



Project: GRAND VALLEY
Site: CASCADE CREEK 609-33 PAD
Well: CASCADE CREEK 697-09-35B
Wellbore: CASCADE CREEK 697-09-35B
Design: PLAN 2

OXY USA MID-CON

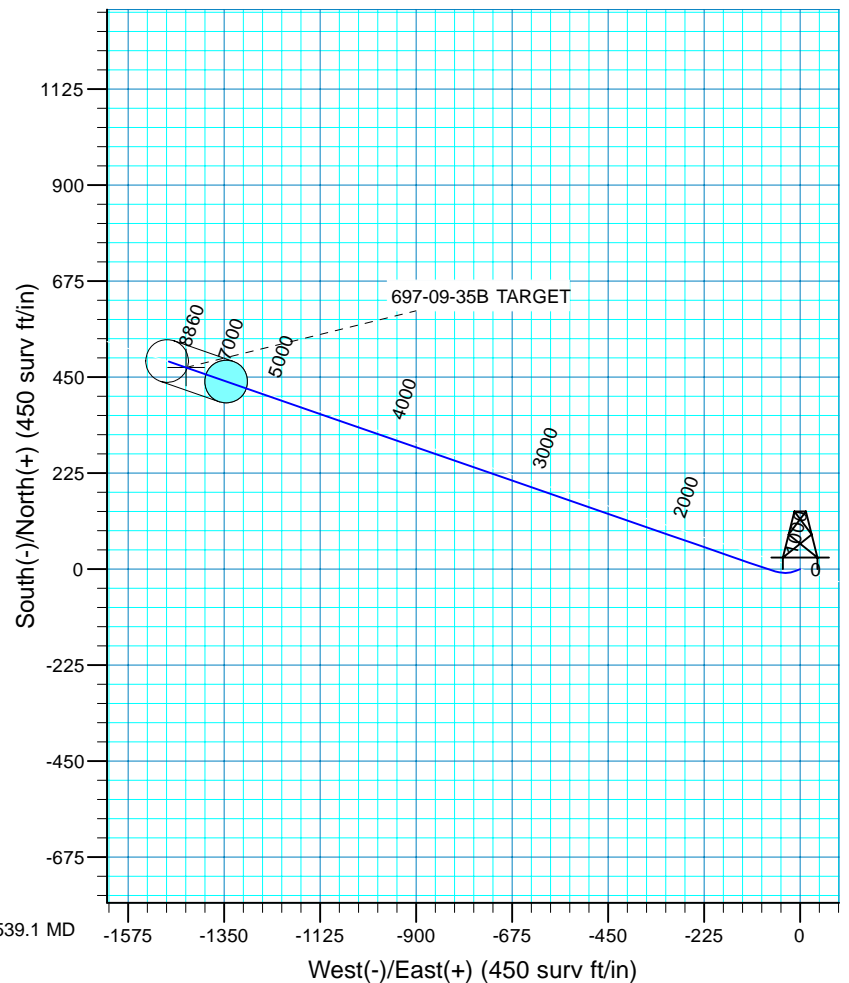
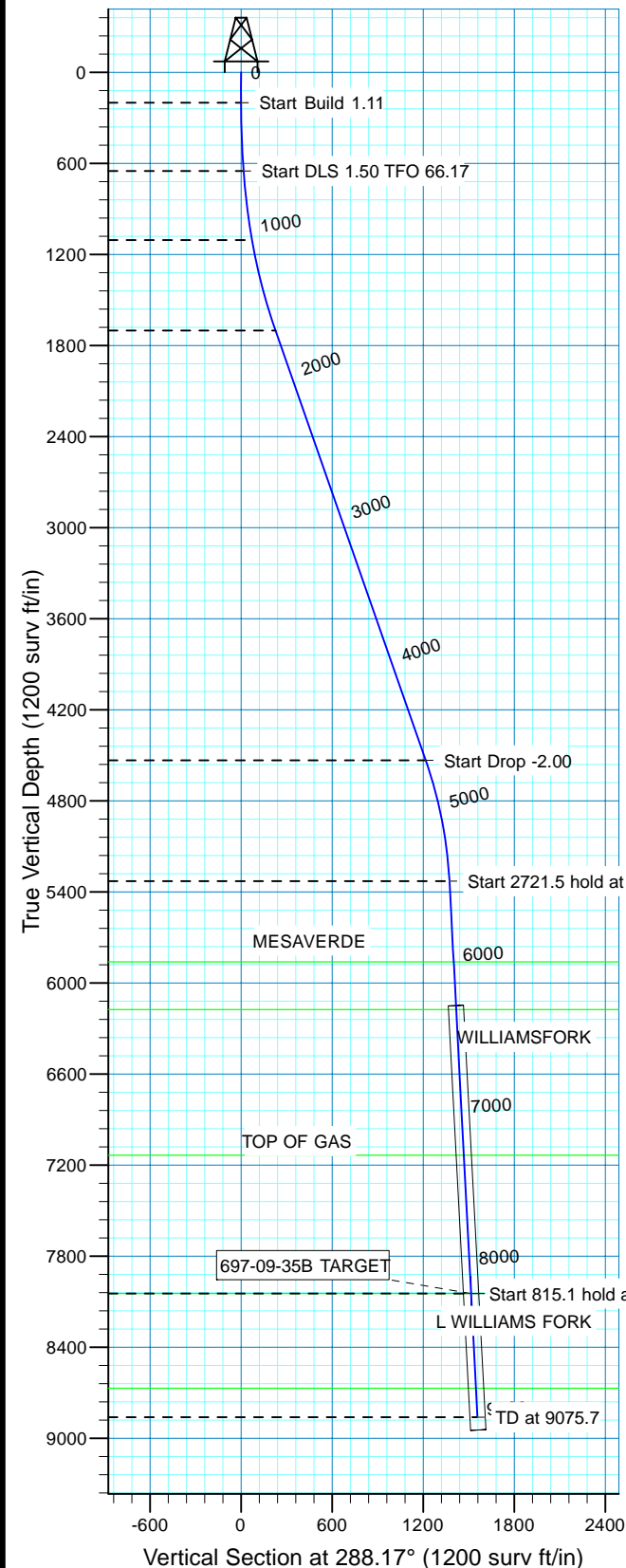
WELL DETAILS: CASCADE CREEK 697-09-35B

WELL @ 8410.0surv ft (Original Well Elev) 8380.0
+N/-S +E/-W Northing Easting Longitude Slot
0.0 0.0 631286.51 1232466.81 39° 32' 6.481 N108° 13' 17.994 W CC#697-09-35B



Azimuths to True North
Magnetic North: 10.53°

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



FORMATION TOP DETAILS		PROJECT DETAILS: GRAND VALLEY	
TVDPath	MDPath	Geodetic System: US State Plane 1927 (Exact solution)	
5860.0	6071.6	Datum: NAD 1927 (NADCON CONUS)	
6175.0	6387.0	Ellipsoid: Clarke 1866	
7135.0	7348.3	Zone: Colorado Central 502	
8046.0	8260.6	System Datum: Mean Sea Level	
8670.0	8885.4	Local North: True	

SECTION DETAILS								
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	V Sect	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	
650.6	5.00	250.00	650.0	-6.7	-18.5	1.11	15.4	
1109.1	10.00	289.11	1104.7	-0.5	-74.9	1.50	71.0	697-09-35B TARGET
1726.3	19.26	289.11	1701.2	50.5	-222.0	1.50	226.7	
4726.3	19.26	289.11	4533.4	374.5	-1156.9	0.00	1216.0	
5539.1	3.00	289.11	5328.3	425.7	-1304.6	2.00	1372.3	
8260.6	3.00	289.11	8046.0	472.3	-1439.2	0.00	1514.7	697-09-35B TARGET
9075.7	3.00	289.11	8860.0	486.3	-1479.5	0.00	1557.4	



OXY USA MID-CON

GRAND VALLEY

CASCADE CREEK 609-33 PAD

CASCADE CREEK 697-09-35B - Slot CC#697-09-35B

CASCADE CREEK 697-09-35B

Plan: PLAN 2

Standard Planning Report - Geographic

08 September, 2010



OXY

Planning Report - Geographic

Database:	HOPSPP	Local Co-ordinate Reference:	Well CASCADE CREEK 697-09-35B - Slot CC#697-09-35B
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 697-09-35B	Survey Calculation Method:	Minimum Curvature
Wellbore:	CASCADE CREEK 697-09-35B		
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:	631,298.91 surv ft
From:	Map	Easting:	1,232,465.23 surv ft
Position Uncertainty:	0.0 surv ft	Slot Radius:	0.000 in
		Latitude:	39° 32' 6.603 N
		Longitude:	108° 13' 18.019 W
		Grid Convergence:	-1.72 °

Well	CASCADE CREEK 697-09-35B - Slot CC#697-09-35B		
Well Position	+N/-S	0.0 surv ft	Northing: 631,286.51 surv ft
	+E/-W	0.0 surv ft	Easting: 1,232,466.81 surv ft
Position Uncertainty	0.0 surv ft	Wellhead Elevation:	30.0 surv ft
		Latitude:	39° 32' 6.481 N
		Longitude:	108° 13' 17.994 W
		Ground Level:	8,380.0 surv ft

Wellbore	CASCADE CREEK 697-09-35B				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	9/2/2010	10.53	65.76	52,332

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	288.17	

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	
650.6	5.00	250.00	650.0	-6.7	-18.5	1.11	1.11	0.00	250.00	
1,109.1	10.00	289.11	1,104.7	-0.5	-74.9	1.50	1.09	8.53	66.17	697-09-35B TARGET
1,726.3	19.26	289.11	1,701.2	50.5	-222.0	1.50	1.50	0.00	0.00	
4,726.3	19.26	289.11	4,533.4	374.5	-1,156.9	0.00	0.00	0.00	0.00	
5,539.1	3.00	289.11	5,328.3	425.7	-1,304.6	2.00	-2.00	0.00	180.00	
8,260.6	3.00	289.11	8,046.0	472.3	-1,439.2	0.00	0.00	0.00	0.00	697-09-35B TARGET
9,075.7	3.00	289.11	8,860.0	486.3	-1,479.5	0.00	0.00	0.00	0.00	



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Planning Report - Geographic

Database:	HOPSP	Local Co-ordinate Reference:	Well CASCADE CREEK 697-09-35B - Slot CC#697-09-35B
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 697-09-35B	Survey Calculation Method:	Minimum Curvature
Wellbore:	CASCADE CREEK 697-09-35B		
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	631,286.51	1,232,466.81	39° 32' 6.481 N	108° 13' 17.994 W	
100.0	0.00	0.00	100.0	0.0	0.0	631,286.51	1,232,466.81	39° 32' 6.481 N	108° 13' 17.994 W	
200.0	0.00	0.00	200.0	0.0	0.0	631,286.51	1,232,466.81	39° 32' 6.481 N	108° 13' 17.994 W	
300.0	1.11	250.00	300.0	-0.3	-0.9	631,286.21	1,232,465.89	39° 32' 6.478 N	108° 13' 18.005 W	
400.0	2.22	250.00	399.9	-1.3	-3.6	631,285.30	1,232,463.13	39° 32' 6.468 N	108° 13' 18.040 W	
500.0	3.33	250.00	499.8	-3.0	-8.2	631,283.78	1,232,458.53	39° 32' 6.452 N	108° 13' 18.098 W	
600.0	4.44	250.00	599.6	-5.3	-14.6	631,281.66	1,232,452.10	39° 32' 6.429 N	108° 13' 18.179 W	
650.6	5.00	250.00	650.0	-6.7	-18.5	631,280.35	1,232,448.15	39° 32' 6.415 N	108° 13' 18.229 W	
700.0	5.34	257.30	699.2	-8.0	-22.7	631,279.24	1,232,443.85	39° 32' 6.402 N	108° 13' 18.284 W	
800.0	6.25	269.18	798.7	-9.1	-32.7	631,278.44	1,232,433.83	39° 32' 6.391 N	108° 13' 18.411 W	
900.0	7.35	277.80	898.0	-8.3	-44.5	631,279.58	1,232,422.08	39° 32' 6.399 N	108° 13' 18.562 W	
1,000.0	8.58	284.07	997.1	-5.6	-58.1	631,282.67	1,232,408.59	39° 32' 6.426 N	108° 13' 18.735 W	
1,109.1	10.00	289.11	1,104.7	-0.5	-74.9	631,288.25	1,232,391.90	39° 32' 6.476 N	108° 13' 18.950 W	
1,200.0	11.36	289.11	1,194.0	5.0	-90.8	631,294.24	1,232,376.16	39° 32' 6.530 N	108° 13' 19.153 W	
1,300.0	12.86	289.11	1,291.8	11.9	-110.7	631,301.70	1,232,356.54	39° 32' 6.598 N	108° 13' 19.406 W	
1,400.0	14.36	289.11	1,389.0	19.6	-132.9	631,310.07	1,232,334.55	39° 32' 6.675 N	108° 13' 19.690 W	
1,500.0	15.86	289.11	1,485.5	28.1	-157.5	631,319.34	1,232,310.18	39° 32' 6.759 N	108° 13' 20.004 W	
1,600.0	17.36	289.11	1,581.4	37.5	-184.6	631,329.51	1,232,283.46	39° 32' 6.851 N	108° 13' 20.349 W	
1,700.0	18.86	289.11	1,676.4	47.7	-213.9	631,340.57	1,232,254.40	39° 32' 6.952 N	108° 13' 20.724 W	
1,726.3	19.26	289.11	1,701.2	50.5	-222.0	631,343.61	1,232,246.39	39° 32' 6.980 N	108° 13' 20.828 W	
1,800.0	19.26	289.11	1,770.8	58.4	-245.0	631,352.26	1,232,223.66	39° 32' 7.059 N	108° 13' 21.121 W	
1,900.0	19.26	289.11	1,865.2	69.2	-276.2	631,363.99	1,232,192.83	39° 32' 7.165 N	108° 13' 21.519 W	
2,000.0	19.26	289.11	1,959.6	80.0	-307.3	631,375.72	1,232,162.01	39° 32' 7.272 N	108° 13' 21.916 W	
2,100.0	19.26	289.11	2,054.1	90.8	-338.5	631,387.45	1,232,131.18	39° 32' 7.379 N	108° 13' 22.314 W	
2,200.0	19.26	289.11	2,148.5	101.6	-369.7	631,399.18	1,232,100.36	39° 32' 7.485 N	108° 13' 22.712 W	
2,300.0	19.26	289.11	2,242.9	112.4	-400.8	631,410.91	1,232,069.53	39° 32' 7.592 N	108° 13' 23.110 W	
2,400.0	19.26	289.11	2,337.3	123.2	-432.0	631,422.63	1,232,038.71	39° 32' 7.699 N	108° 13' 23.507 W	
2,500.0	19.26	289.11	2,431.7	134.0	-463.1	631,434.36	1,232,007.88	39° 32' 7.806 N	108° 13' 23.905 W	
2,600.0	19.26	289.11	2,526.1	144.8	-494.3	631,446.09	1,231,977.06	39° 32' 7.912 N	108° 13' 24.303 W	
2,700.0	19.26	289.11	2,620.5	155.6	-525.5	631,457.82	1,231,946.23	39° 32' 8.019 N	108° 13' 24.701 W	
2,800.0	19.26	289.11	2,714.9	166.4	-556.6	631,469.55	1,231,915.41	39° 32' 8.126 N	108° 13' 25.098 W	
2,900.0	19.26	289.11	2,809.3	177.2	-587.8	631,481.28	1,231,884.58	39° 32' 8.233 N	108° 13' 25.496 W	
3,000.0	19.26	289.11	2,903.7	188.0	-619.0	631,493.00	1,231,853.76	39° 32' 8.339 N	108° 13' 25.894 W	
3,100.0	19.26	289.11	2,998.1	198.8	-650.1	631,504.73	1,231,822.93	39° 32' 8.446 N	108° 13' 26.292 W	
3,200.0	19.26	289.11	3,092.5	209.6	-681.3	631,516.46	1,231,792.11	39° 32' 8.553 N	108° 13' 26.689 W	
3,300.0	19.26	289.11	3,186.9	220.4	-712.4	631,528.19	1,231,761.28	39° 32' 8.660 N	108° 13' 27.087 W	
3,400.0	19.26	289.11	3,281.3	231.2	-743.6	631,539.92	1,231,730.46	39° 32' 8.766 N	108° 13' 27.485 W	
3,500.0	19.26	289.11	3,375.7	242.0	-774.8	631,551.65	1,231,699.63	39° 32' 8.873 N	108° 13' 27.883 W	
3,600.0	19.26	289.11	3,470.1	252.8	-805.9	631,563.38	1,231,668.81	39° 32' 8.980 N	108° 13' 28.280 W	
3,700.0	19.26	289.11	3,564.5	263.6	-837.1	631,575.10	1,231,637.98	39° 32' 9.086 N	108° 13' 28.678 W	
3,800.0	19.26	289.11	3,658.9	274.4	-868.3	631,586.83	1,231,607.16	39° 32' 9.193 N	108° 13' 29.076 W	
3,900.0	19.26	289.11	3,753.3	285.2	-899.4	631,598.56	1,231,576.33	39° 32' 9.300 N	108° 13' 29.474 W	
4,000.0	19.26	289.11	3,847.7	296.0	-930.6	631,610.29	1,231,545.51	39° 32' 9.407 N	108° 13' 29.871 W	
4,100.0	19.26	289.11	3,942.1	306.8	-961.7	631,622.02	1,231,514.68	39° 32' 9.513 N	108° 13' 30.269 W	
4,200.0	19.26	289.11	4,036.6	317.6	-992.9	631,633.75	1,231,483.86	39° 32' 9.620 N	108° 13' 30.667 W	
4,300.0	19.26	289.11	4,131.0	328.4	-1,024.1	631,645.47	1,231,453.03	39° 32' 9.727 N	108° 13' 31.065 W	
4,400.0	19.26	289.11	4,225.4	339.2	-1,055.2	631,657.20	1,231,422.21	39° 32' 9.834 N	108° 13' 31.462 W	
4,500.0	19.26	289.11	4,319.8	350.0	-1,086.4	631,668.93	1,231,391.38	39° 32' 9.940 N	108° 13' 31.860 W	
4,600.0	19.26	289.11	4,414.2	360.8	-1,117.6	631,680.66	1,231,360.56	39° 32' 10.047 N	108° 13' 32.258 W	
4,700.0	19.26	289.11	4,508.6	371.6	-1,148.7	631,692.39	1,231,329.74	39° 32' 10.154 N	108° 13' 32.656 W	
4,726.3	19.26	289.11	4,533.4	374.5	-1,156.9	631,695.47	1,231,321.64	39° 32' 10.182 N	108° 13' 32.760 W	
4,800.0	17.78	289.11	4,603.3	382.1	-1,179.0	631,703.80	1,231,299.75	39° 32' 10.258 N	108° 13' 33.043 W	
4,900.0	15.78	289.11	4,699.0	391.6	-1,206.3	631,714.06	1,231,272.77	39° 32' 10.351 N	108° 13' 33.391 W	
5,000.0	13.78	289.11	4,795.7	399.9	-1,230.4	631,723.14	1,231,248.92	39° 32' 10.434 N	108° 13' 33.699 W	



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Planning Report - Geographic

Database:	HOPSP	Local Co-ordinate Reference:	Well CASCADE CREEK 697-09-35B - Slot CC#697-09-35B
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 697-09-35B	Survey Calculation Method:	Minimum Curvature
Wellbore:	CASCADE CREEK 697-09-35B		
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	
5,100.0	11.78	289.11	4,893.2	407.2	-1,251.3	631,731.01	1,231,228.24	39° 32' 10.505 N	108° 13' 33.965 W	
5,200.0	9.78	289.11	4,991.5	413.3	-1,269.0	631,737.66	1,231,210.76	39° 32' 10.566 N	108° 13' 34.191 W	
5,300.0	7.78	289.11	5,090.3	418.3	-1,283.4	631,743.09	1,231,196.49	39° 32' 10.615 N	108° 13' 34.375 W	
5,400.0	5.78	289.11	5,189.6	422.2	-1,294.6	631,747.29	1,231,185.45	39° 32' 10.653 N	108° 13' 34.518 W	
5,500.0	3.78	289.11	5,289.2	424.9	-1,302.5	631,750.25	1,231,177.66	39° 32' 10.680 N	108° 13' 34.618 W	
5,539.1	3.00	289.11	5,328.3	425.7	-1,304.6	631,751.07	1,231,175.50	39° 32' 10.688 N	108° 13' 34.646 W	
5,600.0	3.00	289.11	5,389.1	426.7	-1,307.7	631,752.21	1,231,172.52	39° 32' 10.698 N	108° 13' 34.684 W	
5,700.0	3.00	289.11	5,488.9	428.4	-1,312.6	631,754.07	1,231,167.63	39° 32' 10.715 N	108° 13' 34.748 W	
5,800.0	3.00	289.11	5,588.8	430.1	-1,317.5	631,755.93	1,231,162.74	39° 32' 10.732 N	108° 13' 34.811 W	
5,900.0	3.00	289.11	5,688.7	431.9	-1,322.5	631,757.79	1,231,157.84	39° 32' 10.749 N	108° 13' 34.874 W	
6,000.0	3.00	289.11	5,788.5	433.6	-1,327.4	631,759.65	1,231,152.95	39° 32' 10.766 N	108° 13' 34.937 W	
6,071.6	3.00	289.11	5,860.0	434.8	-1,331.0	631,760.98	1,231,149.45	39° 32' 10.778 N	108° 13' 34.982 W	
MESAVERDE										
6,100.0	3.00	289.11	5,888.4	435.3	-1,332.4	631,761.51	1,231,148.06	39° 32' 10.783 N	108° 13' 35.000 W	
6,200.0	3.00	289.11	5,988.2	437.0	-1,337.3	631,763.37	1,231,143.17	39° 32' 10.800 N	108° 13' 35.063 W	
6,300.0	3.00	289.11	6,088.1	438.7	-1,342.3	631,765.23	1,231,138.28	39° 32' 10.817 N	108° 13' 35.126 W	
6,387.0	3.00	289.11	6,175.0	440.2	-1,346.6	631,766.85	1,231,134.02	39° 32' 10.831 N	108° 13' 35.181 W	
WILLIAMSFORK										
6,400.0	3.00	289.11	6,188.0	440.4	-1,347.2	631,767.10	1,231,133.39	39° 32' 10.834 N	108° 13' 35.189 W	
6,500.0	3.00	289.11	6,287.8	442.1	-1,352.2	631,768.96	1,231,128.50	39° 32' 10.851 N	108° 13' 35.252 W	
6,600.0	3.00	289.11	6,387.7	443.9	-1,357.1	631,770.82	1,231,123.60	39° 32' 10.867 N	108° 13' 35.316 W	
6,700.0	3.00	289.11	6,487.6	445.6	-1,362.1	631,772.68	1,231,118.71	39° 32' 10.884 N	108° 13' 35.379 W	
6,800.0	3.00	289.11	6,587.4	447.3	-1,367.0	631,774.54	1,231,113.82	39° 32' 10.901 N	108° 13' 35.442 W	
6,900.0	3.00	289.11	6,687.3	449.0	-1,371.9	631,776.40	1,231,108.93	39° 32' 10.918 N	108° 13' 35.505 W	
7,000.0	3.00	289.11	6,787.1	450.7	-1,376.9	631,778.26	1,231,104.04	39° 32' 10.935 N	108° 13' 35.568 W	
7,100.0	3.00	289.11	6,887.0	452.4	-1,381.8	631,780.12	1,231,099.15	39° 32' 10.952 N	108° 13' 35.631 W	
7,200.0	3.00	289.11	6,986.9	454.1	-1,386.8	631,781.99	1,231,094.26	39° 32' 10.969 N	108° 13' 35.694 W	
7,300.0	3.00	289.11	7,086.7	455.8	-1,391.7	631,783.85	1,231,089.36	39° 32' 10.986 N	108° 13' 35.757 W	
7,348.3	3.00	289.11	7,135.0	456.7	-1,394.1	631,784.75	1,231,087.00	39° 32' 10.994 N	108° 13' 35.788 W	
TOP OF GAS										
7,400.0	3.00	289.11	7,186.6	457.6	-1,396.7	631,785.71	1,231,084.47	39° 32' 11.003 N	108° 13' 35.821 W	
7,500.0	3.00	289.11	7,286.5	459.3	-1,401.6	631,787.57	1,231,079.58	39° 32' 11.020 N	108° 13' 35.884 W	
7,600.0	3.00	289.11	7,386.3	461.0	-1,406.6	631,789.43	1,231,074.69	39° 32' 11.037 N	108° 13' 35.947 W	
7,700.0	3.00	289.11	7,486.2	462.7	-1,411.5	631,791.29	1,231,069.80	39° 32' 11.054 N	108° 13' 36.010 W	
7,800.0	3.00	289.11	7,586.1	464.4	-1,416.4	631,793.15	1,231,064.91	39° 32' 11.071 N	108° 13' 36.073 W	
7,900.0	3.00	289.11	7,685.9	466.1	-1,421.4	631,795.01	1,231,060.02	39° 32' 11.088 N	108° 13' 36.136 W	
8,000.0	3.00	289.11	7,785.8	467.8	-1,426.3	631,796.87	1,231,055.12	39° 32' 11.105 N	108° 13' 36.199 W	
8,100.0	3.00	289.11	7,885.6	469.6	-1,431.3	631,798.74	1,231,050.23	39° 32' 11.122 N	108° 13' 36.262 W	
8,200.0	3.00	289.11	7,985.5	471.3	-1,436.2	631,800.60	1,231,045.34	39° 32' 11.138 N	108° 13' 36.326 W	
8,260.6	3.00	289.11	8,046.0	472.3	-1,439.2	631,801.72	1,231,042.38	39° 32' 11.149 N	108° 13' 36.364 W	
L WILLIAMS FORK										
8,300.0	3.00	289.11	8,085.4	473.0	-1,441.2	631,802.46	1,231,040.45	39° 32' 11.155 N	108° 13' 36.389 W	
8,400.0	3.00	289.11	8,185.2	474.7	-1,446.1	631,804.32	1,231,035.56	39° 32' 11.172 N	108° 13' 36.452 W	
8,500.0	3.00	289.11	8,285.1	476.4	-1,451.1	631,806.18	1,231,030.67	39° 32' 11.189 N	108° 13' 36.515 W	
8,600.0	3.00	289.11	8,385.0	478.1	-1,456.0	631,808.04	1,231,025.77	39° 32' 11.206 N	108° 13' 36.578 W	
8,700.0	3.00	289.11	8,484.8	479.8	-1,461.0	631,809.90	1,231,020.88	39° 32' 11.223 N	108° 13' 36.641 W	
8,800.0	3.00	289.11	8,584.7	481.6	-1,465.9	631,811.76	1,231,015.99	39° 32' 11.240 N	108° 13' 36.704 W	
8,885.4	3.00	289.11	8,670.0	483.0	-1,470.1	631,813.35	1,231,011.81	39° 32' 11.255 N	108° 13' 36.758 W	
ROLLINS										
8,900.0	3.00	289.11	8,684.5	483.3	-1,470.8	631,813.62	1,231,011.10	39° 32' 11.257 N	108° 13' 36.767 W	
9,000.0	3.00	289.11	8,784.4	485.0	-1,475.8	631,815.49	1,231,006.21	39° 32' 11.274 N	108° 13' 36.830 W	
9,075.7	3.00	289.11	8,860.0	486.3	-1,479.5	631,816.89	1,231,002.51	39° 32' 11.287 N	108° 13' 36.878 W	



OXY
Planning Report - Geographic

Database:	HOPSP	Local Co-ordinate Reference:	Well CASCADE CREEK 697-09-35B - Slot CC#697-09-35B
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 697-09-35B	Survey Calculation Method:	Minimum Curvature
Wellbore:	CASCADE CREEK 697-09-35B		
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)		
697-09-35B TARGET	357.00	289.17	8,046.0	472.3	-1,439.2	631,801.72	1,231,042.38	39° 32' 11.149 N	108° 13' 36.364 W
- plan hits target center									
- Circle (radius 50.0)									

Formations						
Measured Depth	Vertical Depth					
(surv ft)	(surv ft)	Name	Lithology	Dip	Dip Direction	
				(°)	(°)	
6,071.6	5,860.0	MESAVERDE		0.00		
6,387.0	6,175.0	WILLIAMSFORK		0.00		
7,348.3	7,135.0	TOP OF GAS		0.00		
8,260.6	8,046.0	L WILLIAMS FORK		0.00		
8,885.4	8,670.0	ROLLINS		0.00		