



US ROCKIES REGION PLANNING

KERR MCGEE OIL & GAS ONSHORE LP

WELD_RASMUSSEN 9 PAD

P_RASMUSSEN 25-29

P_RASMUSSEN 25-29

Plan: PLAN #1 09-02-09 RHS

Standard Planning Report

02 September, 2009





P_RASMUSSEN 25-29
KERR MCGEE OIL & GAS ONSHORE LP
SECTION 29 T2N R68W
787 FSL 1961 FEL
LAT: 40° 6' 16.164 N
LONG: 105° 1' 28.992 W



Azimuths to True North
Magnetic North: 9.18°
Magnetic Field
Strength: 53153.2nT
Dip Angle: 66.84°
Date: 9/2/2009
Model: IGRF200510

WELL DETAILS: P_RASMUSSEN 25-29

+N/-S	+E/-W	Northing	Easting	Ground Level:	Latitude	Longitude	Slot
0.00	0.00	1281266.29	3132946.75	4934.00	40° 6' 16.164 N	105° 1' 28.992 W	

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
3885.00	4098.35	PARKMAN
4420.00	4686.89	SUSSEX TOP
4833.00	5141.23	SHANNON TOP
7251.00	7681.70	NIO A TOP
7546.00	7976.70	CODELL TOP

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
935.00	0.00	0.00	935.00	0.00	0.00	0.00	0.00	0.00	
2166.51	24.63	337.19	2128.93	240.26	-101.06	2.00	337.19	260.65	
6074.18	24.63	337.19	5681.07	1741.45	-732.46	0.00	0.00	1889.21	
7305.70	0.00	0.00	6875.00	1981.71	-833.51	2.00	180.00	2149.86	
8136.70	0.00	0.00	7706.00	1981.71	-833.51	0.00	0.00	2149.86	PBHL_RASMUSSEN 25-29(2530 FNL 2550 FWL)50' TGT RAD

CASING DETAILS

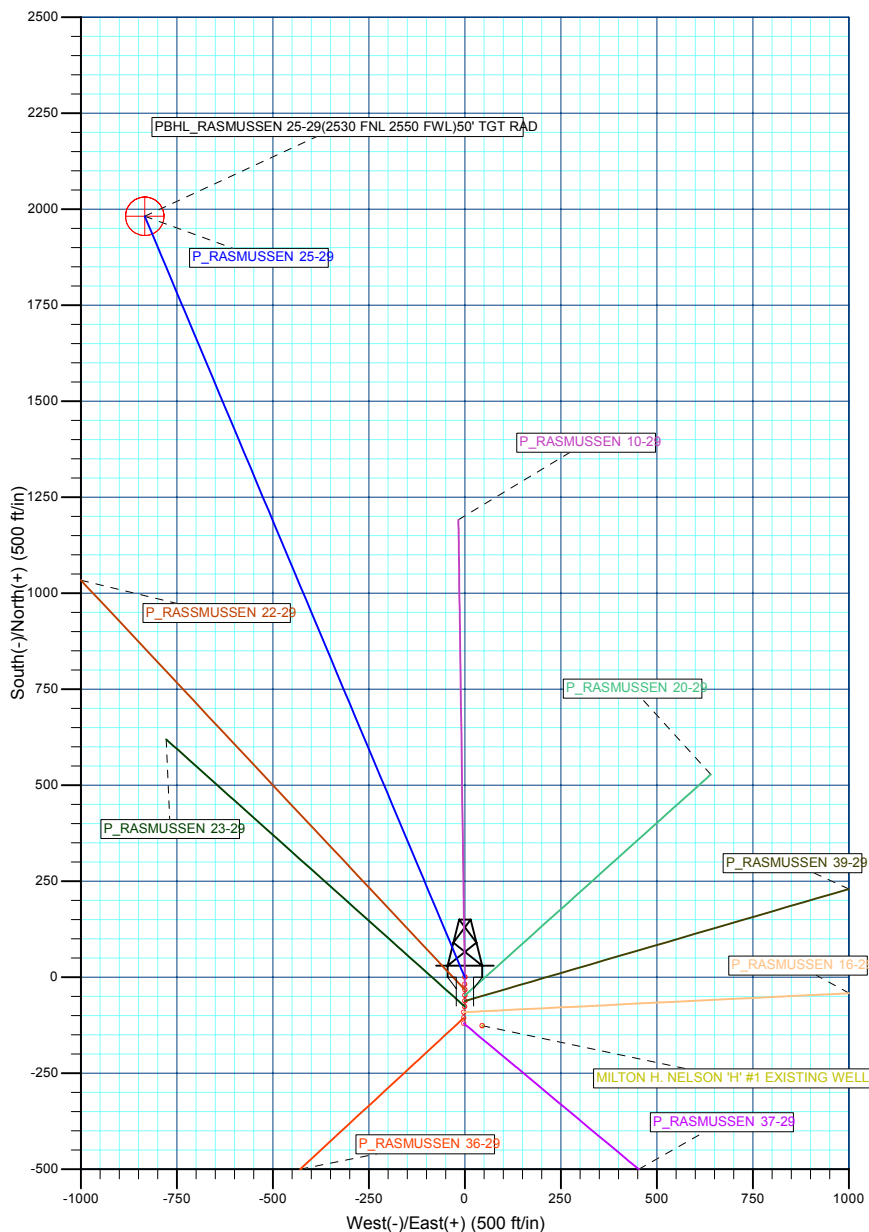
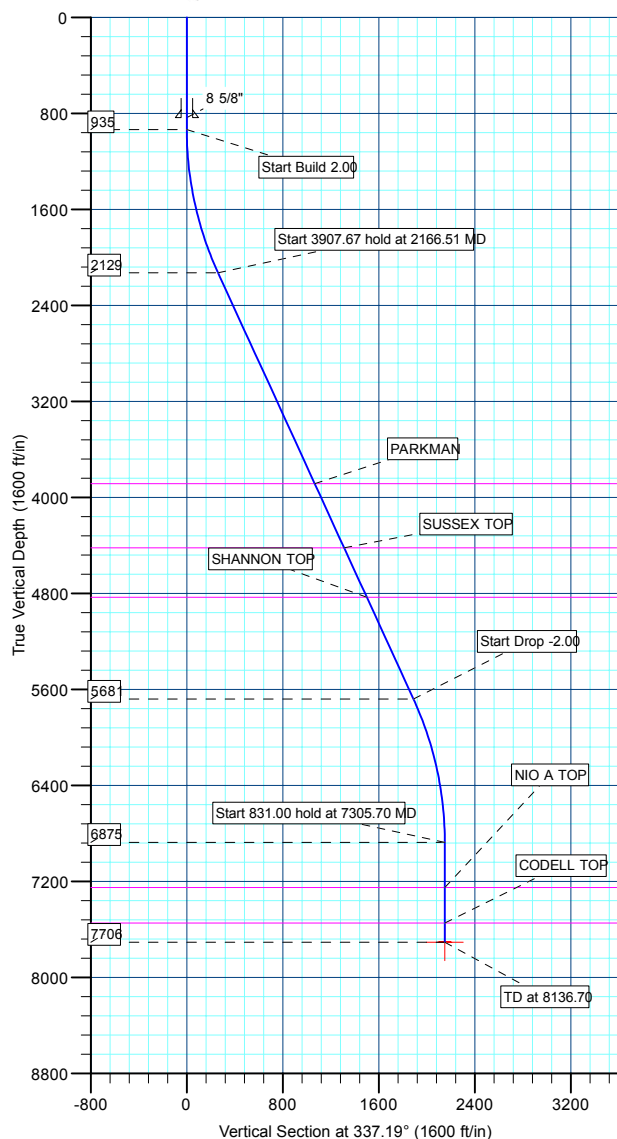
TVD	MD	Name	Size
835.00	835.00		8 5/8"

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

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
PBHL	7706.00	1981.70	-833.51	1283243.50	3132102.63	40° 6' 35.748 N	105° 1' 39.720 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 25-29/P_RASMUSSEN 25-29)

Created By: Robert H. Scott



Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well P_RASMUSSEN 25-29
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 25-29	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_RASMUSSEN 25-29		
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 25-29					
Well Position	+N/-S	18.20 ft	Northing:	1,281,266.29 ft	Latitude:	40° 6' 16.164 N
	+E/-W	0.00 ft	Easting:	3,132,946.75 ft	Longitude:	105° 1' 28.992 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	4,934.00 ft

Wellbore	P_RASMUSSEN 25-29				
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	337.19

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
935.00	0.00	0.00	935.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,166.51	24.63	337.19	2,128.93	240.26	-101.06	2.00	2.00	0.00	337.19	
6,074.18	24.63	337.19	5,681.07	1,741.45	-732.46	0.00	0.00	0.00	0.00	
7,305.70	0.00	0.00	6,875.00	1,981.71	-833.51	2.00	-2.00	0.00	180.00	
8,136.70	0.00	0.00	7,706.00	1,981.71	-833.51	0.00	0.00	0.00	0.00	PBHL_RASMUSSE



Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well P_RASMUSSEN 25-29
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 25-29	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_RASMUSSEN 25-29		
Design:	PLAN #1 09-02-09 RHS		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
Start Build 2.00									
935.00	0.00	0.00	935.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	1.30	337.19	999.99	0.68	-0.29	0.74	2.00	2.00	0.00
1,100.00	3.30	337.19	1,099.91	4.38	-1.84	4.75	2.00	2.00	0.00
1,200.00	5.30	337.19	1,199.62	11.29	-4.75	12.25	2.00	2.00	0.00
1,300.00	7.30	337.19	1,299.01	21.40	-9.00	23.22	2.00	2.00	0.00
1,400.00	9.30	337.19	1,397.96	34.71	-14.60	37.66	2.00	2.00	0.00
1,500.00	11.30	337.19	1,496.34	51.19	-21.53	55.53	2.00	2.00	0.00
1,600.00	13.30	337.19	1,594.04	70.83	-29.79	76.84	2.00	2.00	0.00
1,700.00	15.30	337.19	1,690.94	93.59	-39.37	101.54	2.00	2.00	0.00
1,800.00	17.30	337.19	1,786.92	119.46	-50.25	129.60	2.00	2.00	0.00
1,900.00	19.30	337.19	1,881.85	148.41	-62.42	161.00	2.00	2.00	0.00
2,000.00	21.30	337.19	1,975.64	180.38	-75.87	195.69	2.00	2.00	0.00
2,100.00	23.30	337.19	2,068.15	215.36	-90.58	233.63	2.00	2.00	0.00
Start 3907.67 hold at 2166.51 MD									
2,166.51	24.63	337.19	2,128.93	240.26	-101.06	260.65	2.00	2.00	0.00
2,200.00	24.63	337.19	2,159.37	253.13	-106.47	274.61	0.00	0.00	0.00
2,300.00	24.63	337.19	2,250.27	291.54	-122.62	316.28	0.00	0.00	0.00
2,400.00	24.63	337.19	2,341.18	329.96	-138.78	357.96	0.00	0.00	0.00
2,500.00	24.63	337.19	2,432.08	368.38	-154.94	399.63	0.00	0.00	0.00
2,600.00	24.63	337.19	2,522.98	406.79	-171.10	441.31	0.00	0.00	0.00
2,700.00	24.63	337.19	2,613.88	445.21	-187.26	482.99	0.00	0.00	0.00
2,800.00	24.63	337.19	2,704.78	483.62	-203.41	524.66	0.00	0.00	0.00
2,900.00	24.63	337.19	2,795.68	522.04	-219.57	566.34	0.00	0.00	0.00
3,000.00	24.63	337.19	2,886.59	560.46	-235.73	608.01	0.00	0.00	0.00
3,100.00	24.63	337.19	2,977.49	598.87	-251.89	649.69	0.00	0.00	0.00
3,200.00	24.63	337.19	3,068.39	637.29	-268.05	691.37	0.00	0.00	0.00
3,300.00	24.63	337.19	3,159.29	675.71	-284.20	733.04	0.00	0.00	0.00
3,400.00	24.63	337.19	3,250.19	714.12	-300.36	774.72	0.00	0.00	0.00
3,500.00	24.63	337.19	3,341.09	752.54	-316.52	816.39	0.00	0.00	0.00
3,600.00	24.63	337.19	3,431.99	790.96	-332.68	858.07	0.00	0.00	0.00
3,700.00	24.63	337.19	3,522.90	829.37	-348.84	899.75	0.00	0.00	0.00
3,800.00	24.63	337.19	3,613.80	867.79	-364.99	941.42	0.00	0.00	0.00
3,900.00	24.63	337.19	3,704.70	906.20	-381.15	983.10	0.00	0.00	0.00
4,000.00	24.63	337.19	3,795.60	944.62	-397.31	1,024.78	0.00	0.00	0.00
PARKMAN									
4,098.35	24.63	337.19	3,885.00	982.40	-413.20	1,065.76	0.00	0.00	0.00
4,100.00	24.63	337.19	3,886.50	983.04	-413.47	1,066.45	0.00	0.00	0.00
4,200.00	24.63	337.19	3,977.40	1,021.45	-429.63	1,108.13	0.00	0.00	0.00
4,300.00	24.63	337.19	4,068.31	1,059.87	-445.78	1,149.80	0.00	0.00	0.00
4,400.00	24.63	337.19	4,159.21	1,098.29	-461.94	1,191.48	0.00	0.00	0.00
4,500.00	24.63	337.19	4,250.11	1,136.70	-478.10	1,233.16	0.00	0.00	0.00
4,600.00	24.63	337.19	4,341.01	1,175.12	-494.26	1,274.83	0.00	0.00	0.00
SUSSEX TOP									
4,686.89	24.63	337.19	4,420.00	1,208.50	-508.30	1,311.05	0.00	0.00	0.00
4,700.00	24.63	337.19	4,431.91	1,213.54	-510.42	1,316.51	0.00	0.00	0.00
4,800.00	24.63	337.19	4,522.81	1,251.95	-526.58	1,358.18	0.00	0.00	0.00
4,900.00	24.63	337.19	4,613.72	1,290.37	-542.73	1,399.86	0.00	0.00	0.00
5,000.00	24.63	337.19	4,704.62	1,328.78	-558.89	1,441.54	0.00	0.00	0.00
5,100.00	24.63	337.19	4,795.52	1,367.20	-575.05	1,483.21	0.00	0.00	0.00
SHANNON TOP									
5,141.23	24.63	337.19	4,833.00	1,383.04	-581.71	1,500.40	0.00	0.00	0.00
5,200.00	24.63	337.19	4,886.42	1,405.62	-591.21	1,524.89	0.00	0.00	0.00
5,300.00	24.63	337.19	4,977.32	1,444.03	-607.37	1,566.56	0.00	0.00	0.00



Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well P_RASMUSSEN 25-29
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 25-29	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_RASMUSSEN 25-29		
Design:	PLAN #1 09-02-09 RHS		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,400.00	24.63	337.19	5,068.22	1,482.45	-623.52	1,608.24	0.00	0.00	0.00
5,500.00	24.63	337.19	5,159.13	1,520.87	-639.68	1,649.92	0.00	0.00	0.00
5,600.00	24.63	337.19	5,250.03	1,559.28	-655.84	1,691.59	0.00	0.00	0.00
5,700.00	24.63	337.19	5,340.93	1,597.70	-672.00	1,733.27	0.00	0.00	0.00
5,800.00	24.63	337.19	5,431.83	1,636.11	-688.16	1,774.95	0.00	0.00	0.00
5,900.00	24.63	337.19	5,522.73	1,674.53	-704.31	1,816.62	0.00	0.00	0.00
6,000.00	24.63	337.19	5,613.63	1,712.95	-720.47	1,858.30	0.00	0.00	0.00
Start Drop -2.00									
6,074.18	24.63	337.19	5,681.07	1,741.45	-732.46	1,889.21	0.00	0.00	0.00
6,100.00	24.11	337.19	5,704.58	1,751.27	-736.59	1,899.87	2.00	-2.00	0.00
6,200.00	22.11	337.19	5,796.55	1,787.45	-751.81	1,939.12	2.00	-2.00	0.00
6,300.00	20.11	337.19	5,889.83	1,820.65	-765.77	1,975.14	2.00	-2.00	0.00
6,400.00	18.11	337.19	5,984.32	1,850.84	-778.47	2,007.89	2.00	-2.00	0.00
6,500.00	16.11	337.19	6,079.88	1,877.96	-789.88	2,037.31	2.00	-2.00	0.00
6,600.00	14.11	337.19	6,176.42	1,901.99	-799.98	2,063.38	2.00	-2.00	0.00
6,700.00	12.11	337.19	6,273.81	1,922.91	-808.78	2,086.07	2.00	-2.00	0.00
6,800.00	10.11	337.19	6,371.93	1,940.67	-816.25	2,105.35	2.00	-2.00	0.00
6,900.00	8.11	337.19	6,470.66	1,955.27	-822.39	2,121.19	2.00	-2.00	0.00
7,000.00	6.11	337.19	6,569.88	1,966.69	-827.20	2,133.57	2.00	-2.00	0.00
7,100.00	4.11	337.19	6,669.48	1,974.90	-830.65	2,142.48	2.00	-2.00	0.00
7,200.00	2.11	337.19	6,769.33	1,979.91	-832.76	2,147.91	2.00	-2.00	0.00
7,300.00	0.11	337.19	6,869.30	1,981.70	-833.51	2,149.86	2.00	-2.00	0.00
Start 831.00 hold at 7305.70 MD									
7,305.70	0.00	0.00	6,875.00	1,981.71	-833.51	2,149.86	2.00	-2.00	0.00
7,400.00	0.00	0.00	6,969.30	1,981.71	-833.51	2,149.86	0.00	0.00	0.00
7,500.00	0.00	0.00	7,069.30	1,981.71	-833.51	2,149.86	0.00	0.00	0.00
7,600.00	0.00	0.00	7,169.30	1,981.71	-833.51	2,149.86	0.00	0.00	0.00
NIO A TOP									
7,681.70	0.00	0.00	7,251.00	1,981.71	-833.51	2,149.86	0.00	0.00	0.00
7,700.00	0.00	0.00	7,269.30	1,981.71	-833.51	2,149.86	0.00	0.00	0.00
7,800.00	0.00	0.00	7,369.30	1,981.71	-833.51	2,149.86	0.00	0.00	0.00
7,900.00	0.00	0.00	7,469.30	1,981.71	-833.51	2,149.86	0.00	0.00	0.00
CODELL TOP									
7,976.70	0.00	0.00	7,546.00	1,981.71	-833.51	2,149.86	0.00	0.00	0.00
8,000.00	0.00	0.00	7,569.30	1,981.71	-833.51	2,149.86	0.00	0.00	0.00
8,100.00	0.00	0.00	7,669.30	1,981.71	-833.51	2,149.86	0.00	0.00	0.00
PBHL_RASMUSSEN 25-29(2530 FNL 2550 FWL)50' TGT RAD									
8,136.70	0.00	0.00	7,706.00	1,981.71	-833.51	2,149.86	0.00	0.00	0.00

Design Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- hit/miss target									
- Shape									
PBHL_RASMUSSEN	0.00	0.00	7,706.00	1,981.70	-833.51	1,283,243.50	3,132,102.63	40° 6' 35.748 N	105° 1' 39.720 W
- plan hits target center									
- Circle (radius 50.00)									



Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well P_RASMUSSEN 25-29
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 25-29	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_RASMUSSEN 25-29		
Design:	PLAN #1 09-02-09 RHS		

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

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
4,098.35	3,885.00	PARKMAN			
4,686.89	4,420.00	SUSSEX TOP			
5,141.23	4,833.00	SHANNON TOP			
7,681.70	7,251.00	NIO A TOP			
7,976.70	7,546.00	CODELL TOP			

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
935.00	935.00	0.00	0.00	Start Build 2.00	
2,166.51	2,128.93	240.26	-101.06	Start 3907.67 hold at 2166.51 MD	
6,074.18	5,681.07	1,741.45	-732.46	Start Drop -2.00	
7,305.70	6,875.00	1,981.71	-833.51	Start 831.00 hold at 7305.70 MD	
8,136.70	7,706.00	1,981.71	-833.51	TD at 8136.70	



US ROCKIES REGION PLANNING

**KERR MCGEE OIL & GAS ONSHORE LP
WELD_RASMUSSEN 9 PAD
P_RASMUSSEN 25-29**

**P_RASMUSSEN 25-29
PLAN #1 09-02-09 RHS**

Anticollision Report

02 September, 2009





Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_RASMUSSEN 25-29
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 25-29	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_RASMUSSEN 25-29	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	8,136.70	PLAN #1 09-02-09 RHS (P_RASMUSSEN	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	935.00	935.00	134.27	97.20	3.622	CC
MILTON H. NELSON 'H' #1 EXISTING WELL - MILTON	1,100.00	1,099.91	139.01	95.04	3.161	ES
MILTON H. NELSON 'H' #1 EXISTING WELL - MILTON	1,300.00	1,299.01	157.46	105.41	3.025	SF
P_RASMUSSEN 10-29 - P_RASMUSSEN 10-29 - PLAN	1,108.44	1,109.34	1.80	-2.93	0.381	Level 1, CC, ES, SF
P_RASMUSSEN 16-29 - P_RASMUSSEN 16-29 - PLAN	940.93	941.17	90.88	86.94	23.054	CC, ES
P_RASMUSSEN 16-29 - P_RASMUSSEN 16-29 - PLAN	1,100.00	1,099.32	95.92	91.28	20.666	SF
P_RASMUSSEN 20-29 - P_RASMUSSEN 20-29 - PLAN	1,055.83	1,058.11	40.91	36.43	9.114	CC, ES
P_RASMUSSEN 20-29 - P_RASMUSSEN 20-29 - PLAN	1,100.00	1,102.23	41.40	36.71	8.825	SF
P_RASMUSSEN 23-29 - P_RASMUSSEN 23-29 - PLAN	1,167.93	1,173.43	67.44	62.40	13.389	CC
P_RASMUSSEN 23-29 - P_RASMUSSEN 23-29 - PLAN	1,200.00	1,205.70	67.56	62.36	12.997	ES
P_RASMUSSEN 23-29 - P_RASMUSSEN 23-29 - PLAN	1,500.00	1,505.64	80.83	73.78	11.465	SF
P_RASMUSSEN 36-29 - P_RASMUSSEN 36-29 - PLAN	758.34	758.34	105.67	102.52	33.542	CC
P_RASMUSSEN 36-29 - P_RASMUSSEN 36-29 - PLAN	800.00	799.50	105.72	102.39	31.730	ES
P_RASMUSSEN 36-29 - P_RASMUSSEN 36-29 - PLAN	1,100.00	1,090.48	122.57	118.01	26.860	SF
P_RASMUSSEN 37-29 - P_RASMUSSEN 37-29 - PLAN	762.96	762.96	120.24	117.06	37.914	CC
P_RASMUSSEN 37-29 - P_RASMUSSEN 37-29 - PLAN	800.00	799.75	120.25	116.91	36.058	ES
P_RASMUSSEN 37-29 - P_RASMUSSEN 37-29 - PLAN	1,100.00	1,090.48	135.49	130.92	29.670	SF
P_RASMUSSEN 39-29 - P_RASMUSSEN 39-29 - PLAN	971.08	971.95	60.66	56.58	14.854	CC, ES
P_RASMUSSEN 39-29 - P_RASMUSSEN 39-29 - PLAN	1,100.00	1,100.45	64.18	59.52	13.773	SF
P_RASMUSSEN 22-29 - P_RASMUSSEN 22-29 - PLAN	935.00	935.00	32.79	28.84	8.311	CC
P_RASMUSSEN 22-29 - P_RASMUSSEN 22-29 - PLAN	1,000.00	1,000.55	32.92	28.69	7.775	ES
P_RASMUSSEN 22-29 - P_RASMUSSEN 22-29 - PLAN	1,300.00	1,302.88	37.77	32.18	6.761	SF

Offset Design WELD_RASMUSSEN 9 PAD - MILTON H. NELSON 'H' #1 EXISTING WELL - MILTON H. NELSON 'H'											
Survey Program: 0-UNKNOWN											
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)
0.00	0.00	0.00	0.00	0.00	0.00	160.20	-126.33	45.49	134.27		
100.00	100.00	100.00	100.00	0.10	1.70	160.20	-126.33	45.49	134.27	132.47	1.80
200.00	200.00	200.00	200.00	0.32	5.70	160.20	-126.33	45.49	134.27	128.25	6.02
300.00	300.00	300.00	300.00	0.55	9.70	160.20	-126.33	45.49	134.27	124.02	10.25
400.00	400.00	400.00	400.00	0.77	13.70	160.20	-126.33	45.49	134.27	119.80	14.47
500.00	500.00	500.00	500.00	0.99	17.70	160.20	-126.33	45.49	134.27	115.58	18.69
											7.182

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 25-29
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 25-29	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_RASMUSSEN 25-29	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	
600.00	600.00	600.00	600.00	1.22	21.70	160.20	-126.33	45.49	134.27	111.35	22.92	5.858	
700.00	700.00	700.00	700.00	1.44	25.70	160.20	-126.33	45.49	134.27	107.13	27.14	4.947	
800.00	800.00	800.00	800.00	1.67	29.70	160.20	-126.33	45.49	134.27	102.90	31.37	4.280	
900.00	900.00	900.00	900.00	1.89	33.70	160.20	-126.33	45.49	134.27	98.68	35.59	3.772	
935.00	935.00	935.00	935.00	1.97	35.10	160.20	-126.33	45.49	134.27	97.20	37.07	3.622 CC	
1,000.00	999.99	999.99	999.99	2.12	37.70	-177.01	-126.33	45.49	135.01	95.20	39.81	3.391	
1,100.00	1,099.91	1,099.91	1,099.91	2.34	41.70	-177.09	-126.33	45.49	139.01	95.04	43.97	3.161 ES	
1,200.00	1,199.62	1,199.62	1,199.62	2.57	45.68	-177.23	-126.33	45.49	146.50	98.44	48.06	3.048	
1,300.00	1,299.01	1,299.01	1,299.01	2.81	49.66	-177.41	-126.33	45.49	157.46	105.41	52.05	3.025 SF	
1,400.00	1,397.96	1,397.96	1,397.96	3.07	53.62	-177.62	-126.33	45.49	171.89	115.95	55.94	3.073	
1,500.00	1,496.34	1,496.34	1,496.34	3.37	57.55	-177.83	-126.33	45.49	189.75	130.06	59.69	3.179	
1,600.00	1,594.04	1,594.04	1,594.04	3.71	61.46	-178.03	-126.33	45.49	211.04	147.74	63.30	3.334	
1,700.00	1,690.94	1,690.94	1,690.94	4.10	65.34	-178.22	-126.33	45.49	235.73	168.98	66.75	3.532	
1,800.00	1,786.92	1,786.92	1,786.92	4.54	69.18	-178.40	-126.33	45.49	263.78	193.76	70.02	3.767	
1,900.00	1,881.85	1,881.85	1,881.85	5.05	72.97	-178.55	-126.33	45.49	295.17	222.07	73.09	4.038	
2,000.00	1,975.64	1,975.64	1,975.64	5.62	76.73	-178.69	-126.33	45.49	329.85	253.88	75.97	4.342	
2,100.00	2,068.15	2,068.15	2,068.15	6.27	80.43	-178.80	-126.33	45.49	367.79	289.16	78.62	4.678	
2,166.51	2,128.93	2,128.93	2,128.93	6.73	82.86	-178.87	-126.33	45.49	394.80	314.53	80.26	4.919	
2,200.00	2,159.37	2,159.37	2,159.37	6.97	84.07	-178.91	-126.33	45.49	408.75	327.28	81.47	5.017	
2,300.00	2,250.27	2,250.27	2,250.27	7.71	87.71	-179.01	-126.33	45.49	450.42	365.33	85.10	5.293	
2,400.00	2,341.18	2,341.18	2,341.18	8.46	91.35	-179.10	-126.33	45.49	492.09	403.37	88.73	5.546	
2,500.00	2,432.08	2,432.08	2,432.08	9.23	94.98	-179.17	-126.33	45.49	533.77	441.40	92.36	5.779	
2,600.00	2,522.98	2,522.98	2,522.98	10.01	98.62	-179.23	-126.33	45.49	575.44	479.44	96.00	5.994	
2,700.00	2,613.88	2,613.88	2,613.88	10.79	102.26	-179.28	-126.33	45.49	617.11	517.47	99.64	6.193	
2,800.00	2,704.78	2,704.78	2,704.78	11.59	105.89	-179.33	-126.33	45.49	658.78	555.49	103.29	6.378	
2,900.00	2,795.68	2,795.68	2,795.68	12.38	109.53	-179.37	-126.33	45.49	700.46	593.52	106.94	6.550	
3,000.00	2,886.59	2,886.59	2,886.59	13.18	113.16	-179.40	-126.33	45.49	742.13	631.54	110.59	6.710	
3,100.00	2,977.49	2,977.49	2,977.49	13.98	116.80	-179.43	-126.33	45.49	783.81	669.56	114.25	6.861	
3,200.00	3,068.39	3,068.39	3,068.39	14.79	120.44	-179.46	-126.33	45.49	825.48	707.58	117.90	7.001	
3,300.00	3,159.29	3,159.29	3,159.29	15.60	124.07	-179.49	-126.33	45.49	867.16	745.59	121.56	7.133	
3,400.00	3,250.19	3,250.19	3,250.19	16.41	127.71	-179.51	-126.33	45.49	908.83	783.61	125.22	7.258	
3,500.00	3,341.09	3,341.09	3,341.09	17.22	131.34	-179.53	-126.33	45.49	950.51	821.62	128.88	7.375	
3,600.00	3,431.99	3,431.99	3,431.99	18.04	134.98	-179.55	-126.33	45.49	992.18	859.63	132.55	7.486	
3,700.00	3,522.90	3,522.90	3,522.90	18.85	138.62	-179.57	-126.33	45.49	1,033.86	897.65	136.21	7.590	
3,800.00	3,613.80	3,613.80	3,613.80	19.67	142.25	-179.59	-126.33	45.49	1,075.53	935.66	139.87	7.689	
3,900.00	3,704.70	3,704.70	3,704.70	20.48	145.89	-179.60	-126.33	45.49	1,117.21	973.67	143.54	7.783	
4,000.00	3,795.60	3,795.60	3,795.60	21.30	149.52	-179.62	-126.33	45.49	1,158.88	1,011.68	147.20	7.873	
4,100.00	3,886.50	3,886.50	3,886.50	22.12	153.16	-179.63	-126.33	45.49	1,200.56	1,049.69	150.87	7.957	
4,200.00	3,977.40	3,977.40	3,977.40	22.94	156.80	-179.64	-126.33	45.49	1,242.23	1,087.69	154.54	8.038	
4,300.00	4,068.31	4,068.31	4,068.31	23.76	160.43	-179.65	-126.33	45.49	1,283.91	1,125.70	158.21	8.115	
4,400.00	4,159.21	4,159.21	4,159.21	24.58	164.07	-179.66	-126.33	45.49	1,325.58	1,163.71	161.87	8.189	
4,500.00	4,250.11	4,250.11	4,250.11	25.40	167.70	-179.67	-126.33	45.49	1,367.26	1,201.72	165.54	8.259	
4,600.00	4,341.01	4,341.01	4,341.01	26.23	171.34	-179.68	-126.33	45.49	1,408.93	1,239.72	169.21	8.326	
4,700.00	4,431.91	4,431.91	4,431.91	27.05	174.98	-179.69	-126.33	45.49	1,450.61	1,277.73	172.88	8.391	
4,800.00	4,522.81	4,522.81	4,522.81	27.87	178.61	-179.70	-126.33	45.49	1,492.29	1,315.73	176.55	8.452	
4,900.00	4,613.72	4,613.72	4,613.72	28.69	182.25	-179.71	-126.33	45.49	1,533.96	1,353.74	180.22	8.511	
5,000.00	4,704.62	4,704.62	4,704.62	29.52	185.88	-179.72	-126.33	45.49	1,575.64	1,391.74	183.89	8.568	
5,100.00	4,795.52	4,795.52	4,795.52	30.34	189.52	-179.73	-126.33	45.49	1,617.31	1,429.75	187.56	8.623	
5,200.00	4,886.42	4,886.42	4,886.42	31.16	193.16	-179.73	-126.33	45.49	1,658.99	1,467.75	191.24	8.675	
5,300.00	4,977.32	4,977.32	4,977.32	31.99	196.79	-179.74	-126.33	45.49	1,700.66	1,505.76	194.91	8.725	
5,400.00	5,068.22	5,068.22	5,068.22	32.81	200.43	-179.74	-126.33	45.49	1,742.34	1,543.76	198.58	8.774	
5,500.00	5,159.13	5,159.13	5,159.13	33.64	204.07	-179.75	-126.33	45.49	1,784.02	1,581.76	202.25	8.821	

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 25-29
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 25-29	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_RASMUSSEN 25-29	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	5,250.03	5,250.03	5,250.03	34.46	207.70	-179.76	-126.33	45.49	1,825.69	1,619.77	205.92	8.866		
5,700.00	5,340.93	5,340.93	5,340.93	35.29	211.34	-179.76	-126.33	45.49	1,867.37	1,657.77	209.60	8.909		
5,800.00	5,431.83	5,431.83	5,431.83	36.11	214.97	-179.77	-126.33	45.49	1,909.04	1,695.77	213.27	8.951		
5,900.00	5,522.73	5,522.73	5,522.73	36.94	218.61	-179.77	-126.33	45.49	1,950.72	1,733.78	216.94	8.992		
6,000.00	5,613.63	5,613.63	5,613.63	37.76	222.25	-179.78	-126.33	45.49	1,992.39	1,771.78	220.61	9.031		
6,074.18	5,681.07	5,681.07	5,681.07	38.38	224.94	-179.78	-126.33	45.49	2,023.31	1,799.97	223.34	9.059		
6,100.00	5,704.58	5,704.58	5,704.58	38.56	225.88	-179.78	-126.33	45.49	2,033.96	1,808.87	225.09	9.036		
6,200.00	5,796.55	5,796.55	5,796.55	39.18	229.56	-179.79	-126.33	45.49	2,073.22	1,841.39	231.83	8.943		
6,300.00	5,889.83	5,889.83	5,889.83	39.75	233.29	-179.80	-126.33	45.49	2,109.24	1,870.72	238.52	8.843		
6,400.00	5,984.32	5,984.32	5,984.32	40.27	237.07	-179.80	-126.33	45.49	2,141.98	1,896.94	245.04	8.741		
6,500.00	6,079.88	6,079.88	6,079.88	40.75	240.90	-179.81	-126.33	45.49	2,171.41	1,920.03	251.37	8.638		
6,600.00	6,176.42	6,176.42	6,176.42	41.19	244.76	-179.81	-126.33	45.49	2,197.48	1,939.98	257.50	8.534		
6,700.00	6,273.81	6,273.81	6,273.81	41.57	248.65	-179.81	-126.33	45.49	2,220.17	1,956.78	263.39	8.429		
6,800.00	6,371.93	6,371.93	6,371.93	41.91	252.58	-179.82	-126.33	45.49	2,239.44	1,970.42	269.02	8.324		
6,900.00	6,470.66	6,470.66	6,470.66	42.20	256.53	-179.82	-126.33	45.49	2,255.28	1,980.89	274.39	8.219		
7,000.00	6,569.88	6,569.88	6,569.88	42.44	260.50	-179.82	-126.33	45.49	2,267.66	1,988.20	279.46	8.114		
7,100.00	6,669.48	6,669.48	6,669.48	42.63	264.48	-179.82	-126.33	45.49	2,276.58	1,992.35	284.23	8.010		
7,200.00	6,769.33	6,769.33	6,769.33	42.77	268.47	-179.82	-126.33	45.49	2,282.01	1,993.35	288.66	7.906		
7,305.70	6,875.00	6,875.00	6,875.00	42.87	272.70	157.37	-126.33	45.49	2,283.96	1,991.01	292.95	7.796		
7,400.00	6,969.30	6,969.30	6,969.30	42.93	276.47	157.37	-126.33	45.49	2,283.96	1,987.10	296.86	7.694		
7,500.00	7,069.30	7,069.30	7,069.30	43.01	280.47	157.37	-126.33	45.49	2,283.96	1,982.95	301.01	7.588		
7,600.00	7,169.30	7,169.30	7,169.30	43.08	284.47	157.37	-126.33	45.49	2,283.96	1,978.79	305.17	7.484		
7,700.00	7,269.30	7,269.30	7,269.30	43.16	288.47	157.37	-126.33	45.49	2,283.96	1,974.64	309.32	7.384		
7,800.00	7,369.30	7,369.30	7,369.30	43.24	292.47	157.37	-126.33	45.49	2,283.96	1,970.48	313.48	7.286		
7,900.00	7,469.30	7,469.30	7,469.30	43.31	296.47	157.37	-126.33	45.49	2,283.96	1,966.32	317.64	7.190		
8,000.00	7,569.30	7,569.30	7,569.30	43.39	300.47	157.37	-126.33	45.49	2,283.96	1,962.16	321.80	7.098		
8,100.00	7,669.30	7,669.30	7,669.30	43.47	304.47	157.37	-126.33	45.49	2,283.96	1,958.00	325.96	7.007		
8,136.70	7,706.00	7,706.00	7,706.00	43.50	305.94	157.37	-126.33	45.49	2,283.96	1,956.47	327.49	6.974		



Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_RASMUSSEN 25-29
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 25-29	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_RASMUSSEN 25-29	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	-18.20	0.00	18.20				
100.00	100.00	100.00	100.00	0.10	0.10	-180.00	-18.20	0.00	18.20	18.01	0.19	95.270	
200.00	200.00	200.00	200.00	0.32	0.32	-180.00	-18.20	0.00	18.20	17.56	0.64	28.414	
300.00	300.00	300.00	300.00	0.55	0.55	-180.00	-18.20	0.00	18.20	17.11	1.09	16.697	
400.00	400.00	400.00	400.00	0.77	0.77	-180.00	-18.20	0.00	18.20	16.66	1.54	11.822	
500.00	500.00	500.00	500.00	0.99	0.99	-180.00	-18.20	0.00	18.20	16.21	1.99	9.150	
600.00	600.00	600.00	600.00	1.22	1.22	-180.00	-18.20	0.00	18.20	15.76	2.44	7.464	
700.00	700.00	700.00	700.00	1.44	1.44	-180.00	-18.20	0.00	18.20	15.31	2.89	6.302	
800.00	800.00	800.31	800.31	1.67	1.67	-179.98	-17.76	-0.01	17.76	14.42	3.34	5.320	
900.00	900.00	900.82	900.75	1.89	1.90	-179.78	-14.23	-0.06	14.25	10.46	3.79	3.761	
935.00	935.00	935.92	935.79	1.97	1.97	-179.61	-12.17	-0.08	12.20	8.25	3.95	3.089	
1,000.00	999.99	1,001.01	1,000.69	2.12	2.12	-158.19	-7.21	-0.15	7.92	3.68	4.24	1.869	
1,100.00	1,099.91	1,100.93	1,100.05	2.34	2.36	148.75	3.26	-0.30	1.91	-2.79	4.70	0.407 Level 1	
1,108.44	1,108.33	1,109.34	1,108.40	2.36	2.39	130.09	4.30	-0.31	1.80	-2.93	4.74	0.381 Level 1, CC, ES, SF	
1,200.00	1,199.62	1,200.56	1,198.70	2.57	2.63	58.34	17.15	-0.49	7.30	2.14	5.16	1.415 Level 3	
1,300.00	1,299.01	1,300.00	1,296.63	2.81	2.92	54.53	34.43	-0.73	15.61	9.97	5.65	2.765	
1,400.00	1,397.96	1,398.87	1,393.34	3.07	3.26	55.56	54.96	-1.02	24.82	18.65	6.17	4.024	
1,500.00	1,496.34	1,497.51	1,489.06	3.37	3.65	57.48	78.76	-1.35	34.94	28.19	6.75	5.175	
1,600.00	1,594.04	1,595.78	1,583.55	3.71	4.08	59.58	105.73	-1.72	46.01	38.60	7.41	6.209	
1,700.00	1,690.94	1,693.66	1,676.69	4.10	4.58	61.63	135.80	-2.14	58.06	49.90	8.16	7.113	
1,800.00	1,786.92	1,791.14	1,768.37	4.54	5.13	63.55	168.90	-2.60	71.12	62.10	9.02	7.882	
1,900.00	1,881.85	1,888.19	1,858.49	5.05	5.74	65.33	204.92	-3.10	85.20	75.20	10.00	8.520	
2,000.00	1,975.64	1,985.09	1,947.19	5.62	6.41	66.96	243.89	-3.64	100.30	89.20	11.10	9.036	
2,100.00	2,068.15	2,083.86	2,037.09	6.27	7.13	69.27	284.81	-4.20	115.10	102.73	12.37	9.305	
2,166.51	2,128.93	2,149.56	2,096.88	6.73	7.62	71.31	312.02	-4.58	124.43	111.12	13.31	9.348	
2,200.00	2,159.37	2,182.62	2,126.98	6.97	7.86	72.48	325.72	-4.77	129.07	115.27	13.81	9.347	
2,300.00	2,250.27	2,281.36	2,216.85	7.71	8.61	75.49	366.62	-5.34	143.21	127.89	15.32	9.348	
2,400.00	2,341.18	2,380.10	2,306.72	8.46	9.36	77.97	407.52	-5.91	157.66	140.81	16.85	9.355	
2,500.00	2,432.08	2,478.84	2,396.59	9.23	10.11	80.02	448.42	-6.48	172.36	153.96	18.40	9.367	
2,600.00	2,522.98	2,577.59	2,486.46	10.01	10.88	81.75	489.32	-7.04	187.24	167.28	19.96	9.381	
2,700.00	2,613.88	2,676.33	2,576.33	10.79	11.64	83.23	530.22	-7.61	202.26	180.74	21.52	9.397	
2,800.00	2,704.78	2,775.07	2,666.20	11.59	12.42	84.50	571.12	-8.18	217.40	194.30	23.10	9.413	
2,900.00	2,795.68	2,873.81	2,756.07	12.38	13.19	85.61	612.02	-8.75	232.62	207.95	24.67	9.429	
3,000.00	2,886.59	2,972.55	2,845.94	13.18	13.96	86.58	652.92	-9.31	247.92	221.68	26.25	9.446	
3,100.00	2,977.49	3,071.29	2,935.81	13.98	14.74	87.44	693.82	-9.88	263.29	235.46	27.83	9.461	
3,200.00	3,068.39	3,170.03	3,025.68	14.79	15.52	88.20	734.72	-10.45	278.70	249.29	29.41	9.477	
3,300.00	3,159.29	3,268.77	3,115.54	15.60	16.30	88.88	775.62	-11.02	294.16	263.16	30.99	9.491	
3,400.00	3,250.19	3,367.51	3,205.41	16.41	17.08	89.50	816.52	-11.58	309.65	277.07	32.58	9.506	
3,500.00	3,341.09	3,466.25	3,295.28	17.22	17.87	90.05	857.42	-12.15	325.18	291.01	34.16	9.519	
3,600.00	3,431.99	3,564.99	3,385.15	18.04	18.65	90.56	898.32	-12.72	340.73	304.98	35.75	9.532	
3,700.00	3,522.90	3,664.28	3,475.53	18.85	19.42	91.03	939.42	-13.29	356.29	318.97	37.32	9.546	
3,800.00	3,613.80	3,767.21	3,570.15	19.67	20.06	91.81	979.92	-13.85	371.19	332.39	38.80	9.567	
3,900.00	3,704.70	3,870.03	3,666.06	20.48	20.64	93.06	1,016.95	-14.36	385.09	344.85	40.23	9.571	
4,000.00	3,795.60	3,972.47	3,762.88	21.30	21.17	94.72	1,050.40	-14.83	398.19	356.55	41.64	9.563	
4,100.00	3,886.50	4,074.27	3,860.22	22.12	21.66	96.76	1,080.20	-15.24	410.75	367.76	42.99	9.554	
4,200.00	3,977.40	4,175.20	3,957.71	22.94	22.10	99.13	1,106.31	-15.60	423.09	378.83	44.26	9.559	
4,300.00	4,068.31	4,275.00	4,054.95	23.76	22.49	101.78	1,128.73	-15.92	435.55	390.14	45.41	9.591	
4,400.00	4,159.21	4,373.47	4,151.60	24.58	22.83	104.68	1,147.52	-16.18	448.54	402.12	46.43	9.662	
4,500.00	4,250.11	4,470.39	4,247.32	25.40	23.12	107.78	1,162.77	-16.39	462.46	415.18	47.27	9.783	
4,600.00	4,341.01	4,565.60	4,341.79	26.23	23.37	111.02	1,174.58	-16.55	477.71	429.78	47.93	9.966	
4,700.00	4,431.91	4,658.93	4,434.72	27.05	23.56	114.35	1,183.11	-16.67	494.69	446.29	48.40	10.221	
4,800.00	4,522.81	4,750.25	4,525.87	27.87	23.71	117.73	1,188.51	-16.75	513.77	465.10	48.67	10.556	

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 25-29
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 25-29	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_RASMUSSEN 25-29	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 09-02-09 RHS	Offset TVD Reference:	Offset Datum

Offset Design WELD_RASMUSSEN 9 PAD - P_RASMUSSEN 10-29 - P_RASMUSSEN 10-29 - PLAN #1 09-02-09 R												Offset Site Error:	0.00 ft
Survey Program: 0-MWD												Offset Well Error:	0.00 ft
Reference	Offset	Semi Major Axis		Distance									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
4,900.00	4,613.72	4,839.43	4,615.02	28.69	23.82	121.10	1,190.99	-16.78	535.26	486.51	48.75	10.979	
5,000.00	4,704.62	4,929.03	4,704.62	29.52	23.90	124.46	1,191.20	-16.78	559.29	510.63	48.67	11.492	
5,100.00	4,795.52	5,019.93	4,795.52	30.34	23.98	127.64	1,191.20	-16.78	585.35	536.86	48.49	12.071	
5,200.00	4,886.42	5,110.83	4,886.42	31.16	24.07	130.56	1,191.20	-16.78	613.14	564.86	48.28	12.699	
5,300.00	4,977.32	5,201.74	4,977.32	31.99	24.15	133.26	1,191.20	-16.78	642.43	594.37	48.05	13.369	
5,400.00	5,068.22	5,292.64	5,068.22	32.81	24.23	135.73	1,191.20	-16.78	673.02	625.20	47.82	14.073	
5,500.00	5,159.13	5,383.54	5,159.13	33.64	24.32	138.00	1,191.20	-16.78	704.75	657.15	47.60	14.805	
5,600.00	5,250.03	5,474.44	5,250.03	34.46	24.41	140.09	1,191.20	-16.78	737.48	690.08	47.40	15.558	
5,700.00	5,340.93	5,565.34	5,340.93	35.29	24.49	142.01	1,191.20	-16.78	771.07	723.84	47.23	16.326	
5,800.00	5,431.83	5,656.24	5,431.83	36.11	24.58	143.78	1,191.20	-16.78	805.41	758.33	47.08	17.107	
5,900.00	5,522.73	5,747.14	5,522.73	36.94	24.68	145.41	1,191.20	-16.78	840.42	793.45	46.97	17.894	
6,000.00	5,613.63	5,838.05	5,613.63	37.76	24.77	146.92	1,191.20	-16.78	876.01	829.13	46.88	18.685	
6,074.18	5,681.07	5,905.48	5,681.07	38.38	24.84	147.96	1,191.20	-16.78	902.75	855.91	46.84	19.272	
6,100.00	5,704.58	5,929.00	5,704.58	38.56	24.86	148.41	1,191.20	-16.78	912.02	865.22	46.81	19.485	
6,200.00	5,796.55	6,020.96	5,796.55	39.18	24.96	150.00	1,191.20	-16.78	946.45	899.78	46.67	20.278	
6,300.00	5,889.83	6,114.25	5,889.83	39.75	25.06	151.36	1,191.20	-16.78	978.36	931.76	46.60	20.996	
6,400.00	5,984.32	6,208.73	5,984.32	40.27	25.16	152.53	1,191.20	-16.78	1,007.61	961.04	46.57	21.638	
6,500.00	6,079.88	6,304.30	6,079.88	40.75	25.26	153.52	1,191.20	-16.78	1,034.07	987.50	46.57	22.205	
6,600.00	6,176.42	6,400.83	6,176.42	41.19	25.37	154.36	1,191.20	-16.78	1,057.65	1,011.06	46.59	22.699	
6,700.00	6,273.81	6,498.22	6,273.81	41.57	25.48	155.06	1,191.20	-16.78	1,078.26	1,031.63	46.63	23.123	
6,800.00	6,371.93	6,596.34	6,371.93	41.91	25.59	155.63	1,191.20	-16.78	1,095.84	1,049.16	46.68	23.477	
6,900.00	6,470.66	6,695.07	6,470.66	42.20	25.70	156.08	1,191.20	-16.78	1,110.32	1,063.60	46.72	23.763	
7,000.00	6,569.88	6,794.30	6,569.88	42.44	25.82	156.43	1,191.20	-16.78	1,121.67	1,074.90	46.77	23.984	
7,100.00	6,669.48	6,893.89	6,669.48	42.63	25.94	156.68	1,191.20	-16.78	1,129.85	1,083.05	46.81	24.139	
7,200.00	6,769.33	6,993.74	6,769.33	42.77	26.06	156.82	1,191.20	-16.78	1,134.85	1,088.01	46.84	24.230	
7,305.70	6,875.00	7,099.41	6,875.00	42.87	26.18	134.07	1,191.20	-16.78	1,136.64	1,089.78	46.86	24.256	
7,400.00	6,969.30	7,193.72	6,969.30	42.93	26.30	134.07	1,191.20	-16.78	1,136.64	1,089.53	47.10	24.130	
7,500.00	7,069.30	7,293.72	7,069.30	43.01	26.42	134.07	1,191.20	-16.78	1,136.64	1,089.26	47.37	23.993	
7,600.00	7,169.30	7,393.72	7,169.30	43.08	26.55	134.07	1,191.20	-16.78	1,136.64	1,088.99	47.65	23.856	
7,700.00	7,269.30	7,493.72	7,269.30	43.16	26.67	134.07	1,191.20	-16.78	1,136.64	1,088.72	47.92	23.719	
7,800.00	7,369.30	7,593.72	7,369.30	43.24	26.80	134.07	1,191.20	-16.78	1,136.64	1,088.44	48.20	23.583	
7,900.00	7,469.30	7,693.72	7,469.30	43.31	26.93	134.07	1,191.20	-16.78	1,136.64	1,088.16	48.48	23.446	
8,000.00	7,569.30	7,793.72	7,569.30	43.39	27.06	134.07	1,191.20	-16.78	1,136.64	1,087.88	48.76	23.311	
8,100.00	7,669.30	7,893.72	7,669.30	43.47	27.19	134.07	1,191.20	-16.78	1,136.64	1,087.59	49.05	23.175	
8,136.70	7,706.00	7,930.41	7,706.00	43.50	27.24	134.07	1,191.20	-16.78	1,136.64	1,087.49	49.15	23.126	



Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_RASMUSSEN 25-29
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 25-29	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_RASMUSSEN 25-29	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	-178.24	-91.07	-2.80	91.11				
100.00	100.00	100.00	100.00	0.10	0.10	-178.24	-91.07	-2.80	91.11	90.92	0.19	476.880	
200.00	200.00	200.00	200.00	0.32	0.32	-178.24	-91.07	-2.80	91.11	90.47	0.64	142.227	
300.00	300.00	300.00	300.00	0.55	0.55	-178.24	-91.07	-2.80	91.11	90.02	1.09	83.577	
400.00	400.00	400.00	400.00	0.77	0.77	-178.24	-91.07	-2.80	91.11	89.57	1.54	59.175	
500.00	500.00	500.00	500.00	0.99	0.99	-178.24	-91.07	-2.80	91.11	89.12	1.99	45.802	
600.00	600.00	600.00	600.00	1.22	1.22	-178.24	-91.07	-2.80	91.11	88.67	2.44	37.359	
700.00	700.00	700.00	700.00	1.44	1.44	-178.24	-91.07	-2.80	91.11	88.22	2.89	31.545	
800.00	800.00	800.03	800.03	1.67	1.67	-178.25	-91.06	-2.78	91.11	87.77	3.34	27.307	
900.00	900.00	900.23	900.20	1.89	1.87	-179.57	-90.96	-0.68	90.96	87.20	3.76	24.172	
935.00	935.00	935.25	935.18	1.97	1.94	179.45	-90.88	0.88	90.89	86.97	3.92	23.210	
940.93	940.93	941.17	941.10	1.99	1.96	-157.94	-90.87	1.19	90.88	86.94	3.94	23.054 CC, ES	
1,000.00	999.99	1,000.13	999.95	2.12	2.08	-160.43	-90.69	4.90	91.51	87.31	4.20	21.796	
1,100.00	1,099.91	1,099.32	1,098.71	2.34	2.31	-166.58	-90.24	13.86	95.92	91.28	4.64	20.666 SF	
1,200.00	1,199.62	1,197.30	1,195.93	2.57	2.56	-174.13	-89.64	26.07	105.59	100.50	5.09	20.725	
1,300.00	1,299.01	1,293.65	1,291.05	2.81	2.83	178.26	-88.88	41.31	121.48	115.93	5.56	21.863	
1,400.00	1,397.96	1,387.94	1,383.61	3.07	3.14	171.51	-87.99	59.30	143.96	137.93	6.02	23.896	
1,500.00	1,496.34	1,479.83	1,473.18	3.37	3.49	165.94	-86.98	79.75	172.88	166.38	6.50	26.599	
1,600.00	1,594.04	1,568.97	1,559.41	3.71	3.87	161.50	-85.87	102.33	207.87	200.88	6.99	29.754	
1,700.00	1,690.94	1,655.11	1,642.02	4.10	4.29	157.99	-84.66	126.68	248.47	240.99	7.49	33.184	
1,800.00	1,786.92	1,738.02	1,720.81	4.54	4.74	155.18	-83.39	152.45	294.29	286.28	8.01	36.751	
1,900.00	1,881.85	1,817.51	1,795.62	5.05	5.22	152.87	-82.06	179.28	344.92	336.37	8.55	40.353	
2,000.00	1,975.64	1,893.47	1,866.38	5.62	5.71	150.93	-80.70	206.85	400.04	390.93	9.11	43.901	
2,100.00	2,068.15	1,965.79	1,933.06	6.27	6.24	149.23	-79.32	234.83	459.32	449.62	9.71	47.315	
2,166.51	2,128.93	2,012.55	1,975.78	6.73	6.58	148.19	-78.38	253.81	500.91	490.80	10.12	49.520	
2,200.00	2,159.37	2,038.32	1,999.27	6.97	6.78	147.97	-77.85	264.42	522.24	511.87	10.37	50.337	
2,300.00	2,250.27	2,115.28	2,069.39	7.71	7.39	147.39	-76.29	296.09	585.95	574.79	11.16	52.490	
2,400.00	2,341.18	2,192.24	2,139.51	8.46	8.00	146.93	-74.72	327.76	649.69	637.71	11.97	54.264	
2,500.00	2,432.08	2,269.20	2,209.64	9.23	8.63	146.55	-73.15	359.43	713.44	700.64	12.80	55.736	
2,600.00	2,522.98	2,346.16	2,279.76	10.01	9.26	146.23	-71.59	391.10	777.21	763.57	13.64	56.975	
2,700.00	2,613.88	2,423.12	2,349.89	10.79	9.89	145.96	-70.02	422.76	841.00	826.51	14.49	58.025	
2,800.00	2,704.78	2,500.08	2,420.01	11.59	10.53	145.73	-68.46	454.43	904.79	889.44	15.36	58.923	
2,900.00	2,795.68	2,577.04	2,490.14	12.38	11.17	145.53	-66.89	486.10	968.60	952.37	16.23	59.694	
3,000.00	2,886.59	2,654.00	2,560.26	13.18	11.82	145.35	-65.32	517.77	1,032.40	1,015.30	17.10	60.363	
3,100.00	2,977.49	2,730.96	2,630.39	13.98	12.46	145.19	-63.76	549.44	1,096.22	1,078.23	17.99	60.948	
3,200.00	3,068.39	2,807.92	2,700.51	14.79	13.11	145.05	-62.19	581.11	1,160.04	1,141.16	18.87	61.463	
3,300.00	3,159.29	2,884.89	2,770.63	15.60	13.77	144.93	-60.63	612.78	1,223.86	1,204.09	19.77	61.917	
3,400.00	3,250.19	2,961.85	2,840.76	16.41	14.42	144.82	-59.06	644.45	1,287.68	1,267.02	20.66	62.321	
3,500.00	3,341.09	3,038.81	2,910.88	17.22	15.07	144.72	-57.49	676.12	1,351.51	1,329.95	21.56	62.682	
3,600.00	3,431.99	3,115.77	2,981.01	18.04	15.73	144.62	-55.93	707.79	1,415.34	1,392.87	22.46	63.006	
3,700.00	3,522.90	3,192.73	3,051.13	18.85	16.39	144.54	-54.36	739.46	1,479.17	1,455.80	23.37	63.299	
3,800.00	3,613.80	3,269.69	3,121.26	19.67	17.04	144.46	-52.80	771.13	1,543.00	1,518.73	24.28	63.563	
3,900.00	3,704.70	3,346.65	3,191.38	20.48	17.70	144.39	-51.23	802.80	1,606.84	1,581.65	25.18	63.803	
4,000.00	3,795.60	3,423.61	3,261.51	21.30	18.36	144.33	-49.66	834.47	1,670.67	1,644.58	26.10	64.023	
4,100.00	3,886.50	3,500.57	3,331.63	22.12	19.02	144.26	-48.10	866.14	1,734.51	1,707.50	27.01	64.223	
4,200.00	3,977.40	3,577.53	3,401.76	22.94	19.68	144.21	-46.53	897.81	1,798.35	1,770.43	27.92	64.407	
4,300.00	4,068.31	3,654.49	3,471.88	23.76	20.34	144.16	-44.97	929.48	1,862.19	1,833.35	28.84	64.577	
4,400.00	4,159.21	3,731.45	3,542.00	24.58	21.00	144.11	-43.40	961.15	1,926.03	1,896.27	29.75	64.733	
4,500.00	4,250.11	3,808.41	3,612.13	25.40	21.66	144.06	-41.83	992.82	1,989.87	1,959.20	30.67	64.878	
4,600.00	4,341.01	3,971.96	3,762.82	26.23	22.81	144.06	-38.70	1,056.26	2,052.26	2,020.38	31.88	64.365	
4,700.00	4,431.91	4,158.32	3,938.61	27.05	23.86	144.30	-35.65	1,117.96	2,110.79	2,077.71	33.07	63.819	
4,800.00	4,522.81	4,357.53	4,130.53	27.87	24.79	144.79	-33.02	1,171.15	2,165.01	2,130.80	34.21	63.287	

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 25-29
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 25-29	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_RASMUSSEN 25-29	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
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
4,900.00	4,613.72	4,568.84	4,337.62	28.69	25.54	145.53	-30.95	1,212.86	2,214.55	2,179.29	35.26	62.809	
5,000.00	4,704.62	4,790.90	4,557.94	29.52	26.09	146.52	-29.60	1,240.14	2,259.04	2,222.84	36.19	62.418	
5,100.00	4,795.52	5,021.69	4,788.44	30.34	26.40	147.77	-29.10	1,250.35	2,298.21	2,261.23	36.98	62.152	
5,200.00	4,886.42	5,119.67	4,886.42	31.16	26.48	148.35	-29.10	1,250.37	2,334.49	2,296.91	37.58	62.125	
5,300.00	4,977.32	5,210.57	4,977.32	31.99	26.55	148.86	-29.10	1,250.37	2,370.93	2,332.76	38.17	62.117	
5,400.00	5,068.22	5,301.47	5,068.22	32.81	26.63	149.36	-29.10	1,250.37	2,407.54	2,368.79	38.75	62.124	
5,500.00	5,159.13	5,392.38	5,159.13	33.64	26.72	149.85	-29.10	1,250.37	2,444.32	2,404.98	39.33	62.143	
5,600.00	5,250.03	5,483.28	5,250.03	34.46	26.80	150.32	-29.10	1,250.37	2,481.25	2,441.34	39.91	62.174	
5,700.00	5,340.93	5,574.18	5,340.93	35.29	26.88	150.78	-29.10	1,250.37	2,518.33	2,477.85	40.48	62.215	
5,800.00	5,431.83	5,665.08	5,431.83	36.11	26.97	151.23	-29.10	1,250.37	2,555.55	2,514.51	41.04	62.266	
5,900.00	5,522.73	5,755.98	5,522.73	36.94	27.06	151.66	-29.10	1,250.37	2,592.90	2,551.30	41.60	62.325	
6,000.00	5,613.63	5,846.88	5,613.63	37.76	27.14	152.09	-29.10	1,250.37	2,630.39	2,588.23	42.16	62.393	
6,074.18	5,681.07	5,914.32	5,681.07	38.38	27.21	152.39	-29.10	1,250.37	2,658.28	2,615.71	42.57	62.447	
6,100.00	5,704.58	5,937.83	5,704.58	38.56	27.23	152.59	-29.10	1,250.37	2,667.90	2,625.12	42.79	62.353	
6,200.00	5,796.55	6,029.80	5,796.55	39.18	27.32	153.31	-29.10	1,250.37	2,703.44	2,659.87	43.57	62.049	
6,300.00	5,889.83	6,123.08	5,889.83	39.75	27.42	153.95	-29.10	1,250.37	2,736.13	2,691.83	44.30	61.761	
6,400.00	5,984.32	6,217.57	5,984.32	40.27	27.52	154.52	-29.10	1,250.37	2,765.92	2,720.94	44.98	61.488	
6,500.00	6,079.88	6,313.13	6,079.88	40.75	27.61	155.01	-29.10	1,250.37	2,792.76	2,747.15	45.61	61.231	
6,600.00	6,176.42	6,409.67	6,176.42	41.19	27.72	155.44	-29.10	1,250.37	2,816.57	2,770.39	46.18	60.990	
6,700.00	6,273.81	6,507.06	6,273.81	41.57	27.82	155.80	-29.10	1,250.37	2,837.33	2,790.63	46.69	60.764	
6,800.00	6,371.93	6,605.18	6,371.93	41.91	27.93	156.11	-29.10	1,250.37	2,854.99	2,807.84	47.15	60.553	
6,900.00	6,470.66	6,703.91	6,470.66	42.20	28.03	156.35	-29.10	1,250.37	2,869.51	2,821.97	47.54	60.354	
7,000.00	6,569.88	6,803.13	6,569.88	42.44	28.14	156.54	-29.10	1,250.37	2,880.88	2,833.00	47.88	60.169	
7,100.00	6,669.48	6,902.73	6,669.48	42.63	28.25	156.68	-29.10	1,250.37	2,889.06	2,840.91	48.16	59.995	
7,200.00	6,769.33	7,002.58	6,769.33	42.77	28.37	156.76	-29.10	1,250.37	2,894.05	2,845.68	48.37	59.830	
7,305.70	6,875.00	7,108.25	6,875.00	42.87	28.49	133.98	-29.10	1,250.37	2,895.85	2,847.31	48.54	59.664	
7,400.00	6,969.30	7,202.55	6,969.30	42.93	28.60	133.98	-29.10	1,250.37	2,895.85	2,847.07	48.77	59.376	
7,500.00	7,069.30	7,302.55	7,069.30	43.01	28.72	133.98	-29.10	1,250.37	2,895.85	2,846.81	49.03	59.062	
7,600.00	7,169.30	7,402.55	7,169.30	43.08	28.83	133.98	-29.10	1,250.37	2,895.85	2,846.55	49.29	58.747	
7,700.00	7,269.30	7,502.55	7,269.30	43.16	28.95	133.98	-29.10	1,250.37	2,895.85	2,846.29	49.56	58.434	
7,800.00	7,369.30	7,602.55	7,369.30	43.24	29.07	133.98	-29.10	1,250.37	2,895.85	2,846.02	49.83	58.120	
7,900.00	7,469.30	7,702.55	7,469.30	43.31	29.20	133.98	-29.10	1,250.37	2,895.85	2,845.75	50.10	57.807	
8,000.00	7,569.30	7,802.55	7,569.30	43.39	29.32	133.98	-29.10	1,250.37	2,895.85	2,845.48	50.37	57.494	
8,100.00	7,669.30	7,902.55	7,669.30	43.47	29.44	133.98	-29.10	1,250.37	2,895.85	2,845.20	50.64	57.181	
8,136.70	7,706.00	7,939.25	7,706.00	43.50	29.49	133.98	-29.10	1,250.37	2,895.85	2,845.10	50.74	57.067	



Weatherford International Ltd.

Anticollision Report



Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_RASMUSSEN 25-29
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 25-29	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_RASMUSSEN 25-29	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	-47.37	0.00	47.37				
100.00	100.00	100.00	100.00	0.10	0.10	180.00	-47.37	0.00	47.37	47.18	0.19	247.938	
200.00	200.00	200.00	200.00	0.32	0.32	180.00	-47.37	0.00	47.37	46.73	0.64	73.946	
300.00	300.00	300.00	300.00	0.55	0.55	180.00	-47.37	0.00	47.37	46.28	1.09	43.453	
400.00	400.00	400.00	400.00	0.77	0.77	180.00	-47.37	0.00	47.37	45.83	1.54	30.766	
500.00	500.00	500.00	500.00	0.99	0.99	180.00	-47.37	0.00	47.37	45.38	1.99	23.813	
600.00	600.00	600.00	600.00	1.22	1.22	180.00	-47.37	0.00	47.37	44.93	2.44	19.424	
700.00	700.00	700.00	700.00	1.44	1.44	180.00	-47.37	0.00	47.37	44.48	2.89	16.401	
800.00	800.00	800.55	800.55	1.67	1.67	179.60	-47.07	0.33	47.08	43.74	3.34	14.108	
900.00	900.00	901.53	901.46	1.89	1.89	176.18	-44.69	2.98	44.81	41.03	3.78	11.849	
935.00	935.00	936.80	936.67	1.97	1.97	174.03	-43.30	4.53	43.57	39.63	3.94	11.059	
1,000.00	999.99	1,002.16	1,001.83	2.12	2.12	-169.06	-39.96	8.25	41.56	37.33	4.23	9.820	
1,055.83	1,055.80	1,058.11	1,057.52	2.24	2.25	-176.18	-36.31	12.31	40.91	36.43	4.49	9.114 CC, ES	
1,100.00	1,099.91	1,102.23	1,101.34	2.34	2.36	177.14	-32.91	16.09	41.40	36.71	4.69	8.825 SF	
1,200.00	1,199.62	1,201.52	1,199.65	2.57	2.62	161.00	-23.64	26.41	46.81	41.64	5.17	9.058	
1,300.00	1,299.01	1,300.00	1,296.63	2.81	2.92	147.34	-12.19	39.15	58.76	53.10	5.66	10.374	
1,400.00	1,397.96	1,396.85	1,391.36	3.07	3.26	137.88	1.23	54.09	76.70	70.50	6.19	12.385	
1,500.00	1,496.34	1,492.48	1,484.20	3.37	3.64	131.69	16.58	71.17	99.69	92.93	6.77	14.736	
1,600.00	1,594.04	1,586.52	1,574.68	3.71	4.07	127.62	33.68	90.20	127.09	119.70	7.39	17.190	
1,700.00	1,690.94	1,681.08	1,665.08	4.10	4.54	125.13	52.23	110.84	157.93	149.84	8.08	19.538	
1,800.00	1,786.92	1,775.52	1,755.34	4.54	5.03	124.12	70.78	131.49	190.77	181.94	8.83	21.601	
1,900.00	1,881.85	1,869.28	1,844.97	5.05	5.53	123.98	89.21	151.99	225.47	215.84	9.63	23.407	
2,000.00	1,975.64	1,962.27	1,933.84	5.62	6.04	124.36	107.48	172.33	262.04	251.56	10.48	24.998	
2,100.00	2,068.15	2,054.35	2,021.85	6.27	6.55	125.03	125.58	192.46	300.53	289.16	11.38	26.418	
2,166.51	2,128.93	2,115.04	2,079.87	6.73	6.89	125.57	137.50	205.74	327.24	315.25	11.99	27.290	
2,200.00	2,159.37	2,145.48	2,108.96	6.97	7.07	126.09	143.48	212.39	340.93	328.61	12.32	27.662	
2,300.00	2,250.27	2,236.38	2,195.84	7.71	7.58	127.40	161.35	232.27	381.92	368.59	13.33	28.650	
2,400.00	2,341.18	2,327.28	2,282.73	8.46	8.10	128.45	179.21	252.15	423.05	408.70	14.35	29.481	
2,500.00	2,432.08	2,418.18	2,369.61	9.23	8.63	129.32	197.07	272.03	464.27	448.89	15.38	30.188	
2,600.00	2,522.98	2,509.08	2,456.49	10.01	9.15	130.05	214.93	291.91	505.57	489.16	16.42	30.796	
2,700.00	2,613.88	2,599.98	2,543.37	10.79	9.68	130.67	232.80	311.78	546.93	529.47	17.46	31.323	
2,800.00	2,704.78	2,690.88	2,630.26	11.59	10.21	131.20	250.66	331.66	588.33	569.82	18.51	31.783	
2,900.00	2,795.68	2,781.78	2,717.14	12.38	10.74	131.66	268.52	351.54	629.77	610.21	19.57	32.188	
3,000.00	2,886.59	2,872.68	2,804.02	13.18	11.28	132.07	286.38	371.42	671.24	650.62	20.62	32.547	
3,100.00	2,977.49	2,963.58	2,890.90	13.98	11.81	132.43	304.24	391.30	712.73	691.05	21.68	32.868	
3,200.00	3,068.39	3,054.48	2,977.79	14.79	12.35	132.75	322.11	411.17	754.25	731.50	22.75	33.156	
3,300.00	3,159.29	3,145.38	3,064.67	15.60	12.88	133.03	339.97	431.05	795.78	771.97	23.81	33.415	
3,400.00	3,250.19	3,236.28	3,151.55	16.41	13.42	133.29	357.83	450.93	837.33	812.44	24.88	33.650	
3,500.00	3,341.09	3,327.18	3,238.43	17.22	13.96	133.52	375.69	470.81	878.89	852.93	25.95	33.864	
3,600.00	3,431.99	3,418.08	3,325.32	18.04	14.50	133.73	393.55	490.69	920.46	893.43	27.02	34.060	
3,700.00	3,522.90	3,508.98	3,412.20	18.85	15.04	133.93	411.42	510.56	962.04	933.94	28.10	34.239	
3,800.00	3,613.80	3,599.88	3,499.08	19.67	15.58	134.10	429.28	530.44	1,003.62	974.45	29.17	34.404	
3,900.00	3,704.70	3,690.73	3,588.81	20.48	16.12	134.28	447.67	550.91	1,045.19	1,014.94	30.25	34.553	
4,000.00	3,795.60	3,800.18	3,691.32	21.30	16.59	134.60	466.82	572.22	1,085.89	1,054.63	31.26	34.741	
4,100.00	3,886.50	3,907.46	3,795.64	22.12	17.01	135.10	483.53	590.82	1,125.32	1,093.12	32.20	34.944	
4,200.00	3,977.40	4,015.28	3,901.36	22.94	17.38	135.76	497.68	606.57	1,163.54	1,130.45	33.09	35.167	
4,300.00	4,068.31	4,123.35	4,008.04	23.76	17.71	136.57	509.19	619.37	1,200.60	1,166.70	33.90	35.418	
4,400.00	4,159.21	4,231.35	4,115.22	24.58	17.98	137.51	517.99	629.17	1,236.61	1,201.97	34.63	35.704	
4,500.00	4,250.11	4,338.98	4,222.46	25.40	18.20	138.57	524.07	635.94	1,271.68	1,236.38	35.29	36.032	
4,600.00	4,341.01	4,445.94	4,329.30	26.23	18.37	139.73	527.45	639.69	1,305.93	1,270.06	35.87	36.409	
4,700.00	4,431.91	4,548.56	4,431.91	27.05	18.49	140.94	528.23	640.56	1,339.55	1,303.18	36.37	36.829	
4,800.00	4,522.81	4,639.47	4,522.81	27.87	18.59	142.00	528.23	640.56	1,373.31	1,336.45	36.86	37.261	

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 25-29
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 25-29	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_RASMUSSEN 25-29	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 09-02-09 RHS	Offset TVD Reference:	Offset Datum

Offset Design WELD_RASMUSSEN 9 PAD - P_RASMUSSEN 20-29 - P_RASMUSSEN 20-29 - PLAN #1 09-02-09 RI												Offset Site Error:	0.00 ft
Survey Program: 0-MWD												Offset Well Error:	0.00 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Semi Major Axis Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
4,900.00	4,613.72	4,730.37	4,613.72	28.69	18.69	143.01	528.23	640.56	1,407.49	1,370.16	37.33	37.701	
5,000.00	4,704.62	4,821.27	4,704.62	29.52	18.80	143.97	528.23	640.56	1,442.07	1,404.27	37.80	38.148	
5,100.00	4,795.52	4,912.17	4,795.52	30.34	18.91	144.90	528.23	640.56	1,477.02	1,438.75	38.26	38.601	
5,200.00	4,886.42	5,003.07	4,886.42	31.16	19.01	145.78	528.23	640.56	1,512.30	1,473.58	38.72	39.059	
5,300.00	4,977.32	5,093.97	4,977.32	31.99	19.12	146.62	528.23	640.56	1,547.91	1,508.74	39.17	39.519	
5,400.00	5,068.22	5,184.88	5,068.22	32.81	19.23	147.43	528.23	640.56	1,583.81	1,544.19	39.61	39.980	
5,500.00	5,159.13	5,275.78	5,159.13	33.64	19.35	148.21	528.23	640.56	1,619.98	1,579.93	40.06	40.443	
5,600.00	5,250.03	5,366.68	5,250.03	34.46	19.46	148.95	528.23	640.56	1,656.42	1,615.92	40.50	40.904	
5,700.00	5,340.93	5,457.58	5,340.93	35.29	19.58	149.66	528.23	640.56	1,693.10	1,652.16	40.93	41.364	
5,800.00	5,431.83	5,548.48	5,431.83	36.11	19.69	150.34	528.23	640.56	1,730.00	1,688.63	41.37	41.822	
5,900.00	5,522.73	5,639.38	5,522.73	36.94	19.81	151.00	528.23	640.56	1,767.11	1,725.32	41.80	42.277	
6,000.00	5,613.63	5,730.28	5,613.63	37.76	19.93	151.63	528.23	640.56	1,804.43	1,762.20	42.23	42.729	
6,074.18	5,681.07	5,797.72	5,681.07	38.38	20.02	152.08	528.23	640.56	1,832.23	1,789.68	42.55	43.062	
6,100.00	5,704.58	5,821.23	5,704.58	38.56	20.05	152.32	528.23	640.56	1,841.84	1,799.15	42.69	43.147	
6,200.00	5,796.55	5,913.20	5,796.55	39.18	20.18	153.22	528.23	640.56	1,877.32	1,834.15	43.17	43.483	
6,300.00	5,889.83	6,006.48	5,889.83	39.75	20.30	154.00	528.23	640.56	1,910.01	1,866.37	43.64	43.769	
6,400.00	5,984.32	6,100.97	5,984.32	40.27	20.43	154.69	528.23	640.56	1,939.83	1,895.75	44.08	44.010	
6,500.00	6,079.88	6,196.53	6,079.88	40.75	20.57	155.29	528.23	640.56	1,966.70	1,922.22	44.49	44.208	
6,600.00	6,176.42	6,293.07	6,176.42	41.19	20.70	155.80	528.23	640.56	1,990.58	1,945.71	44.87	44.368	
6,700.00	6,273.81	6,390.46	6,273.81	41.57	20.84	156.24	528.23	640.56	2,011.40	1,966.19	45.21	44.491	
6,800.00	6,371.93	6,488.58	6,371.93	41.91	20.98	156.60	528.23	640.56	2,029.11	1,983.60	45.51	44.581	
6,900.00	6,470.66	6,587.31	6,470.66	42.20	21.12	156.89	528.23	640.56	2,043.70	1,997.91	45.78	44.639	
7,000.00	6,569.88	6,686.53	6,569.88	42.44	21.27	157.12	528.23	640.56	2,055.11	2,009.10	46.01	44.666	
7,100.00	6,669.48	6,786.13	6,669.48	42.63	21.42	157.28	528.23	640.56	2,063.33	2,017.13	46.20	44.662	
7,200.00	6,769.33	6,885.98	6,769.33	42.77	21.57	157.37	528.23	640.56	2,068.34	2,022.00	46.35	44.629	
7,305.70	6,875.00	6,991.65	6,875.00	42.87	21.72	134.60	528.23	640.56	2,070.14	2,023.69	46.46	44.560	
7,400.00	6,969.30	7,085.95	6,969.30	42.93	21.87	134.60	528.23	640.56	2,070.14	2,023.43	46.71	44.320	
7,500.00	7,069.30	7,185.95	7,069.30	43.01	22.02	134.60	528.23	640.56	2,070.14	2,023.16	46.99	44.059	
7,600.00	7,169.30	7,285.95	7,169.30	43.08	22.17	134.60	528.23	640.56	2,070.14	2,022.88	47.26	43.799	
7,700.00	7,269.30	7,385.95	7,269.30	43.16	22.33	134.60	528.23	640.56	2,070.14	2,022.60	47.55	43.540	
7,800.00	7,369.30	7,485.95	7,369.30	43.24	22.49	134.60	528.23	640.56	2,070.14	2,022.31	47.83	43.281	
7,900.00	7,469.30	7,585.95	7,469.30	43.31	22.64	134.60	528.23	640.56	2,070.14	2,022.03	48.12	43.024	
8,000.00	7,569.30	7,685.95	7,569.30	43.39	22.80	134.60	528.23	640.56	2,070.14	2,021.74	48.41	42.767	
8,100.00	7,669.30	7,785.95	7,669.30	43.47	22.96	134.60	528.23	640.56	2,070.14	2,021.45	48.70	42.511	
8,136.70	7,706.00	7,822.65	7,706.00	43.50	23.02	134.60	528.23	640.56	2,070.14	2,021.34	48.80	42.417	



Weatherford International Ltd.

Anticollision Report



Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_RASMUSSEN 25-29
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 25-29	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_RASMUSSEN 25-29	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	-76.49	0.00	76.49				
100.00	100.00	100.00	100.00	0.10	0.10	-180.00	-76.49	0.00	76.49	76.30	0.19	400.387	
200.00	200.00	200.00	200.00	0.32	0.32	-180.00	-76.49	0.00	76.49	75.85	0.64	119.414	
300.00	300.00	300.00	300.00	0.55	0.55	-180.00	-76.49	0.00	76.49	75.40	1.09	70.171	
400.00	400.00	400.00	400.00	0.77	0.77	-180.00	-76.49	0.00	76.49	74.95	1.54	49.683	
500.00	500.00	500.00	500.00	0.99	0.99	-180.00	-76.49	0.00	76.49	74.51	1.99	38.455	
600.00	600.00	600.00	600.00	1.22	1.22	-180.00	-76.49	0.00	76.49	74.06	2.44	31.367	
700.00	700.00	700.00	700.00	1.44	1.44	-180.00	-76.49	0.00	76.49	73.61	2.89	26.485	
800.00	800.00	800.90	800.90	1.67	1.67	-179.75	-76.19	-0.34	76.20	72.86	3.34	22.831	
900.00	900.00	902.57	902.50	1.89	1.89	-177.65	-73.79	-3.03	73.89	70.11	3.78	19.523	
935.00	935.00	938.08	937.95	1.97	1.97	-176.36	-72.38	-4.60	72.58	68.64	3.94	18.404	
1,000.00	999.99	1,003.92	1,003.59	2.12	2.12	-150.59	-69.00	-8.38	70.24	66.00	4.24	16.572	
1,100.00	1,099.91	1,104.97	1,104.06	2.34	2.37	-144.89	-61.85	-16.37	67.93	63.23	4.70	14.442	
1,167.93	1,167.67	1,173.43	1,171.89	2.50	2.55	-140.34	-55.67	-23.28	67.44	62.40	5.04	13.389 CC	
1,200.00	1,199.62	1,205.70	1,203.78	2.57	2.64	-138.06	-52.38	-26.95	67.56	62.36	5.20	12.997 ES	
1,300.00	1,299.01	1,306.07	1,302.59	2.81	2.95	-130.62	-40.62	-40.09	69.47	63.73	5.74	12.101	
1,400.00	1,397.96	1,406.07	1,400.35	3.07	3.31	-123.24	-26.62	-55.74	73.89	67.54	6.35	11.630	
1,500.00	1,496.34	1,505.64	1,496.91	3.37	3.71	-116.48	-10.43	-73.84	80.83	73.78	7.05	11.465 SF	
1,600.00	1,594.04	1,604.78	1,592.15	3.71	4.18	-110.67	7.91	-94.33	90.15	82.31	7.84	11.500	
1,700.00	1,690.94	1,703.45	1,685.95	4.10	4.71	-105.89	28.33	-117.15	101.66	92.93	8.73	11.647	
1,800.00	1,786.92	1,801.63	1,778.17	4.54	5.30	-102.06	50.77	-142.24	115.14	105.41	9.72	11.842	
1,900.00	1,881.85	1,899.43	1,868.85	5.05	5.95	-99.03	75.20	-169.53	130.39	119.56	10.83	12.041	
2,000.00	1,975.64	1,998.04	1,959.79	5.62	6.66	-97.40	100.63	-197.95	146.68	134.64	12.04	12.181	
2,100.00	2,068.15	2,096.62	2,050.69	6.27	7.37	-97.26	126.05	-226.36	163.46	150.10	13.35	12.242	
2,166.51	2,128.93	2,162.11	2,111.09	6.73	7.86	-97.78	142.94	-245.24	174.87	160.59	14.28	12.249	
2,200.00	2,159.37	2,195.06	2,141.47	6.97	8.10	-98.24	151.43	-254.73	180.68	165.92	14.76	12.245	
2,300.00	2,250.27	2,293.45	2,232.21	7.71	8.84	-99.46	176.81	-283.09	198.09	181.88	16.21	12.223	
2,400.00	2,341.18	2,391.84	2,322.95	8.46	9.59	-100.48	202.18	-311.44	215.57	197.90	17.68	12.194	
2,500.00	2,432.08	2,490.23	2,413.68	9.23	10.34	-101.35	227.55	-339.80	233.12	213.95	19.16	12.164	
2,600.00	2,522.98	2,588.63	2,504.42	10.01	11.10	-102.10	252.92	-368.16	250.70	230.04	20.66	12.133	
2,700.00	2,613.88	2,687.02	2,595.16	10.79	11.86	-102.75	278.30	-396.51	268.33	246.16	22.17	12.103	
2,800.00	2,704.78	2,785.41	2,685.89	11.59	12.62	-103.32	303.67	-424.87	285.98	262.29	23.68	12.075	
2,900.00	2,795.68	2,883.80	2,776.63	12.38	13.38	-103.83	329.04	-453.23	303.65	278.45	25.20	12.048	
3,000.00	2,886.59	2,982.20	2,867.37	13.18	14.15	-104.28	354.42	-481.58	321.35	294.62	26.73	12.023	
3,100.00	2,977.49	3,080.59	2,958.11	13.98	14.92	-104.68	379.79	-509.94	339.06	310.81	28.26	12.000	
3,200.00	3,068.39	3,178.98	3,048.84	14.79	15.69	-105.04	405.16	-538.30	356.79	327.01	29.79	11.979	
3,300.00	3,159.29	3,277.37	3,139.58	15.60	16.46	-105.37	430.53	-566.65	374.53	343.21	31.32	11.959	
3,400.00	3,250.19	3,375.77	3,230.32	16.41	17.23	-105.66	455.91	-595.01	392.28	359.43	32.85	11.940	
3,500.00	3,341.09	3,474.91	3,321.87	17.22	17.97	-105.98	481.28	-623.37	410.01	375.65	34.36	11.934	
3,600.00	3,431.99	3,575.03	3,415.38	18.04	18.57	-106.67	505.11	-650.00	427.41	391.69	35.72	11.966	
3,700.00	3,522.90	3,674.82	3,509.78	18.85	19.11	-107.75	526.68	-674.10	444.52	407.52	36.99	12.016	
3,800.00	3,613.80	3,774.07	3,604.73	19.67	19.60	-109.17	545.94	-695.63	461.51	423.32	38.19	12.085	
3,900.00	3,704.70	3,872.52	3,699.85	20.48	20.04	-110.90	562.87	-714.55	478.60	439.31	39.29	12.182	
4,000.00	3,795.60	3,969.97	3,794.80	21.30	20.43	-112.87	577.47	-730.87	496.05	455.77	40.27	12.317	
4,100.00	3,886.50	4,066.21	3,889.25	22.12	20.76	-115.05	589.77	-744.62	514.12	472.99	41.13	12.499	
4,200.00	3,977.40	4,161.05	3,982.88	22.94	21.05	-117.40	599.82	-755.84	533.13	491.26	41.86	12.735	
4,300.00	4,068.31	4,254.31	4,075.39	23.76	21.29	-119.87	607.67	-764.62	553.34	510.89	42.45	13.035	
4,400.00	4,159.21	4,345.85	4,166.51	24.58	21.48	-122.42	613.43	-771.05	575.06	532.16	42.90	13.406	
4,500.00	4,250.11	4,435.52	4,256.01	25.40	21.63	-125.02	617.18	-775.24	598.53	555.32	43.21	13.853	
4,600.00	4,341.01	4,523.21	4,343.65	26.23	21.75	-127.62	619.04	-777.32	623.99	580.60	43.39	14.381	
4,700.00	4,431.91	4,611.47	4,431.91	27.05	21.83	-130.26	619.30	-777.62	651.55	608.10	43.45	14.997	
4,800.00	4,522.81	4,702.38	4,522.81	27.87	21.91	-132.81	619.30	-777.62	680.64	637.19	43.45	15.665	

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 25-29
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 25-29	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_RASMUSSEN 25-29	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	
4,900.00	4,613.72	4,793.28	4,613.72	28.69	22.00	-135.17	619.30	-777.62	710.99	667.55	43.44	16.368	
5,000.00	4,704.62	4,884.18	4,704.62	29.52	22.09	-137.35	619.30	-777.62	742.44	699.02	43.42	17.099	
5,100.00	4,795.52	4,975.08	4,795.52	30.34	22.18	-139.36	619.30	-777.62	774.85	731.44	43.41	17.851	
5,200.00	4,886.42	5,065.98	4,886.42	31.16	22.28	-141.21	619.30	-777.62	808.11	764.71	43.40	18.620	
5,300.00	4,977.32	5,156.88	4,977.32	31.99	22.37	-142.93	619.30	-777.62	842.12	798.71	43.41	19.400	
5,400.00	5,068.22	5,247.79	5,068.22	32.81	22.46	-144.53	619.30	-777.62	876.80	833.36	43.43	20.187	
5,500.00	5,159.13	5,338.69	5,159.13	33.64	22.56	-146.00	619.30	-777.62	912.06	868.58	43.48	20.979	
5,600.00	5,250.03	5,429.59	5,250.03	34.46	22.66	-147.38	619.30	-777.62	947.84	904.30	43.54	21.771	
5,700.00	5,340.93	5,520.49	5,340.93	35.29	22.76	-148.65	619.30	-777.62	984.08	940.47	43.62	22.561	
5,800.00	5,431.83	5,611.39	5,431.83	36.11	22.86	-149.84	619.30	-777.62	1,020.74	977.02	43.72	23.348	
5,900.00	5,522.73	5,702.29	5,522.73	36.94	22.96	-150.95	619.30	-777.62	1,057.78	1,013.93	43.84	24.128	
6,000.00	5,613.63	5,793.20	5,613.63	37.76	23.07	-151.99	619.30	-777.62	1,095.14	1,051.16	43.98	24.901	
6,074.18	5,681.07	5,860.63	5,681.07	38.38	23.14	-152.72	619.30	-777.62	1,123.06	1,078.96	44.10	25.468	
6,100.00	5,704.58	5,884.15	5,704.58	38.56	23.17	-153.06	619.30	-777.62	1,132.71	1,088.59	44.13	25.670	
6,200.00	5,796.55	5,976.11	5,796.55	39.18	23.28	-154.25	619.30	-777.62	1,168.44	1,124.22	44.21	26.427	
6,300.00	5,889.83	6,069.39	5,889.83	39.75	23.39	-155.28	619.30	-777.62	1,201.41	1,157.08	44.33	27.102	
6,400.00	5,984.32	6,163.88	5,984.32	40.27	23.50	-156.17	619.30	-777.62	1,231.54	1,187.07	44.46	27.699	
6,500.00	6,079.88	6,259.44	6,079.88	40.75	23.62	-156.93	619.30	-777.62	1,258.72	1,214.12	44.60	28.221	
6,600.00	6,176.42	6,355.98	6,176.42	41.19	23.74	-157.57	619.30	-777.62	1,282.89	1,238.14	44.74	28.672	
6,700.00	6,273.81	6,453.37	6,273.81	41.57	23.86	-158.12	619.30	-777.62	1,303.98	1,259.10	44.88	29.054	
6,800.00	6,371.93	6,551.49	6,371.93	41.91	23.98	-158.56	619.30	-777.62	1,321.94	1,276.93	45.01	29.372	
6,900.00	6,470.66	6,650.22	6,470.66	42.20	24.11	-158.92	619.30	-777.62	1,336.72	1,291.61	45.12	29.627	
7,000.00	6,569.88	6,749.44	6,569.88	42.44	24.24	-159.19	619.30	-777.62	1,348.30	1,303.09	45.21	29.821	
7,100.00	6,669.48	6,849.04	6,669.48	42.63	24.37	-159.38	619.30	-777.62	1,356.64	1,311.36	45.29	29.956	
7,200.00	6,769.33	6,948.89	6,769.33	42.77	24.50	-159.50	619.30	-777.62	1,361.73	1,316.39	45.34	30.033	
7,305.70	6,875.00	7,054.56	6,875.00	42.87	24.64	-177.65	619.30	-777.62	1,363.56	1,318.18	45.37	30.052	
7,400.00	6,969.30	7,148.86	6,969.30	42.93	24.76	177.65	619.30	-777.62	1,363.56	1,317.92	45.63	29.882	
7,500.00	7,069.30	7,248.86	7,069.30	43.01	24.90	177.65	619.30	-777.62	1,363.56	1,317.64	45.92	29.694	
7,600.00	7,169.30	7,348.86	7,169.30	43.08	25.04	177.65	619.30	-777.62	1,363.56	1,317.34	46.21	29.507	
7,700.00	7,269.30	7,448.86	7,269.30	43.16	25.17	177.65	619.30	-777.62	1,363.56	1,317.05	46.51	29.321	
7,800.00	7,369.30	7,548.86	7,369.30	43.24	25.31	177.65	619.30	-777.62	1,363.56	1,316.75	46.80	29.135	
7,900.00	7,469.30	7,648.86	7,469.30	43.31	25.45	177.65	619.30	-777.62	1,363.56	1,316.46	47.10	28.951	
8,000.00	7,569.30	7,748.86	7,569.30	43.39	25.59	177.65	619.30	-777.62	1,363.56	1,316.16	47.40	28.767	
8,100.00	7,669.30	7,848.86	7,669.30	43.47	25.74	177.65	619.30	-777.62	1,363.56	1,315.85	47.70	28.584	
8,136.70	7,706.00	7,856.56	7,677.00	43.50	25.75	177.65	619.30	-777.62	1,363.86	1,316.10	47.77	28.552	



Weatherford International Ltd.

Anticollision Report



Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_RASMUSSEN 25-29
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 25-29	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_RASMUSSEN 25-29	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	-178.48	-105.64	-2.80	105.67				
100.00	100.00	100.00	100.00	0.10	0.10	-178.48	-105.64	-2.80	105.67	105.48	0.19	553.117	
200.00	200.00	200.00	200.00	0.32	0.32	-178.48	-105.64	-2.80	105.67	105.03	0.64	164.965	
300.00	300.00	300.00	300.00	0.55	0.55	-178.48	-105.64	-2.80	105.67	104.58	1.09	96.938	
400.00	400.00	400.00	400.00	0.77	0.77	-178.48	-105.64	-2.80	105.67	104.13	1.54	68.635	
500.00	500.00	500.00	500.00	0.99	0.99	-178.48	-105.64	-2.80	105.67	103.68	1.99	53.124	
600.00	600.00	600.00	600.00	1.22	1.22	-178.48	-105.64	-2.80	105.67	103.24	2.44	43.332	
700.00	700.00	700.00	700.00	1.44	1.44	-178.48	-105.64	-2.80	105.67	102.79	2.89	36.588	
758.34	758.34	758.34	758.34	1.58	1.58	-178.48	-105.64	-2.80	105.67	102.52	3.15	33.542 CC	
800.00	800.00	799.50	799.50	1.67	1.66	-178.46	-105.68	-2.85	105.72	102.39	3.33	31.730 ES	
900.00	900.00	896.92	896.89	1.89	1.84	-177.57	-107.26	-4.55	107.40	103.66	3.73	28.762	
935.00	935.00	930.97	930.90	1.97	1.91	-176.98	-108.34	-5.72	108.57	104.69	3.88	27.996	
1,000.00	999.99	994.05	993.85	2.12	2.03	-152.86	-111.07	-8.66	112.23	108.08	4.15	27.069	
1,100.00	1,099.91	1,090.48	1,089.87	2.34	2.24	-150.77	-117.05	-15.13	122.57	118.01	4.56	26.860 SF	
1,200.00	1,199.62	1,185.77	1,184.41	2.57	2.47	-148.80	-125.12	-23.85	138.58	133.59	4.99	27.777	
1,300.00	1,299.01	1,279.49	1,276.96	2.81	2.73	-147.11	-135.14	-34.67	160.16	154.73	5.43	29.516	
1,400.00	1,397.96	1,371.27	1,367.08	3.07	3.03	-145.72	-146.94	-47.42	187.15	181.27	5.88	31.840	
1,500.00	1,496.34	1,460.76	1,454.37	3.37	3.36	-144.58	-160.32	-61.88	219.38	213.03	6.35	34.560	
1,600.00	1,594.04	1,547.66	1,538.50	3.71	3.73	-143.65	-175.08	-77.83	256.64	249.80	6.84	37.525	
1,700.00	1,690.94	1,631.69	1,619.20	4.10	4.13	-142.84	-191.00	-95.03	298.73	291.37	7.35	40.620	
1,800.00	1,786.92	1,712.65	1,696.26	4.54	4.56	-142.12	-207.85	-113.23	345.43	337.53	7.89	43.761	
1,900.00	1,881.85	1,795.96	1,774.98	5.05	5.04	-141.50	-226.39	-133.27	396.12	387.64	8.48	46.708	
2,000.00	1,975.64	1,880.62	1,854.92	5.62	5.56	-141.11	-245.32	-153.72	449.28	440.18	9.11	49.331	
2,100.00	2,068.15	1,963.71	1,933.38	6.27	6.07	-140.88	-263.90	-173.79	504.75	494.99	9.76	51.712	
2,166.51	2,128.93	2,018.07	1,984.70	6.73	6.41	-140.78	-276.05	-186.92	542.91	532.70	10.21	53.179	
2,200.00	2,159.37	2,045.24	2,010.36	6.97	6.58	-141.03	-282.13	-193.49	562.38	551.91	10.47	53.730	
2,300.00	2,250.27	2,126.39	2,086.99	7.71	7.10	-141.69	-300.27	-213.09	620.56	609.31	11.25	55.178	
2,400.00	2,341.18	2,207.54	2,163.62	8.46	7.62	-142.23	-318.42	-232.70	678.78	666.74	12.04	56.371	
2,500.00	2,432.08	2,288.69	2,240.24	9.23	8.14	-142.69	-336.56	-252.30	737.03	724.18	12.85	57.362	
2,600.00	2,522.98	2,369.84	2,316.87	10.01	8.67	-143.08	-354.71	-271.91	795.31	781.65	13.67	58.196	
2,700.00	2,613.88	2,450.99	2,393.50	10.79	9.21	-143.42	-372.85	-291.51	853.62	839.12	14.49	58.905	
2,800.00	2,704.78	2,532.14	2,470.12	11.59	9.74	-143.72	-390.99	-311.12	911.93	896.61	15.32	59.513	
2,900.00	2,795.68	2,613.29	2,546.75	12.38	10.28	-143.97	-409.14	-330.72	970.27	954.11	16.16	60.040	
3,000.00	2,886.59	2,694.44	2,623.37	13.18	10.82	-144.20	-427.28	-350.32	1,028.61	1,011.61	17.00	60.498	
3,100.00	2,977.49	2,775.58	2,700.00	13.98	11.36	-144.41	-445.43	-369.93	1,086.97	1,069.12	17.85	60.899	
3,200.00	3,068.39	2,856.73	2,776.63	14.79	11.90	-144.60	-463.57	-389.53	1,145.33	1,126.63	18.70	61.253	
3,300.00	3,159.29	2,937.88	2,853.25	15.60	12.44	-144.76	-481.72	-409.14	1,203.70	1,184.15	19.55	61.567	
3,400.00	3,250.19	3,019.03	2,929.88	16.41	12.98	-144.91	-499.86	-428.74	1,262.08	1,241.67	20.41	61.847	
3,500.00	3,341.09	3,100.18	3,006.51	17.22	13.53	-145.05	-518.01	-448.35	1,320.46	1,299.20	21.26	62.099	
3,600.00	3,431.99	3,181.33	3,083.13	18.04	14.07	-145.18	-536.15	-467.95	1,378.85	1,356.72	22.12	62.325	
3,700.00	3,522.90	3,262.48	3,159.76	18.85	14.62	-145.29	-554.30	-487.56	1,437.24	1,414.25	22.98	62.530	
3,800.00	3,613.80	3,343.63	3,236.39	19.67	15.16	-145.40	-572.44	-507.16	1,495.63	1,471.78	23.85	62.716	
3,900.00	3,704.70	3,424.78	3,313.01	20.48	15.71	-145.50	-590.59	-526.77	1,554.03	1,529.32	24.71	62.885	
4,000.00	3,795.60	3,505.93	3,389.64	21.30	16.26	-145.59	-608.73	-546.37	1,612.43	1,586.85	25.58	63.040	
4,100.00	3,886.50	3,588.40	3,476.99	22.12	16.86	-145.69	-629.34	-568.63	1,670.78	1,644.31	26.48	63.102	
4,200.00	3,977.40	3,674.38	3,562.20	22.94	17.55	-145.97	-659.66	-601.40	1,727.00	1,699.54	27.46	62.887	
4,300.00	4,068.31	3,760.00	3,647.05	23.76	18.19	-146.44	-685.91	-629.76	1,779.78	1,751.37	28.41	62.638	
4,400.00	4,159.21	4,073.82	3,937.85	24.58	18.74	-147.09	-707.13	-652.69	1,828.91	1,799.60	29.31	62.401	
4,500.00	4,250.11	4,246.15	4,108.69	25.40	19.18	-147.93	-722.37	-669.15	1,874.20	1,844.07	30.13	62.199	
4,600.00	4,341.01	4,424.08	4,286.16	26.23	19.50	-148.96	-730.75	-678.21	1,915.51	1,884.64	30.87	62.057	
4,700.00	4,431.91	4,569.86	4,431.91	27.05	19.66	-149.90	-732.18	-679.75	1,953.07	1,921.58	31.49	62.026	
4,800.00	4,522.81	4,660.76	4,522.81	27.87	19.75	-150.49	-732.18	-679.75	1,990.03	1,957.98	32.06	62.078	

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 25-29
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 25-29	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_RASMUSSEN 25-29	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	
4,900.00	4,613.72	4,751.66	4,613.72	28.69	19.84	-151.06	-732.18	-679.75	2,027.18	1,994.56	32.62	62.144	
5,000.00	4,704.62	4,842.56	4,704.62	29.52	19.93	-151.61	-732.18	-679.75	2,064.50	2,031.32	33.18	62.223	
5,100.00	4,795.52	4,933.46	4,795.52	30.34	20.02	-152.14	-732.18	-679.75	2,101.99	2,068.26	33.73	62.313	
5,200.00	4,886.42	5,024.37	4,886.42	31.16	20.12	-152.65	-732.18	-679.75	2,139.63	2,105.35	34.28	62.412	
5,300.00	4,977.32	5,115.27	4,977.32	31.99	20.21	-153.14	-732.18	-679.75	2,177.42	2,142.59	34.83	62.520	
5,400.00	5,068.22	5,206.17	5,068.22	32.81	20.31	-153.62	-732.18	-679.75	2,215.34	2,179.97	35.37	62.635	
5,500.00	5,159.13	5,297.07	5,159.13	33.64	20.41	-154.08	-732.18	-679.75	2,253.40	2,217.49	35.91	62.757	
5,600.00	5,250.03	5,387.97	5,250.03	34.46	20.51	-154.53	-732.18	-679.75	2,291.59	2,255.14	36.44	62.883	
5,700.00	5,340.93	5,478.87	5,340.93	35.29	20.61	-154.97	-732.18	-679.75	2,329.89	2,292.92	36.97	63.015	
5,800.00	5,431.83	5,569.77	5,431.83	36.11	20.72	-155.39	-732.18	-679.75	2,368.31	2,330.81	37.50	63.150	
5,900.00	5,522.73	5,660.68	5,522.73	36.94	20.82	-155.79	-732.18	-679.75	2,406.84	2,368.81	38.03	63.288	
6,000.00	5,613.63	5,751.58	5,613.63	37.76	20.93	-156.19	-732.18	-679.75	2,445.47	2,406.91	38.55	63.429	
6,074.18	5,681.07	5,819.01	5,681.07	38.38	21.01	-156.47	-732.18	-679.75	2,474.19	2,435.24	38.94	63.536	
6,100.00	5,704.58	5,842.53	5,704.58	38.56	21.04	-156.66	-732.18	-679.75	2,484.10	2,444.97	39.13	63.486	
6,200.00	5,796.55	5,934.50	5,796.55	39.18	21.15	-157.31	-732.18	-679.75	2,520.66	2,480.87	39.79	63.352	
6,300.00	5,889.83	6,027.78	5,889.83	39.75	21.26	-157.89	-732.18	-679.75	2,554.28	2,513.87	40.41	63.208	
6,400.00	5,984.32	6,122.26	5,984.32	40.27	21.38	-158.40	-732.18	-679.75	2,584.90	2,543.91	40.99	63.059	
6,500.00	6,079.88	6,217.83	6,079.88	40.75	21.50	-158.84	-732.18	-679.75	2,612.46	2,570.93	41.53	62.907	
6,600.00	6,176.42	6,314.36	6,176.42	41.19	21.62	-159.23	-732.18	-679.75	2,636.91	2,594.89	42.02	62.753	
6,700.00	6,273.81	6,411.75	6,273.81	41.57	21.74	-159.55	-732.18	-679.75	2,658.22	2,615.75	42.46	62.599	
6,800.00	6,371.93	6,509.87	6,371.93	41.91	21.87	-159.82	-732.18	-679.75	2,676.34	2,633.48	42.86	62.446	
6,900.00	6,470.66	6,608.60	6,470.66	42.20	22.00	-160.04	-732.18	-679.75	2,691.24	2,648.03	43.20	62.294	
7,000.00	6,569.88	6,707.83	6,569.88	42.44	22.13	-160.21	-732.18	-679.75	2,702.89	2,659.40	43.49	62.143	
7,100.00	6,669.48	6,807.42	6,669.48	42.63	22.27	-160.33	-732.18	-679.75	2,711.29	2,667.55	43.74	61.993	
7,200.00	6,769.33	6,907.27	6,769.33	42.77	22.40	-160.40	-732.18	-679.75	2,716.40	2,672.48	43.92	61.843	
7,305.70	6,875.00	7,012.94	6,875.00	42.87	22.55	-176.76	-732.18	-679.75	2,718.24	2,674.17	44.07	61.684	
7,400.00	6,969.30	7,107.25	6,969.30	42.93	22.68	-176.76	-732.18	-679.75	2,718.24	2,673.91	44.33	61.322	
7,500.00	7,069.30	7,207.25	7,069.30	43.01	22.82	-176.76	-732.18	-679.75	2,718.24	2,673.62	44.62	60.922	
7,600.00	7,169.30	7,307.25	7,169.30	43.08	22.96	-176.76	-732.18	-679.75	2,718.24	2,673.33	44.91	60.524	
7,700.00	7,269.30	7,407.25	7,269.30	43.16	23.10	-176.76	-732.18	-679.75	2,718.24	2,673.03	45.21	60.127	
7,800.00	7,369.30	7,507.25	7,369.30	43.24	23.24	-176.76	-732.18	-679.75	2,718.24	2,672.73	45.51	59.733	
7,900.00	7,469.30	7,607.25	7,469.30	43.31	23.39	-176.76	-732.18	-679.75	2,718.24	2,672.43	45.81	59.341	
8,000.00	7,569.30	7,707.25	7,569.30	43.39	23.54	-176.76	-732.18	-679.75	2,718.24	2,672.13	46.11	58.950	
8,100.00	7,669.30	7,807.25	7,669.30	43.47	23.68	-176.76	-732.18	-679.75	2,718.24	2,671.82	46.42	58.562	
8,101.34	7,670.65	7,808.59	7,670.65	43.48	23.69	-176.76	-732.18	-679.75	2,718.24	2,671.82	46.42	58.557	
8,136.70	7,706.00	7,819.94	7,682.00	43.50	23.70	-176.76	-732.18	-679.75	2,718.35	2,671.86	46.49	58.472	



Weatherford International Ltd.

Anticollision Report



Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_RASMUSSEN 25-29
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 25-29	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_RASMUSSEN 25-29	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	-178.67	-120.20	-2.80	120.24						
100.00	100.00	100.00	100.00	0.10	0.10	-178.67	-120.20	-2.80	120.24	120.05	0.19	629.340			
200.00	200.00	200.00	200.00	0.32	0.32	-178.67	-120.20	-2.80	120.24	119.60	0.64	187.698			
300.00	300.00	300.00	300.00	0.55	0.55	-178.67	-120.20	-2.80	120.24	119.15	1.09	110.297			
400.00	400.00	400.00	400.00	0.77	0.77	-178.67	-120.20	-2.80	120.24	118.70	1.54	78.093			
500.00	500.00	500.00	500.00	0.99	0.99	-178.67	-120.20	-2.80	120.24	118.25	1.99	60.445			
600.00	600.00	600.00	600.00	1.22	1.22	-178.67	-120.20	-2.80	120.24	117.80	2.44	49.303			
700.00	700.00	700.00	700.00	1.44	1.44	-178.67	-120.20	-2.80	120.24	117.35	2.89	41.630			
762.96	762.96	762.96	762.96	1.59	1.59	-178.67	-120.20	-2.80	120.24	117.06	3.17	37.914 CC			
800.00	800.00	799.75	799.75	1.67	1.67	-178.67	-120.21	-2.78	120.25	116.91	3.33	36.058 ES			
900.00	900.00	897.15	897.13	1.89	1.84	-179.41	-121.49	-1.26	121.53	117.79	3.74	32.511			
935.00	935.00	931.20	931.14	1.97	1.91	-179.94	-122.43	-0.13	122.49	118.61	3.88	31.545			
1,000.00	999.99	994.26	994.08	2.12	2.03	-158.57	-124.86	2.79	125.72	121.57	4.15	30.294			
1,100.00	1,099.91	1,090.48	1,089.93	2.34	2.24	-161.81	-130.28	9.30	135.49	130.92	4.57	29.670 SF			
1,200.00	1,199.62	1,185.20	1,183.95	2.57	2.47	-165.72	-137.63	18.11	151.48	146.49	4.99	30.380			
1,300.00	1,299.01	1,277.83	1,275.48	2.81	2.73	-169.67	-146.74	29.03	173.99	168.58	5.40	32.193			
1,400.00	1,397.96	1,367.86	1,363.95	3.07	3.01	-173.28	-157.39	41.82	203.09	197.27	5.82	34.912			
1,500.00	1,496.34	1,454.81	1,448.86	3.37	3.33	-176.39	-169.38	56.19	238.63	232.41	6.22	38.358			
1,600.00	1,594.04	1,538.31	1,529.83	3.71	3.68	-178.97	-182.43	71.85	280.34	273.73	6.61	42.383			
1,700.00	1,690.94	1,618.02	1,606.54	4.10	4.05	178.90	-196.29	88.48	327.88	320.88	7.00	46.867			
1,800.00	1,786.92	1,693.72	1,678.80	4.54	4.44	177.14	-210.72	105.79	380.86	373.50	7.37	51.701			
1,900.00	1,881.85	1,765.21	1,746.48	5.05	4.85	175.67	-225.46	123.47	438.93	431.20	7.73	56.775			
2,000.00	1,975.64	1,835.55	1,812.53	5.62	5.29	174.38	-240.97	142.07	501.64	493.55	8.09	62.017			
2,100.00	2,068.15	1,910.45	1,882.70	6.27	5.77	173.22	-257.73	162.18	567.54	559.08	8.46	67.091			
2,166.51	2,128.93	1,959.01	1,928.20	6.73	6.09	172.57	-268.60	175.22	612.83	604.13	8.70	70.401			
2,200.00	2,159.37	1,983.20	1,950.86	6.97	6.25	172.35	-274.02	181.71	635.93	627.06	8.87	71.691			
2,300.00	2,250.27	2,055.43	2,018.53	7.71	6.74	171.79	-290.18	201.11	704.92	695.54	9.38	75.182			
2,400.00	2,341.18	2,127.66	2,086.21	8.46	7.23	171.32	-306.35	220.50	773.94	764.05	9.89	78.236			
2,500.00	2,432.08	2,199.89	2,153.88	9.23	7.73	170.93	-322.52	239.90	842.98	832.56	10.42	80.919			
2,600.00	2,522.98	2,272.12	2,221.56	10.01	8.23	170.60	-338.68	259.29	912.04	901.09	10.95	83.268			
2,700.00	2,613.88	2,344.35	2,289.23	10.79	8.74	170.32	-354.85	278.68	981.12	969.62	11.49	85.354			
2,800.00	2,704.78	2,416.58	2,356.90	11.59	9.24	170.07	-371.02	298.08	1,050.20	1,038.16	12.04	87.211			
2,900.00	2,795.68	2,488.81	2,424.58	12.38	9.75	169.85	-387.18	317.47	1,119.29	1,106.70	12.59	88.869			
3,000.00	2,886.59	2,561.04	2,492.25	13.18	10.27	169.66	-403.35	336.86	1,188.40	1,175.24	13.15	90.353			
3,100.00	2,977.49	2,633.27	2,559.93	13.98	10.78	169.49	-419.52	356.26	1,257.50	1,243.79	13.71	91.693			
3,200.00	3,068.39	2,705.51	2,627.60	14.79	11.30	169.34	-435.68	375.65	1,326.62	1,312.34	14.28	92.906			
3,300.00	3,159.29	2,777.74	2,695.28	15.60	11.82	169.20	-451.85	395.04	1,395.73	1,380.88	14.85	94.003			
3,400.00	3,250.19	2,849.97	2,762.95	16.41	12.33	169.08	-468.02	414.44	1,464.85	1,449.43	15.42	95.004			
3,500.00	3,341.09	2,922.20	2,830.62	17.22	12.85	168.96	-484.18	433.83	1,533.98	1,517.99	15.99	95.920			
3,600.00	3,431.99	2,994.43	2,898.30	18.04	13.37	168.86	-500.35	453.22	1,603.10	1,586.54	16.57	96.760			
3,700.00	3,522.90	3,066.66	2,965.97	18.85	13.90	168.77	-516.52	472.62	1,672.23	1,655.09	17.15	97.530			
3,800.00	3,613.80	3,138.89	3,033.65	19.67	14.42	168.68	-532.68	492.01	1,741.37	1,723.64	17.73	98.241			
3,900.00	3,704.70	3,211.12	3,101.32	20.48	14.94	168.60	-548.85	511.40	1,810.50	1,792.19	18.31	98.900			
4,000.00	3,795.60	3,283.35	3,168.99	21.30	15.46	168.52	-565.02	530.80	1,879.63	1,860.75	18.89	99.509			
4,100.00	3,886.50	3,355.58	3,236.67	22.12	15.99	168.45	-581.18	550.19	1,948.77	1,929.30	19.47	100.075			
4,200.00	3,977.40	3,427.81	3,304.34	22.94	16.51	168.39	-597.35	569.58	2,017.91	1,997.85	20.06	100.602			
4,300.00	4,068.31	3,500.04	3,372.02	23.76	17.04	168.33	-613.52	588.98	2,087.05	2,066.40	20.64	101.095			
4,400.00	4,159.21	3,581.32	3,543.20	24.58	18.10	168.23	-651.66	634.74	2,155.11	2,133.62	21.49	100.294			
4,500.00	4,250.11	3,971.23	3,823.73	25.40	19.33	168.33	-698.20	690.50	2,216.85	2,194.33	22.52	98.431			
4,600.00	4,341.01	4,306.33	4,155.15	26.23	20.26	168.74	-729.06	727.58	2,270.09	2,246.54	23.55	96.401			
4,700.00	4,431.91	4,583.40	4,431.91	27.05	20.64	169.27	-735.82	735.70	2,313.61	2,289.25	24.36	94.974			
4,800.00	4,522.81	4,674.30	4,522.81	27.87	20.73	169.45	-735.82	735.70	2,354.69	2,329.82	24.88	94.649			



Weatherford International Ltd.

Anticollision Report



Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_RASMUSSEN 25-29
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 25-29	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_RASMUSSEN 25-29	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	
4,900.00	4,613.72	4,765.20	4,613.72	28.69	20.82	169.64	-735.82	735.70	2,395.80	2,370.40	25.40	94.336	
5,000.00	4,704.62	4,856.10	4,704.62	29.52	20.91	169.81	-735.82	735.70	2,436.92	2,411.00	25.92	94.035	
5,100.00	4,795.52	4,947.01	4,795.52	30.34	21.00	169.98	-735.82	735.70	2,478.06	2,451.62	26.43	93.743	
5,200.00	4,886.42	5,037.91	4,886.42	31.16	21.09	170.15	-735.82	735.70	2,519.22	2,492.26	26.95	93.461	
5,300.00	4,977.32	5,128.81	4,977.32	31.99	21.18	170.31	-735.82	735.70	2,560.39	2,532.91	27.48	93.189	
5,400.00	5,068.22	5,219.71	5,068.22	32.81	21.28	170.46	-735.82	735.70	2,601.58	2,573.58	28.00	92.926	
5,500.00	5,159.13	5,310.61	5,159.13	33.64	21.37	170.61	-735.82	735.70	2,642.79	2,614.27	28.52	92.670	
5,600.00	5,250.03	5,401.51	5,250.03	34.46	21.47	170.75	-735.82	735.70	2,684.01	2,654.97	29.04	92.423	
5,700.00	5,340.93	5,492.41	5,340.93	35.29	21.57	170.90	-735.82	735.70	2,725.24	2,695.68	29.56	92.183	
5,800.00	5,431.83	5,583.32	5,431.83	36.11	21.67	171.03	-735.82	735.70	2,766.49	2,736.40	30.09	91.950	
5,900.00	5,522.73	5,674.22	5,522.73	36.94	21.77	171.16	-735.82	735.70	2,807.75	2,777.14	30.61	91.723	
6,000.00	5,613.63	5,765.12	5,613.63	37.76	21.88	171.29	-735.82	735.70	2,849.02	2,817.88	31.14	91.503	
6,074.18	5,681.07	5,832.55	5,681.07	38.38	21.96	171.39	-735.82	735.70	2,879.64	2,848.12	31.53	91.344	
6,100.00	5,704.58	5,856.07	5,704.58	38.56	21.98	171.45	-735.82	735.70	2,890.20	2,858.46	31.74	91.072	
6,200.00	5,796.55	5,948.04	5,796.55	39.18	22.09	171.69	-735.82	735.70	2,929.09	2,896.59	32.50	90.118	
6,300.00	5,889.83	6,041.32	5,889.83	39.75	22.20	171.90	-735.82	735.70	2,964.79	2,931.57	33.22	89.236	
6,400.00	5,984.32	6,135.80	5,984.32	40.27	22.32	172.08	-735.82	735.70	2,997.25	2,963.35	33.90	88.423	
6,500.00	6,079.88	6,231.37	6,079.88	40.75	22.43	172.24	-735.82	735.70	3,026.42	2,991.90	34.52	87.674	
6,600.00	6,176.42	6,327.90	6,176.42	41.19	22.55	172.38	-735.82	735.70	3,052.28	3,017.19	35.09	86.985	
6,700.00	6,273.81	6,425.29	6,273.81	41.57	22.67	172.49	-735.82	735.70	3,074.78	3,039.17	35.61	86.354	
6,800.00	6,371.93	6,523.41	6,371.93	41.91	22.80	172.59	-735.82	735.70	3,093.90	3,057.83	36.07	85.777	
6,900.00	6,470.66	6,622.14	6,470.66	42.20	22.92	172.67	-735.82	735.70	3,109.61	3,073.13	36.48	85.251	
7,000.00	6,569.88	6,721.37	6,569.88	42.44	23.05	172.73	-735.82	735.70	3,121.89	3,085.07	36.83	84.775	
7,100.00	6,669.48	6,820.97	6,669.48	42.63	23.18	172.77	-735.82	735.70	3,130.73	3,093.62	37.12	84.346	
7,200.00	6,769.33	6,920.81	6,769.33	42.77	23.32	172.80	-735.82	735.70	3,136.12	3,098.77	37.35	83.962	
7,305.70	6,875.00	7,026.49	6,875.00	42.87	23.46	150.00	-735.82	735.70	3,138.06	3,100.52	37.54	83.602	
7,400.00	6,969.30	7,120.79	6,969.30	42.93	23.58	150.00	-735.82	735.70	3,138.06	3,100.22	37.84	82.931	
7,500.00	7,069.30	7,220.79	7,069.30	43.01	23.72	150.00	-735.82	735.70	3,138.06	3,099.88	38.17	82.202	
7,600.00	7,169.30	7,320.79	7,169.30	43.08	23.86	150.00	-735.82	735.70	3,138.06	3,099.55	38.51	81.482	
7,700.00	7,269.30	7,420.79	7,269.30	43.16	24.00	150.00	-735.82	735.70	3,138.06	3,099.21	38.85	80.769	
7,800.00	7,369.30	7,520.79	7,369.30	43.24	24.14	150.00	-735.82	735.70	3,138.06	3,098.86	39.19	80.064	
7,900.00	7,469.30	7,620.79	7,469.30	43.31	24.28	150.00	-735.82	735.70	3,138.06	3,098.52	39.54	79.368	
8,000.00	7,569.30	7,720.79	7,569.30	43.39	24.42	150.00	-735.82	735.70	3,138.06	3,098.17	39.88	78.679	
8,100.00	7,669.30	7,820.79	7,669.30	43.47	24.57	150.00	-735.82	735.70	3,138.06	3,097.83	40.23	77.998	
8,111.33	7,680.63	7,832.12	7,680.63	43.48	24.58	150.00	-735.82	735.70	3,138.06	3,097.79	40.27	77.922	
8,136.70	7,706.00	7,838.49	7,687.00	43.50	24.59	150.00	-735.82	735.70	3,138.12	3,097.79	40.32	77.823	



Weatherford International Ltd.

Anticollision Report



Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_RASMUSSEN 25-29
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 25-29	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_RASMUSSEN 25-29	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	-61.93	0.00	61.93				
100.00	100.00	100.00	100.00	0.10	0.10	180.00	-61.93	0.00	61.93	61.74	0.19	324.140	
200.00	200.00	200.00	200.00	0.32	0.32	180.00	-61.93	0.00	61.93	61.29	0.64	96.673	
300.00	300.00	300.00	300.00	0.55	0.55	180.00	-61.93	0.00	61.93	60.84	1.09	56.808	
400.00	400.00	400.00	400.00	0.77	0.77	180.00	-61.93	0.00	61.93	60.39	1.54	40.222	
500.00	500.00	500.00	500.00	0.99	0.99	180.00	-61.93	0.00	61.93	59.94	1.99	31.132	
600.00	600.00	600.00	600.00	1.22	1.22	180.00	-61.93	0.00	61.93	59.49	2.44	25.393	
700.00	700.00	700.00	700.00	1.44	1.44	180.00	-61.93	0.00	61.93	59.04	2.89	21.441	
800.00	800.00	800.12	800.12	1.67	1.67	179.94	-61.91	0.07	61.91	58.57	3.34	18.558	
900.00	900.00	900.66	900.66	1.89	1.88	177.72	-61.22	2.44	61.27	57.50	3.77	16.252	
935.00	935.00	935.79	935.71	1.97	1.95	176.17	-60.74	4.07	60.88	56.96	3.92	15.513	
971.08	971.07	971.95	971.81	2.05	2.03	-163.11	-60.13	6.17	60.66	56.58	4.08	14.854 CC, ES	
1,000.00	999.99	1,000.89	1,000.67	2.12	2.09	-165.18	-59.54	8.17	60.82	56.61	4.21	14.442	
1,100.00	1,099.91	1,100.45	1,099.79	2.34	2.33	-174.43	-56.91	17.19	64.18	59.52	4.66	13.773 SF	
1,200.00	1,199.62	1,198.96	1,197.47	2.57	2.58	174.96	-53.36	29.36	73.13	68.01	5.12	14.290	
1,300.00	1,299.01	1,296.04	1,293.25	2.81	2.86	165.33	-48.94	44.50	88.57	82.98	5.59	15.858	
1,400.00	1,397.96	1,391.34	1,386.71	3.07	3.18	157.72	-43.73	62.38	110.48	104.41	6.07	18.212	
1,500.00	1,496.34	1,484.55	1,477.47	3.37	3.54	152.09	-37.78	82.75	138.37	131.81	6.57	21.071	
1,600.00	1,594.04	1,575.40	1,565.22	3.71	3.94	147.97	-31.20	105.32	171.74	164.64	7.10	24.203	
1,700.00	1,690.94	1,663.65	1,649.70	4.10	4.37	144.90	-24.06	129.79	210.14	202.48	7.66	27.441	
1,800.00	1,786.92	1,749.08	1,730.71	4.54	4.85	142.54	-16.45	155.85	253.20	244.94	8.26	30.666	
1,900.00	1,881.85	1,831.55	1,808.09	5.05	5.35	140.66	-8.48	183.19	300.63	291.74	8.90	33.797	
2,000.00	1,975.64	1,910.92	1,881.77	5.62	5.87	139.08	-0.21	211.52	352.16	342.59	9.57	36.784	
2,100.00	2,068.15	1,987.09	1,951.69	6.27	6.43	137.70	8.26	240.54	407.55	397.25	10.30	39.576	
2,166.51	2,128.93	2,039.67	1,999.57	6.73	6.83	136.87	14.34	261.38	446.25	435.43	10.82	41.254	
2,200.00	2,159.37	2,066.72	2,024.20	6.97	7.04	136.82	17.47	272.13	465.98	454.87	11.12	41.919	
2,300.00	2,250.27	2,147.51	2,097.75	7.71	7.68	136.70	26.84	304.22	524.91	512.88	12.03	43.640	
2,400.00	2,341.18	2,228.30	2,171.30	8.46	8.32	136.61	36.20	336.31	583.83	570.87	12.96	45.041	
2,500.00	2,432.08	2,309.09	2,244.85	9.23	8.97	136.53	45.56	368.39	642.76	628.85	13.91	46.194	
2,600.00	2,522.98	2,389.88	2,318.41	10.01	9.63	136.47	54.92	400.48	701.69	686.81	14.88	47.152	
2,700.00	2,613.88	2,470.67	2,391.96	10.79	10.29	136.42	64.29	432.57	760.62	744.76	15.86	47.957	
2,800.00	2,704.78	2,551.47	2,465.51	11.59	10.96	136.37	73.65	464.66	819.55	802.70	16.85	48.640	
2,900.00	2,795.68	2,632.26	2,539.06	12.38	11.63	136.33	83.01	496.75	878.47	860.63	17.85	49.225	
3,000.00	2,886.59	2,713.05	2,612.61	13.18	12.31	136.29	92.37	528.84	937.40	918.55	18.85	49.731	
3,100.00	2,977.49	2,793.84	2,686.16	13.98	12.98	136.26	101.74	560.92	996.33	976.47	19.86	50.171	
3,200.00	3,068.39	2,874.63	2,759.71	14.79	13.66	136.24	111.10	593.01	1,055.26	1,034.39	20.87	50.555	
3,300.00	3,159.29	2,955.42	2,833.27	15.60	14.34	136.21	120.46	625.10	1,114.19	1,092.30	21.89	50.894	
3,400.00	3,250.19	3,036.21	2,906.82	16.41	15.02	136.19	129.82	657.19	1,173.12	1,150.21	22.91	51.195	
3,500.00	3,341.09	3,117.00	2,980.37	17.22	15.70	136.17	139.19	689.28	1,232.05	1,208.11	23.94	51.464	
3,600.00	3,431.99	3,197.79	3,053.92	18.04	16.39	136.15	148.55	721.37	1,290.98	1,266.01	24.97	51.704	
3,700.00	3,522.90	3,278.58	3,127.47	18.85	17.07	136.14	157.91	753.45	1,349.91	1,323.91	26.00	51.920	
3,800.00	3,613.80	3,359.37	3,201.02	19.67	17.76	136.12	167.28	785.54	1,408.84	1,381.81	27.03	52.116	
3,900.00	3,704.70	3,440.16	3,274.58	20.48	18.44	136.11	176.64	817.63	1,467.77	1,439.71	28.07	52.294	
4,000.00	3,795.60	3,520.95	3,348.13	21.30	19.13	136.09	186.00	849.72	1,526.70	1,497.60	29.10	52.455	
4,100.00	3,886.50	3,601.74	3,421.68	22.12	19.82	136.08	195.36	881.81	1,585.63	1,555.49	30.14	52.603	
4,200.00	3,977.40	3,682.54	3,495.23	22.94	20.51	136.07	204.73	913.90	1,644.56	1,613.38	31.18	52.739	
4,300.00	4,068.31	3,763.33	3,568.78	23.76	21.20	136.06	214.09	945.98	1,703.49	1,671.27	32.22	52.863	
4,400.00	4,159.21	3,844.12	3,642.33	24.58	21.89	136.05	223.45	978.07	1,762.43	1,729.16	33.27	52.979	
4,500.00	4,250.11	3,924.91	3,715.88	25.40	22.57	136.04	232.81	1,010.16	1,821.36	1,787.05	34.31	53.085	
4,600.00	4,341.01	4,005.70	3,789.44	26.23	23.26	136.03	242.18	1,042.25	1,880.29	1,844.93	35.35	53.184	
4,700.00	4,431.91	4,086.49	3,862.99	27.05	23.95	136.03	251.54	1,074.34	1,939.22	1,902.82	36.40	53.276	
4,800.00	4,522.81	4,167.28	3,936.54	27.87	24.65	136.02	260.90	1,106.43	1,998.15	1,960.70	37.45	53.361	

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 25-29
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 25-29	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_RASMUSSEN 25-29	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
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
4,900.00	4,613.72	4,248.07	4,010.09	28.69	25.34	136.01	270.26	1,138.51	2,057.08	2,018.59	38.49	53.441		
5,000.00	4,704.62	4,328.86	4,083.64	29.52	26.03	136.00	279.63	1,170.60	2,116.01	2,076.47	39.54	53.515		
5,100.00	4,795.52	4,409.65	4,157.19	30.34	26.72	136.00	288.99	1,202.69	2,174.94	2,134.35	40.59	53.585		
5,200.00	4,886.42	4,490.44	4,230.74	31.16	27.41	135.99	298.35	1,234.78	2,233.87	2,192.23	41.64	53.651		
5,300.00	4,977.32	4,571.23	4,304.30	31.99	28.10	135.99	307.71	1,266.87	2,292.80	2,250.11	42.69	53.713		
5,400.00	5,068.22	4,652.02	4,377.85	32.81	28.79	135.98	317.08	1,298.96	2,351.73	2,308.00	43.74	53.771		
5,500.00	5,159.13	4,732.81	4,451.40	33.64	29.49	135.98	326.44	1,331.04	2,410.66	2,365.88	44.79	53.826		
5,600.00	5,250.03	4,813.61	4,524.95	34.46	30.18	135.97	335.80	1,363.13	2,469.59	2,423.76	45.84	53.878		
5,700.00	5,340.93	4,894.40	4,598.50	35.29	30.87	135.97	345.16	1,395.22	2,528.52	2,481.64	46.89	53.927		
5,800.00	5,431.83	4,975.19	4,672.05	36.11	31.56	135.96	354.53	1,427.31	2,587.45	2,539.51	47.94	53.974		
5,900.00	5,522.73	5,055.98	4,745.61	36.94	32.26	135.96	363.89	1,459.40	2,646.38	2,597.39	48.99	54.018		
6,000.00	5,613.63	5,136.77	4,819.16	37.76	32.95	135.95	373.25	1,491.49	2,705.32	2,655.27	50.04	54.060		
6,074.18	5,681.07	5,196.70	4,873.72	38.38	33.46	135.95	380.20	1,515.29	2,749.03	2,698.21	50.82	54.089		
6,100.00	5,704.58	5,217.61	4,892.75	38.56	33.64	136.21	382.62	1,523.59	2,764.18	2,713.01	51.17	54.023		
6,200.00	5,796.55	5,299.48	4,967.29	39.18	34.35	137.12	392.11	1,556.11	2,821.55	2,769.13	52.42	53.821		
6,300.00	5,889.83	5,382.71	5,043.06	39.75	35.06	137.91	401.75	1,589.17	2,876.81	2,823.16	53.66	53.615		
6,400.00	5,984.32	5,467.18	5,119.96	40.27	35.78	138.59	411.54	1,622.72	2,929.91	2,875.05	54.86	53.410		
6,500.00	6,079.88	5,552.80	5,197.91	40.75	36.52	139.17	421.46	1,656.72	2,980.79	2,924.77	56.02	53.211		
6,600.00	6,176.42	5,633.27	5,276.78	41.19	37.43	139.23	432.70	1,693.76	3,027.00	2,968.98	58.02	52.168		
6,700.00	6,273.81	5,717.34	5,357.38	41.57	40.15	139.47	440.98	1,730.70	3,062.46	3,002.55	59.92	51.113		
6,800.00	6,371.93	5,809.98	5,443.76	41.91	41.11	140.13	449.76	1,767.94	3,098.60	3,038.36	61.24	50.384		
6,900.00	6,470.66	5,903.92	5,534.66	42.20	41.28	140.64	459.51	1,804.48	3,134.31	3,073.46	61.85	50.094		
7,000.00	6,569.88	5,993.15	5,629.88	42.44	41.35	140.90	469.51	1,840.48	3,169.94	3,108.66	62.28	49.905		
7,100.00	6,669.48	6,082.75	5,724.48	42.63	41.43	141.10	479.51	1,876.48	3,205.87	3,143.25	62.63	49.737		
7,200.00	6,769.33	6,172.59	5,819.33	42.77	41.51	141.21	489.51	1,912.48	3,241.11	3,178.11	62.90	49.587		
7,305.70	6,875.00	6,268.27	5,915.00	42.87	41.59	141.44	495.51	1,948.48	3,276.63	3,213.52	63.11	49.446		
7,400.00	6,969.30	6,362.57	6,009.30	42.93	41.66	141.44	495.51	1,984.48	3,312.63	3,248.34	63.29	49.307		
7,500.00	7,069.30	6,462.57	6,109.30	43.01	41.74	141.44	495.51	1,999.48	3,348.63	3,283.14	63.49	49.155		
7,600.00	7,169.30	6,562.57	6,209.30	43.08	41.83	141.44	495.51	1,999.48	3,384.63	3,318.94	63.68	49.002		
7,700.00	7,269.30	6,662.57	6,309.30	43.16	41.91	141.44	495.51	1,999.48	3,420.63	3,354.74	63.88	48.848		
7,800.00	7,369.30	6,762.57	6,409.30	43.24	41.99	141.44	495.51	1,999.48	3,456.63	3,390.54	64.09	48.693		
7,900.00	7,469.30	6,862.57	6,509.30	43.31	42.08	141.44	495.51	1,999.48	3,492.63	3,426.33	64.29	48.537		
8,000.00	7,569.30	6,962.57	6,609.30	43.39	42.16	141.44	495.51	1,999.48	3,528.63	3,462.13	64.50	48.381		
8,100.00	7,669.30	7,062.57	6,709.30	43.47	42.25	141.44	495.51	1,999.48	3,564.63	3,497.92	64.71	48.223		
8,136.70	7,706.00	7,099.27	6,746.00	43.50	42.28	141.44	495.51	1,999.48	3,564.63	3,497.92	64.79	48.165		



Weatherford International Ltd.

Anticollision Report



Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_RASMUSSEN 25-29
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 25-29	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_RASMUSSEN 25-29	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 22-29 - P_RASMUSSEN 22-29 - PLAN #1 09-02-09												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	-32.79	0.00	32.79				
100.00	100.00	100.00	100.00	0.10	0.10	180.00	-32.79	0.00	32.79	32.59	0.19	171.604	
200.00	200.00	200.00	200.00	0.32	0.32	180.00	-32.79	0.00	32.79	32.14	0.64	51.180	
300.00	300.00	300.00	300.00	0.55	0.55	180.00	-32.79	0.00	32.79	31.69	1.09	30.075	
400.00	400.00	400.00	400.00	0.77	0.77	180.00	-32.79	0.00	32.79	31.25	1.54	21.294	
500.00	500.00	500.00	500.00	0.99	0.99	180.00	-32.79	0.00	32.79	30.80	1.99	16.482	
600.00	600.00	600.00	600.00	1.22	1.22	180.00	-32.79	0.00	32.79	30.35	2.44	13.444	
700.00	700.00	700.00	700.00	1.44	1.44	180.00	-32.79	0.00	32.79	29.90	2.89	11.351	
800.00	800.00	800.00	800.00	1.67	1.67	180.00	-32.79	0.00	32.79	29.45	3.34	9.822	
900.00	900.00	900.00	900.00	1.89	1.89	180.00	-32.79	0.00	32.79	29.00	3.79	8.657	
935.00	935.00	935.00	935.00	1.97	1.97	180.00	-32.79	0.00	32.79	28.84	3.94	8.311 CC	
1,000.00	999.99	1,000.55	1,000.54	2.12	2.12	-156.80	-32.24	-0.51	32.92	28.69	4.23	7.775 ES	
1,100.00	1,099.91	1,101.37	1,101.28	2.34	2.34	-154.72	-29.26	-3.30	33.70	29.02	4.68	7.208	
1,200.00	1,199.62	1,202.16	1,201.77	2.57	2.57	-151.10	-23.70	-8.51	35.26	30.14	5.12	6.884	
1,300.00	1,299.01	1,302.88	1,301.87	2.81	2.81	-146.37	-15.58	-16.13	37.77	32.18	5.59	6.761 SF	
1,400.00	1,397.96	1,403.51	1,401.43	3.07	3.08	-141.06	-4.90	-26.14	41.40	35.31	6.09	6.801	
1,500.00	1,496.34	1,504.04	1,500.30	3.37	3.39	-135.69	8.31	-38.52	46.30	39.65	6.65	6.962	
1,600.00	1,594.04	1,604.43	1,598.35	3.71	3.73	-130.63	24.02	-53.25	52.54	45.24	7.30	7.198	
1,700.00	1,690.94	1,704.67	1,695.44	4.10	4.13	-126.11	42.19	-70.29	60.15	52.10	8.05	7.469	
1,800.00	1,786.92	1,804.73	1,791.44	4.54	4.59	-122.18	62.80	-89.60	69.14	60.21	8.93	7.743	
1,900.00	1,881.85	1,904.61	1,886.20	5.05	5.12	-118.82	85.79	-111.16	79.47	69.53	9.94	7.999	
2,000.00	1,975.64	2,004.27	1,979.62	5.62	5.70	-115.98	111.12	-134.90	91.10	80.02	11.08	8.225	
2,100.00	2,068.15	2,103.71	2,071.56	6.27	6.36	-113.58	138.74	-160.79	103.98	91.63	12.35	8.419	
2,166.51	2,128.93	2,169.72	2,131.84	6.73	6.84	-112.19	158.35	-179.18	113.23	99.95	13.28	8.525	
2,200.00	2,159.37	2,202.91	2,161.92	6.97	7.09	-111.54	168.59	-188.78	118.02	104.25	13.77	8.572	
2,300.00	2,250.27	2,301.83	2,250.56	7.71	7.89	-108.89	200.62	-218.81	132.36	117.04	15.32	8.640	
2,400.00	2,341.18	2,400.27	2,337.21	8.46	8.75	-105.44	234.69	-250.74	147.06	130.10	16.97	8.668	
2,500.00	2,432.08	2,498.19	2,421.84	9.23	9.68	-101.50	270.62	-284.43	162.57	143.90	18.67	8.708	
2,600.00	2,522.98	2,596.31	2,506.22	10.01	10.64	-97.98	307.16	-318.68	178.85	158.49	20.36	8.783	
2,700.00	2,613.88	2,694.42	2,590.59	10.79	11.62	-95.05	343.69	-352.93	195.69	173.66	22.04	8.880	
2,800.00	2,704.78	2,792.54	2,674.96	11.59	12.61	-92.58	380.22	-387.18	212.96	189.26	23.69	8.988	
2,900.00	2,795.68	2,890.65	2,759.34	12.38	13.60	-90.49	416.76	-421.43	230.54	205.21	25.33	9.101	
3,000.00	2,886.59	2,988.77	2,843.71	13.18	14.60	-88.69	453.29	-455.67	248.39	221.43	26.96	9.213	
3,100.00	2,977.49	3,086.88	2,928.08	13.98	15.61	-87.13	489.82	-489.92	266.45	237.87	28.58	9.323	
3,200.00	3,068.39	3,185.00	3,012.46	14.79	16.62	-85.77	526.36	-524.17	284.67	254.47	30.19	9.429	
3,300.00	3,159.29	3,283.11	3,096.83	15.60	17.63	-84.58	562.89	-558.42	303.02	271.23	31.80	9.530	
3,400.00	3,250.19	3,381.23	3,181.21	16.41	18.65	-83.52	599.42	-592.67	321.49	288.09	33.40	9.626	
3,500.00	3,341.09	3,479.34	3,265.58	17.22	19.67	-82.58	635.95	-626.92	340.06	305.06	35.00	9.717	
3,600.00	3,431.99	3,577.46	3,349.95	18.04	20.69	-81.73	672.49	-661.16	358.70	322.11	36.59	9.803	
3,700.00	3,522.90	3,675.57	3,434.33	18.85	21.72	-80.97	709.02	-695.41	377.42	339.24	38.18	9.885	
3,800.00	3,613.80	3,773.69	3,518.70	19.67	22.74	-80.28	745.55	-729.66	396.19	356.42	39.77	9.962	
3,900.00	3,704.70	3,871.80	3,603.08	20.48	23.77	-79.65	782.09	-763.91	415.01	373.65	41.36	10.034	
4,000.00	3,795.60	3,969.92	3,687.45	21.30	24.80	-79.07	818.62	-798.16	433.88	390.93	42.95	10.103	
4,100.00	3,886.50	4,068.03	3,771.82	22.12	25.82	-78.55	855.15	-832.41	452.78	408.25	44.53	10.168	
4,200.00	3,977.40	4,166.15	3,856.20	22.94	26.85	-78.06	891.69	-866.65	471.72	425.61	46.12	10.229	
4,300.00	4,068.31	4,264.26	3,940.57	23.76	27.88	-77.62	928.22	-900.90	490.69	442.99	47.70	10.287	
4,400.00	4,159.21	4,362.38	4,024.95	24.58	28.92	-77.20	964.75	-935.15	509.69	460.41	49.28	10.342	
4,500.00	4,250.11	4,460.49	4,109.32	25.40	29.95	-76.82	1,001.29	-969.40	528.71	477.84	50.87	10.394	
4,600.00	4,341.01	4,558.61	4,193.69	26.23	30.98	-76.46	1,037.82	-1,003.65	547.75	495.30	52.45	10.444	
4,700.00	4,431.91	4,656.73	4,278.07	27.05	32.01	-76.13	1,074.35	-1,037.90	566.81	512.78	54.03	10.491	
4,800.00	4,522.81	4,754.84	4,362.44	27.87	33.05	-75.82	1,110.89	-1,072.14	585.89	530.28	55.61	10.535	
4,900.00	4,613.72	4,852.96	4,446.82	28.69	34.08	-75.53	1,147.42	-1,106.39	604.98	547.79	57.19	10.578	

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



Weatherford International Ltd.

Anticollision Report



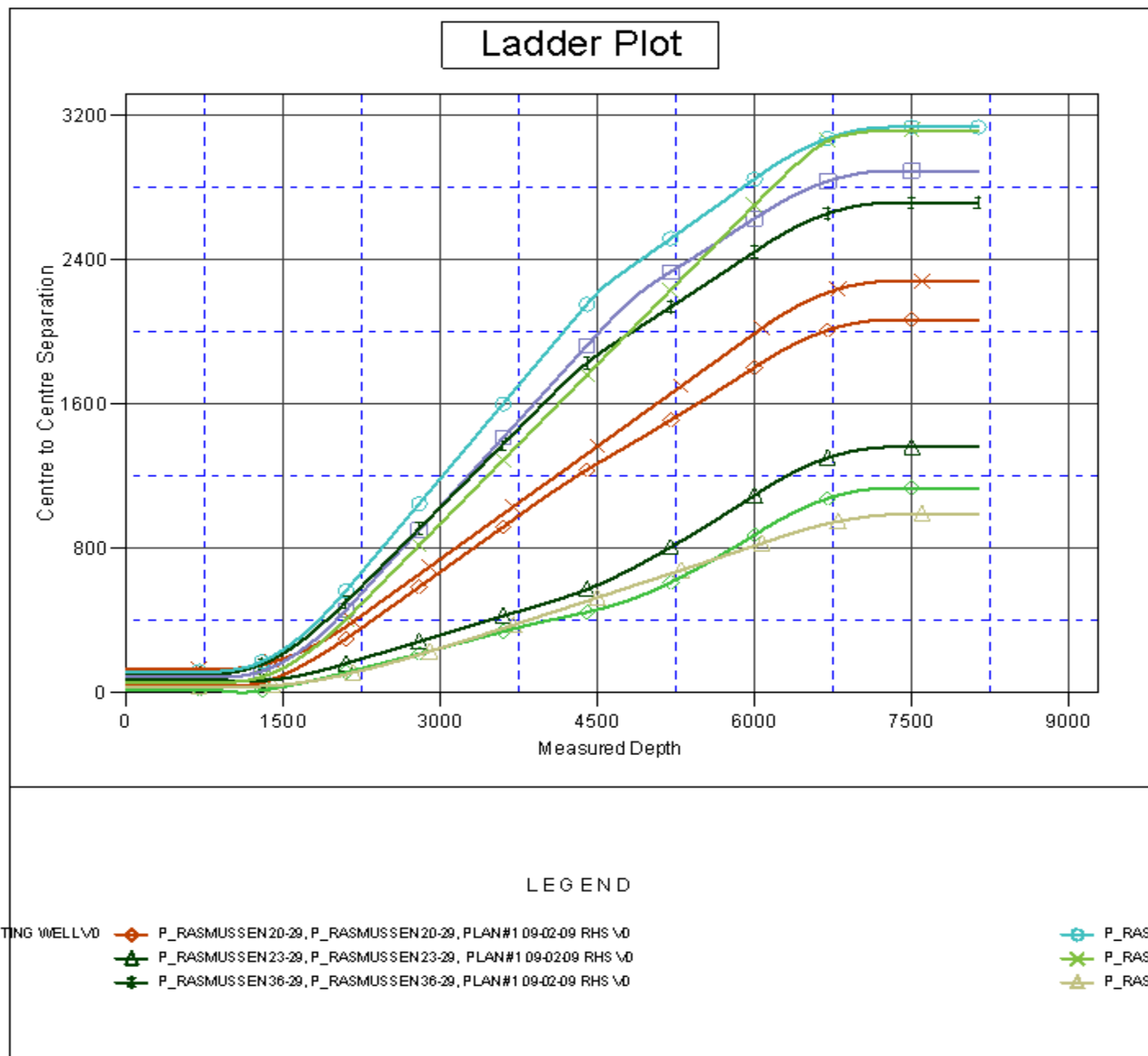
Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_RASMUSSEN 25-29
Project:	KERR MCGEE OIL & GAS ONSHORE LP	TVD Reference:	WELL @ 4949.00ft (Original Well Elev)
Reference Site:	WELD_RASMUSSEN 9 PAD	MD Reference:	WELL @ 4949.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_RASMUSSEN 25-29	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_RASMUSSEN 25-29	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 22-29 - P_RASMUSSEN 22-29 - PLAN #1 09-02-09												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
5,000.00	4,704.62	4,951.07	4,531.19	29.52	35.12	-75.25	1,183.95	-1,140.64	624.09	565.32	58.77	10.619	
5,100.00	4,795.52	5,049.19	4,615.56	30.34	36.15	-74.99	1,220.49	-1,174.89	643.21	582.86	60.35	10.657	
5,200.00	4,886.42	5,147.30	4,699.94	31.16	37.19	-74.75	1,257.02	-1,209.14	662.34	600.41	61.93	10.694	
5,300.00	4,977.32	5,245.42	4,784.31	31.99	38.22	-74.52	1,293.55	-1,243.39	681.48	617.97	63.51	10.730	
5,400.00	5,068.22	5,343.53	4,868.69	32.81	39.26	-74.31	1,330.09	-1,277.63	700.64	635.54	65.09	10.764	
5,500.00	5,159.13	5,441.65	4,953.06	33.64	40.30	-74.10	1,366.62	-1,311.88	719.80	653.13	66.67	10.796	
5,600.00	5,250.03	5,539.76	5,037.43	34.46	41.33	-73.91	1,403.15	-1,346.13	738.97	670.72	68.25	10.827	
5,700.00	5,340.93	5,637.88	5,121.81	35.29	42.37	-73.72	1,439.68	-1,380.38	758.15	688.31	69.83	10.857	
5,800.00	5,431.83	5,735.99	5,206.18	36.11	43.41	-73.55	1,476.22	-1,414.63	777.33	705.92	71.41	10.885	
5,900.00	5,522.73	5,834.11	5,290.55	36.94	44.44	-73.38	1,512.75	-1,448.88	796.53	723.53	72.99	10.913	
6,000.00	5,613.63	5,932.22	5,374.93	37.76	45.48	-73.22	1,549.28	-1,483.12	815.72	741.15	74.57	10.939	
6,074.18	5,681.07	6,005.01	5,437.52	38.38	46.25	-73.11	1,576.39	-1,508.53	829.97	754.23	75.74	10.958	
6,100.00	5,704.58	6,030.33	5,459.29	38.56	46.52	-73.16	1,585.81	-1,517.37	834.96	758.80	76.16	10.964	
6,200.00	5,796.55	6,129.56	5,544.64	39.18	47.56	-73.22	1,622.76	-1,552.00	854.92	777.34	77.59	11.019	
6,300.00	5,889.83	6,248.33	5,648.16	39.75	48.60	-73.12	1,665.22	-1,591.81	874.58	795.68	78.91	11.084	
6,400.00	5,984.32	6,368.23	5,755.02	40.27	49.52	-73.01	1,704.87	-1,628.98	892.89	812.81	80.07	11.151	
6,500.00	6,079.88	6,489.22	5,865.07	40.75	50.37	-72.89	1,741.54	-1,663.35	909.79	828.66	81.13	11.213	
6,600.00	6,176.42	6,611.26	5,978.11	41.19	51.14	-72.75	1,775.06	-1,694.78	925.25	843.17	82.08	11.273	
6,700.00	6,273.81	6,734.27	6,093.95	41.57	51.84	-72.61	1,805.26	-1,723.09	939.23	856.33	82.90	11.329	
6,800.00	6,371.93	6,858.22	6,212.34	41.91	52.46	-72.44	1,831.99	-1,748.15	951.69	868.08	83.61	11.382	
6,900.00	6,470.66	6,983.01	6,333.03	42.20	53.00	-72.27	1,855.11	-1,769.83	962.60	878.40	84.20	11.432	
7,000.00	6,569.88	7,108.58	6,455.75	42.44	53.46	-72.08	1,874.48	-1,787.98	971.93	887.26	84.66	11.480	
7,100.00	6,669.48	7,234.83	6,580.19	42.63	53.83	-71.87	1,889.98	-1,802.51	979.64	894.65	85.00	11.526	
7,200.00	6,769.33	7,361.69	6,706.05	42.77	54.12	-71.64	1,901.51	-1,813.32	985.73	900.52	85.21	11.568	
7,305.70	6,875.00	7,496.32	6,840.24	42.87	54.35	-94.20	1,909.29	-1,820.62	990.37	905.06	85.30	11.610	
7,400.00	6,969.30	7,616.87	6,960.71	42.93	54.47	-94.01	1,912.35	-1,823.48	992.43	907.06	85.37	11.625	
7,500.00	7,069.30	7,725.46	7,069.30	43.01	54.53	-94.00	1,912.54	-1,823.67	992.56	907.05	85.52	11.607	
7,600.00	7,169.30	7,825.46	7,169.30	43.08	54.59	-94.00	1,912.54	-1,823.67	992.56	906.90	85.66	11.587	
7,700.00	7,269.30	7,925.46	7,269.30	43.16	54.66	-94.00	1,912.54	-1,823.67	992.56	906.75	85.81	11.567	
7,800.00	7,369.30	8,025.46	7,369.30	43.24	54.72	-94.00	1,912.54	-1,823.67	992.56	906.60	85.96	11.546	
7,900.00	7,469.30	8,125.46	7,469.30	43.31	54.78	-94.00	1,912.54	-1,823.67	992.56	906.45	86.12	11.526	
8,000.00	7,569.30	8,225.46	7,569.30	43.39	54.85	-94.00	1,912.54	-1,823.67	992.56	906.29	86.27	11.505	
8,100.00	7,669.30	8,325.46	7,669.30	43.47	54.91	-94.00	1,912.54	-1,823.67	992.56	906.14	86.43	11.484	
8,136.70	7,706.00	8,337.16	7,681.00	43.50	54.92	-94.00	1,912.54	-1,823.67	992.88	906.41	86.47	11.483	



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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 25-29	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_RASMUSSEN 25-29	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 25-29
Offset Depths are relative to Offset Datum Coordinate System is US State Plane 1983, Colorado Northern Zone
Central Meridian is 105° 30' 0.000 W ° Grid Convergence at Surface is: 0.31°

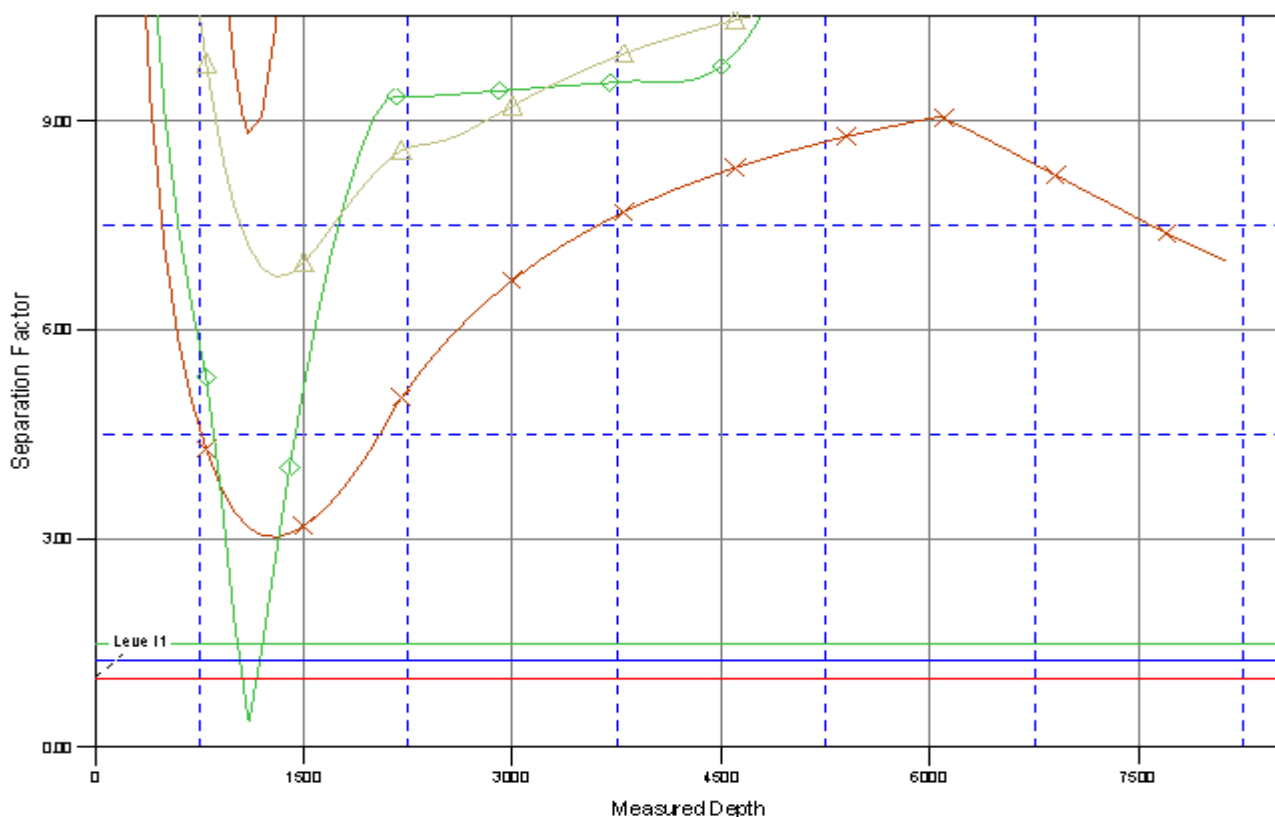




Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_RASMUSSEN 25-29
Project:	KERR MCGEE OIL & GAS ONSHORE LP	TVD Reference:	WELL @ 4949.00ft (Original Well Elev)
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Site Error:	0.00ft	North Reference:	True
Reference Well:	P_RASMUSSEN 25-29	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_RASMUSSEN 25-29	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 25-29
Offset Depths are relative to Offset Datum Coordinate System is US State Plane 1983, Colorado Northern Zone
Central Meridian is 105° 30' 0.000 W ° Grid Convergence at Surface is: 0.31°

Separation Factor Plot



LEGEND

STING WELL VD	P_RASMUSSEN 20-29, P_RASMUSSEN 20-29, PLAN #1 09-02-09 RHS VD	P_RASMUSSEN 20-29, P_RASMUSSEN 20-29, PLAN #1 09-02-09 RHS VD
	P_RASMUSSEN 23-29, P_RASMUSSEN 23-29, PLAN #1 09-02-09 RHS VD	P_RASMUSSEN 23-29, P_RASMUSSEN 23-29, PLAN #1 09-02-09 RHS VD
	P_RASMUSSEN 36-29, P_RASMUSSEN 36-29, PLAN #1 09-02-09 RHS VD	P_RASMUSSEN 36-29, P_RASMUSSEN 36-29, PLAN #1 09-02-09 RHS VD