



US ROCKIES REGION PLANNING

COLORADO NORTHERN ZONE - 83

WELD_NRC 19-9 PAD

P_NRC 35-9

P_NRC 35-9

Plan: PLAN #1 1-10-10 RHS

Standard Planning Report

11 January, 2010





Azimuths to True North
 Magnetic North: 9.10°
 Magnetic Field
 Strength: 53085.9nT
 Dip Angle: 66.80°
 Date: 1/11/2010
 Model: IGRF2010

WELL DETAILS: P_NRC 35-9

+N/-S	+E/-W	Northing	Easting	Ground Level:	Latitude	Longitude	Slot
0.00	0.00	1265667.66	3167431.99	5052.00	40° 3' 39.949 N	104° 54' 6.538 W	

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
3264.00	3308.79	PARKMAN
4739.00	4821.50	SUSSEX
5209.00	5303.51	SHANNON
7379.00	7492.51	NIO A
7719.00	7832.51	CODELL
8169.00	8282.51	JSAND

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1085.00	0.00	0.00	1085.00	0.00	0.00	0.00	0.00	0.00	
1725.98	12.82	157.92	1720.65	-66.17	26.84	2.00	157.92	71.41	
5851.52	12.82	157.92	5743.35	-914.44	370.92	0.00	0.00	986.80	
6492.51	0.00	0.00	6379.00	-980.61	397.76	2.00	180.00	1058.21	
8417.51	0.00	0.00	8304.00	-980.61	397.76	0.00	0.00	1058.21	PBHL_NRC 35-9(50 FSL 1315 FWL)

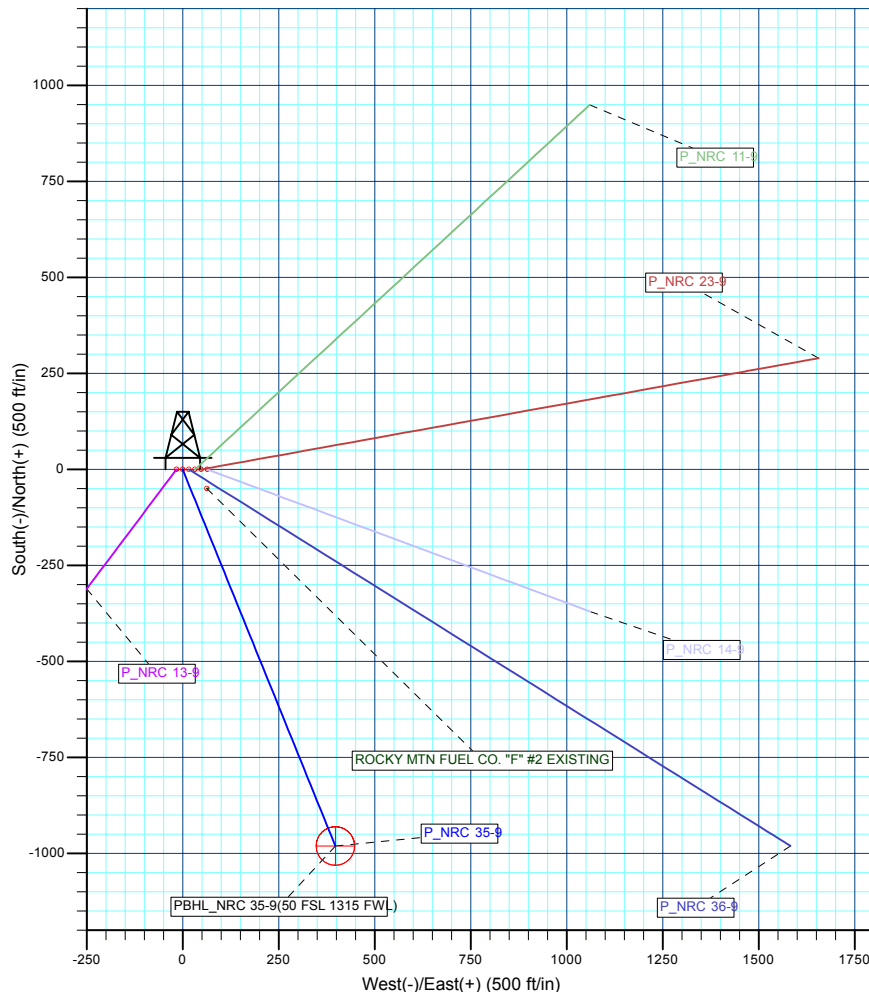
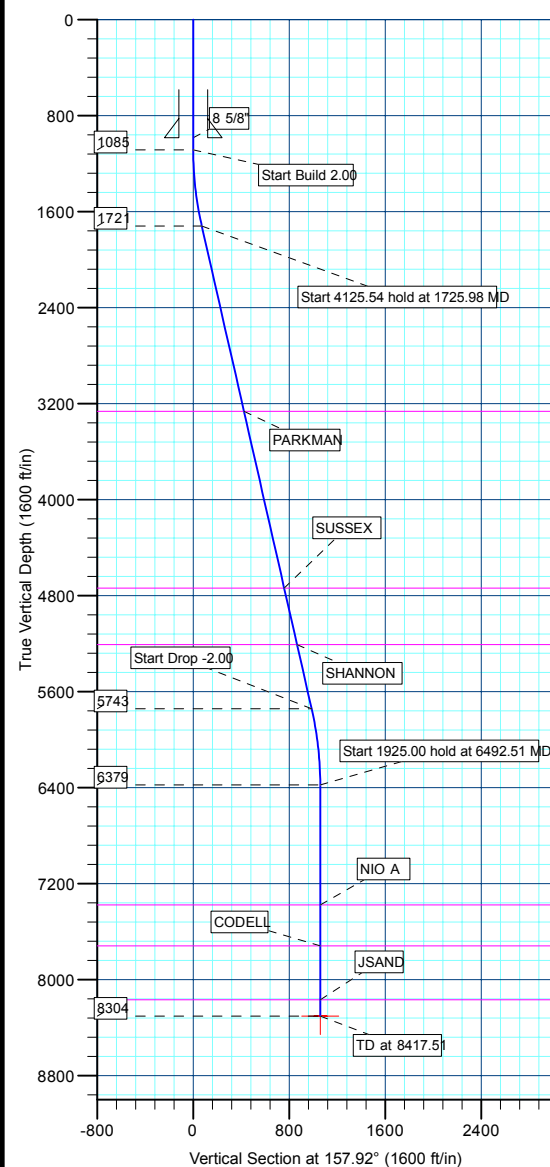
CASING DETAILS

TVD	MD	Name	Size
985.00	985.00	8 5/8"	8.62



KB ELEV:WELL @ 5067.00ft (Original Well Elev)

GRD ELEV: 5052.00



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

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
PBHL	8304.00	-980.61	397.76	1264689.75	3167836.35	40° 3' 30.258 N	104° 54' 1.422 W	Circle (Radius: 50.00)

Plan: PLAN #1 1-10-10 RHS (P_NRC 35-9/P_NRC 35-9)

Created By: Robert H. Scott

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well P_NRC 35-9
Company:	US ROCKIES REGION PLANNING	TVD Reference:	WELL @ 5067.00ft (Original Well Elev)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	WELL @ 5067.00ft (Original Well Elev)
Site:	WELD_NRC 19-9 PAD	North Reference:	True
Well:	P_NRC 35-9	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_NRC 35-9		
Design:	PLAN #1 1-10-10 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_NRC 19-9 PAD, SECTION 9 T1N R67W											
Site Position:						Northing:			1,265,667.89 ft			Latitude:			40° 3' 39.949 N		
From:			Lat/Long			Easting:			3,167,464.18 ft			Longitude:			104° 54' 6.124 W		
Position Uncertainty:			0.00 ft			Slot Radius:			in			Grid Convergence:			0.39 °		

Well	P_NRC 35-9					
Well Position	+N/-S	-0.02 ft	Northing:	1,265,667.66 ft	Latitude:	40° 3' 39.949 N
	+E/-W	-32.19 ft	Easting:	3,167,431.99 ft	Longitude:	104° 54' 6.538 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	5,052.00 ft

Wellbore	P_NRC 35-9				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	1/11/2010	9.10	66.80	53,086

Design	PLAN #1 1-10-10 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	157.92

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	
1,085.00	0.00	0.00	1,085.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,725.98	12.82	157.92	1,720.65	-66.17	26.84	2.00	2.00	0.00	157.92	
5,851.52	12.82	157.92	5,743.35	-914.44	370.92	0.00	0.00	0.00	0.00	
6,492.51	0.00	0.00	6,379.00	-980.61	397.76	2.00	-2.00	0.00	180.00	
8,417.51	0.00	0.00	8,304.00	-980.61	397.76	0.00	0.00	0.00	0.00	PBHL_NRC 35-9(5)

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well P_NRC 35-9
Company:	US ROCKIES REGION PLANNING	TVD Reference:	WELL @ 5067.00ft (Original Well Elev)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	WELL @ 5067.00ft (Original Well Elev)
Site:	WELD_NRC 19-9 PAD	North Reference:	True
Well:	P_NRC 35-9	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_NRC 35-9		
Design:	PLAN #1 1-10-10 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									
1,085.00	0.00	0.00	1,085.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.30	157.92	1,100.00	-0.04	0.01	0.04	2.00	2.00	0.00
1,200.00	2.30	157.92	1,199.97	-2.14	0.87	2.31	2.00	2.00	0.00
1,300.00	4.30	157.92	1,299.80	-7.47	3.03	8.06	2.00	2.00	0.00
1,400.00	6.30	157.92	1,399.37	-16.03	6.50	17.30	2.00	2.00	0.00
1,500.00	8.30	157.92	1,498.55	-27.81	11.28	30.01	2.00	2.00	0.00
1,600.00	10.30	157.92	1,597.23	-42.78	17.35	46.17	2.00	2.00	0.00
1,700.00	12.30	157.92	1,695.29	-60.94	24.72	65.76	2.00	2.00	0.00
Start 4125.54 hold at 1725.98 MD									
1,725.98	12.82	157.92	1,720.65	-66.17	26.84	71.41	2.00	2.00	0.00
1,800.00	12.82	157.92	1,792.82	-81.39	33.01	87.83	0.00	0.00	0.00
1,900.00	12.82	157.92	1,890.33	-101.95	41.35	110.02	0.00	0.00	0.00
2,000.00	12.82	157.92	1,987.83	-122.51	49.69	132.21	0.00	0.00	0.00
2,100.00	12.82	157.92	2,085.34	-143.08	58.03	154.40	0.00	0.00	0.00
2,200.00	12.82	157.92	2,182.85	-163.64	66.38	176.59	0.00	0.00	0.00
2,300.00	12.82	157.92	2,280.36	-184.20	74.72	198.77	0.00	0.00	0.00
2,400.00	12.82	157.92	2,377.86	-204.76	83.06	220.96	0.00	0.00	0.00
2,500.00	12.82	157.92	2,475.37	-225.32	91.40	243.15	0.00	0.00	0.00
2,600.00	12.82	157.92	2,572.88	-245.88	99.74	265.34	0.00	0.00	0.00
2,700.00	12.82	157.92	2,670.39	-266.44	108.08	287.53	0.00	0.00	0.00
2,800.00	12.82	157.92	2,767.89	-287.00	116.42	309.72	0.00	0.00	0.00
2,900.00	12.82	157.92	2,865.40	-307.57	124.76	331.90	0.00	0.00	0.00
3,000.00	12.82	157.92	2,962.91	-328.13	133.10	354.09	0.00	0.00	0.00
3,100.00	12.82	157.92	3,060.42	-348.69	141.44	376.28	0.00	0.00	0.00
3,200.00	12.82	157.92	3,157.92	-369.25	149.78	398.47	0.00	0.00	0.00
3,300.00	12.82	157.92	3,255.43	-389.81	158.12	420.66	0.00	0.00	0.00
PARKMAN									
3,308.79	12.82	157.92	3,264.00	-391.62	158.85	422.61	0.00	0.00	0.00
3,400.00	12.82	157.92	3,352.94	-410.37	166.46	442.85	0.00	0.00	0.00
3,500.00	12.82	157.92	3,450.44	-430.93	174.80	465.03	0.00	0.00	0.00
3,600.00	12.82	157.92	3,547.95	-451.49	183.14	487.22	0.00	0.00	0.00
3,700.00	12.82	157.92	3,645.46	-472.06	191.48	509.41	0.00	0.00	0.00
3,800.00	12.82	157.92	3,742.97	-492.62	199.82	531.60	0.00	0.00	0.00
3,900.00	12.82	157.92	3,840.47	-513.18	208.16	553.79	0.00	0.00	0.00
4,000.00	12.82	157.92	3,937.98	-533.74	216.50	575.98	0.00	0.00	0.00
4,100.00	12.82	157.92	4,035.49	-554.30	224.84	598.17	0.00	0.00	0.00
4,200.00	12.82	157.92	4,133.00	-574.86	233.18	620.35	0.00	0.00	0.00
4,300.00	12.82	157.92	4,230.50	-595.42	241.52	642.54	0.00	0.00	0.00
4,400.00	12.82	157.92	4,328.01	-615.98	249.86	664.73	0.00	0.00	0.00
4,500.00	12.82	157.92	4,425.52	-636.55	258.20	686.92	0.00	0.00	0.00
4,600.00	12.82	157.92	4,523.03	-657.11	266.54	709.11	0.00	0.00	0.00
4,700.00	12.82	157.92	4,620.53	-677.67	274.88	731.30	0.00	0.00	0.00
4,800.00	12.82	157.92	4,718.04	-698.23	283.22	753.48	0.00	0.00	0.00
SUSSEX									
4,821.50	12.82	157.92	4,739.00	-702.65	285.01	758.25	0.00	0.00	0.00
4,900.00	12.82	157.92	4,815.55	-718.79	291.56	775.67	0.00	0.00	0.00
5,000.00	12.82	157.92	4,913.05	-739.35	299.90	797.86	0.00	0.00	0.00
5,100.00	12.82	157.92	5,010.56	-759.91	308.24	820.05	0.00	0.00	0.00
5,200.00	12.82	157.92	5,108.07	-780.47	316.58	842.24	0.00	0.00	0.00
5,300.00	12.82	157.92	5,205.58	-801.04	324.92	864.43	0.00	0.00	0.00
SHANNON									
5,303.51	12.82	157.92	5,209.00	-801.76	325.21	865.20	0.00	0.00	0.00

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well P_NRC 35-9
Company:	US ROCKIES REGION PLANNING	TVD Reference:	WELL @ 5067.00ft (Original Well Elev)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	WELL @ 5067.00ft (Original Well Elev)
Site:	WELD_NRC 19-9 PAD	North Reference:	True
Well:	P_NRC 35-9	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_NRC 35-9		
Design:	PLAN #1 1-10-10 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)
5,400.00	12.82	157.92	5,303.08	-821.60	333.26	886.61	0.00	0.00	0.00
5,500.00	12.82	157.92	5,400.59	-842.16	341.60	908.80	0.00	0.00	0.00
5,600.00	12.82	157.92	5,498.10	-862.72	349.94	930.99	0.00	0.00	0.00
5,700.00	12.82	157.92	5,595.61	-883.28	358.28	953.18	0.00	0.00	0.00
5,800.00	12.82	157.92	5,693.11	-903.84	366.62	975.37	0.00	0.00	0.00
Start Drop -2.00									
5,851.52	12.82	157.92	5,743.35	-914.44	370.92	986.80	0.00	0.00	0.00
5,900.00	11.85	157.92	5,790.71	-924.03	374.81	997.15	2.00	-2.00	0.00
6,000.00	9.85	157.92	5,888.92	-941.48	381.88	1,015.98	2.00	-2.00	0.00
6,100.00	7.85	157.92	5,987.72	-955.73	387.67	1,031.36	2.00	-2.00	0.00
6,200.00	5.85	157.92	6,087.00	-966.78	392.15	1,043.29	2.00	-2.00	0.00
6,300.00	3.85	157.92	6,186.64	-974.62	395.33	1,051.74	2.00	-2.00	0.00
6,400.00	1.85	157.92	6,286.51	-979.23	397.20	1,056.72	2.00	-2.00	0.00
Start 1925.00 hold at 6492.51 MD									
6,492.51	0.00	0.00	6,379.00	-980.61	397.76	1,058.21	2.00	-2.00	-170.71
6,500.00	0.00	0.00	6,386.49	-980.61	397.76	1,058.21	0.00	0.00	0.00
6,600.00	0.00	0.00	6,486.49	-980.61	397.76	1,058.21	0.00	0.00	0.00
6,700.00	0.00	0.00	6,586.49	-980.61	397.76	1,058.21	0.00	0.00	0.00
6,800.00	0.00	0.00	6,686.49	-980.61	397.76	1,058.21	0.00	0.00	0.00
6,900.00	0.00	0.00	6,786.49	-980.61	397.76	1,058.21	0.00	0.00	0.00
7,000.00	0.00	0.00	6,886.49	-980.61	397.76	1,058.21	0.00	0.00	0.00
7,100.00	0.00	0.00	6,986.49	-980.61	397.76	1,058.21	0.00	0.00	0.00
7,200.00	0.00	0.00	7,086.49	-980.61	397.76	1,058.21	0.00	0.00	0.00
7,300.00	0.00	0.00	7,186.49	-980.61	397.76	1,058.21	0.00	0.00	0.00
7,400.00	0.00	0.00	7,286.49	-980.61	397.76	1,058.21	0.00	0.00	0.00
NIO A									
7,492.51	0.00	0.00	7,379.00	-980.61	397.76	1,058.21	0.00	0.00	0.00
7,500.00	0.00	0.00	7,386.49	-980.61	397.76	1,058.21	0.00	0.00	0.00
7,600.00	0.00	0.00	7,486.49	-980.61	397.76	1,058.21	0.00	0.00	0.00
7,700.00	0.00	0.00	7,586.49	-980.61	397.76	1,058.21	0.00	0.00	0.00
7,800.00	0.00	0.00	7,686.49	-980.61	397.76	1,058.21	0.00	0.00	0.00
CODELL									
7,832.51	0.00	0.00	7,719.00	-980.61	397.76	1,058.21	0.00	0.00	0.00
7,900.00	0.00	0.00	7,786.49	-980.61	397.76	1,058.21	0.00	0.00	0.00
8,000.00	0.00	0.00	7,886.49	-980.61	397.76	1,058.21	0.00	0.00	0.00
8,100.00	0.00	0.00	7,986.49	-980.61	397.76	1,058.21	0.00	0.00	0.00
8,200.00	0.00	0.00	8,086.49	-980.61	397.76	1,058.21	0.00	0.00	0.00
JSAND									
8,282.51	0.00	0.00	8,169.00	-980.61	397.76	1,058.21	0.00	0.00	0.00
8,300.00	0.00	0.00	8,186.49	-980.61	397.76	1,058.21	0.00	0.00	0.00
8,400.00	0.00	0.00	8,286.49	-980.61	397.76	1,058.21	0.00	0.00	0.00
PBHL_NRC 35-9(50 FSL 1315 FWL)									
8,417.51	0.00	0.00	8,304.00	-980.61	397.76	1,058.21	0.00	0.00	0.00

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well P_NRC 35-9
Company:	US ROCKIES REGION PLANNING	TVD Reference:	WELL @ 5067.00ft (Original Well Elev)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	WELL @ 5067.00ft (Original Well Elev)
Site:	WELD_NRC 19-9 PAD	North Reference:	True
Well:	P_NRC 35-9	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_NRC 35-9		
Design:	PLAN #1 1-10-10 RHS		

Design Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)		
PBHL_NRC 35-9(50 F	0.00	0.00	8,304.00	-980.61	397.76	1,264,689.75	3,167,836.35	40° 3' 30.258 N	104° 54' 1.422 W
- plan hits target center									
- Circle (radius 50.00)									

Casing Points					
	Measured Depth	Vertical Depth		Casing Diameter	Hole Diameter
	(ft)	(ft)	Name	(in)	(in)
	985.00	985.00	8 5/8"	8.62	11.00

Formations						
	Measured Depth	Vertical Depth			Dip	Dip Direction
	(ft)	(ft)	Name	Lithology	(°)	(°)
	3,308.79	3,264.00	PARKMAN			
	4,821.50	4,739.00	SUSSEX			
	5,303.51	5,209.00	SHANNON			
	7,492.51	7,379.00	NIO A			
	7,832.51	7,719.00	CODELL			
	8,282.51	8,169.00	JSAND			

Plan Annotations					
	Measured Depth	Vertical Depth	Local Coordinates		
	(ft)	(ft)	+N/-S	+E/-W	Comment
	(ft)	(ft)	(ft)	(ft)	
	1,085.00	1,085.00	0.00	0.00	Start Build 2.00
	1,725.98	1,720.65	-66.17	26.84	Start 4125.54 hold at 1725.98 MD
	5,851.52	5,743.35	-914.44	370.92	Start Drop -2.00
	6,492.51	6,379.00	-980.61	397.76	Start 1925.00 hold at 6492.51 MD
	8,417.51	8,304.00	-980.61	397.76	TD at 8417.51



US ROCKIES REGION PLANNING

**COLORADO NORTHERN ZONE - 83
WELD_NRC 19-9 PAD
P_NRC 35-9**

**P_NRC 35-9
PLAN #1 1-10-10 RHS**

Anticollision Report

11 January, 2010



Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_NRC 35-9
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 5067.00ft (Original Well Elev)
Reference Site:	WELD_NRC 19-9 PAD	MD Reference:	WELL @ 5067.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_NRC 35-9	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_NRC 35-9	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 1-10-10 RHS	Offset TVD Reference:	Offset Datum

Reference	PLAN #1 1-10-10 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	1/11/2010		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.00	8,417.51	PLAN #1 1-10-10 RHS (P_NRC 35-9)	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_NRC 19-9 PAD						
P_NRC 11-9 - P_NRC 11-9 - PLAN #1 1-10-10 RHS	1,085.00	1,085.00	32.19	27.57	6.969	CC
P_NRC 11-9 - P_NRC 11-9 - PLAN #1 1-10-10 RHS	1,100.00	1,099.88	32.20	27.52	6.879	ES
P_NRC 11-9 - P_NRC 11-9 - PLAN #1 1-10-10 RHS	1,200.00	1,198.94	33.21	28.14	6.555	SF
P_NRC 13-9 - P_NRC 13-9 - PLAN #1 1-10-10 RHS	1,085.00	1,085.00	15.95	11.34	3.454	CC
P_NRC 13-9 - P_NRC 13-9 - PLAN #1 1-10-10 RHS	1,100.00	1,099.95	15.99	11.31	3.419	ES, SF
P_NRC 14-9 - P_NRC 14-9 - PLAN #1 1-10-10 RHS	1,085.00	1,085.00	64.10	59.48	13.877	CC
P_NRC 14-9 - P_NRC 14-9 - PLAN #1 1-10-10 RHS	1,100.00	1,099.69	64.12	59.44	13.705	ES
P_NRC 14-9 - P_NRC 14-9 - PLAN #1 1-10-10 RHS	1,300.00	1,295.40	68.63	63.22	12.694	SF
P_NRC 23-9 - P_NRC 23-9 - PLAN #1 1-10-10 RHS	1,085.00	1,085.00	48.14	45.27	16.776	CC
P_NRC 23-9 - P_NRC 23-9 - PLAN #1 1-10-10 RHS	1,100.00	1,099.76	48.17	45.26	16.570	ES
P_NRC 23-9 - P_NRC 23-9 - PLAN #1 1-10-10 RHS	1,200.00	1,198.06	49.57	46.44	15.837	SF
P_NRC 36-9 - P_NRC 36-9 - PLAN #1 1-10-10 RHS	1,085.00	1,085.00	16.23	11.62	3.515	CC
P_NRC 36-9 - P_NRC 36-9 - PLAN #1 1-10-10 RHS	1,100.00	1,099.93	16.25	11.57	3.474	ES
P_NRC 36-9 - P_NRC 36-9 - PLAN #1 1-10-10 RHS	1,200.00	1,199.43	17.34	12.31	3.445	SF
ROCKY MTN FUEL CO. "F" #2 EXISTING - ROCKY MT	1,719.67	1,695.49	39.86	-29.70	0.573	Level 1, CC
ROCKY MTN FUEL CO. "F" #2 EXISTING - ROCKY MT	1,725.98	1,701.65	39.89	-29.94	0.571	Level 1, ES, SF

Offset Design WELD_NRC 19-9 PAD - P_NRC 11-9 - P_NRC 11-9 - PLAN #1 1-10-10 RHS											
Survey Program: 0-MWD											
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	89.96	0.02	32.19	32.19		
100.00	100.00	100.00	100.00	0.10	0.10	89.96	0.02	32.19	32.19	32.00	0.19
200.00	200.00	200.00	200.00	0.32	0.32	89.96	0.02	32.19	32.19	31.55	0.64
300.00	300.00	300.00	300.00	0.55	0.55	89.96	0.02	32.19	32.19	31.10	1.09
400.00	400.00	400.00	400.00	0.77	0.77	89.96	0.02	32.19	32.19	30.65	1.54
500.00	500.00	500.00	500.00	0.99	0.99	89.96	0.02	32.19	32.19	30.20	1.99
600.00	600.00	600.00	600.00	1.22	1.22	89.96	0.02	32.19	32.19	29.75	2.44
700.00	700.00	700.00	700.00	1.44	1.44	89.96	0.02	32.19	32.19	29.30	2.89
800.00	800.00	800.00	800.00	1.67	1.67	89.96	0.02	32.19	32.19	28.85	3.34
900.00	900.00	900.00	900.00	1.89	1.89	89.96	0.02	32.19	32.19	28.40	3.79
1,000.00	1,000.00	1,000.00	1,000.00	2.12	2.12	89.96	0.02	32.19	32.19	27.95	4.24
1,085.00	1,085.00	1,085.00	1,085.00	2.31	2.31	89.96	0.02	32.19	32.19	27.57	4.62
											6.969 CC

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_NRC 35-9
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 5067.00ft (Original Well Elev)
Reference Site:	WELD_NRC 19-9 PAD	MD Reference:	WELL @ 5067.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_NRC 35-9	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_NRC 35-9	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 1-10-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design WELD_NRC 19-9 PAD - P_NRC 11-9 - P_NRC 11-9 - PLAN #1 1-10-10 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
1,100.00	1,100.00	1,099.88	1,099.88	2.34	2.34	-68.07	0.05	32.22	32.20	27.52	4.68	6.879	ES
1,200.00	1,199.97	1,198.94	1,198.91	2.51	2.56	-74.26	1.56	33.85	33.21	28.14	5.07	6.555	SF
1,300.00	1,299.80	1,297.44	1,297.24	2.70	2.77	-87.80	5.36	37.97	37.31	31.85	5.46	6.830	
1,400.00	1,399.37	1,394.92	1,394.31	2.89	3.00	-103.00	11.38	44.49	47.12	41.25	5.87	8.022	
1,500.00	1,498.55	1,490.93	1,489.57	3.12	3.23	-115.01	19.50	53.28	63.90	57.60	6.30	10.148	
1,600.00	1,597.23	1,585.05	1,582.51	3.37	3.49	-123.10	29.55	64.17	87.41	80.68	6.73	12.987	
1,700.00	1,695.29	1,676.90	1,672.70	3.68	3.77	-128.31	41.36	76.95	117.06	109.88	7.18	16.300	
1,725.98	1,720.65	1,700.00	1,695.29	3.76	3.84	-129.31	44.63	80.50	125.70	118.40	7.30	17.220	
1,800.00	1,792.82	1,766.43	1,760.02	4.02	4.08	-131.84	54.74	91.45	151.73	144.06	7.67	19.782	
1,900.00	1,890.33	1,854.12	1,844.91	4.39	4.41	-133.80	69.64	107.59	189.46	181.27	8.19	23.135	
2,000.00	1,987.83	1,939.90	1,927.27	4.79	4.78	-134.79	85.92	125.21	229.82	221.09	8.73	26.329	
2,100.00	2,085.34	2,028.30	2,011.53	5.19	5.21	-135.29	104.04	144.84	272.12	262.82	9.30	29.256	
2,200.00	2,182.85	2,118.82	2,097.77	5.61	5.67	-135.66	122.70	165.04	314.59	304.69	9.90	31.785	
2,300.00	2,280.36	2,209.34	2,184.01	6.04	6.14	-135.94	141.36	185.25	357.06	346.55	10.51	33.978	
2,400.00	2,377.86	2,299.86	2,270.25	6.48	6.63	-136.16	160.02	205.46	399.54	388.40	11.13	35.890	
2,500.00	2,475.37	2,390.38	2,356.49	6.93	7.13	-136.33	178.68	225.67	442.02	430.25	11.77	37.563	
2,600.00	2,572.88	2,480.90	2,442.73	7.38	7.64	-136.48	197.34	245.87	484.50	472.09	12.41	39.036	
2,700.00	2,670.39	2,571.42	2,528.97	7.83	8.15	-136.60	216.00	266.08	526.99	513.93	13.06	40.342	
2,800.00	2,767.89	2,661.94	2,615.21	8.29	8.67	-136.71	234.66	286.29	569.48	555.76	13.72	41.504	
2,900.00	2,865.40	2,752.46	2,701.45	8.75	9.19	-136.80	253.32	306.50	611.97	597.58	14.38	42.543	
3,000.00	2,962.91	2,842.98	2,787.69	9.21	9.72	-136.88	271.98	326.70	654.46	639.41	15.05	43.476	
3,100.00	3,060.42	2,933.50	2,873.93	9.67	10.25	-136.94	290.64	346.91	696.95	681.23	15.73	44.318	
3,200.00	3,157.92	3,024.02	2,960.17	10.14	10.79	-137.01	309.30	367.12	739.44	723.04	16.40	45.081	
3,300.00	3,255.43	3,114.54	3,046.41	10.61	11.33	-137.06	327.96	387.33	781.94	764.85	17.08	45.774	
3,400.00	3,352.94	3,205.06	3,132.65	11.08	11.87	-137.11	346.62	407.53	824.43	806.67	17.77	46.407	
3,500.00	3,450.44	3,295.58	3,218.89	11.55	12.41	-137.15	365.28	427.74	866.92	848.47	18.45	46.986	
3,600.00	3,547.95	3,386.10	3,305.14	12.02	12.95	-137.19	383.94	447.95	909.42	890.28	19.14	47.517	
3,700.00	3,645.46	3,476.62	3,391.38	12.49	13.49	-137.23	402.61	468.15	951.91	932.09	19.83	48.007	
3,800.00	3,742.97	3,567.14	3,477.62	12.97	14.04	-137.26	421.27	488.36	994.41	973.89	20.52	48.459	
3,900.00	3,840.47	3,657.66	3,563.86	13.44	14.59	-137.29	439.93	508.57	1,036.91	1,015.69	21.21	48.878	
4,000.00	3,937.98	3,748.18	3,650.10	13.92	15.13	-137.32	458.59	528.78	1,079.40	1,057.49	21.91	49.267	
4,100.00	4,035.49	3,838.70	3,736.34	14.39	15.68	-137.35	477.25	548.98	1,121.90	1,099.29	22.61	49.629	
4,200.00	4,133.00	3,929.22	3,822.58	14.87	16.23	-137.37	495.91	569.19	1,164.39	1,141.09	23.30	49.967	
4,300.00	4,230.50	4,019.74	3,908.82	15.35	16.78	-137.39	514.57	589.40	1,206.89	1,182.89	24.00	50.282	
4,400.00	4,328.01	4,110.26	3,995.06	15.82	17.33	-137.41	533.23	609.61	1,249.39	1,224.68	24.70	50.578	
4,500.00	4,425.52	4,200.78	4,081.30	16.30	17.88	-137.43	551.89	629.81	1,291.88	1,266.48	25.40	50.856	
4,600.00	4,523.03	4,291.30	4,167.54	16.78	18.43	-137.45	570.55	650.02	1,334.38	1,308.27	26.10	51.116	
4,700.00	4,620.53	4,381.82	4,253.78	17.26	18.98	-137.47	589.21	670.23	1,376.87	1,350.07	26.81	51.362	
4,800.00	4,718.04	4,472.34	4,340.02	17.74	19.54	-137.48	607.87	690.44	1,419.37	1,391.86	27.51	51.593	
4,900.00	4,815.55	4,562.86	4,426.26	18.22	20.09	-137.50	626.53	710.64	1,461.87	1,433.65	28.21	51.812	
5,000.00	4,913.05	4,653.38	4,512.50	18.70	20.64	-137.51	645.19	730.85	1,504.37	1,475.45	28.92	52.019	
5,100.00	5,010.56	4,743.90	4,598.74	19.18	21.20	-137.53	663.85	751.06	1,546.86	1,517.24	29.63	52.215	
5,200.00	5,108.07	4,834.42	4,684.98	19.66	21.75	-137.54	682.51	771.27	1,589.36	1,559.03	30.33	52.401	
5,300.00	5,205.58	4,924.94	4,771.22	20.14	22.30	-137.55	701.17	791.47	1,631.86	1,600.82	31.04	52.577	
5,400.00	5,303.08	5,015.46	4,857.46	20.62	22.86	-137.56	719.83	811.68	1,674.35	1,642.61	31.74	52.745	
5,500.00	5,400.59	5,105.98	4,943.70	21.10	23.41	-137.57	738.49	831.89	1,716.85	1,684.40	32.45	52.905	
5,600.00	5,498.10	5,196.50	5,029.94	21.58	23.97	-137.58	757.15	852.10	1,759.35	1,726.19	33.16	53.057	
5,700.00	5,595.61	5,287.03	5,116.18	22.06	24.52	-137.59	775.81	872.30	1,801.85	1,767.98	33.87	53.202	
5,800.00	5,693.11	5,377.55	5,202.42	22.54	25.08	-137.60	794.47	892.51	1,844.34	1,809.77	34.58	53.341	
5,851.52	5,743.35	5,424.18	5,246.85	22.79	25.37	-137.61	804.08	902.92	1,866.24	1,831.30	34.94	53.410	
5,900.00	5,790.71	5,468.19	5,288.78	22.99	25.64	-137.90	813.15	912.75	1,886.57	1,851.20	35.36	53.353	
6,000.00	5,888.92	5,559.74	5,376.00	23.30	26.20	-138.42	832.03	933.18	1,926.74	1,890.58	36.16	53.288	

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_NRC 35-9
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 5067.00ft (Original Well Elev)
Reference Site:	WELD_NRC 19-9 PAD	MD Reference:	WELL @ 5067.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_NRC 35-9	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_NRC 35-9	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 1-10-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design WELD_NRC 19-9 PAD - P_NRC 11-9 - P_NRC 11-9 - PLAN #1 1-10-10 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
6,100.00	5,987.72	5,652.23	5,464.11	23.57	26.77	-138.83	851.09	953.83	1,964.51	1,927.60	36.92	53.216	
6,200.00	6,087.00	5,844.47	5,648.56	23.81	27.68	-138.94	887.77	993.55	1,998.31	1,960.46	37.85	52.790	
6,300.00	6,186.64	6,097.43	5,895.97	24.00	28.59	-138.95	923.24	1,031.96	2,022.78	1,984.00	38.78	52.156	
6,400.00	6,286.51	6,360.31	6,156.94	24.16	29.22	-138.96	944.26	1,054.73	2,036.90	1,997.36	39.54	51.520	
6,492.51	6,379.00	6,582.56	6,379.00	24.28	29.52	18.95	949.35	1,060.23	2,040.49	2,000.45	40.04	50.963	
6,500.00	6,386.49	6,590.05	6,386.49	24.29	29.53	18.95	949.35	1,060.23	2,040.49	2,000.43	40.06	50.937	
6,600.00	6,486.49	6,690.05	6,486.49	24.39	29.63	18.95	949.35	1,060.23	2,040.49	2,000.15	40.34	50.585	
6,700.00	6,586.49	6,790.05	6,586.49	24.50	29.73	18.95	949.35	1,060.23	2,040.49	1,999.87	40.62	50.233	
6,800.00	6,686.49	6,890.05	6,686.49	24.61	29.84	18.95	949.35	1,060.23	2,040.49	1,999.59	40.91	49.882	
6,900.00	6,786.49	6,990.05	6,786.49	24.71	29.94	18.95	949.35	1,060.23	2,040.49	1,999.30	41.20	49.532	
7,000.00	6,886.49	7,090.05	6,886.49	24.82	30.05	18.95	949.35	1,060.23	2,040.49	1,999.01	41.49	49.184	
7,100.00	6,986.49	7,190.05	6,986.49	24.94	30.16	18.95	949.35	1,060.23	2,040.49	1,998.71	41.78	48.837	
7,200.00	7,086.49	7,290.05	7,086.49	25.05	30.27	18.95	949.35	1,060.23	2,040.49	1,998.41	42.08	48.492	
7,300.00	7,186.49	7,390.05	7,186.49	25.16	30.38	18.95	949.35	1,060.23	2,040.49	1,998.11	42.38	48.149	
7,400.00	7,286.49	7,490.05	7,286.49	25.28	30.49	18.95	949.35	1,060.23	2,040.49	1,997.81	42.68	47.807	
7,500.00	7,386.49	7,590.05	7,386.49	25.40	30.60	18.95	949.35	1,060.23	2,040.49	1,997.51	42.99	47.468	
7,600.00	7,486.49	7,690.05	7,486.49	25.52	30.72	18.95	949.35	1,060.23	2,040.49	1,997.20	43.29	47.131	
7,700.00	7,586.49	7,790.05	7,586.49	25.64	30.84	18.95	949.35	1,060.23	2,040.49	1,996.89	43.60	46.796	
7,800.00	7,686.49	7,890.05	7,686.49	25.76	30.95	18.95	949.35	1,060.23	2,040.49	1,996.58	43.92	46.463	
7,900.00	7,786.49	7,990.05	7,786.49	25.88	31.07	18.95	949.35	1,060.23	2,040.49	1,996.26	44.23	46.132	
8,000.00	7,886.49	8,090.05	7,886.49	26.01	31.19	18.95	949.35	1,060.23	2,040.49	1,995.94	44.55	45.803	
8,100.00	7,986.49	8,190.05	7,986.49	26.13	31.31	18.95	949.35	1,060.23	2,040.49	1,995.62	44.87	45.477	
8,200.00	8,086.49	8,290.05	8,086.49	26.26	31.43	18.95	949.35	1,060.23	2,040.49	1,995.30	45.19	45.154	
8,300.00	8,186.49	8,390.05	8,186.49	26.39	31.56	18.95	949.35	1,060.23	2,040.49	1,994.98	45.51	44.832	
8,400.00	8,286.49	8,490.05	8,286.49	26.52	31.68	18.95	949.35	1,060.23	2,040.49	1,994.65	45.84	44.514	
8,417.51	8,304.00	8,492.56	8,289.00	26.54	31.68	18.95	949.35	1,060.23	2,040.55	1,994.68	45.87	44.484	

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_NRC 35-9
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 5067.00ft (Original Well Elev)
Reference Site:	WELD_NRC 19-9 PAD	MD Reference:	WELL @ 5067.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_NRC 35-9	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_NRC 35-9	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 1-10-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design WELD_NRC 19-9 PAD - P_NRC 13-9 - P_NRC 13-9 - PLAN #1 1-10-10 RHS												Offset Site Error:	0.00 ft
Survey Program: 0-MWD												Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
0.00	0.00	0.00	0.00	0.00	0.00	-89.97	0.01	-15.95	15.95				
100.00	100.00	100.00	100.00	0.10	0.10	-89.97	0.01	-15.95	15.95	15.76	0.19	83.509	
200.00	200.00	200.00	200.00	0.32	0.32	-89.97	0.01	-15.95	15.95	15.31	0.64	24.906	
300.00	300.00	300.00	300.00	0.55	0.55	-89.97	0.01	-15.95	15.95	14.86	1.09	14.636	
400.00	400.00	400.00	400.00	0.77	0.77	-89.97	0.01	-15.95	15.95	14.41	1.54	10.362	
500.00	500.00	500.00	500.00	0.99	0.99	-89.97	0.01	-15.95	15.95	13.97	1.99	8.021	
600.00	600.00	600.00	600.00	1.22	1.22	-89.97	0.01	-15.95	15.95	13.52	2.44	6.542	
700.00	700.00	700.00	700.00	1.44	1.44	-89.97	0.01	-15.95	15.95	13.07	2.89	5.524	
800.00	800.00	800.00	800.00	1.67	1.67	-89.97	0.01	-15.95	15.95	12.62	3.34	4.780	
900.00	900.00	900.00	900.00	1.89	1.89	-89.97	0.01	-15.95	15.95	12.17	3.79	4.213	
1,000.00	1,000.00	1,000.00	1,000.00	2.12	2.12	-89.97	0.01	-15.95	15.95	11.72	4.24	3.766	
1,085.00	1,085.00	1,085.00	1,085.00	2.31	2.31	-89.97	0.01	-15.95	15.95	11.34	4.62	3.454 CC	
1,100.00	1,100.00	1,099.95	1,099.95	2.34	2.34	112.13	-0.02	-15.98	15.99	11.31	4.68	3.419 ES, SF	
1,200.00	1,199.97	1,199.57	1,199.54	2.51	2.52	113.01	-1.82	-17.33	18.21	13.18	5.02	3.624	
1,300.00	1,299.80	1,298.99	1,298.79	2.70	2.70	114.49	-6.38	-20.76	23.83	18.45	5.39	4.424	
1,400.00	1,399.37	1,398.04	1,397.42	2.89	2.90	115.78	-13.65	-26.23	32.87	27.10	5.77	5.693	
1,500.00	1,498.55	1,496.54	1,495.13	3.12	3.12	116.65	-23.57	-33.69	45.30	39.10	6.20	7.306	
1,600.00	1,597.23	1,594.34	1,591.66	3.37	3.38	117.18	-36.08	-43.10	61.08	54.40	6.68	9.145	
1,700.00	1,695.29	1,691.47	1,686.96	3.68	3.67	117.49	-51.07	-54.38	80.15	72.93	7.22	11.097	
1,725.98	1,720.65	1,716.85	1,711.83	3.76	3.75	117.67	-55.25	-57.52	85.53	78.15	7.38	11.593	
1,800.00	1,792.82	1,789.25	1,782.65	4.02	3.99	118.47	-67.13	-66.47	101.01	93.17	7.84	12.882	
1,900.00	1,890.33	1,887.03	1,878.34	4.39	4.34	119.23	-83.19	-78.55	121.95	113.45	8.50	14.341	
2,000.00	1,987.83	1,984.80	1,974.02	4.79	4.70	119.77	-99.25	-90.63	142.91	133.71	9.20	15.537	
2,100.00	2,085.34	2,082.57	2,069.71	5.19	5.08	120.17	-115.31	-102.71	163.87	153.95	9.92	16.523	
2,200.00	2,182.85	2,180.34	2,165.39	5.61	5.47	120.48	-131.37	-114.79	184.84	174.18	10.66	17.344	
2,300.00	2,280.36	2,278.11	2,261.08	6.04	5.86	120.73	-147.43	-126.87	205.82	194.40	11.41	18.034	
2,400.00	2,377.86	2,375.89	2,356.76	6.48	6.27	120.93	-163.48	-138.95	226.79	214.61	12.18	18.618	
2,500.00	2,475.37	2,473.66	2,452.45	6.93	6.67	121.10	-179.54	-151.03	247.77	234.81	12.96	19.118	
2,600.00	2,572.88	2,571.43	2,548.13	7.38	7.09	121.24	-195.60	-163.11	268.75	255.01	13.75	19.549	
2,700.00	2,670.39	2,669.20	2,643.82	7.83	7.50	121.36	-211.66	-175.19	289.74	275.19	14.54	19.923	
2,800.00	2,767.89	2,766.98	2,739.50	8.29	7.92	121.46	-227.72	-187.27	310.72	295.38	15.34	20.251	
2,900.00	2,865.40	2,864.75	2,835.19	8.75	8.35	121.56	-243.77	-199.35	331.71	315.56	16.15	20.540	
3,000.00	2,962.91	2,962.52	2,930.87	9.21	8.77	121.64	-259.83	-211.43	352.69	335.73	16.96	20.796	
3,100.00	3,060.42	3,060.29	3,026.56	9.67	9.20	121.71	-275.89	-223.51	373.68	355.90	17.77	21.025	
3,200.00	3,157.92	3,158.06	3,122.24	10.14	9.63	121.77	-291.95	-235.59	394.66	376.07	18.59	21.230	
3,300.00	3,255.43	3,255.84	3,217.93	10.61	10.06	121.83	-308.01	-247.67	415.65	396.24	19.41	21.415	
3,400.00	3,352.94	3,353.61	3,313.61	11.08	10.49	121.88	-324.07	-259.75	436.64	416.41	20.23	21.583	
3,500.00	3,450.44	3,451.38	3,409.30	11.55	10.92	121.93	-340.12	-271.84	457.62	436.57	21.05	21.736	
3,600.00	3,547.95	3,549.15	3,504.98	12.02	11.35	121.97	-356.18	-283.92	478.61	456.73	21.88	21.876	
3,700.00	3,645.46	3,646.93	3,600.67	12.49	11.79	122.01	-372.24	-296.00	499.60	476.90	22.70	22.004	
3,800.00	3,742.97	3,744.70	3,696.35	12.97	12.23	122.04	-388.30	-308.08	520.59	497.06	23.53	22.123	
3,900.00	3,840.47	3,842.47	3,792.04	13.44	12.66	122.08	-404.36	-320.16	541.58	517.22	24.36	22.232	
4,000.00	3,937.98	3,940.24	3,887.72	13.92	13.10	122.11	-420.41	-332.24	562.57	537.38	25.19	22.333	
4,100.00	4,035.49	4,038.01	3,983.40	14.39	13.54	122.14	-436.47	-344.32	583.55	557.53	26.02	22.427	
4,200.00	4,133.00	4,135.79	4,079.09	14.87	13.97	122.16	-452.53	-356.40	604.54	577.69	26.85	22.515	
4,300.00	4,230.50	4,233.56	4,174.77	15.35	14.41	122.19	-468.59	-368.48	625.53	597.85	27.68	22.598	
4,400.00	4,328.01	4,339.64	4,278.84	15.82	14.80	122.32	-485.02	-380.84	646.03	617.57	28.46	22.699	
4,500.00	4,425.52	4,448.39	4,386.23	16.30	15.10	122.76	-498.72	-391.14	664.97	635.81	29.16	22.803	
4,600.00	4,523.03	4,557.34	4,494.38	16.78	15.37	123.49	-509.16	-399.00	682.39	652.57	29.81	22.888	
4,700.00	4,620.53	4,666.16	4,602.83	17.26	15.59	124.49	-516.31	-404.38	698.38	667.97	30.41	22.963	
4,800.00	4,718.04	4,774.54	4,711.10	17.74	15.77	125.75	-520.15	-407.27	713.12	682.16	30.95	23.039	
4,900.00	4,815.55	4,879.00	4,815.55	18.22	15.92	127.18	-520.89	-407.83	726.85	695.41	31.44	23.120	

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_NRC 35-9
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 5067.00ft (Original Well Elev)
Reference Site:	WELD_NRC 19-9 PAD	MD Reference:	WELL @ 5067.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_NRC 35-9	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_NRC 35-9	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 1-10-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design WELD_NRC 19-9 PAD - P_NRC 13-9 - P_NRC 13-9 - PLAN #1 1-10-10 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	
5,000.00	4,913.05	4,976.51	4,913.05	18.70	16.04	128.53	-520.89	-407.83	740.68	708.79	31.89	23.226	
5,100.00	5,010.56	5,074.02	5,010.56	19.18	16.16	129.82	-520.89	-407.83	754.91	722.58	32.33	23.352	
5,200.00	5,108.07	5,171.52	5,108.07	19.66	16.29	131.08	-520.89	-407.83	769.51	736.76	32.75	23.494	
5,300.00	5,205.58	5,269.03	5,205.58	20.14	16.42	132.28	-520.89	-407.83	784.47	751.30	33.17	23.650	
5,400.00	5,303.08	5,366.54	5,303.08	20.62	16.55	133.44	-520.89	-407.83	799.77	766.19	33.58	23.818	
5,500.00	5,400.59	5,464.05	5,400.59	21.10	16.68	134.56	-520.89	-407.83	815.38	781.41	33.98	23.998	
5,600.00	5,498.10	5,561.55	5,498.10	21.58	16.82	135.64	-520.89	-407.83	831.30	796.93	34.37	24.187	
5,700.00	5,595.61	5,659.06	5,595.61	22.06	16.95	136.67	-520.89	-407.83	847.49	812.74	34.75	24.385	
5,800.00	5,693.11	5,756.57	5,693.11	22.54	17.09	137.67	-520.89	-407.83	863.96	828.80	35.16	24.574	
5,851.52	5,743.35	5,806.81	5,743.35	22.79	17.16	138.17	-520.89	-407.83	872.54	837.17	35.36	24.673	
5,900.00	5,790.71	5,854.16	5,790.71	22.99	17.23	138.72	-520.89	-407.83	880.36	844.80	35.56	24.756	
6,000.00	5,888.92	5,952.37	5,888.92	23.30	17.37	139.70	-520.89	-407.83	894.73	858.82	35.91	24.915	
6,100.00	5,987.72	6,051.18	5,987.72	23.57	17.51	140.48	-520.89	-407.83	906.58	870.34	36.24	25.015	
6,200.00	6,087.00	6,150.46	6,087.00	23.81	17.66	141.07	-520.89	-407.83	915.85	879.30	36.55	25.055	
6,300.00	6,186.64	6,250.09	6,186.64	24.00	17.81	141.48	-520.89	-407.83	922.46	885.61	36.85	25.036	
6,400.00	6,286.51	6,349.97	6,286.51	24.16	17.96	141.72	-520.89	-407.83	926.35	889.24	37.11	24.959	
6,492.51	6,379.00	6,442.46	6,379.00	24.28	18.10	-60.29	-520.89	-407.83	927.53	890.17	37.36	24.828	
6,500.00	6,386.49	6,449.95	6,386.49	24.29	18.11	-60.29	-520.89	-407.83	927.53	890.15	37.38	24.813	
6,600.00	6,486.49	6,549.95	6,486.49	24.39	18.27	-60.29	-520.89	-407.83	927.53	889.86	37.66	24.627	
6,700.00	6,586.49	6,649.95	6,586.49	24.50	18.42	-60.29	-520.89	-407.83	927.53	889.58	37.95	24.442	
6,800.00	6,686.49	6,749.95	6,686.49	24.61	18.58	-60.29	-520.89	-407.83	927.53	889.29	38.24	24.257	
6,900.00	6,786.49	6,849.95	6,786.49	24.71	18.74	-60.29	-520.89	-407.83	927.53	889.00	38.53	24.073	
7,000.00	6,886.49	6,949.95	6,886.49	24.82	18.90	-60.29	-520.89	-407.83	927.53	888.70	38.82	23.890	
7,100.00	6,986.49	7,049.95	6,986.49	24.94	19.06	-60.29	-520.89	-407.83	927.53	888.41	39.12	23.708	
7,200.00	7,086.49	7,149.95	7,086.49	25.05	19.22	-60.29	-520.89	-407.83	927.53	888.10	39.42	23.527	
7,300.00	7,186.49	7,249.95	7,186.49	25.16	19.38	-60.29	-520.89	-407.83	927.53	887.80	39.73	23.348	
7,400.00	7,286.49	7,349.95	7,286.49	25.28	19.55	-60.29	-520.89	-407.83	927.53	887.49	40.03	23.169	
7,500.00	7,386.49	7,449.95	7,386.49	25.40	19.71	-60.29	-520.89	-407.83	927.53	887.19	40.34	22.991	
7,600.00	7,486.49	7,549.95	7,486.49	25.52	19.88	-60.29	-520.89	-407.83	927.53	886.87	40.65	22.815	
7,700.00	7,586.49	7,649.95	7,586.49	25.64	20.05	-60.29	-520.89	-407.83	927.53	886.56	40.97	22.640	
7,800.00	7,686.49	7,749.95	7,686.49	25.76	20.22	-60.29	-520.89	-407.83	927.53	886.24	41.28	22.467	
7,900.00	7,786.49	7,849.95	7,786.49	25.88	20.39	-60.29	-520.89	-407.83	927.53	885.92	41.60	22.294	
8,000.00	7,886.49	7,949.95	7,886.49	26.01	20.56	-60.29	-520.89	-407.83	927.53	885.60	41.92	22.124	
8,100.00	7,986.49	8,049.95	7,986.49	26.13	20.73	-60.29	-520.89	-407.83	927.53	885.28	42.25	21.954	
8,200.00	8,086.49	8,149.95	8,086.49	26.26	20.90	-60.29	-520.89	-407.83	927.53	884.95	42.57	21.786	
8,300.00	8,186.49	8,249.95	8,186.49	26.39	21.08	-60.29	-520.89	-407.83	927.53	884.62	42.90	21.619	
8,400.00	8,286.49	8,349.95	8,286.49	26.52	21.25	-60.29	-520.89	-407.83	927.53	884.29	43.23	21.454	
8,417.51	8,304.00	8,367.46	8,304.00	26.54	21.28	-60.29	-520.89	-407.83	927.53	884.24	43.29	21.425	

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_NRC 35-9
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 5067.00ft (Original Well Elev)
Reference Site:	WELD_NRC 19-9 PAD	MD Reference:	WELL @ 5067.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_NRC 35-9	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_NRC 35-9	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 1-10-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design WELD_NRC 19-9 PAD - P_NRC 14-9 - P_NRC 14-9 - PLAN #1 1-10-10 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	89.99	0.01	64.10	64.10				
100.00	100.00	100.00	100.00	0.10	0.10	89.99	0.01	64.10	64.10	63.91	0.19	335.501	
200.00	200.00	200.00	200.00	0.32	0.32	89.99	0.01	64.10	64.10	63.46	0.64	100.062	
300.00	300.00	300.00	300.00	0.55	0.55	89.99	0.01	64.10	64.10	63.01	1.09	58.799	
400.00	400.00	400.00	400.00	0.77	0.77	89.99	0.01	64.10	64.10	62.56	1.54	41.631	
500.00	500.00	500.00	500.00	0.99	0.99	89.99	0.01	64.10	64.10	62.11	1.99	32.223	
600.00	600.00	600.00	600.00	1.22	1.22	89.99	0.01	64.10	64.10	61.66	2.44	26.283	
700.00	700.00	700.00	700.00	1.44	1.44	89.99	0.01	64.10	64.10	61.21	2.89	22.193	
800.00	800.00	800.00	800.00	1.67	1.67	89.99	0.01	64.10	64.10	60.76	3.34	19.204	
900.00	900.00	900.00	900.00	1.89	1.89	89.99	0.01	64.10	64.10	60.31	3.79	16.924	
1,000.00	1,000.00	1,000.00	1,000.00	2.12	2.12	89.99	0.01	64.10	64.10	59.86	4.24	15.129	
1,085.00	1,085.00	1,085.00	1,085.00	2.31	2.31	89.99	0.01	64.10	64.10	59.48	4.62	13.877	CC
1,100.00	1,100.00	1,099.69	1,099.69	2.34	2.34	-67.95	0.00	64.13	64.12	59.44	4.68	13.705	ES
1,200.00	1,199.97	1,197.61	1,197.58	2.51	2.53	-69.07	-0.76	66.17	65.36	60.33	5.03	12.982	
1,300.00	1,299.80	1,295.40	1,295.21	2.70	2.72	-71.71	-2.68	71.34	68.63	63.22	5.41	12.694	SF
1,400.00	1,399.37	1,392.95	1,392.36	2.89	2.93	-75.43	-5.75	79.60	74.15	68.35	5.80	12.780	
1,500.00	1,498.55	1,490.16	1,488.81	3.12	3.16	-79.69	-9.95	90.91	82.19	75.96	6.23	13.184	
1,600.00	1,597.23	1,586.91	1,584.35	3.37	3.42	-83.97	-15.25	105.21	92.97	86.25	6.72	13.835	
1,700.00	1,695.29	1,683.11	1,678.78	3.68	3.72	-87.92	-21.64	122.42	106.59	99.32	7.28	14.651	
1,725.98	1,720.65	1,708.01	1,703.11	3.76	3.80	-88.87	-23.47	127.36	110.61	103.18	7.43	14.882	
1,800.00	1,792.82	1,778.73	1,771.97	4.02	4.06	-91.20	-29.08	142.46	123.08	115.17	7.91	15.565	
1,900.00	1,890.33	1,873.77	1,863.85	4.39	4.45	-92.85	-37.54	165.26	142.13	133.53	8.60	16.532	
2,000.00	1,987.83	1,968.04	1,954.12	4.79	4.89	-93.27	-46.98	190.68	163.46	154.12	9.34	17.506	
2,100.00	2,085.34	2,061.34	2,042.55	5.19	5.39	-92.89	-57.33	218.57	186.96	176.83	10.13	18.462	
2,200.00	2,182.85	2,153.50	2,128.90	5.61	5.95	-91.99	-68.54	248.75	212.64	201.68	10.96	19.405	
2,300.00	2,280.36	2,245.42	2,213.95	6.04	6.55	-90.76	-80.67	281.43	240.54	228.72	11.82	20.354	
2,400.00	2,377.86	2,339.80	2,300.69	6.48	7.24	-89.51	-93.62	316.30	269.65	256.93	12.72	21.199	
2,500.00	2,475.37	2,435.32	2,388.48	6.93	7.95	-88.50	-106.72	351.59	298.86	285.22	13.64	21.913	
2,600.00	2,572.88	2,530.84	2,476.27	7.38	8.67	-87.67	-119.82	386.88	328.14	313.57	14.57	22.526	
2,700.00	2,670.39	2,626.36	2,564.06	7.83	9.41	-86.97	-132.92	422.17	357.47	341.97	15.50	23.056	
2,800.00	2,767.89	2,721.87	2,651.85	8.29	10.15	-86.38	-146.02	457.45	386.85	370.40	16.45	23.519	
2,900.00	2,865.40	2,817.39	2,739.63	8.75	10.90	-85.87	-159.12	492.74	416.25	398.86	17.40	23.926	
3,000.00	2,962.91	2,912.91	2,827.42	9.21	11.66	-85.43	-172.22	528.03	445.69	427.34	18.35	24.287	
3,100.00	3,060.42	3,008.43	2,915.21	9.67	12.43	-85.04	-185.32	563.32	475.14	455.83	19.31	24.608	
3,200.00	3,157.92	3,103.95	3,003.00	10.14	13.19	-84.70	-198.42	598.61	504.61	484.34	20.27	24.896	
3,300.00	3,255.43	3,199.46	3,090.79	10.61	13.97	-84.40	-211.52	633.89	534.10	512.87	21.23	25.155	
3,400.00	3,352.94	3,294.98	3,178.58	11.08	14.74	-84.13	-224.62	669.18	563.60	541.40	22.20	25.390	
3,500.00	3,450.44	3,390.50	3,266.36	11.55	15.52	-83.88	-237.72	704.47	593.11	569.94	23.17	25.603	
3,600.00	3,547.95	3,486.02	3,354.15	12.02	16.30	-83.66	-250.82	739.76	622.62	598.49	24.13	25.798	
3,700.00	3,645.46	3,581.54	3,441.94	12.49	17.08	-83.46	-263.92	775.05	652.15	627.04	25.10	25.978	
3,800.00	3,742.97	3,677.05	3,529.73	12.97	17.86	-83.28	-277.02	810.34	681.68	655.60	26.08	26.143	
3,900.00	3,840.47	3,773.23	3,618.12	13.44	18.64	-83.11	-290.21	845.87	711.22	684.17	27.05	26.294	
4,000.00	3,937.98	3,893.51	3,729.68	13.92	19.41	-83.04	-305.84	887.99	739.07	711.03	28.04	26.355	
4,100.00	4,035.49	4,015.96	3,845.10	14.39	20.10	-83.22	-320.08	926.33	763.68	734.64	29.04	26.301	
4,200.00	4,133.00	4,140.21	3,963.88	14.87	20.72	-83.64	-332.75	960.47	784.97	754.93	30.04	26.131	
4,300.00	4,230.50	4,265.81	4,085.44	15.35	21.28	-84.27	-343.73	990.04	802.92	771.87	31.05	25.858	
4,400.00	4,328.01	4,392.29	4,209.14	15.82	21.76	-85.12	-352.90	1,014.74	817.55	785.49	32.06	25.497	
4,500.00	4,425.52	4,519.17	4,334.27	16.30	22.16	-86.18	-360.18	1,034.36	828.93	795.86	33.07	25.065	
4,600.00	4,523.03	4,645.95	4,460.10	16.78	22.47	-87.45	-365.52	1,048.75	837.16	803.09	34.07	24.572	
4,700.00	4,620.53	4,772.13	4,585.90	17.26	22.71	-88.93	-368.91	1,057.87	842.39	807.33	35.06	24.030	
4,800.00	4,718.04	4,897.24	4,710.93	17.74	22.87	-90.63	-370.36	1,061.79	844.82	808.79	36.03	23.450	
4,900.00	4,815.55	5,001.86	4,815.55	18.22	22.97	-92.20	-370.43	1,061.97	845.51	808.61	36.90	22.912	

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

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_NRC 35-9
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 5067.00ft (Original Well Elev)
Reference Site:	WELD_NRC 19-9 PAD	MD Reference:	WELL @ 5067.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_NRC 35-9	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_NRC 35-9	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 1-10-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design WELD_NRC 19-9 PAD - P_NRC 14-9 - P_NRC 14-9 - PLAN #1 1-10-10 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	
5,000.00	4,913.05	5,099.37	4,913.05	18.70	23.06	-93.66	-370.43	1,061.97	846.67	808.93	37.74	22.435	
5,100.00	5,010.56	5,196.87	5,010.56	19.18	23.16	-95.12	-370.43	1,061.97	848.41	809.85	38.56	22.003	
5,200.00	5,108.07	5,294.38	5,108.07	19.66	23.26	-96.57	-370.43	1,061.97	850.73	811.37	39.36	21.612	
5,300.00	5,205.58	5,391.89	5,205.58	20.14	23.36	-98.01	-370.43	1,061.97	853.62	813.47	40.15	21.260	
5,400.00	5,303.08	5,489.39	5,303.08	20.62	23.46	-99.45	-370.43	1,061.97	857.07	816.15	40.92	20.945	
5,500.00	5,400.59	5,586.90	5,400.59	21.10	23.56	-100.87	-370.43	1,061.97	861.08	819.41	41.67	20.664	
5,600.00	5,498.10	5,684.41	5,498.10	21.58	23.66	-102.28	-370.43	1,061.97	865.64	823.24	42.40	20.416	
5,700.00	5,595.61	5,781.92	5,595.61	22.06	23.77	-103.67	-370.43	1,061.97	870.74	827.63	43.11	20.198	
5,800.00	5,693.11	5,879.42	5,693.11	22.54	23.88	-105.05	-370.43	1,061.97	876.38	832.58	43.80	20.009	
5,851.52	5,743.35	5,929.66	5,743.35	22.79	23.93	-105.75	-370.43	1,061.97	879.49	835.34	44.15	19.922	
5,900.00	5,790.71	5,977.02	5,790.71	22.99	23.98	-106.44	-370.43	1,061.97	882.42	837.96	44.46	19.849	
6,000.00	5,888.92	6,075.23	5,888.92	23.30	24.10	-107.69	-370.43	1,061.97	888.04	843.05	44.99	19.738	
6,100.00	5,987.72	6,174.03	5,987.72	23.57	24.21	-108.72	-370.43	1,061.97	892.89	847.43	45.47	19.639	
6,200.00	6,087.00	6,273.31	6,087.00	23.81	24.32	-109.51	-370.43	1,061.97	896.82	850.94	45.88	19.546	
6,300.00	6,186.64	6,372.95	6,186.64	24.00	24.44	-110.07	-370.43	1,061.97	899.70	853.45	46.25	19.454	
6,400.00	6,286.51	6,472.82	6,286.51	24.16	24.56	-110.40	-370.43	1,061.97	901.42	854.86	46.56	19.360	
6,492.51	6,379.00	6,565.31	6,379.00	24.28	24.67	47.43	-370.43	1,061.97	901.94	855.13	46.81	19.267	
6,500.00	6,386.49	6,572.80	6,386.49	24.29	24.68	47.43	-370.43	1,061.97	901.94	855.11	46.83	19.259	
6,600.00	6,486.49	6,672.80	6,486.49	24.39	24.80	47.43	-370.43	1,061.97	901.94	854.87	47.07	19.162	
6,700.00	6,586.49	6,772.80	6,586.49	24.50	24.92	47.43	-370.43	1,061.97	901.94	854.63	47.31	19.064	
6,800.00	6,686.49	6,872.80	6,686.49	24.61	25.05	47.43	-370.43	1,061.97	901.94	854.39	47.55	18.966	
6,900.00	6,786.49	6,972.80	6,786.49	24.71	25.18	47.43	-370.43	1,061.97	901.94	854.14	47.80	18.868	
7,000.00	6,886.49	7,072.80	6,886.49	24.82	25.30	47.43	-370.43	1,061.97	901.94	853.89	48.05	18.770	
7,100.00	6,986.49	7,172.80	6,986.49	24.94	25.43	47.43	-370.43	1,061.97	901.94	853.63	48.30	18.672	
7,200.00	7,086.49	7,272.80	7,086.49	25.05	25.56	47.43	-370.43	1,061.97	901.94	853.38	48.56	18.573	
7,300.00	7,186.49	7,372.80	7,186.49	25.16	25.69	47.43	-370.43	1,061.97	901.94	853.12	48.82	18.475	
7,400.00	7,286.49	7,472.80	7,286.49	25.28	25.83	47.43	-370.43	1,061.97	901.94	852.86	49.08	18.377	
7,500.00	7,386.49	7,572.80	7,386.49	25.40	25.96	47.43	-370.43	1,061.97	901.94	852.59	49.35	18.278	
7,600.00	7,486.49	7,672.80	7,486.49	25.52	26.10	47.43	-370.43	1,061.97	901.94	852.33	49.61	18.180	
7,700.00	7,586.49	7,772.80	7,586.49	25.64	26.23	47.43	-370.43	1,061.97	901.94	852.06	49.88	18.082	
7,800.00	7,686.49	7,872.80	7,686.49	25.76	26.37	47.43	-370.43	1,061.97	901.94	851.79	50.15	17.984	
7,900.00	7,786.49	7,972.80	7,786.49	25.88	26.51	47.43	-370.43	1,061.97	901.94	851.51	50.43	17.886	
8,000.00	7,886.49	8,072.80	7,886.49	26.01	26.65	47.43	-370.43	1,061.97	901.94	851.23	50.71	17.788	
8,100.00	7,986.49	8,172.80	7,986.49	26.13	26.79	47.43	-370.43	1,061.97	901.94	850.95	50.99	17.690	
8,200.00	8,086.49	8,272.80	8,086.49	26.26	26.93	47.43	-370.43	1,061.97	901.94	850.67	51.27	17.593	
8,300.00	8,186.49	8,372.80	8,186.49	26.39	27.08	47.43	-370.43	1,061.97	901.94	850.39	51.55	17.496	
8,400.00	8,286.49	8,472.80	8,286.49	26.52	27.22	47.43	-370.43	1,061.97	901.94	850.10	51.84	17.399	
8,417.51	8,304.00	8,490.31	8,304.00	26.54	27.25	47.43	-370.43	1,061.97	901.94	850.05	51.89	17.382	

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_NRC 35-9
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 5067.00ft (Original Well Elev)
Reference Site:	WELD_NRC 19-9 PAD	MD Reference:	WELL @ 5067.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_NRC 35-9	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_NRC 35-9	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 1-10-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design WELD_NRC 19-9 PAD - P_NRC 23-9 - P_NRC 23-9 - PLAN #1 1-10-10 RHS												Offset Site Error:	0.00 ft
Survey Program: 0-Good_gyro												Offset Well Error:	0.00 ft
Reference	Offset	Semi Major Axis		Distance									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	89.99	0.00	48.14	48.14				
100.00	100.00	100.00	100.00	0.10	0.04	89.99	0.00	48.14	48.14	48.00	0.14	343.803	
200.00	200.00	200.00	200.00	0.32	0.10	89.99	0.00	48.14	48.14	47.73	0.42	115.408	
300.00	300.00	300.00	300.00	0.55	0.15	89.99	0.00	48.14	48.14	47.45	0.69	69.342	
400.00	400.00	400.00	400.00	0.77	0.20	89.99	0.00	48.14	48.14	47.17	0.97	49.560	
500.00	500.00	500.00	500.00	0.99	0.25	89.99	0.00	48.14	48.14	46.89	1.25	38.560	
600.00	600.00	600.00	600.00	1.22	0.31	89.99	0.00	48.14	48.14	46.62	1.53	31.556	
700.00	700.00	700.00	700.00	1.44	0.36	89.99	0.00	48.14	48.14	46.34	1.80	26.705	
800.00	800.00	800.00	800.00	1.67	0.41	89.99	0.00	48.14	48.14	46.06	2.08	23.147	
900.00	900.00	900.00	900.00	1.89	0.46	89.99	0.00	48.14	48.14	45.79	2.36	20.425	
1,000.00	1,000.00	1,000.00	1,000.00	2.12	0.52	89.99	0.00	48.14	48.14	45.51	2.63	18.277	
1,085.00	1,085.00	1,085.00	1,085.00	2.31	0.56	89.99	0.00	48.14	48.14	45.27	2.87	16.776 CC	
1,100.00	1,100.00	1,099.76	1,099.76	2.34	0.57	-67.98	0.01	48.18	48.17	45.26	2.91	16.570 ES	
1,200.00	1,199.97	1,198.06	1,198.03	2.51	0.62	-70.79	0.40	50.34	49.57	46.44	3.13	15.837 SF	
1,300.00	1,299.80	1,296.04	1,295.85	2.70	0.67	-77.17	1.38	55.79	53.64	50.28	3.36	15.944	
1,400.00	1,399.37	1,393.43	1,392.84	2.89	0.74	-85.40	2.94	64.47	61.34	57.72	3.62	16.959	
1,500.00	1,498.55	1,489.97	1,488.62	3.12	0.81	-93.58	5.07	76.27	73.50	69.61	3.90	18.855	
1,600.00	1,597.23	1,585.39	1,582.85	3.37	0.91	-100.54	7.73	91.04	90.49	86.27	4.22	21.448	
1,700.00	1,695.29	1,679.48	1,675.22	3.68	1.03	-105.95	10.90	108.63	112.27	107.68	4.59	24.470	
1,725.98	1,720.65	1,703.68	1,698.88	3.76	1.07	-107.13	11.80	113.63	118.69	114.00	4.69	25.297	
1,800.00	1,792.82	1,772.16	1,765.59	4.02	1.18	-110.03	14.54	128.86	138.32	133.31	5.01	27.612	
1,900.00	1,890.33	1,863.67	1,854.12	4.39	1.36	-112.30	18.65	151.65	167.40	161.93	5.47	30.608	
2,000.00	1,987.83	1,953.86	1,940.60	4.79	1.57	-113.37	23.18	176.82	199.05	193.09	5.96	33.382	
2,100.00	2,085.34	2,042.58	2,024.85	5.19	1.80	-113.70	28.11	204.19	233.08	226.59	6.49	35.934	
2,200.00	2,182.85	2,129.71	2,106.71	5.61	2.06	-113.57	33.40	233.55	269.39	262.35	7.03	38.299	
2,300.00	2,280.36	2,221.24	2,192.07	6.04	2.35	-113.24	39.26	266.05	307.14	299.53	7.61	40.341	
2,400.00	2,377.86	2,313.81	2,278.39	6.48	2.65	-112.97	45.19	298.96	344.94	336.73	8.21	42.028	
2,500.00	2,475.37	2,406.38	2,364.71	6.93	2.96	-112.76	51.11	331.87	382.74	373.93	8.81	43.441	
2,600.00	2,572.88	2,498.96	2,451.04	7.38	3.27	-112.59	57.04	364.78	420.54	411.12	9.42	44.637	
2,700.00	2,670.39	2,591.53	2,537.36	7.83	3.58	-112.44	62.97	397.68	458.35	448.31	10.04	45.659	
2,800.00	2,767.89	2,684.10	2,623.68	8.29	3.90	-112.32	68.90	430.59	496.16	485.50	10.66	46.541	
2,900.00	2,865.40	2,776.67	2,710.00	8.75	4.21	-112.21	74.83	463.50	533.97	522.68	11.29	47.309	
3,000.00	2,962.91	2,869.24	2,796.33	9.21	4.53	-112.12	80.75	496.41	571.78	559.86	11.92	47.981	
3,100.00	3,060.42	2,961.82	2,882.65	9.67	4.85	-112.04	86.68	529.32	609.59	597.04	12.55	48.575	
3,200.00	3,157.92	3,054.39	2,968.97	10.14	5.16	-111.97	92.61	562.22	647.40	634.22	13.18	49.103	
3,300.00	3,255.43	3,146.96	3,055.29	10.61	5.48	-111.91	98.54	595.13	685.22	671.40	13.82	49.574	
3,400.00	3,352.94	3,239.53	3,141.62	11.08	5.80	-111.85	104.47	628.04	723.03	708.57	14.46	49.997	
3,500.00	3,450.44	3,332.11	3,227.94	11.55	6.12	-111.80	110.39	660.95	760.85	745.75	15.10	50.379	
3,600.00	3,547.95	3,424.68	3,314.26	12.02	6.44	-111.75	116.32	693.86	798.66	782.92	15.75	50.725	
3,700.00	3,645.46	3,517.25	3,400.58	12.49	6.76	-111.71	122.25	726.76	836.48	820.09	16.39	51.039	
3,800.00	3,742.97	3,609.82	3,486.90	12.97	7.08	-111.67	128.18	759.67	874.30	857.26	17.03	51.327	
3,900.00	3,840.47	3,702.40	3,573.23	13.44	7.40	-111.64	134.11	792.58	912.11	894.43	17.68	51.591	
4,000.00	3,937.98	3,794.97	3,659.55	13.92	7.72	-111.61	140.04	825.49	949.93	931.60	18.33	51.833	
4,100.00	4,035.49	3,887.54	3,745.87	14.39	8.04	-111.58	145.96	858.40	987.75	968.77	18.97	52.057	
4,200.00	4,133.00	3,980.11	3,832.19	14.87	8.36	-111.55	151.89	891.31	1,025.57	1,005.94	19.62	52.264	
4,300.00	4,230.50	4,072.68	3,918.52	15.35	8.68	-111.52	157.82	924.21	1,063.38	1,043.11	20.27	52.456	
4,400.00	4,328.01	4,165.26	4,004.84	15.82	9.00	-111.50	163.75	957.12	1,101.20	1,080.28	20.92	52.634	
4,500.00	4,425.52	4,257.83	4,091.16	16.30	9.32	-111.48	169.68	990.03	1,139.02	1,117.45	21.57	52.801	
4,600.00	4,523.03	4,350.40	4,177.48	16.78	9.64	-111.46	175.60	1,022.94	1,176.84	1,154.61	22.22	52.956	
4,700.00	4,620.53	4,442.97	4,263.81	17.26	9.96	-111.44	181.53	1,055.85	1,214.66	1,191.78	22.87	53.102	
4,800.00	4,718.04	4,535.55	4,350.13	17.74	10.28	-111.42	187.46	1,088.75	1,252.47	1,228.95	23.53	53.238	
4,900.00	4,815.55	4,628.12	4,436.45	18.22	10.60	-111.40	193.39	1,121.66	1,290.29	1,266.11	24.18	53.367	

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_NRC 35-9
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 5067.00ft (Original Well Elev)
Reference Site:	WELD_NRC 19-9 PAD	MD Reference:	WELL @ 5067.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_NRC 35-9	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_NRC 35-9	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 1-10-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design WELD_NRC 19-9 PAD - P_NRC 23-9 - P_NRC 23-9 - PLAN #1 1-10-10 RHS												Offset Site Error:	0.00 ft
Survey Program: 0-Good_gyro												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	
5,000.00	4,913.05	4,720.69	4,522.77	18.70	10.92	-111.39	199.32	1,154.57	1,328.11	1,303.28	24.83	53.488	
5,100.00	5,010.56	4,813.26	4,609.09	19.18	11.24	-111.37	205.24	1,187.48	1,365.93	1,340.45	25.48	53.602	
5,200.00	5,108.07	4,905.83	4,695.42	19.66	11.57	-111.36	211.17	1,220.39	1,403.75	1,377.61	26.14	53.709	
5,300.00	5,205.58	4,998.41	4,781.74	20.14	11.89	-111.34	217.10	1,253.29	1,441.57	1,414.78	26.79	53.811	
5,400.00	5,303.08	5,090.98	4,868.06	20.62	12.21	-111.33	223.03	1,286.20	1,479.39	1,451.94	27.44	53.908	
5,500.00	5,400.59	5,183.55	4,954.38	21.10	12.53	-111.32	228.96	1,319.11	1,517.21	1,489.11	28.10	53.999	
5,600.00	5,498.10	5,276.12	5,040.71	21.58	12.85	-111.30	234.88	1,352.02	1,555.03	1,526.27	28.75	54.086	
5,700.00	5,595.61	5,368.70	5,127.03	22.06	13.17	-111.29	240.81	1,384.93	1,592.84	1,563.44	29.41	54.169	
5,800.00	5,693.11	5,461.27	5,213.35	22.54	13.49	-111.28	246.74	1,417.83	1,630.66	1,600.60	30.06	54.247	
5,851.52	5,743.35	5,508.96	5,257.83	22.79	13.66	-111.28	249.79	1,434.79	1,650.15	1,619.75	30.40	54.286	
5,900.00	5,790.71	5,553.89	5,299.72	22.99	13.81	-111.62	252.67	1,450.76	1,668.34	1,637.63	30.72	54.311	
6,000.00	5,888.92	5,694.62	5,431.54	23.30	14.29	-112.17	261.40	1,499.23	1,704.28	1,672.90	31.38	54.308	
6,100.00	5,987.72	5,881.40	5,609.80	23.57	14.81	-112.56	271.27	1,554.00	1,734.56	1,702.52	32.04	54.134	
6,200.00	6,087.00	6,074.92	5,797.91	23.81	15.24	-112.84	279.30	1,598.57	1,758.34	1,725.74	32.60	53.935	
6,300.00	6,186.64	6,273.78	5,993.94	24.00	15.55	-113.04	285.18	1,631.25	1,775.31	1,742.26	33.05	53.722	
6,400.00	6,286.51	6,476.27	6,195.42	24.16	15.75	-113.15	288.69	1,650.69	1,785.25	1,751.88	33.37	53.499	
6,492.51	6,379.00	6,659.97	6,379.00	24.28	15.82	44.73	289.67	1,656.17	1,788.08	1,754.51	33.57	53.269	
6,500.00	6,386.49	6,667.46	6,386.49	24.29	15.82	44.73	289.67	1,656.17	1,788.08	1,754.50	33.58	53.253	
6,600.00	6,486.49	6,767.46	6,486.49	24.39	15.83	44.73	289.67	1,656.17	1,788.08	1,754.37	33.71	53.050	
6,700.00	6,586.49	6,867.46	6,586.49	24.50	15.84	44.73	289.67	1,656.17	1,788.08	1,754.24	33.84	52.845	
6,800.00	6,686.49	6,967.46	6,686.49	24.61	15.86	44.73	289.67	1,656.17	1,788.08	1,754.11	33.97	52.639	
6,900.00	6,786.49	7,067.46	6,786.49	24.71	15.87	44.73	289.67	1,656.17	1,788.08	1,753.97	34.10	52.431	
7,000.00	6,886.49	7,167.46	6,886.49	24.82	15.88	44.73	289.67	1,656.17	1,788.08	1,753.84	34.24	52.223	
7,100.00	6,986.49	7,267.46	6,986.49	24.94	15.89	44.73	289.67	1,656.17	1,788.08	1,753.70	34.38	52.013	
7,200.00	7,086.49	7,367.46	7,086.49	25.05	15.91	44.73	289.67	1,656.17	1,788.08	1,753.56	34.52	51.803	
7,300.00	7,186.49	7,467.46	7,186.49	25.16	15.92	44.73	289.67	1,656.17	1,788.08	1,753.42	34.66	51.592	
7,400.00	7,286.49	7,567.46	7,286.49	25.28	15.93	44.73	289.67	1,656.17	1,788.08	1,753.27	34.80	51.380	
7,500.00	7,386.49	7,667.46	7,386.49	25.40	15.94	44.73	289.67	1,656.17	1,788.08	1,753.13	34.95	51.167	
7,600.00	7,486.49	7,767.46	7,486.49	25.52	15.96	44.73	289.67	1,656.17	1,788.08	1,752.98	35.09	50.953	
7,700.00	7,586.49	7,867.46	7,586.49	25.64	15.97	44.73	289.67	1,656.17	1,788.08	1,752.84	35.24	50.739	
7,800.00	7,686.49	7,967.46	7,686.49	25.76	15.98	44.73	289.67	1,656.17	1,788.08	1,752.69	35.39	50.525	
7,900.00	7,786.49	8,067.46	7,786.49	25.88	16.00	44.73	289.67	1,656.17	1,788.08	1,752.53	35.54	50.310	
8,000.00	7,886.49	8,167.46	7,886.49	26.01	16.01	44.73	289.67	1,656.17	1,788.08	1,752.38	35.69	50.095	
8,100.00	7,986.49	8,267.46	7,986.49	26.13	16.03	44.73	289.67	1,656.17	1,788.08	1,752.23	35.85	49.879	
8,200.00	8,086.49	8,367.46	8,086.49	26.26	16.04	44.73	289.67	1,656.17	1,788.08	1,752.07	36.00	49.663	
8,300.00	8,186.49	8,467.46	8,186.49	26.39	16.05	44.73	289.67	1,656.17	1,788.08	1,751.91	36.16	49.447	
8,400.00	8,286.49	8,567.46	8,286.49	26.52	16.07	44.73	289.67	1,656.17	1,788.08	1,751.76	36.32	49.231	
8,404.34	8,290.83	8,571.80	8,290.83	26.52	16.07	44.73	289.67	1,656.17	1,788.08	1,751.75	36.33	49.222	
8,417.51	8,304.00	8,579.97	8,299.00	26.54	16.07	44.73	289.67	1,656.17	1,788.08	1,751.74	36.35	49.195	

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_NRC 35-9
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 5067.00ft (Original Well Elev)
Reference Site:	WELD_NRC 19-9 PAD	MD Reference:	WELL @ 5067.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_NRC 35-9	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_NRC 35-9	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 1-10-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design WELD_NRC 19-9 PAD - P_NRC 36-9 - P_NRC 36-9 - PLAN #1 1-10-10 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	89.99	0.00	16.23	16.23				
100.00	100.00	100.00	100.00	0.10	0.10	89.99	0.00	16.23	16.23	16.04	0.19	84.974	
200.00	200.00	200.00	200.00	0.32	0.32	89.99	0.00	16.23	16.23	15.59	0.64	25.343	
300.00	300.00	300.00	300.00	0.55	0.55	89.99	0.00	16.23	16.23	15.14	1.09	14.892	
400.00	400.00	400.00	400.00	0.77	0.77	89.99	0.00	16.23	16.23	14.69	1.54	10.544	
500.00	500.00	500.00	500.00	0.99	0.99	89.99	0.00	16.23	16.23	14.25	1.99	8.161	
600.00	600.00	600.00	600.00	1.22	1.22	89.99	0.00	16.23	16.23	13.80	2.44	6.657	
700.00	700.00	700.00	700.00	1.44	1.44	89.99	0.00	16.23	16.23	13.35	2.89	5.621	
800.00	800.00	800.00	800.00	1.67	1.67	89.99	0.00	16.23	16.23	12.90	3.34	4.864	
900.00	900.00	900.00	900.00	1.89	1.89	89.99	0.00	16.23	16.23	12.45	3.79	4.287	
1,000.00	1,000.00	1,000.00	1,000.00	2.12	2.12	89.99	0.00	16.23	16.23	12.00	4.24	3.832	
1,085.00	1,085.00	1,085.00	1,085.00	2.31	2.31	89.99	0.00	16.23	16.23	11.62	4.62	3.515 CC	
1,100.00	1,100.00	1,099.93	1,099.93	2.34	2.34	-67.99	-0.02	16.27	16.25	11.57	4.68	3.474 ES	
1,200.00	1,199.97	1,199.43	1,199.40	2.51	2.52	-70.94	-1.21	18.17	17.34	12.31	5.03	3.445 SF	
1,300.00	1,299.80	1,298.86	1,298.66	2.70	2.72	-76.95	-4.23	23.00	20.26	14.85	5.41	3.748	
1,400.00	1,399.37	1,398.14	1,397.52	2.89	2.93	-83.54	-9.07	30.73	25.27	19.47	5.81	4.352	
1,500.00	1,498.55	1,497.21	1,495.79	3.12	3.16	-89.16	-15.70	41.33	32.51	26.26	6.25	5.199	
1,600.00	1,597.23	1,596.00	1,593.30	3.37	3.43	-93.41	-24.11	54.76	42.00	35.23	6.76	6.211	
1,700.00	1,695.29	1,694.46	1,689.87	3.68	3.73	-96.48	-34.26	70.98	53.68	46.33	7.35	7.307	
1,725.98	1,720.65	1,719.98	1,714.79	3.76	3.82	-97.12	-37.18	75.64	57.07	49.55	7.51	7.594	
1,800.00	1,792.82	1,792.55	1,785.38	4.02	4.08	-98.08	-46.12	89.92	67.37	59.35	8.02	8.401	
1,900.00	1,890.33	1,890.20	1,879.64	4.39	4.49	-97.15	-59.64	111.52	82.64	73.87	8.76	9.430	
2,000.00	1,987.83	1,987.19	1,972.35	4.79	4.96	-94.81	-74.74	135.66	99.56	89.99	9.57	10.408	
2,100.00	2,085.34	2,083.32	2,063.23	5.19	5.49	-91.81	-91.35	162.20	118.38	107.97	10.41	11.372	
2,200.00	2,182.85	2,178.38	2,152.02	5.61	6.08	-88.54	-109.36	190.96	139.35	128.07	11.28	12.355	
2,300.00	2,280.36	2,272.18	2,238.49	6.04	6.73	-85.27	-128.64	221.78	162.69	150.53	12.16	13.380	
2,400.00	2,377.86	2,366.81	2,324.67	6.48	7.44	-82.17	-149.38	254.91	188.23	175.19	13.04	14.431	
2,500.00	2,475.37	2,462.96	2,412.11	6.93	8.19	-79.71	-170.60	288.81	214.40	200.46	13.94	15.379	
2,600.00	2,572.88	2,559.11	2,499.55	7.38	8.97	-77.78	-191.82	322.71	240.87	226.03	14.84	16.229	
2,700.00	2,670.39	2,655.26	2,586.99	7.83	9.75	-76.24	-213.03	356.61	267.54	251.80	15.75	16.992	
2,800.00	2,767.89	2,751.41	2,674.42	8.29	10.54	-74.97	-234.25	390.51	294.36	277.71	16.65	17.677	
2,900.00	2,865.40	2,847.56	2,761.86	8.75	11.34	-73.91	-255.47	424.41	321.29	303.73	17.56	18.294	
3,000.00	2,962.91	2,943.71	2,849.30	9.21	12.15	-73.02	-276.69	458.31	348.31	329.83	18.48	18.852	
3,100.00	3,060.42	3,039.86	2,936.74	9.67	12.96	-72.26	-297.91	492.21	375.39	356.00	19.39	19.358	
3,200.00	3,157.92	3,136.01	3,024.18	10.14	13.78	-71.59	-319.12	526.11	402.53	382.22	20.31	19.819	
3,300.00	3,255.43	3,232.16	3,111.61	10.61	14.60	-71.02	-340.34	560.01	429.71	408.48	21.23	20.240	
3,400.00	3,352.94	3,328.31	3,199.05	11.08	15.42	-70.51	-361.56	593.91	456.93	434.78	22.15	20.626	
3,500.00	3,450.44	3,424.46	3,286.49	11.55	16.25	-70.06	-382.78	627.82	484.18	461.10	23.08	20.981	
3,600.00	3,547.95	3,520.61	3,373.93	12.02	17.08	-69.65	-404.00	661.72	511.45	487.45	24.00	21.309	
3,700.00	3,645.46	3,616.76	3,461.37	12.49	17.91	-69.29	-425.21	695.62	538.74	513.81	24.93	21.612	
3,800.00	3,742.97	3,712.91	3,548.80	12.97	18.74	-68.96	-446.43	729.52	566.05	540.20	25.86	21.893	
3,900.00	3,840.47	3,809.06	3,636.24	13.44	19.57	-68.66	-467.65	763.42	593.38	566.59	26.78	22.154	
4,000.00	3,937.98	3,905.21	3,723.68	13.92	20.41	-68.39	-488.87	797.32	620.72	593.01	27.71	22.398	
4,100.00	4,035.49	4,001.36	3,811.12	14.39	21.24	-68.14	-510.09	831.22	648.07	619.43	28.64	22.626	
4,200.00	4,133.00	4,097.51	3,898.56	14.87	22.08	-67.91	-531.30	865.12	675.43	645.86	29.57	22.840	
4,300.00	4,230.50	4,193.66	3,985.99	15.35	22.91	-67.70	-552.52	899.02	702.80	672.30	30.50	23.041	
4,400.00	4,328.01	4,289.81	4,073.43	15.82	23.75	-67.51	-573.74	932.92	730.18	698.75	31.43	23.229	
4,500.00	4,425.52	4,385.96	4,160.87	16.30	24.59	-67.33	-594.96	966.82	757.57	725.21	32.36	23.407	
4,600.00	4,523.03	4,482.11	4,248.31	16.78	25.43	-67.16	-616.17	1,000.72	784.96	751.67	33.30	23.576	
4,700.00	4,620.53	4,578.26	4,335.75	17.26	26.27	-67.00	-637.39	1,034.62	812.36	778.14	34.23	23.735	
4,800.00	4,718.04	4,674.41	4,423.18	17.74	27.11	-66.85	-658.61	1,068.52	839.77	804.61	35.16	23.886	
4,900.00	4,815.55	4,770.56	4,510.62	18.22	27.95	-66.72	-679.83	1,102.42	867.18	831.09	36.09	24.029	

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_NRC 35-9
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 5067.00ft (Original Well Elev)
Reference Site:	WELD_NRC 19-9 PAD	MD Reference:	WELL @ 5067.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_NRC 35-9	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_NRC 35-9	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 1-10-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design WELD_NRC 19-9 PAD - P_NRC 36-9 - P_NRC 36-9 - PLAN #1 1-10-10 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	4,913.05	4,866.71	4,598.06	18.70	28.79	-66.59	-701.05	1,136.32	894.59	857.57	37.02	24.165	
5,100.00	5,010.56	4,962.86	4,685.50	19.18	29.63	-66.47	-722.26	1,170.22	922.01	884.06	37.95	24.295	
5,200.00	5,108.07	5,059.01	4,772.94	19.66	30.47	-66.35	-743.48	1,204.12	949.43	910.55	38.88	24.418	
5,300.00	5,205.58	5,155.16	4,860.37	20.14	31.32	-66.24	-764.70	1,238.02	976.86	937.04	39.81	24.536	
5,400.00	5,303.08	5,251.31	4,947.81	20.62	32.16	-66.14	-785.92	1,271.93	1,004.28	963.54	40.74	24.649	
5,500.00	5,400.59	5,347.46	5,035.25	21.10	33.00	-66.05	-807.14	1,305.83	1,031.71	990.04	41.67	24.757	
5,600.00	5,498.10	5,443.61	5,122.69	21.58	33.84	-65.95	-828.35	1,339.73	1,059.15	1,016.54	42.60	24.860	
5,700.00	5,595.61	5,554.34	5,223.52	22.06	34.76	-65.86	-852.62	1,378.49	1,086.38	1,042.79	43.58	24.926	
5,800.00	5,693.11	5,698.56	5,357.01	22.54	35.71	-65.90	-881.57	1,424.75	1,110.45	1,065.79	44.66	24.862	
5,851.52	5,743.35	5,773.96	5,427.84	22.79	36.14	-66.00	-895.28	1,446.65	1,121.21	1,075.99	45.22	24.793	
5,900.00	5,790.71	5,845.46	5,495.62	22.99	36.52	-66.29	-907.36	1,465.95	1,130.46	1,084.70	45.76	24.705	
6,000.00	5,888.92	5,994.36	5,638.46	23.30	37.24	-66.80	-929.61	1,501.51	1,147.36	1,100.65	46.70	24.566	
6,100.00	5,987.72	6,144.93	5,784.94	23.57	37.83	-67.21	-948.09	1,531.02	1,161.23	1,113.72	47.51	24.442	
6,200.00	6,087.00	6,296.87	5,934.39	23.81	38.32	-67.52	-962.56	1,554.15	1,171.99	1,123.81	48.18	24.324	
6,300.00	6,186.64	6,449.84	6,086.11	24.00	38.68	-67.75	-972.87	1,570.62	1,179.59	1,130.88	48.71	24.218	
6,400.00	6,286.51	6,603.50	6,239.32	24.16	38.93	-67.88	-978.88	1,580.23	1,183.97	1,134.88	49.10	24.115	
6,492.51	6,379.00	6,743.22	6,379.00	24.28	39.07	90.00	-980.56	1,582.91	1,185.16	1,135.81	49.34	24.018	
6,500.00	6,386.49	6,750.72	6,386.49	24.29	39.07	90.00	-980.56	1,582.91	1,185.16	1,135.79	49.36	24.010	
6,600.00	6,486.49	6,850.72	6,486.49	24.39	39.15	90.00	-980.56	1,582.91	1,185.16	1,135.59	49.57	23.908	
6,700.00	6,586.49	6,950.72	6,586.49	24.50	39.22	90.00	-980.56	1,582.91	1,185.16	1,135.37	49.78	23.807	
6,800.00	6,686.49	7,050.72	6,686.49	24.61	39.30	90.00	-980.56	1,582.91	1,185.16	1,135.16	50.00	23.705	
6,900.00	6,786.49	7,150.72	6,786.49	24.71	39.37	90.00	-980.56	1,582.91	1,185.16	1,134.94	50.21	23.603	
7,000.00	6,886.49	7,250.72	6,886.49	24.82	39.45	90.00	-980.56	1,582.91	1,185.16	1,134.72	50.43	23.500	
7,100.00	6,986.49	7,350.72	6,986.49	24.94	39.53	90.00	-980.56	1,582.91	1,185.16	1,134.50	50.66	23.396	
7,200.00	7,086.49	7,450.72	7,086.49	25.05	39.61	90.00	-980.56	1,582.91	1,185.16	1,134.27	50.88	23.292	
7,300.00	7,186.49	7,550.72	7,186.49	25.16	39.69	90.00	-980.56	1,582.91	1,185.16	1,134.05	51.11	23.188	
7,400.00	7,286.49	7,650.72	7,286.49	25.28	39.77	90.00	-980.56	1,582.91	1,185.16	1,133.81	51.34	23.083	
7,500.00	7,386.49	7,750.72	7,386.49	25.40	39.86	90.00	-980.56	1,582.91	1,185.16	1,133.58	51.58	22.978	
7,600.00	7,486.49	7,850.72	7,486.49	25.52	39.94	90.00	-980.56	1,582.91	1,185.16	1,133.34	51.82	22.872	
7,700.00	7,586.49	7,950.72	7,586.49	25.64	40.03	90.00	-980.56	1,582.91	1,185.16	1,133.10	52.06	22.767	
7,800.00	7,686.49	8,050.72	7,686.49	25.76	40.11	90.00	-980.56	1,582.91	1,185.16	1,132.86	52.30	22.661	
7,900.00	7,786.49	8,150.72	7,786.49	25.88	40.20	90.00	-980.56	1,582.91	1,185.16	1,132.61	52.55	22.555	
8,000.00	7,886.49	8,250.72	7,886.49	26.01	40.29	90.00	-980.56	1,582.91	1,185.16	1,132.36	52.79	22.448	
8,100.00	7,986.49	8,350.72	7,986.49	26.13	40.38	90.00	-980.56	1,582.91	1,185.16	1,132.11	53.05	22.342	
8,200.00	8,086.49	8,450.72	8,086.49	26.26	40.47	90.00	-980.56	1,582.91	1,185.16	1,131.86	53.30	22.235	
8,300.00	8,186.49	8,550.72	8,186.49	26.39	40.56	90.00	-980.56	1,582.91	1,185.16	1,131.60	53.56	22.129	
8,400.00	8,286.49	8,650.72	8,286.49	26.52	40.66	90.00	-980.56	1,582.91	1,185.16	1,131.34	53.82	22.022	
8,404.34	8,290.83	8,655.06	8,290.83	26.52	40.66	90.00	-980.56	1,582.91	1,185.16	1,131.33	53.83	22.018	
8,417.51	8,304.00	8,663.22	8,299.00	26.54	40.67	90.00	-980.56	1,582.91	1,185.17	1,131.31	53.86	22.006	

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_NRC 35-9
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 5067.00ft (Original Well Elev)
Reference Site:	WELD_NRC 19-9 PAD	MD Reference:	WELL @ 5067.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_NRC 35-9	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_NRC 35-9	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 1-10-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design WELD_NRC 19-9 PAD - ROCKY MTN FUEL CO. "F" #2 EXISTING - ROCKY MTN FUEL CO. "F" #2 E												Offset Site Error:	0.00 ft
Survey Program: 0-UNKNOWN												Offset Well Error:	0.00 ft
Reference	Offset	Semi Major Axis			Distance								Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
0.00	0.00	0.00	0.00	0.00	0.00	128.27	-49.90	63.26	82.78				
100.00	100.00	81.00	81.00	0.10	1.62	128.27	-49.90	63.26	80.57	78.85	1.72	46.964	
200.00	200.00	181.00	181.00	0.32	5.24	128.27	-49.90	63.26	80.57	75.01	5.56	14.490	
300.00	300.00	281.00	281.00	0.55	9.24	128.27	-49.90	63.26	80.57	70.78	9.79	8.234	
400.00	400.00	381.00	381.00	0.77	13.24	128.27	-49.90	63.26	80.57	66.56	14.01	5.751	
500.00	500.00	481.00	481.00	0.99	17.24	128.27	-49.90	63.26	80.57	62.33	18.23	4.418	
600.00	600.00	581.00	581.00	1.22	21.24	128.27	-49.90	63.26	80.57	58.11	22.46	3.587	
700.00	700.00	681.00	681.00	1.44	25.24	128.27	-49.90	63.26	80.57	53.88	26.68	3.019	
800.00	800.00	781.00	781.00	1.67	29.24	128.27	-49.90	63.26	80.57	49.66	30.91	2.607	
900.00	900.00	881.00	881.00	1.89	33.24	128.27	-49.90	63.26	80.57	45.44	35.13	2.293	
1,000.00	1,000.00	981.00	981.00	2.12	37.24	128.27	-49.90	63.26	80.57	41.21	39.36	2.047	
1,085.00	1,085.00	1,066.00	1,066.00	2.31	40.64	128.27	-49.90	63.26	80.57	37.62	42.95	1.876	
1,100.00	1,100.00	1,081.00	1,081.00	2.34	41.24	-29.67	-49.90	63.26	80.53	36.96	43.58	1.848	
1,200.00	1,199.97	1,180.97	1,180.97	2.51	45.24	-30.51	-49.90	63.26	78.57	30.85	47.72	1.646	
1,300.00	1,299.80	1,280.80	1,280.80	2.70	49.23	-32.83	-49.90	63.26	73.67	21.85	51.82	1.422 Level 3	
1,400.00	1,399.37	1,380.37	1,380.37	2.89	53.21	-37.26	-49.90	63.26	66.09	10.21	55.88	1.183 Level 2	
1,500.00	1,498.55	1,479.55	1,479.55	3.12	57.18	-45.20	-49.90	63.26	56.48	-3.49	59.97	0.942 Level 1	
1,600.00	1,597.23	1,578.23	1,578.23	3.37	61.13	-59.52	-49.90	63.26	46.45	-17.76	64.21	0.723 Level 1	
1,700.00	1,695.29	1,676.29	1,676.29	3.68	65.05	-84.04	-49.90	63.26	40.09	-28.62	68.71	0.584 Level 1	
1,719.67	1,714.49	1,695.49	1,695.49	3.74	65.82	-90.00	-49.90	63.26	39.86	-29.70	69.56	0.573 Level 1, CC	
1,725.98	1,720.65	1,701.65	1,701.65	3.76	66.07	-91.95	-49.90	63.26	39.89	-29.94	69.83	0.571 Level 1, ES, SF	
1,800.00	1,792.82	1,773.82	1,773.82	4.02	68.95	-113.55	-49.90	63.26	43.66	-28.99	72.65	0.601 Level 1	
1,900.00	1,890.33	1,871.33	1,871.33	4.39	72.85	-134.38	-49.90	63.26	56.48	-19.65	76.13	0.742 Level 1	
2,000.00	1,987.83	1,968.83	1,968.83	4.79	76.75	-146.68	-49.90	63.26	73.87	-5.89	79.77	0.926 Level 1	
2,100.00	2,085.34	2,066.34	2,066.34	5.19	80.65	-154.15	-49.90	63.26	93.32	9.75	83.57	1.117 Level 2	
2,200.00	2,182.85	2,163.85	2,163.85	5.61	84.55	-159.01	-49.90	63.26	113.78	26.30	87.48	1.301 Level 3	
2,300.00	2,280.36	2,261.36	2,261.36	6.04	88.45	-162.38	-49.90	63.26	134.79	43.35	91.44	1.474 Level 3	
2,400.00	2,377.86	2,358.86	2,358.86	6.48	92.35	-164.85	-49.90	63.26	156.12	60.69	95.43	1.636	
2,500.00	2,475.37	2,456.37	2,456.37	6.93	96.25	-166.71	-49.90	63.26	177.67	78.22	99.44	1.787	
2,600.00	2,572.88	2,553.88	2,553.88	7.38	100.16	-168.18	-49.90	63.26	199.35	95.88	103.47	1.927	
2,700.00	2,670.39	2,651.39	2,651.39	7.83	104.06	-169.36	-49.90	63.26	221.14	113.63	107.50	2.057	
2,800.00	2,767.89	2,748.89	2,748.89	8.29	107.96	-170.32	-49.90	63.26	242.99	131.45	111.55	2.178	
2,900.00	2,865.40	2,846.40	2,846.40	8.75	111.86	-171.13	-49.90	63.26	264.91	149.31	115.59	2.292	
3,000.00	2,962.91	2,943.91	2,943.91	9.21	115.76	-171.81	-49.90	63.26	286.86	167.22	119.64	2.398	
3,100.00	3,060.42	3,041.42	3,041.42	9.67	119.66	-172.40	-49.90	63.26	308.85	185.15	123.70	2.497	
3,200.00	3,157.92	3,138.92	3,138.92	10.14	123.56	-172.90	-49.90	63.26	330.86	203.11	127.75	2.590	
3,300.00	3,255.43	3,236.43	3,236.43	10.61	127.46	-173.35	-49.90	63.26	352.90	221.09	131.81	2.677	
3,400.00	3,352.94	3,333.94	3,333.94	11.08	131.36	-173.74	-49.90	63.26	374.96	239.08	135.87	2.760	
3,500.00	3,450.44	3,431.44	3,431.44	11.55	135.26	-174.09	-49.90	63.26	397.03	257.09	139.93	2.837	
3,600.00	3,547.95	3,528.95	3,528.95	12.02	139.16	-174.40	-49.90	63.26	419.11	275.11	144.00	2.911	
3,700.00	3,645.46	3,626.46	3,626.46	12.49	143.06	-174.68	-49.90	63.26	441.20	293.14	148.06	2.980	
3,800.00	3,742.97	3,723.97	3,723.97	12.97	146.96	-174.94	-49.90	63.26	463.30	311.17	152.13	3.045	
3,900.00	3,840.47	3,821.47	3,821.47	13.44	150.86	-175.17	-49.90	63.26	485.41	329.22	156.19	3.108	
4,000.00	3,937.98	3,918.98	3,918.98	13.92	154.76	-175.38	-49.90	63.26	507.53	347.27	160.26	3.167	
4,100.00	4,035.49	4,016.49	4,016.49	14.39	158.66	-175.57	-49.90	63.26	529.65	365.32	164.33	3.223	
4,200.00	4,133.00	4,114.00	4,114.00	14.87	162.56	-175.75	-49.90	63.26	551.78	383.38	168.40	3.277	
4,300.00	4,230.50	4,211.50	4,211.50	15.35	166.46	-175.92	-49.90	63.26	573.91	401.45	172.47	3.328	
4,400.00	4,328.01	4,309.01	4,309.01	15.82	170.36	-176.07	-49.90	63.26	596.05	419.51	176.54	3.376	
4,500.00	4,425.52	4,406.52	4,406.52	16.30	174.26	-176.21	-49.90	63.26	618.19	437.58	180.61	3.423	
4,600.00	4,523.03	4,504.03	4,504.03	16.78	178.16	-176.34	-49.90	63.26	640.33	455.66	184.68	3.467	
4,700.00	4,620.53	4,601.53	4,601.53	17.26	182.06	-176.46	-49.90	63.26	662.48	473.73	188.75	3.510	
4,800.00	4,718.04	4,699.04	4,699.04	17.74	185.96	-176.58	-49.90	63.26	684.63	491.81	192.82	3.551	

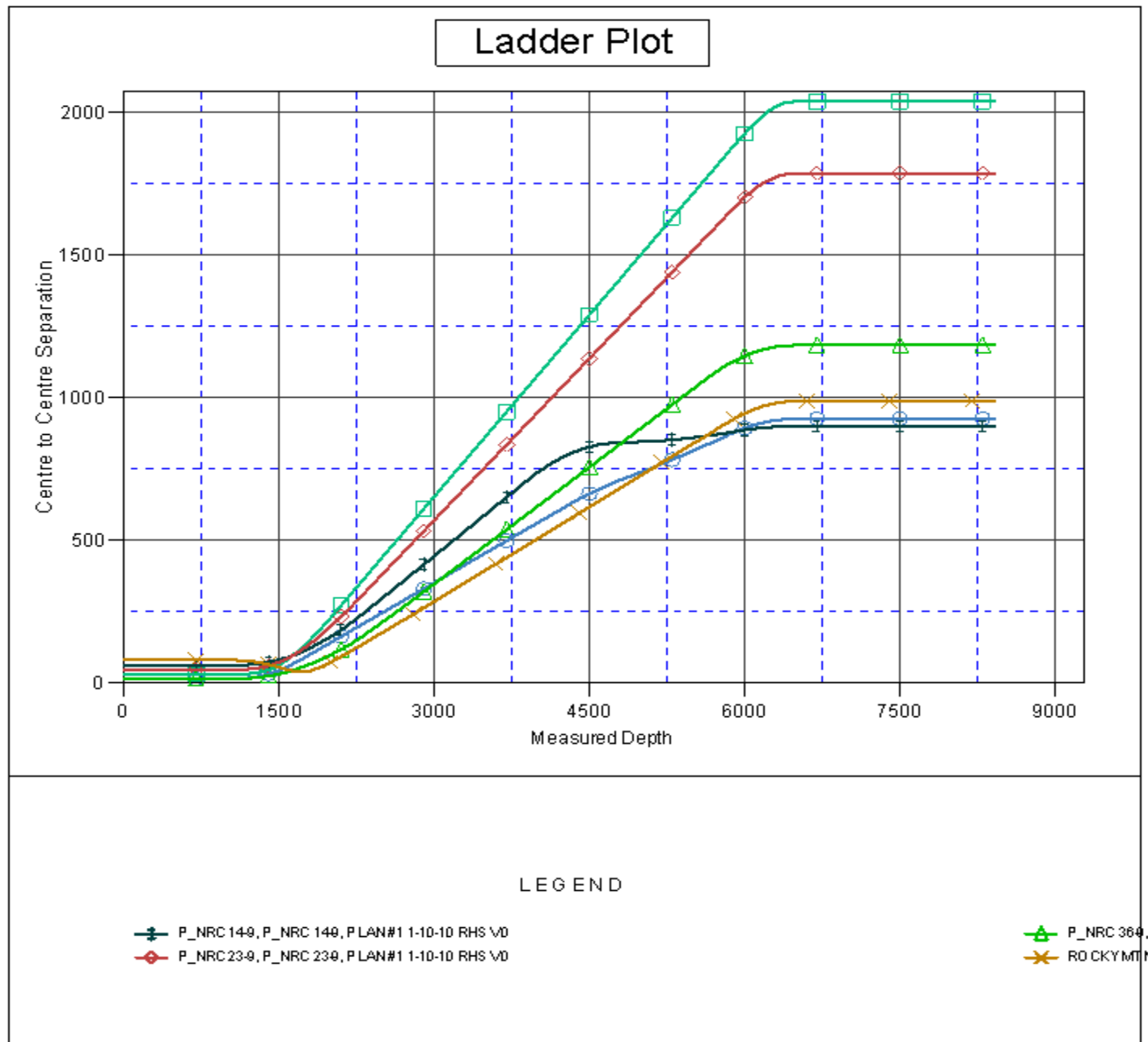
CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_NRC 35-9
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 5067.00ft (Original Well Elev)
Reference Site:	WELD_NRC 19-9 PAD	MD Reference:	WELL @ 5067.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_NRC 35-9	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_NRC 35-9	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 1-10-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design WELD_NRC 19-9 PAD - ROCKY MTN FUEL CO. "F" #2 EXISTING - ROCKY MTN FUEL CO. "F" #2 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
4,900.00	4,815.55	4,796.55	4,796.55	18.22	189.86	-176.68	-49.90	63.26	706.78	509.89	196.89	3.590	
5,000.00	4,913.05	4,894.05	4,894.05	18.70	193.76	-176.79	-49.90	63.26	728.94	527.97	200.96	3.627	
5,100.00	5,010.56	4,991.56	4,991.56	19.18	197.66	-176.88	-49.90	63.26	751.09	546.06	205.03	3.663	
5,200.00	5,108.07	5,089.07	5,089.07	19.66	201.56	-176.97	-49.90	63.26	773.25	564.14	209.11	3.698	
5,300.00	5,205.58	5,186.58	5,186.58	20.14	205.46	-177.05	-49.90	63.26	795.41	582.23	213.18	3.731	
5,400.00	5,303.08	5,284.08	5,284.08	20.62	209.36	-177.13	-49.90	63.26	817.57	600.32	217.25	3.763	
5,500.00	5,400.59	5,381.59	5,381.59	21.10	213.26	-177.21	-49.90	63.26	839.73	618.41	221.33	3.794	
5,600.00	5,498.10	5,479.10	5,479.10	21.58	217.16	-177.28	-49.90	63.26	861.90	636.50	225.40	3.824	
5,700.00	5,595.61	5,576.61	5,576.61	22.06	221.06	-177.35	-49.90	63.26	884.06	654.59	229.47	3.853	
5,800.00	5,693.11	5,674.11	5,674.11	22.54	224.96	-177.41	-49.90	63.26	906.23	672.68	233.55	3.880	
5,851.52	5,743.35	5,724.35	5,724.35	22.79	226.97	-177.45	-49.90	63.26	917.65	682.00	235.65	3.894	
5,900.00	5,790.71	5,771.71	5,771.71	22.99	228.87	-177.48	-49.90	63.26	928.00	689.58	238.41	3.892	
6,000.00	5,888.92	5,869.92	5,869.92	23.30	232.80	-177.55	-49.90	63.26	946.80	702.79	244.01	3.880	
6,100.00	5,987.72	5,968.72	5,968.72	23.57	236.75	-177.60	-49.90	63.26	962.17	712.80	249.38	3.858	
6,200.00	6,087.00	6,068.00	6,068.00	23.81	240.72	-177.64	-49.90	63.26	974.09	719.61	254.48	3.828	
6,300.00	6,186.64	6,167.64	6,167.64	24.00	244.71	-177.67	-49.90	63.26	982.54	723.23	259.31	3.789	
6,400.00	6,286.51	6,267.51	6,267.51	24.16	248.70	-177.69	-49.90	63.26	987.50	723.67	263.84	3.743	
6,492.51	6,379.00	6,360.00	6,360.00	24.28	252.40	-19.77	-49.90	63.26	989.00	721.24	267.75	3.694	
6,500.00	6,386.49	6,367.49	6,367.49	24.29	252.70	-19.77	-49.90	63.26	989.00	720.93	268.07	3.689	
6,600.00	6,486.49	6,467.49	6,467.49	24.39	256.70	-19.77	-49.90	63.26	989.00	716.76	272.23	3.633	
6,700.00	6,586.49	6,567.49	6,567.49	24.50	260.70	-19.77	-49.90	63.26	989.00	712.59	276.40	3.578	
6,800.00	6,686.49	6,667.49	6,667.49	24.61	264.70	-19.77	-49.90	63.26	989.00	708.42	280.57	3.525	
6,900.00	6,786.49	6,767.49	6,767.49	24.71	268.70	-19.77	-49.90	63.26	989.00	704.25	284.74	3.473	
7,000.00	6,886.49	6,867.49	6,867.49	24.82	272.70	-19.77	-49.90	63.26	989.00	700.08	288.92	3.423	
7,100.00	6,986.49	6,967.49	6,967.49	24.94	276.70	-19.77	-49.90	63.26	989.00	695.91	293.09	3.374	
7,200.00	7,086.49	7,067.49	7,067.49	25.05	280.70	-19.77	-49.90	63.26	989.00	691.73	297.26	3.327	
7,300.00	7,186.49	7,167.49	7,167.49	25.16	284.70	-19.77	-49.90	63.26	989.00	687.56	301.44	3.281	
7,400.00	7,286.49	7,267.49	7,267.49	25.28	288.70	-19.77	-49.90	63.26	989.00	683.38	305.62	3.236	
7,500.00	7,386.49	7,367.49	7,367.49	25.40	292.70	-19.77	-49.90	63.26	989.00	679.20	309.79	3.192	
7,600.00	7,486.49	7,467.49	7,467.49	25.52	296.70	-19.77	-49.90	63.26	989.00	675.02	313.97	3.150	
7,700.00	7,586.49	7,567.49	7,567.49	25.64	300.70	-19.77	-49.90	63.26	989.00	670.84	318.15	3.109	
7,800.00	7,686.49	7,667.49	7,667.49	25.76	304.70	-19.77	-49.90	63.26	989.00	666.66	322.34	3.068	
7,900.00	7,786.49	7,767.49	7,767.49	25.88	308.70	-19.77	-49.90	63.26	989.00	662.48	326.52	3.029	
8,000.00	7,886.49	7,867.49	7,867.49	26.01	312.70	-19.77	-49.90	63.26	989.00	658.30	330.70	2.991	
8,100.00	7,986.49	7,967.49	7,967.49	26.13	316.70	-19.77	-49.90	63.26	989.00	654.11	334.89	2.953	
8,200.00	8,086.49	8,067.49	8,067.49	26.26	320.70	-19.77	-49.90	63.26	989.00	649.93	339.07	2.917	
8,300.00	8,186.49	8,167.49	8,167.49	26.39	324.70	-19.77	-49.90	63.26	989.00	645.74	343.26	2.881	
8,400.00	8,286.49	8,267.49	8,267.49	26.52	328.70	-19.77	-49.90	63.26	989.00	641.55	347.44	2.846	
8,417.51	8,304.00	8,285.00	8,285.00	26.54	329.40	-19.77	-49.90	63.26	989.00	640.82	348.18	2.840	

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_NRC 35-9
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 5067.00ft (Original Well Elev)
Reference Site:	WELD_NRC 19-9 PAD	MD Reference:	WELL @ 5067.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_NRC 35-9	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_NRC 35-9	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 1-10-10 RHS	Offset TVD Reference:	Offset Datum

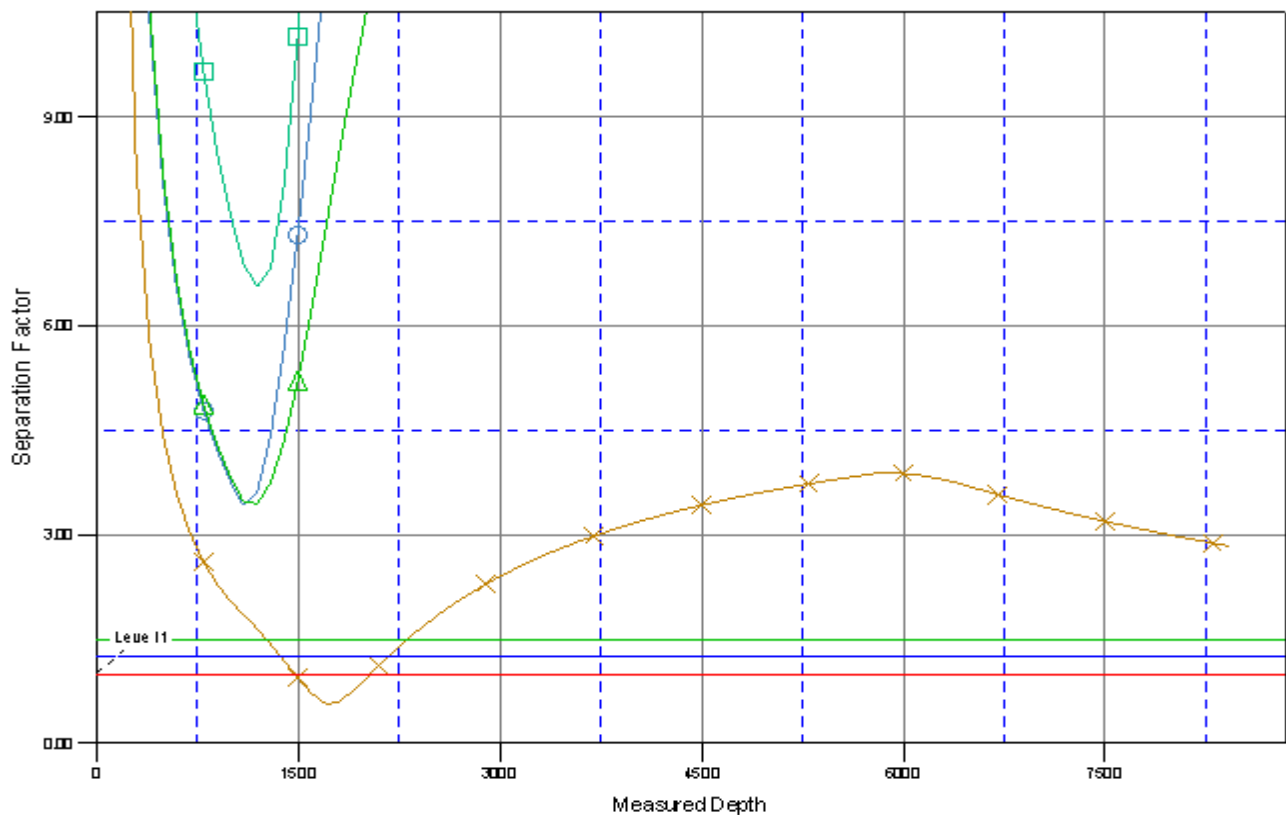
Reference Depths are relative to WELL @ 5067.00ft (Original Well Elev) Coordinates are relative to: P_NRC 35-9
Offset Depths are relative to Offset Datum Coordinate System is US State Plane 1983, Colorado Northern Zone
Central Meridian is 105° 30' 0.000 W ° Grid Convergence at Surface is: 0.39°





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Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_NRC 35-9	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 1-10-10 RHS	Offset TVD Reference:	Offset Datum



Reference Depths are relative to WELL @ 5067.00ft (Original Well Elev) Coordinates are relative to: P_NRC 35-9
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: 0.39°

Separation Factor Plot



LEGEND

 P_NRC 14-9, P_NRC 14-9, P LAN#1 1-10-10 RHS V0
 P_NRC 23-9, P_NRC 23-9, P LAN#1 1-10-10 RHS V0

 P_NRC 36-9, I
 ROCKY MOUNTAIN