



US ROCKIES REGION PLANNING

KERR MCGEE OIL & GAS ONSHORE LP

WELD_RASMUSSEN 9 PAD

P_RASSMUSSEN 22-29

P_RASSMUSSEN 22-29

Plan: PLAN #1 09-02-09 RHS

Standard Planning Report

02 September, 2009





P_RASSMUSSEN 22-29
KERR MCGEE OIL & GAS ONSHORE LP
SECTION 29 T2N R68W
757 FSL 1962 FEL
LAT: 40° 6' 15.840 N
LONG: 105° 1' 28.992 W



Azimuths to True North
Magnetic North: 9.18°
Magnetic Field
Strength: 53153.1snT
Dip Angle: 66.84°
Date: 9/2/2009
Model: IGRF200510

WELL DETAILS: P_RASSMUSSEN 22-29

+N/-S	+E/-W	Northing	Easting	Ground Level:	Latitude	Longitude	Slot
0.00	0.00	1281233.51	3132946.93	4934.00	40° 6' 15.840 N	105° 1' 28.992 W	

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
3860.00	4170.57	PARKMAN
4395.00	4792.70	SUSSEX TOP
4808.00	5272.96	SHANNON TOP
7226.00	7882.16	NIO A TOP
7521.00	8177.16	CODELL TOP

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
935.00	0.00	0.00	935.00	0.00	0.00	0.00	0.00	0.00	
2469.46	30.69	316.85	2397.14	292.71	-274.40	2.00	316.85	401.22	
6121.69	30.69	316.85	5537.86	1652.62	-1549.26	0.00	0.00	2265.25	
7656.16	0.00	0.00	7000.00	1945.33	-1823.67	2.00	180.00	2666.47	
8337.16	0.00	0.00	7681.00	1945.33	-1823.67	0.00	0.00	2666.47	PBHL_RASMUSSEN 22-29(2600 FNL 1560 FWL)50' TGT RAD

CASING DETAILS

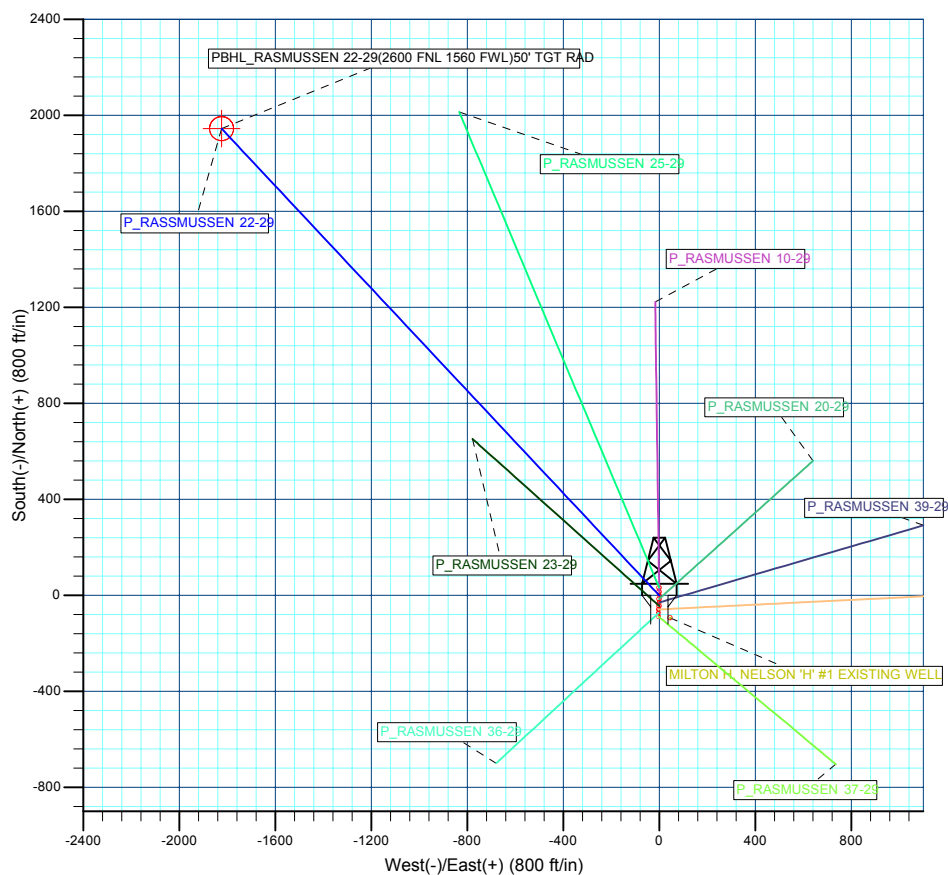
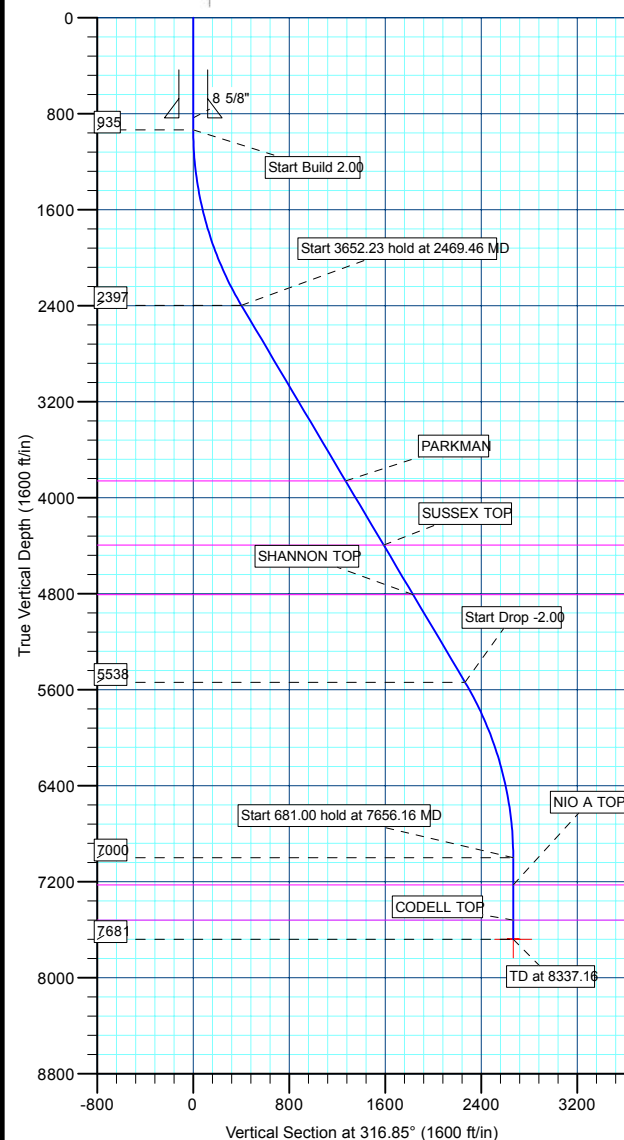
TVD	MD	Name	Size
835.00	835.00	8 5/8"	8.62

WELLBORE TARGET DETAILS (MAP CO-ORDINATES AND LAT/LONG)

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
PBHL	7681.00	1945.33	-1823.67	1283169.03	3131112.86	40° 6' 35.064 N	105° 1' 52.464 W	Circle (Radius: 50.00)



KB ELEV: WELL @ 4949.00ft (Original Well Elev)
GRD ELEV: 4934.00



Plan: PLAN #1 09-02-09 RHS (P_RASSMUSSEN 22-29/P_RASSMUSSEN 22-29)

Created By: Robert H. Scott



Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well P_RASSMUSSEN 22-29
Company:	US ROCKIES REGION PLANNING	TVD Reference:	WELL @ 4949.00ft (Original Well Elev)
Project:	KERR MCGEE OIL & GAS ONSHORE LP	MD Reference:	WELL @ 4949.00ft (Original Well Elev)
Site:	WELD_RASMUSSEN 9 PAD	North Reference:	True
Well:	P_RASSMUSSEN 22-29	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_RASSMUSSEN 22-29		
Design:	PLAN #1 09-02-09 RHS		

Project	KERR MCGEE OIL & GAS ONSHORE LP, KERR MCGEE OIL & GAS ONSHORE LP		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		

Site		WELD_RASMUSSEN 9 PAD, SECTION 29 T2N R68W			
Site Position:		Northing:	1,281,248.09 ft	Latitude:	40° 6' 15.984 N
From:	Lat/Long	Easting:	3,132,946.85 ft	Longitude:	105° 1' 28.992 W
Position Uncertainty:	0.00 ft	Slot Radius:	in	Grid Convergence:	0.31 °

Well		P_RASSMUSSEN 22-29				
Well Position	+N/-S	-14.58 ft	Northing:	1,281,233.51 ft	Latitude:	40° 6' 15.840 N
	+E/-W	0.00 ft	Easting:	3,132,946.93 ft	Longitude:	105° 1' 28.992 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	4,934.00 ft

Wellbore	P_RASSMUSSEN 22-29				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	9/2/2009	9.18	66.84	53,153

Design	PLAN #1 09-02-09 RHS			
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	316.85

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	
935.00	0.00	0.00	935.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,469.46	30.69	316.85	2,397.14	292.71	-274.40	2.00	2.00	0.00	316.85	
6,121.69	30.69	316.85	5,537.86	1,652.62	-1,549.26	0.00	0.00	0.00	0.00	
7,656.16	0.00	0.00	7,000.00	1,945.33	-1,823.67	2.00	-2.00	0.00	180.00	
8,337.16	0.00	0.00	7,681.00	1,945.33	-1,823.67	0.00	0.00	0.00	0.00	PBHL_RASMUSSE



Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well P_RASSMUSSEN 22-29
Company:	US ROCKIES REGION PLANNING	TVD Reference:	WELL @ 4949.00ft (Original Well Elev)
Project:	KERR MCGEE OIL & GAS ONSHORE LP	MD Reference:	WELL @ 4949.00ft (Original Well Elev)
Site:	WELD_RASMUSSEN 9 PAD	North Reference:	True
Well:	P_RASSMUSSEN 22-29	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_RASSMUSSEN 22-29		
Design:	PLAN #1 09-02-09 RHS		

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)
Start Build 2.00									
935.00	0.00	0.00	935.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	1.30	316.85	999.99	0.54	-0.50	0.74	2.00	2.00	0.00
1,100.00	3.30	316.85	1,099.91	3.47	-3.25	4.75	2.00	2.00	0.00
1,200.00	5.30	316.85	1,199.62	8.94	-8.38	12.25	2.00	2.00	0.00
1,300.00	7.30	316.85	1,299.01	16.94	-15.88	23.22	2.00	2.00	0.00
1,400.00	9.30	316.85	1,397.96	27.47	-25.75	37.66	2.00	2.00	0.00
1,500.00	11.30	316.85	1,496.34	40.52	-37.98	55.53	2.00	2.00	0.00
1,600.00	13.30	316.85	1,594.04	56.06	-52.55	76.84	2.00	2.00	0.00
1,700.00	15.30	316.85	1,690.94	74.08	-69.44	101.54	2.00	2.00	0.00
1,800.00	17.30	316.85	1,786.92	94.55	-88.64	129.60	2.00	2.00	0.00
1,900.00	19.30	316.85	1,881.85	117.46	-110.11	161.00	2.00	2.00	0.00
2,000.00	21.30	316.85	1,975.64	142.77	-133.84	195.69	2.00	2.00	0.00
2,100.00	23.30	316.85	2,068.15	170.45	-159.79	233.63	2.00	2.00	0.00
2,200.00	25.30	316.85	2,159.29	200.47	-187.93	274.78	2.00	2.00	0.00
2,300.00	27.30	316.85	2,248.93	232.79	-218.23	319.09	2.00	2.00	0.00
2,400.00	29.30	316.85	2,336.98	267.38	-250.65	366.49	2.00	2.00	0.00
Start 3652.23 hold at 2469.46 MD									
2,469.46	30.69	316.85	2,397.14	292.71	-274.40	401.22	2.00	2.00	0.00
2,500.00	30.69	316.85	2,423.40	304.08	-285.06	416.81	0.00	0.00	0.00
2,600.00	30.69	316.85	2,509.39	341.32	-319.97	467.84	0.00	0.00	0.00
2,700.00	30.69	316.85	2,595.39	378.55	-354.88	518.88	0.00	0.00	0.00
2,800.00	30.69	316.85	2,681.38	415.79	-389.78	569.92	0.00	0.00	0.00
2,900.00	30.69	316.85	2,767.38	453.02	-424.69	620.96	0.00	0.00	0.00
3,000.00	30.69	316.85	2,853.37	490.26	-459.59	672.00	0.00	0.00	0.00
3,100.00	30.69	316.85	2,939.36	527.49	-494.50	723.03	0.00	0.00	0.00
3,200.00	30.69	316.85	3,025.36	564.73	-529.41	774.07	0.00	0.00	0.00
3,300.00	30.69	316.85	3,111.35	601.96	-564.31	825.11	0.00	0.00	0.00
3,400.00	30.69	316.85	3,197.35	639.20	-599.22	876.15	0.00	0.00	0.00
3,500.00	30.69	316.85	3,283.34	676.43	-634.13	927.19	0.00	0.00	0.00
3,600.00	30.69	316.85	3,369.34	713.67	-669.03	978.22	0.00	0.00	0.00
3,700.00	30.69	316.85	3,455.33	750.90	-703.94	1,029.26	0.00	0.00	0.00
3,800.00	30.69	316.85	3,541.33	788.14	-738.85	1,080.30	0.00	0.00	0.00
3,900.00	30.69	316.85	3,627.32	825.37	-773.75	1,131.34	0.00	0.00	0.00
4,000.00	30.69	316.85	3,713.32	862.61	-808.66	1,182.38	0.00	0.00	0.00
4,100.00	30.69	316.85	3,799.31	899.84	-843.56	1,233.42	0.00	0.00	0.00
PARKMAN									
4,170.57	30.69	316.85	3,860.00	926.12	-868.20	1,269.43	0.00	0.00	0.00
4,200.00	30.69	316.85	3,885.31	937.08	-878.47	1,284.45	0.00	0.00	0.00
4,300.00	30.69	316.85	3,971.30	974.31	-913.38	1,335.49	0.00	0.00	0.00
4,400.00	30.69	316.85	4,057.30	1,011.55	-948.28	1,386.53	0.00	0.00	0.00
4,500.00	30.69	316.85	4,143.29	1,048.78	-983.19	1,437.57	0.00	0.00	0.00
4,600.00	30.69	316.85	4,229.29	1,086.02	-1,018.10	1,488.61	0.00	0.00	0.00
4,700.00	30.69	316.85	4,315.28	1,123.25	-1,053.00	1,539.64	0.00	0.00	0.00
SUSSEX TOP									
4,792.70	30.69	316.85	4,395.00	1,157.77	-1,085.36	1,586.96	0.00	0.00	0.00
4,800.00	30.69	316.85	4,401.28	1,160.49	-1,087.91	1,590.68	0.00	0.00	0.00
4,900.00	30.69	316.85	4,487.27	1,197.72	-1,122.81	1,641.72	0.00	0.00	0.00
5,000.00	30.69	316.85	4,573.27	1,234.96	-1,157.72	1,692.76	0.00	0.00	0.00
5,100.00	30.69	316.85	4,659.26	1,272.19	-1,192.63	1,743.80	0.00	0.00	0.00
5,200.00	30.69	316.85	4,745.26	1,309.43	-1,227.53	1,794.84	0.00	0.00	0.00
SHANNON TOP									
5,272.96	30.69	316.85	4,808.00	1,336.59	-1,253.00	1,832.07	0.00	0.00	0.00
5,300.00	30.69	316.85	4,831.25	1,346.66	-1,262.44	1,845.87	0.00	0.00	0.00



Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well P_RASSMUSSEN 22-29
Company:	US ROCKIES REGION PLANNING	TVD Reference:	WELL @ 4949.00ft (Original Well Elev)
Project:	KERR MCGEE OIL & GAS ONSHORE LP	MD Reference:	WELL @ 4949.00ft (Original Well Elev)
Site:	WELD_RASMUSSEN 9 PAD	North Reference:	True
Well:	P_RASSMUSSEN 22-29	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_RASSMUSSEN 22-29		
Design:	PLAN #1 09-02-09 RHS		

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)
5,400.00	30.69	316.85	4,917.25	1,383.90	-1,297.35	1,896.91	0.00	0.00	0.00
5,500.00	30.69	316.85	5,003.24	1,421.13	-1,332.25	1,947.95	0.00	0.00	0.00
5,600.00	30.69	316.85	5,089.24	1,458.37	-1,367.16	1,998.99	0.00	0.00	0.00
5,700.00	30.69	316.85	5,175.23	1,495.60	-1,402.06	2,050.03	0.00	0.00	0.00
5,800.00	30.69	316.85	5,261.22	1,532.84	-1,436.97	2,101.06	0.00	0.00	0.00
5,900.00	30.69	316.85	5,347.22	1,570.07	-1,471.88	2,152.10	0.00	0.00	0.00
6,000.00	30.69	316.85	5,433.21	1,607.31	-1,506.78	2,203.14	0.00	0.00	0.00
6,100.00	30.69	316.85	5,519.21	1,644.54	-1,541.69	2,254.18	0.00	0.00	0.00
Start Drop -2.00									
6,121.69	30.69	316.85	5,537.86	1,652.62	-1,549.26	2,265.25	0.00	0.00	0.00
6,200.00	29.12	316.85	5,605.74	1,681.10	-1,575.96	2,304.29	2.00	-2.00	0.00
6,300.00	27.12	316.85	5,693.93	1,715.49	-1,608.20	2,351.43	2.00	-2.00	0.00
6,400.00	25.12	316.85	5,783.71	1,747.61	-1,638.31	2,395.45	2.00	-2.00	0.00
6,500.00	23.12	316.85	5,874.97	1,777.42	-1,666.26	2,436.32	2.00	-2.00	0.00
6,600.00	21.12	316.85	5,967.61	1,804.90	-1,692.02	2,473.98	2.00	-2.00	0.00
6,700.00	19.12	316.85	6,061.50	1,830.00	-1,715.55	2,508.38	2.00	-2.00	0.00
6,800.00	17.12	316.85	6,156.53	1,852.69	-1,736.82	2,539.49	2.00	-2.00	0.00
6,900.00	15.12	316.85	6,252.59	1,872.95	-1,755.81	2,567.26	2.00	-2.00	0.00
7,000.00	13.12	316.85	6,349.57	1,890.75	-1,772.50	2,591.65	2.00	-2.00	0.00
7,100.00	11.12	316.85	6,447.33	1,906.07	-1,786.86	2,612.65	2.00	-2.00	0.00
7,200.00	9.12	316.85	6,545.77	1,918.89	-1,798.88	2,630.23	2.00	-2.00	0.00
7,300.00	7.12	316.85	6,644.76	1,929.20	-1,808.54	2,644.36	2.00	-2.00	0.00
7,400.00	5.12	316.85	6,744.19	1,936.98	-1,815.84	2,655.03	2.00	-2.00	0.00
7,500.00	3.12	316.85	6,843.92	1,942.23	-1,820.76	2,662.22	2.00	-2.00	0.00
7,600.00	1.12	316.85	6,943.85	1,944.93	-1,823.29	2,665.92	2.00	-2.00	0.00
Start 681.00 hold at 7656.16 MD									
7,656.16	0.00	0.00	7,000.00	1,945.33	-1,823.67	2,666.47	2.00	-2.00	76.84
7,700.00	0.00	0.00	7,043.84	1,945.33	-1,823.67	2,666.47	0.00	0.00	0.00
7,800.00	0.00	0.00	7,143.84	1,945.33	-1,823.67	2,666.47	0.00	0.00	0.00
NIO A TOP									
7,882.16	0.00	0.00	7,226.00	1,945.33	-1,823.67	2,666.47	0.00	0.00	0.00
7,900.00	0.00	0.00	7,243.84	1,945.33	-1,823.67	2,666.47	0.00	0.00	0.00
8,000.00	0.00	0.00	7,343.84	1,945.33	-1,823.67	2,666.47	0.00	0.00	0.00
8,100.00	0.00	0.00	7,443.84	1,945.33	-1,823.67	2,666.47	0.00	0.00	0.00
CODELL TOP									
8,177.16	0.00	0.00	7,521.00	1,945.33	-1,823.67	2,666.47	0.00	0.00	0.00
8,200.00	0.00	0.00	7,543.84	1,945.33	-1,823.67	2,666.47	0.00	0.00	0.00
8,300.00	0.00	0.00	7,643.84	1,945.33	-1,823.67	2,666.47	0.00	0.00	0.00
PBHL_RASMUSSEN 22-29(2600 FNL 1560 FWL)50' TGT RAD									
8,337.16	0.00	0.00	7,681.00	1,945.33	-1,823.67	2,666.47	0.00	0.00	0.00

Design 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									
PBHL_RASMUSSEN	0.00	0.00	7,681.00	1,945.33	-1,823.67	1,283,169.03	3,131,112.86	40° 6' 35.064 N	105° 1' 52.464 W
- plan hits target center									
- Circle (radius 50.00)									



Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well P_RASSMUSSEN 22-29
Company:	US ROCKIES REGION PLANNING	TVD Reference:	WELL @ 4949.00ft (Original Well Elev)
Project:	KERR MCGEE OIL & GAS ONSHORE LP	MD Reference:	WELL @ 4949.00ft (Original Well Elev)
Site:	WELD_RASMUSSEN 9 PAD	North Reference:	True
Well:	P_RASSMUSSEN 22-29	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_RASSMUSSEN 22-29		
Design:	PLAN #1 09-02-09 RHS		

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name		Casing Diameter (in)	Hole Diameter (in)
835.00	835.00	8 5/8"		8.62	11.00

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
4,170.57	3,860.00	PARKMAN				
4,792.70	4,395.00	SUSSEX TOP				
5,272.96	4,808.00	SHANNON TOP				
7,882.16	7,226.00	NIO A TOP				
8,177.16	7,521.00	CODELL TOP				

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
935.00	935.00	0.00	0.00	Start Build 2.00	
2,469.46	2,397.14	292.71	-274.40	Start 3652.23 hold at 2469.46 MD	
6,121.69	5,537.86	1,652.62	-1,549.26	Start Drop -2.00	
7,656.16	7,000.00	1,945.33	-1,823.67	Start 681.00 hold at 7656.16 MD	
8,337.16	7,681.00	1,945.33	-1,823.67	TD at 8337.16	



US ROCKIES REGION PLANNING

**KERR MCGEE OIL & GAS ONSHORE LP
WELD_RASMUSSEN 9 PAD
P_RASSMUSSEN 22-29**

**P_RASSMUSSEN 22-29
PLAN #1 09-02-09 RHS**

Anticollision Report

02 September, 2009





Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_RASSMUSSEN 22-29
Project:	KERR MCGEE OIL & GAS ONSHORE LP	TVD Reference:	WELL @ 4949.00ft (Original Well Elev)
Reference Site:	WELD_RASMUSSEN 9 PAD	MD Reference:	WELL @ 4949.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_RASSMUSSEN 22-29	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_RASSMUSSEN 22-29	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 09-02-09 RHS	Offset TVD Reference:	Offset Datum

Reference	PLAN #1 09-02-09 RHS		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	Stations	Error Model:	ISCWSA
Depth Range:	0.00 to 20,000.00ft	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 10,000.00ft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma		

Survey Tool Program	Date 9/2/2009			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.00	8,337.16	PLAN #1 09-02-09 RHS (P_RASSMUSSEN 22-29)	MWD	MWD - Standard

Summary						
Site Name		Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
WELD_RASMUSSEN 9 PAD						
MILTON H. NELSON 'H' #1 EXISTING WELL - MILTON		935.00	935.00	104.02	66.95	2.806 CC
MILTON H. NELSON 'H' #1 EXISTING WELL - MILTON		1,100.00	1,099.91	108.56	64.59	2.469 ES
MILTON H. NELSON 'H' #1 EXISTING WELL - MILTON		1,200.00	1,199.62	115.77	67.71	2.409 SF
P_RASMUSSEN 10-29 - P_RASMUSSEN 10-29 - PLAN		733.33	733.33	14.58	11.55	4.800 CC, ES
P_RASMUSSEN 10-29 - P_RASMUSSEN 10-29 - PLAN		800.00	799.74	15.02	11.68	4.500 SF
P_RASMUSSEN 16-29 - P_RASMUSSEN 16-29 - PLAN		940.90	941.06	58.10	54.16	14.740 CC, ES
P_RASMUSSEN 16-29 - P_RASMUSSEN 16-29 - PLAN		1,100.00	1,098.99	63.29	58.66	13.656 SF
P_RASMUSSEN 20-29 - P_RASMUSSEN 20-29 - PLAN		966.08	966.41	11.13	7.05	2.731 CC, ES, SF
P_RASMUSSEN 23-29 - P_RASMUSSEN 23-29 - PLAN		1,219.75	1,222.15	34.11	28.80	6.432 CC, ES
P_RASMUSSEN 23-29 - P_RASMUSSEN 23-29 - PLAN		2,600.00	2,593.66	73.58	51.78	3.376 SF
P_RASMUSSEN 25-29 - P_RASMUSSEN 25-29 - PLAN		935.00	935.00	32.79	28.84	8.311 CC
P_RASMUSSEN 25-29 - P_RASMUSSEN 25-29 - PLAN		1,000.00	999.32	32.92	28.69	7.779 ES
P_RASMUSSEN 25-29 - P_RASMUSSEN 25-29 - PLAN		1,300.00	1,296.02	37.67	32.08	6.748 SF
P_RASMUSSEN 36-29 - P_RASMUSSEN 36-29 - PLAN		758.34	758.34	72.91	69.75	23.141 CC
P_RASMUSSEN 36-29 - P_RASMUSSEN 36-29 - PLAN		800.00	799.65	72.95	69.62	21.894 ES
P_RASMUSSEN 36-29 - P_RASMUSSEN 36-29 - PLAN		1,000.00	995.70	79.46	75.31	19.157 SF
P_RASMUSSEN 37-29 - P_RASMUSSEN 37-29 - PLAN		762.96	762.96	87.46	84.29	27.580 CC
P_RASMUSSEN 37-29 - P_RASMUSSEN 37-29 - PLAN		800.00	799.82	87.47	84.14	26.229 ES
P_RASMUSSEN 37-29 - P_RASMUSSEN 37-29 - PLAN		1,000.00	995.72	92.85	88.70	22.366 SF
P_RASMUSSEN 39-29 - P_RASMUSSEN 39-29 - PLAN		955.34	955.62	28.18	24.16	7.021 CC, ES
P_RASMUSSEN 39-29 - P_RASMUSSEN 39-29 - PLAN		1,000.00	1,000.16	28.64	24.43	6.807 SF

Offset Design		WELD_RASMUSSEN 9 PAD - MILTON H. NELSON 'H' #1 EXISTING WELL - MILTON H. NELSON 'H'										Offset Site Error:		0.00 ft			
Survey Program: 0-UNKNOWN														Offset Well Error:		0.00 ft	
Reference		Offset		Semi Major Axis			Distance							Warning			
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor					
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)						
0.00	0.00	0.00	0.00	0.00	0.00	154.07	-93.55	45.49	104.02								
100.00	100.00	100.00	100.00	0.10	1.70	154.07	-93.55	45.49	104.02	102.22	1.80	57.932					
200.00	200.00	200.00	200.00	0.32	5.70	154.07	-93.55	45.49	104.02	98.00	6.02	17.278					
300.00	300.00	300.00	300.00	0.55	9.70	154.07	-93.55	45.49	104.02	93.77	10.25	10.153					
400.00	400.00	400.00	400.00	0.77	13.70	154.07	-93.55	45.49	104.02	89.55	14.47	7.189					
500.00	500.00	500.00	500.00	0.99	17.70	154.07	-93.55	45.49	104.02	85.32	18.69	5.564					
600.00	600.00	600.00	600.00	1.22	21.70	154.07	-93.55	45.49	104.02	81.10	22.92	4.538					

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Weatherford International Ltd.

Anticollision Report



Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_RASSMUSSEN 22-29
Project:	KERR MCGEE OIL & GAS ONSHORE LP	TVD Reference:	WELL @ 4949.00ft (Original Well Elev)
Reference Site:	WELD_RASMUSSEN 9 PAD	MD Reference:	WELL @ 4949.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_RASSMUSSEN 22-29	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_RASSMUSSEN 22-29	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 09-02-09 RHS	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 ft
Survey Program: 0-UNKNOWN												Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis			Distance						
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)	Minimum Separation (ft)	Separation Factor	Warning
700.00	700.00	700.00	700.00	1.44	25.70	154.07	-93.55	45.49	104.02	76.87	27.14	3.832	
800.00	800.00	800.00	800.00	1.67	29.70	154.07	-93.55	45.49	104.02	72.65	31.37	3.316	
900.00	900.00	900.00	900.00	1.89	33.70	154.07	-93.55	45.49	104.02	68.42	35.59	2.922	
935.00	935.00	935.00	935.00	1.97	35.10	154.07	-93.55	45.49	104.02	66.95	37.07	2.806 CC	
1,000.00	999.99	999.99	999.99	2.12	37.70	-162.90	-93.55	45.49	104.72	64.91	39.81	2.631	
1,100.00	1,099.91	1,099.91	1,099.91	2.34	41.70	-163.50	-93.55	45.49	108.56	64.59	43.97	2.469 ES	
1,200.00	1,199.62	1,199.62	1,199.62	2.56	45.68	-164.51	-93.55	45.49	115.77	67.71	48.07	2.409 SF	
1,300.00	1,299.01	1,299.01	1,299.01	2.81	49.66	-165.79	-93.55	45.49	126.39	74.31	52.07	2.427	
1,400.00	1,397.96	1,397.96	1,397.96	3.07	53.62	-167.17	-93.55	45.49	140.43	84.46	55.97	2.509	
1,500.00	1,496.34	1,496.34	1,496.34	3.37	57.55	-168.54	-93.55	45.49	157.92	98.19	59.73	2.644	
1,600.00	1,594.04	1,594.04	1,594.04	3.72	61.46	-169.82	-93.55	45.49	178.86	115.51	63.35	2.823	
1,700.00	1,690.94	1,690.94	1,690.94	4.11	65.34	-170.97	-93.55	45.49	203.24	136.43	66.81	3.042	
1,800.00	1,786.92	1,786.92	1,786.92	4.57	69.18	-171.98	-93.55	45.49	231.02	160.93	70.09	3.296	
1,900.00	1,881.85	1,881.85	1,881.85	5.09	72.97	-172.86	-93.55	45.49	262.17	188.99	73.18	3.583	
2,000.00	1,975.64	1,975.64	1,975.64	5.68	76.73	-173.61	-93.55	45.49	296.65	220.59	76.06	3.900	
2,100.00	2,068.15	2,068.15	2,068.15	6.33	80.43	-174.25	-93.55	45.49	334.41	255.69	78.72	4.248	
2,200.00	2,159.29	2,159.29	2,159.29	7.07	84.07	-174.80	-93.55	45.49	375.40	294.25	81.15	4.626	
2,300.00	2,248.93	2,248.93	2,248.93	7.87	87.66	-175.27	-93.55	45.49	419.58	336.23	83.34	5.034	
2,400.00	2,336.98	2,336.98	2,336.98	8.75	91.18	-175.67	-93.55	45.49	466.87	381.59	85.28	5.475	
2,469.46	2,397.14	2,397.14	2,397.14	9.40	93.59	-175.91	-93.55	45.49	501.52	415.05	86.47	5.800	
2,500.00	2,423.40	2,423.40	2,423.40	9.70	94.64	-176.03	-93.55	45.49	517.08	429.60	87.48	5.911	
2,600.00	2,509.39	2,509.39	2,509.39	10.68	98.08	-176.39	-93.55	45.49	568.03	477.23	90.80	6.256	
2,700.00	2,595.39	2,595.39	2,595.39	11.68	101.52	-176.69	-93.55	45.49	619.00	524.88	94.13	6.576	
2,800.00	2,681.38	2,681.38	2,681.38	12.68	104.96	-176.94	-93.55	45.49	669.98	572.52	97.46	6.874	
2,900.00	2,767.38	2,767.38	2,767.38	13.70	108.40	-177.15	-93.55	45.49	720.97	620.17	100.80	7.152	
3,000.00	2,853.37	2,853.37	2,853.37	14.72	111.83	-177.34	-93.55	45.49	771.97	667.82	104.15	7.412	
3,100.00	2,939.36	2,939.36	2,939.36	15.74	115.27	-177.51	-93.55	45.49	822.97	715.47	107.50	7.656	
3,200.00	3,025.36	3,025.36	3,025.36	16.77	118.71	-177.65	-93.55	45.49	873.97	763.12	110.85	7.884	
3,300.00	3,111.35	3,111.35	3,111.35	17.81	122.15	-177.78	-93.55	45.49	924.98	810.77	114.20	8.099	
3,400.00	3,197.35	3,197.35	3,197.35	18.85	125.59	-177.90	-93.55	45.49	975.99	858.43	117.56	8.302	
3,500.00	3,283.34	3,283.34	3,283.34	19.89	129.03	-178.00	-93.55	45.49	1,027.00	906.08	120.92	8.493	
3,600.00	3,369.34	3,369.34	3,369.34	20.93	132.47	-178.10	-93.55	45.49	1,078.02	953.73	124.29	8.674	
3,700.00	3,455.33	3,455.33	3,455.33	21.97	135.91	-178.18	-93.55	45.49	1,129.04	1,001.39	127.65	8.845	
3,800.00	3,541.33	3,541.33	3,541.33	23.02	139.35	-178.26	-93.55	45.49	1,180.06	1,049.04	131.02	9.007	
3,900.00	3,627.32	3,627.32	3,627.32	24.06	142.79	-178.33	-93.55	45.49	1,231.08	1,096.70	134.38	9.161	
4,000.00	3,713.32	3,713.32	3,713.32	25.11	146.23	-178.40	-93.55	45.49	1,282.10	1,144.35	137.75	9.307	
4,100.00	3,799.31	3,799.31	3,799.31	26.16	149.67	-178.46	-93.55	45.49	1,333.13	1,192.01	141.12	9.447	
4,200.00	3,885.31	3,885.31	3,885.31	27.21	153.11	-178.52	-93.55	45.49	1,384.15	1,239.66	144.49	9.580	
4,300.00	3,971.30	3,971.30	3,971.30	28.26	156.55	-178.57	-93.55	45.49	1,435.18	1,287.32	147.86	9.706	
4,400.00	4,057.30	4,057.30	4,057.30	29.31	159.99	-178.62	-93.55	45.49	1,486.20	1,334.97	151.23	9.827	
4,500.00	4,143.29	4,143.29	4,143.29	30.36	163.43	-178.67	-93.55	45.49	1,537.23	1,382.63	154.61	9.943	
4,600.00	4,229.29	4,229.29	4,229.29	31.42	166.87	-178.71	-93.55	45.49	1,588.26	1,430.28	157.98	10.054	
4,700.00	4,315.28	4,315.28	4,315.28	32.47	170.31	-178.75	-93.55	45.49	1,639.29	1,477.94	161.35	10.160	
4,800.00	4,401.28	4,401.28	4,401.28	33.52	173.75	-178.79	-93.55	45.49	1,690.32	1,525.59	164.73	10.261	
4,900.00	4,487.27	4,487.27	4,487.27	34.58	177.19	-178.82	-93.55	45.49	1,741.35	1,573.24	168.10	10.359	
5,000.00	4,573.27	4,573.27	4,573.27	35.63	180.63	-178.86	-93.55	45.49	1,792.38	1,620.90	171.48	10.452	
5,100.00	4,659.26	4,659.26	4,659.26	36.69	184.07	-178.89	-93.55	45.49	1,843.41	1,668.55	174.86	10.542	
5,200.00	4,745.26	4,745.26	4,745.26	37.74	187.51	-178.92	-93.55	45.49	1,894.44	1,716.21	178.23	10.629	
5,300.00	4,831.25	4,831.25	4,831.25	38.80	190.95	-178.95	-93.55	45.49	1,945.47	1,763.86	181.61	10.712	
5,400.00	4,917.25	4,917.25	4,917.25	39.86	194.39	-178.97	-93.55	45.49	1,996.50	1,811.52	184.99	10.793	
5,500.00	5,003.24	5,003.24	5,003.24	40.91	197.83	-179.00	-93.55	45.49	2,047.54	1,859.17	188.36	10.870	
5,600.00	5,089.24	5,089.24	5,089.24	41.97	201.27	-179.02	-93.55	45.49	2,098.57	1,906.83	191.74	10.945	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_RASSMUSSEN 22-29
Project:	KERR MCGEE OIL & GAS ONSHORE LP	TVD Reference:	WELL @ 4949.00ft (Original Well Elev)
Reference Site:	WELD_RASMUSSEN 9 PAD	MD Reference:	WELL @ 4949.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_RASSMUSSEN 22-29	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_RASSMUSSEN 22-29	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 09-02-09 RHS	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 ft
Survey Program: 0-UNKNOWN												Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis			Distance						
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)	Minimum Separation (ft)	Separation Factor	Warning
5,700.00	5,175.23	5,175.23	5,175.23	43.03	204.71	-179.05	-93.55	45.49	2,149.60	1,954.48	195.12	11.017	
5,800.00	5,261.22	5,261.22	5,261.22	44.08	208.15	-179.07	-93.55	45.49	2,200.64	2,002.14	198.50	11.086	
5,900.00	5,347.22	5,347.22	5,347.22	45.14	211.59	-179.09	-93.55	45.49	2,251.67	2,049.79	201.88	11.154	
6,000.00	5,433.21	5,433.21	5,433.21	46.20	215.03	-179.11	-93.55	45.49	2,302.70	2,097.45	205.25	11.219	
6,100.00	5,519.21	5,519.21	5,519.21	47.25	218.47	-179.13	-93.55	45.49	2,353.74	2,145.10	208.63	11.282	
6,121.69	5,537.86	5,537.86	5,537.86	47.48	219.21	-179.13	-93.55	45.49	2,364.81	2,155.44	209.37	11.295	
6,200.00	5,605.74	5,605.74	5,605.74	48.22	221.93	-179.16	-93.55	45.49	2,403.84	2,188.90	214.94	11.184	
6,300.00	5,693.93	5,693.93	5,693.93	49.01	225.46	-179.19	-93.55	45.49	2,450.98	2,229.01	221.96	11.042	
6,400.00	5,783.71	5,783.71	5,783.71	49.75	229.05	-179.22	-93.55	45.49	2,495.00	2,265.98	229.02	10.894	
6,500.00	5,874.97	5,874.97	5,874.97	50.44	232.70	-179.24	-93.55	45.49	2,535.86	2,299.91	235.95	10.747	
6,600.00	5,967.61	5,967.61	5,967.61	51.08	236.40	-179.27	-93.55	45.49	2,573.52	2,330.79	242.73	10.602	
6,700.00	6,061.50	6,061.50	6,061.50	51.66	240.16	-179.28	-93.55	45.49	2,607.92	2,358.59	249.33	10.460	
6,800.00	6,156.53	6,156.53	6,156.53	52.18	243.96	-179.30	-93.55	45.49	2,639.02	2,383.27	255.75	10.319	
6,900.00	6,252.59	6,252.59	6,252.59	52.65	247.80	-179.31	-93.55	45.49	2,666.79	2,404.84	261.95	10.181	
7,000.00	6,349.57	6,349.57	6,349.57	53.07	251.68	-179.33	-93.55	45.49	2,691.19	2,423.27	267.92	10.045	
7,100.00	6,447.33	6,447.33	6,447.33	53.43	255.59	-179.34	-93.55	45.49	2,712.19	2,438.55	273.64	9.912	
7,200.00	6,545.77	6,545.77	6,545.77	53.74	259.53	-179.35	-93.55	45.49	2,729.76	2,450.68	279.08	9.781	
7,300.00	6,644.76	6,644.76	6,644.76	53.99	263.49	-179.35	-93.55	45.49	2,743.89	2,459.65	284.24	9.653	
7,400.00	6,744.19	6,744.19	6,744.19	54.20	267.47	-179.36	-93.55	45.49	2,754.55	2,465.47	289.08	9.529	
7,500.00	6,843.92	6,843.92	6,843.92	54.35	271.46	-179.36	-93.55	45.49	2,761.74	2,468.15	293.59	9.407	
7,600.00	6,943.85	6,943.85	6,943.85	54.46	275.45	-179.36	-93.55	45.49	2,765.45	2,467.70	297.75	9.288	
7,656.16	7,000.00	7,000.00	7,000.00	54.49	277.70	137.49	-93.55	45.49	2,766.00	2,466.08	299.92	9.222	
7,700.00	7,043.84	7,043.84	7,043.84	54.52	279.45	137.49	-93.55	45.49	2,766.00	2,464.27	301.73	9.167	
7,800.00	7,143.84	7,143.84	7,143.84	54.58	283.45	137.49	-93.55	45.49	2,766.00	2,460.13	305.86	9.043	
7,900.00	7,243.84	7,243.84	7,243.84	54.64	287.45	137.49	-93.55	45.49	2,766.00	2,456.00	310.00	8.923	
8,000.00	7,343.84	7,343.84	7,343.84	54.70	291.45	137.49	-93.55	45.49	2,766.00	2,451.86	314.14	8.805	
8,100.00	7,443.84	7,443.84	7,443.84	54.77	295.45	137.49	-93.55	45.49	2,766.00	2,447.72	318.28	8.690	
8,200.00	7,543.84	7,543.84	7,543.84	54.83	299.45	137.49	-93.55	45.49	2,766.00	2,443.58	322.42	8.579	
8,300.00	7,643.84	7,643.84	7,643.84	54.90	303.45	137.49	-93.55	45.49	2,766.00	2,439.43	326.56	8.470	
8,337.16	7,681.00	7,681.00	7,681.00	54.92	304.94	137.49	-93.55	45.49	2,766.00	2,437.89	328.10	8.430	



Weatherford International Ltd.

Anticollision Report



Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_RASSMUSSEN 22-29
Project:	KERR MCGEE OIL & GAS ONSHORE LP	TVD Reference:	WELL @ 4949.00ft (Original Well Elev)
Reference Site:	WELD_RASMUSSEN 9 PAD	MD Reference:	WELL @ 4949.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_RASSMUSSEN 22-29	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_RASSMUSSEN 22-29	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 09-02-09 RHS	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 ft
Survey Program: 0-MWD												Offset Well Error:	0.00 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)	Minimum Separation (ft)	Separation Factor	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.58	0.00	14.58				
100.00	100.00	100.00	100.00	0.10	0.10	0.00	14.58	0.00	14.58	14.39	0.19	76.334	
200.00	200.00	200.00	200.00	0.32	0.32	0.00	14.58	0.00	14.58	13.94	0.64	22.766	
300.00	300.00	300.00	300.00	0.55	0.55	0.00	14.58	0.00	14.58	13.49	1.09	13.378	
400.00	400.00	400.00	400.00	0.77	0.77	0.00	14.58	0.00	14.58	13.04	1.54	9.472	
500.00	500.00	500.00	500.00	0.99	0.99	0.00	14.58	0.00	14.58	12.59	1.99	7.332	
600.00	600.00	600.00	600.00	1.22	1.22	0.00	14.58	0.00	14.58	12.15	2.44	5.980	
700.00	700.00	700.00	700.00	1.44	1.44	0.00	14.58	0.00	14.58	11.70	2.89	5.049	
733.33	733.33	733.33	733.33	1.52	1.52	0.00	14.58	0.00	14.58	11.55	3.04	4.800 CC, ES	
800.00	800.00	799.74	799.74	1.67	1.67	-0.02	15.02	-0.01	15.02	11.68	3.34	4.500 SF	
900.00	900.00	899.11	899.04	1.89	1.89	-0.17	18.46	-0.05	18.49	14.70	3.78	4.885	
935.00	935.00	933.81	933.68	1.97	1.97	-0.23	20.48	-0.08	20.52	16.58	3.94	5.205	
1,000.00	999.99	998.15	997.84	2.12	2.12	43.90	25.32	-0.15	24.88	20.65	4.23	5.882	
1,100.00	1,099.91	1,096.86	1,096.01	2.34	2.35	48.17	35.55	-0.29	32.46	27.79	4.67	6.946	
1,200.00	1,199.62	1,195.14	1,193.35	2.56	2.61	53.74	49.09	-0.48	41.41	36.28	5.13	8.079	
1,300.00	1,299.01	1,292.91	1,289.67	2.81	2.90	59.43	65.87	-0.71	52.07	46.47	5.60	9.297	
1,400.00	1,397.96	1,390.10	1,384.79	3.07	3.23	64.69	85.79	-0.99	64.71	58.60	6.12	10.576	
1,500.00	1,496.34	1,486.63	1,478.54	3.37	3.60	69.32	108.76	-1.31	79.49	72.80	6.70	11.866	
1,600.00	1,594.04	1,582.42	1,570.75	3.72	4.02	73.28	134.66	-1.67	96.49	89.13	7.36	13.111	
1,700.00	1,690.94	1,677.41	1,661.29	4.11	4.50	76.62	163.38	-2.06	115.73	107.62	8.11	14.263	
1,800.00	1,786.92	1,771.54	1,750.03	4.57	5.02	79.42	194.78	-2.50	137.21	128.23	8.97	15.291	
1,900.00	1,881.85	1,864.76	1,836.84	5.09	5.60	81.76	228.73	-2.97	160.89	150.95	9.94	16.183	
2,000.00	1,975.64	1,957.02	1,921.63	5.68	6.21	83.71	265.10	-3.48	186.75	175.73	11.02	16.947	
2,100.00	2,068.15	2,052.08	2,008.16	6.33	6.90	85.64	304.43	-4.02	214.04	201.80	12.23	17.495	
2,200.00	2,159.29	2,147.62	2,095.12	7.07	7.60	87.85	344.00	-4.57	241.54	227.97	13.57	17.801	
2,300.00	2,248.93	2,242.78	2,181.73	7.87	8.31	90.23	383.42	-5.12	269.49	254.48	15.01	17.956	
2,400.00	2,336.98	2,337.42	2,267.87	8.75	9.03	92.72	422.62	-5.66	298.16	281.62	16.54	18.027	
2,469.46	2,397.14	2,402.81	2,327.38	9.40	9.53	94.48	449.71	-6.04	318.64	301.00	17.65	18.055	
2,500.00	2,423.40	2,431.48	2,353.48	9.70	9.75	95.42	461.58	-6.20	327.81	309.66	18.15	18.059	
2,600.00	2,509.39	2,525.37	2,438.94	10.68	10.47	98.17	500.47	-6.74	358.34	338.54	19.80	18.098	
2,700.00	2,595.39	2,619.27	2,524.39	11.68	11.20	100.49	539.37	-7.28	389.52	368.07	21.44	18.164	
2,800.00	2,681.38	2,713.16	2,609.85	12.68	11.93	102.47	578.26	-7.82	421.20	398.11	23.09	18.245	
2,900.00	2,767.38	2,807.05	2,695.31	13.70	12.67	104.18	617.15	-8.36	453.28	428.55	24.72	18.335	
3,000.00	2,853.37	2,900.94	2,780.77	14.72	13.40	105.67	656.04	-8.90	485.68	459.32	26.36	18.428	
3,100.00	2,939.36	2,994.84	2,866.22	15.74	14.14	106.97	694.94	-9.44	518.33	490.35	27.98	18.522	
3,200.00	3,025.36	3,088.73	2,951.68	16.77	14.88	108.11	733.83	-9.98	551.21	521.60	29.61	18.615	
3,300.00	3,111.35	3,182.62	3,037.14	17.81	15.62	109.13	772.72	-10.52	584.25	553.02	31.23	18.706	
3,400.00	3,197.35	3,276.52	3,122.60	18.85	16.36	110.05	811.61	-11.06	617.45	584.60	32.85	18.794	
3,500.00	3,283.34	3,370.41	3,208.05	19.89	17.11	110.87	850.50	-11.60	650.78	616.30	34.47	18.878	
3,600.00	3,369.34	3,464.30	3,293.51	20.93	17.85	111.61	889.40	-12.14	684.21	648.12	36.09	18.959	
3,700.00	3,455.33	3,558.20	3,378.97	21.97	18.60	112.28	928.29	-12.68	717.73	680.03	37.70	19.036	
3,800.00	3,541.33	3,652.18	3,464.51	23.02	19.34	112.89	967.22	-13.22	751.33	712.02	39.32	19.110	
3,900.00	3,627.32	3,752.58	3,556.62	24.06	19.98	113.62	1,007.15	-13.77	784.61	743.79	40.81	19.224	
4,000.00	3,713.32	3,852.84	3,649.94	25.11	20.54	114.54	1,043.78	-14.28	817.24	775.02	42.22	19.357	
4,100.00	3,799.31	3,952.69	3,744.10	26.16	21.07	115.62	1,077.00	-14.74	849.34	805.78	43.56	19.500	
4,200.00	3,885.31	4,051.91	3,838.75	27.21	21.55	116.85	1,106.74	-15.16	881.06	836.24	44.82	19.659	
4,300.00	3,971.30	4,150.27	3,933.55	28.26	21.99	118.19	1,132.96	-15.52	912.55	866.56	45.99	19.843	
4,400.00	4,057.30	4,247.55	4,028.12	29.31	22.38	119.64	1,155.69	-15.83	943.97	896.90	47.07	20.055	
4,500.00	4,143.29	4,343.54	4,122.16	30.36	22.73	121.16	1,174.95	-16.10	975.51	927.46	48.05	20.302	
4,600.00	4,229.29	4,438.06	4,215.33	31.42	23.03	122.76	1,190.83	-16.32	1,007.34	958.41	48.93	20.589	
4,700.00	4,315.28	4,530.95	4,307.36	32.47	23.28	124.40	1,203.43	-16.50	1,039.63	989.93	49.70	20.920	
4,800.00	4,401.28	4,622.05	4,397.96	33.52	23.49	126.07	1,212.88	-16.63	1,072.56	1,022.20	50.36	21.297	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Weatherford International Ltd.
Anticollision Report



Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_RASSMUSSEN 22-29
Project:	KERR MCGEE OIL & GAS ONSHORE LP	TVD Reference:	WELL @ 4949.00ft (Original Well Elev)
Reference Site:	WELD_RASMUSSEN 9 PAD	MD Reference:	WELL @ 4949.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_RASSMUSSEN 22-29	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_RASSMUSSEN 22-29	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 09-02-09 RHS	Offset TVD Reference:	Offset Datum

Offset Design WELD_RASMUSSEN 9 PAD - P_RASMUSSEN 10-29 - P_RASMUSSEN 10-29 - PLAN #1 09-02-09 R												Offset Site Error:	0.00 ft
Survey Program: 0-MWD												Offset Well Error:	0.00 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)	Minimum Separation (ft)	Separation Factor	
4,900.00	4,487.27	4,711.24	4,486.91	34.58	23.66	127.77	1,219.34	-16.72	1,106.31	1,055.38	50.93	21.724	
5,000.00	4,573.27	4,798.41	4,574.00	35.63	23.78	129.48	1,222.98	-16.77	1,141.01	1,089.63	51.39	22.204	
5,100.00	4,659.26	4,883.67	4,659.26	36.69	23.87	131.19	1,223.99	-16.78	1,176.83	1,125.08	51.75	22.740	
5,200.00	4,745.26	4,969.67	4,745.26	37.74	23.94	132.87	1,223.99	-16.78	1,213.76	1,161.70	52.06	23.316	
5,300.00	4,831.25	5,055.66	4,831.25	38.80	24.02	134.46	1,223.99	-16.78	1,251.68	1,199.34	52.34	23.915	
5,400.00	4,917.25	5,141.66	4,917.25	39.86	24.09	135.98	1,223.99	-16.78	1,290.51	1,237.91	52.60	24.534	
5,500.00	5,003.24	5,227.65	5,003.24	40.91	24.17	137.41	1,223.99	-16.78	1,330.16	1,277.31	52.85	25.170	
5,600.00	5,089.24	5,313.65	5,089.24	41.97	24.25	138.77	1,223.99	-16.78	1,370.56	1,317.48	53.08	25.820	
5,700.00	5,175.23	5,399.64	5,175.23	43.03	24.33	140.06	1,223.99	-16.78	1,411.66	1,358.35	53.31	26.480	
5,800.00	5,261.22	5,485.64	5,261.22	44.08	24.42	141.28	1,223.99	-16.78	1,453.38	1,399.85	53.53	27.150	
5,900.00	5,347.22	5,571.63	5,347.22	45.14	24.50	142.45	1,223.99	-16.78	1,495.68	1,441.93	53.75	27.826	
6,000.00	5,433.21	5,657.63	5,433.21	46.20	24.59	143.55	1,223.99	-16.78	1,538.52	1,484.55	53.97	28.508	
6,100.00	5,519.21	5,743.62	5,519.21	47.25	24.67	144.60	1,223.99	-16.78	1,581.84	1,527.65	54.19	29.193	
6,121.69	5,537.86	5,762.28	5,537.86	47.48	24.69	144.82	1,223.99	-16.78	1,591.29	1,537.06	54.23	29.341	
6,200.00	5,605.74	5,830.15	5,605.74	48.22	24.76	146.00	1,223.99	-16.78	1,624.81	1,570.47	54.34	29.901	
6,300.00	5,693.93	5,918.34	5,693.93	49.01	24.85	147.36	1,223.99	-16.78	1,665.59	1,611.15	54.44	30.594	
6,400.00	5,783.71	6,008.12	5,783.71	49.75	24.94	148.57	1,223.99	-16.78	1,703.98	1,649.42	54.56	31.234	
6,500.00	5,874.97	6,099.39	5,874.97	50.44	25.04	149.65	1,223.99	-16.78	1,739.85	1,685.17	54.68	31.819	
6,600.00	5,967.61	6,192.02	5,967.61	51.08	25.14	150.60	1,223.99	-16.78	1,773.09	1,718.29	54.81	32.352	
6,700.00	6,061.50	6,285.91	6,061.50	51.66	25.24	151.44	1,223.99	-16.78	1,803.62	1,748.69	54.93	32.834	
6,800.00	6,156.53	6,380.94	6,156.53	52.18	25.35	152.17	1,223.99	-16.78	1,831.33	1,776.28	55.05	33.265	
6,900.00	6,252.59	6,477.01	6,252.59	52.65	25.46	152.80	1,223.99	-16.78	1,856.17	1,801.00	55.17	33.646	
7,000.00	6,349.57	6,573.98	6,349.57	53.07	25.57	153.34	1,223.99	-16.78	1,878.06	1,822.79	55.27	33.980	
7,100.00	6,447.33	6,671.74	6,447.33	53.43	25.68	153.80	1,223.99	-16.78	1,896.95	1,841.59	55.36	34.268	
7,200.00	6,545.77	6,770.18	6,545.77	53.74	25.79	154.17	1,223.99	-16.78	1,912.79	1,857.36	55.43	34.509	
7,300.00	6,644.76	6,869.17	6,644.76	53.99	25.91	154.46	1,223.99	-16.78	1,925.55	1,870.06	55.48	34.706	
7,400.00	6,744.19	6,968.60	6,744.19	54.20	26.03	154.68	1,223.99	-16.78	1,935.19	1,879.67	55.52	34.857	
7,500.00	6,843.92	7,068.33	6,843.92	54.35	26.15	154.83	1,223.99	-16.78	1,941.70	1,886.16	55.53	34.964	
7,600.00	6,943.85	7,168.26	6,943.85	54.46	26.27	154.90	1,223.99	-16.78	1,945.05	1,889.52	55.53	35.025	
7,656.16	7,000.00	7,224.41	7,000.00	54.49	26.34	111.76	1,223.99	-16.78	1,945.55	1,890.02	55.53	35.038	
7,700.00	7,043.84	7,268.26	7,043.84	54.52	26.39	111.76	1,223.99	-16.78	1,945.55	1,889.92	55.62	34.977	
7,800.00	7,143.84	7,368.26	7,143.84	54.58	26.52	111.76	1,223.99	-16.78	1,945.55	1,889.70	55.85	34.834	
7,900.00	7,243.84	7,468.26	7,243.84	54.64	26.64	111.76	1,223.99	-16.78	1,945.55	1,889.47	56.08	34.691	
8,000.00	7,343.84	7,568.26	7,343.84	54.70	26.77	111.76	1,223.99	-16.78	1,945.55	1,889.23	56.32	34.547	
8,100.00	7,443.84	7,668.26	7,443.84	54.77	26.90	111.76	1,223.99	-16.78	1,945.55	1,889.00	56.55	34.403	
8,200.00	7,543.84	7,768.26	7,543.84	54.83	27.03	111.76	1,223.99	-16.78	1,945.55	1,888.76	56.79	34.259	
8,300.00	7,643.84	7,868.26	7,643.84	54.90	27.16	111.76	1,223.99	-16.78	1,945.55	1,888.52	57.03	34.114	
8,337.16	7,681.00	7,905.41	7,681.00	54.92	27.20	111.76	1,223.99	-16.78	1,945.55	1,888.43	57.12	34.060	



Weatherford International Ltd.

Anticollision Report



Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_RASSMUSSEN 22-29
Project:	KERR MCGEE OIL & GAS ONSHORE LP	TVD Reference:	WELL @ 4949.00ft (Original Well Elev)
Reference Site:	WELD_RASMUSSEN 9 PAD	MD Reference:	WELL @ 4949.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_RASSMUSSEN 22-29	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_RASSMUSSEN 22-29	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 09-02-09 RHS	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 ft
Survey Program: 0-MWD													Offset Well Error:	0.00 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)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	0.00	0.00	0.00	-177.25	-58.28	-2.80	58.35					
100.00	100.00	100.00	100.00	0.10	0.10	-177.25	-58.28	-2.80	58.35	58.16	0.19	305.402		
200.00	200.00	200.00	200.00	0.32	0.32	-177.25	-58.28	-2.80	58.35	57.71	0.64	91.085		
300.00	300.00	300.00	300.00	0.55	0.55	-177.25	-58.28	-2.80	58.35	57.26	1.09	53.524		
400.00	400.00	400.00	400.00	0.77	0.77	-177.25	-58.28	-2.80	58.35	56.81	1.54	37.897		
500.00	500.00	500.00	500.00	0.99	0.99	-177.25	-58.28	-2.80	58.35	56.36	1.99	29.332		
600.00	600.00	600.00	600.00	1.22	1.22	-177.25	-58.28	-2.80	58.35	55.91	2.44	23.926		
700.00	700.00	700.00	700.00	1.44	1.44	-177.25	-58.28	-2.80	58.35	55.46	2.89	20.202		
800.00	800.00	800.02	800.02	1.67	1.67	-177.27	-58.28	-2.78	58.35	55.01	3.34	17.488		
900.00	900.00	900.16	900.14	1.89	1.87	-179.33	-58.18	-0.68	58.18	54.42	3.76	15.463		
935.00	935.00	935.16	935.10	1.97	1.94	179.14	-58.10	0.88	58.11	54.19	3.91	14.843		
940.90	940.90	941.06	940.99	1.99	1.96	-138.02	-58.08	1.18	58.10	54.16	3.94	14.740 CC, ES		
1,000.00	999.99	1,000.00	999.81	2.12	2.08	-142.11	-57.90	4.89	58.69	54.49	4.20	13.984		
1,100.00	1,099.91	1,098.99	1,098.39	2.34	2.31	-152.43	-57.46	13.83	63.29	58.66	4.63	13.656 SF		
1,200.00	1,199.62	1,196.55	1,195.19	2.56	2.55	-164.26	-56.86	25.97	74.35	69.27	5.08	14.646		
1,300.00	1,299.01	1,292.15	1,289.58	2.81	2.83	-174.66	-56.11	41.05	93.09	87.58	5.51	16.888		
1,400.00	1,397.96	1,385.30	1,381.03	3.07	3.13	177.44	-55.24	58.76	119.45	113.51	5.94	20.106		
1,500.00	1,496.34	1,475.57	1,469.04	3.37	3.47	171.77	-54.25	78.74	152.81	146.44	6.37	24.005		
1,600.00	1,594.04	1,562.58	1,553.25	3.72	3.85	167.71	-53.17	100.62	192.50	185.71	6.79	28.348		
1,700.00	1,690.94	1,646.03	1,633.35	4.11	4.25	164.74	-52.01	123.99	237.98	230.76	7.22	32.972		
1,800.00	1,786.92	1,725.68	1,709.13	4.57	4.67	162.47	-50.80	148.47	288.78	281.14	7.65	37.760		
1,900.00	1,881.85	1,800.00	1,779.21	5.09	5.10	160.70	-49.58	173.19	344.53	336.45	8.08	42.645		
2,000.00	1,975.64	1,872.90	1,847.30	5.68	5.58	159.19	-48.29	199.20	404.83	396.30	8.53	47.457		
2,100.00	2,068.15	1,940.29	1,909.63	6.33	6.05	157.90	-47.03	224.78	469.38	460.39	8.99	52.233		
2,200.00	2,159.29	2,006.56	1,970.32	7.07	6.53	156.70	-45.71	251.35	537.85	528.38	9.46	56.849		
2,300.00	2,248.93	2,072.86	2,030.73	7.87	7.05	155.62	-44.36	278.63	609.34	599.38	9.97	61.141		
2,400.00	2,336.98	2,140.44	2,092.31	8.75	7.59	154.66	-42.99	306.44	683.04	672.54	10.50	65.041		
2,469.46	2,397.14	2,186.00	2,133.82	9.40	7.95	154.04	-42.06	325.19	735.47	724.58	10.89	67.560		
2,500.00	2,423.40	2,205.77	2,151.84	9.70	8.11	154.09	-41.66	333.32	758.74	747.64	11.10	68.374		
2,600.00	2,509.39	2,270.52	2,210.84	10.68	8.64	154.24	-40.34	359.97	834.93	823.13	11.80	70.772		
2,700.00	2,595.39	2,335.27	2,269.84	11.68	9.17	154.36	-39.02	386.61	911.13	898.62	12.51	72.827		
2,800.00	2,681.38	2,400.02	2,328.84	12.68	9.70	154.46	-37.71	413.26	987.33	974.09	13.23	74.602		
2,900.00	2,767.38	2,464.77	2,387.84	13.70	10.24	154.54	-36.39	439.90	1,063.53	1,049.56	13.97	76.139		
3,000.00	2,853.37	2,529.52	2,446.84	14.72	10.77	154.62	-35.07	466.55	1,139.73	1,125.02	14.71	77.486		
3,100.00	2,939.36	2,594.27	2,505.83	15.74	11.32	154.68	-33.75	493.19	1,215.93	1,200.47	15.46	78.672		
3,200.00	3,025.36	2,659.02	2,564.83	16.77	11.86	154.74	-32.44	519.84	1,292.13	1,275.92	16.21	79.719		
3,300.00	3,111.35	2,723.77	2,623.83	17.81	12.40	154.79	-31.12	546.48	1,368.34	1,351.37	16.97	80.652		
3,400.00	3,197.35	2,788.52	2,682.83	18.85	12.95	154.84	-29.80	573.13	1,444.54	1,426.81	17.73	81.486		
3,500.00	3,283.34	2,853.27	2,741.83	19.89	13.50	154.88	-28.48	599.77	1,520.74	1,502.25	18.49	82.235		
3,600.00	3,369.34	2,918.02	2,800.83	20.93	14.05	154.91	-27.17	626.42	1,596.94	1,577.68	19.26	82.912		
3,700.00	3,455.33	2,982.77	2,859.83	21.97	14.60	154.95	-25.85	653.06	1,673.15	1,653.12	20.03	83.524		
3,800.00	3,541.33	3,047.52	2,918.83	23.02	15.15	154.98	-24.53	679.71	1,749.35	1,728.55	20.81	84.081		
3,900.00	3,627.32	3,112.27	2,977.83	24.06	15.70	155.01	-23.21	706.36	1,825.56	1,803.98	21.58	84.590		
4,000.00	3,713.32	3,177.02	3,036.82	25.11	16.25	155.03	-21.90	733.00	1,901.76	1,879.40	22.36	85.055		
4,100.00	3,799.31	3,241.77	3,095.82	26.16	16.80	155.06	-20.58	759.65	1,977.97	1,954.83	23.14	85.482		
4,200.00	3,885.31	3,306.52	3,154.82	27.21	17.36	155.08	-19.26	786.29	2,054.17	2,030.25	23.92	85.877		
4,300.00	3,971.30	3,371.27	3,213.82	28.26	17.91	155.10	-17.94	812.94	2,130.38	2,105.67	24.70	86.240		
4,400.00	4,057.30	3,436.02	3,272.82	29.31	18.47	155.12	-16.63	839.58	2,206.58	2,181.09	25.49	86.577		
4,500.00	4,143.29	3,500.77	3,331.82	30.36	19.02	155.14	-15.31	866.23	2,282.79	2,256.51	26.27	86.890		
4,600.00	4,229.29	3,565.52	3,390.82	31.42	19.58	155.15	-13.99	892.87	2,358.99	2,331.93	27.06	87.181		
4,700.00	4,315.28	3,630.27	3,449.82	32.47	20.13	155.17	-12.67	919.52	2,435.20	2,407.35	27.85	87.452		
4,800.00	4,401.28	3,695.02	3,508.82	33.52	20.69	155.18	-11.36	946.16	2,511.40	2,482.77	28.63	87.705		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Weatherford International Ltd.

Anticollision Report



Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_RASSMUSSEN 22-29
Project:	KERR MCGEE OIL & GAS ONSHORE LP	TVD Reference:	WELL @ 4949.00ft (Original Well Elev)
Reference Site:	WELD_RASMUSSEN 9 PAD	MD Reference:	WELL @ 4949.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_RASSMUSSEN 22-29	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_RASSMUSSEN 22-29	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 09-02-09 RHS	Offset TVD Reference:	Offset Datum

Offset Design WELD_RASMUSSEN 9 PAD - P_RASMUSSEN 16-29 - P_RASMUSSEN 16-29 - PLAN #1 09-02-09 RI												Offset Site Error:	0.00 ft
Survey Program: 0-MWD												Offset Well Error:	0.00 ft
Reference	Offset	Semi Major Axis		Distance									
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)	Minimum Separation (ft)	Separation Factor	Warning
4,900.00	4,487.27	3,759.77	3,567.82	34.58	21.25	155.20	-10.04	972.81	2,587.61	2,558.18	29.42	87.943	
5,000.00	4,573.27	3,856.23	3,655.81	35.63	22.03	155.22	-8.09	1,012.25	2,663.77	2,633.46	30.31	87.889	
5,100.00	4,659.26	4,227.97	4,005.28	36.69	24.21	155.70	-1.87	1,138.07	2,735.52	2,703.70	31.82	85.975	
5,200.00	4,745.26	4,689.77	4,457.34	37.74	25.87	157.00	2.67	1,229.83	2,798.06	2,764.89	33.17	84.354	
5,300.00	4,831.25	5,064.50	4,831.25	38.80	26.43	158.49	3.69	1,250.37	2,849.18	2,815.13	34.04	83.696	
5,400.00	4,917.25	5,150.50	4,917.25	39.86	26.50	158.85	3.69	1,250.37	2,897.56	2,862.92	34.63	83.665	
5,500.00	5,003.24	5,236.49	5,003.24	40.91	26.58	159.20	3.69	1,250.37	2,946.03	2,910.81	35.22	83.642	
5,600.00	5,089.24	5,322.49	5,089.24	41.97	26.65	159.54	3.69	1,250.37	2,994.59	2,958.78	35.81	83.629	
5,700.00	5,175.23	5,408.48	5,175.23	43.03	26.73	159.87	3.69	1,250.37	3,043.23	3,006.84	36.39	83.626	
5,800.00	5,261.22	5,494.48	5,261.22	44.08	26.81	160.19	3.69	1,250.37	3,091.94	3,054.97	36.97	83.630	
5,900.00	5,347.22	5,580.47	5,347.22	45.14	26.89	160.50	3.69	1,250.37	3,140.73	3,103.18	37.55	83.643	
6,000.00	5,433.21	5,666.47	5,433.21	46.20	26.97	160.81	3.69	1,250.37	3,189.59	3,151.47	38.13	83.661	
6,100.00	5,519.21	5,752.46	5,519.21	47.25	27.05	161.10	3.69	1,250.37	3,238.52	3,199.82	38.70	83.686	
6,121.69	5,537.86	5,771.12	5,537.86	47.48	27.07	161.16	3.69	1,250.37	3,249.14	3,210.32	38.82	83.692	
6,200.00	5,605.74	5,838.99	5,605.74	48.22	27.14	161.65	3.69	1,250.37	3,286.62	3,247.07	39.55	83.104	
6,300.00	5,693.93	5,927.18	5,693.93	49.01	27.22	162.21	3.69	1,250.37	3,331.92	3,291.51	40.41	82.448	
6,400.00	5,783.71	6,016.96	5,783.71	49.75	27.31	162.72	3.69	1,250.37	3,374.28	3,333.05	41.23	81.842	
6,500.00	5,874.97	6,108.22	5,874.97	50.44	27.40	163.17	3.69	1,250.37	3,413.63	3,371.64	42.00	81.284	
6,600.00	5,967.61	6,200.86	5,967.61	51.08	27.50	163.57	3.69	1,250.37	3,449.93	3,407.22	42.71	80.774	
6,700.00	6,061.50	6,294.75	6,061.50	51.66	27.60	163.93	3.69	1,250.37	3,483.11	3,439.74	43.37	80.312	
6,800.00	6,156.53	6,389.78	6,156.53	52.18	27.70	164.24	3.69	1,250.37	3,513.13	3,469.16	43.97	79.895	
6,900.00	6,252.59	6,485.84	6,252.59	52.65	27.80	164.51	3.69	1,250.37	3,539.95	3,495.44	44.51	79.523	
7,000.00	6,349.57	6,582.82	6,349.57	53.07	27.90	164.75	3.69	1,250.37	3,563.53	3,518.53	45.00	79.193	
7,100.00	6,447.33	6,680.58	6,447.33	53.43	28.01	164.94	3.69	1,250.37	3,583.83	3,538.41	45.42	78.905	
7,200.00	6,545.77	6,779.02	6,545.77	53.74	28.12	165.10	3.69	1,250.37	3,600.83	3,555.05	45.78	78.657	
7,300.00	6,644.76	6,878.01	6,644.76	53.99	28.23	165.23	3.69	1,250.37	3,614.49	3,568.42	46.08	78.446	
7,400.00	6,744.19	6,977.44	6,744.19	54.20	28.34	165.33	3.69	1,250.37	3,624.81	3,578.50	46.31	78.271	
7,500.00	6,843.92	7,077.17	6,843.92	54.35	28.45	165.39	3.69	1,250.37	3,631.77	3,585.29	46.48	78.131	
7,600.00	6,943.85	7,177.10	6,943.85	54.46	28.57	165.42	3.69	1,250.37	3,635.36	3,588.76	46.59	78.023	
7,656.16	7,000.00	7,233.25	7,000.00	54.49	28.63	122.28	3.69	1,250.37	3,635.89	3,589.26	46.63	77.975	
7,700.00	7,043.84	7,277.09	7,043.84	54.52	28.69	122.28	3.69	1,250.37	3,635.89	3,589.14	46.74	77.784	
7,800.00	7,143.84	7,377.09	7,143.84	54.58	28.80	122.28	3.69	1,250.37	3,635.89	3,588.88	47.01	77.339	
7,900.00	7,243.84	7,477.09	7,243.84	54.64	28.92	122.28	3.69	1,250.37	3,635.89	3,588.60	47.28	76.894	
8,000.00	7,343.84	7,577.09	7,343.84	54.70	29.04	122.28	3.69	1,250.37	3,635.89	3,588.33	47.56	76.451	
8,100.00	7,443.84	7,677.09	7,443.84	54.77	29.17	122.28	3.69	1,250.37	3,635.89	3,588.05	47.84	76.008	
8,200.00	7,543.84	7,777.09	7,543.84	54.83	29.29	122.28	3.69	1,250.37	3,635.89	3,587.77	48.12	75.566	
8,300.00	7,643.84	7,877.09	7,643.84	54.90	29.41	122.28	3.69	1,250.37	3,635.89	3,587.49	48.40	75.126	
8,337.16	7,681.00	7,914.25	7,681.00	54.92	29.46	122.28	3.69	1,250.37	3,635.89	3,587.39	48.50	74.963	



Weatherford International Ltd.

Anticollision Report



Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_RASSMUSSEN 22-29
Project:	KERR MCGEE OIL & GAS ONSHORE LP	TVD Reference:	WELL @ 4949.00ft (Original Well Elev)
Reference Site:	WELD_RASMUSSEN 9 PAD	MD Reference:	WELL @ 4949.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_RASSMUSSEN 22-29	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_RASSMUSSEN 22-29	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 09-02-09 RHS	Offset TVD Reference:	Offset Datum

Offset Design WELD_RASMUSSEN 9 PAD - P_RASMUSSEN 20-29 - P_RASMUSSEN 20-29 - PLAN #1 09-02-09 RI												Offset Site Error:	0.00 ft
Survey Program: 0-MWD												Offset Well Error:	0.00 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Semi Major Axis Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	-180.00	-14.58	0.00	14.58				
100.00	100.00	100.00	100.00	0.10	0.10	-180.00	-14.58	0.00	14.58	14.39	0.19	76.334	
200.00	200.00	200.00	200.00	0.32	0.32	-180.00	-14.58	0.00	14.58	13.94	0.64	22.766	
300.00	300.00	300.00	300.00	0.55	0.55	-180.00	-14.58	0.00	14.58	13.49	1.09	13.378	
400.00	400.00	400.00	400.00	0.77	0.77	-180.00	-14.58	0.00	14.58	13.04	1.54	9.472	
500.00	500.00	500.00	500.00	0.99	0.99	-180.00	-14.58	0.00	14.58	12.59	1.99	7.332	
600.00	600.00	600.00	600.00	1.22	1.22	-180.00	-14.58	0.00	14.58	12.15	2.44	5.980	
700.00	700.00	700.00	700.00	1.44	1.44	-180.00	-14.58	0.00	14.58	11.70	2.89	5.049	
800.00	800.00	800.17	800.16	1.67	1.67	178.69	-14.29	0.33	14.29	10.96	3.34	4.285	
900.00	900.00	900.37	900.30	1.89	1.89	166.20	-11.95	2.93	12.31	8.53	3.78	3.256	
935.00	935.00	935.37	935.24	1.97	1.96	157.14	-10.58	4.46	11.48	7.54	3.94	2.917	
966.08	966.08	966.41	966.20	2.04	2.03	-170.66	-9.12	6.08	11.13	7.05	4.07	2.731 CC, ES, SF	
1,000.00	999.99	1,000.21	999.89	2.12	2.11	175.35	-7.29	8.12	11.65	7.42	4.22	2.757	
1,100.00	1,099.91	1,099.35	1,098.48	2.34	2.35	144.32	-0.36	15.82	19.51	14.85	4.66	4.186	
1,200.00	1,199.62	1,197.44	1,195.63	2.56	2.61	132.93	8.72	25.94	34.55	29.44	5.10	6.769	
1,300.00	1,299.01	1,294.15	1,290.89	2.81	2.90	128.99	19.85	38.32	54.89	49.33	5.56	9.865	
1,400.00	1,397.96	1,389.17	1,383.88	3.07	3.23	127.52	32.88	52.82	80.01	73.96	6.05	13.226	
1,500.00	1,496.34	1,482.21	1,474.27	3.37	3.60	126.95	47.62	69.22	109.69	103.12	6.57	16.705	
1,600.00	1,594.04	1,573.03	1,561.75	3.72	4.00	126.72	63.89	87.33	143.78	136.65	7.12	20.187	
1,700.00	1,690.94	1,664.22	1,648.97	4.11	4.45	126.74	81.70	107.15	181.67	173.95	7.73	23.511	
1,800.00	1,786.92	1,755.78	1,736.48	4.57	4.92	127.24	99.69	127.17	221.68	213.30	8.38	26.447	
1,900.00	1,881.85	1,846.33	1,823.03	5.09	5.41	127.99	117.49	146.97	263.73	254.65	9.08	29.047	
2,000.00	1,975.64	1,935.76	1,908.50	5.68	5.89	128.85	135.06	166.53	307.88	298.06	9.82	31.362	
2,100.00	2,068.15	2,023.95	1,992.80	6.33	6.38	129.74	152.39	185.82	354.19	343.59	10.59	33.441	
2,200.00	2,159.29	2,110.80	2,075.81	7.07	6.87	130.63	169.45	204.81	402.71	391.31	11.40	35.327	
2,300.00	2,248.93	2,196.21	2,157.44	7.87	7.35	131.47	186.24	223.49	453.49	441.25	12.24	37.055	
2,400.00	2,336.98	2,280.07	2,237.60	8.75	7.83	132.25	202.72	241.82	506.55	493.45	13.11	38.652	
2,469.46	2,397.14	2,337.35	2,292.35	9.40	8.16	132.76	213.97	254.35	544.76	531.04	13.72	39.698	
2,500.00	2,423.40	2,362.35	2,316.25	9.70	8.31	133.26	218.89	259.82	561.82	547.80	14.02	40.076	
2,600.00	2,509.39	2,444.23	2,394.51	10.68	8.78	134.71	234.97	277.72	617.86	602.86	14.99	41.205	
2,700.00	2,595.39	2,526.11	2,472.76	11.68	9.25	135.92	251.06	295.63	674.13	658.15	15.98	42.194	
2,800.00	2,681.38	2,607.99	2,551.02	12.68	9.73	136.94	267.15	313.53	730.57	713.61	16.96	43.067	
2,900.00	2,767.38	2,689.86	2,629.28	13.70	10.21	137.83	283.24	331.44	787.16	769.21	17.95	43.841	
3,000.00	2,853.37	2,771.74	2,707.54	14.72	10.69	138.59	299.33	349.34	843.86	824.91	18.95	44.533	
3,100.00	2,939.36	2,853.62	2,785.80	15.74	11.17	139.26	315.42	367.25	900.65	880.70	19.95	45.155	
3,200.00	3,025.36	2,935.50	2,864.06	16.77	11.65	139.85	331.51	385.15	957.51	936.57	20.94	45.717	
3,300.00	3,111.35	3,017.38	2,942.32	17.81	12.13	140.38	347.60	403.06	1,014.44	992.49	21.95	46.226	
3,400.00	3,197.35	3,099.25	3,020.58	18.85	12.61	140.85	363.69	420.97	1,071.41	1,048.47	22.95	46.690	
3,500.00	3,283.34	3,181.13	3,098.84	19.89	13.09	141.27	379.78	438.87	1,128.44	1,104.48	23.95	47.115	
3,600.00	3,369.34	3,263.01	3,177.10	20.93	13.58	141.65	395.87	456.78	1,185.49	1,160.54	24.96	47.505	
3,700.00	3,455.33	3,344.89	3,255.36	21.97	14.06	142.00	411.96	474.68	1,242.58	1,216.62	25.96	47.864	
3,800.00	3,541.33	3,426.76	3,333.62	23.02	14.55	142.31	428.05	492.59	1,299.70	1,272.74	26.97	48.196	
3,900.00	3,627.32	3,508.64	3,411.88	24.06	15.03	142.60	444.14	510.49	1,356.85	1,328.87	27.97	48.503	
4,000.00	3,713.32	3,590.52	3,490.14	25.11	15.52	142.87	460.22	528.40	1,414.01	1,385.03	28.98	48.789	
4,100.00	3,799.31	3,672.40	3,568.39	26.16	16.01	143.12	476.31	546.30	1,471.20	1,441.21	29.99	49.055	
4,200.00	3,885.31	3,756.44	3,678.03	27.21	16.53	143.52	492.28	569.63	1,527.54	1,496.53	31.01	49.260	
4,300.00	3,971.30	3,903.21	3,791.49	28.26	16.99	144.06	515.70	590.14	1,582.15	1,550.19	31.96	49.499	
4,400.00	4,057.30	4,022.26	3,908.23	29.31	17.40	144.73	531.29	607.48	1,635.02	1,602.17	32.85	49.775	
4,500.00	4,143.29	4,143.23	4,027.73	30.36	17.76	145.52	543.80	621.40	1,686.14	1,652.48	33.66	50.094	
4,600.00	4,229.29	4,265.73	4,149.44	31.42	18.06	146.42	553.01	631.66	1,735.55	1,701.16	34.39	50.466	
4,700.00	4,315.28	4,389.33	4,272.73	32.47	18.29	147.43	558.78	638.07	1,783.30	1,748.27	35.04	50.900	
4,800.00	4,401.28	4,513.58	4,396.93	33.52	18.46	148.53	560.99	640.53	1,829.46	1,793.87	35.59	51.407	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Weatherford International Ltd.

Anticollision Report



Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_RASSMUSSEN 22-29
Project:	KERR MCGEE OIL & GAS ONSHORE LP	TVD Reference:	WELL @ 4949.00ft (Original Well Elev)
Reference Site:	WELD_RASMUSSEN 9 PAD	MD Reference:	WELL @ 4949.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_RASSMUSSEN 22-29	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_RASSMUSSEN 22-29	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 09-02-09 RHS	Offset TVD Reference:	Offset Datum

Offset Design WELD_RASMUSSEN 9 PAD - P_RASMUSSEN 20-29 - P_RASMUSSEN 20-29 - PLAN #1 09-02-09 RI													Offset Site Error: 0.00 ft
Survey Program: 0-MWD													Offset Well Error: 0.00 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Semi Major Axis Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
4,900.00	4,487.27	4,603.92	4,487.27	34.58	18.55	149.36	561.01	640.56	1,874.80	1,838.68	36.12	51.899	
5,000.00	4,573.27	4,689.92	4,573.27	35.63	18.65	150.11	561.01	640.56	1,920.42	1,883.75	36.66	52.381	
5,100.00	4,659.26	4,775.91	4,659.26	36.69	18.75	150.83	561.01	640.56	1,966.30	1,929.11	37.19	52.866	
5,200.00	4,745.26	4,861.91	4,745.26	37.74	18.85	151.51	561.01	640.56	2,012.43	1,974.71	37.72	53.352	
5,300.00	4,831.25	4,947.90	4,831.25	38.80	18.95	152.17	561.01	640.56	2,058.80	2,020.56	38.24	53.838	
5,400.00	4,917.25	5,033.90	4,917.25	39.86	19.05	152.80	561.01	640.56	2,105.38	2,066.62	38.76	54.322	
5,500.00	5,003.24	5,119.89	5,003.24	40.91	19.15	153.41	561.01	640.56	2,152.16	2,112.89	39.27	54.805	
5,600.00	5,089.24	5,205.89	5,089.24	41.97	19.26	153.99	561.01	640.56	2,199.13	2,159.35	39.78	55.284	
5,700.00	5,175.23	5,291.88	5,175.23	43.03	19.37	154.54	561.01	640.56	2,246.28	2,205.99	40.29	55.759	
5,800.00	5,261.22	5,377.88	5,261.22	44.08	19.47	155.08	561.01	640.56	2,293.59	2,252.80	40.79	56.230	
5,900.00	5,347.22	5,463.87	5,347.22	45.14	19.58	155.59	561.01	640.56	2,341.06	2,299.77	41.29	56.696	
6,000.00	5,433.21	5,549.87	5,433.21	46.20	19.69	156.09	561.01	640.56	2,388.68	2,346.89	41.79	57.157	
6,100.00	5,519.21	5,635.86	5,519.21	47.25	19.81	156.56	561.01	640.56	2,436.44	2,394.15	42.29	57.612	
6,121.69	5,537.86	5,654.52	5,537.86	47.48	19.83	156.67	561.01	640.56	2,446.82	2,404.42	42.40	57.710	
6,200.00	5,605.74	5,722.39	5,605.74	48.22	19.92	157.34	561.01	640.56	2,483.46	2,440.55	42.91	57.874	
6,300.00	5,693.93	5,810.58	5,693.93	49.01	20.04	158.11	561.01	640.56	2,527.79	2,484.27	43.52	58.088	
6,400.00	5,783.71	5,900.36	5,783.71	49.75	20.16	158.81	561.01	640.56	2,569.29	2,525.20	44.09	58.268	
6,500.00	5,874.97	5,991.62	5,874.97	50.44	20.28	159.43	561.01	640.56	2,607.89	2,563.24	44.64	58.417	
6,600.00	5,967.61	6,084.26	5,967.61	51.08	20.41	159.97	561.01	640.56	2,643.51	2,598.36	45.16	58.542	
6,700.00	6,061.50	6,178.15	6,061.50	51.66	20.54	160.45	561.01	640.56	2,676.11	2,630.47	45.63	58.647	
6,800.00	6,156.53	6,273.18	6,156.53	52.18	20.67	160.88	561.01	640.56	2,705.61	2,659.55	46.07	58.733	
6,900.00	6,252.59	6,369.24	6,252.59	52.65	20.81	161.24	561.01	640.56	2,731.99	2,685.53	46.46	58.806	
7,000.00	6,349.57	6,466.22	6,349.57	53.07	20.95	161.56	561.01	640.56	2,755.18	2,708.38	46.80	58.866	
7,100.00	6,447.33	6,563.98	6,447.33	53.43	21.09	161.82	561.01	640.56	2,775.16	2,728.06	47.10	58.915	
7,200.00	6,545.77	6,662.42	6,545.77	53.74	21.23	162.04	561.01	640.56	2,791.90	2,744.54	47.36	58.954	
7,300.00	6,644.76	6,761.41	6,644.76	53.99	21.38	162.21	561.01	640.56	2,805.36	2,757.80	47.56	58.984	
7,400.00	6,744.19	6,860.84	6,744.19	54.20	21.53	162.34	561.01	640.56	2,815.52	2,767.81	47.72	59.006	
7,500.00	6,843.92	6,960.57	6,843.92	54.35	21.68	162.43	561.01	640.56	2,822.38	2,774.56	47.82	59.019	
7,600.00	6,943.85	7,060.50	6,943.85	54.46	21.83	162.47	561.01	640.56	2,825.91	2,778.03	47.88	59.022	
7,656.16	7,000.00	7,116.65	7,000.00	54.49	21.91	119.33	561.01	640.56	2,826.43	2,778.54	47.89	59.019	
7,700.00	7,043.84	7,160.50	7,043.84	54.52	21.98	119.33	561.01	640.56	2,826.43	2,778.43	48.00	58.878	
7,800.00	7,143.84	7,260.50	7,143.84	54.58	22.13	119.33	561.01	640.56	2,826.43	2,778.16	48.27	58.551	
7,900.00	7,243.84	7,360.50	7,243.84	54.64	22.29	119.33	561.01	640.56	2,826.43	2,777.89	48.54	58.224	
8,000.00	7,343.84	7,460.50	7,343.84	54.70	22.45	119.33	561.01	640.56	2,826.43	2,777.62	48.82	57.898	
8,100.00	7,443.84	7,560.50	7,443.84	54.77	22.60	119.33	561.01	640.56	2,826.43	2,777.34	49.09	57.572	
8,200.00	7,543.84	7,660.50	7,543.84	54.83	22.76	119.33	561.01	640.56	2,826.43	2,777.06	49.37	57.248	
8,300.00	7,643.84	7,760.50	7,643.84	54.90	22.92	119.33	561.01	640.56	2,826.43	2,776.78	49.65	56.924	
8,337.16	7,681.00	7,797.65	7,681.00	54.92	22.98	119.33	561.01	640.56	2,826.43	2,776.68	49.76	56.804	



Weatherford International Ltd.

Anticollision Report



Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_RASSMUSSEN 22-29
Project:	KERR MCGEE OIL & GAS ONSHORE LP	TVD Reference:	WELL @ 4949.00ft (Original Well Elev)
Reference Site:	WELD_RASMUSSEN 9 PAD	MD Reference:	WELL @ 4949.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_RASSMUSSEN 22-29	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_RASSMUSSEN 22-29	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 09-02-09 RHS	Offset TVD Reference:	Offset Datum

Offset Design WELD_RASMUSSEN 9 PAD - P_RASMUSSEN 23-29 - P_RASMUSSEN 23-29 - PLAN #1 09-02-09 R													Offset Site Error:	0.00 ft
Survey Program: 0-MWD													Offset Well Error:	0.00 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)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	0.00	0.00	0.00	-180.00	-43.71	0.00	43.71					
100.00	100.00	100.00	100.00	0.10	0.10	-180.00	-43.71	0.00	43.71	43.52	0.19	228.783		
200.00	200.00	200.00	200.00	0.32	0.32	-180.00	-43.71	0.00	43.71	43.07	0.64	68.234		
300.00	300.00	300.00	300.00	0.55	0.55	-180.00	-43.71	0.00	43.71	42.62	1.09	40.096		
400.00	400.00	400.00	400.00	0.77	0.77	-180.00	-43.71	0.00	43.71	42.17	1.54	28.389		
500.00	500.00	500.00	500.00	0.99	0.99	-180.00	-43.71	0.00	43.71	41.72	1.99	21.974		
600.00	600.00	600.00	600.00	1.22	1.22	-180.00	-43.71	0.00	43.71	41.27	2.44	17.923		
700.00	700.00	700.00	700.00	1.44	1.44	-180.00	-43.71	0.00	43.71	40.82	2.89	15.134		
800.00	800.00	800.51	800.51	1.67	1.67	-179.56	-43.41	-0.33	43.42	40.08	3.34	13.012		
900.00	900.00	901.40	901.33	1.89	1.89	-175.85	-41.04	-2.98	41.17	37.39	3.78	10.888		
935.00	935.00	936.64	936.51	1.97	1.97	-173.48	-39.66	-4.53	39.94	36.00	3.94	10.140		
1,000.00	999.99	1,001.98	1,001.65	2.12	2.12	-125.02	-36.32	-8.25	37.70	33.47	4.23	8.908		
1,100.00	1,099.91	1,102.31	1,101.42	2.34	2.36	-115.48	-29.28	-16.12	35.22	30.52	4.70	7.499		
1,200.00	1,199.62	1,202.41	1,200.53	2.56	2.63	-104.72	-19.94	-26.57	34.14	28.94	5.20	6.571		
1,219.75	1,219.28	1,222.15	1,220.01	2.61	2.69	-102.52	-17.82	-28.93	34.11	28.80	5.30	6.432 CC, ES		
1,300.00	1,299.01	1,302.27	1,298.86	2.81	2.94	-93.65	-8.32	-39.55	34.62	28.88	5.74	6.029		
1,400.00	1,397.96	1,401.91	1,396.29	3.07	3.29	-83.35	5.54	-55.04	36.63	30.29	6.34	5.781		
1,500.00	1,496.34	1,501.31	1,492.72	3.37	3.69	-74.51	21.61	-73.00	39.96	32.99	6.97	5.731		
1,600.00	1,594.04	1,600.48	1,588.04	3.72	4.16	-67.35	39.85	-93.39	44.34	36.70	7.65	5.798		
1,700.00	1,690.94	1,699.42	1,682.13	4.11	4.68	-61.74	60.24	-116.17	49.52	41.16	8.37	5.919		
1,800.00	1,786.92	1,798.13	1,774.90	4.57	5.28	-57.42	82.72	-141.30	55.30	46.16	9.13	6.053		
1,900.00	1,881.85	1,896.74	1,866.37	5.09	5.94	-54.12	107.29	-168.76	61.50	51.54	9.96	6.174		
2,000.00	1,975.64	1,996.59	1,958.45	5.68	6.65	-52.87	133.04	-197.54	66.69	55.77	10.92	6.108		
2,100.00	2,068.15	2,096.53	2,050.61	6.33	7.37	-54.07	158.81	-226.34	69.80	57.71	12.09	5.773		
2,200.00	2,159.29	2,196.43	2,142.74	7.07	8.11	-57.51	184.57	-255.13	71.01	57.46	13.55	5.242		
2,300.00	2,248.93	2,296.16	2,234.71	7.87	8.86	-63.30	210.29	-283.87	70.83	55.47	15.36	4.612		
2,400.00	2,336.98	2,395.62	2,326.43	8.75	9.62	-71.68	235.94	-312.53	70.20	52.69	17.52	4.008		
2,432.87	2,365.55	2,428.23	2,356.50	9.06	9.87	-75.03	244.35	-321.93	70.13	51.85	18.28	3.836		
2,469.46	2,397.14	2,464.47	2,389.93	9.40	10.14	-79.09	253.69	-332.38	70.25	51.12	19.13	3.672		
2,500.00	2,423.40	2,494.70	2,417.80	9.70	10.37	-82.61	261.49	-341.09	70.60	50.78	19.82	3.562		
2,600.00	2,509.39	2,593.66	2,509.06	10.68	11.14	-93.67	287.01	-369.61	73.58	51.78	21.79	3.376 SF		
2,700.00	2,595.39	2,692.63	2,600.33	11.68	11.90	-103.56	312.53	-398.13	79.08	55.79	23.29	3.396		
2,800.00	2,681.38	2,791.59	2,691.60	12.68	12.67	-111.97	338.05	-426.65	86.64	62.23	24.41	3.550		
2,900.00	2,767.38	2,890.56	2,782.86	13.70	13.44	-118.92	363.57	-455.17	95.76	70.51	25.25	3.793		
3,000.00	2,853.37	2,989.53	2,874.13	14.72	14.21	-124.61	389.09	-483.70	106.05	80.11	25.94	4.088		
3,100.00	2,939.36	3,088.49	2,965.39	15.74	14.98	-129.27	414.61	-512.22	117.19	90.63	26.56	4.413		
3,200.00	3,025.36	3,187.46	3,056.66	16.77	15.75	-133.10	440.13	-540.74	128.96	101.81	27.15	4.750		
3,300.00	3,111.35	3,286.42	3,147.92	17.81	16.53	-136.28	465.65	-569.26	141.22	113.47	27.75	5.090		
3,400.00	3,197.35	3,385.39	3,239.19	18.85	17.31	-138.95	491.17	-597.78	153.83	125.47	28.35	5.425		
3,500.00	3,283.34	3,482.26	3,328.68	19.89	18.02	-141.27	515.89	-625.41	167.05	138.13	28.92	5.776		
3,600.00	3,369.34	3,576.41	3,416.69	20.93	18.58	-143.78	538.21	-650.35	182.69	153.47	29.21	6.253		
3,700.00	3,455.33	3,669.42	3,504.64	21.97	19.08	-146.43	558.35	-672.86	201.18	171.85	29.33	6.859		
3,800.00	3,541.33	3,761.09	3,592.26	23.02	19.54	-149.07	576.33	-692.96	222.62	193.29	29.33	7.590		
3,900.00	3,627.32	3,851.29	3,679.26	24.06	19.95	-151.61	592.19	-710.68	247.08	217.81	29.27	8.441		
4,000.00	3,713.32	3,939.86	3,765.38	25.11	20.31	-153.98	605.98	-726.09	274.57	245.38	29.19	9.407		
4,100.00	3,799.31	4,026.69	3,850.39	26.16	20.63	-156.16	617.76	-739.26	305.05	275.94	29.11	10.480		
4,200.00	3,885.31	4,111.68	3,934.08	27.21	20.91	-158.14	627.63	-750.29	338.48	309.42	29.05	11.650		
4,300.00	3,971.30	4,200.00	4,021.47	28.26	21.16	-160.03	636.13	-759.78	374.80	345.78	29.03	12.913		
4,400.00	4,057.30	4,275.79	4,096.75	29.31	21.34	-161.52	641.98	-766.32	413.82	384.71	29.10	14.219		
4,500.00	4,143.29	4,354.79	4,175.43	30.36	21.50	-162.94	646.67	-771.56	455.54	426.35	29.19	15.605		
4,600.00	4,229.29	4,431.69	4,252.18	31.42	21.63	-164.22	649.84	-775.11	499.82	470.50	29.32	17.047		
4,700.00	4,315.28	4,506.48	4,326.92	32.47	21.73	-165.36	651.61	-777.08	546.55	517.07	29.48	18.537		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Weatherford International Ltd.

Anticollision Report



Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_RASSMUSSEN 22-29
Project:	KERR MCGEE OIL & GAS ONSHORE LP	TVD Reference:	WELL @ 4949.00ft (Original Well Elev)
Reference Site:	WELD_RASMUSSEN 9 PAD	MD Reference:	WELL @ 4949.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_RASSMUSSEN 22-29	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_RASSMUSSEN 22-29	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 09-02-09 RHS	Offset TVD Reference:	Offset Datum

Offset Design WELD_RASMUSSEN 9 PAD - P_RASMUSSEN 23-29 - P_RASMUSSEN 23-29 - PLAN #1 09-02-09 R												Offset Site Error:	0.00 ft
Survey Program: 0-MWD												Offset Well Error:	0.00 ft
Reference	Offset	Semi Major Axis		Distance									
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)	Minimum Separation (ft)	Separation Factor	Warning
4,800.00	4,401.28	4,580.84	4,401.28	33.52	21.80	-166.40	652.08	-777.62	595.61	565.94	29.67	20.072	
4,900.00	4,487.27	4,666.83	4,487.27	34.58	21.88	-167.46	652.08	-777.62	645.66	615.78	29.88	21.606	
5,000.00	4,573.27	4,752.83	4,573.27	35.63	21.96	-168.36	652.08	-777.62	695.86	665.71	30.15	23.077	
5,100.00	4,659.26	4,838.82	4,659.26	36.69	22.05	-169.15	652.08	-777.62	746.17	715.70	30.47	24.489	
5,200.00	4,745.26	4,924.82	4,745.26	37.74	22.13	-169.84	652.08	-777.62	796.57	765.75	30.82	25.845	
5,300.00	4,831.25	5,010.81	4,831.25	38.80	22.22	-170.45	652.08	-777.62	847.05	815.85	31.20	27.147	
5,400.00	4,917.25	5,096.81	4,917.25	39.86	22.31	-170.99	652.08	-777.62	897.59	865.98	31.61	28.398	
5,500.00	5,003.24	5,182.80	5,003.24	40.91	22.40	-171.47	652.08	-777.62	948.19	916.15	32.03	29.600	
5,600.00	5,089.24	5,268.80	5,089.24	41.97	22.49	-171.90	652.08	-777.62	998.82	966.35	32.48	30.757	
5,700.00	5,175.23	5,354.79	5,175.23	43.03	22.58	-172.29	652.08	-777.62	1,049.50	1,016.57	32.93	31.870	
5,800.00	5,261.22	5,440.79	5,261.22	44.08	22.67	-172.65	652.08	-777.62	1,100.22	1,066.82	33.40	32.942	
5,900.00	5,347.22	5,526.78	5,347.22	45.14	22.77	-172.97	652.08	-777.62	1,150.96	1,117.08	33.88	33.976	
6,000.00	5,433.21	5,612.78	5,433.21	46.20	22.86	-173.27	652.08	-777.62	1,201.72	1,167.36	34.36	34.972	
6,100.00	5,519.21	5,698.77	5,519.21	47.25	22.96	-173.54	652.08	-777.62	1,252.51	1,217.65	34.86	35.933	
6,121.69	5,537.86	5,717.43	5,537.86	47.48	22.98	-173.60	652.08	-777.62	1,263.53	1,228.57	34.96	36.137	
6,200.00	5,605.74	5,785.30	5,605.74	48.22	23.06	-173.89	652.08	-777.62	1,302.40	1,266.94	35.45	36.736	
6,300.00	5,693.93	5,873.49	5,693.93	49.01	23.16	-174.21	652.08	-777.62	1,349.33	1,313.30	36.03	37.451	
6,400.00	5,783.71	5,963.27	5,783.71	49.75	23.26	-174.48	652.08	-777.62	1,393.19	1,356.62	36.57	38.096	
6,500.00	5,874.97	6,054.54	5,874.97	50.44	23.37	-174.72	652.08	-777.62	1,433.90	1,396.83	37.07	38.679	
6,600.00	5,967.61	6,147.17	5,967.61	51.08	23.48	-174.93	652.08	-777.62	1,471.43	1,433.90	37.53	39.206	
6,700.00	6,061.50	6,241.06	6,061.50	51.66	23.60	-175.11	652.08	-777.62	1,505.72	1,467.77	37.94	39.683	
6,800.00	6,156.53	6,336.09	6,156.53	52.18	23.71	-175.26	652.08	-777.62	1,536.72	1,498.41	38.31	40.114	
6,900.00	6,252.59	6,432.16	6,252.59	52.65	23.83	-175.39	652.08	-777.62	1,564.41	1,525.78	38.62	40.504	
7,000.00	6,349.57	6,529.13	6,349.57	53.07	23.95	-175.50	652.08	-777.62	1,588.73	1,549.85	38.89	40.856	
7,100.00	6,447.33	6,626.89	6,447.33	53.43	24.08	-175.59	652.08	-777.62	1,609.67	1,570.58	39.10	41.173	
7,200.00	6,545.77	6,725.33	6,545.77	53.74	24.20	-175.67	652.08	-777.62	1,627.20	1,587.95	39.25	41.458	
7,300.00	6,644.76	6,824.32	6,644.76	53.99	24.33	-175.73	652.08	-777.62	1,641.29	1,601.94	39.35	41.714	
7,400.00	6,744.19	6,923.75	6,744.19	54.20	24.46	-175.77	652.08	-777.62	1,651.93	1,612.54	39.39	41.940	
7,500.00	6,843.92	7,023.48	6,843.92	54.35	24.60	-175.80	652.08	-777.62	1,659.10	1,619.73	39.37	42.141	
7,600.00	6,943.85	7,123.41	6,943.85	54.46	24.73	-175.81	652.08	-777.62	1,662.79	1,623.50	39.30	42.315	
7,656.16	7,000.00	7,179.56	7,000.00	54.49	24.80	141.03	652.08	-777.62	1,663.34	1,624.11	39.23	42.402	
7,700.00	7,043.84	7,223.41	7,043.84	54.52	24.86	141.03	652.08	-777.62	1,663.34	1,623.97	39.37	42.250	
7,800.00	7,143.84	7,323.41	7,143.84	54.58	25.00	141.03	652.08	-777.62	1,663.34	1,623.64	39.70	41.898	
7,900.00	7,243.84	7,423.41	7,243.84	54.64	25.14	141.03	652.08	-777.62	1,663.34	1,623.31	40.03	41.549	
8,000.00	7,343.84	7,523.41	7,343.84	54.70	25.28	141.03	652.08	-777.62	1,663.34	1,622.97	40.37	41.204	
8,100.00	7,443.84	7,623.41	7,443.84	54.77	25.42	141.03	652.08	-777.62	1,663.34	1,622.64	40.71	40.863	
8,200.00	7,543.84	7,723.41	7,543.84	54.83	25.56	141.03	652.08	-777.62	1,663.34	1,622.30	41.04	40.525	
8,300.00	7,643.84	7,823.41	7,643.84	54.90	25.70	141.03	652.08	-777.62	1,663.34	1,621.96	41.39	40.191	
8,323.28	7,667.12	7,846.68	7,667.12	54.91	25.73	141.03	652.08	-777.62	1,663.34	1,621.88	41.47	40.114	
8,337.16	7,681.00	7,856.56	7,677.00	54.92	25.75	141.03	652.08	-777.62	1,663.35	1,621.84	41.51	40.076	



Weatherford International Ltd.

Anticollision Report



Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_RASSMUSSEN 22-29
Project:	KERR MCGEE OIL & GAS ONSHORE LP	TVD Reference:	WELL @ 4949.00ft (Original Well Elev)
Reference Site:	WELD_RASMUSSEN 9 PAD	MD Reference:	WELL @ 4949.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_RASSMUSSEN 22-29	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_RASSMUSSEN 22-29	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 09-02-09 RHS	Offset TVD Reference:	Offset Datum

Offset Design WELD_RASMUSSEN 9 PAD - P_RASMUSSEN 25-29 - P_RASMUSSEN 25-29 - PLAN #1 09-02-09 RI												Offset Site Error:	0.00 ft
Survey Program: 0-MWD												Offset Well Error:	0.00 ft
Reference	Offset	Semi Major Axis		Distance									
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)	Minimum Separation (ft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	0.00	32.79	0.00	32.79				
100.00	100.00	100.00	100.00	0.10	0.10	0.00	32.79	0.00	32.79	32.59	0.19	171.604	
200.00	200.00	200.00	200.00	0.32	0.32	0.00	32.79	0.00	32.79	32.14	0.64	51.180	
300.00	300.00	300.00	300.00	0.55	0.55	0.00	32.79	0.00	32.79	31.69	1.09	30.075	
400.00	400.00	400.00	400.00	0.77	0.77	0.00	32.79	0.00	32.79	31.25	1.54	21.294	
500.00	500.00	500.00	500.00	0.99	0.99	0.00	32.79	0.00	32.79	30.80	1.99	16.482	
600.00	600.00	600.00	600.00	1.22	1.22	0.00	32.79	0.00	32.79	30.35	2.44	13.444	
700.00	700.00	700.00	700.00	1.44	1.44	0.00	32.79	0.00	32.79	29.90	2.89	11.351	
800.00	800.00	800.00	800.00	1.67	1.67	0.00	32.79	0.00	32.79	29.45	3.34	9.822	
900.00	900.00	900.00	900.00	1.89	1.89	0.00	32.79	0.00	32.79	29.00	3.79	8.657	
935.00	935.00	935.00	935.00	1.97	1.97	0.00	32.79	0.00	32.79	28.84	3.94	8.311 CC	
1,000.00	999.99	999.32	999.32	2.12	2.12	43.53	33.45	-0.28	32.92	28.69	4.23	7.779 ES	
1,100.00	1,099.91	1,098.26	1,098.17	2.34	2.34	45.54	37.07	-1.80	33.68	29.01	4.67	7.212	
1,200.00	1,199.62	1,197.17	1,196.80	2.56	2.56	49.05	43.84	-4.65	35.21	30.09	5.12	6.882	
1,300.00	1,299.01	1,296.02	1,295.06	2.81	2.80	53.64	53.73	-8.81	37.67	32.08	5.58	6.748 SF	
1,400.00	1,397.96	1,394.80	1,392.82	3.07	3.06	58.78	66.72	-14.27	41.22	35.13	6.08	6.774	
1,500.00	1,496.34	1,493.48	1,489.94	3.37	3.35	63.99	82.80	-21.04	46.00	39.36	6.65	6.920	
1,600.00	1,594.04	1,592.04	1,586.30	3.72	3.68	68.88	101.93	-29.08	52.11	44.82	7.29	7.144	
1,700.00	1,690.94	1,690.47	1,681.75	4.11	4.06	73.23	124.08	-38.40	59.57	51.52	8.04	7.405	
1,800.00	1,786.92	1,788.75	1,776.17	4.57	4.49	76.97	149.19	-48.96	68.37	59.46	8.91	7.673	
1,900.00	1,881.85	1,886.87	1,869.45	5.09	4.98	80.12	177.22	-60.75	78.50	68.59	9.90	7.926	
2,000.00	1,975.64	1,984.80	1,961.46	5.68	5.54	82.74	208.11	-73.74	89.90	78.88	11.03	8.153	
2,100.00	2,068.15	2,082.54	2,052.09	6.33	6.15	84.90	241.82	-87.92	102.55	90.27	12.28	8.349	
2,200.00	2,159.29	2,180.26	2,141.43	7.07	6.83	86.69	278.33	-103.28	116.39	102.72	13.67	8.514	
2,300.00	2,248.93	2,279.07	2,231.24	7.87	7.55	89.08	316.29	-119.24	130.70	115.50	15.20	8.599	
2,400.00	2,336.98	2,377.62	2,320.83	8.75	8.30	92.30	354.15	-135.17	145.35	128.53	16.83	8.639	
2,469.46	2,397.14	2,445.88	2,382.88	9.40	8.82	94.89	380.37	-146.20	155.96	137.97	17.99	8.667	
2,500.00	2,423.40	2,475.84	2,410.12	9.70	9.05	96.14	391.88	-151.04	160.77	142.26	18.51	8.684	
2,600.00	2,509.39	2,573.95	2,499.30	10.68	9.81	99.73	429.57	-166.89	176.99	156.79	20.20	8.763	
2,700.00	2,595.39	2,672.07	2,588.49	11.68	10.57	102.73	467.26	-182.74	193.77	171.91	21.86	8.864	
2,800.00	2,681.38	2,770.19	2,677.68	12.68	11.35	105.24	504.96	-198.60	210.99	187.48	23.51	8.976	
2,900.00	2,767.38	2,868.30	2,766.87	13.70	12.13	107.37	542.65	-214.45	228.55	203.41	25.14	9.091	
3,000.00	2,853.37	2,966.42	2,856.06	14.72	12.91	109.20	580.34	-230.30	246.37	219.60	26.76	9.205	
3,100.00	2,939.36	3,064.53	2,945.24	15.74	13.70	110.78	618.03	-246.16	264.40	236.02	28.38	9.317	
3,200.00	3,025.36	3,162.65	3,034.43	16.77	14.49	112.16	655.73	-262.01	282.60	252.61	29.99	9.424	
3,300.00	3,111.35	3,260.76	3,123.62	17.81	15.28	113.37	693.42	-277.86	300.95	269.35	31.59	9.526	
3,400.00	3,197.35	3,358.88	3,212.81	18.85	16.08	114.45	731.11	-293.72	319.40	286.21	33.19	9.623	
3,500.00	3,283.34	3,456.99	3,302.00	19.89	16.87	115.40	768.80	-309.57	337.96	303.17	34.79	9.715	
3,600.00	3,369.34	3,555.11	3,391.19	20.93	17.67	116.26	806.49	-325.42	356.60	320.21	36.38	9.802	
3,700.00	3,455.33	3,653.22	3,480.37	21.97	18.47	117.03	844.19	-341.28	375.30	337.33	37.97	9.883	
3,800.00	3,541.33	3,751.34	3,569.56	23.02	19.27	117.73	881.88	-357.13	394.07	354.50	39.56	9.960	
3,900.00	3,627.32	3,849.45	3,658.75	24.06	20.07	118.37	919.57	-372.99	412.89	371.73	41.15	10.033	
4,000.00	3,713.32	3,947.57	3,747.94	25.11	20.87	118.95	957.26	-388.84	431.75	389.01	42.74	10.102	
4,100.00	3,799.31	4,045.68	3,837.13	26.16	21.68	119.48	994.96	-404.69	450.65	406.32	44.33	10.167	
4,200.00	3,885.31	4,143.80	3,926.32	27.21	22.48	119.97	1,032.65	-420.55	469.59	423.67	45.91	10.228	
4,300.00	3,971.30	4,241.91	4,015.50	28.26	23.29	120.42	1,070.34	-436.40	488.55	441.05	47.50	10.286	
4,400.00	4,057.30	4,340.03	4,104.69	29.31	24.09	120.83	1,108.03	-452.25	507.54	458.46	49.08	10.341	
4,500.00	4,143.29	4,438.14	4,193.88	30.36	24.90	121.22	1,145.72	-468.11	526.56	475.90	50.67	10.393	
4,600.00	4,229.29	4,536.26	4,283.07	31.42	25.70	121.58	1,183.42	-483.96	545.60	493.35	52.25	10.442	
4,700.00	4,315.28	4,634.37	4,372.26	32.47	26.51	121.92	1,221.11	-499.81	564.66	510.83	53.83	10.489	
4,800.00	4,401.28	4,732.49	4,461.45	33.52	27.32	122.23	1,258.80	-515.67	583.73	528.32	55.42	10.534	
4,900.00	4,487.27	4,830.60	4,550.63	34.58	28.12	122.52	1,296.49	-531.52	602.83	545.83	57.00	10.576	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Weatherford International Ltd.

Anticollision Report



Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_RASSMUSSEN 22-29
Project:	KERR MCGEE OIL & GAS ONSHORE LP	TVD Reference:	WELL @ 4949.00ft (Original Well Elev)
Reference Site:	WELD_RASMUSSEN 9 PAD	MD Reference:	WELL @ 4949.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_RASSMUSSEN 22-29	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_RASSMUSSEN 22-29	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 09-02-09 RHS	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 ft
Survey Program: 0-MWD												Offset Well Error:	0.00 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)	Minimum Separation (ft)	Separation Factor	
5,000.00	4,573.27	4,928.72	4,639.82	35.63	28.93	122.80	1,334.19	-547.37	621.93	563.35	58.58	10.617	
5,100.00	4,659.26	5,026.83	4,729.01	36.69	29.74	123.06	1,371.88	-563.23	641.05	580.89	60.16	10.655	
5,200.00	4,745.26	5,124.95	4,818.20	37.74	30.55	123.30	1,409.57	-579.08	660.18	598.44	61.75	10.692	
5,300.00	4,831.25	5,223.06	4,907.39	38.80	31.35	123.53	1,447.26	-594.93	679.32	616.00	63.33	10.727	
5,400.00	4,917.25	5,321.18	4,996.57	39.86	32.16	123.75	1,484.95	-610.79	698.48	633.57	64.91	10.761	
5,500.00	5,003.24	5,419.29	5,085.76	40.91	32.97	123.96	1,522.65	-626.64	717.64	651.14	66.49	10.793	
5,600.00	5,089.24	5,517.41	5,174.95	41.97	33.78	124.15	1,560.34	-642.49	736.81	668.73	68.07	10.824	
5,700.00	5,175.23	5,615.52	5,264.14	43.03	34.59	124.34	1,598.03	-658.35	755.98	686.33	69.65	10.853	
5,800.00	5,261.22	5,713.64	5,353.33	44.08	35.40	124.52	1,635.72	-674.20	775.17	703.93	71.24	10.882	
5,900.00	5,347.22	5,811.75	5,442.52	45.14	36.21	124.68	1,673.42	-690.06	794.36	721.54	72.82	10.909	
6,000.00	5,433.21	5,909.87	5,531.70	46.20	37.02	124.84	1,711.11	-705.91	813.56	739.16	74.40	10.935	
6,100.00	5,519.21	6,007.99	5,620.89	47.25	37.83	125.00	1,748.80	-721.76	832.76	756.78	75.98	10.960	
6,121.69	5,537.86	6,029.27	5,640.24	47.48	38.00	125.03	1,756.98	-725.20	836.93	760.60	76.32	10.965	
6,200.00	5,605.74	6,100.00	5,704.58	48.22	38.56	125.33	1,784.05	-736.59	851.42	773.99	77.43	10.996	
6,300.00	5,693.93	6,194.10	5,791.09	49.01	39.14	125.68	1,818.18	-750.94	868.83	790.22	78.62	11.051	
6,400.00	5,783.71	6,284.55	5,875.34	49.75	39.66	126.01	1,848.51	-763.70	885.17	805.47	79.70	11.107	
6,500.00	5,874.97	6,375.00	5,960.59	50.44	40.14	126.32	1,876.36	-775.41	900.40	819.72	80.69	11.159	
6,600.00	5,967.61	6,465.43	6,046.73	51.08	40.59	126.63	1,901.72	-786.08	914.53	832.94	81.59	11.209	
6,700.00	6,061.50	6,555.85	6,133.69	51.66	40.99	126.92	1,924.55	-795.68	927.52	845.13	82.40	11.257	
6,800.00	6,156.53	6,646.25	6,221.36	52.18	41.36	127.21	1,944.84	-804.22	939.38	856.27	83.11	11.303	
6,900.00	6,252.59	6,736.61	6,309.65	52.65	41.69	127.48	1,962.56	-811.67	950.10	866.37	83.73	11.348	
7,000.00	6,349.57	6,826.94	6,398.47	53.07	41.99	127.74	1,977.70	-818.04	959.66	875.41	84.25	11.391	
7,100.00	6,447.33	6,917.22	6,487.71	53.43	42.24	128.00	1,990.25	-823.32	968.06	883.38	84.68	11.432	
7,200.00	6,545.77	7,007.45	6,577.29	53.74	42.45	128.24	2,000.20	-827.50	975.29	890.28	85.01	11.473	
7,300.00	6,644.76	7,100.00	6,669.48	53.99	42.63	128.49	2,007.69	-830.65	981.35	896.11	85.24	11.513	
7,400.00	6,744.19	7,187.70	6,757.04	54.20	42.75	128.71	2,012.25	-832.57	986.23	900.85	85.37	11.552	
7,500.00	6,843.92	7,277.71	6,847.01	54.35	42.84	128.94	2,014.37	-833.46	989.93	904.52	85.41	11.590	
7,600.00	6,943.85	7,374.54	6,943.85	54.46	42.92	129.13	2,014.49	-833.51	992.22	906.82	85.40	11.618	
7,656.16	7,000.00	7,430.70	7,000.00	54.49	42.96	86.00	2,014.49	-833.51	992.56	907.15	85.42	11.620	
7,700.00	7,043.84	7,474.54	7,043.84	54.52	42.99	86.00	2,014.49	-833.51	992.56	907.08	85.48	11.612	
7,800.00	7,143.84	7,574.54	7,143.84	54.58	43.06	86.00	2,014.49	-833.51	992.56	906.94	85.63	11.592	
7,900.00	7,243.84	7,674.54	7,243.84	54.64	43.14	86.00	2,014.49	-833.51	992.56	906.79	85.77	11.572	
8,000.00	7,343.84	7,774.54	7,343.84	54.70	43.22	86.00	2,014.49	-833.51	992.56	906.64	85.92	11.552	
8,100.00	7,443.84	7,874.54	7,443.84	54.77	43.29	86.00	2,014.49	-833.51	992.56	906.49	86.08	11.531	
8,200.00	7,543.84	7,974.54	7,543.84	54.83	43.37	86.00	2,014.49	-833.51	992.56	906.33	86.23	11.511	
8,300.00	7,643.84	8,074.54	7,643.84	54.90	43.45	86.00	2,014.49	-833.51	992.56	906.18	86.39	11.490	
8,337.16	7,681.00	8,111.70	7,681.00	54.92	43.48	86.00	2,014.49	-833.51	992.56	906.12	86.45	11.482	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Weatherford International Ltd.

Anticollision Report



Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_RASSMUSSEN 22-29
Project:	KERR MCGEE OIL & GAS ONSHORE LP	TVD Reference:	WELL @ 4949.00ft (Original Well Elev)
Reference Site:	WELD_RASMUSSEN 9 PAD	MD Reference:	WELL @ 4949.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_RASSMUSSEN 22-29	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_RASSMUSSEN 22-29	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 09-02-09 RHS	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 ft
Survey Program: 0-MWD												Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis			Distance						
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)	Minimum Separation (ft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	-177.80	-72.85	-2.80	72.91				
100.00	100.00	100.00	100.00	0.10	0.10	-177.80	-72.85	-2.80	72.91	72.71	0.19	381.600	
200.00	200.00	200.00	200.00	0.32	0.32	-177.80	-72.85	-2.80	72.91	72.26	0.64	113.811	
300.00	300.00	300.00	300.00	0.55	0.55	-177.80	-72.85	-2.80	72.91	71.82	1.09	66.878	
400.00	400.00	400.00	400.00	0.77	0.77	-177.80	-72.85	-2.80	72.91	71.37	1.54	47.352	
500.00	500.00	500.00	500.00	0.99	0.99	-177.80	-72.85	-2.80	72.91	70.92	1.99	36.651	
600.00	600.00	600.00	600.00	1.22	1.22	-177.80	-72.85	-2.80	72.91	70.47	2.44	29.895	
700.00	700.00	700.00	700.00	1.44	1.44	-177.80	-72.85	-2.80	72.91	70.02	2.89	25.242	
758.34	758.34	758.34	758.34	1.58	1.58	-177.80	-72.85	-2.80	72.91	69.75	3.15	23.141 CC	
800.00	800.00	799.65	799.65	1.67	1.66	-177.76	-72.90	-2.85	72.95	69.62	3.33	21.894 ES	
900.00	900.00	897.81	897.78	1.89	1.84	-176.49	-74.50	-4.57	74.67	70.94	3.74	19.991	
935.00	935.00	932.12	932.05	1.97	1.91	-175.64	-75.59	-5.76	75.87	71.99	3.88	19.559	
1,000.00	999.99	995.70	995.49	2.12	2.03	-130.82	-78.36	-8.75	79.46	75.31	4.15	19.157 SF	
1,100.00	1,099.91	1,093.01	1,092.38	2.34	2.24	-128.76	-84.45	-15.33	89.07	84.50	4.57	19.509	
1,200.00	1,199.62	1,189.41	1,188.02	2.56	2.48	-127.39	-92.69	-24.23	103.51	98.51	5.00	20.707	
1,300.00	1,299.01	1,284.58	1,281.98	2.81	2.75	-126.59	-102.96	-35.33	122.65	117.20	5.45	22.491	
1,400.00	1,397.96	1,378.24	1,373.90	3.07	3.05	-126.18	-115.13	-48.47	146.39	140.45	5.94	24.653	
1,500.00	1,496.34	1,470.10	1,463.45	3.37	3.40	-125.99	-129.04	-63.51	174.59	168.13	6.46	27.031	
1,600.00	1,594.04	1,559.93	1,550.34	3.72	3.79	-125.90	-144.52	-80.23	207.14	200.12	7.02	29.495	
1,700.00	1,690.94	1,647.51	1,634.32	4.11	4.22	-125.84	-161.39	-98.46	243.91	236.28	7.63	31.947	
1,800.00	1,786.92	1,732.66	1,715.20	4.57	4.67	-125.76	-179.46	-117.98	284.75	276.46	8.29	34.332	
1,900.00	1,881.85	1,821.74	1,799.32	5.09	5.20	-125.83	-199.37	-139.49	328.71	319.68	9.03	36.395	
2,000.00	1,975.64	1,910.37	1,883.01	5.68	5.74	-126.13	-219.18	-160.90	374.59	364.78	9.82	38.149	
2,100.00	2,068.15	1,997.81	1,965.57	6.33	6.28	-126.57	-238.74	-182.03	422.43	411.78	10.65	39.652	
2,200.00	2,159.29	2,083.95	2,046.91	7.07	6.83	-127.08	-258.00	-202.84	472.27	460.74	11.53	40.949	
2,300.00	2,248.93	2,168.69	2,126.93	7.87	7.37	-127.61	-276.94	-223.31	524.16	511.68	12.48	41.997	
2,400.00	2,336.98	2,251.93	2,205.53	8.75	7.91	-128.14	-295.56	-243.42	578.12	564.65	13.47	42.908	
2,469.46	2,397.14	2,308.81	2,259.24	9.40	8.27	-128.49	-308.27	-257.16	616.84	602.65	14.19	43.475	
2,500.00	2,423.40	2,333.63	2,282.68	9.70	8.44	-128.95	-313.83	-263.16	634.10	619.58	14.52	43.661	
2,600.00	2,509.39	2,414.94	2,359.46	10.68	8.97	-130.32	-332.01	-282.80	690.81	675.19	15.62	44.216	
2,700.00	2,595.39	2,496.25	2,436.24	11.68	9.50	-131.48	-350.19	-302.45	747.75	731.03	16.73	44.700	
2,800.00	2,681.38	2,577.56	2,513.02	12.68	10.04	-132.48	-368.37	-322.09	804.88	787.04	17.84	45.127	
2,900.00	2,767.38	2,658.87	2,589.79	13.70	10.58	-133.35	-386.55	-341.73	862.14	843.20	18.95	45.507	
3,000.00	2,853.37	2,740.18	2,666.57	14.72	11.12	-134.11	-404.73	-361.38	919.53	899.48	20.06	45.849	
3,100.00	2,939.36	2,821.49	2,743.35	15.74	11.66	-134.78	-422.91	-381.02	977.02	955.85	21.17	46.158	
3,200.00	3,025.36	2,902.80	2,820.13	16.77	12.20	-135.38	-441.09	-400.66	1,034.58	1,012.30	22.28	46.439	
3,300.00	3,111.35	2,984.11	2,896.90	17.81	12.75	-135.92	-459.27	-420.31	1,092.22	1,068.83	23.39	46.696	
3,400.00	3,197.35	3,065.42	2,973.68	18.85	13.29	-136.41	-477.45	-439.95	1,149.91	1,125.41	24.50	46.933	
3,500.00	3,283.34	3,146.73	3,050.46	19.89	13.84	-136.84	-495.63	-459.59	1,207.65	1,182.04	25.61	47.151	
3,600.00	3,369.34	3,228.04	3,127.24	20.93	14.39	-137.24	-513.81	-479.24	1,265.44	1,238.72	26.72	47.354	
3,700.00	3,455.33	3,309.35	3,204.02	21.97	14.93	-137.61	-531.99	-498.88	1,323.26	1,295.43	27.83	47.543	
3,800.00	3,541.33	3,390.66	3,280.79	23.02	15.48	-137.94	-550.17	-518.52	1,381.12	1,352.18	28.94	47.719	
3,900.00	3,627.32	3,471.97	3,357.57	24.06	16.03	-138.25	-568.35	-538.17	1,439.00	1,408.95	30.05	47.884	
4,000.00	3,713.32	3,553.27	3,434.35	25.11	16.58	-138.53	-586.53	-557.81	1,496.91	1,465.75	31.16	48.039	
4,100.00	3,799.31	3,661.66	3,537.13	26.16	17.16	-138.92	-609.89	-583.04	1,554.31	1,522.05	32.26	48.183	
4,200.00	3,885.31	3,781.35	3,652.03	27.21	17.69	-139.48	-632.63	-607.62	1,609.89	1,576.60	33.29	48.355	
4,300.00	3,971.30	3,903.75	3,770.88	28.26	18.17	-140.18	-652.50	-629.09	1,663.58	1,629.32	34.27	48.548	
4,400.00	4,057.30	4,028.49	3,893.16	29.31	18.60	-140.99	-669.18	-647.11	1,715.37	1,680.21	35.16	48.782	
4,500.00	4,143.29	4,155.15	4,018.30	30.36	18.96	-141.92	-682.41	-661.40	1,765.27	1,729.29	35.98	49.064	
4,600.00	4,229.29	4,283.27	4,145.64	31.42	19.26	-142.96	-691.95	-671.71	1,813.32	1,776.62	36.70	49.405	
4,700.00	4,315.28	4,412.36	4,274.45	32.47	19.48	-144.10	-697.64	-677.86	1,859.58	1,822.26	37.33	49.821	
4,800.00	4,401.28	4,539.22	4,401.28	33.52	19.63	-145.30	-699.39	-679.75	1,904.14	1,866.28	37.86	50.297	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Weatherford International Ltd.

Anticollision Report



Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_RASSMUSSEN 22-29
Project:	KERR MCGEE OIL & GAS ONSHORE LP	TVD Reference:	WELL @ 4949.00ft (Original Well Elev)
Reference Site:	WELD_RASMUSSEN 9 PAD	MD Reference:	WELL @ 4949.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_RASSMUSSEN 22-29	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_RASSMUSSEN 22-29	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 09-02-09 RHS	Offset TVD Reference:	Offset Datum

Offset Design WELD_RASMUSSEN 9 PAD - P_RASMUSSEN 36-29 - P_RASMUSSEN 36-29 - PLAN #1 09-02-09 RI												Offset Site Error:	0.00 ft
Survey Program: 0-MWD												Offset Well Error:	0.00 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)	Minimum Separation (ft)	Separation Factor	
4,900.00	4,487.27	4,625.22	4,487.27	34.58	19.72	-146.12	-699.39	-679.75	1,948.17	1,909.72	38.45	50.672	
5,000.00	4,573.27	4,711.21	4,573.27	35.63	19.80	-146.90	-699.39	-679.75	1,992.53	1,953.50	39.03	51.057	
5,100.00	4,659.26	4,797.21	4,659.26	36.69	19.88	-147.66	-699.39	-679.75	2,037.20	1,997.61	39.59	51.451	
5,200.00	4,745.26	4,883.20	4,745.26	37.74	19.97	-148.38	-699.39	-679.75	2,082.17	2,042.01	40.16	51.852	
5,300.00	4,831.25	4,969.20	4,831.25	38.80	20.06	-149.08	-699.39	-679.75	2,127.41	2,086.70	40.71	52.258	
5,400.00	4,917.25	5,055.19	4,917.25	39.86	20.15	-149.75	-699.39	-679.75	2,172.91	2,131.65	41.26	52.669	
5,500.00	5,003.24	5,141.18	5,003.24	40.91	20.24	-150.39	-699.39	-679.75	2,218.64	2,176.85	41.80	53.083	
5,600.00	5,089.24	5,227.18	5,089.24	41.97	20.33	-151.01	-699.39	-679.75	2,264.61	2,222.28	42.33	53.498	
5,700.00	5,175.23	5,313.17	5,175.23	43.03	20.43	-151.60	-699.39	-679.75	2,310.79	2,267.93	42.86	53.915	
5,800.00	5,261.22	5,399.17	5,261.22	44.08	20.52	-152.17	-699.39	-679.75	2,357.17	2,313.78	43.38	54.332	
5,900.00	5,347.22	5,485.16	5,347.22	45.14	20.62	-152.73	-699.39	-679.75	2,403.73	2,359.83	43.91	54.748	
6,000.00	5,433.21	5,571.16	5,433.21	46.20	20.72	-153.26	-699.39	-679.75	2,450.48	2,406.06	44.42	55.163	
6,100.00	5,519.21	5,657.15	5,519.21	47.25	20.82	-153.77	-699.39	-679.75	2,497.39	2,452.46	44.94	55.576	
6,121.69	5,537.86	5,675.81	5,537.86	47.48	20.84	-153.88	-699.39	-679.75	2,507.59	2,462.54	45.05	55.665	
6,200.00	5,605.74	5,743.69	5,605.74	48.22	20.92	-154.61	-699.39	-679.75	2,543.61	2,498.06	45.55	55.848	
6,300.00	5,693.93	5,831.88	5,693.93	49.01	21.02	-155.45	-699.39	-679.75	2,587.21	2,541.10	46.11	56.105	
6,400.00	5,783.71	5,921.66	5,783.71	49.75	21.13	-156.21	-699.39	-679.75	2,628.05	2,581.40	46.66	56.329	
6,500.00	5,874.97	6,012.92	5,874.97	50.44	21.24	-156.88	-699.39	-679.75	2,666.05	2,618.88	47.17	56.522	
6,600.00	5,967.61	6,105.55	5,967.61	51.08	21.36	-157.48	-699.39	-679.75	2,701.14	2,653.49	47.65	56.689	
6,700.00	6,061.50	6,199.44	6,061.50	51.66	21.47	-158.01	-699.39	-679.75	2,733.25	2,685.16	48.09	56.834	
6,800.00	6,156.53	6,294.48	6,156.53	52.18	21.59	-158.48	-699.39	-679.75	2,762.34	2,713.84	48.50	56.960	
6,900.00	6,252.59	6,390.54	6,252.59	52.65	21.72	-158.88	-699.39	-679.75	2,788.34	2,739.48	48.86	57.067	
7,000.00	6,349.57	6,487.51	6,349.57	53.07	21.84	-159.23	-699.39	-679.75	2,811.21	2,762.03	49.18	57.160	
7,100.00	6,447.33	6,585.28	6,447.33	53.43	21.97	-159.52	-699.39	-679.75	2,830.92	2,781.46	49.46	57.238	
7,200.00	6,545.77	6,683.71	6,545.77	53.74	22.10	-159.76	-699.39	-679.75	2,847.43	2,797.74	49.69	57.303	
7,300.00	6,644.76	6,782.71	6,644.76	53.99	22.23	-159.95	-699.39	-679.75	2,860.71	2,810.83	49.88	57.356	
7,400.00	6,744.19	6,882.13	6,744.19	54.20	22.37	-160.09	-699.39	-679.75	2,870.74	2,820.73	50.02	57.396	
7,500.00	6,843.92	6,981.87	6,843.92	54.35	22.50	-160.18	-699.39	-679.75	2,877.51	2,827.40	50.11	57.424	
7,600.00	6,943.85	7,081.79	6,943.85	54.46	22.64	-160.23	-699.39	-679.75	2,880.99	2,830.83	50.16	57.438	
7,656.16	7,000.00	7,137.94	7,000.00	54.49	22.72	156.61	-699.39	-679.75	2,881.51	2,831.34	50.17	57.440	
7,700.00	7,043.84	7,181.79	7,043.84	54.52	22.78	156.61	-699.39	-679.75	2,881.51	2,831.24	50.27	57.317	
7,800.00	7,143.84	7,281.79	7,143.84	54.58	22.92	156.61	-699.39	-679.75	2,881.51	2,830.98	50.53	57.025	
7,900.00	7,243.84	7,381.79	7,243.84	54.64	23.06	156.61	-699.39	-679.75	2,881.51	2,830.72	50.79	56.733	
8,000.00	7,343.84	7,481.79	7,343.84	54.70	23.21	156.61	-699.39	-679.75	2,881.51	2,830.46	51.05	56.441	
8,100.00	7,443.84	7,581.79	7,443.84	54.77	23.35	156.61	-699.39	-679.75	2,881.51	2,830.19	51.32	56.149	
8,200.00	7,543.84	7,681.79	7,543.84	54.83	23.50	156.61	-699.39	-679.75	2,881.51	2,829.92	51.59	55.858	
8,300.00	7,643.84	7,781.79	7,643.84	54.90	23.65	156.61	-699.39	-679.75	2,881.51	2,829.65	51.86	55.566	
8,337.16	7,681.00	7,818.94	7,681.00	54.92	23.70	156.61	-699.39	-679.75	2,881.51	2,829.55	51.96	55.458	



Weatherford International Ltd.

Anticollision Report



Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_RASSMUSSEN 22-29
Project:	KERR MCGEE OIL & GAS ONSHORE LP	TVD Reference:	WELL @ 4949.00ft (Original Well Elev)
Reference Site:	WELD_RASMUSSEN 9 PAD	MD Reference:	WELL @ 4949.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_RASSMUSSEN 22-29	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_RASSMUSSEN 22-29	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 09-02-09 RHS	Offset TVD Reference:	Offset Datum

Offset Design WELD_RASMUSSEN 9 PAD - P_RASMUSSEN 37-29 - P_RASMUSSEN 37-29 - PLAN #1 09-02-09 RI												Offset Site Error:	0.00 ft
Survey Program: 0-MWDD												Offset Well Error:	0.00 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)	Minimum Separation (ft)	Separation Factor	
0.00	0.00	0.00	0.00	0.00	0.00	-178.17	-87.42	-2.80	87.46				
100.00	100.00	100.00	100.00	0.10	0.10	-178.17	-87.42	-2.80	87.46	87.27	0.19	457.800	
200.00	200.00	200.00	200.00	0.32	0.32	-178.17	-87.42	-2.80	87.46	86.82	0.64	136.537	
300.00	300.00	300.00	300.00	0.55	0.55	-178.17	-87.42	-2.80	87.46	86.37	1.09	80.233	
400.00	400.00	400.00	400.00	0.77	0.77	-178.17	-87.42	-2.80	87.46	85.92	1.54	56.807	
500.00	500.00	500.00	500.00	0.99	0.99	-178.17	-87.42	-2.80	87.46	85.47	1.99	43.970	
600.00	600.00	600.00	600.00	1.22	1.22	-178.17	-87.42	-2.80	87.46	85.02	2.44	35.865	
700.00	700.00	700.00	700.00	1.44	1.44	-178.17	-87.42	-2.80	87.46	84.58	2.89	30.283	
762.96	762.96	762.96	762.96	1.59	1.59	-178.17	-87.42	-2.80	87.46	84.29	3.17	27.580	CC
800.00	800.00	799.82	799.82	1.67	1.67	-178.18	-87.43	-2.78	87.47	84.14	3.33	26.229	ES
900.00	900.00	897.92	897.89	1.89	1.85	-179.20	-88.72	-1.24	88.75	85.01	3.74	23.736	
935.00	935.00	932.21	932.15	1.97	1.91	-179.94	-89.68	-0.09	89.72	85.84	3.88	23.097	
1,000.00	999.99	995.72	995.54	2.12	2.04	-138.89	-92.15	2.87	92.85	88.70	4.15	22.366	SF
1,100.00	1,099.91	1,092.57	1,092.01	2.34	2.25	-143.82	-97.64	9.46	102.21	97.64	4.57	22.382	
1,200.00	1,199.62	1,187.82	1,186.55	2.56	2.48	-149.65	-105.08	18.39	117.84	112.85	4.98	23.640	
1,300.00	1,299.01	1,280.85	1,278.45	2.81	2.73	-155.27	-114.28	29.42	140.33	134.94	5.40	25.991	
1,400.00	1,397.96	1,371.10	1,367.12	3.07	3.02	-160.08	-125.03	42.32	169.82	164.02	5.80	29.257	
1,500.00	1,496.34	1,458.09	1,452.05	3.37	3.34	-163.95	-137.07	56.77	206.10	199.90	6.20	33.255	
1,600.00	1,594.04	1,541.40	1,532.82	3.72	3.69	-166.98	-150.16	72.46	248.80	242.22	6.58	37.828	
1,700.00	1,690.94	1,620.72	1,609.12	4.11	4.06	-169.33	-164.00	89.07	297.49	290.55	6.94	42.850	
1,800.00	1,786.92	1,700.00	1,684.77	4.57	4.47	-171.27	-179.19	107.29	351.78	344.48	7.30	48.173	
1,900.00	1,881.85	1,766.43	1,747.64	5.09	4.86	-172.59	-192.94	123.79	411.18	403.54	7.64	53.831	
2,000.00	1,975.64	1,835.74	1,812.71	5.68	5.29	-173.78	-208.23	142.12	475.29	467.31	7.97	59.617	
2,100.00	2,068.15	1,909.26	1,881.59	6.33	5.76	-174.83	-224.68	161.86	542.58	534.27	8.31	65.278	
2,200.00	2,159.29	1,980.37	1,948.21	7.07	6.23	-175.66	-240.60	180.96	612.51	603.87	8.65	70.847	
2,300.00	2,248.93	2,048.99	2,012.50	7.87	6.70	-176.34	-255.96	199.38	684.96	675.99	8.97	76.344	
2,400.00	2,336.98	2,115.03	2,074.38	8.75	7.14	-176.89	-270.74	217.11	759.82	750.53	9.29	81.786	
2,469.46	2,397.14	2,159.35	2,115.90	9.40	7.45	-177.22	-280.66	229.01	813.19	803.68	9.51	85.518	
2,500.00	2,423.40	2,178.55	2,133.89	9.70	7.58	-177.39	-284.95	234.16	836.88	827.23	9.65	86.696	
2,600.00	2,509.39	2,241.41	2,192.78	10.68	8.02	-177.88	-299.02	251.04	914.51	904.38	10.13	90.245	
2,700.00	2,595.39	2,304.28	2,251.68	11.68	8.45	-178.29	-313.09	267.92	992.16	981.54	10.62	93.406	
2,800.00	2,681.38	2,367.14	2,310.58	12.68	8.90	-178.64	-327.16	284.80	1,069.83	1,058.71	11.12	96.211	
2,900.00	2,767.38	2,430.00	2,369.48	13.70	9.34	-178.95	-341.23	301.68	1,147.51	1,135.88	11.62	98.729	
3,000.00	2,853.37	2,492.87	2,428.38	14.72	9.78	-179.21	-355.30	318.56	1,225.20	1,213.07	12.13	100.994	
3,100.00	2,939.36	2,555.73	2,487.28	15.74	10.23	-179.45	-369.38	335.44	1,302.90	1,290.26	12.65	103.032	
3,200.00	3,025.36	2,618.60	2,546.17	16.77	10.68	-179.66	-383.45	352.32	1,380.61	1,367.45	13.16	104.882	
3,300.00	3,111.35	2,681.46	2,605.07	17.81	11.13	-179.84	-397.52	369.19	1,458.32	1,444.64	13.69	106.562	
3,400.00	3,197.35	2,744.32	2,663.97	18.85	11.58	-179.99	-411.59	386.07	1,536.05	1,521.84	14.21	108.093	
3,500.00	3,283.34	2,807.19	2,722.87	19.89	12.03	-179.84	-425.66	402.95	1,613.77	1,599.03	14.74	109.498	
3,600.00	3,369.34	2,870.05	2,781.77	20.93	12.48	-179.70	-439.73	419.83	1,691.50	1,676.23	15.27	110.782	
3,700.00	3,455.33	2,932.92	2,840.67	21.97	12.93	-179.58	-453.80	436.71	1,769.23	1,753.43	15.80	111.966	
3,800.00	3,541.33	2,995.78	2,899.56	23.02	13.38	-179.46	-467.87	453.59	1,846.97	1,830.63	16.34	113.060	
3,900.00	3,627.32	3,058.64	2,958.46	24.06	13.84	-179.36	-481.94	470.47	1,924.71	1,907.84	16.87	114.069	
4,000.00	3,713.32	3,121.51	3,017.36	25.11	14.29	-179.26	-496.01	487.34	2,002.45	1,985.04	17.41	115.007	
4,100.00	3,799.31	3,184.37	3,076.26	26.16	14.75	-179.17	-510.08	504.22	2,080.19	2,062.24	17.95	115.879	
4,200.00	3,885.31	3,247.24	3,135.16	27.21	15.20	-179.08	-524.15	521.10	2,157.94	2,139.45	18.49	116.690	
4,300.00	3,971.30	3,310.10	3,194.06	28.26	15.66	-179.01	-538.22	537.98	2,235.69	2,216.65	19.04	117.449	
4,400.00	4,057.30	3,372.96	3,252.96	29.31	16.11	-178.93	-552.29	554.86	2,313.43	2,293.86	19.58	118.157	
4,500.00	4,143.29	3,435.83	3,311.85	30.36	16.57	-178.87	-566.36	571.74	2,391.18	2,371.06	20.12	118.822	
4,600.00	4,229.29	3,498.69	3,370.75	31.42	17.03	-178.80	-580.43	588.62	2,468.94	2,448.27	20.67	119.446	
4,700.00	4,315.28	3,561.57	3,362.90	32.47	18.68	-178.58	-641.11	661.41	2,545.15	2,523.47	21.68	117.386	
4,800.00	4,401.28	4,552.76	4,401.28	33.52	20.62	-178.57	-703.04	735.70	2,607.35	2,583.98	23.37	111.583	



Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_RASSMUSSEN 22-29
Project:	KERR MCGEE OIL & GAS ONSHORE LP	TVD Reference:	WELL @ 4949.00ft (Original Well Elev)
Reference Site:	WELD_RASMUSSEN 9 PAD	MD Reference:	WELL @ 4949.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_RASSMUSSEN 22-29	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_RASSMUSSEN 22-29	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 09-02-09 RHS	Offset TVD Reference:	Offset Datum

Offset Design WELD_RASMUSSEN 9 PAD - P_RASMUSSEN 37-29 - P_RASMUSSEN 37-29 - PLAN #1 09-02-09 RI													Offset Site Error:	0.00 ft
Survey Program: 0-MWD													Offset Well Error:	0.00 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Semi Major Axis Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
4,900.00	4,487.27	4,638.76	4,487.27	34.58	20.70	178.60	-703.04	735.70	2,658.38	2,634.46	23.91	111.173		
5,000.00	4,573.27	4,724.75	4,573.27	35.63	20.78	178.63	-703.04	735.70	2,709.40	2,684.94	24.46	110.774		
5,100.00	4,659.26	4,810.75	4,659.26	36.69	20.86	178.65	-703.04	735.70	2,760.43	2,735.42	25.01	110.385		
5,200.00	4,745.26	4,896.74	4,745.26	37.74	20.95	178.68	-703.04	735.70	2,811.46	2,785.90	25.56	110.006		
5,300.00	4,831.25	4,982.74	4,831.25	38.80	21.03	178.70	-703.04	735.70	2,862.49	2,836.38	26.11	109.636		
5,400.00	4,917.25	5,068.73	4,917.25	39.86	21.12	178.72	-703.04	735.70	2,913.51	2,886.85	26.66	109.275		
5,500.00	5,003.24	5,154.73	5,003.24	40.91	21.21	178.74	-703.04	735.70	2,964.54	2,937.33	27.22	108.924		
5,600.00	5,089.24	5,240.72	5,089.24	41.97	21.30	178.76	-703.04	735.70	3,015.57	2,987.80	27.77	108.582		
5,700.00	5,175.23	5,326.72	5,175.23	43.03	21.39	178.79	-703.04	735.70	3,066.60	3,038.27	28.33	108.248		
5,800.00	5,261.22	5,412.71	5,261.22	44.08	21.48	178.81	-703.04	735.70	3,117.63	3,088.74	28.89	107.924		
5,900.00	5,347.22	5,498.71	5,347.22	45.14	21.58	178.82	-703.04	735.70	3,168.66	3,139.22	29.45	107.607		
6,000.00	5,433.21	5,584.70	5,433.21	46.20	21.67	178.84	-703.04	735.70	3,219.69	3,189.69	30.01	107.298		
6,100.00	5,519.21	5,670.70	5,519.21	47.25	21.77	178.86	-703.04	735.70	3,270.72	3,240.15	30.57	106.996		
6,121.69	5,537.86	5,689.35	5,537.86	47.48	21.79	178.87	-703.04	735.70	3,281.79	3,251.10	30.69	106.932		
6,200.00	5,605.74	5,757.23	5,605.74	48.22	21.87	178.90	-703.04	735.70	3,320.83	3,289.45	31.38	105.823		
6,300.00	5,693.93	5,845.42	5,693.93	49.01	21.97	178.93	-703.04	735.70	3,367.96	3,335.75	32.21	104.564		
6,400.00	5,783.71	5,935.20	5,783.71	49.75	22.08	178.96	-703.04	735.70	3,411.98	3,378.99	32.99	103.418		
6,500.00	5,874.97	6,026.46	5,874.97	50.44	22.18	178.99	-703.04	735.70	3,452.84	3,419.11	33.73	102.378		
6,600.00	5,967.61	6,119.09	5,967.61	51.08	22.30	179.02	-703.04	735.70	3,490.49	3,456.08	34.41	101.435		
6,700.00	6,061.50	6,212.98	6,061.50	51.66	22.41	179.04	-703.04	735.70	3,524.89	3,489.85	35.04	100.583		
6,800.00	6,156.53	6,308.02	6,156.53	52.18	22.53	179.06	-703.04	735.70	3,555.99	3,520.37	35.62	99.818		
6,900.00	6,252.59	6,404.08	6,252.59	52.65	22.65	179.07	-703.04	735.70	3,583.76	3,547.61	36.15	99.134		
7,000.00	6,349.57	6,501.05	6,349.57	53.07	22.77	179.09	-703.04	735.70	3,608.15	3,571.53	36.62	98.528		
7,100.00	6,447.33	6,598.82	6,447.33	53.43	22.89	179.10	-703.04	735.70	3,629.15	3,592.12	37.03	97.997		
7,200.00	6,545.77	6,697.26	6,545.77	53.74	23.02	179.11	-703.04	735.70	3,646.73	3,609.34	37.39	97.538		
7,300.00	6,644.76	6,796.25	6,644.76	53.99	23.15	179.12	-703.04	735.70	3,660.85	3,623.17	37.68	97.149		
7,400.00	6,744.19	6,895.67	6,744.19	54.20	23.28	179.12	-703.04	735.70	3,671.52	3,633.60	37.92	96.829		
7,500.00	6,843.92	6,995.41	6,843.92	54.35	23.42	179.13	-703.04	735.70	3,678.71	3,640.62	38.09	96.577		
7,600.00	6,943.85	7,095.33	6,943.85	54.46	23.55	179.13	-703.04	735.70	3,682.41	3,644.21	38.20	96.391		
7,656.16	7,000.00	7,151.49	7,000.00	54.49	23.63	135.98	-703.04	735.70	3,682.96	3,644.72	38.24	96.315		
7,700.00	7,043.84	7,195.33	7,043.84	54.52	23.69	135.98	-703.04	735.70	3,682.96	3,644.58	38.38	95.960		
7,800.00	7,143.84	7,295.33	7,143.84	54.58	23.82	135.98	-703.04	735.70	3,682.96	3,644.25	38.71	95.137		
7,900.00	7,243.84	7,395.33	7,243.84	54.64	23.96	135.98	-703.04	735.70	3,682.96	3,643.91	39.05	94.322		
8,000.00	7,343.84	7,495.33	7,343.84	54.70	24.10	135.98	-703.04	735.70	3,682.96	3,643.58	39.38	93.516		
8,100.00	7,443.84	7,595.33	7,443.84	54.77	24.24	135.98	-703.04	735.70	3,682.96	3,643.24	39.72	92.719		
8,200.00	7,543.84	7,695.33	7,543.84	54.83	24.39	135.98	-703.04	735.70	3,682.96	3,642.90	40.06	91.931		
8,300.00	7,643.84	7,795.33	7,643.84	54.90	24.53	135.98	-703.04	735.70	3,682.96	3,642.56	40.40	91.152		
8,337.16	7,681.00	7,832.49	7,681.00	54.92	24.58	135.98	-703.04	735.70	3,682.96	3,642.43	40.53	90.865		



Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_RASSMUSSEN 22-29
Project:	KERR MCGEE OIL & GAS ONSHORE LP	TVD Reference:	WELL @ 4949.00ft (Original Well Elev)
Reference Site:	WELD_RASMUSSEN 9 PAD	MD Reference:	WELL @ 4949.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_RASSMUSSEN 22-29	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_RASSMUSSEN 22-29	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 09-02-09 RHS	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 ft
Survey Program: 0-MWD												Offset Well Error:	0.00 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)	Minimum Separation (ft)	Separation Factor	
0.00	0.00	0.00	0.00	0.00	0.00	180.00	-29.14	0.00	29.14				
100.00	100.00	100.00	100.00	0.10	0.10	180.00	-29.14	0.00	29.14	28.95	0.19	152.537	
200.00	200.00	200.00	200.00	0.32	0.32	180.00	-29.14	0.00	29.14	28.50	0.64	45.493	
300.00	300.00	300.00	300.00	0.55	0.55	180.00	-29.14	0.00	29.14	28.05	1.09	26.733	
400.00	400.00	400.00	400.00	0.77	0.77	180.00	-29.14	0.00	29.14	27.60	1.54	18.928	
500.00	500.00	500.00	500.00	0.99	0.99	180.00	-29.14	0.00	29.14	27.15	1.99	14.650	
600.00	600.00	600.00	600.00	1.22	1.22	180.00	-29.14	0.00	29.14	26.70	2.44	11.950	
700.00	700.00	700.00	700.00	1.44	1.44	180.00	-29.14	0.00	29.14	26.25	2.89	10.090	
800.00	800.00	800.06	800.06	1.67	1.67	179.87	-29.12	0.07	29.12	25.79	3.34	8.730	
900.00	900.00	900.27	900.24	1.89	1.88	175.13	-28.44	2.42	28.54	24.77	3.77	7.573	
935.00	935.00	935.29	935.21	1.97	1.95	171.78	-27.96	4.04	28.25	24.33	3.92	7.203	
955.34	955.34	955.62	955.51	2.02	2.00	-147.52	-27.64	5.17	28.18	24.16	4.01	7.021 CC, ES	
1,000.00	999.99	1,000.16	999.95	2.12	2.09	-154.36	-26.77	8.12	28.64	24.43	4.21	6.807 SF	
1,100.00	1,099.91	1,099.25	1,098.59	2.34	2.32	-173.14	-24.16	17.06	34.32	29.67	4.64	7.390	
1,200.00	1,199.62	1,197.04	1,195.56	2.56	2.58	171.35	-20.66	29.09	47.91	42.84	5.08	9.439	
1,300.00	1,299.01	1,293.03	1,290.30	2.81	2.85	161.77	-16.31	43.98	69.03	63.52	5.51	12.533	
1,400.00	1,397.96	1,386.81	1,382.29	3.07	3.17	156.17	-11.21	61.46	96.69	90.74	5.95	16.260	
1,500.00	1,496.34	1,477.98	1,471.10	3.37	3.51	152.76	-5.44	81.22	130.23	123.83	6.40	20.361	
1,600.00	1,594.04	1,566.21	1,556.38	3.72	3.90	150.54	0.89	102.92	169.21	162.35	6.86	24.666	
1,700.00	1,690.94	1,651.20	1,637.84	4.11	4.31	148.97	7.68	126.19	213.31	205.97	7.34	29.056	
1,800.00	1,786.92	1,732.74	1,715.28	4.57	4.75	147.78	14.82	150.69	262.23	254.39	7.84	33.440	
1,900.00	1,881.85	1,810.65	1,788.56	5.09	5.21	146.79	22.23	176.06	315.70	307.34	8.36	37.749	
2,000.00	1,975.64	1,884.79	1,857.61	5.68	5.70	145.92	29.79	201.98	373.45	364.54	8.91	41.912	
2,100.00	2,068.15	1,955.10	1,922.42	6.33	6.20	145.09	37.42	228.13	435.22	425.73	9.48	45.886	
2,200.00	2,159.29	2,024.39	1,985.66	7.07	6.71	144.28	45.35	255.32	500.68	490.58	10.09	49.602	
2,300.00	2,248.93	2,097.71	2,052.41	7.87	7.28	143.60	53.85	284.44	568.61	557.86	10.76	52.868	
2,400.00	2,336.98	2,168.99	2,117.31	8.75	7.85	143.00	62.11	312.75	638.60	627.15	11.45	55.776	
2,469.46	2,397.14	2,217.27	2,161.26	9.40	8.23	142.61	67.70	331.92	688.40	676.45	11.95	57.608	
2,500.00	2,423.40	2,238.26	2,180.37	9.70	8.40	142.82	70.14	340.26	710.51	698.31	12.20	58.239	
2,600.00	2,509.39	2,307.00	2,242.95	10.68	8.95	143.43	78.10	367.56	782.93	769.90	13.03	60.097	
2,700.00	2,595.39	2,375.74	2,305.53	11.68	9.52	143.94	86.07	394.86	855.38	841.51	13.87	61.669	
2,800.00	2,681.38	2,444.48	2,368.11	12.68	10.08	144.37	94.04	422.17	927.86	913.14	14.72	63.015	
2,900.00	2,767.38	2,513.22	2,430.69	13.70	10.65	144.74	102.00	449.47	1,000.36	984.77	15.59	64.179	
3,000.00	2,853.37	2,581.96	2,493.27	14.72	11.22	145.06	109.97	476.77	1,072.88	1,056.42	16.46	65.190	
3,100.00	2,939.36	2,650.70	2,555.85	15.74	11.79	145.34	117.93	504.07	1,145.41	1,128.08	17.34	66.075	
3,200.00	3,025.36	2,719.44	2,618.43	16.77	12.36	145.58	125.90	531.38	1,217.96	1,199.74	18.22	66.856	
3,300.00	3,111.35	2,788.18	2,681.01	17.81	12.94	145.80	133.87	558.68	1,290.51	1,271.41	19.11	67.548	
3,400.00	3,197.35	2,856.92	2,743.59	18.85	13.51	146.00	141.83	585.98	1,363.07	1,343.07	20.00	68.165	
3,500.00	3,283.34	2,925.66	2,806.17	19.89	14.09	146.17	149.80	613.28	1,435.64	1,414.75	20.89	68.719	
3,600.00	3,369.34	2,994.40	2,868.76	20.93	14.67	146.33	157.76	640.58	1,508.21	1,486.42	21.79	69.217	
3,700.00	3,455.33	3,063.14	2,931.34	21.97	15.25	146.47	165.73	667.89	1,580.79	1,558.10	22.69	69.667	
3,800.00	3,541.33	3,131.88	2,993.92	23.02	15.83	146.60	173.70	695.19	1,653.37	1,629.78	23.59	70.076	
3,900.00	3,627.32	3,200.62	3,056.50	24.06	16.41	146.72	181.66	722.49	1,725.96	1,701.46	24.50	70.450	
4,000.00	3,713.32	3,269.36	3,119.08	25.11	16.99	146.84	189.63	749.79	1,798.55	1,773.14	25.41	70.790	
4,100.00	3,799.31	3,338.10	3,181.66	26.16	17.58	146.94	197.60	777.09	1,871.14	1,844.83	26.32	71.103	
4,200.00	3,885.31	3,406.84	3,244.24	27.21	18.16	147.03	205.56	804.40	1,943.74	1,916.51	27.23	71.392	
4,300.00	3,971.30	3,475.58	3,306.82	28.26	18.75	147.12	213.53	831.70	2,016.34	1,988.20	28.14	71.658	
4,400.00	4,057.30	3,544.32	3,369.40	29.31	19.33	147.20	221.49	859.00	2,088.94	2,059.89	29.05	71.904	
4,500.00	4,143.29	3,613.06	3,431.98	30.36	19.92	147.28	229.46	886.30	2,161.54	2,131.57	29.97	72.133	
4,600.00	4,229.29	3,681.80	3,494.56	31.42	20.50	147.35	237.43	913.61	2,234.14	2,203.26	30.88	72.345	
4,700.00	4,315.28	3,750.54	3,557.14	32.47	21.09	147.41	245.39	940.91	2,306.75	2,274.95	31.80	72.543	
4,800.00	4,401.28	3,819.28	3,619.73	33.52	21.67	147.48	253.36	968.21	2,379.35	2,346.64	32.72	72.728	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Weatherford International Ltd.

Anticollision Report



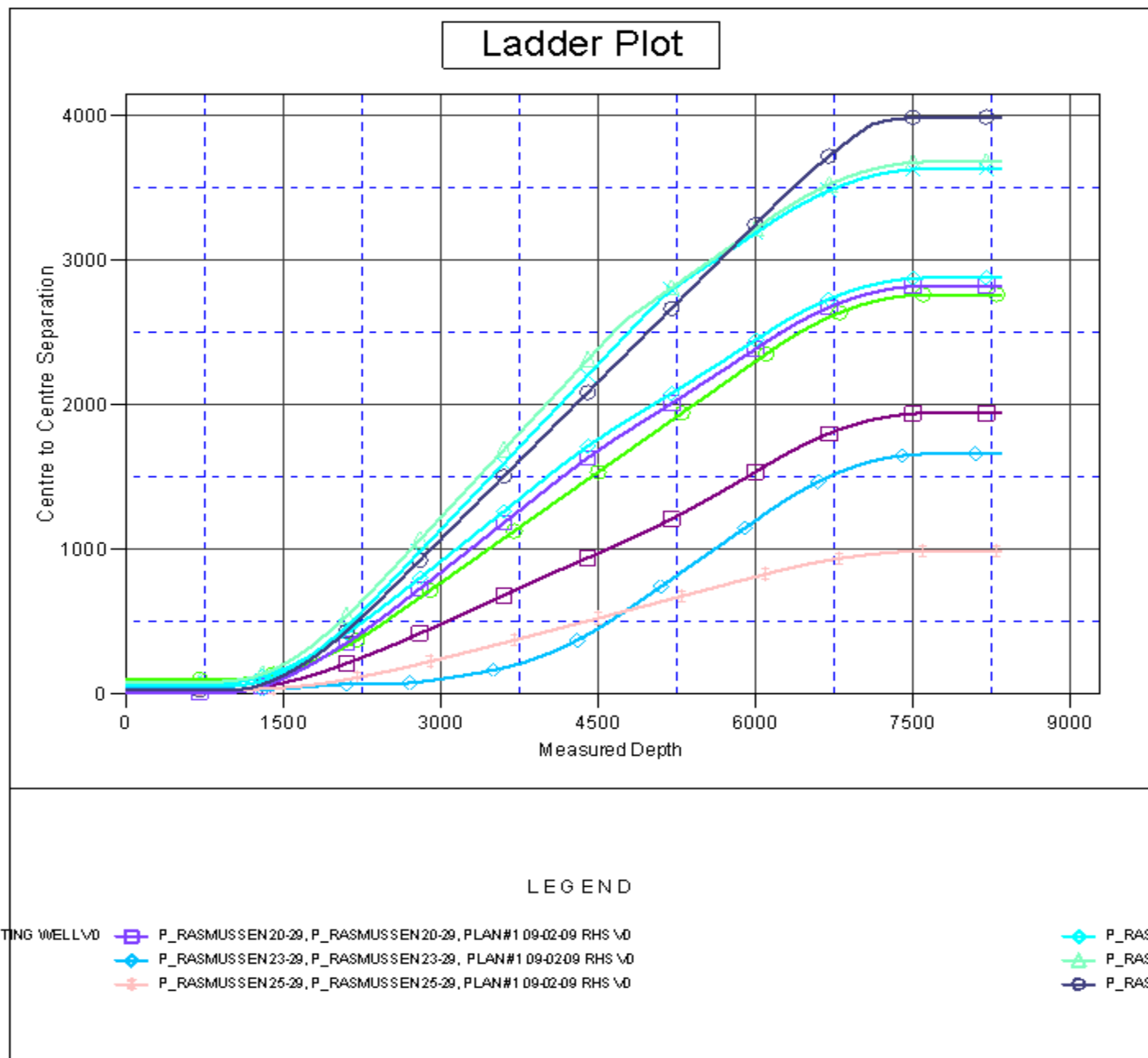
Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_RASSMUSSEN 22-29
Project:	KERR MCGEE OIL & GAS ONSHORE LP	TVD Reference:	WELL @ 4949.00ft (Original Well Elev)
Reference Site:	WELD_RASMUSSEN 9 PAD	MD Reference:	WELL @ 4949.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_RASSMUSSEN 22-29	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_RASSMUSSEN 22-29	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 09-02-09 RHS	Offset TVD Reference:	Offset Datum

Offset Design WELD_RASMUSSEN 9 PAD - P_RASMUSSEN 39-29 - P_RASMUSSEN 39-29 - PLAN #1 09-02-09 RI												Offset Site Error:	0.00 ft
Survey Program: 0-MWD												Offset Well Error:	0.00 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)	Minimum Separation (ft)	Separation Factor	
4,900.00	4,487.27	3,888.02	3,682.31	34.58	22.26	147.54	261.32	995.51	2,451.96	2,418.33	33.63	72.902	
5,000.00	4,573.27	3,956.77	3,744.89	35.63	22.85	147.59	269.29	1,022.81	2,524.57	2,490.02	34.55	73.064	
5,100.00	4,659.26	4,025.51	3,807.47	36.69	23.43	147.64	277.26	1,050.12	2,597.18	2,561.71	35.47	73.217	
5,200.00	4,745.26	4,094.25	3,870.05	37.74	24.02	147.69	285.22	1,077.42	2,669.79	2,633.40	36.39	73.361	
5,300.00	4,831.25	4,162.99	3,932.63	38.80	24.61	147.74	293.19	1,104.72	2,742.40	2,705.09	37.31	73.496	
5,400.00	4,917.25	4,231.73	3,995.21	39.86	25.20	147.78	301.15	1,132.02	2,815.01	2,776.78	38.23	73.624	
5,500.00	5,003.24	4,300.47	4,057.79	40.91	25.78	147.83	309.12	1,159.32	2,887.63	2,848.47	39.16	73.745	
5,600.00	5,089.24	4,369.21	4,120.37	41.97	26.37	147.87	317.09	1,186.63	2,960.24	2,920.16	40.08	73.860	
5,700.00	5,175.23	4,437.95	4,182.95	43.03	26.96	147.90	325.05	1,213.93	3,032.86	2,991.85	41.00	73.968	
5,800.00	5,261.22	4,506.69	4,245.53	44.08	27.55	147.94	333.02	1,241.23	3,105.47	3,063.55	41.93	74.071	
5,900.00	5,347.22	4,575.43	4,308.11	45.14	28.14	147.98	340.99	1,268.53	3,178.09	3,135.24	42.85	74.169	
6,000.00	5,433.21	4,644.17	4,370.70	46.20	28.73	148.01	348.95	1,295.84	3,250.70	3,206.93	43.77	74.263	
6,100.00	5,519.21	4,712.91	4,433.28	47.25	29.32	148.04	356.92	1,323.14	3,323.32	3,278.62	44.70	74.351	
6,121.69	5,537.86	4,727.82	4,446.85	47.48	29.44	148.05	358.65	1,329.06	3,339.07	3,294.18	44.90	74.370	
6,200.00	5,605.74	4,782.31	4,496.46	48.22	29.91	148.90	364.96	1,350.70	3,395.31	3,349.55	45.76	74.205	
6,300.00	5,693.93	4,853.78	4,561.53	49.01	30.52	149.87	373.24	1,379.09	3,465.24	3,418.42	46.81	74.020	
6,400.00	5,783.71	4,927.28	4,628.44	49.75	31.15	150.72	381.76	1,408.28	3,532.98	3,485.10	47.87	73.800	
6,500.00	5,874.97	5,002.72	4,697.12	50.44	31.80	151.46	390.50	1,438.24	3,598.45	3,549.53	48.92	73.559	
6,600.00	5,967.61	5,080.00	4,767.48	51.08	32.46	152.10	399.46	1,468.94	3,661.59	3,611.64	49.95	73.308	
6,700.00	6,061.50	5,159.05	4,839.44	51.66	33.14	152.66	408.62	1,500.33	3,722.31	3,671.36	50.95	73.055	
6,800.00	6,156.53	5,239.74	4,912.91	52.18	33.83	153.13	417.97	1,532.39	3,780.57	3,728.64	51.93	72.806	
6,900.00	6,252.59	5,322.00	4,987.79	52.65	34.54	153.53	427.50	1,565.06	3,836.30	3,783.43	52.87	72.567	
7,000.00	6,349.57	5,405.72	5,064.01	53.07	35.26	153.87	437.21	1,598.31	3,889.44	3,835.68	53.76	72.343	
7,100.00	6,447.33	5,490.80	5,141.46	53.43	35.99	154.14	447.06	1,632.10	3,939.96	3,885.34	54.62	72.137	
7,200.00	6,545.77	5,575.04	5,218.91	53.74	36.72	154.41	456.91	1,665.89	3,991.46	3,937.35	55.49	71.930	
7,300.00	6,644.76	5,664.76	5,308.46	53.99	37.46	154.62	466.86	1,698.66	4,043.91	4,000.40	56.36	71.724	
7,400.00	6,744.19	5,754.19	5,397.89	54.20	38.21	154.77	476.81	1,731.43	4,096.41	4,052.90	57.23	71.518	
7,500.00	6,843.92	5,843.92	5,487.42	54.35	38.96	154.87	486.76	1,764.20	4,148.91	4,105.40	58.10	71.312	
7,600.00	6,943.85	5,933.85	5,576.95	54.46	39.71	154.92	496.71	1,796.97	4,201.41	4,157.90	58.97	71.106	
7,656.16	7,000.00	6,000.00	5,646.00	54.49	40.46	154.92	506.66	1,829.74	4,253.91	4,210.40	59.84	70.900	
7,700.00	7,043.84	6,043.84	5,689.84	54.52	41.21	154.92	516.61	1,862.51	4,306.41	4,262.90	60.71	70.694	
7,800.00	7,143.84	6,143.84	5,779.37	54.58	41.96	154.92	526.56	1,895.28	4,358.91	4,315.40	61.58	70.488	
7,900.00	7,243.84	6,243.84	5,868.90	54.64	42.71	154.92	536.51	1,928.05	4,411.41	4,367.90	62.45	70.282	
8,000.00	7,343.84	6,343.84	5,958.43	54.70	43.46	154.92	546.46	1,960.82	4,463.91	4,420.40	63.32	70.076	
8,100.00	7,443.84	6,443.84	6,047.96	54.77	44.21	154.92	556.41	1,993.59	4,516.41	4,472.90	64.19	69.870	
8,200.00	7,543.84	6,543.84	6,137.49	54.83	44.96	154.92	566.36	2,026.36	4,568.91	4,525.40	65.06	69.664	
8,300.00	7,643.84	6,643.84	6,226.96	54.90	45.71	154.92	576.31	2,059.13	4,621.41	4,577.90	65.93	69.458	
8,337.16	7,681.00	6,681.00	6,264.16	54.92	46.46	154.92	586.26	2,091.90	4,673.91	4,630.40	66.80	69.252	



Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_RASSMUSSEN 22-29
Project:	KERR MCGEE OIL & GAS ONSHORE LP	TVD Reference:	WELL @ 4949.00ft (Original Well Elev)
Reference Site:	WELD_RASMUSSEN 9 PAD	MD Reference:	WELL @ 4949.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_RASSMUSSEN 22-29	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_RASSMUSSEN 22-29	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 09-02-09 RHS	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 4949.00ft (Original Well Elev) Coordinates are relative to: P_RASSMUSSEN 22-29
Offset Depths are relative to Offset Datum Coordinate System is US State Plane 1983, Colorado Northern Zone
Central Meridian is 105° 30' 0.000 W ° Grid Convergence at Surface is: 0.31°

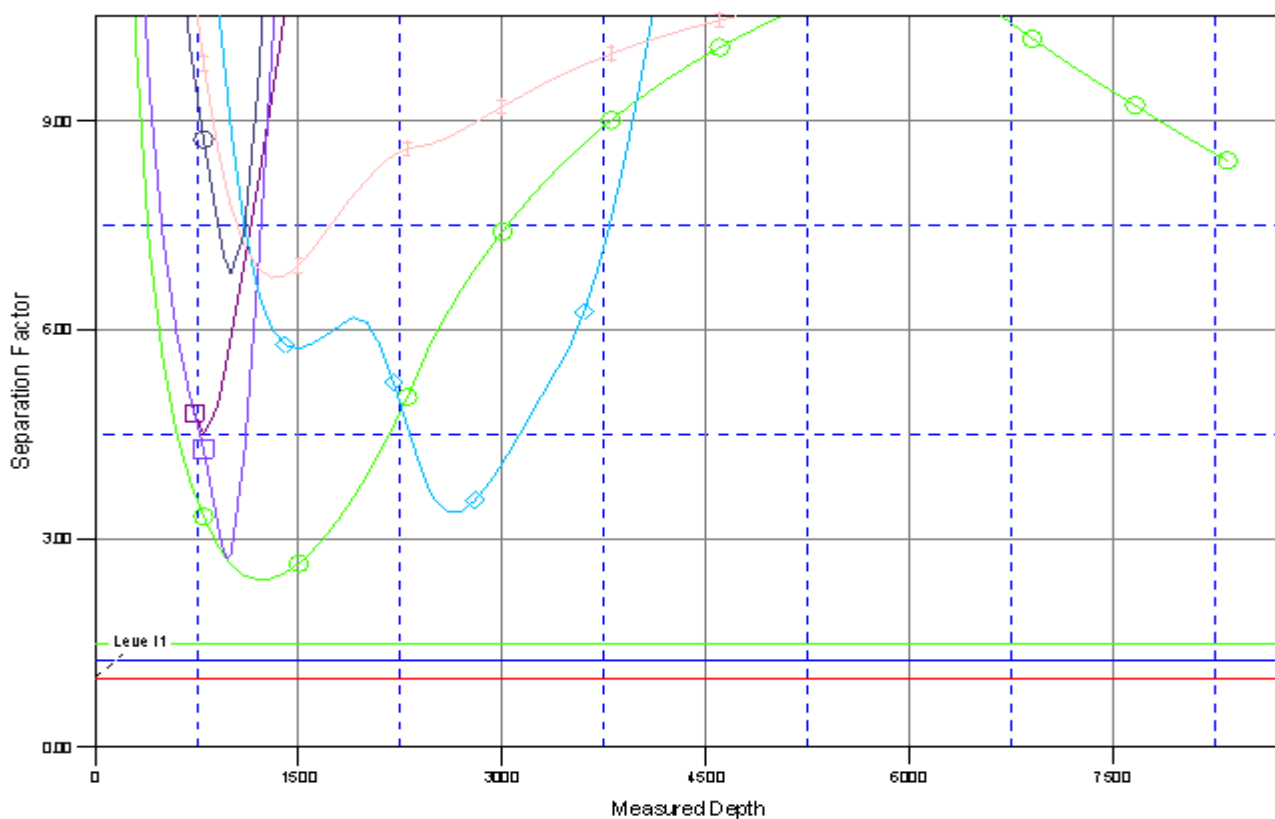




Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_RASMUSSEN 22-29
Project:	KERR MCGEE OIL & GAS ONSHORE LP	TVD Reference:	WELL @ 4949.00ft (Original Well Elev)
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Site Error:	0.00ft	North Reference:	True
Reference Well:	P_RASMUSSEN 22-29	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_RASMUSSEN 22-29	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 09-02-09 RHS	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 4949.00ft (Original Well Elev) Coordinates are relative to: P_RASMUSSEN 22-29
Offset Depths are relative to Offset Datum Coordinate System is US State Plane 1983, Colorado Northern Zone
Central Meridian is 105° 30' 0.000 W ° Grid Convergence at Surface is: 0.31°

Separation Factor Plot



LEGEND

STING WELL VD

- P_RASMUSSEN 20-29, P_RASMUSSEN 20-29, PLAN #1 09-02-09 RHS VD
- P_RASMUSSEN 23-29, P_RASMUSSEN 23-29, PLAN #1 09-02-09 RHS VD
- P_RASMUSSEN 25-29, P_RASMUSSEN 25-29, PLAN #1 09-02-09 RHS VD

- P_RASML
- P_RASML
- P_RASML