



US ROCKIES REGION PLANNING

KERR MCGEE OIL & GAS ONSHORE LP

WELD_RASMUSSEN 9 PAD

P_RASMUSSEN 10-29

P_RASMUSSEN 10-29

Plan: PLAN #1 09-02-09 RHS

Standard Planning Report

02 September, 2009





P_RASMUSSEN 10-29
KERR MCGEE OIL & GAS ONSHORE LP
SECTION 29 T2N R68W
787 FSL 1961 FEL
LAT: 40° 6' 15.984 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_RASMUSSEN 10-29

+N/-S	+E/-W	Northing	Easting	Ground Level:	Latitude	Longitude	Slot
0.00	0.00	1281248.09	3132946.85	4934.00	40° 6' 15.984 N	105° 1' 28.992 W	

FORMATION TOP DETAILS

TVDPATH	MDPATH	FORMATION
3815.00	4027.11	PARKMAN
4350.00	4573.86	SUSSEX TOP
4818.00	5042.41	SHANNON TOP
7236.00	7460.41	NIO A TOP
7531.00	7755.41	CODELL TOP
7971.00	8195.41	JSAND 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	
750.00	0.00	0.00	750.00	0.00	0.00	0.00	0.00	0.00	
1973.63	24.47	359.20	1936.76	257.35	-3.57	2.00	359.20	257.37	
3650.78	24.47	359.20	3463.24	952.06	-13.21	0.00	0.00	952.15	
4874.41	0.00	0.00	4650.00	1209.41	-16.78	2.00	180.00	1209.52	
8345.41	0.00	0.00	8121.00	1209.41	-16.78	0.00	0.00	1209.52	PBHL_RASMUSSEN 10-29(1980 FSL 1980 FEL)50'TGT RAD

CASING DETAILS

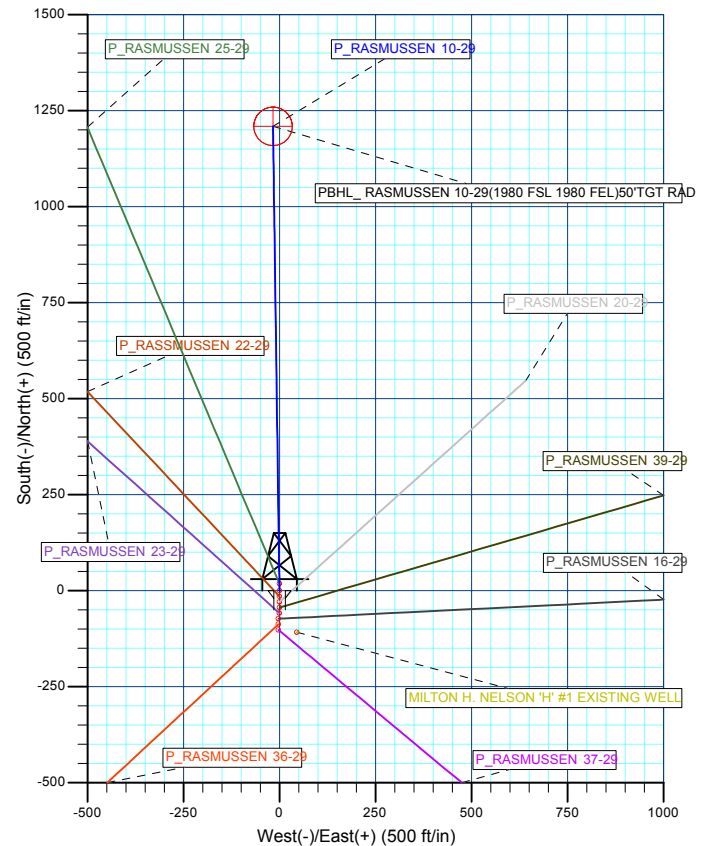
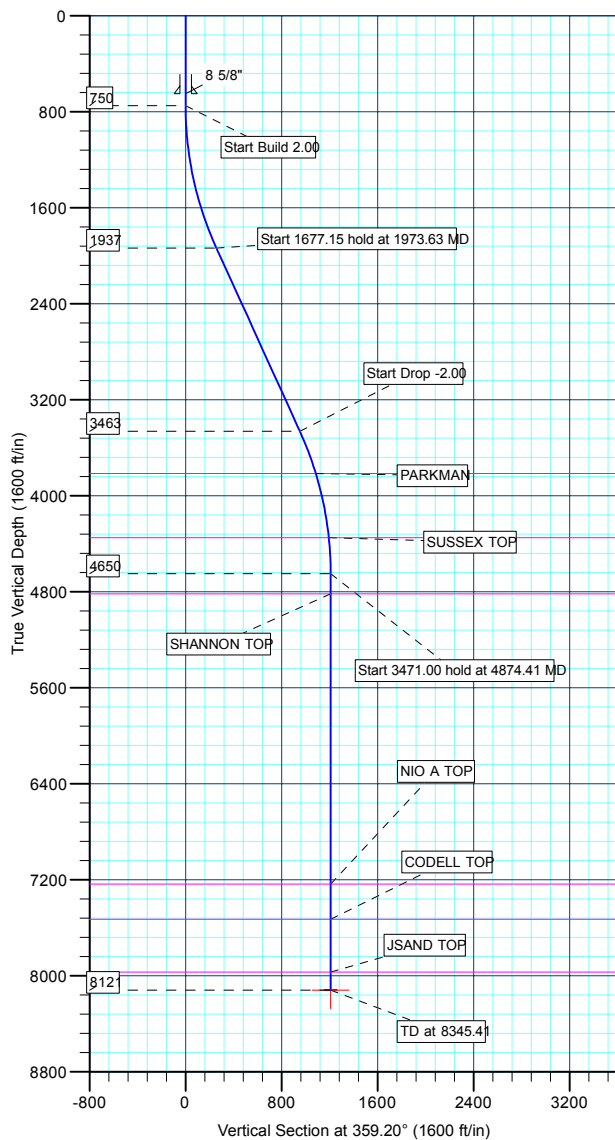
TVD	MD	Name	Size
650.00	650.00	8 5/8"	8.62

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

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
PBHL	8121.00	1209.41	-16.78	1282457.39	3132923.58	40° 6' 27.936 N	105° 1' 29.208 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_RASMUSSEN 10-29/P_RASMUSSEN 10-29)

Created By: Robert H. Scott



Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well P_RASMUSSEN 10-29
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_RASMUSSEN 10-29	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_RASMUSSEN 10-29		
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_RASMUSSEN 10-29					
Well Position	+N/-S	0.00 ft	Northing:	1,281,248.09 ft	Latitude:	40° 6' 15.984 N
	+E/-W	0.00 ft	Easting:	3,132,946.85 ft	Longitude:	105° 1' 28.992 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	4,934.00 ft

Wellbore	P_RASMUSSEN 10-29				
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	359.20

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	
750.00	0.00	0.00	750.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,973.63	24.47	359.20	1,936.76	257.35	-3.57	2.00	2.00	0.00	359.20	
3,650.78	24.47	359.20	3,463.24	952.06	-13.21	0.00	0.00	0.00	0.00	
4,874.41	0.00	0.00	4,650.00	1,209.41	-16.78	2.00	-2.00	0.00	180.00	
8,345.41	0.00	0.00	8,121.00	1,209.41	-16.78	0.00	0.00	0.00	0.00	PBHL_RASMUSSEN



Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well P_RASMUSSEN 10-29
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_RASMUSSEN 10-29	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_RASMUSSEN 10-29		
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									
750.00	0.00	0.00	750.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	1.00	359.20	800.00	0.44	-0.01	0.44	2.00	2.00	0.00
900.00	3.00	359.20	899.93	3.93	-0.05	3.93	2.00	2.00	0.00
1,000.00	5.00	359.20	999.68	10.90	-0.15	10.90	2.00	2.00	0.00
1,100.00	7.00	359.20	1,099.13	21.35	-0.30	21.35	2.00	2.00	0.00
1,200.00	9.00	359.20	1,198.15	35.27	-0.49	35.27	2.00	2.00	0.00
1,300.00	11.00	359.20	1,296.63	52.63	-0.73	52.63	2.00	2.00	0.00
1,400.00	13.00	359.20	1,394.44	73.42	-1.02	73.42	2.00	2.00	0.00
1,500.00	15.00	359.20	1,491.46	97.61	-1.35	97.62	2.00	2.00	0.00
1,600.00	17.00	359.20	1,587.58	125.17	-1.74	125.18	2.00	2.00	0.00
1,700.00	19.00	359.20	1,682.68	156.06	-2.17	156.08	2.00	2.00	0.00
1,800.00	21.00	359.20	1,776.65	190.26	-2.64	190.28	2.00	2.00	0.00
1,900.00	23.00	359.20	1,869.36	227.71	-3.16	227.74	2.00	2.00	0.00
Start 1677.15 hold at 1973.63 MD									
1,973.63	24.47	359.20	1,936.76	257.35	-3.57	257.37	2.00	2.00	0.00
2,000.00	24.47	359.20	1,960.76	268.27	-3.72	268.30	0.00	0.00	0.00
2,100.00	24.47	359.20	2,051.78	309.69	-4.30	309.72	0.00	0.00	0.00
2,200.00	24.47	359.20	2,142.79	351.12	-4.87	351.15	0.00	0.00	0.00
2,300.00	24.47	359.20	2,233.81	392.54	-5.45	392.58	0.00	0.00	0.00
2,400.00	24.47	359.20	2,324.83	433.96	-6.02	434.00	0.00	0.00	0.00
2,500.00	24.47	359.20	2,415.84	475.38	-6.60	475.43	0.00	0.00	0.00
2,600.00	24.47	359.20	2,506.86	516.80	-7.17	516.85	0.00	0.00	0.00
2,700.00	24.47	359.20	2,597.87	558.23	-7.75	558.28	0.00	0.00	0.00
2,800.00	24.47	359.20	2,688.89	599.65	-8.32	599.70	0.00	0.00	0.00
2,900.00	24.47	359.20	2,779.91	641.07	-8.90	641.13	0.00	0.00	0.00
3,000.00	24.47	359.20	2,870.92	682.49	-9.47	682.56	0.00	0.00	0.00
3,100.00	24.47	359.20	2,961.94	723.91	-10.05	723.98	0.00	0.00	0.00
3,200.00	24.47	359.20	3,052.95	765.33	-10.62	765.41	0.00	0.00	0.00
3,300.00	24.47	359.20	3,143.97	806.76	-11.20	806.83	0.00	0.00	0.00
3,400.00	24.47	359.20	3,234.99	848.18	-11.77	848.26	0.00	0.00	0.00
3,500.00	24.47	359.20	3,326.00	889.60	-12.34	889.69	0.00	0.00	0.00
3,600.00	24.47	359.20	3,417.02	931.02	-12.92	931.11	0.00	0.00	0.00
Start Drop -2.00									
3,650.78	24.47	359.20	3,463.24	952.06	-13.21	952.15	0.00	0.00	0.00
3,700.00	23.49	359.20	3,508.21	972.06	-13.49	972.15	2.00	-2.00	0.00
3,800.00	21.49	359.20	3,600.60	1,010.30	-14.02	1,010.40	2.00	-2.00	0.00
3,900.00	19.49	359.20	3,694.27	1,045.30	-14.51	1,045.40	2.00	-2.00	0.00
4,000.00	17.49	359.20	3,789.10	1,077.00	-14.95	1,077.11	2.00	-2.00	0.00
PARKMAN									
4,027.11	16.95	359.20	3,815.00	1,085.03	-15.06	1,085.13	2.00	-2.00	0.00
4,100.00	15.49	359.20	3,884.98	1,105.38	-15.34	1,105.49	2.00	-2.00	0.00
4,200.00	13.49	359.20	3,981.80	1,130.40	-15.69	1,130.51	2.00	-2.00	0.00
4,300.00	11.49	359.20	4,079.43	1,152.02	-15.99	1,152.13	2.00	-2.00	0.00
4,400.00	9.49	359.20	4,177.75	1,170.22	-16.24	1,170.33	2.00	-2.00	0.00
4,500.00	7.49	359.20	4,276.65	1,184.98	-16.44	1,185.09	2.00	-2.00	0.00
SUSSEX TOP									
4,573.86	6.01	359.20	4,350.00	1,193.66	-16.56	1,193.77	2.00	-2.00	0.00
4,600.00	5.49	359.20	4,376.01	1,196.27	-16.60	1,196.39	2.00	-2.00	0.00
4,700.00	3.49	359.20	4,475.69	1,204.10	-16.71	1,204.22	2.00	-2.00	0.00
4,800.00	1.49	359.20	4,575.60	1,208.44	-16.77	1,208.56	2.00	-2.00	0.00
Start 3471.00 hold at 4874.41 MD									
4,874.41	0.00	0.00	4,650.00	1,209.41	-16.78	1,209.52	2.00	-2.00	0.00



Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well P_RASMUSSEN 10-29
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_RASMUSSEN 10-29	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_RASMUSSEN 10-29		
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)
4,900.00	0.00	0.00	4,675.59	1,209.41	-16.78	1,209.52	0.00	0.00	0.00
5,000.00	0.00	0.00	4,775.59	1,209.41	-16.78	1,209.52	0.00	0.00	0.00
SHANNON TOP									
5,042.41	0.00	0.00	4,818.00	1,209.41	-16.78	1,209.52	0.00	0.00	0.00
5,100.00	0.00	0.00	4,875.59	1,209.41	-16.78	1,209.52	0.00	0.00	0.00
5,200.00	0.00	0.00	4,975.59	1,209.41	-16.78	1,209.52	0.00	0.00	0.00
5,300.00	0.00	0.00	5,075.59	1,209.41	-16.78	1,209.52	0.00	0.00	0.00
5,400.00	0.00	0.00	5,175.59	1,209.41	-16.78	1,209.52	0.00	0.00	0.00
5,500.00	0.00	0.00	5,275.59	1,209.41	-16.78	1,209.52	0.00	0.00	0.00
5,600.00	0.00	0.00	5,375.59	1,209.41	-16.78	1,209.52	0.00	0.00	0.00
5,700.00	0.00	0.00	5,475.59	1,209.41	-16.78	1,209.52	0.00	0.00	0.00
5,800.00	0.00	0.00	5,575.59	1,209.41	-16.78	1,209.52	0.00	0.00	0.00
5,900.00	0.00	0.00	5,675.59	1,209.41	-16.78	1,209.52	0.00	0.00	0.00
6,000.00	0.00	0.00	5,775.59	1,209.41	-16.78	1,209.52	0.00	0.00	0.00
6,100.00	0.00	0.00	5,875.59	1,209.41	-16.78	1,209.52	0.00	0.00	0.00
6,200.00	0.00	0.00	5,975.59	1,209.41	-16.78	1,209.52	0.00	0.00	0.00
6,300.00	0.00	0.00	6,075.59	1,209.41	-16.78	1,209.52	0.00	0.00	0.00
6,400.00	0.00	0.00	6,175.59	1,209.41	-16.78	1,209.52	0.00	0.00	0.00
6,500.00	0.00	0.00	6,275.59	1,209.41	-16.78	1,209.52	0.00	0.00	0.00
6,600.00	0.00	0.00	6,375.59	1,209.41	-16.78	1,209.52	0.00	0.00	0.00
6,700.00	0.00	0.00	6,475.59	1,209.41	-16.78	1,209.52	0.00	0.00	0.00
6,800.00	0.00	0.00	6,575.59	1,209.41	-16.78	1,209.52	0.00	0.00	0.00
6,900.00	0.00	0.00	6,675.59	1,209.41	-16.78	1,209.52	0.00	0.00	0.00
7,000.00	0.00	0.00	6,775.59	1,209.41	-16.78	1,209.52	0.00	0.00	0.00
7,100.00	0.00	0.00	6,875.59	1,209.41	-16.78	1,209.52	0.00	0.00	0.00
7,200.00	0.00	0.00	6,975.59	1,209.41	-16.78	1,209.52	0.00	0.00	0.00
7,300.00	0.00	0.00	7,075.59	1,209.41	-16.78	1,209.52	0.00	0.00	0.00
7,400.00	0.00	0.00	7,175.59	1,209.41	-16.78	1,209.52	0.00	0.00	0.00
NIO A TOP									
7,460.41	0.00	0.00	7,236.00	1,209.41	-16.78	1,209.52	0.00	0.00	0.00
7,500.00	0.00	0.00	7,275.59	1,209.41	-16.78	1,209.52	0.00	0.00	0.00
7,600.00	0.00	0.00	7,375.59	1,209.41	-16.78	1,209.52	0.00	0.00	0.00
7,700.00	0.00	0.00	7,475.59	1,209.41	-16.78	1,209.52	0.00	0.00	0.00
CODELL TOP									
7,755.41	0.00	0.00	7,531.00	1,209.41	-16.78	1,209.52	0.00	0.00	0.00
7,800.00	0.00	0.00	7,575.59	1,209.41	-16.78	1,209.52	0.00	0.00	0.00
7,900.00	0.00	0.00	7,675.59	1,209.41	-16.78	1,209.52	0.00	0.00	0.00
8,000.00	0.00	0.00	7,775.59	1,209.41	-16.78	1,209.52	0.00	0.00	0.00
8,100.00	0.00	0.00	7,875.59	1,209.41	-16.78	1,209.52	0.00	0.00	0.00
JSAND TOP									
8,195.41	0.00	0.00	7,971.00	1,209.41	-16.78	1,209.52	0.00	0.00	0.00
8,200.00	0.00	0.00	7,975.59	1,209.41	-16.78	1,209.52	0.00	0.00	0.00
8,300.00	0.00	0.00	8,075.59	1,209.41	-16.78	1,209.52	0.00	0.00	0.00
PBHL_ RASMUSSEN 10-29(1980 FSL 1980 FEL)50'TGT RAD									
8,345.41	0.00	0.00	8,121.00	1,209.41	-16.78	1,209.52	0.00	0.00	0.00



Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well P_RASMUSSEN 10-29
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_RASMUSSEN 10-29	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_RASMUSSEN 10-29		
Design:	PLAN #1 09-02-09 RHS		

Design Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)		
PBHL_RASMUSSEN	0.00	0.00	8,121.00	1,209.41	-16.78	1,282,457.39	3,132,923.58	40° 6' 27.936 N	105° 1' 29.208 W
- plan hits target center									
- Circle (radius 50.00)									

Casing Points				
Measured Depth	Vertical Depth		Casing Diameter	Hole Diameter
(ft)	(ft)	Name	(in)	(in)
650.00	650.00	8 5/8"	8.62	11.00

Formations					
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction
(ft)	(ft)			(°)	(°)
4,027.11	3,815.00	PARKMAN			
4,573.86	4,350.00	SUSSEX TOP			
5,042.41	4,818.00	SHANNON TOP			
7,460.41	7,236.00	NIO A TOP			
7,755.41	7,531.00	CODELL TOP			
8,195.41	7,971.00	JSAND TOP			

Plan Annotations				
Measured Depth	Vertical Depth	Local Coordinates		Comment
(ft)	(ft)	+N/-S (ft)	+E/-W (ft)	
750.00	750.00	0.00	0.00	Start Build 2.00
1,973.63	1,936.76	257.35	-3.57	Start 1677.15 hold at 1973.63 MD
3,650.78	3,463.24	952.06	-13.21	Start Drop -2.00
4,874.41	4,650.00	1,209.41	-16.78	Start 3471.00 hold at 4874.41 MD
8,345.41	8,121.00	1,209.41	-16.78	TD at 8345.41



US ROCKIES REGION PLANNING

**KERR MCGEE OIL & GAS ONSHORE LP
WELD_RASMUSSEN 9 PAD
P_RASMUSSEN 10-29**

**P_RASMUSSEN 10-29
PLAN #1 09-02-09 RHS**

Anticollision Report

02 September, 2009





Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_RASMUSSEN 10-29
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_RASMUSSEN 10-29	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_RASMUSSEN 10-29	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	8,345.41	PLAN #1 09-02-09 RHS (P_RASMUSSEN 10-29)	MWD	MWD - Standard	

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
WELD_RASMUSSEN 9 PAD						
MILTON H. NELSON 'H' #1 EXISTING WELL - MILTON	750.00	750.00	117.31	88.05	4.010	CC
MILTON H. NELSON 'H' #1 EXISTING WELL - MILTON	900.00	899.93	120.96	85.40	3.402	ES
MILTON H. NELSON 'H' #1 EXISTING WELL - MILTON	1,100.00	1,099.13	137.34	93.60	3.140	SF
P_RASMUSSEN 16-29 - P_RASMUSSEN 16-29 - PLAN	750.00	750.00	72.92	69.80	23.424	CC, ES
P_RASMUSSEN 16-29 - P_RASMUSSEN 16-29 - PLAN	1,000.00	999.80	83.54	79.35	19.955	SF
P_RASMUSSEN 20-29 - P_RASMUSSEN 20-29 - PLAN	750.00	750.00	29.17	26.05	9.370	CC
P_RASMUSSEN 20-29 - P_RASMUSSEN 20-29 - PLAN	800.00	800.34	29.31	25.98	8.787	ES
P_RASMUSSEN 20-29 - P_RASMUSSEN 20-29 - PLAN	1,000.00	1,001.38	33.78	29.56	8.003	SF
P_RASMUSSEN 23-29 - P_RASMUSSEN 23-29 - PLAN	750.00	750.00	58.29	55.18	18.726	CC
P_RASMUSSEN 23-29 - P_RASMUSSEN 23-29 - PLAN	800.00	800.69	58.44	55.10	17.513	ES
P_RASMUSSEN 23-29 - P_RASMUSSEN 23-29 - PLAN	1,100.00	1,103.94	67.13	62.44	14.324	SF
P_RASMUSSEN 25-29 - P_RASMUSSEN 25-29 - PLAN	1,109.34	1,108.44	1.80	-2.94	0.381	Level 1, CC, ES, SF
P_RASMUSSEN 36-29 - P_RASMUSSEN 36-29 - PLAN	750.00	750.00	87.48	84.37	28.101	CC, ES
P_RASMUSSEN 36-29 - P_RASMUSSEN 36-29 - PLAN	900.00	897.24	93.14	89.41	24.967	SF
P_RASMUSSEN 37-29 - P_RASMUSSEN 37-29 - PLAN	750.00	750.00	102.04	98.93	32.779	CC, ES
P_RASMUSSEN 37-29 - P_RASMUSSEN 37-29 - PLAN	1,000.00	994.32	117.73	113.60	28.450	SF
P_RASMUSSEN 39-29 - P_RASMUSSEN 39-29 - PLAN	750.00	750.00	43.73	40.61	14.046	CC, ES
P_RASMUSSEN 39-29 - P_RASMUSSEN 39-29 - PLAN	900.00	900.42	47.01	43.25	12.486	SF
P_RASMUSSEN 22-29 - P_RASMUSSEN 22-29 - PLAN	750.00	750.00	14.58	11.47	4.685	CC, ES
P_RASMUSSEN 22-29 - P_RASMUSSEN 22-29 - PLAN	800.00	800.00	15.02	11.68	4.501	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										
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	157.19	-108.13	45.49	117.31								
100.00	100.00	100.00	100.00	0.10	1.70	157.19	-108.13	45.49	117.31	115.51	1.80	65.333					
200.00	200.00	200.00	200.00	0.32	5.70	157.19	-108.13	45.49	117.31	111.29	6.02	19.485					
300.00	300.00	300.00	300.00	0.55	9.70	157.19	-108.13	45.49	117.31	107.06	10.25	11.450					
400.00	400.00	400.00	400.00	0.77	13.70	157.19	-108.13	45.49	117.31	102.84	14.47	8.107					
500.00	500.00	500.00	500.00	0.99	17.70	157.19	-108.13	45.49	117.31	98.61	18.69	6.275					
600.00	600.00	600.00	600.00	1.22	21.70	157.19	-108.13	45.49	117.31	94.39	22.92	5.118					
700.00	700.00	700.00	700.00	1.44	25.70	157.19	-108.13	45.49	117.31	90.16	27.14	4.322					

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_RASMUSSEN 10-29
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_RASMUSSEN 10-29	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_RASMUSSEN 10-29	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 - 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
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
750.00	750.00	750.00	750.00	1.56	27.70	157.19	-108.13	45.49	117.31	88.05	29.26	4.010 CC	
800.00	800.00	800.00	800.00	1.67	29.70	158.06	-108.13	45.49	117.71	86.35	31.37	3.753	
900.00	899.93	899.93	899.93	1.89	33.70	158.65	-108.13	45.49	120.96	85.40	35.55	3.402 ES	
1,000.00	999.68	999.68	999.68	2.12	37.69	159.75	-108.13	45.49	127.48	87.80	39.68	3.212	
1,100.00	1,099.13	1,099.13	1,099.13	2.36	41.67	161.19	-108.13	45.49	137.34	93.60	43.74	3.140 SF	
1,200.00	1,198.15	1,198.15	1,198.15	2.63	45.63	162.82	-108.13	45.49	150.59	102.89	47.69	3.157	
1,300.00	1,296.63	1,296.63	1,296.63	2.92	49.57	164.48	-108.13	45.49	167.27	115.74	51.53	3.246	
1,400.00	1,394.44	1,394.44	1,394.44	3.26	53.48	166.08	-108.13	45.49	187.41	132.17	55.24	3.393	
1,500.00	1,491.46	1,491.46	1,491.46	3.66	57.36	167.56	-108.13	45.49	211.00	152.21	58.79	3.589	
1,600.00	1,587.58	1,587.58	1,587.58	4.10	61.20	168.88	-108.13	45.49	238.03	175.85	62.18	3.828	
1,700.00	1,682.68	1,682.68	1,682.68	4.61	65.01	170.04	-108.13	45.49	268.46	203.07	65.38	4.106	
1,800.00	1,776.65	1,776.65	1,776.65	5.18	68.77	171.05	-108.13	45.49	302.25	233.86	68.39	4.420	
1,900.00	1,869.36	1,869.36	1,869.36	5.82	72.47	171.92	-108.13	45.49	339.35	268.16	71.19	4.767	
1,973.63	1,936.76	1,936.76	1,936.76	6.33	75.17	172.48	-108.13	45.49	368.76	295.65	73.11	5.044	
2,000.00	1,960.76	1,960.76	1,960.76	6.52	76.13	172.70	-108.13	45.49	379.60	305.55	74.06	5.126	
2,100.00	2,051.78	2,051.78	2,051.78	7.25	79.77	173.41	-108.13	45.49	420.78	343.10	77.68	5.417	
2,200.00	2,142.79	2,142.79	2,142.79	7.99	83.41	174.00	-108.13	45.49	462.00	380.69	81.30	5.682	
2,300.00	2,233.81	2,233.81	2,233.81	8.75	87.05	174.49	-108.13	45.49	503.25	418.31	84.94	5.925	
2,400.00	2,324.83	2,324.83	2,324.83	9.51	90.69	174.91	-108.13	45.49	544.53	455.95	88.58	6.147	
2,500.00	2,415.84	2,415.84	2,415.84	10.28	94.33	175.27	-108.13	45.49	585.83	493.60	92.23	6.352	
2,600.00	2,506.86	2,506.86	2,506.86	11.05	97.97	175.58	-108.13	45.49	627.15	531.27	95.88	6.541	
2,700.00	2,597.87	2,597.87	2,597.87	11.83	101.61	175.86	-108.13	45.49	668.48	568.94	99.54	6.716	
2,800.00	2,688.89	2,688.89	2,688.89	12.61	105.26	176.10	-108.13	45.49	709.82	606.62	103.19	6.878	
2,900.00	2,779.91	2,779.91	2,779.91	13.39	108.90	176.31	-108.13	45.49	751.17	644.31	106.85	7.030	
3,000.00	2,870.92	2,870.92	2,870.92	14.18	112.54	176.51	-108.13	45.49	792.53	682.01	110.52	7.171	
3,100.00	2,961.94	2,961.94	2,961.94	14.97	116.18	176.68	-108.13	45.49	833.89	719.71	114.18	7.303	
3,200.00	3,052.95	3,052.95	3,052.95	15.76	119.82	176.84	-108.13	45.49	875.26	757.42	117.85	7.427	
3,300.00	3,143.97	3,143.97	3,143.97	16.55	123.46	176.98	-108.13	45.49	916.64	795.12	121.52	7.543	
3,400.00	3,234.99	3,234.99	3,234.99	17.34	127.10	177.11	-108.13	45.49	958.02	832.84	125.18	7.653	
3,500.00	3,326.00	3,326.00	3,326.00	18.13	130.74	177.23	-108.13	45.49	999.40	870.55	128.85	7.756	
3,600.00	3,417.02	3,417.02	3,417.02	18.93	134.38	177.34	-108.13	45.49	1,040.79	908.27	132.53	7.853	
3,650.78	3,463.24	3,463.24	3,463.24	19.33	136.23	177.39	-108.13	45.49	1,061.81	927.42	134.39	7.901	
3,700.00	3,508.21	3,508.21	3,508.21	19.67	138.03	177.46	-108.13	45.49	1,081.80	944.66	137.14	7.888	
3,800.00	3,600.60	3,600.60	3,600.60	20.25	141.72	177.58	-108.13	45.49	1,120.01	977.33	142.69	7.849	
3,900.00	3,694.27	3,694.27	3,694.27	20.80	145.47	177.69	-108.13	45.49	1,154.99	1,006.74	148.25	7.791	
4,000.00	3,789.10	3,789.10	3,789.10	21.31	149.26	177.77	-108.13	45.49	1,186.67	1,032.92	153.75	7.718	
4,100.00	3,884.98	3,884.98	3,884.98	21.78	153.10	177.85	-108.13	45.49	1,215.03	1,055.86	159.17	7.633	
4,200.00	3,981.80	3,981.80	3,981.80	22.20	156.97	177.91	-108.13	45.49	1,240.04	1,075.54	164.50	7.538	
4,300.00	4,079.43	4,079.43	4,079.43	22.58	160.88	177.96	-108.13	45.49	1,261.64	1,091.94	169.70	7.435	
4,400.00	4,177.75	4,177.75	4,177.75	22.92	164.81	178.00	-108.13	45.49	1,279.84	1,105.07	174.76	7.323	
4,500.00	4,276.65	4,276.65	4,276.65	23.21	168.77	178.04	-108.13	45.49	1,294.59	1,114.92	179.67	7.205	
4,600.00	4,376.01	4,376.01	4,376.01	23.45	172.74	178.06	-108.13	45.49	1,305.88	1,121.49	184.39	7.082	
4,700.00	4,475.69	4,475.69	4,475.69	23.64	176.73	178.08	-108.13	45.49	1,313.70	1,124.78	188.92	6.954	
4,800.00	4,575.60	4,575.60	4,575.60	23.78	180.72	178.09	-108.13	45.49	1,318.04	1,124.81	193.23	6.821	
4,874.41	4,650.00	4,650.00	4,650.00	23.86	183.70	177.29	-108.13	45.49	1,319.01	1,122.73	196.28	6.720	
4,900.00	4,675.59	4,675.59	4,675.59	23.88	184.72	177.29	-108.13	45.49	1,319.01	1,121.67	197.34	6.684	
5,000.00	4,775.59	4,775.59	4,775.59	23.97	188.72	177.29	-108.13	45.49	1,319.01	1,117.50	201.51	6.546	
5,100.00	4,875.59	4,875.59	4,875.59	24.06	192.72	177.29	-108.13	45.49	1,319.01	1,113.33	205.67	6.413	
5,200.00	4,975.59	4,975.59	4,975.59	24.15	196.72	177.29	-108.13	45.49	1,319.01	1,109.16	209.84	6.286	
5,300.00	5,075.59	5,075.59	5,075.59	24.24	200.72	177.29	-108.13	45.49	1,319.01	1,104.99	214.01	6.163	
5,400.00	5,175.59	5,175.59	5,175.59	24.33	204.72	177.29	-108.13	45.49	1,319.01	1,100.82	218.18	6.045	
5,500.00	5,275.59	5,275.59	5,275.59	24.43	208.72	177.29	-108.13	45.49	1,319.01	1,096.65	222.36	5.932	

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_RASMUSSEN 10-29
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_RASMUSSEN 10-29	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_RASMUSSEN 10-29	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 - 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 (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		
5,600.00	5,375.59	5,375.59	5,375.59	24.53	212.72	177.29	-108.13	45.49	1,319.01	1,092.47	226.53	5.823		
5,700.00	5,475.59	5,475.59	5,475.59	24.63	216.72	177.29	-108.13	45.49	1,319.01	1,088.30	230.71	5.717		
5,800.00	5,575.59	5,575.59	5,575.59	24.73	220.72	177.29	-108.13	45.49	1,319.01	1,084.12	234.89	5.615		
5,900.00	5,675.59	5,675.59	5,675.59	24.83	224.72	177.29	-108.13	45.49	1,319.01	1,079.94	239.07	5.517		
6,000.00	5,775.59	5,775.59	5,775.59	24.94	228.72	177.29	-108.13	45.49	1,319.01	1,075.76	243.25	5.422		
6,100.00	5,875.59	5,875.59	5,875.59	25.04	232.72	177.29	-108.13	45.49	1,319.01	1,071.58	247.43	5.331		
6,200.00	5,975.59	5,975.59	5,975.59	25.15	236.72	177.29	-108.13	45.49	1,319.01	1,067.39	251.61	5.242		
6,300.00	6,075.59	6,075.59	6,075.59	25.26	240.72	177.29	-108.13	45.49	1,319.01	1,063.21	255.80	5.156		
6,400.00	6,175.59	6,175.59	6,175.59	25.37	244.72	177.29	-108.13	45.49	1,319.01	1,059.02	259.98	5.073		
6,500.00	6,275.59	6,275.59	6,275.59	25.48	248.72	177.29	-108.13	45.49	1,319.01	1,054.84	264.17	4.993		
6,600.00	6,375.59	6,375.59	6,375.59	25.60	252.72	177.29	-108.13	45.49	1,319.01	1,050.65	268.36	4.915		
6,700.00	6,475.59	6,475.59	6,475.59	25.71	256.72	177.29	-108.13	45.49	1,319.01	1,046.46	272.54	4.840		
6,800.00	6,575.59	6,575.59	6,575.59	25.83	260.72	177.29	-108.13	45.49	1,319.01	1,042.27	276.73	4.766		
6,900.00	6,675.59	6,675.59	6,675.59	25.94	264.72	177.29	-108.13	45.49	1,319.01	1,038.08	280.92	4.695		
7,000.00	6,775.59	6,775.59	6,775.59	26.06	268.72	177.29	-108.13	45.49	1,319.01	1,033.89	285.11	4.626		
7,100.00	6,875.59	6,875.59	6,875.59	26.18	272.72	177.29	-108.13	45.49	1,319.01	1,029.70	289.31	4.559		
7,200.00	6,975.59	6,975.59	6,975.59	26.31	276.72	177.29	-108.13	45.49	1,319.01	1,025.51	293.50	4.494		
7,300.00	7,075.59	7,075.59	7,075.59	26.43	280.72	177.29	-108.13	45.49	1,319.01	1,021.31	297.69	4.431		
7,400.00	7,175.59	7,175.59	7,175.59	26.55	284.72	177.29	-108.13	45.49	1,319.01	1,017.12	301.89	4.369		
7,500.00	7,275.59	7,275.59	7,275.59	26.68	288.72	177.29	-108.13	45.49	1,319.01	1,012.93	306.08	4.309		
7,600.00	7,375.59	7,375.59	7,375.59	26.81	292.72	177.29	-108.13	45.49	1,319.01	1,008.73	310.28	4.251		
7,700.00	7,475.59	7,475.59	7,475.59	26.94	296.72	177.29	-108.13	45.49	1,319.01	1,004.53	314.47	4.194		
7,800.00	7,575.59	7,575.59	7,575.59	27.07	300.72	177.29	-108.13	45.49	1,319.01	1,000.34	318.67	4.139		
7,900.00	7,675.59	7,675.59	7,675.59	27.20	304.72	177.29	-108.13	45.49	1,319.01	996.14	322.87	4.085		
8,000.00	7,775.59	7,775.59	7,775.59	27.33	308.72	177.29	-108.13	45.49	1,319.01	991.94	327.07	4.033		
8,100.00	7,875.59	7,875.59	7,875.59	27.46	312.72	177.29	-108.13	45.49	1,319.01	987.74	331.26	3.982		
8,200.00	7,975.59	7,975.59	7,975.59	27.60	316.72	177.29	-108.13	45.49	1,319.01	983.54	335.46	3.932		
8,300.00	8,075.59	8,075.59	8,075.59	27.73	320.72	177.29	-108.13	45.49	1,319.01	979.34	339.66	3.883		
8,345.41	8,121.00	8,121.00	8,121.00	27.80	322.54	177.29	-108.13	45.49	1,319.01	977.44	341.57	3.862		



Weatherford International Ltd.

Anticollision Report



Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_RASMUSSEN 10-29
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_RASMUSSEN 10-29	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_RASMUSSEN 10-29	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	-72.86	-2.80	72.92				
100.00	100.00	100.00	100.00	0.10	0.10	-177.80	-72.86	-2.80	72.92	72.73	0.19	381.666	
200.00	200.00	200.00	200.00	0.32	0.32	-177.80	-72.86	-2.80	72.92	72.28	0.64	113.830	
300.00	300.00	300.00	300.00	0.55	0.55	-177.80	-72.86	-2.80	72.92	71.83	1.09	66.890	
400.00	400.00	400.00	400.00	0.77	0.77	-177.80	-72.86	-2.80	72.92	71.38	1.54	47.360	
500.00	500.00	500.00	500.00	0.99	0.99	-177.80	-72.86	-2.80	72.92	70.93	1.99	36.657	
600.00	600.00	600.00	600.00	1.22	1.22	-177.80	-72.86	-2.80	72.92	70.48	2.44	29.900	
700.00	700.00	700.00	700.00	1.44	1.44	-177.80	-72.86	-2.80	72.92	70.03	2.89	25.246	
750.00	750.00	750.00	750.00	1.56	1.56	-177.80	-72.86	-2.80	72.92	69.80	3.11	23.424 CC, ES	
800.00	800.00	800.02	800.02	1.67	1.67	-177.04	-72.86	-2.78	73.35	70.02	3.34	21.988	
900.00	899.93	900.13	900.10	1.89	1.87	-178.73	-72.76	-0.68	76.69	72.93	3.76	20.403	
1,000.00	999.68	999.80	999.62	2.12	2.08	177.34	-72.48	4.87	83.54	79.35	4.19	19.955 SF	
1,100.00	1,099.13	1,098.70	1,098.11	2.36	2.31	172.14	-72.04	13.80	94.46	89.83	4.62	20.429	
1,200.00	1,198.15	1,196.49	1,195.13	2.63	2.55	166.66	-71.44	25.96	109.98	104.90	5.08	21.658	
1,300.00	1,296.63	1,292.86	1,290.29	2.92	2.83	161.54	-70.69	41.17	130.40	124.84	5.56	23.460	
1,400.00	1,394.44	1,387.52	1,383.20	3.26	3.14	157.09	-69.80	59.22	155.77	149.70	6.07	25.647	
1,500.00	1,491.46	1,480.21	1,473.55	3.66	3.49	153.35	-68.78	79.85	186.00	179.37	6.63	28.050	
1,600.00	1,587.58	1,570.69	1,561.07	4.10	3.88	150.22	-67.64	102.79	220.92	213.68	7.24	30.526	
1,700.00	1,682.68	1,658.77	1,645.51	4.61	4.31	147.61	-66.41	127.77	260.30	252.41	7.89	32.974	
1,800.00	1,776.65	1,744.27	1,726.72	5.18	4.78	145.39	-65.09	154.48	303.94	295.34	8.60	35.326	
1,900.00	1,869.36	1,827.04	1,804.54	5.82	5.28	143.46	-63.69	182.64	351.63	342.26	9.37	37.544	
1,973.63	1,936.76	1,886.19	1,859.63	6.33	5.67	142.19	-62.63	204.13	389.20	379.24	9.96	39.079	
2,000.00	1,960.76	1,907.03	1,878.94	6.52	5.81	141.94	-62.24	211.97	403.06	392.87	10.20	39.530	
2,100.00	2,051.78	1,984.99	1,950.64	7.25	6.38	140.99	-60.73	242.54	456.48	445.35	11.13	41.013	
2,200.00	2,142.79	2,066.65	2,025.07	7.99	7.00	140.01	-59.07	276.07	510.92	498.80	12.12	42.148	
2,300.00	2,233.81	2,150.19	2,101.19	8.75	7.67	139.18	-57.37	310.45	565.51	552.36	13.15	43.008	
2,400.00	2,324.83	2,233.72	2,177.31	9.51	8.34	138.51	-55.67	344.83	620.16	605.97	14.19	43.700	
2,500.00	2,415.84	2,317.26	2,253.43	10.28	9.02	137.94	-53.97	379.20	674.86	659.61	15.25	44.265	
2,600.00	2,506.86	2,400.80	2,329.55	11.05	9.71	137.45	-52.27	413.58	729.60	713.29	16.31	44.730	
2,700.00	2,597.87	2,484.34	2,405.67	11.83	10.40	137.04	-50.58	447.96	784.38	766.99	17.39	45.117	
2,800.00	2,688.89	2,567.88	2,481.78	12.61	11.10	136.67	-48.88	482.33	839.18	820.71	18.47	45.443	
2,900.00	2,779.91	2,651.42	2,557.90	13.39	11.80	136.36	-47.18	516.71	893.99	874.44	19.55	45.722	
3,000.00	2,870.92	2,734.95	2,634.02	14.18	12.50	136.07	-45.48	551.09	948.83	928.19	20.64	45.961	
3,100.00	2,961.94	2,818.49	2,710.14	14.97	13.20	135.82	-43.78	585.46	1,003.68	981.94	21.74	46.168	
3,200.00	3,052.95	2,902.03	2,786.26	15.76	13.91	135.60	-42.08	619.84	1,058.54	1,035.71	22.84	46.349	
3,300.00	3,143.97	2,985.57	2,862.37	16.55	14.62	135.40	-40.38	654.22	1,113.42	1,089.48	23.94	46.507	
3,400.00	3,234.99	3,069.11	2,938.49	17.34	15.33	135.21	-38.68	688.59	1,168.30	1,143.25	25.05	46.647	
3,500.00	3,326.00	3,152.64	3,014.61	18.13	16.04	135.05	-36.98	722.97	1,223.19	1,197.04	26.15	46.771	
3,600.00	3,417.02	3,236.18	3,090.73	18.93	16.76	134.89	-35.28	757.34	1,278.09	1,250.82	27.26	46.882	
3,650.78	3,463.24	3,278.60	3,129.38	19.33	17.12	134.82	-34.41	774.80	1,305.97	1,278.14	27.83	46.934	
3,700.00	3,508.21	3,319.87	3,166.99	19.67	17.47	135.19	-33.57	791.78	1,332.74	1,304.32	28.42	46.893	
3,800.00	3,600.60	3,404.62	3,244.20	20.25	18.20	135.81	-31.85	826.66	1,385.58	1,356.02	29.56	46.867	
3,900.00	3,694.27	3,490.48	3,322.44	20.80	18.93	136.29	-30.10	861.99	1,436.31	1,405.61	30.70	46.792	
4,000.00	3,789.10	3,577.35	3,401.60	21.31	19.68	136.63	-28.33	897.74	1,484.90	1,453.09	31.81	46.683	
4,100.00	3,884.98	3,665.14	3,481.58	21.78	20.43	136.85	-26.55	933.86	1,531.33	1,498.44	32.90	46.552	
4,200.00	3,981.80	3,753.72	3,562.30	22.20	21.19	136.96	-24.75	970.31	1,575.61	1,541.65	33.95	46.408	
4,300.00	4,079.43	3,858.38	3,657.79	22.58	22.05	136.87	-22.63	1,013.11	1,617.59	1,582.55	35.04	46.163	
4,400.00	4,177.75	4,004.73	3,793.43	22.92	23.01	136.51	-19.92	1,067.94	1,655.16	1,618.98	36.19	45.738	
4,500.00	4,276.65	4,157.62	3,937.94	23.21	23.86	136.16	-17.45	1,117.75	1,687.30	1,650.09	37.20	45.352	
4,600.00	4,376.01	4,316.43	4,090.63	23.45	24.61	135.83	-15.30	1,161.27	1,713.69	1,675.58	38.10	44.974	
4,700.00	4,475.69	4,480.29	4,250.47	23.64	25.25	135.51	-13.52	1,197.24	1,734.07	1,695.21	38.86	44.622	
4,800.00	4,575.60	4,648.18	4,416.09	23.78	25.76	135.21	-12.17	1,224.56	1,748.21	1,708.75	39.46	44.298	

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_RASMUSSEN 10-29
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_RASMUSSEN 10-29	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_RASMUSSEN 10-29	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						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	
4,874.41	4,650.00	4,775.00	4,542.10	23.86	26.05	134.20	-11.47	1,238.75	1,754.58	1,714.77	39.81	44.071	
4,900.00	4,675.59	4,818.87	4,585.82	23.88	26.14	134.11	-11.29	1,242.36	1,756.02	1,716.11	39.92	43.994	
5,000.00	4,775.59	4,991.11	4,757.86	23.97	26.37	133.93	-10.91	1,250.06	1,759.09	1,718.83	40.26	43.694	
5,100.00	4,875.59	5,108.84	4,875.59	24.06	26.47	133.92	-10.90	1,250.37	1,759.21	1,718.72	40.49	43.450	
5,200.00	4,975.59	5,208.84	4,975.59	24.15	26.55	133.92	-10.90	1,250.37	1,759.21	1,718.51	40.70	43.219	
5,300.00	5,075.59	5,308.84	5,075.59	24.24	26.64	133.92	-10.90	1,250.37	1,759.21	1,718.29	40.92	42.987	
5,400.00	5,175.59	5,408.84	5,175.59	24.33	26.73	133.92	-10.90	1,250.37	1,759.21	1,718.06	41.15	42.753	
5,500.00	5,275.59	5,508.84	5,275.59	24.43	26.82	133.92	-10.90	1,250.37	1,759.21	1,717.83	41.38	42.518	
5,600.00	5,375.59	5,608.84	5,375.59	24.53	26.92	133.92	-10.90	1,250.37	1,759.21	1,717.60	41.61	42.282	
5,700.00	5,475.59	5,708.84	5,475.59	24.63	27.01	133.92	-10.90	1,250.37	1,759.21	1,717.37	41.84	42.044	
5,800.00	5,575.59	5,808.84	5,575.59	24.73	27.11	133.92	-10.90	1,250.37	1,759.21	1,717.13	42.08	41.806	
5,900.00	5,675.59	5,908.84	5,675.59	24.83	27.20	133.92	-10.90	1,250.37	1,759.21	1,716.89	42.32	41.568	
6,000.00	5,775.59	6,008.84	5,775.59	24.94	27.30	133.92	-10.90	1,250.37	1,759.21	1,716.64	42.57	41.328	
6,100.00	5,875.59	6,108.84	5,875.59	25.04	27.40	133.92	-10.90	1,250.37	1,759.21	1,716.40	42.81	41.089	
6,200.00	5,975.59	6,208.84	5,975.59	25.15	27.51	133.92	-10.90	1,250.37	1,759.21	1,716.14	43.07	40.849	
6,300.00	6,075.59	6,308.84	6,075.59	25.26	27.61	133.92	-10.90	1,250.37	1,759.21	1,715.89	43.32	40.608	
6,400.00	6,175.59	6,408.84	6,175.59	25.37	27.72	133.92	-10.90	1,250.37	1,759.21	1,715.63	43.58	40.368	
6,500.00	6,275.59	6,508.84	6,275.59	25.48	27.82	133.92	-10.90	1,250.37	1,759.21	1,715.37	43.84	40.128	
6,600.00	6,375.59	6,608.84	6,375.59	25.60	27.93	133.92	-10.90	1,250.37	1,759.21	1,715.11	44.10	39.888	
6,700.00	6,475.59	6,708.84	6,475.59	25.71	28.04	133.92	-10.90	1,250.37	1,759.21	1,714.84	44.37	39.647	
6,800.00	6,575.59	6,808.84	6,575.59	25.83	28.15	133.92	-10.90	1,250.37	1,759.21	1,714.57	44.64	39.408	
6,900.00	6,675.59	6,908.84	6,675.59	25.94	28.26	133.92	-10.90	1,250.37	1,759.21	1,714.30	44.91	39.168	
7,000.00	6,775.59	7,008.84	6,775.59	26.06	28.37	133.92	-10.90	1,250.37	1,759.21	1,714.02	45.19	38.929	
7,100.00	6,875.59	7,108.84	6,875.59	26.18	28.49	133.92	-10.90	1,250.37	1,759.21	1,713.74	45.47	38.691	
7,200.00	6,975.59	7,208.84	6,975.59	26.31	28.61	133.92	-10.90	1,250.37	1,759.21	1,713.46	45.75	38.453	
7,300.00	7,075.59	7,308.84	7,075.59	26.43	28.72	133.92	-10.90	1,250.37	1,759.21	1,713.18	46.03	38.216	
7,400.00	7,175.59	7,408.84	7,175.59	26.55	28.84	133.92	-10.90	1,250.37	1,759.21	1,712.89	46.32	37.980	
7,500.00	7,275.59	7,508.84	7,275.59	26.68	28.96	133.92	-10.90	1,250.37	1,759.21	1,712.60	46.61	37.744	
7,600.00	7,375.59	7,608.84	7,375.59	26.81	29.08	133.92	-10.90	1,250.37	1,759.21	1,712.31	46.90	37.510	
7,700.00	7,475.59	7,708.84	7,475.59	26.94	29.20	133.92	-10.90	1,250.37	1,759.21	1,712.02	47.19	37.276	
7,800.00	7,575.59	7,808.84	7,575.59	27.07	29.33	133.92	-10.90	1,250.37	1,759.21	1,711.72	47.49	37.043	
7,900.00	7,675.59	7,908.84	7,675.59	27.20	29.45	133.92	-10.90	1,250.37	1,759.21	1,711.42	47.79	36.812	
8,000.00	7,775.59	8,008.84	7,775.59	27.33	29.58	133.92	-10.90	1,250.37	1,759.21	1,711.12	48.09	36.581	
8,100.00	7,875.59	8,108.84	7,875.59	27.46	29.71	133.92	-10.90	1,250.37	1,759.21	1,710.82	48.39	36.352	
8,200.00	7,975.59	8,208.84	7,975.59	27.60	29.83	133.92	-10.90	1,250.37	1,759.21	1,710.51	48.70	36.123	
8,300.00	8,075.59	8,308.84	8,075.59	27.73	29.96	133.92	-10.90	1,250.37	1,759.21	1,710.20	49.01	35.897	
8,345.41	8,121.00	8,354.25	8,121.00	27.80	30.02	133.92	-10.90	1,250.37	1,759.21	1,710.06	49.15	35.794	



Weatherford International Ltd.

Anticollision Report



Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_RASMUSSEN 10-29
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_RASMUSSEN 10-29	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_RASMUSSEN 10-29	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)	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	-29.17	0.00	29.17				
100.00	100.00	100.00	100.00	0.10	0.10	180.00	-29.17	0.00	29.17	28.98	0.19	152.668	
200.00	200.00	200.00	200.00	0.32	0.32	180.00	-29.17	0.00	29.17	28.53	0.64	45.533	
300.00	300.00	300.00	300.00	0.55	0.55	180.00	-29.17	0.00	29.17	28.08	1.09	26.756	
400.00	400.00	400.00	400.00	0.77	0.77	180.00	-29.17	0.00	29.17	27.63	1.54	18.944	
500.00	500.00	500.00	500.00	0.99	0.99	180.00	-29.17	0.00	29.17	27.18	1.99	14.663	
600.00	600.00	600.00	600.00	1.22	1.22	180.00	-29.17	0.00	29.17	26.73	2.44	11.960	
700.00	700.00	700.00	700.00	1.44	1.44	180.00	-29.17	0.00	29.17	26.28	2.89	10.099	
750.00	750.00	750.00	750.00	1.56	1.56	180.00	-29.17	0.00	29.17	26.05	3.11	9.370 CC	
800.00	800.00	800.34	800.34	1.67	1.67	-179.86	-28.87	0.33	29.31	25.98	3.34	8.787 ES	
900.00	899.93	900.96	900.89	1.89	1.89	175.14	-26.51	2.96	30.60	26.82	3.78	8.103	
1,000.00	999.68	1,001.38	1,001.06	2.12	2.11	166.47	-21.80	8.20	33.78	29.56	4.22	8.003 SF	
1,100.00	1,099.13	1,101.49	1,100.61	2.36	2.36	156.44	-14.77	16.02	39.67	34.99	4.68	8.475	
1,200.00	1,198.15	1,201.17	1,199.30	2.63	2.62	147.19	-5.47	26.37	48.81	43.63	5.18	9.430	
1,300.00	1,296.63	1,300.29	1,296.91	2.92	2.92	139.71	6.05	39.19	61.35	55.62	5.73	10.709	
1,400.00	1,394.44	1,398.74	1,393.21	3.26	3.26	134.00	19.72	54.40	77.18	70.83	6.35	12.146	
1,500.00	1,491.46	1,496.42	1,488.01	3.66	3.65	129.70	35.46	71.92	96.14	89.08	7.07	13.608	
1,600.00	1,587.58	1,593.24	1,581.11	4.10	4.10	126.43	53.18	91.64	118.08	110.21	7.87	15.004	
1,700.00	1,682.68	1,690.02	1,673.63	4.61	4.58	124.38	72.19	112.79	142.59	133.84	8.76	16.284	
1,800.00	1,776.65	1,786.45	1,765.79	5.18	5.09	123.78	91.13	133.88	169.06	159.36	9.70	17.430	
1,900.00	1,869.36	1,882.31	1,857.42	5.82	5.60	124.07	109.97	154.84	197.41	186.72	10.69	18.472	
1,973.63	1,936.76	1,952.47	1,924.47	6.33	5.99	124.62	123.76	170.18	219.52	208.08	11.44	19.192	
2,000.00	1,960.76	1,977.52	1,948.42	6.52	6.13	124.99	128.68	175.66	227.63	215.92	11.72	19.425	
2,100.00	2,051.78	2,072.53	2,039.23	7.25	6.66	126.17	147.35	196.44	258.47	245.68	12.80	20.200	
2,200.00	2,142.79	2,167.53	2,130.04	7.99	7.19	127.09	166.02	217.22	289.39	275.50	13.89	20.837	
2,300.00	2,233.81	2,262.54	2,220.85	8.75	7.73	127.84	184.69	237.99	320.36	305.37	14.99	21.369	
2,400.00	2,324.83	2,357.55	2,311.65	9.51	8.28	128.46	203.36	258.77	351.38	335.27	16.11	21.817	
2,500.00	2,415.84	2,452.56	2,402.46	10.28	8.83	128.98	222.03	279.54	382.42	365.19	17.23	22.200	
2,600.00	2,506.86	2,547.56	2,493.27	11.05	9.38	129.41	240.70	300.32	413.49	395.13	18.35	22.529	
2,700.00	2,597.87	2,642.57	2,584.08	11.83	9.93	129.79	259.37	321.10	444.57	425.09	19.49	22.816	
2,800.00	2,688.89	2,737.58	2,674.89	12.61	10.49	130.12	278.03	341.87	475.68	455.05	20.62	23.068	
2,900.00	2,779.91	2,832.59	2,765.70	13.39	11.04	130.41	296.70	362.65	506.79	485.03	21.76	23.290	
3,000.00	2,870.92	2,927.59	2,856.51	14.18	11.60	130.66	315.37	383.43	537.91	515.01	22.90	23.487	
3,100.00	2,961.94	3,022.60	2,947.31	14.97	12.16	130.89	334.04	404.20	569.05	545.00	24.05	23.663	
3,200.00	3,052.95	3,117.61	3,038.12	15.76	12.72	131.09	352.71	424.98	600.19	574.99	25.19	23.822	
3,300.00	3,143.97	3,212.62	3,128.93	16.55	13.28	131.28	371.38	445.76	631.33	604.99	26.34	23.966	
3,400.00	3,234.99	3,307.62	3,219.74	17.34	13.84	131.44	390.05	466.53	662.48	634.99	27.49	24.096	
3,500.00	3,326.00	3,402.63	3,310.55	18.13	14.41	131.59	408.72	487.31	693.64	664.99	28.65	24.215	
3,600.00	3,417.02	3,497.64	3,401.36	18.93	14.97	131.73	427.39	508.08	724.80	695.00	29.80	24.323	
3,650.78	3,463.24	3,545.88	3,447.47	19.33	15.25	131.80	436.87	518.64	740.63	710.24	30.38	24.375	
3,700.00	3,508.21	3,592.74	3,492.25	19.67	15.53	132.07	446.08	528.88	755.70	724.75	30.95	24.419	
3,800.00	3,600.60	3,688.76	3,584.05	20.25	16.09	132.44	464.92	549.85	784.64	752.62	32.02	24.504	
3,900.00	3,694.27	3,787.20	3,678.76	20.80	16.53	132.74	482.82	569.77	811.17	778.22	32.96	24.614	
4,000.00	3,789.10	3,886.42	3,775.11	21.31	16.93	133.06	498.66	587.40	835.16	801.35	33.81	24.702	
4,100.00	3,884.98	3,986.32	3,872.88	21.78	17.29	133.40	512.34	602.63	856.58	822.00	34.58	24.770	
4,200.00	3,981.80	4,086.79	3,971.88	22.20	17.60	133.75	523.80	615.37	875.38	840.12	35.26	24.823	
4,300.00	4,079.43	4,187.72	4,071.87	22.58	17.88	134.12	532.96	625.57	891.56	855.71	35.85	24.866	
4,400.00	4,177.75	4,288.98	4,172.60	22.92	18.11	134.51	539.79	633.17	905.10	868.75	36.35	24.901	
4,500.00	4,276.65	4,390.44	4,273.84	23.21	18.29	134.92	544.23	638.11	915.97	879.23	36.74	24.931	
4,600.00	4,376.01	4,491.98	4,375.33	23.45	18.43	135.35	546.28	640.39	924.19	887.16	37.03	24.958	
4,700.00	4,475.69	4,592.35	4,475.69	23.64	18.54	135.76	546.43	640.56	929.80	892.56	37.24	24.969	
4,800.00	4,575.60	4,692.25	4,575.60	23.78	18.65	135.99	546.43	640.56	932.92	895.49	37.43	24.925	

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_RASMUSSEN 10-29
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_RASMUSSEN 10-29	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_RASMUSSEN 10-29	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
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
4,874.41	4,650.00	4,766.65	4,650.00	23.86	18.74	135.24	546.43	640.56	933.61	896.05	37.56	24.856	
4,900.00	4,675.59	4,792.24	4,675.59	23.88	18.77	135.24	546.43	640.56	933.61	896.00	37.62	24.819	
5,000.00	4,775.59	4,892.24	4,775.59	23.97	18.88	135.24	546.43	640.56	933.61	895.77	37.84	24.670	
5,100.00	4,875.59	4,992.24	4,875.59	24.06	19.00	135.24	546.43	640.56	933.61	895.54	38.07	24.521	
5,200.00	4,975.59	5,092.24	4,975.59	24.15	19.12	135.24	546.43	640.56	933.61	895.31	38.31	24.371	
5,300.00	5,075.59	5,192.24	5,075.59	24.24	19.24	135.24	546.43	640.56	933.61	895.07	38.55	24.220	
5,400.00	5,175.59	5,292.24	5,175.59	24.33	19.37	135.24	546.43	640.56	933.61	894.83	38.79	24.069	
5,500.00	5,275.59	5,392.24	5,275.59	24.43	19.49	135.24	546.43	640.56	933.61	894.58	39.03	23.918	
5,600.00	5,375.59	5,492.24	5,375.59	24.53	19.62	135.24	546.43	640.56	933.61	894.33	39.28	23.766	
5,700.00	5,475.59	5,592.24	5,475.59	24.63	19.75	135.24	546.43	640.56	933.61	894.08	39.54	23.614	
5,800.00	5,575.59	5,692.24	5,575.59	24.73	19.88	135.24	546.43	640.56	933.61	893.82	39.79	23.462	
5,900.00	5,675.59	5,792.24	5,675.59	24.83	20.01	135.24	546.43	640.56	933.61	893.56	40.05	23.310	
6,000.00	5,775.59	5,892.24	5,775.59	24.94	20.15	135.24	546.43	640.56	933.61	893.30	40.32	23.158	
6,100.00	5,875.59	5,992.24	5,875.59	25.04	20.28	135.24	546.43	640.56	933.61	893.03	40.58	23.006	
6,200.00	5,975.59	6,092.24	5,975.59	25.15	20.42	135.24	546.43	640.56	933.61	892.76	40.85	22.854	
6,300.00	6,075.59	6,192.24	6,075.59	25.26	20.56	135.24	546.43	640.56	933.61	892.49	41.12	22.702	
6,400.00	6,175.59	6,292.24	6,175.59	25.37	20.70	135.24	546.43	640.56	933.61	892.21	41.40	22.551	
6,500.00	6,275.59	6,392.24	6,275.59	25.48	20.84	135.24	546.43	640.56	933.61	891.94	41.68	22.400	
6,600.00	6,375.59	6,492.24	6,375.59	25.60	20.99	135.24	546.43	640.56	933.61	891.65	41.96	22.250	
6,700.00	6,475.59	6,592.24	6,475.59	25.71	21.13	135.24	546.43	640.56	933.61	891.37	42.25	22.100	
6,800.00	6,575.59	6,692.24	6,575.59	25.83	21.28	135.24	546.43	640.56	933.61	891.08	42.53	21.950	
6,900.00	6,675.59	6,792.24	6,675.59	25.94	21.43	135.24	546.43	640.56	933.61	890.79	42.82	21.802	
7,000.00	6,775.59	6,892.24	6,775.59	26.06	21.57	135.24	546.43	640.56	933.61	890.50	43.12	21.653	
7,100.00	6,875.59	6,992.24	6,875.59	26.18	21.73	135.24	546.43	640.56	933.61	890.20	43.41	21.506	
7,200.00	6,975.59	7,092.24	6,975.59	26.31	21.88	135.24	546.43	640.56	933.61	889.90	43.71	21.359	
7,300.00	7,075.59	7,192.24	7,075.59	26.43	22.03	135.24	546.43	640.56	933.61	889.60	44.01	21.213	
7,400.00	7,175.59	7,292.24	7,175.59	26.55	22.18	135.24	546.43	640.56	933.61	889.30	44.31	21.068	
7,500.00	7,275.59	7,392.24	7,275.59	26.68	22.34	135.24	546.43	640.56	933.61	888.99	44.62	20.923	
7,600.00	7,375.59	7,492.24	7,375.59	26.81	22.50	135.24	546.43	640.56	933.61	888.69	44.93	20.780	
7,700.00	7,475.59	7,592.24	7,475.59	26.94	22.65	135.24	546.43	640.56	933.61	888.38	45.24	20.637	
7,800.00	7,575.59	7,692.24	7,575.59	27.07	22.81	135.24	546.43	640.56	933.61	888.06	45.55	20.495	
7,900.00	7,675.59	7,792.24	7,675.59	27.20	22.97	135.24	546.43	640.56	933.61	887.75	45.87	20.355	
8,000.00	7,775.59	7,892.24	7,775.59	27.33	23.13	135.24	546.43	640.56	933.61	887.43	46.19	20.215	
8,100.00	7,875.59	7,992.24	7,875.59	27.46	23.29	135.24	546.43	640.56	933.61	887.11	46.50	20.076	
8,200.00	7,975.59	8,092.24	7,975.59	27.60	23.46	135.24	546.43	640.56	933.61	886.79	46.83	19.938	
8,300.00	8,075.59	8,192.24	8,075.59	27.73	23.62	135.24	546.43	640.56	933.61	886.46	47.15	19.801	
8,345.41	8,121.00	8,237.65	8,121.00	27.80	23.70	135.24	546.43	640.56	933.61	886.32	47.30	19.739	



Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_RASMUSSEN 10-29
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_RASMUSSEN 10-29	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_RASMUSSEN 10-29	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	-58.29	0.00	58.29					
100.00	100.00	100.00	100.00	0.10	0.10	-180.00	-58.29	0.00	58.29	58.10	0.19	305.117		
200.00	200.00	200.00	200.00	0.32	0.32	-180.00	-58.29	0.00	58.29	57.65	0.64	91.000		
300.00	300.00	300.00	300.00	0.55	0.55	-180.00	-58.29	0.00	58.29	57.20	1.09	53.474		
400.00	400.00	400.00	400.00	0.77	0.77	-180.00	-58.29	0.00	58.29	56.75	1.54	37.861		
500.00	500.00	500.00	500.00	0.99	0.99	-180.00	-58.29	0.00	58.29	56.30	1.99	29.305		
600.00	600.00	600.00	600.00	1.22	1.22	-180.00	-58.29	0.00	58.29	55.85	2.44	23.903		
700.00	700.00	700.00	700.00	1.44	1.44	-180.00	-58.29	0.00	58.29	55.40	2.89	20.183		
750.00	750.00	750.00	750.00	1.56	1.56	-180.00	-58.29	0.00	58.29	55.18	3.11	18.726 CC		
800.00	800.00	800.69	800.68	1.67	1.67	-178.88	-57.99	-0.33	58.44	55.10	3.34	17.513 ES		
900.00	899.93	901.99	901.92	1.89	1.89	-176.37	-55.60	-3.00	59.64	55.86	3.78	15.780		
1,000.00	999.68	1,003.12	1,002.79	2.12	2.12	-171.67	-50.84	-8.33	62.36	58.13	4.23	14.756		
1,100.00	1,099.13	1,103.94	1,103.04	2.36	2.37	-165.41	-43.73	-16.27	67.13	62.44	4.69	14.324 SF		
1,200.00	1,198.15	1,204.34	1,202.44	2.63	2.64	-158.45	-34.32	-26.79	74.52	69.34	5.18	14.390		
1,300.00	1,296.63	1,304.21	1,300.75	2.92	2.95	-151.58	-22.66	-39.82	84.93	79.21	5.72	14.841		
1,400.00	1,394.44	1,403.43	1,397.78	3.26	3.30	-145.34	-8.82	-55.29	98.59	92.25	6.34	15.545		
1,500.00	1,491.46	1,501.91	1,493.30	3.66	3.70	-139.97	7.13	-73.11	115.50	108.44	7.05	16.379		
1,600.00	1,587.58	1,599.55	1,587.15	4.10	4.15	-135.47	25.09	-93.19	135.57	127.71	7.86	17.244		
1,700.00	1,682.68	1,696.26	1,679.15	4.61	4.67	-131.74	44.97	-115.41	158.67	149.90	8.78	18.074		
1,800.00	1,776.65	1,791.97	1,769.15	5.18	5.24	-128.64	66.67	-139.66	184.68	174.87	9.80	18.837		
1,900.00	1,869.36	1,886.60	1,857.02	5.82	5.86	-126.05	90.09	-165.84	213.44	202.51	10.93	19.525		
1,973.63	1,936.76	1,956.51	1,921.49	6.33	6.36	-124.58	108.12	-185.98	236.17	224.35	11.82	19.975		
2,000.00	1,960.76	1,981.50	1,944.53	6.52	6.54	-124.32	114.57	-193.19	244.51	232.35	12.16	20.113		
2,100.00	2,051.78	2,076.28	2,031.94	7.25	7.23	-123.45	139.01	-220.50	276.17	262.73	13.44	20.543		
2,200.00	2,142.79	2,171.07	2,119.35	7.99	7.93	-122.76	163.45	-247.82	307.88	293.13	14.76	20.865		
2,300.00	2,233.81	2,265.85	2,206.76	8.75	8.64	-122.20	187.89	-275.13	339.62	323.54	16.09	21.112		
2,400.00	2,324.83	2,360.63	2,294.16	9.51	9.35	-121.74	212.33	-302.45	371.39	353.95	17.43	21.304		
2,500.00	2,415.84	2,455.41	2,381.57	10.28	10.07	-121.35	236.77	-329.76	403.17	384.38	18.79	21.456		
2,600.00	2,506.86	2,550.19	2,468.98	11.05	10.80	-121.02	261.21	-357.08	434.97	414.81	20.16	21.578		
2,700.00	2,597.87	2,644.97	2,556.38	11.83	11.53	-120.73	285.66	-384.40	466.78	445.24	21.53	21.677		
2,800.00	2,688.89	2,739.76	2,643.79	12.61	12.26	-120.48	310.10	-411.71	498.59	475.68	22.91	21.759		
2,900.00	2,779.91	2,834.54	2,731.20	13.39	13.00	-120.26	334.54	-439.03	530.42	506.12	24.30	21.828		
3,000.00	2,870.92	2,929.32	2,818.61	14.18	13.74	-120.06	358.98	-466.34	562.25	536.56	25.69	21.886		
3,100.00	2,961.94	3,024.10	2,906.01	14.97	14.48	-119.88	383.42	-493.66	594.09	567.01	27.08	21.935		
3,200.00	3,052.95	3,118.88	2,993.42	15.76	15.22	-119.73	407.86	-520.98	625.93	597.45	28.48	21.977		
3,300.00	3,143.97	3,213.66	3,080.83	16.55	15.96	-119.58	432.31	-548.29	657.78	627.90	29.88	22.013		
3,400.00	3,234.99	3,308.45	3,168.23	17.34	16.70	-119.46	456.75	-575.61	689.63	658.34	31.28	22.044		
3,500.00	3,326.00	3,403.23	3,255.64	18.13	17.45	-119.34	481.19	-602.92	721.48	688.79	32.69	22.072		
3,600.00	3,417.02	3,502.65	3,347.65	18.93	18.16	-119.29	506.30	-630.99	753.13	719.07	34.06	22.111		
3,650.78	3,463.24	3,554.38	3,395.99	19.33	18.45	-119.36	518.58	-644.71	768.90	734.21	34.70	22.160		
3,700.00	3,508.21	3,604.70	3,443.33	19.67	18.74	-119.74	529.95	-657.42	783.78	748.48	35.30	22.203		
3,800.00	3,600.60	3,707.68	3,541.11	20.25	19.28	-120.47	551.50	-681.50	812.14	775.75	36.39	22.319		
3,900.00	3,694.27	3,811.58	3,640.87	20.80	19.77	-121.16	570.85	-703.13	837.95	800.55	37.40	22.407		
4,000.00	3,789.10	3,916.29	3,742.40	21.31	20.22	-121.82	587.90	-722.18	861.15	822.83	38.32	22.471		
4,100.00	3,884.98	4,021.69	3,845.48	21.78	20.61	-122.45	602.55	-738.55	881.73	842.57	39.16	22.518		
4,200.00	3,981.80	4,127.65	3,949.86	22.20	20.95	-123.06	614.72	-752.15	899.63	859.73	39.89	22.551		
4,300.00	4,079.43	4,234.05	4,055.27	22.58	21.24	-123.65	624.34	-762.90	914.83	874.30	40.53	22.573		
4,400.00	4,177.75	4,340.75	4,161.44	22.92	21.47	-124.23	631.36	-770.75	927.32	886.26	41.06	22.586		
4,500.00	4,276.65	4,447.61	4,268.08	23.21	21.65	-124.80	635.74	-775.65	937.08	895.61	41.48	22.592		
4,600.00	4,376.01	4,554.48	4,374.91	23.45	21.78	-125.37	637.47	-777.58	944.12	902.32	41.80	22.589		
4,700.00	4,475.69	4,655.26	4,475.69	23.64	21.87	-125.83	637.50	-777.62	948.69	906.66	42.03	22.570		
4,800.00	4,575.60	4,755.16	4,575.60	23.78	21.97	-126.08	637.50	-777.62	951.24	909.00	42.24	22.521		

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_RASMUSSEN 10-29
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_RASMUSSEN 10-29	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_RASMUSSEN 10-29	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	
4,874.41	4,650.00	4,829.56	4,650.00	23.86	22.04	-126.93	637.50	-777.62	951.81	909.44	42.37	22.463	
4,900.00	4,675.59	4,855.15	4,675.59	23.88	22.06	-126.93	637.50	-777.62	951.81	909.39	42.42	22.437	
5,000.00	4,775.59	4,955.15	4,775.59	23.97	22.16	-126.93	637.50	-777.62	951.81	909.19	42.62	22.331	
5,100.00	4,875.59	5,055.15	4,875.59	24.06	22.26	-126.93	637.50	-777.62	951.81	908.98	42.83	22.224	
5,200.00	4,975.59	5,155.15	4,975.59	24.15	22.37	-126.93	637.50	-777.62	951.81	908.77	43.04	22.116	
5,300.00	5,075.59	5,255.15	5,075.59	24.24	22.47	-126.93	637.50	-777.62	951.81	908.56	43.25	22.007	
5,400.00	5,175.59	5,355.15	5,175.59	24.33	22.58	-126.93	637.50	-777.62	951.81	908.34	43.47	21.897	
5,500.00	5,275.59	5,455.15	5,275.59	24.43	22.69	-126.93	637.50	-777.62	951.81	908.12	43.69	21.787	
5,600.00	5,375.59	5,555.15	5,375.59	24.53	22.80	-126.93	637.50	-777.62	951.81	907.90	43.91	21.676	
5,700.00	5,475.59	5,655.15	5,475.59	24.63	22.91	-126.93	637.50	-777.62	951.81	907.67	44.14	21.565	
5,800.00	5,575.59	5,755.15	5,575.59	24.73	23.02	-126.93	637.50	-777.62	951.81	907.44	44.37	21.453	
5,900.00	5,675.59	5,855.15	5,675.59	24.83	23.14	-126.93	637.50	-777.62	951.81	907.21	44.60	21.341	
6,000.00	5,775.59	5,955.15	5,775.59	24.94	23.26	-126.93	637.50	-777.62	951.81	906.97	44.84	21.228	
6,100.00	5,875.59	6,055.15	5,875.59	25.04	23.37	-126.93	637.50	-777.62	951.81	906.73	45.08	21.115	
6,200.00	5,975.59	6,155.15	5,975.59	25.15	23.49	-126.93	637.50	-777.62	951.81	906.49	45.32	21.001	
6,300.00	6,075.59	6,255.15	6,075.59	25.26	23.61	-126.93	637.50	-777.62	951.81	906.24	45.57	20.888	
6,400.00	6,175.59	6,355.15	6,175.59	25.37	23.74	-126.93	637.50	-777.62	951.81	905.99	45.82	20.774	
6,500.00	6,275.59	6,455.15	6,275.59	25.48	23.86	-126.93	637.50	-777.62	951.81	905.74	46.07	20.660	
6,600.00	6,375.59	6,555.15	6,375.59	25.60	23.99	-126.93	637.50	-777.62	951.81	905.49	46.33	20.546	
6,700.00	6,475.59	6,655.15	6,475.59	25.71	24.11	-126.93	637.50	-777.62	951.81	905.23	46.58	20.432	
6,800.00	6,575.59	6,755.15	6,575.59	25.83	24.24	-126.93	637.50	-777.62	951.81	904.97	46.85	20.318	
6,900.00	6,675.59	6,855.15	6,675.59	25.94	24.37	-126.93	637.50	-777.62	951.81	904.70	47.11	20.204	
7,000.00	6,775.59	6,955.15	6,775.59	26.06	24.51	-126.93	637.50	-777.62	951.81	904.43	47.38	20.090	
7,100.00	6,875.59	7,055.15	6,875.59	26.18	24.64	-126.93	637.50	-777.62	951.81	904.16	47.65	19.977	
7,200.00	6,975.59	7,155.15	6,975.59	26.31	24.77	-126.93	637.50	-777.62	951.81	903.89	47.92	19.863	
7,300.00	7,075.59	7,255.15	7,075.59	26.43	24.91	-126.93	637.50	-777.62	951.81	903.62	48.19	19.750	
7,400.00	7,175.59	7,355.15	7,175.59	26.55	25.04	-126.93	637.50	-777.62	951.81	903.34	48.47	19.636	
7,500.00	7,275.59	7,455.15	7,275.59	26.68	25.18	-126.93	637.50	-777.62	951.81	903.06	48.75	19.524	
7,600.00	7,375.59	7,555.15	7,375.59	26.81	25.32	-126.93	637.50	-777.62	951.81	902.78	49.03	19.411	
7,700.00	7,475.59	7,655.15	7,475.59	26.94	25.46	-126.93	637.50	-777.62	951.81	902.49	49.32	19.299	
7,800.00	7,575.59	7,755.15	7,575.59	27.07	25.60	-126.93	637.50	-777.62	951.81	902.20	49.61	19.187	
7,900.00	7,675.59	7,855.15	7,675.59	27.20	25.75	-126.93	637.50	-777.62	951.81	901.91	49.90	19.075	
8,000.00	7,775.59	7,955.15	7,775.59	27.33	25.75	-126.93	637.50	-777.62	956.90	906.86	50.05	19.120	
8,100.00	7,875.59	8,055.15	7,875.59	27.46	25.75	-126.93	637.50	-777.62	972.31	922.11	50.20	19.370	
8,200.00	7,975.59	8,155.15	7,975.59	27.60	25.75	-126.93	637.50	-777.62	997.55	947.20	50.35	19.814	
8,300.00	8,075.59	8,255.15	8,075.59	27.73	25.75	-126.93	637.50	-777.62	1,031.90	981.40	50.50	20.435	
8,345.41	8,121.00	8,255.15	8,121.00	27.80	25.75	-126.93	637.50	-777.62	1,050.28	999.71	50.57	20.770	



Weatherford International Ltd.

Anticollision Report



Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_RASMUSSEN 10-29
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_RASMUSSEN 10-29	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_RASMUSSEN 10-29	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	18.20	0.00	18.20				
100.00	100.00	100.00	100.00	0.10	0.10	0.00	18.20	0.00	18.20	18.01	0.19	95.270	
200.00	200.00	200.00	200.00	0.32	0.32	0.00	18.20	0.00	18.20	17.56	0.64	28.414	
300.00	300.00	300.00	300.00	0.55	0.55	0.00	18.20	0.00	18.20	17.11	1.09	16.697	
400.00	400.00	400.00	400.00	0.77	0.77	0.00	18.20	0.00	18.20	16.66	1.54	11.822	
500.00	500.00	500.00	500.00	0.99	0.99	0.00	18.20	0.00	18.20	16.21	1.99	9.150	
600.00	600.00	600.00	600.00	1.22	1.22	0.00	18.20	0.00	18.20	15.76	2.44	7.464	
700.00	700.00	700.00	700.00	1.44	1.44	0.00	18.20	0.00	18.20	15.31	2.89	6.302	
750.00	750.00	750.00	750.00	1.56	1.56	0.00	18.20	0.00	18.20	15.09	3.11	5.847	
800.00	800.00	800.00	800.00	1.67	1.67	0.81	18.20	0.00	17.77	14.43	3.34	5.323	
900.00	899.93	899.93	899.93	1.89	1.89	1.02	18.20	0.00	14.28	10.49	3.78	3.773	
1,000.00	999.68	999.52	999.52	2.12	2.12	-0.14	18.87	-0.28	7.97	3.75	4.22	1.887	
1,100.00	1,099.13	1,099.12	1,099.03	2.36	2.34	-51.38	22.53	-1.82	1.93	-2.75	4.68	0.413 Level 1	
1,109.34	1,108.40	1,108.44	1,108.33	2.39	2.36	-71.85	23.04	-2.03	1.80	-2.94	4.74	0.381 Level 1, CC, ES, SF	
1,200.00	1,198.15	1,198.87	1,198.50	2.63	2.57	-143.43	29.40	-4.71	7.24	2.11	5.13	1.410 Level 3	
1,300.00	1,296.63	1,298.75	1,297.77	2.92	2.81	-147.22	39.46	-8.94	15.56	9.96	5.60	2.779	
1,400.00	1,394.44	1,398.72	1,396.70	3.26	3.07	-146.07	52.72	-14.52	24.81	18.70	6.11	4.061	
1,500.00	1,491.46	1,498.77	1,495.14	3.66	3.37	-143.96	69.17	-21.44	35.01	28.33	6.68	5.240	
1,600.00	1,587.58	1,598.86	1,592.94	4.10	3.71	-141.66	88.79	-29.69	46.19	38.86	7.33	6.302	
1,700.00	1,682.68	1,698.99	1,689.96	4.61	4.09	-139.38	111.55	-39.26	58.40	50.32	8.08	7.231	
1,800.00	1,776.65	1,799.12	1,786.07	5.18	4.54	-137.20	137.42	-50.14	71.67	62.74	8.93	8.022	
1,900.00	1,869.36	1,899.22	1,881.12	5.82	5.05	-135.14	166.37	-62.32	86.03	76.11	9.92	8.676	
1,973.63	1,936.76	1,972.91	1,950.35	6.33	5.47	-133.71	189.63	-72.10	97.30	86.57	10.73	9.070	
2,000.00	1,960.76	1,999.30	1,974.99	6.52	5.62	-133.22	198.35	-75.77	101.40	90.36	11.04	9.185	
2,100.00	2,051.78	2,099.48	2,067.68	7.25	6.26	-130.66	233.37	-90.50	116.23	103.88	12.35	9.411	
2,200.00	2,142.79	2,199.17	2,158.61	7.99	6.97	-127.32	271.01	-106.33	130.24	116.41	13.82	9.421	
2,300.00	2,233.81	2,297.91	2,248.37	8.75	7.69	-124.35	308.94	-122.29	144.40	129.05	15.35	9.407	
2,400.00	2,324.83	2,396.65	2,338.13	9.51	8.44	-121.92	346.87	-138.24	158.88	141.98	16.90	9.404	
2,500.00	2,415.84	2,495.39	2,427.89	10.28	9.20	-119.89	384.81	-154.20	173.59	155.14	18.45	9.407	
2,600.00	2,506.86	2,594.13	2,517.64	11.05	9.96	-118.18	422.74	-170.15	188.48	168.46	20.02	9.415	
2,700.00	2,597.87	2,692.87	2,607.40	11.83	10.74	-116.72	460.67	-186.10	203.52	181.92	21.59	9.425	
2,800.00	2,688.89	2,791.61	2,697.16	12.61	11.52	-115.47	498.60	-202.06	218.66	195.49	23.17	9.438	
2,900.00	2,779.91	2,890.35	2,786.91	13.39	12.30	-114.37	536.54	-218.01	233.89	209.15	24.75	9.451	
3,000.00	2,870.92	2,989.09	2,876.67	14.18	13.09	-113.41	574.47	-233.97	249.20	222.87	26.33	9.465	
3,100.00	2,961.94	3,087.83	2,966.43	14.97	13.89	-112.57	612.40	-249.92	264.57	236.65	27.91	9.478	
3,200.00	3,052.95	3,186.57	3,056.18	15.76	14.68	-111.81	650.33	-265.88	279.98	250.49	29.50	9.492	
3,300.00	3,143.97	3,285.31	3,145.94	16.55	15.48	-111.13	688.27	-281.83	295.45	264.36	31.08	9.505	
3,400.00	3,234.99	3,384.05	3,235.70	17.34	16.28	-110.57	726.20	-297.79	310.94	278.27	32.67	9.518	
3,500.00	3,326.00	3,482.79	3,325.45	18.13	17.08	-109.97	764.13	-313.74	326.47	292.21	34.25	9.531	
3,600.00	3,417.02	3,581.53	3,415.21	18.93	17.89	-109.47	802.06	-329.70	342.02	306.18	35.84	9.543	
3,650.78	3,463.24	3,631.68	3,460.79	19.33	18.29	-109.23	821.33	-337.80	349.93	313.28	36.65	9.548	
3,700.00	3,508.21	3,680.28	3,504.97	19.67	18.69	-109.09	840.00	-345.65	357.47	320.07	37.39	9.559	
3,800.00	3,600.60	3,779.05	3,594.75	20.25	19.50	-108.44	877.94	-361.61	371.98	333.16	38.82	9.581	
3,900.00	3,694.27	3,877.72	3,684.44	20.80	20.30	-107.35	915.85	-377.55	385.56	345.32	40.24	9.580	
4,000.00	3,789.10	3,976.17	3,773.94	21.31	21.11	-105.87	953.67	-393.46	398.39	356.76	41.63	9.569	
4,100.00	3,884.98	4,074.30	3,863.14	21.78	21.91	-104.02	991.36	-409.32	410.72	367.76	42.97	9.559	
4,200.00	3,981.80	4,171.97	3,951.92	22.20	22.71	-101.85	1,028.89	-425.10	422.86	378.64	44.22	9.562	
4,300.00	4,079.43	4,269.07	4,040.19	22.58	23.51	-99.40	1,066.19	-440.79	435.16	389.79	45.37	9.592	
4,400.00	4,177.75	4,365.48	4,127.83	22.92	24.30	-96.70	1,103.23	-456.37	447.99	401.61	46.38	9.660	
4,500.00	4,276.65	4,461.09	4,214.74	23.21	25.08	-93.80	1,139.95	-471.81	461.76	414.54	47.22	9.778	
4,600.00	4,376.01	4,555.77	4,300.80	23.45	25.86	-90.75	1,176.33	-487.11	476.90	429.02	47.88	9.960	
4,700.00	4,475.69	4,649.41	4,385.92	23.64	26.63	-87.60	1,212.30	-502.24	493.83	445.48	48.35	10.214	

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_RASMUSSEN 10-29
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_RASMUSSEN 10-29	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_RASMUSSEN 10-29	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						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	
4,800.00	4,575.60	4,741.90	4,470.00	23.78	27.39	-84.39	1,247.83	-517.19	512.95	464.35	48.61	10.553	
4,874.41	4,650.00	4,809.90	4,531.82	23.86	27.95	-82.81	1,273.96	-528.18	528.83	480.16	48.67	10.866	
4,900.00	4,675.59	4,833.16	4,552.96	23.88	28.14	-81.88	1,282.89	-531.93	534.62	485.97	48.64	10.990	
5,000.00	4,775.59	4,924.07	4,635.59	23.97	28.89	-78.44	1,317.81	-546.62	558.64	510.15	48.49	11.520	
5,100.00	4,875.59	5,014.97	4,718.22	24.06	29.64	-75.25	1,352.74	-561.31	584.65	536.38	48.27	12.112	
5,200.00	4,975.59	5,105.87	4,800.85	24.15	30.39	-72.32	1,387.66	-576.00	612.39	564.39	48.01	12.756	
5,300.00	5,075.59	5,196.77	4,883.48	24.24	31.14	-69.62	1,422.58	-590.69	641.65	593.92	47.72	13.445	
5,400.00	5,175.59	5,287.67	4,966.12	24.33	31.89	-67.14	1,457.50	-605.37	672.21	624.77	47.44	14.170	
5,500.00	5,275.59	5,378.57	5,048.75	24.43	32.64	-64.87	1,492.42	-620.06	703.92	656.75	47.16	14.925	
5,600.00	5,375.59	5,469.48	5,131.38	24.53	33.39	-62.77	1,527.34	-634.75	736.62	689.71	46.90	15.705	
5,700.00	5,475.59	5,560.38	5,214.01	24.63	34.14	-60.85	1,562.26	-649.44	770.18	723.51	46.67	16.502	
5,800.00	5,575.59	5,651.28	5,296.64	24.73	34.88	-59.08	1,597.18	-664.13	804.51	758.04	46.47	17.313	
5,900.00	5,675.59	5,742.18	5,379.27	24.83	35.63	-57.44	1,632.10	-678.81	839.50	793.20	46.30	18.133	
6,000.00	5,775.59	5,833.08	5,461.90	24.94	36.38	-55.93	1,667.03	-693.50	875.08	828.92	46.16	18.959	
6,100.00	5,875.59	5,923.98	5,544.53	25.04	37.14	-54.53	1,701.95	-708.19	911.17	865.12	46.05	19.787	
6,200.00	5,975.59	6,014.88	5,627.16	25.15	37.89	-53.24	1,736.87	-722.88	947.72	901.75	45.97	20.615	
6,300.00	6,075.59	6,119.74	5,722.63	25.26	38.68	-51.87	1,776.85	-739.69	984.46	938.58	45.88	21.457	
6,400.00	6,175.59	6,254.34	5,847.09	25.37	39.49	-50.39	1,824.07	-759.55	1,018.54	972.79	45.76	22.260	
6,500.00	6,275.59	6,393.99	5,978.60	25.48	40.24	-49.15	1,867.31	-777.74	1,048.85	1,003.13	45.73	22.937	
6,600.00	6,375.59	6,538.26	6,116.71	25.60	40.92	-48.14	1,905.72	-793.90	1,075.07	1,029.30	45.78	23.486	
6,700.00	6,475.59	6,686.63	6,260.74	25.71	41.52	-47.33	1,938.49	-807.68	1,096.93	1,051.03	45.90	23.900	
6,800.00	6,575.59	6,838.45	6,409.82	25.83	42.02	-46.71	1,964.86	-818.77	1,114.17	1,068.10	46.07	24.183	
6,900.00	6,675.59	6,992.97	6,562.89	25.94	42.42	-46.28	1,984.19	-826.90	1,126.63	1,080.33	46.30	24.333	
7,000.00	6,775.59	7,149.32	6,718.71	26.06	42.70	-46.02	1,995.98	-831.86	1,134.14	1,087.58	46.56	24.358	
7,100.00	6,875.59	7,306.28	6,875.59	26.18	42.87	-45.93	1,999.91	-833.51	1,136.64	1,089.78	46.86	24.256	
7,200.00	6,975.59	7,406.28	6,975.59	26.31	42.94	-45.93	1,999.91	-833.51	1,136.64	1,089.52	47.12	24.121	
7,300.00	7,075.59	7,506.28	7,075.59	26.43	43.01	-45.93	1,999.91	-833.51	1,136.64	1,089.25	47.39	23.984	
7,400.00	7,175.59	7,606.28	7,175.59	26.55	43.09	-45.93	1,999.91	-833.51	1,136.64	1,088.97	47.66	23.847	
7,500.00	7,275.59	7,706.28	7,275.59	26.68	43.16	-45.93	1,999.91	-833.51	1,136.64	1,088.70	47.94	23.711	
7,600.00	7,375.59	7,806.28	7,375.59	26.81	43.24	-45.93	1,999.91	-833.51	1,136.64	1,088.42	48.22	23.574	
7,700.00	7,475.59	7,906.28	7,475.59	26.94	43.32	-45.93	1,999.91	-833.51	1,136.64	1,088.14	48.50	23.438	
7,800.00	7,575.59	8,006.28	7,575.59	27.07	43.40	-45.93	1,999.91	-833.51	1,136.64	1,087.86	48.78	23.302	
7,900.00	7,675.59	8,106.28	7,675.59	27.20	43.48	-45.93	1,999.91	-833.51	1,136.64	1,087.57	49.06	23.167	
8,000.00	7,775.59	8,136.70	7,706.00	27.33	43.50	-45.93	1,999.91	-833.51	1,138.77	1,089.51	49.26	23.118	
8,100.00	7,875.59	8,136.70	7,706.00	27.46	43.50	-45.93	1,999.91	-833.51	1,149.22	1,099.80	49.42	23.256	
8,200.00	7,975.59	8,136.70	7,706.00	27.60	43.50	-45.93	1,999.91	-833.51	1,168.17	1,118.60	49.57	23.565	
8,300.00	8,075.59	8,136.70	7,706.00	27.73	43.50	-45.93	1,999.91	-833.51	1,195.22	1,145.48	49.73	24.033	
8,345.41	8,121.00	8,136.70	7,706.00	27.80	43.50	-45.93	1,999.91	-833.51	1,210.03	1,160.23	49.80	24.296	



Weatherford International Ltd.

Anticollision Report



Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_RASMUSSEN 10-29
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_RASMUSSEN 10-29	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_RASMUSSEN 10-29	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-MWID													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	-87.44	-2.80	87.48				
100.00	100.00	100.00	100.00	0.10	0.10	-178.17	-87.44	-2.80	87.48	87.29	0.19	457.888	
200.00	200.00	200.00	200.00	0.32	0.32	-178.17	-87.44	-2.80	87.48	86.84	0.64	136.563	
300.00	300.00	300.00	300.00	0.55	0.55	-178.17	-87.44	-2.80	87.48	86.39	1.09	80.248	
400.00	400.00	400.00	400.00	0.77	0.77	-178.17	-87.44	-2.80	87.48	85.94	1.54	56.818	
500.00	500.00	500.00	500.00	0.99	0.99	-178.17	-87.44	-2.80	87.48	85.49	1.99	43.978	
600.00	600.00	600.00	600.00	1.22	1.22	-178.17	-87.44	-2.80	87.48	85.04	2.44	35.871	
700.00	700.00	700.00	700.00	1.44	1.44	-178.17	-87.44	-2.80	87.48	84.59	2.89	30.288	
750.00	750.00	750.00	750.00	1.56	1.56	-178.17	-87.44	-2.80	87.48	84.37	3.11	28.101 CC, ES	
800.00	800.00	799.58	799.58	1.67	1.66	-177.35	-87.48	-2.85	87.96	84.63	3.33	26.403	
900.00	899.93	897.24	897.21	1.89	1.84	-176.42	-89.06	-4.56	93.14	89.41	3.73	24.967 SF	
1,000.00	999.68	994.14	993.94	2.12	2.03	-174.47	-92.87	-8.67	104.28	100.14	4.13	25.223	
1,100.00	1,099.13	1,089.70	1,089.10	2.36	2.24	-172.06	-98.79	-15.07	121.47	116.92	4.54	26.740	
1,200.00	1,198.15	1,183.41	1,182.08	2.63	2.46	-169.65	-106.70	-23.61	144.73	139.77	4.96	29.205	
1,300.00	1,296.63	1,274.79	1,272.33	2.92	2.72	-167.49	-116.39	-34.08	173.98	168.60	5.37	32.373	
1,400.00	1,394.44	1,363.40	1,359.38	3.26	3.00	-165.63	-127.65	-46.24	209.05	203.25	5.80	36.048	
1,500.00	1,491.46	1,448.89	1,442.83	3.66	3.32	-164.06	-140.24	-59.85	249.71	243.48	6.23	40.075	
1,600.00	1,587.58	1,530.94	1,522.37	4.10	3.66	-162.73	-153.91	-74.62	295.71	289.04	6.67	44.335	
1,700.00	1,682.68	1,609.31	1,597.78	4.61	4.02	-161.57	-168.40	-90.28	346.77	339.66	7.12	48.732	
1,800.00	1,776.65	1,683.81	1,668.90	5.18	4.40	-160.55	-183.48	-106.57	402.61	395.03	7.57	53.158	
1,900.00	1,869.36	1,756.19	1,737.42	5.82	4.81	-159.60	-199.29	-123.66	462.89	454.84	8.04	57.541	
1,973.63	1,936.76	1,813.31	1,791.35	6.33	5.15	-158.98	-212.06	-137.45	509.33	500.92	8.42	60.525	
2,000.00	1,960.76	1,833.56	1,810.48	6.52	5.27	-158.93	-216.59	-142.35	526.21	517.64	8.57	61.366	
2,100.00	2,051.78	1,910.38	1,883.02	7.25	5.74	-158.78	-233.77	-160.91	590.22	581.03	9.19	64.250	
2,200.00	2,142.79	1,987.20	1,955.56	7.99	6.22	-158.66	-250.95	-179.47	654.23	644.42	9.81	66.669	
2,300.00	2,233.81	2,064.02	2,028.10	8.75	6.70	-158.56	-268.12	-198.03	718.25	707.80	10.45	68.720	
2,400.00	2,324.83	2,140.84	2,100.64	9.51	7.19	-158.47	-285.30	-216.58	782.26	771.16	11.10	70.479	
2,500.00	2,415.84	2,217.66	2,173.18	10.28	7.68	-158.40	-302.48	-235.14	846.28	834.52	11.75	71.997	
2,600.00	2,506.86	2,294.49	2,245.72	11.05	8.18	-158.34	-319.66	-253.70	910.29	897.88	12.42	73.315	
2,700.00	2,597.87	2,371.31	2,318.25	11.83	8.68	-158.29	-336.83	-272.26	974.31	961.23	13.08	74.464	
2,800.00	2,688.89	2,448.13	2,390.79	12.61	9.19	-158.24	-354.01	-290.82	1,038.33	1,024.57	13.76	75.476	
2,900.00	2,779.91	2,524.95	2,463.33	13.39	9.69	-158.20	-371.19	-309.38	1,102.35	1,087.91	14.43	76.374	
3,000.00	2,870.92	2,601.77	2,535.87	14.18	10.20	-158.16	-388.36	-327.94	1,166.36	1,151.25	15.11	77.173	
3,100.00	2,961.94	2,678.59	2,608.41	14.97	10.71	-158.13	-405.54	-346.50	1,230.38	1,214.59	15.80	77.886	
3,200.00	3,052.95	2,755.41	2,680.95	15.76	11.22	-158.10	-422.72	-365.06	1,294.40	1,277.92	16.48	78.527	
3,300.00	3,143.97	2,832.23	2,753.49	16.55	11.73	-158.07	-439.89	-383.61	1,358.42	1,341.25	17.17	79.106	
3,400.00	3,234.99	2,909.05	2,826.03	17.34	12.25	-158.05	-457.07	-402.17	1,422.44	1,404.58	17.86	79.632	
3,500.00	3,326.00	2,985.87	2,898.57	18.13	12.76	-158.03	-474.25	-420.73	1,486.46	1,467.90	18.56	80.110	
3,600.00	3,417.02	3,062.69	2,971.10	18.93	13.27	-158.01	-491.42	-439.29	1,550.48	1,531.23	19.25	80.546	
3,650.78	3,463.24	3,101.70	3,007.94	19.33	13.54	-158.00	-500.15	-448.72	1,582.99	1,563.39	19.60	80.754	
3,700.00	3,508.21	3,139.76	3,043.88	19.67	13.79	-158.28	-508.66	-457.91	1,614.19	1,594.18	20.01	80.668	
3,800.00	3,600.60	3,218.58	3,118.30	20.25	14.32	-158.78	-526.28	-476.95	1,675.71	1,654.91	20.80	80.574	
3,900.00	3,694.27	3,299.32	3,194.55	20.80	14.86	-159.18	-544.33	-496.46	1,734.63	1,713.05	21.57	80.402	
4,000.00	3,789.10	3,381.88	3,272.51	21.31	15.42	-159.50	-562.79	-516.40	1,790.88	1,768.55	22.34	80.175	
4,100.00	3,884.98	3,466.17	3,352.10	21.78	15.99	-159.75	-581.64	-536.77	1,844.42	1,821.34	23.08	79.909	
4,200.00	3,981.80	3,552.08	3,433.22	22.20	16.57	-159.92	-600.85	-557.52	1,895.19	1,871.38	23.80	79.619	
4,300.00	4,079.43	3,738.15	3,610.40	22.58	17.50	-159.82	-639.38	-599.15	1,941.44	1,916.68	24.76	78.419	
4,400.00	4,177.75	3,971.84	3,837.49	22.92	18.41	-159.73	-676.64	-639.41	1,978.64	1,952.91	25.72	76.919	
4,500.00	4,276.65	4,220.98	4,083.65	23.21	19.12	-159.77	-702.38	-667.22	2,005.71	1,979.13	26.58	75.471	
4,600.00	4,376.01	4,480.94	4,343.00	23.45	19.57	-159.95	-713.64	-679.39	2,021.92	1,994.66	27.27	74.157	
4,700.00	4,475.69	4,613.64	4,475.69	23.64	19.70	-160.10	-713.98	-679.75	2,029.44	2,001.80	27.64	73.415	
4,800.00	4,575.60	4,713.54	4,575.60	23.78	19.80	-160.17	-713.98	-679.75	2,033.53	2,005.60	27.93	72.813	

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_RASMUSSEN 10-29
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_RASMUSSEN 10-29	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_RASMUSSEN 10-29	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	
4,874.41	4,650.00	4,787.94	4,650.00	23.86	19.87	-160.98	-713.98	-679.75	2,034.44	2,006.33	28.11	72.374	
4,900.00	4,675.59	4,813.53	4,675.59	23.88	19.90	-160.98	-713.98	-679.75	2,034.44	2,006.25	28.18	72.190	
5,000.00	4,775.59	4,913.53	4,775.59	23.97	20.00	-160.98	-713.98	-679.75	2,034.44	2,005.96	28.47	71.449	
5,100.00	4,875.59	5,013.53	4,875.59	24.06	20.11	-160.98	-713.98	-679.75	2,034.44	2,005.67	28.77	70.714	
5,200.00	4,975.59	5,113.53	4,975.59	24.15	20.21	-160.98	-713.98	-679.75	2,034.44	2,005.37	29.07	69.984	
5,300.00	5,075.59	5,213.53	5,075.59	24.24	20.32	-160.98	-713.98	-679.75	2,034.44	2,005.06	29.37	69.260	
5,400.00	5,175.59	5,313.53	5,175.59	24.33	20.43	-160.98	-713.98	-679.75	2,034.44	2,004.76	29.68	68.542	
5,500.00	5,275.59	5,413.53	5,275.59	24.43	20.54	-160.98	-713.98	-679.75	2,034.44	2,004.44	29.99	67.831	
5,600.00	5,375.59	5,513.53	5,375.59	24.53	20.65	-160.98	-713.98	-679.75	2,034.44	2,004.13	30.31	67.127	
5,700.00	5,475.59	5,613.53	5,475.59	24.63	20.77	-160.98	-713.98	-679.75	2,034.44	2,003.81	30.63	66.430	
5,800.00	5,575.59	5,713.53	5,575.59	24.73	20.88	-160.98	-713.98	-679.75	2,034.44	2,003.49	30.95	65.741	
5,900.00	5,675.59	5,813.53	5,675.59	24.83	21.00	-160.98	-713.98	-679.75	2,034.44	2,003.17	31.27	65.059	
6,000.00	5,775.59	5,913.53	5,775.59	24.94	21.12	-160.98	-713.98	-679.75	2,034.44	2,002.84	31.60	64.384	
6,100.00	5,875.59	6,013.53	5,875.59	25.04	21.24	-160.98	-713.98	-679.75	2,034.44	2,002.51	31.93	63.718	
6,200.00	5,975.59	6,113.53	5,975.59	25.15	21.37	-160.98	-713.98	-679.75	2,034.44	2,002.17	32.26	63.060	
6,300.00	6,075.59	6,213.53	6,075.59	25.26	21.49	-160.98	-713.98	-679.75	2,034.44	2,001.84	32.60	62.409	
6,400.00	6,175.59	6,313.53	6,175.59	25.37	21.62	-160.98	-713.98	-679.75	2,034.44	2,001.50	32.94	61.767	
6,500.00	6,275.59	6,413.53	6,275.59	25.48	21.75	-160.98	-713.98	-679.75	2,034.44	2,001.16	33.28	61.134	
6,600.00	6,375.59	6,513.53	6,375.59	25.60	21.88	-160.98	-713.98	-679.75	2,034.44	2,000.81	33.62	60.508	
6,700.00	6,475.59	6,613.53	6,475.59	25.71	22.01	-160.98	-713.98	-679.75	2,034.44	2,000.47	33.97	59.891	
6,800.00	6,575.59	6,713.53	6,575.59	25.83	22.14	-160.98	-713.98	-679.75	2,034.44	2,000.12	34.32	59.282	
6,900.00	6,675.59	6,813.53	6,675.59	25.94	22.27	-160.98	-713.98	-679.75	2,034.44	1,999.77	34.67	58.682	
7,000.00	6,775.59	6,913.53	6,775.59	26.06	22.41	-160.98	-713.98	-679.75	2,034.44	1,999.41	35.02	58.090	
7,100.00	6,875.59	7,013.53	6,875.59	26.18	22.55	-160.98	-713.98	-679.75	2,034.44	1,999.06	35.38	57.506	
7,200.00	6,975.59	7,113.53	6,975.59	26.31	22.69	-160.98	-713.98	-679.75	2,034.44	1,998.70	35.74	56.930	
7,300.00	7,075.59	7,213.53	7,075.59	26.43	22.83	-160.98	-713.98	-679.75	2,034.44	1,998.34	36.10	56.363	
7,400.00	7,175.59	7,313.53	7,175.59	26.55	22.97	-160.98	-713.98	-679.75	2,034.44	1,997.98	36.46	55.804	
7,500.00	7,275.59	7,413.53	7,275.59	26.68	23.11	-160.98	-713.98	-679.75	2,034.44	1,997.62	36.82	55.252	
7,600.00	7,375.59	7,513.53	7,375.59	26.81	23.25	-160.98	-713.98	-679.75	2,034.44	1,997.25	37.19	54.709	
7,700.00	7,475.59	7,613.53	7,475.59	26.94	23.40	-160.98	-713.98	-679.75	2,034.44	1,996.88	37.55	54.174	
7,800.00	7,575.59	7,713.53	7,575.59	27.07	23.55	-160.98	-713.98	-679.75	2,034.44	1,996.51	37.92	53.647	
7,900.00	7,675.59	7,813.53	7,675.59	27.20	23.69	-160.98	-713.98	-679.75	2,034.44	1,996.14	38.29	53.127	
8,000.00	7,775.59	7,913.53	7,775.59	27.33	23.70	-160.98	-713.98	-679.75	2,036.59	1,998.10	38.49	52.910	
8,100.00	7,875.59	8,013.53	7,875.59	27.46	23.70	-160.98	-713.98	-679.75	2,043.63	2,004.95	38.68	52.837	
8,200.00	7,975.59	8,113.53	7,975.59	27.60	23.70	-160.98	-713.98	-679.75	2,055.51	2,016.65	38.87	52.888	
8,300.00	8,075.59	8,213.53	8,075.59	27.73	23.70	-160.98	-713.98	-679.75	2,072.16	2,033.11	39.05	53.060	
8,345.41	8,121.00	8,213.53	8,121.00	27.80	23.70	-160.98	-713.98	-679.75	2,081.26	2,042.12	39.14	53.176	



Weatherford International Ltd.

Anticollision Report



Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_RASMUSSEN 10-29
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_RASMUSSEN 10-29	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_RASMUSSEN 10-29	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
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	-178.43	-102.00	-2.80	102.04				
100.00	100.00	100.00	100.00	0.10	0.10	-178.43	-102.00	-2.80	102.04	101.85	0.19	534.101	
200.00	200.00	200.00	200.00	0.32	0.32	-178.43	-102.00	-2.80	102.04	101.40	0.64	159.293	
300.00	300.00	300.00	300.00	0.55	0.55	-178.43	-102.00	-2.80	102.04	100.95	1.09	93.605	
400.00	400.00	400.00	400.00	0.77	0.77	-178.43	-102.00	-2.80	102.04	100.50	1.54	66.275	
500.00	500.00	500.00	500.00	0.99	0.99	-178.43	-102.00	-2.80	102.04	100.05	1.99	51.298	
600.00	600.00	600.00	600.00	1.22	1.22	-178.43	-102.00	-2.80	102.04	99.60	2.44	41.842	
700.00	700.00	700.00	700.00	1.44	1.44	-178.43	-102.00	-2.80	102.04	99.15	2.89	35.330	
750.00	750.00	750.00	750.00	1.56	1.56	-178.43	-102.00	-2.80	102.04	98.93	3.11	32.779 CC, ES	
800.00	800.00	799.78	799.78	1.67	1.67	-177.65	-102.01	-2.78	102.49	99.15	3.33	30.736	
900.00	899.93	897.42	897.39	1.89	1.84	-178.56	-103.29	-1.25	107.25	103.52	3.73	28.725	
1,000.00	999.68	994.32	994.14	2.12	2.04	179.35	-106.67	2.80	117.73	113.60	4.14	28.450 SF	
1,100.00	1,099.13	1,089.93	1,089.38	2.36	2.24	176.65	-112.05	9.25	134.09	129.55	4.55	29.490	
1,200.00	1,198.15	1,183.74	1,182.50	2.63	2.47	173.82	-119.30	17.95	156.45	151.49	4.96	31.537	
1,300.00	1,296.63	1,275.27	1,272.95	2.92	2.72	171.18	-128.26	28.70	184.79	179.41	5.38	34.350	
1,400.00	1,394.44	1,364.09	1,360.25	3.26	3.00	168.86	-138.71	41.24	218.98	213.18	5.80	37.728	
1,500.00	1,491.46	1,449.83	1,444.01	3.66	3.31	166.86	-150.44	55.31	258.83	252.59	6.24	41.511	
1,600.00	1,587.58	1,532.19	1,523.91	4.10	3.65	165.16	-163.22	70.64	304.07	297.40	6.67	45.569	
1,700.00	1,682.68	1,610.91	1,599.72	4.61	4.01	163.70	-176.80	86.93	354.43	347.31	7.12	49.802	
1,800.00	1,776.65	1,685.80	1,671.27	5.18	4.40	162.42	-190.95	103.91	409.61	402.04	7.57	54.096	
1,900.00	1,869.36	1,756.74	1,738.49	5.82	4.80	161.26	-205.46	121.31	469.32	461.28	8.04	58.385	
1,973.63	1,936.76	1,806.39	1,785.20	6.33	5.10	160.47	-216.25	134.25	516.00	507.62	8.38	61.557	
2,000.00	1,960.76	1,825.39	1,803.00	6.52	5.22	160.33	-220.49	139.34	533.15	524.61	8.54	62.428	
2,100.00	2,051.78	1,901.24	1,874.07	7.25	5.71	159.86	-237.47	159.71	598.22	589.06	9.16	65.328	
2,200.00	2,142.79	1,977.09	1,945.13	7.99	6.21	159.48	-254.45	180.07	663.31	653.52	9.79	67.741	
2,300.00	2,233.81	2,052.93	2,016.20	8.75	6.72	159.16	-271.42	200.44	728.41	717.98	10.44	69.783	
2,400.00	2,324.83	2,128.78	2,087.26	9.51	7.24	158.90	-288.40	220.80	793.53	782.44	11.09	71.524	
2,500.00	2,415.84	2,204.63	2,158.32	10.28	7.76	158.68	-305.38	241.17	858.65	846.89	11.76	73.020	
2,600.00	2,506.86	2,280.48	2,229.39	11.05	8.29	158.49	-322.35	261.53	923.78	911.35	12.43	74.303	
2,700.00	2,597.87	2,356.33	2,300.45	11.83	8.82	158.32	-339.33	281.90	988.92	975.80	13.11	75.421	
2,800.00	2,688.89	2,432.18	2,371.52	12.61	9.35	158.18	-356.31	302.26	1,054.06	1,040.26	13.80	76.401	
2,900.00	2,779.91	2,508.03	2,442.58	13.39	9.89	158.05	-373.28	322.63	1,119.20	1,104.71	14.48	77.266	
3,000.00	2,870.92	2,583.88	2,513.65	14.18	10.43	157.93	-390.26	342.99	1,184.34	1,169.16	15.18	78.030	
3,100.00	2,961.94	2,659.73	2,584.71	14.97	10.97	157.83	-407.24	363.36	1,249.49	1,233.62	15.87	78.709	
3,200.00	3,052.95	2,735.58	2,655.78	15.76	11.51	157.74	-424.21	383.72	1,314.64	1,298.07	16.57	79.319	
3,300.00	3,143.97	2,811.43	2,726.84	16.55	12.06	157.66	-441.19	404.09	1,379.79	1,362.52	17.28	79.867	
3,400.00	3,234.99	2,887.27	2,797.90	17.34	12.60	157.58	-458.16	424.45	1,444.94	1,426.96	17.98	80.361	
3,500.00	3,326.00	2,963.12	2,868.97	18.13	13.15	157.51	-475.14	444.82	1,510.10	1,491.41	18.69	80.809	
3,600.00	3,417.02	3,038.97	2,940.03	18.93	13.70	157.45	-492.12	465.18	1,575.25	1,555.86	19.40	81.217	
3,650.78	3,463.24	3,077.49	2,976.12	19.33	13.97	157.42	-500.74	475.53	1,608.34	1,588.59	19.76	81.410	
3,700.00	3,508.21	3,115.07	3,011.33	19.67	14.24	157.70	-509.15	485.62	1,640.11	1,619.94	20.18	81.291	
3,800.00	3,600.60	3,192.93	3,084.28	20.25	14.81	158.19	-526.58	506.52	1,702.80	1,681.81	20.99	81.124	
3,900.00	3,694.27	3,272.73	3,159.04	20.80	15.39	158.59	-544.44	527.95	1,762.95	1,741.15	21.80	80.887	
4,000.00	3,789.10	3,354.37	3,235.53	21.31	15.98	158.90	-562.71	549.87	1,820.47	1,797.88	22.59	80.603	
4,100.00	3,884.98	3,437.74	3,313.65	21.78	16.58	159.14	-581.37	572.25	1,875.32	1,851.96	23.36	80.289	
4,200.00	3,981.80	3,522.76	3,393.30	22.20	17.20	159.32	-600.40	595.08	1,927.44	1,903.33	24.11	79.957	
4,300.00	4,079.43	3,730.81	3,590.55	22.58	18.33	159.13	-642.69	645.81	1,974.32	1,949.14	25.18	78.404	
4,400.00	4,177.75	3,967.69	3,820.26	22.92	19.32	159.02	-679.54	690.01	2,012.01	1,985.81	26.19	76.811	
4,500.00	4,276.65	4,220.68	4,069.93	23.21	20.07	159.05	-705.33	720.96	2,039.55	2,012.47	27.08	75.310	
4,600.00	4,376.01	4,485.04	4,333.56	23.45	20.54	159.22	-717.11	735.09	2,056.18	2,028.39	27.80	73.976	
4,700.00	4,475.69	4,627.18	4,475.69	23.64	20.69	159.38	-717.62	735.70	2,063.77	2,035.58	28.19	73.209	
4,800.00	4,575.60	4,727.08	4,575.60	23.78	20.78	159.45	-717.62	735.70	2,067.83	2,039.35	28.48	72.614	

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_RASMUSSEN 10-29
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_RASMUSSEN 10-29	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_RASMUSSEN 10-29	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
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	
4,874.41	4,650.00	4,801.49	4,650.00	23.86	20.85	158.67	-717.62	735.70	2,068.74	2,040.08	28.66	72.184	
4,900.00	4,675.59	4,827.07	4,675.59	23.88	20.88	158.67	-717.62	735.70	2,068.74	2,040.01	28.73	72.006	
5,000.00	4,775.59	4,927.07	4,775.59	23.97	20.98	158.67	-717.62	735.70	2,068.74	2,039.72	29.02	71.295	
5,100.00	4,875.59	5,027.07	4,875.59	24.06	21.08	158.67	-717.62	735.70	2,068.74	2,039.43	29.31	70.588	
5,200.00	4,975.59	5,127.07	4,975.59	24.15	21.18	158.67	-717.62	735.70	2,068.74	2,039.13	29.60	69.886	
5,300.00	5,075.59	5,227.07	5,075.59	24.24	21.28	158.67	-717.62	735.70	2,068.74	2,038.84	29.90	69.188	
5,400.00	5,175.59	5,327.07	5,175.59	24.33	21.39	158.67	-717.62	735.70	2,068.74	2,038.53	30.20	68.496	
5,500.00	5,275.59	5,427.07	5,275.59	24.43	21.50	158.67	-717.62	735.70	2,068.74	2,038.23	30.51	67.809	
5,600.00	5,375.59	5,527.07	5,375.59	24.53	21.61	158.67	-717.62	735.70	2,068.74	2,037.92	30.82	67.129	
5,700.00	5,475.59	5,627.07	5,475.59	24.63	21.72	158.67	-717.62	735.70	2,068.74	2,037.61	31.13	66.454	
5,800.00	5,575.59	5,727.07	5,575.59	24.73	21.83	158.67	-717.62	735.70	2,068.74	2,037.29	31.45	65.786	
5,900.00	5,675.59	5,827.07	5,675.59	24.83	21.95	158.67	-717.62	735.70	2,068.74	2,036.97	31.77	65.125	
6,000.00	5,775.59	5,927.07	5,775.59	24.94	22.07	158.67	-717.62	735.70	2,068.74	2,036.65	32.09	64.471	
6,100.00	5,875.59	6,027.07	5,875.59	25.04	22.19	158.67	-717.62	735.70	2,068.74	2,036.32	32.41	63.824	
6,200.00	5,975.59	6,127.07	5,975.59	25.15	22.31	158.67	-717.62	735.70	2,068.74	2,035.99	32.74	63.183	
6,300.00	6,075.59	6,227.07	6,075.59	25.26	22.43	158.67	-717.62	735.70	2,068.74	2,035.66	33.07	62.551	
6,400.00	6,175.59	6,327.07	6,175.59	25.37	22.55	158.67	-717.62	735.70	2,068.74	2,035.33	33.41	61.925	
6,500.00	6,275.59	6,427.07	6,275.59	25.48	22.68	158.67	-717.62	735.70	2,068.74	2,034.99	33.74	61.307	
6,600.00	6,375.59	6,527.07	6,375.59	25.60	22.80	158.67	-717.62	735.70	2,068.74	2,034.65	34.08	60.697	
6,700.00	6,475.59	6,627.07	6,475.59	25.71	22.93	158.67	-717.62	735.70	2,068.74	2,034.31	34.42	60.095	
6,800.00	6,575.59	6,727.07	6,575.59	25.83	23.06	158.67	-717.62	735.70	2,068.74	2,033.97	34.77	59.500	
6,900.00	6,675.59	6,827.07	6,675.59	25.94	23.19	158.67	-717.62	735.70	2,068.74	2,033.62	35.12	58.912	
7,000.00	6,775.59	6,927.07	6,775.59	26.06	23.32	158.67	-717.62	735.70	2,068.74	2,033.27	35.46	58.333	
7,100.00	6,875.59	7,027.07	6,875.59	26.18	23.46	158.67	-717.62	735.70	2,068.74	2,032.92	35.82	57.761	
7,200.00	6,975.59	7,127.07	6,975.59	26.31	23.59	158.67	-717.62	735.70	2,068.74	2,032.57	36.17	57.196	
7,300.00	7,075.59	7,227.07	7,075.59	26.43	23.73	158.67	-717.62	735.70	2,068.74	2,032.21	36.52	56.640	
7,400.00	7,175.59	7,327.07	7,175.59	26.55	23.87	158.67	-717.62	735.70	2,068.74	2,031.85	36.88	56.091	
7,500.00	7,275.59	7,427.07	7,275.59	26.68	24.01	158.67	-717.62	735.70	2,068.74	2,031.49	37.24	55.549	
7,600.00	7,375.59	7,527.07	7,375.59	26.81	24.15	158.67	-717.62	735.70	2,068.74	2,031.13	37.60	55.015	
7,700.00	7,475.59	7,627.07	7,475.59	26.94	24.29	158.67	-717.62	735.70	2,068.74	2,030.77	37.97	54.489	
7,800.00	7,575.59	7,727.07	7,575.59	27.07	24.43	158.67	-717.62	735.70	2,068.74	2,030.40	38.33	53.969	
7,900.00	7,675.59	7,827.07	7,675.59	27.20	24.58	158.67	-717.62	735.70	2,068.74	2,030.04	38.70	53.458	
8,000.00	7,775.59	7,927.07	7,775.59	27.33	24.59	158.67	-717.62	735.70	2,070.63	2,031.73	38.90	53.224	
8,100.00	7,875.59	8,027.07	7,875.59	27.46	24.59	158.67	-717.62	735.70	2,077.31	2,038.22	39.09	53.142	
8,200.00	7,975.59	8,127.07	7,975.59	27.60	24.59	158.67	-717.62	735.70	2,088.77	2,049.49	39.28	53.182	
8,300.00	8,075.59	8,227.07	8,075.59	27.73	24.59	158.67	-717.62	735.70	2,104.92	2,065.45	39.46	53.339	
8,345.41	8,121.00	8,283.49	8,121.00	27.80	24.59	158.67	-717.62	735.70	2,113.77	2,074.22	39.55	53.448	



Weatherford International Ltd.

Anticollision Report



Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_RASMUSSEN 10-29
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_RASMUSSEN 10-29	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_RASMUSSEN 10-29	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	-43.73	0.00	43.73				
100.00	100.00	100.00	100.00	0.10	0.10	180.00	-43.73	0.00	43.73	43.53	0.19	228.871	
200.00	200.00	200.00	200.00	0.32	0.32	180.00	-43.73	0.00	43.73	43.09	0.64	68.260	
300.00	300.00	300.00	300.00	0.55	0.55	180.00	-43.73	0.00	43.73	42.64	1.09	40.111	
400.00	400.00	400.00	400.00	0.77	0.77	180.00	-43.73	0.00	43.73	42.19	1.54	28.400	
500.00	500.00	500.00	500.00	0.99	0.99	180.00	-43.73	0.00	43.73	41.74	1.99	21.982	
600.00	600.00	600.00	600.00	1.22	1.22	180.00	-43.73	0.00	43.73	41.29	2.44	17.930	
700.00	700.00	700.00	700.00	1.44	1.44	180.00	-43.73	0.00	43.73	40.84	2.89	15.139	
750.00	750.00	750.00	750.00	1.56	1.56	180.00	-43.73	0.00	43.73	40.61	3.11	14.046 CC, ES	
800.00	800.00	800.08	800.08	1.67	1.67	-179.30	-43.71	0.07	44.14	40.81	3.34	13.235	
900.00	899.93	900.42	900.38	1.89	1.88	177.76	-43.02	2.43	47.01	43.25	3.76	12.486 SF	
1,000.00	999.68	1,000.42	1,000.20	2.12	2.09	171.76	-41.35	8.14	52.91	48.71	4.20	12.600	
1,100.00	1,099.13	1,099.81	1,099.14	2.36	2.32	164.52	-38.73	17.12	62.56	57.91	4.64	13.470	
1,200.00	1,198.15	1,198.34	1,196.85	2.63	2.58	157.59	-35.19	29.27	76.49	71.38	5.11	14.962	
1,300.00	1,296.63	1,295.77	1,292.98	2.92	2.86	151.70	-30.76	44.45	94.91	89.29	5.62	16.897	
1,400.00	1,394.44	1,391.86	1,387.22	3.26	3.18	146.98	-25.49	62.49	117.76	111.59	6.17	19.087	
1,500.00	1,491.46	1,486.42	1,479.29	3.66	3.55	143.25	-19.45	83.19	144.91	138.13	6.78	21.369	
1,600.00	1,587.58	1,579.25	1,568.93	4.10	3.95	140.29	-12.70	106.34	176.17	168.71	7.46	23.623	
1,700.00	1,682.68	1,670.19	1,655.93	4.61	4.41	137.89	-5.30	131.70	211.36	203.16	8.20	25.769	
1,800.00	1,776.65	1,759.07	1,740.12	5.18	4.90	135.89	2.68	159.05	250.33	241.31	9.02	27.760	
1,900.00	1,869.36	1,845.79	1,821.37	5.82	5.44	134.19	11.17	188.13	292.90	283.00	9.90	29.579	
1,973.63	1,936.76	1,908.19	1,879.26	6.33	5.85	133.07	17.70	210.52	326.46	315.86	10.59	30.817	
2,000.00	1,960.76	1,930.27	1,899.61	6.52	6.02	132.88	20.09	218.72	338.84	327.98	10.87	31.178	
2,100.00	2,051.78	2,013.79	1,976.01	7.25	6.63	132.04	29.54	251.11	386.60	374.67	11.93	32.406	
2,200.00	2,142.79	2,101.23	2,055.61	7.99	7.31	131.23	39.67	285.83	434.86	421.81	13.06	33.305	
2,300.00	2,233.81	2,188.66	2,135.21	8.75	8.00	130.59	49.81	320.56	483.19	468.98	14.21	34.011	
2,400.00	2,324.83	2,276.09	2,214.81	9.51	8.70	130.06	59.94	355.29	531.54	516.17	15.37	34.579	
2,500.00	2,415.84	2,363.52	2,294.41	10.28	9.42	129.61	70.07	390.01	579.93	563.38	16.55	35.042	
2,600.00	2,506.86	2,450.96	2,374.00	11.05	10.13	129.24	80.20	424.74	628.34	610.61	17.74	35.424	
2,700.00	2,597.87	2,538.39	2,453.60	11.83	10.85	128.92	90.33	459.47	676.77	657.84	18.93	35.743	
2,800.00	2,688.89	2,625.82	2,533.20	12.61	11.58	128.64	100.47	494.19	725.22	705.08	20.14	36.013	
2,900.00	2,779.91	2,713.25	2,612.80	13.39	12.31	128.40	110.60	528.92	773.67	752.32	21.35	36.243	
3,000.00	2,870.92	2,800.69	2,692.40	14.18	13.04	128.18	120.73	563.64	822.13	799.57	22.56	36.441	
3,100.00	2,961.94	2,888.12	2,772.00	14.97	13.77	127.99	130.86	598.37	870.61	846.83	23.78	36.613	
3,200.00	3,052.95	2,975.55	2,851.59	15.76	14.51	127.82	141.00	633.10	919.08	894.08	25.00	36.763	
3,300.00	3,143.97	3,062.98	2,931.19	16.55	15.25	127.67	151.13	667.82	967.57	941.34	26.22	36.895	
3,400.00	3,234.99	3,150.41	3,010.79	17.34	15.99	127.53	161.26	702.55	1,016.06	988.60	27.45	37.012	
3,500.00	3,326.00	3,237.85	3,090.39	18.13	16.73	127.40	171.39	737.28	1,064.55	1,035.87	28.68	37.117	
3,600.00	3,417.02	3,325.28	3,169.99	18.93	17.47	127.29	181.53	772.00	1,113.05	1,083.13	29.91	37.210	
3,650.78	3,463.24	3,369.68	3,210.41	19.33	17.85	127.23	186.67	789.64	1,137.67	1,107.14	30.54	37.254	
3,700.00	3,508.21	3,412.83	3,249.69	19.67	18.21	127.59	191.67	806.77	1,161.32	1,130.14	31.18	37.249	
3,800.00	3,600.60	3,501.16	3,330.11	20.25	18.96	128.18	201.91	841.86	1,207.97	1,175.57	32.40	37.286	
3,900.00	3,694.27	3,590.30	3,411.26	20.80	19.72	128.60	212.24	877.26	1,252.73	1,219.13	33.60	37.281	
4,000.00	3,789.10	3,680.14	3,493.05	21.31	20.49	128.86	222.65	912.94	1,295.59	1,260.81	34.78	37.248	
4,100.00	3,884.98	3,770.56	3,575.37	21.78	21.26	128.99	233.13	948.86	1,336.55	1,300.62	35.93	37.196	
4,200.00	3,981.80	3,861.46	3,658.12	22.20	22.03	129.00	243.66	984.96	1,375.63	1,338.58	37.05	37.132	
4,300.00	4,079.43	3,952.73	3,741.21	22.58	22.81	128.89	254.24	1,021.21	1,412.86	1,374.74	38.12	37.065	
4,400.00	4,177.75	4,044.25	3,824.53	22.92	23.59	128.68	264.84	1,057.56	1,448.28	1,409.14	39.14	37.001	
4,500.00	4,276.65	4,135.92	3,907.99	23.21	24.38	128.36	275.47	1,093.97	1,481.94	1,441.83	40.11	36.945	
4,600.00	4,376.01	4,227.62	3,991.47	23.45	25.16	127.96	286.09	1,130.39	1,513.90	1,472.87	41.02	36.903	
4,700.00	4,475.69	4,319.24	4,074.88	23.64	25.95	127.48	296.71	1,166.78	1,544.23	1,502.36	41.87	36.881	
4,800.00	4,575.60	4,410.66	4,158.11	23.78	26.73	126.91	307.31	1,203.09	1,573.02	1,530.37	42.65	36.881	

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_RASMUSSEN 10-29
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_RASMUSSEN 10-29	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_RASMUSSEN 10-29	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	
4,874.41	4,650.00	4,478.51	4,219.88	23.86	27.31	125.65	315.17	1,230.04	1,593.50	1,550.31	43.19	36.899	
4,900.00	4,675.59	4,501.80	4,241.09	23.88	27.51	125.37	317.87	1,239.29	1,600.42	1,557.07	43.36	36.914	
5,000.00	4,775.59	4,592.84	4,323.97	23.97	28.29	124.28	328.42	1,275.45	1,627.87	1,583.86	44.01	36.987	
5,100.00	4,875.59	4,683.88	4,406.85	24.06	29.07	123.24	338.97	1,311.61	1,655.90	1,611.25	44.65	37.088	
5,200.00	4,975.59	4,774.92	4,489.73	24.15	29.85	122.22	349.52	1,347.77	1,684.48	1,639.21	45.27	37.214	
5,300.00	5,075.59	4,865.96	4,572.61	24.24	30.63	121.23	360.07	1,383.93	1,713.58	1,667.71	45.86	37.362	
5,400.00	5,175.59	4,957.00	4,655.50	24.33	31.41	120.27	370.62	1,420.09	1,743.17	1,696.73	46.45	37.531	
5,500.00	5,275.59	5,048.04	4,738.38	24.43	32.19	119.35	381.17	1,456.24	1,773.24	1,726.23	47.01	37.719	
5,600.00	5,375.59	5,139.08	4,821.26	24.53	32.97	118.45	391.72	1,492.40	1,803.75	1,756.19	47.56	37.923	
5,700.00	5,475.59	5,230.12	4,904.14	24.63	33.75	117.58	402.27	1,528.56	1,834.70	1,786.59	48.10	38.143	
5,800.00	5,575.59	5,321.16	4,987.02	24.73	34.53	116.73	412.82	1,564.72	1,866.04	1,817.41	48.63	38.376	
5,900.00	5,675.59	5,412.20	5,069.91	24.83	35.31	115.92	423.37	1,600.88	1,897.77	1,848.63	49.14	38.621	
6,000.00	5,775.59	5,503.24	5,152.79	24.94	36.09	115.12	433.92	1,637.04	1,929.87	1,880.23	49.64	38.877	
6,100.00	5,875.59	5,621.27	5,260.42	25.04	37.04	114.14	447.49	1,683.54	1,962.15	1,911.95	50.20	39.084	
6,200.00	5,975.59	5,826.49	5,451.47	25.15	38.29	112.69	468.45	1,755.37	1,991.04	1,940.15	50.89	39.124	
6,300.00	6,075.59	6,042.56	5,657.86	25.26	39.36	111.52	486.31	1,816.60	2,014.61	1,963.10	51.51	39.113	
6,400.00	6,175.59	6,267.72	5,877.39	25.37	40.22	110.66	500.24	1,864.34	2,032.35	1,980.30	52.05	39.044	
6,500.00	6,275.59	6,499.63	6,106.87	25.48	40.84	110.10	509.50	1,896.05	2,043.84	1,991.31	52.52	38.912	
6,600.00	6,375.59	6,735.45	6,342.19	25.60	41.18	109.86	513.54	1,909.92	2,048.79	1,995.88	52.91	38.721	
6,700.00	6,475.59	6,868.85	6,475.59	25.71	41.28	109.85	513.71	1,910.48	2,048.99	1,995.82	53.16	38.541	
6,800.00	6,575.59	6,968.85	6,575.59	25.83	41.36	109.85	513.71	1,910.48	2,048.99	1,995.60	53.38	38.382	
6,900.00	6,675.59	7,068.85	6,675.59	25.94	41.43	109.85	513.71	1,910.48	2,048.99	1,995.38	53.61	38.222	
7,000.00	6,775.59	7,168.85	6,775.59	26.06	41.51	109.85	513.71	1,910.48	2,048.99	1,995.15	53.83	38.062	
7,100.00	6,875.59	7,268.85	6,875.59	26.18	41.59	109.85	513.71	1,910.48	2,048.99	1,994.93	54.06	37.900	
7,200.00	6,975.59	7,368.85	6,975.59	26.31	41.67	109.85	513.71	1,910.48	2,048.99	1,994.69	54.29	37.739	
7,300.00	7,075.59	7,468.85	7,075.59	26.43	41.75	109.85	513.71	1,910.48	2,048.99	1,994.46	54.53	37.576	
7,400.00	7,175.59	7,568.85	7,175.59	26.55	41.83	109.85	513.71	1,910.48	2,048.99	1,994.22	54.77	37.414	
7,500.00	7,275.59	7,668.85	7,275.59	26.68	41.91	109.85	513.71	1,910.48	2,048.99	1,993.98	55.01	37.250	
7,600.00	7,375.59	7,768.85	7,375.59	26.81	42.00	109.85	513.71	1,910.48	2,048.99	1,993.74	55.25	37.087	
7,700.00	7,475.59	7,868.85	7,475.59	26.94	42.08	109.85	513.71	1,910.48	2,048.99	1,993.49	55.49	36.923	
7,800.00	7,575.59	7,968.85	7,575.59	27.07	42.17	109.85	513.71	1,910.48	2,048.99	1,993.25	55.74	36.759	
7,900.00	7,675.59	8,068.85	7,675.59	27.20	42.25	109.85	513.71	1,910.48	2,048.99	1,993.00	55.99	36.595	
8,000.00	7,775.59	8,100.27	7,707.00	27.33	42.28	109.85	513.71	1,910.48	2,050.14	1,993.97	56.16	36.503	
8,100.00	7,875.59	8,100.27	7,707.00	27.46	42.28	109.85	513.71	1,910.48	2,055.91	1,999.61	56.30	36.516	
8,200.00	7,975.59	8,100.27	7,707.00	27.60	42.28	109.85	513.71	1,910.48	2,066.52	2,010.07	56.44	36.614	
8,300.00	8,075.59	8,100.27	7,707.00	27.73	42.28	109.85	513.71	1,910.48	2,081.88	2,025.29	56.58	36.794	
8,345.41	8,121.00	8,100.27	7,707.00	27.80	42.28	109.85	513.71	1,910.48	2,090.39	2,033.75	56.65	36.903	



Weatherford International Ltd.

Anticollision Report



Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_RASMUSSEN 10-29
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_RASMUSSEN 10-29	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_RASMUSSEN 10-29	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	-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	
750.00	750.00	750.00	750.00	1.56	1.56	180.00	-14.58	0.00	14.58	11.47	3.11	4.685 CC, ES	
800.00	800.00	800.00	800.00	1.67	1.67	-179.23	-14.58	0.00	15.02	11.68	3.34	4.501 SF	
900.00	899.93	899.93	899.93	1.89	1.89	-179.37	-14.58	0.00	18.51	14.73	3.78	4.893	
1,000.00	999.68	1,000.10	1,000.09	2.12	2.12	-178.39	-14.04	-0.51	24.95	20.73	4.22	5.910	
1,100.00	1,099.13	1,100.47	1,100.38	2.36	2.34	-173.96	-11.10	-3.27	32.61	27.95	4.66	7.004	
1,200.00	1,198.15	1,200.80	1,200.42	2.63	2.57	-168.17	-5.59	-8.43	41.69	36.59	5.10	8.178	
1,300.00	1,296.63	1,300.99	1,299.99	2.92	2.81	-162.22	2.45	-15.97	52.55	46.99	5.56	9.451	
1,400.00	1,394.44	1,400.93	1,398.88	3.26	3.08	-156.67	13.00	-25.86	65.48	59.41	6.07	10.795	
1,500.00	1,491.46	1,500.56	1,496.89	3.66	3.37	-151.72	26.01	-38.06	80.64	74.00	6.63	12.155	
1,600.00	1,587.58	1,599.76	1,593.81	4.10	3.72	-147.40	41.43	-52.51	98.12	90.84	7.29	13.465	
1,700.00	1,682.68	1,698.47	1,689.47	4.61	4.11	-143.66	59.20	-69.17	117.97	109.93	8.04	14.670	
1,800.00	1,776.65	1,796.61	1,783.68	5.18	4.55	-140.42	79.23	-87.95	140.19	131.29	8.91	15.739	
1,900.00	1,869.36	1,894.09	1,876.28	5.82	5.06	-137.60	101.45	-108.78	164.76	154.87	9.89	16.659	
1,973.63	1,936.76	1,965.42	1,943.35	6.33	5.47	-135.74	119.16	-125.38	184.33	173.63	10.69	17.235	
2,000.00	1,960.76	1,990.88	1,967.14	6.52	5.62	-135.19	125.78	-131.58	191.56	180.55	11.00	17.409	
2,100.00	2,051.78	2,087.23	2,056.42	7.25	6.25	-132.90	152.20	-156.35	218.97	206.70	12.26	17.854	
2,200.00	2,142.79	2,183.08	2,143.97	7.99	6.94	-130.36	180.64	-183.02	246.57	232.94	13.64	18.082	
2,300.00	2,233.81	2,278.22	2,229.54	8.75	7.70	-127.65	210.97	-211.45	274.63	259.52	15.11	18.178	
2,400.00	2,324.83	2,372.44	2,312.88	9.51	8.51	-124.85	243.04	-241.51	303.39	286.73	16.66	18.209	
2,500.00	2,415.84	2,465.57	2,393.79	10.28	9.37	-122.02	276.68	-273.05	333.11	314.84	18.28	18.227	
2,600.00	2,506.86	2,559.41	2,474.48	11.05	10.28	-119.36	311.62	-305.80	363.77	343.83	19.94	18.246	
2,700.00	2,597.87	2,653.30	2,555.23	11.83	11.21	-117.10	346.58	-338.58	395.04	373.45	21.59	18.297	
2,800.00	2,688.89	2,747.19	2,635.97	12.61	12.15	-115.17	381.54	-371.35	426.80	403.57	23.24	18.367	
2,900.00	2,779.91	2,841.09	2,716.71	13.39	13.10	-113.50	416.50	-404.12	458.94	434.07	24.88	18.449	
3,000.00	2,870.92	2,934.98	2,797.46	14.18	14.05	-112.05	451.46	-436.90	491.39	464.88	26.51	18.536	
3,100.00	2,961.94	3,028.87	2,878.20	14.97	15.01	-110.78	486.42	-469.67	524.09	495.95	28.14	18.625	
3,200.00	3,052.95	3,122.77	2,958.94	15.76	15.98	-109.65	521.38	-502.45	557.00	527.23	29.76	18.715	
3,300.00	3,143.97	3,216.66	3,039.69	16.55	16.95	-108.66	556.35	-535.22	590.07	558.69	31.38	18.803	
3,400.00	3,234.99	3,310.55	3,120.43	17.34	17.92	-107.76	591.31	-568.00	623.29	590.30	33.00	18.889	
3,500.00	3,326.00	3,404.45	3,201.17	18.13	18.89	-106.96	626.27	-600.77	656.64	622.03	34.61	18.972	
3,600.00	3,417.02	3,498.34	3,281.92	18.93	19.87	-106.23	661.23	-633.55	690.09	653.86	36.22	19.052	
3,650.78	3,463.24	3,546.02	3,322.92	19.33	20.36	-105.89	678.98	-650.19	707.11	670.07	37.04	19.091	
3,700.00	3,508.21	3,592.24	3,362.66	19.67	20.85	-105.87	696.19	-666.32	723.52	685.69	37.82	19.129	
3,800.00	3,600.60	3,686.11	3,443.39	20.25	21.83	-105.67	731.15	-699.09	756.28	716.99	39.30	19.245	
3,900.00	3,694.27	3,779.86	3,524.01	20.80	22.81	-105.28	766.05	-731.82	788.35	747.63	40.72	19.358	
4,000.00	3,789.10	3,873.38	3,604.43	21.31	23.78	-104.72	800.87	-764.46	819.83	777.74	42.09	19.476	
4,100.00	3,884.98	3,966.53	3,684.54	21.78	24.76	-104.02	835.56	-796.98	850.85	807.45	43.40	19.606	
4,200.00	3,981.80	4,059.23	3,764.25	22.20	25.73	-103.18	870.07	-829.33	881.54	836.91	44.63	19.754	
4,300.00	4,079.43	4,151.34	3,843.46	22.58	26.70	-102.24	904.37	-861.48	912.07	866.30	45.77	19.927	
4,400.00	4,177.75	4,242.76	3,922.07	22.92	27.66	-101.21	938.41	-893.39	942.61	895.78	46.83	20.130	
4,500.00	4,276.65	4,333.37	4,000.00	23.21	28.61	-100.10	972.15	-925.02	973.32	925.53	47.78	20.369	
4,600.00	4,376.01	4,423.07	4,077.14	23.45	29.55	-98.94	1,005.55	-956.34	1,004.39	955.75	48.64	20.647	
4,700.00	4,475.69	4,511.75	4,153.40	23.64	30.49	-97.74	1,038.57	-987.29	1,036.00	986.60	49.40	20.970	
4,800.00	4,575.60	4,599.30	4,228.68	23.78	31.41	-96.50	1,071.17	-1,017.85	1,068.34	1,018.28	50.06	21.342	

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



Weatherford International Ltd.

Anticollision Report



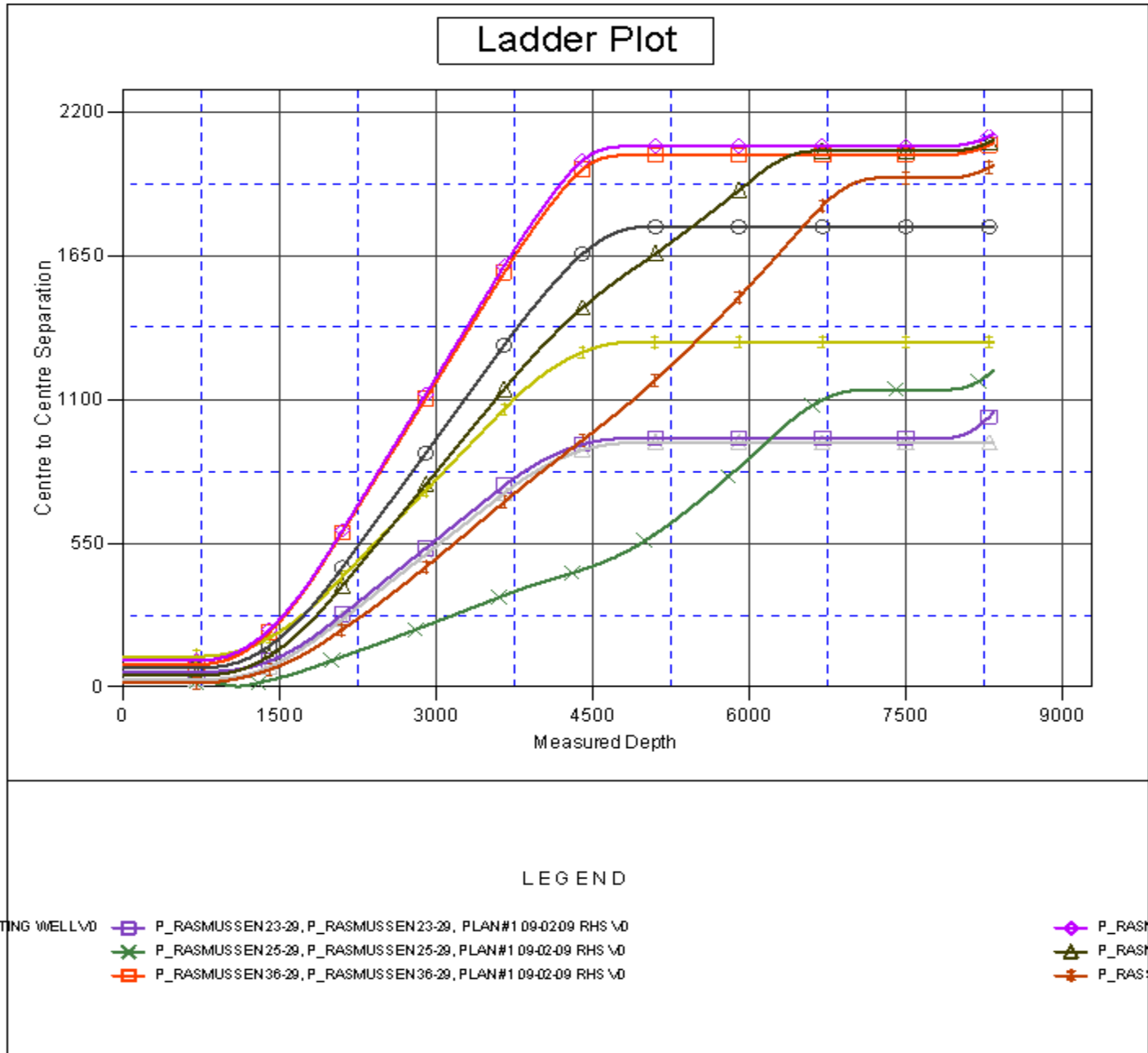
Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_RASMUSSEN 10-29
Project:	KERR MCGEE OIL & GAS ONSHORE LP	TVD Reference:	WELL @ 4949.00ft (Original Well Elev)
Reference Site:	WELD_RASMUSSEN 9 PAD	MD Reference:	WELL @ 4949.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_RASMUSSEN 10-29	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_RASMUSSEN 10-29	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_RASSMUSSEN 22-29 - P_RASSMUSSEN 22-29 - PLAN #1 09-02-01													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		
4,874.41	4,650.00	4,663.64	4,284.02	23.86	32.09	-96.37	1,095.13	-1,040.31	1,092.98	1,042.50	50.48	21.651		
4,900.00	4,675.59	4,685.65	4,302.94	23.88	32.32	-95.87	1,103.32	-1,047.99	1,101.60	1,051.02	50.57	21.783		
5,000.00	4,775.59	4,771.64	4,376.89	23.97	33.23	-93.99	1,135.34	-1,078.01	1,136.07	1,085.17	50.90	22.322		
5,100.00	4,875.59	4,857.64	4,450.84	24.06	34.13	-92.21	1,167.36	-1,108.03	1,171.75	1,120.56	51.18	22.893		
5,200.00	4,975.59	4,943.63	4,524.79	24.15	35.04	-90.51	1,199.38	-1,138.04	1,208.53	1,157.09	51.44	23.495		
5,300.00	5,075.59	5,029.63	4,598.74	24.24	35.95	-88.91	1,231.40	-1,168.06	1,246.32	1,194.65	51.67	24.122		
5,400.00	5,175.59	5,115.62	4,672.70	24.33	36.85	-87.38	1,263.42	-1,198.08	1,285.02	1,233.15	51.88	24.771		
5,500.00	5,275.59	5,201.62	4,746.65	24.43	37.76	-85.94	1,295.44	-1,228.10	1,324.56	1,272.49	52.07	25.439		
5,600.00	5,375.59	5,287.61	4,820.60	24.53	38.67	-84.57	1,327.47	-1,258.12	1,364.87	1,312.62	52.25	26.124		
5,700.00	5,475.59	5,373.61	4,894.55	24.63	39.58	-83.27	1,359.49	-1,288.13	1,405.87	1,353.45	52.42	26.822		
5,800.00	5,575.59	5,459.60	4,968.50	24.73	40.49	-82.03	1,391.51	-1,318.15	1,447.51	1,394.93	52.58	27.531		
5,900.00	5,675.59	5,545.60	5,042.45	24.83	41.39	-80.86	1,423.53	-1,348.17	1,489.73	1,436.99	52.74	28.249		
6,000.00	5,775.59	5,631.59	5,116.40	24.94	42.30	-79.75	1,455.55	-1,378.19	1,532.49	1,479.60	52.89	28.974		
6,100.00	5,875.59	5,717.59	5,190.35	25.04	43.21	-78.69	1,487.57	-1,408.20	1,575.74	1,522.70	53.05	29.704		
6,200.00	5,975.59	5,803.58	5,264.30	25.15	44.12	-77.69	1,519.59	-1,438.22	1,619.45	1,566.25	53.20	30.438		
6,300.00	6,075.59	5,889.58	5,338.26	25.26	45.03	-76.73	1,551.61	-1,468.24	1,663.58	1,610.21	53.36	31.174		
6,400.00	6,175.59	5,975.57	5,412.21	25.37	45.94	-75.82	1,583.63	-1,498.26	1,708.08	1,654.56	53.53	31.911		
6,500.00	6,275.59	6,061.57	5,486.16	25.48	46.85	-74.96	1,615.65	-1,528.27	1,752.95	1,699.26	53.69	32.647		
6,600.00	6,375.59	6,180.17	5,588.45	25.60	48.03	-73.83	1,659.43	-1,569.32	1,797.91	1,744.05	53.86	33.380		
6,700.00	6,475.59	6,384.50	5,769.69	25.71	49.64	-72.21	1,728.20	-1,633.78	1,839.05	1,785.05	54.00	34.056		
6,800.00	6,575.59	6,603.66	5,971.02	25.83	51.10	-70.86	1,791.28	-1,692.92	1,874.43	1,820.23	54.20	34.585		
6,900.00	6,675.59	6,836.51	6,191.49	25.94	52.35	-69.77	1,845.78	-1,744.02	1,903.33	1,848.88	54.45	34.955		
7,000.00	6,775.59	7,081.02	6,428.72	26.06	53.36	-68.98	1,888.77	-1,784.31	1,925.10	1,870.35	54.75	35.160		
7,100.00	6,875.59	7,334.31	6,678.83	26.18	54.06	-68.46	1,917.57	-1,811.31	1,939.21	1,884.13	55.08	35.205		
7,200.00	6,975.59	7,592.75	6,936.60	26.31	54.45	-68.25	1,930.23	-1,823.19	1,945.30	1,889.87	55.44	35.090		
7,300.00	7,075.59	7,731.74	7,075.59	26.43	54.54	-68.24	1,930.75	-1,823.67	1,945.55	1,889.85	55.70	34.932		
7,400.00	7,175.59	7,831.74	7,175.59	26.55	54.60	-68.24	1,930.75	-1,823.67	1,945.55	1,889.62	55.92	34.789		
7,500.00	7,275.59	7,931.74	7,275.59	26.68	54.66	-68.24	1,930.75	-1,823.67	1,945.55	1,889.39	56.16	34.645		
7,600.00	7,375.59	8,031.74	7,375.59	26.81	54.72	-68.24	1,930.75	-1,823.67	1,945.55	1,889.16	56.39	34.502		
7,700.00	7,475.59	8,131.74	7,475.59	26.94	54.79	-68.24	1,930.75	-1,823.67	1,945.55	1,888.92	56.63	34.357		
7,800.00	7,575.59	8,231.74	7,575.59	27.07	54.85	-68.24	1,930.75	-1,823.67	1,945.55	1,888.68	56.87	34.213		
7,900.00	7,675.59	8,331.74	7,675.59	27.20	54.92	-68.24	1,930.75	-1,823.67	1,945.55	1,888.44	57.11	34.068		
8,000.00	7,775.59	8,337.16	7,681.00	27.33	54.92	-68.24	1,930.75	-1,823.67	1,947.85	1,890.59	57.25	34.023		
8,100.00	7,875.59	8,337.16	7,681.00	27.46	54.92	-68.24	1,930.75	-1,823.67	1,955.25	1,897.86	57.39	34.069		
8,200.00	7,975.59	8,337.16	7,681.00	27.60	54.92	-68.24	1,930.75	-1,823.67	1,967.72	1,910.19	57.53	34.203		
8,300.00	8,075.59	8,337.16	7,681.00	27.73	54.92	-68.24	1,930.75	-1,823.67	1,985.16	1,927.49	57.67	34.421		
8,345.41	8,121.00	8,337.16	7,681.00	27.80	54.92	-68.24	1,930.75	-1,823.67	1,994.68	1,936.95	57.74	34.548		



Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_RASMUSSEN 10-29
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_RASMUSSEN 10-29	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_RASMUSSEN 10-29	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 10-29
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°





Reference Depths are relative to WELL @ 4949.00ft (Original Well ElevCoordinates are relative to: P_RASMUSSEN 10-29
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°

