



US ROCKIES REGION PLANNING

COLORADO NORTHERN ZONE - 83

WELD_JESSER 18-2 PAD

P_JESSER 21-2

P_JESSER 21-2

Plan: PLAN #1 3-16-10 RHS

Standard Planning Report

16 March, 2010

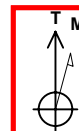




Project: COLORADO NORTHERN ZONE - 83
Site: WELD_JESSER 18-2 PAD
Well: P_JESSER 21-2
Wellbore: P_JESSER 21-2
Section: SECTION 2 T1N R66W
SHL: 1178 FNL 1222 FWL
Design: PLAN #1 3-16-10 RHS
Latitude: 40° 5' 2.663 N
Longitude: 104° 44' 57.581 W
GL: 5143.00
KB: WELL @ 5158.00ft (Original Well Elev)



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
4311.00	4444.93	PARKMAN
4801.00	4962.43	SUSSEX
7281.00	7490.45	NIO A
7601.00	7810.45	CODELL
8061.00	8270.45	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
2238.07	18.76	93.20	2221.39	-8.49	151.98	2.00	93.20	152.22	Start 3314.32 hold at 2238.07 MD
5552.38	18.76	93.20	5359.61	-67.95	1216.29	0.00	0.00	1216.19	Start Drop -2.00
6490.45	0.00	0.00	6281.00	-76.44	1368.27	2.00	180.00	1370.40	Start 1915.00 hold at 6490.45 MD
8405.45	0.00	0.00	8196.00	-76.44	1368.27	0.00	0.00	1370.40	TD at 8405.45

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

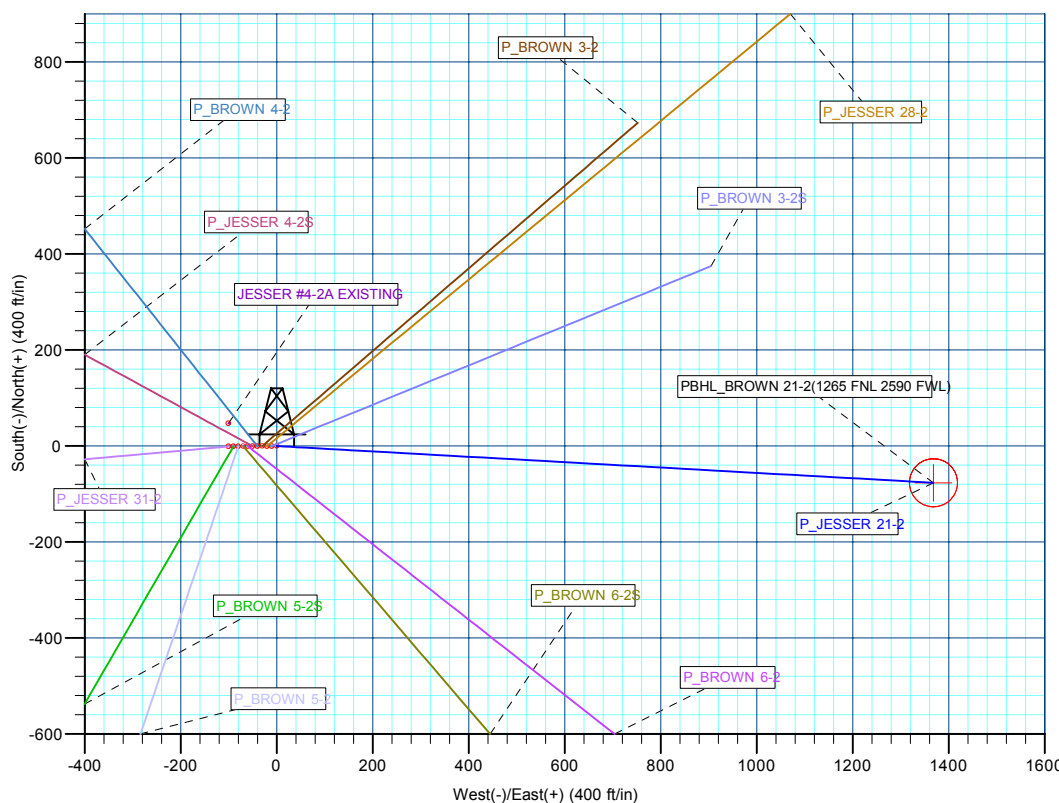
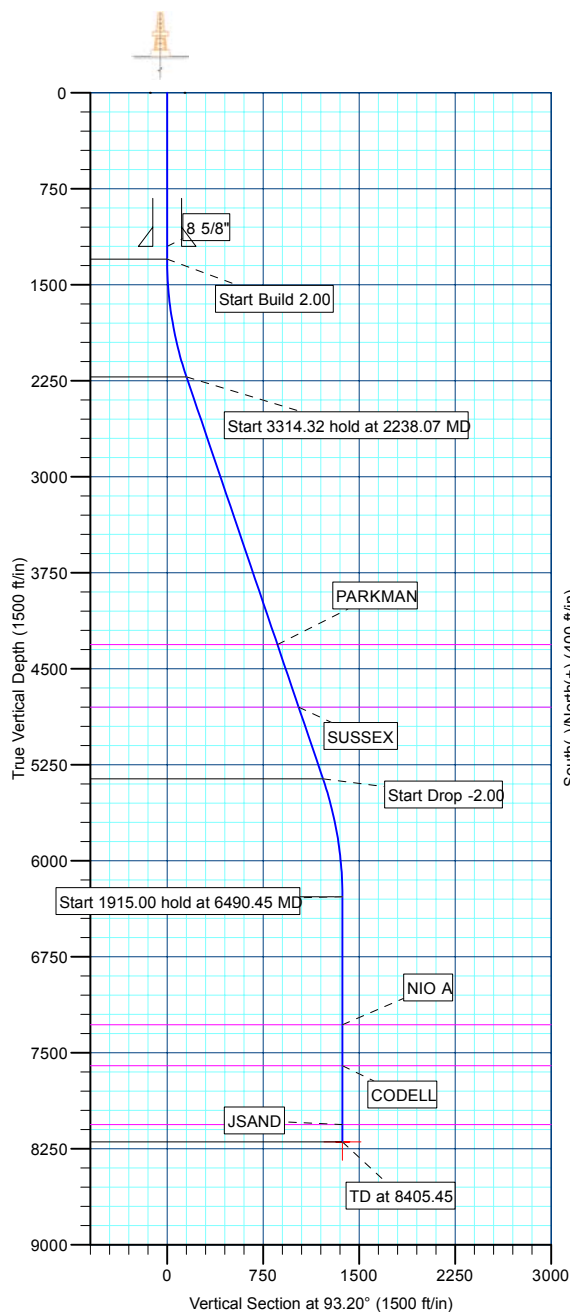
Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
PBHL	8196.00	-76.44	1368.27	40° 5' 1.907 N	104° 44' 39.977 W	Circle (Radius: 50.00)

WELL DETAILS: P_JESSER 21-2

+N/-S	+E/-W	Northing	Ground Level: Easting	5143.00 Latitude	Longitude	Slot
0.00	0.00	1274361.60	3210041.69	40° 5' 2.663 N	104° 44' 57.581 W	

LEGEND

- JESSER #4-2A EXISTING, JESSER #4-2A EXISTING, JESSER #4-2A EXISTING 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 28-2, P_JESSER 28-2, PLAN #1 3-16-10 RHS V0
- P_JESSER 31-2, P_JESSER 31-2, PLAN #1 3-16-10 RHS V0
- P_JESSER 4-2S, P_JESSER 4-2S, PLAN #1 3-16-10 RHS V0
- P_BROWN 3-2, P_BROWN 3-2, PLAN #1 3-16-10 RHS V0
- PLAN #1 3-16-10 RHS



Plan: PLAN #1 3-16-10 RHS (P_JESSER 21-2/P_JESSER 21-2)

Created By: Robert H. Scott Date: 15:51, March 16 2010

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well P_JESSER 21-2
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 21-2	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_JESSER 21-2		
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 21-2					
Well Position	+N/-S	-0.02 ft	Northing:	1,274,361.60 ft	Latitude:	40° 5' 2.663 N
	+E/-W	29.94 ft	Easting:	3,210,041.69 ft	Longitude:	104° 44' 57.581 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	5,143.00 ft

Wellbore	P_JESSER 21-2				
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	93.20

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,238.07	18.76	93.20	2,221.39	-8.49	151.98	2.00	2.00	0.00	93.20	
5,552.38	18.76	93.20	5,359.61	-67.95	1,216.29	0.00	0.00	0.00	0.00	
6,490.45	0.00	0.00	6,281.00	-76.44	1,368.27	2.00	-2.00	0.00	180.00	
8,405.45	0.00	0.00	8,196.00	-76.44	1,368.27	0.00	0.00	0.00	0.00	PBHL_BROWN 21-

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well P_JESSER 21-2
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 21-2	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_JESSER 21-2		
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	93.20	1,399.98	-0.10	1.74	1.75	2.00	2.00	0.00
1,500.00	4.00	93.20	1,499.84	-0.39	6.97	6.98	2.00	2.00	0.00
1,600.00	6.00	93.20	1,599.45	-0.88	15.67	15.69	2.00	2.00	0.00
1,700.00	8.00	93.20	1,698.70	-1.56	27.84	27.88	2.00	2.00	0.00
1,800.00	10.00	93.20	1,797.47	-2.43	43.45	43.52	2.00	2.00	0.00
1,900.00	12.00	93.20	1,895.62	-3.49	62.51	62.60	2.00	2.00	0.00
2,000.00	14.00	93.20	1,993.06	-4.75	84.96	85.10	2.00	2.00	0.00
2,100.00	16.00	93.20	2,089.64	-6.19	110.80	110.98	2.00	2.00	0.00
2,200.00	18.00	93.20	2,185.27	-7.82	139.99	140.21	2.00	2.00	0.00
Start 3314.32 hold at 2238.07 MD									
2,238.07	18.76	93.20	2,221.39	-8.49	151.98	152.22	2.00	2.00	0.00
2,300.00	18.76	93.20	2,280.04	-9.60	171.87	172.14	0.00	0.00	0.00
2,400.00	18.76	93.20	2,374.72	-11.40	203.98	204.30	0.00	0.00	0.00
2,500.00	18.76	93.20	2,469.41	-13.19	236.09	236.46	0.00	0.00	0.00
2,600.00	18.76	93.20	2,564.10	-14.98	268.21	268.62	0.00	0.00	0.00
2,700.00	18.76	93.20	2,658.78	-16.78	300.32	300.79	0.00	0.00	0.00
2,800.00	18.76	93.20	2,753.47	-18.57	332.43	332.95	0.00	0.00	0.00
2,900.00	18.76	93.20	2,848.16	-20.37	364.54	365.11	0.00	0.00	0.00
3,000.00	18.76	93.20	2,942.84	-22.16	396.66	397.27	0.00	0.00	0.00
3,100.00	18.76	93.20	3,037.53	-23.95	428.77	429.44	0.00	0.00	0.00
3,200.00	18.76	93.20	3,132.22	-25.75	460.88	461.60	0.00	0.00	0.00
3,300.00	18.76	93.20	3,226.90	-27.54	492.99	493.76	0.00	0.00	0.00
3,400.00	18.76	93.20	3,321.59	-29.34	525.11	525.92	0.00	0.00	0.00
3,500.00	18.76	93.20	3,416.28	-31.13	557.22	558.09	0.00	0.00	0.00
3,600.00	18.76	93.20	3,510.96	-32.93	589.33	590.25	0.00	0.00	0.00
3,700.00	18.76	93.20	3,605.65	-34.72	621.44	622.41	0.00	0.00	0.00
3,800.00	18.76	93.20	3,700.34	-36.51	653.56	654.57	0.00	0.00	0.00
3,900.00	18.76	93.20	3,795.02	-38.31	685.67	686.74	0.00	0.00	0.00
4,000.00	18.76	93.20	3,889.71	-40.10	717.78	718.90	0.00	0.00	0.00
4,100.00	18.76	93.20	3,984.40	-41.90	749.89	751.06	0.00	0.00	0.00
4,200.00	18.76	93.20	4,079.08	-43.69	782.01	783.23	0.00	0.00	0.00
4,300.00	18.76	93.20	4,173.77	-45.48	814.12	815.39	0.00	0.00	0.00
4,400.00	18.76	93.20	4,268.46	-47.28	846.23	847.55	0.00	0.00	0.00
PARKMAN									
4,444.93	18.76	93.20	4,311.00	-48.08	860.66	862.00	0.00	0.00	0.00
4,500.00	18.76	93.20	4,363.14	-49.07	878.34	879.71	0.00	0.00	0.00
4,600.00	18.76	93.20	4,457.83	-50.87	910.46	911.88	0.00	0.00	0.00
4,700.00	18.76	93.20	4,552.52	-52.66	942.57	944.04	0.00	0.00	0.00
4,800.00	18.76	93.20	4,647.20	-54.45	974.68	976.20	0.00	0.00	0.00
4,900.00	18.76	93.20	4,741.89	-56.25	1,006.79	1,008.36	0.00	0.00	0.00
SUSSEX									
4,962.43	18.76	93.20	4,801.00	-57.37	1,026.84	1,028.44	0.00	0.00	0.00
5,000.00	18.76	93.20	4,836.58	-58.04	1,038.91	1,040.53	0.00	0.00	0.00
5,100.00	18.76	93.20	4,931.26	-59.84	1,071.02	1,072.69	0.00	0.00	0.00
5,200.00	18.76	93.20	5,025.95	-61.63	1,103.13	1,104.85	0.00	0.00	0.00
5,300.00	18.76	93.20	5,120.64	-63.42	1,135.24	1,137.01	0.00	0.00	0.00
5,400.00	18.76	93.20	5,215.32	-65.22	1,167.36	1,169.18	0.00	0.00	0.00
5,500.00	18.76	93.20	5,310.01	-67.01	1,199.47	1,201.34	0.00	0.00	0.00
Start Drop -2.00									
5,552.38	18.76	93.20	5,359.61	-67.95	1,216.29	1,218.19	0.00	0.00	0.00
5,600.00	17.81	93.20	5,404.82	-68.79	1,231.21	1,233.13	2.00	-2.00	0.00

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well P_JESSER 21-2
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 21-2	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_JESSER 21-2		
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	15.81	93.20	5,500.54	-70.40	1,260.08	1,262.04	2.00	-2.00	0.00
5,800.00	13.81	93.20	5,597.22	-71.83	1,285.60	1,287.60	2.00	-2.00	0.00
5,900.00	11.81	93.20	5,694.72	-73.06	1,307.73	1,309.77	2.00	-2.00	0.00
6,000.00	9.81	93.20	5,792.94	-74.11	1,326.45	1,328.52	2.00	-2.00	0.00
6,100.00	7.81	93.20	5,891.76	-74.96	1,341.74	1,343.84	2.00	-2.00	0.00
6,200.00	5.81	93.20	5,991.05	-75.62	1,353.58	1,355.69	2.00	-2.00	0.00
6,300.00	3.81	93.20	6,090.69	-76.09	1,361.95	1,364.07	2.00	-2.00	0.00
6,400.00	1.81	93.20	6,190.57	-76.36	1,366.84	1,368.98	2.00	-2.00	0.00
Start 1915.00 hold at 6490.45 MD									
6,490.45	0.00	0.00	6,281.00	-76.44	1,368.27	1,370.40	2.00	-2.00	0.00
6,500.00	0.00	0.00	6,290.55	-76.44	1,368.27	1,370.40	0.00	0.00	0.00
6,600.00	0.00	0.00	6,390.55	-76.44	1,368.27	1,370.40	0.00	0.00	0.00
6,700.00	0.00	0.00	6,490.55	-76.44	1,368.27	1,370.40	0.00	0.00	0.00
6,800.00	0.00	0.00	6,590.55	-76.44	1,368.27	1,370.40	0.00	0.00	0.00
6,900.00	0.00	0.00	6,690.55	-76.44	1,368.27	1,370.40	0.00	0.00	0.00
7,000.00	0.00	0.00	6,790.55	-76.44	1,368.27	1,370.40	0.00	0.00	0.00
7,100.00	0.00	0.00	6,890.55	-76.44	1,368.27	1,370.40	0.00	0.00	0.00
7,200.00	0.00	0.00	6,990.55	-76.44	1,368.27	1,370.40	0.00	0.00	0.00
7,300.00	0.00	0.00	7,090.55	-76.44	1,368.27	1,370.40	0.00	0.00	0.00
7,400.00	0.00	0.00	7,190.55	-76.44	1,368.27	1,370.40	0.00	0.00	0.00
NIO A									
7,490.45	0.00	0.00	7,281.00	-76.44	1,368.27	1,370.40	0.00	0.00	0.00
7,500.00	0.00	0.00	7,290.55	-76.44	1,368.27	1,370.40	0.00	0.00	0.00
7,600.00	0.00	0.00	7,390.55	-76.44	1,368.27	1,370.40	0.00	0.00	0.00
7,700.00	0.00	0.00	7,490.55	-76.44	1,368.27	1,370.40	0.00	0.00	0.00
7,800.00	0.00	0.00	7,590.55	-76.44	1,368.27	1,370.40	0.00	0.00	0.00
CODELL									
7,810.45	0.00	0.00	7,601.00	-76.44	1,368.27	1,370.40	0.00	0.00	0.00
7,900.00	0.00	0.00	7,690.55	-76.44	1,368.27	1,370.40	0.00	0.00	0.00
8,000.00	0.00	0.00	7,790.55	-76.44	1,368.27	1,370.40	0.00	0.00	0.00
8,100.00	0.00	0.00	7,890.55	-76.44	1,368.27	1,370.40	0.00	0.00	0.00
8,200.00	0.00	0.00	7,990.55	-76.44	1,368.27	1,370.40	0.00	0.00	0.00
JSAND									
8,270.45	0.00	0.00	8,061.00	-76.44	1,368.27	1,370.40	0.00	0.00	0.00
8,300.00	0.00	0.00	8,090.55	-76.44	1,368.27	1,370.40	0.00	0.00	0.00
8,400.00	0.00	0.00	8,190.55	-76.44	1,368.27	1,370.40	0.00	0.00	0.00
PBHL_BROWN 21-2(1265 FNL 2590 FWL)									
8,405.45	0.00	0.00	8,196.00	-76.44	1,368.27	1,370.40	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 21-2(- plan hits target center - Circle (radius 50.00)	0.00	0.00	8,196.00	-76.44	1,368.27	1,274,296.74	3,211,410.55	40° 5' 1.907 N	104° 44' 39.977 W

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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 21-2	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_JESSER 21-2		
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 (°)	
4,444.93	4,311.00	PARKMAN				
4,962.43	4,801.00	SUSSEX				
7,490.45	7,281.00	NIO A				
7,810.45	7,601.00	CODELL				
8,270.45	8,061.00	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	
2,238.07	2,221.39	-8.49	151.98	Start 3314.32 hold at 2238.07 MD	
5,552.38	5,359.61	-67.95	1,216.29	Start Drop -2.00	
6,490.45	6,281.00	-76.44	1,368.27	Start 1915.00 hold at 6490.45 MD	
8,405.45	8,196.00	-76.44	1,368.27	TD at 8405.45	



US ROCKIES REGION PLANNING

**COLORADO NORTHERN ZONE - 83
WELD_JESSER 18-2 PAD
P_JESSER 21-2**

**P_JESSER 21-2
PLAN #1 3-16-10 RHS**

Anticollision Report

16 March, 2010



Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_JESSER 21-2
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 21-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_JESSER 21-2	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	8,405.45	PLAN #1 3-16-10 RHS (P_JESSER 21-2)	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	111.05	59.10	2.138	CC
JESSER #4-2A EXISTING - JESSER #4-2A EXISTING -	1,400.00	1,378.98	112.67	56.53	2.007	ES
JESSER #4-2A EXISTING - JESSER #4-2A EXISTING -	1,500.00	1,478.84	117.55	57.30	1.951	SF
P_BROWN 3-2 - P_BROWN 3-2 - PLAN #1 3-16-10 RHS	1,300.00	1,300.00	29.94	24.35	5.360	CC, ES
P_BROWN 3-2 - P_BROWN 3-2 - PLAN #1 3-16-10 RHS	1,500.00	1,501.46	31.97	25.56	4.983	SF
P_BROWN 3-2S - P_BROWN 3-2S - PLAN #1 3-16-10 F	1,300.00	1,300.00	10.07	4.49	1.803	CC, ES
P_BROWN 3-2S - P_BROWN 3-2S - PLAN #1 3-16-10 F	1,400.00	1,400.24	10.62	4.61	1.767	SF
P_BROWN 4-2 - P_BROWN 4-2 - PLAN #1 3-16-10 RHS	1,300.00	1,300.00	40.01	34.43	7.164	CC, ES
P_BROWN 4-2 - P_BROWN 4-2 - PLAN #1 3-16-10 RHS	1,400.00	1,399.05	42.84	36.83	7.128	SF
P_BROWN 5-2 - P_BROWN 5-2 - PLAN #1 3-16-10 RHS	1,300.00	1,300.00	80.03	74.44	14.328	CC, ES
P_BROWN 5-2 - P_BROWN 5-2 - PLAN #1 3-16-10 RHS	1,400.00	1,399.01	82.36	76.37	13.759	SF
P_BROWN 5-2S - P_BROWN 5-2S - PLAN #1 3-16-10 F	1,300.00	1,300.00	90.10	84.52	16.131	CC, ES
P_BROWN 5-2S - P_BROWN 5-2S - PLAN #1 3-16-10 F	1,400.00	1,398.76	92.50	86.52	15.452	SF
P_BROWN 6-2 - P_BROWN 6-2 - PLAN #1 3-16-10 RHS	1,300.00	1,300.00	60.16	54.57	10.771	CC
P_BROWN 6-2 - P_BROWN 6-2 - PLAN #1 3-16-10 RHS	1,400.00	1,401.66	60.52	54.52	10.093	ES
P_BROWN 6-2 - P_BROWN 6-2 - PLAN #1 3-16-10 RHS	1,700.00	1,705.94	67.72	60.56	9.462	SF
P_BROWN 6-2S - P_BROWN 6-2S - PLAN #1 3-16-10 F	1,300.00	1,300.00	69.95	64.37	12.524	CC, ES
P_BROWN 6-2S - P_BROWN 6-2S - PLAN #1 3-16-10 F	1,500.00	1,502.30	73.58	67.22	11.566	SF
P_JESSER 28-2 - P_JESSER 28-2 - PLAN #1 3-16-10 R	1,300.00	1,300.00	20.15	14.56	3.607	CC
P_JESSER 28-2 - P_JESSER 28-2 - PLAN #1 3-16-10 R	1,400.00	1,400.53	20.57	14.56	3.422	ES, SF
P_JESSER 31-2 - P_JESSER 31-2 - PLAN #1 3-16-10 R	1,300.00	1,300.00	100.17	94.59	17.935	CC, ES
P_JESSER 31-2 - P_JESSER 31-2 - PLAN #1 3-16-10 R	1,400.00	1,396.52	103.59	97.60	17.285	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	1,400.00	1,398.78	52.96	46.96	8.818	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		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)			
0.00	0.00	0.00	0.00	0.00	0.00	-64.76	47.34	-100.45	113.02					
100.00	100.00	79.00	79.00	0.10	1.58	-64.76	47.34	-100.45	111.05	109.37	1.68	66.275		
200.00	200.00	179.00	179.00	0.32	5.16	-64.76	47.34	-100.45	111.05	105.57	5.48	20.263		
300.00	300.00	279.00	279.00	0.55	9.16	-64.76	47.34	-100.45	111.05	101.34	9.71	11.442		

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

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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 21-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_JESSER 21-2	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-UNKNOWN												Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
400.00	400.00	379.00	379.00	0.77	13.16	-64.76	47.34	-100.45	111.05	97.12	13.93	7.972	
500.00	500.00	479.00	479.00	0.99	17.16	-64.76	47.34	-100.45	111.05	92.89	18.15	6.117	
600.00	600.00	579.00	579.00	1.22	21.16	-64.76	47.34	-100.45	111.05	88.67	22.38	4.962	
700.00	700.00	679.00	679.00	1.44	25.16	-64.76	47.34	-100.45	111.05	84.44	26.60	4.174	
800.00	800.00	779.00	779.00	1.67	29.16	-64.76	47.34	-100.45	111.05	80.22	30.83	3.602	
900.00	900.00	879.00	879.00	1.89	33.16	-64.76	47.34	-100.45	111.05	76.00	35.05	3.168	
1,000.00	1,000.00	979.00	979.00	2.12	37.16	-64.76	47.34	-100.45	111.05	71.77	39.28	2.827	
1,100.00	1,100.00	1,079.00	1,079.00	2.34	41.16	-64.76	47.34	-100.45	111.05	67.55	43.50	2.553	
1,200.00	1,200.00	1,179.00	1,179.00	2.57	45.16	-64.76	47.34	-100.45	111.05	63.32	47.73	2.327	
1,300.00	1,300.00	1,279.00	1,279.00	2.79	49.16	-64.76	47.34	-100.45	111.05	59.10	51.95	2.138 CC	
1,400.00	1,399.98	1,378.98	1,378.98	3.00	53.16	-158.28	47.34	-100.45	112.67	56.53	56.14	2.007 ES	
1,500.00	1,499.84	1,478.84	1,478.84	3.21	57.15	-159.19	47.34	-100.45	117.55	57.30	60.24	1.951 SF	
1,600.00	1,599.45	1,578.45	1,578.45	3.42	61.14	-160.55	47.34	-100.45	125.73	61.48	64.26	1.957	
1,700.00	1,698.70	1,677.70	1,677.70	3.66	65.11	-162.17	47.34	-100.45	137.29	69.14	68.15	2.014	
1,800.00	1,797.47	1,776.47	1,776.47	3.92	69.06	-163.89	47.34	-100.45	152.27	80.35	71.92	2.117	
1,900.00	1,895.62	1,874.62	1,874.62	4.21	72.98	-165.57	47.34	-100.45	170.70	95.17	75.53	2.260	
2,000.00	1,993.06	1,972.06	1,972.06	4.55	76.88	-167.14	47.34	-100.45	192.59	113.63	78.97	2.439	
2,100.00	2,089.64	2,068.64	2,068.64	4.95	80.75	-168.55	47.34	-100.45	217.93	135.72	82.22	2.651	
2,200.00	2,185.27	2,164.27	2,164.27	5.41	84.57	-169.79	47.34	-100.45	246.69	161.43	85.26	2.893	
2,238.07	2,221.39	2,200.39	2,200.39	5.60	86.02	-170.21	47.34	-100.45	258.53	172.16	86.37	2.993	
2,300.00	2,280.04	2,259.04	2,259.04	5.92	88.36	-170.91	47.34	-100.45	278.21	189.48	88.73	3.135	
2,400.00	2,374.72	2,353.72	2,353.72	6.47	92.15	-171.85	47.34	-100.45	310.05	217.49	92.55	3.350	
2,500.00	2,469.41	2,448.41	2,448.41	7.04	95.94	-172.61	47.34	-100.45	341.94	245.55	96.39	3.547	
2,600.00	2,564.10	2,543.10	2,543.10	7.63	99.72	-173.25	47.34	-100.45	373.89	273.65	100.24	3.730	
2,700.00	2,658.78	2,637.78	2,637.78	8.23	103.51	-173.78	47.34	-100.45	405.87	301.78	104.09	3.899	
2,800.00	2,753.47	2,732.47	2,732.47	8.84	107.30	-174.24	47.34	-100.45	437.87	329.92	107.95	4.056	
2,900.00	2,848.16	2,827.16	2,827.16	9.46	111.09	-174.63	47.34	-100.45	469.90	358.09	111.81	4.203	
3,000.00	2,942.84	2,921.84	2,921.84	10.09	114.87	-174.97	47.34	-100.45	501.94	386.26	115.68	4.339	
3,100.00	3,037.53	3,016.53	3,016.53	10.72	118.66	-175.27	47.34	-100.45	534.00	414.45	119.55	4.467	
3,200.00	3,132.22	3,111.22	3,111.22	11.36	122.45	-175.54	47.34	-100.45	566.07	442.64	123.43	4.586	
3,300.00	3,226.90	3,205.90	3,205.90	12.00	126.24	-175.78	47.34	-100.45	598.15	470.85	127.30	4.699	
3,400.00	3,321.59	3,300.59	3,300.59	12.65	130.02	-176.00	47.34	-100.45	630.24	499.06	131.18	4.804	
3,500.00	3,416.28	3,395.28	3,395.28	13.30	133.81	-176.19	47.34	-100.45	662.33	527.27	135.07	4.904	
3,600.00	3,510.96	3,489.96	3,489.96	13.95	137.60	-176.37	47.34	-100.45	694.44	555.49	138.95	4.998	
3,700.00	3,605.65	3,584.65	3,584.65	14.60	141.39	-176.53	47.34	-100.45	726.54	583.71	142.84	5.087	
3,800.00	3,700.34	3,679.34	3,679.34	15.26	145.17	-176.68	47.34	-100.45	758.66	611.93	146.72	5.171	
3,900.00	3,795.02	3,774.02	3,774.02	15.92	148.96	-176.81	47.34	-100.45	790.77	640.16	150.61	5.250	
4,000.00	3,889.71	3,868.71	3,868.71	16.58	152.75	-176.94	47.34	-100.45	822.89	668.39	154.50	5.326	
4,100.00	3,984.40	3,963.40	3,963.40	17.24	156.54	-177.05	47.34	-100.45	855.01	696.62	158.39	5.398	
4,200.00	4,079.08	4,058.08	4,058.08	17.90	160.32	-177.16	47.34	-100.45	887.14	724.86	162.28	5.467	
4,300.00	4,173.77	4,152.77	4,152.77	18.56	164.11	-177.26	47.34	-100.45	919.27	753.09	166.18	5.532	
4,400.00	4,268.46	4,247.46	4,247.46	19.22	167.90	-177.35	47.34	-100.45	951.40	781.33	170.07	5.594	
4,500.00	4,363.14	4,342.14	4,342.14	19.89	171.69	-177.44	47.34	-100.45	983.53	809.57	173.96	5.654	
4,600.00	4,457.83	4,436.83	4,436.83	20.55	175.47	-177.52	47.34	-100.45	1,015.67	837.81	177.86	5.711	
4,700.00	4,552.52	4,531.52	4,531.52	21.22	179.26	-177.59	47.34	-100.45	1,047.80	866.05	181.75	5.765	
4,800.00	4,647.20	4,626.20	4,626.20	21.88	183.05	-177.66	47.34	-100.45	1,079.94	894.29	185.65	5.817	
4,900.00	4,741.89	4,720.89	4,720.89	22.55	186.84	-177.73	47.34	-100.45	1,112.08	922.53	189.55	5.867	
5,000.00	4,836.58	4,815.58	4,815.58	23.22	190.62	-177.80	47.34	-100.45	1,144.22	950.78	193.44	5.915	
5,100.00	4,931.26	4,910.26	4,910.26	23.88	194.41	-177.86	47.34	-100.45	1,176.36	979.02	197.34	5.961	
5,200.00	5,025.95	5,004.95	5,004.95	24.55	198.20	-177.91	47.34	-100.45	1,208.51	1,007.27	201.24	6.005	
5,300.00	5,120.64	5,099.64	5,099.64	25.22	201.99	-177.97	47.34	-100.45	1,240.65	1,035.51	205.14	6.048	
5,400.00	5,215.32	5,194.32	5,194.32	25.89	205.77	-178.02	47.34	-100.45	1,272.79	1,063.76	209.04	6.089	

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

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Reference Well:	P_JESSER 21-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_JESSER 21-2	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							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		
5,500.00	5,310.01	5,289.01	5,289.01	26.56	209.56	-178.07	47.34	-100.45	1,304.94	1,092.00	212.94	6.128		
5,552.38	5,359.61	5,338.61	5,338.61	26.91	211.54	-178.09	47.34	-100.45	1,321.78	1,106.80	214.98	6.148		
5,600.00	5,404.82	5,383.82	5,383.82	27.19	213.35	-178.12	47.34	-100.45	1,336.71	1,118.82	217.89	6.135		
5,700.00	5,500.54	5,479.54	5,479.54	27.66	217.18	-178.18	47.34	-100.45	1,365.61	1,141.61	224.01	6.096		
5,800.00	5,597.22	5,576.22	5,576.22	28.09	221.05	-178.23	47.34	-100.45	1,391.16	1,161.21	229.95	6.050		
5,900.00	5,694.72	5,673.72	5,673.72	28.47	224.95	-178.27	47.34	-100.45	1,413.32	1,177.62	235.70	5.996		
6,000.00	5,792.94	5,771.94	5,771.94	28.80	228.88	-178.31	47.34	-100.45	1,432.07	1,190.83	241.23	5.936		
6,100.00	5,891.76	5,870.76	5,870.76	29.09	232.83	-178.33	47.34	-100.45	1,447.37	1,200.84	246.53	5.871		
6,200.00	5,991.05	5,970.05	5,970.05	29.32	236.80	-178.36	47.34	-100.45	1,459.22	1,207.65	251.57	5.800		
6,300.00	6,090.69	6,069.69	6,069.69	29.51	240.79	-178.37	47.34	-100.45	1,467.60	1,211.27	256.33	5.725		
6,400.00	6,190.57	6,169.57	6,169.57	29.66	244.78	-178.38	47.34	-100.45	1,472.50	1,211.71	260.79	5.646		
6,490.45	6,281.00	6,260.00	6,260.00	29.75	248.40	-85.18	47.34	-100.45	1,473.93	1,209.36	264.56	5.571		
6,500.00	6,290.55	6,269.55	6,269.55	29.76	248.78	-85.18	47.34	-100.45	1,473.93	1,208.97	264.96	5.563		
6,600.00	6,390.55	6,369.55	6,369.55	29.86	252.78	-85.18	47.34	-100.45	1,473.93	1,204.80	269.13	5.477		
6,700.00	6,490.55	6,469.55	6,469.55	29.97	256.78	-85.18	47.34	-100.45	1,473.93	1,200.63	273.30	5.393		
6,800.00	6,590.55	6,569.55	6,569.55	30.07	260.78	-85.18	47.34	-100.45	1,473.93	1,196.46	277.47	5.312		
6,900.00	6,690.55	6,669.55	6,669.55	30.17	264.78	-85.18	47.34	-100.45	1,473.93	1,192.28	281.64	5.233		
7,000.00	6,790.55	6,769.55	6,769.55	30.28	268.78	-85.18	47.34	-100.45	1,473.93	1,188.11	285.82	5.157		
7,100.00	6,890.55	6,869.55	6,869.55	30.39	272.78	-85.18	47.34	-100.45	1,473.93	1,183.94	289.99	5.083		
7,200.00	6,990.55	6,969.55	6,969.55	30.49	276.78	-85.18	47.34	-100.45	1,473.93	1,179.76	294.17	5.010		
7,300.00	7,090.55	7,069.55	7,069.55	30.60	280.78	-85.18	47.34	-100.45	1,473.93	1,175.58	298.35	4.940		
7,400.00	7,190.55	7,169.55	7,169.55	30.71	284.78	-85.18	47.34	-100.45	1,473.93	1,171.40	302.52	4.872		
7,500.00	7,290.55	7,269.55	7,269.55	30.83	288.78	-85.18	47.34	-100.45	1,473.93	1,167.22	306.70	4.806		
7,600.00	7,390.55	7,369.55	7,369.55	30.94	292.78	-85.18	47.34	-100.45	1,473.93	1,163.04	310.88	4.741		
7,700.00	7,490.55	7,469.55	7,469.55	31.05	296.78	-85.18	47.34	-100.45	1,473.93	1,158.86	315.07	4.678		
7,800.00	7,590.55	7,569.55	7,569.55	31.17	300.78	-85.18	47.34	-100.45	1,473.93	1,154.68	319.25	4.617		
7,900.00	7,690.55	7,669.55	7,669.55	31.29	304.78	-85.18	47.34	-100.45	1,473.93	1,150.50	323.43	4.557		
8,000.00	7,790.55	7,769.55	7,769.55	31.40	308.78	-85.18	47.34	-100.45	1,473.93	1,146.31	327.61	4.499		
8,100.00	7,890.55	7,869.55	7,869.55	31.52	312.78	-85.18	47.34	-100.45	1,473.93	1,142.13	331.80	4.442		
8,200.00	7,990.55	7,969.55	7,969.55	31.64	316.78	-85.18	47.34	-100.45	1,473.93	1,137.94	335.99	4.387		
8,300.00	8,090.55	8,069.55	8,069.55	31.76	320.78	-85.18	47.34	-100.45	1,473.93	1,133.76	340.17	4.333		
8,405.45	8,196.00	8,175.00	8,175.00	31.89	325.00	-85.18	47.34	-100.45	1,473.93	1,129.34	344.59	4.277		

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_JESSER 21-2
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 21-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_JESSER 21-2	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						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
0.00	0.00	0.00	0.00	0.00	0.00	-89.97	0.02	-29.94	29.94				
100.00	100.00	100.00	100.00	0.10	0.10	-89.97	0.02	-29.94	29.94	29.75	0.19	156.709	
200.00	200.00	200.00	200.00	0.32	0.32	-89.97	0.02	-29.94	29.94	29.30	0.64	46.738	
300.00	300.00	300.00	300.00	0.55	0.55	-89.97	0.02	-29.94	29.94	28.85	1.09	27.465	
400.00	400.00	400.00	400.00	0.77	0.77	-89.97	0.02	-29.94	29.94	28.40	1.54	19.446	
500.00	500.00	500.00	500.00	0.99	0.99	-89.97	0.02	-29.94	29.94	27.95	1.99	15.051	
600.00	600.00	600.00	600.00	1.22	1.22	-89.97	0.02	-29.94	29.94	27.50	2.44	12.277	
700.00	700.00	700.00	700.00	1.44	1.44	-89.97	0.02	-29.94	29.94	27.05	2.89	10.366	
800.00	800.00	800.00	800.00	1.67	1.67	-89.97	0.02	-29.94	29.94	26.60	3.34	8.970	
900.00	900.00	900.00	900.00	1.89	1.89	-89.97	0.02	-29.94	29.94	26.15	3.79	7.905	
1,000.00	1,000.00	1,000.00	1,000.00	2.12	2.12	-89.97	0.02	-29.94	29.94	25.70	4.24	7.066	
1,100.00	1,100.00	1,100.00	1,100.00	2.34	2.34	-89.97	0.02	-29.94	29.94	25.25	4.69	6.389	
1,200.00	1,200.00	1,200.00	1,200.00	2.57	2.57	-89.97	0.02	-29.94	29.94	24.80	5.14	5.829	
1,300.00	1,300.00	1,300.00	1,300.00	2.79	2.79	-89.97	0.02	-29.94	29.94	24.35	5.59	5.360 CC, ES	
1,400.00	1,399.98	1,400.78	1,400.76	3.00	3.01	179.20	1.17	-28.60	30.38	24.36	6.01	5.052	
1,500.00	1,499.84	1,501.46	1,501.29	3.21	3.24	-174.15	4.64	-24.57	31.97	25.56	6.42	4.983 SF	
1,600.00	1,599.45	1,601.92	1,601.37	3.42	3.46	-164.65	10.39	-17.89	35.45	28.63	6.83	5.194	
1,700.00	1,698.70	1,702.08	1,700.76	3.66	3.70	-154.44	18.40	-8.59	41.59	34.33	7.26	5.731	
1,800.00	1,797.47	1,801.83	1,799.27	3.92	3.97	-145.29	28.62	3.28	50.80	43.07	7.73	6.569	
1,900.00	1,895.62	1,901.08	1,896.68	4.21	4.26	-137.92	41.01	17.67	63.18	54.90	8.28	7.633	
2,000.00	1,993.06	1,999.73	1,992.81	4.55	4.59	-132.30	55.46	34.45	78.59	69.69	8.90	8.833	
2,100.00	2,089.64	2,098.00	2,088.31	4.95	4.95	-129.38	70.56	51.99	96.70	87.12	9.58	10.097	
2,200.00	2,185.27	2,195.89	2,183.45	5.41	5.33	-128.62	85.60	69.46	117.07	106.77	10.30	11.368	
2,238.07	2,221.39	2,233.03	2,219.55	5.60	5.48	-128.70	91.30	76.09	125.39	114.80	10.58	11.848	
2,300.00	2,280.04	2,293.41	2,278.23	5.92	5.72	-129.12	100.58	86.86	139.17	128.10	11.08	12.566	
2,400.00	2,374.72	2,390.89	2,372.96	6.47	6.13	-129.65	115.55	104.25	161.45	149.55	11.90	13.569	
2,500.00	2,469.41	2,488.36	2,467.70	7.04	6.54	-130.05	130.53	121.65	183.73	170.98	12.75	14.413	
2,600.00	2,564.10	2,585.84	2,562.44	7.63	6.97	-130.36	145.51	139.04	206.02	192.40	13.62	15.127	
2,700.00	2,658.78	2,683.32	2,657.18	8.23	7.40	-130.61	160.48	156.44	228.31	213.80	14.51	15.736	
2,800.00	2,753.47	2,780.80	2,751.92	8.84	7.84	-130.82	175.46	173.83	250.61	235.19	15.41	16.260	
2,900.00	2,848.16	2,878.28	2,846.65	9.46	8.28	-130.99	190.44	191.23	272.91	256.58	16.33	16.713	
3,000.00	2,942.84	2,975.76	2,941.39	10.09	8.73	-131.14	205.41	208.62	295.21	277.95	17.26	17.108	
3,100.00	3,037.53	3,073.24	3,036.13	10.72	9.18	-131.26	220.39	226.02	317.51	299.32	18.19	17.455	
3,200.00	3,132.22	3,170.72	3,130.87	11.36	9.64	-131.37	235.37	243.41	339.82	320.68	19.13	17.761	
3,300.00	3,226.90	3,268.20	3,225.60	12.00	10.10	-131.47	250.34	260.81	362.12	342.04	20.08	18.033	
3,400.00	3,321.59	3,365.67	3,320.34	12.65	10.56	-131.56	265.32	278.20	384.43	363.39	21.04	18.275	
3,500.00	3,416.28	3,463.15	3,415.08	13.30	11.02	-131.63	280.30	295.60	406.74	384.74	21.99	18.493	
3,600.00	3,510.96	3,560.63	3,509.82	13.95	11.48	-131.70	295.27	312.99	429.04	406.09	22.96	18.689	
3,700.00	3,605.65	3,658.11	3,604.56	14.60	11.95	-131.76	310.25	330.39	451.35	427.43	23.92	18.866	
3,800.00	3,700.34	3,755.59	3,699.29	15.26	12.41	-131.82	325.23	347.78	473.66	448.77	24.89	19.028	
3,900.00	3,795.02	3,853.07	3,794.03	15.92	12.88	-131.87	340.20	365.18	495.97	470.10	25.87	19.175	
4,000.00	3,889.71	3,950.55	3,888.77	16.58	13.35	-131.91	355.18	382.57	518.28	491.44	26.84	19.309	
4,100.00	3,984.40	4,048.03	3,983.51	17.24	13.82	-131.95	370.15	399.97	540.59	512.77	27.82	19.433	
4,200.00	4,079.08	4,145.51	4,078.25	17.90	14.29	-131.99	385.13	417.36	562.90	534.10	28.80	19.547	
4,300.00	4,173.77	4,242.98	4,172.98	18.56	14.76	-132.03	400.11	434.76	585.21	555.43	29.78	19.652	
4,400.00	4,268.46	4,340.46	4,267.72	19.22	15.24	-132.06	415.08	452.15	607.52	576.76	30.76	19.749	
4,500.00	4,363.14	4,437.94	4,362.46	19.89	15.71	-132.09	430.06	469.54	629.83	598.08	31.75	19.840	
4,600.00	4,457.83	4,535.42	4,457.20	20.55	16.18	-132.12	445.04	486.94	652.14	619.41	32.73	19.924	
4,700.00	4,552.52	4,632.90	4,551.93	21.22	16.66	-132.15	460.01	504.33	674.45	640.73	33.72	20.002	
4,800.00	4,647.20	4,730.38	4,646.67	21.88	17.13	-132.17	474.99	521.73	696.76	662.06	34.71	20.076	
4,900.00	4,741.89	4,827.86	4,741.41	22.55	17.61	-132.20	489.97	539.12	719.07	683.38	35.70	20.145	
5,000.00	4,836.58	4,925.34	4,836.15	23.22	18.09	-132.22	504.94	556.52	741.38	704.70	36.69	20.209	

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 21-2
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 21-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_JESSER 21-2	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						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	
5,100.00	4,931.26	5,022.82	4,930.89	23.88	18.56	-132.24	519.92	573.91	763.70	726.02	37.68	20.270	
5,200.00	5,025.95	5,120.29	5,025.62	24.55	19.04	-132.26	534.90	591.31	786.01	747.34	38.67	20.327	
5,300.00	5,120.64	5,217.77	5,120.36	25.22	19.52	-132.28	549.87	608.70	808.32	768.66	39.66	20.381	
5,400.00	5,215.32	5,315.25	5,215.10	25.89	19.99	-132.30	564.85	626.10	830.63	789.98	40.65	20.432	
5,500.00	5,310.01	5,412.73	5,309.84	26.56	20.47	-132.31	579.83	643.49	852.94	811.29	41.65	20.480	
5,552.38	5,359.61	5,463.79	5,359.46	26.91	20.72	-132.32	587.67	652.60	864.63	822.46	42.17	20.504	
5,600.00	5,404.82	5,510.27	5,404.63	27.19	20.95	-132.47	594.81	660.90	874.99	832.35	42.64	20.520	
5,700.00	5,500.54	5,608.20	5,499.81	27.66	21.43	-132.62	609.86	678.37	895.06	851.47	43.59	20.535	
5,800.00	5,597.22	5,706.56	5,595.43	28.09	21.89	-132.59	624.90	695.84	912.82	868.31	44.51	20.509	
5,900.00	5,694.72	5,805.61	5,692.27	28.47	22.25	-132.52	638.46	711.59	928.25	882.98	45.27	20.503	
6,000.00	5,792.94	5,905.19	5,790.29	28.80	22.56	-132.48	649.88	724.86	941.32	895.37	45.95	20.487	
6,100.00	5,891.76	6,005.21	5,889.31	29.09	22.84	-132.46	659.12	735.59	952.00	905.48	46.52	20.462	
6,200.00	5,991.05	6,105.58	5,989.10	29.32	23.07	-132.47	666.11	743.71	960.27	913.26	47.00	20.429	
6,300.00	6,090.69	6,206.19	6,089.44	29.51	23.26	-132.50	670.82	749.18	966.11	918.72	47.38	20.389	
6,400.00	6,190.57	6,306.95	6,190.12	29.66	23.42	-132.54	673.24	751.99	969.51	921.84	47.67	20.339	
6,490.45	6,281.00	6,397.83	6,281.00	29.75	23.52	-39.39	673.58	752.38	970.49	922.64	47.85	20.283	
6,500.00	6,290.55	6,407.38	6,290.55	29.76	23.53	-39.39	673.58	752.38	970.49	922.62	47.87	20.274	
6,600.00	6,390.55	6,507.38	6,390.55	29.86	23.66	-39.39	673.58	752.38	970.49	922.37	48.11	20.171	
6,700.00	6,490.55	6,607.38	6,490.55	29.97	23.79	-39.39	673.58	752.38	970.49	922.13	48.36	20.067	
6,800.00	6,590.55	6,707.38	6,590.55	30.07	23.92	-39.39	673.58	752.38	970.49	921.88	48.61	19.963	
6,900.00	6,690.55	6,807.38	6,690.55	30.17	24.05	-39.39	673.58	752.38	970.49	921.62	48.87	19.860	
7,000.00	6,790.55	6,907.38	6,790.55	30.28	24.18	-39.39	673.58	752.38	970.49	921.37	49.12	19.756	
7,100.00	6,890.55	7,007.38	6,890.55	30.39	24.32	-39.39	673.58	752.38	970.49	921.11	49.38	19.652	
7,200.00	6,990.55	7,107.38	6,990.55	30.49	24.45	-39.39	673.58	752.38	970.49	920.84	49.65	19.549	
7,300.00	7,090.55	7,207.38	7,090.55	30.60	24.59	-39.39	673.58	752.38	970.49	920.58	49.91	19.445	
7,400.00	7,190.55	7,307.38	7,190.55	30.71	24.73	-39.39	673.58	752.38	970.49	920.31	50.18	19.341	
7,500.00	7,290.55	7,407.38	7,290.55	30.83	24.87	-39.39	673.58	752.38	970.49	920.04	50.45	19.238	
7,600.00	7,390.55	7,507.38	7,390.55	30.94	25.01	-39.39	673.58	752.38	970.49	919.77	50.72	19.134	
7,700.00	7,490.55	7,607.38	7,490.55	31.05	25.15	-39.39	673.58	752.38	970.49	919.49	50.99	19.031	
7,800.00	7,590.55	7,707.38	7,590.55	31.17	25.29	-39.39	673.58	752.38	970.49	919.22	51.27	18.928	
7,900.00	7,690.55	7,807.38	7,690.55	31.29	25.44	-39.39	673.58	752.38	970.49	918.94	51.55	18.825	
8,000.00	7,790.55	7,907.38	7,790.55	31.40	25.58	-39.39	673.58	752.38	970.49	918.65	51.83	18.723	
8,100.00	7,890.55	8,007.38	7,890.55	31.52	25.73	-39.39	673.58	752.38	970.49	918.37	52.12	18.621	
8,200.00	7,990.55	8,107.38	7,990.55	31.64	25.88	-39.39	673.58	752.38	970.49	918.08	52.41	18.519	
8,300.00	8,090.55	8,207.38	8,090.55	31.76	26.03	-39.39	673.58	752.38	970.49	917.79	52.69	18.417	
8,352.08	8,142.63	8,259.45	8,142.63	31.83	26.10	-39.39	673.58	752.38	970.49	917.64	52.85	18.364	
8,405.45	8,196.00	8,276.83	8,160.00	31.89	26.13	-39.39	673.58	752.38	971.16	918.21	52.95	18.342	

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_JESSER 21-2
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 21-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_JESSER 21-2	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)	Semi Major Axis Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	-90.07	-0.01	-10.07	10.07				
100.00	100.00	100.00	100.00	0.10	0.10	-90.07	-0.01	-10.07	10.07	9.88	0.19	52.725	
200.00	200.00	200.00	200.00	0.32	0.32	-90.07	-0.01	-10.07	10.07	9.43	0.64	15.725	
300.00	300.00	300.00	300.00	0.55	0.55	-90.07	-0.01	-10.07	10.07	8.98	1.09	9.240	
400.00	400.00	400.00	400.00	0.77	0.77	-90.07	-0.01	-10.07	10.07	8.53	1.54	6.542	
500.00	500.00	500.00	500.00	0.99	0.99	-90.07	-0.01	-10.07	10.07	8.08	1.99	5.064	
600.00	600.00	600.00	600.00	1.22	1.22	-90.07	-0.01	-10.07	10.07	7.63	2.44	4.131	
700.00	700.00	700.00	700.00	1.44	1.44	-90.07	-0.01	-10.07	10.07	7.18	2.89	3.488	
800.00	800.00	800.00	800.00	1.67	1.67	-90.07	-0.01	-10.07	10.07	6.74	3.34	3.018	
900.00	900.00	900.00	900.00	1.89	1.89	-90.07	-0.01	-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	-90.07	-0.01	-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	-90.07	-0.01	-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	-90.07	-0.01	-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	-90.07	-0.01	-10.07	10.07	4.49	5.59	1.803 CC, ES	
1,400.00	1,399.98	1,400.24	1,400.23	3.00	3.01	179.95	0.49	-8.86	10.62	4.61	6.01	1.767 SF	
1,500.00	1,499.84	1,500.47	1,500.38	3.21	3.22	-172.18	1.98	-5.21	12.41	6.01	6.40	1.938	
1,600.00	1,599.45	1,600.68	1,600.37	3.42	3.44	-163.34	4.47	0.87	15.76	8.96	6.80	2.316	
1,700.00	1,698.70	1,700.86	1,700.12	3.66	3.67	-155.96	7.95	9.37	20.82	13.60	7.22	2.885	
1,800.00	1,797.47	1,800.99	1,799.55	3.92	3.91	-150.53	12.43	20.28	27.60	19.95	7.65	3.607	
1,900.00	1,895.62	1,901.06	1,898.58	4.21	4.17	-146.69	17.88	33.60	36.07	27.95	8.12	4.442	
2,000.00	1,993.06	2,001.07	1,997.14	4.55	4.46	-143.94	24.31	49.29	46.19	37.55	8.63	5.349	
2,100.00	2,089.64	2,101.00	2,095.14	4.95	4.78	-141.94	31.71	67.36	57.92	48.72	9.20	6.293	
2,200.00	2,185.27	2,200.85	2,192.52	5.41	5.13	-140.44	40.08	87.77	71.23	61.40	9.84	7.241	
2,238.07	2,221.39	2,238.83	2,229.40	5.60	5.28	-139.97	43.51	96.15	76.71	66.61	10.10	7.594	
2,300.00	2,280.04	2,300.66	2,289.26	5.92	5.52	-139.11	49.40	110.52	85.61	75.03	10.58	8.091	
2,400.00	2,374.72	2,400.64	2,385.47	6.47	5.96	-136.91	59.69	135.65	99.19	87.74	11.45	8.661	
2,500.00	2,469.41	2,500.17	2,480.62	7.04	6.44	-134.17	70.77	162.67	112.09	99.66	12.43	9.016	
2,600.00	2,564.10	2,599.20	2,575.20	7.63	6.94	-131.87	81.90	189.83	125.10	111.64	13.46	9.292	
2,700.00	2,658.78	2,698.24	2,669.79	8.23	7.46	-130.00	93.03	217.00	138.28	123.75	14.53	9.518	
2,800.00	2,753.47	2,797.28	2,764.38	8.84	7.99	-128.46	104.16	244.16	151.57	135.95	15.62	9.704	
2,900.00	2,848.16	2,896.32	2,858.96	9.46	8.53	-127.17	115.29	271.33	164.95	148.22	16.73	9.859	
3,000.00	2,942.84	2,995.35	2,953.55	10.09	9.07	-126.08	126.42	298.49	178.40	160.54	17.86	9.990	
3,100.00	3,037.53	3,094.39	3,048.14	10.72	9.63	-125.13	137.55	325.66	191.90	172.90	19.00	10.100	
3,200.00	3,132.22	3,193.43	3,142.72	11.36	10.19	-124.31	148.68	352.82	205.45	185.30	20.15	10.194	
3,300.00	3,226.90	3,292.47	3,237.31	12.00	10.76	-123.60	159.81	379.99	219.04	197.72	21.32	10.276	
3,400.00	3,321.59	3,391.50	3,331.90	12.65	11.33	-122.96	170.94	407.15	232.66	210.17	22.49	10.346	
3,500.00	3,416.28	3,490.54	3,426.48	13.30	11.91	-122.40	182.07	434.32	246.30	222.63	23.66	10.408	
3,600.00	3,510.96	3,589.58	3,521.07	13.95	12.48	-121.89	193.20	461.48	259.96	235.11	24.85	10.462	
3,700.00	3,605.65	3,688.62	3,615.66	14.60	13.06	-121.44	204.33	488.65	273.64	247.61	26.03	10.511	
3,800.00	3,700.34	3,787.66	3,710.24	15.26	13.65	-121.03	215.46	515.81	287.34	260.11	27.23	10.553	
3,900.00	3,795.02	3,886.69	3,804.83	15.92	14.23	-120.66	226.59	542.98	301.04	272.62	28.42	10.592	
4,000.00	3,889.71	3,985.73	3,899.42	16.58	14.82	-120.32	237.72	570.14	314.76	285.14	29.62	10.626	
4,100.00	3,984.40	4,084.77	3,994.01	17.24	15.41	-120.00	248.85	597.31	328.49	297.67	30.82	10.657	
4,200.00	4,079.08	4,183.81	4,088.59	17.90	16.00	-119.72	259.98	624.47	342.23	310.20	32.03	10.685	
4,300.00	4,173.77	4,282.84	4,183.18	18.56	16.59	-119.45	271.11	651.63	355.98	322.74	33.23	10.711	
4,400.00	4,268.46	4,381.88	4,277.77	19.22	17.19	-119.20	282.24	678.80	369.73	335.29	34.44	10.735	
4,500.00	4,363.14	4,480.92	4,372.35	19.89	17.78	-118.98	293.37	705.96	383.49	347.84	35.65	10.756	
4,600.00	4,457.83	4,579.96	4,466.94	20.55	18.38	-118.76	304.50	733.13	397.26	360.39	36.87	10.776	
4,700.00	4,552.52	4,678.99	4,561.53	21.22	18.97	-118.57	315.63	760.29	411.03	372.95	38.08	10.794	
4,800.00	4,647.20	4,778.03	4,656.11	21.88	19.57	-118.38	326.76	787.46	424.80	385.51	39.29	10.811	
4,900.00	4,741.89	4,877.07	4,750.70	22.55	20.17	-118.21	337.89	814.62	438.58	398.07	40.51	10.826	
5,000.00	4,836.58	4,976.11	4,845.29	23.22	20.77	-118.05	349.02	841.79	452.36	410.64	41.73	10.841	

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 21-2
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 21-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_JESSER 21-2	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						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	
5,100.00	4,931.26	5,075.15	4,939.87	23.88	21.36	-117.89	360.15	868.95	466.15	423.20	42.95	10.854	
5,200.00	5,025.95	5,174.18	5,034.46	24.55	21.96	-117.75	371.28	896.12	479.94	435.77	44.16	10.867	
5,300.00	5,120.64	5,206.16	5,065.00	25.22	22.16	-117.70	374.88	904.89	498.26	453.30	44.97	11.080	
5,400.00	5,215.32	5,206.16	5,065.00	25.89	22.16	-117.70	374.88	904.89	534.01	488.44	45.57	11.718	
5,500.00	5,310.01	5,206.16	5,065.00	26.56	22.16	-117.70	374.88	904.89	584.87	538.69	46.18	12.666	
5,552.38	5,359.61	5,206.16	5,065.00	26.91	22.16	-117.70	374.88	904.89	616.33	569.83	46.50	13.256	
5,600.00	5,404.82	5,206.16	5,065.00	27.19	22.16	-118.42	374.88	904.89	647.15	600.50	46.65	13.873	
5,700.00	5,500.54	5,206.16	5,065.00	27.66	22.16	-120.12	374.88	904.89	717.03	670.21	46.82	15.316	
5,800.00	5,597.22	5,206.16	5,065.00	28.09	22.16	-122.08	374.88	904.89	792.30	745.45	46.85	16.911	
5,900.00	5,694.72	5,206.16	5,065.00	28.47	22.16	-124.26	374.88	904.89	871.48	824.73	46.75	18.640	
6,000.00	5,792.94	5,206.16	5,065.00	28.80	22.16	-126.60	374.88	904.89	953.52	907.00	46.52	20.497	
6,100.00	5,891.76	5,206.16	5,065.00	29.09	22.16	-129.06	374.88	904.89	1,037.66	991.50	46.15	22.482	
6,200.00	5,991.05	5,206.16	5,065.00	29.32	22.16	-131.59	374.88	904.89	1,123.32	1,077.65	45.67	24.598	
6,300.00	6,090.69	5,206.16	5,065.00	29.51	22.16	-134.15	374.88	904.89	1,210.09	1,165.02	45.07	26.848	
6,400.00	6,190.57	5,206.16	5,065.00	29.66	22.16	-136.69	374.88	904.89	1,297.66	1,253.28	44.38	29.238	
6,490.45	6,281.00	5,206.16	5,065.00	29.75	22.16	-45.76	374.88	904.89	1,377.34	1,333.65	43.69	31.524	
6,500.00	6,290.55	5,206.16	5,065.00	29.76	22.16	-45.76	374.88	904.89	1,385.78	1,342.08	43.70	31.709	
6,600.00	6,390.55	5,206.16	5,065.00	29.86	22.16	-45.76	374.88	904.89	1,474.96	1,431.13	43.83	33.654	
6,700.00	6,490.55	5,206.16	5,065.00	29.97	22.16	-45.76	374.88	904.89	1,565.44	1,521.49	43.95	35.616	
6,800.00	6,590.55	5,206.16	5,065.00	30.07	22.16	-45.76	374.88	904.89	1,657.02	1,612.94	44.08	37.591	
6,900.00	6,690.55	5,206.16	5,065.00	30.17	22.16	-45.76	374.88	904.89	1,749.52	1,705.31	44.21	39.574	
7,000.00	6,790.55	5,206.16	5,065.00	30.28	22.16	-45.76	374.88	904.89	1,842.81	1,798.47	44.34	41.561	
7,100.00	6,890.55	5,206.16	5,065.00	30.39	22.16	-45.76	374.88	904.89	1,936.76	1,892.29	44.47	43.551	
7,200.00	6,990.55	5,206.16	5,065.00	30.49	22.16	-45.76	374.88	904.89	2,031.30	1,986.69	44.60	45.540	
7,300.00	7,090.55	5,206.16	5,065.00	30.60	22.16	-45.76	374.88	904.89	2,126.33	2,081.59	44.74	47.528	
7,400.00	7,190.55	5,206.16	5,065.00	30.71	22.16	-45.76	374.88	904.89	2,221.80	2,176.92	44.87	49.511	
7,500.00	7,290.55	5,206.16	5,065.00	30.83	22.16	-45.76	374.88	904.89	2,317.65	2,272.64	45.01	51.490	
7,600.00	7,390.55	5,206.16	5,065.00	30.94	22.16	-45.76	374.88	904.89	2,413.84	2,368.69	45.15	53.462	
7,700.00	7,490.55	5,206.16	5,065.00	31.05	22.16	-45.76	374.88	904.89	2,510.32	2,465.03	45.29	55.428	
7,800.00	7,590.55	5,206.16	5,065.00	31.17	22.16	-45.76	374.88	904.89	2,607.07	2,561.64	45.43	57.385	
7,900.00	7,690.55	5,206.16	5,065.00	31.29	22.16	-45.76	374.88	904.89	2,704.06	2,658.49	45.57	59.335	
8,000.00	7,790.55	5,206.16	5,065.00	31.40	22.16	-45.76	374.88	904.89	2,801.26	2,755.54	45.72	61.275	
8,100.00	7,890.55	5,206.16	5,065.00	31.52	22.16	-45.76	374.88	904.89	2,898.65	2,852.79	45.86	63.205	
8,200.00	7,990.55	5,206.16	5,065.00	31.64	22.16	-45.76	374.88	904.89	2,996.21	2,950.20	46.01	65.125	
8,300.00	8,090.55	5,206.16	5,065.00	31.76	22.16	-45.76	374.88	904.89	3,093.93	3,047.77	46.15	67.035	
8,405.45	8,196.00	5,206.16	5,065.00	31.89	22.16	-45.76	374.88	904.89	3,197.12	3,150.81	46.31	69.037	

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_JESSER 21-2
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 21-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_JESSER 21-2	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	-90.52	-0.36	-40.01	40.01				
100.00	100.00	100.00	100.00	0.10	0.10	-90.52	-0.36	-40.01	40.01	39.82	0.19	209.443	
200.00	200.00	200.00	200.00	0.32	0.32	-90.52	-0.36	-40.01	40.01	39.37	0.64	62.465	
300.00	300.00	300.00	300.00	0.55	0.55	-90.52	-0.36	-40.01	40.01	38.92	1.09	36.706	
400.00	400.00	400.00	400.00	0.77	0.77	-90.52	-0.36	-40.01	40.01	38.47	1.54	25.989	
500.00	500.00	500.00	500.00	0.99	0.99	-90.52	-0.36	-40.01	40.01	38.03	1.99	20.116	
600.00	600.00	600.00	600.00	1.22	1.22	-90.52	-0.36	-40.01	40.01	37.58	2.44	16.408	
700.00	700.00	700.00	700.00	1.44	1.44	-90.52	-0.36	-40.01	40.01	37.13	2.89	13.854	
800.00	800.00	800.00	800.00	1.67	1.67	-90.52	-0.36	-40.01	40.01	36.68	3.34	11.988	
900.00	900.00	900.00	900.00	1.89	1.89	-90.52	-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	-90.52	-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	-90.52	-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	-90.52	-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	-90.52	-0.36	-40.01	40.01	34.43	5.59	7.164 CC, ES	
1,400.00	1,399.98	1,399.05	1,399.03	3.00	3.01	178.24	0.98	-41.08	42.84	36.83	6.01	7.128 SF	
1,500.00	1,499.84	1,497.50	1,497.35	3.21	3.23	-177.22	4.96	-44.25	51.55	45.14	6.41	8.041	
1,600.00	1,599.45	1,594.79	1,594.27	3.42	3.45	-172.33	11.50	-49.44	66.48	59.67	6.81	9.766	
1,700.00	1,698.70	1,690.35	1,689.14	3.66	3.68	-168.31	20.42	-56.54	87.71	80.51	7.20	12.185	
1,800.00	1,797.47	1,783.69	1,781.39	3.92	3.93	-165.30	31.52	-65.36	115.12	107.53	7.59	15.175	
1,900.00	1,895.62	1,875.69	1,871.86	4.21	4.19	-163.10	44.62	-75.78	148.33	140.36	7.97	18.602	
2,000.00	1,993.06	1,968.55	1,963.05	4.55	4.48	-161.80	58.34	-86.68	185.32	176.95	8.37	22.140	
2,100.00	2,089.64	2,060.15	2,053.01	4.95	4.78	-161.12	71.86	-97.44	225.39	216.62	8.77	25.706	
2,200.00	2,185.27	2,150.40	2,141.63	5.41	5.08	-160.80	85.19	-108.03	268.46	259.30	9.17	29.283	
2,238.07	2,221.39	2,184.36	2,174.99	5.60	5.20	-160.74	90.20	-112.02	285.64	276.32	9.32	30.646	
2,300.00	2,280.04	2,239.46	2,229.09	5.92	5.39	-160.86	98.34	-118.49	313.93	304.31	9.63	32.611	
2,400.00	2,374.72	2,328.41	2,316.45	6.47	5.71	-161.01	111.48	-128.93	359.62	349.49	10.13	35.496	
2,500.00	2,469.41	2,417.36	2,403.80	7.04	6.03	-161.12	124.61	-139.38	405.30	394.66	10.65	38.067	
2,600.00	2,564.10	2,506.31	2,491.15	7.63	6.36	-161.22	137.75	-149.82	450.99	439.82	11.17	40.363	
2,700.00	2,658.78	2,595.26	2,578.51	8.23	6.69	-161.29	150.88	-160.26	496.68	484.97	11.71	42.422	
2,800.00	2,753.47	2,684.21	2,665.86	8.84	7.03	-161.36	164.02	-170.71	542.37	530.12	12.25	44.274	
2,900.00	2,848.16	2,773.16	2,753.22	9.46	7.37	-161.41	177.15	-181.15	588.05	575.26	12.80	45.946	
3,000.00	2,942.84	2,862.11	2,840.57	10.09	7.71	-161.45	190.29	-191.59	633.74	620.39	13.35	47.461	
3,100.00	3,037.53	2,951.07	2,927.92	10.72	8.06	-161.49	203.42	-202.04	679.43	665.52	13.91	48.839	
3,200.00	3,132.22	3,040.02	3,015.28	11.36	8.41	-161.53	216.56	-212.48	725.12	710.65	14.47	50.095	
3,300.00	3,226.90	3,128.97	3,102.63	12.00	8.76	-161.56	229.69	-222.92	770.81	755.77	15.04	51.245	
3,400.00	3,321.59	3,217.92	3,189.99	12.65	9.11	-161.59	242.83	-233.37	816.50	800.89	15.61	52.300	
3,500.00	3,416.28	3,306.87	3,277.34	13.30	9.46	-161.61	255.96	-243.81	862.19	846.01	16.18	53.271	
3,600.00	3,510.96	3,395.82	3,364.69	13.95	9.82	-161.63	269.10	-254.25	907.88	891.12	16.76	54.167	
3,700.00	3,605.65	3,484.77	3,452.05	14.60	10.18	-161.65	282.23	-264.70	953.57	936.23	17.34	54.996	
3,800.00	3,700.34	3,573.73	3,539.40	15.26	10.53	-161.67	295.37	-275.14	999.26	981.34	17.92	55.764	
3,900.00	3,795.02	3,662.68	3,626.76	15.92	10.89	-161.68	308.50	-285.58	1,044.95	1,026.45	18.50	56.478	
4,000.00	3,889.71	3,751.63	3,714.11	16.58	11.25	-161.70	321.64	-296.03	1,090.64	1,071.56	19.09	57.144	
4,100.00	3,984.40	3,840.58	3,801.46	17.24	11.61	-161.71	334.78	-306.47	1,136.33	1,116.66	19.67	57.765	
4,200.00	4,079.08	3,929.53	3,888.82	17.90	11.97	-161.73	347.91	-316.91	1,182.02	1,161.76	20.26	58.347	
4,300.00	4,173.77	4,018.48	3,976.17	18.56	12.33	-161.74	361.05	-327.36	1,227.71	1,206.87	20.85	58.891	
4,400.00	4,268.46	4,107.43	4,063.53	19.22	12.70	-161.75	374.18	-337.80	1,273.40	1,251.97	21.44	59.403	
4,500.00	4,363.14	4,196.38	4,150.88	19.89	13.06	-161.76	387.32	-348.24	1,319.09	1,297.07	22.03	59.884	
4,600.00	4,457.83	4,285.34	4,238.24	20.55	13.42	-161.77	400.45	-358.69	1,364.78	1,342.16	22.62	60.337	
4,700.00	4,552.52	4,374.29	4,325.59	21.22	13.79	-161.78	413.59	-369.13	1,410.47	1,387.26	23.21	60.764	
4,800.00	4,647.20	4,463.24	4,412.94	21.88	14.15	-161.78	426.72	-379.57	1,456.17	1,432.36	23.81	61.168	
4,900.00	4,741.89	4,552.19	4,500.30	22.55	14.52	-161.79	439.86	-390.02	1,501.86	1,477.46	24.40	61.550	
5,000.00	4,836.58	4,641.14	4,587.65	23.22	14.88	-161.80	452.99	-400.46	1,547.55	1,522.55	25.00	61.913	

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 21-2
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 21-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_JESSER 21-2	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
5,100.00	4,931.26	4,730.09	4,675.01	23.88	15.25	-161.81	466.13	-410.91	1,593.24	1,567.65	25.59	62.256	
5,200.00	5,025.95	4,819.04	4,762.36	24.55	15.61	-161.81	479.26	-421.35	1,638.93	1,612.74	26.19	62.583	
5,300.00	5,120.64	4,908.00	4,849.71	25.22	15.98	-161.82	492.40	-431.79	1,684.62	1,657.83	26.79	62.893	
5,400.00	5,215.32	4,996.95	4,937.07	25.89	16.34	-161.83	505.53	-442.24	1,730.31	1,702.93	27.38	63.189	
5,500.00	5,310.01	5,085.90	5,024.42	26.56	16.71	-161.83	518.67	-452.68	1,776.00	1,748.02	27.98	63.470	
5,552.38	5,359.61	5,132.49	5,070.18	26.91	16.90	-161.83	525.55	-458.15	1,799.93	1,771.64	28.30	63.613	
5,600.00	5,404.82	5,175.02	5,111.94	27.19	17.08	-161.98	531.83	-463.14	1,821.36	1,792.70	28.66	63.559	
5,700.00	5,500.54	5,265.39	5,200.70	27.66	17.45	-162.24	545.18	-473.75	1,864.14	1,834.77	29.37	63.464	
5,800.00	5,597.22	5,357.13	5,290.78	28.09	17.83	-162.44	558.72	-484.52	1,903.89	1,873.84	30.06	63.339	
5,900.00	5,694.72	5,450.10	5,382.08	28.47	18.22	-162.58	572.45	-495.44	1,940.58	1,909.87	30.71	63.189	
6,000.00	5,792.94	5,544.20	5,474.50	28.80	18.60	-162.67	586.35	-506.49	1,974.15	1,942.83	31.33	63.019	
6,100.00	5,891.76	5,639.32	5,567.91	29.09	19.00	-162.71	600.39	-517.65	2,004.58	1,972.68	31.90	62.833	
6,200.00	5,991.05	5,735.34	5,662.21	29.32	19.40	-162.70	614.57	-528.93	2,031.83	1,999.39	32.44	62.635	
6,300.00	6,090.69	5,838.88	5,763.16	29.51	19.96	-162.52	637.15	-546.88	2,055.21	2,022.13	33.08	62.132	
6,400.00	6,190.57	6,158.76	6,081.48	29.66	20.56	-162.32	658.80	-564.09	2,069.02	2,035.25	33.78	61.256	
6,490.45	6,281.00	6,358.39	6,281.00	29.75	20.86	-69.09	663.01	-567.44	2,072.14	2,037.93	34.21	60.578	
6,500.00	6,290.55	6,367.94	6,290.55	29.76	20.88	-69.09	663.01	-567.44	2,072.14	2,037.90	34.24	60.525	
6,600.00	6,390.55	6,467.94	6,390.55	29.86	21.02	-69.09	663.01	-567.44	2,072.14	2,037.57	34.57	59.948	
6,700.00	6,490.55	6,567.94	6,490.55	29.97	21.16	-69.09	663.01	-567.44	2,072.14	2,037.23	34.90	59.370	
6,800.00	6,590.55	6,667.94	6,590.55	30.07	21.31	-69.09	663.01	-567.44	2,072.14	2,036.90	35.24	58.798	
6,900.00	6,690.55	6,767.94	6,690.55	30.17	21.46	-69.09	663.01	-567.44	2,072.14	2,036.55	35.58	58.234	
7,000.00	6,790.55	6,867.94	6,790.55	30.28	21.61	-69.09	663.01	-567.44	2,072.14	2,036.21	35.93	57.676	
7,100.00	6,890.55	6,967.94	6,890.55	30.39	21.76	-69.09	663.01	-567.44	2,072.14	2,035.86	36.27	57.126	
7,200.00	6,990.55	7,067.94	6,990.55	30.49	21.91	-69.09	663.01	-567.44	2,072.14	2,035.52	36.62	56.582	
7,300.00	7,090.55	7,167.94	7,090.55	30.60	22.07	-69.09	663.01	-567.44	2,072.14	2,035.16	36.97	56.046	
7,400.00	7,190.55	7,267.94	7,190.55	30.71	22.22	-69.09	663.01	-567.44	2,072.14	2,034.81	37.32	55.516	
7,500.00	7,290.55	7,367.94	7,290.55	30.83	22.38	-69.09	663.01	-567.44	2,072.14	2,034.46	37.68	54.994	
7,600.00	7,390.55	7,467.94	7,390.55	30.94	22.54	-69.09	663.01	-567.44	2,072.14	2,034.10	38.04	54.478	
7,700.00	7,490.55	7,567.94	7,490.55	31.05	22.70	-69.09	663.01	-567.44	2,072.14	2,033.74	38.39	53.969	
7,800.00	7,590.55	7,667.94	7,590.55	31.17	22.86	-69.09	663.01	-567.44	2,072.14	2,033.38	38.76	53.467	
7,900.00	7,690.55	7,767.94	7,690.55	31.29	23.02	-69.09	663.01	-567.44	2,072.14	2,033.02	39.12	52.972	
8,000.00	7,790.55	7,867.94	7,790.55	31.40	23.18	-69.09	663.01	-567.44	2,072.14	2,032.66	39.48	52.483	
8,100.00	7,890.55	7,967.94	7,890.55	31.52	23.34	-69.09	663.01	-567.44	2,072.14	2,032.29	39.85	52.001	
8,200.00	7,990.55	8,067.94	7,990.55	31.64	23.51	-69.09	663.01	-567.44	2,072.14	2,031.92	40.22	51.526	
8,300.00	8,090.55	8,167.94	8,090.55	31.76	23.67	-69.09	663.01	-567.44	2,072.14	2,031.55	40.58	51.057	
8,405.45	8,196.00	8,273.39	8,196.00	31.89	23.85	-69.09	663.01	-567.44	2,072.14	2,031.16	40.98	50.570	

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_JESSER 21-2
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 21-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_JESSER 21-2	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	-90.52	-0.73	-80.03	80.03				
100.00	100.00	100.00	100.00	0.10	0.10	-90.52	-0.73	-80.03	80.03	79.84	0.19	418.886	
200.00	200.00	200.00	200.00	0.32	0.32	-90.52	-0.73	-80.03	80.03	79.39	0.64	124.931	
300.00	300.00	300.00	300.00	0.55	0.55	-90.52	-0.73	-80.03	80.03	78.94	1.09	73.413	
400.00	400.00	400.00	400.00	0.77	0.77	-90.52	-0.73	-80.03	80.03	78.49	1.54	51.979	
500.00	500.00	500.00	500.00	0.99	0.99	-90.52	-0.73	-80.03	80.03	78.04	1.99	40.232	
600.00	600.00	600.00	600.00	1.22	1.22	-90.52	-0.73	-80.03	80.03	77.59	2.44	32.816	
700.00	700.00	700.00	700.00	1.44	1.44	-90.52	-0.73	-80.03	80.03	77.14	2.89	27.708	
800.00	800.00	800.00	800.00	1.67	1.67	-90.52	-0.73	-80.03	80.03	76.69	3.34	23.977	
900.00	900.00	900.00	900.00	1.89	1.89	-90.52	-0.73	-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	-90.52	-0.73	-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	-90.52	-0.73	-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	-90.52	-0.73	-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	-90.52	-0.73	-80.03	80.03	74.44	5.59	14.328 CC, ES	
1,400.00	1,399.98	1,399.01	1,398.99	3.00	2.99	175.23	-2.35	-80.58	82.36	76.37	5.99	13.759 SF	
1,500.00	1,499.84	1,497.57	1,497.41	3.21	3.16	172.42	-7.18	-82.22	89.48	83.13	6.34	14.104	
1,600.00	1,599.45	1,595.23	1,594.71	3.42	3.34	168.63	-15.12	-84.92	101.71	95.00	6.71	15.162	
1,700.00	1,698.70	1,691.57	1,690.35	3.66	3.54	164.65	-26.03	-88.63	119.30	112.22	7.08	16.845	
1,800.00	1,797.47	1,786.20	1,783.87	3.92	3.76	160.98	-39.70	-93.28	142.38	134.91	7.47	19.055	
1,900.00	1,895.62	1,878.75	1,874.82	4.21	4.01	157.81	-55.89	-98.79	170.87	162.98	7.88	21.679	
2,000.00	1,993.06	1,969.32	1,963.26	4.55	4.28	155.16	-74.40	-105.09	204.60	196.29	8.31	24.611	
2,100.00	2,089.64	2,061.78	2,053.27	4.95	4.60	153.21	-94.37	-111.89	242.26	233.48	8.78	27.580	
2,200.00	2,185.27	2,153.09	2,142.17	5.41	4.93	151.99	-114.09	-118.60	282.88	273.61	9.28	30.498	
2,238.07	2,221.39	2,187.52	2,175.70	5.60	5.06	151.66	-121.53	-121.13	299.09	289.62	9.47	31.577	
2,300.00	2,280.04	2,243.40	2,230.10	5.92	5.28	151.47	-133.60	-125.24	325.79	315.95	9.84	33.093	
2,400.00	2,374.72	2,333.61	2,317.94	6.47	5.64	151.23	-153.09	-131.87	368.91	358.45	10.46	35.254	
2,500.00	2,469.41	2,423.83	2,405.77	7.04	6.01	151.03	-172.57	-138.50	412.03	400.93	11.10	37.106	
2,600.00	2,564.10	2,514.05	2,493.61	7.63	6.39	150.88	-192.06	-145.13	455.16	443.40	11.76	38.703	
2,700.00	2,658.78	2,604.26	2,581.45	8.23	6.77	150.75	-211.55	-151.76	498.29	485.86	12.43	40.087	
2,800.00	2,753.47	2,694.48	2,669.28	8.84	7.17	150.64	-231.03	-158.39	541.42	528.30	13.11	41.291	
2,900.00	2,848.16	2,784.70	2,757.12	9.46	7.57	150.54	-250.52	-165.02	584.55	570.74	13.80	42.347	
3,000.00	2,942.84	2,874.91	2,844.96	10.09	7.97	150.46	-270.01	-171.65	627.68	613.18	14.50	43.278	
3,100.00	3,037.53	2,965.13	2,932.80	10.72	8.38	150.39	-289.49	-178.28	670.81	655.60	15.21	44.104	
3,200.00	3,132.22	3,055.35	3,020.63	11.36	8.79	150.33	-308.98	-184.91	713.95	698.02	15.92	44.840	
3,300.00	3,226.90	3,145.56	3,108.47	12.00	9.20	150.28	-328.47	-191.54	757.08	740.44	16.64	45.499	
3,400.00	3,321.59	3,235.78	3,196.31	12.65	9.62	150.23	-347.95	-198.17	800.21	782.85	17.36	46.093	
3,500.00	3,416.28	3,326.00	3,284.14	13.30	10.04	150.19	-367.44	-204.80	843.35	825.26	18.09	46.630	
3,600.00	3,510.96	3,416.21	3,371.98	13.95	10.46	150.15	-386.93	-211.43	886.49	867.67	18.81	47.118	
3,700.00	3,605.65	3,506.43	3,459.82	14.60	10.88	150.11	-406.41	-218.06	929.62	910.08	19.55	47.563	
3,800.00	3,700.34	3,596.65	3,547.65	15.26	11.31	150.08	-425.90	-224.69	972.76	952.48	20.28	47.970	
3,900.00	3,795.02	3,686.86	3,635.49	15.92	11.73	150.05	-445.38	-231.33	1,015.89	994.88	21.01	48.345	
4,000.00	3,889.71	3,777.08	3,723.33	16.58	12.16	150.02	-464.87	-237.96	1,059.03	1,037.28	21.75	48.690	
4,100.00	3,984.40	3,867.30	3,811.17	17.24	12.59	150.00	-484.36	-244.59	1,102.17	1,079.68	22.49	49.010	
4,200.00	4,079.08	3,957.51	3,899.00	17.90	13.02	149.97	-503.84	-251.22	1,145.30	1,122.08	23.23	49.308	
4,300.00	4,173.77	4,047.73	3,986.84	18.56	13.45	149.95	-523.33	-257.85	1,188.44	1,164.47	23.97	49.585	
4,400.00	4,268.46	4,137.94	4,074.68	19.22	13.88	149.93	-542.82	-264.48	1,231.58	1,206.87	24.71	49.843	
4,500.00	4,363.14	4,228.16	4,162.51	19.89	14.31	149.91	-562.30	-271.11	1,274.72	1,249.26	25.45	50.086	
4,600.00	4,457.83	4,318.38	4,250.35	20.55	14.74	149.89	-581.79	-277.74	1,317.85	1,291.66	26.20	50.306	
4,700.00	4,552.52	4,408.59	4,338.19	21.22	15.18	149.88	-601.28	-284.37	1,360.99	1,334.04	26.95	50.499	
4,800.00	4,647.20	4,498.81	4,426.02	21.88	15.61	149.86	-620.76	-291.00	1,404.13	1,376.42	27.71	50.679	
4,900.00	4,741.89	4,589.03	4,513.86	22.55	16.04	149.85	-640.25	-297.63	1,447.27	1,418.80	28.46	50.848	
5,000.00	4,836.58	4,679.24	4,601.70	23.22	16.48	149.83	-659.74	-304.26	1,490.40	1,461.18	29.22	51.006	

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 21-2
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 21-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_JESSER 21-2	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	
5,100.00	4,931.26	4,769.46	4,689.54	23.88	16.91	149.82	-679.22	-310.89	1,533.54	1,503.56	29.98	51.155	
5,200.00	5,025.95	4,859.68	4,777.37	24.55	17.35	149.81	-698.71	-317.52	1,576.68	1,545.94	30.74	51.295	
5,300.00	5,120.64	4,949.89	4,865.21	25.22	17.78	149.80	-718.20	-324.15	1,619.82	1,588.32	31.50	51.427	
5,400.00	5,215.32	5,040.11	4,953.05	25.89	18.22	149.79	-737.68	-330.78	1,662.96	1,630.70	32.26	51.551	
5,500.00	5,310.01	5,130.33	5,040.88	26.56	18.66	149.78	-757.17	-337.41	1,706.09	1,673.07	33.02	51.669	
5,552.38	5,359.61	5,177.59	5,086.90	26.91	18.89	149.77	-767.38	-340.89	1,728.69	1,695.27	33.42	51.728	
5,600.00	5,404.82	5,220.69	5,128.86	27.19	19.09	149.98	-776.69	-344.06	1,748.92	1,715.09	33.83	51.690	
5,700.00	5,500.54	5,312.11	5,217.88	27.66	19.54	150.35	-796.43	-350.78	1,789.38	1,754.73	34.65	51.649	
5,800.00	5,597.22	5,404.67	5,307.99	28.09	19.99	150.63	-816.43	-357.58	1,827.05	1,791.62	35.43	51.572	
5,900.00	5,694.72	5,498.24	5,399.10	28.47	20.44	150.82	-836.64	-364.46	1,861.89	1,825.72	36.18	51.466	
6,000.00	5,792.94	5,592.72	5,491.08	28.80	20.90	150.92	-857.04	-371.40	1,893.89	1,857.00	36.89	51.336	
6,100.00	5,891.76	5,687.99	5,583.84	29.09	21.36	150.95	-877.62	-378.40	1,923.01	1,885.44	37.57	51.187	
6,200.00	5,991.05	5,845.38	5,737.69	29.32	21.97	150.75	-908.97	-389.07	1,948.20	1,909.85	38.35	50.798	
6,300.00	6,090.69	6,035.11	5,925.18	29.51	22.48	150.55	-936.23	-398.34	1,966.18	1,927.14	39.03	50.372	
6,400.00	6,190.57	6,229.03	6,118.36	29.66	22.87	150.45	-951.88	-403.67	1,976.48	1,936.91	39.57	49.951	
6,490.45	6,281.00	6,391.73	6,281.00	29.75	23.10	-116.37	-955.49	-404.90	1,979.10	1,939.19	39.91	49.585	
6,500.00	6,290.55	6,401.29	6,290.55	29.76	23.11	-116.37	-955.49	-404.90	1,979.10	1,939.16	39.94	49.554	
6,600.00	6,390.55	6,501.29	6,390.55	29.86	23.22	-116.37	-955.49	-404.90	1,979.10	1,938.90	40.20	49.228	
6,700.00	6,490.55	6,601.29	6,490.55	29.97	23.33	-116.37	-955.49	-404.90	1,979.10	1,938.63	40.47	48.903	
6,800.00	6,590.55	6,701.29	6,590.55	30.07	23.44	-116.37	-955.49	-404.90	1,979.10	1,938.36	40.74	48.578	
6,900.00	6,690.55	6,801.29	6,690.55	30.17	23.55	-116.37	-955.49	-404.90	1,979.10	1,938.08	41.01	48.254	
7,000.00	6,790.55	6,901.29	6,790.55	30.28	23.66	-116.37	-955.49	-404.90	1,979.10	1,937.81	41.29	47.930	
7,100.00	6,890.55	7,001.29	6,890.55	30.39	23.78	-116.37	-955.49	-404.90	1,979.10	1,937.53	41.57	47.608	
7,200.00	6,990.55	7,101.29	6,990.55	30.49	23.90	-116.37	-955.49	-404.90	1,979.10	1,937.24	41.85	47.286	
7,300.00	7,090.55	7,201.29	7,090.55	30.60	24.02	-116.37	-955.49	-404.90	1,979.10	1,936.96	42.14	46.965	
7,400.00	7,190.55	7,301.29	7,190.55	30.71	24.14	-116.37	-955.49	-404.90	1,979.10	1,936.67	42.43	46.646	
7,500.00	7,290.55	7,401.29	7,290.55	30.83	24.26	-116.37	-955.49	-404.90	1,979.10	1,936.38	42.72	46.328	
7,600.00	7,390.55	7,501.29	7,390.55	30.94	24.38	-116.37	-955.49	-404.90	1,979.10	1,936.08	43.01	46.011	
7,700.00	7,490.55	7,601.29	7,490.55	31.05	24.50	-116.37	-955.49	-404.90	1,979.10	1,935.79	43.31	45.696	
7,800.00	7,590.55	7,701.29	7,590.55	31.17	24.63	-116.37	-955.49	-404.90	1,979.10	1,935.49	43.61	45.382	
7,900.00	7,690.55	7,801.29	7,690.55	31.29	24.76	-116.37	-955.49	-404.90	1,979.10	1,935.19	43.91	45.070	
8,000.00	7,790.55	7,901.29	7,790.55	31.40	24.89	-116.37	-955.49	-404.90	1,979.10	1,934.88	44.22	44.760	
8,100.00	7,890.55	8,001.29	7,890.55	31.52	25.02	-116.37	-955.49	-404.90	1,979.10	1,934.57	44.52	44.451	
8,200.00	7,990.55	8,101.29	7,990.55	31.64	25.15	-116.37	-955.49	-404.90	1,979.10	1,934.27	44.83	44.144	
8,300.00	8,090.55	8,201.29	8,090.55	31.76	25.28	-116.37	-955.49	-404.90	1,979.10	1,933.95	45.14	43.839	
8,364.47	8,155.02	8,265.75	8,155.02	31.84	25.37	-116.37	-955.49	-404.90	1,979.10	1,933.75	45.35	43.644	
8,405.45	8,196.00	8,291.73	8,181.00	31.89	25.40	-116.37	-955.49	-404.90	1,979.15	1,933.70	45.45	43.544	

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_JESSER 21-2
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 21-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_JESSER 21-2	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)	Semi Major Axis Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	-90.46	-0.73	-90.10	90.10				
100.00	100.00	100.00	100.00	0.10	0.10	-90.46	-0.73	-90.10	90.10	89.91	0.19	471.608	
200.00	200.00	200.00	200.00	0.32	0.32	-90.46	-0.73	-90.10	90.10	89.46	0.64	140.655	
300.00	300.00	300.00	300.00	0.55	0.55	-90.46	-0.73	-90.10	90.10	89.01	1.09	82.653	
400.00	400.00	400.00	400.00	0.77	0.77	-90.46	-0.73	-90.10	90.10	88.56	1.54	58.521	
500.00	500.00	500.00	500.00	0.99	0.99	-90.46	-0.73	-90.10	90.10	88.11	1.99	45.296	
600.00	600.00	600.00	600.00	1.22	1.22	-90.46	-0.73	-90.10	90.10	87.66	2.44	36.946	
700.00	700.00	700.00	700.00	1.44	1.44	-90.46	-0.73	-90.10	90.10	87.21	2.89	31.196	
800.00	800.00	800.00	800.00	1.67	1.67	-90.46	-0.73	-90.10	90.10	86.76	3.34	26.994	
900.00	900.00	900.00	900.00	1.89	1.89	-90.46	-0.73	-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	-90.46	-0.73	-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	-90.46	-0.73	-90.10	90.10	85.42	4.69	19.226	
1,200.00	1,200.00	1,200.00	1,200.00	2.57	2.57	-90.46	-0.73	-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	-90.46	-0.73	-90.10	90.10	84.52	5.59	16.131 CC, ES	
1,400.00	1,399.98	1,398.76	1,398.74	3.00	2.99	175.72	-1.83	-90.74	92.50	86.52	5.99	15.452 SF	
1,500.00	1,499.84	1,497.14	1,497.05	3.21	3.16	174.05	-5.13	-92.64	99.76	93.42	6.35	15.719	
1,600.00	1,599.45	1,594.78	1,594.49	3.42	3.34	171.75	-10.57	-95.79	111.99	105.28	6.71	16.693	
1,700.00	1,698.70	1,691.33	1,690.65	3.66	3.54	169.25	-18.07	-100.12	129.27	122.19	7.07	18.272	
1,800.00	1,797.47	1,786.45	1,785.14	3.92	3.74	166.87	-27.51	-105.58	151.63	144.18	7.45	20.362	
1,900.00	1,895.62	1,879.81	1,877.59	4.21	3.96	164.75	-38.76	-112.08	179.02	171.19	7.83	22.871	
2,000.00	1,993.06	1,971.13	1,967.68	4.55	4.20	162.91	-51.64	-119.52	211.33	203.11	8.22	25.712	
2,100.00	2,089.64	2,060.13	2,055.12	4.95	4.47	161.35	-66.00	-127.82	248.41	239.79	8.62	28.803	
2,200.00	2,185.27	2,146.57	2,139.66	5.41	4.75	160.00	-81.62	-136.85	290.12	281.07	9.05	32.072	
2,238.07	2,221.39	2,178.76	2,171.03	5.60	4.86	159.54	-87.86	-140.46	307.17	297.96	9.21	33.352	
2,300.00	2,280.04	2,230.51	2,221.33	5.92	5.05	159.02	-98.37	-146.53	335.71	326.18	9.54	35.204	
2,400.00	2,374.72	2,312.84	2,301.02	6.47	5.37	158.18	-116.31	-156.90	382.98	372.90	10.08	37.982	
2,500.00	2,469.41	2,395.97	2,381.02	7.04	5.73	157.34	-135.83	-168.18	431.61	420.94	10.67	40.456	
2,600.00	2,564.10	2,482.99	2,464.68	7.63	6.13	156.60	-156.58	-180.17	480.60	469.31	11.29	42.576	
2,700.00	2,658.78	2,570.02	2,548.34	8.23	6.54	155.99	-177.34	-192.17	529.64	517.72	11.92	44.422	
2,800.00	2,753.47	2,657.05	2,632.00	8.84	6.96	155.49	-198.09	-204.16	578.71	566.14	12.57	46.036	
2,900.00	2,848.16	2,744.07	2,715.66	9.46	7.40	155.06	-218.84	-216.16	627.82	614.59	13.23	47.453	
3,000.00	2,942.84	2,831.10	2,799.32	10.09	7.84	154.70	-239.60	-228.15	676.95	663.05	13.90	48.704	
3,100.00	3,037.53	2,918.12	2,882.98	10.72	8.28	154.39	-260.35	-240.15	726.09	711.52	14.58	49.813	
3,200.00	3,132.22	3,005.15	2,966.64	11.36	8.74	154.11	-281.10	-252.14	775.25	759.99	15.26	50.801	
3,300.00	3,226.90	3,092.18	3,050.30	12.00	9.20	153.87	-301.86	-264.13	824.43	808.47	15.95	51.685	
3,400.00	3,321.59	3,179.20	3,133.96	12.65	9.66	153.66	-322.61	-276.13	873.61	856.96	16.65	52.479	
3,500.00	3,416.28	3,266.23	3,217.62	13.30	10.12	153.47	-343.36	-288.12	922.80	905.45	17.35	53.197	
3,600.00	3,510.96	3,353.25	3,301.28	13.95	10.59	153.29	-364.12	-300.12	971.99	953.94	18.05	53.848	
3,700.00	3,605.65	3,440.28	3,384.94	14.60	11.07	153.14	-384.87	-312.11	1,021.20	1,002.44	18.76	54.442	
3,800.00	3,700.34	3,527.31	3,468.60	15.26	11.54	153.00	-405.62	-324.11	1,070.40	1,050.94	19.47	54.985	
3,900.00	3,795.02	3,614.33	3,552.26	15.92	12.02	152.87	-426.38	-336.10	1,119.62	1,099.44	20.18	55.483	
4,000.00	3,889.71	3,701.36	3,635.92	16.58	12.49	152.75	-447.13	-348.10	1,168.83	1,147.94	20.89	55.942	
4,100.00	3,984.40	3,788.38	3,719.58	17.24	12.97	152.64	-467.88	-360.09	1,218.05	1,196.44	21.61	56.366	
4,200.00	4,079.08	3,875.41	3,803.24	17.90	13.46	152.54	-488.64	-372.08	1,267.28	1,244.95	22.33	56.759	
4,300.00	4,173.77	3,962.44	3,886.90	18.56	13.94	152.45	-509.39	-384.08	1,316.50	1,293.46	23.05	57.125	
4,400.00	4,268.46	4,049.46	3,970.56	19.22	14.42	152.36	-530.15	-396.07	1,365.73	1,341.97	23.77	57.466	
4,500.00	4,363.14	4,136.49	4,054.22	19.89	14.91	152.28	-550.90	-408.07	1,414.96	1,390.48	24.49	57.785	
4,600.00	4,457.83	4,223.51	4,137.88	20.55	15.39	152.21	-571.65	-420.06	1,464.19	1,438.98	25.22	58.064	
4,700.00	4,552.52	4,310.54	4,221.54	21.22	15.88	152.14	-592.41	-432.06	1,513.43	1,487.48	25.95	58.321	
4,800.00	4,647.20	4,397.57	4,305.20	21.88	16.37	152.07	-613.16	-444.05	1,562.66	1,535.98	26.68	58.561	
4,900.00	4,741.89	4,484.59	4,388.86	22.55	16.86	152.01	-633.91	-456.04	1,611.90	1,584.48	27.42	58.784	
5,000.00	4,836.58	4,571.62	4,472.52	23.22	17.35	151.96	-654.67	-468.04	1,661.14	1,632.98	28.16	58.994	

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 21-2
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 21-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_JESSER 21-2	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
5,100.00	4,931.26	4,658.64	4,556.18	23.88	17.84	151.90	-675.42	-480.03	1,710.38	1,681.48	28.90	59.191	
5,200.00	5,025.95	4,745.67	4,639.84	24.55	18.33	151.85	-696.17	-492.03	1,759.62	1,729.98	29.64	59.376	
5,300.00	5,120.64	4,832.70	4,723.50	25.22	18.82	151.80	-716.93	-504.02	1,808.86	1,778.49	30.38	59.550	
5,400.00	5,215.32	4,919.72	4,807.16	25.89	19.31	151.76	-737.68	-516.02	1,858.10	1,826.99	31.12	59.715	
5,500.00	5,310.01	5,006.75	4,890.82	26.56	19.80	151.71	-758.43	-528.01	1,907.35	1,875.49	31.86	59.870	
5,552.38	5,359.61	5,052.33	4,934.64	26.91	20.06	151.69	-769.31	-534.29	1,933.14	1,900.90	32.25	59.948	
5,600.00	5,404.82	5,093.94	4,974.64	27.19	20.30	151.91	-779.23	-540.03	1,956.29	1,923.62	32.67	59.883	
5,700.00	5,500.54	5,182.37	5,059.64	27.66	20.80	152.32	-800.32	-552.22	2,002.89	1,969.40	33.49	59.803	
5,800.00	5,597.22	5,209.79	5,086.00	28.09	20.95	152.74	-806.85	-556.00	2,047.70	2,013.66	34.04	60.150	
5,900.00	5,694.72	5,209.79	5,086.00	28.47	20.95	153.21	-806.85	-556.00	2,093.44	2,059.00	34.44	60.791	
6,000.00	5,792.94	5,209.79	5,086.00	28.80	20.95	153.68	-806.85	-556.00	2,140.16	2,105.39	34.78	61.542	
6,100.00	5,891.76	5,209.79	5,086.00	29.09	20.95	154.16	-806.85	-556.00	2,187.77	2,152.71	35.06	62.401	
6,200.00	5,991.05	5,209.79	5,086.00	29.32	20.95	154.63	-806.85	-556.00	2,236.13	2,200.84	35.29	63.366	
6,300.00	6,090.69	5,209.79	5,086.00	29.51	20.95	155.11	-806.85	-556.00	2,285.16	2,249.69	35.46	64.437	
6,400.00	6,190.57	5,209.79	5,086.00	29.66	20.95	155.59	-806.85	-556.00	2,334.74	2,299.15	35.58	65.615	
6,490.45	6,281.00	5,209.79	5,086.00	29.75	20.95	-110.79	-806.85	-556.00	2,379.98	2,344.34	35.65	66.765	
6,500.00	6,290.55	5,209.79	5,086.00	29.76	20.95	-110.79	-806.85	-556.00	2,384.79	2,349.13	35.66	66.875	
6,600.00	6,390.55	5,209.79	5,086.00	29.86	20.95	-110.79	-806.85	-556.00	2,436.83	2,401.03	35.80	68.059	
6,700.00	6,490.55	5,209.79	5,086.00	29.97	20.95	-110.79	-806.85	-556.00	2,491.80	2,455.85	35.95	69.313	
6,800.00	6,590.55	5,209.79	5,086.00	30.07	20.95	-110.79	-806.85	-556.00	2,549.50	2,513.41	36.10	70.629	
6,900.00	6,690.55	5,209.79	5,086.00	30.17	20.95	-110.79	-806.85	-556.00	2,609.77	2,573.52	36.25	72.002	
7,000.00	6,790.55	5,209.79	5,086.00	30.28	20.95	-110.79	-806.85	-556.00	2,672.41	2,636.02	36.40	73.427	
7,100.00	6,890.55	5,209.79	5,086.00	30.39	20.95	-110.79	-806.85	-556.00	2,737.28	2,700.73	36.55	74.898	
7,200.00	6,990.55	5,209.79	5,086.00	30.49	20.95	-110.79	-806.85	-556.00	2,804.21	2,767.51	36.70	76.410	
7,300.00	7,090.55	5,209.79	5,086.00	30.60	20.95	-110.79	-806.85	-556.00	2,873.07	2,836.21	36.85	77.959	
7,400.00	7,190.55	5,209.79	5,086.00	30.71	20.95	-110.79	-806.85	-556.00	2,943.71	2,906.70	37.01	79.540	
7,500.00	7,290.55	5,209.79	5,086.00	30.83	20.95	-110.79	-806.85	-556.00	3,016.01	2,978.85	37.17	81.151	
7,600.00	7,390.55	5,209.79	5,086.00	30.94	20.95	-110.79	-806.85	-556.00	3,089.86	3,052.54	37.32	82.786	
7,700.00	7,490.55	5,209.79	5,086.00	31.05	20.95	-110.79	-806.85	-556.00	3,165.15	3,127.67	37.48	84.443	
7,800.00	7,590.55	5,209.79	5,086.00	31.17	20.95	-110.79	-806.85	-556.00	3,241.77	3,204.13	37.64	86.119	
7,900.00	7,690.55	5,209.79	5,086.00	31.29	20.95	-110.79	-806.85	-556.00	3,319.64	3,281.83	37.80	87.812	
8,000.00	7,790.55	5,209.79	5,086.00	31.40	20.95	-110.79	-806.85	-556.00	3,398.66	3,360.69	37.97	89.517	
8,100.00	7,890.55	5,209.79	5,086.00	31.52	20.95	-110.79	-806.85	-556.00	3,478.76	3,440.63	38.13	91.234	
8,200.00	7,990.55	5,209.79	5,086.00	31.64	20.95	-110.79	-806.85	-556.00	3,559.88	3,521.58	38.30	92.959	
8,300.00	8,090.55	5,209.79	5,086.00	31.76	20.95	-110.79	-806.85	-556.00	3,641.93	3,603.47	38.46	94.692	
8,405.45	8,196.00	5,209.79	5,086.00	31.89	20.95	-110.79	-806.85	-556.00	3,729.40	3,690.76	38.64	96.525	

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_JESSER 21-2
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 21-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_JESSER 21-2	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						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
0.00	0.00	0.00	0.00	0.00	0.00	-90.35	-0.36	-60.16	60.16				
100.00	100.00	100.00	100.00	0.10	0.10	-90.35	-0.36	-60.16	60.16	59.97	0.19	314.889	
200.00	200.00	200.00	200.00	0.32	0.32	-90.35	-0.36	-60.16	60.16	59.52	0.64	93.914	
300.00	300.00	300.00	300.00	0.55	0.55	-90.35	-0.36	-60.16	60.16	59.07	1.09	55.187	
400.00	400.00	400.00	400.00	0.77	0.77	-90.35	-0.36	-60.16	60.16	58.62	1.54	39.074	
500.00	500.00	500.00	500.00	0.99	0.99	-90.35	-0.36	-60.16	60.16	58.17	1.99	30.244	
600.00	600.00	600.00	600.00	1.22	1.22	-90.35	-0.36	-60.16	60.16	57.72	2.44	24.669	
700.00	700.00	700.00	700.00	1.44	1.44	-90.35	-0.36	-60.16	60.16	57.27	2.89	20.829	
800.00	800.00	800.00	800.00	1.67	1.67	-90.35	-0.36	-60.16	60.16	56.82	3.34	18.024	
900.00	900.00	900.00	900.00	1.89	1.89	-90.35	-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	-90.35	-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	-90.35	-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	-90.35	-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	-90.35	-0.36	-60.16	60.16	54.57	5.59	10.771 CC	
1,400.00	1,399.98	1,401.66	1,401.64	3.00	3.00	175.50	-1.48	-58.74	60.52	54.52	6.00	10.093 ES	
1,500.00	1,499.84	1,503.25	1,503.08	3.21	3.19	172.69	-4.81	-54.49	61.70	55.33	6.37	9.686	
1,600.00	1,599.45	1,604.70	1,604.13	3.42	3.39	168.28	-10.36	-47.42	63.97	57.22	6.75	9.472	
1,700.00	1,698.70	1,705.94	1,704.59	3.66	3.62	162.66	-18.09	-37.57	67.72	60.56	7.16	9.462 SF	
1,800.00	1,797.47	1,806.91	1,804.27	3.92	3.87	156.38	-27.98	-24.97	73.36	65.76	7.60	9.650	
1,900.00	1,895.62	1,907.54	1,903.00	4.21	4.17	149.98	-39.99	-9.67	81.21	73.10	8.11	10.009	
2,000.00	1,993.06	2,007.54	2,000.39	4.55	4.50	143.98	-53.99	8.17	91.52	82.80	8.72	10.498	
2,100.00	2,089.64	2,106.40	2,096.43	4.95	4.88	139.87	-68.47	26.62	104.93	95.54	9.39	11.169	
2,200.00	2,185.27	2,204.99	2,192.19	5.41	5.27	137.74	-82.91	45.03	121.27	111.15	10.12	11.983	
2,238.07	2,221.39	2,242.41	2,228.55	5.60	5.42	137.33	-88.40	52.01	128.18	117.77	10.41	12.315	
2,300.00	2,280.04	2,303.26	2,287.66	5.92	5.68	137.00	-97.31	63.37	139.72	128.81	10.91	12.808	
2,400.00	2,374.72	2,401.50	2,383.09	6.47	6.10	136.57	-111.70	81.71	158.37	146.62	11.75	13.479	
2,500.00	2,469.41	2,499.74	2,478.52	7.04	6.54	136.23	-126.10	100.05	177.03	164.41	12.62	14.029	
2,600.00	2,564.10	2,597.98	2,573.96	7.63	6.99	135.95	-140.49	118.39	195.69	182.17	13.51	14.482	
2,700.00	2,658.78	2,696.22	2,669.39	8.23	7.44	135.72	-154.88	136.73	214.35	199.92	14.42	14.860	
2,800.00	2,753.47	2,794.46	2,764.82	8.84	7.90	135.53	-169.27	155.07	233.02	217.66	15.35	15.177	
2,900.00	2,848.16	2,892.69	2,860.26	9.46	8.37	135.37	-183.67	173.41	251.68	235.39	16.30	15.445	
3,000.00	2,942.84	2,990.93	2,955.69	10.09	8.84	135.23	-198.06	191.75	270.36	253.11	17.25	15.674	
3,100.00	3,037.53	3,089.17	3,051.12	10.72	9.31	135.11	-212.45	210.09	289.03	270.82	18.21	15.871	
3,200.00	3,132.22	3,187.41	3,146.56	11.36	9.79	135.00	-226.84	228.43	307.70	288.52	19.18	16.042	
3,300.00	3,226.90	3,285.65	3,241.99	12.00	10.27	134.91	-241.24	246.77	326.37	306.22	20.16	16.191	
3,400.00	3,321.59	3,383.89	3,337.42	12.65	10.75	134.82	-255.63	265.11	345.05	323.91	21.14	16.321	
3,500.00	3,416.28	3,482.13	3,432.86	13.30	11.24	134.74	-270.02	283.45	363.72	341.59	22.13	16.436	
3,600.00	3,510.96	3,580.37	3,528.29	13.95	11.72	134.68	-284.42	301.79	382.40	359.28	23.12	16.538	
3,700.00	3,605.65	3,678.61	3,623.73	14.60	12.21	134.61	-298.81	320.13	401.08	376.96	24.12	16.630	
3,800.00	3,700.34	3,776.85	3,719.16	15.26	12.70	134.56	-313.20	338.47	419.75	394.63	25.12	16.711	
3,900.00	3,795.02	3,875.09	3,814.59	15.92	13.19	134.51	-327.59	356.81	438.43	412.31	26.12	16.785	
4,000.00	3,889.71	3,973.33	3,910.03	16.58	13.68	134.46	-341.99	375.14	457.11	429.98	27.13	16.851	
4,100.00	3,984.40	4,071.57	4,005.46	17.24	14.18	134.41	-356.38	393.48	475.78	447.65	28.13	16.911	
4,200.00	4,079.08	4,169.81	4,100.89	17.90	14.67	134.37	-370.77	411.82	494.46	465.32	29.14	16.966	
4,300.00	4,173.77	4,268.05	4,196.33	18.56	15.17	134.34	-385.16	430.16	513.14	482.98	30.16	17.016	
4,400.00	4,268.46	4,366.29	4,291.76	19.22	15.66	134.30	-399.56	448.50	531.82	500.65	31.17	17.062	
4,500.00	4,363.14	4,464.53	4,387.19	19.89	16.16	134.27	-413.95	466.84	550.50	518.31	32.19	17.104	
4,600.00	4,457.83	4,562.77	4,482.63	20.55	16.66	134.24	-428.34	485.18	569.18	535.97	33.20	17.143	
4,700.00	4,552.52	4,661.01	4,578.06	21.22	17.15	134.21	-442.74	503.52	587.85	553.63	34.22	17.179	
4,800.00	4,647.20	4,759.25	4,673.49	21.88	17.65	134.18	-457.13	521.86	606.53	571.29	35.24	17.212	
4,900.00	4,741.89	4,857.49	4,768.93	22.55	18.15	134.16	-471.52	540.20	625.21	588.95	36.26	17.243	
5,000.00	4,836.58	4,955.73	4,864.36	23.22	18.65	134.13	-485.91	558.54	643.89	606.61	37.28	17.271	

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 21-2
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 21-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_JESSER 21-2	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
5,100.00	4,931.26	5,053.97	4,959.79	23.88	19.15	134.11	-500.31	576.88	662.57	624.27	38.30	17.298	
5,200.00	5,025.95	5,152.21	5,055.23	24.55	19.65	134.09	-514.70	595.22	681.25	641.92	39.33	17.323	
5,300.00	5,120.64	5,250.45	5,150.66	25.22	20.15	134.07	-529.09	613.56	699.93	659.58	40.35	17.346	
5,400.00	5,215.32	5,348.69	5,246.09	25.89	20.65	134.05	-543.48	631.90	718.61	677.23	41.38	17.368	
5,500.00	5,310.01	5,446.92	5,341.53	26.56	21.15	134.03	-557.88	650.24	737.29	694.89	42.40	17.389	
5,552.38	5,359.61	5,498.39	5,391.52	26.91	21.42	134.02	-565.42	659.85	747.07	704.14	42.94	17.399	
5,600.00	5,404.82	5,545.21	5,437.01	27.19	21.65	134.12	-572.28	668.59	755.70	712.28	43.42	17.405	
5,700.00	5,500.54	5,643.83	5,532.80	27.66	22.16	134.16	-586.72	687.00	772.05	727.67	44.37	17.400	
5,800.00	5,597.22	5,741.03	5,627.28	28.09	22.62	134.01	-600.83	704.97	786.05	740.76	45.29	17.357	
5,900.00	5,694.72	5,835.81	5,719.97	28.47	22.99	133.86	-613.05	720.54	798.13	752.08	46.06	17.329	
6,000.00	5,792.94	5,930.90	5,813.56	28.80	23.28	133.74	-623.41	733.74	808.37	761.68	46.70	17.311	
6,100.00	5,891.76	6,026.24	5,907.91	29.09	23.54	133.65	-631.86	744.51	816.75	769.51	47.24	17.289	
6,200.00	5,991.05	6,121.78	6,002.86	29.32	23.76	133.59	-638.38	752.81	823.26	775.56	47.69	17.261	
6,300.00	6,090.69	6,217.48	6,098.27	29.51	23.94	133.55	-642.94	758.63	827.87	779.82	48.05	17.229	
6,400.00	6,190.57	6,313.27	6,193.96	29.66	24.09	133.54	-645.54	761.94	830.59	782.27	48.32	17.190	
6,490.45	6,281.00	6,400.32	6,281.00	29.75	24.20	-133.26	-646.20	762.78	831.41	782.92	48.49	17.147	
6,500.00	6,290.55	6,409.87	6,290.55	29.76	24.21	-133.26	-646.20	762.78	831.41	782.90	48.51	17.139	
6,600.00	6,390.55	6,509.87	6,390.55	29.86	24.32	-133.26	-646.20	762.78	831.41	782.67	48.74	17.058	
6,700.00	6,490.55	6,609.87	6,490.55	29.97	24.44	-133.26	-646.20	762.78	831.41	782.43	48.97	16.977	
6,800.00	6,590.55	6,709.87	6,590.55	30.07	24.55	-133.26	-646.20	762.78	831.41	782.20	49.21	16.896	
6,900.00	6,690.55	6,809.87	6,690.55	30.17	24.67	-133.26	-646.20	762.78	831.41	781.96	49.45	16.814	
7,000.00	6,790.55	6,909.87	6,790.55	30.28	24.79	-133.26	-646.20	762.78	831.41	781.72	49.69	16.732	
7,100.00	6,890.55	7,009.87	6,890.55	30.39	24.91	-133.26	-646.20	762.78	831.41	781.47	49.93	16.650	
7,200.00	6,990.55	7,109.87	6,990.55	30.49	25.03	-133.26	-646.20	762.78	831.41	781.23	50.18	16.568	
7,300.00	7,090.55	7,209.87	7,090.55	30.60	25.16	-133.26	-646.20	762.78	831.41	780.98	50.43	16.486	
7,400.00	7,190.55	7,309.87	7,190.55	30.71	25.28	-133.26	-646.20	762.78	831.41	780.72	50.68	16.403	
7,500.00	7,290.55	7,409.87	7,290.55	30.83	25.41	-133.26	-646.20	762.78	831.41	780.47	50.94	16.321	
7,600.00	7,390.55	7,509.87	7,390.55	30.94	25.54	-133.26	-646.20	762.78	831.41	780.21	51.20	16.239	
7,700.00	7,490.55	7,609.87	7,490.55	31.05	25.66	-133.26	-646.20	762.78	831.41	779.95	51.46	16.156	
7,800.00	7,590.55	7,709.87	7,590.55	31.17	25.79	-133.26	-646.20	762.78	831.41	779.68	51.72	16.074	
7,900.00	7,690.55	7,809.87	7,690.55	31.29	25.93	-133.26	-646.20	762.78	831.41	779.42	51.99	15.992	
8,000.00	7,790.55	7,909.87	7,790.55	31.40	26.06	-133.26	-646.20	762.78	831.41	779.15	52.26	15.909	
8,100.00	7,890.55	8,009.87	7,890.55	31.52	26.19	-133.26	-646.20	762.78	831.41	778.88	52.53	15.827	
8,200.00	7,990.55	8,109.87	7,990.55	31.64	26.33	-133.26	-646.20	762.78	831.41	778.60	52.80	15.745	
8,300.00	8,090.55	8,209.87	8,090.55	31.76	26.46	-133.26	-646.20	762.78	831.41	778.33	53.08	15.663	
8,367.02	8,157.57	8,276.89	8,157.57	31.85	26.56	-133.26	-646.20	762.78	831.41	778.14	53.27	15.608	
8,405.45	8,196.00	8,306.32	8,187.00	31.89	26.60	-133.26	-646.20	762.78	831.46	778.09	53.36	15.582	

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_JESSER 21-2
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 21-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_JESSER 21-2	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	-90.30	-0.36	-69.95	69.95				
100.00	100.00	100.00	100.00	0.10	0.10	-90.30	-0.36	-69.95	69.95	69.76	0.19	366.148	
200.00	200.00	200.00	200.00	0.32	0.32	-90.30	-0.36	-69.95	69.95	69.31	0.64	109.202	
300.00	300.00	300.00	300.00	0.55	0.55	-90.30	-0.36	-69.95	69.95	68.86	1.09	64.170	
400.00	400.00	400.00	400.00	0.77	0.77	-90.30	-0.36	-69.95	69.95	68.41	1.54	45.435	
500.00	500.00	500.00	500.00	0.99	0.99	-90.30	-0.36	-69.95	69.95	67.96	1.99	35.167	
600.00	600.00	600.00	600.00	1.22	1.22	-90.30	-0.36	-69.95	69.95	67.51	2.44	28.684	
700.00	700.00	700.00	700.00	1.44	1.44	-90.30	-0.36	-69.95	69.95	67.06	2.89	24.220	
800.00	800.00	800.00	800.00	1.67	1.67	-90.30	-0.36	-69.95	69.95	66.62	3.34	20.958	
900.00	900.00	900.00	900.00	1.89	1.89	-90.30	-0.36	-69.95	69.95	66.17	3.79	18.470	
1,000.00	1,000.00	1,000.00	1,000.00	2.12	2.12	-90.30	-0.36	-69.95	69.95	65.72	4.24	16.511	
1,100.00	1,100.00	1,100.00	1,100.00	2.34	2.34	-90.30	-0.36	-69.95	69.95	65.27	4.69	14.927	
1,200.00	1,200.00	1,200.00	1,200.00	2.57	2.57	-90.30	-0.36	-69.95	69.95	64.82	5.14	13.620	
1,300.00	1,300.00	1,300.00	1,300.00	2.79	2.79	-90.30	-0.36	-69.95	69.95	64.37	5.59	12.524 CC, ES	
1,400.00	1,399.98	1,401.19	1,401.18	3.00	2.99	175.76	-1.38	-69.08	70.84	64.85	5.99	11.821	
1,500.00	1,499.84	1,502.30	1,502.21	3.21	3.18	173.65	-4.43	-66.46	73.58	67.22	6.36	11.566 SF	
1,600.00	1,599.45	1,603.28	1,602.96	3.42	3.37	170.47	-9.50	-62.12	78.34	71.60	6.74	11.628	
1,700.00	1,698.70	1,704.04	1,703.29	3.66	3.58	166.63	-16.57	-56.05	85.34	78.22	7.12	11.979	
1,800.00	1,797.47	1,804.53	1,803.06	3.92	3.80	162.55	-25.62	-48.29	94.79	87.26	7.53	12.583	
1,900.00	1,895.62	1,904.67	1,902.15	4.21	4.05	158.55	-36.61	-38.85	106.83	98.85	7.98	13.392	
2,000.00	1,993.06	2,004.40	2,000.41	4.55	4.33	154.85	-49.52	-27.78	121.53	113.06	8.47	14.349	
2,100.00	2,089.64	2,103.65	2,097.74	4.95	4.64	151.54	-64.29	-15.10	138.90	129.88	9.02	15.391	
2,200.00	2,185.27	2,202.37	2,194.00	5.41	4.99	148.64	-80.88	-0.87	158.92	149.27	9.65	16.461	
2,238.07	2,221.39	2,239.80	2,230.35	5.60	5.13	147.64	-87.66	4.95	167.23	157.31	9.92	16.857	
2,300.00	2,280.04	2,300.60	2,289.20	5.92	5.37	146.16	-99.26	14.90	181.00	170.59	10.40	17.396	
2,400.00	2,374.72	2,398.64	2,383.55	6.47	5.81	143.63	-119.45	32.23	203.11	191.84	11.27	18.024	
2,500.00	2,469.41	2,496.39	2,476.92	7.04	6.29	140.96	-141.40	51.06	225.23	213.01	12.23	18.423	
2,600.00	2,564.10	2,593.43	2,569.08	7.63	6.81	138.37	-164.46	70.85	247.62	234.37	13.26	18.679	
2,700.00	2,658.78	2,690.32	2,661.07	8.23	7.34	136.19	-187.54	90.65	270.41	256.09	14.32	18.878	
2,800.00	2,753.47	2,787.21	2,753.07	8.84	7.90	134.35	-210.62	110.46	293.52	278.10	15.42	19.037	
2,900.00	2,848.16	2,884.10	2,845.07	9.46	8.46	132.78	-233.70	130.26	316.87	300.34	16.53	19.165	
3,000.00	2,942.84	2,981.00	2,937.07	10.09	9.04	131.43	-256.78	150.06	340.42	322.76	17.67	19.271	
3,100.00	3,037.53	3,077.89	3,029.06	10.72	9.62	130.25	-279.86	169.86	364.13	345.32	18.81	19.358	
3,200.00	3,132.22	3,174.78	3,121.06	11.36	10.21	129.21	-302.93	189.67	387.96	368.00	19.96	19.432	
3,300.00	3,226.90	3,271.67	3,213.06	12.00	10.80	128.30	-326.01	209.47	411.90	390.77	21.13	19.495	
3,400.00	3,321.59	3,368.57	3,305.05	12.65	11.40	127.48	-349.09	229.27	435.93	413.63	22.30	19.549	
3,500.00	3,416.28	3,465.46	3,397.05	13.30	12.01	126.75	-372.17	249.08	460.03	436.56	23.48	19.595	
3,600.00	3,510.96	3,562.35	3,489.05	13.95	12.61	126.09	-395.25	268.88	484.20	459.54	24.66	19.636	
3,700.00	3,605.65	3,659.24	3,581.04	14.60	13.22	125.50	-418.33	288.68	508.42	482.58	25.84	19.672	
3,800.00	3,700.34	3,756.14	3,673.04	15.26	13.84	124.96	-441.41	308.48	532.69	505.66	27.03	19.704	
3,900.00	3,795.02	3,853.03	3,765.04	15.92	14.45	124.46	-464.49	328.29	557.00	528.77	28.23	19.733	
4,000.00	3,889.71	3,949.92	3,857.03	16.58	15.07	124.01	-487.57	348.09	581.35	551.92	29.42	19.758	
4,100.00	3,984.40	4,046.82	3,949.03	17.24	15.69	123.59	-510.65	367.89	605.72	575.10	30.62	19.782	
4,200.00	4,079.08	4,143.71	4,041.03	17.90	16.31	123.21	-533.72	387.70	630.13	598.31	31.82	19.802	
4,300.00	4,173.77	4,240.60	4,133.02	18.56	16.93	122.85	-556.80	407.50	654.56	621.54	33.02	19.822	
4,400.00	4,268.46	4,337.49	4,225.02	19.22	17.56	122.52	-579.88	427.30	679.01	644.78	34.23	19.839	
4,500.00	4,363.14	4,434.39	4,317.02	19.89	18.18	122.21	-602.96	447.10	703.48	668.05	35.43	19.855	
4,600.00	4,457.83	4,531.28	4,409.01	20.55	18.81	121.93	-626.04	466.91	727.97	691.34	36.64	19.870	
4,700.00	4,552.52	4,628.17	4,501.01	21.22	19.43	121.66	-649.12	486.71	752.48	714.63	37.84	19.883	
4,800.00	4,647.20	4,725.06	4,593.01	21.88	20.06	121.41	-672.20	506.51	777.00	737.94	39.05	19.896	
4,900.00	4,741.89	4,821.96	4,685.00	22.55	20.69	121.17	-695.28	526.31	801.53	761.27	40.26	19.908	
5,000.00	4,836.58	4,918.85	4,777.00	23.22	21.32	120.95	-718.36	546.12	826.08	784.60	41.47	19.918	

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 21-2
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 21-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_JESSER 21-2	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
5,100.00	4,931.26	5,015.74	4,869.00	23.88	21.94	120.74	-741.43	565.92	850.63	807.95	42.68	19.929	
5,200.00	5,025.95	5,112.64	4,960.99	24.55	22.57	120.54	-764.51	585.72	875.20	831.30	43.90	19.938	
5,300.00	5,120.64	5,209.53	5,052.99	25.22	23.20	120.36	-787.59	605.53	899.78	854.67	45.11	19.947	
5,400.00	5,215.32	5,250.61	5,092.00	25.89	23.47	120.28	-797.38	613.92	926.04	880.07	45.97	20.145	
5,500.00	5,310.01	5,250.61	5,092.00	26.56	23.47	120.28	-797.38	613.92	961.16	914.59	46.57	20.638	
5,552.38	5,359.61	5,250.61	5,092.00	26.91	23.47	120.28	-797.38	613.92	983.12	936.23	46.89	20.967	
5,600.00	5,404.82	5,250.61	5,092.00	27.19	23.47	120.70	-797.38	613.92	1,004.86	957.71	47.15	21.314	
5,700.00	5,500.54	5,250.61	5,092.00	27.66	23.47	121.69	-797.38	613.92	1,054.95	1,007.39	47.56	22.180	
5,800.00	5,597.22	5,250.61	5,092.00	28.09	23.47	122.82	-797.38	613.92	1,110.32	1,062.42	47.90	23.178	
5,900.00	5,694.72	5,250.61	5,092.00	28.47	23.47	124.07	-797.38	613.92	1,170.16	1,122.00	48.16	24.295	
6,000.00	5,792.94	5,250.61	5,092.00	28.80	23.47	125.42	-797.38	613.92	1,233.75	1,185.41	48.34	25.521	
6,100.00	5,891.76	5,250.61	5,092.00	29.09	23.47	126.87	-797.38	613.92	1,300.47	1,252.04	48.43	26.850	
6,200.00	5,991.05	5,250.61	5,092.00	29.32	23.47	128.39	-797.38	613.92	1,369.79	1,321.35	48.44	28.278	
6,300.00	6,090.69	5,250.61	5,092.00	29.51	23.47	129.97	-797.38	613.92	1,441.25	1,392.89	48.36	29.804	
6,400.00	6,190.57	5,250.61	5,092.00	29.66	23.47	131.60	-797.38	613.92	1,514.46	1,466.27	48.19	31.427	
6,490.45	6,281.00	5,250.61	5,092.00	29.75	23.47	-133.70	-797.38	613.92	1,581.93	1,533.96	47.97	32.979	
6,500.00	6,290.55	5,250.61	5,092.00	29.76	23.47	-133.70	-797.38	613.92	1,589.12	1,541.14	47.98	33.121	
6,600.00	6,390.55	5,250.61	5,092.00	29.86	23.47	-133.70	-797.38	613.92	1,665.84	1,617.74	48.10	34.636	
6,700.00	6,490.55	5,250.61	5,092.00	29.97	23.47	-133.70	-797.38	613.92	1,744.92	1,696.70	48.21	36.191	
6,800.00	6,590.55	5,250.61	5,092.00	30.07	23.47	-133.70	-797.38	613.92	1,826.05	1,777.71	48.33	37.780	
6,900.00	6,690.55	5,250.61	5,092.00	30.17	23.47	-133.70	-797.38	613.92	1,908.97	1,860.51	48.46	39.397	
7,000.00	6,790.55	5,250.61	5,092.00	30.28	23.47	-133.70	-797.38	613.92	1,993.46	1,944.88	48.58	41.036	
7,100.00	6,890.55	5,250.61	5,092.00	30.39	23.47	-133.70	-797.38	613.92	2,079.32	2,030.62	48.70	42.695	
7,200.00	6,990.55	5,250.61	5,092.00	30.49	23.47	-133.70	-797.38	613.92	2,166.40	2,117.57	48.83	44.369	
7,300.00	7,090.55	5,250.61	5,092.00	30.60	23.47	-133.70	-797.38	613.92	2,254.55	2,205.60	48.95	46.054	
7,400.00	7,190.55	5,250.61	5,092.00	30.71	23.47	-133.70	-797.38	613.92	2,343.65	2,294.57	49.08	47.750	
7,500.00	7,290.55	5,250.61	5,092.00	30.83	23.47	-133.70	-797.38	613.92	2,433.60	2,384.39	49.21	49.452	
7,600.00	7,390.55	5,250.61	5,092.00	30.94	23.47	-133.70	-797.38	613.92	2,524.31	2,474.96	49.34	51.159	
7,700.00	7,490.55	5,250.61	5,092.00	31.05	23.47	-133.70	-797.38	613.92	2,615.69	2,566.22	49.47	52.870	
7,800.00	7,590.55	5,250.61	5,092.00	31.17	23.47	-133.70	-797.38	613.92	2,707.68	2,658.08	49.61	54.582	
7,900.00	7,690.55	5,250.61	5,092.00	31.29	23.47	-133.70	-797.38	613.92	2,800.22	2,750.48	49.74	56.295	
8,000.00	7,790.55	5,250.61	5,092.00	31.40	23.47	-133.70	-797.38	613.92	2,893.26	2,843.38	49.88	58.007	
8,100.00	7,890.55	5,250.61	5,092.00	31.52	23.47	-133.70	-797.38	613.92	2,986.75	2,936.74	50.01	59.717	
8,200.00	7,990.55	5,250.61	5,092.00	31.64	23.47	-133.70	-797.38	613.92	3,080.65	3,030.49	50.15	61.425	
8,300.00	8,090.55	5,250.61	5,092.00	31.76	23.47	-133.70	-797.38	613.92	3,174.92	3,124.62	50.29	63.129	
8,405.45	8,196.00	5,250.61	5,092.00	31.89	23.47	-133.70	-797.38	613.92	3,274.69	3,224.25	50.44	64.922	

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_JESSER 21-2
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 21-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_JESSER 21-2	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
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	-90.04	-0.01	-20.15	20.15				
100.00	100.00	100.00	100.00	0.10	0.10	-90.04	-0.01	-20.15	20.15	19.96	0.19	105.449	
200.00	200.00	200.00	200.00	0.32	0.32	-90.04	-0.01	-20.15	20.15	19.51	0.64	31.450	
300.00	300.00	300.00	300.00	0.55	0.55	-90.04	-0.01	-20.15	20.15	19.06	1.09	18.481	
400.00	400.00	400.00	400.00	0.77	0.77	-90.04	-0.01	-20.15	20.15	18.61	1.54	13.085	
500.00	500.00	500.00	500.00	0.99	0.99	-90.04	-0.01	-20.15	20.15	18.16	1.99	10.128	
600.00	600.00	600.00	600.00	1.22	1.22	-90.04	-0.01	-20.15	20.15	17.71	2.44	8.261	
700.00	700.00	700.00	700.00	1.44	1.44	-90.04	-0.01	-20.15	20.15	17.26	2.89	6.975	
800.00	800.00	800.00	800.00	1.67	1.67	-90.04	-0.01	-20.15	20.15	16.81	3.34	6.036	
900.00	900.00	900.00	900.00	1.89	1.89	-90.04	-0.01	-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	-90.04	-0.01	-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	-90.04	-0.01	-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	-90.04	-0.01	-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	-90.04	-0.01	-20.15	20.15	14.56	5.59	3.607 CC	
1,400.00	1,399.98	1,400.53	1,400.51	3.00	3.01	-179.83	1.11	-18.79	20.57	14.56	6.01	3.422 ES, SF	
1,500.00	1,499.84	1,500.96	1,500.79	3.21	3.23	-170.56	4.47	-14.71	22.24	15.82	6.42	3.467	
1,600.00	1,599.45	1,601.19	1,600.64	3.42	3.46	-158.35	10.06	-7.95	26.05	19.23	6.83	3.816	
1,700.00	1,698.70	1,701.14	1,699.83	3.66	3.70	-146.75	17.84	1.47	32.75	25.48	7.27	4.505	
1,800.00	1,797.47	1,800.69	1,798.15	3.92	3.96	-137.63	27.78	13.51	42.54	34.78	7.76	5.482	
1,900.00	1,895.62	1,899.77	1,895.40	4.21	4.25	-131.01	39.82	28.09	55.32	47.01	8.31	6.654	
2,000.00	1,993.06	1,998.30	1,991.40	4.55	4.58	-126.27	53.91	45.15	70.91	61.96	8.94	7.927	
2,100.00	2,089.64	2,096.18	2,085.97	4.95	4.96	-122.83	69.98	64.62	89.16	79.49	9.66	9.226	
2,200.00	2,185.27	2,193.34	2,178.93	5.41	5.39	-120.25	87.96	86.39	109.94	99.46	10.48	10.490	
2,238.07	2,221.39	2,230.12	2,213.87	5.60	5.57	-119.43	95.29	95.26	118.50	107.68	10.82	10.949	
2,300.00	2,280.04	2,289.77	2,270.20	5.92	5.87	-118.26	107.78	110.39	132.87	121.45	11.42	11.639	
2,400.00	2,374.72	2,385.53	2,359.73	6.47	6.40	-115.88	129.38	136.55	156.81	144.36	12.45	12.593	
2,500.00	2,469.41	2,480.42	2,447.30	7.04	7.00	-113.15	152.66	164.74	181.89	168.33	13.57	13.407	
2,600.00	2,564.10	2,575.25	2,533.66	7.63	7.65	-110.31	177.59	194.94	208.28	193.54	14.74	14.129	
2,700.00	2,658.78	2,671.14	2,620.76	8.23	8.35	-107.95	203.12	225.85	235.26	219.31	15.95	14.748	
2,800.00	2,753.47	2,767.02	2,707.87	8.84	9.06	-106.08	228.65	256.77	262.53	245.36	17.17	15.287	
2,900.00	2,848.16	2,862.91	2,794.97	9.46	9.78	-104.56	254.18	287.68	290.02	271.61	18.41	15.755	
3,000.00	2,942.84	2,958.80	2,882.08	10.09	10.52	-103.30	279.70	318.60	317.66	298.01	19.65	16.165	
3,100.00	3,037.53	3,054.69	2,969.18	10.72	11.27	-102.24	305.23	349.51	345.42	324.52	20.90	16.526	
3,200.00	3,132.22	3,150.58	3,056.29	11.36	12.03	-101.34	330.76	380.43	373.28	351.12	22.16	16.845	
3,300.00	3,226.90	3,246.46	3,143.39	12.00	12.79	-100.56	356.29	411.34	401.21	377.79	23.42	17.129	
3,400.00	3,321.59	3,342.35	3,230.49	12.65	13.56	-99.89	381.82	442.26	429.20	404.50	24.69	17.382	
3,500.00	3,416.28	3,438.24	3,317.60	13.30	14.33	-99.29	407.34	473.17	457.23	431.27	25.96	17.610	
3,600.00	3,510.96	3,534.13	3,404.70	13.95	15.11	-98.77	432.87	504.09	485.31	458.07	27.24	17.815	
3,700.00	3,605.65	3,630.02	3,491.81	14.60	15.89	-98.30	458.40	535.00	513.42	484.90	28.52	18.001	
3,800.00	3,700.34	3,725.91	3,578.91	15.26	16.67	-97.88	483.93	565.92	541.56	511.75	29.80	18.171	
3,900.00	3,795.02	3,821.79	3,666.01	15.92	17.46	-97.51	509.46	596.83	569.72	538.63	31.09	18.325	
4,000.00	3,889.71	3,917.68	3,753.12	16.58	18.25	-97.17	534.99	627.75	597.90	565.53	32.38	18.467	
4,100.00	3,984.40	4,013.57	3,840.22	17.24	19.03	-96.86	560.51	658.66	626.10	592.44	33.67	18.597	
4,200.00	4,079.08	4,109.46	3,927.33	17.90	19.83	-96.57	586.04	689.58	654.32	619.36	34.96	18.717	
4,300.00	4,173.77	4,205.35	4,014.43	18.56	20.62	-96.31	611.57	720.50	682.55	646.30	36.25	18.828	
4,400.00	4,268.46	4,301.24	4,101.53	19.22	21.41	-96.07	637.10	751.41	710.79	673.25	37.55	18.931	
4,500.00	4,363.14	4,397.12	4,188.64	19.89	22.21	-95.85	662.63	782.33	739.04	700.20	38.84	19.027	
4,600.00	4,457.83	4,493.01	4,275.74	20.55	23.00	-95.64	688.16	813.24	767.31	727.17	40.14	19.116	
4,700.00	4,552.52	4,588.90	4,362.85	21.22	23.80	-95.45	713.68	844.16	795.58	754.14	41.44	19.199	
4,800.00	4,647.20	4,684.79	4,449.95	21.88	24.59	-95.27	739.21	875.07	823.85	781.12	42.74	19.277	
4,900.00	4,741.89	4,780.68	4,537.05	22.55	25.39	-95.11	764.74	905.99	852.14	808.10	44.04	19.350	
5,000.00	4,836.58	4,876.57	4,624.16	23.22	26.19	-94.95	790.27	936.90	880.43	835.09	45.34	19.419	

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 21-2
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 21-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_JESSER 21-2	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
5,100.00	4,931.26	4,972.45	4,711.26	23.88	26.99	-94.81	815.80	967.82	908.73	862.09	46.64	19.484	
5,200.00	5,025.95	5,068.34	4,798.37	24.55	27.79	-94.67	841.32	998.73	937.03	889.08	47.94	19.545	
5,300.00	5,120.64	5,164.23	4,885.47	25.22	28.59	-94.54	866.85	1,029.65	965.33	916.09	49.25	19.602	
5,400.00	5,215.32	5,260.12	4,972.58	25.89	29.39	-94.42	892.38	1,060.56	993.64	943.09	50.55	19.657	
5,500.00	5,310.01	5,356.01	5,059.68	26.56	30.19	-94.31	917.91	1,091.48	1,021.96	970.10	51.85	19.708	
5,552.38	5,359.61	5,406.24	5,105.31	26.91	30.61	-94.25	931.28	1,107.67	1,036.79	984.25	52.54	19.734	
5,600.00	5,404.82	5,451.89	5,146.78	27.19	30.99	-94.46	943.44	1,122.39	1,050.25	997.07	53.17	19.751	
5,700.00	5,500.54	5,547.73	5,233.84	27.66	31.80	-94.75	968.95	1,153.29	1,078.32	1,023.94	54.38	19.828	
5,800.00	5,597.22	5,668.96	5,344.84	28.09	32.62	-94.81	999.98	1,190.86	1,105.18	1,049.66	55.52	19.905	
5,900.00	5,694.72	5,795.28	5,462.57	28.47	33.36	-94.82	1,029.10	1,226.14	1,129.30	1,072.77	56.54	19.975	
6,000.00	5,792.94	5,923.60	5,584.12	28.80	34.03	-94.78	1,055.28	1,257.84	1,150.58	1,093.14	57.44	20.032	
6,100.00	5,891.76	6,053.77	5,709.17	29.09	34.63	-94.70	1,078.27	1,285.67	1,168.94	1,110.71	58.23	20.076	
6,200.00	5,991.05	6,185.59	5,837.34	29.32	35.17	-94.57	1,097.83	1,309.37	1,184.31	1,125.40	58.90	20.107	
6,300.00	6,090.69	6,318.85	5,968.21	29.51	35.61	-94.40	1,113.78	1,328.68	1,196.62	1,137.17	59.45	20.128	
6,400.00	6,190.57	6,453.31	6,101.31	29.66	35.97	-94.18	1,125.92	1,343.38	1,205.82	1,145.95	59.87	20.141	
6,490.45	6,281.00	6,575.77	6,223.17	29.75	36.23	-0.74	1,133.51	1,352.57	1,211.43	1,151.29	60.14	20.143	
6,500.00	6,290.55	6,588.74	6,236.11	29.76	36.25	-0.71	1,134.12	1,353.31	1,211.88	1,151.71	60.17	20.142	
6,600.00	6,390.55	6,724.94	6,372.14	29.86	36.44	-0.47	1,138.26	1,358.33	1,214.89	1,154.50	60.39	20.118	
6,700.00	6,490.55	6,843.36	6,490.55	29.97	36.55	-0.44	1,138.79	1,358.97	1,215.27	1,154.67	60.60	20.055	
6,800.00	6,590.55	6,943.36	6,590.55	30.07	36.63	-0.44	1,138.79	1,358.97	1,215.27	1,154.47	60.80	19.988	
6,900.00	6,690.55	7,043.36	6,690.55	30.17	36.72	-0.44	1,138.79	1,358.97	1,215.27	1,154.26	61.01	19.920	
7,000.00	6,790.55	7,143.36	6,790.55	30.28	36.80	-0.44	1,138.79	1,358.97	1,215.27	1,154.05	61.22	19.852	
7,100.00	6,890.55	7,243.36	6,890.55	30.39	36.89	-0.44	1,138.79	1,358.97	1,215.27	1,153.84	61.43	19.784	
7,200.00	6,990.55	7,343.36	6,990.55	30.49	36.98	-0.44	1,138.79	1,358.97	1,215.27	1,153.63	61.64	19.716	
7,300.00	7,090.55	7,443.36	7,090.55	30.60	37.07	-0.44	1,138.79	1,358.97	1,215.27	1,153.41	61.86	19.647	
7,400.00	7,190.55	7,543.36	7,190.55	30.71	37.16	-0.44	1,138.79	1,358.97	1,215.27	1,153.19	62.07	19.578	
7,500.00	7,290.55	7,643.36	7,290.55	30.83	37.25	-0.44	1,138.79	1,358.97	1,215.27	1,152.97	62.30	19.508	
7,600.00	7,390.55	7,743.36	7,390.55	30.94	37.34	-0.44	1,138.79	1,358.97	1,215.27	1,152.75	62.52	19.438	
7,700.00	7,490.55	7,843.36	7,490.55	31.05	37.43	-0.44	1,138.79	1,358.97	1,215.27	1,152.52	62.75	19.368	
7,800.00	7,590.55	7,943.36	7,590.55	31.17	37.53	-0.44	1,138.79	1,358.97	1,215.27	1,152.29	62.97	19.298	
7,900.00	7,690.55	8,043.36	7,690.55	31.29	37.62	-0.44	1,138.79	1,358.97	1,215.27	1,152.06	63.20	19.228	
8,000.00	7,790.55	8,143.36	7,790.55	31.40	37.72	-0.44	1,138.79	1,358.97	1,215.27	1,151.83	63.44	19.157	
8,100.00	7,890.55	8,243.36	7,890.55	31.52	37.82	-0.44	1,138.79	1,358.97	1,215.27	1,151.59	63.67	19.086	
8,200.00	7,990.55	8,343.36	7,990.55	31.64	37.92	-0.44	1,138.79	1,358.97	1,215.27	1,151.36	63.91	19.015	
8,300.00	8,090.55	8,443.36	8,090.55	31.76	38.02	-0.44	1,138.79	1,358.97	1,215.27	1,151.12	64.15	18.944	
8,348.81	8,139.37	8,492.17	8,139.37	31.82	38.07	-0.44	1,138.79	1,358.97	1,215.27	1,151.00	64.27	18.909	
8,405.45	8,196.00	8,508.80	8,156.00	31.89	38.08	-0.44	1,138.79	1,358.97	1,215.93	1,151.57	64.36	18.893	

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_JESSER 21-2
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 21-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_JESSER 21-2	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 31-2 - P_JESSER 31-2 - 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)	Semi Major Axis Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	-90.42	-0.73	-100.17	100.17				
100.00	100.00	100.00	100.00	0.10	0.10	-90.42	-0.73	-100.17	100.17	99.98	0.19	524.331	
200.00	200.00	200.00	200.00	0.32	0.32	-90.42	-0.73	-100.17	100.17	99.53	0.64	156.380	
300.00	300.00	300.00	300.00	0.55	0.55	-90.42	-0.73	-100.17	100.17	99.08	1.09	91.893	
400.00	400.00	400.00	400.00	0.77	0.77	-90.42	-0.73	-100.17	100.17	98.63	1.54	65.063	
500.00	500.00	500.00	500.00	0.99	0.99	-90.42	-0.73	-100.17	100.17	98.19	1.99	50.360	
600.00	600.00	600.00	600.00	1.22	1.22	-90.42	-0.73	-100.17	100.17	97.74	2.44	41.077	
700.00	700.00	700.00	700.00	1.44	1.44	-90.42	-0.73	-100.17	100.17	97.29	2.89	34.683	
800.00	800.00	800.00	800.00	1.67	1.67	-90.42	-0.73	-100.17	100.17	96.84	3.34	30.012	
900.00	900.00	900.00	900.00	1.89	1.89	-90.42	-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	-90.42	-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	-90.42	-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	-90.42	-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	-90.42	-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	176.37	-0.87	-101.79	103.59	97.60	5.99	17.285 SF	
1,500.00	1,499.84	1,492.37	1,492.22	3.21	3.19	176.31	-1.31	-106.60	113.83	107.46	6.37	17.874	
1,600.00	1,599.45	1,586.90	1,586.42	3.42	3.39	176.24	-2.01	-114.47	130.79	124.05	6.74	19.410	
1,700.00	1,698.70	1,679.49	1,678.38	3.66	3.61	176.16	-2.97	-125.17	154.36	147.25	7.10	21.736	
1,800.00	1,797.47	1,769.58	1,767.48	3.92	3.84	176.09	-4.16	-138.42	184.34	176.88	7.46	24.723	
1,900.00	1,895.62	1,856.67	1,853.18	4.21	4.08	176.01	-5.55	-153.87	220.51	212.71	7.80	28.267	
2,000.00	1,993.06	1,940.34	1,935.02	4.55	4.35	175.93	-7.10	-171.15	262.62	254.49	8.14	32.280	
2,100.00	2,089.64	2,021.65	2,014.05	4.95	4.64	175.86	-8.80	-190.19	310.35	301.89	8.46	36.675	
2,200.00	2,185.27	2,107.31	2,097.11	5.41	4.97	175.81	-10.68	-211.03	361.94	353.14	8.80	41.151	
2,238.07	2,221.39	2,139.43	2,128.27	5.60	5.10	175.79	-11.38	-218.85	382.35	373.43	8.92	42.858	
2,300.00	2,280.04	2,191.49	2,178.74	5.92	5.32	175.83	-12.51	-231.52	415.92	406.73	9.19	45.278	
2,400.00	2,374.72	2,275.53	2,260.23	6.47	5.68	175.88	-14.35	-251.97	470.11	460.49	9.62	48.855	
2,500.00	2,469.41	2,359.57	2,341.73	7.04	6.05	175.92	-16.18	-272.42	524.30	514.24	10.07	52.075	
2,600.00	2,564.10	2,443.61	2,423.22	7.63	6.42	175.95	-18.02	-292.87	578.50	567.98	10.52	54.981	
2,700.00	2,658.78	2,527.65	2,504.72	8.23	6.81	175.98	-19.85	-313.32	632.69	621.71	10.98	57.611	
2,800.00	2,753.47	2,611.69	2,586.21	8.84	7.20	176.00	-21.69	-333.77	686.89	675.44	11.45	59.998	
2,900.00	2,848.16	2,695.74	2,667.71	9.46	7.60	176.02	-23.52	-354.22	741.08	729.16	11.92	62.170	
3,000.00	2,942.84	2,779.78	2,749.20	10.09	8.01	176.03	-25.36	-374.68	795.27	782.88	12.40	64.152	
3,100.00	3,037.53	2,863.82	2,830.70	10.72	8.41	176.05	-27.19	-395.13	849.47	836.59	12.88	65.966	
3,200.00	3,132.22	2,947.86	2,912.19	11.36	8.82	176.06	-29.03	-415.58	903.66	890.30	13.36	67.631	
3,300.00	3,226.90	3,031.90	2,993.69	12.00	9.24	176.07	-30.86	-436.03	957.85	944.00	13.85	69.163	
3,400.00	3,321.59	3,115.94	3,075.18	12.65	9.65	176.08	-32.70	-456.48	1,012.05	997.71	14.34	70.577	
3,500.00	3,416.28	3,199.99	3,156.68	13.30	10.07	176.09	-34.53	-476.93	1,066.24	1,051.41	14.83	71.885	
3,600.00	3,510.96	3,284.03	3,238.17	13.95	10.49	176.10	-36.37	-497.38	1,120.44	1,105.11	15.33	73.096	
3,700.00	3,605.65	3,368.07	3,319.66	14.60	10.92	176.11	-38.20	-517.84	1,174.63	1,158.80	15.83	74.221	
3,800.00	3,700.34	3,452.11	3,401.16	15.26	11.34	176.11	-40.04	-538.29	1,228.82	1,212.50	16.33	75.269	
3,900.00	3,795.02	3,536.15	3,482.65	15.92	11.77	176.12	-41.87	-558.74	1,283.02	1,266.19	16.83	76.247	
4,000.00	3,889.71	3,620.19	3,564.15	16.58	12.19	176.12	-43.71	-579.19	1,337.21	1,319.88	17.33	77.161	
4,100.00	3,984.40	3,704.24	3,645.64	17.24	12.62	176.13	-45.54	-599.64	1,391.41	1,373.57	17.83	78.017	
4,200.00	4,079.08	3,788.28	3,727.14	17.90	13.05	176.13	-47.38	-620.09	1,445.60	1,427.26	18.34	78.819	
4,300.00	4,173.77	3,872.32	3,808.63	18.56	13.48	176.14	-49.21	-640.54	1,499.79	1,480.95	18.85	79.573	
4,400.00	4,268.46	3,956.36	3,890.13	19.22	13.91	176.14	-51.05	-660.99	1,553.99	1,534.63	19.36	80.283	
4,500.00	4,363.14	4,040.40	3,971.62	19.89	14.34	176.15	-52.88	-681.45	1,608.18	1,588.32	19.87	80.953	
4,600.00	4,457.83	4,124.44	4,053.12	20.55	14.78	176.15	-54.72	-701.90	1,662.38	1,642.00	20.38	81.585	
4,700.00	4,552.52	4,208.49	4,134.61	21.22	15.21	176.15	-56.55	-722.35	1,716.57	1,695.68	20.89	82.182	
4,800.00	4,647.20	4,292.53	4,216.11	21.88	15.64	176.16	-58.39	-742.80	1,770.76	1,749.36	21.40	82.748	
4,900.00	4,741.89	4,376.57	4,297.60	22.55	16.08	176.16	-60.22	-763.25	1,824.96	1,803.04	21.91	83.284	
5,000.00	4,836.58	4,460.61	4,379.10	23.22	16.51	176.16	-62.06	-783.70	1,879.15	1,856.72	22.43	83.793	

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 21-2
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 21-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_JESSER 21-2	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 31-2 - P_JESSER 31-2 - 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
5,100.00	4,931.26	4,544.65	4,460.59	23.88	16.95	176.17	-63.89	-804.15	1,933.34	1,910.40	22.94	84.277	
5,200.00	5,025.95	4,628.69	4,542.08	24.55	17.38	176.17	-65.73	-824.61	1,987.54	1,964.08	23.46	84.737	
5,300.00	5,120.64	4,712.74	4,623.58	25.22	17.82	176.17	-67.56	-845.06	2,041.73	2,017.76	23.97	85.175	
5,400.00	5,215.32	4,796.78	4,705.07	25.89	18.26	176.17	-69.40	-865.51	2,095.93	2,071.44	24.49	85.593	
5,500.00	5,310.01	4,880.82	4,786.57	26.56	18.69	176.18	-71.23	-885.96	2,150.12	2,125.12	25.00	85.992	
5,552.38	5,359.61	4,924.84	4,829.26	26.91	18.92	176.18	-72.19	-896.67	2,178.51	2,153.23	25.27	86.193	
5,600.00	5,404.82	4,965.07	4,868.27	27.19	19.13	176.22	-73.07	-906.46	2,203.98	2,178.37	25.62	86.037	
5,700.00	5,500.54	5,050.90	4,951.50	27.66	19.58	176.29	-74.95	-927.35	2,255.29	2,228.99	26.29	85.770	
5,800.00	5,597.22	5,138.47	5,036.41	28.09	20.03	176.35	-76.86	-948.66	2,303.57	2,276.63	26.94	85.500	
5,900.00	5,694.72	5,227.66	5,122.90	28.47	20.50	176.40	-78.81	-970.36	2,348.77	2,321.21	27.56	85.230	
6,000.00	5,792.94	5,318.37	5,210.86	28.80	20.97	176.43	-80.79	-992.44	2,390.84	2,362.70	28.14	84.964	
6,100.00	5,891.76	5,410.49	5,300.19	29.09	21.45	176.46	-82.80	-1,014.85	2,429.73	2,401.04	28.69	84.702	
6,200.00	5,991.05	5,503.91	5,390.77	29.32	21.94	176.47	-84.84	-1,037.59	2,465.38	2,436.19	29.19	84.446	
6,300.00	6,090.69	5,598.50	5,482.50	29.51	22.43	176.48	-86.90	-1,060.61	2,497.76	2,468.09	29.67	84.199	
6,400.00	6,190.57	5,694.16	5,575.26	29.66	22.93	176.48	-88.99	-1,083.89	2,526.82	2,496.73	30.10	83.960	
6,490.45	6,281.00	6,407.21	6,281.00	29.75	24.75	-90.46	-96.86	-1,171.56	2,539.91	2,508.26	31.66	80.228	
6,500.00	6,290.55	6,416.76	6,290.55	29.76	24.76	-90.46	-96.86	-1,171.56	2,539.91	2,508.22	31.69	80.146	
6,600.00	6,390.55	6,516.76	6,390.55	29.86	24.87	-90.46	-96.86	-1,171.56	2,539.91	2,507.88	32.03	79.289	
6,700.00	6,490.55	6,616.76	6,490.55	29.97	24.99	-90.46	-96.86	-1,171.56	2,539.91	2,507.53	32.38	78.436	
6,800.00	6,590.55	6,716.76	6,590.55	30.07	25.12	-90.46	-96.86	-1,171.56	2,539.91	2,507.18	32.73	77.596	
6,900.00	6,690.55	6,816.76	6,690.55	30.17	25.24	-90.46	-96.86	-1,171.56	2,539.91	2,506.83	33.09	76.768	
7,000.00	6,790.55	6,916.76	6,790.55	30.28	25.36	-90.46	-96.86	-1,171.56	2,539.91	2,506.47	33.44	75.952	
7,100.00	6,890.55	7,016.76	6,890.55	30.39	25.49	-90.46	-96.86	-1,171.56	2,539.91	2,506.12	33.80	75.148	
7,200.00	6,990.55	7,116.76	6,990.55	30.49	25.62	-90.46	-96.86	-1,171.56	2,539.91	2,505.76	34.16	74.357	
7,300.00	7,090.55	7,216.76	7,090.55	30.60	25.74	-90.46	-96.86	-1,171.56	2,539.91	2,505.39	34.52	73.577	
7,400.00	7,190.55	7,316.76	7,190.55	30.71	25.87	-90.46	-96.86	-1,171.56	2,539.91	2,505.03	34.88	72.809	
7,500.00	7,290.55	7,416.76	7,290.55	30.83	26.01	-90.46	-96.86	-1,171.56	2,539.91	2,504.66	35.25	72.054	
7,600.00	7,390.55	7,516.76	7,390.55	30.94	26.14	-90.46	-96.86	-1,171.56	2,539.91	2,504.30	35.62	71.310	
7,700.00	7,490.55	7,616.76	7,490.55	31.05	26.27	-90.46	-96.86	-1,171.56	2,539.91	2,503.93	35.99	70.577	
7,800.00	7,590.55	7,716.76	7,590.55	31.17	26.41	-90.46	-96.86	-1,171.56	2,539.91	2,503.56	36.36	69.856	
7,900.00	7,690.55	7,816.76	7,690.55	31.29	26.54	-90.46	-96.86	-1,171.56	2,539.91	2,503.18	36.73	69.146	
8,000.00	7,790.55	7,916.76	7,790.55	31.40	26.68	-90.46	-96.86	-1,171.56	2,539.91	2,502.81	37.11	68.448	
8,100.00	7,890.55	8,016.76	7,890.55	31.52	26.82	-90.46	-96.86	-1,171.56	2,539.91	2,502.43	37.48	67.760	
8,200.00	7,990.55	8,116.76	7,990.55	31.64	26.96	-90.46	-96.86	-1,171.56	2,539.91	2,502.05	37.86	67.084	
8,300.00	8,090.55	8,216.76	8,090.55	31.76	27.10	-90.46	-96.86	-1,171.56	2,539.91	2,501.67	38.24	66.418	
8,369.96	8,160.51	8,286.72	8,160.51	31.85	27.20	-90.46	-96.86	-1,171.56	2,539.91	2,501.41	38.51	65.958	
8,405.45	8,196.00	8,321.21	8,195.00	31.89	27.25	-90.46	-96.86	-1,171.56	2,539.91	2,501.27	38.64	65.730	

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_JESSER 21-2
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 21-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_JESSER 21-2	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)	Semi Major Axis Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	-90.42	-0.36	-50.09	50.09				
100.00	100.00	100.00	100.00	0.10	0.10	-90.42	-0.36	-50.09	50.09	49.90	0.19	262.166	
200.00	200.00	200.00	200.00	0.32	0.32	-90.42	-0.36	-50.09	50.09	49.45	0.64	78.190	
300.00	300.00	300.00	300.00	0.55	0.55	-90.42	-0.36	-50.09	50.09	49.00	1.09	45.947	
400.00	400.00	400.00	400.00	0.77	0.77	-90.42	-0.36	-50.09	50.09	48.55	1.54	32.532	
500.00	500.00	500.00	500.00	0.99	0.99	-90.42	-0.36	-50.09	50.09	48.10	1.99	25.180	
600.00	600.00	600.00	600.00	1.22	1.22	-90.42	-0.36	-50.09	50.09	47.65	2.44	20.538	
700.00	700.00	700.00	700.00	1.44	1.44	-90.42	-0.36	-50.09	50.09	47.20	2.89	17.342	
800.00	800.00	800.00	800.00	1.67	1.67	-90.42	-0.36	-50.09	50.09	46.75	3.34	15.006	
900.00	900.00	900.00	900.00	1.89	1.89	-90.42	-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	-90.42	-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	-90.42	-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	-90.42	-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	-90.42	-0.36	-50.09	50.09	44.50	5.59	8.967 CC, ES	
1,400.00	1,399.98	1,398.78	1,398.77	3.00	3.01	177.17	0.25	-51.21	52.96	46.96	6.01	8.818 SF	
1,500.00	1,499.84	1,497.07	1,496.99	3.21	3.22	179.08	2.07	-54.55	61.63	55.23	6.40	9.630	
1,600.00	1,599.45	1,594.39	1,594.10	3.42	3.43	-178.70	5.06	-60.04	76.13	69.34	6.79	11.216	
1,700.00	1,698.70	1,690.26	1,689.59	3.66	3.65	-176.71	9.17	-67.58	96.45	89.28	7.17	13.453	
1,800.00	1,797.47	1,784.26	1,782.96	3.92	3.88	-175.11	14.31	-77.00	122.48	114.93	7.54	16.239	
1,900.00	1,895.62	1,875.97	1,873.79	4.21	4.12	-173.88	20.38	-88.14	154.08	146.18	7.91	19.488	
2,000.00	1,993.06	1,965.03	1,961.67	4.55	4.37	-172.93	27.27	-100.79	191.09	182.82	8.26	23.126	
2,100.00	2,089.64	2,051.11	2,046.28	4.95	4.64	-172.17	34.86	-114.72	233.30	224.69	8.61	27.093	
2,200.00	2,185.27	2,133.94	2,127.33	5.41	4.91	-171.56	43.03	-129.70	280.50	271.55	8.95	31.340	
2,238.07	2,221.39	2,165.71	2,158.33	5.60	5.03	-171.36	46.37	-135.83	299.70	290.62	9.08	33.006	
2,300.00	2,280.04	2,218.94	2,210.25	5.92	5.22	-171.16	51.98	-146.13	331.34	321.99	9.36	35.416	
2,400.00	2,374.72	2,304.89	2,294.08	6.47	5.54	-170.92	61.05	-162.78	382.44	372.63	9.81	38.990	
2,500.00	2,469.41	2,390.84	2,377.92	7.04	5.88	-170.73	70.12	-179.42	433.54	423.27	10.27	42.206	
2,600.00	2,564.10	2,476.79	2,461.75	7.63	6.22	-170.59	79.19	-196.06	484.65	473.90	10.74	45.108	
2,700.00	2,658.78	2,562.74	2,545.59	8.23	6.57	-170.47	88.26	-212.70	535.75	524.53	11.22	47.735	
2,800.00	2,753.47	2,648.69	2,629.42	8.84	6.93	-170.37	97.33	-229.34	586.86	575.15	11.71	50.119	
2,900.00	2,848.16	2,734.64	2,713.25	9.46	7.29	-170.29	106.40	-245.98	637.97	625.77	12.20	52.290	
3,000.00	2,942.84	2,820.59	2,797.09	10.09	7.66	-170.22	115.47	-262.62	689.08	676.38	12.70	54.271	
3,100.00	3,037.53	2,906.54	2,880.92	10.72	8.03	-170.16	124.54	-279.26	740.19	726.99	13.20	56.085	
3,200.00	3,132.22	2,992.49	2,964.75	11.36	8.40	-170.10	133.61	-295.90	791.30	777.60	13.70	57.748	
3,300.00	3,226.90	3,078.44	3,048.59	12.00	8.78	-170.06	142.68	-312.54	842.41	828.20	14.21	59.279	
3,400.00	3,321.59	3,164.39	3,132.42	12.65	9.16	-170.02	151.75	-329.19	893.53	878.80	14.72	60.691	
3,500.00	3,416.28	3,250.34	3,216.26	13.30	9.55	-169.98	160.82	-345.83	944.64	929.40	15.24	61.997	
3,600.00	3,510.96	3,336.29	3,300.09	13.95	9.93	-169.95	169.89	-362.47	995.75	980.00	15.75	63.208	
3,700.00	3,605.65	3,422.24	3,383.92	14.60	10.32	-169.92	178.96	-379.11	1,046.86	1,030.59	16.27	64.333	
3,800.00	3,700.34	3,508.19	3,467.76	15.26	10.71	-169.89	188.02	-395.75	1,097.98	1,081.18	16.79	65.380	
3,900.00	3,795.02	3,594.14	3,551.59	15.92	11.10	-169.87	197.09	-412.39	1,149.09	1,131.77	17.32	66.357	
4,000.00	3,889.71	3,680.08	3,635.43	16.58	11.49	-169.84	206.16	-429.03	1,200.20	1,182.36	17.84	67.270	
4,100.00	3,984.40	3,766.03	3,719.26	17.24	11.89	-169.82	215.23	-445.67	1,251.31	1,232.95	18.37	68.126	
4,200.00	4,079.08	3,851.98	3,803.09	17.90	12.28	-169.80	224.30	-462.31	1,302.43	1,283.53	18.90	68.928	
4,300.00	4,173.77	3,937.93	3,886.93	18.56	12.68	-169.79	233.37	-478.95	1,353.54	1,334.12	19.42	69.683	
4,400.00	4,268.46	4,023.88	3,970.76	19.22	13.07	-169.77	242.44	-495.59	1,404.65	1,384.70	19.95	70.393	
4,500.00	4,363.14	4,109.83	4,054.60	19.89	13.47	-169.75	251.51	-512.24	1,455.77	1,435.28	20.49	71.063	
4,600.00	4,457.83	4,195.78	4,138.43	20.55	13.87	-169.74	260.58	-528.88	1,506.88	1,485.86	21.02	71.695	
4,700.00	4,552.52	4,281.73	4,222.26	21.22	14.27	-169.73	269.65	-545.52	1,558.00	1,536.44	21.55	72.292	
4,800.00	4,647.20	4,367.68	4,306.10	21.88	14.66	-169.72	278.72	-562.16	1,609.11	1,587.02	22.09	72.858	
4,900.00	4,741.89	4,453.63	4,389.93	22.55	15.06	-169.70	287.79	-578.80	1,660.22	1,637.60	22.62	73.395	
5,000.00	4,836.58	4,539.58	4,473.77	23.22	15.47	-169.69	296.86	-595.44	1,711.34	1,688.18	23.16	73.904	

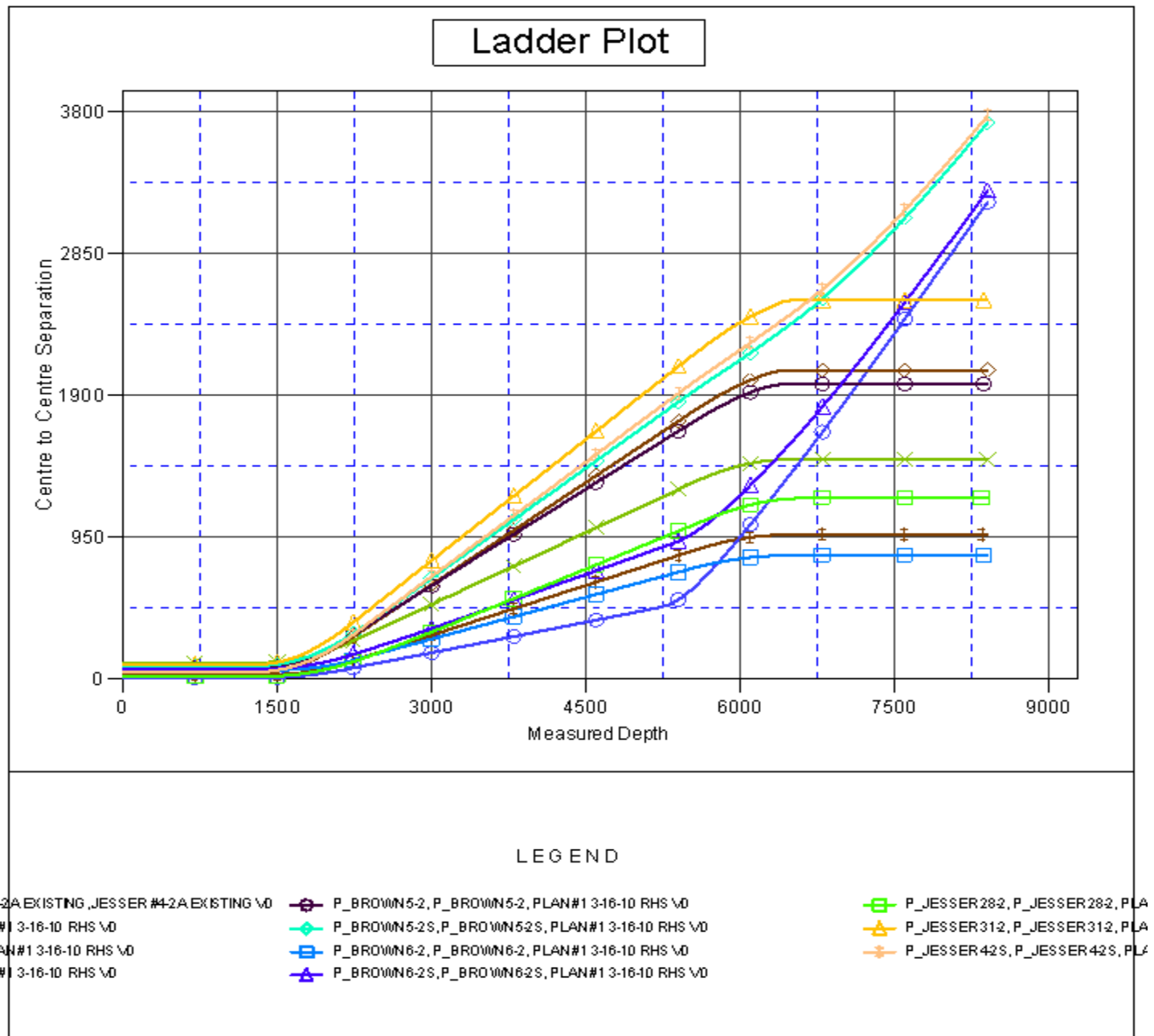
CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_JESSER 21-2
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 21-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_JESSER 21-2	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
5,100.00	4,931.26	4,625.53	4,557.60	23.88	15.87	-169.68	305.93	-612.08	1,762.45	1,738.76	23.69	74.389	
5,200.00	5,025.95	4,711.48	4,641.43	24.55	16.27	-169.67	315.00	-628.72	1,813.56	1,789.34	24.23	74.849	
5,300.00	5,120.64	4,797.43	4,725.27	25.22	16.67	-169.66	324.07	-645.36	1,864.68	1,839.91	24.77	75.288	
5,400.00	5,215.32	4,883.38	4,809.10	25.89	17.07	-169.66	333.14	-662.00	1,915.79	1,890.49	25.31	75.707	
5,500.00	5,310.01	4,969.33	4,892.93	26.56	17.47	-169.65	342.21	-678.64	1,966.91	1,941.06	25.84	76.106	
5,552.38	5,359.61	5,014.35	4,936.85	26.91	17.69	-169.64	346.96	-687.36	1,993.68	1,967.56	26.13	76.308	
5,600.00	5,404.82	5,055.47	4,976.96	27.19	17.88	-169.74	351.30	-695.32	2,017.69	1,991.21	26.47	76.216	
5,700.00	5,500.54	5,143.08	5,062.41	27.66	18.29	-169.90	360.54	-712.29	2,065.89	2,038.72	27.16	76.055	
5,800.00	5,597.22	5,158.04	5,077.00	28.09	18.36	-170.08	362.12	-715.18	2,112.36	2,084.73	27.63	76.456	
5,900.00	5,694.72	5,158.04	5,077.00	28.47	18.36	-170.26	362.12	-715.18	2,159.43	2,131.42	28.01	77.097	
6,000.00	5,792.94	5,158.04	5,077.00	28.80	18.36	-170.44	362.12	-715.18	2,207.07	2,178.72	28.34	77.870	
6,100.00	5,891.76	5,158.04	5,077.00	29.09	18.36	-170.62	362.12	-715.18	2,255.18	2,226.55	28.63	78.771	
6,200.00	5,991.05	5,158.04	5,077.00	29.32	18.36	-170.80	362.12	-715.18	2,303.67	2,274.80	28.87	79.801	
6,300.00	6,090.69	5,158.04	5,077.00	29.51	18.36	-170.98	362.12	-715.18	2,352.46	2,323.40	29.06	80.958	
6,400.00	6,190.57	5,158.04	5,077.00	29.66	18.36	-171.15	362.12	-715.18	2,401.48	2,372.28	29.20	82.243	
6,490.45	6,281.00	5,158.04	5,077.00	29.75	18.36	-78.11	362.12	-715.18	2,445.96	2,416.67	29.29	83.510	
6,500.00	6,290.55	5,158.04	5,077.00	29.76	18.36	-78.11	362.12	-715.18	2,450.68	2,421.37	29.30	83.627	
6,600.00	6,390.55	5,158.04	5,077.00	29.86	18.36	-78.11	362.12	-715.18	2,501.70	2,472.23	29.47	84.890	
6,700.00	6,490.55	5,158.04	5,077.00	29.97	18.36	-78.11	362.12	-715.18	2,555.63	2,525.99	29.64	86.231	
6,800.00	6,590.55	5,158.04	5,077.00	30.07	18.36	-78.11	362.12	-715.18	2,612.27	2,582.46	29.81	87.645	
6,900.00	6,690.55	5,158.04	5,077.00	30.17	18.36	-78.11	362.12	-715.18	2,671.45	2,641.48	29.97	89.124	
7,000.00	6,790.55	5,158.04	5,077.00	30.28	18.36	-78.11	362.12	-715.18	2,733.01	2,702.87	30.15	90.662	
7,100.00	6,890.55	5,158.04	5,077.00	30.39	18.36	-78.11	362.12	-715.18	2,796.80	2,766.48	30.32	92.252	
7,200.00	6,990.55	5,158.04	5,077.00	30.49	18.36	-78.11	362.12	-715.18	2,862.65	2,832.16	30.49	93.888	
7,300.00	7,090.55	5,158.04	5,077.00	30.60	18.36	-78.11	362.12	-715.18	2,930.44	2,899.78	30.66	95.565	
7,400.00	7,190.55	5,158.04	5,077.00	30.71	18.36	-78.11	362.12	-715.18	3,000.03	2,969.19	30.84	97.279	
7,500.00	7,290.55	5,158.04	5,077.00	30.83	18.36	-78.11	362.12	-715.18	3,071.31	3,040.29	31.02	99.023	
7,600.00	7,390.55	5,158.04	5,077.00	30.94	18.36	-78.11	362.12	-715.18	3,144.14	3,112.95	31.19	100.795	
7,700.00	7,490.55	5,158.04	5,077.00	31.05	18.36	-78.11	362.12	-715.18	3,218.44	3,187.06	31.37	102.589	
7,800.00	7,590.55	5,158.04	5,077.00	31.17	18.36	-78.11	362.12	-715.18	3,294.09	3,262.54	31.55	104.404	
7,900.00	7,690.55	5,158.04	5,077.00	31.29	18.36	-78.11	362.12	-715.18	3,371.02	3,339.29	31.73	106.234	
8,000.00	7,790.55	5,158.04	5,077.00	31.40	18.36	-78.11	362.12	-715.18	3,449.13	3,417.21	31.91	108.078	
8,100.00	7,890.55	5,158.04	5,077.00	31.52	18.36	-78.11	362.12	-715.18	3,528.34	3,496.24	32.10	109.932	
8,200.00	7,990.55	5,158.04	5,077.00	31.64	18.36	-78.11	362.12	-715.18	3,608.59	3,576.31	32.28	111.794	
8,300.00	8,090.55	5,158.04	5,077.00	31.76	18.36	-78.11	362.12	-715.18	3,689.80	3,657.33	32.46	113.662	
8,405.45	8,196.00	5,158.04	5,077.00	31.89	18.36	-78.11	362.12	-715.18	3,776.41	3,743.75	32.66	115.636	

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_JESSER 21-2
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 21-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_JESSER 21-2	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 21-2
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: 0.49°



Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_JESSER 21-2
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 5158.00ft (Original Well Elev)
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Reference Well:	P_JESSER 21-2	Survey Calculation Method:	Minimum Curvature
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