		