



US ROCKIES REGION PLANNING

COLORADO NORTHERN ZONE - 83

WELD_JESSER 18-2 PAD

P_JESSER 28-2

P_JESSER 28-2

Plan: PLAN #1 3-16-10 RHS

Standard Planning Report

16 March, 2010

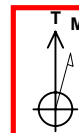




Project: COLORADO NORTHERN ZONE - 83
 Site: WELD_JESSER 18-2 PAD
 Well: P_JESSER 28-2
 Wellbore: P_JESSER 28-2
 Section: SECTION 2 T1N R66W
 SHL: 1178 FNL 1202 FWL
 Design: PLAN #1 3-16-10 RHS
 Latitude: 40° 5' 2.662 N
 Longitude: 104° 44' 57.840 W
 GL: 5143.00
 KB: WELL @ 5158.00ft (Original Well Elev)



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
4271.00	4487.79	PARKMAN
4761.00	5027.21	SUSSEX
7241.00	7593.80	NIO A
7561.00	7913.80	CODELL
8021.00	8373.80	JSAND

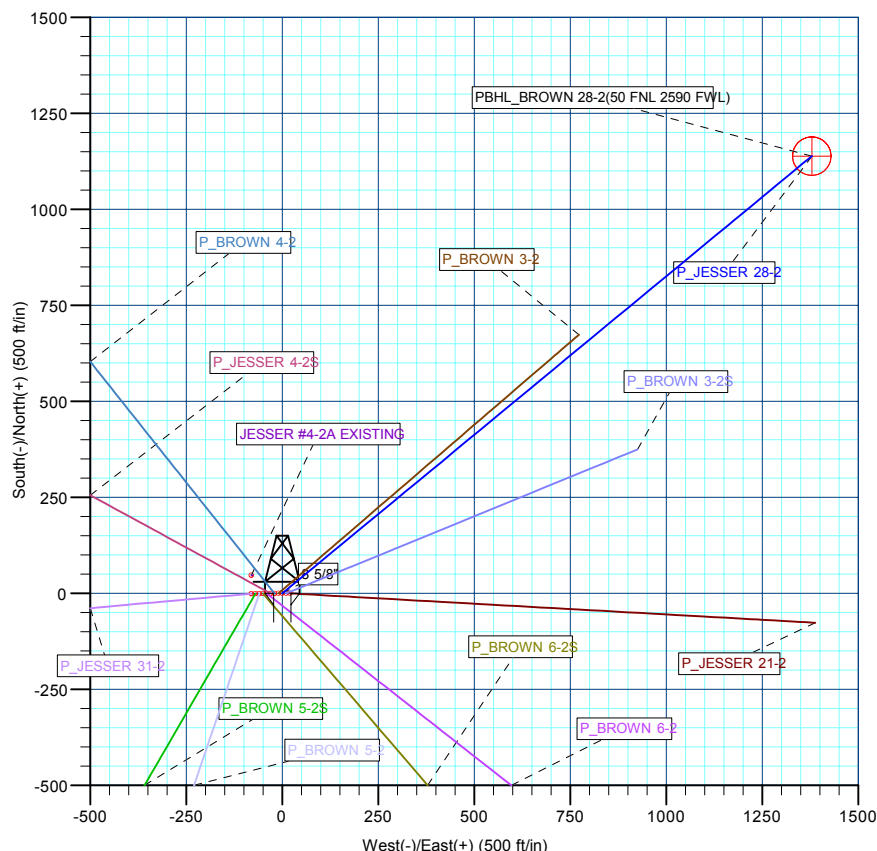
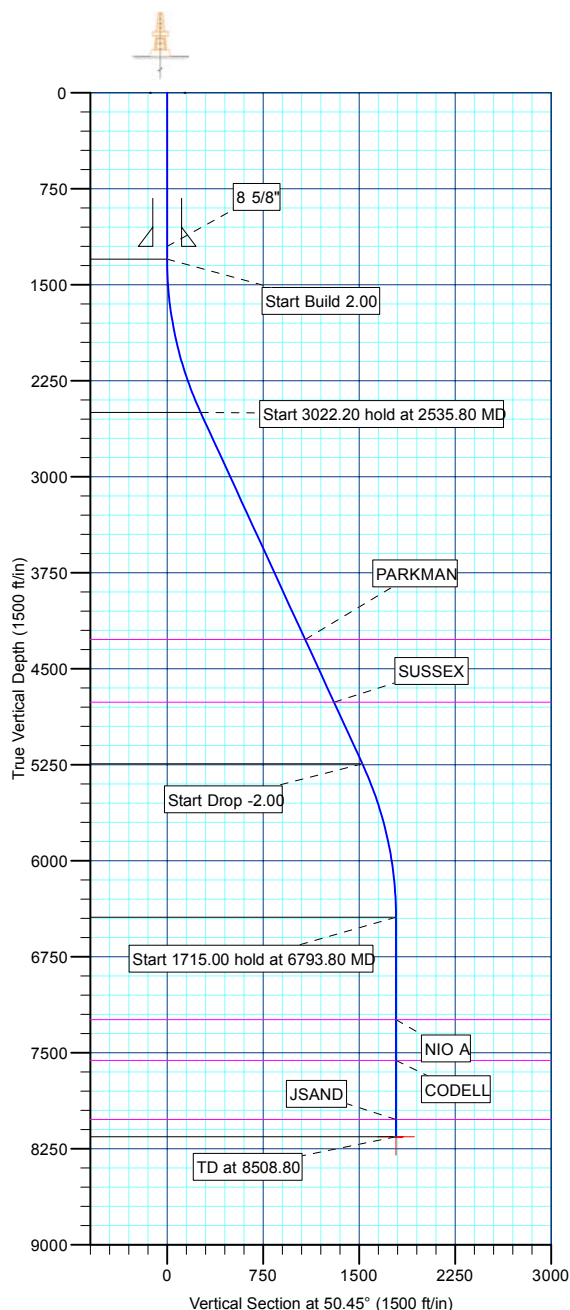
CASING DETAILS			
TVD	MD	Name	Size
1200.00	1200.00	8 5/8"	8.62

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
2535.80	24.72	50.45	2497.83	167.10	202.36	2.00	50.45	262.44	Start 3022.20 hold at 2535.80 MD
5558.00	24.72	50.45	5243.17	971.70	1176.75	0.00	0.00	1526.09	Start Drop -2.00
6793.80	0.00	0.00	6441.00	1138.80	1379.11	2.00	180.00	1788.53	Start 1715.00 hold at 6793.80 MD
8508.80	0.00	0.00	8156.00	1138.80	1379.11	0.00	0.00	1788.53	TD at 8508.80

WELLBORE TARGET DETAILS (MAP CO-ORDINATES AND LAT/LONG)						
Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
PBHL	8156.00	1138.80	1379.11	40° 5' 13.916 N	104° 44' 40.096 W	Circle (Radius: 50.00)

WELL DETAILS: P_JESSER 28-2						
+N/-S	+E/-W	Northing	Ground Level: Easting	5143.00 Latitude	Longitude	Slot
0.00	0.00	1274361.42	3210021.54	40° 5' 2.662 N	104° 44' 57.840 W	

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



Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well P_JESSER 28-2
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 28-2	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_JESSER 28-2		
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 28-2					
Well Position	+N/-S	-0.03 ft	Northing:	1,274,361.42 ft	Latitude:	40° 5' 2.662 N
	+E/-W	9.79 ft	Easting:	3,210,021.54 ft	Longitude:	104° 44' 57.840 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	5,143.00 ft

Wellbore	P_JESSER 28-2				
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	50.45

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	
2,535.80	24.72	50.45	2,497.83	167.10	202.36	2.00	2.00	0.00	50.45	
5,558.00	24.72	50.45	5,243.17	971.70	1,176.75	0.00	0.00	0.00	0.00	
6,793.80	0.00	0.00	6,441.00	1,138.80	1,379.11	2.00	-2.00	0.00	180.00	
8,508.80	0.00	0.00	8,156.00	1,138.80	1,379.11	0.00	0.00	0.00	0.00	PBHL_BROWN 28-

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well P_JESSER 28-2
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 28-2	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_JESSER 28-2		
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	50.45	1,399.98	1.11	1.35	1.75	2.00	2.00	0.00
1,500.00	4.00	50.45	1,499.84	4.44	5.38	6.98	2.00	2.00	0.00
1,600.00	6.00	50.45	1,599.45	9.99	12.10	15.69	2.00	2.00	0.00
1,700.00	8.00	50.45	1,698.70	17.75	21.50	27.88	2.00	2.00	0.00
1,800.00	10.00	50.45	1,797.47	27.71	33.56	43.52	2.00	2.00	0.00
1,900.00	12.00	50.45	1,895.62	39.86	48.27	62.60	2.00	2.00	0.00
2,000.00	14.00	50.45	1,993.06	54.18	65.62	85.10	2.00	2.00	0.00
2,100.00	16.00	50.45	2,089.64	70.66	85.57	110.98	2.00	2.00	0.00
2,200.00	18.00	50.45	2,185.27	89.28	108.12	140.21	2.00	2.00	0.00
2,300.00	20.00	50.45	2,279.82	110.01	133.22	172.77	2.00	2.00	0.00
2,400.00	22.00	50.45	2,373.17	132.82	160.85	208.60	2.00	2.00	0.00
2,500.00	24.00	50.45	2,465.21	157.70	190.98	247.67	2.00	2.00	0.00
Start 3022.20 hold at 2535.80 MD									
2,535.80	24.72	50.45	2,497.83	167.10	202.36	262.44	2.00	2.00	0.00
2,600.00	24.72	50.45	2,556.15	184.19	223.06	289.28	0.00	0.00	0.00
2,700.00	24.72	50.45	2,646.99	210.82	255.30	331.09	0.00	0.00	0.00
2,800.00	24.72	50.45	2,737.82	237.44	287.54	372.91	0.00	0.00	0.00
2,900.00	24.72	50.45	2,828.66	264.06	319.79	414.72	0.00	0.00	0.00
3,000.00	24.72	50.45	2,919.50	290.69	352.03	456.53	0.00	0.00	0.00
3,100.00	24.72	50.45	3,010.34	317.31	384.27	498.34	0.00	0.00	0.00
3,200.00	24.72	50.45	3,101.18	343.93	416.51	540.16	0.00	0.00	0.00
3,300.00	24.72	50.45	3,192.02	370.55	448.75	581.97	0.00	0.00	0.00
3,400.00	24.72	50.45	3,282.86	397.18	480.99	623.78	0.00	0.00	0.00
3,500.00	24.72	50.45	3,373.70	423.80	513.23	665.59	0.00	0.00	0.00
3,600.00	24.72	50.45	3,464.54	450.42	545.47	707.40	0.00	0.00	0.00
3,700.00	24.72	50.45	3,555.38	477.05	577.71	749.22	0.00	0.00	0.00
3,800.00	24.72	50.45	3,646.22	503.67	609.95	791.03	0.00	0.00	0.00
3,900.00	24.72	50.45	3,737.06	530.29	642.19	832.84	0.00	0.00	0.00
4,000.00	24.72	50.45	3,827.89	556.91	674.44	874.65	0.00	0.00	0.00
4,100.00	24.72	50.45	3,918.73	583.54	706.68	916.46	0.00	0.00	0.00
4,200.00	24.72	50.45	4,009.57	610.16	738.92	958.28	0.00	0.00	0.00
4,300.00	24.72	50.45	4,100.41	636.78	771.16	1,000.09	0.00	0.00	0.00
4,400.00	24.72	50.45	4,191.25	663.41	803.40	1,041.90	0.00	0.00	0.00
PARKMAN									
4,487.79	24.72	50.45	4,271.00	686.78	831.70	1,078.61	0.00	0.00	0.00
4,500.00	24.72	50.45	4,282.09	690.03	835.64	1,083.71	0.00	0.00	0.00
4,600.00	24.72	50.45	4,372.93	716.65	867.88	1,125.52	0.00	0.00	0.00
4,700.00	24.72	50.45	4,463.77	743.27	900.12	1,167.34	0.00	0.00	0.00
4,800.00	24.72	50.45	4,554.61	769.90	932.36	1,209.15	0.00	0.00	0.00
4,900.00	24.72	50.45	4,645.45	796.52	964.60	1,250.96	0.00	0.00	0.00
5,000.00	24.72	50.45	4,736.29	823.14	996.84	1,292.77	0.00	0.00	0.00
SUSSEX									
5,027.21	24.72	50.45	4,761.00	830.39	1,005.62	1,304.15	0.00	0.00	0.00
5,100.00	24.72	50.45	4,827.12	849.77	1,029.09	1,334.58	0.00	0.00	0.00
5,200.00	24.72	50.45	4,917.96	876.39	1,061.33	1,376.40	0.00	0.00	0.00
5,300.00	24.72	50.45	5,008.80	903.01	1,093.57	1,418.21	0.00	0.00	0.00
5,400.00	24.72	50.45	5,099.64	929.63	1,125.81	1,460.02	0.00	0.00	0.00
5,500.00	24.72	50.45	5,190.48	956.26	1,158.05	1,501.83	0.00	0.00	0.00
Start Drop -2.00									
5,558.00	24.72	50.45	5,243.17	971.70	1,176.75	1,526.09	0.00	0.00	0.00
5,600.00	23.88	50.45	5,281.45	982.70	1,190.07	1,543.37	2.00	-2.00	0.00

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well P_JESSER 28-2
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 28-2	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_JESSER 28-2		
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	21.88	50.45	5,373.58	1,007.45	1,220.05	1,582.24	2.00	-2.00	0.00
5,800.00	19.88	50.45	5,467.01	1,030.14	1,247.52	1,617.87	2.00	-2.00	0.00
5,900.00	17.88	50.45	5,561.63	1,050.74	1,272.47	1,650.22	2.00	-2.00	0.00
6,000.00	15.88	50.45	5,657.31	1,069.22	1,294.85	1,679.25	2.00	-2.00	0.00
6,100.00	13.88	50.45	5,753.96	1,085.57	1,314.65	1,704.92	2.00	-2.00	0.00
6,200.00	11.88	50.45	5,851.44	1,099.76	1,331.83	1,727.20	2.00	-2.00	0.00
6,300.00	9.88	50.45	5,949.64	1,111.77	1,346.38	1,746.07	2.00	-2.00	0.00
6,400.00	7.88	50.45	6,048.43	1,121.59	1,358.28	1,761.50	2.00	-2.00	0.00
6,500.00	5.88	50.45	6,147.71	1,129.22	1,367.51	1,773.47	2.00	-2.00	0.00
6,600.00	3.88	50.45	6,247.34	1,134.63	1,374.06	1,781.97	2.00	-2.00	0.00
6,700.00	1.88	50.45	6,347.21	1,137.82	1,377.93	1,786.99	2.00	-2.00	0.00
Start 1715.00 hold at 6793.80 MD									
6,793.80	0.00	0.00	6,441.00	1,138.80	1,379.11	1,788.53	2.00	-2.00	-53.78
6,800.00	0.00	0.00	6,447.20	1,138.80	1,379.11	1,788.53	0.00	0.00	0.00
6,900.00	0.00	0.00	6,547.20	1,138.80	1,379.11	1,788.53	0.00	0.00	0.00
7,000.00	0.00	0.00	6,647.20	1,138.80	1,379.11	1,788.53	0.00	0.00	0.00
7,100.00	0.00	0.00	6,747.20	1,138.80	1,379.11	1,788.53	0.00	0.00	0.00
7,200.00	0.00	0.00	6,847.20	1,138.80	1,379.11	1,788.53	0.00	0.00	0.00
7,300.00	0.00	0.00	6,947.20	1,138.80	1,379.11	1,788.53	0.00	0.00	0.00
7,400.00	0.00	0.00	7,047.20	1,138.80	1,379.11	1,788.53	0.00	0.00	0.00
7,500.00	0.00	0.00	7,147.20	1,138.80	1,379.11	1,788.53	0.00	0.00	0.00
NIO A									
7,593.80	0.00	0.00	7,241.00	1,138.80	1,379.11	1,788.53	0.00	0.00	0.00
7,600.00	0.00	0.00	7,247.20	1,138.80	1,379.11	1,788.53	0.00	0.00	0.00
7,700.00	0.00	0.00	7,347.20	1,138.80	1,379.11	1,788.53	0.00	0.00	0.00
7,800.00	0.00	0.00	7,447.20	1,138.80	1,379.11	1,788.53	0.00	0.00	0.00
7,900.00	0.00	0.00	7,547.20	1,138.80	1,379.11	1,788.53	0.00	0.00	0.00
CODELL									
7,913.80	0.00	0.00	7,561.00	1,138.80	1,379.11	1,788.53	0.00	0.00	0.00
8,000.00	0.00	0.00	7,647.20	1,138.80	1,379.11	1,788.53	0.00	0.00	0.00
8,100.00	0.00	0.00	7,747.20	1,138.80	1,379.11	1,788.53	0.00	0.00	0.00
8,200.00	0.00	0.00	7,847.20	1,138.80	1,379.11	1,788.53	0.00	0.00	0.00
8,300.00	0.00	0.00	7,947.20	1,138.80	1,379.11	1,788.53	0.00	0.00	0.00
JSAND									
8,373.80	0.00	0.00	8,021.00	1,138.80	1,379.11	1,788.53	0.00	0.00	0.00
8,400.00	0.00	0.00	8,047.20	1,138.80	1,379.11	1,788.53	0.00	0.00	0.00
8,500.00	0.00	0.00	8,147.20	1,138.80	1,379.11	1,788.53	0.00	0.00	0.00
PBHL_BROWN 28-2(50 FNL 2590 FWL)									
8,508.80	0.00	0.00	8,156.00	1,138.80	1,379.11	1,788.53	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 28-2(0.00	0.00	8,156.00	1,138.80	1,379.11	1,275,511.85	3,211,390.96	40° 5' 13.916 N	104° 44' 40.096 W
- plan hits target center									
- Circle (radius 50.00)									

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well P_JESSER 28-2
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 28-2	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_JESSER 28-2		
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 (°)	
4,487.79	4,271.00	PARKMAN				
5,027.21	4,761.00	SUSSEX				
7,593.80	7,241.00	NIO A				
7,913.80	7,561.00	CODELL				
8,373.80	8,021.00	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	
2,535.80	2,497.83	167.10	202.36	Start 3022.20 hold at 2535.80 MD	
5,558.00	5,243.17	971.70	1,176.75	Start Drop -2.00	
6,793.80	6,441.00	1,138.80	1,379.11	Start 1715.00 hold at 6793.80 MD	
8,508.80	8,156.00	1,138.80	1,379.11	TD at 8508.80	



US ROCKIES REGION PLANNING

**COLORADO NORTHERN ZONE - 83
WELD_JESSER 18-2 PAD
P_JESSER 28-2**

**P_JESSER 28-2
PLAN #1 3-16-10 RHS**

Anticollision Report

16 March, 2010



Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_JESSER 28-2
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 28-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_JESSER 28-2	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	8,508.80	PLAN #1 3-16-10 RHS (P_JESSER 28-2)	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	93.23	41.28	1.794	CC
JESSER #4-2A EXISTING - JESSER #4-2A EXISTING -	1,600.00	1,578.45	99.67	35.16	1.545	ES, SF
P_BROWN 3-2 - P_BROWN 3-2 - PLAN #1 3-16-10 RHS	1,300.00	1,300.00	9.79	4.21	1.753	CC
P_BROWN 3-2 - P_BROWN 3-2 - PLAN #1 3-16-10 RHS	2,000.00	2,001.74	10.91	2.08	1.235	Level 2, ES, SF
P_BROWN 3-2S - P_BROWN 3-2S - PLAN #1 3-16-10 F	1,486.61	1,486.16	9.83	3.45	1.540	CC
P_BROWN 3-2S - P_BROWN 3-2S - PLAN #1 3-16-10 F	1,500.00	1,499.52	9.84	3.40	1.528	ES
P_BROWN 3-2S - P_BROWN 3-2S - PLAN #1 3-16-10 F	1,600.00	1,599.28	10.43	3.55	1.516	SF
P_BROWN 4-2 - P_BROWN 4-2 - PLAN #1 3-16-10 RHS	1,300.00	1,300.00	19.87	14.28	3.557	CC, ES, SF
P_BROWN 5-2 - P_BROWN 5-2 - PLAN #1 3-16-10 RHS	1,300.00	1,300.00	59.88	54.30	10.721	CC, ES
P_BROWN 5-2 - P_BROWN 5-2 - PLAN #1 3-16-10 RHS	1,400.00	1,399.20	61.88	55.88	10.319	SF
P_BROWN 5-2S - P_BROWN 5-2S - PLAN #1 3-16-10 F	1,300.00	1,300.00	69.96	64.37	12.525	CC, ES
P_BROWN 5-2S - P_BROWN 5-2S - PLAN #1 3-16-10 F	1,400.00	1,398.99	72.01	66.01	12.006	SF
P_BROWN 6-2 - P_BROWN 6-2 - PLAN #1 3-16-10 RHS	1,343.35	1,343.82	40.01	34.24	6.937	CC
P_BROWN 6-2 - P_BROWN 6-2 - PLAN #1 3-16-10 RHS	1,400.00	1,401.05	40.05	34.05	6.669	ES
P_BROWN 6-2 - P_BROWN 6-2 - PLAN #1 3-16-10 RHS	1,500.00	1,501.81	40.89	34.49	6.392	SF
P_BROWN 6-2S - P_BROWN 6-2S - PLAN #1 3-16-10 F	1,300.00	1,300.00	49.81	44.22	8.917	CC, ES
P_BROWN 6-2S - P_BROWN 6-2S - PLAN #1 3-16-10 F	1,500.00	1,501.36	52.50	46.11	8.216	SF
P_JESSER 21-2 - P_JESSER 21-2 - PLAN #1 3-16-10 R	1,300.00	1,300.00	20.15	14.56	3.607	CC
P_JESSER 21-2 - P_JESSER 21-2 - PLAN #1 3-16-10 R	1,400.00	1,399.29	20.57	14.55	3.421	ES, SF
P_JESSER 31-2 - P_JESSER 31-2 - PLAN #1 3-16-10 R	1,300.00	1,300.00	80.03	74.44	14.328	CC, ES
P_JESSER 31-2 - P_JESSER 31-2 - PLAN #1 3-16-10 R	1,400.00	1,397.19	83.08	77.08	13.835	SF
P_JESSER 4-2S - P_JESSER 4-2S - PLAN #1 3-16-10 F	1,300.00	1,300.00	29.94	24.36	5.361	CC, ES, SF

Offset Design WELD_JESSER 18-2 PAD - JESSER #4-2A EXISTING - JESSER #4-2A EXISTING - JESSER #4-2A E											
Survey Program: 0-UNKNOWN											
Reference											
Offset											
Semi Major Axis											
Distance											
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)
0.00	0.00	0.00	0.00	0.00	0.00	-59.47	47.36	-80.30	95.56		
100.00	100.00	79.00	79.00	0.10	1.58	-59.47	47.36	-80.30	93.23	91.55	1.68
200.00	200.00	179.00	179.00	0.32	5.16	-59.47	47.36	-80.30	93.23	87.75	5.48
300.00	300.00	279.00	279.00	0.55	9.16	-59.47	47.36	-80.30	93.23	83.52	9.71
400.00	400.00	379.00	379.00	0.77	13.16	-59.47	47.36	-80.30	93.23	79.30	13.93
500.00	500.00	479.00	479.00	0.99	17.16	-59.47	47.36	-80.30	93.23	75.07	18.15
											5.135

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 28-2
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 28-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_JESSER 28-2	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 3-16-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design		WELD_JESSER 18-2 PAD - JESSER #4-2A EXISTING - JESSER #4-2A EXISTING - JESSER #4-2A E										Offset Site Error:		0.00 ft		
Survey Program: 0-UNKNOWN														Offset Well Error:		0.00 ft
Reference		Offset		Semi Major Axis			Distance									
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning			
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)					
600.00	600.00	579.00	579.00	1.22	21.16	-59.47	47.36	-80.30	93.23	70.85	22.38	4.166				
700.00	700.00	679.00	679.00	1.44	25.16	-59.47	47.36	-80.30	93.23	66.62	26.60	3.504				
800.00	800.00	779.00	779.00	1.67	29.16	-59.47	47.36	-80.30	93.23	62.40	30.83	3.024				
900.00	900.00	879.00	879.00	1.89	33.16	-59.47	47.36	-80.30	93.23	58.17	35.05	2.660				
1,000.00	1,000.00	979.00	979.00	2.12	37.16	-59.47	47.36	-80.30	93.23	53.95	39.28	2.374				
1,100.00	1,100.00	1,079.00	1,079.00	2.34	41.16	-59.47	47.36	-80.30	93.23	49.73	43.50	2.143				
1,200.00	1,200.00	1,179.00	1,179.00	2.57	45.16	-59.47	47.36	-80.30	93.23	45.50	47.73	1.953				
1,300.00	1,300.00	1,279.00	1,279.00	2.79	49.16	-59.47	47.36	-80.30	93.23	41.28	51.95	1.794	CC			
1,400.00	1,399.98	1,378.98	1,378.98	3.01	53.16	-110.91	47.36	-80.30	93.84	37.67	56.17	1.671				
1,500.00	1,499.84	1,478.84	1,478.84	3.23	57.15	-113.80	47.36	-80.30	95.83	35.47	60.36	1.588				
1,600.00	1,599.45	1,578.45	1,578.45	3.46	61.14	-118.30	47.36	-80.30	99.67	35.16	64.52	1.545	ES, SF			
1,700.00	1,698.70	1,677.70	1,677.70	3.70	65.11	-123.98	47.36	-80.30	106.02	37.43	68.59	1.546				
1,800.00	1,797.47	1,776.47	1,776.47	3.96	69.06	-130.23	47.36	-80.30	115.55	43.01	72.54	1.593				
1,900.00	1,895.62	1,874.62	1,874.62	4.25	72.98	-136.48	47.36	-80.30	128.80	52.49	76.31	1.688				
2,000.00	1,993.06	1,972.06	1,972.06	4.59	76.88	-142.30	47.36	-80.30	146.08	66.22	79.86	1.829				
2,100.00	2,089.64	2,068.64	2,068.64	4.97	80.75	-147.43	47.36	-80.30	167.51	84.33	83.18	2.014				
2,200.00	2,185.27	2,164.27	2,164.27	5.41	84.57	-151.81	47.36	-80.30	193.03	106.77	86.25	2.238				
2,300.00	2,279.82	2,258.82	2,258.82	5.92	88.35	-155.49	47.36	-80.30	222.53	133.43	89.09	2.498				
2,400.00	2,373.17	2,352.17	2,352.17	6.49	92.09	-158.53	47.36	-80.30	255.85	164.16	91.69	2.790				
2,500.00	2,465.21	2,444.21	2,444.21	7.13	95.77	-161.05	47.36	-80.30	292.87	198.83	94.04	3.114				
2,535.80	2,497.83	2,476.83	2,476.83	7.37	97.07	-161.84	47.36	-80.30	306.99	212.17	94.82	3.238				
2,600.00	2,556.15	2,535.15	2,535.15	7.83	99.41	-163.27	47.36	-80.30	332.80	235.79	97.01	3.431				
2,700.00	2,646.99	2,625.99	2,625.99	8.56	103.04	-165.11	47.36	-80.30	373.30	272.83	100.47	3.716				
2,800.00	2,737.82	2,716.82	2,716.82	9.30	106.67	-166.59	47.36	-80.30	414.06	310.09	103.97	3.983				
2,900.00	2,828.66	2,807.66	2,807.66	10.07	110.31	-167.81	47.36	-80.30	455.01	347.51	107.50	4.233				
3,000.00	2,919.50	2,898.50	2,898.50	10.84	113.94	-168.82	47.36	-80.30	496.10	385.05	111.06	4.467				
3,100.00	3,010.34	2,989.34	2,989.34	11.63	117.57	-169.68	47.36	-80.30	537.31	422.68	114.63	4.687				
3,200.00	3,101.18	3,080.18	3,080.18	12.42	121.21	-170.42	47.36	-80.30	578.60	460.38	118.22	4.894				
3,300.00	3,192.02	3,171.02	3,171.02	13.22	124.84	-171.07	47.36	-80.30	619.96	498.15	121.82	5.089				
3,400.00	3,282.86	3,261.86	3,261.86	14.02	128.47	-171.63	47.36	-80.30	661.38	535.96	125.42	5.273				
3,500.00	3,373.70	3,352.70	3,352.70	14.83	132.11	-172.12	47.36	-80.30	702.85	573.81	129.04	5.447				
3,600.00	3,464.54	3,443.54	3,443.54	15.65	135.74	-172.56	47.36	-80.30	744.35	611.70	132.66	5.611				
3,700.00	3,555.38	3,534.38	3,534.38	16.46	139.38	-172.96	47.36	-80.30	785.89	649.61	136.28	5.767				
3,800.00	3,646.22	3,625.22	3,625.22	17.28	143.01	-173.31	47.36	-80.30	827.45	687.54	139.91	5.914				
3,900.00	3,737.06	3,716.06	3,716.06	18.10	146.64	-173.63	47.36	-80.30	869.04	725.50	143.54	6.054				
4,000.00	3,827.89	3,806.89	3,806.89	18.92	150.28	-173.92	47.36	-80.30	910.65	763.47	147.18	6.187				
4,100.00	3,918.73	3,897.73	3,897.73	19.75	153.91	-174.19	47.36	-80.30	952.28	801.45	150.82	6.314				
4,200.00	4,009.57	3,988.57	3,988.57	20.57	157.54	-174.43	47.36	-80.30	993.92	839.45	154.46	6.435				
4,300.00	4,100.41	4,079.41	4,079.41	21.40	161.18	-174.66	47.36	-80.30	1,035.57	877.47	158.11	6.550				
4,400.00	4,191.25	4,170.25	4,170.25	22.23	164.81	-174.86	47.36	-80.30	1,077.24	915.49	161.75	6.660				
4,500.00	4,282.09	4,261.09	4,261.09	23.06	168.44	-175.06	47.36	-80.30	1,118.92	953.52	165.40	6.765				
4,600.00	4,372.93	4,351.93	4,351.93	23.89	172.08	-175.23	47.36	-80.30	1,160.61	991.55	169.05	6.865				
4,700.00	4,463.77	4,442.77	4,442.77	24.72	175.71	-175.40	47.36	-80.30	1,202.30	1,029.60	172.70	6.962				
4,800.00	4,554.61	4,533.61	4,533.61	25.55	179.34	-175.55	47.36	-80.30	1,244.01	1,067.65	176.36	7.054				
4,900.00	4,645.45	4,624.45	4,624.45	26.39	182.98	-175.70	47.36	-80.30	1,285.72	1,105.71	180.01	7.142				
5,000.00	4,736.29	4,715.29	4,715.29	27.22	186.61	-175.83	47.36	-80.30	1,327.44	1,143.77	183.67	7.227				
5,100.00	4,827.12	4,806.12	4,806.12	28.05	190.24	-175.96	47.36	-80.30	1,369.16	1,181.84	187.32	7.309				
5,200.00	4,917.96	4,896.96	4,896.96	28.89	193.88	-176.08	47.36	-80.30	1,410.89	1,219.91	190.98	7.388				
5,300.00	5,008.80	4,987.80	4,987.80	29.72	197.51	-176.19	47.36	-80.30	1,452.63	1,257.99	194.64	7.463				
5,400.00	5,099.64	5,078.64	5,078.64	30.56	201.15	-176.30	47.36	-80.30	1,494.36	1,296.07	198.30	7.536				
5,500.00	5,190.48	5,169.48	5,169.48	31.40	204.78	-176.40	47.36	-80.30	1,536.11	1,334.15	201.96	7.606				
5,558.00	5,243.17	5,222.17	5,222.17	31.88	206.89	-176.46	47.36	-80.30	1,560.32	1,356.24	204.08	7.646				

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 28-2
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 28-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_JESSER 28-2	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 3-16-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design WELD_JESSER 18-2 PAD - JESSER #4-2A EXISTING - JESSER #4-2A EXISTING - JESSER #4-2A E												Offset Site Error:	0.00 ft
Survey Program: 0-UNKNOWN												Offset Well Error:	0.00 ft
Reference	Offset	Semi Major Axis		Distance									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5,600.00	5,281.45	5,260.45	5,260.45	32.19	208.42	-176.52	47.36	-80.30	1,577.57	1,370.75	206.83	7.628	
5,700.00	5,373.58	5,352.58	5,352.58	32.81	212.10	-176.65	47.36	-80.30	1,616.38	1,403.00	213.39	7.575	
5,800.00	5,467.01	5,446.01	5,446.01	33.39	215.84	-176.77	47.36	-80.30	1,651.97	1,432.13	219.84	7.514	
5,900.00	5,561.63	5,540.63	5,540.63	33.92	219.63	-176.87	47.36	-80.30	1,684.27	1,458.13	226.14	7.448	
6,000.00	5,657.31	5,636.31	5,636.31	34.40	223.45	-176.95	47.36	-80.30	1,713.26	1,480.98	232.28	7.376	
6,100.00	5,753.96	5,732.96	5,732.96	34.84	227.32	-177.02	47.36	-80.30	1,738.90	1,500.66	238.24	7.299	
6,200.00	5,851.44	5,830.44	5,830.44	35.22	231.22	-177.09	47.36	-80.30	1,761.16	1,517.17	243.98	7.218	
6,300.00	5,949.64	5,928.64	5,928.64	35.56	235.15	-177.14	47.36	-80.30	1,780.00	1,530.50	249.50	7.134	
6,400.00	6,048.43	6,027.43	6,027.43	35.85	239.10	-177.18	47.36	-80.30	1,795.41	1,540.63	254.78	7.047	
6,500.00	6,147.71	6,126.71	6,126.71	36.09	243.07	-177.21	47.36	-80.30	1,807.37	1,547.59	259.78	6.957	
6,600.00	6,247.34	6,226.34	6,226.34	36.28	247.05	-177.23	47.36	-80.30	1,815.86	1,551.36	264.50	6.865	
6,700.00	6,347.21	6,326.21	6,326.21	36.42	251.05	-177.24	47.36	-80.30	1,820.87	1,551.96	268.91	6.771	
6,793.80	6,441.00	6,420.00	6,420.00	36.51	254.80	-126.79	47.36	-80.30	1,822.40	1,549.66	272.74	6.682	
6,800.00	6,447.20	6,426.20	6,426.20	36.51	255.05	-126.79	47.36	-80.30	1,822.40	1,549.40	273.00	6.675	
6,900.00	6,547.20	6,526.20	6,526.20	36.59	259.05	-126.79	47.36	-80.30	1,822.40	1,545.24	277.16	6.575	
7,000.00	6,647.20	6,626.20	6,626.20	36.68	263.05	-126.79	47.36	-80.30	1,822.40	1,541.08	281.32	6.478	
7,100.00	6,747.20	6,726.20	6,726.20	36.76	267.05	-126.79	47.36	-80.30	1,822.40	1,536.92	285.48	6.384	
7,200.00	6,847.20	6,826.20	6,826.20	36.85	271.05	-126.79	47.36	-80.30	1,822.40	1,532.76	289.65	6.292	
7,300.00	6,947.20	6,926.20	6,926.20	36.94	275.05	-126.79	47.36	-80.30	1,822.40	1,528.59	293.81	6.203	
7,400.00	7,047.20	7,026.20	7,026.20	37.03	279.05	-126.79	47.36	-80.30	1,822.40	1,524.43	297.98	6.116	
7,500.00	7,147.20	7,126.20	7,126.20	37.12	283.05	-126.79	47.36	-80.30	1,822.40	1,520.26	302.14	6.032	
7,600.00	7,247.20	7,226.20	7,226.20	37.21	287.05	-126.79	47.36	-80.30	1,822.40	1,516.09	306.31	5.950	
7,700.00	7,347.20	7,326.20	7,326.20	37.30	291.05	-126.79	47.36	-80.30	1,822.40	1,511.92	310.48	5.870	
7,800.00	7,447.20	7,426.20	7,426.20	37.39	295.05	-126.79	47.36	-80.30	1,822.40	1,507.75	314.65	5.792	
7,900.00	7,547.20	7,526.20	7,526.20	37.49	299.05	-126.79	47.36	-80.30	1,822.40	1,503.58	318.82	5.716	
8,000.00	7,647.20	7,626.20	7,626.20	37.58	303.05	-126.79	47.36	-80.30	1,822.40	1,499.41	322.99	5.642	
8,100.00	7,747.20	7,726.20	7,726.20	37.68	307.05	-126.79	47.36	-80.30	1,822.40	1,495.24	327.17	5.570	
8,200.00	7,847.20	7,826.20	7,826.20	37.78	311.05	-126.79	47.36	-80.30	1,822.40	1,491.06	331.34	5.500	
8,300.00	7,947.20	7,926.20	7,926.20	37.88	315.05	-126.79	47.36	-80.30	1,822.40	1,486.89	335.52	5.432	
8,400.00	8,047.20	8,026.20	8,026.20	37.98	319.05	-126.79	47.36	-80.30	1,822.40	1,482.71	339.69	5.365	
8,508.80	8,156.00	8,135.00	8,135.00	38.08	323.40	-126.79	47.36	-80.30	1,822.40	1,478.17	344.24	5.294	

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_JESSER 28-2
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 28-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_JESSER 28-2	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	-89.83	0.03	-9.79	9.79				
100.00	100.00	100.00	100.00	0.10	0.10	-89.83	0.03	-9.79	9.79	9.60	0.19	51.260	
200.00	200.00	200.00	200.00	0.32	0.32	-89.83	0.03	-9.79	9.79	9.15	0.64	15.288	
300.00	300.00	300.00	300.00	0.55	0.55	-89.83	0.03	-9.79	9.79	8.70	1.09	8.984	
400.00	400.00	400.00	400.00	0.77	0.77	-89.83	0.03	-9.79	9.79	8.25	1.54	6.361	
500.00	500.00	500.00	500.00	0.99	0.99	-89.83	0.03	-9.79	9.79	7.80	1.99	4.923	
600.00	600.00	600.00	600.00	1.22	1.22	-89.83	0.03	-9.79	9.79	7.35	2.44	4.016	
700.00	700.00	700.00	700.00	1.44	1.44	-89.83	0.03	-9.79	9.79	6.91	2.89	3.391	
800.00	800.00	800.00	800.00	1.67	1.67	-89.83	0.03	-9.79	9.79	6.46	3.34	2.934	
900.00	900.00	900.00	900.00	1.89	1.89	-89.83	0.03	-9.79	9.79	6.01	3.79	2.586	
1,000.00	1,000.00	1,000.00	1,000.00	2.12	2.12	-89.83	0.03	-9.79	9.79	5.56	4.24	2.311	
1,100.00	1,100.00	1,100.00	1,100.00	2.34	2.34	-89.83	0.03	-9.79	9.79	5.11	4.69	2.090	
1,200.00	1,200.00	1,200.00	1,200.00	2.57	2.57	-89.83	0.03	-9.79	9.79	4.66	5.14	1.907	
1,300.00	1,300.00	1,300.00	1,300.00	2.79	2.79	-89.83	0.03	-9.79	9.79	4.21	5.59	1.753 CC	
1,400.00	1,399.98	1,400.26	1,400.24	3.01	3.01	-140.10	1.17	-8.46	9.81	3.79	6.02	1.629	
1,500.00	1,499.84	1,500.52	1,500.35	3.23	3.23	-139.57	4.61	-4.48	9.87	3.43	6.45	1.532	
1,600.00	1,599.45	1,600.78	1,600.22	3.46	3.46	-138.71	10.32	2.16	9.98	3.10	6.87	1.451 Level 3	
1,700.00	1,698.70	1,701.03	1,699.72	3.70	3.70	-137.52	18.31	11.44	10.12	2.81	7.31	1.384 Level 3	
1,800.00	1,797.47	1,801.29	1,798.73	3.96	3.96	-136.05	28.57	23.36	10.32	2.54	7.77	1.327 Level 3	
1,900.00	1,895.62	1,901.54	1,897.13	4.25	4.26	-134.34	41.08	37.89	10.56	2.28	8.28	1.276 Level 3	
2,000.00	1,993.06	2,001.74	1,994.76	4.59	4.60	-132.71	55.78	54.96	10.91	2.08	8.84	1.235 Level 2, ES, SF	
2,100.00	2,089.64	2,101.70	2,091.91	4.97	4.96	-139.07	71.14	72.80	12.99	3.67	9.32	1.393 Level 3	
2,200.00	2,185.27	2,201.52	2,188.93	5.41	5.35	-150.16	86.47	90.61	18.10	8.44	9.66	1.873	
2,300.00	2,279.82	2,301.08	2,285.68	5.92	5.75	-159.21	101.77	108.37	26.82	16.84	9.98	2.687	
2,400.00	2,373.17	2,400.24	2,382.06	6.49	6.17	-165.15	117.00	126.07	39.23	28.89	10.34	3.795	
2,500.00	2,465.21	2,498.90	2,477.94	7.13	6.59	-168.94	132.16	143.67	55.24	44.52	10.72	5.152	
2,535.80	2,497.83	2,534.07	2,512.12	7.37	6.74	-169.95	137.57	149.95	61.84	50.97	10.86	5.692	
2,600.00	2,556.15	2,597.07	2,573.35	7.83	7.02	-171.38	147.24	161.19	74.09	62.89	11.20	6.615	
2,700.00	2,646.99	2,695.19	2,668.72	8.56	7.45	-172.86	162.32	178.70	93.23	81.49	11.74	7.939	
2,800.00	2,737.82	2,793.32	2,764.09	9.30	7.90	-173.83	177.40	196.21	112.41	100.11	12.30	9.138	
2,900.00	2,828.66	2,891.45	2,859.45	10.07	8.34	-174.52	192.47	213.72	131.61	118.74	12.87	10.227	
3,000.00	2,919.50	2,989.58	2,954.82	10.84	8.80	-175.04	207.55	231.24	150.83	137.38	13.45	11.217	
3,100.00	3,010.34	3,087.71	3,050.19	11.63	9.25	-175.44	222.63	248.75	170.06	156.03	14.03	12.121	
3,200.00	3,101.18	3,185.84	3,145.56	12.42	9.71	-175.75	237.70	266.26	189.29	174.67	14.62	12.948	
3,300.00	3,192.02	3,283.97	3,240.93	13.22	10.17	-176.01	252.78	283.77	208.52	193.31	15.21	13.707	
3,400.00	3,282.86	3,382.09	3,336.30	14.02	10.63	-176.23	267.85	301.28	227.76	211.95	15.81	14.405	
3,500.00	3,373.70	3,480.22	3,431.67	14.83	11.10	-176.41	282.93	318.79	247.01	230.59	16.41	15.049	
3,600.00	3,464.54	3,578.35	3,527.04	15.65	11.57	-176.56	298.01	336.30	266.25	249.23	17.02	15.645	
3,700.00	3,555.38	3,676.48	3,622.41	16.46	12.04	-176.70	313.08	353.81	285.50	267.87	17.63	16.198	
3,800.00	3,646.22	3,774.61	3,717.78	17.28	12.51	-176.82	328.16	371.32	304.75	286.51	18.24	16.711	
3,900.00	3,737.06	3,872.74	3,813.15	18.10	12.98	-176.92	343.24	388.83	323.99	305.14	18.85	17.189	
4,000.00	3,827.89	3,970.86	3,908.51	18.92	13.45	-177.01	358.31	406.34	343.24	323.78	19.46	17.635	
4,100.00	3,918.73	4,068.99	4,003.88	19.75	13.92	-177.09	373.39	423.85	362.49	342.41	20.08	18.052	
4,200.00	4,009.57	4,167.12	4,099.25	20.57	14.40	-177.17	388.46	441.36	381.74	361.05	20.70	18.443	
4,300.00	4,100.41	4,265.25	4,194.62	21.40	14.87	-177.23	403.54	458.87	401.00	379.68	21.32	18.810	
4,400.00	4,191.25	4,363.38	4,289.99	22.23	15.35	-177.29	418.62	476.39	420.25	398.31	21.94	19.155	
4,500.00	4,282.09	4,461.51	4,385.36	23.06	15.83	-177.35	433.69	493.90	439.50	416.94	22.56	19.480	
4,600.00	4,372.93	4,559.63	4,480.73	23.89	16.30	-177.40	448.77	511.41	458.75	435.57	23.18	19.787	
4,700.00	4,463.77	4,657.76	4,576.10	24.72	16.78	-177.45	463.85	528.92	478.01	454.20	23.81	20.076	
4,800.00	4,554.61	4,755.89	4,671.47	25.55	17.26	-177.49	478.92	546.43	497.26	472.83	24.43	20.350	
4,900.00	4,645.45	4,854.02	4,766.84	26.39	17.74	-177.53	494.00	563.94	516.51	491.45	25.06	20.610	
5,000.00	4,736.29	4,952.15	4,862.21	27.22	18.22	-177.57	509.08	581.45	535.77	510.08	25.69	20.856	

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 28-2
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 28-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_JESSER 28-2	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 3-16-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design WELD_JESSER 18-2 PAD - P_BROWN 3-2 - P_BROWN 3-2 - PLAN #1 3-16-10 RHS												Offset Site Error:	0.00 ft
Survey Program: 0-MWD												Offset Well Error:	0.00 ft
Reference	Offset	Semi Major Axis		Distance									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5,100.00	4,827.12	5,050.28	4,957.57	28.05	18.70	-177.60	524.15	598.96	555.02	528.71	26.32	21.090	
5,200.00	4,917.96	5,148.40	5,052.94	28.89	19.18	-177.63	539.23	616.47	574.28	547.33	26.95	21.313	
5,300.00	5,008.80	5,246.53	5,148.31	29.72	19.66	-177.66	554.30	633.98	593.53	565.96	27.57	21.525	
5,400.00	5,099.64	5,344.66	5,243.68	30.56	20.14	-177.69	569.38	651.49	612.78	584.58	28.20	21.726	
5,500.00	5,190.48	5,442.79	5,339.05	31.40	20.62	-177.72	584.46	669.00	632.04	603.20	28.84	21.919	
5,558.00	5,243.17	5,499.71	5,394.37	31.88	20.90	-177.73	593.20	679.16	643.21	614.01	29.20	22.027	
5,600.00	5,281.45	5,540.98	5,434.48	32.19	21.10	-177.75	599.54	686.52	650.99	621.47	29.52	22.051	
5,700.00	5,373.58	5,639.67	5,530.39	32.81	21.59	-177.77	614.70	704.13	667.09	636.85	30.24	22.062	
5,800.00	5,467.01	5,727.75	5,616.08	33.39	21.97	-177.79	627.99	719.57	680.21	649.35	30.86	22.044	
5,900.00	5,561.63	5,800.00	5,686.77	33.92	22.23	-177.80	637.76	730.92	692.45	661.09	31.37	22.077	
6,000.00	5,657.31	5,887.74	5,773.07	34.40	22.51	-177.81	648.06	742.87	703.89	672.05	31.85	22.102	
6,100.00	5,753.96	5,967.45	5,851.87	34.84	22.73	-177.83	655.91	751.99	714.69	682.43	32.25	22.160	
6,200.00	5,851.44	6,046.99	5,930.80	35.22	22.93	-177.84	662.32	759.43	724.77	692.17	32.60	22.235	
6,300.00	5,949.64	6,126.37	6,009.81	35.56	23.11	-177.86	667.28	765.20	734.14	701.26	32.88	22.328	
6,400.00	6,048.43	6,200.00	6,083.26	35.85	23.25	-177.88	670.61	769.07	742.81	709.72	33.09	22.446	
6,500.00	6,147.71	6,284.70	6,167.88	36.09	23.38	-177.90	672.91	771.74	750.70	717.44	33.26	22.570	
6,600.00	6,247.34	6,364.17	6,247.34	36.28	23.48	-177.92	673.59	772.53	757.89	724.53	33.36	22.717	
6,700.00	6,347.21	6,464.04	6,347.21	36.42	23.61	-177.93	673.59	772.53	762.90	729.44	33.46	22.799	
6,793.80	6,441.00	6,557.83	6,441.00	36.51	23.73	-127.49	673.59	772.53	764.44	730.92	33.51	22.809	
6,800.00	6,447.20	6,564.02	6,447.20	36.51	23.73	-127.49	673.59	772.53	764.44	730.90	33.54	22.795	
6,900.00	6,547.20	6,664.02	6,547.20	36.59	23.86	-127.49	673.59	772.53	764.44	730.55	33.89	22.558	
7,000.00	6,647.20	6,764.02	6,647.20	36.68	23.99	-127.49	673.59	772.53	764.44	730.20	34.24	22.325	
7,100.00	6,747.20	6,864.02	6,747.20	36.76	24.13	-127.49	673.59	772.53	764.44	729.84	34.60	22.095	
7,200.00	6,847.20	6,964.02	6,847.20	36.85	24.26	-127.49	673.59	772.53	764.44	729.48	34.95	21.869	
7,300.00	6,947.20	7,064.02	6,947.20	36.94	24.39	-127.49	673.59	772.53	764.44	729.12	35.32	21.646	
7,400.00	7,047.20	7,164.02	7,047.20	37.03	24.53	-127.49	673.59	772.53	764.44	728.76	35.68	21.427	
7,500.00	7,147.20	7,264.02	7,147.20	37.12	24.67	-127.49	673.59	772.53	764.44	728.40	36.04	21.210	
7,600.00	7,247.20	7,364.02	7,247.20	37.21	24.81	-127.49	673.59	772.53	764.44	728.03	36.41	20.997	
7,700.00	7,347.20	7,464.02	7,347.20	37.30	24.95	-127.49	673.59	772.53	764.44	727.66	36.77	20.787	
7,800.00	7,447.20	7,564.02	7,447.20	37.39	25.09	-127.49	673.59	772.53	764.44	727.29	37.14	20.580	
7,900.00	7,547.20	7,664.02	7,547.20	37.49	25.23	-127.49	673.59	772.53	764.44	726.92	37.51	20.377	
8,000.00	7,647.20	7,764.02	7,647.20	37.58	25.37	-127.49	673.59	772.53	764.44	726.55	37.89	20.176	
8,100.00	7,747.20	7,864.02	7,747.20	37.68	25.52	-127.49	673.59	772.53	764.44	726.17	38.26	19.979	
8,200.00	7,847.20	7,964.02	7,847.20	37.78	25.67	-127.49	673.59	772.53	764.44	725.80	38.64	19.785	
8,300.00	7,947.20	8,064.02	7,947.20	37.88	25.81	-127.49	673.59	772.53	764.44	725.42	39.02	19.593	
8,400.00	8,047.20	8,164.02	8,047.20	37.98	25.96	-127.49	673.59	772.53	764.44	725.04	39.39	19.405	
8,508.80	8,156.00	8,272.83	8,156.00	38.08	26.12	-127.49	673.59	772.53	764.44	724.63	39.81	19.203	

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_JESSER 28-2
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 28-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_JESSER 28-2	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	90.00	0.00	10.07	10.07				
100.00	100.00	100.00	100.00	0.10	0.10	90.00	0.00	10.07	10.07	9.88	0.19	52.725	
200.00	200.00	200.00	200.00	0.32	0.32	90.00	0.00	10.07	10.07	9.43	0.64	15.725	
300.00	300.00	300.00	300.00	0.55	0.55	90.00	0.00	10.07	10.07	8.98	1.09	9.240	
400.00	400.00	400.00	400.00	0.77	0.77	90.00	0.00	10.07	10.07	8.53	1.54	6.542	
500.00	500.00	500.00	500.00	0.99	0.99	90.00	0.00	10.07	10.07	8.08	1.99	5.064	
600.00	600.00	600.00	600.00	1.22	1.22	90.00	0.00	10.07	10.07	7.63	2.44	4.131	
700.00	700.00	700.00	700.00	1.44	1.44	90.00	0.00	10.07	10.07	7.18	2.89	3.488	
800.00	800.00	800.00	800.00	1.67	1.67	90.00	0.00	10.07	10.07	6.74	3.34	3.018	
900.00	900.00	900.00	900.00	1.89	1.89	90.00	0.00	10.07	10.07	6.29	3.79	2.660	
1,000.00	1,000.00	1,000.00	1,000.00	2.12	2.12	90.00	0.00	10.07	10.07	5.84	4.24	2.378	
1,100.00	1,100.00	1,100.00	1,100.00	2.34	2.34	90.00	0.00	10.07	10.07	5.39	4.69	2.149	
1,200.00	1,200.00	1,200.00	1,200.00	2.57	2.57	90.00	0.00	10.07	10.07	4.94	5.14	1.961	
1,300.00	1,300.00	1,300.00	1,300.00	2.79	2.79	90.00	0.00	10.07	10.07	4.49	5.59	1.803	
1,400.00	1,399.98	1,399.76	1,399.75	3.01	3.01	43.09	0.49	11.28	9.95	3.94	6.02	1.654	
1,486.61	1,486.48	1,486.16	1,486.08	3.20	3.19	52.13	1.72	14.27	9.83	3.45	6.38	1.540 CC	
1,500.00	1,499.84	1,499.52	1,499.43	3.23	3.22	54.02	1.98	14.89	9.84	3.40	6.44	1.528 ES	
1,600.00	1,599.45	1,599.28	1,598.98	3.46	3.44	71.57	4.44	20.92	10.43	3.55	6.88	1.516 SF	
1,700.00	1,698.70	1,699.06	1,698.33	3.70	3.67	90.78	7.90	29.34	12.60	5.25	7.35	1.714	
1,800.00	1,797.47	1,798.84	1,797.43	3.96	3.91	106.03	12.33	40.17	16.74	8.88	7.86	2.131	
1,900.00	1,895.62	1,898.65	1,896.20	4.25	4.17	116.28	17.75	53.39	22.70	14.32	8.38	2.709	
2,000.00	1,993.06	1,998.47	1,994.58	4.59	4.45	122.93	24.14	69.00	30.27	21.33	8.94	3.387	
2,100.00	2,089.64	2,098.31	2,092.51	4.97	4.77	127.33	31.51	86.99	39.28	29.75	9.53	4.122	
2,200.00	2,185.27	2,198.18	2,189.93	5.41	5.12	130.33	39.85	107.34	49.65	39.48	10.17	4.881	
2,300.00	2,279.82	2,298.09	2,286.77	5.92	5.51	132.45	49.16	130.05	61.32	50.45	10.87	5.642	
2,400.00	2,373.17	2,398.03	2,382.97	6.49	5.95	133.99	59.43	155.11	74.27	62.64	11.63	6.385	
2,500.00	2,465.21	2,497.46	2,478.04	7.13	6.43	135.29	70.47	182.08	88.61	76.16	12.45	7.116	
2,535.80	2,497.83	2,532.79	2,511.78	7.37	6.60	135.94	74.44	191.77	94.30	81.55	12.75	7.398	
2,600.00	2,556.15	2,596.09	2,572.23	7.83	6.92	137.19	81.56	209.13	104.82	91.52	13.30	7.881	
2,700.00	2,646.99	2,694.68	2,666.39	8.56	7.44	138.70	92.64	236.17	121.28	107.09	14.19	8.547	
2,800.00	2,737.82	2,793.27	2,760.55	9.30	7.96	139.86	103.72	263.21	137.80	122.70	15.10	9.127	
2,900.00	2,828.66	2,891.86	2,854.71	10.07	8.50	140.76	114.80	290.25	154.37	138.34	16.03	9.632	
3,000.00	2,919.50	2,990.45	2,948.87	10.84	9.05	141.49	125.88	317.30	170.97	154.00	16.97	10.076	
3,100.00	3,010.34	3,089.05	3,043.03	11.63	9.60	142.09	136.96	344.34	187.59	169.67	17.92	10.468	
3,200.00	3,101.18	3,187.64	3,137.19	12.42	10.16	142.60	148.04	371.38	204.22	185.34	18.88	10.815	
3,300.00	3,192.02	3,286.23	3,231.35	13.22	10.72	143.03	159.12	398.42	220.87	201.02	19.85	11.125	
3,400.00	3,282.86	3,384.82	3,325.51	14.02	11.29	143.39	170.20	425.47	237.53	216.70	20.83	11.402	
3,500.00	3,373.70	3,483.41	3,419.68	14.83	11.86	143.71	181.28	452.51	254.20	232.38	21.82	11.652	
3,600.00	3,464.54	3,582.01	3,513.84	15.65	12.44	143.99	192.36	479.55	270.87	248.07	22.81	11.878	
3,700.00	3,555.38	3,680.60	3,608.00	16.46	13.02	144.24	203.44	506.59	287.55	263.75	23.80	12.082	
3,800.00	3,646.22	3,779.19	3,702.16	17.28	13.60	144.46	214.52	533.64	304.24	279.44	24.80	12.269	
3,900.00	3,737.06	3,877.78	3,796.32	18.10	14.18	144.66	225.60	560.68	320.93	295.13	25.80	12.439	
4,000.00	3,827.89	3,976.37	3,890.48	18.92	14.77	144.84	236.68	587.72	337.62	310.81	26.80	12.596	
4,100.00	3,918.73	4,074.96	3,984.64	19.75	15.35	145.00	247.76	614.76	354.31	326.50	27.81	12.740	
4,200.00	4,009.57	4,173.56	4,078.80	20.57	15.94	145.14	258.84	641.80	371.01	342.19	28.82	12.873	
4,300.00	4,100.41	4,272.15	4,172.96	21.40	16.53	145.28	269.92	668.85	387.71	357.88	29.83	12.996	
4,400.00	4,191.25	4,370.74	4,267.13	22.23	17.12	145.40	281.00	695.89	404.41	373.56	30.85	13.110	
4,500.00	4,282.09	4,469.33	4,361.29	23.06	17.71	145.51	292.08	722.93	421.11	389.25	31.86	13.216	
4,600.00	4,372.93	4,567.92	4,455.45	23.89	18.30	145.62	303.16	749.97	437.82	404.94	32.88	13.315	
4,700.00	4,463.77	4,666.52	4,549.61	24.72	18.90	145.72	314.24	777.02	454.52	420.62	33.90	13.407	
4,800.00	4,554.61	4,765.11	4,643.77	25.55	19.49	145.81	325.32	804.06	471.23	436.31	34.92	13.494	
4,900.00	4,645.45	4,863.70	4,737.93	26.39	20.09	145.89	336.40	831.10	487.94	452.00	35.94	13.575	

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 28-2
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 28-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_JESSER 28-2	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 3-16-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design WELD_JESSER 18-2 PAD - P_BROWN 3-2S - P_BROWN 3-2S - PLAN #1 3-16-10 RHS												Offset Site Error:	0.00 ft
Survey Program: 0-MWD												Offset Well Error:	0.00 ft
Reference	Offset	Semi Major Axis		Distance									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5,000.00	4,736.29	4,962.29	4,832.09	27.22	20.68	145.97	347.48	858.14	504.65	467.68	36.97	13.651	
5,100.00	4,827.12	5,060.88	4,926.25	28.05	21.28	146.04	358.56	885.19	521.36	483.37	37.99	13.723	
5,200.00	4,917.96	5,159.48	5,020.41	28.89	21.87	146.11	369.64	912.23	538.07	499.05	39.02	13.791	
5,300.00	5,008.80	5,206.16	5,065.00	29.72	22.16	146.14	374.89	925.03	557.20	517.41	39.80	14.002	
5,400.00	5,099.64	5,206.16	5,065.00	30.56	22.16	146.14	374.89	925.03	590.98	550.62	40.35	14.645	
5,500.00	5,190.48	5,206.16	5,065.00	31.40	22.16	146.14	374.89	925.03	638.77	597.86	40.91	15.613	
5,558.00	5,243.17	5,206.16	5,065.00	31.88	22.16	146.14	374.89	925.03	671.78	630.54	41.24	16.290	
5,600.00	5,281.45	5,206.16	5,065.00	32.19	22.16	146.50	374.89	925.03	697.52	656.17	41.35	16.870	
5,700.00	5,373.58	5,206.16	5,065.00	32.81	22.16	147.45	374.89	925.03	763.14	721.67	41.47	18.402	
5,800.00	5,467.01	5,206.16	5,065.00	33.39	22.16	148.51	374.89	925.03	833.65	792.15	41.49	20.090	
5,900.00	5,561.63	5,206.16	5,065.00	33.92	22.16	149.64	374.89	925.03	907.81	866.39	41.43	21.914	
6,000.00	5,657.31	5,206.16	5,065.00	34.40	22.16	150.84	374.89	925.03	984.73	943.46	41.27	23.858	
6,100.00	5,753.96	5,206.16	5,065.00	34.84	22.16	152.07	374.89	925.03	1,063.73	1,022.69	41.05	25.915	
6,200.00	5,851.44	5,206.16	5,065.00	35.22	22.16	153.32	374.89	925.03	1,144.29	1,103.54	40.76	28.077	
6,300.00	5,949.64	5,206.16	5,065.00	35.56	22.16	154.56	374.89	925.03	1,226.01	1,185.61	40.41	30.341	
6,400.00	6,048.43	5,206.16	5,065.00	35.85	22.16	155.79	374.89	925.03	1,308.59	1,268.58	40.01	32.707	
6,500.00	6,147.71	5,206.16	5,065.00	36.09	22.16	156.99	374.89	925.03	1,391.78	1,352.21	39.57	35.174	
6,600.00	6,247.34	5,206.16	5,065.00	36.28	22.16	158.16	374.89	925.03	1,475.39	1,436.30	39.09	37.743	
6,700.00	6,347.21	5,206.16	5,065.00	36.42	22.16	159.27	374.89	925.03	1,559.25	1,520.67	38.58	40.417	
6,793.80	6,441.00	5,206.16	5,065.00	36.51	22.16	-149.27	374.89	925.03	1,638.03	1,599.95	38.07	43.025	
6,800.00	6,447.20	5,206.16	5,065.00	36.51	22.16	-149.27	374.89	925.03	1,643.23	1,605.15	38.08	43.153	
6,900.00	6,547.20	5,206.16	5,065.00	36.59	22.16	-149.27	374.89	925.03	1,728.19	1,689.97	38.22	45.218	
7,000.00	6,647.20	5,206.16	5,065.00	36.68	22.16	-149.27	374.89	925.03	1,814.69	1,776.33	38.36	47.306	
7,100.00	6,747.20	5,206.16	5,065.00	36.76	22.16	-149.27	374.89	925.03	1,902.51	1,864.00	38.50	49.412	
7,200.00	6,847.20	5,206.16	5,065.00	36.85	22.16	-149.27	374.89	925.03	1,991.47	1,952.83	38.65	51.530	
7,300.00	6,947.20	5,206.16	5,065.00	36.94	22.16	-149.27	374.89	925.03	2,081.44	2,042.65	38.79	53.656	
7,400.00	7,047.20	5,206.16	5,065.00	37.03	22.16	-149.27	374.89	925.03	2,172.29	2,133.35	38.94	55.786	
7,500.00	7,147.20	5,206.16	5,065.00	37.12	22.16	-149.27	374.89	925.03	2,263.91	2,224.82	39.09	57.919	
7,600.00	7,247.20	5,206.16	5,065.00	37.21	22.16	-149.27	374.89	925.03	2,356.21	2,316.97	39.24	60.051	
7,700.00	7,347.20	5,206.16	5,065.00	37.30	22.16	-149.27	374.89	925.03	2,449.12	2,409.73	39.39	62.180	
7,800.00	7,447.20	5,206.16	5,065.00	37.39	22.16	-149.27	374.89	925.03	2,542.56	2,503.02	39.54	64.304	
7,900.00	7,547.20	5,206.16	5,065.00	37.49	22.16	-149.27	374.89	925.03	2,636.48	2,596.79	39.69	66.422	
8,000.00	7,647.20	5,206.16	5,065.00	37.58	22.16	-149.27	374.89	925.03	2,730.84	2,690.99	39.85	68.533	
8,100.00	7,747.20	5,206.16	5,065.00	37.68	22.16	-149.27	374.89	925.03	2,825.58	2,785.58	40.00	70.635	
8,200.00	7,847.20	5,206.16	5,065.00	37.78	22.16	-149.27	374.89	925.03	2,920.68	2,880.52	40.16	72.728	
8,300.00	7,947.20	5,206.16	5,065.00	37.88	22.16	-149.27	374.89	925.03	3,016.09	2,975.77	40.32	74.810	
8,400.00	8,047.20	5,206.16	5,065.00	37.98	22.16	-149.27	374.89	925.03	3,111.79	3,071.31	40.48	76.881	
8,508.80	8,156.00	5,206.16	5,065.00	38.08	22.16	-149.27	374.89	925.03	3,216.21	3,175.56	40.65	79.120	

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_JESSER 28-2
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 28-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_JESSER 28-2	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						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	-91.01	-0.35	-19.87	19.87				
100.00	100.00	100.00	100.00	0.10	0.10	-91.01	-0.35	-19.87	19.87	19.68	0.19	104.001	
200.00	200.00	200.00	200.00	0.32	0.32	-91.01	-0.35	-19.87	19.87	19.23	0.64	31.018	
300.00	300.00	300.00	300.00	0.55	0.55	-91.01	-0.35	-19.87	19.87	18.78	1.09	18.227	
400.00	400.00	400.00	400.00	0.77	0.77	-91.01	-0.35	-19.87	19.87	18.33	1.54	12.905	
500.00	500.00	500.00	500.00	0.99	0.99	-91.01	-0.35	-19.87	19.87	17.88	1.99	9.989	
600.00	600.00	600.00	600.00	1.22	1.22	-91.01	-0.35	-19.87	19.87	17.43	2.44	8.148	
700.00	700.00	700.00	700.00	1.44	1.44	-91.01	-0.35	-19.87	19.87	16.98	2.89	6.879	
800.00	800.00	800.00	800.00	1.67	1.67	-91.01	-0.35	-19.87	19.87	16.53	3.34	5.953	
900.00	900.00	900.00	900.00	1.89	1.89	-91.01	-0.35	-19.87	19.87	16.08	3.79	5.246	
1,000.00	1,000.00	1,000.00	1,000.00	2.12	2.12	-91.01	-0.35	-19.87	19.87	15.63	4.24	4.690	
1,100.00	1,100.00	1,100.00	1,100.00	2.34	2.34	-91.01	-0.35	-19.87	19.87	15.18	4.69	4.240	
1,200.00	1,200.00	1,200.00	1,200.00	2.57	2.57	-91.01	-0.35	-19.87	19.87	14.73	5.14	3.869	
1,300.00	1,300.00	1,300.00	1,300.00	2.79	2.79	-91.01	-0.35	-19.87	19.87	14.28	5.59	3.557 CC, ES, SF	
1,400.00	1,399.98	1,399.52	1,399.50	3.01	3.01	-140.69	1.00	-20.94	22.29	16.27	6.02	3.702	
1,500.00	1,499.84	1,498.69	1,498.53	3.23	3.23	-139.11	5.04	-24.15	29.57	23.12	6.45	4.586	
1,600.00	1,599.45	1,597.15	1,596.62	3.46	3.46	-137.67	11.70	-29.45	41.68	34.81	6.87	6.066	
1,700.00	1,698.70	1,694.58	1,693.34	3.70	3.69	-136.59	20.89	-36.75	58.58	51.28	7.30	8.021	
1,800.00	1,797.47	1,790.66	1,788.26	3.96	3.95	-135.79	32.46	-45.95	80.18	72.44	7.75	10.349	
1,900.00	1,895.62	1,886.12	1,882.10	4.25	4.22	-135.29	46.18	-56.86	106.19	97.97	8.22	12.925	
2,000.00	1,993.06	1,981.89	1,976.15	4.59	4.52	-135.72	60.32	-68.10	134.92	126.21	8.71	15.492	
2,100.00	2,089.64	2,076.83	2,069.39	4.97	4.83	-136.69	74.34	-79.25	166.10	156.88	9.22	18.007	
2,200.00	2,185.27	2,170.84	2,161.71	5.41	5.15	-137.89	88.22	-90.29	199.80	190.04	9.76	20.470	
2,300.00	2,279.82	2,263.80	2,253.00	5.92	5.48	-139.16	101.95	-101.20	236.09	225.77	10.32	22.884	
2,400.00	2,373.17	2,355.61	2,343.16	6.49	5.81	-140.43	115.50	-111.98	275.02	264.13	10.89	25.253	
2,500.00	2,465.21	2,446.13	2,432.06	7.13	6.14	-141.64	128.87	-122.61	316.65	305.17	11.48	27.582	
2,535.80	2,497.83	2,478.21	2,463.56	7.37	6.26	-142.05	133.61	-126.37	332.21	320.52	11.69	28.407	
2,600.00	2,556.15	2,535.58	2,519.90	7.83	6.47	-143.09	142.08	-133.11	360.48	348.35	12.13	29.709	
2,700.00	2,646.99	2,624.93	2,607.65	8.56	6.80	-144.41	155.28	-143.60	404.67	391.84	12.83	31.540	
2,800.00	2,737.82	2,714.29	2,695.40	9.30	7.14	-145.48	168.47	-154.09	449.00	435.46	13.54	33.159	
2,900.00	2,828.66	2,803.64	2,783.15	10.07	7.49	-146.35	181.66	-164.58	493.43	479.17	14.26	34.597	
3,000.00	2,919.50	2,893.00	2,870.90	10.84	7.83	-147.08	194.86	-175.07	537.94	522.95	14.99	35.880	
3,100.00	3,010.34	2,982.35	2,958.65	11.63	8.18	-147.70	208.05	-185.56	582.51	566.78	15.73	37.028	
3,200.00	3,101.18	3,071.70	3,046.40	12.42	8.53	-148.23	221.25	-196.05	627.12	610.65	16.48	38.062	
3,300.00	3,192.02	3,161.06	3,134.14	13.22	8.88	-148.70	234.44	-206.54	671.78	654.55	17.23	38.995	
3,400.00	3,282.86	3,250.41	3,221.89	14.02	9.24	-149.10	247.64	-217.04	716.46	698.48	17.98	39.842	
3,500.00	3,373.70	3,339.77	3,309.64	14.83	9.60	-149.46	260.83	-227.53	761.17	742.43	18.74	40.612	
3,600.00	3,464.54	3,429.12	3,397.39	15.65	9.95	-149.77	274.03	-238.02	805.90	786.40	19.51	41.316	
3,700.00	3,555.38	3,518.47	3,485.14	16.46	10.31	-150.06	287.22	-248.51	850.65	830.38	20.27	41.961	
3,800.00	3,646.22	3,607.83	3,572.89	17.28	10.67	-150.31	300.42	-259.00	895.41	874.37	21.04	42.553	
3,900.00	3,737.06	3,697.18	3,660.64	18.10	11.03	-150.54	313.61	-269.49	940.19	918.37	21.81	43.100	
4,000.00	3,827.89	3,786.54	3,748.39	18.92	11.39	-150.75	326.81	-279.98	984.98	962.39	22.59	43.605	
4,100.00	3,918.73	3,875.89	3,836.14	19.75	11.75	-150.94	340.00	-290.47	1,029.77	1,006.41	23.37	44.073	
4,200.00	4,009.57	3,965.24	3,923.89	20.57	12.12	-151.12	353.20	-300.96	1,074.58	1,050.43	24.14	44.507	
4,300.00	4,100.41	4,054.60	4,011.64	21.40	12.48	-151.28	366.39	-311.45	1,119.39	1,094.47	24.92	44.912	
4,400.00	4,191.25	4,143.95	4,099.39	22.23	12.84	-151.43	379.59	-321.94	1,164.21	1,138.50	25.71	45.290	
4,500.00	4,282.09	4,233.31	4,187.14	23.06	13.21	-151.57	392.78	-332.43	1,209.04	1,182.55	26.49	45.644	
4,600.00	4,372.93	4,322.66	4,274.89	23.89	13.57	-151.70	405.98	-342.92	1,253.87	1,226.59	27.27	45.975	
4,700.00	4,463.77	4,412.01	4,362.64	24.72	13.94	-151.82	419.17	-353.41	1,298.70	1,270.64	28.06	46.286	
4,800.00	4,554.61	4,501.37	4,450.39	25.55	14.31	-151.93	432.37	-363.91	1,343.54	1,314.70	28.84	46.579	
4,900.00	4,645.45	4,590.72	4,538.14	26.39	14.67	-152.03	445.56	-374.40	1,388.38	1,358.75	29.63	46.854	
5,000.00	4,736.29	4,680.08	4,625.89	27.22	15.04	-152.13	458.75	-384.89	1,433.23	1,402.81	30.42	47.114	

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 28-2
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 28-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_JESSER 28-2	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						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	4,827.12	4,769.43	4,713.64	28.05	15.41	-152.22	471.95	-395.38	1,478.08	1,446.87	31.21	47.360	
5,200.00	4,917.96	4,858.79	4,801.39	28.89	15.78	-152.31	485.14	-405.87	1,522.93	1,490.93	32.00	47.593	
5,300.00	5,008.80	4,948.14	4,889.14	29.72	16.14	-152.39	498.34	-416.36	1,567.79	1,535.00	32.79	47.813	
5,400.00	5,099.64	5,037.49	4,976.89	30.56	16.51	-152.47	511.53	-426.85	1,612.64	1,579.06	33.58	48.022	
5,500.00	5,190.48	5,126.85	5,064.64	31.40	16.88	-152.54	524.73	-437.34	1,657.50	1,623.13	34.37	48.221	
5,558.00	5,243.17	5,178.68	5,115.53	31.88	17.09	-152.58	532.38	-443.43	1,683.53	1,648.69	34.83	48.332	
5,600.00	5,281.45	5,216.33	5,152.51	32.19	17.25	-152.79	537.94	-447.85	1,702.12	1,666.91	35.21	48.339	
5,700.00	5,373.58	5,306.94	5,241.49	32.81	17.62	-153.23	551.32	-458.48	1,744.41	1,708.34	36.07	48.357	
5,800.00	5,467.01	5,398.81	5,331.72	33.39	18.00	-153.57	564.89	-469.27	1,783.86	1,746.94	36.92	48.322	
5,900.00	5,561.63	5,491.85	5,423.08	33.92	18.39	-153.82	578.63	-480.19	1,820.41	1,782.68	37.74	48.242	
6,000.00	5,657.31	5,585.92	5,515.46	34.40	18.78	-154.00	592.52	-491.24	1,854.05	1,815.52	38.53	48.122	
6,100.00	5,753.96	5,680.92	5,608.76	34.84	19.17	-154.09	606.55	-502.39	1,884.72	1,845.43	39.29	47.968	
6,200.00	5,851.44	5,776.72	5,702.84	35.22	19.57	-154.12	620.69	-513.64	1,912.42	1,872.40	40.02	47.785	
6,300.00	5,949.64	5,905.47	5,829.68	35.56	19.97	-154.04	637.93	-527.35	1,936.43	1,895.69	40.74	47.531	
6,400.00	6,048.43	6,042.20	5,965.32	35.85	20.32	-154.02	651.37	-538.03	1,955.50	1,914.16	41.34	47.302	
6,500.00	6,147.71	6,180.91	6,103.60	36.09	20.60	-154.07	659.80	-544.73	1,969.51	1,927.69	41.81	47.102	
6,600.00	6,247.34	6,320.82	6,243.43	36.28	20.81	-154.19	663.00	-547.27	1,978.38	1,936.23	42.15	46.937	
6,700.00	6,347.21	6,424.60	6,347.21	36.42	20.95	-154.29	663.02	-547.29	1,982.91	1,940.55	42.36	46.815	
6,793.80	6,441.00	6,518.39	6,441.00	36.51	21.09	-103.87	663.02	-547.29	1,984.29	1,941.77	42.52	46.670	
6,800.00	6,447.20	6,524.58	6,447.20	36.51	21.10	-103.87	663.02	-547.29	1,984.29	1,941.76	42.53	46.652	
6,900.00	6,547.20	6,624.58	6,547.20	36.59	21.25	-103.87	663.02	-547.29	1,984.29	1,941.48	42.81	46.349	
7,000.00	6,647.20	6,724.58	6,647.20	36.68	21.39	-103.87	663.02	-547.29	1,984.29	1,941.20	43.09	46.047	
7,100.00	6,747.20	6,824.58	6,747.20	36.76	21.54	-103.87	663.02	-547.29	1,984.29	1,940.91	43.38	45.746	
7,200.00	6,847.20	6,924.58	6,847.20	36.85	21.70	-103.87	663.02	-547.29	1,984.29	1,940.63	43.66	45.446	
7,300.00	6,947.20	7,024.58	6,947.20	36.94	21.85	-103.87	663.02	-547.29	1,984.29	1,940.34	43.95	45.147	
7,400.00	7,047.20	7,124.58	7,047.20	37.03	22.00	-103.87	663.02	-547.29	1,984.29	1,940.05	44.24	44.849	
7,500.00	7,147.20	7,224.58	7,147.20	37.12	22.16	-103.87	663.02	-547.29	1,984.29	1,939.75	44.54	44.553	
7,600.00	7,247.20	7,324.58	7,247.20	37.21	22.31	-103.87	663.02	-547.29	1,984.29	1,939.45	44.84	44.258	
7,700.00	7,347.20	7,424.58	7,347.20	37.30	22.47	-103.87	663.02	-547.29	1,984.29	1,939.16	45.13	43.964	
7,800.00	7,447.20	7,524.58	7,447.20	37.39	22.63	-103.87	663.02	-547.29	1,984.29	1,938.85	45.44	43.672	
7,900.00	7,547.20	7,624.58	7,547.20	37.49	22.79	-103.87	663.02	-547.29	1,984.29	1,938.55	45.74	43.381	
8,000.00	7,647.20	7,724.58	7,647.20	37.58	22.95	-103.87	663.02	-547.29	1,984.29	1,938.24	46.05	43.093	
8,100.00	7,747.20	7,824.58	7,747.20	37.68	23.11	-103.87	663.02	-547.29	1,984.29	1,937.93	46.36	42.805	
8,200.00	7,847.20	7,924.58	7,847.20	37.78	23.27	-103.87	663.02	-547.29	1,984.29	1,937.62	46.67	42.520	
8,300.00	7,947.20	8,024.58	7,947.20	37.88	23.44	-103.87	663.02	-547.29	1,984.29	1,937.31	46.98	42.236	
8,400.00	8,047.20	8,124.58	8,047.20	37.98	23.60	-103.87	663.02	-547.29	1,984.29	1,936.99	47.30	41.954	
8,508.80	8,156.00	8,233.39	8,156.00	38.08	23.78	-103.87	663.02	-547.29	1,984.29	1,936.65	47.64	41.650	

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_JESSER 28-2
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 28-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_JESSER 28-2	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	
0.00	0.00	0.00	0.00	0.00	0.00	-90.69	-0.72	-59.88	59.88				
100.00	100.00	100.00	100.00	0.10	0.10	-90.69	-0.72	-59.88	59.88	59.69	0.19	313.441	
200.00	200.00	200.00	200.00	0.32	0.32	-90.69	-0.72	-59.88	59.88	59.24	0.64	93.483	
300.00	300.00	300.00	300.00	0.55	0.55	-90.69	-0.72	-59.88	59.88	58.79	1.09	54.933	
400.00	400.00	400.00	400.00	0.77	0.77	-90.69	-0.72	-59.88	59.88	58.34	1.54	38.894	
500.00	500.00	500.00	500.00	0.99	0.99	-90.69	-0.72	-59.88	59.88	57.89	1.99	30.105	
600.00	600.00	600.00	600.00	1.22	1.22	-90.69	-0.72	-59.88	59.88	57.44	2.44	24.555	
700.00	700.00	700.00	700.00	1.44	1.44	-90.69	-0.72	-59.88	59.88	57.00	2.89	20.734	
800.00	800.00	800.00	800.00	1.67	1.67	-90.69	-0.72	-59.88	59.88	56.55	3.34	17.941	
900.00	900.00	900.00	900.00	1.89	1.89	-90.69	-0.72	-59.88	59.88	56.10	3.79	15.812	
1,000.00	1,000.00	1,000.00	1,000.00	2.12	2.12	-90.69	-0.72	-59.88	59.88	55.65	4.24	14.134	
1,100.00	1,100.00	1,100.00	1,100.00	2.34	2.34	-90.69	-0.72	-59.88	59.88	55.20	4.69	12.778	
1,200.00	1,200.00	1,200.00	1,200.00	2.57	2.57	-90.69	-0.72	-59.88	59.88	54.75	5.14	11.660	
1,300.00	1,300.00	1,300.00	1,300.00	2.79	2.79	-90.69	-0.72	-59.88	59.88	54.30	5.59	10.721 CC, ES	
1,400.00	1,399.98	1,399.20	1,399.18	3.01	2.99	-143.62	-2.35	-60.43	61.88	55.88	6.00	10.319 SF	
1,500.00	1,499.84	1,497.73	1,497.57	3.23	3.16	-150.10	-7.18	-62.08	68.49	62.11	6.37	10.746	
1,600.00	1,599.45	1,594.96	1,594.44	3.46	3.34	-158.27	-15.08	-64.77	81.01	74.26	6.75	12.003	
1,700.00	1,698.70	1,690.28	1,689.07	3.70	3.54	-166.00	-25.85	-68.43	100.40	93.28	7.12	14.098	
1,800.00	1,797.47	1,783.13	1,780.84	3.96	3.75	-172.29	-39.20	-72.97	126.89	119.40	7.49	16.942	
1,900.00	1,895.62	1,873.01	1,869.19	4.25	3.99	-177.08	-54.79	-78.28	160.23	152.37	7.85	20.405	
2,000.00	1,993.06	1,959.50	1,953.69	4.59	4.25	-179.33	-72.27	-84.22	199.98	191.77	8.21	24.371	
2,100.00	2,089.64	2,048.51	2,040.36	4.97	4.55	-176.63	-91.50	-90.77	244.58	236.01	8.57	28.538	
2,200.00	2,185.27	2,135.94	2,125.48	5.41	4.87	-174.75	-110.38	-97.19	292.56	283.63	8.93	32.761	
2,300.00	2,279.82	2,221.67	2,208.95	5.92	5.19	-173.42	-128.90	-103.49	343.70	334.41	9.29	37.008	
2,400.00	2,373.17	2,305.60	2,290.66	6.49	5.52	-172.43	-147.03	-109.66	397.87	388.23	9.64	41.263	
2,500.00	2,465.21	2,387.63	2,370.53	7.13	5.86	-171.68	-164.74	-115.69	454.95	444.96	10.00	45.510	
2,535.80	2,497.83	2,416.52	2,398.66	7.37	5.98	-171.46	-170.98	-117.81	476.08	465.96	10.12	47.029	
2,600.00	2,556.15	2,468.09	2,448.86	7.83	6.19	-171.23	-182.12	-121.60	514.29	503.85	10.44	49.259	
2,700.00	2,646.99	2,548.41	2,527.07	8.56	6.53	-170.94	-199.47	-127.51	573.81	562.87	10.94	52.429	
2,800.00	2,737.82	2,628.73	2,605.27	9.30	6.88	-170.70	-216.82	-133.41	633.34	621.89	11.46	55.270	
2,900.00	2,828.66	2,709.06	2,683.48	10.07	7.23	-170.50	-234.17	-139.31	692.88	680.90	11.98	57.822	
3,000.00	2,919.50	2,789.38	2,761.68	10.84	7.59	-170.34	-251.52	-145.22	752.43	739.91	12.52	60.121	
3,100.00	3,010.34	2,869.70	2,839.88	11.63	7.95	-170.19	-268.87	-151.12	811.97	798.92	13.05	62.197	
3,200.00	3,101.18	2,950.03	2,918.09	12.42	8.31	-170.07	-286.22	-157.02	871.52	857.92	13.60	64.081	
3,300.00	3,192.02	3,030.35	2,996.29	13.22	8.68	-169.96	-303.57	-162.93	931.07	916.92	14.15	65.795	
3,400.00	3,282.86	3,110.67	3,074.50	14.02	9.04	-169.87	-320.92	-168.83	990.63	975.92	14.71	67.359	
3,500.00	3,373.70	3,190.99	3,152.70	14.83	9.41	-169.79	-338.27	-174.73	1,050.18	1,034.91	15.27	68.790	
3,600.00	3,464.54	3,271.32	3,230.91	15.65	9.79	-169.71	-355.62	-180.64	1,109.74	1,093.91	15.83	70.102	
3,700.00	3,555.38	3,351.64	3,309.11	16.46	10.16	-169.65	-372.97	-186.54	1,169.29	1,152.90	16.40	71.309	
3,800.00	3,646.22	3,431.96	3,387.32	17.28	10.53	-169.59	-390.32	-192.45	1,228.85	1,211.89	16.97	72.424	
3,900.00	3,737.06	3,512.29	3,465.52	18.10	10.91	-169.53	-407.66	-198.35	1,288.41	1,270.87	17.54	73.455	
4,000.00	3,827.89	3,592.61	3,543.73	18.92	11.29	-169.48	-425.01	-204.25	1,347.97	1,329.86	18.12	74.410	
4,100.00	3,918.73	3,672.93	3,621.93	19.75	11.67	-169.44	-442.36	-210.16	1,407.53	1,388.84	18.69	75.297	
4,200.00	4,009.57	3,753.26	3,700.13	20.57	12.05	-169.39	-459.71	-216.06	1,467.09	1,447.82	19.27	76.123	
4,300.00	4,100.41	3,833.58	3,778.34	21.40	12.43	-169.35	-477.06	-221.96	1,526.65	1,506.80	19.85	76.894	
4,400.00	4,191.25	3,913.90	3,856.54	22.23	12.81	-169.32	-494.41	-227.87	1,586.21	1,565.78	20.44	77.615	
4,500.00	4,282.09	3,994.23	3,934.75	23.06	13.19	-169.29	-511.76	-233.77	1,645.78	1,624.76	21.02	78.291	
4,600.00	4,372.93	4,074.55	4,012.95	23.89	13.58	-169.26	-529.11	-239.67	1,705.34	1,683.73	21.61	78.924	
4,700.00	4,463.77	4,154.87	4,091.16	24.72	13.96	-169.23	-546.46	-245.58	1,764.90	1,742.71	22.19	79.519	
4,800.00	4,554.61	4,235.20	4,169.36	25.55	14.34	-169.20	-563.81	-251.48	1,824.46	1,801.68	22.78	80.080	
4,900.00	4,645.45	4,315.52	4,247.57	26.39	14.73	-169.17	-581.16	-257.38	1,884.03	1,860.65	23.37	80.608	
5,000.00	4,736.29	4,395.84	4,325.77	27.22	15.11	-169.15	-598.51	-263.29	1,943.59	1,919.63	23.96	81.107	

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 28-2
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 28-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_JESSER 28-2	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	4,827.12	4,476.16	4,403.98	28.05	15.50	169.13	-615.86	-269.19	2,003.15	1,978.60	24.55	81.579	
5,200.00	4,917.96	4,556.49	4,482.18	28.89	15.89	169.11	-633.21	-275.09	2,062.72	2,037.57	25.15	82.025	
5,300.00	5,008.80	4,636.81	4,560.38	29.72	16.27	169.09	-650.56	-281.00	2,122.28	2,096.54	25.74	82.449	
5,400.00	5,099.64	4,717.13	4,638.59	30.56	16.66	169.07	-667.91	-286.90	2,181.85	2,155.51	26.33	82.851	
5,500.00	5,190.48	4,797.46	4,716.79	31.40	17.05	169.05	-685.26	-292.80	2,241.41	2,214.48	26.93	83.233	
5,558.00	5,243.17	4,844.05	4,762.16	31.88	17.27	169.04	-695.32	-296.23	2,275.96	2,248.69	27.27	83.446	
5,600.00	5,281.45	4,877.96	4,795.17	32.19	17.44	169.15	-702.65	-298.72	2,300.73	2,273.12	27.62	83.313	
5,700.00	5,373.58	4,960.11	4,875.16	32.81	17.83	169.37	-720.39	-304.76	2,357.73	2,329.35	28.38	83.069	
5,800.00	5,467.01	5,044.16	4,956.99	33.39	18.24	169.56	-738.54	-310.94	2,411.88	2,382.76	29.12	82.820	
5,900.00	5,561.63	5,130.00	5,040.56	33.92	18.65	169.71	-757.08	-317.24	2,463.11	2,433.28	29.83	82.571	
6,000.00	5,657.31	5,217.52	5,125.78	34.40	19.08	169.82	-775.99	-323.68	2,511.37	2,480.86	30.51	82.326	
6,100.00	5,753.96	5,306.63	5,212.54	34.84	19.51	169.91	-795.24	-330.23	2,556.59	2,525.45	31.14	82.089	
6,200.00	5,851.44	5,397.21	5,300.73	35.22	19.95	169.97	-814.80	-336.88	2,598.73	2,566.99	31.74	81.863	
6,300.00	5,949.64	5,489.16	5,390.25	35.56	20.40	170.00	-834.66	-343.64	2,637.74	2,605.44	32.31	81.650	
6,400.00	6,048.43	5,582.35	5,480.99	35.85	20.85	170.01	-854.79	-350.49	2,673.57	2,640.75	32.82	81.451	
6,500.00	6,147.71	5,676.69	5,572.83	36.09	21.31	169.99	-875.17	-357.42	2,706.18	2,672.88	33.30	81.268	
6,600.00	6,247.34	5,769.66	5,669.02	36.28	21.74	169.60	-895.86	-363.18	2,731.15	2,696.48	33.67	78.774	
6,700.00	6,347.21	5,862.95	5,769.21	36.42	22.17	169.64	-915.47	-368.75	2,756.59	2,721.41	34.01	77.786	
6,793.80	6,441.00	5,951.73	5,861.00	36.51	22.27	-139.89	-935.47	-374.75	2,781.10	2,746.74	34.36	77.424	
6,800.00	6,447.20	5,957.93	5,867.20	36.51	22.28	-139.89	-935.47	-374.75	2,781.10	2,746.74	34.36	77.384	
6,900.00	6,547.20	6,057.93	5,967.20	36.59	22.39	-139.89	-955.47	-384.75	2,738.10	2,702.41	35.69	76.709	
7,000.00	6,647.20	6,157.93	6,067.20	36.68	22.50	-139.89	-955.47	-384.75	2,738.10	2,702.09	36.01	76.040	
7,100.00	6,747.20	6,257.93	6,167.20	36.76	22.61	-139.89	-955.47	-384.75	2,738.10	2,701.78	36.33	75.376	
7,200.00	6,847.20	6,357.93	6,267.20	36.85	22.73	-139.89	-955.47	-384.75	2,738.10	2,701.46	36.65	74.719	
7,300.00	6,947.20	6,457.93	6,367.20	36.94	22.85	-139.89	-955.47	-384.75	2,738.10	2,701.13	36.97	74.067	
7,400.00	7,047.20	6,557.93	6,467.20	37.03	22.96	-139.89	-955.47	-384.75	2,738.10	2,700.81	37.29	73.421	
7,500.00	7,147.20	6,657.93	6,567.20	37.12	23.08	-139.89	-955.47	-384.75	2,738.10	2,700.48	37.62	72.781	
7,600.00	7,247.20	6,757.93	6,667.20	37.21	23.20	-139.89	-955.47	-384.75	2,738.10	2,700.15	37.95	72.148	
7,700.00	7,347.20	6,857.93	6,767.20	37.30	23.33	-139.89	-955.47	-384.75	2,738.10	2,699.82	38.28	71.521	
7,800.00	7,447.20	6,957.93	6,867.20	37.39	23.45	-139.89	-955.47	-384.75	2,738.10	2,699.48	38.62	70.901	
7,900.00	7,547.20	7,057.93	6,967.20	37.49	23.58	-139.89	-955.47	-384.75	2,738.10	2,699.15	38.96	70.287	
8,000.00	7,647.20	7,157.93	7,067.20	37.58	23.70	-139.89	-955.47	-384.75	2,738.10	2,698.81	39.30	69.680	
8,100.00	7,747.20	7,257.93	7,167.20	37.68	23.83	-139.89	-955.47	-384.75	2,738.10	2,698.46	39.64	69.079	
8,200.00	7,847.20	7,357.93	7,267.20	37.78	23.96	-139.89	-955.47	-384.75	2,738.10	2,698.12	39.98	68.485	
8,300.00	7,947.20	7,457.93	7,367.20	37.88	24.09	-139.89	-955.47	-384.75	2,738.10	2,697.77	40.33	67.897	
8,400.00	8,047.20	7,557.93	7,467.20	37.98	24.22	-139.89	-955.47	-384.75	2,738.10	2,697.43	40.68	67.316	
8,508.80	8,156.00	7,666.73	7,576.00	38.08	24.37	-139.89	-955.47	-384.75	2,738.10	2,697.05	41.06	66.692	

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_JESSER 28-2
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 28-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_JESSER 28-2	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						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	-90.59	-0.72	-69.95	69.96				
100.00	100.00	100.00	100.00	0.10	0.10	-90.59	-0.72	-69.95	69.96	69.76	0.19	366.163	
200.00	200.00	200.00	200.00	0.32	0.32	-90.59	-0.72	-69.95	69.96	69.32	0.64	109.206	
300.00	300.00	300.00	300.00	0.55	0.55	-90.59	-0.72	-69.95	69.96	68.87	1.09	64.173	
400.00	400.00	400.00	400.00	0.77	0.77	-90.59	-0.72	-69.95	69.96	68.42	1.54	45.436	
500.00	500.00	500.00	500.00	0.99	0.99	-90.59	-0.72	-69.95	69.96	67.97	1.99	35.168	
600.00	600.00	600.00	600.00	1.22	1.22	-90.59	-0.72	-69.95	69.96	67.52	2.44	28.686	
700.00	700.00	700.00	700.00	1.44	1.44	-90.59	-0.72	-69.95	69.96	67.07	2.89	24.221	
800.00	800.00	800.00	800.00	1.67	1.67	-90.59	-0.72	-69.95	69.96	66.62	3.34	20.959	
900.00	900.00	900.00	900.00	1.89	1.89	-90.59	-0.72	-69.95	69.96	66.17	3.79	18.471	
1,000.00	1,000.00	1,000.00	1,000.00	2.12	2.12	-90.59	-0.72	-69.95	69.96	65.72	4.24	16.511	
1,100.00	1,100.00	1,100.00	1,100.00	2.34	2.34	-90.59	-0.72	-69.95	69.96	65.27	4.69	14.928	
1,200.00	1,200.00	1,200.00	1,200.00	2.57	2.57	-90.59	-0.72	-69.95	69.96	64.82	5.14	13.621	
1,300.00	1,300.00	1,300.00	1,300.00	2.79	2.79	-90.59	-0.72	-69.95	69.96	64.37	5.59	12.525 CC, ES	
1,400.00	1,399.98	1,398.99	1,398.98	3.01	2.99	-142.76	-1.83	-70.59	72.01	66.01	6.00	12.006 SF	
1,500.00	1,499.84	1,497.48	1,497.39	3.23	3.16	-147.33	-5.13	-72.51	78.51	72.13	6.38	12.311	
1,600.00	1,599.45	1,594.97	1,594.68	3.46	3.34	-153.37	-10.57	-75.65	90.25	83.50	6.75	13.362	
1,700.00	1,698.70	1,690.99	1,690.30	3.70	3.54	-159.48	-18.03	-79.96	107.91	100.78	7.13	15.138	
1,800.00	1,797.47	1,785.08	1,783.78	3.96	3.74	-164.81	-27.35	-85.34	131.75	124.25	7.49	17.579	
1,900.00	1,895.62	1,876.85	1,874.66	4.25	3.96	-169.12	-38.36	-91.71	161.71	153.86	7.85	20.591	
2,000.00	1,993.06	1,965.91	1,962.54	4.59	4.19	-172.50	-50.84	-98.92	197.57	189.37	8.20	24.083	
2,100.00	2,089.64	2,051.93	2,047.08	4.97	4.44	-175.12	-64.59	-106.87	239.03	230.49	8.55	27.972	
2,200.00	2,185.27	2,134.64	2,128.01	5.41	4.71	-177.17	-79.35	-115.40	285.79	276.91	8.88	32.191	
2,300.00	2,279.82	2,213.80	2,205.11	5.92	4.99	-178.78	-94.90	-124.39	337.53	328.33	9.20	36.686	
2,400.00	2,373.17	2,289.22	2,278.20	6.49	5.28	-179.92	-111.00	-133.69	393.98	384.47	9.52	41.404	
2,500.00	2,465.21	2,360.76	2,347.18	7.13	5.58	-178.85	-127.42	-143.18	454.85	445.03	9.82	46.310	
2,535.80	2,497.83	2,387.72	2,373.10	7.37	5.69	-178.49	-133.85	-146.90	477.61	467.68	9.93	48.075	
2,600.00	2,556.15	2,436.85	2,420.33	7.83	5.92	-177.93	-145.57	-153.67	518.76	508.53	10.23	50.708	
2,700.00	2,646.99	2,513.39	2,493.90	8.56	6.27	-177.21	-163.82	-164.22	582.91	572.21	10.70	54.491	
2,800.00	2,737.82	2,589.92	2,567.48	9.30	6.64	-176.64	-182.07	-174.76	647.10	635.92	11.18	57.899	
2,900.00	2,828.66	2,666.45	2,641.05	10.07	7.01	-176.16	-200.32	-185.31	711.32	699.65	11.67	60.977	
3,000.00	2,919.50	2,742.99	2,714.62	10.84	7.39	-175.77	-218.57	-195.86	775.56	763.40	12.16	63.769	
3,100.00	3,010.34	2,819.52	2,788.19	11.63	7.78	-175.44	-236.82	-206.41	839.83	827.16	12.67	66.307	
3,200.00	3,101.18	2,896.05	2,861.76	12.42	8.17	-175.15	-255.07	-216.96	904.10	890.93	13.18	68.620	
3,300.00	3,192.02	2,972.58	2,935.34	13.22	8.57	-174.90	-273.32	-227.51	968.39	954.70	13.69	70.727	
3,400.00	3,282.86	3,049.12	3,008.91	14.02	8.97	-174.69	-291.58	-238.05	1,032.69	1,018.48	14.21	72.658	
3,500.00	3,373.70	3,125.65	3,082.48	14.83	9.37	-174.49	-309.83	-248.60	1,097.00	1,082.26	14.74	74.432	
3,600.00	3,464.54	3,202.18	3,156.05	15.65	9.78	-174.32	-328.08	-259.15	1,161.31	1,146.04	15.27	76.066	
3,700.00	3,555.38	3,278.72	3,229.63	16.46	10.19	-174.17	-346.33	-269.70	1,225.63	1,209.83	15.80	77.570	
3,800.00	3,646.22	3,355.25	3,303.20	17.28	10.60	-174.03	-364.58	-280.25	1,289.95	1,273.61	16.34	78.961	
3,900.00	3,737.06	3,431.78	3,376.77	18.10	11.02	-173.91	-382.83	-290.79	1,354.28	1,337.40	16.88	80.252	
4,000.00	3,827.89	3,508.31	3,450.34	18.92	11.44	-173.79	-401.08	-301.34	1,418.61	1,401.19	17.42	81.451	
4,100.00	3,918.73	3,584.85	3,523.92	19.75	11.85	-173.69	-419.33	-311.89	1,482.94	1,464.98	17.96	82.565	
4,200.00	4,009.57	3,661.38	3,597.49	20.57	12.27	-173.60	-437.59	-322.44	1,547.27	1,528.77	18.51	83.604	
4,300.00	4,100.41	3,737.91	3,671.06	21.40	12.70	-173.51	-455.84	-332.99	1,611.61	1,592.56	19.06	84.576	
4,400.00	4,191.25	3,814.45	3,744.63	22.23	13.12	-173.43	-474.09	-343.54	1,675.95	1,656.35	19.60	85.486	
4,500.00	4,282.09	3,890.98	3,818.21	23.06	13.54	-173.35	-492.34	-354.08	1,740.29	1,720.14	20.16	86.339	
4,600.00	4,372.93	3,967.51	3,891.78	23.89	13.97	-173.28	-510.59	-364.63	1,804.64	1,783.93	20.71	87.139	
4,700.00	4,463.77	4,044.04	3,965.35	24.72	14.39	-173.22	-528.84	-375.18	1,868.98	1,847.72	21.26	87.893	
4,800.00	4,554.61	4,120.58	4,038.92	25.55	14.82	-173.16	-547.09	-385.73	1,933.33	1,911.51	21.82	88.603	
4,900.00	4,645.45	4,197.11	4,112.50	26.39	15.25	-173.10	-565.34	-396.28	1,997.67	1,975.30	22.38	89.273	
5,000.00	4,736.29	4,273.64	4,186.07	27.22	15.67	-173.05	-583.59	-406.82	2,062.02	2,039.09	22.94	89.905	

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 28-2
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 28-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_JESSER 28-2	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	4,827.12	4,350.18	4,259.64	28.05	16.10	173.00	-601.85	-417.37	2,126.37	2,102.88	23.49	90.504	
5,200.00	4,917.96	4,426.71	4,333.21	28.89	16.53	172.95	-620.10	-427.92	2,190.72	2,166.67	24.05	91.072	
5,300.00	5,008.80	4,503.24	4,406.79	29.72	16.96	172.91	-638.35	-438.47	2,255.07	2,230.46	24.62	91.610	
5,400.00	5,099.64	4,579.77	4,480.36	30.56	17.39	172.87	-656.60	-449.02	2,319.42	2,294.24	25.18	92.121	
5,500.00	5,190.48	4,656.31	4,553.93	31.40	17.82	172.83	-674.85	-459.57	2,383.77	2,358.03	25.74	92.607	
5,558.00	5,243.17	4,700.70	4,596.61	31.88	18.07	172.81	-685.44	-465.68	2,421.10	2,395.03	26.07	92.879	
5,600.00	5,281.45	4,733.03	4,627.69	32.19	18.26	172.88	-693.15	-470.14	2,447.89	2,421.49	26.40	92.712	
5,700.00	5,373.58	4,811.57	4,703.19	32.81	18.70	173.02	-711.88	-480.96	2,509.77	2,482.61	27.16	92.402	
5,800.00	5,467.01	4,892.19	4,780.69	33.39	19.15	173.14	-731.10	-492.08	2,568.89	2,541.00	27.89	92.102	
5,900.00	5,561.63	4,974.79	4,860.10	33.92	19.62	173.24	-750.80	-503.46	2,625.19	2,596.60	28.59	91.817	
6,000.00	5,657.31	5,059.29	4,941.32	34.40	20.10	173.31	-770.95	-515.11	2,678.59	2,649.33	29.26	91.548	
6,100.00	5,753.96	5,145.57	5,024.27	34.84	20.59	173.37	-791.53	-527.00	2,729.03	2,699.14	29.89	91.298	
6,200.00	5,851.44	5,209.79	5,086.00	35.22	20.95	173.43	-806.84	-535.85	2,776.55	2,746.13	30.42	91.274	
6,300.00	5,949.64	5,209.79	5,086.00	35.56	20.95	173.55	-806.84	-535.85	2,823.07	2,792.35	30.72	91.902	
6,400.00	6,048.43	5,209.79	5,086.00	35.85	20.95	173.67	-806.84	-535.85	2,869.29	2,838.33	30.96	92.665	
6,500.00	6,147.71	5,209.79	5,086.00	36.09	20.95	173.78	-806.84	-535.85	2,915.19	2,884.03	31.16	93.562	
6,600.00	6,247.34	5,209.79	5,086.00	36.28	20.95	173.89	-806.84	-535.85	2,960.71	2,929.41	31.30	94.595	
6,700.00	6,347.21	5,209.79	5,086.00	36.42	20.95	174.00	-806.84	-535.85	3,005.82	2,974.43	31.39	95.766	
6,793.80	6,441.00	5,209.79	5,086.00	36.51	20.95	-135.46	-806.84	-535.85	3,047.73	3,016.30	31.42	96.991	
6,800.00	6,447.20	5,209.79	5,086.00	36.51	20.95	-135.46	-806.84	-535.85	3,050.49	3,019.05	31.43	97.051	
6,900.00	6,547.20	5,209.79	5,086.00	36.59	20.95	-135.46	-806.84	-535.85	3,096.40	3,064.81	31.59	98.019	
7,000.00	6,647.20	5,209.79	5,086.00	36.68	20.95	-135.46	-806.84	-535.85	3,144.83	3,113.08	31.75	99.053	
7,100.00	6,747.20	5,209.79	5,086.00	36.76	20.95	-135.46	-806.84	-535.85	3,195.65	3,163.74	31.91	100.147	
7,200.00	6,847.20	5,209.79	5,086.00	36.85	20.95	-135.46	-806.84	-535.85	3,248.76	3,216.68	32.07	101.297	
7,300.00	6,947.20	5,209.79	5,086.00	36.94	20.95	-135.46	-806.84	-535.85	3,304.04	3,271.80	32.23	102.499	
7,400.00	7,047.20	5,209.79	5,086.00	37.03	20.95	-135.46	-806.84	-535.85	3,361.38	3,328.98	32.40	103.749	
7,500.00	7,147.20	5,209.79	5,086.00	37.12	20.95	-135.46	-806.84	-535.85	3,420.69	3,388.13	32.56	105.043	
7,600.00	7,247.20	5,209.79	5,086.00	37.21	20.95	-135.46	-806.84	-535.85	3,481.86	3,449.13	32.73	106.376	
7,700.00	7,347.20	5,209.79	5,086.00	37.30	20.95	-135.46	-806.84	-535.85	3,544.80	3,511.90	32.90	107.746	
7,800.00	7,447.20	5,209.79	5,086.00	37.39	20.95	-135.46	-806.84	-535.85	3,609.41	3,576.34	33.07	109.149	
7,900.00	7,547.20	5,209.79	5,086.00	37.49	20.95	-135.46	-806.84	-535.85	3,675.61	3,642.37	33.24	110.582	
8,000.00	7,647.20	5,209.79	5,086.00	37.58	20.95	-135.46	-806.84	-535.85	3,743.30	3,709.89	33.41	112.041	
8,100.00	7,747.20	5,209.79	5,086.00	37.68	20.95	-135.46	-806.84	-535.85	3,812.42	3,778.84	33.58	113.525	
8,200.00	7,847.20	5,209.79	5,086.00	37.78	20.95	-135.46	-806.84	-535.85	3,882.89	3,849.13	33.76	115.029	
8,300.00	7,947.20	5,209.79	5,086.00	37.88	20.95	-135.46	-806.84	-535.85	3,954.62	3,920.69	33.93	116.553	
8,400.00	8,047.20	5,209.79	5,086.00	37.98	20.95	-135.46	-806.84	-535.85	4,027.57	3,993.46	34.11	118.093	
8,508.80	8,156.00	5,209.79	5,086.00	38.08	20.95	-135.46	-806.84	-535.85	4,108.22	4,073.93	34.30	119.784	

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_JESSER 28-2
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 28-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_JESSER 28-2	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 3-16-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design WELD_JESSER 18-2 PAD - P_BROWN 6-2 - P_BROWN 6-2 - PLAN #1 3-16-10 RHS												Offset Site Error:	0.00 ft
Survey Program: 0-MWD												Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	-90.50	-0.35	-40.01	40.01				
100.00	100.00	100.00	100.00	0.10	0.10	-90.50	-0.35	-40.01	40.01	39.82	0.19	209.442	
200.00	200.00	200.00	200.00	0.32	0.32	-90.50	-0.35	-40.01	40.01	39.37	0.64	62.465	
300.00	300.00	300.00	300.00	0.55	0.55	-90.50	-0.35	-40.01	40.01	38.92	1.09	36.706	
400.00	400.00	400.00	400.00	0.77	0.77	-90.50	-0.35	-40.01	40.01	38.47	1.54	25.989	
500.00	500.00	500.00	500.00	0.99	0.99	-90.50	-0.35	-40.01	40.01	38.03	1.99	20.116	
600.00	600.00	600.00	600.00	1.22	1.22	-90.50	-0.35	-40.01	40.01	37.58	2.44	16.408	
700.00	700.00	700.00	700.00	1.44	1.44	-90.50	-0.35	-40.01	40.01	37.13	2.89	13.854	
800.00	800.00	800.00	800.00	1.67	1.67	-90.50	-0.35	-40.01	40.01	36.68	3.34	11.988	
900.00	900.00	900.00	900.00	1.89	1.89	-90.50	-0.35	-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	-90.50	-0.35	-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	-90.50	-0.35	-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	-90.50	-0.35	-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	-90.50	-0.35	-40.01	40.01	34.43	5.59	7.164	
1,343.35	1,343.34	1,343.82	1,343.82	2.89	2.88	-141.55	-0.56	-39.75	40.01	34.24	5.77	6.937 CC	
1,400.00	1,399.98	1,401.05	1,401.03	3.01	3.00	-144.14	-1.45	-38.61	40.05	34.05	6.01	6.669 ES	
1,500.00	1,499.84	1,501.81	1,501.65	3.23	3.19	-153.46	-4.74	-34.42	40.89	34.49	6.40	6.392 SF	
1,600.00	1,599.45	1,601.99	1,601.43	3.46	3.39	-167.42	-10.17	-27.50	44.48	37.69	6.79	6.548	
1,700.00	1,698.70	1,701.30	1,699.99	3.70	3.61	177.60	-17.68	-17.94	53.03	45.82	7.21	7.356	
1,800.00	1,797.47	1,799.48	1,796.96	3.96	3.85	164.99	-27.17	-5.85	67.56	59.90	7.66	8.822	
1,900.00	1,895.62	1,896.29	1,891.99	4.25	4.13	155.70	-38.53	8.63	87.92	79.76	8.15	10.786	
2,000.00	1,993.06	1,991.54	1,984.84	4.59	4.45	149.12	-51.63	25.33	113.52	104.83	8.69	13.061	
2,100.00	2,089.64	2,086.68	2,077.26	4.97	4.80	145.02	-65.57	43.09	143.24	133.96	9.28	15.437	
2,200.00	2,185.27	2,181.05	2,168.94	5.41	5.17	142.86	-79.39	60.70	175.97	166.07	9.90	17.778	
2,300.00	2,279.82	2,274.55	2,259.77	5.92	5.56	141.82	-93.09	78.16	211.38	200.83	10.55	20.039	
2,400.00	2,373.17	2,367.05	2,349.63	6.49	5.95	141.43	-106.64	95.43	249.36	238.13	11.23	22.208	
2,500.00	2,465.21	2,458.44	2,438.41	7.13	6.36	141.44	-120.03	112.49	289.85	277.92	11.93	24.287	
2,535.80	2,497.83	2,490.87	2,469.92	7.37	6.50	141.50	-124.78	118.54	304.96	292.77	12.19	25.012	
2,600.00	2,556.15	2,548.89	2,526.27	7.83	6.76	141.97	-133.28	129.37	332.36	319.64	12.72	26.139	
2,700.00	2,646.99	2,639.25	2,614.05	8.56	7.18	142.57	-146.52	146.24	375.06	361.51	13.55	27.688	
2,800.00	2,737.82	2,729.61	2,701.83	9.30	7.60	143.05	-159.76	163.11	417.79	403.39	14.39	29.025	
2,900.00	2,828.66	2,819.98	2,789.62	10.07	8.02	143.44	-173.00	179.98	460.54	445.28	15.26	30.186	
3,000.00	2,919.50	2,910.34	2,877.40	10.84	8.45	143.76	-186.24	196.85	503.30	487.17	16.13	31.200	
3,100.00	3,010.34	3,000.70	2,965.18	11.63	8.88	144.03	-199.48	213.72	546.07	529.05	17.02	32.091	
3,200.00	3,101.18	3,091.06	3,052.96	12.42	9.32	144.27	-212.72	230.59	588.85	570.94	17.91	32.878	
3,300.00	3,192.02	3,181.43	3,140.74	13.22	9.76	144.47	-225.95	247.46	631.64	612.83	18.81	33.579	
3,400.00	3,282.86	3,271.79	3,228.52	14.02	10.20	144.64	-239.19	264.33	674.44	654.72	19.72	34.204	
3,500.00	3,373.70	3,362.15	3,316.30	14.83	10.64	144.80	-252.43	281.19	717.23	696.60	20.63	34.766	
3,600.00	3,464.54	3,452.51	3,404.09	15.65	11.09	144.93	-265.67	298.06	760.04	738.49	21.55	35.273	
3,700.00	3,555.38	3,542.88	3,491.87	16.46	11.54	145.06	-278.91	314.93	802.84	780.37	22.47	35.732	
3,800.00	3,646.22	3,633.24	3,579.65	17.28	11.99	145.17	-292.15	331.80	845.65	822.26	23.39	36.149	
3,900.00	3,737.06	3,723.60	3,667.43	18.10	12.44	145.27	-305.39	348.67	888.46	864.14	24.32	36.530	
4,000.00	3,827.89	3,813.96	3,755.21	18.92	12.89	145.36	-318.63	365.54	931.27	906.02	25.25	36.879	
4,100.00	3,918.73	3,904.33	3,842.99	19.75	13.34	145.44	-331.86	382.41	974.09	947.90	26.19	37.200	
4,200.00	4,009.57	3,994.69	3,930.77	20.57	13.79	145.51	-345.10	399.28	1,016.90	989.78	27.12	37.496	
4,300.00	4,100.41	4,085.05	4,018.56	21.40	14.25	145.58	-358.34	416.15	1,059.72	1,031.66	28.06	37.769	
4,400.00	4,191.25	4,175.42	4,106.34	22.23	14.70	145.65	-371.58	433.02	1,102.54	1,073.54	29.00	38.022	
4,500.00	4,282.09	4,265.78	4,194.12	23.06	15.16	145.71	-384.82	449.89	1,145.36	1,115.42	29.94	38.257	
4,600.00	4,372.93	4,356.14	4,281.90	23.89	15.61	145.76	-398.06	466.75	1,188.18	1,157.30	30.88	38.476	
4,700.00	4,463.77	4,446.50	4,369.68	24.72	16.07	145.81	-411.30	483.62	1,231.00	1,199.17	31.82	38.680	
4,800.00	4,554.61	4,536.87	4,457.46	25.55	16.53	145.86	-424.54	500.49	1,273.82	1,241.05	32.77	38.871	
4,900.00	4,645.45	4,627.23	4,545.24	26.39	16.98	145.90	-437.77	517.36	1,316.64	1,282.93	33.72	39.051	

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 28-2
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 28-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_JESSER 28-2	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
5,000.00	4,736.29	4,717.59	4,633.03	27.22	17.44	145.95	-451.01	534.23	1,359.46	1,324.80	34.66	39.219	
5,100.00	4,827.12	4,807.95	4,720.81	28.05	17.90	145.99	-464.25	551.10	1,402.29	1,366.68	35.61	39.377	
5,200.00	4,917.96	4,898.32	4,808.59	28.89	18.36	146.02	-477.49	567.97	1,445.11	1,408.55	36.56	39.526	
5,300.00	5,008.80	4,988.68	4,896.37	29.72	18.82	146.06	-490.73	584.84	1,487.94	1,450.43	37.51	39.667	
5,400.00	5,099.64	5,079.04	4,984.15	30.56	19.28	146.09	-503.97	601.71	1,530.76	1,492.30	38.46	39.799	
5,500.00	5,190.48	5,169.40	5,071.93	31.40	19.74	146.12	-517.21	618.58	1,573.59	1,534.17	39.41	39.925	
5,558.00	5,243.17	5,221.82	5,122.85	31.88	20.01	146.14	-524.88	628.36	1,598.43	1,558.46	39.97	39.995	
5,600.00	5,281.45	5,259.88	5,159.82	32.19	20.20	146.36	-530.46	635.47	1,616.18	1,575.78	40.40	40.004	
5,700.00	5,373.58	5,351.34	5,248.68	32.81	20.67	146.81	-543.86	652.54	1,656.57	1,615.20	41.37	40.038	
5,800.00	5,467.01	5,443.91	5,338.60	33.39	21.14	147.14	-557.42	669.82	1,694.28	1,651.95	42.33	40.022	
5,900.00	5,561.63	5,537.47	5,429.48	33.92	21.62	147.38	-571.13	687.29	1,729.26	1,685.99	43.27	39.962	
6,000.00	5,657.31	5,631.89	5,521.21	34.40	22.10	147.52	-584.96	704.91	1,761.50	1,717.31	44.19	39.863	
6,100.00	5,753.96	5,732.83	5,619.30	34.84	22.59	147.55	-599.67	723.65	1,790.93	1,745.84	45.09	39.722	
6,200.00	5,851.44	5,854.65	5,738.47	35.22	23.05	147.53	-615.24	743.50	1,816.62	1,770.70	45.92	39.559	
6,300.00	5,949.64	5,978.71	5,860.82	35.56	23.42	147.55	-627.87	759.59	1,838.09	1,791.48	46.61	39.437	
6,400.00	6,048.43	6,104.56	5,985.72	35.85	23.73	147.60	-637.33	771.65	1,855.23	1,808.06	47.17	39.328	
6,500.00	6,147.71	6,231.71	6,112.48	36.09	23.97	147.71	-643.44	779.43	1,867.99	1,820.39	47.61	39.238	
6,600.00	6,247.34	6,359.65	6,240.33	36.28	24.15	147.85	-646.08	782.79	1,876.32	1,828.40	47.91	39.159	
6,700.00	6,347.21	6,466.53	6,347.21	36.42	24.28	147.98	-646.19	782.93	1,880.62	1,832.51	48.11	39.092	
6,793.80	6,441.00	6,560.32	6,441.00	36.51	24.38	-161.53	-646.19	782.93	1,881.92	1,833.68	48.24	39.010	
6,800.00	6,447.20	6,566.51	6,447.20	36.51	24.39	-161.53	-646.19	782.93	1,881.92	1,833.66	48.26	38.999	
6,900.00	6,547.20	6,666.51	6,547.20	36.59	24.50	-161.53	-646.19	782.93	1,881.92	1,833.42	48.50	38.804	
7,000.00	6,647.20	6,766.51	6,647.20	36.68	24.62	-161.53	-646.19	782.93	1,881.92	1,833.18	48.74	38.609	
7,100.00	6,747.20	6,866.51	6,747.20	36.76	24.74	-161.53	-646.19	782.93	1,881.92	1,832.93	48.99	38.414	
7,200.00	6,847.20	6,966.51	6,847.20	36.85	24.86	-161.53	-646.19	782.93	1,881.92	1,832.68	49.24	38.219	
7,300.00	6,947.20	7,066.51	6,947.20	36.94	24.98	-161.53	-646.19	782.93	1,881.92	1,832.42	49.49	38.023	
7,400.00	7,047.20	7,166.51	7,047.20	37.03	25.10	-161.53	-646.19	782.93	1,881.92	1,832.17	49.75	37.827	
7,500.00	7,147.20	7,266.51	7,147.20	37.12	25.23	-161.53	-646.19	782.93	1,881.92	1,831.91	50.01	37.631	
7,600.00	7,247.20	7,366.51	7,247.20	37.21	25.35	-161.53	-646.19	782.93	1,881.92	1,831.65	50.27	37.435	
7,700.00	7,347.20	7,466.51	7,347.20	37.30	25.48	-161.53	-646.19	782.93	1,881.92	1,831.38	50.54	37.240	
7,800.00	7,447.20	7,566.51	7,447.20	37.39	25.61	-161.53	-646.19	782.93	1,881.92	1,831.12	50.80	37.044	
7,900.00	7,547.20	7,666.51	7,547.20	37.49	25.74	-161.53	-646.19	782.93	1,881.92	1,830.85	51.07	36.849	
8,000.00	7,647.20	7,766.51	7,647.20	37.58	25.87	-161.53	-646.19	782.93	1,881.92	1,830.58	51.34	36.653	
8,100.00	7,747.20	7,866.51	7,747.20	37.68	26.00	-161.53	-646.19	782.93	1,881.92	1,830.30	51.62	36.459	
8,200.00	7,847.20	7,966.51	7,847.20	37.78	26.13	-161.53	-646.19	782.93	1,881.92	1,830.02	51.89	36.264	
8,300.00	7,947.20	8,066.51	7,947.20	37.88	26.27	-161.53	-646.19	782.93	1,881.92	1,829.74	52.17	36.070	
8,400.00	8,047.20	8,166.51	8,047.20	37.98	26.40	-161.53	-646.19	782.93	1,881.92	1,829.46	52.46	35.876	
8,508.80	8,156.00	8,275.32	8,156.00	38.08	26.55	-161.53	-646.19	782.93	1,881.92	1,829.15	52.76	35.666	

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_JESSER 28-2
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 28-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_JESSER 28-2	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	-90.40	-0.35	-49.81	49.81				
100.00	100.00	100.00	100.00	0.10	0.10	-90.40	-0.35	-49.81	49.81	49.62	0.19	260.701	
200.00	200.00	200.00	200.00	0.32	0.32	-90.40	-0.35	-49.81	49.81	49.17	0.64	77.753	
300.00	300.00	300.00	300.00	0.55	0.55	-90.40	-0.35	-49.81	49.81	48.72	1.09	45.690	
400.00	400.00	400.00	400.00	0.77	0.77	-90.40	-0.35	-49.81	49.81	48.27	1.54	32.350	
500.00	500.00	500.00	500.00	0.99	0.99	-90.40	-0.35	-49.81	49.81	47.82	1.99	25.039	
600.00	600.00	600.00	600.00	1.22	1.22	-90.40	-0.35	-49.81	49.81	47.37	2.44	20.424	
700.00	700.00	700.00	700.00	1.44	1.44	-90.40	-0.35	-49.81	49.81	46.92	2.89	17.245	
800.00	800.00	800.00	800.00	1.67	1.67	-90.40	-0.35	-49.81	49.81	46.47	3.34	14.922	
900.00	900.00	900.00	900.00	1.89	1.89	-90.40	-0.35	-49.81	49.81	46.02	3.79	13.151	
1,000.00	1,000.00	1,000.00	1,000.00	2.12	2.12	-90.40	-0.35	-49.81	49.81	45.57	4.24	11.756	
1,100.00	1,100.00	1,100.00	1,100.00	2.34	2.34	-90.40	-0.35	-49.81	49.81	45.12	4.69	10.628	
1,200.00	1,200.00	1,200.00	1,200.00	2.57	2.57	-90.40	-0.35	-49.81	49.81	44.67	5.14	9.698	
1,300.00	1,300.00	1,300.00	1,300.00	2.79	2.79	-90.40	-0.35	-49.81	49.81	44.22	5.59	8.917 CC, ES	
1,400.00	1,399.98	1,400.81	1,400.79	3.01	2.99	-143.27	-1.36	-48.94	50.35	44.35	6.00	8.388	
1,500.00	1,499.84	1,501.36	1,501.26	3.23	3.18	-150.12	-4.38	-46.35	52.50	46.11	6.39	8.216 SF	
1,600.00	1,599.45	1,601.39	1,601.08	3.46	3.37	-160.08	-9.37	-42.07	57.55	50.77	6.78	8.490	
1,700.00	1,698.70	1,700.67	1,699.93	3.70	3.57	-170.95	-16.28	-36.13	66.94	59.77	7.17	9.334	
1,800.00	1,797.47	1,798.94	1,797.52	3.96	3.79	179.22	-25.05	-28.62	81.54	73.96	7.58	10.760	
1,900.00	1,895.62	1,895.99	1,893.57	4.25	4.03	171.30	-35.57	-19.59	101.48	93.48	8.01	12.675	
2,000.00	1,993.06	1,991.58	1,987.81	4.59	4.29	165.24	-47.74	-9.15	126.51	118.05	8.46	14.951	
2,100.00	2,089.64	2,085.53	2,080.00	4.97	4.58	160.66	-61.44	2.61	156.29	147.34	8.95	17.464	
2,200.00	2,185.27	2,177.63	2,169.93	5.41	4.90	157.15	-76.53	15.56	190.51	181.04	9.47	20.111	
2,300.00	2,279.82	2,267.74	2,257.42	5.92	5.24	154.40	-92.89	29.60	228.92	218.89	10.04	22.807	
2,400.00	2,373.17	2,355.68	2,342.30	6.49	5.62	152.19	-110.36	44.59	271.31	260.67	10.64	25.488	
2,500.00	2,465.21	2,441.34	2,424.43	7.13	6.02	150.35	-128.80	60.41	317.48	306.19	11.30	28.105	
2,535.80	2,497.83	2,471.42	2,453.15	7.37	6.16	149.76	-135.61	66.25	334.90	323.36	11.54	29.020	
2,600.00	2,556.15	2,525.10	2,504.20	7.83	6.44	149.10	-148.17	77.03	366.73	354.68	12.05	30.426	
2,700.00	2,646.99	2,611.59	2,586.33	8.56	6.91	148.16	-168.78	94.71	416.61	403.71	12.90	32.295	
2,800.00	2,737.82	2,698.09	2,668.45	9.30	7.39	147.42	-189.38	112.39	466.55	452.78	13.77	33.879	
2,900.00	2,828.66	2,784.59	2,750.58	10.07	7.88	146.83	-209.98	130.07	516.53	501.87	14.66	35.224	
3,000.00	2,919.50	2,871.08	2,832.71	10.84	8.38	146.34	-230.58	147.74	566.56	550.98	15.57	36.378	
3,100.00	3,010.34	2,957.58	2,914.83	11.63	8.90	145.93	-251.19	165.42	616.61	600.11	16.50	37.372	
3,200.00	3,101.18	3,044.08	2,996.96	12.42	9.41	145.58	-271.79	183.10	666.67	649.24	17.44	38.236	
3,300.00	3,192.02	3,130.58	3,079.09	13.22	9.94	145.28	-292.39	200.78	716.76	698.37	18.38	38.990	
3,400.00	3,282.86	3,217.07	3,161.21	14.02	10.47	145.02	-313.00	218.46	766.85	747.52	19.34	39.652	
3,500.00	3,373.70	3,303.57	3,243.34	14.83	11.00	144.79	-333.60	236.14	816.96	796.66	20.30	40.238	
3,600.00	3,464.54	3,390.07	3,325.47	15.65	11.54	144.59	-354.20	253.81	867.08	845.80	21.27	40.757	
3,700.00	3,555.38	3,476.56	3,407.59	16.46	12.08	144.41	-374.80	271.49	917.20	894.95	22.25	41.220	
3,800.00	3,646.22	3,563.06	3,489.72	17.28	12.62	144.25	-395.41	289.17	967.33	944.10	23.23	41.636	
3,900.00	3,737.06	3,649.56	3,571.85	18.10	13.16	144.10	-416.01	306.85	1,017.47	993.25	24.22	42.010	
4,000.00	3,827.89	3,736.06	3,653.97	18.92	13.71	143.97	-436.61	324.53	1,067.60	1,042.40	25.21	42.349	
4,100.00	3,918.73	3,822.55	3,736.10	19.75	14.26	143.85	-457.22	342.20	1,117.75	1,091.54	26.20	42.657	
4,200.00	4,009.57	3,909.05	3,818.22	20.57	14.81	143.74	-477.82	359.88	1,167.89	1,140.69	27.20	42.937	
4,300.00	4,100.41	3,995.55	3,900.35	21.40	15.36	143.64	-498.42	377.56	1,218.04	1,189.84	28.20	43.193	
4,400.00	4,191.25	4,082.04	3,982.48	22.23	15.92	143.55	-519.02	395.24	1,268.20	1,238.99	29.20	43.428	
4,500.00	4,282.09	4,168.54	4,064.60	23.06	16.47	143.46	-539.63	412.92	1,318.35	1,288.14	30.21	43.644	
4,600.00	4,372.93	4,255.04	4,146.73	23.89	17.03	143.38	-560.23	430.59	1,368.51	1,337.29	31.21	43.843	
4,700.00	4,463.77	4,341.54	4,228.86	24.72	17.58	143.31	-580.83	448.27	1,418.66	1,386.44	32.22	44.027	
4,800.00	4,554.61	4,428.03	4,310.98	25.55	18.14	143.24	-601.43	465.95	1,468.82	1,435.59	33.23	44.198	
4,900.00	4,645.45	4,514.53	4,393.11	26.39	18.70	143.18	-622.04	483.63	1,518.98	1,484.74	34.24	44.357	
5,000.00	4,736.29	4,601.03	4,475.24	27.22	19.26	143.12	-642.64	501.31	1,569.15	1,533.89	35.26	44.505	

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 28-2
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 28-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_JESSER 28-2	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						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	4,827.12	4,687.52	4,557.36	28.05	19.82	143.06	-663.24	518.99	1,619.31	1,583.04	36.27	44.644	
5,200.00	4,917.96	4,774.02	4,639.49	28.89	20.38	143.01	-683.85	536.66	1,669.48	1,632.19	37.29	44.773	
5,300.00	5,008.80	4,860.52	4,721.62	29.72	20.94	142.96	-704.45	554.34	1,719.64	1,681.34	38.30	44.894	
5,400.00	5,099.64	4,947.02	4,803.74	30.56	21.50	142.91	-725.05	572.02	1,769.81	1,730.49	39.32	45.008	
5,500.00	5,190.48	5,033.51	4,885.87	31.40	22.06	142.87	-745.65	589.70	1,819.98	1,779.63	40.34	45.115	
5,558.00	5,243.17	5,083.68	4,933.51	31.88	22.39	142.84	-757.60	599.95	1,849.08	1,808.14	40.93	45.174	
5,600.00	5,281.45	5,120.13	4,968.11	32.19	22.62	143.11	-766.29	607.40	1,869.93	1,828.52	41.41	45.156	
5,700.00	5,373.58	5,207.83	5,051.38	32.81	23.19	143.65	-787.18	625.33	1,917.86	1,875.38	42.48	45.148	
5,800.00	5,467.01	5,250.61	5,092.00	33.39	23.47	144.19	-797.37	634.07	1,963.86	1,920.58	43.28	45.379	
5,900.00	5,561.63	5,250.61	5,092.00	33.92	23.47	144.81	-797.37	634.07	2,010.87	1,967.08	43.78	45.927	
6,000.00	5,657.31	5,250.61	5,092.00	34.40	23.47	145.44	-797.37	634.07	2,059.21	2,014.99	44.23	46.560	
6,100.00	5,753.96	5,250.61	5,092.00	34.84	23.47	146.08	-797.37	634.07	2,108.75	2,064.14	44.61	47.276	
6,200.00	5,851.44	5,250.61	5,092.00	35.22	23.47	146.73	-797.37	634.07	2,159.33	2,114.41	44.92	48.073	
6,300.00	5,949.64	5,250.61	5,092.00	35.56	23.47	147.38	-797.37	634.07	2,210.82	2,165.66	45.16	48.952	
6,400.00	6,048.43	5,250.61	5,092.00	35.85	23.47	148.04	-797.37	634.07	2,263.11	2,217.76	45.34	49.912	
6,500.00	6,147.71	5,250.61	5,092.00	36.09	23.47	148.69	-797.37	634.07	2,316.07	2,270.61	45.45	50.953	
6,600.00	6,247.34	5,250.61	5,092.00	36.28	23.47	149.34	-797.37	634.07	2,369.60	2,324.10	45.50	52.078	
6,700.00	6,347.21	5,250.61	5,092.00	36.42	23.47	149.99	-797.37	634.07	2,423.60	2,378.12	45.48	53.287	
6,793.80	6,441.00	5,250.61	5,092.00	36.51	23.47	-158.95	-797.37	634.07	2,474.60	2,429.19	45.40	54.502	
6,800.00	6,447.20	5,250.61	5,092.00	36.51	23.47	-158.95	-797.37	634.07	2,477.98	2,432.57	45.41	54.568	
6,900.00	6,547.20	5,250.61	5,092.00	36.59	23.47	-158.95	-797.37	634.07	2,534.05	2,488.52	45.54	55.650	
7,000.00	6,647.20	5,250.61	5,092.00	36.68	23.47	-158.95	-797.37	634.07	2,592.77	2,547.11	45.66	56.782	
7,100.00	6,747.20	5,250.61	5,092.00	36.76	23.47	-158.95	-797.37	634.07	2,653.96	2,608.17	45.79	57.961	
7,200.00	6,847.20	5,250.61	5,092.00	36.85	23.47	-158.95	-797.37	634.07	2,717.45	2,671.53	45.92	59.181	
7,300.00	6,947.20	5,250.61	5,092.00	36.94	23.47	-158.95	-797.37	634.07	2,783.09	2,737.04	46.05	60.439	
7,400.00	7,047.20	5,250.61	5,092.00	37.03	23.47	-158.95	-797.37	634.07	2,850.72	2,804.54	46.18	61.731	
7,500.00	7,147.20	5,250.61	5,092.00	37.12	23.47	-158.95	-797.37	634.07	2,920.22	2,873.90	46.31	63.055	
7,600.00	7,247.20	5,250.61	5,092.00	37.21	23.47	-158.95	-797.37	634.07	2,991.44	2,944.99	46.45	64.406	
7,700.00	7,347.20	5,250.61	5,092.00	37.30	23.47	-158.95	-797.37	634.07	3,064.27	3,017.69	46.58	65.782	
7,800.00	7,447.20	5,250.61	5,092.00	37.39	23.47	-158.95	-797.37	634.07	3,138.59	3,091.88	46.72	67.180	
7,900.00	7,547.20	5,250.61	5,092.00	37.49	23.47	-158.95	-797.37	634.07	3,214.31	3,167.46	46.86	68.598	
8,000.00	7,647.20	5,250.61	5,092.00	37.58	23.47	-158.95	-797.37	634.07	3,291.33	3,244.33	47.00	70.034	
8,100.00	7,747.20	5,250.61	5,092.00	37.68	23.47	-158.95	-797.37	634.07	3,369.55	3,322.42	47.14	71.485	
8,200.00	7,847.20	5,250.61	5,092.00	37.78	23.47	-158.95	-797.37	634.07	3,448.90	3,401.62	47.28	72.949	
8,300.00	7,947.20	5,250.61	5,092.00	37.88	23.47	-158.95	-797.37	634.07	3,529.30	3,481.88	47.42	74.424	
8,400.00	8,047.20	5,250.61	5,092.00	37.98	23.47	-158.95	-797.37	634.07	3,610.68	3,563.12	47.57	75.910	
8,508.80	8,156.00	5,250.61	5,092.00	38.08	23.47	-158.95	-797.37	634.07	3,700.26	3,652.54	47.72	77.536	

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_JESSER 28-2
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 28-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_JESSER 28-2	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 3-16-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design WELD_JESSER 18-2 PAD - P_JESSER 21-2 - P_JESSER 21-2 - PLAN #1 3-16-10 RHS												Offset Site Error:	0.00 ft
Survey Program: 0-MWD												Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
0.00	0.00	0.00	0.00	0.00	0.00	89.96	0.01	20.15	20.15				
100.00	100.00	100.00	100.00	0.10	0.10	89.96	0.01	20.15	20.15	19.96	0.19	105.449	
200.00	200.00	200.00	200.00	0.32	0.32	89.96	0.01	20.15	20.15	19.51	0.64	31.450	
300.00	300.00	300.00	300.00	0.55	0.55	89.96	0.01	20.15	20.15	19.06	1.09	18.481	
400.00	400.00	400.00	400.00	0.77	0.77	89.96	0.01	20.15	20.15	18.61	1.54	13.085	
500.00	500.00	500.00	500.00	0.99	0.99	89.96	0.01	20.15	20.15	18.16	1.99	10.128	
600.00	600.00	600.00	600.00	1.22	1.22	89.96	0.01	20.15	20.15	17.71	2.44	8.261	
700.00	700.00	700.00	700.00	1.44	1.44	89.96	0.01	20.15	20.15	17.26	2.89	6.975	
800.00	800.00	800.00	800.00	1.67	1.67	89.96	0.01	20.15	20.15	16.81	3.34	6.036	
900.00	900.00	900.00	900.00	1.89	1.89	89.96	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	89.96	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	89.96	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	89.96	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	89.96	0.01	20.15	20.15	14.56	5.59	3.607 CC	
1,400.00	1,399.98	1,399.29	1,399.27	3.01	3.00	42.85	-0.08	21.86	20.57	14.55	6.01	3.421 ES, SF	
1,500.00	1,499.84	1,498.48	1,498.32	3.23	3.20	51.95	-0.37	27.01	22.21	15.79	6.42	3.460	
1,600.00	1,599.45	1,597.48	1,596.95	3.46	3.42	63.96	-0.85	35.55	25.96	19.12	6.84	3.794	
1,700.00	1,698.70	1,696.21	1,694.94	3.70	3.65	75.36	-1.51	47.46	32.55	25.25	7.30	4.461	
1,800.00	1,797.47	1,794.56	1,792.11	3.96	3.90	84.29	-2.36	62.66	42.19	34.40	7.80	5.412	
1,900.00	1,895.62	1,892.46	1,888.24	4.25	4.19	90.68	-3.39	81.09	54.80	46.44	8.36	6.558	
2,000.00	1,993.06	1,989.81	1,983.17	4.59	4.52	95.14	-4.60	102.67	70.18	61.20	8.99	7.809	
2,100.00	2,089.64	2,086.55	2,076.71	4.97	4.90	98.26	-5.97	127.28	88.20	78.50	9.70	9.091	
2,200.00	2,185.27	2,182.61	2,168.71	5.41	5.33	100.45	-7.51	154.82	108.74	98.22	10.51	10.343	
2,300.00	2,279.82	2,278.77	2,259.93	5.92	5.81	102.13	-9.21	185.19	131.56	120.14	11.43	11.515	
2,400.00	2,373.17	2,375.62	2,351.64	6.49	6.34	104.27	-10.95	216.30	155.59	143.15	12.44	12.509	
2,500.00	2,465.21	2,472.01	2,442.90	7.13	6.88	106.77	-12.68	247.25	180.81	167.28	13.53	13.367	
2,535.80	2,497.83	2,506.37	2,475.44	7.37	7.08	107.72	-13.29	258.29	190.18	176.25	13.93	13.652	
2,600.00	2,556.15	2,567.93	2,533.73	7.83	7.44	109.59	-14.40	278.05	207.28	192.60	14.68	14.116	
2,700.00	2,646.99	2,663.82	2,624.53	8.56	8.01	111.97	-16.12	308.85	234.24	218.37	15.87	14.757	
2,800.00	2,737.82	2,759.71	2,715.32	9.30	8.60	113.86	-17.84	339.64	261.51	244.43	17.08	15.310	
2,900.00	2,828.66	2,855.60	2,806.11	10.07	9.19	115.40	-19.56	370.43	288.99	270.68	18.30	15.788	
3,000.00	2,919.50	2,951.49	2,896.91	10.84	9.79	116.66	-21.28	401.22	316.63	297.09	19.54	16.204	
3,100.00	3,010.34	3,047.38	2,987.70	11.63	10.39	117.73	-23.00	432.02	344.38	323.60	20.79	16.568	
3,200.00	3,101.18	3,143.26	3,078.49	12.42	11.00	118.64	-24.72	462.81	372.24	350.20	22.04	16.889	
3,300.00	3,192.02	3,239.15	3,169.29	13.22	11.61	119.42	-26.44	493.60	400.16	376.86	23.30	17.174	
3,400.00	3,282.86	3,335.04	3,260.08	14.02	12.23	120.09	-28.16	524.39	428.15	403.58	24.57	17.427	
3,500.00	3,373.70	3,430.93	3,350.87	14.83	12.85	120.69	-29.88	555.18	456.19	430.35	25.84	17.654	
3,600.00	3,464.54	3,526.82	3,441.67	15.65	13.47	121.22	-31.60	585.98	484.26	457.15	27.12	17.859	
3,700.00	3,555.38	3,622.71	3,532.46	16.46	14.10	121.68	-33.32	616.77	512.37	483.97	28.40	18.044	
3,800.00	3,646.22	3,718.59	3,623.25	17.28	14.73	122.10	-35.04	647.56	540.51	510.83	29.68	18.212	
3,900.00	3,737.06	3,814.48	3,714.05	18.10	15.35	122.48	-36.76	678.35	568.67	537.70	30.96	18.365	
4,000.00	3,827.89	3,910.37	3,804.84	18.92	15.99	122.83	-38.48	709.14	596.85	564.60	32.25	18.505	
4,100.00	3,918.73	4,006.26	3,895.63	19.75	16.62	123.14	-40.20	739.94	625.05	591.51	33.54	18.634	
4,200.00	4,009.57	4,102.15	3,986.43	20.57	17.25	123.42	-41.92	770.73	653.27	618.43	34.84	18.753	
4,300.00	4,100.41	4,198.04	4,077.22	21.40	17.88	123.68	-43.64	801.52	681.50	645.37	36.13	18.862	
4,400.00	4,191.25	4,293.92	4,168.02	22.23	18.52	123.93	-45.36	832.31	709.74	672.31	37.43	18.964	
4,500.00	4,282.09	4,389.81	4,258.81	23.06	19.15	124.15	-47.08	863.11	737.99	699.27	38.72	19.058	
4,600.00	4,372.93	4,485.70	4,349.60	23.89	19.79	124.35	-48.80	893.90	766.25	726.23	40.02	19.146	
4,700.00	4,463.77	4,581.59	4,440.40	24.72	20.43	124.54	-50.52	924.69	794.52	753.20	41.32	19.227	
4,800.00	4,554.61	4,677.48	4,531.19	25.55	21.07	124.72	-52.24	955.48	822.80	780.18	42.62	19.304	
4,900.00	4,645.45	4,773.36	4,621.98	26.39	21.71	124.89	-53.96	986.27	851.08	807.16	43.92	19.376	
5,000.00	4,736.29	4,869.25	4,712.78	27.22	22.34	125.04	-55.68	1,017.07	879.37	834.15	45.23	19.443	

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 28-2
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 28-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_JESSER 28-2	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 3-16-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design WELD_JESSER 18-2 PAD - P_JESSER 21-2 - P_JESSER 21-2 - PLAN #1 3-16-10 RHS												Offset Site Error:	0.00 ft
Survey Program: 0-MWD												Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
5,100.00	4,827.12	4,965.14	4,803.57	28.05	22.98	125.19	-57.40	1,047.86	907.67	861.14	46.53	19.507	
5,200.00	4,917.96	5,061.03	4,894.36	28.89	23.62	125.33	-59.13	1,078.65	935.97	888.14	47.83	19.567	
5,300.00	5,008.80	5,156.92	4,985.16	29.72	24.26	125.46	-60.85	1,109.44	964.28	915.14	49.14	19.623	
5,400.00	5,099.64	5,252.81	5,075.95	30.56	24.91	125.58	-62.57	1,140.24	992.59	942.14	50.45	19.677	
5,500.00	5,190.48	5,348.69	5,166.74	31.40	25.55	125.69	-64.29	1,171.03	1,020.90	969.15	51.75	19.727	
5,558.00	5,243.17	5,404.31	5,219.41	31.88	25.92	125.76	-65.28	1,188.89	1,037.33	984.82	52.51	19.755	
5,600.00	5,281.45	5,444.64	5,257.59	32.19	26.19	125.99	-66.01	1,201.84	1,049.05	995.99	53.05	19.774	
5,700.00	5,373.58	5,541.05	5,348.88	32.81	26.83	126.39	-67.74	1,232.80	1,075.55	1,021.28	54.26	19.821	
5,800.00	5,467.01	5,640.43	5,443.40	33.39	27.38	126.67	-69.45	1,263.43	1,099.96	1,044.60	55.36	19.869	
5,900.00	5,561.63	5,740.82	5,539.90	33.92	27.84	126.95	-70.99	1,291.05	1,122.09	1,065.77	56.32	19.923	
6,000.00	5,657.31	5,841.84	5,637.92	34.40	28.25	127.22	-72.35	1,315.42	1,141.92	1,084.74	57.19	19.968	
6,100.00	5,753.96	5,943.39	5,737.26	34.84	28.61	127.49	-73.53	1,336.42	1,159.42	1,101.47	57.95	20.006	
6,200.00	5,851.44	6,045.38	5,837.72	35.22	28.93	127.76	-74.51	1,353.97	1,174.55	1,115.94	58.62	20.038	
6,300.00	5,949.64	6,147.72	5,939.09	35.56	29.20	128.02	-75.29	1,367.97	1,187.30	1,128.13	59.17	20.065	
6,400.00	6,048.43	6,250.30	6,041.14	35.85	29.42	128.28	-75.87	1,378.37	1,197.65	1,138.03	59.62	20.087	
6,500.00	6,147.71	6,353.03	6,143.64	36.09	29.59	128.55	-76.25	1,385.13	1,205.60	1,145.63	59.97	20.105	
6,600.00	6,247.34	6,455.80	6,246.36	36.28	29.72	128.81	-76.42	1,388.21	1,211.13	1,150.93	60.20	20.117	
6,700.00	6,347.21	6,556.66	6,347.21	36.42	29.82	129.04	-76.43	1,388.42	1,214.30	1,153.93	60.37	20.115	
6,793.80	6,441.00	6,650.45	6,441.00	36.51	29.92	129.56	-76.43	1,388.42	1,215.27	1,154.77	60.50	20.087	
6,800.00	6,447.20	6,656.64	6,447.20	36.51	29.92	129.56	-76.43	1,388.42	1,215.27	1,154.76	60.51	20.084	
6,900.00	6,547.20	6,756.64	6,547.20	36.59	30.02	129.56	-76.43	1,388.42	1,215.27	1,154.55	60.71	20.017	
7,000.00	6,647.20	6,856.64	6,647.20	36.68	30.13	129.56	-76.43	1,388.42	1,215.27	1,154.35	60.92	19.949	
7,100.00	6,747.20	6,956.64	6,747.20	36.76	30.23	129.56	-76.43	1,388.42	1,215.27	1,154.14	61.12	19.882	
7,200.00	6,847.20	7,056.64	6,847.20	36.85	30.34	129.56	-76.43	1,388.42	1,215.27	1,153.93	61.33	19.814	
7,300.00	6,947.20	7,156.64	6,947.20	36.94	30.45	129.56	-76.43	1,388.42	1,215.27	1,153.72	61.55	19.745	
7,400.00	7,047.20	7,256.64	7,047.20	37.03	30.56	129.56	-76.43	1,388.42	1,215.27	1,153.51	61.76	19.677	
7,500.00	7,147.20	7,356.64	7,147.20	37.12	30.67	129.56	-76.43	1,388.42	1,215.27	1,153.29	61.98	19.608	
7,600.00	7,247.20	7,456.64	7,247.20	37.21	30.78	129.56	-76.43	1,388.42	1,215.27	1,153.07	62.20	19.538	
7,700.00	7,347.20	7,556.64	7,347.20	37.30	30.89	129.56	-76.43	1,388.42	1,215.27	1,152.85	62.42	19.469	
7,800.00	7,447.20	7,656.64	7,447.20	37.39	31.00	129.56	-76.43	1,388.42	1,215.27	1,152.62	62.65	19.399	
7,900.00	7,547.20	7,756.64	7,547.20	37.49	31.12	129.56	-76.43	1,388.42	1,215.27	1,152.39	62.87	19.329	
8,000.00	7,647.20	7,856.64	7,647.20	37.58	31.23	129.56	-76.43	1,388.42	1,215.27	1,152.16	63.10	19.258	
8,100.00	7,747.20	7,956.64	7,747.20	37.68	31.35	129.56	-76.43	1,388.42	1,215.27	1,151.93	63.34	19.188	
8,200.00	7,847.20	8,056.64	7,847.20	37.78	31.47	129.56	-76.43	1,388.42	1,215.27	1,151.70	63.57	19.117	
8,300.00	7,947.20	8,156.64	7,947.20	37.88	31.59	129.56	-76.43	1,388.42	1,215.27	1,151.46	63.81	19.046	
8,400.00	8,047.20	8,256.64	8,047.20	37.98	31.71	129.56	-76.43	1,388.42	1,215.27	1,151.22	64.05	18.975	
8,508.80	8,156.00	8,365.45	8,156.00	38.08	31.84	129.56	-76.43	1,388.42	1,215.27	1,150.96	64.31	18.897	

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_JESSER 28-2
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 28-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_JESSER 28-2	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)	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	-90.51	-0.72	-80.03	80.03				
100.00	100.00	100.00	100.00	0.10	0.10	-90.51	-0.72	-80.03	80.03	79.84	0.19	418.885	
200.00	200.00	200.00	200.00	0.32	0.32	-90.51	-0.72	-80.03	80.03	79.39	0.64	124.931	
300.00	300.00	300.00	300.00	0.55	0.55	-90.51	-0.72	-80.03	80.03	78.94	1.09	73.413	
400.00	400.00	400.00	400.00	0.77	0.77	-90.51	-0.72	-80.03	80.03	78.49	1.54	51.978	
500.00	500.00	500.00	500.00	0.99	0.99	-90.51	-0.72	-80.03	80.03	78.04	1.99	40.232	
600.00	600.00	600.00	600.00	1.22	1.22	-90.51	-0.72	-80.03	80.03	77.59	2.44	32.816	
700.00	700.00	700.00	700.00	1.44	1.44	-90.51	-0.72	-80.03	80.03	77.14	2.89	27.708	
800.00	800.00	800.00	800.00	1.67	1.67	-90.51	-0.72	-80.03	80.03	76.69	3.34	23.977	
900.00	900.00	900.00	900.00	1.89	1.89	-90.51	-0.72	-80.03	80.03	76.24	3.79	21.131	
1,000.00	1,000.00	1,000.00	1,000.00	2.12	2.12	-90.51	-0.72	-80.03	80.03	75.79	4.24	18.889	
1,100.00	1,100.00	1,100.00	1,100.00	2.34	2.34	-90.51	-0.72	-80.03	80.03	75.34	4.69	17.077	
1,200.00	1,200.00	1,200.00	1,200.00	2.57	2.57	-90.51	-0.72	-80.03	80.03	74.89	5.14	15.582	
1,300.00	1,300.00	1,300.00	1,300.00	2.79	2.79	-90.51	-0.72	-80.03	80.03	74.44	5.59	14.328 CC, ES	
1,400.00	1,399.98	1,397.19	1,397.17	3.01	3.00	-141.76	-0.86	-81.67	83.08	77.08	6.01	13.835 SF	
1,500.00	1,499.84	1,493.75	1,493.60	3.23	3.19	-143.80	-1.30	-86.55	92.32	85.92	6.40	14.420	
1,600.00	1,599.45	1,589.08	1,588.59	3.46	3.40	-146.40	-2.02	-94.54	107.86	101.07	6.79	15.875	
1,700.00	1,698.70	1,682.60	1,681.47	3.70	3.61	-148.94	-3.00	-105.43	129.77	122.59	7.18	18.071	
1,800.00	1,797.47	1,773.79	1,771.63	3.96	3.85	-151.10	-4.21	-118.96	157.95	150.39	7.56	20.889	
1,900.00	1,895.62	1,862.17	1,858.57	4.25	4.10	-152.82	-5.63	-134.79	192.23	184.30	7.94	24.222	
2,000.00	1,993.06	1,947.33	1,941.84	4.59	4.38	-154.12	-7.22	-152.56	232.37	224.06	8.31	27.976	
2,100.00	2,089.64	2,031.01	2,023.13	4.97	4.68	-155.11	-9.00	-172.32	277.99	269.31	8.68	32.042	
2,200.00	2,185.27	2,117.85	2,107.33	5.41	5.01	-156.00	-10.89	-193.45	327.19	318.13	9.06	36.127	
2,300.00	2,279.82	2,202.97	2,189.87	5.92	5.36	-156.74	-12.75	-214.16	379.26	369.82	9.44	40.178	
2,400.00	2,373.17	2,286.27	2,270.65	6.49	5.72	-157.38	-14.57	-234.44	434.15	424.33	9.83	44.187	
2,500.00	2,465.21	2,367.65	2,349.57	7.13	6.08	-157.91	-16.35	-254.24	491.82	481.61	10.21	48.150	
2,535.80	2,497.83	2,396.30	2,377.35	7.37	6.21	-158.08	-16.97	-261.21	513.13	502.78	10.35	49.558	
2,600.00	2,556.15	2,447.44	2,426.94	7.83	6.44	-158.69	-18.09	-273.66	551.67	540.99	10.68	51.661	
2,700.00	2,646.99	2,527.10	2,504.18	8.56	6.81	-159.48	-19.83	-293.04	611.78	600.58	11.19	54.653	
2,800.00	2,737.82	2,606.76	2,581.43	9.30	7.18	-160.14	-21.57	-312.43	671.94	660.22	11.72	57.334	
2,900.00	2,828.66	2,686.42	2,658.67	10.07	7.56	-160.69	-23.31	-331.81	732.16	719.90	12.26	59.742	
3,000.00	2,919.50	2,766.08	2,735.92	10.84	7.94	-161.15	-25.05	-351.20	792.41	779.61	12.80	61.913	
3,100.00	3,010.34	2,845.74	2,813.16	11.63	8.33	-161.55	-26.79	-370.58	852.69	839.34	13.35	63.878	
3,200.00	3,101.18	2,925.40	2,890.41	12.42	8.71	-161.90	-28.52	-389.97	912.99	899.08	13.90	65.662	
3,300.00	3,192.02	3,005.06	2,967.65	13.22	9.11	-162.20	-30.26	-409.35	973.31	958.84	14.47	67.287	
3,400.00	3,282.86	3,084.71	3,044.90	14.02	9.50	-162.47	-32.00	-428.74	1,033.64	1,018.61	15.03	68.770	
3,500.00	3,373.70	3,164.37	3,122.14	14.83	9.90	-162.71	-33.74	-448.12	1,093.99	1,078.39	15.60	70.128	
3,600.00	3,464.54	3,244.03	3,199.39	15.65	10.29	-162.92	-35.48	-467.51	1,154.35	1,138.18	16.17	71.377	
3,700.00	3,555.38	3,323.69	3,276.63	16.46	10.69	-163.11	-37.22	-486.89	1,214.72	1,197.97	16.75	72.527	
3,800.00	3,646.22	3,403.35	3,353.88	17.28	11.10	-163.29	-38.96	-506.27	1,275.10	1,257.77	17.33	73.589	
3,900.00	3,737.06	3,483.01	3,431.12	18.10	11.50	-163.44	-40.70	-525.66	1,335.48	1,317.57	17.91	74.572	
4,000.00	3,827.89	3,562.67	3,508.37	18.92	11.90	-163.59	-42.44	-545.04	1,395.87	1,377.38	18.49	75.484	
4,100.00	3,918.73	3,642.33	3,585.61	19.75	12.31	-163.72	-44.18	-564.43	1,456.26	1,437.19	19.08	76.332	
4,200.00	4,009.57	3,721.99	3,662.86	20.57	12.71	-163.84	-45.92	-583.81	1,516.66	1,497.00	19.67	77.123	
4,300.00	4,100.41	3,801.65	3,740.10	21.40	13.12	-163.96	-47.66	-603.20	1,577.07	1,556.81	20.25	77.861	
4,400.00	4,191.25	3,881.30	3,817.35	22.23	13.53	-164.06	-49.40	-622.58	1,637.47	1,616.63	20.85	78.552	
4,500.00	4,282.09	3,960.96	3,894.59	23.06	13.94	-164.16	-51.14	-641.97	1,697.88	1,676.44	21.44	79.199	
4,600.00	4,372.93	4,040.62	3,971.84	23.89	14.35	-164.25	-52.87	-661.35	1,758.30	1,736.26	22.03	79.807	
4,700.00	4,463.77	4,120.28	4,049.08	24.72	14.76	-164.33	-54.61	-680.74	1,818.71	1,796.08	22.63	80.379	
4,800.00	4,554.61	4,199.94	4,126.33	25.55	15.17	-164.41	-56.35	-700.12	1,879.13	1,855.91	23.22	80.918	
4,900.00	4,645.45	4,279.60	4,203.57	26.39	15.58	-164.49	-58.09	-719.51	1,939.55	1,915.73	23.82	81.426	
5,000.00	4,736.29	4,359.26	4,280.82	27.22	15.99	-164.56	-59.83	-738.89	1,999.97	1,975.55	24.42	81.906	

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 28-2
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 28-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_JESSER 28-2	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	4,827.12	4,438.92	4,358.06	28.05	16.40	-164.62	-61.57	-758.28	2,060.39	2,035.38	25.02	82.360	
5,200.00	4,917.96	4,518.58	4,435.31	28.89	16.81	-164.68	-63.31	-777.66	2,120.82	2,095.20	25.62	82.791	
5,300.00	5,008.80	4,598.24	4,512.55	29.72	17.23	-164.74	-65.05	-797.05	2,181.25	2,155.03	26.22	83.199	
5,400.00	5,099.64	4,677.90	4,589.79	30.56	17.64	-164.80	-66.79	-816.43	2,241.67	2,214.85	26.82	83.587	
5,500.00	5,190.48	4,757.55	4,667.04	31.40	18.05	-164.85	-68.53	-835.82	2,302.10	2,274.68	27.42	83.955	
5,558.00	5,243.17	4,803.76	4,711.84	31.88	18.29	-164.88	-69.54	-847.06	2,337.15	2,309.38	27.77	84.161	
5,600.00	5,281.45	4,837.39	4,744.46	32.19	18.47	-165.06	-70.27	-855.25	2,362.30	2,334.19	28.11	84.041	
5,700.00	5,373.58	4,918.90	4,823.49	32.81	18.89	-165.45	-72.05	-875.08	2,420.22	2,391.34	28.88	83.804	
5,800.00	5,467.01	5,002.31	4,904.38	33.39	19.32	-165.77	-73.87	-895.38	2,475.36	2,445.74	29.63	83.555	
5,900.00	5,561.63	5,087.54	4,987.03	33.92	19.77	-166.04	-75.73	-916.12	2,527.65	2,497.31	30.34	83.301	
6,000.00	5,657.31	5,174.48	5,071.33	34.40	20.22	-166.27	-77.63	-937.28	2,577.02	2,545.99	31.03	83.049	
6,100.00	5,753.96	5,263.02	5,157.19	34.84	20.68	-166.45	-79.56	-958.82	2,623.42	2,591.74	31.68	82.804	
6,200.00	5,851.44	5,353.06	5,244.50	35.22	21.15	-166.59	-81.53	-980.73	2,666.79	2,634.49	32.30	82.569	
6,300.00	5,949.64	5,444.48	5,333.14	35.56	21.63	-166.70	-83.53	-1,002.98	2,707.08	2,674.21	32.87	82.348	
6,400.00	6,048.43	5,537.17	5,423.03	35.85	22.11	-166.77	-85.55	-1,025.54	2,744.25	2,710.84	33.41	82.142	
6,500.00	6,147.71	5,631.03	5,514.04	36.09	22.60	-166.80	-87.60	-1,048.37	2,778.25	2,744.35	33.90	81.953	
6,600.00	6,247.34	6,017.76	5,892.74	36.28	24.05	-166.49	-94.50	-1,125.23	2,807.66	2,772.59	35.07	80.062	
6,700.00	6,347.21	6,473.42	6,347.21	36.42	24.82	-166.46	-96.85	-1,151.42	2,814.61	2,778.60	36.00	78.180	
6,793.80	6,441.00	6,567.21	6,441.00	36.51	24.93	-116.03	-96.85	-1,151.42	2,816.10	2,779.89	36.21	77.771	
6,800.00	6,447.20	6,573.40	6,447.20	36.51	24.94	-116.03	-96.85	-1,151.42	2,816.10	2,779.87	36.23	77.730	
6,900.00	6,547.20	6,673.40	6,547.20	36.59	25.06	-116.03	-96.85	-1,151.42	2,816.10	2,779.55	36.55	77.058	
7,000.00	6,647.20	6,773.40	6,647.20	36.68	25.19	-116.03	-96.85	-1,151.42	2,816.10	2,779.23	36.86	76.391	
7,100.00	6,747.20	6,873.40	6,747.20	36.76	25.31	-116.03	-96.85	-1,151.42	2,816.10	2,778.91	37.19	75.730	
7,200.00	6,847.20	6,973.40	6,847.20	36.85	25.43	-116.03	-96.85	-1,151.42	2,816.10	2,778.59	37.51	75.076	
7,300.00	6,947.20	7,073.40	6,947.20	36.94	25.56	-116.03	-96.85	-1,151.42	2,816.10	2,778.26	37.84	74.428	
7,400.00	7,047.20	7,173.40	7,047.20	37.03	25.69	-116.03	-96.85	-1,151.42	2,816.10	2,777.93	38.17	73.786	
7,500.00	7,147.20	7,273.40	7,147.20	37.12	25.82	-116.03	-96.85	-1,151.42	2,816.10	2,777.60	38.50	73.150	
7,600.00	7,247.20	7,373.40	7,247.20	37.21	25.95	-116.03	-96.85	-1,151.42	2,816.10	2,777.27	38.83	72.521	
7,700.00	7,347.20	7,473.40	7,347.20	37.30	26.08	-116.03	-96.85	-1,151.42	2,816.10	2,776.93	39.17	71.899	
7,800.00	7,447.20	7,573.40	7,447.20	37.39	26.21	-116.03	-96.85	-1,151.42	2,816.10	2,776.59	39.51	71.283	
7,900.00	7,547.20	7,673.40	7,547.20	37.49	26.35	-116.03	-96.85	-1,151.42	2,816.10	2,776.25	39.85	70.673	
8,000.00	7,647.20	7,773.40	7,647.20	37.58	26.48	-116.03	-96.85	-1,151.42	2,816.10	2,775.91	40.19	70.071	
8,100.00	7,747.20	7,873.40	7,747.20	37.68	26.62	-116.03	-96.85	-1,151.42	2,816.10	2,775.56	40.53	69.475	
8,200.00	7,847.20	7,973.40	7,847.20	37.78	26.76	-116.03	-96.85	-1,151.42	2,816.10	2,775.22	40.88	68.885	
8,300.00	7,947.20	8,073.40	7,947.20	37.88	26.90	-116.03	-96.85	-1,151.42	2,816.10	2,774.87	41.23	68.302	
8,400.00	8,047.20	8,173.40	8,047.20	37.98	27.04	-116.03	-96.85	-1,151.42	2,816.10	2,774.52	41.58	67.726	
8,508.80	8,156.00	8,282.21	8,156.00	38.08	27.19	-116.03	-96.85	-1,151.42	2,816.10	2,774.13	41.96	67.107	

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_JESSER 28-2
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 28-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_JESSER 28-2	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 3-16-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design WELD_JESSER 18-2 PAD - P_JESSER 4-2S - P_JESSER 4-2S - PLAN #1 3-16-10 RHS												Offset Site Error:	0.00 ft
Survey Program: 0-MWD												Offset Well Error:	0.00 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	-90.67	-0.35	-29.94	29.94				
100.00	100.00	100.00	100.00	0.10	0.10	-90.67	-0.35	-29.94	29.94	29.75	0.19	156.720	
200.00	200.00	200.00	200.00	0.32	0.32	-90.67	-0.35	-29.94	29.94	29.30	0.64	46.741	
300.00	300.00	300.00	300.00	0.55	0.55	-90.67	-0.35	-29.94	29.94	28.85	1.09	27.466	
400.00	400.00	400.00	400.00	0.77	0.77	-90.67	-0.35	-29.94	29.94	28.40	1.54	19.447	
500.00	500.00	500.00	500.00	0.99	0.99	-90.67	-0.35	-29.94	29.94	27.95	1.99	15.052	
600.00	600.00	600.00	600.00	1.22	1.22	-90.67	-0.35	-29.94	29.94	27.50	2.44	12.278	
700.00	700.00	700.00	700.00	1.44	1.44	-90.67	-0.35	-29.94	29.94	27.05	2.89	10.367	
800.00	800.00	800.00	800.00	1.67	1.67	-90.67	-0.35	-29.94	29.94	26.60	3.34	8.971	
900.00	900.00	900.00	900.00	1.89	1.89	-90.67	-0.35	-29.94	29.94	26.15	3.79	7.906	
1,000.00	1,000.00	1,000.00	1,000.00	2.12	2.12	-90.67	-0.35	-29.94	29.94	25.70	4.24	7.067	
1,100.00	1,100.00	1,100.00	1,100.00	2.34	2.34	-90.67	-0.35	-29.94	29.94	25.26	4.69	6.389	
1,200.00	1,200.00	1,200.00	1,200.00	2.57	2.57	-90.67	-0.35	-29.94	29.94	24.81	5.14	5.830	
1,300.00	1,300.00	1,300.00	1,300.00	2.79	2.79	-90.67	-0.35	-29.94	29.94	24.36	5.59	5.361	CC, ES, SF
1,400.00	1,399.98	1,399.26	1,399.25	3.01	3.01	-141.90	0.27	-31.07	32.44	26.42	6.02	5.390	
1,500.00	1,499.84	1,498.17	1,498.08	3.23	3.22	-143.64	2.11	-34.45	39.94	33.51	6.43	6.208	
1,600.00	1,599.45	1,596.37	1,596.07	3.46	3.44	-145.39	5.15	-40.03	52.46	45.62	6.85	7.664	
1,700.00	1,698.70	1,693.53	1,692.83	3.70	3.66	-146.75	9.34	-47.72	69.98	62.72	7.26	9.643	
1,800.00	1,797.47	1,789.32	1,787.98	3.96	3.90	-147.69	14.63	-57.42	92.41	84.74	7.67	12.051	
1,900.00	1,895.62	1,883.43	1,881.17	4.25	4.14	-148.29	20.93	-68.99	119.65	111.57	8.08	14.801	
2,000.00	1,993.06	1,975.59	1,972.07	4.59	4.40	-148.65	28.16	-82.26	151.61	143.10	8.51	17.820	
2,100.00	2,089.64	2,065.53	2,060.41	4.97	4.68	-148.83	36.24	-97.07	188.15	179.20	8.94	21.039	
2,200.00	2,185.27	2,153.19	2,146.11	5.41	4.98	-148.88	45.06	-113.26	229.12	219.73	9.39	24.395	
2,300.00	2,279.82	2,242.73	2,233.45	5.92	5.31	-149.02	54.51	-130.59	273.55	263.68	9.87	27.720	
2,400.00	2,373.17	2,330.85	2,319.40	6.49	5.64	-149.30	63.80	-147.65	320.67	310.31	10.36	30.959	
2,500.00	2,465.21	2,417.42	2,403.84	7.13	5.98	-149.64	72.94	-164.42	370.48	359.62	10.86	34.108	
2,535.80	2,497.83	2,448.02	2,433.68	7.37	6.10	-149.76	76.17	-170.34	388.96	377.92	11.05	35.212	
2,600.00	2,556.15	2,502.70	2,487.02	7.83	6.32	-150.34	81.94	-180.93	422.42	410.98	11.44	36.923	
2,700.00	2,646.99	2,587.87	2,570.09	8.56	6.67	-151.07	90.92	-197.42	474.60	462.53	12.07	39.319	
2,800.00	2,737.82	2,673.04	2,653.17	9.30	7.03	-151.66	99.91	-213.91	526.82	514.10	12.72	41.431	
2,900.00	2,828.66	2,758.21	2,736.24	10.07	7.39	-152.14	108.90	-230.40	579.07	565.69	13.37	43.302	
3,000.00	2,919.50	2,843.38	2,819.31	10.84	7.75	-152.55	117.89	-246.89	631.34	617.30	14.04	44.965	
3,100.00	3,010.34	2,928.55	2,902.39	11.63	8.12	-152.89	126.87	-263.38	683.64	668.92	14.72	46.450	
3,200.00	3,101.18	3,013.72	2,985.46	12.42	8.50	-153.18	135.86	-279.87	735.95	720.55	15.40	47.782	
3,300.00	3,192.02	3,098.89	3,068.54	13.22	8.87	-153.44	144.85	-296.36	788.27	772.18	16.09	48.981	
3,400.00	3,282.86	3,184.06	3,151.61	14.02	9.25	-153.66	153.84	-312.85	840.61	823.82	16.79	50.063	
3,500.00	3,373.70	3,269.23	3,234.68	14.83	9.63	-153.86	162.82	-329.34	892.95	875.45	17.49	51.045	
3,600.00	3,464.54	3,354.40	3,317.76	15.65	10.01	-154.03	171.81	-345.83	945.30	927.10	18.20	51.939	
3,700.00	3,555.38	3,439.57	3,400.83	16.46	10.40	-154.19	180.80	-362.32	997.65	978.74	18.91	52.756	
3,800.00	3,646.22	3,524.74	3,483.91	17.28	10.78	-154.33	189.78	-378.81	1,050.01	1,030.38	19.62	53.504	
3,900.00	3,737.06	3,609.91	3,566.98	18.10	11.17	-154.46	198.77	-395.30	1,102.37	1,082.03	20.34	54.192	
4,000.00	3,827.89	3,695.08	3,650.05	18.92	11.56	-154.57	207.76	-411.79	1,154.74	1,133.67	21.06	54.825	
4,100.00	3,918.73	3,780.25	3,733.13	19.75	11.95	-154.68	216.75	-428.28	1,207.11	1,185.32	21.78	55.410	
4,200.00	4,009.57	3,865.42	3,816.20	20.57	12.34	-154.77	225.73	-444.77	1,259.48	1,236.97	22.51	55.952	
4,300.00	4,100.41	3,950.59	3,899.27	21.40	12.73	-154.86	234.72	-461.26	1,311.85	1,288.62	23.24	56.455	
4,400.00	4,191.25	4,035.76	3,982.35	22.23	13.13	-154.95	243.71	-477.75	1,364.23	1,340.26	23.97	56.924	
4,500.00	4,282.09	4,120.93	4,065.42	23.06	13.52	-155.02	252.69	-494.24	1,416.61	1,391.91	24.70	57.361	
4,600.00	4,372.93	4,206.10	4,148.50	23.89	13.91	-155.09	261.68	-510.73	1,468.99	1,443.56	25.43	57.769	
4,700.00	4,463.77	4,291.27	4,231.57	24.72	14.31	-155.16	270.67	-527.22	1,521.37	1,495.21	26.16	58.152	
4,800.00	4,554.61	4,376.44	4,314.64	25.55	14.71	-155.22	279.66	-543.71	1,573.75	1,546.86	26.90	58.510	
4,900.00	4,645.45	4,461.61	4,397.72	26.39	15.10	-155.28	288.64	-560.20	1,626.14	1,598.51	27.63	58.847	
5,000.00	4,736.29	4,546.78	4,480.79	27.22	15.50	-155.33	297.63	-576.69	1,678.52	1,650.15	28.37	59.165	

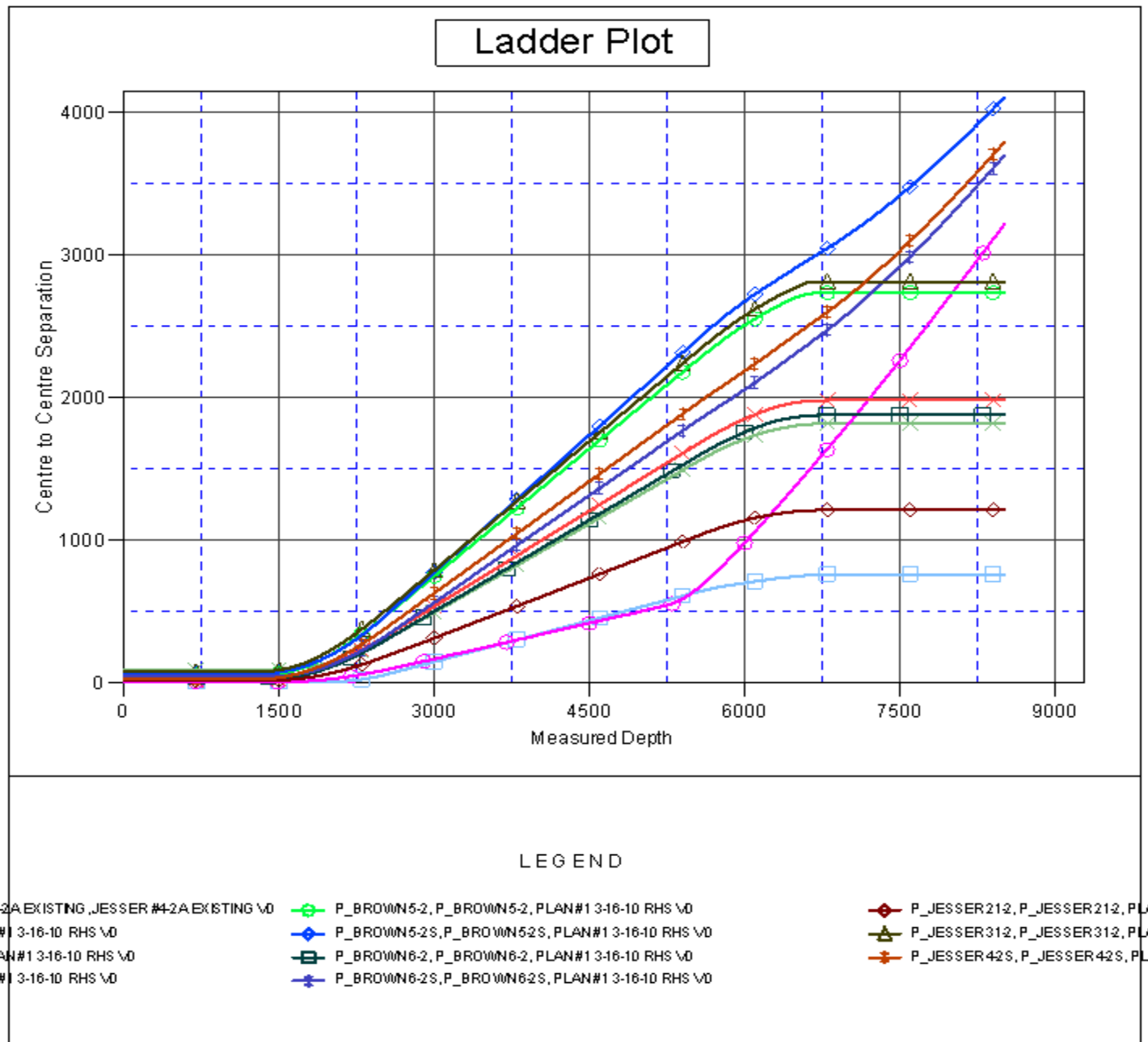
CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_JESSER 28-2
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 28-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_JESSER 28-2	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	4,827.12	4,631.95	4,563.87	28.05	15.90	-155.38	306.62	-593.18	1,730.91	1,701.80	29.11	59.464	
5,200.00	4,917.96	4,717.12	4,646.94	28.89	16.29	-155.43	315.61	-609.67	1,783.30	1,753.45	29.85	59.746	
5,300.00	5,008.80	4,802.29	4,730.01	29.72	16.69	-155.48	324.59	-626.16	1,835.69	1,805.10	30.59	60.014	
5,400.00	5,099.64	4,887.46	4,813.09	30.56	17.09	-155.52	333.58	-642.65	1,888.08	1,856.75	31.33	60.267	
5,500.00	5,190.48	4,972.63	4,896.16	31.40	17.49	-155.56	342.57	-659.14	1,940.47	1,908.40	32.07	60.506	
5,558.00	5,243.17	5,022.04	4,944.35	31.88	17.72	-155.58	347.78	-668.70	1,970.86	1,938.35	32.50	60.640	
5,600.00	5,281.45	5,057.95	4,979.38	32.19	17.89	-155.80	351.57	-675.66	1,992.62	1,959.74	32.88	60.610	
5,700.00	5,373.58	5,144.62	5,063.92	32.81	18.30	-156.26	360.72	-692.44	2,042.49	2,008.76	33.73	60.559	
5,800.00	5,467.01	5,158.04	5,077.00	33.39	18.36	-156.70	362.13	-695.04	2,090.90	2,056.61	34.29	60.973	
5,900.00	5,561.63	5,158.04	5,077.00	33.92	18.36	-157.14	362.13	-695.04	2,140.12	2,105.36	34.76	61.573	
6,000.00	5,657.31	5,158.04	5,077.00	34.40	18.36	-157.59	362.13	-695.04	2,190.07	2,154.90	35.17	62.275	
6,100.00	5,753.96	5,158.04	5,077.00	34.84	18.36	-158.03	362.13	-695.04	2,240.64	2,205.12	35.52	63.078	
6,200.00	5,851.44	5,158.04	5,077.00	35.22	18.36	-158.47	362.13	-695.04	2,291.73	2,255.91	35.82	63.981	
6,300.00	5,949.64	5,158.04	5,077.00	35.56	18.36	-158.91	362.13	-695.04	2,343.25	2,307.19	36.06	64.984	
6,400.00	6,048.43	5,158.04	5,077.00	35.85	18.36	-159.34	362.13	-695.04	2,395.11	2,358.87	36.24	66.087	
6,500.00	6,147.71	5,158.04	5,077.00	36.09	18.36	-159.77	362.13	-695.04	2,447.23	2,410.86	36.37	67.291	
6,600.00	6,247.34	5,158.04	5,077.00	36.28	18.36	-160.19	362.13	-695.04	2,499.52	2,463.09	36.44	68.600	
6,700.00	6,347.21	5,158.04	5,077.00	36.42	18.36	-160.60	362.13	-695.04	2,551.93	2,515.48	36.45	70.015	
6,793.80	6,441.00	5,158.04	5,077.00	36.51	18.36	-110.53	362.13	-695.04	2,601.12	2,564.71	36.41	71.442	
6,800.00	6,447.20	5,158.04	5,077.00	36.51	18.36	-110.53	362.13	-695.04	2,604.37	2,567.95	36.42	71.515	
6,900.00	6,547.20	5,158.04	5,077.00	36.59	18.36	-110.53	362.13	-695.04	2,658.34	2,621.79	36.55	72.723	
7,000.00	6,647.20	5,158.04	5,077.00	36.68	18.36	-110.53	362.13	-695.04	2,714.93	2,678.23	36.69	73.989	
7,100.00	6,747.20	5,158.04	5,077.00	36.76	18.36	-110.53	362.13	-695.04	2,773.96	2,737.13	36.83	75.310	
7,200.00	6,847.20	5,158.04	5,077.00	36.85	18.36	-110.53	362.13	-695.04	2,835.30	2,798.32	36.98	76.679	
7,300.00	6,947.20	5,158.04	5,077.00	36.94	18.36	-110.53	362.13	-695.04	2,898.78	2,861.66	37.12	78.093	
7,400.00	7,047.20	5,158.04	5,077.00	37.03	18.36	-110.53	362.13	-695.04	2,964.28	2,927.02	37.26	79.548	
7,500.00	7,147.20	5,158.04	5,077.00	37.12	18.36	-110.53	362.13	-695.04	3,031.67	2,994.26	37.41	81.038	
7,600.00	7,247.20	5,158.04	5,077.00	37.21	18.36	-110.53	362.13	-695.04	3,100.82	3,063.26	37.56	82.561	
7,700.00	7,347.20	5,158.04	5,077.00	37.30	18.36	-110.53	362.13	-695.04	3,171.61	3,133.90	37.71	84.112	
7,800.00	7,447.20	5,158.04	5,077.00	37.39	18.36	-110.53	362.13	-695.04	3,243.94	3,206.08	37.86	85.689	
7,900.00	7,547.20	5,158.04	5,077.00	37.49	18.36	-110.53	362.13	-695.04	3,317.71	3,279.70	38.01	87.289	
8,000.00	7,647.20	5,158.04	5,077.00	37.58	18.36	-110.53	362.13	-695.04	3,392.82	3,354.66	38.16	88.908	
8,100.00	7,747.20	5,158.04	5,077.00	37.68	18.36	-110.53	362.13	-695.04	3,469.19	3,430.87	38.31	90.544	
8,200.00	7,847.20	5,158.04	5,077.00	37.78	18.36	-110.53	362.13	-695.04	3,546.73	3,508.26	38.47	92.195	
8,300.00	7,947.20	5,158.04	5,077.00	37.88	18.36	-110.53	362.13	-695.04	3,625.37	3,586.75	38.63	93.858	
8,400.00	8,047.20	5,158.04	5,077.00	37.98	18.36	-110.53	362.13	-695.04	3,705.05	3,666.26	38.78	95.531	
8,508.80	8,156.00	5,158.04	5,077.00	38.08	18.36	-110.53	362.13	-695.04	3,792.83	3,753.87	38.96	97.362	

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_JESSER 28-2
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 28-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_JESSER 28-2	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 28-2
Offset Depths are relative to Offset Datum Coordinate System is US State Plane 1983, Colorado Northern Zone
Central Meridian is 105° 30' 0.000 W ° Grid Convergence at Surface is: 0.48°



Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_JESSER 28-2
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 28-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_JESSER 28-2	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 28-2
Offset Depths are relative to Offset Datum Coordinate System is US State Plane 1983, Colorado Northern Zone
Central Meridian is 105° 30' 0.000 W ° Grid Convergence at Surface is: 0.48°

