



US ROCKIES REGION PLANNING

COLORADO NORTHERN ZONE - 83

WELD_JESSER 18-2 PAD

P_JESSER 31-2

P_JESSER 31-2

Plan: PLAN #1 3-16-10 RHS

Standard Planning Report

16 March, 2010

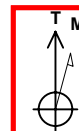




Project: COLORADO NORTHERN ZONE - 83
 Site: WELD_JESSER 18-2 PAD
 Well: P_JESSER 31-2
 Wellbore: P_JESSER 31-2
 Section: SECTION 2 T1N R66W
 SHL: 1178 FNL 1122 FWL
 Design: PLAN #1 3-16-10 RHS
 Latitude: 40° 5' 2.655 N
 Longitude: 104° 44' 58.870 W
 GL: 5143.00
 KB: WELL @ 5158.00ft (Original Well Elev)



Weatherford®



Azimuths to True North
 Magnetic North: 8.99°
 Magnetic Field
 Strength: 53095.8nT
 Dip Angle: 66.84°
 Date: 3/16/2010
 Model: IGRF2010

FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
4310.00	4389.36	PARKMAN
4800.00	4894.67	SUSSEX
7280.00	7406.21	NIO A
7600.00	7726.21	CODELL
8060.00	8186.21	JSAND

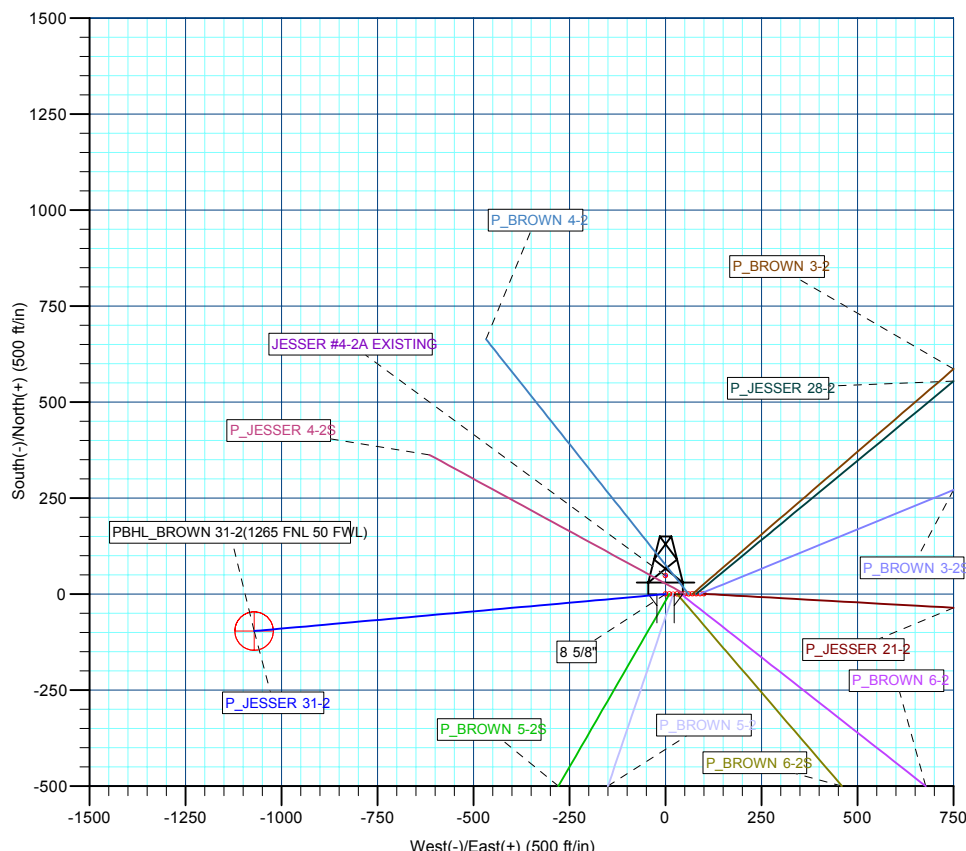
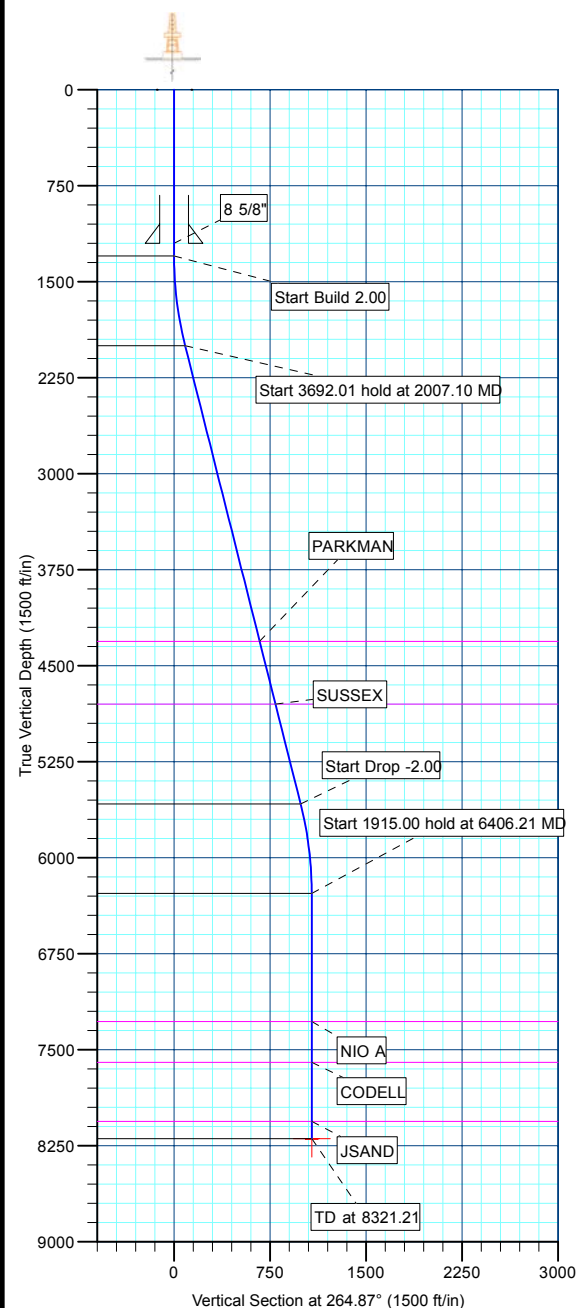
CASING DETAILS			
TVD	MD	Name	Size
1200.00	1200.00	8 5/8"	8.62

SECTION DETAILS									
MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1300.00	0.00	0.00	1300.00	0.00	0.00	0.00	0.00	0.00	Start Build 2.00
2007.10	14.14	264.87	1999.94	-7.76	-86.47	2.00	264.87	86.82	Start 3692.01 hold at 2007.10 MD
5699.11	14.14	264.87	5580.06	-88.37	-984.92	0.00	0.00	988.82	Start Drop -2.00
6406.21	0.00	0.00	6280.00	-96.13	-1071.39	2.00	180.00	1075.70	Start 1915.00 hold at 6406.21 MD
8321.21	0.00	0.00	8195.00	-96.13	-1071.39	0.00	0.00	1075.70	TD at 8321.21

WELLBORE TARGET DETAILS (MAP CO-ORDINATES AND LAT/LONG)							
Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape	
PBHL	8195.00	-96.13	-1071.39	40° 5' 1.705 N	104° 45' 12.654 W	Circle (Radius: 50.00)	

WELL DETAILS: P_JESSER 31-2						
+N/-S	+E/-W	Northing	Ground Level: Easting	5143.00 Latitude	Longitude	Slot
0.00	0.00	1274360.02	3209941.53	40° 5' 2.655 N	104° 44' 58.870 W	

LEGEND	
JESSER #4-2A EXISTING, JESSER #4-2A EXISTING, JESSER #4-2A EXISTING V0	
P_BROWN 3-2, P_BROWN 3-2, PLAN #1 3-16-10 RHS V0	
P_BROWN 3-2S, P_BROWN 3-2S, PLAN #1 3-16-10 RHS V0	
P_BROWN 4-2, P_BROWN 4-2, PLAN #1 3-16-10 RHS V0	
P_BROWN 5-2, P_BROWN 5-2, PLAN #1 3-16-10 RHS V0	
P_BROWN 5-2S, P_BROWN 5-2S, PLAN #1 3-16-10 RHS V0	
P_BROWN 6-2, P_BROWN 6-2, PLAN #1 3-16-10 RHS V0	
P_BROWN 6-2S, P_BROWN 6-2S, PLAN #1 3-16-10 RHS V0	
P_JESSER 21-2, P_JESSER 21-2, PLAN #1 3-16-10 RHS V0	
P_JESSER 28-2, P_JESSER 28-2, PLAN #1 3-16-10 RHS V0	
P_JESSER 4-2S, P_JESSER 4-2S, PLAN #1 3-16-10 RHS V0	
PLAN #1 3-16-10 RHS	



Plan: PLAN #1 3-16-10 RHS (P_JESSER 31-2/P_JESSER 31-2)	
Created By: Robert H. Scott	Date: 16:02, March 16 2010

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well P_JESSER 31-2
Company:	US ROCKIES REGION PLANNING	TVD Reference:	WELL @ 5158.00ft (Original Well Elev)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	WELL @ 5158.00ft (Original Well Elev)
Site:	WELD_JESSER 18-2 PAD	North Reference:	True
Well:	P_JESSER 31-2	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_JESSER 31-2		
Design:	PLAN #1 3-16-10 RHS		

Project	COLORADO NORTHERN ZONE - 83, 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_JESSER 18-2 PAD, SECTION 2 T1N R66W			
Site Position:		Northing:	1,274,361.36ft	Latitude:	40° 5' 2.663 N
From:	Lat/Long	Easting:	3,210,011.75ft	Longitude:	104° 44' 57.966 W
Position Uncertainty:	0.00 ft	Slot Radius:	in	Grid Convergence:	0.48 °

Well	P_JESSER 31-2					
Well Position	+N/-S	-0.75 ft	Northing:	1,274,360.02 ft	Latitude:	40° 5' 2.655 N
	+E/-W	-70.23 ft	Easting:	3,209,941.53 ft	Longitude:	104° 44' 58.870 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	5,143.00 ft

Wellbore	P_JESSER 31-2				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	3/16/2010	9.00	66.84	53,096

Design	PLAN #1 3-16-10 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	264.87

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	
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,007.10	14.14	264.87	1,999.94	-7.76	-86.47	2.00	2.00	0.00	264.87	
5,699.11	14.14	264.87	5,580.06	-88.37	-984.92	0.00	0.00	0.00	0.00	
6,406.21	0.00	0.00	6,280.00	-96.13	-1,071.39	2.00	-2.00	0.00	180.00	
8,321.21	0.00	0.00	8,195.00	-96.13	-1,071.39	0.00	0.00	0.00	0.00	PBHL_BROWN 31-

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well P_JESSER 31-2
Company:	US ROCKIES REGION PLANNING	TVD Reference:	WELL @ 5158.00ft (Original Well Elev)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	WELL @ 5158.00ft (Original Well Elev)
Site:	WELD_JESSER 18-2 PAD	North Reference:	True
Well:	P_JESSER 31-2	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_JESSER 31-2		
Design:	PLAN #1 3-16-10 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									
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	2.00	264.87	1,399.98	-0.16	-1.74	1.75	2.00	2.00	0.00
1,500.00	4.00	264.87	1,499.84	-0.62	-6.95	6.98	2.00	2.00	0.00
1,600.00	6.00	264.87	1,599.45	-1.40	-15.63	15.69	2.00	2.00	0.00
1,700.00	8.00	264.87	1,698.70	-2.49	-27.77	27.88	2.00	2.00	0.00
1,800.00	10.00	264.87	1,797.47	-3.89	-43.35	43.52	2.00	2.00	0.00
1,900.00	12.00	264.87	1,895.62	-5.59	-62.35	62.60	2.00	2.00	0.00
2,000.00	14.00	264.87	1,993.06	-7.60	-84.76	85.10	2.00	2.00	0.00
Start 3692.01 hold at 2007.10 MD									
2,007.10	14.14	264.87	1,999.94	-7.76	-86.47	86.82	2.00	2.00	0.00
2,100.00	14.14	264.87	2,090.03	-9.79	-109.08	109.52	0.00	0.00	0.00
2,200.00	14.14	264.87	2,187.00	-11.97	-133.42	133.95	0.00	0.00	0.00
2,300.00	14.14	264.87	2,283.97	-14.15	-157.75	158.39	0.00	0.00	0.00
2,400.00	14.14	264.87	2,380.93	-16.34	-182.09	182.82	0.00	0.00	0.00
2,500.00	14.14	264.87	2,477.90	-18.52	-206.42	207.25	0.00	0.00	0.00
2,600.00	14.14	264.87	2,574.87	-20.70	-230.76	231.68	0.00	0.00	0.00
2,700.00	14.14	264.87	2,671.84	-22.89	-255.09	256.12	0.00	0.00	0.00
2,800.00	14.14	264.87	2,768.81	-25.07	-279.43	280.55	0.00	0.00	0.00
2,900.00	14.14	264.87	2,865.78	-27.25	-303.76	304.98	0.00	0.00	0.00
3,000.00	14.14	264.87	2,962.75	-29.44	-328.10	329.41	0.00	0.00	0.00
3,100.00	14.14	264.87	3,059.72	-31.62	-352.43	353.85	0.00	0.00	0.00
3,200.00	14.14	264.87	3,156.69	-33.80	-376.76	378.28	0.00	0.00	0.00
3,300.00	14.14	264.87	3,253.66	-35.99	-401.10	402.71	0.00	0.00	0.00
3,400.00	14.14	264.87	3,350.63	-38.17	-425.43	427.14	0.00	0.00	0.00
3,500.00	14.14	264.87	3,447.60	-40.36	-449.77	451.58	0.00	0.00	0.00
3,600.00	14.14	264.87	3,544.57	-42.54	-474.10	476.01	0.00	0.00	0.00
3,700.00	14.14	264.87	3,641.54	-44.72	-498.44	500.44	0.00	0.00	0.00
3,800.00	14.14	264.87	3,738.51	-46.91	-522.77	524.87	0.00	0.00	0.00
3,900.00	14.14	264.87	3,835.47	-49.09	-547.11	549.31	0.00	0.00	0.00
4,000.00	14.14	264.87	3,932.44	-51.27	-571.44	573.74	0.00	0.00	0.00
4,100.00	14.14	264.87	4,029.41	-53.46	-595.78	598.17	0.00	0.00	0.00
4,200.00	14.14	264.87	4,126.38	-55.64	-620.11	622.60	0.00	0.00	0.00
4,300.00	14.14	264.87	4,223.35	-57.82	-644.45	647.04	0.00	0.00	0.00
PARKMAN									
4,389.36	14.14	264.87	4,310.00	-59.77	-666.19	668.87	0.00	0.00	0.00
4,400.00	14.14	264.87	4,320.32	-60.01	-668.78	671.47	0.00	0.00	0.00
4,500.00	14.14	264.87	4,417.29	-62.19	-693.12	695.90	0.00	0.00	0.00
4,600.00	14.14	264.87	4,514.26	-64.37	-717.45	720.33	0.00	0.00	0.00
4,700.00	14.14	264.87	4,611.23	-66.56	-741.79	744.77	0.00	0.00	0.00
4,800.00	14.14	264.87	4,708.20	-68.74	-766.12	769.20	0.00	0.00	0.00
SUSSEX									
4,894.67	14.14	264.87	4,800.00	-70.81	-789.16	792.33	0.00	0.00	0.00
4,900.00	14.14	264.87	4,805.17	-70.92	-790.46	793.63	0.00	0.00	0.00
5,000.00	14.14	264.87	4,902.14	-73.11	-814.79	818.06	0.00	0.00	0.00
5,100.00	14.14	264.87	4,999.11	-75.29	-839.13	842.50	0.00	0.00	0.00
5,200.00	14.14	264.87	5,096.08	-77.47	-863.46	866.93	0.00	0.00	0.00
5,300.00	14.14	264.87	5,193.05	-79.66	-887.79	891.36	0.00	0.00	0.00
5,400.00	14.14	264.87	5,290.01	-81.84	-912.13	915.79	0.00	0.00	0.00
5,500.00	14.14	264.87	5,386.98	-84.02	-936.46	940.23	0.00	0.00	0.00
5,600.00	14.14	264.87	5,483.95	-86.21	-960.80	964.66	0.00	0.00	0.00
Start Drop -2.00									
5,699.11	14.14	264.87	5,580.06	-88.37	-984.92	988.87	0.00	0.00	0.00

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well P_JESSER 31-2
Company:	US ROCKIES REGION PLANNING	TVD Reference:	WELL @ 5158.00ft (Original Well Elev)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	WELL @ 5158.00ft (Original Well Elev)
Site:	WELD_JESSER 18-2 PAD	North Reference:	True
Well:	P_JESSER 31-2	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_JESSER 31-2		
Design:	PLAN #1 3-16-10 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)
5,700.00	14.12	264.87	5,580.92	-88.39	-985.13	989.09	2.00	-2.00	0.00
5,800.00	12.12	264.87	5,678.31	-90.42	-1,007.75	1,011.80	2.00	-2.00	0.00
5,900.00	10.12	264.87	5,776.42	-92.14	-1,026.96	1,031.09	2.00	-2.00	0.00
6,000.00	8.12	264.87	5,875.15	-93.56	-1,042.76	1,046.95	2.00	-2.00	0.00
6,100.00	6.12	264.87	5,974.37	-94.67	-1,055.11	1,059.35	2.00	-2.00	0.00
6,200.00	4.12	264.87	6,073.97	-95.47	-1,064.00	1,068.28	2.00	-2.00	0.00
6,300.00	2.12	264.87	6,173.82	-95.95	-1,069.43	1,073.73	2.00	-2.00	0.00
6,400.00	0.12	264.87	6,273.79	-96.13	-1,071.39	1,075.69	2.00	-2.00	0.00
Start 1915.00 hold at 6406.21 MD									
6,406.21	0.00	0.00	6,280.00	-96.13	-1,071.39	1,075.70	2.00	-2.00	0.00
6,500.00	0.00	0.00	6,373.79	-96.13	-1,071.39	1,075.70	0.00	0.00	0.00
6,600.00	0.00	0.00	6,473.79	-96.13	-1,071.39	1,075.70	0.00	0.00	0.00
6,700.00	0.00	0.00	6,573.79	-96.13	-1,071.39	1,075.70	0.00	0.00	0.00
6,800.00	0.00	0.00	6,673.79	-96.13	-1,071.39	1,075.70	0.00	0.00	0.00
6,900.00	0.00	0.00	6,773.79	-96.13	-1,071.39	1,075.70	0.00	0.00	0.00
7,000.00	0.00	0.00	6,873.79	-96.13	-1,071.39	1,075.70	0.00	0.00	0.00
7,100.00	0.00	0.00	6,973.79	-96.13	-1,071.39	1,075.70	0.00	0.00	0.00
7,200.00	0.00	0.00	7,073.79	-96.13	-1,071.39	1,075.70	0.00	0.00	0.00
7,300.00	0.00	0.00	7,173.79	-96.13	-1,071.39	1,075.70	0.00	0.00	0.00
7,400.00	0.00	0.00	7,273.79	-96.13	-1,071.39	1,075.70	0.00	0.00	0.00
NIO A									
7,406.21	0.00	0.00	7,280.00	-96.13	-1,071.39	1,075.70	0.00	0.00	0.00
7,500.00	0.00	0.00	7,373.79	-96.13	-1,071.39	1,075.70	0.00	0.00	0.00
7,600.00	0.00	0.00	7,473.79	-96.13	-1,071.39	1,075.70	0.00	0.00	0.00
7,700.00	0.00	0.00	7,573.79	-96.13	-1,071.39	1,075.70	0.00	0.00	0.00
CODELL									
7,726.21	0.00	0.00	7,600.00	-96.13	-1,071.39	1,075.70	0.00	0.00	0.00
7,800.00	0.00	0.00	7,673.79	-96.13	-1,071.39	1,075.70	0.00	0.00	0.00
7,900.00	0.00	0.00	7,773.79	-96.13	-1,071.39	1,075.70	0.00	0.00	0.00
8,000.00	0.00	0.00	7,873.79	-96.13	-1,071.39	1,075.70	0.00	0.00	0.00
8,100.00	0.00	0.00	7,973.79	-96.13	-1,071.39	1,075.70	0.00	0.00	0.00
JSAND									
8,186.21	0.00	0.00	8,060.00	-96.13	-1,071.39	1,075.70	0.00	0.00	0.00
8,200.00	0.00	0.00	8,073.79	-96.13	-1,071.39	1,075.70	0.00	0.00	0.00
8,300.00	0.00	0.00	8,173.79	-96.13	-1,071.39	1,075.70	0.00	0.00	0.00
PBHL_BROWN 31-2(1265 FNL 50 FWL)									
8,321.21	0.00	0.00	8,195.00	-96.13	-1,071.39	1,075.70	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_BROWN 31-2(0.00	0.00	8,195.00	-96.13	-1,071.39	1,274,254.83	3,208,870.99	40° 5' 1.705 N	104° 45' 12.654 W
- plan hits target center									
- Circle (radius 50.00)									

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well P_JESSER 31-2
Company:	US ROCKIES REGION PLANNING	TVD Reference:	WELL @ 5158.00ft (Original Well Elev)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	WELL @ 5158.00ft (Original Well Elev)
Site:	WELD_JESSER 18-2 PAD	North Reference:	True
Well:	P_JESSER 31-2	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_JESSER 31-2		
Design:	PLAN #1 3-16-10 RHS		

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)	
1,200.00	1,200.00	8 5/8"	8.62	11.00	

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
4,389.36	4,310.00	PARKMAN				
4,894.67	4,800.00	SUSSEX				
7,406.21	7,280.00	NIO A				
7,726.21	7,600.00	CODELL				
8,186.21	8,060.00	JSAND				

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
1,300.00	1,300.00	0.00	0.00	Start Build 2.00	
2,007.10	1,999.94	-7.76	-86.47	Start 3692.01 hold at 2007.10 MD	
5,699.11	5,580.06	-88.37	-984.92	Start Drop -2.00	
6,406.21	6,280.00	-96.13	-1,071.39	Start 1915.00 hold at 6406.21 MD	
8,321.21	8,195.00	-96.13	-1,071.39	TD at 8321.21	



US ROCKIES REGION PLANNING

**COLORADO NORTHERN ZONE - 83
WELD_JESSER 18-2 PAD
P_JESSER 31-2**

**P_JESSER 31-2
PLAN #1 3-16-10 RHS**

Anticollision Report

16 March, 2010



Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_JESSER 31-2
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 5158.00ft (Original Well Elev)
Reference Site:	WELD_JESSER 18-2 PAD	MD Reference:	WELL @ 5158.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_JESSER 31-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_JESSER 31-2	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 3-16-10 RHS	Offset TVD Reference:	Offset Datum

Reference	PLAN #1 3-16-10 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 3/16/2010			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.00	8,321.21	PLAN #1 3-16-10 RHS (P_JESSER 31-2)	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_JESSER 18-2 PAD						
JESSER #4-2A EXISTING - JESSER #4-2A EXISTING -	1,300.00	1,279.00	48.07	-3.88	0.925	Level 1, CC
JESSER #4-2A EXISTING - JESSER #4-2A EXISTING -	1,600.00	1,578.45	51.80	-12.71	0.803	Level 1, ES, SF
P_BROWN 3-2 - P_BROWN 3-2 - PLAN #1 3-16-10 RHS	1,300.00	1,300.00	70.24	64.65	12.575	CC, ES
P_BROWN 3-2 - P_BROWN 3-2 - PLAN #1 3-16-10 RHS	1,400.00	1,398.05	73.29	67.29	12.204	SF
P_BROWN 3-2S - P_BROWN 3-2S - PLAN #1 3-16-10 F	1,300.00	1,300.00	90.10	84.52	16.131	CC, ES
P_BROWN 3-2S - P_BROWN 3-2S - PLAN #1 3-16-10 F	1,400.00	1,397.77	93.03	87.03	15.500	SF
P_BROWN 4-2 - P_BROWN 4-2 - PLAN #1 3-16-10 RHS	1,300.00	1,300.00	60.16	54.57	10.771	CC, ES
P_BROWN 4-2 - P_BROWN 4-2 - PLAN #1 3-16-10 RHS	1,500.00	1,502.40	63.05	56.63	9.817	SF
P_BROWN 5-2 - P_BROWN 5-2 - PLAN #1 3-16-10 RHS	1,300.00	1,300.00	20.15	14.56	3.607	CC, ES
P_BROWN 5-2 - P_BROWN 5-2 - PLAN #1 3-16-10 RHS	1,400.00	1,400.19	21.37	15.39	3.570	SF
P_BROWN 5-2S - P_BROWN 5-2S - PLAN #1 3-16-10 F	1,300.00	1,300.00	10.07	4.49	1.803	CC, ES, SF
P_BROWN 6-2 - P_BROWN 6-2 - PLAN #1 3-16-10 RHS	1,300.00	1,300.00	40.01	34.43	7.164	CC, ES, SF
P_BROWN 6-2S - P_BROWN 6-2S - PLAN #1 3-16-10 F	1,300.00	1,300.00	30.22	24.64	5.411	CC, ES, SF
P_JESSER 21-2 - P_JESSER 21-2 - PLAN #1 3-16-10 R	1,300.00	1,300.00	100.17	94.59	17.935	CC, ES
P_JESSER 21-2 - P_JESSER 21-2 - PLAN #1 3-16-10 R	1,400.00	1,396.52	103.59	97.60	17.285	SF
P_JESSER 28-2 - P_JESSER 28-2 - PLAN #1 3-16-10 R	1,300.00	1,300.00	80.03	74.44	14.328	CC, ES
P_JESSER 28-2 - P_JESSER 28-2 - PLAN #1 3-16-10 R	1,400.00	1,397.77	83.10	77.10	13.838	SF
P_JESSER 4-2S - P_JESSER 4-2S - PLAN #1 3-16-10 F	1,300.00	1,300.00	50.09	44.50	8.967	CC, ES
P_JESSER 4-2S - P_JESSER 4-2S - PLAN #1 3-16-10 F	1,600.00	1,603.34	55.77	48.96	8.189	SF

Offset Design	WELD_JESSER 18-2 PAD - JESSER #4-2A EXISTING - JESSER #4-2A EXISTING - JESSER #4-2A E												Offset Site Error:	0.00 ft
Survey Program:	0-UNKNOWN												Offset Well Error:	0.00 ft
Reference	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
0.00	0.00	0.00	0.00	0.00	0.00	-0.33	48.07	-0.28	52.46					
100.00	100.00	79.00	79.00	0.10	1.58	-0.33	48.07	-0.28	48.07	46.40	1.68	28.691		
200.00	200.00	179.00	179.00	0.32	5.16	-0.33	48.07	-0.28	48.07	42.59	5.48	8.772		
300.00	300.00	279.00	279.00	0.55	9.16	-0.33	48.07	-0.28	48.07	38.37	9.71	4.953		
400.00	400.00	379.00	379.00	0.77	13.16	-0.33	48.07	-0.28	48.07	34.14	13.93	3.451		
500.00	500.00	479.00	479.00	0.99	17.16	-0.33	48.07	-0.28	48.07	29.92	18.15	2.648		
600.00	600.00	579.00	579.00	1.22	21.16	-0.33	48.07	-0.28	48.07	25.69	22.38	2.148		
700.00	700.00	679.00	679.00	1.44	25.16	-0.33	48.07	-0.28	48.07	21.47	26.60	1.807		
800.00	800.00	779.00	779.00	1.67	29.16	-0.33	48.07	-0.28	48.07	17.24	30.83	1.559		

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_JESSER 31-2
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 5158.00ft (Original Well Elev)
Reference Site:	WELD_JESSER 18-2 PAD	MD Reference:	WELL @ 5158.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_JESSER 31-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_JESSER 31-2	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 3-16-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design		WELD_JESSER 18-2 PAD - JESSER #4-2A EXISTING - JESSER #4-2A EXISTING - JESSER #4-2A E										Offset Site Error:		0.00 ft
Survey Program: 0-UNKNOWN												Offset Well Error:		0.00 ft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning	
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
900.00	900.00	879.00	879.00	1.89	33.16	-0.33	48.07	-0.28	48.07	13.02	35.05	1.371	Level 3	
1,000.00	1,000.00	979.00	979.00	2.12	37.16	-0.33	48.07	-0.28	48.07	8.79	39.28	1.224	Level 2	
1,100.00	1,100.00	1,079.00	1,079.00	2.34	41.16	-0.33	48.07	-0.28	48.07	4.57	43.50	1.105	Level 2	
1,200.00	1,200.00	1,179.00	1,179.00	2.57	45.16	-0.33	48.07	-0.28	48.07	0.34	47.73	1.007	Level 2	
1,300.00	1,300.00	1,279.00	1,279.00	2.79	49.16	-0.33	48.07	-0.28	48.07	-3.88	51.95	0.925	Level 1, CC	
1,400.00	1,399.98	1,378.98	1,378.98	3.00	53.16	96.85	48.07	-0.28	48.25	-7.91	56.16	0.859	Level 1	
1,500.00	1,499.84	1,478.84	1,478.84	3.21	57.15	102.90	48.07	-0.28	49.15	-11.20	60.35	0.814	Level 1	
1,600.00	1,599.45	1,578.45	1,578.45	3.42	61.14	112.25	48.07	-0.28	51.80	-12.71	64.51	0.803	Level 1, ES, SF	
1,700.00	1,698.70	1,677.70	1,677.70	3.65	65.11	123.40	48.07	-0.28	57.55	-11.01	68.56	0.839	Level 1	
1,800.00	1,797.47	1,776.47	1,776.47	3.91	69.06	134.34	48.07	-0.28	67.49	-4.92	72.41	0.932	Level 1	
1,900.00	1,895.62	1,874.62	1,874.62	4.21	72.98	143.68	48.07	-0.28	82.06	6.02	76.03	1.079	Level 2	
2,007.10	1,999.94	1,978.94	1,978.94	4.58	77.16	151.46	48.07	-0.28	102.70	23.03	79.67	1.289	Level 3	
2,100.00	2,090.03	2,069.03	2,069.03	4.94	80.76	156.49	48.07	-0.28	123.23	40.00	83.23	1.481	Level 3	
2,200.00	2,187.00	2,166.00	2,166.00	5.35	84.64	160.30	48.07	-0.28	146.05	58.93	87.12	1.676		
2,300.00	2,283.97	2,262.97	2,262.97	5.78	88.52	163.08	48.07	-0.28	169.32	78.27	91.05	1.860		
2,400.00	2,380.93	2,359.93	2,359.93	6.23	92.40	165.19	48.07	-0.28	192.88	97.87	95.01	2.030		
2,500.00	2,477.90	2,456.90	2,456.90	6.68	96.28	166.84	48.07	-0.28	216.63	117.65	98.98	2.189		
2,600.00	2,574.87	2,553.87	2,553.87	7.15	100.15	168.16	48.07	-0.28	240.52	137.55	102.97	2.336		
2,700.00	2,671.84	2,650.84	2,650.84	7.62	104.03	169.25	48.07	-0.28	264.51	157.54	106.96	2.473		
2,800.00	2,768.81	2,747.81	2,747.81	8.10	107.91	170.15	48.07	-0.28	288.57	177.60	110.97	2.601		
2,900.00	2,865.78	2,844.78	2,844.78	8.59	111.79	170.92	48.07	-0.28	312.69	197.72	114.97	2.720		
3,000.00	2,962.75	2,941.75	2,941.75	9.08	115.67	171.57	48.07	-0.28	336.85	217.87	118.98	2.831		
3,100.00	3,059.72	3,038.72	3,038.72	9.58	119.55	172.14	48.07	-0.28	361.06	238.06	123.00	2.935		
3,200.00	3,156.69	3,135.69	3,135.69	10.07	123.43	172.64	48.07	-0.28	385.29	258.27	127.02	3.033		
3,300.00	3,253.66	3,232.66	3,232.66	10.57	127.31	173.07	48.07	-0.28	409.54	278.50	131.04	3.125		
3,400.00	3,350.63	3,329.63	3,329.63	11.08	131.19	173.46	48.07	-0.28	433.81	298.75	135.06	3.212		
3,500.00	3,447.60	3,426.60	3,426.60	11.58	135.06	173.81	48.07	-0.28	458.10	319.02	139.09	3.294		
3,600.00	3,544.57	3,523.57	3,523.57	12.09	138.94	174.12	48.07	-0.28	482.41	339.30	143.11	3.371		
3,700.00	3,641.54	3,620.54	3,620.54	12.60	142.82	174.41	48.07	-0.28	506.73	359.59	147.14	3.444		
3,800.00	3,738.51	3,717.51	3,717.51	13.11	146.70	174.66	48.07	-0.28	531.06	379.89	151.17	3.513		
3,900.00	3,835.47	3,814.47	3,814.47	13.62	150.58	174.90	48.07	-0.28	555.39	400.19	155.20	3.579		
4,000.00	3,932.44	3,911.44	3,911.44	14.14	154.46	175.11	48.07	-0.28	579.74	420.51	159.23	3.641		
4,100.00	4,029.41	4,008.41	4,008.41	14.65	158.34	175.31	48.07	-0.28	604.09	440.83	163.26	3.700		
4,200.00	4,126.38	4,105.38	4,105.38	15.17	162.22	175.49	48.07	-0.28	628.45	461.16	167.29	3.757		
4,300.00	4,223.35	4,202.35	4,202.35	15.68	166.09	175.66	48.07	-0.28	652.81	481.49	171.33	3.810		
4,400.00	4,320.32	4,299.32	4,299.32	16.20	169.97	175.82	48.07	-0.28	677.18	501.82	175.36	3.862		
4,500.00	4,417.29	4,396.29	4,396.29	16.72	173.85	175.96	48.07	-0.28	701.56	522.16	179.40	3.911		
4,600.00	4,514.26	4,493.26	4,493.26	17.23	177.73	176.10	48.07	-0.28	725.93	542.50	183.43	3.957		
4,700.00	4,611.23	4,590.23	4,590.23	17.75	181.61	176.23	48.07	-0.28	750.31	562.85	187.47	4.002		
4,800.00	4,708.20	4,687.20	4,687.20	18.27	185.49	176.34	48.07	-0.28	774.70	583.19	191.50	4.045		
4,900.00	4,805.17	4,784.17	4,784.17	18.79	189.37	176.46	48.07	-0.28	799.09	603.54	195.54	4.087		
5,000.00	4,902.14	4,881.14	4,881.14	19.31	193.25	176.56	48.07	-0.28	823.48	623.90	199.58	4.126		
5,100.00	4,999.11	4,978.11	4,978.11	19.83	197.12	176.66	48.07	-0.28	847.87	644.25	203.62	4.164		
5,200.00	5,096.08	5,075.08	5,075.08	20.35	201.00	176.75	48.07	-0.28	872.26	664.61	207.65	4.201		
5,300.00	5,193.05	5,172.05	5,172.05	20.87	204.88	176.84	48.07	-0.28	896.66	684.97	211.69	4.236		
5,400.00	5,290.01	5,269.01	5,269.01	21.40	208.76	176.93	48.07	-0.28	921.06	705.33	215.73	4.269		
5,500.00	5,386.98	5,365.98	5,365.98	21.92	212.64	177.01	48.07	-0.28	945.46	725.69	219.77	4.302		
5,600.00	5,483.95	5,462.95	5,462.95	22.44	216.52	177.08	48.07	-0.28	969.86	746.05	223.81	4.333		
5,699.11	5,580.06	5,559.06	5,559.06	22.96	220.36	177.15	48.07	-0.28	994.05	766.23	227.81	4.363		
5,800.00	5,678.31	5,657.31	5,657.31	23.40	224.29	177.24	48.07	-0.28	1,016.94	783.28	233.66	4.352		
5,900.00	5,776.42	5,755.42	5,755.42	23.72	228.22	177.31	48.07	-0.28	1,036.21	796.96	239.26	4.331		
6,000.00	5,875.15	5,854.15	5,854.15	24.01	232.17	177.36	48.07	-0.28	1,052.05	807.43	244.62	4.301		

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_JESSER 31-2
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 5158.00ft (Original Well Elev)
Reference Site:	WELD_JESSER 18-2 PAD	MD Reference:	WELL @ 5158.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_JESSER 31-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_JESSER 31-2	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 3-16-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design WELD_JESSER 18-2 PAD - JESSER #4-2A EXISTING - JESSER #4-2A EXISTING - JESSER #4-2A E												Offset Site Error:	0.00 ft
Survey Program: 0-UNKNOWN												Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
6,100.00	5,974.37	5,953.37	5,953.37	24.26	236.13	177.41	48.07	-0.28	1,064.44	814.70	249.74	4.262	
6,200.00	6,073.97	6,052.97	6,052.97	24.46	240.12	177.44	48.07	-0.28	1,073.36	818.78	254.58	4.216	
6,300.00	6,173.82	6,152.82	6,152.82	24.62	244.11	177.45	48.07	-0.28	1,078.81	819.67	259.14	4.163	
6,406.21	6,280.00	6,259.00	6,259.00	24.75	248.36	82.33	48.07	-0.28	1,080.78	817.13	263.64	4.099	
6,500.00	6,373.79	6,352.79	6,352.79	24.85	252.11	82.33	48.07	-0.28	1,080.78	813.22	267.56	4.039	
6,600.00	6,473.79	6,452.79	6,452.79	24.97	256.11	82.33	48.07	-0.28	1,080.78	809.04	271.74	3.977	
6,700.00	6,573.79	6,552.79	6,552.79	25.09	260.11	82.33	48.07	-0.28	1,080.78	804.85	275.92	3.917	
6,800.00	6,673.79	6,652.79	6,652.79	25.22	264.11	82.33	48.07	-0.28	1,080.78	800.67	280.10	3.858	
6,900.00	6,773.79	6,752.79	6,752.79	25.34	268.11	82.33	48.07	-0.28	1,080.78	796.49	284.29	3.802	
7,000.00	6,873.79	6,852.79	6,852.79	25.47	272.11	82.33	48.07	-0.28	1,080.78	792.30	288.47	3.747	
7,100.00	6,973.79	6,952.79	6,952.79	25.59	276.11	82.33	48.07	-0.28	1,080.78	788.12	292.66	3.693	
7,200.00	7,073.79	7,052.79	7,052.79	25.72	280.11	82.33	48.07	-0.28	1,080.78	783.93	296.85	3.641	
7,300.00	7,173.79	7,152.79	7,152.79	25.85	284.11	82.33	48.07	-0.28	1,080.78	779.74	301.03	3.590	
7,400.00	7,273.79	7,252.79	7,252.79	25.98	288.11	82.33	48.07	-0.28	1,080.78	775.55	305.22	3.541	
7,500.00	7,373.79	7,352.79	7,352.79	26.12	292.11	82.33	48.07	-0.28	1,080.78	771.36	309.41	3.493	
7,600.00	7,473.79	7,452.79	7,452.79	26.25	296.11	82.33	48.07	-0.28	1,080.78	767.17	313.60	3.446	
7,700.00	7,573.79	7,552.79	7,552.79	26.38	300.11	82.33	48.07	-0.28	1,080.78	762.98	317.79	3.401	
7,800.00	7,673.79	7,652.79	7,652.79	26.52	304.11	82.33	48.07	-0.28	1,080.78	758.79	321.99	3.357	
7,900.00	7,773.79	7,752.79	7,752.79	26.66	308.11	82.33	48.07	-0.28	1,080.78	754.60	326.18	3.313	
8,000.00	7,873.79	7,852.79	7,852.79	26.79	312.11	82.33	48.07	-0.28	1,080.78	750.40	330.37	3.271	
8,100.00	7,973.79	7,952.79	7,952.79	26.93	316.11	82.33	48.07	-0.28	1,080.78	746.21	334.57	3.230	
8,200.00	8,073.79	8,052.79	8,052.79	27.07	320.11	82.33	48.07	-0.28	1,080.78	742.02	338.76	3.190	
8,300.00	8,173.79	8,152.79	8,152.79	27.22	324.11	82.33	48.07	-0.28	1,080.78	737.82	342.96	3.151	
8,321.21	8,195.00	8,174.00	8,174.00	27.25	324.96	82.33	48.07	-0.28	1,080.78	736.93	343.85	3.143	

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_JESSER 31-2
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 5158.00ft (Original Well Elev)
Reference Site:	WELD_JESSER 18-2 PAD	MD Reference:	WELL @ 5158.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_JESSER 31-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_JESSER 31-2	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 3-16-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design WELD_JESSER 18-2 PAD - P_BROWN 3-2 - P_BROWN 3-2 - PLAN #1 3-16-10 RHS												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	89.39	0.75	70.23	70.24				
100.00	100.00	100.00	100.00	0.10	0.10	89.39	0.75	70.23	70.24	70.04	0.19	367.629	
200.00	200.00	200.00	200.00	0.32	0.32	89.39	0.75	70.23	70.24	69.60	0.64	109.644	
300.00	300.00	300.00	300.00	0.55	0.55	89.39	0.75	70.23	70.24	69.15	1.09	64.430	
400.00	400.00	400.00	400.00	0.77	0.77	89.39	0.75	70.23	70.24	68.70	1.54	45.618	
500.00	500.00	500.00	500.00	0.99	0.99	89.39	0.75	70.23	70.24	68.25	1.99	35.309	
600.00	600.00	600.00	600.00	1.22	1.22	89.39	0.75	70.23	70.24	67.80	2.44	28.800	
700.00	700.00	700.00	700.00	1.44	1.44	89.39	0.75	70.23	70.24	67.35	2.89	24.318	
800.00	800.00	800.00	800.00	1.67	1.67	89.39	0.75	70.23	70.24	66.90	3.34	21.043	
900.00	900.00	900.00	900.00	1.89	1.89	89.39	0.75	70.23	70.24	66.45	3.79	18.545	
1,000.00	1,000.00	1,000.00	1,000.00	2.12	2.12	89.39	0.75	70.23	70.24	66.00	4.24	16.577	
1,100.00	1,100.00	1,100.00	1,100.00	2.34	2.34	89.39	0.75	70.23	70.24	65.55	4.69	14.987	
1,200.00	1,200.00	1,200.00	1,200.00	2.57	2.57	89.39	0.75	70.23	70.24	65.10	5.14	13.675	
1,300.00	1,300.00	1,300.00	1,300.00	2.79	2.79	89.39	0.75	70.23	70.24	64.65	5.59	12.575 CC, ES	
1,400.00	1,399.98	1,398.05	1,398.03	3.00	3.01	-176.43	1.84	71.50	73.29	67.29	6.01	12.204 SF	
1,500.00	1,499.84	1,495.48	1,495.32	3.21	3.22	-178.84	5.10	75.28	82.56	76.16	6.40	12.898	
1,600.00	1,599.45	1,591.65	1,591.15	3.42	3.44	178.16	10.42	81.47	98.17	91.38	6.79	14.460	
1,700.00	1,698.70	1,685.99	1,684.83	3.65	3.66	175.28	17.69	89.91	120.20	113.03	7.17	16.762	
1,800.00	1,797.47	1,777.98	1,775.76	3.91	3.90	172.82	26.70	100.38	148.54	141.00	7.55	19.685	
1,900.00	1,895.62	1,867.11	1,863.42	4.21	4.16	170.83	37.25	112.63	183.01	175.09	7.91	23.123	
2,007.10	1,999.94	1,958.96	1,953.16	4.58	4.45	169.14	49.98	127.41	226.43	218.13	8.30	27.277	
2,100.00	2,090.03	2,040.59	2,032.52	4.94	4.74	168.08	62.46	141.92	267.45	258.74	8.71	30.706	
2,200.00	2,187.00	2,130.15	2,119.57	5.35	5.07	167.22	76.22	157.90	311.75	302.59	9.16	34.017	
2,300.00	2,283.97	2,219.72	2,206.61	5.78	5.42	166.58	89.99	173.88	356.10	346.47	9.63	36.978	
2,400.00	2,380.93	2,309.28	2,293.66	6.23	5.79	166.07	103.75	189.86	400.48	390.38	10.10	39.632	
2,500.00	2,477.90	2,398.85	2,380.70	6.68	6.16	165.67	117.51	205.85	444.88	434.29	10.59	42.017	
2,600.00	2,574.87	2,488.41	2,467.75	7.15	6.54	165.34	131.27	221.83	489.29	478.21	11.08	44.165	
2,700.00	2,671.84	2,577.98	2,554.80	7.62	6.93	165.07	145.03	237.81	533.71	522.14	11.58	46.108	
2,800.00	2,768.81	2,667.54	2,641.84	8.10	7.33	164.84	158.79	253.79	578.14	566.07	12.08	47.870	
2,900.00	2,865.78	2,757.11	2,728.89	8.59	7.73	164.64	172.55	269.78	622.58	610.00	12.58	49.474	
3,000.00	2,962.75	2,846.67	2,815.93	9.08	8.14	164.47	186.31	285.76	667.02	653.93	13.09	50.938	
3,100.00	3,059.72	2,936.24	2,902.98	9.58	8.55	164.31	200.07	301.74	711.47	697.86	13.61	52.278	
3,200.00	3,156.69	3,025.80	2,990.03	10.07	8.96	164.18	213.83	317.72	755.92	741.79	14.13	53.508	
3,300.00	3,253.66	3,115.37	3,077.07	10.57	9.38	164.06	227.59	333.71	800.37	785.72	14.65	54.641	
3,400.00	3,350.63	3,204.93	3,164.12	11.08	9.80	163.96	241.35	349.69	844.83	829.66	15.17	55.686	
3,500.00	3,447.60	3,294.50	3,251.17	11.58	10.22	163.86	255.11	365.67	889.29	873.59	15.70	56.652	
3,600.00	3,544.57	3,384.06	3,338.21	12.09	10.64	163.78	268.87	381.65	933.75	917.52	16.23	57.548	
3,700.00	3,641.54	3,473.63	3,425.26	12.60	11.07	163.70	282.63	397.64	978.21	961.45	16.76	58.381	
3,800.00	3,738.51	3,563.19	3,512.30	13.11	11.49	163.63	296.39	413.62	1,022.67	1,005.38	17.29	59.157	
3,900.00	3,835.47	3,652.75	3,599.35	13.62	11.92	163.56	310.15	429.60	1,067.13	1,049.31	17.82	59.881	
4,000.00	3,932.44	3,742.32	3,686.40	14.14	12.35	163.50	323.92	445.58	1,111.60	1,093.24	18.36	60.559	
4,100.00	4,029.41	3,831.88	3,773.44	14.65	12.78	163.44	337.68	461.57	1,156.06	1,137.17	18.89	61.193	
4,200.00	4,126.38	3,921.45	3,860.49	15.17	13.21	163.39	351.44	477.55	1,200.53	1,181.10	19.43	61.789	
4,300.00	4,223.35	4,011.01	3,947.54	15.68	13.64	163.34	365.20	493.53	1,245.00	1,225.03	19.97	62.350	
4,400.00	4,320.32	4,100.58	4,034.58	16.20	14.08	163.30	378.96	509.51	1,289.46	1,268.96	20.51	62.877	
4,500.00	4,417.29	4,190.14	4,121.63	16.72	14.51	163.26	392.72	525.50	1,333.93	1,312.88	21.05	63.375	
4,600.00	4,514.26	4,279.71	4,208.67	17.23	14.94	163.22	406.48	541.48	1,378.40	1,356.81	21.59	63.845	
4,700.00	4,611.23	4,369.27	4,295.72	17.75	15.38	163.18	420.24	557.46	1,422.87	1,400.74	22.13	64.289	
4,800.00	4,708.20	4,458.84	4,382.77	18.27	15.81	163.15	434.00	573.44	1,467.34	1,444.67	22.68	64.710	
4,900.00	4,805.17	4,548.40	4,469.81	18.79	16.25	163.12	447.76	589.43	1,511.81	1,488.59	23.22	65.110	
5,000.00	4,902.14	4,637.97	4,556.86	19.31	16.68	163.08	461.52	605.41	1,556.28	1,532.52	23.76	65.489	
5,100.00	4,999.11	4,727.53	4,643.91	19.83	17.12	163.06	475.28	621.39	1,600.75	1,576.44	24.31	65.850	

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_JESSER 31-2
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 5158.00ft (Original Well Elev)
Reference Site:	WELD_JESSER 18-2 PAD	MD Reference:	WELL @ 5158.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_JESSER 31-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_JESSER 31-2	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 3-16-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design WELD_JESSER 18-2 PAD - P_BROWN 3-2 - P_BROWN 3-2 - PLAN #1 3-16-10 RHS												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
5,200.00	5,096.08	4,817.10	4,730.95	20.35	17.56	163.03	489.04	637.38	1,645.22	1,620.37	24.85	66.194	
5,300.00	5,193.05	4,906.66	4,818.00	20.87	18.00	163.00	502.80	653.36	1,689.70	1,664.29	25.40	66.521	
5,400.00	5,290.01	4,996.23	4,905.04	21.40	18.43	162.98	516.56	669.34	1,734.17	1,708.22	25.95	66.833	
5,500.00	5,386.98	5,085.79	4,992.09	21.92	18.87	162.96	530.32	685.32	1,778.64	1,752.14	26.50	67.131	
5,600.00	5,483.95	5,175.35	5,079.14	22.44	19.31	162.93	544.08	701.31	1,823.11	1,796.07	27.04	67.416	
5,699.11	5,580.06	5,264.12	5,165.41	22.96	19.74	162.91	557.72	717.15	1,867.19	1,839.60	27.59	67.686	
5,800.00	5,678.31	5,355.22	5,253.94	23.40	20.19	163.15	571.72	733.40	1,910.53	1,882.23	28.30	67.517	
5,900.00	5,776.42	5,446.88	5,343.03	23.72	20.64	163.34	585.80	749.76	1,950.43	1,921.48	28.95	67.372	
6,000.00	5,875.15	5,539.80	5,433.33	24.01	21.10	163.47	600.08	766.34	1,987.25	1,957.68	29.57	67.206	
6,100.00	5,974.37	5,633.86	5,524.74	24.26	21.56	163.55	614.53	783.12	2,020.95	1,990.79	30.15	67.025	
6,200.00	6,073.97	5,729.69	5,615.92	24.46	22.32	163.45	642.15	815.21	2,050.30	2,019.39	30.91	66.322	
6,300.00	6,173.82	6,137.13	6,020.53	24.62	23.13	163.31	668.56	845.88	2,067.95	2,036.17	31.78	65.079	
6,406.21	6,280.00	6,396.83	6,280.00	24.75	23.52	68.18	674.31	852.56	2,072.47	2,040.07	32.40	63.962	
6,500.00	6,373.79	6,490.62	6,373.79	24.85	23.64	68.18	674.31	852.56	2,072.47	2,039.75	32.72	63.332	
6,600.00	6,473.79	6,590.62	6,473.79	24.97	23.77	68.18	674.31	852.56	2,072.47	2,039.40	33.08	62.658	
6,700.00	6,573.79	6,690.62	6,573.79	25.09	23.90	68.18	674.31	852.56	2,072.47	2,039.04	33.43	61.994	
6,800.00	6,673.79	6,790.62	6,673.79	25.22	24.03	68.18	674.31	852.56	2,072.47	2,038.69	33.79	61.340	
6,900.00	6,773.79	6,890.62	6,773.79	25.34	24.16	68.18	674.31	852.56	2,072.47	2,038.33	34.15	60.696	
7,000.00	6,873.79	6,990.62	6,873.79	25.47	24.30	68.18	674.31	852.56	2,072.47	2,037.97	34.51	60.062	
7,100.00	6,973.79	7,090.62	6,973.79	25.59	24.43	68.18	674.31	852.56	2,072.47	2,037.61	34.87	59.437	
7,200.00	7,073.79	7,190.62	7,073.79	25.72	24.57	68.18	674.31	852.56	2,072.47	2,037.24	35.23	58.821	
7,300.00	7,173.79	7,290.62	7,173.79	25.85	24.71	68.18	674.31	852.56	2,072.47	2,036.87	35.60	58.216	
7,400.00	7,273.79	7,390.62	7,273.79	25.98	24.84	68.18	674.31	852.56	2,072.47	2,036.51	35.97	57.619	
7,500.00	7,373.79	7,490.62	7,373.79	26.12	24.98	68.18	674.31	852.56	2,072.47	2,036.14	36.34	57.032	
7,600.00	7,473.79	7,590.62	7,473.79	26.25	25.13	68.18	674.31	852.56	2,072.47	2,035.76	36.71	56.454	
7,700.00	7,573.79	7,690.62	7,573.79	26.38	25.27	68.18	674.31	852.56	2,072.47	2,035.39	37.09	55.884	
7,800.00	7,673.79	7,790.62	7,673.79	26.52	25.41	68.18	674.31	852.56	2,072.47	2,035.01	37.46	55.324	
7,900.00	7,773.79	7,890.62	7,773.79	26.66	25.56	68.18	674.31	852.56	2,072.47	2,034.64	37.84	54.773	
8,000.00	7,873.79	7,990.62	7,873.79	26.79	25.70	68.18	674.31	852.56	2,072.47	2,034.26	38.22	54.230	
8,100.00	7,973.79	8,090.62	7,973.79	26.93	25.85	68.18	674.31	852.56	2,072.47	2,033.88	38.60	53.696	
8,200.00	8,073.79	8,190.62	8,073.79	27.07	26.00	68.18	674.31	852.56	2,072.47	2,033.50	38.98	53.170	
8,261.33	8,135.13	8,251.95	8,135.13	27.16	26.09	68.18	674.31	852.56	2,072.47	2,033.26	39.21	52.851	
8,300.00	8,173.79	8,276.83	8,160.00	27.22	26.13	68.18	674.31	852.56	2,072.52	2,033.19	39.33	52.689	
8,321.21	8,195.00	8,276.83	8,160.00	27.25	26.13	68.18	674.31	852.56	2,072.77	2,033.39	39.38	52.642	

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_JESSER 31-2
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 5158.00ft (Original Well Elev)
Reference Site:	WELD_JESSER 18-2 PAD	MD Reference:	WELL @ 5158.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_JESSER 31-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_JESSER 31-2	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 3-16-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design WELD_JESSER 18-2 PAD - P_BROWN 3-2S - P_BROWN 3-2S - PLAN #1 3-16-10 RHS												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	89.54	0.72	90.10	90.10				
100.00	100.00	100.00	100.00	0.10	0.10	89.54	0.72	90.10	90.10	89.91	0.19	471.608	
200.00	200.00	200.00	200.00	0.32	0.32	89.54	0.72	90.10	90.10	89.46	0.64	140.655	
300.00	300.00	300.00	300.00	0.55	0.55	89.54	0.72	90.10	90.10	89.01	1.09	82.653	
400.00	400.00	400.00	400.00	0.77	0.77	89.54	0.72	90.10	90.10	88.56	1.54	58.521	
500.00	500.00	500.00	500.00	0.99	0.99	89.54	0.72	90.10	90.10	88.11	1.99	45.296	
600.00	600.00	600.00	600.00	1.22	1.22	89.54	0.72	90.10	90.10	87.66	2.44	36.946	
700.00	700.00	700.00	700.00	1.44	1.44	89.54	0.72	90.10	90.10	87.21	2.89	31.196	
800.00	800.00	800.00	800.00	1.67	1.67	89.54	0.72	90.10	90.10	86.76	3.34	26.994	
900.00	900.00	900.00	900.00	1.89	1.89	89.54	0.72	90.10	90.10	86.31	3.79	23.790	
1,000.00	1,000.00	1,000.00	1,000.00	2.12	2.12	89.54	0.72	90.10	90.10	85.86	4.24	21.266	
1,100.00	1,100.00	1,100.00	1,100.00	2.34	2.34	89.54	0.72	90.10	90.10	85.41	4.69	19.226	
1,200.00	1,200.00	1,200.00	1,200.00	2.57	2.57	89.54	0.72	90.10	90.10	84.97	5.14	17.543	
1,300.00	1,300.00	1,300.00	1,300.00	2.79	2.79	89.54	0.72	90.10	90.10	84.52	5.59	16.131 CC, ES	
1,400.00	1,399.98	1,397.77	1,397.76	3.00	3.00	-175.70	1.19	91.26	93.03	87.03	6.00	15.500 SF	
1,500.00	1,499.84	1,495.05	1,494.97	3.21	3.21	-176.67	2.60	94.71	101.82	95.43	6.39	15.934	
1,600.00	1,599.45	1,591.35	1,591.07	3.42	3.42	-177.97	4.93	100.38	116.48	109.71	6.77	17.198	
1,700.00	1,698.70	1,686.19	1,685.53	3.65	3.64	-179.32	8.11	108.15	136.96	129.82	7.15	19.159	
1,800.00	1,797.47	1,779.14	1,777.89	3.91	3.86	179.44	12.10	117.87	163.19	155.67	7.52	21.711	
1,900.00	1,895.62	1,869.80	1,867.69	4.21	4.09	178.38	16.80	129.35	195.02	187.14	7.87	24.766	
2,007.10	1,999.94	1,963.92	1,960.58	4.58	4.36	177.43	22.54	143.36	235.14	226.89	8.25	28.510	
2,100.00	2,090.03	2,043.38	2,038.70	4.94	4.60	176.78	28.06	156.82	273.45	264.82	8.63	31.685	
2,200.00	2,187.00	2,127.25	2,120.80	5.35	4.87	176.17	34.55	172.67	316.60	307.55	9.05	34.999	
2,300.00	2,283.97	2,209.36	2,200.80	5.78	5.17	175.64	41.56	189.79	361.67	352.21	9.46	38.212	
2,400.00	2,380.93	2,289.70	2,278.67	6.23	5.48	175.16	49.06	208.08	408.61	398.73	9.89	41.325	
2,500.00	2,477.90	2,368.26	2,354.39	6.68	5.82	174.74	56.98	227.43	457.36	447.05	10.31	44.345	
2,600.00	2,574.87	2,445.02	2,427.95	7.15	6.17	174.35	65.30	247.72	507.86	497.12	10.74	47.286	
2,700.00	2,671.84	2,530.13	2,509.23	7.62	6.59	173.97	74.86	271.06	559.31	548.12	11.19	49.969	
2,800.00	2,768.81	2,615.82	2,591.07	8.10	7.03	173.66	84.49	294.56	610.79	599.13	11.65	52.418	
2,900.00	2,865.78	2,701.51	2,672.91	8.59	7.47	173.39	94.12	318.07	662.27	650.15	12.12	54.659	
3,000.00	2,962.75	2,787.20	2,754.75	9.08	7.93	173.17	103.75	341.57	713.76	701.18	12.59	56.711	
3,100.00	3,059.72	2,872.89	2,836.59	9.58	8.40	172.97	113.38	365.08	765.26	752.20	13.06	58.599	
3,200.00	3,156.69	2,958.59	2,918.43	10.07	8.87	172.80	123.01	388.58	816.77	803.23	13.54	60.339	
3,300.00	3,253.66	3,044.28	3,000.27	10.57	9.35	172.64	132.64	412.08	868.28	854.26	14.02	61.947	
3,400.00	3,350.63	3,129.97	3,082.11	11.08	9.83	172.51	142.27	435.59	919.79	905.29	14.50	63.436	
3,500.00	3,447.60	3,215.66	3,163.96	11.58	10.32	172.39	151.90	459.09	971.31	956.33	14.99	64.818	
3,600.00	3,544.57	3,301.35	3,245.80	12.09	10.81	172.28	161.53	482.60	1,022.83	1,007.36	15.47	66.103	
3,700.00	3,641.54	3,387.04	3,327.64	12.60	11.30	172.18	171.17	506.10	1,074.35	1,058.39	15.96	67.299	
3,800.00	3,738.51	3,472.73	3,409.48	13.11	11.80	172.09	180.80	529.60	1,125.88	1,109.42	16.46	68.415	
3,900.00	3,835.47	3,558.42	3,491.32	13.62	12.30	172.01	190.43	553.11	1,177.41	1,160.46	16.95	69.460	
4,000.00	3,932.44	3,644.12	3,573.16	14.14	12.80	171.94	200.06	576.61	1,228.94	1,211.49	17.45	70.438	
4,100.00	4,029.41	3,729.81	3,655.00	14.65	13.31	171.87	209.69	600.12	1,280.47	1,262.52	17.94	71.357	
4,200.00	4,126.38	3,815.50	3,736.84	15.17	13.81	171.81	219.32	623.62	1,332.00	1,313.55	18.44	72.220	
4,300.00	4,223.35	3,901.19	3,818.68	15.68	14.32	171.75	228.95	647.12	1,383.53	1,364.59	18.94	73.033	
4,400.00	4,320.32	3,986.88	3,900.52	16.20	14.83	171.69	238.58	670.63	1,435.06	1,415.62	19.45	73.799	
4,500.00	4,417.29	4,072.57	3,982.36	16.72	15.34	171.64	248.21	694.13	1,486.60	1,466.65	19.95	74.523	
4,600.00	4,514.26	4,158.26	4,064.20	17.23	15.85	171.59	257.84	717.64	1,538.13	1,517.68	20.45	75.207	
4,700.00	4,611.23	4,243.96	4,146.04	17.75	16.36	171.55	267.47	741.14	1,589.67	1,568.71	20.96	75.855	
4,800.00	4,708.20	4,329.65	4,227.88	18.27	16.87	171.51	277.10	764.64	1,641.20	1,619.74	21.46	76.469	
4,900.00	4,805.17	4,415.34	4,309.72	18.79	17.39	171.47	286.73	788.15	1,692.74	1,670.77	21.97	77.052	
5,000.00	4,902.14	4,501.03	4,391.56	19.31	17.90	171.43	296.36	811.65	1,744.28	1,721.80	22.48	77.606	
5,100.00	4,999.11	4,586.72	4,473.40	19.83	18.42	171.40	305.99	835.16	1,795.82	1,772.83	22.98	78.133	

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_JESSER 31-2
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 5158.00ft (Original Well Elev)
Reference Site:	WELD_JESSER 18-2 PAD	MD Reference:	WELL @ 5158.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_JESSER 31-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_JESSER 31-2	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 3-16-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design WELD_JESSER 18-2 PAD - P_BROWN 3-2S - P_BROWN 3-2S - PLAN #1 3-16-10 RHS												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
5,200.00	5,096.08	4,672.41	4,555.24	20.35	18.93	171.37	315.62	858.66	1,847.36	1,823.86	23.49	78.635	
5,300.00	5,193.05	4,758.10	4,637.08	20.87	19.45	171.34	325.25	882.16	1,898.89	1,874.89	24.00	79.114	
5,400.00	5,290.01	4,843.79	4,718.92	21.40	19.97	171.31	334.88	905.67	1,950.43	1,925.92	24.51	79.571	
5,500.00	5,386.98	4,929.49	4,800.76	21.92	20.48	171.28	344.51	929.17	2,001.97	1,976.95	25.02	80.007	
5,600.00	5,483.95	5,015.18	4,882.60	22.44	21.00	171.25	354.14	952.68	2,053.51	2,027.98	25.53	80.425	
5,699.11	5,580.06	5,100.11	4,963.71	22.96	21.52	171.23	363.69	975.97	2,104.59	2,078.55	26.04	80.821	
5,800.00	5,678.31	5,187.44	5,047.13	23.40	22.04	171.37	373.50	999.93	2,155.08	2,128.34	26.74	80.586	
5,900.00	5,776.42	5,206.16	5,065.00	23.72	22.16	171.53	375.60	1,005.06	2,203.19	2,175.98	27.20	80.997	
6,000.00	5,875.15	5,206.16	5,065.00	24.01	22.16	171.69	375.60	1,005.06	2,251.67	2,224.10	27.56	81.686	
6,100.00	5,974.37	5,206.16	5,065.00	24.26	22.16	171.85	375.60	1,005.06	2,300.52	2,272.64	27.88	82.500	
6,200.00	6,073.97	5,206.16	5,065.00	24.46	22.16	172.01	375.60	1,005.06	2,349.67	2,321.51	28.16	83.439	
6,300.00	6,173.82	5,206.16	5,065.00	24.62	22.16	172.16	375.60	1,005.06	2,399.03	2,370.64	28.39	84.500	
6,406.21	6,280.00	5,206.16	5,065.00	24.75	22.16	77.20	375.60	1,005.06	2,451.61	2,423.02	28.59	85.749	
6,500.00	6,373.79	5,206.16	5,065.00	24.85	22.16	77.20	375.60	1,005.06	2,499.42	2,470.67	28.75	86.926	
6,600.00	6,473.79	5,206.16	5,065.00	24.97	22.16	77.20	375.60	1,005.06	2,553.21	2,524.28	28.93	88.246	
6,700.00	6,573.79	5,206.16	5,065.00	25.09	22.16	77.20	375.60	1,005.06	2,609.72	2,580.61	29.11	89.640	
6,800.00	6,673.79	5,206.16	5,065.00	25.22	22.16	77.20	375.60	1,005.06	2,668.78	2,639.49	29.29	91.101	
6,900.00	6,773.79	5,206.16	5,065.00	25.34	22.16	77.20	375.60	1,005.06	2,730.23	2,700.75	29.48	92.621	
7,000.00	6,873.79	5,206.16	5,065.00	25.47	22.16	77.20	375.60	1,005.06	2,793.91	2,764.25	29.66	94.195	
7,100.00	6,973.79	5,206.16	5,065.00	25.59	22.16	77.20	375.60	1,005.06	2,859.66	2,829.82	29.85	95.815	
7,200.00	7,073.79	5,206.16	5,065.00	25.72	22.16	77.20	375.60	1,005.06	2,927.36	2,897.33	30.03	97.477	
7,300.00	7,173.79	5,206.16	5,065.00	25.85	22.16	77.20	375.60	1,005.06	2,996.86	2,966.65	30.22	99.176	
7,400.00	7,273.79	5,206.16	5,065.00	25.98	22.16	77.20	375.60	1,005.06	3,068.05	3,037.65	30.41	100.906	
7,500.00	7,373.79	5,206.16	5,065.00	26.12	22.16	77.20	375.60	1,005.06	3,140.81	3,110.22	30.59	102.663	
7,600.00	7,473.79	5,206.16	5,065.00	26.25	22.16	77.20	375.60	1,005.06	3,215.04	3,184.25	30.78	104.443	
7,700.00	7,573.79	5,206.16	5,065.00	26.38	22.16	77.20	375.60	1,005.06	3,290.63	3,259.65	30.97	106.243	
7,800.00	7,673.79	5,206.16	5,065.00	26.52	22.16	77.20	375.60	1,005.06	3,367.49	3,336.32	31.16	108.059	
7,900.00	7,773.79	5,206.16	5,065.00	26.66	22.16	77.20	375.60	1,005.06	3,445.54	3,414.18	31.36	109.888	
8,000.00	7,873.79	5,206.16	5,065.00	26.79	22.16	77.20	375.60	1,005.06	3,524.70	3,493.15	31.55	111.727	
8,100.00	7,973.79	5,206.16	5,065.00	26.93	22.16	77.20	375.60	1,005.06	3,604.89	3,573.15	31.74	113.574	
8,200.00	8,073.79	5,206.16	5,065.00	27.07	22.16	77.20	375.60	1,005.06	3,686.06	3,654.12	31.93	115.427	
8,300.00	8,173.79	5,206.16	5,065.00	27.22	22.16	77.20	375.60	1,005.06	3,768.13	3,736.00	32.13	117.282	
8,321.21	8,195.00	5,206.16	5,065.00	27.25	22.16	77.20	375.60	1,005.06	3,785.64	3,753.47	32.17	117.676	

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_JESSER 31-2
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 5158.00ft (Original Well Elev)
Reference Site:	WELD_JESSER 18-2 PAD	MD Reference:	WELL @ 5158.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_JESSER 31-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_JESSER 31-2	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 3-16-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design WELD_JESSER 18-2 PAD - P_BROWN 4-2 - P_BROWN 4-2 - PLAN #1 3-16-10 RHS												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	89.65	0.36	60.16	60.16				
100.00	100.00	100.00	100.00	0.10	0.10	89.65	0.36	60.16	60.16	59.97	0.19	314.889	
200.00	200.00	200.00	200.00	0.32	0.32	89.65	0.36	60.16	60.16	59.52	0.64	93.914	
300.00	300.00	300.00	300.00	0.55	0.55	89.65	0.36	60.16	60.16	59.07	1.09	55.187	
400.00	400.00	400.00	400.00	0.77	0.77	89.65	0.36	60.16	60.16	58.62	1.54	39.074	
500.00	500.00	500.00	500.00	0.99	0.99	89.65	0.36	60.16	60.16	58.17	1.99	30.244	
600.00	600.00	600.00	600.00	1.22	1.22	89.65	0.36	60.16	60.16	57.72	2.44	24.669	
700.00	700.00	700.00	700.00	1.44	1.44	89.65	0.36	60.16	60.16	57.27	2.89	20.829	
800.00	800.00	800.00	800.00	1.67	1.67	89.65	0.36	60.16	60.16	56.82	3.34	18.024	
900.00	900.00	900.00	900.00	1.89	1.89	89.65	0.36	60.16	60.16	56.37	3.79	15.885	
1,000.00	1,000.00	1,000.00	1,000.00	2.12	2.12	89.65	0.36	60.16	60.16	55.92	4.24	14.199	
1,100.00	1,100.00	1,100.00	1,100.00	2.34	2.34	89.65	0.36	60.16	60.16	55.47	4.69	12.837	
1,200.00	1,200.00	1,200.00	1,200.00	2.57	2.57	89.65	0.36	60.16	60.16	55.02	5.14	11.714	
1,300.00	1,300.00	1,300.00	1,300.00	2.79	2.79	89.65	0.36	60.16	60.16	54.57	5.59	10.771 CC, ES	
1,400.00	1,399.98	1,401.29	1,401.26	3.00	3.02	-176.68	1.77	59.04	60.83	54.81	6.02	10.112	
1,500.00	1,499.84	1,502.40	1,502.23	3.21	3.24	179.13	5.96	55.71	63.05	56.63	6.42	9.817 SF	
1,600.00	1,599.45	1,603.18	1,602.61	3.42	3.47	172.85	12.91	50.18	67.43	60.59	6.83	9.868	
1,700.00	1,698.70	1,703.45	1,702.12	3.65	3.72	165.46	22.57	42.51	74.69	67.43	7.26	10.292	
1,800.00	1,797.47	1,803.07	1,800.49	3.91	3.98	157.97	34.85	32.74	85.44	77.72	7.71	11.075	
1,900.00	1,895.62	1,901.69	1,897.39	4.21	4.27	151.49	49.19	21.34	100.04	91.82	8.22	12.172	
2,007.10	1,999.94	2,006.65	2,000.46	4.58	4.60	147.17	64.69	9.02	119.86	111.06	8.80	13.620	
2,100.00	2,090.03	2,097.47	2,089.66	4.94	4.90	145.00	78.10	-1.65	138.81	129.43	9.38	14.803	
2,200.00	2,187.00	2,195.23	2,185.66	5.35	5.24	143.23	92.54	-13.13	159.35	149.33	10.02	15.896	
2,300.00	2,283.97	2,293.00	2,281.67	5.78	5.58	141.87	106.97	-24.60	180.02	169.32	10.70	16.829	
2,400.00	2,380.93	2,390.76	2,377.68	6.23	5.93	140.79	121.41	-36.08	200.76	189.37	11.39	17.627	
2,500.00	2,477.90	2,488.52	2,473.68	6.68	6.29	139.91	135.85	-47.56	221.55	209.45	12.10	18.312	
2,600.00	2,574.87	2,586.28	2,569.69	7.15	6.66	139.18	150.28	-59.04	242.39	229.56	12.82	18.904	
2,700.00	2,671.84	2,684.05	2,665.70	7.62	7.03	138.57	164.72	-70.52	263.25	249.70	13.56	19.418	
2,800.00	2,768.81	2,781.81	2,761.71	8.10	7.40	138.05	179.16	-81.99	284.15	269.84	14.30	19.867	
2,900.00	2,865.78	2,879.57	2,857.71	8.59	7.78	137.59	193.59	-93.47	305.06	290.00	15.06	20.262	
3,000.00	2,962.75	2,977.33	2,953.72	9.08	8.16	137.20	208.03	-104.95	325.99	310.17	15.82	20.609	
3,100.00	3,059.72	3,075.10	3,049.73	9.58	8.55	136.86	222.47	-116.43	346.93	330.34	16.58	20.918	
3,200.00	3,156.69	3,172.86	3,145.74	10.07	8.93	136.55	236.90	-127.91	367.88	350.52	17.36	21.194	
3,300.00	3,253.66	3,270.62	3,241.74	10.57	9.32	136.28	251.34	-139.38	388.84	370.70	18.14	21.440	
3,400.00	3,350.63	3,368.39	3,337.75	11.08	9.71	136.03	265.78	-150.86	409.81	390.89	18.92	21.662	
3,500.00	3,447.60	3,466.15	3,433.76	11.58	10.10	135.81	280.21	-162.34	430.78	411.08	19.70	21.863	
3,600.00	3,544.57	3,563.91	3,529.76	12.09	10.49	135.61	294.65	-173.82	451.76	431.27	20.49	22.045	
3,700.00	3,641.54	3,661.67	3,625.77	12.60	10.89	135.42	309.09	-185.29	472.74	451.46	21.29	22.210	
3,800.00	3,738.51	3,759.44	3,721.78	13.11	11.28	135.26	323.52	-196.77	493.73	471.65	22.08	22.361	
3,900.00	3,835.47	3,857.20	3,817.79	13.62	11.68	135.10	337.96	-208.25	514.73	491.85	22.88	22.500	
4,000.00	3,932.44	3,954.96	3,913.79	14.14	12.08	134.96	352.39	-219.73	535.72	512.05	23.68	22.627	
4,100.00	4,029.41	4,052.72	4,009.80	14.65	12.47	134.83	366.83	-231.21	556.72	532.24	24.48	22.745	
4,200.00	4,126.38	4,150.49	4,105.81	15.17	12.87	134.71	381.27	-242.68	577.72	552.44	25.28	22.853	
4,300.00	4,223.35	4,248.25	4,201.82	15.68	13.27	134.59	395.70	-254.16	598.73	572.64	26.08	22.954	
4,400.00	4,320.32	4,346.01	4,297.82	16.20	13.67	134.49	410.14	-265.64	619.73	592.84	26.89	23.048	
4,500.00	4,417.29	4,443.78	4,393.83	16.72	14.07	134.39	424.58	-277.12	640.74	613.04	27.70	23.135	
4,600.00	4,514.26	4,541.54	4,489.84	17.23	14.47	134.30	439.01	-288.60	661.75	633.24	28.50	23.216	
4,700.00	4,611.23	4,639.30	4,585.84	17.75	14.87	134.21	453.45	-300.07	682.76	653.45	29.31	23.292	
4,800.00	4,708.20	4,737.06	4,681.85	18.27	15.27	134.13	467.89	-311.55	703.77	673.65	30.12	23.363	
4,900.00	4,805.17	4,834.83	4,777.86	18.79	15.68	134.05	482.32	-323.03	724.78	693.85	30.93	23.430	
5,000.00	4,902.14	4,932.59	4,873.87	19.31	16.08	133.98	496.76	-334.51	745.80	714.05	31.75	23.492	
5,100.00	4,999.11	5,030.35	4,969.87	19.83	16.48	133.91	511.20	-345.99	766.82	734.26	32.56	23.551	

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_JESSER 31-2
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 5158.00ft (Original Well Elev)
Reference Site:	WELD_JESSER 18-2 PAD	MD Reference:	WELL @ 5158.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_JESSER 31-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_JESSER 31-2	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 3-16-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design WELD_JESSER 18-2 PAD - P_BROWN 4-2 - P_BROWN 4-2 - PLAN #1 3-16-10 RHS												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
5,200.00	5,096.08	5,128.12	5,065.88	20.35	16.89	133.85	525.63	-357.46	787.83	754.46	33.37	23.607	
5,300.00	5,193.05	5,225.88	5,161.89	20.87	17.29	133.79	540.07	-368.94	808.85	774.66	34.19	23.660	
5,400.00	5,290.01	5,323.64	5,257.90	21.40	17.69	133.73	554.50	-380.42	829.87	794.87	35.00	23.709	
5,500.00	5,386.98	5,421.40	5,353.90	21.92	18.10	133.67	568.94	-391.90	850.89	815.07	35.82	23.757	
5,600.00	5,483.95	5,519.17	5,449.91	22.44	18.50	133.62	583.38	-403.38	871.91	835.27	36.63	23.801	
5,699.11	5,580.06	5,616.06	5,545.06	22.96	18.90	133.57	597.69	-414.75	892.74	855.30	37.44	23.843	
5,800.00	5,678.31	5,714.92	5,642.15	23.40	19.31	133.74	612.28	-426.36	912.75	874.47	38.28	23.846	
5,900.00	5,776.42	5,814.97	5,740.42	23.72	19.70	133.71	626.98	-438.04	930.19	891.16	39.03	23.833	
6,000.00	5,875.15	5,921.36	5,845.40	24.01	20.02	133.63	640.47	-448.77	944.73	905.06	39.66	23.819	
6,100.00	5,974.37	6,028.52	5,951.71	24.26	20.29	133.59	650.97	-457.11	956.08	915.87	40.21	23.779	
6,200.00	6,073.97	6,136.23	6,059.00	24.46	20.52	133.57	658.37	-463.00	964.21	923.55	40.66	23.716	
6,300.00	6,173.82	6,244.32	6,166.94	24.62	20.71	133.58	662.63	-466.39	969.10	928.09	41.02	23.628	
6,406.21	6,280.00	6,357.39	6,280.00	24.75	20.86	38.49	663.74	-467.27	970.75	929.45	41.30	23.505	
6,500.00	6,373.79	6,451.18	6,373.79	24.85	20.99	38.49	663.74	-467.27	970.75	929.20	41.56	23.360	
6,600.00	6,473.79	6,551.18	6,473.79	24.97	21.14	38.49	663.74	-467.27	970.75	928.91	41.84	23.199	
6,700.00	6,573.79	6,651.18	6,573.79	25.09	21.29	38.49	663.74	-467.27	970.75	928.62	42.14	23.038	
6,800.00	6,673.79	6,751.18	6,673.79	25.22	21.43	38.49	663.74	-467.27	970.75	928.32	42.43	22.878	
6,900.00	6,773.79	6,851.18	6,773.79	25.34	21.58	38.49	663.74	-467.27	970.75	928.03	42.73	22.719	
7,000.00	6,873.79	6,951.18	6,873.79	25.47	21.74	38.49	663.74	-467.27	970.75	927.73	43.03	22.561	
7,100.00	6,973.79	7,051.18	6,973.79	25.59	21.89	38.49	663.74	-467.27	970.75	927.42	43.33	22.403	
7,200.00	7,073.79	7,151.18	7,073.79	25.72	22.04	38.49	663.74	-467.27	970.75	927.12	43.64	22.247	
7,300.00	7,173.79	7,251.18	7,173.79	25.85	22.20	38.49	663.74	-467.27	970.75	926.81	43.94	22.091	
7,400.00	7,273.79	7,351.18	7,273.79	25.98	22.35	38.49	663.74	-467.27	970.75	926.50	44.25	21.936	
7,500.00	7,373.79	7,451.18	7,373.79	26.12	22.51	38.49	663.74	-467.27	970.75	926.19	44.57	21.783	
7,600.00	7,473.79	7,551.18	7,473.79	26.25	22.67	38.49	663.74	-467.27	970.75	925.87	44.88	21.630	
7,700.00	7,573.79	7,651.18	7,573.79	26.38	22.83	38.49	663.74	-467.27	970.75	925.56	45.20	21.478	
7,800.00	7,673.79	7,751.18	7,673.79	26.52	22.99	38.49	663.74	-467.27	970.75	925.24	45.52	21.328	
7,900.00	7,773.79	7,851.18	7,773.79	26.66	23.15	38.49	663.74	-467.27	970.75	924.92	45.84	21.178	
8,000.00	7,873.79	7,951.18	7,873.79	26.79	23.32	38.49	663.74	-467.27	970.75	924.59	46.16	21.030	
8,100.00	7,973.79	8,051.18	7,973.79	26.93	23.48	38.49	663.74	-467.27	970.75	924.27	46.49	20.882	
8,200.00	8,073.79	8,151.18	8,073.79	27.07	23.65	38.49	663.74	-467.27	970.75	923.94	46.81	20.736	
8,300.00	8,173.79	8,251.18	8,173.79	27.22	23.81	38.49	663.74	-467.27	970.75	923.61	47.14	20.591	
8,321.21	8,195.00	8,272.39	8,195.00	27.25	23.85	38.49	663.74	-467.27	970.75	923.54	47.21	20.561	

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_JESSER 31-2
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 5158.00ft (Original Well Elev)
Reference Site:	WELD_JESSER 18-2 PAD	MD Reference:	WELL @ 5158.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_JESSER 31-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_JESSER 31-2	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 3-16-10 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	90.01	0.00	20.15	20.15				
100.00	100.00	100.00	100.00	0.10	0.10	90.01	0.00	20.15	20.15	19.96	0.19	105.449	
200.00	200.00	200.00	200.00	0.32	0.32	90.01	0.00	20.15	20.15	19.51	0.64	31.450	
300.00	300.00	300.00	300.00	0.55	0.55	90.01	0.00	20.15	20.15	19.06	1.09	18.481	
400.00	400.00	400.00	400.00	0.77	0.77	90.01	0.00	20.15	20.15	18.61	1.54	13.085	
500.00	500.00	500.00	500.00	0.99	0.99	90.01	0.00	20.15	20.15	18.16	1.99	10.128	
600.00	600.00	600.00	600.00	1.22	1.22	90.01	0.00	20.15	20.15	17.71	2.44	8.261	
700.00	700.00	700.00	700.00	1.44	1.44	90.01	0.00	20.15	20.15	17.26	2.89	6.975	
800.00	800.00	800.00	800.00	1.67	1.67	90.01	0.00	20.15	20.15	16.81	3.34	6.036	
900.00	900.00	900.00	900.00	1.89	1.89	90.01	0.00	20.15	20.15	16.36	3.79	5.319	
1,000.00	1,000.00	1,000.00	1,000.00	2.12	2.12	90.01	0.00	20.15	20.15	15.91	4.24	4.755	
1,100.00	1,100.00	1,100.00	1,100.00	2.34	2.34	90.01	0.00	20.15	20.15	15.46	4.69	4.299	
1,200.00	1,200.00	1,200.00	1,200.00	2.57	2.57	90.01	0.00	20.15	20.15	15.01	5.14	3.923	
1,300.00	1,300.00	1,300.00	1,300.00	2.79	2.79	90.01	0.00	20.15	20.15	14.56	5.59	3.607 CC, ES	
1,400.00	1,399.98	1,400.19	1,400.17	3.00	2.99	-170.83	-1.66	19.58	21.37	15.39	5.99	3.570 SF	
1,500.00	1,499.84	1,500.16	1,500.00	3.21	3.16	-161.27	-6.62	17.89	25.56	19.21	6.35	4.025	
1,600.00	1,599.45	1,599.70	1,599.16	3.42	3.35	-151.11	-14.83	15.10	33.54	26.81	6.73	4.985	
1,700.00	1,698.70	1,698.60	1,697.32	3.65	3.55	-143.15	-26.21	11.23	45.67	38.53	7.14	6.399	
1,800.00	1,797.47	1,796.66	1,794.17	3.91	3.78	-137.56	-40.66	6.31	61.88	54.29	7.59	8.158	
1,900.00	1,895.62	1,893.68	1,889.44	4.21	4.05	-133.70	-58.03	0.40	82.01	73.93	8.09	10.143	
2,007.10	1,999.94	1,996.80	1,990.00	4.58	4.37	-130.91	-79.61	-6.94	107.64	98.95	8.69	12.380	
2,100.00	2,090.03	2,086.61	2,077.45	4.94	4.69	-129.91	-99.01	-13.54	131.33	122.03	9.30	14.122	
2,200.00	2,187.00	2,183.28	2,171.57	5.35	5.05	-129.17	-119.89	-20.65	156.85	146.86	9.98	15.710	
2,300.00	2,283.97	2,279.95	2,265.69	5.78	5.42	-128.64	-140.77	-27.75	182.39	171.69	10.70	17.049	
2,400.00	2,380.93	2,376.62	2,359.81	6.23	5.81	-128.24	-161.65	-34.86	207.94	196.50	11.44	18.182	
2,500.00	2,477.90	2,473.30	2,453.93	6.68	6.21	-127.93	-182.53	-41.96	233.50	221.30	12.19	19.147	
2,600.00	2,574.87	2,569.97	2,548.06	7.15	6.63	-127.68	-203.41	-49.07	259.06	246.09	12.97	19.975	
2,700.00	2,671.84	2,666.64	2,642.18	7.62	7.05	-127.48	-224.29	-56.17	284.63	270.87	13.76	20.690	
2,800.00	2,768.81	2,763.31	2,736.30	8.10	7.47	-127.30	-245.17	-63.28	310.20	295.64	14.56	21.311	
2,900.00	2,865.78	2,859.98	2,830.42	8.59	7.90	-127.16	-266.05	-70.38	335.77	320.40	15.36	21.854	
3,000.00	2,962.75	2,956.65	2,924.54	9.08	8.34	-127.03	-286.93	-77.49	361.34	345.16	16.18	22.332	
3,100.00	3,059.72	3,053.33	3,018.67	9.58	8.78	-126.92	-307.81	-84.59	386.92	369.92	17.00	22.756	
3,200.00	3,156.69	3,150.00	3,112.79	10.07	9.22	-126.83	-328.70	-91.70	412.49	394.66	17.83	23.133	
3,300.00	3,253.66	3,246.67	3,206.91	10.57	9.67	-126.75	-349.58	-98.80	438.07	419.41	18.66	23.470	
3,400.00	3,350.63	3,343.34	3,301.03	11.08	10.12	-126.67	-370.46	-105.91	463.65	444.15	19.50	23.774	
3,500.00	3,447.60	3,440.01	3,395.15	11.58	10.57	-126.60	-391.34	-113.01	489.23	468.89	20.34	24.049	
3,600.00	3,544.57	3,536.68	3,489.28	12.09	11.03	-126.54	-412.22	-120.12	514.81	493.62	21.19	24.298	
3,700.00	3,641.54	3,633.36	3,583.40	12.60	11.48	-126.49	-433.10	-127.22	540.39	518.35	22.03	24.526	
3,800.00	3,738.51	3,730.03	3,677.52	13.11	11.94	-126.44	-453.98	-134.33	565.97	543.09	22.88	24.734	
3,900.00	3,835.47	3,826.70	3,771.64	13.62	12.40	-126.39	-474.86	-141.43	591.55	567.82	23.73	24.925	
4,000.00	3,932.44	3,923.37	3,865.76	14.14	12.86	-126.35	-495.74	-148.54	617.13	592.54	24.59	25.101	
4,100.00	4,029.41	4,020.04	3,959.89	14.65	13.32	-126.32	-516.62	-155.64	642.71	617.27	25.44	25.265	
4,200.00	4,126.38	4,116.72	4,054.01	15.17	13.78	-126.28	-537.50	-162.75	668.29	642.00	26.29	25.416	
4,300.00	4,223.35	4,213.39	4,148.13	15.68	14.24	-126.25	-558.38	-169.85	693.87	666.72	27.15	25.557	
4,400.00	4,320.32	4,310.06	4,242.25	16.20	14.70	-126.22	-579.26	-176.96	719.46	691.45	28.01	25.688	
4,500.00	4,417.29	4,406.73	4,336.37	16.72	15.17	-126.19	-600.15	-184.06	745.04	716.17	28.87	25.811	
4,600.00	4,514.26	4,503.40	4,430.50	17.23	15.63	-126.16	-621.03	-191.17	770.62	740.90	29.72	25.926	
4,700.00	4,611.23	4,600.07	4,524.62	17.75	16.10	-126.14	-641.91	-198.27	796.20	765.62	30.58	26.035	
4,800.00	4,708.20	4,696.75	4,618.74	18.27	16.56	-126.11	-662.79	-205.38	821.79	790.34	31.44	26.137	
4,900.00	4,805.17	4,793.42	4,712.86	18.79	17.03	-126.09	-683.67	-212.48	847.37	815.07	32.30	26.233	
5,000.00	4,902.14	4,890.09	4,806.98	19.31	17.49	-126.07	-704.55	-219.59	872.95	839.79	33.16	26.324	
5,100.00	4,999.11	4,986.76	4,901.11	19.83	17.96	-126.05	-725.43	-226.69	898.53	864.51	34.02	26.410	

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_JESSER 31-2
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 5158.00ft (Original Well Elev)
Reference Site:	WELD_JESSER 18-2 PAD	MD Reference:	WELL @ 5158.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_JESSER 31-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_JESSER 31-2	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 3-16-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design WELD_JESSER 18-2 PAD - P_BROWN 5-2 - P_BROWN 5-2 - PLAN #1 3-16-10 RHS												Offset Site Error:	0.00 ft
Survey Program: 0-MWD												Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
5,200.00	5,096.08	5,083.43	4,995.23	20.35	18.43	-126.03	-746.31	-233.80	924.12	889.23	34.88	26.492	
5,300.00	5,193.05	5,180.11	5,089.35	20.87	18.90	-126.02	-767.19	-240.90	949.70	913.95	35.75	26.565	
5,400.00	5,290.01	5,276.78	5,183.47	21.40	19.37	-126.00	-788.07	-248.01	975.28	938.66	36.62	26.631	
5,500.00	5,386.98	5,373.45	5,277.59	21.92	19.83	-125.99	-808.95	-255.11	1,000.87	963.37	37.49	26.694	
5,600.00	5,483.95	5,470.12	5,371.72	22.44	20.30	-125.97	-829.83	-262.22	1,026.45	988.08	38.37	26.754	
5,699.11	5,580.06	5,565.93	5,465.00	22.96	20.77	-125.96	-850.53	-269.26	1,051.80	1,012.57	39.23	26.810	
5,800.00	5,678.31	5,663.71	5,560.20	23.40	21.24	-126.28	-871.65	-276.44	1,076.60	1,036.48	40.12	26.834	
5,900.00	5,776.42	5,770.99	5,664.77	23.72	21.72	-126.40	-894.36	-284.17	1,098.98	1,058.06	40.91	26.861	
6,000.00	5,875.15	5,891.87	5,783.45	24.01	22.11	-126.47	-916.01	-291.54	1,117.66	1,076.06	41.60	26.867	
6,100.00	5,974.37	6,014.22	5,904.45	24.26	22.44	-126.52	-933.07	-297.35	1,132.26	1,090.08	42.18	26.844	
6,200.00	6,073.97	6,137.68	6,027.22	24.46	22.71	-126.56	-945.32	-301.51	1,142.73	1,100.06	42.67	26.783	
6,300.00	6,173.82	6,261.88	6,151.18	24.62	22.92	-126.60	-952.58	-303.98	1,149.01	1,105.96	43.06	26.686	
6,406.21	6,280.00	6,390.73	6,280.00	24.75	23.10	138.24	-954.76	-304.72	1,151.10	1,107.72	43.38	26.536	
6,500.00	6,373.79	6,484.53	6,373.79	24.85	23.20	138.24	-954.76	-304.72	1,151.10	1,107.49	43.61	26.397	
6,600.00	6,473.79	6,584.53	6,473.79	24.97	23.31	138.24	-954.76	-304.72	1,151.10	1,107.24	43.86	26.247	
6,700.00	6,573.79	6,684.53	6,573.79	25.09	23.42	138.24	-954.76	-304.72	1,151.10	1,106.99	44.11	26.096	
6,800.00	6,673.79	6,784.53	6,673.79	25.22	23.53	138.24	-954.76	-304.72	1,151.10	1,106.73	44.37	25.945	
6,900.00	6,773.79	6,884.53	6,773.79	25.34	23.65	138.24	-954.76	-304.72	1,151.10	1,106.47	44.63	25.794	
7,000.00	6,873.79	6,984.53	6,873.79	25.47	23.76	138.24	-954.76	-304.72	1,151.10	1,106.21	44.89	25.643	
7,100.00	6,973.79	7,084.53	6,973.79	25.59	23.88	138.24	-954.76	-304.72	1,151.10	1,105.94	45.15	25.493	
7,200.00	7,073.79	7,184.53	7,073.79	25.72	24.00	138.24	-954.76	-304.72	1,151.10	1,105.67	45.42	25.342	
7,300.00	7,173.79	7,284.53	7,173.79	25.85	24.12	138.24	-954.76	-304.72	1,151.10	1,105.40	45.69	25.192	
7,400.00	7,273.79	7,384.53	7,273.79	25.98	24.24	138.24	-954.76	-304.72	1,151.10	1,105.13	45.97	25.042	
7,500.00	7,373.79	7,484.53	7,373.79	26.12	24.36	138.24	-954.76	-304.72	1,151.10	1,104.85	46.24	24.892	
7,600.00	7,473.79	7,584.53	7,473.79	26.25	24.48	138.24	-954.76	-304.72	1,151.10	1,104.57	46.52	24.742	
7,700.00	7,573.79	7,684.53	7,573.79	26.38	24.61	138.24	-954.76	-304.72	1,151.10	1,104.29	46.81	24.593	
7,800.00	7,673.79	7,784.53	7,673.79	26.52	24.74	138.24	-954.76	-304.72	1,151.10	1,104.01	47.09	24.444	
7,900.00	7,773.79	7,884.53	7,773.79	26.66	24.87	138.24	-954.76	-304.72	1,151.10	1,103.72	47.38	24.296	
8,000.00	7,873.79	7,984.53	7,873.79	26.79	25.00	138.24	-954.76	-304.72	1,151.10	1,103.43	47.67	24.148	
8,100.00	7,973.79	8,084.53	7,973.79	26.93	25.13	138.24	-954.76	-304.72	1,151.10	1,103.14	47.96	24.001	
8,200.00	8,073.79	8,184.53	8,073.79	27.07	25.26	138.24	-954.76	-304.72	1,151.10	1,102.84	48.25	23.855	
8,300.00	8,173.79	8,284.53	8,173.79	27.22	25.39	138.24	-954.76	-304.72	1,151.10	1,102.54	48.55	23.709	
8,300.41	8,174.20	8,284.93	8,174.20	27.22	25.39	138.24	-954.76	-304.72	1,151.10	1,102.54	48.55	23.708	
8,321.21	8,195.00	8,291.73	8,181.00	27.25	25.40	138.24	-954.76	-304.72	1,151.18	1,102.59	48.59	23.690	

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_JESSER 31-2
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 5158.00ft (Original Well Elev)
Reference Site:	WELD_JESSER 18-2 PAD	MD Reference:	WELL @ 5158.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_JESSER 31-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_JESSER 31-2	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 3-16-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design WELD_JESSER 18-2 PAD - P_BROWN 5-2S - P_BROWN 5-2S - PLAN #1 3-16-10 RHS												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	90.00	0.00	10.07	10.07				
100.00	100.00	100.00	100.00	0.10	0.10	90.00	0.00	10.07	10.07	9.88	0.19	52.725	
200.00	200.00	200.00	200.00	0.32	0.32	90.00	0.00	10.07	10.07	9.43	0.64	15.725	
300.00	300.00	300.00	300.00	0.55	0.55	90.00	0.00	10.07	10.07	8.98	1.09	9.240	
400.00	400.00	400.00	400.00	0.77	0.77	90.00	0.00	10.07	10.07	8.53	1.54	6.542	
500.00	500.00	500.00	500.00	0.99	0.99	90.00	0.00	10.07	10.07	8.08	1.99	5.064	
600.00	600.00	600.00	600.00	1.22	1.22	90.00	0.00	10.07	10.07	7.63	2.44	4.131	
700.00	700.00	700.00	700.00	1.44	1.44	90.00	0.00	10.07	10.07	7.18	2.89	3.488	
800.00	800.00	800.00	800.00	1.67	1.67	90.00	0.00	10.07	10.07	6.74	3.34	3.018	
900.00	900.00	900.00	900.00	1.89	1.89	90.00	0.00	10.07	10.07	6.29	3.79	2.660	
1,000.00	1,000.00	1,000.00	1,000.00	2.12	2.12	90.00	0.00	10.07	10.07	5.84	4.24	2.378	
1,100.00	1,100.00	1,100.00	1,100.00	2.34	2.34	90.00	0.00	10.07	10.07	5.39	4.69	2.149	
1,200.00	1,200.00	1,200.00	1,200.00	2.57	2.57	90.00	0.00	10.07	10.07	4.94	5.14	1.961	
1,300.00	1,300.00	1,300.00	1,300.00	2.79	2.79	90.00	0.00	10.07	10.07	4.49	5.59	1.803 CC, ES, SF	
1,400.00	1,399.98	1,400.12	1,400.10	3.00	2.99	-169.85	-1.14	9.42	11.20	5.21	5.99	1.870	
1,500.00	1,499.84	1,500.13	1,500.04	3.21	3.17	-159.64	-4.54	7.45	14.92	8.57	6.35	2.349	
1,600.00	1,599.45	1,599.94	1,599.63	3.42	3.35	-150.84	-10.19	4.18	21.68	14.95	6.73	3.220	
1,700.00	1,698.70	1,699.45	1,698.73	3.65	3.55	-145.00	-18.07	-0.37	31.52	24.39	7.13	4.419	
1,800.00	1,797.47	1,798.57	1,797.15	3.91	3.77	-141.28	-28.13	-6.19	44.37	36.81	7.56	5.866	
1,900.00	1,895.62	1,897.19	1,894.76	4.21	4.01	-138.86	-40.34	-13.24	60.16	52.13	8.04	7.487	
2,007.10	1,999.94	2,002.15	1,998.21	4.58	4.29	-137.09	-55.72	-22.13	80.27	71.67	8.60	9.931	
2,100.00	2,090.03	2,092.78	2,087.10	4.94	4.57	-135.63	-70.98	-30.95	99.29	90.10	9.18	10.813	
2,200.00	2,187.00	2,190.03	2,182.00	5.35	4.90	-133.44	-89.37	-41.58	120.21	110.34	9.87	12.181	
2,300.00	2,283.97	2,286.84	2,275.90	5.78	5.27	-130.90	-109.76	-53.36	141.78	131.16	10.62	13.352	
2,400.00	2,380.93	2,383.28	2,368.83	6.23	5.68	-128.21	-132.07	-66.26	164.19	152.76	11.43	14.371	
2,500.00	2,477.90	2,480.38	2,462.17	6.68	6.12	-125.90	-155.23	-79.64	187.11	174.84	12.27	15.248	
2,600.00	2,574.87	2,577.47	2,555.50	7.15	6.58	-124.09	-178.38	-93.02	210.26	197.12	13.14	16.006	
2,700.00	2,671.84	2,674.56	2,648.84	7.62	7.05	-122.64	-201.54	-106.40	233.56	219.55	14.02	16.664	
2,800.00	2,768.81	2,771.65	2,742.18	8.10	7.54	-121.46	-224.69	-119.79	256.99	242.08	14.91	17.237	
2,900.00	2,865.78	2,868.75	2,835.52	8.59	8.03	-120.47	-247.85	-133.17	280.50	264.68	15.81	17.739	
3,000.00	2,962.75	2,965.84	2,928.85	9.08	8.53	-119.64	-271.00	-146.55	304.07	287.35	16.72	18.181	
3,100.00	3,059.72	3,062.93	3,022.19	9.58	9.04	-118.92	-294.15	-159.93	327.70	310.06	17.64	18.573	
3,200.00	3,156.69	3,160.03	3,115.53	10.07	9.56	-118.31	-317.31	-173.31	351.37	332.80	18.57	18.922	
3,300.00	3,253.66	3,257.12	3,208.87	10.57	10.08	-117.77	-340.46	-186.70	375.07	355.57	19.50	19.234	
3,400.00	3,350.63	3,354.21	3,302.20	11.08	10.60	-117.29	-363.62	-200.08	398.80	378.37	20.44	19.515	
3,500.00	3,447.60	3,451.31	3,395.54	11.58	11.13	-116.87	-386.77	-213.46	422.56	401.19	21.37	19.769	
3,600.00	3,544.57	3,548.40	3,488.88	12.09	11.66	-116.49	-409.93	-226.84	446.33	424.02	22.32	20.000	
3,700.00	3,641.54	3,645.49	3,582.22	12.60	12.19	-116.15	-433.08	-240.22	470.12	446.86	23.26	20.210	
3,800.00	3,738.51	3,742.59	3,675.55	13.11	12.72	-115.84	-456.23	-253.61	493.93	469.72	24.21	20.403	
3,900.00	3,835.47	3,839.68	3,768.89	13.62	13.26	-115.56	-479.39	-266.99	517.74	492.59	25.16	20.580	
4,000.00	3,932.44	3,936.77	3,862.23	14.14	13.80	-115.31	-502.54	-280.37	541.57	515.46	26.11	20.742	
4,100.00	4,029.41	4,033.86	3,955.57	14.65	14.34	-115.08	-525.70	-293.75	565.41	538.35	27.06	20.893	
4,200.00	4,126.38	4,130.96	4,048.90	15.17	14.88	-114.86	-548.85	-307.13	589.25	561.24	28.02	21.033	
4,300.00	4,223.35	4,228.05	4,142.24	15.68	15.42	-114.67	-572.01	-320.52	613.10	584.13	28.97	21.163	
4,400.00	4,320.32	4,325.14	4,235.58	16.20	15.96	-114.48	-595.16	-333.90	636.96	607.03	29.93	21.284	
4,500.00	4,417.29	4,422.24	4,328.92	16.72	16.51	-114.31	-618.32	-347.28	660.83	629.94	30.89	21.394	
4,600.00	4,514.26	4,519.33	4,422.25	17.23	17.05	-114.16	-641.47	-360.66	684.69	652.84	31.85	21.495	
4,700.00	4,611.23	4,616.42	4,515.59	17.75	17.60	-114.01	-664.62	-374.04	708.57	675.75	32.82	21.589	
4,800.00	4,708.20	4,713.52	4,608.93	18.27	18.15	-113.87	-687.78	-387.43	732.44	698.66	33.79	21.677	
4,900.00	4,805.17	4,810.61	4,702.26	18.79	18.69	-113.74	-710.93	-400.81	756.32	721.57	34.76	21.760	
5,000.00	4,902.14	4,907.70	4,795.60	19.31	19.24	-113.62	-734.09	-414.19	780.21	744.48	35.73	21.838	
5,100.00	4,999.11	5,004.80	4,888.94	19.83	19.79	-113.51	-757.24	-427.57	804.10	767.40	36.70	21.912	

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_JESSER 31-2
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 5158.00ft (Original Well Elev)
Reference Site:	WELD_JESSER 18-2 PAD	MD Reference:	WELL @ 5158.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_JESSER 31-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_JESSER 31-2	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 3-16-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design WELD_JESSER 18-2 PAD - P_BROWN 5-2S - P_BROWN 5-2S - PLAN #1 3-16-10 RHS												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
5,200.00	5,096.08	5,101.89	4,982.28	20.35	20.34	-113.40	-780.40	-440.95	827.99	790.32	37.67	21.981	
5,300.00	5,193.05	5,198.98	5,075.61	20.87	20.89	-113.30	-803.55	-454.33	851.88	813.24	38.64	22.046	
5,400.00	5,290.01	5,209.79	5,086.00	21.40	20.95	-113.29	-806.13	-455.82	880.02	840.83	39.19	22.456	
5,500.00	5,386.98	5,209.79	5,086.00	21.92	20.95	-113.29	-806.13	-455.82	918.17	878.49	39.68	23.138	
5,600.00	5,483.95	5,209.79	5,086.00	22.44	20.95	-113.29	-806.13	-455.82	965.22	925.04	40.18	24.022	
5,699.11	5,580.06	5,209.79	5,086.00	22.96	20.95	-113.29	-806.13	-455.82	1,019.42	978.71	40.70	25.046	
5,800.00	5,678.31	5,209.79	5,086.00	23.40	20.95	-114.70	-806.13	-455.82	1,080.59	1,039.41	41.18	26.239	
5,900.00	5,776.42	5,209.79	5,086.00	23.72	20.95	-116.25	-806.13	-455.82	1,145.71	1,104.19	41.53	27.590	
6,000.00	5,875.15	5,209.79	5,086.00	24.01	20.95	-117.94	-806.13	-455.82	1,214.50	1,172.68	41.82	29.042	
6,100.00	5,974.37	5,209.79	5,086.00	24.26	20.95	-119.74	-806.13	-455.82	1,286.28	1,244.23	42.05	30.589	
6,200.00	6,073.97	5,209.79	5,086.00	24.46	20.95	-121.65	-806.13	-455.82	1,360.52	1,318.31	42.21	32.233	
6,300.00	6,173.82	5,209.79	5,086.00	24.62	20.95	-123.63	-806.13	-455.82	1,436.73	1,394.44	42.29	33.972	
6,406.21	6,280.00	5,209.79	5,086.00	24.75	20.95	139.07	-806.13	-455.82	1,519.43	1,477.13	42.30	35.921	
6,500.00	6,373.79	5,209.79	5,086.00	24.85	20.95	139.07	-806.13	-455.82	1,594.19	1,551.77	42.41	37.586	
6,600.00	6,473.79	5,209.79	5,086.00	24.97	20.95	139.07	-806.13	-455.82	1,676.00	1,633.46	42.54	39.394	
6,700.00	6,573.79	5,209.79	5,086.00	25.09	20.95	139.07	-806.13	-455.82	1,759.70	1,717.02	42.68	41.234	
6,800.00	6,673.79	5,209.79	5,086.00	25.22	20.95	139.07	-806.13	-455.82	1,845.02	1,802.21	42.81	43.099	
6,900.00	6,773.79	5,209.79	5,086.00	25.34	20.95	139.07	-806.13	-455.82	1,931.75	1,888.81	42.94	44.983	
7,000.00	6,873.79	5,209.79	5,086.00	25.47	20.95	139.07	-806.13	-455.82	2,019.71	1,976.63	43.08	46.883	
7,100.00	6,973.79	5,209.79	5,086.00	25.59	20.95	139.07	-806.13	-455.82	2,108.74	2,065.52	43.22	48.794	
7,200.00	7,073.79	5,209.79	5,086.00	25.72	20.95	139.07	-806.13	-455.82	2,198.71	2,155.36	43.36	50.713	
7,300.00	7,173.79	5,209.79	5,086.00	25.85	20.95	139.07	-806.13	-455.82	2,289.52	2,246.02	43.50	52.637	
7,400.00	7,273.79	5,209.79	5,086.00	25.98	20.95	139.07	-806.13	-455.82	2,381.06	2,337.42	43.64	54.565	
7,500.00	7,373.79	5,209.79	5,086.00	26.12	20.95	139.07	-806.13	-455.82	2,473.26	2,429.48	43.78	56.493	
7,600.00	7,473.79	5,209.79	5,086.00	26.25	20.95	139.07	-806.13	-455.82	2,566.04	2,522.12	43.92	58.420	
7,700.00	7,573.79	5,209.79	5,086.00	26.38	20.95	139.07	-806.13	-455.82	2,659.35	2,615.28	44.07	60.345	
7,800.00	7,673.79	5,209.79	5,086.00	26.52	20.95	139.07	-806.13	-455.82	2,753.12	2,708.91	44.22	62.266	
7,900.00	7,773.79	5,209.79	5,086.00	26.66	20.95	139.07	-806.13	-455.82	2,847.32	2,802.96	44.36	64.182	
8,000.00	7,873.79	5,209.79	5,086.00	26.79	20.95	139.07	-806.13	-455.82	2,941.90	2,897.39	44.51	66.092	
8,100.00	7,973.79	5,209.79	5,086.00	26.93	20.95	139.07	-806.13	-455.82	3,036.83	2,992.17	44.66	67.996	
8,200.00	8,073.79	5,209.79	5,086.00	27.07	20.95	139.07	-806.13	-455.82	3,132.08	3,087.27	44.81	69.892	
8,300.00	8,173.79	5,209.79	5,086.00	27.22	20.95	139.07	-806.13	-455.82	3,227.61	3,182.65	44.97	71.780	
8,321.21	8,195.00	5,209.79	5,086.00	27.25	20.95	139.07	-806.13	-455.82	3,247.91	3,202.91	45.00	72.179	

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_JESSER 31-2
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 5158.00ft (Original Well Elev)
Reference Site:	WELD_JESSER 18-2 PAD	MD Reference:	WELL @ 5158.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_JESSER 31-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_JESSER 31-2	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 3-16-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design WELD_JESSER 18-2 PAD - P_BROWN 6-2 - P_BROWN 6-2 - PLAN #1 3-16-10 RHS												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	89.48	0.36	40.01	40.01				
100.00	100.00	100.00	100.00	0.10	0.10	89.48	0.36	40.01	40.01	39.82	0.19	209.443	
200.00	200.00	200.00	200.00	0.32	0.32	89.48	0.36	40.01	40.01	39.37	0.64	62.465	
300.00	300.00	300.00	300.00	0.55	0.55	89.48	0.36	40.01	40.01	38.92	1.09	36.706	
400.00	400.00	400.00	400.00	0.77	0.77	89.48	0.36	40.01	40.01	38.47	1.54	25.989	
500.00	500.00	500.00	500.00	0.99	0.99	89.48	0.36	40.01	40.01	38.03	1.99	20.116	
600.00	600.00	600.00	600.00	1.22	1.22	89.48	0.36	40.01	40.01	37.58	2.44	16.408	
700.00	700.00	700.00	700.00	1.44	1.44	89.48	0.36	40.01	40.01	37.13	2.89	13.854	
800.00	800.00	800.00	800.00	1.67	1.67	89.48	0.36	40.01	40.01	36.68	3.34	11.988	
900.00	900.00	900.00	900.00	1.89	1.89	89.48	0.36	40.01	40.01	36.23	3.79	10.565	
1,000.00	1,000.00	1,000.00	1,000.00	2.12	2.12	89.48	0.36	40.01	40.01	35.78	4.24	9.444	
1,100.00	1,100.00	1,100.00	1,100.00	2.34	2.34	89.48	0.36	40.01	40.01	35.33	4.69	8.538	
1,200.00	1,200.00	1,200.00	1,200.00	2.57	2.57	89.48	0.36	40.01	40.01	34.88	5.14	7.791	
1,300.00	1,300.00	1,300.00	1,300.00	2.79	2.79	89.48	0.36	40.01	40.01	34.43	5.59	7.164 CC, ES, SF	
1,400.00	1,399.98	1,398.82	1,398.80	3.00	2.99	-174.16	-0.69	41.35	43.11	37.12	5.99	7.197	
1,500.00	1,499.84	1,497.02	1,496.87	3.21	3.18	-171.32	-3.82	45.34	52.47	46.12	6.36	8.256	
1,600.00	1,599.45	1,594.02	1,593.50	3.42	3.37	-168.33	-8.94	51.87	68.18	61.46	6.72	10.144	
1,700.00	1,698.70	1,689.24	1,688.04	3.65	3.58	-165.88	-15.94	60.78	90.20	83.11	7.09	12.727	
1,800.00	1,797.47	1,782.16	1,779.89	3.91	3.81	-164.03	-24.63	71.86	118.37	110.91	7.45	15.878	
1,900.00	1,895.62	1,872.33	1,868.53	4.21	4.06	-162.64	-34.81	84.84	152.49	144.66	7.82	19.489	
2,007.10	1,999.94	1,965.36	1,959.40	4.58	4.36	-161.52	-47.12	100.52	195.35	187.13	8.22	23.758	
2,100.00	2,090.03	2,047.66	2,039.36	4.94	4.65	-160.95	-59.14	115.83	235.77	227.13	8.64	27.282	
2,200.00	2,187.00	2,137.64	2,126.77	5.35	5.00	-160.51	-72.32	132.63	279.37	270.26	9.11	30.662	
2,300.00	2,283.97	2,227.61	2,214.18	5.78	5.36	-160.19	-85.50	149.42	322.98	313.39	9.60	33.661	
2,400.00	2,380.93	2,317.59	2,301.58	6.23	5.74	-159.94	-98.68	166.22	366.60	356.51	10.09	36.327	
2,500.00	2,477.90	2,407.57	2,388.99	6.68	6.13	-159.75	-111.86	183.02	410.22	399.62	10.60	38.704	
2,600.00	2,574.87	2,497.54	2,476.39	7.15	6.53	-159.59	-125.05	199.81	453.85	442.73	11.12	40.829	
2,700.00	2,671.84	2,587.52	2,563.80	7.62	6.94	-159.46	-138.23	216.61	497.47	485.83	11.64	42.734	
2,800.00	2,768.81	2,677.50	2,651.21	8.10	7.35	-159.36	-151.41	233.41	541.10	528.93	12.17	44.450	
2,900.00	2,865.78	2,767.47	2,738.61	8.59	7.77	-159.26	-164.59	250.20	584.73	572.02	12.71	45.999	
3,000.00	2,962.75	2,857.45	2,826.02	9.08	8.20	-159.18	-177.77	267.00	628.36	615.11	13.26	47.404	
3,100.00	3,059.72	2,947.43	2,913.43	9.58	8.63	-159.12	-190.96	283.80	671.99	658.19	13.80	48.682	
3,200.00	3,156.69	3,037.40	3,000.83	10.07	9.06	-159.05	-204.14	300.60	715.63	701.27	14.36	49.847	
3,300.00	3,253.66	3,127.38	3,088.24	10.57	9.50	-159.00	-217.32	317.39	759.26	744.35	14.91	50.913	
3,400.00	3,350.63	3,217.35	3,175.64	11.08	9.93	-158.95	-230.50	334.19	802.89	787.42	15.47	51.891	
3,500.00	3,447.60	3,307.33	3,263.05	11.58	10.37	-158.91	-243.68	350.99	846.53	830.49	16.04	52.791	
3,600.00	3,544.57	3,397.31	3,350.46	12.09	10.82	-158.87	-256.87	367.78	890.16	873.56	16.60	53.621	
3,700.00	3,641.54	3,487.28	3,437.86	12.60	11.26	-158.84	-270.05	384.58	933.80	916.63	17.17	54.388	
3,800.00	3,738.51	3,577.26	3,525.27	13.11	11.71	-158.80	-283.23	401.38	977.43	959.69	17.74	55.099	
3,900.00	3,835.47	3,667.24	3,612.68	13.62	12.15	-158.78	-296.41	418.17	1,021.07	1,002.76	18.31	55.760	
4,000.00	3,932.44	3,757.21	3,700.08	14.14	12.60	-158.75	-309.60	434.97	1,064.70	1,045.82	18.89	56.376	
4,100.00	4,029.41	3,847.19	3,787.49	14.65	13.05	-158.72	-322.78	451.77	1,108.34	1,088.88	19.46	56.950	
4,200.00	4,126.38	3,937.17	3,874.89	15.17	13.50	-158.70	-335.96	468.57	1,151.97	1,131.94	20.04	57.488	
4,300.00	4,223.35	4,027.14	3,962.30	15.68	13.95	-158.68	-349.14	485.36	1,195.61	1,174.99	20.62	57.991	
4,400.00	4,320.32	4,117.12	4,049.71	16.20	14.41	-158.66	-362.32	502.16	1,239.25	1,218.05	21.20	58.463	
4,500.00	4,417.29	4,207.10	4,137.11	16.72	14.86	-158.64	-375.51	518.96	1,282.88	1,261.10	21.78	58.907	
4,600.00	4,514.26	4,297.07	4,224.52	17.23	15.31	-158.63	-388.69	535.75	1,326.52	1,304.16	22.36	59.325	
4,700.00	4,611.23	4,387.05	4,311.92	17.75	15.77	-158.61	-401.87	552.55	1,370.15	1,347.21	22.94	59.719	
4,800.00	4,708.20	4,477.02	4,399.33	18.27	16.22	-158.59	-415.05	569.35	1,413.79	1,390.26	23.53	60.091	
4,900.00	4,805.17	4,567.00	4,486.74	18.79	16.68	-158.58	-428.23	586.14	1,457.43	1,433.32	24.11	60.442	
5,000.00	4,902.14	4,656.98	4,574.14	19.31	17.13	-158.57	-441.42	602.94	1,501.06	1,476.37	24.70	60.776	
5,100.00	4,999.11	4,746.95	4,661.55	19.83	17.59	-158.55	-454.60	619.74	1,544.70	1,519.42	25.28	61.092	

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_JESSER 31-2
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 5158.00ft (Original Well Elev)
Reference Site:	WELD_JESSER 18-2 PAD	MD Reference:	WELL @ 5158.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_JESSER 31-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_JESSER 31-2	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 3-16-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design WELD_JESSER 18-2 PAD - P_BROWN 6-2 - P_BROWN 6-2 - PLAN #1 3-16-10 RHS												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
5,200.00	5,096.08	4,836.93	4,748.96	20.35	18.05	-158.54	-467.78	636.53	1,588.34	1,562.47	25.87	61.392	
5,300.00	5,193.05	4,926.91	4,836.36	20.87	18.50	-158.53	-480.96	653.33	1,631.97	1,605.51	26.46	61.677	
5,400.00	5,290.01	5,016.88	4,923.77	21.40	18.96	-158.52	-494.14	670.13	1,675.61	1,648.56	27.05	61.949	
5,500.00	5,386.98	5,106.86	5,011.17	21.92	19.42	-158.51	-507.33	686.93	1,719.25	1,691.61	27.64	62.207	
5,600.00	5,483.95	5,196.84	5,098.58	22.44	19.88	-158.50	-520.51	703.72	1,762.88	1,734.66	28.23	62.454	
5,699.11	5,580.06	5,286.01	5,185.21	22.96	20.33	-158.49	-533.57	720.37	1,806.13	1,777.32	28.81	62.688	
5,800.00	5,678.31	5,377.49	5,274.07	23.40	20.80	-158.80	-546.98	737.45	1,848.66	1,819.11	29.55	62.562	
5,900.00	5,776.42	5,469.47	5,363.43	23.72	21.27	-159.04	-560.45	754.62	1,887.83	1,857.62	30.22	62.477	
6,000.00	5,875.15	5,562.64	5,453.93	24.01	21.74	-159.20	-574.10	772.01	1,923.99	1,893.14	30.85	62.366	
6,100.00	5,974.37	5,656.88	5,545.49	24.26	22.22	-159.31	-587.91	789.61	1,957.09	1,925.64	31.45	62.235	
6,200.00	6,073.97	5,836.31	5,720.46	24.46	22.99	-159.22	-612.38	820.79	1,986.11	1,953.90	32.20	61.673	
6,300.00	6,173.82	6,112.43	5,993.55	24.62	23.74	-159.06	-637.10	852.28	2,004.57	1,971.56	33.01	60.726	
6,406.21	6,280.00	6,399.32	6,280.00	24.75	24.20	105.85	-645.47	862.95	2,010.84	1,977.15	33.69	59.693	
6,500.00	6,373.79	6,493.11	6,373.79	24.85	24.31	105.85	-645.47	862.95	2,010.84	1,976.85	33.98	59.176	
6,600.00	6,473.79	6,593.11	6,473.79	24.97	24.42	105.85	-645.47	862.95	2,010.84	1,976.53	34.30	58.624	
6,700.00	6,573.79	6,693.11	6,573.79	25.09	24.54	105.85	-645.47	862.95	2,010.84	1,976.21	34.62	58.077	
6,800.00	6,673.79	6,793.11	6,673.79	25.22	24.65	105.85	-645.47	862.95	2,010.84	1,975.89	34.95	57.536	
6,900.00	6,773.79	6,893.11	6,773.79	25.34	24.77	105.85	-645.47	862.95	2,010.84	1,975.56	35.28	57.000	
7,000.00	6,873.79	6,993.11	6,873.79	25.47	24.89	105.85	-645.47	862.95	2,010.84	1,975.23	35.61	56.470	
7,100.00	6,973.79	7,093.11	6,973.79	25.59	25.01	105.85	-645.47	862.95	2,010.84	1,974.89	35.94	55.946	
7,200.00	7,073.79	7,193.11	7,073.79	25.72	25.14	105.85	-645.47	862.95	2,010.84	1,974.56	36.28	55.428	
7,300.00	7,173.79	7,293.11	7,173.79	25.85	25.26	105.85	-645.47	862.95	2,010.84	1,974.22	36.62	54.915	
7,400.00	7,273.79	7,393.11	7,273.79	25.98	25.39	105.85	-645.47	862.95	2,010.84	1,973.88	36.96	54.409	
7,500.00	7,373.79	7,493.11	7,373.79	26.12	25.51	105.85	-645.47	862.95	2,010.84	1,973.53	37.30	53.908	
7,600.00	7,473.79	7,593.11	7,473.79	26.25	25.64	105.85	-645.47	862.95	2,010.84	1,973.19	37.65	53.414	
7,700.00	7,573.79	7,693.11	7,573.79	26.38	25.77	105.85	-645.47	862.95	2,010.84	1,972.84	37.99	52.925	
7,800.00	7,673.79	7,793.11	7,673.79	26.52	25.90	105.85	-645.47	862.95	2,010.84	1,972.49	38.34	52.442	
7,900.00	7,773.79	7,893.11	7,773.79	26.66	26.04	105.85	-645.47	862.95	2,010.84	1,972.14	38.70	51.966	
8,000.00	7,873.79	7,993.11	7,873.79	26.79	26.17	105.85	-645.47	862.95	2,010.84	1,971.79	39.05	51.495	
8,100.00	7,973.79	8,093.11	7,973.79	26.93	26.30	105.85	-645.47	862.95	2,010.84	1,971.43	39.41	51.030	
8,200.00	8,073.79	8,193.11	8,073.79	27.07	26.44	105.85	-645.47	862.95	2,010.84	1,971.07	39.76	50.571	
8,300.00	8,173.79	8,293.11	8,173.79	27.22	26.58	105.85	-645.47	862.95	2,010.84	1,970.71	40.12	50.118	
8,304.86	8,178.65	8,297.97	8,178.65	27.22	26.59	105.85	-645.47	862.95	2,010.84	1,970.70	40.14	50.096	
8,321.21	8,195.00	8,306.32	8,187.00	27.25	26.60	105.85	-645.47	862.95	2,010.85	1,970.67	40.18	50.041	

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_JESSER 31-2
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 5158.00ft (Original Well Elev)
Reference Site:	WELD_JESSER 18-2 PAD	MD Reference:	WELL @ 5158.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_JESSER 31-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_JESSER 31-2	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 3-16-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design WELD_JESSER 18-2 PAD - P_BROWN 6-2S - P_BROWN 6-2S - PLAN #1 3-16-10 RHS												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	89.31	0.36	30.22	30.22				
100.00	100.00	100.00	100.00	0.10	0.10	89.31	0.36	30.22	30.22	30.03	0.19	158.185	
200.00	200.00	200.00	200.00	0.32	0.32	89.31	0.36	30.22	30.22	29.58	0.64	47.178	
300.00	300.00	300.00	300.00	0.55	0.55	89.31	0.36	30.22	30.22	29.13	1.09	27.723	
400.00	400.00	400.00	400.00	0.77	0.77	89.31	0.36	30.22	30.22	28.68	1.54	19.629	
500.00	500.00	500.00	500.00	0.99	0.99	89.31	0.36	30.22	30.22	28.23	1.99	15.193	
600.00	600.00	600.00	600.00	1.22	1.22	89.31	0.36	30.22	30.22	27.78	2.44	12.392	
700.00	700.00	700.00	700.00	1.44	1.44	89.31	0.36	30.22	30.22	27.33	2.89	10.464	
800.00	800.00	800.00	800.00	1.67	1.67	89.31	0.36	30.22	30.22	26.88	3.34	9.054	
900.00	900.00	900.00	900.00	1.89	1.89	89.31	0.36	30.22	30.22	26.43	3.79	7.980	
1,000.00	1,000.00	1,000.00	1,000.00	2.12	2.12	89.31	0.36	30.22	30.22	25.98	4.24	7.133	
1,100.00	1,100.00	1,100.00	1,100.00	2.34	2.34	89.31	0.36	30.22	30.22	25.54	4.69	6.449	
1,200.00	1,200.00	1,200.00	1,200.00	2.57	2.57	89.31	0.36	30.22	30.22	25.09	5.14	5.884	
1,300.00	1,300.00	1,300.00	1,300.00	2.79	2.79	89.31	0.36	30.22	30.22	24.64	5.59	5.411	CC, ES, SF
1,400.00	1,399.98	1,399.43	1,399.41	3.00	2.99	-174.06	-0.62	31.06	32.81	26.82	5.99	5.478	
1,500.00	1,499.84	1,498.44	1,498.35	3.21	3.17	-170.70	-3.55	33.58	40.66	34.31	6.35	6.400	
1,600.00	1,599.45	1,596.64	1,596.34	3.42	3.36	-167.29	-8.37	37.72	53.89	47.17	6.72	8.022	
1,700.00	1,698.70	1,693.62	1,692.93	3.65	3.56	-164.58	-15.01	43.41	72.51	65.42	7.09	10.233	
1,800.00	1,797.47	1,789.02	1,787.69	3.91	3.77	-162.61	-23.36	50.58	96.42	88.96	7.46	12.928	
1,900.00	1,895.62	1,882.50	1,880.24	4.21	4.00	-161.17	-33.28	59.09	125.50	117.66	7.84	16.015	
2,007.10	1,999.94	1,980.10	1,976.51	4.58	4.26	-160.03	-45.46	69.54	162.21	153.96	8.25	19.661	
2,100.00	2,090.03	2,062.91	2,057.85	4.94	4.51	-159.36	-57.26	79.67	197.27	188.60	8.68	22.740	
2,200.00	2,187.00	2,150.64	2,143.63	5.35	4.80	-158.57	-71.22	91.64	236.74	227.59	9.15	25.872	
2,300.00	2,283.97	2,236.84	2,227.47	5.78	5.12	-157.77	-86.39	104.66	277.97	268.33	9.64	28.827	
2,400.00	2,380.93	2,321.46	2,309.33	6.23	5.47	-156.97	-102.67	118.63	320.95	310.80	10.15	31.619	
2,500.00	2,477.90	2,404.48	2,389.15	6.68	5.84	-156.19	-119.98	133.48	365.65	354.98	10.68	34.245	
2,600.00	2,574.87	2,485.85	2,466.90	7.15	6.24	-155.44	-138.22	149.13	412.04	400.82	11.22	36.717	
2,700.00	2,671.84	2,570.36	2,547.18	7.62	6.68	-154.70	-158.24	166.31	459.82	448.03	11.79	38.998	
2,800.00	2,768.81	2,657.98	2,630.37	8.10	7.16	-154.06	-179.11	184.22	507.80	495.42	12.38	41.018	
2,900.00	2,865.78	2,745.59	2,713.56	8.59	7.66	-153.54	-199.98	202.12	555.81	542.83	12.98	42.832	
3,000.00	2,962.75	2,833.21	2,796.75	9.08	8.16	-153.10	-220.85	220.03	603.85	590.27	13.58	44.466	
3,100.00	3,059.72	2,920.83	2,879.93	9.58	8.68	-152.72	-241.72	237.94	651.92	637.73	14.19	45.943	
3,200.00	3,156.69	3,008.44	2,963.12	10.07	9.20	-152.39	-262.59	255.84	700.00	685.20	14.80	47.283	
3,300.00	3,253.66	3,096.06	3,046.31	10.57	9.73	-152.11	-283.46	273.75	748.10	732.68	15.42	48.501	
3,400.00	3,350.63	3,183.67	3,129.50	11.08	10.26	-151.86	-304.32	291.66	796.21	780.16	16.05	49.613	
3,500.00	3,447.60	3,271.29	3,212.69	11.58	10.80	-151.64	-325.19	309.56	844.33	827.66	16.68	50.632	
3,600.00	3,544.57	3,358.91	3,295.88	12.09	11.34	-151.44	-346.06	327.47	892.46	875.16	17.31	51.570	
3,700.00	3,641.54	3,446.52	3,379.07	12.60	11.89	-151.27	-366.93	345.38	940.60	922.66	17.94	52.434	
3,800.00	3,738.51	3,534.14	3,462.26	13.11	12.44	-151.11	-387.80	363.28	988.75	970.17	18.57	53.234	
3,900.00	3,835.47	3,621.75	3,545.45	13.62	12.99	-150.96	-408.67	381.19	1,036.90	1,017.68	19.21	53.967	
4,000.00	3,932.44	3,709.37	3,628.64	14.14	13.54	-150.83	-429.54	399.10	1,085.05	1,065.19	19.86	54.634	
4,100.00	4,029.41	3,796.99	3,711.82	14.65	14.10	-150.71	-450.41	417.00	1,133.21	1,112.70	20.51	55.254	
4,200.00	4,126.38	3,884.60	3,795.01	15.17	14.65	-150.60	-471.28	434.91	1,181.37	1,160.21	21.16	55.830	
4,300.00	4,223.35	3,972.22	3,878.20	15.68	15.21	-150.50	-492.15	452.82	1,229.54	1,207.72	21.81	56.366	
4,400.00	4,320.32	4,059.84	3,961.39	16.20	15.77	-150.40	-513.02	470.72	1,277.70	1,255.24	22.47	56.867	
4,500.00	4,417.29	4,147.45	4,044.58	16.72	16.33	-150.31	-533.89	488.63	1,325.87	1,302.75	23.12	57.336	
4,600.00	4,514.26	4,235.07	4,127.77	17.23	16.90	-150.23	-554.76	506.54	1,374.05	1,350.26	23.78	57.775	
4,700.00	4,611.23	4,322.68	4,210.96	17.75	17.46	-150.16	-575.63	524.45	1,422.22	1,397.78	24.44	58.188	
4,800.00	4,708.20	4,410.30	4,294.15	18.27	18.02	-150.09	-596.50	542.35	1,470.40	1,445.29	25.10	58.576	
4,900.00	4,805.17	4,497.92	4,377.34	18.79	18.59	-150.02	-617.36	560.26	1,518.57	1,492.81	25.76	58.942	
5,000.00	4,902.14	4,585.53	4,460.52	19.31	19.16	-149.96	-638.23	578.17	1,566.75	1,540.33	26.43	59.287	
5,100.00	4,999.11	4,673.15	4,543.71	19.83	19.72	-149.90	-659.10	596.07	1,614.93	1,587.84	27.09	59.613	

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_JESSER 31-2
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 5158.00ft (Original Well Elev)
Reference Site:	WELD_JESSER 18-2 PAD	MD Reference:	WELL @ 5158.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_JESSER 31-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_JESSER 31-2	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 3-16-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design WELD_JESSER 18-2 PAD - P_BROWN 6-2S - P_BROWN 6-2S - PLAN #1 3-16-10 RHS												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
5,200.00	5,096.08	4,760.76	4,626.90	20.35	20.29	-149.84	-679.97	613.98	1,663.12	1,635.36	27.76	59.921	
5,300.00	5,193.05	4,848.38	4,710.09	20.87	20.86	-149.79	-700.84	631.89	1,711.30	1,682.88	28.42	60.213	
5,400.00	5,290.01	4,936.00	4,793.28	21.40	21.43	-149.74	-721.71	649.79	1,759.48	1,730.40	29.09	60.490	
5,500.00	5,386.98	5,023.61	4,876.47	21.92	22.00	-149.69	-742.58	667.70	1,807.67	1,777.91	29.75	60.753	
5,600.00	5,483.95	5,111.23	4,959.66	22.44	22.56	-149.65	-763.45	685.61	1,855.85	1,825.43	30.42	61.004	
5,699.11	5,580.06	5,198.07	5,042.11	22.96	23.13	-149.61	-784.13	703.35	1,903.61	1,872.53	31.08	61.240	
5,800.00	5,678.31	5,250.61	5,092.00	23.40	23.47	-150.12	-796.65	714.09	1,951.22	1,919.43	31.79	61.383	
5,900.00	5,776.42	5,250.61	5,092.00	23.72	23.47	-150.65	-796.65	714.09	1,999.01	1,966.80	32.21	62.055	
6,000.00	5,875.15	5,250.61	5,092.00	24.01	23.47	-151.20	-796.65	714.09	2,047.97	2,015.38	32.59	62.838	
6,100.00	5,974.37	5,250.61	5,092.00	24.26	23.47	-151.75	-796.65	714.09	2,097.96	2,065.04	32.92	63.729	
6,200.00	6,073.97	5,250.61	5,092.00	24.46	23.47	-152.31	-796.65	714.09	2,148.85	2,115.65	33.20	64.727	
6,300.00	6,173.82	5,250.61	5,092.00	24.62	23.47	-152.86	-796.65	714.09	2,200.51	2,167.09	33.43	65.831	
6,406.21	6,280.00	5,250.61	5,092.00	24.75	23.47	111.42	-796.65	714.09	2,256.11	2,222.49	33.62	67.105	
6,500.00	6,373.79	5,250.61	5,092.00	24.85	23.47	111.42	-796.65	714.09	2,306.88	2,273.11	33.76	68.324	
6,600.00	6,473.79	5,250.61	5,092.00	24.97	23.47	111.42	-796.65	714.09	2,363.90	2,329.98	33.92	69.689	
6,700.00	6,573.79	5,250.61	5,092.00	25.09	23.47	111.42	-796.65	714.09	2,423.72	2,389.64	34.08	71.120	
6,800.00	6,673.79	5,250.61	5,092.00	25.22	23.47	111.42	-796.65	714.09	2,486.11	2,451.87	34.24	72.610	
6,900.00	6,773.79	5,250.61	5,092.00	25.34	23.47	111.42	-796.65	714.09	2,550.90	2,516.50	34.40	74.153	
7,000.00	6,873.79	5,250.61	5,092.00	25.47	23.47	111.42	-796.65	714.09	2,617.91	2,583.35	34.56	75.742	
7,100.00	6,973.79	5,250.61	5,092.00	25.59	23.47	111.42	-796.65	714.09	2,686.97	2,652.25	34.73	77.374	
7,200.00	7,073.79	5,250.61	5,092.00	25.72	23.47	111.42	-796.65	714.09	2,757.93	2,723.04	34.89	79.041	
7,300.00	7,173.79	5,250.61	5,092.00	25.85	23.47	111.42	-796.65	714.09	2,830.64	2,795.59	35.06	80.740	
7,400.00	7,273.79	5,250.61	5,092.00	25.98	23.47	111.42	-796.65	714.09	2,904.98	2,869.75	35.23	82.466	
7,500.00	7,373.79	5,250.61	5,092.00	26.12	23.47	111.42	-796.65	714.09	2,980.82	2,945.42	35.40	84.215	
7,600.00	7,473.79	5,250.61	5,092.00	26.25	23.47	111.42	-796.65	714.09	3,058.04	3,022.48	35.57	85.985	
7,700.00	7,573.79	5,250.61	5,092.00	26.38	23.47	111.42	-796.65	714.09	3,136.56	3,100.82	35.74	87.770	
7,800.00	7,673.79	5,250.61	5,092.00	26.52	23.47	111.42	-796.65	714.09	3,216.26	3,180.35	35.91	89.570	
7,900.00	7,773.79	5,250.61	5,092.00	26.66	23.47	111.42	-796.65	714.09	3,297.07	3,260.99	36.08	91.380	
8,000.00	7,873.79	5,250.61	5,092.00	26.79	23.47	111.42	-796.65	714.09	3,378.91	3,342.66	36.26	93.198	
8,100.00	7,973.79	5,250.61	5,092.00	26.93	23.47	111.42	-796.65	714.09	3,461.71	3,425.28	36.43	95.023	
8,200.00	8,073.79	5,250.61	5,092.00	27.07	23.47	111.42	-796.65	714.09	3,545.39	3,508.78	36.61	96.852	
8,300.00	8,173.79	5,250.61	5,092.00	27.22	23.47	111.42	-796.65	714.09	3,629.89	3,593.11	36.78	98.684	
8,321.21	8,195.00	5,250.61	5,092.00	27.25	23.47	111.42	-796.65	714.09	3,647.92	3,611.10	36.82	99.072	

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_JESSER 31-2
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 5158.00ft (Original Well Elev)
Reference Site:	WELD_JESSER 18-2 PAD	MD Reference:	WELL @ 5158.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_JESSER 31-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_JESSER 31-2	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 3-16-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design WELD_JESSER 18-2 PAD - P_JESSER 21-2 - P_JESSER 21-2 - PLAN #1 3-16-10 RHS												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	89.58	0.73	100.17	100.17				
100.00	100.00	100.00	100.00	0.10	0.10	89.58	0.73	100.17	100.17	99.98	0.19	524.331	
200.00	200.00	200.00	200.00	0.32	0.32	89.58	0.73	100.17	100.17	99.53	0.64	156.380	
300.00	300.00	300.00	300.00	0.55	0.55	89.58	0.73	100.17	100.17	99.08	1.09	91.893	
400.00	400.00	400.00	400.00	0.77	0.77	89.58	0.73	100.17	100.17	98.63	1.54	65.063	
500.00	500.00	500.00	500.00	0.99	0.99	89.58	0.73	100.17	100.17	98.19	1.99	50.360	
600.00	600.00	600.00	600.00	1.22	1.22	89.58	0.73	100.17	100.17	97.74	2.44	41.077	
700.00	700.00	700.00	700.00	1.44	1.44	89.58	0.73	100.17	100.17	97.29	2.89	34.683	
800.00	800.00	800.00	800.00	1.67	1.67	89.58	0.73	100.17	100.17	96.84	3.34	30.012	
900.00	900.00	900.00	900.00	1.89	1.89	89.58	0.73	100.17	100.17	96.39	3.79	26.450	
1,000.00	1,000.00	1,000.00	1,000.00	2.12	2.12	89.58	0.73	100.17	100.17	95.94	4.24	23.644	
1,100.00	1,100.00	1,100.00	1,100.00	2.34	2.34	89.58	0.73	100.17	100.17	95.49	4.69	21.376	
1,200.00	1,200.00	1,200.00	1,200.00	2.57	2.57	89.58	0.73	100.17	100.17	95.04	5.14	19.505	
1,300.00	1,300.00	1,300.00	1,300.00	2.79	2.79	89.58	0.73	100.17	100.17	94.59	5.59	17.935 CC, ES	
1,400.00	1,399.98	1,396.52	1,396.50	3.00	3.00	-175.30	0.64	101.79	103.59	97.60	5.99	17.285 SF	
1,500.00	1,499.84	1,492.36	1,492.22	3.21	3.19	-175.34	0.37	106.62	113.83	107.46	6.37	17.874	
1,600.00	1,599.45	1,586.88	1,586.40	3.42	3.39	-175.39	-0.07	114.50	130.79	124.05	6.74	19.410	
1,700.00	1,698.70	1,679.47	1,678.36	3.65	3.61	-175.43	-0.67	125.23	154.35	147.25	7.10	21.736	
1,800.00	1,797.47	1,769.56	1,767.46	3.91	3.84	-175.45	-1.41	138.51	184.33	176.88	7.46	24.723	
1,900.00	1,895.62	1,856.65	1,853.15	4.21	4.08	-175.47	-2.28	154.00	220.50	212.70	7.80	28.267	
2,007.10	1,999.94	1,946.11	1,940.65	4.58	4.37	-175.46	-3.32	172.61	265.82	257.66	8.16	32.581	
2,100.00	2,090.03	2,020.86	2,013.27	4.94	4.64	-175.51	-4.30	190.25	309.06	300.53	8.53	36.245	
2,200.00	2,187.00	2,100.00	2,089.64	5.35	4.95	-175.51	-5.46	210.98	357.95	349.02	8.93	40.089	
2,300.00	2,283.97	2,174.80	2,161.27	5.78	5.29	-175.49	-6.66	232.50	409.15	399.82	9.33	43.852	
2,400.00	2,380.93	2,249.84	2,232.54	6.23	5.66	-175.45	-7.97	255.93	462.55	452.81	9.74	47.498	
2,500.00	2,477.90	2,333.88	2,312.12	6.68	6.11	-175.41	-9.48	282.92	516.74	506.57	10.17	50.791	
2,600.00	2,574.87	2,417.92	2,391.69	7.15	6.57	-175.38	-10.99	309.91	570.93	560.32	10.62	53.780	
2,700.00	2,671.84	2,501.97	2,471.27	7.62	7.05	-175.35	-12.50	336.90	625.13	614.06	11.06	56.498	
2,800.00	2,768.81	2,586.01	2,550.85	8.10	7.55	-175.33	-14.00	363.88	679.32	667.80	11.52	58.972	
2,900.00	2,865.78	2,670.05	2,630.42	8.59	8.05	-175.31	-15.51	390.87	733.52	721.54	11.98	61.232	
3,000.00	2,962.75	2,754.09	2,710.00	9.08	8.56	-175.30	-17.02	417.86	787.71	775.27	12.44	63.303	
3,100.00	3,059.72	2,838.13	2,789.58	9.58	9.08	-175.28	-18.53	444.85	841.90	828.99	12.91	65.205	
3,200.00	3,156.69	2,922.17	2,869.15	10.07	9.60	-175.27	-20.04	471.84	896.10	882.71	13.38	66.956	
3,300.00	3,253.66	3,006.22	2,948.73	10.57	10.13	-175.26	-21.54	498.82	950.29	936.43	13.86	68.571	
3,400.00	3,350.63	3,090.26	3,028.30	11.08	10.66	-175.25	-23.05	525.81	1,004.48	990.15	14.34	70.065	
3,500.00	3,447.60	3,174.30	3,107.88	11.58	11.20	-175.24	-24.56	552.80	1,058.68	1,043.86	14.82	71.449	
3,600.00	3,544.57	3,258.34	3,187.46	12.09	11.74	-175.23	-26.07	579.79	1,112.87	1,097.57	15.30	72.734	
3,700.00	3,641.54	3,342.38	3,267.03	12.60	12.28	-175.22	-27.57	606.77	1,167.07	1,151.28	15.79	73.931	
3,800.00	3,738.51	3,426.42	3,346.61	13.11	12.82	-175.22	-29.08	633.76	1,221.26	1,204.99	16.27	75.048	
3,900.00	3,835.47	3,510.47	3,426.19	13.62	13.37	-175.21	-30.59	660.75	1,275.45	1,258.69	16.76	76.091	
4,000.00	3,932.44	3,594.51	3,505.76	14.14	13.91	-175.20	-32.10	687.74	1,329.65	1,312.39	17.25	77.068	
4,100.00	4,029.41	3,678.55	3,585.34	14.65	14.46	-175.20	-33.61	714.73	1,383.84	1,366.10	17.75	77.983	
4,200.00	4,126.38	3,762.59	3,664.91	15.17	15.01	-175.19	-35.11	741.71	1,438.04	1,419.80	18.24	78.843	
4,300.00	4,223.35	3,846.63	3,744.49	15.68	15.57	-175.19	-36.62	768.70	1,492.23	1,473.50	18.73	79.653	
4,400.00	4,320.32	3,930.67	3,824.07	16.20	16.12	-175.19	-38.13	795.69	1,546.42	1,527.19	19.23	80.415	
4,500.00	4,417.29	4,014.72	3,903.64	16.72	16.67	-175.18	-39.64	822.68	1,600.62	1,580.89	19.73	81.135	
4,600.00	4,514.26	4,098.76	3,983.22	17.23	17.23	-175.18	-41.14	849.67	1,654.81	1,634.59	20.23	81.816	
4,700.00	4,611.23	4,182.80	4,062.80	17.75	17.78	-175.17	-42.65	876.65	1,709.01	1,688.28	20.73	82.459	
4,800.00	4,708.20	4,266.84	4,142.37	18.27	18.34	-175.17	-44.16	903.64	1,763.20	1,741.97	21.23	83.069	
4,900.00	4,805.17	4,350.88	4,221.95	18.79	18.90	-175.17	-45.67	930.63	1,817.39	1,795.67	21.73	83.647	
5,000.00	4,902.14	4,434.92	4,301.52	19.31	19.45	-175.17	-47.18	957.62	1,871.59	1,849.36	22.23	84.197	
5,100.00	4,999.11	4,518.97	4,381.10	19.83	20.01	-175.16	-48.68	984.61	1,925.78	1,903.05	22.73	84.719	

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_JESSER 31-2
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 5158.00ft (Original Well Elev)
Reference Site:	WELD_JESSER 18-2 PAD	MD Reference:	WELL @ 5158.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_JESSER 31-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_JESSER 31-2	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 3-16-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design WELD_JESSER 18-2 PAD - P_JESSER 21-2 - P_JESSER 21-2 - PLAN #1 3-16-10 RHS												Offset Site Error:	0.00 ft
Survey Program: 0-MWD												Offset Well Error:	0.00 ft
Reference	Offset	Semi Major Axis			Distance								Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
5,200.00	5,096.08	4,603.01	4,460.68	20.35	20.57	-175.16	-50.19	1,011.59	1,979.98	1,956.74	23.23	85.217	
5,300.00	5,193.05	4,687.05	4,540.25	20.87	21.13	-175.16	-51.70	1,038.58	2,034.17	2,010.43	23.74	85.691	
5,400.00	5,290.01	4,771.09	4,619.83	21.40	21.69	-175.16	-53.21	1,065.57	2,088.36	2,064.12	24.24	86.143	
5,500.00	5,386.98	4,855.13	4,699.41	21.92	22.25	-175.15	-54.71	1,092.56	2,142.56	2,117.81	24.75	86.575	
5,600.00	5,483.95	4,939.18	4,778.98	22.44	22.81	-175.15	-56.22	1,119.55	2,196.75	2,171.50	25.25	86.988	
5,699.11	5,580.06	5,022.47	4,857.85	22.96	23.37	-175.15	-57.72	1,146.29	2,250.46	2,224.71	25.76	87.379	
5,800.00	5,678.31	5,108.20	4,939.03	23.40	23.94	-175.25	-59.26	1,173.82	2,303.64	2,277.18	26.46	87.046	
5,900.00	5,776.42	5,194.96	5,021.18	23.72	24.52	-175.33	-60.81	1,201.69	2,353.35	2,326.23	27.12	86.774	
6,000.00	5,875.15	5,283.40	5,104.92	24.01	25.11	-175.39	-62.40	1,230.09	2,400.01	2,372.26	27.75	86.494	
6,100.00	5,974.37	5,373.41	5,190.14	24.26	25.71	-175.44	-64.01	1,258.99	2,443.56	2,415.22	28.34	86.208	
6,200.00	6,073.97	5,464.87	5,276.74	24.46	26.32	-175.48	-65.65	1,288.36	2,483.96	2,455.05	28.91	85.920	
6,300.00	6,173.82	5,559.83	5,400.85	24.62	27.16	-175.48	-67.99	1,330.10	2,521.11	2,491.57	29.55	85.328	
6,406.21	6,280.00	6,481.77	6,272.32	24.75	29.75	89.54	-75.71	1,468.43	2,539.91	2,508.27	31.64	80.267	
6,500.00	6,373.79	6,583.24	6,373.79	24.85	29.85	89.54	-75.72	1,468.44	2,539.91	2,507.94	31.98	79.433	
6,600.00	6,473.79	6,683.24	6,473.79	24.97	29.95	89.54	-75.72	1,468.44	2,539.91	2,507.59	32.32	78.578	
6,700.00	6,573.79	6,783.24	6,573.79	25.09	30.05	89.54	-75.72	1,468.44	2,539.91	2,507.24	32.67	77.736	
6,800.00	6,673.79	6,883.24	6,673.79	25.22	30.16	89.54	-75.72	1,468.44	2,539.91	2,506.89	33.03	76.905	
6,900.00	6,773.79	6,983.24	6,773.79	25.34	30.26	89.54	-75.72	1,468.44	2,539.91	2,506.53	33.38	76.088	
7,000.00	6,873.79	7,083.24	6,873.79	25.47	30.37	89.54	-75.72	1,468.44	2,539.91	2,506.18	33.74	75.282	
7,100.00	6,973.79	7,183.24	6,973.79	25.59	30.48	89.54	-75.72	1,468.44	2,539.91	2,505.82	34.10	74.488	
7,200.00	7,073.79	7,283.24	7,073.79	25.72	30.58	89.54	-75.72	1,468.44	2,539.91	2,505.46	34.46	73.707	
7,300.00	7,173.79	7,383.24	7,173.79	25.85	30.69	89.54	-75.72	1,468.44	2,539.91	2,505.09	34.82	72.937	
7,400.00	7,273.79	7,483.24	7,273.79	25.98	30.81	89.54	-75.72	1,468.44	2,539.91	2,504.73	35.19	72.180	
7,500.00	7,373.79	7,583.24	7,373.79	26.12	30.92	89.54	-75.72	1,468.44	2,539.91	2,504.36	35.56	71.434	
7,600.00	7,473.79	7,683.24	7,473.79	26.25	31.03	89.54	-75.72	1,468.44	2,539.91	2,503.99	35.93	70.699	
7,700.00	7,573.79	7,783.24	7,573.79	26.38	31.15	89.54	-75.72	1,468.44	2,539.91	2,503.62	36.30	69.976	
7,800.00	7,673.79	7,883.24	7,673.79	26.52	31.27	89.54	-75.72	1,468.44	2,539.91	2,503.24	36.67	69.265	
7,900.00	7,773.79	7,983.24	7,773.79	26.66	31.38	89.54	-75.72	1,468.44	2,539.91	2,502.87	37.04	68.564	
8,000.00	7,873.79	8,083.24	7,873.79	26.79	31.50	89.54	-75.72	1,468.44	2,539.91	2,502.49	37.42	67.875	
8,100.00	7,973.79	8,183.24	7,973.79	26.93	31.62	89.54	-75.72	1,468.44	2,539.91	2,502.12	37.80	67.196	
8,200.00	8,073.79	8,283.24	8,073.79	27.07	31.74	89.54	-75.72	1,468.44	2,539.91	2,501.74	38.18	66.529	
8,300.00	8,173.79	8,383.24	8,173.79	27.22	31.87	89.54	-75.72	1,468.44	2,539.91	2,501.36	38.56	65.871	
8,321.21	8,195.00	8,404.45	8,195.00	27.25	31.89	89.54	-75.72	1,468.44	2,539.91	2,501.28	38.64	65.733	

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_JESSER 31-2
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 5158.00ft (Original Well Elev)
Reference Site:	WELD_JESSER 18-2 PAD	MD Reference:	WELL @ 5158.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_JESSER 31-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_JESSER 31-2	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 3-16-10 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	89.49	0.72	80.03	80.03				
100.00	100.00	100.00	100.00	0.10	0.10	89.49	0.72	80.03	80.03	79.84	0.19	418.885	
200.00	200.00	200.00	200.00	0.32	0.32	89.49	0.72	80.03	80.03	79.39	0.64	124.931	
300.00	300.00	300.00	300.00	0.55	0.55	89.49	0.72	80.03	80.03	78.94	1.09	73.413	
400.00	400.00	400.00	400.00	0.77	0.77	89.49	0.72	80.03	80.03	78.49	1.54	51.978	
500.00	500.00	500.00	500.00	0.99	0.99	89.49	0.72	80.03	80.03	78.04	1.99	40.232	
600.00	600.00	600.00	600.00	1.22	1.22	89.49	0.72	80.03	80.03	77.59	2.44	32.816	
700.00	700.00	700.00	700.00	1.44	1.44	89.49	0.72	80.03	80.03	77.14	2.89	27.708	
800.00	800.00	800.00	800.00	1.67	1.67	89.49	0.72	80.03	80.03	76.69	3.34	23.977	
900.00	900.00	900.00	900.00	1.89	1.89	89.49	0.72	80.03	80.03	76.24	3.79	21.131	
1,000.00	1,000.00	1,000.00	1,000.00	2.12	2.12	89.49	0.72	80.03	80.03	75.79	4.24	18.889	
1,100.00	1,100.00	1,100.00	1,100.00	2.34	2.34	89.49	0.72	80.03	80.03	75.34	4.69	17.077	
1,200.00	1,200.00	1,200.00	1,200.00	2.57	2.57	89.49	0.72	80.03	80.03	74.89	5.14	15.582	
1,300.00	1,300.00	1,300.00	1,300.00	2.79	2.79	89.49	0.72	80.03	80.03	74.44	5.59	14.328 CC, ES	
1,400.00	1,399.98	1,397.77	1,397.75	3.00	3.01	-176.20	1.78	81.31	83.10	77.10	6.01	13.838 SF	
1,500.00	1,499.84	1,494.91	1,494.76	3.21	3.22	-178.32	4.94	85.14	92.39	86.00	6.40	14.439	
1,600.00	1,599.45	1,590.80	1,590.30	3.42	3.44	178.98	10.11	91.40	108.03	101.25	6.79	15.919	
1,700.00	1,698.70	1,684.86	1,683.70	3.65	3.66	176.29	17.15	99.93	130.07	122.90	7.17	18.148	
1,800.00	1,797.47	1,776.56	1,774.36	3.91	3.90	173.92	25.90	110.52	158.42	150.88	7.54	21.008	
1,900.00	1,895.62	1,865.41	1,861.74	4.21	4.15	171.96	36.13	122.91	192.90	184.99	7.91	24.395	
2,007.10	1,999.94	1,956.95	1,951.21	4.58	4.44	170.27	48.47	137.85	236.35	228.05	8.29	28.502	
2,100.00	2,090.03	2,033.63	2,025.63	4.94	4.72	169.18	60.20	152.06	277.92	269.24	8.69	31.991	
2,200.00	2,187.00	2,113.94	2,103.04	5.35	5.03	168.14	73.85	168.59	324.99	315.87	9.12	35.638	
2,300.00	2,283.97	2,191.93	2,177.59	5.78	5.38	167.23	88.41	186.23	374.38	364.82	9.56	39.168	
2,400.00	2,380.93	2,267.58	2,249.29	6.23	5.75	166.41	103.77	204.83	425.98	415.98	10.01	42.576	
2,500.00	2,477.90	2,340.90	2,318.15	6.68	6.15	165.68	119.80	224.24	479.72	469.26	10.46	45.880	
2,600.00	2,574.87	2,411.90	2,384.19	7.15	6.56	165.01	136.39	244.33	535.49	524.58	10.91	49.089	
2,700.00	2,671.84	2,480.60	2,447.47	7.62	7.00	164.41	153.43	264.97	593.21	581.84	11.37	52.189	
2,800.00	2,768.81	2,549.47	2,510.25	8.10	7.47	163.83	171.46	286.80	652.75	640.92	11.83	55.171	
2,900.00	2,865.78	2,629.13	2,582.61	8.59	8.04	163.26	192.67	312.48	712.95	700.62	12.34	57.791	
3,000.00	2,962.75	2,708.79	2,654.97	9.08	8.62	162.77	213.87	338.16	773.19	760.35	12.85	60.188	
3,100.00	3,059.72	2,788.45	2,727.33	9.58	9.22	162.35	235.08	363.85	833.46	820.10	13.36	62.368	
3,200.00	3,156.69	2,868.11	2,799.69	10.07	9.82	161.99	256.29	389.53	893.76	879.87	13.89	64.359	
3,300.00	3,253.66	2,947.77	2,872.06	10.57	10.44	161.67	277.50	415.21	954.07	939.66	14.41	66.188	
3,400.00	3,350.63	3,027.43	2,944.42	11.08	11.06	161.39	298.70	440.89	1,014.40	999.46	14.95	67.871	
3,500.00	3,447.60	3,107.09	3,016.78	11.58	11.68	161.15	319.91	466.58	1,074.75	1,059.27	15.48	69.422	
3,600.00	3,544.57	3,186.75	3,089.14	12.09	12.32	160.92	341.12	492.26	1,135.11	1,119.08	16.02	70.851	
3,700.00	3,641.54	3,266.40	3,161.50	12.60	12.95	160.73	362.33	517.94	1,195.47	1,178.91	16.56	72.172	
3,800.00	3,738.51	3,346.06	3,233.86	13.11	13.59	160.55	383.53	543.63	1,255.85	1,238.74	17.11	73.399	
3,900.00	3,835.47	3,425.72	3,306.23	13.62	14.23	160.38	404.74	569.31	1,316.23	1,298.57	17.66	74.540	
4,000.00	3,932.44	3,505.38	3,378.59	14.14	14.88	160.23	425.95	594.99	1,376.61	1,358.41	18.21	75.604	
4,100.00	4,029.41	3,585.04	3,450.95	14.65	15.52	160.10	447.16	620.67	1,437.01	1,418.24	18.76	76.594	
4,200.00	4,126.38	3,664.70	3,523.31	15.17	16.17	159.97	468.36	646.36	1,497.40	1,478.09	19.32	77.519	
4,300.00	4,223.35	3,744.36	3,595.67	15.68	16.82	159.86	489.57	672.04	1,557.81	1,537.93	19.87	78.386	
4,400.00	4,320.32	3,824.02	3,668.03	16.20	17.48	159.75	510.78	697.72	1,618.21	1,597.78	20.43	79.200	
4,500.00	4,417.29	3,903.68	3,740.40	16.72	18.13	159.65	531.99	723.41	1,678.62	1,657.63	20.99	79.966	
4,600.00	4,514.26	3,983.34	3,812.76	17.23	18.79	159.56	553.19	749.09	1,739.03	1,717.48	21.55	80.684	
4,700.00	4,611.23	4,063.00	3,885.12	17.75	19.44	159.47	574.40	774.77	1,799.45	1,777.33	22.12	81.362	
4,800.00	4,708.20	4,142.65	3,957.48	18.27	20.10	159.39	595.61	800.45	1,859.86	1,837.18	22.68	82.002	
4,900.00	4,805.17	4,222.31	4,029.84	18.79	20.76	159.31	616.82	826.14	1,920.28	1,897.04	23.25	82.607	
5,000.00	4,902.14	4,301.97	4,102.20	19.31	21.42	159.24	638.02	851.82	1,980.70	1,956.89	23.81	83.180	
5,100.00	4,999.11	4,381.63	4,174.57	19.83	22.08	159.18	659.23	877.50	2,041.13	2,016.75	24.38	83.722	

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_JESSER 31-2
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 5158.00ft (Original Well Elev)
Reference Site:	WELD_JESSER 18-2 PAD	MD Reference:	WELL @ 5158.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_JESSER 31-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_JESSER 31-2	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 3-16-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design WELD_JESSER 18-2 PAD - P_JESSER 28-2 - P_JESSER 28-2 - PLAN #1 3-16-10 RHS												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
5,200.00	5,096.08	4,461.29	4,246.93	20.35	22.74	159.11	680.44	903.18	2,101.55	2,076.60	24.95	84.236	
5,300.00	5,193.05	4,540.95	4,319.29	20.87	23.40	159.05	701.65	928.87	2,161.98	2,136.46	25.52	84.725	
5,400.00	5,290.01	4,620.61	4,391.65	21.40	24.06	159.00	722.85	954.55	2,222.41	2,196.32	26.09	85.191	
5,500.00	5,386.98	4,700.27	4,464.01	21.92	24.72	158.94	744.06	980.23	2,282.83	2,256.18	26.66	85.634	
5,600.00	5,483.95	4,779.93	4,536.37	22.44	25.39	158.89	765.27	1,005.92	2,343.26	2,316.03	27.23	86.055	
5,699.11	5,580.06	4,858.88	4,608.09	22.96	26.04	158.85	786.29	1,031.37	2,403.16	2,375.36	27.80	86.454	
5,800.00	5,678.31	4,940.22	4,681.98	23.40	26.72	159.31	807.94	1,057.60	2,462.80	2,434.19	28.61	86.083	
5,900.00	5,776.42	5,022.69	4,756.90	23.72	27.41	159.69	829.90	1,084.19	2,519.23	2,489.86	29.37	85.777	
6,000.00	5,875.15	5,106.91	4,833.40	24.01	28.11	160.01	852.32	1,111.34	2,572.95	2,542.85	30.10	85.475	
6,100.00	5,974.37	5,192.76	4,911.39	24.26	28.83	160.26	875.18	1,139.02	2,623.88	2,593.07	30.80	85.183	
6,200.00	6,073.97	5,280.15	4,990.77	24.46	29.56	160.46	898.44	1,167.19	2,671.97	2,640.50	31.47	84.906	
6,300.00	6,173.82	5,368.97	5,071.46	24.62	30.30	160.60	922.09	1,195.83	2,717.17	2,685.07	32.10	84.649	
6,406.21	6,280.00	5,464.75	5,158.46	24.75	31.10	65.57	947.59	1,226.71	2,761.97	2,729.24	32.73	84.392	
6,500.00	6,373.79	5,549.95	5,235.86	24.85	31.82	65.37	970.27	1,254.18	2,800.07	2,766.88	33.19	84.367	
6,600.00	6,473.79	5,626.60	5,313.79	24.97	32.53	63.97	1,139.52	1,459.14	2,816.10	2,779.79	36.31	77.550	
6,700.00	6,573.79	5,703.60	5,393.79	25.09	33.24	63.97	1,139.52	1,459.14	2,816.10	2,779.79	36.31	77.550	
6,800.00	6,673.79	5,780.60	5,470.79	25.21	33.95	63.97	1,139.52	1,459.14	2,816.10	2,779.79	36.31	77.550	
6,900.00	6,773.79	5,857.60	5,547.79	25.33	34.66	63.97	1,139.52	1,459.14	2,816.10	2,779.79	36.31	77.550	
7,000.00	6,873.79	5,934.60	5,624.79	25.45	35.37	63.97	1,139.52	1,459.14	2,816.10	2,779.79	36.31	77.550	
7,100.00	6,973.79	6,011.60	5,701.79	25.57	36.08	63.97	1,139.52	1,459.14	2,816.10	2,779.79	36.31	77.550	
7,200.00	7,073.79	6,088.60	5,778.79	25.69	36.79	63.97	1,139.52	1,459.14	2,816.10	2,779.79	36.31	77.550	
7,300.00	7,173.79	6,165.60	5,855.79	25.81	37.50	63.97	1,139.52	1,459.14	2,816.10	2,779.79	36.31	77.550	
7,400.00	7,273.79	6,242.60	5,932.79	25.93	38.21	63.97	1,139.52	1,459.14	2,816.10	2,779.79	36.31	77.550	
7,500.00	7,373.79	6,319.60	6,009.79	26.05	38.92	63.97	1,139.52	1,459.14	2,816.10	2,779.79	36.31	77.550	
7,600.00	7,473.79	6,396.60	6,086.79	26.17	39.63	63.97	1,139.52	1,459.14	2,816.10	2,779.79	36.31	77.550	
7,700.00	7,573.79	6,473.60	6,163.79	26.29	40.34	63.97	1,139.52	1,459.14	2,816.10	2,779.79	36.31	77.550	
7,800.00	7,673.79	6,550.60	6,240.79	26.41	41.05	63.97	1,139.52	1,459.14	2,816.10	2,779.79	36.31	77.550	
7,900.00	7,773.79	6,627.60	6,317.79	26.53	41.76	63.97	1,139.52	1,459.14	2,816.10	2,779.79	36.31	77.550	
8,000.00	7,873.79	6,704.60	6,394.79	26.65	42.47	63.97	1,139.52	1,459.14	2,816.10	2,779.79	36.31	77.550	
8,100.00	7,973.79	6,781.60	6,471.79	26.77	43.18	63.97	1,139.52	1,459.14	2,816.10	2,779.79	36.31	77.550	
8,200.00	8,073.79	6,858.60	6,548.79	26.89	43.89	63.97	1,139.52	1,459.14	2,816.10	2,779.79	36.31	77.550	
8,259.45	8,133.24	6,918.05	6,608.24	27.01	44.60	63.97	1,139.52	1,459.14	2,816.10	2,779.79	36.31	77.550	
8,300.00	8,173.79	6,995.60	6,685.79	27.13	45.31	63.97	1,139.52	1,459.14	2,816.10	2,779.79	36.31	77.550	
8,321.21	8,195.00	7,016.80	6,706.99	27.25	46.02	63.97	1,139.52	1,459.14	2,816.10	2,779.79	36.31	77.550	

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_JESSER 31-2
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 5158.00ft (Original Well Elev)
Reference Site:	WELD_JESSER 18-2 PAD	MD Reference:	WELL @ 5158.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_JESSER 31-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_JESSER 31-2	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 3-16-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design WELD_JESSER 18-2 PAD - P_JESSER 4-2S - P_JESSER 4-2S - PLAN #1 3-16-10 RHS												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	89.58	0.36	50.09	50.09				
100.00	100.00	100.00	100.00	0.10	0.10	89.58	0.36	50.09	50.09	49.90	0.19	262.166	
200.00	200.00	200.00	200.00	0.32	0.32	89.58	0.36	50.09	50.09	49.45	0.64	78.190	
300.00	300.00	300.00	300.00	0.55	0.55	89.58	0.36	50.09	50.09	49.00	1.09	45.947	
400.00	400.00	400.00	400.00	0.77	0.77	89.58	0.36	50.09	50.09	48.55	1.54	32.532	
500.00	500.00	500.00	500.00	0.99	0.99	89.58	0.36	50.09	50.09	48.10	1.99	25.180	
600.00	600.00	600.00	600.00	1.22	1.22	89.58	0.36	50.09	50.09	47.65	2.44	20.538	
700.00	700.00	700.00	700.00	1.44	1.44	89.58	0.36	50.09	50.09	47.20	2.89	17.342	
800.00	800.00	800.00	800.00	1.67	1.67	89.58	0.36	50.09	50.09	46.75	3.34	15.006	
900.00	900.00	900.00	900.00	1.89	1.89	89.58	0.36	50.09	50.09	46.30	3.79	13.225	
1,000.00	1,000.00	1,000.00	1,000.00	2.12	2.12	89.58	0.36	50.09	50.09	45.85	4.24	11.822	
1,100.00	1,100.00	1,100.00	1,100.00	2.34	2.34	89.58	0.36	50.09	50.09	45.40	4.69	10.688	
1,200.00	1,200.00	1,200.00	1,200.00	2.57	2.57	89.58	0.36	50.09	50.09	44.95	5.14	9.752	
1,300.00	1,300.00	1,300.00	1,300.00	2.79	2.79	89.58	0.36	50.09	50.09	44.50	5.59	8.967 CC, ES	
1,400.00	1,399.98	1,401.15	1,401.14	3.00	3.01	-176.19	1.01	48.91	50.67	44.66	6.01	8.431	
1,500.00	1,499.84	1,502.28	1,502.18	3.21	3.23	-178.75	2.93	45.38	52.51	46.10	6.41	8.190	
1,600.00	1,599.45	1,603.34	1,603.02	3.42	3.45	177.36	6.13	39.52	55.77	48.96	6.81	8.189 SF	
1,700.00	1,698.70	1,704.30	1,703.55	3.65	3.69	172.65	10.59	31.32	60.71	53.50	7.21	8.416	
1,800.00	1,797.47	1,805.14	1,803.67	3.91	3.94	167.65	16.33	20.80	67.54	59.92	7.63	8.854	
1,900.00	1,895.62	1,905.83	1,903.29	4.21	4.20	162.79	23.31	7.99	76.43	68.36	8.07	9.473	
2,007.10	1,999.94	2,013.45	2,009.31	4.58	4.52	158.05	32.16	-8.25	88.32	79.73	8.59	10.287	
2,100.00	2,090.03	2,106.74	2,100.75	4.94	4.82	154.15	40.98	-24.44	99.28	90.14	9.14	10.866	
2,200.00	2,187.00	2,206.37	2,197.98	5.35	5.17	149.90	51.38	-43.53	110.52	100.72	9.80	11.278	
2,300.00	2,283.97	2,305.43	2,294.61	5.78	5.54	146.36	61.84	-62.71	122.15	111.64	10.51	11.622	
2,400.00	2,380.93	2,404.50	2,391.24	6.23	5.93	143.44	72.29	-81.89	134.17	122.91	11.26	11.913	
2,500.00	2,477.90	2,503.56	2,487.86	6.68	6.33	141.01	82.74	-101.07	146.47	134.42	12.04	12.161	
2,600.00	2,574.87	2,602.63	2,584.49	7.15	6.73	138.95	93.20	-120.25	158.99	146.14	12.85	12.370	
2,700.00	2,671.84	2,701.69	2,681.11	7.62	7.15	137.20	103.65	-139.43	171.68	158.00	13.68	12.548	
2,800.00	2,768.81	2,800.75	2,777.74	8.10	7.57	135.69	114.10	-158.61	184.52	169.99	14.53	12.700	
2,900.00	2,865.78	2,899.82	2,874.36	8.59	8.00	134.37	124.56	-177.79	197.46	182.07	15.39	12.832	
3,000.00	2,962.75	2,998.88	2,970.99	9.08	8.43	133.22	135.01	-196.97	210.49	194.23	16.26	12.945	
3,100.00	3,059.72	3,097.94	3,067.61	9.58	8.87	132.20	145.46	-216.15	223.59	206.45	17.14	13.044	
3,200.00	3,156.69	3,197.01	3,164.24	10.07	9.31	131.30	155.92	-235.33	236.76	218.73	18.03	13.131	
3,300.00	3,253.66	3,296.07	3,260.86	10.57	9.75	130.49	166.37	-254.51	249.98	231.05	18.93	13.208	
3,400.00	3,350.63	3,395.13	3,357.49	11.08	10.20	129.76	176.82	-273.69	263.24	243.41	19.83	13.276	
3,500.00	3,447.60	3,494.20	3,454.12	11.58	10.65	129.10	187.28	-292.87	276.54	255.81	20.73	13.337	
3,600.00	3,544.57	3,593.26	3,550.74	12.09	11.10	128.50	197.73	-312.05	289.88	268.23	21.65	13.392	
3,700.00	3,641.54	3,692.33	3,647.37	12.60	11.55	127.96	208.18	-331.23	303.24	280.68	22.56	13.441	
3,800.00	3,738.51	3,791.39	3,743.99	13.11	12.00	127.46	218.64	-350.41	316.63	293.15	23.48	13.486	
3,900.00	3,835.47	3,890.45	3,840.62	13.62	12.46	127.00	229.09	-369.59	330.03	305.64	24.40	13.526	
4,000.00	3,932.44	3,989.52	3,937.24	14.14	12.91	126.57	239.54	-388.77	343.46	318.14	25.32	13.563	
4,100.00	4,029.41	4,088.58	4,033.87	14.65	13.37	126.18	250.00	-407.95	356.91	330.66	26.25	13.597	
4,200.00	4,126.38	4,187.64	4,130.49	15.17	13.83	125.82	260.45	-427.13	370.37	343.19	27.18	13.628	
4,300.00	4,223.35	4,286.71	4,227.12	15.68	14.29	125.48	270.90	-446.31	383.84	355.73	28.11	13.657	
4,400.00	4,320.32	4,385.77	4,323.74	16.20	14.75	125.17	281.36	-465.49	397.33	368.29	29.04	13.683	
4,500.00	4,417.29	4,484.84	4,420.37	16.72	15.21	124.87	291.81	-484.67	410.82	380.85	29.97	13.708	
4,600.00	4,514.26	4,583.90	4,517.00	17.23	15.67	124.60	302.26	-503.85	424.33	393.42	30.90	13.730	
4,700.00	4,611.23	4,682.96	4,613.62	17.75	16.13	124.34	312.72	-523.03	437.84	406.00	31.84	13.751	
4,800.00	4,708.20	4,782.03	4,710.25	18.27	16.60	124.10	323.17	-542.21	451.37	418.59	32.78	13.771	
4,900.00	4,805.17	4,881.09	4,806.87	18.79	17.06	123.87	333.62	-561.39	464.90	431.19	33.71	13.790	
5,000.00	4,902.14	4,980.15	4,903.50	19.31	17.53	123.65	344.08	-580.57	478.44	443.79	34.65	13.807	
5,100.00	4,999.11	5,079.22	5,000.12	19.83	17.99	123.45	354.53	-599.75	491.98	456.39	35.59	13.823	

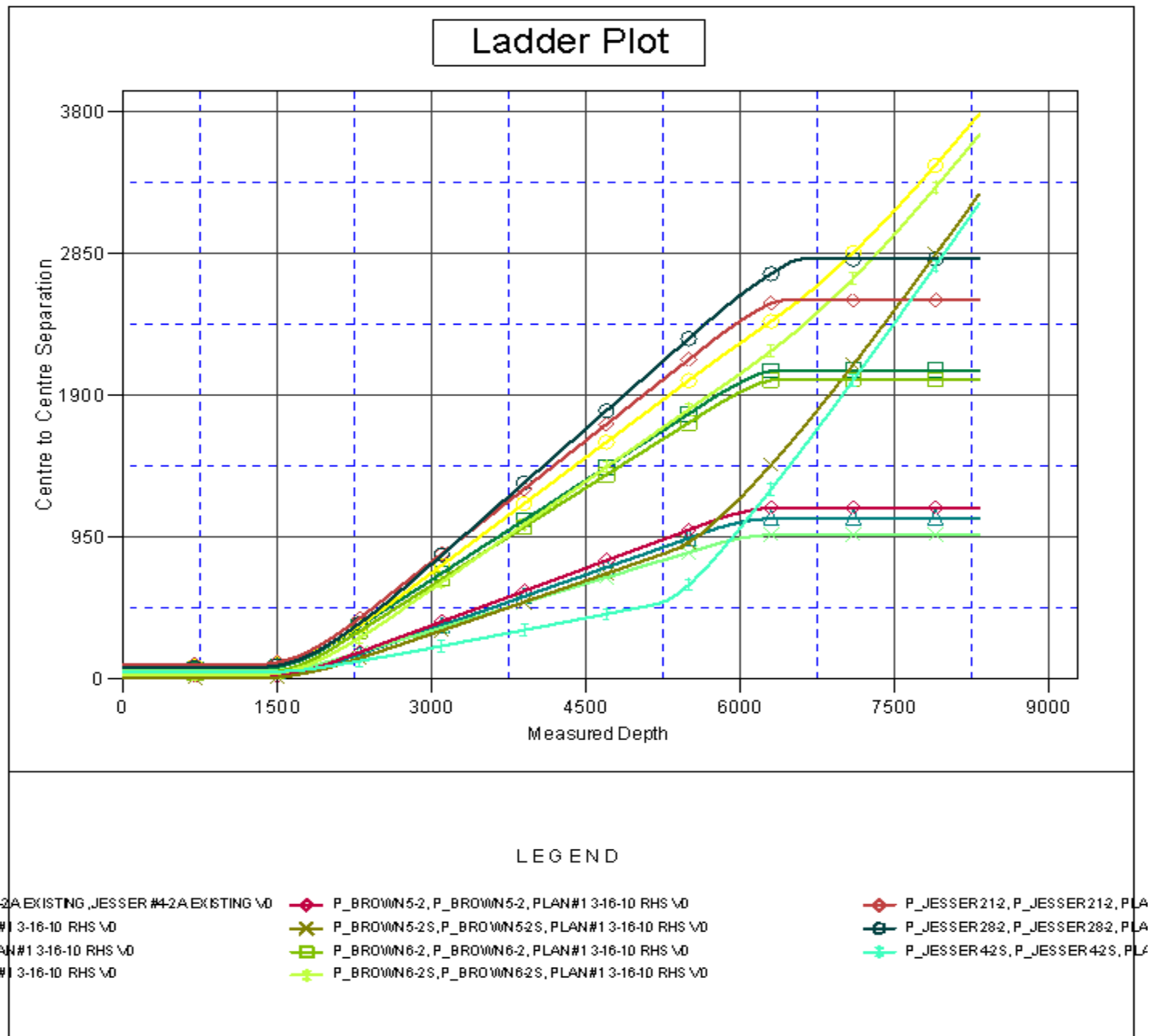
CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_JESSER 31-2
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 5158.00ft (Original Well Elev)
Reference Site:	WELD_JESSER 18-2 PAD	MD Reference:	WELL @ 5158.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_JESSER 31-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_JESSER 31-2	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 3-16-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design WELD_JESSER 18-2 PAD - P_JESSER 4-2S - P_JESSER 4-2S - PLAN #1 3-16-10 RHS												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
5,200.00	5,096.08	5,158.04	5,077.00	20.35	18.36	123.30	362.85	-615.01	505.94	469.51	36.43	13.887	
5,300.00	5,193.05	5,158.04	5,077.00	20.87	18.36	123.30	362.85	-615.01	532.62	495.73	36.89	14.439	
5,400.00	5,290.01	5,158.04	5,077.00	21.40	18.36	123.30	362.85	-615.01	575.67	538.33	37.35	15.415	
5,500.00	5,386.98	5,158.04	5,077.00	21.92	18.36	123.30	362.85	-615.01	631.76	593.95	37.80	16.712	
5,600.00	5,483.95	5,158.04	5,077.00	22.44	18.36	123.30	362.85	-615.01	697.73	659.47	38.26	18.236	
5,699.11	5,580.06	5,158.04	5,077.00	22.96	18.36	123.30	362.85	-615.01	770.39	731.67	38.72	19.899	
5,800.00	5,678.31	5,158.04	5,077.00	23.40	18.36	125.39	362.85	-615.01	849.27	810.42	38.85	21.858	
5,900.00	5,776.42	5,158.04	5,077.00	23.72	18.36	127.63	362.85	-615.01	930.54	891.70	38.85	23.954	
6,000.00	5,875.15	5,158.04	5,077.00	24.01	18.36	130.00	362.85	-615.01	1,014.06	975.32	38.74	26.174	
6,100.00	5,974.37	5,158.04	5,077.00	24.26	18.36	132.44	362.85	-615.01	1,099.22	1,060.67	38.55	28.515	
6,200.00	6,073.97	5,158.04	5,077.00	24.46	18.36	134.92	362.85	-615.01	1,185.58	1,147.31	38.27	30.978	
6,300.00	6,173.82	5,158.04	5,077.00	24.62	18.36	137.39	362.85	-615.01	1,272.79	1,234.87	37.92	33.565	
6,406.21	6,280.00	5,158.04	5,077.00	24.75	18.36	44.84	362.85	-615.01	1,366.07	1,328.59	37.48	36.448	
6,500.00	6,373.79	5,158.04	5,077.00	24.85	18.36	44.84	362.85	-615.01	1,449.35	1,411.74	37.61	38.537	
6,600.00	6,473.79	5,158.04	5,077.00	24.97	18.36	44.84	362.85	-615.01	1,539.47	1,501.72	37.76	40.774	
6,700.00	6,573.79	5,158.04	5,077.00	25.09	18.36	44.84	362.85	-615.01	1,630.75	1,592.84	37.90	43.023	
6,800.00	6,673.79	5,158.04	5,077.00	25.22	18.36	44.84	362.85	-615.01	1,722.99	1,684.93	38.05	45.278	
6,900.00	6,773.79	5,158.04	5,077.00	25.34	18.36	44.84	362.85	-615.01	1,816.05	1,777.85	38.20	47.535	
7,000.00	6,873.79	5,158.04	5,077.00	25.47	18.36	44.84	362.85	-615.01	1,909.82	1,871.46	38.36	49.791	
7,100.00	6,973.79	5,158.04	5,077.00	25.59	18.36	44.84	362.85	-615.01	2,004.19	1,965.68	38.51	52.042	
7,200.00	7,073.79	5,158.04	5,077.00	25.72	18.36	44.84	362.85	-615.01	2,099.08	2,060.41	38.67	54.288	
7,300.00	7,173.79	5,158.04	5,077.00	25.85	18.36	44.84	362.85	-615.01	2,194.42	2,155.60	38.82	56.526	
7,400.00	7,273.79	5,158.04	5,077.00	25.98	18.36	44.84	362.85	-615.01	2,290.16	2,251.18	38.98	58.754	
7,500.00	7,373.79	5,158.04	5,077.00	26.12	18.36	44.84	362.85	-615.01	2,386.25	2,347.11	39.14	60.971	
7,600.00	7,473.79	5,158.04	5,077.00	26.25	18.36	44.84	362.85	-615.01	2,482.65	2,443.35	39.30	63.176	
7,700.00	7,573.79	5,158.04	5,077.00	26.38	18.36	44.84	362.85	-615.01	2,579.32	2,539.87	39.46	65.368	
7,800.00	7,673.79	5,158.04	5,077.00	26.52	18.36	44.84	362.85	-615.01	2,676.24	2,636.62	39.62	67.547	
7,900.00	7,773.79	5,158.04	5,077.00	26.66	18.36	44.84	362.85	-615.01	2,773.38	2,733.60	39.78	69.711	
8,000.00	7,873.79	5,158.04	5,077.00	26.79	18.36	44.84	362.85	-615.01	2,870.71	2,830.76	39.95	71.861	
8,100.00	7,973.79	5,158.04	5,077.00	26.93	18.36	44.84	362.85	-615.01	2,968.22	2,928.11	40.11	73.996	
8,200.00	8,073.79	5,158.04	5,077.00	27.07	18.36	44.84	362.85	-615.01	3,065.89	3,025.61	40.28	76.115	
8,300.00	8,173.79	5,158.04	5,077.00	27.22	18.36	44.84	362.85	-615.01	3,163.71	3,123.26	40.45	78.218	
8,321.21	8,195.00	5,158.04	5,077.00	27.25	18.36	44.84	362.85	-615.01	3,184.47	3,143.99	40.48	78.662	

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_JESSER 31-2
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 5158.00ft (Original Well Elev)
Reference Site:	WELD_JESSER 18-2 PAD	MD Reference:	WELL @ 5158.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_JESSER 31-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_JESSER 31-2	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 3-16-10 RHS	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 5158.00ft (Original Well Elev) Coordinates are relative to: P_JESSER 31-2
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: 0.48°



Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_JESSER 31-2
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 5158.00ft (Original Well Elev)
Reference Site:	WELD_JESSER 18-2 PAD	MD Reference:	WELL @ 5158.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_JESSER 31-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_JESSER 31-2	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 3-16-10 RHS	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 5158.00ft (Original Well Elev) Coordinates are relative to: P_JESSER 31-2
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: 0.48°

