



# **US ROCKIES REGION PLANNING**

**COLORADO NORTHERN ZONE - 83**

**WELD\_NRC 20-9 PAD**

**P\_NRC 37-9**

**P\_NRC 37-9**

**Plan: PLAN #1 1-6-10 RHS**

## **Standard Planning Report**

**06 January, 2010**





Azimuths to True North  
 Magnetic North: 9.09°  
 Magnetic Field  
 Strength: 53088.7nT  
 Dip Angle: 66.80°  
 Date: 1/6/2010  
 Model: IGRF2010

#### WELL DETAILS: P\_NRC 37-9

+N/-S	+E/-W	Northing	Ground Level: Easting	5024.00 Latitude	Longitude	Slot
0.00	0.00	1265711.37	3170270.53	40° 3' 40.190 N	104° 53' 30.026 W	

#### FORMATION TOP DETAILS

TVDPath	MDPath	Formation
3293.00	3334.86	PARKMAN
4768.00	4844.16	SUSSEX
5238.00	5325.08	SHANNON
7408.00	7512.81	NIO A
7748.00	7852.81	CODELL
8198.00	8302.81	JSAND

#### SECTION DETAILS

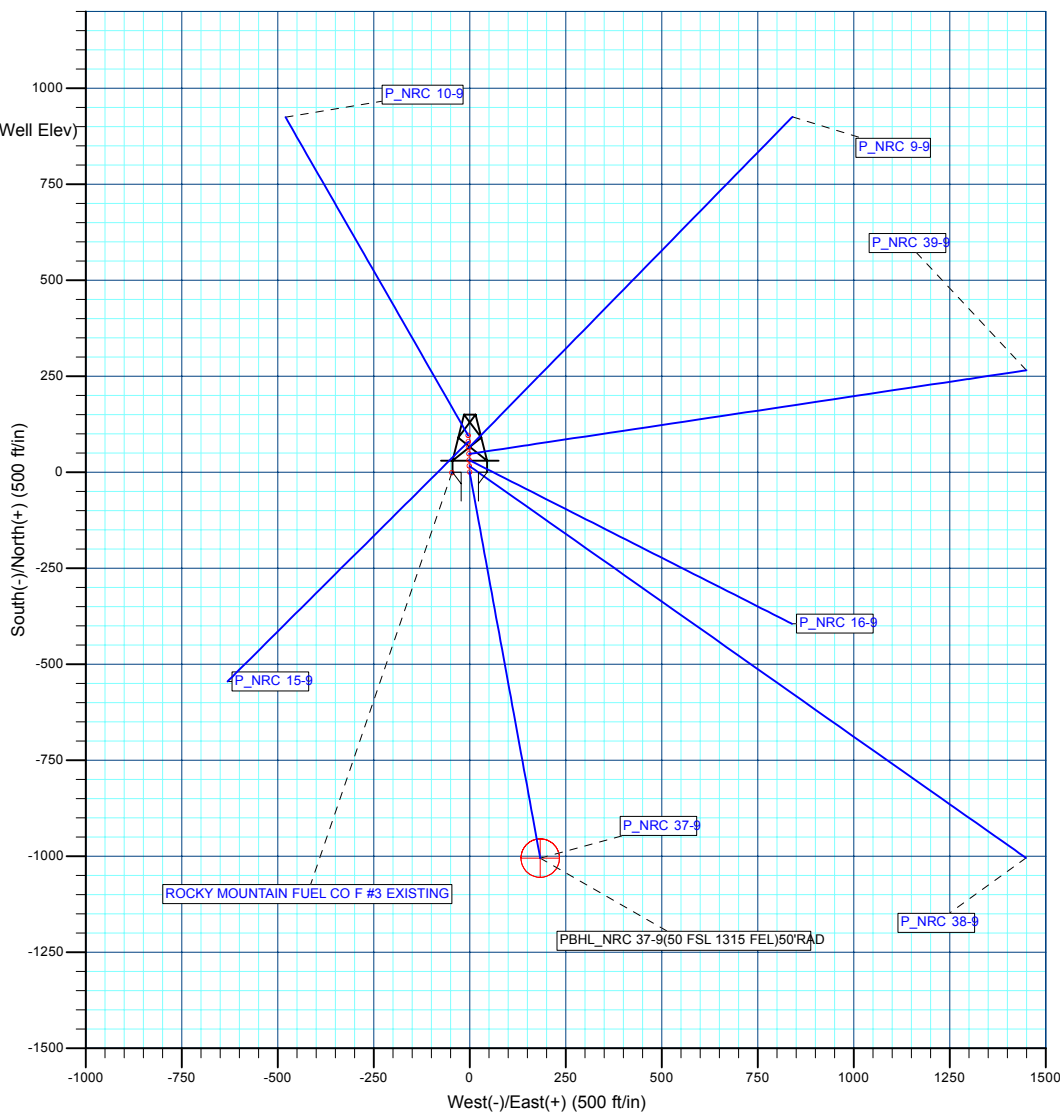
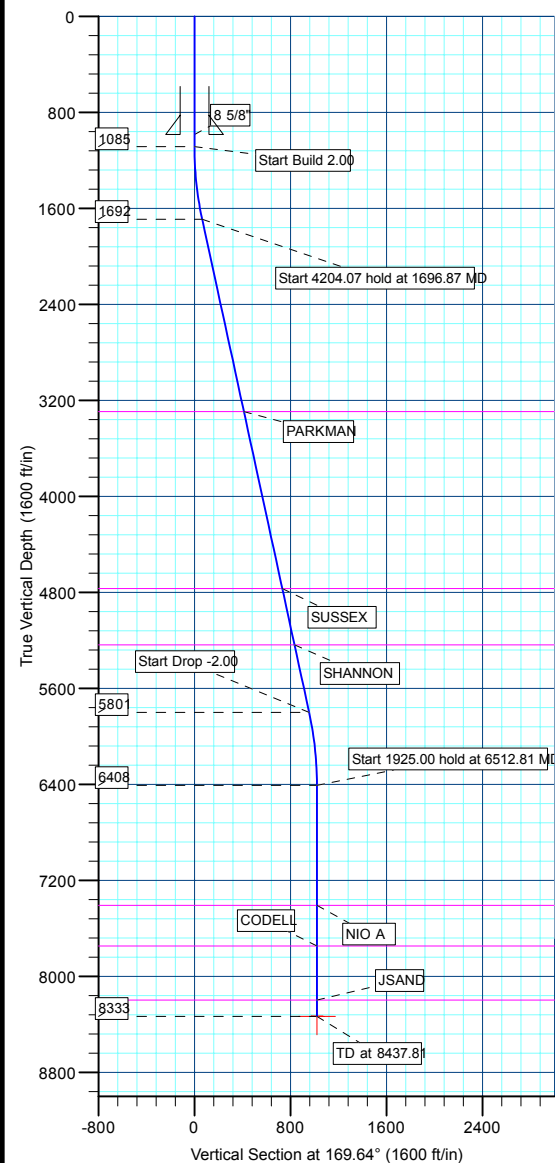
MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1085.00	0.00	0.00	1085.00	0.00	0.00	0.00	0.00	0.00	
1696.87	12.24	169.64	1692.23	-64.03	11.70	2.00	169.64	65.09	
5900.94	12.24	169.64	5800.77	-940.62	171.92	0.00	0.00	956.20	
6512.81	0.00	0.00	6408.00	-1004.65	183.62	2.00	180.00	1021.30	
8437.81	0.00	0.00	8333.00	-1004.65	183.62	0.00	0.00	1021.30	PBHL_NRC 37-9(50 FSL 1315 FEL)50°RAD

#### CASING DETAILS

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



KB ELEV:WELL @ 5039.00ft (Original Well Elev)  
 GRD ELEV: 5024.00



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

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
PBHL	8333.00	-1004.65	183.62	1264708.00	3170461.04	40° 3' 30.262 N 104° 53' 27.665 W		Circle (Radius: 50.00)

<b>Database:</b>	EDM 2003.21 Single User Db	<b>Local Co-ordinate Reference:</b>	Well P_NRC 37-9
<b>Company:</b>	US ROCKIES REGION PLANNING	<b>TVD Reference:</b>	WELL @ 5039.00ft (Original Well Elev)
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>MD Reference:</b>	WELL @ 5039.00ft (Original Well Elev)
<b>Site:</b>	WELD_NRC 20-9 PAD	<b>North Reference:</b>	True
<b>Well:</b>	P_NRC 37-9	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	P_NRC 37-9		
<b>Design:</b>	PLAN #1 1-6-10 RHS		

<b>Project</b>	COLORADO NORTHERN ZONE - 83, KERR MCGEE OIL & GAS ONSHORE LP		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	Colorado Northern Zone		

Site						WELD_NRC 20-9 PAD, SECTION 9 T1N R67W											
Site Position:						Northing:			1,265,759.10 ft			Latitude:			40° 3' 40.662 N		
From:			Lat/Long			Easting:			3,170,268.24 ft			Longitude:			104° 53' 30.052 W		
Position Uncertainty:			0.00 ft			Slot Radius:			in			Grid Convergence:			0.39 °		

Well	P_NRC 37-9					
Well Position	+N/-S	-47.74 ft	Northing:	1,265,711.37 ft	Latitude:	40° 3' 40.190 N
	+E/-W	1.96 ft	Easting:	3,170,270.53 ft	Longitude:	104° 53' 30.026 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	5,024.00 ft

<b>Wellbore</b>	P_NRC 37-9				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	1/6/2010	9.09	66.80	53,089

<b>Design</b>	PLAN #1 1-6-10 RHS			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>
	0.00	0.00	0.00	169.64

<b>Plan Sections</b>										
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	
1,696.87	12.24	169.64	1,692.23	-64.03	11.70	2.00	2.00	0.00	169.64	
5,900.94	12.24	169.64	5,800.77	-940.62	171.92	0.00	0.00	0.00	0.00	
6,512.81	0.00	0.00	6,408.00	-1,004.65	183.62	2.00	-2.00	0.00	180.00	
8,437.81	0.00	0.00	8,333.00	-1,004.65	183.62	0.00	0.00	0.00	0.00	PBHL_NRC 37-9(5)

<b>Database:</b>	EDM 2003.21 Single User Db	<b>Local Co-ordinate Reference:</b>	Well P_NRC 37-9
<b>Company:</b>	US ROCKIES REGION PLANNING	<b>TVD Reference:</b>	WELL @ 5039.00ft (Original Well Elev)
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>MD Reference:</b>	WELL @ 5039.00ft (Original Well Elev)
<b>Site:</b>	WELD_NRC 20-9 PAD	<b>North Reference:</b>	True
<b>Well:</b>	P_NRC 37-9	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	P_NRC 37-9		
<b>Design:</b>	PLAN #1 1-6-10 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)
<b>Start Build 2.00</b>									
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	169.64	1,100.00	-0.04	0.01	0.04	2.00	2.00	0.00
1,200.00	2.30	169.64	1,199.97	-2.27	0.41	2.31	2.00	2.00	0.00
1,300.00	4.30	169.64	1,299.80	-7.93	1.45	8.06	2.00	2.00	0.00
1,400.00	6.30	169.64	1,399.37	-17.02	3.11	17.30	2.00	2.00	0.00
1,500.00	8.30	169.64	1,498.55	-29.52	5.39	30.01	2.00	2.00	0.00
1,600.00	10.30	169.64	1,597.23	-45.41	8.30	46.17	2.00	2.00	0.00
<b>Start 4204.07 hold at 1696.87 MD</b>									
1,696.87	12.24	169.64	1,692.23	-64.03	11.70	65.09	2.00	2.00	0.00
1,700.00	12.24	169.64	1,695.29	-64.69	11.82	65.76	0.00	0.00	0.00
1,800.00	12.24	169.64	1,793.02	-85.54	15.63	86.95	0.00	0.00	0.00
1,900.00	12.24	169.64	1,890.74	-106.39	19.44	108.15	0.00	0.00	0.00
2,000.00	12.24	169.64	1,988.47	-127.24	23.26	129.35	0.00	0.00	0.00
2,100.00	12.24	169.64	2,086.20	-148.09	27.07	150.54	0.00	0.00	0.00
2,200.00	12.24	169.64	2,183.93	-168.94	30.88	171.74	0.00	0.00	0.00
2,300.00	12.24	169.64	2,281.65	-189.79	34.69	192.94	0.00	0.00	0.00
2,400.00	12.24	169.64	2,379.38	-210.64	38.50	214.13	0.00	0.00	0.00
2,500.00	12.24	169.64	2,477.11	-231.49	42.31	235.33	0.00	0.00	0.00
2,600.00	12.24	169.64	2,574.84	-252.34	46.12	256.52	0.00	0.00	0.00
2,700.00	12.24	169.64	2,672.57	-273.20	49.93	277.72	0.00	0.00	0.00
2,800.00	12.24	169.64	2,770.29	-294.05	53.74	298.92	0.00	0.00	0.00
2,900.00	12.24	169.64	2,868.02	-314.90	57.55	320.11	0.00	0.00	0.00
3,000.00	12.24	169.64	2,965.75	-335.75	61.37	341.31	0.00	0.00	0.00
3,100.00	12.24	169.64	3,063.48	-356.60	65.18	362.51	0.00	0.00	0.00
3,200.00	12.24	169.64	3,161.20	-377.45	68.99	383.70	0.00	0.00	0.00
3,300.00	12.24	169.64	3,258.93	-398.30	72.80	404.90	0.00	0.00	0.00
<b>PARKMAN</b>									
3,334.86	12.24	169.64	3,293.00	-405.57	74.13	412.29	0.00	0.00	0.00
3,400.00	12.24	169.64	3,356.66	-419.15	76.61	426.10	0.00	0.00	0.00
3,500.00	12.24	169.64	3,454.39	-440.00	80.42	447.29	0.00	0.00	0.00
3,600.00	12.24	169.64	3,552.11	-460.85	84.23	468.49	0.00	0.00	0.00
3,700.00	12.24	169.64	3,649.84	-481.70	88.04	489.68	0.00	0.00	0.00
3,800.00	12.24	169.64	3,747.57	-502.56	91.85	510.88	0.00	0.00	0.00
3,900.00	12.24	169.64	3,845.30	-523.41	95.66	532.08	0.00	0.00	0.00
4,000.00	12.24	169.64	3,943.03	-544.26	99.48	553.27	0.00	0.00	0.00
4,100.00	12.24	169.64	4,040.75	-565.11	103.29	574.47	0.00	0.00	0.00
4,200.00	12.24	169.64	4,138.48	-585.96	107.10	595.67	0.00	0.00	0.00
4,300.00	12.24	169.64	4,236.21	-606.81	110.91	616.86	0.00	0.00	0.00
4,400.00	12.24	169.64	4,333.94	-627.66	114.72	638.06	0.00	0.00	0.00
4,500.00	12.24	169.64	4,431.66	-648.51	118.53	659.25	0.00	0.00	0.00
4,600.00	12.24	169.64	4,529.39	-669.36	122.34	680.45	0.00	0.00	0.00
4,700.00	12.24	169.64	4,627.12	-690.21	126.15	701.65	0.00	0.00	0.00
4,800.00	12.24	169.64	4,724.85	-711.06	129.96	722.84	0.00	0.00	0.00
<b>SUSSEX</b>									
4,844.16	12.24	169.64	4,768.00	-720.27	131.65	732.20	0.00	0.00	0.00
4,900.00	12.24	169.64	4,822.58	-731.92	133.77	744.04	0.00	0.00	0.00
5,000.00	12.24	169.64	4,920.30	-752.77	137.59	765.24	0.00	0.00	0.00
5,100.00	12.24	169.64	5,018.03	-773.62	141.40	786.43	0.00	0.00	0.00
5,200.00	12.24	169.64	5,115.76	-794.47	145.21	807.63	0.00	0.00	0.00
5,300.00	12.24	169.64	5,213.49	-815.32	149.02	828.83	0.00	0.00	0.00
<b>SHANNON</b>									
5,325.08	12.24	169.64	5,238.00	-820.55	149.97	834.14	0.00	0.00	0.00

<b>Database:</b>	EDM 2003.21 Single User Db	<b>Local Co-ordinate Reference:</b>	Well P_NRC 37-9
<b>Company:</b>	US ROCKIES REGION PLANNING	<b>TVD Reference:</b>	WELL @ 5039.00ft (Original Well Elev)
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>MD Reference:</b>	WELL @ 5039.00ft (Original Well Elev)
<b>Site:</b>	WELD_NRC 20-9 PAD	<b>North Reference:</b>	True
<b>Well:</b>	P_NRC 37-9	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	P_NRC 37-9		
<b>Design:</b>	PLAN #1 1-6-10 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	12.24	169.64	5,311.21	-836.17	152.83	850.02	0.00	0.00	0.00
5,500.00	12.24	169.64	5,408.94	-857.02	156.64	871.22	0.00	0.00	0.00
5,600.00	12.24	169.64	5,506.67	-877.87	160.45	892.41	0.00	0.00	0.00
5,700.00	12.24	169.64	5,604.40	-898.72	164.26	913.61	0.00	0.00	0.00
5,800.00	12.24	169.64	5,702.13	-919.57	168.07	934.81	0.00	0.00	0.00
5,900.00	12.24	169.64	5,799.85	-940.42	171.88	956.00	0.00	0.00	0.00
<b>Start Drop -2.00</b>									
5,900.94	12.24	169.64	5,800.77	-940.62	171.92	956.20	0.00	0.00	0.00
6,000.00	10.26	169.64	5,897.93	-959.62	175.39	975.52	2.00	-2.00	0.00
6,100.00	8.26	169.64	5,996.62	-975.45	178.29	991.61	2.00	-2.00	0.00
6,200.00	6.26	169.64	6,095.81	-987.87	180.56	1,004.24	2.00	-2.00	0.00
6,300.00	4.26	169.64	6,195.39	-996.88	182.20	1,013.40	2.00	-2.00	0.00
6,400.00	2.26	169.64	6,295.22	-1,002.47	183.22	1,019.08	2.00	-2.00	0.00
6,500.00	0.26	169.64	6,395.19	-1,004.63	183.62	1,021.27	2.00	-2.00	0.00
<b>Start 1925.00 hold at 6512.81 MD</b>									
6,512.81	0.00	0.00	6,408.00	-1,004.65	183.62	1,021.30	2.00	-2.00	-1,324.38
6,600.00	0.00	0.00	6,495.19	-1,004.65	183.62	1,021.30	0.00	0.00	0.00
6,700.00	0.00	0.00	6,595.19	-1,004.65	183.62	1,021.30	0.00	0.00	0.00
6,800.00	0.00	0.00	6,695.19	-1,004.65	183.62	1,021.30	0.00	0.00	0.00
6,900.00	0.00	0.00	6,795.19	-1,004.65	183.62	1,021.30	0.00	0.00	0.00
7,000.00	0.00	0.00	6,895.19	-1,004.65	183.62	1,021.30	0.00	0.00	0.00
7,100.00	0.00	0.00	6,995.19	-1,004.65	183.62	1,021.30	0.00	0.00	0.00
7,200.00	0.00	0.00	7,095.19	-1,004.65	183.62	1,021.30	0.00	0.00	0.00
7,300.00	0.00	0.00	7,195.19	-1,004.65	183.62	1,021.30	0.00	0.00	0.00
7,400.00	0.00	0.00	7,295.19	-1,004.65	183.62	1,021.30	0.00	0.00	0.00
7,500.00	0.00	0.00	7,395.19	-1,004.65	183.62	1,021.30	0.00	0.00	0.00
<b>NIO A</b>									
7,512.81	0.00	0.00	7,408.00	-1,004.65	183.62	1,021.30	0.00	0.00	0.00
7,600.00	0.00	0.00	7,495.19	-1,004.65	183.62	1,021.30	0.00	0.00	0.00
7,700.00	0.00	0.00	7,595.19	-1,004.65	183.62	1,021.30	0.00	0.00	0.00
7,800.00	0.00	0.00	7,695.19	-1,004.65	183.62	1,021.30	0.00	0.00	0.00
<b>CODELL</b>									
7,852.81	0.00	0.00	7,748.00	-1,004.65	183.62	1,021.30	0.00	0.00	0.00
7,900.00	0.00	0.00	7,795.19	-1,004.65	183.62	1,021.30	0.00	0.00	0.00
8,000.00	0.00	0.00	7,895.19	-1,004.65	183.62	1,021.30	0.00	0.00	0.00
8,100.00	0.00	0.00	7,995.19	-1,004.65	183.62	1,021.30	0.00	0.00	0.00
8,200.00	0.00	0.00	8,095.19	-1,004.65	183.62	1,021.30	0.00	0.00	0.00
8,300.00	0.00	0.00	8,195.19	-1,004.65	183.62	1,021.30	0.00	0.00	0.00
<b>JSAND</b>									
8,302.81	0.00	0.00	8,198.00	-1,004.65	183.62	1,021.30	0.00	0.00	0.00
8,400.00	0.00	0.00	8,295.19	-1,004.65	183.62	1,021.30	0.00	0.00	0.00
<b>PBHL_NRC 37-9(50 FSL 1315 FEL)50'RAD</b>									
8,437.81	0.00	0.00	8,333.00	-1,004.65	183.62	1,021.30	0.00	0.00	0.00

<b>Database:</b>	EDM 2003.21 Single User Db	<b>Local Co-ordinate Reference:</b>	Well P_NRC 37-9
<b>Company:</b>	US ROCKIES REGION PLANNING	<b>TVD Reference:</b>	WELL @ 5039.00ft (Original Well Elev)
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>MD Reference:</b>	WELL @ 5039.00ft (Original Well Elev)
<b>Site:</b>	WELD_NRC 20-9 PAD	<b>North Reference:</b>	True
<b>Well:</b>	P_NRC 37-9	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	P_NRC 37-9		
<b>Design:</b>	PLAN #1 1-6-10 RHS		

Design Targets									
Target Name									
- hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- Shape									
PBHL_NRC 37-9(50 F - plan hits target center - Circle (radius 50.00)	0.00	0.00	8,333.00	-1,004.65	183.62	1,264,708.00	3,170,461.04	40° 3' 30.262 N	104° 53' 27.665 W

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

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
3,334.86	3,293.00	PARKMAN				
4,844.16	4,768.00	SUSSEX				
5,325.08	5,238.00	SHANNON				
7,512.81	7,408.00	NIO A				
7,852.81	7,748.00	CODELL				
8,302.81	8,198.00	JSAND				

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
1,085.00	1,085.00	0.00	0.00	Start Build 2.00	
1,696.87	1,692.23	-64.03	11.70	Start 4204.07 hold at 1696.87 MD	
5,900.94	5,800.77	-940.62	171.92	Start Drop -2.00	
6,512.81	6,408.00	-1,004.65	183.62	Start 1925.00 hold at 6512.81 MD	
8,437.81	8,333.00	-1,004.65	183.62	TD at 8437.81	



# **US ROCKIES REGION PLANNING**

**COLORADO NORTHERN ZONE - 83  
WELD\_NRC 20-9 PAD  
P\_NRC 37-9**

**P\_NRC 37-9  
PLAN #1 1-6-10 RHS**

## **Anticollision Report**

**06 January, 2010**



<b>Company:</b>	US ROCKIES REGION PLANNING	<b>Local Co-ordinate Reference:</b>	Well P_NRC 37-9
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>TVD Reference:</b>	WELL @ 5039.00ft (Original Well Elev)
<b>Reference Site:</b>	WELD_NRC 20-9 PAD	<b>MD Reference:</b>	WELL @ 5039.00ft (Original Well Elev)
<b>Site Error:</b>	0.00ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	P_NRC 37-9	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	P_NRC 37-9	<b>Database:</b>	EDM 2003.21 Single User Db
<b>Reference Design:</b>	PLAN #1 1-6-10 RHS	<b>Offset TVD Reference:</b>	Offset Datum

<b>Reference</b>	PLAN #1 1-6-10 RHS		
<b>Filter type:</b>	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
<b>Interpolation Method:</b>	Stations	<b>Error Model:</b>	ISCWSA
<b>Depth Range:</b>	0.00 to 20,000.00ft	<b>Scan Method:</b>	Closest Approach 3D
<b>Results Limited by:</b>	Maximum center-center distance of 10,000.00ft	<b>Error Surface:</b>	Elliptical Conic
<b>Warning Levels Evaluated at:</b>	2.00 Sigma		

<b>Survey Tool Program</b>	<b>Date</b> 1/6/2010				
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
0.00	8,437.81	PLAN #1 1-6-10 RHS (P_NRC 37-9)	MWD	MWD - Standard	

<b>Summary</b>						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
<b>Offset Well - Wellbore - Design</b>						
WELD_NRC 20-9 PAD						
P_NRC 10-9 - P_NRC 10-9 - PLAN #1 1-6-10 RHS	1,085.00	1,085.00	95.89	91.27	20.761	CC, ES
P_NRC 10-9 - P_NRC 10-9 - PLAN #1 1-6-10 RHS	1,200.00	1,196.52	100.17	95.11	19.785	SF
P_NRC 15-9 - P_NRC 15-9 - PLAN #1 1-6-10 RHS	1,085.00	1,085.00	79.85	75.23	17.288	CC
P_NRC 15-9 - P_NRC 15-9 - PLAN #1 1-6-10 RHS	1,100.00	1,100.29	79.86	75.18	17.070	ES
P_NRC 15-9 - P_NRC 15-9 - PLAN #1 1-6-10 RHS	1,400.00	1,405.18	86.49	80.72	14.985	SF
P_NRC 16-9 - P_NRC 16-9 - PLAN #1 1-6-10 RHS	1,085.00	1,085.00	31.72	27.11	6.868	CC
P_NRC 16-9 - P_NRC 16-9 - PLAN #1 1-6-10 RHS	1,100.00	1,100.08	31.74	27.07	6.785	ES
P_NRC 16-9 - P_NRC 16-9 - PLAN #1 1-6-10 RHS	1,200.00	1,200.58	32.93	27.90	6.540	SF
P_NRC 38-9 - P_NRC 38-9 - PLAN #1 1-6-10 RHS	1,085.00	1,085.00	16.04	11.42	3.473	CC
P_NRC 38-9 - P_NRC 38-9 - PLAN #1 1-6-10 RHS	1,100.00	1,100.05	16.06	11.38	3.432	ES
P_NRC 38-9 - P_NRC 38-9 - PLAN #1 1-6-10 RHS	1,200.00	1,200.36	16.99	11.96	3.378	SF
P_NRC 39-9 - P_NRC 39-9 - PLAN #1 1-6-10 RHS	1,085.00	1,085.00	47.78	4.37	1.101	Level 2, CC
P_NRC 39-9 - P_NRC 39-9 - PLAN #1 1-6-10 RHS	1,100.00	1,099.97	47.82	4.04	1.092	Level 2, ES, SF
P_NRC 9-9 - P_NRC 9-9 - PLAN #1 1-6-10 RHS	1,085.00	1,085.00	63.80	59.18	13.813	CC, ES
P_NRC 9-9 - P_NRC 9-9 - PLAN #1 1-6-10 RHS	1,200.00	1,198.13	67.66	62.60	13.364	SF
ROCKY MOUNTAIN FUEL CO F #3 EXISTING - ROCKY	1,085.00	1,066.00	46.49	41.89	10.121	CC
ROCKY MOUNTAIN FUEL CO F #3 EXISTING - ROCKY	1,200.00	1,180.97	46.89	41.83	9.282	ES
ROCKY MOUNTAIN FUEL CO F #3 EXISTING - ROCKY	1,400.00	1,380.37	51.96	46.10	8.858	SF

<b>Offset Design</b> WELD_NRC 20-9 PAD - P_NRC 10-9 - P_NRC 10-9 - PLAN #1 1-6-10 RHS												
Survey Program: 0-MWD												
<b>Reference</b>		<b>Offset</b>		<b>Semi Major Axis</b>			<b>Distance</b>					
<b>Measured Depth (ft)</b>	<b>Vertical Depth (ft)</b>	<b>Measured Depth (ft)</b>	<b>Vertical Depth (ft)</b>	<b>Reference (ft)</b>	<b>Offset (ft)</b>	<b>Highside Toolface (°)</b>	<b>Offset Wellbore Centre +N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Between Centres (ft)</b>	<b>Between Ellipses (ft)</b>	<b>Minimum Separation (ft)</b>	<b>Separation Factor</b>
0.00	0.00	0.00	0.00	0.00	0.00	-2.34	95.81	-3.92	95.89			
100.00	100.00	100.00	100.00	0.10	0.10	-2.34	95.81	-3.92	95.89	95.70	0.19	501.924
200.00	200.00	200.00	200.00	0.32	0.32	-2.34	95.81	-3.92	95.89	95.25	0.64	149.697
300.00	300.00	300.00	300.00	0.55	0.55	-2.34	95.81	-3.92	95.89	94.80	1.09	87.966
400.00	400.00	400.00	400.00	0.77	0.77	-2.34	95.81	-3.92	95.89	94.35	1.54	62.283
500.00	500.00	500.00	500.00	0.99	0.99	-2.34	95.81	-3.92	95.89	93.90	1.99	48.207
600.00	600.00	600.00	600.00	1.22	1.22	-2.34	95.81	-3.92	95.89	93.45	2.44	39.321
700.00	700.00	700.00	700.00	1.44	1.44	-2.34	95.81	-3.92	95.89	93.01	2.89	33.201
800.00	800.00	800.00	800.00	1.67	1.67	-2.34	95.81	-3.92	95.89	92.56	3.34	28.730
900.00	900.00	900.00	900.00	1.89	1.89	-2.34	95.81	-3.92	95.89	92.11	3.79	25.320

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



<b>Company:</b>	US ROCKIES REGION PLANNING	<b>Local Co-ordinate Reference:</b>	Well P_NRC 37-9
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>TVD Reference:</b>	WELL @ 5039.00ft (Original Well Elev)
<b>Reference Site:</b>	WELD_NRC 20-9 PAD	<b>MD Reference:</b>	WELL @ 5039.00ft (Original Well Elev)
<b>Site Error:</b>	0.00ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	P_NRC 37-9	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	P_NRC 37-9	<b>Database:</b>	EDM 2003.21 Single User Db
<b>Reference Design:</b>	PLAN #1 1-6-10 RHS	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design</b> WELD_NRC 20-9 PAD - P_NRC 10-9 - P_NRC 10-9 - PLAN #1 1-6-10 RHS												<b>Offset Site Error:</b>	0.00 ft
Survey Program: 0-MWD												<b>Offset Well Error:</b>	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	
1,000.00	1,000.00	1,000.00	1,000.00	2.12	2.12	-2.34	95.81	-3.92	95.89	91.66	4.24	22.633	
1,085.00	1,085.00	1,085.00	1,085.00	2.31	2.31	-2.34	95.81	-3.92	95.89	91.27	4.62	20.761 CC, ES	
1,100.00	1,100.00	1,099.57	1,099.57	2.34	2.34	-172.00	95.85	-3.94	95.97	91.29	4.68	20.503	
1,200.00	1,199.97	1,196.52	1,196.49	2.51	2.56	-172.73	97.70	-5.00	100.17	95.11	5.06	19.785 SF	
1,300.00	1,299.80	1,292.70	1,292.52	2.69	2.77	-174.32	102.34	-7.66	110.89	105.44	5.45	20.360	
1,400.00	1,399.37	1,387.49	1,386.93	2.89	2.99	-176.32	109.65	-11.86	128.16	122.33	5.83	21.993	
1,500.00	1,498.55	1,480.28	1,479.03	3.11	3.22	-178.32	119.43	-17.47	151.95	145.75	6.20	24.494	
1,600.00	1,597.23	1,570.53	1,568.21	3.36	3.46	179.89	131.41	-24.35	182.14	175.57	6.57	27.709	
1,696.87	1,692.23	1,655.06	1,651.30	3.65	3.71	178.43	144.84	-32.06	217.30	210.38	6.92	31.386	
1,700.00	1,695.29	1,657.74	1,653.93	3.66	3.72	178.38	145.30	-32.32	218.53	211.59	6.94	31.506	
1,800.00	1,793.02	1,749.29	1,743.64	4.00	4.02	177.15	161.15	-41.42	257.97	250.61	7.36	35.031	
1,900.00	1,890.74	1,841.06	1,833.57	4.35	4.33	176.25	177.04	-50.54	297.49	289.69	7.80	38.135	
2,000.00	1,988.47	1,932.83	1,923.49	4.73	4.65	175.55	192.93	-59.65	337.06	328.81	8.25	40.875	
2,100.00	2,086.20	2,024.61	2,013.42	5.13	4.99	175.01	208.82	-68.77	376.65	367.96	8.70	43.301	
2,200.00	2,183.93	2,116.38	2,103.34	5.53	5.34	174.56	224.71	-77.89	416.28	407.12	9.16	45.460	
2,300.00	2,281.65	2,208.15	2,193.26	5.94	5.69	174.20	240.60	-87.01	455.92	446.30	9.62	47.390	
2,400.00	2,379.38	2,299.92	2,283.19	6.36	6.05	173.89	256.49	-96.13	495.57	485.48	10.09	49.121	
2,500.00	2,477.11	2,391.69	2,373.11	6.79	6.41	173.62	272.38	-105.25	535.24	524.67	10.56	50.679	
2,600.00	2,574.84	2,483.47	2,463.04	7.22	6.78	173.40	288.27	-114.37	574.91	563.87	11.04	52.089	
2,700.00	2,672.57	2,575.24	2,552.96	7.65	7.15	173.20	304.16	-123.49	614.59	603.07	11.52	53.369	
2,800.00	2,770.29	2,667.01	2,642.89	8.09	7.52	173.03	320.05	-132.60	654.27	642.27	12.00	54.535	
2,900.00	2,868.02	2,758.78	2,732.81	8.53	7.90	172.87	335.94	-141.72	693.96	681.48	12.48	55.601	
3,000.00	2,965.75	2,850.55	2,822.74	8.98	8.28	172.74	351.83	-150.84	733.65	720.68	12.97	56.580	
3,100.00	3,063.48	2,942.33	2,912.66	9.42	8.66	172.61	367.72	-159.96	773.35	759.89	13.45	57.480	
3,200.00	3,161.20	3,034.10	3,002.59	9.87	9.04	172.50	383.61	-169.08	813.04	799.10	13.94	58.310	
3,300.00	3,258.93	3,125.87	3,092.51	10.32	9.42	172.40	399.49	-178.20	852.74	838.31	14.43	59.078	
3,400.00	3,356.66	3,217.64	3,182.44	10.77	9.81	172.31	415.38	-187.32	892.45	877.52	14.93	59.790	
3,500.00	3,454.39	3,309.41	3,272.36	11.22	10.19	172.23	431.27	-196.44	932.15	916.73	15.42	60.453	
3,600.00	3,552.11	3,401.19	3,362.29	11.68	10.58	172.15	447.16	-205.55	971.86	955.94	15.91	61.070	
3,700.00	3,649.84	3,492.96	3,452.21	12.13	10.97	172.08	463.05	-214.67	1,011.56	995.15	16.41	61.646	
3,800.00	3,747.57	3,584.73	3,542.14	12.59	11.36	172.01	478.94	-223.79	1,051.27	1,034.37	16.91	62.185	
3,900.00	3,845.30	3,676.50	3,632.06	13.04	11.75	171.95	494.83	-232.91	1,090.98	1,073.58	17.40	62.691	
4,000.00	3,943.03	3,768.27	3,721.99	13.50	12.14	171.90	510.72	-242.03	1,130.69	1,112.79	17.90	63.166	
4,100.00	4,040.75	3,860.05	3,811.91	13.95	12.53	171.84	526.61	-251.15	1,170.40	1,152.00	18.40	63.612	
4,200.00	4,138.48	3,951.82	3,901.84	14.41	12.92	171.80	542.50	-260.27	1,210.11	1,191.22	18.90	64.034	
4,300.00	4,236.21	4,043.59	3,991.76	14.87	13.31	171.75	558.39	-269.38	1,249.83	1,230.43	19.40	64.431	
4,400.00	4,333.94	4,135.36	4,081.68	15.33	13.70	171.71	574.28	-278.50	1,289.54	1,269.64	19.90	64.807	
4,500.00	4,431.66	4,227.13	4,171.61	15.79	14.09	171.67	590.17	-287.62	1,329.25	1,308.85	20.40	65.163	
4,600.00	4,529.39	4,318.91	4,261.53	16.25	14.49	171.63	606.06	-296.74	1,368.97	1,348.07	20.90	65.500	
4,700.00	4,627.12	4,410.68	4,351.46	16.70	14.88	171.59	621.95	-305.86	1,408.68	1,387.28	21.40	65.820	
4,800.00	4,724.85	4,502.45	4,441.38	17.16	15.27	171.56	637.83	-314.98	1,448.40	1,426.49	21.90	66.124	
4,900.00	4,822.58	4,594.22	4,531.31	17.62	15.67	171.52	653.72	-324.10	1,488.11	1,465.71	22.41	66.414	
5,000.00	4,920.30	4,685.99	4,621.23	18.09	16.06	171.49	669.61	-333.22	1,527.83	1,504.92	22.91	66.690	
5,100.00	5,018.03	4,777.76	4,711.16	18.55	16.46	171.47	685.50	-342.33	1,567.55	1,544.13	23.41	66.953	
5,200.00	5,115.76	4,869.54	4,801.08	19.01	16.85	171.44	701.39	-351.45	1,607.26	1,583.35	23.92	67.204	
5,300.00	5,213.49	4,961.31	4,891.01	19.47	17.25	171.41	717.28	-360.57	1,646.98	1,622.56	24.42	67.444	
5,400.00	5,311.21	5,053.08	4,980.93	19.93	17.64	171.39	733.17	-369.69	1,686.70	1,661.77	24.92	67.674	
5,500.00	5,408.94	5,144.85	5,070.86	20.39	18.04	171.36	749.06	-378.81	1,726.41	1,700.99	25.43	67.893	
5,600.00	5,506.67	5,236.62	5,160.78	20.85	18.43	171.34	764.95	-387.93	1,766.13	1,740.20	25.93	68.104	
5,700.00	5,604.40	5,328.40	5,250.71	21.31	18.83	171.32	780.84	-397.05	1,805.85	1,779.41	26.44	68.306	
5,800.00	5,702.13	5,420.17	5,340.63	21.78	19.22	171.30	796.73	-406.17	1,845.57	1,818.63	26.94	68.500	
5,900.94	5,800.77	5,512.80	5,431.40	22.24	19.62	171.28	812.77	-415.37	1,885.66	1,858.21	27.45	68.688	

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

<b>Company:</b>	US ROCKIES REGION PLANNING	<b>Local Co-ordinate Reference:</b>	Well P_NRC 37-9
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>TVD Reference:</b>	WELL @ 5039.00ft (Original Well Elev)
<b>Reference Site:</b>	WELD_NRC 20-9 PAD	<b>MD Reference:</b>	WELL @ 5039.00ft (Original Well Elev)
<b>Site Error:</b>	0.00ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	P_NRC 37-9	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	P_NRC 37-9	<b>Database:</b>	EDM 2003.21 Single User Db
<b>Reference Design:</b>	PLAN #1 1-6-10 RHS	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design</b> WELD_NRC 20-9 PAD - P_NRC 10-9 - P_NRC 10-9 - PLAN #1 1-6-10 RHS												<b>Offset Site Error:</b>	0.00 ft
Survey Program: 0-MWD												<b>Offset Well Error:</b>	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	
6,000.00	5,897.93	5,604.36	5,521.12	22.62	20.02	171.37	828.62	-424.47	1,923.44	1,895.35	28.10	68.457	
6,100.00	5,996.62	5,698.04	5,612.91	22.89	20.42	171.44	844.84	-433.78	1,958.39	1,929.70	28.69	68.249	
6,200.00	6,095.81	5,792.87	5,705.83	23.13	20.83	171.48	861.26	-443.20	1,990.08	1,960.83	29.26	68.022	
6,300.00	6,195.39	5,926.80	5,837.17	23.34	21.36	171.47	884.00	-456.25	2,018.33	1,988.47	29.86	67.601	
6,400.00	6,295.22	6,249.40	6,157.06	23.50	22.18	171.38	918.99	-476.33	2,036.20	2,005.50	30.70	66.332	
6,500.00	6,395.19	6,487.68	6,395.19	23.63	22.54	171.39	924.92	-479.74	2,040.39	2,009.12	31.28	65.239	
6,512.81	6,408.00	6,500.49	6,408.00	23.65	22.55	-18.97	924.92	-479.74	2,040.42	2,009.10	31.32	65.147	
6,600.00	6,495.19	6,587.68	6,495.19	23.75	22.67	-18.97	924.92	-479.74	2,040.42	2,008.78	31.64	64.480	
6,700.00	6,595.19	6,687.68	6,595.19	23.85	22.81	-18.97	924.92	-479.74	2,040.42	2,008.42	32.00	63.755	
6,800.00	6,695.19	6,787.68	6,695.19	23.96	22.95	-18.97	924.92	-479.74	2,040.42	2,008.06	32.37	63.041	
6,900.00	6,795.19	6,887.68	6,795.19	24.07	23.08	-18.97	924.92	-479.74	2,040.42	2,007.69	32.73	62.340	
7,000.00	6,895.19	6,987.68	6,895.19	24.18	23.23	-18.97	924.92	-479.74	2,040.42	2,007.32	33.10	61.650	
7,100.00	6,995.19	7,087.68	6,995.19	24.29	23.37	-18.97	924.92	-479.74	2,040.42	2,006.96	33.47	60.971	
7,200.00	7,095.19	7,187.68	7,095.19	24.41	23.51	-18.97	924.92	-479.74	2,040.42	2,006.59	33.84	60.304	
7,300.00	7,195.19	7,287.68	7,195.19	24.52	23.66	-18.97	924.92	-479.74	2,040.42	2,006.21	34.21	59.648	
7,400.00	7,295.19	7,387.68	7,295.19	24.64	23.80	-18.97	924.92	-479.74	2,040.42	2,005.84	34.58	59.003	
7,500.00	7,395.19	7,487.68	7,395.19	24.76	23.95	-18.97	924.92	-479.74	2,040.42	2,005.46	34.96	58.368	
7,600.00	7,495.19	7,587.68	7,495.19	24.88	24.10	-18.97	924.92	-479.74	2,040.42	2,005.09	35.34	57.745	
7,700.00	7,595.19	7,687.68	7,595.19	25.00	24.25	-18.97	924.92	-479.74	2,040.42	2,004.71	35.71	57.132	
7,800.00	7,695.19	7,787.68	7,695.19	25.12	24.40	-18.97	924.92	-479.74	2,040.42	2,004.33	36.10	56.529	
7,900.00	7,795.19	7,887.68	7,795.19	25.25	24.55	-18.97	924.92	-479.74	2,040.42	2,003.94	36.48	55.937	
8,000.00	7,895.19	7,987.68	7,895.19	25.37	24.71	-18.97	924.92	-479.74	2,040.42	2,003.56	36.86	55.354	
8,100.00	7,995.19	8,087.68	7,995.19	25.50	24.86	-18.97	924.92	-479.74	2,040.42	2,003.18	37.25	54.782	
8,200.00	8,095.19	8,187.68	8,095.19	25.63	25.02	-18.97	924.92	-479.74	2,040.42	2,002.79	37.63	54.219	
8,300.00	8,195.19	8,287.68	8,195.19	25.76	25.17	-18.97	924.92	-479.74	2,040.42	2,002.40	38.02	53.665	
8,360.70	8,255.89	8,348.38	8,255.89	25.84	25.27	-18.97	924.92	-479.74	2,040.42	2,002.16	38.26	53.334	
8,400.00	8,295.19	8,372.49	8,280.00	25.89	25.31	-18.97	924.92	-479.74	2,040.48	2,002.10	38.38	53.166	
8,437.81	8,333.00	8,372.49	8,280.00	25.94	25.31	-18.97	924.92	-479.74	2,041.11	2,002.66	38.45	53.086	

<b>Company:</b>	US ROCKIES REGION PLANNING	<b>Local Co-ordinate Reference:</b>	Well P_NRC 37-9
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>TVD Reference:</b>	WELL @ 5039.00ft (Original Well Elev)
<b>Reference Site:</b>	WELD_NRC 20-9 PAD	<b>MD Reference:</b>	WELL @ 5039.00ft (Original Well Elev)
<b>Site Error:</b>	0.00ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	P_NRC 37-9	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	P_NRC 37-9	<b>Database:</b>	EDM 2003.21 Single User Db
<b>Reference Design:</b>	PLAN #1 1-6-10 RHS	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design WELD_NRC 20-9 PAD - P_NRC 15-9 - P_NRC 15-9 - PLAN #1 1-6-10 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	-2.41	79.78	-3.36	79.85				
100.00	100.00	100.00	100.00	0.10	0.10	-2.41	79.78	-3.36	79.85	79.66	0.19	417.958	
200.00	200.00	200.00	200.00	0.32	0.32	-2.41	79.78	-3.36	79.85	79.21	0.64	124.654	
300.00	300.00	300.00	300.00	0.55	0.55	-2.41	79.78	-3.36	79.85	78.76	1.09	73.251	
400.00	400.00	400.00	400.00	0.77	0.77	-2.41	79.78	-3.36	79.85	78.31	1.54	51.864	
500.00	500.00	500.00	500.00	0.99	0.99	-2.41	79.78	-3.36	79.85	77.86	1.99	40.143	
600.00	600.00	600.00	600.00	1.22	1.22	-2.41	79.78	-3.36	79.85	77.41	2.44	32.743	
700.00	700.00	700.00	700.00	1.44	1.44	-2.41	79.78	-3.36	79.85	76.96	2.89	27.647	
800.00	800.00	800.00	800.00	1.67	1.67	-2.41	79.78	-3.36	79.85	76.51	3.34	23.924	
900.00	900.00	900.00	900.00	1.89	1.89	-2.41	79.78	-3.36	79.85	76.06	3.79	21.084	
1,000.00	1,000.00	1,000.00	1,000.00	2.12	2.12	-2.41	79.78	-3.36	79.85	75.61	4.24	18.847	
1,085.00	1,085.00	1,085.00	1,085.00	2.31	2.31	-2.41	79.78	-3.36	79.85	75.23	4.62	17.288	CC
1,100.00	1,100.00	1,100.29	1,100.29	2.34	2.34	-172.08	79.75	-3.39	79.86	75.18	4.68	17.070	ES
1,200.00	1,199.97	1,202.16	1,202.13	2.51	2.52	-173.54	78.09	-5.06	80.58	75.55	5.03	16.020	
1,300.00	1,299.80	1,303.85	1,303.63	2.69	2.72	-177.12	73.89	-9.28	82.61	77.22	5.39	15.318	
1,400.00	1,399.37	1,405.18	1,404.51	2.89	2.93	177.55	67.17	-16.03	86.49	80.72	5.77	14.985	SF
1,500.00	1,498.55	1,505.99	1,504.48	3.11	3.16	171.05	58.00	-25.24	92.91	86.73	6.18	15.042	
1,600.00	1,597.23	1,606.13	1,603.26	3.36	3.42	164.10	46.43	-36.86	102.53	95.90	6.62	15.476	
1,696.87	1,692.23	1,701.59	1,697.09	3.65	3.71	158.22	34.05	-49.30	115.61	108.50	7.11	16.265	
1,700.00	1,695.29	1,704.66	1,700.11	3.66	3.72	158.06	33.65	-49.70	116.10	108.97	7.13	16.293	
1,800.00	1,793.02	1,802.93	1,796.70	4.00	4.04	153.70	20.88	-62.52	132.09	124.38	7.71	17.142	
1,900.00	1,890.74	1,901.20	1,893.29	4.35	4.37	150.28	8.12	-75.34	148.67	140.35	8.32	17.861	
2,000.00	1,988.47	1,999.47	1,989.88	4.73	4.71	147.56	-4.64	-88.16	165.67	156.70	8.97	18.463	
2,100.00	2,086.20	2,097.74	2,086.47	5.13	5.07	145.34	-17.40	-100.98	182.97	173.32	9.65	18.966	
2,200.00	2,183.93	2,196.01	2,183.06	5.53	5.43	143.51	-30.16	-113.80	200.48	190.14	10.34	19.386	
2,300.00	2,281.65	2,294.27	2,279.65	5.94	5.80	141.97	-42.93	-126.62	218.16	207.11	11.05	19.739	
2,400.00	2,379.38	2,392.54	2,376.24	6.36	6.18	140.66	-55.69	-139.44	235.98	224.20	11.78	20.038	
2,500.00	2,477.11	2,490.81	2,472.83	6.79	6.56	139.54	-68.45	-152.26	253.89	241.38	12.51	20.293	
2,600.00	2,574.84	2,589.08	2,569.42	7.22	6.95	138.56	-81.21	-165.08	271.89	258.63	13.26	20.512	
2,700.00	2,672.57	2,687.35	2,666.00	7.65	7.34	137.71	-93.97	-177.90	289.95	275.95	14.01	20.701	
2,800.00	2,770.29	2,785.62	2,762.59	8.09	7.73	136.95	-106.74	-190.72	308.07	293.31	14.76	20.866	
2,900.00	2,868.02	2,883.88	2,859.18	8.53	8.12	136.28	-119.50	-203.55	326.24	310.71	15.53	21.011	
3,000.00	2,965.75	2,982.15	2,955.77	8.98	8.52	135.68	-132.26	-216.37	344.44	328.15	16.29	21.138	
3,100.00	3,063.48	3,080.42	3,052.36	9.42	8.91	135.14	-145.02	-229.19	362.68	345.62	17.07	21.252	
3,200.00	3,161.20	3,178.69	3,148.95	9.87	9.31	134.65	-157.78	-242.01	380.95	363.11	17.84	21.354	
3,300.00	3,258.93	3,276.96	3,245.54	10.32	9.71	134.21	-170.55	-254.83	399.24	380.62	18.62	21.445	
3,400.00	3,356.66	3,375.23	3,342.13	10.77	10.11	133.81	-183.31	-267.65	417.55	398.15	19.40	21.527	
3,500.00	3,454.39	3,473.50	3,438.72	11.22	10.52	133.43	-196.07	-280.47	435.88	415.70	20.18	21.602	
3,600.00	3,552.11	3,571.76	3,535.31	11.68	10.92	133.09	-208.83	-293.29	454.22	433.26	20.96	21.671	
3,700.00	3,649.84	3,670.03	3,631.90	12.13	11.32	132.78	-221.59	-306.11	472.58	450.84	21.74	21.733	
3,800.00	3,747.57	3,768.30	3,728.48	12.59	11.73	132.49	-234.36	-318.93	490.95	468.42	22.53	21.791	
3,900.00	3,845.30	3,866.57	3,825.07	13.04	12.13	132.22	-247.12	-331.75	509.34	486.02	23.32	21.844	
4,000.00	3,943.03	3,964.84	3,921.66	13.50	12.54	131.97	-259.88	-344.57	527.73	503.63	24.10	21.894	
4,100.00	4,040.75	4,063.11	4,018.25	13.95	12.95	131.73	-272.64	-357.39	546.13	521.24	24.89	21.940	
4,200.00	4,138.48	4,161.37	4,114.84	14.41	13.35	131.52	-285.40	-370.21	564.55	538.86	25.68	21.983	
4,300.00	4,236.21	4,259.64	4,211.43	14.87	13.76	131.31	-298.17	-383.03	582.96	556.49	26.47	22.023	
4,400.00	4,333.94	4,357.91	4,308.02	15.33	14.17	131.12	-310.93	-395.85	601.39	574.13	27.26	22.060	
4,500.00	4,431.66	4,456.18	4,404.61	15.79	14.58	130.94	-323.69	-408.67	619.82	591.77	28.05	22.096	
4,600.00	4,529.39	4,554.45	4,501.20	16.25	14.99	130.77	-336.45	-421.49	638.26	609.42	28.84	22.129	
4,700.00	4,627.12	4,652.72	4,597.79	16.70	15.40	130.61	-349.21	-434.31	656.70	627.07	29.63	22.161	
4,800.00	4,724.85	4,750.98	4,694.38	17.16	15.80	130.45	-361.98	-447.13	675.15	644.72	30.42	22.191	
4,900.00	4,822.58	4,849.25	4,790.96	17.62	16.21	130.31	-374.74	-459.95	693.60	662.39	31.22	22.220	

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

<b>Company:</b>	US ROCKIES REGION PLANNING	<b>Local Co-ordinate Reference:</b>	Well P_NRC 37-9
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>TVD Reference:</b>	WELL @ 5039.00ft (Original Well Elev)
<b>Reference Site:</b>	WELD_NRC 20-9 PAD	<b>MD Reference:</b>	WELL @ 5039.00ft (Original Well Elev)
<b>Site Error:</b>	0.00ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	P_NRC 37-9	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	P_NRC 37-9	<b>Database:</b>	EDM 2003.21 Single User Db
<b>Reference Design:</b>	PLAN #1 1-6-10 RHS	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design WELD_NRC 20-9 PAD - P_NRC 15-9 - P_NRC 15-9 - PLAN #1 1-6-10 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	4,920.30	4,947.52	4,887.55	18.09	16.62	130.17	-387.50	-472.77	712.06	680.05	32.01	22.247	
5,100.00	5,018.03	5,045.79	4,984.14	18.55	17.03	130.04	-400.26	-485.59	730.52	697.72	32.80	22.273	
5,200.00	5,115.76	5,144.06	5,080.73	19.01	17.44	129.92	-413.02	-498.41	748.98	715.39	33.59	22.298	
5,300.00	5,213.49	5,242.33	5,177.32	19.47	17.86	129.80	-425.79	-511.23	767.44	733.06	34.38	22.322	
5,400.00	5,311.21	5,340.59	5,273.91	19.93	18.27	129.69	-438.55	-524.05	785.91	750.74	35.17	22.345	
5,500.00	5,408.94	5,438.86	5,370.50	20.39	18.68	129.58	-451.31	-536.87	804.38	768.42	35.96	22.367	
5,600.00	5,506.67	5,537.13	5,467.09	20.85	19.09	129.48	-464.07	-549.69	822.86	786.10	36.75	22.388	
5,700.00	5,604.40	5,635.40	5,563.68	21.31	19.50	129.38	-476.83	-562.51	841.34	803.79	37.55	22.409	
5,800.00	5,702.13	5,733.67	5,660.27	21.78	19.91	129.29	-489.60	-575.33	859.81	821.48	38.34	22.428	
5,900.94	5,800.77	5,832.86	5,757.76	22.24	20.33	129.20	-502.48	-588.27	878.47	839.32	39.15	22.441	
6,000.00	5,897.93	5,933.72	5,856.95	22.62	20.70	129.31	-515.38	-601.24	895.65	855.75	39.90	22.448	
6,100.00	5,996.62	6,041.85	5,963.82	22.89	20.99	129.38	-526.96	-612.86	910.02	869.53	40.49	22.477	
6,200.00	6,095.81	6,150.66	6,071.91	23.13	21.24	129.47	-535.73	-621.67	921.18	880.19	40.99	22.471	
6,300.00	6,195.39	6,259.96	6,180.89	23.34	21.45	129.57	-541.61	-627.58	929.10	887.69	41.42	22.434	
6,400.00	6,295.22	6,369.54	6,290.38	23.50	21.62	129.69	-544.56	-630.55	933.77	892.02	41.75	22.366	
6,500.00	6,395.19	6,474.35	6,395.19	23.63	21.75	129.80	-544.93	-630.91	935.30	893.29	42.01	22.264	
6,512.81	6,408.00	6,487.16	6,408.00	23.65	21.77	-60.56	-544.93	-630.91	935.32	893.28	42.04	22.247	
6,600.00	6,495.19	6,574.35	6,495.19	23.75	21.88	-60.56	-544.93	-630.91	935.32	893.05	42.27	22.129	
6,700.00	6,595.19	6,674.35	6,595.19	23.85	22.00	-60.56	-544.93	-630.91	935.32	892.81	42.51	22.001	
6,800.00	6,695.19	6,774.35	6,695.19	23.96	22.13	-60.56	-544.93	-630.91	935.32	892.56	42.76	21.874	
6,900.00	6,795.19	6,874.35	6,795.19	24.07	22.25	-60.56	-544.93	-630.91	935.32	892.31	43.01	21.746	
7,000.00	6,895.19	6,974.35	6,895.19	24.18	22.38	-60.56	-544.93	-630.91	935.32	892.05	43.27	21.618	
7,100.00	6,995.19	7,074.35	6,995.19	24.29	22.51	-60.56	-544.93	-630.91	935.32	891.79	43.52	21.490	
7,200.00	7,095.19	7,174.35	7,095.19	24.41	22.64	-60.56	-544.93	-630.91	935.32	891.53	43.78	21.362	
7,300.00	7,195.19	7,274.35	7,195.19	24.52	22.77	-60.56	-544.93	-630.91	935.32	891.27	44.05	21.234	
7,400.00	7,295.19	7,374.35	7,295.19	24.64	22.91	-60.56	-544.93	-630.91	935.32	891.00	44.32	21.106	
7,500.00	7,395.19	7,474.35	7,395.19	24.76	23.04	-60.56	-544.93	-630.91	935.32	890.73	44.59	20.978	
7,600.00	7,495.19	7,574.35	7,495.19	24.88	23.18	-60.56	-544.93	-630.91	935.32	890.46	44.86	20.850	
7,700.00	7,595.19	7,674.35	7,595.19	25.00	23.32	-60.56	-544.93	-630.91	935.32	890.18	45.13	20.723	
7,800.00	7,695.19	7,774.35	7,695.19	25.12	23.46	-60.56	-544.93	-630.91	935.32	889.91	45.41	20.596	
7,900.00	7,795.19	7,874.35	7,795.19	25.25	23.60	-60.56	-544.93	-630.91	935.32	889.62	45.69	20.469	
8,000.00	7,895.19	7,974.35	7,895.19	25.37	23.74	-60.56	-544.93	-630.91	935.32	889.34	45.98	20.343	
8,100.00	7,995.19	8,074.35	7,995.19	25.50	23.88	-60.56	-544.93	-630.91	935.32	889.05	46.26	20.217	
8,200.00	8,095.19	8,174.35	8,095.19	25.63	24.03	-60.56	-544.93	-630.91	935.32	888.77	46.55	20.092	
8,300.00	8,195.19	8,274.35	8,195.19	25.76	24.17	-60.56	-544.93	-630.91	935.32	888.47	46.84	19.967	
8,355.44	8,250.63	8,329.80	8,250.63	25.83	24.25	-60.56	-544.93	-630.91	935.32	888.31	47.01	19.898	
8,400.00	8,295.19	8,349.16	8,270.00	25.89	24.28	-60.56	-544.93	-630.91	935.66	888.56	47.10	19.865	
8,437.81	8,333.00	8,349.16	8,270.00	25.94	24.28	-60.56	-544.93	-630.91	937.44	890.28	47.16	19.879	

<b>Company:</b>	US ROCKIES REGION PLANNING	<b>Local Co-ordinate Reference:</b>	Well P_NRC 37-9
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>TVD Reference:</b>	WELL @ 5039.00ft (Original Well Elev)
<b>Reference Site:</b>	WELD_NRC 20-9 PAD	<b>MD Reference:</b>	WELL @ 5039.00ft (Original Well Elev)
<b>Site Error:</b>	0.00ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	P_NRC 37-9	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	P_NRC 37-9	<b>Database:</b>	EDM 2003.21 Single User Db
<b>Reference Design:</b>	PLAN #1 1-6-10 RHS	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design</b> WELD_NRC 20-9 PAD - P_NRC 16-9 - P_NRC 16-9 - PLAN #1 1-6-10 RHS												<b>Offset Site Error:</b>	0.00 ft
Survey Program: 0-MWD												<b>Offset Well Error:</b>	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	-2.02	31.70	-1.12	31.72				
100.00	100.00	100.00	100.00	0.10	0.10	-2.02	31.70	-1.12	31.72	31.53	0.19	166.052	
200.00	200.00	200.00	200.00	0.32	0.32	-2.02	31.70	-1.12	31.72	31.08	0.64	49.524	
300.00	300.00	300.00	300.00	0.55	0.55	-2.02	31.70	-1.12	31.72	30.63	1.09	29.102	
400.00	400.00	400.00	400.00	0.77	0.77	-2.02	31.70	-1.12	31.72	30.18	1.54	20.605	
500.00	500.00	500.00	500.00	0.99	0.99	-2.02	31.70	-1.12	31.72	29.74	1.99	15.949	
600.00	600.00	600.00	600.00	1.22	1.22	-2.02	31.70	-1.12	31.72	29.29	2.44	13.009	
700.00	700.00	700.00	700.00	1.44	1.44	-2.02	31.70	-1.12	31.72	28.84	2.89	10.984	
800.00	800.00	800.00	800.00	1.67	1.67	-2.02	31.70	-1.12	31.72	28.39	3.34	9.505	
900.00	900.00	900.00	900.00	1.89	1.89	-2.02	31.70	-1.12	31.72	27.94	3.79	8.377	
1,000.00	1,000.00	1,000.00	1,000.00	2.12	2.12	-2.02	31.70	-1.12	31.72	27.49	4.24	7.488	
1,085.00	1,085.00	1,085.00	1,085.00	2.31	2.31	-2.02	31.70	-1.12	31.72	27.11	4.62	6.868 CC	
1,100.00	1,100.00	1,100.08	1,100.08	2.34	2.34	-171.61	31.69	-1.08	31.74	27.07	4.68	6.785 ES	
1,200.00	1,199.97	1,200.58	1,200.55	2.51	2.53	-168.69	30.65	0.96	32.93	27.90	5.03	6.540 SF	
1,300.00	1,299.80	1,300.92	1,300.71	2.69	2.73	-162.21	28.03	6.13	36.27	30.87	5.41	6.711	
1,400.00	1,399.37	1,400.94	1,400.30	2.89	2.94	-154.12	23.83	14.40	42.39	36.60	5.80	7.312	
1,500.00	1,498.55	1,500.51	1,499.05	3.11	3.18	-146.31	18.10	25.71	51.77	45.54	6.23	8.314	
1,600.00	1,597.23	1,599.49	1,596.72	3.36	3.44	-139.76	10.86	39.97	64.58	57.87	6.71	9.622	
1,696.87	1,692.23	1,694.83	1,690.30	3.65	3.74	-134.99	2.59	56.28	80.19	72.94	7.25	11.068	
1,700.00	1,695.29	1,697.91	1,693.32	3.66	3.75	-134.89	2.32	56.82	80.74	73.47	7.26	11.115	
1,800.00	1,793.02	1,796.25	1,789.73	4.00	4.08	-132.22	-6.44	74.08	98.41	90.52	7.89	12.478	
1,900.00	1,890.74	1,894.59	1,886.15	4.35	4.43	-130.36	-15.19	91.35	116.22	107.68	8.54	13.602	
2,000.00	1,988.47	1,992.93	1,982.57	4.73	4.79	-129.00	-23.95	108.62	134.12	124.89	9.23	14.531	
2,100.00	2,086.20	2,091.27	2,078.98	5.13	5.16	-127.96	-32.71	125.88	152.08	142.14	9.94	15.302	
2,200.00	2,183.93	2,189.61	2,175.40	5.53	5.55	-127.14	-41.47	143.15	170.08	159.41	10.67	15.947	
2,300.00	2,281.65	2,287.96	2,271.82	5.94	5.94	-126.48	-50.22	160.41	188.10	176.70	11.41	16.491	
2,400.00	2,379.38	2,386.30	2,368.23	6.36	6.33	-125.93	-58.98	177.68	206.15	193.99	12.16	16.953	
2,500.00	2,477.11	2,484.64	2,464.65	6.79	6.73	-125.47	-67.74	194.94	224.21	211.28	12.92	17.350	
2,600.00	2,574.84	2,582.98	2,561.07	7.22	7.14	-125.08	-76.49	212.21	242.28	228.58	13.69	17.693	
2,700.00	2,672.57	2,681.32	2,657.48	7.65	7.55	-124.75	-85.25	229.47	260.36	245.89	14.47	17.992	
2,800.00	2,770.29	2,779.66	2,753.90	8.09	7.96	-124.45	-94.01	246.74	278.45	263.19	15.25	18.255	
2,900.00	2,868.02	2,878.00	2,850.32	8.53	8.37	-124.20	-102.76	264.00	296.54	280.50	16.04	18.486	
3,000.00	2,965.75	2,976.34	2,946.74	8.98	8.79	-123.97	-111.52	281.27	314.64	297.81	16.83	18.692	
3,100.00	3,063.48	3,074.69	3,043.15	9.42	9.20	-123.77	-120.28	298.53	332.74	315.11	17.63	18.876	
3,200.00	3,161.20	3,173.03	3,139.57	9.87	9.62	-123.58	-129.03	315.80	350.85	332.42	18.43	19.042	
3,300.00	3,258.93	3,271.37	3,235.99	10.32	10.04	-123.42	-137.79	333.07	368.96	349.73	19.23	19.191	
3,400.00	3,356.66	3,369.71	3,332.40	10.77	10.46	-123.27	-146.55	350.33	387.07	367.04	20.03	19.326	
3,500.00	3,454.39	3,468.05	3,428.82	11.22	10.89	-123.14	-155.30	367.60	405.19	384.36	20.83	19.450	
3,600.00	3,552.11	3,566.39	3,525.24	11.68	11.31	-123.01	-164.06	384.86	423.30	401.67	21.64	19.563	
3,700.00	3,649.84	3,664.73	3,621.65	12.13	11.74	-122.90	-172.82	402.13	441.42	418.98	22.45	19.667	
3,800.00	3,747.57	3,763.07	3,718.07	12.59	12.16	-122.79	-181.57	419.39	459.54	436.29	23.26	19.758	
3,900.00	3,845.30	3,861.42	3,814.49	13.04	12.59	-122.70	-190.33	436.66	477.67	453.59	24.07	19.842	
4,000.00	3,943.03	3,959.76	3,910.90	13.50	13.01	-122.61	-199.09	453.92	495.79	470.90	24.89	19.919	
4,100.00	4,040.75	4,058.10	4,007.32	13.95	13.44	-122.52	-207.84	471.19	513.91	488.20	25.71	19.990	
4,200.00	4,138.48	4,156.44	4,103.74	14.41	13.87	-122.45	-216.60	488.45	532.04	505.51	26.53	20.056	
4,300.00	4,236.21	4,254.78	4,200.15	14.87	14.30	-122.37	-225.36	505.72	550.16	522.82	27.35	20.118	
4,400.00	4,333.94	4,353.12	4,296.57	15.33	14.73	-122.31	-234.11	522.98	568.29	540.12	28.17	20.175	
4,500.00	4,431.66	4,451.46	4,392.99	15.79	15.15	-122.24	-242.87	540.25	586.42	557.43	28.99	20.228	
4,600.00	4,529.39	4,549.80	4,489.41	16.25	15.58	-122.18	-251.63	557.52	604.55	574.73	29.81	20.278	
4,700.00	4,627.12	4,648.14	4,585.82	16.70	16.01	-122.13	-260.39	574.78	622.68	592.04	30.64	20.325	
4,800.00	4,724.85	4,746.49	4,682.24	17.16	16.44	-122.07	-269.14	592.05	640.81	609.35	31.46	20.369	
4,900.00	4,822.58	4,844.83	4,778.66	17.62	16.87	-122.02	-277.90	609.31	658.93	626.65	32.28	20.411	

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

<b>Company:</b>	US ROCKIES REGION PLANNING	<b>Local Co-ordinate Reference:</b>	Well P_NRC 37-9
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>TVD Reference:</b>	WELL @ 5039.00ft (Original Well Elev)
<b>Reference Site:</b>	WELD_NRC 20-9 PAD	<b>MD Reference:</b>	WELL @ 5039.00ft (Original Well Elev)
<b>Site Error:</b>	0.00ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	P_NRC 37-9	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	P_NRC 37-9	<b>Database:</b>	EDM 2003.21 Single User Db
<b>Reference Design:</b>	PLAN #1 1-6-10 RHS	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design</b> WELD_NRC 20-9 PAD - P_NRC 16-9 - P_NRC 16-9 - PLAN #1 1-6-10 RHS												<b>Offset Site Error:</b>	0.00 ft
Survey Program: 0-MWD												<b>Offset Well Error:</b>	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	4,920.30	4,943.17	4,875.07	18.09	17.30	-121.97	-286.66	626.58	677.07	643.96	33.11	20.450	
5,100.00	5,018.03	5,041.51	4,971.49	18.55	17.73	-121.93	-295.41	643.84	695.20	661.26	33.93	20.487	
5,200.00	5,115.76	5,139.85	5,067.91	19.01	18.17	-121.89	-304.17	661.11	713.33	678.57	34.76	20.522	
5,300.00	5,213.49	5,238.19	5,164.32	19.47	18.60	-121.85	-312.93	678.37	731.46	695.87	35.59	20.555	
5,400.00	5,311.21	5,336.53	5,260.74	19.93	19.03	-121.81	-321.68	695.64	749.59	713.18	36.41	20.586	
5,500.00	5,408.94	5,434.87	5,357.16	20.39	19.46	-121.77	-330.44	712.90	767.72	730.48	37.24	20.616	
5,600.00	5,506.67	5,533.22	5,453.57	20.85	19.89	-121.73	-339.20	730.17	785.86	747.79	38.07	20.644	
5,700.00	5,604.40	5,631.56	5,549.99	21.31	20.32	-121.70	-347.95	747.43	803.99	765.09	38.89	20.671	
5,800.00	5,702.13	5,729.90	5,646.41	21.78	20.75	-121.67	-356.71	764.70	822.12	782.40	39.72	20.696	
5,900.94	5,800.77	5,829.16	5,743.73	22.24	21.19	-121.64	-365.55	782.13	840.42	799.87	40.56	20.721	
6,000.00	5,897.93	5,933.36	5,846.03	22.62	21.58	-121.84	-374.51	799.79	857.28	815.95	41.33	20.744	
6,100.00	5,996.62	6,043.94	5,955.25	22.89	21.89	-122.00	-382.30	815.16	871.29	829.36	41.93	20.780	
6,200.00	6,095.81	6,155.18	6,065.71	23.13	22.16	-122.16	-388.21	826.82	882.13	839.68	42.45	20.781	
6,300.00	6,195.39	6,266.89	6,177.06	23.34	22.38	-122.32	-392.19	834.66	889.77	846.89	42.88	20.749	
6,400.00	6,295.22	6,378.87	6,288.95	23.50	22.55	-122.47	-394.21	838.64	894.19	850.97	43.23	20.686	
6,500.00	6,395.19	6,485.11	6,395.19	23.63	22.68	-122.59	-394.48	839.16	895.56	852.06	43.50	20.589	
6,512.81	6,408.00	6,497.92	6,408.00	23.65	22.70	47.05	-394.48	839.16	895.57	852.04	43.53	20.574	
6,600.00	6,495.19	6,585.11	6,495.19	23.75	22.81	47.05	-394.48	839.16	895.57	851.82	43.75	20.469	
6,700.00	6,595.19	6,685.11	6,595.19	23.85	22.93	47.05	-394.48	839.16	895.57	851.57	44.00	20.354	
6,800.00	6,695.19	6,785.11	6,695.19	23.96	23.06	47.05	-394.48	839.16	895.57	851.32	44.25	20.239	
6,900.00	6,795.19	6,885.11	6,795.19	24.07	23.19	47.05	-394.48	839.16	895.57	851.07	44.50	20.124	
7,000.00	6,895.19	6,985.11	6,895.19	24.18	23.32	47.05	-394.48	839.16	895.57	850.81	44.76	20.009	
7,100.00	6,995.19	7,085.11	6,995.19	24.29	23.45	47.05	-394.48	839.16	895.57	850.55	45.02	19.894	
7,200.00	7,095.19	7,185.11	7,095.19	24.41	23.58	47.05	-394.48	839.16	895.57	850.29	45.28	19.779	
7,300.00	7,195.19	7,285.11	7,195.19	24.52	23.72	47.05	-394.48	839.16	895.57	850.03	45.55	19.663	
7,400.00	7,295.19	7,385.11	7,295.19	24.64	23.86	47.05	-394.48	839.16	895.57	849.76	45.81	19.548	
7,500.00	7,395.19	7,485.11	7,395.19	24.76	23.99	47.05	-394.48	839.16	895.57	849.49	46.08	19.433	
7,600.00	7,495.19	7,585.11	7,495.19	24.88	24.13	47.05	-394.48	839.16	895.57	849.21	46.36	19.319	
7,700.00	7,595.19	7,685.11	7,595.19	25.00	24.27	47.05	-394.48	839.16	895.57	848.94	46.63	19.204	
7,800.00	7,695.19	7,785.11	7,695.19	25.12	24.41	47.05	-394.48	839.16	895.57	848.66	46.91	19.090	
7,900.00	7,795.19	7,885.11	7,795.19	25.25	24.56	47.05	-394.48	839.16	895.57	848.38	47.19	18.976	
8,000.00	7,895.19	7,985.11	7,895.19	25.37	24.70	47.05	-394.48	839.16	895.57	848.09	47.48	18.863	
8,100.00	7,995.19	8,085.11	7,995.19	25.50	24.84	47.05	-394.48	839.16	895.57	847.81	47.77	18.749	
8,200.00	8,095.19	8,185.11	8,095.19	25.63	24.99	47.05	-394.48	839.16	895.57	847.52	48.05	18.636	
8,300.00	8,195.19	8,285.11	8,195.19	25.76	25.14	47.05	-394.48	839.16	895.57	847.22	48.35	18.524	
8,341.32	8,236.51	8,326.43	8,236.51	25.81	25.20	47.05	-394.48	839.16	895.57	847.10	48.47	18.478	
8,400.00	8,295.19	8,341.92	8,252.00	25.89	25.22	47.05	-394.48	839.16	896.61	848.04	48.58	18.458	
8,437.81	8,333.00	8,341.92	8,252.00	25.94	25.22	47.05	-394.48	839.16	899.23	850.60	48.63	18.491	



<b>Company:</b>	US ROCKIES REGION PLANNING	<b>Local Co-ordinate Reference:</b>	Well P_NRC 37-9
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>TVD Reference:</b>	WELL @ 5039.00ft (Original Well Elev)
<b>Reference Site:</b>	WELD_NRC 20-9 PAD	<b>MD Reference:</b>	WELL @ 5039.00ft (Original Well Elev)
<b>Site Error:</b>	0.00ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	P_NRC 37-9	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	P_NRC 37-9	<b>Database:</b>	EDM 2003.21 Single User Db
<b>Reference Design:</b>	PLAN #1 1-6-10 RHS	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design</b> WELD_NRC 20-9 PAD - P_NRC 38-9 - P_NRC 38-9 - PLAN #1 1-6-10 RHS												<b>Offset Site Error:</b>	0.00 ft
Survey Program: 0-MWD												<b>Offset Well Error:</b>	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	-2.00	16.03	-0.56	16.04				
100.00	100.00	100.00	100.00	0.10	0.10	-2.00	16.03	-0.56	16.04	15.85	0.19	83.968	
200.00	200.00	200.00	200.00	0.32	0.32	-2.00	16.03	-0.56	16.04	15.40	0.64	25.043	
300.00	300.00	300.00	300.00	0.55	0.55	-2.00	16.03	-0.56	16.04	14.95	1.09	14.716	
400.00	400.00	400.00	400.00	0.77	0.77	-2.00	16.03	-0.56	16.04	14.50	1.54	10.419	
500.00	500.00	500.00	500.00	0.99	0.99	-2.00	16.03	-0.56	16.04	14.05	1.99	8.065	
600.00	600.00	600.00	600.00	1.22	1.22	-2.00	16.03	-0.56	16.04	13.60	2.44	6.578	
700.00	700.00	700.00	700.00	1.44	1.44	-2.00	16.03	-0.56	16.04	13.15	2.89	5.554	
800.00	800.00	800.00	800.00	1.67	1.67	-2.00	16.03	-0.56	16.04	12.70	3.34	4.806	
900.00	900.00	900.00	900.00	1.89	1.89	-2.00	16.03	-0.56	16.04	12.25	3.79	4.236	
1,000.00	1,000.00	1,000.00	1,000.00	2.12	2.12	-2.00	16.03	-0.56	16.04	11.81	4.24	3.786	
1,085.00	1,085.00	1,085.00	1,085.00	2.31	2.31	-2.00	16.03	-0.56	16.04	11.42	4.62	3.473	CC
1,100.00	1,100.00	1,100.05	1,100.05	2.34	2.34	-171.55	16.01	-0.53	16.06	11.38	4.68	3.432	ES
1,200.00	1,199.97	1,200.36	1,200.33	2.51	2.52	-166.52	14.70	1.34	16.99	11.96	5.03	3.378	SF
1,300.00	1,299.80	1,300.55	1,300.35	2.69	2.72	-156.17	11.37	6.07	19.85	14.45	5.40	3.677	
1,400.00	1,399.37	1,400.52	1,399.88	2.89	2.93	-145.02	6.04	13.63	25.35	19.56	5.79	4.377	
1,500.00	1,498.55	1,500.16	1,498.71	3.11	3.16	-136.02	-1.26	23.99	33.83	27.60	6.23	5.432	
1,600.00	1,597.23	1,599.37	1,596.61	3.36	3.43	-129.58	-10.48	37.10	45.28	38.55	6.73	6.732	
1,696.87	1,692.23	1,694.98	1,690.38	3.65	3.72	-125.21	-21.21	52.34	59.06	51.78	7.28	8.114	
1,700.00	1,695.29	1,698.05	1,693.39	3.66	3.73	-125.09	-21.59	52.87	59.55	52.25	7.30	8.160	
1,800.00	1,793.02	1,796.21	1,788.93	4.00	4.09	-121.01	-34.53	71.26	75.58	67.61	7.97	9.482	
1,900.00	1,890.74	1,893.74	1,883.04	4.35	4.50	-116.35	-49.25	92.16	92.80	84.08	8.72	10.640	
2,000.00	1,988.47	1,990.41	1,975.41	4.73	4.97	-111.57	-65.65	115.46	111.65	102.11	9.54	11.706	
2,100.00	2,086.20	2,086.02	2,065.78	5.13	5.49	-106.92	-83.63	140.99	132.48	122.08	10.40	12.741	
2,200.00	2,183.93	2,180.39	2,153.89	5.53	6.08	-102.54	-103.07	168.60	155.59	144.30	11.29	13.784	
2,300.00	2,281.65	2,273.35	2,239.56	5.94	6.72	-98.49	-123.84	198.10	181.17	168.99	12.18	14.870	
2,400.00	2,379.38	2,368.89	2,327.01	6.36	7.43	-95.01	-145.99	229.56	208.40	195.29	13.10	15.903	
2,500.00	2,477.11	2,464.43	2,414.45	6.79	8.16	-92.32	-168.15	261.03	236.17	222.15	14.02	16.847	
2,600.00	2,574.84	2,559.97	2,501.90	7.22	8.90	-90.20	-190.30	292.50	264.33	249.40	14.93	17.702	
2,700.00	2,672.57	2,655.51	2,589.34	7.65	9.65	-88.49	-212.46	323.97	292.76	276.92	15.85	18.474	
2,800.00	2,770.29	2,751.04	2,676.79	8.09	10.41	-87.08	-234.61	355.43	321.39	304.63	16.76	19.173	
2,900.00	2,868.02	2,846.58	2,764.23	8.53	11.18	-85.90	-256.77	386.90	350.17	332.49	17.68	19.806	
3,000.00	2,965.75	2,942.12	2,851.68	8.98	11.96	-84.90	-278.92	418.37	379.07	360.47	18.60	20.381	
3,100.00	3,063.48	3,037.66	2,939.12	9.42	12.74	-84.04	-301.08	449.84	408.05	388.54	19.52	20.905	
3,200.00	3,161.20	3,133.20	3,026.57	9.87	13.52	-83.29	-323.23	481.30	437.12	416.67	20.44	21.383	
3,300.00	3,258.93	3,228.74	3,114.01	10.32	14.31	-82.64	-345.39	512.77	466.24	444.87	21.37	21.822	
3,400.00	3,356.66	3,324.28	3,201.46	10.77	15.10	-82.06	-367.54	544.24	495.41	473.11	22.29	22.225	
3,500.00	3,454.39	3,419.82	3,288.90	11.22	15.89	-81.55	-389.70	575.70	524.62	501.40	23.22	22.596	
3,600.00	3,552.11	3,515.36	3,376.35	11.68	16.68	-81.09	-411.85	607.17	553.86	529.72	24.14	22.940	
3,700.00	3,649.84	3,610.90	3,463.79	12.13	17.48	-80.68	-434.01	638.64	583.13	558.06	25.07	23.259	
3,800.00	3,747.57	3,706.43	3,551.24	12.59	18.28	-80.30	-456.16	670.11	612.43	586.43	26.00	23.555	
3,900.00	3,845.30	3,801.97	3,638.68	13.04	19.07	-79.96	-478.32	701.57	641.75	614.82	26.93	23.831	
4,000.00	3,943.03	3,897.51	3,726.13	13.50	19.87	-79.65	-500.47	733.04	671.09	643.23	27.86	24.089	
4,100.00	4,040.75	3,993.05	3,813.57	13.95	20.67	-79.37	-522.63	764.51	700.45	671.66	28.79	24.331	
4,200.00	4,138.48	4,088.59	3,901.02	14.41	21.48	-79.11	-544.79	795.98	729.82	700.10	29.72	24.558	
4,300.00	4,236.21	4,184.13	3,988.46	14.87	22.28	-78.87	-566.94	827.44	759.20	728.55	30.65	24.771	
4,400.00	4,333.94	4,279.67	4,075.91	15.33	23.08	-78.65	-589.10	858.91	788.60	757.02	31.58	24.972	
4,500.00	4,431.66	4,375.21	4,163.36	15.79	23.89	-78.44	-611.25	890.38	818.00	785.49	32.51	25.162	
4,600.00	4,529.39	4,470.75	4,250.80	16.25	24.69	-78.25	-633.41	921.84	847.41	813.97	33.44	25.341	
4,700.00	4,627.12	4,566.28	4,338.25	16.70	25.49	-78.07	-655.56	953.31	876.84	842.47	34.37	25.511	
4,800.00	4,724.85	4,661.82	4,425.69	17.16	26.30	-77.90	-677.72	984.78	906.27	870.96	35.30	25.672	
4,900.00	4,822.58	4,757.36	4,513.14	17.62	27.11	-77.74	-699.87	1,016.25	935.70	899.47	36.23	25.825	

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

<b>Company:</b>	US ROCKIES REGION PLANNING	<b>Local Co-ordinate Reference:</b>	Well P_NRC 37-9
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>TVD Reference:</b>	WELL @ 5039.00ft (Original Well Elev)
<b>Reference Site:</b>	WELD_NRC 20-9 PAD	<b>MD Reference:</b>	WELL @ 5039.00ft (Original Well Elev)
<b>Site Error:</b>	0.00ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	P_NRC 37-9	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	P_NRC 37-9	<b>Database:</b>	EDM 2003.21 Single User Db
<b>Reference Design:</b>	PLAN #1 1-6-10 RHS	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design</b> WELD_NRC 20-9 PAD - P_NRC 38-9 - P_NRC 38-9 - PLAN #1 1-6-10 RHS												<b>Offset Site Error:</b>	0.00 ft
Survey Program: 0-MWD												<b>Offset Well Error:</b>	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	4,920.30	4,852.90	4,600.58	18.09	27.91	-77.60	-722.03	1,047.71	965.14	927.98	37.16	25.971	
5,100.00	5,018.03	4,948.44	4,688.03	18.55	28.72	-77.46	-744.18	1,079.18	994.59	956.50	38.09	26.110	
5,200.00	5,115.76	5,043.98	4,775.47	19.01	29.53	-77.33	-766.34	1,110.65	1,024.04	985.02	39.02	26.243	
5,300.00	5,213.49	5,139.52	4,862.92	19.47	30.33	-77.20	-788.49	1,142.12	1,053.50	1,013.55	39.95	26.370	
5,400.00	5,311.21	5,235.06	4,950.36	19.93	31.14	-77.08	-810.65	1,173.58	1,082.96	1,042.08	40.88	26.491	
5,500.00	5,408.94	5,330.60	5,037.81	20.39	31.95	-76.97	-832.80	1,205.05	1,112.43	1,070.62	41.81	26.607	
5,600.00	5,506.67	5,426.14	5,125.25	20.85	32.76	-76.87	-854.96	1,236.52	1,141.89	1,099.16	42.74	26.719	
5,700.00	5,604.40	5,549.54	5,238.66	21.31	33.66	-76.77	-882.95	1,276.28	1,170.72	1,126.98	43.74	26.767	
5,800.00	5,702.13	5,696.80	5,376.46	21.78	34.52	-76.85	-912.83	1,318.72	1,195.86	1,151.06	44.80	26.696	
5,900.94	5,800.77	5,848.31	5,520.82	22.24	35.28	-77.13	-939.27	1,356.27	1,216.99	1,171.10	45.89	26.520	
6,000.00	5,897.93	5,999.13	5,666.74	22.62	35.94	-77.83	-961.20	1,387.41	1,233.87	1,186.92	46.96	26.277	
6,100.00	5,996.62	6,153.10	5,817.56	22.89	36.47	-78.41	-978.99	1,412.68	1,247.32	1,199.50	47.82	26.081	
6,200.00	6,095.81	6,308.38	5,971.11	23.13	36.90	-78.90	-992.18	1,431.42	1,257.07	1,208.51	48.56	25.888	
6,300.00	6,195.39	6,464.50	6,126.53	23.34	37.20	-79.27	-1,000.60	1,443.37	1,263.05	1,213.91	49.15	25.700	
6,400.00	6,295.22	6,621.00	6,282.89	23.50	37.39	-79.55	-1,004.13	1,448.39	1,265.23	1,215.63	49.60	25.510	
6,500.00	6,395.19	6,733.30	6,395.19	23.63	37.47	-79.66	-1,004.25	1,448.56	1,264.94	1,215.08	49.86	25.369	
6,512.81	6,408.00	6,746.11	6,408.00	23.65	37.48	89.98	-1,004.25	1,448.56	1,264.93	1,215.05	49.89	25.356	
6,600.00	6,495.19	6,833.30	6,495.19	23.75	37.55	89.98	-1,004.25	1,448.56	1,264.93	1,214.85	50.08	25.259	
6,700.00	6,595.19	6,933.30	6,595.19	23.85	37.62	89.98	-1,004.25	1,448.56	1,264.93	1,214.65	50.29	25.155	
6,800.00	6,695.19	7,033.30	6,695.19	23.96	37.70	89.98	-1,004.25	1,448.56	1,264.93	1,214.44	50.50	25.050	
6,900.00	6,795.19	7,133.30	6,795.19	24.07	37.78	89.98	-1,004.25	1,448.56	1,264.93	1,214.22	50.71	24.944	
7,000.00	6,895.19	7,233.30	6,895.19	24.18	37.86	89.98	-1,004.25	1,448.56	1,264.93	1,214.00	50.93	24.837	
7,100.00	6,995.19	7,333.30	6,995.19	24.29	37.94	89.98	-1,004.25	1,448.56	1,264.93	1,213.78	51.15	24.730	
7,200.00	7,095.19	7,433.30	7,095.19	24.41	38.03	89.98	-1,004.25	1,448.56	1,264.93	1,213.56	51.37	24.623	
7,300.00	7,195.19	7,533.30	7,195.19	24.52	38.11	89.98	-1,004.25	1,448.56	1,264.93	1,213.33	51.60	24.515	
7,400.00	7,295.19	7,633.30	7,295.19	24.64	38.20	89.98	-1,004.25	1,448.56	1,264.93	1,213.10	51.83	24.406	
7,500.00	7,395.19	7,733.30	7,395.19	24.76	38.28	89.98	-1,004.25	1,448.56	1,264.93	1,212.87	52.06	24.297	
7,600.00	7,495.19	7,833.30	7,495.19	24.88	38.37	89.98	-1,004.25	1,448.56	1,264.93	1,212.64	52.30	24.188	
7,700.00	7,595.19	7,933.30	7,595.19	25.00	38.46	89.98	-1,004.25	1,448.56	1,264.93	1,212.40	52.53	24.079	
7,800.00	7,695.19	8,033.30	7,695.19	25.12	38.55	89.98	-1,004.25	1,448.56	1,264.93	1,212.16	52.77	23.969	
7,900.00	7,795.19	8,133.30	7,795.19	25.25	38.64	89.98	-1,004.25	1,448.56	1,264.93	1,211.92	53.02	23.859	
8,000.00	7,895.19	8,233.30	7,895.19	25.37	38.73	89.98	-1,004.25	1,448.56	1,264.93	1,211.67	53.26	23.749	
8,100.00	7,995.19	8,333.30	7,995.19	25.50	38.82	89.98	-1,004.25	1,448.56	1,264.93	1,211.42	53.51	23.638	
8,200.00	8,095.19	8,433.30	8,095.19	25.63	38.92	89.98	-1,004.25	1,448.56	1,264.93	1,211.17	53.76	23.528	
8,300.00	8,195.19	8,533.30	8,195.19	25.76	39.01	89.98	-1,004.25	1,448.56	1,264.93	1,210.92	54.02	23.417	
8,328.78	8,223.97	8,562.08	8,223.97	25.79	39.04	89.98	-1,004.25	1,448.56	1,264.93	1,210.84	54.09	23.385	
8,400.00	8,295.19	8,580.11	8,242.00	25.89	39.06	89.98	-1,004.25	1,448.56	1,266.05	1,211.84	54.21	23.356	
8,437.81	8,333.00	8,580.11	8,242.00	25.94	39.06	89.98	-1,004.25	1,448.56	1,268.20	1,213.94	54.26	23.374	



<b>Company:</b>	US ROCKIES REGION PLANNING	<b>Local Co-ordinate Reference:</b>	Well P_NRC 37-9
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>TVD Reference:</b>	WELL @ 5039.00ft (Original Well Elev)
<b>Reference Site:</b>	WELD_NRC 20-9 PAD	<b>MD Reference:</b>	WELL @ 5039.00ft (Original Well Elev)
<b>Site Error:</b>	0.00ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	P_NRC 37-9	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	P_NRC 37-9	<b>Database:</b>	EDM 2003.21 Single User Db
<b>Reference Design:</b>	PLAN #1 1-6-10 RHS	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design WELD_NRC 20-9 PAD - P_NRC 39-9 - P_NRC 39-9 - PLAN #1 1-6-10 RHS												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
0.00	0.00	0.00	0.00	0.00	0.00	-2.35	47.74	-1.96	47.78				
100.00	100.00	100.00	100.00	0.10	1.70	-2.35	47.74	-1.96	47.78	45.99	1.80	26.611	
200.00	200.00	200.00	200.00	0.32	5.70	-2.35	47.74	-1.96	47.78	41.76	6.02	7.937	
300.00	300.00	300.00	300.00	0.55	9.70	-2.35	47.74	-1.96	47.78	37.54	10.25	4.664	
400.00	400.00	400.00	400.00	0.77	13.70	-2.35	47.74	-1.96	47.78	33.31	14.47	3.302	
500.00	500.00	500.00	500.00	0.99	17.70	-2.35	47.74	-1.96	47.78	29.09	18.69	2.556	
600.00	600.00	600.00	600.00	1.22	21.70	-2.35	47.74	-1.96	47.78	24.86	22.92	2.085	
700.00	700.00	700.00	700.00	1.44	25.70	-2.35	47.74	-1.96	47.78	20.64	27.14	1.760	
800.00	800.00	800.00	800.00	1.67	29.70	-2.35	47.74	-1.96	47.78	16.41	31.37	1.523	
900.00	900.00	900.00	900.00	1.89	33.70	-2.35	47.74	-1.96	47.78	12.19	35.59	1.342 Level 3	
1,000.00	1,000.00	1,000.00	1,000.00	2.12	37.70	-2.35	47.74	-1.96	47.78	7.96	39.82	1.200 Level 2	
1,085.00	1,085.00	1,085.00	1,085.00	2.31	41.10	-2.35	47.74	-1.96	47.78	4.37	43.41	1.101 Level 2, CC	
1,100.00	1,100.00	1,099.97	1,099.97	2.34	41.44	-171.95	47.75	-1.92	47.82	4.04	43.78	1.092 Level 2, ES, SF	
1,200.00	1,199.97	1,199.70	1,199.67	2.51	42.25	-169.75	48.08	0.31	50.35	5.62	44.73	1.126 Level 2	
1,300.00	1,299.80	1,299.03	1,298.83	2.69	43.41	-165.06	48.93	5.94	57.05	11.08	45.97	1.241 Level 2	
1,400.00	1,399.37	1,397.62	1,397.00	2.89	44.91	-159.52	50.27	14.89	68.35	20.88	47.47	1.440 Level 3	
1,500.00	1,498.55	1,495.12	1,493.72	3.11	46.71	-154.36	52.09	27.02	84.56	35.36	49.20	1.719	
1,600.00	1,597.23	1,591.24	1,588.61	3.36	48.79	-150.08	54.36	42.16	105.72	54.59	51.12	2.068	
1,696.87	1,692.23	1,682.75	1,678.42	3.65	51.06	-146.78	56.96	59.49	130.82	77.69	53.13	2.462	
1,700.00	1,695.29	1,685.68	1,681.29	3.66	51.13	-146.70	57.05	60.09	131.70	78.50	53.20	2.476	
1,800.00	1,793.02	1,778.55	1,771.80	4.00	53.71	-144.01	60.14	80.66	160.94	105.18	55.76	2.886	
1,900.00	1,890.74	1,870.01	1,860.22	4.35	56.51	-141.40	63.60	103.74	192.18	133.71	58.47	3.287	
2,000.00	1,988.47	1,959.89	1,946.36	4.73	59.52	-138.92	67.41	129.13	225.55	164.24	61.31	3.679	
2,100.00	2,086.20	2,048.91	2,030.83	5.13	62.72	-136.58	71.58	156.86	261.09	196.85	64.24	4.064	
2,200.00	2,183.93	2,141.54	2,118.43	5.53	66.29	-134.56	76.05	186.66	297.62	230.19	67.43	4.413	
2,300.00	2,281.65	2,234.17	2,206.03	5.94	70.01	-132.98	80.52	216.46	334.41	263.68	70.72	4.729	
2,400.00	2,379.38	2,326.81	2,293.62	6.36	73.85	-131.71	84.99	246.25	371.37	297.27	74.10	5.012	
2,500.00	2,477.11	2,419.44	2,381.22	6.79	77.81	-130.67	89.46	276.05	408.46	330.90	77.56	5.266	
2,600.00	2,574.84	2,512.07	2,468.81	7.22	81.87	-129.81	93.93	305.84	445.65	364.56	81.09	5.496	
2,700.00	2,672.57	2,604.70	2,556.41	7.65	86.01	-129.07	98.41	335.64	482.92	398.23	84.69	5.702	
2,800.00	2,770.29	2,697.34	2,644.01	8.09	90.23	-128.44	102.88	365.44	520.24	431.90	88.34	5.889	
2,900.00	2,868.02	2,789.97	2,731.60	8.53	94.51	-127.90	107.35	395.23	557.61	465.57	92.04	6.058	
3,000.00	2,965.75	2,882.60	2,819.20	8.98	98.85	-127.42	111.82	425.03	595.02	499.23	95.79	6.212	
3,100.00	3,063.48	2,975.24	2,906.79	9.42	103.23	-127.00	116.29	454.83	632.46	532.89	99.57	6.352	
3,200.00	3,161.20	3,067.87	2,994.39	9.87	107.65	-126.63	120.76	484.62	669.92	566.54	103.38	6.480	
3,300.00	3,258.93	3,160.50	3,081.99	10.32	112.11	-126.30	125.24	514.42	707.41	600.18	107.23	6.597	
3,400.00	3,356.66	3,253.14	3,169.58	10.77	116.60	-126.00	129.71	544.22	744.92	633.81	111.10	6.705	
3,500.00	3,454.39	3,345.77	3,257.18	11.22	121.12	-125.72	134.18	574.01	782.44	667.43	115.00	6.804	
3,600.00	3,552.11	3,438.40	3,344.77	11.68	125.67	-125.48	138.65	603.81	819.97	701.05	118.92	6.895	
3,700.00	3,649.84	3,531.03	3,432.37	12.13	130.24	-125.25	143.12	633.61	857.52	734.66	122.86	6.979	
3,800.00	3,747.57	3,623.67	3,519.97	12.59	134.83	-125.05	147.59	663.40	895.08	768.26	126.82	7.058	
3,900.00	3,845.30	3,716.30	3,607.56	13.04	139.44	-124.86	152.06	693.20	932.64	801.85	130.80	7.130	
4,000.00	3,943.03	3,808.93	3,695.16	13.50	144.06	-124.68	156.54	722.99	970.22	835.43	134.79	7.198	
4,100.00	4,040.75	3,901.57	3,782.75	13.95	148.70	-124.52	161.01	752.79	1,007.80	869.01	138.79	7.261	
4,200.00	4,138.48	3,994.20	3,870.35	14.41	153.36	-124.37	165.48	782.59	1,045.39	902.58	142.81	7.320	
4,300.00	4,236.21	4,086.83	3,957.95	14.87	158.03	-124.23	169.95	812.38	1,082.98	936.14	146.84	7.375	
4,400.00	4,333.94	4,179.47	4,045.54	15.33	162.71	-124.10	174.42	842.18	1,120.58	969.70	150.88	7.427	
4,500.00	4,431.66	4,272.10	4,133.14	15.79	167.40	-123.98	178.89	871.98	1,158.19	1,003.26	154.93	7.476	
4,600.00	4,529.39	4,364.73	4,220.73	16.25	172.10	-123.86	183.37	901.77	1,195.80	1,036.81	158.99	7.521	
4,700.00	4,627.12	4,457.36	4,308.33	16.70	176.81	-123.76	187.84	931.57	1,233.41	1,070.35	163.06	7.564	
4,800.00	4,724.85	4,550.00	4,395.93	17.16	181.53	-123.66	192.31	961.37	1,271.02	1,103.89	167.13	7.605	
4,900.00	4,822.58	4,642.63	4,483.52	17.62	186.25	-123.56	196.78	991.16	1,308.64	1,137.43	171.22	7.643	

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

<b>Company:</b>	US ROCKIES REGION PLANNING	<b>Local Co-ordinate Reference:</b>	Well P_NRC 37-9
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>TVD Reference:</b>	WELL @ 5039.00ft (Original Well Elev)
<b>Reference Site:</b>	WELD_NRC 20-9 PAD	<b>MD Reference:</b>	WELL @ 5039.00ft (Original Well Elev)
<b>Site Error:</b>	0.00ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	P_NRC 37-9	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	P_NRC 37-9	<b>Database:</b>	EDM 2003.21 Single User Db
<b>Reference Design:</b>	PLAN #1 1-6-10 RHS	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design WELD_NRC 20-9 PAD - P_NRC 39-9 - P_NRC 39-9 - PLAN #1 1-6-10 RHS												Offset Site Error:	0.00 ft
Survey Program: 0-UNKNOWN												Offset Well Error:	0.00 ft
Reference	Offset	Semi Major Axis			Distance								Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
5,000.00	4,920.30	4,735.26	4,571.12	18.09	190.98	-123.47	201.25	1,020.96	1,346.27	1,170.96	175.31	7.679	
5,100.00	5,018.03	4,827.90	4,658.71	18.55	195.72	-123.39	205.72	1,050.75	1,383.89	1,204.49	179.40	7.714	
5,200.00	5,115.76	4,920.53	4,746.31	19.01	200.47	-123.30	210.20	1,080.55	1,421.52	1,238.01	183.51	7.746	
5,300.00	5,213.49	5,013.16	4,833.91	19.47	205.22	-123.23	214.67	1,110.35	1,459.15	1,271.53	187.61	7.777	
5,400.00	5,311.21	5,105.80	4,921.50	19.93	209.97	-123.16	219.14	1,140.14	1,496.78	1,305.05	191.73	7.807	
5,500.00	5,408.94	5,198.43	5,009.10	20.39	214.73	-123.09	223.61	1,169.94	1,534.41	1,338.56	195.85	7.835	
5,600.00	5,506.67	5,291.06	5,096.69	20.85	219.50	-123.02	228.08	1,199.74	1,572.05	1,372.08	199.97	7.861	
5,700.00	5,604.40	5,383.69	5,184.29	21.31	224.27	-122.96	232.55	1,229.53	1,609.68	1,405.59	204.10	7.887	
5,800.00	5,702.13	5,476.33	5,271.89	21.78	229.04	-122.90	237.02	1,259.33	1,647.32	1,439.09	208.23	7.911	
5,900.94	5,800.77	5,569.83	5,360.30	22.24	233.87	-122.84	241.54	1,289.41	1,685.31	1,472.91	212.40	7.935	
6,000.00	5,897.93	5,729.29	5,512.14	22.62	241.88	-123.35	248.76	1,337.50	1,720.32	1,499.39	220.93	7.787	
6,100.00	5,996.62	5,916.01	5,693.02	22.89	250.64	-123.77	255.61	1,383.18	1,749.13	1,518.75	230.37	7.593	
6,200.00	6,095.81	6,109.06	5,882.80	23.13	258.95	-124.11	260.85	1,418.06	1,770.90	1,531.08	239.82	7.384	
6,300.00	6,195.39	6,306.76	6,079.14	23.34	266.67	-124.40	264.23	1,440.59	1,785.34	1,536.23	249.11	7.167	
6,400.00	6,295.22	6,507.13	6,279.26	23.50	273.63	-124.64	265.60	1,449.71	1,792.27	1,534.27	258.00	6.947	
6,500.00	6,395.19	6,623.07	6,395.19	23.63	275.27	-124.73	265.62	1,449.88	1,793.59	1,532.58	261.00	6.872	
6,512.81	6,408.00	6,635.88	6,408.00	23.65	275.42	44.91	265.62	1,449.88	1,793.60	1,532.30	261.30	6.864	
6,600.00	6,495.19	6,723.07	6,495.19	23.75	276.43	44.91	265.62	1,449.88	1,793.60	1,531.11	262.50	6.833	
6,700.00	6,595.19	6,823.07	6,595.19	23.85	277.64	44.91	265.62	1,449.88	1,793.60	1,529.69	263.92	6.796	
6,800.00	6,695.19	6,923.07	6,695.19	23.96	278.91	44.91	265.62	1,449.88	1,793.60	1,528.21	265.40	6.758	
6,900.00	6,795.19	7,023.07	6,795.19	24.07	280.22	44.91	265.62	1,449.88	1,793.60	1,526.67	266.94	6.719	
7,000.00	6,895.19	7,123.07	6,895.19	24.18	281.59	44.91	265.62	1,449.88	1,793.60	1,525.07	268.54	6.679	
7,100.00	6,995.19	7,223.07	6,995.19	24.29	283.00	44.91	265.62	1,449.88	1,793.60	1,523.41	270.19	6.638	
7,200.00	7,095.19	7,323.07	7,095.19	24.41	284.47	44.91	265.62	1,449.88	1,793.60	1,521.70	271.90	6.596	
7,300.00	7,195.19	7,423.07	7,195.19	24.52	285.98	44.91	265.62	1,449.88	1,793.60	1,519.93	273.67	6.554	
7,400.00	7,295.19	7,523.07	7,295.19	24.64	287.55	44.91	265.62	1,449.88	1,793.60	1,518.11	275.49	6.511	
7,500.00	7,395.19	7,623.07	7,395.19	24.76	289.16	44.91	265.62	1,449.88	1,793.60	1,516.24	277.37	6.467	
7,600.00	7,495.19	7,723.07	7,495.19	24.88	290.81	44.91	265.62	1,449.88	1,793.60	1,514.31	279.29	6.422	
7,700.00	7,595.19	7,823.07	7,595.19	25.00	292.51	44.91	265.62	1,449.88	1,793.60	1,512.33	281.27	6.377	
7,800.00	7,695.19	7,923.07	7,695.19	25.12	294.26	44.91	265.62	1,449.88	1,793.60	1,510.31	283.30	6.331	
7,900.00	7,795.19	8,023.07	7,795.19	25.25	296.05	44.91	265.62	1,449.88	1,793.60	1,508.23	285.37	6.285	
8,000.00	7,895.19	8,123.07	7,895.19	25.37	297.88	44.91	265.62	1,449.88	1,793.60	1,506.11	287.49	6.239	
8,100.00	7,995.19	8,223.07	7,995.19	25.50	299.76	44.91	265.62	1,449.88	1,793.60	1,503.94	289.67	6.192	
8,200.00	8,095.19	8,323.07	8,095.19	25.63	301.67	44.91	265.62	1,449.88	1,793.60	1,501.72	291.88	6.145	
8,300.00	8,195.19	8,423.07	8,195.19	25.76	303.63	44.91	265.62	1,449.88	1,793.60	1,499.46	294.14	6.098	
8,318.31	8,213.50	8,441.38	8,213.50	25.78	303.99	44.91	265.62	1,449.88	1,793.60	1,499.04	294.56	6.089	
8,400.00	8,295.19	8,463.88	8,236.00	25.89	304.44	44.91	265.62	1,449.88	1,794.58	1,499.42	295.16	6.080	
8,437.81	8,333.00	8,463.88	8,236.00	25.94	304.44	44.91	265.62	1,449.88	1,796.22	1,501.01	295.21	6.084	

<b>Company:</b>	US ROCKIES REGION PLANNING	<b>Local Co-ordinate Reference:</b>	Well P_NRC 37-9
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>TVD Reference:</b>	WELL @ 5039.00ft (Original Well Elev)
<b>Reference Site:</b>	WELD_NRC 20-9 PAD	<b>MD Reference:</b>	WELL @ 5039.00ft (Original Well Elev)
<b>Site Error:</b>	0.00ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	P_NRC 37-9	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	P_NRC 37-9	<b>Database:</b>	EDM 2003.21 Single User Db
<b>Reference Design:</b>	PLAN #1 1-6-10 RHS	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design WELD_NRC 20-9 PAD - P_NRC 9-9 - P_NRC 9-9 - PLAN #1 1-6-10 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	-2.26	63.75	-2.52	63.80				
100.00	100.00	100.00	100.00	0.10	0.10	-2.26	63.75	-2.52	63.80	63.61	0.19	333.954	
200.00	200.00	200.00	200.00	0.32	0.32	-2.26	63.75	-2.52	63.80	63.16	0.64	99.600	
300.00	300.00	300.00	300.00	0.55	0.55	-2.26	63.75	-2.52	63.80	62.71	1.09	58.528	
400.00	400.00	400.00	400.00	0.77	0.77	-2.26	63.75	-2.52	63.80	62.26	1.54	41.440	
500.00	500.00	500.00	500.00	0.99	0.99	-2.26	63.75	-2.52	63.80	61.81	1.99	32.075	
600.00	600.00	600.00	600.00	1.22	1.22	-2.26	63.75	-2.52	63.80	61.36	2.44	26.162	
700.00	700.00	700.00	700.00	1.44	1.44	-2.26	63.75	-2.52	63.80	60.91	2.89	22.090	
800.00	800.00	800.00	800.00	1.67	1.67	-2.26	63.75	-2.52	63.80	60.46	3.34	19.115	
900.00	900.00	900.00	900.00	1.89	1.89	-2.26	63.75	-2.52	63.80	60.02	3.79	16.846	
1,000.00	1,000.00	1,000.00	1,000.00	2.12	2.12	-2.26	63.75	-2.52	63.80	59.57	4.24	15.059	
1,085.00	1,085.00	1,085.00	1,085.00	2.31	2.31	-2.26	63.75	-2.52	63.80	59.18	4.62	13.813 CC, ES	
1,100.00	1,100.00	1,099.77	1,099.77	2.34	2.34	-171.88	63.78	-2.49	63.87	59.19	4.68	13.645	
1,200.00	1,199.97	1,198.13	1,198.10	2.51	2.56	-170.79	65.35	-0.96	67.66	62.60	5.06	13.364 SF	
1,300.00	1,299.80	1,295.84	1,295.65	2.69	2.77	-168.49	69.30	2.90	77.35	71.91	5.45	14.199	
1,400.00	1,399.37	1,392.39	1,391.80	2.89	2.99	-165.79	75.53	9.00	93.04	87.21	5.84	15.943	
1,500.00	1,498.55	1,487.24	1,485.92	3.11	3.23	-163.27	83.91	17.19	114.73	108.51	6.23	18.422	
1,600.00	1,597.23	1,579.95	1,577.49	3.36	3.48	-161.15	94.24	27.30	142.32	135.69	6.63	21.479	
1,696.87	1,692.23	1,667.30	1,663.30	3.65	3.74	-159.46	105.91	38.72	174.50	167.48	7.02	24.863	
1,700.00	1,695.29	1,670.07	1,666.02	3.66	3.75	-159.42	106.32	39.11	175.62	168.59	7.03	24.973	
1,800.00	1,793.02	1,757.86	1,751.69	4.00	4.04	-158.13	119.98	52.48	212.85	205.35	7.49	28.399	
1,900.00	1,890.74	1,844.35	1,835.49	4.35	4.37	-156.87	135.27	67.43	252.49	244.52	7.97	31.668	
2,000.00	1,988.47	1,935.59	1,923.62	4.73	4.75	-155.76	152.14	83.93	293.15	284.67	8.49	34.544	
2,100.00	2,086.20	2,026.82	2,011.75	5.13	5.14	-154.93	169.01	100.43	333.88	324.87	9.01	37.050	
2,200.00	2,183.93	2,118.05	2,099.88	5.53	5.55	-154.28	185.88	116.94	374.66	365.11	9.55	39.235	
2,300.00	2,281.65	2,209.29	2,188.01	5.94	5.97	-153.76	202.75	133.44	415.47	405.37	10.10	41.150	
2,400.00	2,379.38	2,300.52	2,276.14	6.36	6.40	-153.32	219.63	149.94	456.30	445.65	10.65	42.837	
2,500.00	2,477.11	2,391.76	2,364.27	6.79	6.84	-152.96	236.50	166.44	497.15	485.93	11.22	44.327	
2,600.00	2,574.84	2,482.99	2,452.40	7.22	7.29	-152.66	253.37	182.95	538.01	526.23	11.79	45.652	
2,700.00	2,672.57	2,574.23	2,540.53	7.65	7.74	-152.40	270.24	199.45	578.89	566.53	12.36	46.837	
2,800.00	2,770.29	2,665.46	2,628.66	8.09	8.19	-152.17	287.11	215.95	619.77	606.83	12.94	47.900	
2,900.00	2,868.02	2,756.70	2,716.79	8.53	8.65	-151.97	303.99	232.45	660.67	647.14	13.52	48.858	
3,000.00	2,965.75	2,847.93	2,804.92	8.98	9.11	-151.79	320.86	248.96	701.56	687.45	14.11	49.725	
3,100.00	3,063.48	2,939.17	2,893.05	9.42	9.58	-151.64	337.73	265.46	742.46	727.77	14.70	50.512	
3,200.00	3,161.20	3,030.40	2,981.17	9.87	10.04	-151.50	354.60	281.96	783.37	768.08	15.29	51.230	
3,300.00	3,258.93	3,121.64	3,069.30	10.32	10.51	-151.37	371.47	298.46	824.28	808.39	15.89	51.887	
3,400.00	3,356.66	3,212.87	3,157.43	10.77	10.98	-151.26	388.35	314.97	865.19	848.71	16.48	52.490	
3,500.00	3,454.39	3,304.11	3,245.56	11.22	11.45	-151.15	405.22	331.47	906.11	889.03	17.08	53.044	
3,600.00	3,552.11	3,395.34	3,333.69	11.68	11.93	-151.06	422.09	347.97	947.03	929.34	17.68	53.556	
3,700.00	3,649.84	3,486.58	3,421.82	12.13	12.40	-150.97	438.96	364.47	987.95	969.66	18.29	54.029	
3,800.00	3,747.57	3,577.81	3,509.95	12.59	12.88	-150.89	455.83	380.98	1,028.87	1,009.98	18.89	54.469	
3,900.00	3,845.30	3,669.04	3,598.08	13.04	13.35	-150.81	472.71	397.48	1,069.79	1,050.30	19.49	54.877	
4,000.00	3,943.03	3,760.28	3,686.21	13.50	13.83	-150.75	489.58	413.98	1,110.71	1,090.61	20.10	55.258	
4,100.00	4,040.75	3,851.51	3,774.34	13.95	14.31	-150.68	506.45	430.48	1,151.64	1,130.93	20.71	55.614	
4,200.00	4,138.48	3,942.75	3,862.47	14.41	14.79	-150.62	523.32	446.99	1,192.57	1,171.25	21.32	55.947	
4,300.00	4,236.21	4,033.98	3,950.60	14.87	15.27	-150.57	540.20	463.49	1,233.49	1,211.57	21.93	56.259	
4,400.00	4,333.94	4,125.22	4,038.73	15.33	15.75	-150.51	557.07	479.99	1,274.42	1,251.89	22.54	56.552	
4,500.00	4,431.66	4,216.45	4,126.86	15.79	16.23	-150.47	573.94	496.50	1,315.35	1,292.21	23.15	56.828	
4,600.00	4,529.39	4,307.69	4,214.98	16.25	16.71	-150.42	590.81	513.00	1,356.28	1,332.53	23.76	57.089	
4,700.00	4,627.12	4,398.92	4,303.11	16.70	17.19	-150.38	607.68	529.50	1,397.21	1,372.84	24.37	57.334	
4,800.00	4,724.85	4,490.16	4,391.24	17.16	17.67	-150.34	624.56	546.00	1,438.14	1,413.16	24.98	57.566	
4,900.00	4,822.58	4,581.39	4,479.37	17.62	18.15	-150.30	641.43	562.51	1,479.08	1,453.48	25.60	57.786	

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

<b>Company:</b>	US ROCKIES REGION PLANNING	<b>Local Co-ordinate Reference:</b>	Well P_NRC 37-9
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>TVD Reference:</b>	WELL @ 5039.00ft (Original Well Elev)
<b>Reference Site:</b>	WELD_NRC 20-9 PAD	<b>MD Reference:</b>	WELL @ 5039.00ft (Original Well Elev)
<b>Site Error:</b>	0.00ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	P_NRC 37-9	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	P_NRC 37-9	<b>Database:</b>	EDM 2003.21 Single User Db
<b>Reference Design:</b>	PLAN #1 1-6-10 RHS	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design WELD_NRC 20-9 PAD - P_NRC 9-9 - P_NRC 9-9 - PLAN #1 1-6-10 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	4,920.30	4,672.63	4,567.50	18.09	18.64	-150.26	658.30	579.01	1,520.01	1,493.80	26.21	57.995	
5,100.00	5,018.03	4,763.86	4,655.63	18.55	19.12	-150.23	675.17	595.51	1,560.94	1,534.12	26.82	58.193	
5,200.00	5,115.76	4,855.10	4,743.76	19.01	19.60	-150.19	692.04	612.01	1,601.88	1,574.44	27.44	58.381	
5,300.00	5,213.49	4,946.33	4,831.89	19.47	20.08	-150.16	708.92	628.52	1,642.81	1,614.76	28.05	58.560	
5,400.00	5,311.21	5,037.57	4,920.02	19.93	20.57	-150.13	725.79	645.02	1,683.74	1,655.08	28.67	58.730	
5,500.00	5,408.94	5,128.80	5,008.15	20.39	21.05	-150.11	742.66	661.52	1,724.68	1,695.39	29.28	58.893	
5,600.00	5,506.67	5,220.03	5,096.28	20.85	21.54	-150.08	759.53	678.02	1,765.61	1,735.71	29.90	59.048	
5,700.00	5,604.40	5,311.27	5,184.41	21.31	22.02	-150.05	776.40	694.53	1,806.55	1,776.03	30.52	59.197	
5,800.00	5,702.13	5,402.50	5,272.54	21.78	22.50	-150.03	793.28	711.03	1,847.48	1,816.35	31.13	59.339	
5,900.94	5,800.77	5,494.59	5,361.49	22.24	22.99	-150.01	810.31	727.69	1,888.80	1,857.05	31.76	59.476	
6,000.00	5,897.93	5,585.56	5,449.36	22.62	23.48	-150.38	827.13	744.14	1,928.00	1,895.48	32.51	59.297	
6,100.00	5,996.62	5,678.49	5,539.13	22.89	23.97	-150.67	844.31	760.95	1,964.77	1,931.56	33.21	59.158	
6,200.00	6,095.81	5,824.87	5,680.83	23.13	24.67	-150.79	870.54	786.60	1,998.30	1,964.30	34.00	58.774	
6,300.00	6,195.39	6,088.72	5,940.01	23.34	25.53	-150.75	905.50	820.80	2,022.89	1,987.99	34.90	57.961	
6,400.00	6,295.22	6,363.38	6,213.40	23.50	26.11	-150.79	923.63	838.53	2,036.17	2,000.52	35.65	57.123	
6,500.00	6,395.19	6,545.22	6,395.19	23.63	26.34	-150.85	925.66	840.52	2,039.00	2,002.89	36.11	56.459	
6,512.81	6,408.00	6,558.03	6,408.00	23.65	26.35	18.79	925.66	840.52	2,039.03	2,002.87	36.16	56.392	
6,600.00	6,495.19	6,645.22	6,495.19	23.75	26.45	18.79	925.66	840.52	2,039.03	2,002.59	36.44	55.959	
6,700.00	6,595.19	6,745.22	6,595.19	23.85	26.57	18.79	925.66	840.52	2,039.03	2,002.28	36.75	55.484	
6,800.00	6,695.19	6,845.22	6,695.19	23.96	26.69	18.79	925.66	840.52	2,039.03	2,001.96	37.06	55.012	
6,900.00	6,795.19	6,945.22	6,795.19	24.07	26.81	18.79	925.66	840.52	2,039.03	2,001.65	37.38	54.545	
7,000.00	6,895.19	7,045.22	6,895.19	24.18	26.93	18.79	925.66	840.52	2,039.03	2,001.32	37.70	54.082	
7,100.00	6,995.19	7,145.22	6,995.19	24.29	27.05	18.79	925.66	840.52	2,039.03	2,001.00	38.03	53.623	
7,200.00	7,095.19	7,245.22	7,095.19	24.41	27.17	18.79	925.66	840.52	2,039.03	2,000.68	38.35	53.168	
7,300.00	7,195.19	7,345.22	7,195.19	24.52	27.29	18.79	925.66	840.52	2,039.03	2,000.35	38.68	52.717	
7,400.00	7,295.19	7,445.22	7,295.19	24.64	27.42	18.79	925.66	840.52	2,039.03	2,000.02	39.01	52.270	
7,500.00	7,395.19	7,545.22	7,395.19	24.76	27.55	18.79	925.66	840.52	2,039.03	1,999.69	39.34	51.828	
7,600.00	7,495.19	7,645.22	7,495.19	24.88	27.67	18.79	925.66	840.52	2,039.03	1,999.35	39.68	51.391	
7,700.00	7,595.19	7,745.22	7,595.19	25.00	27.80	18.79	925.66	840.52	2,039.03	1,999.01	40.01	50.958	
7,800.00	7,695.19	7,845.22	7,695.19	25.12	27.93	18.79	925.66	840.52	2,039.03	1,998.67	40.35	50.529	
7,900.00	7,795.19	7,945.22	7,795.19	25.25	28.07	18.79	925.66	840.52	2,039.03	1,998.33	40.70	50.105	
8,000.00	7,895.19	8,045.22	7,895.19	25.37	28.20	18.79	925.66	840.52	2,039.03	1,997.99	41.04	49.685	
8,100.00	7,995.19	8,145.22	7,995.19	25.50	28.33	18.79	925.66	840.52	2,039.03	1,997.64	41.38	49.270	
8,200.00	8,095.19	8,245.22	8,095.19	25.63	28.47	18.79	925.66	840.52	2,039.03	1,997.30	41.73	48.860	
8,300.00	8,195.19	8,345.22	8,195.19	25.76	28.60	18.79	925.66	840.52	2,039.03	1,996.95	42.08	48.454	
8,352.92	8,248.12	8,398.14	8,248.12	25.83	28.68	18.79	925.66	840.52	2,039.03	1,996.76	42.27	48.241	
8,400.00	8,295.19	8,416.03	8,266.00	25.89	28.70	18.79	925.66	840.52	2,039.24	1,996.86	42.38	48.118	
8,437.81	8,333.00	8,416.03	8,266.00	25.94	28.70	18.79	925.66	840.52	2,040.13	1,997.68	42.44	48.066	

<b>Company:</b>	US ROCKIES REGION PLANNING	<b>Local Co-ordinate Reference:</b>	Well P_NRC 37-9
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>TVD Reference:</b>	WELL @ 5039.00ft (Original Well Elev)
<b>Reference Site:</b>	WELD_NRC 20-9 PAD	<b>MD Reference:</b>	WELL @ 5039.00ft (Original Well Elev)
<b>Site Error:</b>	0.00ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	P_NRC 37-9	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	P_NRC 37-9	<b>Database:</b>	EDM 2003.21 Single User Db
<b>Reference Design:</b>	PLAN #1 1-6-10 RHS	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design</b> WELD_NRC 20-9 PAD - ROCKY MOUNTAIN FUEL CO F #3 EXISTING - ROCKY MOUNTAIN FUEL C												<b>Offset Site Error:</b>	0.00 ft
Survey Program: 0-MWD												<b>Offset Well Error:</b>	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	-91.79	-1.45	-46.46	50.22				
100.00	100.00	81.00	81.00	0.10	0.09	-91.79	-1.45	-46.46	46.49	46.30	0.19	249.132	
200.00	200.00	181.00	181.00	0.32	0.29	-91.79	-1.45	-46.46	46.49	45.87	0.61	75.620	
300.00	300.00	281.00	281.00	0.55	0.52	-91.79	-1.45	-46.46	46.49	45.42	1.06	43.679	
400.00	400.00	381.00	381.00	0.77	0.74	-91.79	-1.45	-46.46	46.49	44.97	1.51	30.708	
500.00	500.00	481.00	481.00	0.99	0.97	-91.79	-1.45	-46.46	46.49	44.52	1.96	23.677	
600.00	600.00	581.00	581.00	1.22	1.19	-91.79	-1.45	-46.46	46.49	44.07	2.41	19.266	
700.00	700.00	681.00	681.00	1.44	1.42	-91.79	-1.45	-46.46	46.49	43.62	2.86	16.240	
800.00	800.00	781.00	781.00	1.67	1.64	-91.79	-1.45	-46.46	46.49	43.17	3.31	14.036	
900.00	900.00	881.00	881.00	1.89	1.87	-91.79	-1.45	-46.46	46.49	42.73	3.76	12.359	
1,000.00	1,000.00	981.00	981.00	2.12	2.09	-91.79	-1.45	-46.46	46.49	42.28	4.21	11.039	
1,085.00	1,085.00	1,066.00	1,066.00	2.31	2.28	-91.79	-1.45	-46.46	46.49	41.89	4.59	10.121 CC	
1,100.00	1,100.00	1,081.00	1,081.00	2.34	2.32	98.62	-1.45	-46.46	46.49	41.84	4.66	9.985	
1,200.00	1,199.97	1,180.97	1,180.97	2.51	2.54	101.35	-1.45	-46.46	46.89	41.83	5.05	9.282 ES	
1,300.00	1,299.80	1,280.80	1,280.80	2.69	2.77	108.02	-1.45	-46.46	48.35	42.90	5.45	8.864	
1,400.00	1,399.37	1,380.37	1,380.37	2.89	2.99	117.65	-1.45	-46.46	51.96	46.10	5.87	8.858 SF	
1,500.00	1,498.55	1,479.55	1,479.55	3.11	3.21	128.49	-1.45	-46.46	58.97	52.69	6.28	9.387	
1,600.00	1,597.23	1,578.23	1,578.23	3.36	3.43	138.65	-1.45	-46.46	70.23	63.54	6.69	10.494	
1,696.87	1,692.23	1,673.23	1,673.23	3.65	3.65	146.85	-1.45	-46.46	85.44	78.36	7.08	12.067	
1,700.00	1,695.29	1,676.29	1,676.29	3.66	3.66	147.09	-1.45	-46.46	86.00	78.91	7.09	12.123	
1,800.00	1,793.02	1,774.02	1,774.02	4.00	3.88	153.39	-1.45	-46.46	104.53	97.01	7.53	13.891	
1,900.00	1,890.74	1,871.74	1,871.74	4.35	4.09	157.77	-1.45	-46.46	123.92	115.96	7.96	15.563	
2,000.00	1,988.47	1,969.47	1,969.47	4.73	4.31	160.96	-1.45	-46.46	143.82	135.41	8.41	17.109	
2,100.00	2,086.20	2,067.20	2,067.20	5.13	4.53	163.37	-1.45	-46.46	164.04	155.19	8.85	18.528	
2,200.00	2,183.93	2,164.93	2,164.93	5.53	4.75	165.25	-1.45	-46.46	184.49	175.18	9.31	19.824	
2,300.00	2,281.65	2,262.65	2,262.65	5.94	4.97	166.76	-1.45	-46.46	205.08	195.32	9.76	21.009	
2,400.00	2,379.38	2,360.38	2,360.38	6.36	5.19	167.99	-1.45	-46.46	225.79	215.57	10.22	22.093	
2,500.00	2,477.11	2,458.11	2,458.11	6.79	5.41	169.01	-1.45	-46.46	246.58	235.90	10.68	23.086	
2,600.00	2,574.84	2,555.84	2,555.84	7.22	5.63	169.88	-1.45	-46.46	267.43	256.29	11.14	23.998	
2,700.00	2,672.57	2,653.57	2,653.57	7.65	5.85	170.62	-1.45	-46.46	288.34	276.73	11.61	24.837	
2,800.00	2,770.29	2,751.29	2,751.29	8.09	6.07	171.26	-1.45	-46.46	309.28	297.21	12.08	25.611	
2,900.00	2,868.02	2,849.02	2,849.02	8.53	6.29	171.82	-1.45	-46.46	330.26	317.71	12.54	26.327	
3,000.00	2,965.75	2,946.75	2,946.75	8.98	6.51	172.31	-1.45	-46.46	351.26	338.25	13.01	26.990	
3,100.00	3,063.48	3,044.48	3,044.48	9.42	6.73	172.74	-1.45	-46.46	372.28	358.80	13.49	27.607	
3,200.00	3,161.20	3,142.20	3,142.20	9.87	6.95	173.13	-1.45	-46.46	393.33	379.37	13.96	28.181	
3,300.00	3,258.93	3,239.93	3,239.93	10.32	7.17	173.48	-1.45	-46.46	414.39	399.96	14.43	28.716	
3,400.00	3,356.66	3,337.66	3,337.66	10.77	7.39	173.80	-1.45	-46.46	435.46	420.55	14.90	29.217	
3,500.00	3,454.39	3,435.39	3,435.39	11.22	7.61	174.09	-1.45	-46.46	456.54	441.16	15.38	29.686	
3,600.00	3,552.11	3,533.11	3,533.11	11.68	7.83	174.35	-1.45	-46.46	477.63	461.78	15.85	30.127	
3,700.00	3,649.84	3,630.84	3,630.84	12.13	8.05	174.59	-1.45	-46.46	498.74	482.41	16.33	30.541	
3,800.00	3,747.57	3,728.57	3,728.57	12.59	8.27	174.81	-1.45	-46.46	519.85	503.04	16.81	30.931	
3,900.00	3,845.30	3,826.30	3,826.30	13.04	8.49	175.01	-1.45	-46.46	540.96	523.68	17.28	31.299	
4,000.00	3,943.03	3,924.03	3,924.03	13.50	8.71	175.20	-1.45	-46.46	562.08	544.32	17.76	31.647	
4,100.00	4,040.75	4,021.75	4,021.75	13.95	8.93	175.37	-1.45	-46.46	583.21	564.97	18.24	31.976	
4,200.00	4,138.48	4,119.48	4,119.48	14.41	9.15	175.54	-1.45	-46.46	604.35	585.63	18.72	32.287	
4,300.00	4,236.21	4,217.21	4,217.21	14.87	9.37	175.69	-1.45	-46.46	625.48	606.29	19.20	32.583	
4,400.00	4,333.94	4,314.94	4,314.94	15.33	9.59	175.83	-1.45	-46.46	646.62	626.95	19.68	32.864	
4,500.00	4,431.66	4,412.66	4,412.66	15.79	9.81	175.96	-1.45	-46.46	667.77	647.61	20.16	33.131	
4,600.00	4,529.39	4,510.39	4,510.39	16.25	10.03	176.09	-1.45	-46.46	688.92	668.28	20.64	33.386	
4,700.00	4,627.12	4,608.12	4,608.12	16.70	10.25	176.20	-1.45	-46.46	710.07	688.95	21.12	33.628	
4,800.00	4,724.85	4,705.85	4,705.85	17.16	10.46	176.31	-1.45	-46.46	731.22	709.62	21.60	33.860	
4,900.00	4,822.58	4,803.58	4,803.58	17.62	10.68	176.42	-1.45	-46.46	752.37	730.30	22.08	34.081	

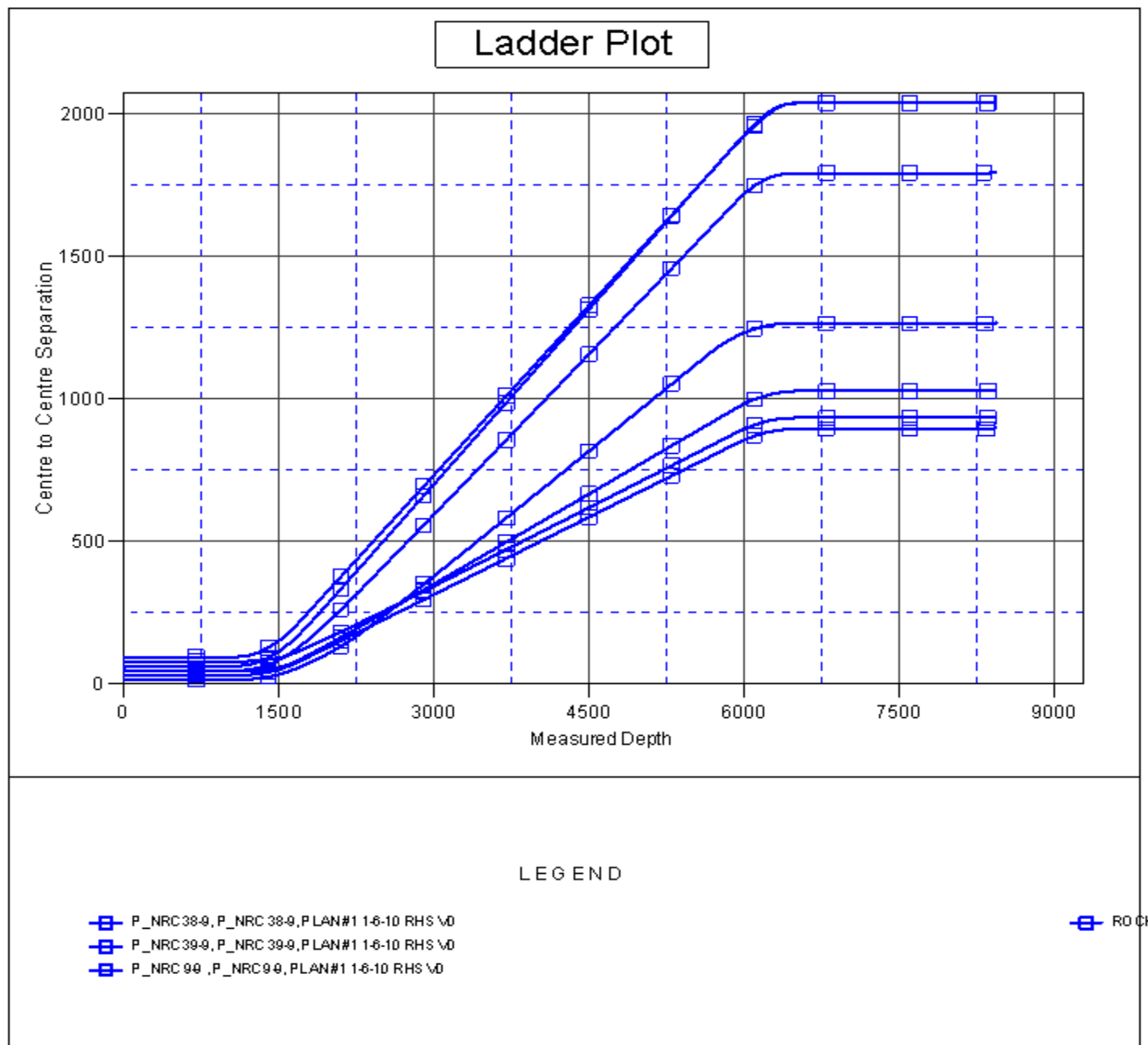
CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

<b>Company:</b>	US ROCKIES REGION PLANNING	<b>Local Co-ordinate Reference:</b>	Well P_NRC 37-9
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>TVD Reference:</b>	WELL @ 5039.00ft (Original Well Elev)
<b>Reference Site:</b>	WELD_NRC 20-9 PAD	<b>MD Reference:</b>	WELL @ 5039.00ft (Original Well Elev)
<b>Site Error:</b>	0.00ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	P_NRC 37-9	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	P_NRC 37-9	<b>Database:</b>	EDM 2003.21 Single User Db
<b>Reference Design:</b>	PLAN #1 1-6-10 RHS	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design</b> WELD_NRC 20-9 PAD - ROCKY MOUNTAIN FUEL CO F #3 EXISTING - ROCKY MOUNTAIN FUEL C												<b>Offset Site Error:</b>	0.00 ft
Survey Program: 0-MWD												<b>Offset Well Error:</b>	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	4,920.30	4,901.30	4,901.30	18.09	10.90	176.51	-1.45	-46.46	773.53	750.98	22.56	34.293	
5,100.00	5,018.03	4,999.03	4,999.03	18.55	11.12	176.61	-1.45	-46.46	794.69	771.65	23.04	34.495	
5,200.00	5,115.76	5,096.76	5,096.76	19.01	11.34	176.70	-1.45	-46.46	815.85	792.33	23.52	34.689	
5,300.00	5,213.49	5,194.49	5,194.49	19.47	11.56	176.78	-1.45	-46.46	837.02	813.02	24.00	34.875	
5,400.00	5,311.21	5,292.21	5,292.21	19.93	11.78	176.86	-1.45	-46.46	858.18	833.70	24.48	35.054	
5,500.00	5,408.94	5,389.94	5,389.94	20.39	12.00	176.93	-1.45	-46.46	879.35	854.39	24.96	35.225	
5,600.00	5,506.67	5,487.67	5,487.67	20.85	12.22	177.01	-1.45	-46.46	900.52	875.07	25.45	35.390	
5,700.00	5,604.40	5,585.40	5,585.40	21.31	12.44	177.07	-1.45	-46.46	921.69	895.76	25.93	35.548	
5,800.00	5,702.13	5,683.13	5,683.13	21.78	12.66	177.14	-1.45	-46.46	942.86	916.45	26.41	35.701	
5,900.94	5,800.77	5,781.77	5,781.77	22.24	12.88	177.20	-1.45	-46.46	964.23	937.33	26.90	35.849	
6,000.00	5,897.93	5,878.93	5,878.93	22.62	13.10	177.28	-1.45	-46.46	983.53	956.08	27.44	35.838	
6,100.00	5,996.62	5,977.62	5,977.62	22.89	13.32	177.34	-1.45	-46.46	999.59	971.65	27.94	35.776	
6,200.00	6,095.81	6,076.81	6,076.81	23.13	13.55	177.38	-1.45	-46.46	1,012.21	983.81	28.40	35.644	
6,300.00	6,195.39	6,176.39	6,176.39	23.34	13.77	177.41	-1.45	-46.46	1,021.36	992.55	28.81	35.448	
6,400.00	6,295.22	6,276.22	6,276.22	23.50	13.99	177.43	-1.45	-46.46	1,027.03	997.85	29.19	35.190	
6,500.00	6,395.19	6,376.19	6,376.19	23.63	14.22	177.44	-1.45	-46.46	1,029.22	999.71	29.51	34.872	
6,512.81	6,408.00	6,389.00	6,389.00	23.65	14.25	-12.92	-1.45	-46.46	1,029.25	999.70	29.56	34.825	
6,600.00	6,495.19	6,476.19	6,476.19	23.75	14.44	-12.92	-1.45	-46.46	1,029.25	999.35	29.91	34.414	
6,700.00	6,595.19	6,576.19	6,576.19	23.85	14.67	-12.92	-1.45	-46.46	1,029.25	998.95	30.30	33.969	
6,800.00	6,695.19	6,676.19	6,676.19	23.96	14.89	-12.92	-1.45	-46.46	1,029.25	998.56	30.69	33.534	
6,900.00	6,795.19	6,776.19	6,776.19	24.07	15.12	-12.92	-1.45	-46.46	1,029.25	998.16	31.09	33.108	
7,000.00	6,895.19	6,876.19	6,876.19	24.18	15.34	-12.92	-1.45	-46.46	1,029.25	997.77	31.48	32.691	
7,100.00	6,995.19	6,976.19	6,976.19	24.29	15.57	-12.92	-1.45	-46.46	1,029.25	997.37	31.88	32.284	
7,200.00	7,095.19	7,076.19	7,076.19	24.41	15.79	-12.92	-1.45	-46.46	1,029.25	996.97	32.28	31.885	
7,300.00	7,195.19	7,176.19	7,176.19	24.52	16.02	-12.92	-1.45	-46.46	1,029.25	996.57	32.68	31.495	
7,400.00	7,295.19	7,276.19	7,276.19	24.64	16.24	-12.92	-1.45	-46.46	1,029.25	996.17	33.08	31.113	
7,500.00	7,395.19	7,376.19	7,376.19	24.76	16.47	-12.92	-1.45	-46.46	1,029.25	995.77	33.48	30.739	
7,600.00	7,495.19	7,476.19	7,476.19	24.88	16.69	-12.92	-1.45	-46.46	1,029.25	995.37	33.89	30.373	
7,700.00	7,595.19	7,576.19	7,576.19	25.00	16.92	-12.92	-1.45	-46.46	1,029.25	994.96	34.29	30.015	
7,800.00	7,695.19	7,676.19	7,676.19	25.12	17.14	-12.92	-1.45	-46.46	1,029.25	994.56	34.70	29.664	
7,900.00	7,795.19	7,776.19	7,776.19	25.25	17.37	-12.92	-1.45	-46.46	1,029.25	994.15	35.10	29.321	
8,000.00	7,895.19	7,876.19	7,876.19	25.37	17.59	-12.92	-1.45	-46.46	1,029.25	993.74	35.51	28.984	
8,100.00	7,995.19	7,976.19	7,976.19	25.50	17.82	-12.92	-1.45	-46.46	1,029.25	993.33	35.92	28.655	
8,200.00	8,095.19	8,076.19	8,076.19	25.63	18.04	-12.92	-1.45	-46.46	1,029.25	992.92	36.33	28.332	
8,300.00	8,195.19	8,176.19	8,176.19	25.76	18.26	-12.92	-1.45	-46.46	1,029.25	992.51	36.74	28.016	
8,360.23	8,255.42	8,236.42	8,236.42	25.83	18.40	-12.92	-1.45	-46.46	1,029.25	992.27	36.99	27.828	
8,400.00	8,295.19	8,260.00	8,260.00	25.89	18.45	-12.92	-1.45	-46.46	1,029.38	992.27	37.11	27.736	
8,437.81	8,333.00	8,260.00	8,260.00	25.94	18.45	-12.92	-1.45	-46.46	1,030.67	993.48	37.18	27.718	

<b>Company:</b>	US ROCKIES REGION PLANNING	<b>Local Co-ordinate Reference:</b>	Well P_NRC 37-9
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>TVD Reference:</b>	WELL @ 5039.00ft (Original Well Elev)
<b>Reference Site:</b>	WELD_NRC 20-9 PAD	<b>MD Reference:</b>	WELL @ 5039.00ft (Original Well Elev)
<b>Site Error:</b>	0.00ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	P_NRC 37-9	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	P_NRC 37-9	<b>Database:</b>	EDM 2003.21 Single User Db
<b>Reference Design:</b>	PLAN #1 1-6-10 RHS	<b>Offset TVD Reference:</b>	Offset Datum

Reference Depths are relative to WELL @ 5039.00ft (Original Well Elev) Coordinates are relative to: P\_NRC 37-9  
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°





<b>Company:</b>	US ROCKIES REGION PLANNING	<b>Local Co-ordinate Reference:</b>	Well P_NRC 37-9
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>TVD Reference:</b>	WELL @ 5039.00ft (Original Well Elev)
<b>Reference Site:</b>	WELD_NRC 20-9 PAD	<b>MD Reference:</b>	WELL @ 5039.00ft (Original Well Elev)
<b>Site Error:</b>	0.00ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	P_NRC 37-9	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	P_NRC 37-9	<b>Database:</b>	EDM 2003.21 Single User Db
<b>Reference Design:</b>	PLAN #1 1-6-10 RHS	<b>Offset TVD Reference:</b>	Offset Datum

Reference Depths are relative to WELL @ 5039.00ft (Original Well Elev) Coordinates are relative to: P\_NRC 37-9  
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