



Project: GRAND VALLEY
Site: CASCADE CREEK 609-33 PAD
Well: CASCADE CREEK 697-09-37A
Wellbore: CASCADE CREEK 697-09-37A
Design: PLAN 2

OXY USA MID-CON

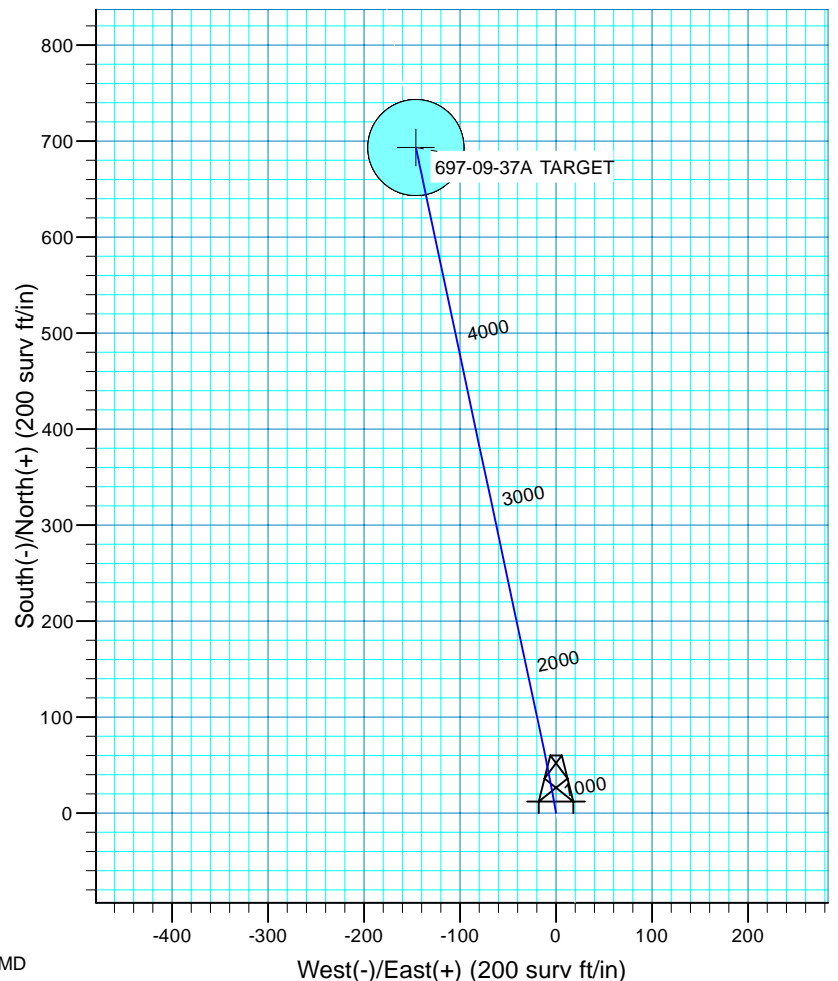
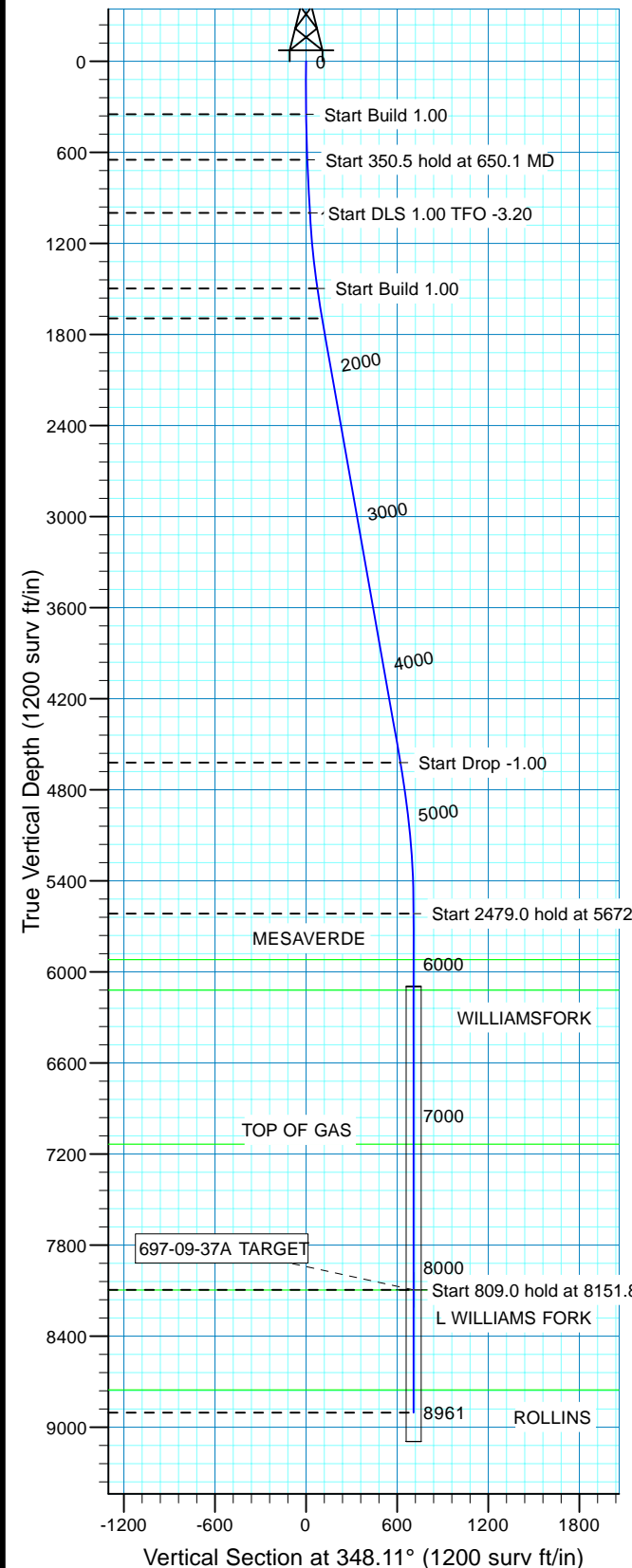


Azimuths to True North
Magnetic North: 10.53°

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

WELL DETAILS: CASCADE CREEK 697-09-37A

WELL @ 8410.0surv ft (Original Well Elev) 8380.0
Northing 631275.39 Easting 1232486.36 Latitude 39° 32' 6.377 N Longitude 108° 13' 17.740 W Slot CC#697-09-37A
+N/-S 0.0 +E/-W 0.0



FORMATION TOP DETAILS									
TVDPath	MDPath	Formation							
5920.0	5975.8	MESAVERDE							
6120.0	6175.8	WILLIAMSFORK							
7136.0	7191.8	TOP OF GAS							
8097.0	8152.8	L WILLIAMSFORK							
8755.0	8810.8	ROLLINS							

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		
350.0	0.00	0.00	350.0	0.0	0.0	0.00	0.0		
650.1	3.00	350.00	650.0	7.7	-1.4	1.00	7.9		
1000.6	3.00	350.00	1000.0	25.8	-4.5	0.00	26.2		
1500.9	8.00	347.99	1497.8	72.8	-14.1	1.00	74.1	697-09-37A TARGET	
1700.9	10.00	347.99	1695.4	103.4	-20.6	1.00	105.4		
4672.8	10.00	347.99	4622.1	608.1	-127.9	0.00	621.5		
5672.8	0.00	0.00	5617.0	693.3	-146.0	1.00	708.5		
8151.8	0.00	0.00	8096.0	693.3	-146.0	0.00	708.5	697-09-37A TARGET	
8960.8	0.00	0.00	8905.0	693.3	-146.0	0.00	708.5		



OXY USA MID-CON

GRAND VALLEY

CASCADE CREEK 609-33 PAD

CASCADE CREEK 697-09-37A - Slot CC#697-09-37A

CASCADE CREEK 697-09-37A

Plan: PLAN 2

Standard Planning Report - Geographic

08 September, 2010



OXY

Planning Report - Geographic

Database:	HOPSPP	Local Co-ordinate Reference:	Well CASCADE CREEK 697-09-37A - Slot CC#697-09-37A
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 697-09-37A	Survey Calculation Method:	Minimum Curvature
Wellbore:	CASCADE CREEK 697-09-37A		
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' 17.740 W
		Grid Convergence:	-1.72 °

Well	CASCADE CREEK 697-09-37A - Slot CC#697-09-37A		
Well Position	+N/-S	0.0 surv ft	Northing: 631,275.40 surv ft
	+E/-W	0.0 surv ft	Easting: 1,232,486.36 surv ft
Position Uncertainty	0.0 surv ft	Wellhead Elevation:	30.0 surv ft
		Latitude:	39° 32' 6.377 N
		Longitude:	108° 13' 17.740 W
		Ground Level:	8,380.0 surv ft

Wellbore	CASCADE CREEK 697-09-37A				
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	348.11	

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	
350.0	0.00	0.00	350.0	0.0	0.0	0.00	0.00	0.00	0.00	
650.1	3.00	350.00	650.0	7.7	-1.4	1.00	1.00	0.00	350.00	
1,000.6	3.00	350.00	1,000.0	25.8	-4.5	0.00	0.00	0.00	0.00	
1,500.9	8.00	347.99	1,497.8	72.8	-14.1	1.00	1.00	-0.40	-3.20	697-09-37A TARGET
1,700.9	10.00	347.99	1,695.4	103.4	-20.6	1.00	1.00	0.00	0.00	
4,672.8	10.00	347.99	4,622.1	608.1	-127.9	0.00	0.00	0.00	0.00	
5,672.8	0.00	0.00	5,617.0	693.3	-146.0	1.00	-1.00	0.00	180.00	
8,151.8	0.00	0.00	8,096.0	693.3	-146.0	0.00	0.00	0.00	0.00	697-09-37A TARGET
8,960.8	0.00	0.00	8,905.0	693.3	-146.0	0.00	0.00	0.00	0.00	



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Planning Report - Geographic

Database:	HOPSP	Local Co-ordinate Reference:	Well CASCADE CREEK 697-09-37A - Slot CC#697-09-37A
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 697-09-37A	Survey Calculation Method:	Minimum Curvature
Wellbore:	CASCADE CREEK 697-09-37A		
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	631,275.40	1,232,486.36	39° 32' 6.377 N	108° 13' 17.740 W	
100.0	0.00	0.00	100.0	0.0	0.0	631,275.40	1,232,486.36	39° 32' 6.377 N	108° 13' 17.740 W	
200.0	0.00	0.00	200.0	0.0	0.0	631,275.40	1,232,486.36	39° 32' 6.377 N	108° 13' 17.740 W	
300.0	0.00	0.00	300.0	0.0	0.0	631,275.40	1,232,486.36	39° 32' 6.377 N	108° 13' 17.740 W	
350.0	0.00	0.00	350.0	0.0	0.0	631,275.40	1,232,486.36	39° 32' 6.377 N	108° 13' 17.740 W	
400.0	0.50	350.00	400.0	0.2	0.0	631,275.61	1,232,486.33	39° 32' 6.379 N	108° 13' 17.740 W	
500.0	1.50	350.00	500.0	1.9	-0.3	631,277.34	1,232,486.07	39° 32' 6.396 N	108° 13' 17.744 W	
600.0	2.50	350.00	599.9	5.4	-0.9	631,280.79	1,232,485.57	39° 32' 6.430 N	108° 13' 17.752 W	
650.1	3.00	350.00	650.0	7.7	-1.4	631,283.17	1,232,485.22	39° 32' 6.453 N	108° 13' 17.757 W	
700.0	3.00	350.00	699.8	10.3	-1.8	631,285.75	1,232,484.85	39° 32' 6.479 N	108° 13' 17.763 W	
800.0	3.00	350.00	799.7	15.5	-2.7	631,290.93	1,232,484.09	39° 32' 6.530 N	108° 13' 17.775 W	
900.0	3.00	350.00	899.5	20.6	-3.6	631,296.11	1,232,483.34	39° 32' 6.581 N	108° 13' 17.786 W	
1,000.6	3.00	350.00	1,000.0	25.8	-4.5	631,301.32	1,232,482.58	39° 32' 6.632 N	108° 13' 17.798 W	
1,100.0	3.99	349.20	1,099.2	31.8	-5.6	631,307.31	1,232,481.66	39° 32' 6.691 N	108° 13' 17.812 W	
1,200.0	4.99	348.72	1,198.9	39.4	-7.2	631,315.04	1,232,480.39	39° 32' 6.767 N	108° 13' 17.831 W	
1,300.0	5.99	348.40	1,298.4	48.8	-9.1	631,324.47	1,232,478.77	39° 32' 6.860 N	108° 13' 17.856 W	
1,400.0	6.99	348.17	1,397.8	59.9	-11.4	631,335.61	1,232,476.81	39° 32' 6.969 N	108° 13' 17.885 W	
1,500.9	8.00	347.99	1,497.8	72.8	-14.1	631,348.56	1,232,474.47	39° 32' 7.096 N	108° 13' 17.920 W	
1,600.0	8.99	347.99	1,595.8	87.1	-17.1	631,362.96	1,232,471.86	39° 32' 7.238 N	108° 13' 17.958 W	
1,700.9	10.00	347.99	1,695.4	103.4	-20.6	631,379.34	1,232,468.88	39° 32' 7.399 N	108° 13' 18.003 W	
1,800.0	10.00	347.99	1,792.9	120.2	-24.2	631,396.27	1,232,465.81	39° 32' 7.565 N	108° 13' 18.048 W	
1,900.0	10.00	347.99	1,891.4	137.2	-27.8	631,413.36	1,232,462.71	39° 32' 7.733 N	108° 13' 18.094 W	
2,000.0	10.00	347.99	1,989.9	154.2	-31.4	631,430.44	1,232,459.61	39° 32' 7.901 N	108° 13' 18.141 W	
2,100.0	10.00	347.99	2,088.4	171.2	-35.0	631,447.53	1,232,456.51	39° 32' 8.069 N	108° 13' 18.187 W	
2,200.0	10.00	347.99	2,186.9	188.1	-38.6	631,464.62	1,232,453.40	39° 32' 8.236 N	108° 13' 18.233 W	
2,300.0	10.00	347.99	2,285.3	205.1	-42.2	631,481.70	1,232,450.30	39° 32' 8.404 N	108° 13' 18.279 W	
2,400.0	10.00	347.99	2,383.8	222.1	-45.8	631,498.79	1,232,447.20	39° 32' 8.572 N	108° 13' 18.325 W	
2,500.0	10.00	347.99	2,482.3	239.1	-49.4	631,515.87	1,232,444.10	39° 32' 8.740 N	108° 13' 18.371 W	
2,600.0	10.00	347.99	2,580.8	256.1	-53.1	631,532.96	1,232,441.00	39° 32' 8.908 N	108° 13' 18.417 W	
2,700.0	10.00	347.99	2,679.3	273.1	-56.7	631,550.04	1,232,437.90	39° 32' 9.076 N	108° 13' 18.463 W	
2,800.0	10.00	347.99	2,777.8	290.1	-60.3	631,567.13	1,232,434.79	39° 32' 9.244 N	108° 13' 18.509 W	
2,900.0	10.00	347.99	2,876.2	307.0	-63.9	631,584.21	1,232,431.69	39° 32' 9.412 N	108° 13' 18.555 W	
3,000.0	10.00	347.99	2,974.7	324.0	-67.5	631,601.30	1,232,428.59	39° 32' 9.579 N	108° 13' 18.602 W	
3,100.0	10.00	347.99	3,073.2	341.0	-71.1	631,618.39	1,232,425.49	39° 32' 9.747 N	108° 13' 18.648 W	
3,200.0	10.00	347.99	3,171.7	358.0	-74.7	631,635.47	1,232,422.39	39° 32' 9.915 N	108° 13' 18.694 W	
3,300.0	10.00	347.99	3,270.2	375.0	-78.3	631,652.56	1,232,419.28	39° 32' 10.083 N	108° 13' 18.740 W	
3,400.0	10.00	347.99	3,368.6	392.0	-82.0	631,669.64	1,232,416.18	39° 32' 10.251 N	108° 13' 18.786 W	
3,500.0	10.00	347.99	3,467.1	409.0	-85.6	631,686.73	1,232,413.08	39° 32' 10.419 N	108° 13' 18.832 W	
3,600.0	10.00	347.99	3,565.6	425.9	-89.2	631,703.81	1,232,409.98	39° 32' 10.587 N	108° 13' 18.878 W	
3,700.0	10.00	347.99	3,664.1	442.9	-92.8	631,720.90	1,232,406.88	39° 32' 10.755 N	108° 13' 18.924 W	
3,800.0	10.00	347.99	3,762.6	459.9	-96.4	631,737.98	1,232,403.78	39° 32' 10.922 N	108° 13' 18.970 W	
3,900.0	10.00	347.99	3,861.0	476.9	-100.0	631,755.07	1,232,400.67	39° 32' 11.090 N	108° 13' 19.017 W	
4,000.0	10.00	347.99	3,959.5	493.9	-103.6	631,772.16	1,232,397.57	39° 32' 11.258 N	108° 13' 19.063 W	
4,100.0	10.00	347.99	4,058.0	510.9	-107.2	631,789.24	1,232,394.47	39° 32' 11.426 N	108° 13' 19.109 W	
4,200.0	10.00	347.99	4,156.5	527.8	-110.8	631,806.33	1,232,391.37	39° 32' 11.594 N	108° 13' 19.155 W	
4,300.0	10.00	347.99	4,255.0	544.8	-114.5	631,823.41	1,232,388.27	39° 32' 11.762 N	108° 13' 19.201 W	
4,400.0	10.00	347.99	4,353.4	561.8	-118.1	631,840.50	1,232,385.17	39° 32' 11.930 N	108° 13' 19.247 W	
4,500.0	10.00	347.99	4,451.9	578.8	-121.7	631,857.58	1,232,382.06	39° 32' 12.098 N	108° 13' 19.293 W	
4,600.0	10.00	347.99	4,550.4	595.8	-125.3	631,874.67	1,232,378.96	39° 32' 12.265 N	108° 13' 19.339 W	
4,672.8	10.00	347.99	4,622.1	608.1	-127.9	631,887.10	1,232,376.71	39° 32' 12.388 N	108° 13' 19.373 W	
4,700.0	9.73	347.99	4,648.9	612.7	-128.9	631,891.69	1,232,375.87	39° 32' 12.433 N	108° 13' 19.385 W	
4,800.0	8.73	347.99	4,747.6	628.4	-132.2	631,907.47	1,232,373.01	39° 32' 12.588 N	108° 13' 19.428 W	
4,900.0	7.73	347.99	4,846.6	642.4	-135.2	631,921.55	1,232,370.45	39° 32' 12.726 N	108° 13' 19.466 W	
5,000.0	6.73	347.99	4,945.8	654.7	-137.8	631,933.93	1,232,368.20	39° 32' 12.848 N	108° 13' 19.499 W	



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Planning Report - Geographic

Database:	HOPSPP	Local Co-ordinate Reference:	Well CASCADE CREEK 697-09-37A - Slot CC#697-09-37A
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 697-09-37A	Survey Calculation Method:	Minimum Curvature
Wellbore:	CASCADE CREEK 697-09-37A		
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	5.73	347.99	5,045.2	665.3	-140.1	631,944.60	1,232,366.27	39° 32' 12.953 N	108° 13' 19.528 W	
5,200.0	4.73	347.99	5,144.8	674.2	-142.0	631,953.57	1,232,364.64	39° 32' 13.041 N	108° 13' 19.552 W	
5,300.0	3.73	347.99	5,244.5	681.4	-143.5	631,960.82	1,232,363.32	39° 32' 13.112 N	108° 13' 19.572 W	
5,400.0	2.73	347.99	5,344.3	686.9	-144.7	631,966.36	1,232,362.32	39° 32' 13.166 N	108° 13' 19.587 W	
5,500.0	1.73	347.99	5,444.3	690.7	-145.5	631,970.18	1,232,361.62	39° 32' 13.204 N	108° 13' 19.597 W	
5,600.0	0.73	347.99	5,544.2	692.8	-145.9	631,972.29	1,232,361.24	39° 32' 13.225 N	108° 13' 19.603 W	
5,672.8	0.00	0.00	5,617.0	693.3	-146.0	631,972.74	1,232,361.16	39° 32' 13.229 N	108° 13' 19.604 W	
5,700.0	0.00	0.00	5,644.2	693.3	-146.0	631,972.74	1,232,361.16	39° 32' 13.229 N	108° 13' 19.604 W	
5,800.0	0.00	0.00	5,744.2	693.3	-146.0	631,972.74	1,232,361.16	39° 32' 13.229 N	108° 13' 19.604 W	
5,900.0	0.00	0.00	5,844.2	693.3	-146.0	631,972.74	1,232,361.16	39° 32' 13.229 N	108° 13' 19.604 W	
5,975.8	0.00	0.00	5,920.0	693.3	-146.0	631,972.74	1,232,361.16	39° 32' 13.229 N	108° 13' 19.604 W	
MESAVERDE										
6,000.0	0.00	0.00	5,944.2	693.3	-146.0	631,972.74	1,232,361.16	39° 32' 13.229 N	108° 13' 19.604 W	
6,100.0	0.00	0.00	6,044.2	693.3	-146.0	631,972.74	1,232,361.16	39° 32' 13.229 N	108° 13' 19.604 W	
6,175.8	0.00	0.00	6,120.0	693.3	-146.0	631,972.74	1,232,361.16	39° 32' 13.229 N	108° 13' 19.604 W	
WILLIAMSFORK										
6,200.0	0.00	0.00	6,144.2	693.3	-146.0	631,972.74	1,232,361.16	39° 32' 13.229 N	108° 13' 19.604 W	
6,300.0	0.00	0.00	6,244.2	693.3	-146.0	631,972.74	1,232,361.16	39° 32' 13.229 N	108° 13' 19.604 W	
6,400.0	0.00	0.00	6,344.2	693.3	-146.0	631,972.74	1,232,361.16	39° 32' 13.229 N	108° 13' 19.604 W	
6,500.0	0.00	0.00	6,444.2	693.3	-146.0	631,972.74	1,232,361.16	39° 32' 13.229 N	108° 13' 19.604 W	
6,600.0	0.00	0.00	6,544.2	693.3	-146.0	631,972.74	1,232,361.16	39° 32' 13.229 N	108° 13' 19.604 W	
6,700.0	0.00	0.00	6,644.2	693.3	-146.0	631,972.74	1,232,361.16	39° 32' 13.229 N	108° 13' 19.604 W	
6,800.0	0.00	0.00	6,744.2	693.3	-146.0	631,972.74	1,232,361.16	39° 32' 13.229 N	108° 13' 19.604 W	
6,900.0	0.00	0.00	6,844.2	693.3	-146.0	631,972.74	1,232,361.16	39° 32' 13.229 N	108° 13' 19.604 W	
7,000.0	0.00	0.00	6,944.2	693.3	-146.0	631,972.74	1,232,361.16	39° 32' 13.229 N	108° 13' 19.604 W	
7,100.0	0.00	0.00	7,044.2	693.3	-146.0	631,972.74	1,232,361.16	39° 32' 13.229 N	108° 13' 19.604 W	
7,191.8	0.00	0.00	7,136.0	693.3	-146.0	631,972.74	1,232,361.16	39° 32' 13.229 N	108° 13' 19.604 W	
TOP OF GAS										
7,200.0	0.00	0.00	7,144.2	693.3	-146.0	631,972.74	1,232,361.16	39° 32' 13.229 N	108° 13' 19.604 W	
7,300.0	0.00	0.00	7,244.2	693.3	-146.0	631,972.74	1,232,361.16	39° 32' 13.229 N	108° 13' 19.604 W	
7,400.0	0.00	0.00	7,344.2	693.3	-146.0	631,972.74	1,232,361.16	39° 32' 13.229 N	108° 13' 19.604 W	
7,500.0	0.00	0.00	7,444.2	693.3	-146.0	631,972.74	1,232,361.16	39° 32' 13.229 N	108° 13' 19.604 W	
7,600.0	0.00	0.00	7,544.2	693.3	-146.0	631,972.74	1,232,361.16	39° 32' 13.229 N	108° 13' 19.604 W	
7,700.0	0.00	0.00	7,644.2	693.3	-146.0	631,972.74	1,232,361.16	39° 32' 13.229 N	108° 13' 19.604 W	
7,800.0	0.00	0.00	7,744.2	693.3	-146.0	631,972.74	1,232,361.16	39° 32' 13.229 N	108° 13' 19.604 W	
7,900.0	0.00	0.00	7,844.2	693.3	-146.0	631,972.74	1,232,361.16	39° 32' 13.229 N	108° 13' 19.604 W	
8,000.0	0.00	0.00	7,944.2	693.3	-146.0	631,972.74	1,232,361.16	39° 32' 13.229 N	108° 13' 19.604 W	
8,100.0	0.00	0.00	8,044.2	693.3	-146.0	631,972.74	1,232,361.16	39° 32' 13.229 N	108° 13' 19.604 W	
8,151.8	0.00	0.00	8,096.0	693.3	-146.0	631,972.74	1,232,361.16	39° 32' 13.229 N	108° 13' 19.604 W	
8,152.8	0.00	0.00	8,097.0	693.3	-146.0	631,972.74	1,232,361.16	39° 32' 13.229 N	108° 13' 19.604 W	
L WILLIAMS FORK										
8,200.0	0.00	0.00	8,144.2	693.3	-146.0	631,972.74	1,232,361.16	39° 32' 13.229 N	108° 13' 19.604 W	
8,300.0	0.00	0.00	8,244.2	693.3	-146.0	631,972.74	1,232,361.16	39° 32' 13.229 N	108° 13' 19.604 W	
8,400.0	0.00	0.00	8,344.2	693.3	-146.0	631,972.74	1,232,361.16	39° 32' 13.229 N	108° 13' 19.604 W	
8,500.0	0.00	0.00	8,444.2	693.3	-146.0	631,972.74	1,232,361.16	39° 32' 13.229 N	108° 13' 19.604 W	
8,600.0	0.00	0.00	8,544.2	693.3	-146.0	631,972.74	1,232,361.16	39° 32' 13.229 N	108° 13' 19.604 W	
8,700.0	0.00	0.00	8,644.2	693.3	-146.0	631,972.74	1,232,361.16	39° 32' 13.229 N	108° 13' 19.604 W	
8,800.0	0.00	0.00	8,744.2	693.3	-146.0	631,972.74	1,232,361.16	39° 32' 13.229 N	108° 13' 19.604 W	
8,810.8	0.00	0.00	8,755.0	693.3	-146.0	631,972.74	1,232,361.16	39° 32' 13.229 N	108° 13' 19.604 W	
ROLLINS										
8,900.0	0.00	0.00	8,844.2	693.3	-146.0	631,972.74	1,232,361.16	39° 32' 13.229 N	108° 13' 19.604 W	
8,960.8	0.00	0.00	8,905.0	693.3	-146.0	631,972.74	1,232,361.16	39° 32' 13.229 N	108° 13' 19.604 W	



OXY
Planning Report - Geographic

Database:	HOPSPP	Local Co-ordinate Reference:	Well CASCADE CREEK 697-09-37A - Slot CC#697-09-37A
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 697-09-37A	Survey Calculation Method:	Minimum Curvature
Wellbore:	CASCADE CREEK 697-09-37A		
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)		
697-09-37A TARGET	0.00	348.11	8,096.0	693.3	-146.0	631,972.74	1,232,361.16	39° 32' 13.229 N	108° 13' 19.604 W
- plan hits target center									
- Circle (radius 50.0)									

Formations						
Measured Depth	Vertical Depth					
(surv ft)	(surv ft)	Name	Lithology	Dip	Dip Direction	
				(°)	(°)	
5,975.8	5,920.0	MESAVERDE		0.00		
6,175.8	6,120.0	WILLIAMSFORK		0.00		
7,191.8	7,136.0	TOP OF GAS		0.00		
8,152.8	8,097.0	L WILLIAMS FORK		0.00		
8,810.8	8,755.0	ROLLINS		0.00		