



Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Saddleback 6-29X
Company:	Anadarko Petroleum Corporation	TVD Reference:	WELL @ 5031.0ft (Xtreme 11)
Project:	DJ Wattenberg	MD Reference:	WELL @ 5031.0ft (Xtreme 11)
Site:	S29-T2N-R67W (Saddleback)	North Reference:	True
Well:	Saddleback 6-29X	Survey Calculation Method:	Minimum Curvature
Wellbore:	Stk		
Design:	Stk Plan #1		

Project	DJ Wattenberg		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		

Site	S29-T2N-R67W (Saddleback)				
Site Position:		Northing:	1,284,564.16 ft	Latitude:	40.113055
From:	Lat/Long	Easting:	3,162,379.27 ft	Longitude:	-104.919448
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	0.38 °

Well	Saddleback 6-29X					
Well Position	+N/-S	0.0 ft	Northing:	1,284,553.95 ft	Latitude:	40.113027
	+E/-W	0.0 ft	Easting:	3,162,379.05 ft	Longitude:	-104.919449
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	5,016.0 ft

Wellbore	Stk				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	7/27/2012	8.77	66.75	52,844

Design	Stk Plan #1				
Audit Notes:					
Version:	Phase:	PLAN		Tie On Depth:	3,876.0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	0.0	0.0	0.0	120.40	

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
3,876.0	10.90	140.40	3,815.4	-423.2	460.8	0.00	0.00	0.00	0.00	
4,117.4	10.90	101.37	4,052.8	-445.4	497.8	3.00	0.00	-16.17	-109.19	
4,217.4	10.90	101.37	4,151.0	-449.1	516.3	0.00	0.00	0.00	0.00	
4,217.6	10.90	101.38	4,151.2	-449.1	516.3	2.00	-1.69	5.65	147.71	
5,989.9	10.90	101.38	5,891.4	-515.2	844.8	0.00	0.00	0.00	0.00	
6,534.7	0.00	0.00	6,433.0	-525.4	895.4	2.00	-2.00	0.00	180.00	
8,298.7	0.00	0.00	8,197.0	-525.4	895.4	0.00	0.00	0.00	0.00	Saddleback 6-29X PE

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Saddleback 6-29X
Company:	Anadarko Petroleum Corporation	TVD Reference:	WELL @ 5031.0ft (Xtreme 11)
Project:	DJ Wattenberg	MD Reference:	WELL @ 5031.0ft (Xtreme 11)
Site:	S29-T2N-R67W (Saddleback)	North Reference:	True
Well:	Saddleback 6-29X	Survey Calculation Method:	Minimum Curvature
Wellbore:	Stk		
Design:	Stk 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)	Comments / Formations
3,876.0	10.90	140.40	3,815.4	-423.2	460.8	611.6	0.00	0.00	Sidetrack Pt @ 3876' MD
3,900.0	10.68	136.73	3,838.9	-426.6	463.7	615.9	3.00	-0.90	
4,000.0	10.29	120.33	3,937.3	-437.9	477.8	633.7	3.00	-0.40	
4,100.0	10.74	104.02	4,035.6	-444.6	494.6	651.6	3.00	0.45	
4,117.4	10.90	101.37	4,052.8	-445.4	497.8	654.7	3.00	0.92	End of turn @ 4117' MD
4,200.0	10.90	101.37	4,133.8	-448.4	513.1	669.5	0.00	0.00	
4,217.4	10.90	101.37	4,151.0	-449.1	516.3	672.6	0.00	0.00	
4,217.6	10.90	101.38	4,151.2	-449.1	516.3	672.6	2.00	-1.69	
4,248.0	10.90	101.38	4,181.0	-450.2	522.0	678.0	0.00	0.00	PK Depth
4,300.0	10.90	101.38	4,232.0	-452.2	531.6	687.3	0.00	0.00	
4,400.0	10.90	101.38	4,330.2	-455.9	550.1	705.2	0.00	0.00	
4,500.0	10.90	101.38	4,428.4	-459.6	568.7	723.1	0.00	0.00	
4,600.0	10.90	101.38	4,526.6	-463.4	587.2	740.9	0.00	0.00	
4,660.5	10.90	101.38	4,586.0	-465.6	598.4	751.7	0.00	0.00	SX Depth
4,700.0	10.90	101.38	4,624.8	-467.1	605.7	758.8	0.00	0.00	
4,800.0	10.90	101.38	4,723.0	-470.8	624.3	776.7	0.00	0.00	
4,900.0	10.90	101.38	4,821.2	-474.6	642.8	794.6	0.00	0.00	
5,000.0	10.90	101.38	4,919.4	-478.3	661.3	812.4	0.00	0.00	
5,100.0	10.90	101.38	5,017.6	-482.0	679.8	830.3	0.00	0.00	
5,200.0	10.90	101.38	5,115.8	-485.7	698.4	848.2	0.00	0.00	
5,300.0	10.90	101.38	5,214.0	-489.5	716.9	866.0	0.00	0.00	
5,400.0	10.90	101.38	5,312.2	-493.2	735.4	883.9	0.00	0.00	
5,500.0	10.90	101.38	5,410.4	-496.9	754.0	901.8	0.00	0.00	
5,600.0	10.90	101.38	5,508.6	-500.7	772.5	919.7	0.00	0.00	
5,700.0	10.90	101.38	5,606.8	-504.4	791.0	937.5	0.00	0.00	
5,800.0	10.90	101.38	5,705.0	-508.1	809.6	955.4	0.00	0.00	
5,900.0	10.90	101.38	5,803.2	-511.9	828.1	973.3	0.00	0.00	
5,989.9	10.90	101.38	5,891.5	-515.2	844.8	989.3	0.00	0.00	Start Drop -2.00
6,000.0	10.69	101.38	5,901.4	-515.6	846.6	991.1	2.01	-2.01	
6,100.0	8.69	101.38	6,000.0	-518.9	863.1	1,007.0	2.00	-2.00	
6,200.0	6.69	101.38	6,099.0	-521.5	876.3	1,019.7	2.00	-2.00	
6,300.0	4.69	101.38	6,198.6	-523.5	886.0	1,029.1	2.00	-2.00	
6,400.0	2.69	101.38	6,298.3	-524.8	892.3	1,035.2	2.00	-2.00	
6,500.0	0.69	101.38	6,398.3	-525.4	895.2	1,038.0	2.00	-2.00	
6,534.7	0.00	101.38	6,433.0	-525.4	895.4	1,038.2	2.00	-2.00	EOD; Inc=0°
6,600.0	0.00	0.00	6,498.3	-525.4	895.4	1,038.2	0.00	0.00	
6,700.0	0.00	0.00	6,598.3	-525.4	895.4	1,038.2	0.00	0.00	
6,800.0	0.00	0.00	6,698.3	-525.4	895.4	1,038.2	0.00	0.00	
6,900.0	0.00	0.00	6,798.3	-525.4	895.4	1,038.2	0.00	0.00	
7,000.0	0.00	0.00	6,898.3	-525.4	895.4	1,038.2	0.00	0.00	
7,100.0	0.00	0.00	6,998.3	-525.4	895.4	1,038.2	0.00	0.00	
7,200.0	0.00	0.00	7,098.3	-525.4	895.4	1,038.2	0.00	0.00	
7,300.0	0.00	0.00	7,198.3	-525.4	895.4	1,038.2	0.00	0.00	
7,400.0	0.00	0.00	7,298.3	-525.4	895.4	1,038.2	0.00	0.00	
7,445.7	0.00	0.00	7,344.0	-525.4	895.4	1,038.2	0.00	0.00	NIO Depth
7,500.0	0.00	0.00	7,398.3	-525.4	895.4	1,038.2	0.00	0.00	
7,600.0	0.00	0.00	7,498.3	-525.4	895.4	1,038.2	0.00	0.00	
7,700.0	0.00	0.00	7,598.3	-525.4	895.4	1,038.2	0.00	0.00	
7,732.7	0.00	0.00	7,631.0	-525.4	895.4	1,038.2	0.00	0.00	CD Depth
7,800.0	0.00	0.00	7,698.3	-525.4	895.4	1,038.2	0.00	0.00	
7,809.7	0.00	0.00	7,708.0	-525.4	895.4	1,038.2	0.00	0.00	GH Depth
7,900.0	0.00	0.00	7,798.3	-525.4	895.4	1,038.2	0.00	0.00	

Planning Report

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Project:	DJ Wattenberg	MD Reference:	WELL @ 5031.0ft (Xtreme 11)
Site:	S29-T2N-R67W (Saddleback)	North Reference:	True
Well:	Saddleback 6-29X	Survey Calculation Method:	Minimum Curvature
Wellbore:	Stk		
Design:	Stk 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)	Comments / Formations
8,000.0	0.00	0.00	7,898.3	-525.4	895.4	1,038.2	0.00	0.00	
8,100.0	0.00	0.00	7,998.3	-525.4	895.4	1,038.2	0.00	0.00	
8,158.7	0.00	0.00	8,057.0	-525.4	895.4	1,038.2	0.00	0.00	J Depth
8,200.0	0.00	0.00	8,098.3	-525.4	895.4	1,038.2	0.00	0.00	
8,298.7	0.00	0.00	8,197.0	-525.4	895.4	1,038.2	0.00	0.00	TD at 8298.7 - Saddleback 6-29X PBHL (NEW)

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									
Saddleback 6-29X PBHL	0.00	0.00	8,197.0	-525.4	895.4	1,284,034.42	3,163,277.87	40.111585	-104.916248
- plan hits target center									
- Circle (radius 50.0)									

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
4,248.0	4,181.0	PK Depth			
4,660.5	4,586.0	SX Depth			
7,445.7	7,344.0	NIO Depth			
7,732.7	7,631.0	CD Depth			
7,809.7	7,708.0	GH Depth			
8,158.7	8,057.0	J Depth			

Plan Annotations

	Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
			+N/-S (ft)	+E/-W (ft)	
	3,876.0	3,815.4	-423.2	460.8	Sidetrack Pt @ 3876' MD
	4,117.4	4,052.8	-445.4	497.8	End of turn @ 4117' MD
	5,989.9	5,891.4	-449.1	516.3	Start Drop -2.00
	6,534.7	6,433.0	-515.2	844.8	EOD; Inc=0°
	8,298.7	8,197.0	-525.4	895.4	TD at 8298.7

Anadarko Petroleum Corporation

DJ Wattenberg

S29-T2N-R67W (Saddleback)

Saddleback 6-29X

Stk

Stk Plan #1

Anticollision Report

27 July, 2012

Anadarko Petroleum Corporation

DJ Wattenberg

S29-T2N-R67W (Saddleback)

Saddleback 6-29X

Stk

Stk Plan #1

Anticollision Report

27 July, 2012

Anticollision Report

Company:	Anadarko Petroleum Corporation	Local Co-ordinate Reference:	Well Saddleback 6-29X
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5031.0ft (Xtreme 11)
Reference Site:	S29-T2N-R67W (Saddleback)	MD Reference:	WELL @ 5031.0ft (Xtreme 11)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Saddleback 6-29X	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Stk	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Stk Plan #1	Offset TVD Reference:	Offset Datum

Reference	Stk Plan #1		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD Interval 100.0ft	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 500.0ft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma		

Survey Tool Program	Date	7/27/2012		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
77.0	3,876.0	Survey #1 (Original Hole)	MWD	Geolink MWD
3,876.0	8,298.7	Stk Plan #1 (Stk)	MWD	Geolink MWD

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
S29-T2N-R67W (Saddleback)						
Bernard E Teets B #2 (Existing) - Existing - Existing						Out of range
Bernard E Teets B #7 (Existing) - Existing - Existing	5,289.3	5,180.0	239.6	214.6	9.599	CC, ES
Bernard E Teets B #7 (Existing) - Existing - Existing	5,300.0	5,180.0	239.7	214.7	9.589	SF
Bernard E Teets B #8 (Existing) - Existing - Existing						Out of range
HSR Teets 3-29A (Existing) - Existing - Existing						Out of range
Perrin Helen R GU True #1 (Existing) - Existing - Existing	800.0	780.3	41.6	39.3	18.225	CC, ES
Perrin Helen R GU True #1 (Existing) - Existing - Existing	900.0	879.9	43.2	40.7	16.898	SF
Saddleback 21-29 - DD - Plan #2	0.0	0.0	10.3			
Saddleback 21-29 - DD - Plan #2	300.0	298.9	15.9	14.9	15.903	SF
Saddleback 29-29 - DD - Plan #1	0.0	0.0	60.2			
Saddleback 29-29 - DD - Plan #1	600.0	583.3	113.1	111.0	55.142	SF
Saddleback 30-29 - DD - Plan #1	0.0	0.0	30.3			
Saddleback 30-29 - DD - Plan #1	500.0	497.1	50.9	49.2	30.012	SF
Saddleback 31-29 - DD - Plan #1	0.0	0.0	20.1			
Saddleback 31-29 - DD - Plan #1	400.0	398.0	33.4	32.0	24.507	SF
Saddleback 36-20 - DD - Plan #1	0.0	0.0	49.9			
Saddleback 36-20 - DD - Plan #1	800.0	780.4	128.9	126.0	43.844	SF
Saddleback 4-29 - DD - Plan #1	0.0	0.0	40.1			
Saddleback 4-29 - DD - Plan #1	500.0	494.6	65.3	63.6	38.496	SF
Saddleback 6-29X - Original Hole - Original Hole	3,900.0	3,900.0	0.2	0.0	1.255	Level 3, CC, ES, SF

Anticollision Report

Company:	Anadarko Petroleum Corporation	Local Co-ordinate Reference:	Well Saddleback 6-29X
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5031.0ft (Xtreme 11)
Reference Site:	S29-T2N-R67W (Saddleback)	MD Reference:	WELL @ 5031.0ft (Xtreme 11)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Saddleback 6-29X	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Stk	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Stk Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S29-T2N-R67W (Saddleback) - Bernard E Teets B #7 (Existing) - Existing - Existing													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
3,300.0	3,247.5	3,229.5	3,229.5	11.1	5.6	14.26	-728.5	709.0	488.5	477.0	11.50	42.474		
3,400.0	3,346.6	3,328.6	3,328.6	11.4	5.8	8.66	-728.5	709.0	474.9	463.0	11.86	40.036		
3,500.0	3,445.5	3,427.5	3,427.5	11.7	6.0	5.28	-728.5	709.0	460.8	448.6	12.21	37.744		
3,600.0	3,544.3	3,526.3	3,526.3	12.0	6.2	5.85	-728.5	709.0	445.4	432.9	12.56	35.470		
3,700.0	3,642.8	3,624.8	3,624.8	12.4	6.3	5.67	-728.5	709.0	428.0	415.1	12.89	33.205		
3,800.0	3,740.8	3,722.8	3,722.8	12.8	6.5	0.56	-728.5	709.0	408.2	395.0	13.22	30.886		
3,900.0	3,838.9	3,820.9	3,820.9	13.1	6.7	4.25	-728.5	709.0	389.0	375.4	13.58	28.641		
4,000.0	3,937.3	3,919.3	3,919.3	13.5	6.8	21.48	-728.5	709.0	371.4	357.4	14.02	26.493		
4,100.0	4,035.6	4,017.6	4,017.6	13.8	7.0	39.40	-728.5	709.0	355.8	341.3	14.54	24.466		
4,200.0	4,133.8	4,115.8	4,115.8	14.2	7.2	44.17	-728.5	709.0	341.9	326.7	15.12	22.605		
4,300.0	4,232.0	4,214.0	4,214.0	14.5	7.4	46.44	-728.5	709.0	328.4	312.7	15.76	20.845		
4,400.0	4,330.2	4,312.2	4,312.2	14.9	7.5	48.90	-728.5	709.0	315.6	299.1	16.45	19.184		
4,500.0	4,428.4	4,410.4	4,410.4	15.2	7.7	51.56	-728.5	709.0	303.3	286.1	17.21	17.628		
4,600.0	4,526.6	4,508.6	4,508.6	15.5	7.9	54.43	-728.5	709.0	291.8	273.8	18.03	16.184		
4,700.0	4,624.8	4,606.8	4,606.8	15.9	8.0	57.53	-728.5	709.0	281.1	262.2	18.92	14.859		
4,800.0	4,723.0	4,705.0	4,705.0	16.2	8.2	60.85	-728.5	709.0	271.3	251.4	19.87	13.657		
4,900.0	4,821.2	4,803.2	4,803.2	16.6	8.4	64.41	-728.5	709.0	262.5	241.6	20.86	12.580		
5,000.0	4,919.4	4,901.4	4,901.4	16.9	8.6	68.19	-728.5	709.0	254.8	232.9	21.91	11.630		
5,100.0	5,017.6	4,999.6	4,999.6	17.3	8.7	72.17	-728.5	709.0	248.2	225.3	22.97	10.806		
5,200.0	5,115.8	5,097.8	5,097.8	17.6	8.9	76.35	-728.5	709.0	243.0	219.0	24.05	10.106		
5,289.3	5,203.5	5,180.0	5,180.0	18.0	9.0	79.96	-728.5	709.0	239.6	214.6	24.96	9.599 CC, ES		
5,300.0	5,214.0	5,180.0	5,180.0	18.0	9.0	79.96	-728.5	709.0	239.7	214.7	25.00	9.589 SF		
5,400.0	5,312.2	5,180.0	5,180.0	18.4	9.0	79.96	-728.5	709.0	262.9	237.5	25.37	10.362		
5,500.0	5,410.4	5,180.0	5,180.0	18.7	9.0	79.96	-728.5	709.0	317.4	291.7	25.74	12.332		
5,600.0	5,508.6	5,180.0	5,180.0	19.1	9.0	79.96	-728.5	709.0	390.4	364.3	26.11	14.951		
5,700.0	5,606.8	5,180.0	5,180.0	19.4	9.0	79.96	-728.5	709.0	473.4	446.9	26.48	17.873		

Anticollision Report

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Reference Site:	S29-T2N-R67W (Saddleback)	MD Reference:	WELL @ 5031.0ft (Xtreme 11)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Saddleback 6-29X	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Stk	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Stk Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S29-T2N-R67W (Saddleback) - Perrin Helen R GU True #1 (Existing) - Existing - Existing													Offset Site Error:	0.0 ft
Survey Program: 100-Gyro													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
0.0	0.0	0.0	0.0	0.0	0.0	88.66	1.1	47.3	50.6					
100.0	100.0	82.2	82.2	0.1	0.1	-82.92	1.4	47.0	47.2	0.22	213.219			
200.0	200.0	182.2	182.2	0.3	0.2	-60.86	2.4	46.5	45.8	0.49	94.038			
300.0	299.9	281.9	281.9	0.5	0.2	-74.10	3.0	46.2	44.3	0.77	57.918			
400.0	399.7	381.6	381.6	0.7	0.3	-79.33	3.1	46.4	43.1	1.06	40.595			
500.0	499.3	481.4	481.4	1.0	0.4	-87.76	3.1	46.6	42.2	1.38	30.659			
600.0	598.9	581.1	581.1	1.2	0.5	-91.51	2.7	46.5	42.1	1.69	24.987			
700.0	698.5	680.5	680.5	1.4	0.6	-87.97	2.2	46.7	41.8	1.99	21.063			
780.8	779.0	761.2	761.2	1.6	0.7	-94.32	1.7	47.2	41.8	2.23	18.786			
800.0	798.1	780.3	780.3	1.6	0.7	-95.97	1.6	47.3	41.6	2.28	18.225 CC, ES			
900.0	897.5	879.9	879.9	1.9	0.8	-111.24	0.6	47.7	43.2	2.56	16.898 SF			
1,000.0	996.7	979.3	979.2	2.2	0.9	-131.98	-0.4	47.7	48.8	2.81	17.381			
1,100.0	1,095.4	1,077.7	1,077.7	2.5	0.9	-151.04	-1.4	47.3	60.9	3.03	20.114			
1,200.0	1,193.6	1,176.1	1,176.1	2.9	1.0	-162.01	-2.2	46.6	77.8	3.25	23.948			
1,300.0	1,291.5	1,274.3	1,274.3	3.3	1.1	-166.90	-3.3	45.8	96.7	3.48	27.805			
1,400.0	1,388.3	1,370.7	1,370.7	3.7	1.2	-162.37	-4.5	44.9	120.3	3.73	32.255			
1,500.0	1,484.7	1,466.6	1,466.5	4.2	1.3	-159.06	-5.2	43.6	145.5	3.98	36.582			
1,600.0	1,581.3	1,563.4	1,563.3	4.7	1.4	-161.41	-6.0	42.2	169.9	4.22	40.299			
1,700.0	1,678.1	1,659.4	1,659.3	5.1	1.5	-163.70	-7.1	40.8	193.9	4.46	43.470			
1,800.0	1,775.4	1,755.7	1,755.6	5.5	1.5	-165.18	-7.6	39.1	217.1	4.71	46.096			
1,900.0	1,873.0	1,853.4	1,853.3	5.9	1.6	-162.58	-8.1	37.3	238.4	4.96	48.028			
2,000.0	1,971.1	1,950.8	1,950.6	6.3	1.7	-165.74	-9.1	35.3	257.9	5.21	49.470			
2,100.0	2,069.7	2,047.8	2,047.6	6.6	1.8	-177.70	-9.8	32.8	275.9	5.46	50.498			
2,200.0	2,168.3	2,145.7	2,145.5	6.9	1.9	177.00	-10.3	30.1	293.8	5.72	51.359			
2,300.0	2,267.3	2,243.7	2,243.4	7.2	2.0	177.45	-11.1	27.1	309.9	5.98	51.840			
2,400.0	2,366.4	2,341.4	2,341.1	7.5	2.1	173.03	-11.4	23.9	325.3	6.24	52.149			
2,500.0	2,465.1	2,439.4	2,439.0	7.9	2.1	171.59	-11.7	20.6	343.4	6.50	52.801			
2,600.0	2,563.3	2,536.5	2,536.0	8.3	2.2	177.93	-12.0	17.1	364.6	6.77	53.898			
2,700.0	2,660.9	2,633.2	2,632.6	8.7	2.3	175.94	-12.0	13.6	388.6	7.03	55.308			
2,800.0	2,758.1	2,729.5	2,728.9	9.2	2.4	179.79	-12.1	10.0	414.9	7.29	56.941			
2,900.0	2,854.9	2,825.2	2,824.6	9.6	2.5	-174.64	-11.9	6.6	442.3	7.55	58.587			
3,000.0	2,952.3	2,922.0	2,921.2	10.0	2.6	-175.61	-11.7	3.2	468.0	7.81	59.881			
3,100.0	3,050.2	3,020.1	3,019.3	10.4	2.7	-176.32	-11.7	-0.4	490.7	8.08	60.737			

Anticollision Report

Company:	Anadarko Petroleum Corporation	Local Co-ordinate Reference:	Well Saddleback 6-29X
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5031.0ft (Xtreme 11)
Reference Site:	S29-T2N-R67W (Saddleback)	MD Reference:	WELL @ 5031.0ft (Xtreme 11)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Saddleback 6-29X	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Stk	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Stk Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S29-T2N-R67W (Saddleback) - Saddleback 21-29 - DD - Plan #2													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
0.0	0.0	0.0	0.0	0.0	0.0	1.57	10.2	0.3	10.3					
100.0	100.0	99.0	99.0	0.1	0.1	-168.50	10.2	0.3	10.8	10.6	0.30	36.729		
200.0	200.0	199.0	199.0	0.3	0.3	-148.29	10.2	0.3	12.1	11.4	0.64	18.689		
300.0	299.9	298.9	298.8	0.5	0.5	-155.72	10.5	2.0	15.9	14.9	1.00	15.903 SF		
400.0	399.7	398.5	398.3	0.7	0.7	-146.58	11.4	7.0	22.5	21.1	1.38	16.285		
500.0	499.3	497.7	497.2	1.0	0.9	-137.35	12.9	15.5	31.9	30.1	1.80	17.704		
600.0	598.9	596.6	595.3	1.2	1.2	-122.43	15.0	27.3	42.5	40.2	2.27	18.761		
700.0	698.5	695.0	692.6	1.4	1.5	-101.16	17.6	42.3	53.5	50.7	2.77	19.313		
800.0	798.1	793.0	788.7	1.6	1.9	-91.55	20.8	60.5	65.2	61.9	3.29	19.804		
900.0	897.5	891.0	884.5	1.9	2.2	-89.15	24.6	81.4	79.6	75.8	3.82	20.851		
1,000.0	996.7	989.7	980.7	2.2	2.6	-94.27	28.4	102.8	95.4	91.0	4.38	21.788		
1,100.0	1,095.4	1,088.0	1,076.6	2.5	3.1	-102.44	32.3	124.1	113.8	108.8	5.00	22.743		
1,200.0	1,193.6	1,185.8	1,172.0	2.9	3.5	-107.53	36.1	145.3	134.5	128.8	5.66	23.743		
1,300.0	1,291.5	1,283.3	1,267.1	3.3	3.9	-109.11	39.9	166.4	156.4	150.1	6.37	24.558		
1,400.0	1,388.3	1,380.5	1,361.9	3.7	4.3	-103.27	43.7	187.5	179.0	171.8	7.19	24.883		
1,500.0	1,484.7	1,478.2	1,457.2	4.2	4.7	-98.69	47.6	208.6	198.2	190.1	8.06	24.581		
1,600.0	1,581.3	1,576.3	1,552.9	4.7	5.1	-99.55	51.4	229.9	215.7	206.7	8.91	24.201		
1,700.0	1,678.1	1,674.6	1,648.8	5.1	5.5	-100.71	55.3	251.2	233.0	223.2	9.74	23.908		
1,800.0	1,775.4	1,773.0	1,744.8	5.5	6.0	-101.28	59.1	272.5	249.9	239.3	10.54	23.700		
1,900.0	1,873.0	1,871.8	1,841.2	5.9	6.4	-97.54	63.0	293.9	265.3	254.0	11.33	23.426		
2,000.0	1,971.1	1,970.8	1,937.7	6.3	6.8	-99.14	66.9	315.3	279.7	267.6	12.06	23.184		
2,100.0	2,069.7	2,069.4	2,034.0	6.6	7.2	-109.49	70.7	336.7	295.7	282.9	12.73	23.231		
2,200.0	2,168.3	2,167.7	2,129.8	6.9	7.6	-113.76	74.6	358.0	314.0	300.6	13.37	23.482		
2,300.0	2,267.3	2,265.9	2,225.6	7.2	8.1	-112.23	78.4	379.3	331.9	317.8	14.00	23.701		
2,400.0	2,366.4	2,364.2	2,321.5	7.5	8.5	-115.22	82.3	400.6	349.6	335.0	14.60	23.950		
2,500.0	2,465.1	2,462.1	2,417.0	7.9	8.9	-115.60	86.1	421.8	369.3	354.1	15.22	24.271		
2,600.0	2,563.3	2,560.1	2,512.5	8.3	9.3	-108.92	89.9	443.0	389.5	373.6	15.93	24.446		
2,700.0	2,660.9	2,657.9	2,608.0	8.7	9.7	-110.66	93.8	464.2	409.8	393.2	16.67	24.587		
2,800.0	2,758.1	2,755.7	2,703.4	9.2	10.2	-107.15	97.6	485.4	430.6	413.1	17.49	24.617		
2,900.0	2,854.9	2,853.7	2,799.0	9.6	10.6	-102.22	101.4	506.6	449.4	431.0	18.37	24.468		
3,000.0	2,952.3	2,952.0	2,894.9	10.0	11.0	-103.42	105.3	527.9	467.0	447.8	19.17	24.360		
3,100.0	3,050.2	3,050.6	2,991.0	10.4	11.4	-104.06	109.1	549.3	484.2	464.2	19.92	24.301		

Anticollision Report

Company:	Anadarko Petroleum Corporation	Local Co-ordinate Reference:	Well Saddleback 6-29X
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5031.0ft (Xtreme 11)
Reference Site:	S29-T2N-R67W (Saddleback)	MD Reference:	WELL @ 5031.0ft (Xtreme 11)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Saddleback 6-29X	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Stk	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Stk Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S29-T2N-R67W (Saddleback) - Saddleback 29-29 - DD - Plan #1														Offset Site Error:	0.0 ft
Survey Program: 0-MWD														Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Total Uncertainty Axis	Separation Factor	Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)					
0.0	0.0	0.0	0.0	0.0	0.0	0.53	60.1	0.6	60.2						
100.0	100.0	98.0	98.0	0.1	0.1	-169.81	60.1	0.6	60.8	60.5	0.29	206.723			
200.0	200.0	198.0	198.0	0.3	0.3	-145.87	60.1	0.6	61.9	61.3	0.64	96.278			
300.0	299.9	295.7	295.7	0.5	0.5	-154.78	61.7	0.7	67.2	66.2	0.99	67.730			
400.0	399.7	392.7	392.5	0.7	0.7	-153.29	66.6	1.2	77.9	76.6	1.34	58.074			
500.0	499.3	488.5	488.0	1.0	0.9	-151.76	74.6	1.9	93.9	92.3	1.69	55.484			
600.0	598.9	583.3	582.1	1.2	1.1	-144.81	85.6	2.9	113.1	111.0	2.05	55.142 SF			
700.0	698.5	677.0	674.8	1.4	1.4	-130.89	99.6	4.2	134.2	131.8	2.42	55.471			
800.0	798.1	770.1	766.4	1.6	1.7	-128.22	116.4	5.8	157.6	154.8	2.80	56.312			
900.0	897.5	866.8	861.2	1.9	2.1	-131.65	135.1	7.5	183.0	179.8	3.19	57.357			
1,000.0	996.7	962.9	955.4	2.2	2.4	-140.03	153.7	9.3	210.5	206.9	3.59	58.714			
1,100.0	1,095.4	1,057.6	1,048.4	2.5	2.8	-149.12	172.0	11.0	242.3	238.3	3.98	60.948			
1,200.0	1,193.6	1,151.3	1,140.3	2.9	3.1	-153.96	190.2	12.7	277.0	272.6	4.37	63.448			
1,300.0	1,291.5	1,244.4	1,231.6	3.3	3.5	-154.85	208.2	14.3	313.5	308.7	4.75	65.940			
1,400.0	1,388.3	1,336.0	1,321.4	3.7	3.8	-146.80	225.9	16.0	353.3	348.1	5.19	68.054			
1,500.0	1,484.7	1,427.5	1,411.2	4.2	4.2	-140.27	243.6	17.6	392.6	386.9	5.69	69.033			
1,600.0	1,581.3	1,519.7	1,501.6	4.7	4.5	-140.21	261.4	19.3	430.3	424.1	6.17	69.689			
1,700.0	1,678.1	1,612.2	1,592.4	5.1	4.9	-140.79	279.3	21.0	467.3	460.7	6.66	70.170			

Anticollision Report

Company:	Anadarko Petroleum Corporation	Local Co-ordinate Reference:	Well Saddleback 6-29X
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5031.0ft (Xtreme 11)
Reference Site:	S29-T2N-R67W (Saddleback)	MD Reference:	WELL @ 5031.0ft (Xtreme 11)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Saddleback 6-29X	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Stk	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Stk Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S29-T2N-R67W (Saddleback) - Saddleback 30-29 - DD - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	0.53	30.2	0.3	30.3					
100.0	100.0	99.0	99.0	0.1	0.1	-169.75	30.2	0.3	30.9	30.6	0.30	104.548		
200.0	200.0	199.0	199.0	0.3	0.3	-146.61	30.2	0.3	32.1	31.4	0.65	49.730		
300.0	299.9	298.9	298.9	0.5	0.5	-156.99	30.2	0.3	35.7	34.7	1.00	35.839		
400.0	399.7	398.7	398.7	0.7	0.7	-157.56	30.2	0.3	41.6	40.3	1.35	30.871		
500.0	499.3	497.1	497.1	1.0	0.8	-159.84	31.1	-1.1	50.9	49.2	1.70	30.012 SF		
600.0	598.9	594.8	594.6	1.2	1.0	-158.14	33.6	-5.5	63.0	61.0	2.05	30.802		
700.0	698.5	691.4	690.9	1.4	1.2	-150.14	37.7	-12.5	77.8	75.4	2.40	32.448		
800.0	798.1	786.6	785.5	1.6	1.5	-153.11	43.3	-22.3	96.2	93.4	2.74	35.037		
900.0	897.5	880.2	877.9	1.9	1.7	-160.80	50.3	-34.5	119.4	116.4	3.08	38.734		
1,000.0	996.7	971.4	967.6	2.2	2.0	-172.21	58.6	-48.9	148.6	145.2	3.41	43.602		
1,100.0	1,095.4	1,059.5	1,053.7	2.5	2.4	177.03	68.0	-65.2	184.8	181.1	3.72	49.631		
1,200.0	1,193.6	1,144.6	1,136.2	2.9	2.8	171.48	78.4	-83.0	226.1	222.0	4.05	55.884		
1,300.0	1,291.5	1,229.8	1,218.3	3.3	3.2	169.95	90.0	-102.7	271.1	266.7	4.35	62.268		
1,400.0	1,388.3	1,315.8	1,301.2	3.7	3.6	178.69	103.6	-121.5	320.8	316.2	4.65	69.008		
1,500.0	1,484.7	1,400.7	1,382.9	4.2	4.0	-173.15	119.0	-138.4	372.4	367.5	4.96	75.029		
1,600.0	1,581.3	1,486.4	1,465.3	4.7	4.4	-171.77	136.3	-154.0	423.3	418.0	5.27	80.263		
1,700.0	1,678.1	1,572.9	1,548.6	5.1	4.8	-171.27	154.1	-169.5	473.4	467.8	5.59	84.715		

Anticollision Report

Company:	Anadarko Petroleum Corporation	Local Co-ordinate Reference:	Well Saddleback 6-29X
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5031.0ft (Xtreme 11)
Reference Site:	S29-T2N-R67W (Saddleback)	MD Reference:	WELL @ 5031.0ft (Xtreme 11)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Saddleback 6-29X	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Stk	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Stk Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S29-T2N-R67W (Saddleback) - Saddleback 31-29 - DD - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	0.80	20.0	0.3	20.1					
100.0	100.0	99.0	99.0	0.1	0.1	-169.41	20.0	0.3	20.7	20.4	0.30	70.019		
200.0	200.0	199.0	199.0	0.3	0.3	-147.08	20.0	0.3	21.9	21.2	0.65	33.924		
300.0	299.9	298.8	298.8	0.5	0.5	-162.31	20.0	-1.4	25.7	24.7	1.00	25.786		
400.0	399.7	398.0	397.9	0.7	0.7	-171.68	20.0	-6.6	33.4	32.0	1.36	24.507 SF		
500.0	499.3	496.2	495.7	1.0	0.9	179.65	19.9	-15.0	46.1	44.4	1.74	26.569		
600.0	598.9	593.4	592.1	1.2	1.2	178.34	19.8	-26.7	62.4	60.3	2.12	29.396		
700.0	698.5	689.0	686.6	1.4	1.5	-174.84	19.6	-41.4	82.4	79.9	2.51	32.883		
800.0	798.1	784.1	780.1	1.6	1.8	-177.95	19.5	-58.7	106.5	103.6	2.87	37.076		
900.0	897.5	880.1	874.4	1.9	2.1	175.09	19.3	-76.8	133.0	129.7	3.24	41.097		
1,000.0	996.7	975.7	968.3	2.2	2.5	164.68	19.1	-94.7	161.9	158.3	3.60	44.988		
1,100.0	1,095.4	1,070.4	1,061.3	2.5	2.8	155.19	19.0	-112.5	193.8	189.8	3.98	48.658		
1,200.0	1,193.6	1,164.7	1,153.9	2.9	3.2	150.95	18.8	-130.2	227.2	222.8	4.40	51.684		
1,300.0	1,291.5	1,258.5	1,246.1	3.3	3.5	150.36	18.6	-147.8	261.5	256.7	4.81	54.394		
1,400.0	1,388.3	1,350.7	1,336.6	3.7	3.9	159.19	18.5	-165.1	300.2	295.0	5.19	57.801		
1,500.0	1,484.7	1,441.6	1,425.9	4.2	4.2	167.27	18.3	-182.2	341.9	336.3	5.58	61.216		
1,600.0	1,581.3	1,532.6	1,515.3	4.7	4.5	168.45	18.1	-199.3	383.2	377.2	5.98	64.076		
1,700.0	1,678.1	1,624.0	1,605.0	5.1	4.9	168.74	18.0	-216.5	423.8	417.5	6.38	66.461		
1,800.0	1,775.4	1,715.9	1,695.4	5.5	5.2	169.20	17.8	-233.7	462.9	456.2	6.79	68.221		

Anticollision Report

Company:	Anadarko Petroleum Corporation	Local Co-ordinate Reference:	Well Saddleback 6-29X
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5031.0ft (Xtreme 11)
Reference Site:	S29-T2N-R67W (Saddleback)	MD Reference:	WELL @ 5031.0ft (Xtreme 11)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Saddleback 6-29X	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Stk	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Stk Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S29-T2N-R67W (Saddleback) - Saddleback 36-20 - DD - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
0.0	0.0	0.0	0.0	0.0	0.0	0.32	49.9	0.3	49.9					
100.0	100.0	99.0	99.0	0.1	0.1	-170.01	49.9	0.3	50.6	50.3	0.30	171.145		
200.0	200.0	199.0	199.0	0.3	0.3	-146.23	49.9	0.3	51.8	51.1	0.65	80.216		
300.0	299.9	298.1	298.1	0.5	0.5	-155.36	50.3	0.5	55.7	54.7	1.00	55.930		
400.0	399.7	396.1	396.0	0.7	0.7	-153.02	53.0	2.3	64.2	62.9	1.35	47.564		
500.0	499.3	493.3	493.0	1.0	0.9	-149.93	58.6	5.9	77.4	75.7	1.72	45.129		
600.0	598.9	589.7	588.9	1.2	1.1	-141.08	66.8	11.2	93.1	91.0	2.10	44.361		
700.0	698.5	685.5	683.8	1.4	1.4	-125.27	77.6	18.3	110.2	107.7	2.51	43.946		
800.0	798.1	780.4	777.4	1.6	1.7	-120.73	91.0	26.9	128.9	126.0	2.94	43.844 SF		
900.0	897.5	874.1	869.2	1.9	2.0	-122.22	106.7	37.2	151.0	147.6	3.39	44.519		
1,000.0	996.7	966.0	958.6	2.2	2.4	-128.68	124.6	48.8	177.7	173.8	3.86	45.980		
1,100.0	1,095.4	1,055.2	1,044.7	2.5	2.9	-136.05	144.2	61.5	210.9	206.5	4.35	48.481		
1,200.0	1,193.6	1,141.6	1,127.2	2.9	3.3	-139.45	165.3	75.2	249.4	244.5	4.85	51.465		
1,300.0	1,291.5	1,229.7	1,210.9	3.3	3.8	-138.91	188.6	90.4	291.4	286.1	5.36	54.364		
1,400.0	1,388.3	1,319.1	1,295.7	3.7	4.3	-129.91	212.4	105.8	336.1	330.1	5.96	56.390		
1,500.0	1,484.7	1,409.4	1,381.3	4.2	4.8	-122.91	236.4	121.4	378.9	372.2	6.64	57.023		
1,600.0	1,581.3	1,500.5	1,467.7	4.7	5.4	-122.33	260.7	137.2	419.7	412.4	7.33	57.265		
1,700.0	1,678.1	1,592.0	1,554.4	5.1	5.9	-122.44	285.0	153.0	460.0	452.0	8.02	57.386		
1,800.0	1,775.4	1,683.9	1,641.6	5.5	6.4	-122.47	309.5	168.9	499.3	490.6	8.70	57.394		

Anticollision Report

Company:	Anadarko Petroleum Corporation	Local Co-ordinate Reference:	Well Saddleback 6-29X
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5031.0ft (Xtreme 11)
Reference Site:	S29-T2N-R67W (Saddleback)	MD Reference:	WELL @ 5031.0ft (Xtreme 11)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Saddleback 6-29X	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Stk	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Stk Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S29-T2N-R67W (Saddleback) - Saddleback 4-29 - DD - Plan #1													Offset Site Error:	0.0 ft
Survey Program:		0-MWD											Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	0.40	40.1	0.3	40.1					
100.0	100.0	99.0	99.0	0.1	0.1	-169.91	40.1	0.3	40.7	40.4	0.30	137.846		
200.0	200.0	199.0	199.0	0.3	0.3	-146.37	40.1	0.3	41.9	41.3	0.65	64.972		
300.0	299.9	298.9	298.9	0.5	0.5	-156.16	40.1	0.3	45.5	44.5	1.00	45.680		
400.0	399.7	397.2	397.2	0.7	0.7	-157.13	41.3	-0.8	52.8	51.4	1.35	39.172		
500.0	499.3	494.6	494.4	1.0	0.9	-159.55	45.0	-4.1	65.3	63.6	1.70	38.496 SF		
600.0	598.9	590.9	590.4	1.2	1.1	-156.63	51.1	-9.5	81.2	79.2	2.05	39.721		
700.0	698.5	686.0	684.8	1.4	1.3	-146.65	59.5	-17.0	100.0	97.6	2.39	41.803		
800.0	798.1	783.5	781.4	1.6	1.6	-147.50	69.2	-25.7	120.5	117.8	2.74	44.010		
900.0	897.5	880.7	877.8	1.9	1.8	-153.41	78.9	-34.3	142.5	139.5	3.08	46.296		
1,000.0	996.7	977.4	973.6	2.2	2.1	-163.51	88.5	-42.9	167.3	163.8	3.41	49.061		
1,100.0	1,095.4	1,072.9	1,068.3	2.5	2.4	-173.42	98.0	-51.4	196.3	192.5	3.73	52.641		
1,200.0	1,193.6	1,167.8	1,162.3	2.9	2.6	-178.43	107.5	-59.8	227.9	223.8	4.05	56.245		
1,300.0	1,291.5	1,262.1	1,255.7	3.3	2.9	-179.49	116.9	-68.2	261.1	256.8	4.36	59.846		
1,400.0	1,388.3	1,354.7	1,347.6	3.7	3.2	-171.34	126.1	-76.4	298.7	294.0	4.68	63.802		
1,500.0	1,484.7	1,446.7	1,438.7	4.2	3.4	-164.43	135.3	-84.6	337.4	332.3	5.03	67.070		
1,600.0	1,581.3	1,539.1	1,530.3	4.7	3.7	-164.18	144.5	-92.8	375.0	369.6	5.37	69.820		
1,700.0	1,678.1	1,631.8	1,622.1	5.1	4.0	-164.61	153.7	-101.0	411.8	406.1	5.71	72.111		
1,800.0	1,775.4	1,725.1	1,714.7	5.5	4.2	-164.82	163.0	-109.3	447.2	441.1	6.06	73.761		
1,900.0	1,873.0	1,819.2	1,807.9	5.9	4.5	-160.96	172.4	-117.7	480.6	474.1	6.42	74.851		

Anticollision Report

Company:	Anadarko Petroleum Corporation	Local Co-ordinate Reference:	Well Saddleback 6-29X
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5031.0ft (Xtreme 11)
Reference Site:	S29-T2N-R67W (Saddleback)	MD Reference:	WELL @ 5031.0ft (Xtreme 11)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Saddleback 6-29X	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Stk	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Stk Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S29-T2N-R67W (Saddleback) - Saddleback 6-29X - Original Hole - Original Hole													Offset Site Error:	0.0 ft
Survey Program: 77-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
3,876.0	3,815.4	3,876.0	3,815.4	0.0	0.0	88.37	-423.2	460.8	0.3					
3,900.0	3,838.9	3,900.0	3,838.9	0.1	0.1	80.17	-426.8	463.6	0.2	0.0				
4,000.0	3,937.3	3,999.9	3,936.9	0.4	0.5	94.37	-442.4	474.6	5.6	4.7	0.90			
4,100.0	4,035.6	4,099.7	4,034.6	0.8	0.9	100.95	-457.9	488.1	14.8	13.2	1.64			
4,200.0	4,133.8	4,199.4	4,131.9	1.2	1.3	96.90	-472.3	504.7	25.4	23.0	2.36			
4,300.0	4,232.0	4,298.8	4,229.3	1.6	1.7	97.79	-485.3	519.4	35.4	32.3	3.10			
4,400.0	4,330.2	4,398.7	4,327.2	1.9	2.1	98.11	-498.7	534.2	45.7	41.9	3.87			
4,500.0	4,428.4	4,498.4	4,424.5	2.3	2.5	96.10	-511.6	551.4	54.9	50.3	4.62			
4,600.0	4,526.6	4,597.8	4,521.3	2.7	2.9	93.45	-525.0	569.7	64.3	58.9	5.37			
4,700.0	4,624.8	4,697.1	4,618.0	3.1	3.4	91.57	-538.6	587.9	74.0	67.9	6.10			
4,800.0	4,723.0	4,795.2	4,713.3	3.5	3.8	89.88	-553.1	606.0	84.8	78.0	6.84			
4,900.0	4,821.2	4,894.6	4,809.8	3.8	4.3	88.30	-568.5	624.6	96.4	88.8	7.57			
5,000.0	4,919.4	4,994.6	4,906.7	4.2	4.8	86.69	-583.8	644.0	107.7	99.4	8.31			
5,100.0	5,017.6	5,094.5	5,003.3	4.6	5.2	84.96	-598.5	664.3	118.4	109.3	9.01			
5,200.0	5,115.8	5,194.7	5,100.8	5.0	5.7	84.33	-612.8	683.0	128.9	119.1	9.73			
5,300.0	5,214.0	5,297.2	5,201.0	5.4	6.1	84.69	-625.7	700.1	137.9	127.4	10.48			
5,400.0	5,312.2	5,399.3	5,301.6	5.7	6.4	86.27	-636.1	714.4	144.8	133.6	11.26			
5,500.0	5,410.4	5,501.0	5,402.3	6.1	6.7	88.86	-644.5	725.8	150.5	138.4	12.05			
5,600.0	5,508.6	5,602.1	5,502.7	6.5	6.9	92.36	-651.1	734.4	155.3	142.5	12.83			
5,700.0	5,606.8	5,702.8	5,603.1	6.9	7.1	96.69	-656.0	740.5	159.9	146.3	13.56			
5,800.0	5,705.0	5,803.0	5,703.1	7.3	7.2	101.46	-659.5	744.8	164.6	150.4	14.21			
5,900.0	5,803.2	5,900.9	5,801.0	7.6	7.4	106.20	-662.1	748.3	170.1	155.4	14.76			
6,000.0	5,901.4	5,996.7	5,896.7	8.0	7.5	110.77	-665.6	750.1	178.4	163.2	15.21			
6,100.0	6,000.0	6,095.4	5,995.3	8.3	7.7	114.79	-669.5	751.2	187.7	172.1	15.55			
6,200.0	6,099.0	6,194.7	6,094.6	8.6	7.8	117.83	-672.7	751.6	196.0	180.2	15.80			
6,300.0	6,198.6	6,294.5	6,194.3	8.8	7.9	119.88	-675.7	751.6	203.1	187.0	16.01			
6,400.0	6,298.3	6,394.8	6,294.6	9.0	8.0	121.11	-678.1	751.4	208.3	192.0	16.21			
6,500.0	6,398.3	6,495.1	6,394.9	9.1	8.1	121.50	-680.3	751.3	211.5	195.1	16.41			
6,600.0	6,498.3	6,597.1	6,496.9	9.2	8.2	-137.30	-681.8	751.1	212.8	196.2	16.62			
6,700.0	6,598.3	6,697.9	6,597.7	9.3	8.3	-137.51	-682.7	751.4	213.3	196.4	16.83			
6,800.0	6,698.3	6,798.7	6,698.5	9.4	8.4	-137.69	-683.1	751.8	213.3	196.2	17.05			
6,822.9	6,721.1	6,821.4	6,721.2	9.4	8.5	-137.72	-683.2	751.9	213.3	196.2	17.09			
6,900.0	6,798.3	6,898.5	6,798.3	9.5	8.5	-137.83	-683.5	752.2	213.3	196.1	17.26			
7,000.0	6,898.3	6,999.9	6,899.7	9.6	8.7	-137.99	-683.7	752.8	213.1	195.6	17.47			
7,100.0	6,998.3	7,101.0	7,000.8	9.7	8.8	-138.10	-683.2	753.8	212.0	194.3	17.69			
7,200.0	7,098.3	7,201.6	7,101.3	9.8	8.9	-138.19	-682.5	754.9	210.8	192.9	17.90			
7,300.0	7,198.3	7,302.2	7,201.9	9.9	9.0	-138.28	-681.5	756.2	209.2	191.1	18.12			
7,400.0	7,298.3	7,400.9	7,300.6	10.0	9.1	-138.44	-680.8	757.6	207.7	189.4	18.34			
7,500.0	7,398.3	7,500.4	7,400.1	10.1	9.2	-138.51	-680.3	758.4	206.8	188.2	18.56			
7,600.0	7,498.3	7,606.2	7,505.8	10.2	9.4	-139.01	-679.6	761.4	204.4	185.6	18.85			
7,684.1	7,582.4	7,686.0	7,585.5	10.3	9.5	-140.00	-679.4	766.1	201.1	182.0	19.14			
7,700.0	7,598.3	7,686.0	7,585.5	10.3	9.5	-140.00	-679.4	766.1	201.5	182.3	19.16			
7,800.0	7,698.3	7,686.0	7,585.5	10.4	9.5	-140.00	-679.4	766.1	230.5	211.3	19.26			
7,900.0	7,798.3	7,686.0	7,585.5	10.6	9.5	-140.00	-679.4	766.1	292.8	273.4	19.37			
8,000.0	7,898.3	7,686.0	7,585.5	10.7	9.5	-140.00	-679.4	766.1	371.8	352.4	19.48			
8,100.0	7,998.3	7,686.0	7,585.5	10.8	9.5	-140.00	-679.4	766.1	459.2	439.6	19.59			

Anticollision Report

Company:	Anadarko Petroleum Corporation	Local Co-ordinate Reference:	Well Saddleback 6-29X
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5031.0ft (Xtreme 11)
Reference Site:	S29-T2N-R67W (Saddleback)	MD Reference:	WELL @ 5031.0ft (Xtreme 11)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Saddleback 6-29X	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Stk	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Stk Plan #1	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 5031.0ft (Xtreme 11)

Offset Depths are relative to Offset Datum

Central Meridian is -105.500000 °

Coordinates are relative to: Saddleback 6-29X

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.38°

