



US ROCKIES REGION PLANNING

COLORADO NORTHERN ZONE - 83

WELD_NRC 18-9 PAD

P_NRC 6-9

P_NRC 6-9

Plan: PLAN #1 1-6-10 RHS

Standard Planning Report

04 February, 2010





Azimuths to True North
Magnetic North: 9.10°

Magnetic Field
Strength: 53092.0snT
Dip Angle: 66.81°
Date: 1/6/2010
Model: IGRF2010

WELL DETAILS: P_NRC 6-9

+N/-S	+E/-W	Northing	Ground Level: Easting	5021.00 Latitude	Longitude	Slot
0.00	0.00	1268599.25	3167731.27	40° 4' 8.900 N	104° 54' 2.434 W	

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
3273.00	3312.21	PARKMAN
4748.00	4819.49	SUSSEX
5218.00	5299.77	SHANNON
7388.00	7486.71	NIO A
7728.00	7826.71	CODELL
8178.00	8276.71	JSAND
8348.00	8446.71	DAKOTA

SECTION DETAILS

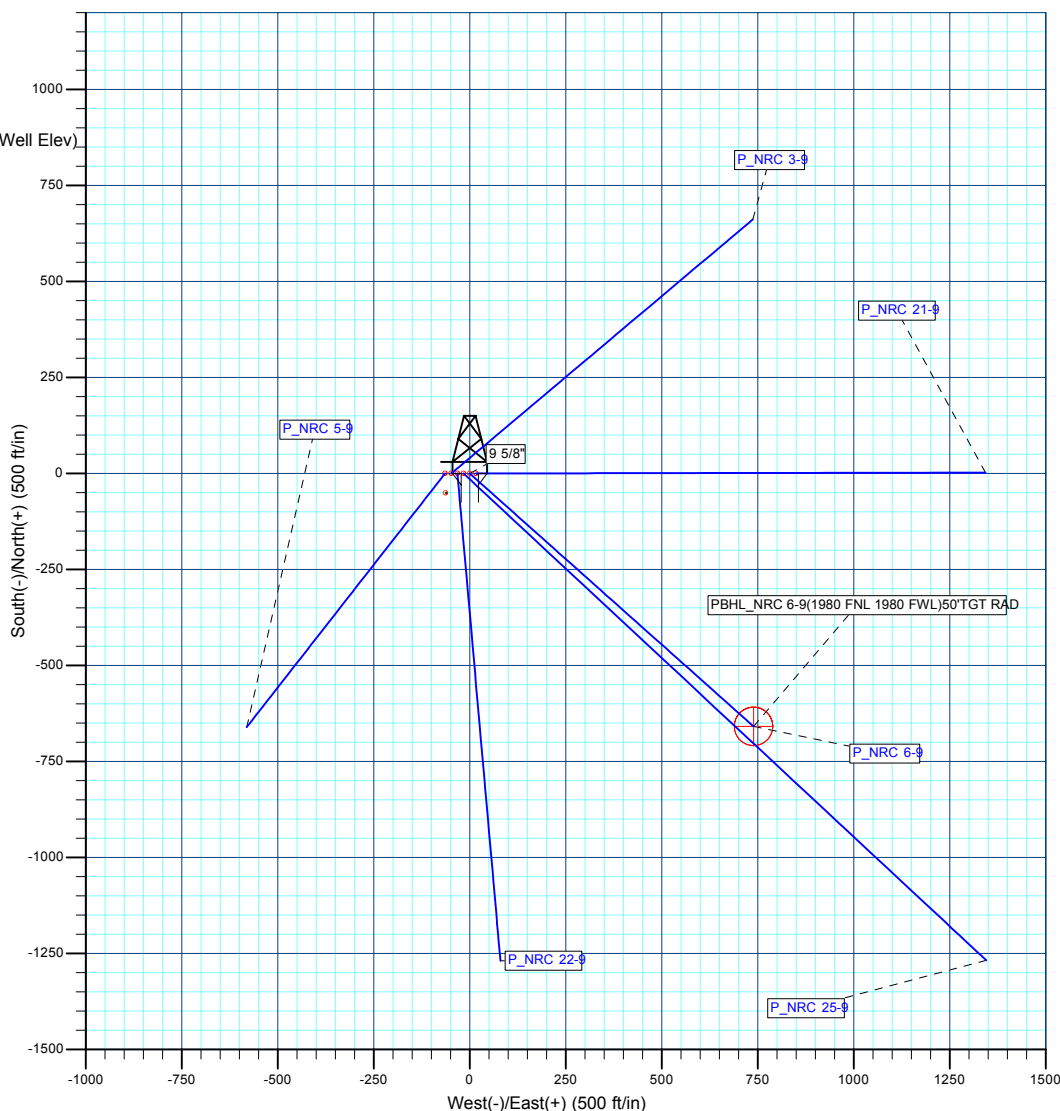
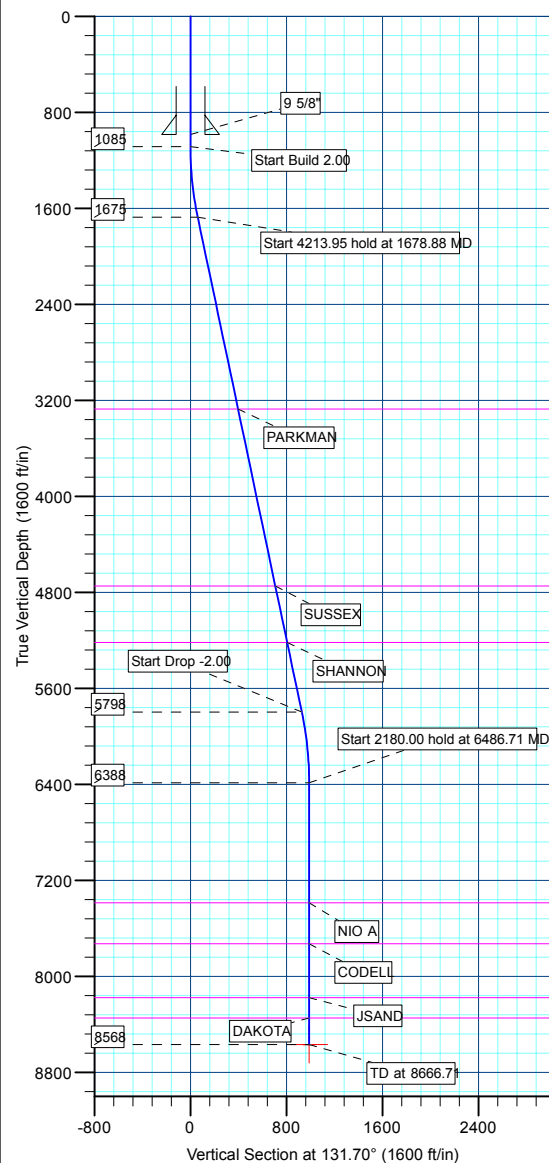
MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1085.00	0.00	0.00	1085.00	0.00	0.00	0.00	0.00	0.00	
1678.88	11.88	131.70	1674.63	-40.80	45.80	2.00	131.70	61.34	
5892.83	11.88	131.70	5798.37	-617.78	693.36	0.00	0.00	928.66	
6486.71	0.00	0.00	6388.00	-658.59	739.16	2.00	180.00	989.99	
8666.71	0.00	0.00	8568.00	-658.59	739.16	0.00	0.00	989.99	PBHL_NRC 6-9(1980 FNL 1980 FWL)50'TGT RAD

CASING DETAILS

TVD	MD	Name	Size
985.00	985.00	9 5/8"	9.62



KB ELEV:WELL @ 5036.00ft (Original Well Elev)
GRD ELEV: 5021.00



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

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
PBHL	8568.00	-658.57	739.16	1267945.68	3168474.86	40° 4' 2.392 N	104° 53' 52.926 W	Circle (Radius: 50.00)

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well P_NRC 6-9
Company:	US ROCKIES REGION PLANNING	TVD Reference:	WELL @ 5036.00ft (Original Well Elev)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	WELL @ 5036.00ft (Original Well Elev)
Site:	WELD_NRC 18-9 PAD	North Reference:	True
Well:	P_NRC 6-9	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_NRC 6-9		
Design:	PLAN #1 1-6-10 RHS		

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

Site						WELD_NRC 18-9 PAD, SECTION 9 T1N R67W											
Site Position:						Northing:			1,268,599.17 ft			Latitude:			40° 4' 8.900 N		
From:			Lat/Long			Easting:			3,167,715.32 ft			Longitude:			104° 54' 2.639 W		
Position Uncertainty:			0.00 ft			Slot Radius:			in			Grid Convergence:			0.39 °		

Well	P_NRC 6-9					
Well Position	+N/-S	-0.03 ft	Northing:	1,268,599.25 ft	Latitude:	40° 4' 8.900 N
	+E/-W	15.95 ft	Easting:	3,167,731.27 ft	Longitude:	104° 54' 2.434 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	5,021.00 ft

Wellbore	P_NRC 6-9				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	1/6/2010	9.10	66.81	53,092

Design	PLAN #1 1-6-10 RHS			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	131.70

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,085.00	0.00	0.00	1,085.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,678.88	11.88	131.70	1,674.63	-40.80	45.80	2.00	2.00	0.00	131.70	
5,892.83	11.88	131.70	5,798.37	-617.78	693.36	0.00	0.00	0.00	0.00	
6,486.71	0.00	0.00	6,388.00	-658.59	739.16	2.00	-2.00	0.00	180.00	
8,666.71	0.00	0.00	8,568.00	-658.59	739.16	0.00	0.00	0.00	0.00	PBHL_NRC 6-9(19)

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well P_NRC 6-9
Company:	US ROCKIES REGION PLANNING	TVD Reference:	WELL @ 5036.00ft (Original Well Elev)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	WELL @ 5036.00ft (Original Well Elev)
Site:	WELD_NRC 18-9 PAD	North Reference:	True
Well:	P_NRC 6-9	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_NRC 6-9		
Design:	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)
Start Build 2.00									
1,085.00	0.00	0.00	1,085.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.30	131.70	1,100.00	-0.03	0.03	0.04	2.00	2.00	0.00
1,200.00	2.30	131.70	1,199.97	-1.54	1.72	2.31	2.00	2.00	0.00
1,300.00	4.30	131.70	1,299.80	-5.36	6.02	8.06	2.00	2.00	0.00
1,400.00	6.30	131.70	1,399.37	-11.51	12.92	17.30	2.00	2.00	0.00
1,500.00	8.30	131.70	1,498.55	-19.96	22.40	30.01	2.00	2.00	0.00
1,600.00	10.30	131.70	1,597.23	-30.71	34.47	46.17	2.00	2.00	0.00
Start 4213.95 hold at 1678.88 MD									
1,678.88	11.88	131.70	1,674.63	-40.80	45.80	61.34	2.00	2.00	0.00
1,700.00	11.88	131.70	1,695.30	-43.70	49.04	65.68	0.00	0.00	0.00
1,800.00	11.88	131.70	1,793.16	-57.39	64.41	86.27	0.00	0.00	0.00
1,900.00	11.88	131.70	1,891.02	-71.08	79.78	106.85	0.00	0.00	0.00
2,000.00	11.88	131.70	1,988.88	-84.77	95.14	127.43	0.00	0.00	0.00
2,100.00	11.88	131.70	2,086.74	-98.46	110.51	148.01	0.00	0.00	0.00
2,200.00	11.88	131.70	2,184.60	-112.16	125.88	168.59	0.00	0.00	0.00
2,300.00	11.88	131.70	2,282.46	-125.85	141.24	189.18	0.00	0.00	0.00
2,400.00	11.88	131.70	2,380.32	-139.54	156.61	209.76	0.00	0.00	0.00
2,500.00	11.88	131.70	2,478.18	-153.23	171.98	230.34	0.00	0.00	0.00
2,600.00	11.88	131.70	2,576.03	-166.92	187.35	250.92	0.00	0.00	0.00
2,700.00	11.88	131.70	2,673.89	-180.62	202.71	271.50	0.00	0.00	0.00
2,800.00	11.88	131.70	2,771.75	-194.31	218.08	292.09	0.00	0.00	0.00
2,900.00	11.88	131.70	2,869.61	-208.00	233.45	312.67	0.00	0.00	0.00
3,000.00	11.88	131.70	2,967.47	-221.69	248.81	333.25	0.00	0.00	0.00
3,100.00	11.88	131.70	3,065.33	-235.38	264.18	353.83	0.00	0.00	0.00
3,200.00	11.88	131.70	3,163.19	-249.08	279.55	374.42	0.00	0.00	0.00
3,300.00	11.88	131.70	3,261.05	-262.77	294.92	395.00	0.00	0.00	0.00
PARKMAN									
3,312.21	11.88	131.70	3,273.00	-264.44	296.79	397.51	0.00	0.00	0.00
3,400.00	11.88	131.70	3,358.91	-276.46	310.28	415.58	0.00	0.00	0.00
3,500.00	11.88	131.70	3,456.76	-290.15	325.65	436.16	0.00	0.00	0.00
3,600.00	11.88	131.70	3,554.62	-303.84	341.02	456.74	0.00	0.00	0.00
3,700.00	11.88	131.70	3,652.48	-317.54	356.38	477.33	0.00	0.00	0.00
3,800.00	11.88	131.70	3,750.34	-331.23	371.75	497.91	0.00	0.00	0.00
3,900.00	11.88	131.70	3,848.20	-344.92	387.12	518.49	0.00	0.00	0.00
4,000.00	11.88	131.70	3,946.06	-358.61	402.49	539.07	0.00	0.00	0.00
4,100.00	11.88	131.70	4,043.92	-372.31	417.85	559.65	0.00	0.00	0.00
4,200.00	11.88	131.70	4,141.78	-386.00	433.22	580.24	0.00	0.00	0.00
4,300.00	11.88	131.70	4,239.64	-399.69	448.59	600.82	0.00	0.00	0.00
4,400.00	11.88	131.70	4,337.50	-413.38	463.96	621.40	0.00	0.00	0.00
4,500.00	11.88	131.70	4,435.35	-427.07	479.32	641.98	0.00	0.00	0.00
4,600.00	11.88	131.70	4,533.21	-440.77	494.69	662.57	0.00	0.00	0.00
4,700.00	11.88	131.70	4,631.07	-454.46	510.06	683.15	0.00	0.00	0.00
4,800.00	11.88	131.70	4,728.93	-468.15	525.42	703.73	0.00	0.00	0.00
SUSSEX									
4,819.49	11.88	131.70	4,748.00	-470.82	528.42	707.74	0.00	0.00	0.00
4,900.00	11.88	131.70	4,826.79	-481.84	540.79	724.31	0.00	0.00	0.00
5,000.00	11.88	131.70	4,924.65	-495.53	556.16	744.89	0.00	0.00	0.00
5,100.00	11.88	131.70	5,022.51	-509.23	571.53	765.48	0.00	0.00	0.00
5,200.00	11.88	131.70	5,120.37	-522.92	586.89	786.06	0.00	0.00	0.00
SHANNON									
5,299.77	11.88	131.70	5,218.00	-536.58	602.22	806.59	0.00	0.00	0.00
5,300.00	11.88	131.70	5,218.23	-536.61	602.26	806.64	0.00	0.00	0.00

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well P_NRC 6-9
Company:	US ROCKIES REGION PLANNING	TVD Reference:	WELL @ 5036.00ft (Original Well Elev)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	WELL @ 5036.00ft (Original Well Elev)
Site:	WELD_NRC 18-9 PAD	North Reference:	True
Well:	P_NRC 6-9	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_NRC 6-9		
Design:	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	11.88	131.70	5,316.08	-550.30	617.63	827.22	0.00	0.00	0.00
5,500.00	11.88	131.70	5,413.94	-563.99	632.99	847.80	0.00	0.00	0.00
5,600.00	11.88	131.70	5,511.80	-577.69	648.36	868.39	0.00	0.00	0.00
5,700.00	11.88	131.70	5,609.66	-591.38	663.73	888.97	0.00	0.00	0.00
5,800.00	11.88	131.70	5,707.52	-605.07	679.10	909.55	0.00	0.00	0.00
Start Drop -2.00									
5,892.83	11.88	131.70	5,798.37	-617.78	693.36	928.66	0.00	0.00	0.00
5,900.00	11.73	131.70	5,805.38	-618.76	694.46	930.12	2.00	-2.00	0.00
6,000.00	9.73	131.70	5,903.63	-631.15	708.36	948.75	2.00	-2.00	0.00
6,100.00	7.73	131.70	6,002.46	-641.25	719.70	963.93	2.00	-2.00	0.00
6,200.00	5.73	131.70	6,101.77	-649.05	728.45	975.66	2.00	-2.00	0.00
6,300.00	3.73	131.70	6,201.42	-654.54	734.62	983.91	2.00	-2.00	0.00
6,400.00	1.73	131.70	6,301.30	-657.71	738.18	988.68	2.00	-2.00	0.00
Start 2180.00 hold at 6486.71 MD									
6,486.71	0.00	0.00	6,388.00	-658.59	739.16	989.99	2.00	-2.00	0.00
6,500.00	0.00	0.00	6,401.29	-658.59	739.16	989.99	0.00	0.00	0.00
6,600.00	0.00	0.00	6,501.29	-658.59	739.16	989.99	0.00	0.00	0.00
6,700.00	0.00	0.00	6,601.29	-658.59	739.16	989.99	0.00	0.00	0.00
6,800.00	0.00	0.00	6,701.29	-658.59	739.16	989.99	0.00	0.00	0.00
6,900.00	0.00	0.00	6,801.29	-658.59	739.16	989.99	0.00	0.00	0.00
7,000.00	0.00	0.00	6,901.29	-658.59	739.16	989.99	0.00	0.00	0.00
7,100.00	0.00	0.00	7,001.29	-658.59	739.16	989.99	0.00	0.00	0.00
7,200.00	0.00	0.00	7,101.29	-658.59	739.16	989.99	0.00	0.00	0.00
7,300.00	0.00	0.00	7,201.29	-658.59	739.16	989.99	0.00	0.00	0.00
7,400.00	0.00	0.00	7,301.29	-658.59	739.16	989.99	0.00	0.00	0.00
NIO A									
7,486.71	0.00	0.00	7,388.00	-658.59	739.16	989.99	0.00	0.00	0.00
7,500.00	0.00	0.00	7,401.29	-658.59	739.16	989.99	0.00	0.00	0.00
7,600.00	0.00	0.00	7,501.29	-658.59	739.16	989.99	0.00	0.00	0.00
7,700.00	0.00	0.00	7,601.29	-658.59	739.16	989.99	0.00	0.00	0.00
7,800.00	0.00	0.00	7,701.29	-658.59	739.16	989.99	0.00	0.00	0.00
CODELL									
7,826.71	0.00	0.00	7,728.00	-658.59	739.16	989.99	0.00	0.00	0.00
7,900.00	0.00	0.00	7,801.29	-658.59	739.16	989.99	0.00	0.00	0.00
8,000.00	0.00	0.00	7,901.29	-658.59	739.16	989.99	0.00	0.00	0.00
8,100.00	0.00	0.00	8,001.29	-658.59	739.16	989.99	0.00	0.00	0.00
8,200.00	0.00	0.00	8,101.29	-658.59	739.16	989.99	0.00	0.00	0.00
JSAND									
8,276.71	0.00	0.00	8,178.00	-658.59	739.16	989.99	0.00	0.00	0.00
8,300.00	0.00	0.00	8,201.29	-658.59	739.16	989.99	0.00	0.00	0.00
8,400.00	0.00	0.00	8,301.29	-658.59	739.16	989.99	0.00	0.00	0.00
DAKOTA									
8,446.71	0.00	0.00	8,348.00	-658.59	739.16	989.99	0.00	0.00	0.00
8,500.00	0.00	0.00	8,401.29	-658.59	739.16	989.99	0.00	0.00	0.00
8,600.00	0.00	0.00	8,501.29	-658.59	739.16	989.99	0.00	0.00	0.00
TD at 8666.71 - PBHL_NRC 6-9(1980 FNL 1980 FWL)50'TGT RAD									
8,666.71	0.00	0.00	8,568.00	-658.59	739.16	989.99	0.00	0.00	0.00

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well P_NRC 6-9
Company:	US ROCKIES REGION PLANNING	TVD Reference:	WELL @ 5036.00ft (Original Well Elev)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	WELL @ 5036.00ft (Original Well Elev)
Site:	WELD_NRC 18-9 PAD	North Reference:	True
Well:	P_NRC 6-9	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_NRC 6-9		
Design:	PLAN #1 1-6-10 RHS		

Design Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)		
PBHL_NRC 6-9(1980	0.00	0.00	8,568.00	-658.57	739.16	1,267,945.68	3,168,474.86	40° 4' 2.392 N	104° 53' 52.926 W
- plan misses target center by 0.01ft at 8666.71ft MD (8568.00 TVD, -658.59 N, 739.16 E)									
- Circle (radius 50.00)									

Casing Points					
Measured Depth	Vertical Depth		Name	Casing Diameter	Hole Diameter
(ft)	(ft)			(in)	(in)
985.00	985.00	9 5/8"		9.62	12.25

Formations						
Measured Depth	Vertical Depth		Name	Lithology	Dip	Dip Direction
(ft)	(ft)				(°)	(°)
3,312.21	3,273.00	PARKMAN				
4,819.49	4,748.00	SUSSEX				
5,299.77	5,218.00	SHANNON				
7,486.71	7,388.00	NIO A				
7,826.71	7,728.00	CODELL				
8,276.71	8,178.00	JSAND				
8,446.71	8,348.00	DAKOTA			0.00	

Plan Annotations					
Measured Depth	Vertical Depth	Local Coordinates			
(ft)	(ft)	+N/-S	+E/-W	Comment	
(ft)	(ft)	(ft)	(ft)		
1,085.00	1,085.00	0.00	0.00	Start Build 2.00	
1,678.88	1,674.63	-40.80	45.80	Start 4213.95 hold at 1678.88 MD	
5,892.83	5,798.37	-617.78	693.36	Start Drop -2.00	
6,486.71	6,388.00	-658.59	739.16	Start 2180.00 hold at 6486.71 MD	
8,666.71	8,568.00	-658.59	739.16	TD at 8666.71	



US ROCKIES REGION PLANNING

**COLORADO NORTHERN ZONE - 83
WELD_NRC 18-9 PAD
P_NRC 6-9**

**P_NRC 6-9
PLAN #1 1-6-10 RHS**

Anticollision Report

04 February, 2010



Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_NRC 6-9
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 5036.00ft (Original Well Elev)
Reference Site:	WELD_NRC 18-9 PAD	MD Reference:	WELL @ 5036.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_NRC 6-9	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_NRC 6-9	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 1-6-10 RHS	Offset TVD Reference:	Offset Datum

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

Survey Tool Program	Date 2/4/2010			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.00	8,666.71	PLAN #1 1-6-10 RHS (P_NRC 6-9)	MWD	MWD - Standard

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
WELD_NRC 18-9 PAD						
P_NRC 21-9 - P_NRC 21-9 - PLAN #1 1-6-10 RHS	1,085.00	1,085.00	16.23	11.61	3.514	CC
P_NRC 21-9 - P_NRC 21-9 - PLAN #1 1-6-10 RHS	1,100.00	1,099.92	16.24	11.56	3.470	ES
P_NRC 21-9 - P_NRC 21-9 - PLAN #1 1-6-10 RHS	1,200.00	1,199.33	16.87	11.82	3.338	SF
P_NRC 22-9 - P_NRC 22-9 - PLAN #1 1-6-10 RHS	1,085.00	1,085.00	31.91	27.29	6.907	CC
P_NRC 22-9 - P_NRC 22-9 - PLAN #1 1-6-10 RHS	1,100.00	1,100.01	31.93	27.25	6.825	ES
P_NRC 22-9 - P_NRC 22-9 - PLAN #1 1-6-10 RHS	1,200.00	1,200.09	33.43	28.41	6.652	SF
P_NRC 25-9 - P_NRC 25-9 - PLAN #1 1-6-10 RHS	558.58	558.93	10.85	8.64	4.917	CC, ES
P_NRC 25-9 - P_NRC 25-9 - PLAN #1 1-6-10 RHS	600.00	600.13	11.58	9.17	4.811	SF
P_NRC 3-9 - P_NRC 3-9 - PLAN #1 1-6-10 RHS	1,150.58	1,151.41	47.85	42.96	9.799	CC
P_NRC 3-9 - P_NRC 3-9 - PLAN #1 1-6-10 RHS	1,200.00	1,201.41	47.89	42.81	9.433	ES
P_NRC 3-9 - P_NRC 3-9 - PLAN #1 1-6-10 RHS	1,300.00	1,302.25	48.82	43.34	8.914	SF
P_NRC 5-9 - P_NRC 5-9 - PLAN #1 1-6-10 RHS	1,085.00	1,085.00	64.09	59.47	13.876	CC
P_NRC 5-9 - P_NRC 5-9 - PLAN #1 1-6-10 RHS	1,100.00	1,099.80	64.14	59.47	13.711	ES
P_NRC 5-9 - P_NRC 5-9 - PLAN #1 1-6-10 RHS	1,200.00	1,198.35	67.22	62.19	13.365	SF
ROCKY MTN FUEL CO UNIT G #2 EXISTING - ROCKY	1,085.00	1,065.00	80.58	37.67	1.878	CC
ROCKY MTN FUEL CO UNIT G #2 EXISTING - ROCKY	1,400.00	1,379.37	85.13	29.06	1.518	ES
ROCKY MTN FUEL CO UNIT G #2 EXISTING - ROCKY	1,500.00	1,478.55	90.45	30.28	1.503	SF

Offset Design WELD_NRC 18-9 PAD - P_NRC 21-9 - P_NRC 21-9 - 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	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)		
0.00	0.00	0.00	0.00	0.00	0.00	90.00	0.00	16.23	16.23				
100.00	100.00	100.00	100.00	0.10	0.10	90.00	0.00	16.23	16.23	16.04	0.19	84.964	
200.00	200.00	200.00	200.00	0.32	0.32	90.00	0.00	16.23	16.23	15.59	0.64	25.340	
300.00	300.00	300.00	300.00	0.55	0.55	90.00	0.00	16.23	16.23	15.14	1.09	14.891	
400.00	400.00	400.00	400.00	0.77	0.77	90.00	0.00	16.23	16.23	14.69	1.54	10.543	
500.00	500.00	500.00	500.00	0.99	0.99	90.00	0.00	16.23	16.23	14.24	1.99	8.160	
600.00	600.00	600.00	600.00	1.22	1.22	90.00	0.00	16.23	16.23	13.79	2.44	6.656	
700.00	700.00	700.00	700.00	1.44	1.44	90.00	0.00	16.23	16.23	13.34	2.89	5.620	
800.00	800.00	800.00	800.00	1.67	1.67	90.00	0.00	16.23	16.23	12.89	3.34	4.863	
900.00	900.00	900.00	900.00	1.89	1.89	90.00	0.00	16.23	16.23	12.45	3.79	4.286	
1,000.00	1,000.00	1,000.00	1,000.00	2.12	2.12	90.00	0.00	16.23	16.23	12.00	4.24	3.831	

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

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_NRC 6-9
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 5036.00ft (Original Well Elev)
Reference Site:	WELD_NRC 18-9 PAD	MD Reference:	WELL @ 5036.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_NRC 6-9	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_NRC 6-9	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 1-6-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design WELD_NRC 18-9 PAD - P_NRC 21-9 - P_NRC 21-9 - 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	
1,085.00	1,085.00	1,085.00	1,085.00	2.31	2.31	90.00	0.00	16.23	16.23	11.61	4.62	3.514	CC
1,100.00	1,100.00	1,099.92	1,099.92	2.34	2.34	-41.79	0.00	16.27	16.24	11.56	4.68	3.470	ES
1,200.00	1,199.97	1,199.33	1,199.30	2.52	2.54	-46.89	0.00	18.51	16.87	11.82	5.06	3.338	SF
1,300.00	1,299.80	1,298.64	1,298.44	2.71	2.75	-58.00	0.01	24.19	19.00	13.56	5.44	3.490	
1,400.00	1,399.37	1,397.75	1,397.13	2.92	2.97	-70.77	0.03	33.29	23.52	17.65	5.86	4.011	
1,500.00	1,498.55	1,496.58	1,495.17	3.15	3.21	-81.49	0.05	45.75	30.93	24.61	6.33	4.889	
1,600.00	1,597.23	1,595.04	1,592.35	3.42	3.48	-89.18	0.08	61.52	41.27	34.42	6.85	6.026	
1,678.88	1,674.63	1,672.40	1,668.29	3.66	3.72	-93.47	0.10	76.24	51.39	44.07	7.31	7.028	
1,700.00	1,695.30	1,693.06	1,688.50	3.73	3.78	-94.39	0.11	80.52	54.37	46.93	7.44	7.307	
1,800.00	1,793.16	1,790.63	1,783.51	4.07	4.14	-96.25	0.15	102.70	69.78	61.68	8.10	8.618	
1,900.00	1,891.02	1,887.59	1,877.13	4.43	4.54	-95.60	0.19	127.92	87.12	78.32	8.80	9.896	
2,000.00	1,988.88	1,985.32	1,970.85	4.81	4.99	-94.08	0.24	155.67	105.90	96.34	9.55	11.084	
2,100.00	2,086.74	2,083.50	2,064.95	5.20	5.48	-92.98	0.28	183.64	124.80	114.46	10.34	12.073	
2,200.00	2,184.60	2,181.67	2,159.05	5.61	5.98	-92.16	0.33	211.62	143.72	132.58	11.14	12.900	
2,300.00	2,282.46	2,279.85	2,253.16	6.02	6.50	-91.54	0.38	239.59	162.67	150.71	11.96	13.597	
2,400.00	2,380.32	2,378.02	2,347.26	6.43	7.02	-91.04	0.42	267.57	181.64	168.84	12.80	14.190	
2,500.00	2,478.18	2,476.19	2,441.37	6.86	7.56	-90.64	0.47	295.54	200.62	186.97	13.65	14.698	
2,600.00	2,576.03	2,574.37	2,535.47	7.28	8.11	-90.31	0.52	323.51	219.60	205.09	14.51	15.136	
2,700.00	2,673.89	2,672.54	2,629.57	7.71	8.66	-90.03	0.57	351.49	238.59	223.22	15.38	15.518	
2,800.00	2,771.75	2,770.72	2,723.68	8.15	9.21	-89.79	0.61	379.46	257.58	241.34	16.25	15.853	
2,900.00	2,869.61	2,868.89	2,817.78	8.59	9.77	-89.59	0.66	407.44	276.58	259.45	17.13	16.148	
3,000.00	2,967.47	2,967.07	2,911.89	9.03	10.34	-89.41	0.71	435.41	295.58	277.57	18.01	16.410	
3,100.00	3,065.33	3,065.24	3,005.99	9.47	10.90	-89.25	0.75	463.39	314.59	295.69	18.90	16.644	
3,200.00	3,163.19	3,163.41	3,100.10	9.91	11.47	-89.11	0.80	491.36	333.59	313.80	19.79	16.854	
3,300.00	3,261.05	3,261.59	3,194.20	10.35	12.04	-88.99	0.85	519.34	352.60	331.91	20.69	17.043	
3,400.00	3,358.91	3,359.76	3,288.30	10.80	12.61	-88.88	0.90	547.31	371.61	350.02	21.59	17.214	
3,500.00	3,456.76	3,457.94	3,382.41	11.25	13.18	-88.78	0.94	575.29	390.62	368.13	22.49	17.370	
3,600.00	3,554.62	3,556.11	3,476.51	11.69	13.76	-88.68	0.99	603.26	409.63	386.24	23.39	17.513	
3,700.00	3,652.48	3,654.29	3,570.62	12.14	14.34	-88.60	1.04	631.24	428.64	404.35	24.30	17.643	
3,800.00	3,750.34	3,752.46	3,664.72	12.59	14.91	-88.52	1.08	659.21	447.65	422.45	25.20	17.763	
3,900.00	3,848.20	3,850.63	3,758.83	13.04	15.49	-88.45	1.13	687.18	466.67	440.56	26.11	17.873	
4,000.00	3,946.06	3,948.81	3,852.93	13.49	16.07	-88.39	1.18	715.16	485.68	458.66	27.02	17.975	
4,100.00	4,043.92	4,046.98	3,947.03	13.94	16.65	-88.33	1.23	743.13	504.70	476.77	27.93	18.070	
4,200.00	4,141.78	4,145.16	4,041.14	14.40	17.23	-88.28	1.27	771.11	523.71	494.87	28.84	18.158	
4,300.00	4,239.64	4,243.33	4,135.24	14.85	17.81	-88.22	1.32	799.08	542.73	512.97	29.76	18.240	
4,400.00	4,337.50	4,341.51	4,229.35	15.30	18.39	-88.18	1.37	827.06	561.74	531.07	30.67	18.316	
4,500.00	4,435.35	4,439.68	4,323.45	15.75	18.97	-88.13	1.41	855.03	580.76	549.18	31.58	18.388	
4,600.00	4,533.21	4,537.85	4,417.56	16.21	19.55	-88.09	1.46	883.01	599.78	567.28	32.50	18.455	
4,700.00	4,631.07	4,636.03	4,511.66	16.66	20.14	-88.05	1.51	910.98	618.79	585.38	33.42	18.518	
4,800.00	4,728.93	4,734.20	4,605.76	17.12	20.72	-88.01	1.56	938.96	637.81	603.48	34.33	18.577	
4,900.00	4,826.79	4,832.38	4,699.87	17.57	21.30	-87.98	1.60	966.93	656.83	621.58	35.25	18.633	
5,000.00	4,924.65	4,930.55	4,793.97	18.03	21.89	-87.94	1.65	994.91	675.85	639.68	36.17	18.686	
5,100.00	5,022.51	5,028.73	4,888.08	18.48	22.47	-87.91	1.70	1,022.88	694.86	657.78	37.09	18.736	
5,200.00	5,120.37	5,126.90	4,982.18	18.94	23.06	-87.88	1.74	1,050.85	713.88	675.88	38.01	18.783	
5,300.00	5,218.23	5,225.07	5,076.29	19.39	23.64	-87.86	1.79	1,078.83	732.90	693.97	38.93	18.828	
5,400.00	5,316.08	5,323.25	5,170.39	19.85	24.23	-87.83	1.84	1,106.80	751.92	712.07	39.85	18.871	
5,500.00	5,413.94	5,421.42	5,264.49	20.30	24.81	-87.80	1.89	1,134.78	770.94	730.17	40.77	18.911	
5,600.00	5,511.80	5,519.60	5,358.60	20.76	25.40	-87.78	1.93	1,162.75	789.96	748.27	41.69	18.950	
5,700.00	5,609.66	5,617.77	5,452.70	21.22	25.98	-87.76	1.98	1,190.73	808.97	766.37	42.61	18.986	
5,800.00	5,707.52	5,715.95	5,546.81	21.67	26.57	-87.74	2.03	1,218.70	827.99	784.46	43.53	19.021	
5,892.83	5,798.37	5,824.78	5,651.50	22.10	27.12	-87.78	2.08	1,248.41	844.91	800.51	44.40	19.028	
5,900.00	5,805.38	5,833.62	5,660.05	22.12	27.15	-87.82	2.08	1,250.66	846.12	801.65	44.47	19.028	

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

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_NRC 6-9
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 5036.00ft (Original Well Elev)
Reference Site:	WELD_NRC 18-9 PAD	MD Reference:	WELL @ 5036.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_NRC 6-9	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_NRC 6-9	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 1-6-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design WELD_NRC 18-9 PAD - P_NRC 21-9 - P_NRC 21-9 - 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
6,000.00	5,903.63	5,957.53	5,780.59	22.44	27.63	-88.27	2.13	1,279.32	861.50	816.24	45.26	19.036	
6,100.00	6,002.46	6,082.40	5,903.20	22.71	28.05	-88.63	2.17	1,302.91	874.06	828.11	45.95	19.023	
6,200.00	6,101.77	6,208.05	6,027.50	22.95	28.39	-88.91	2.20	1,321.23	883.76	837.22	46.54	18.991	
6,300.00	6,201.42	6,334.28	6,153.06	23.15	28.66	-89.11	2.22	1,334.13	890.56	843.54	47.01	18.942	
6,400.00	6,301.30	6,460.88	6,279.44	23.31	28.86	-89.23	2.23	1,341.50	894.43	847.04	47.39	18.874	
6,486.71	6,388.00	6,569.47	6,388.00	23.42	28.99	42.44	2.24	1,343.38	895.42	847.77	47.64	18.795	
6,500.00	6,401.29	6,582.76	6,401.29	23.44	29.00	42.44	2.24	1,343.38	895.42	847.74	47.67	18.783	
6,600.00	6,501.29	6,682.76	6,501.29	23.55	29.10	42.44	2.24	1,343.38	895.42	847.51	47.91	18.690	
6,700.00	6,601.29	6,782.76	6,601.29	23.67	29.21	42.44	2.24	1,343.38	895.42	847.27	48.15	18.597	
6,800.00	6,701.29	6,882.76	6,701.29	23.79	29.31	42.44	2.24	1,343.38	895.42	847.02	48.39	18.504	
6,900.00	6,801.29	6,982.76	6,801.29	23.91	29.42	42.44	2.24	1,343.38	895.42	846.78	48.64	18.411	
7,000.00	6,901.29	7,082.76	6,901.29	24.03	29.53	42.44	2.24	1,343.38	895.42	846.53	48.88	18.317	
7,100.00	7,001.29	7,182.76	7,001.29	24.16	29.64	42.44	2.24	1,343.38	895.42	846.28	49.14	18.223	
7,200.00	7,101.29	7,282.76	7,101.29	24.28	29.76	42.44	2.24	1,343.38	895.42	846.02	49.39	18.129	
7,300.00	7,201.29	7,382.76	7,201.29	24.41	29.87	42.44	2.24	1,343.38	895.42	845.77	49.65	18.036	
7,400.00	7,301.29	7,482.76	7,301.29	24.53	29.99	42.44	2.24	1,343.38	895.42	845.51	49.91	17.942	
7,500.00	7,401.29	7,582.76	7,401.29	24.66	30.10	42.44	2.24	1,343.38	895.42	845.25	50.17	17.848	
7,600.00	7,501.29	7,682.76	7,501.29	24.79	30.22	42.44	2.24	1,343.38	895.42	844.98	50.43	17.754	
7,700.00	7,601.29	7,782.76	7,601.29	24.93	30.34	42.44	2.24	1,343.38	895.42	844.71	50.70	17.660	
7,800.00	7,701.29	7,882.76	7,701.29	25.06	30.46	42.44	2.24	1,343.38	895.42	844.44	50.97	17.567	
7,900.00	7,801.29	7,982.76	7,801.29	25.19	30.58	42.44	2.24	1,343.38	895.42	844.17	51.25	17.473	
8,000.00	7,901.29	8,082.76	7,901.29	25.33	30.70	42.44	2.24	1,343.38	895.42	843.89	51.52	17.380	
8,100.00	8,001.29	8,182.76	8,001.29	25.47	30.82	42.44	2.24	1,343.38	895.42	843.62	51.80	17.287	
8,200.00	8,101.29	8,282.76	8,101.29	25.60	30.95	42.44	2.24	1,343.38	895.42	843.34	52.08	17.194	
8,300.00	8,201.29	8,382.76	8,201.29	25.74	31.07	42.44	2.24	1,343.38	895.42	843.05	52.36	17.101	
8,400.00	8,301.29	8,482.76	8,301.29	25.89	31.20	42.44	2.24	1,343.38	895.42	842.77	52.65	17.008	
8,500.00	8,401.29	8,489.47	8,308.00	26.03	31.21	42.44	2.24	1,343.38	900.26	847.46	52.80	17.051	
8,600.00	8,501.29	8,489.47	8,308.00	26.17	31.21	42.44	2.24	1,343.38	916.04	863.10	52.94	17.303	
8,666.71	8,568.00	8,489.47	8,308.00	26.27	31.21	42.44	2.24	1,343.38	932.40	879.36	53.04	17.581	

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_NRC 6-9
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 5036.00ft (Original Well Elev)
Reference Site:	WELD_NRC 18-9 PAD	MD Reference:	WELL @ 5036.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_NRC 6-9	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_NRC 6-9	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 1-6-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design WELD_NRC 18-9 PAD - P_NRC 22-9 - P_NRC 22-9 - PLAN #1 1-6-10 RHS													Offset Site Error:	0.00 ft
Survey Program: 0-MWD													Offset Well Error:	0.00 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Semi Major Axis Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
0.00	0.00	0.00	0.00	0.00	0.00	-89.99	0.00	-31.91	31.91					
100.00	100.00	100.00	100.00	0.10	0.10	-89.99	0.00	-31.91	31.91	31.71	0.19	166.998		
200.00	200.00	200.00	200.00	0.32	0.32	-89.99	0.00	-31.91	31.91	31.26	0.64	49.806		
300.00	300.00	300.00	300.00	0.55	0.55	-89.99	0.00	-31.91	31.91	30.82	1.09	29.268		
400.00	400.00	400.00	400.00	0.77	0.77	-89.99	0.00	-31.91	31.91	30.37	1.54	20.722		
500.00	500.00	500.00	500.00	0.99	0.99	-89.99	0.00	-31.91	31.91	29.92	1.99	16.039		
600.00	600.00	600.00	600.00	1.22	1.22	-89.99	0.00	-31.91	31.91	29.47	2.44	13.083		
700.00	700.00	700.00	700.00	1.44	1.44	-89.99	0.00	-31.91	31.91	29.02	2.89	11.047		
800.00	800.00	800.00	800.00	1.67	1.67	-89.99	0.00	-31.91	31.91	28.57	3.34	9.559		
900.00	900.00	900.00	900.00	1.89	1.89	-89.99	0.00	-31.91	31.91	28.12	3.79	8.424		
1,000.00	1,000.00	1,000.00	1,000.00	2.12	2.12	-89.99	0.00	-31.91	31.91	27.67	4.24	7.530		
1,085.00	1,085.00	1,085.00	1,085.00	2.31	2.31	-89.99	0.00	-31.91	31.91	27.29	4.62	6.907 CC		
1,100.00	1,100.00	1,100.01	1,100.01	2.34	2.34	138.28	-0.03	-31.90	31.93	27.25	4.68	6.825 ES		
1,200.00	1,199.97	1,200.09	1,200.06	2.52	2.51	136.97	-2.30	-31.70	33.43	28.41	5.03	6.652 SF		
1,300.00	1,299.80	1,300.05	1,299.84	2.71	2.69	134.12	-8.03	-31.20	37.31	31.92	5.39	6.923		
1,400.00	1,399.37	1,399.79	1,399.16	2.92	2.88	130.61	-17.21	-30.39	43.68	37.90	5.78	7.557		
1,500.00	1,498.55	1,499.23	1,497.79	3.15	3.10	127.16	-29.78	-29.28	52.61	46.40	6.21	8.470		
1,600.00	1,597.23	1,598.26	1,595.52	3.42	3.35	124.14	-45.67	-27.88	64.14	57.44	6.70	9.568		
1,678.88	1,674.63	1,676.04	1,671.86	3.66	3.58	122.13	-60.51	-26.57	75.05	67.90	7.15	10.497		
1,700.00	1,695.30	1,696.81	1,692.17	3.73	3.65	121.64	-64.83	-26.19	78.20	70.93	7.28	10.748		
1,800.00	1,793.16	1,794.87	1,787.63	4.07	3.99	118.58	-87.16	-24.22	93.66	85.72	7.94	11.800		
1,900.00	1,891.02	1,892.49	1,881.86	4.43	4.38	114.74	-112.56	-21.98	110.27	101.60	8.67	12.722		
2,000.00	1,988.88	1,990.73	1,976.39	4.81	4.81	111.40	-139.21	-19.63	127.64	118.20	9.45	13.513		
2,100.00	2,086.74	2,088.98	2,070.91	5.20	5.27	108.86	-165.86	-17.28	145.34	135.09	10.25	14.184		
2,200.00	2,184.60	2,187.22	2,165.44	5.61	5.74	106.88	-192.51	-14.93	163.25	152.18	11.07	14.752		
2,300.00	2,282.46	2,285.46	2,259.97	6.02	6.23	105.29	-219.16	-12.58	181.31	169.41	11.90	15.237		
2,400.00	2,380.32	2,383.70	2,354.50	6.43	6.73	103.98	-245.81	-10.23	199.49	186.74	12.74	15.653		
2,500.00	2,478.18	2,481.95	2,449.03	6.86	7.24	102.90	-272.47	-7.88	217.75	204.15	13.60	16.014		
2,600.00	2,576.03	2,580.19	2,543.56	7.28	7.75	101.98	-299.12	-5.53	236.07	221.61	14.46	16.328		
2,700.00	2,673.89	2,678.43	2,638.09	7.71	8.27	101.20	-325.77	-3.18	254.44	239.12	15.32	16.604		
2,800.00	2,771.75	2,776.67	2,732.62	8.15	8.79	100.52	-352.42	-0.83	272.86	256.66	16.19	16.848		
2,900.00	2,869.61	2,874.91	2,827.15	8.59	9.32	99.93	-379.07	1.52	291.30	274.23	17.07	17.066		
3,000.00	2,967.47	2,973.16	2,921.68	9.03	9.85	99.40	-405.72	3.87	309.77	291.82	17.95	17.260		
3,100.00	3,065.33	3,071.40	3,016.21	9.47	10.39	98.94	-432.37	6.23	328.27	309.44	18.83	17.435		
3,200.00	3,163.19	3,169.64	3,110.73	9.91	10.92	98.52	-459.02	8.58	346.78	327.07	19.71	17.593		
3,300.00	3,261.05	3,267.88	3,205.26	10.35	11.46	98.15	-485.67	10.93	365.31	344.71	20.60	17.736		
3,400.00	3,358.91	3,366.13	3,299.79	10.80	12.00	97.82	-512.32	13.28	383.85	362.36	21.48	17.867		
3,500.00	3,456.76	3,464.37	3,394.32	11.25	12.55	97.51	-538.98	15.63	402.40	380.03	22.37	17.987		
3,600.00	3,554.62	3,562.61	3,488.85	11.69	13.09	97.23	-565.63	17.98	420.96	397.70	23.26	18.098		
3,700.00	3,652.48	3,660.85	3,583.38	12.14	13.63	96.98	-592.28	20.33	439.54	415.39	24.15	18.199		
3,800.00	3,750.34	3,759.09	3,677.91	12.59	14.18	96.74	-618.93	22.68	458.12	433.07	25.04	18.294		
3,900.00	3,848.20	3,857.34	3,772.44	13.04	14.72	96.53	-645.58	25.03	476.70	450.77	25.94	18.380		
4,000.00	3,946.06	3,955.58	3,866.97	13.49	15.27	96.33	-672.23	27.38	495.30	468.46	26.83	18.458		
4,100.00	4,043.92	4,053.82	3,961.50	13.94	15.82	96.14	-698.88	29.73	513.89	486.16	27.73	18.530		
4,200.00	4,141.78	4,152.06	4,056.02	14.40	16.37	95.97	-725.53	32.08	532.50	503.86	28.63	18.598		
4,300.00	4,239.64	4,250.31	4,150.55	14.85	16.92	95.81	-752.18	34.43	551.10	521.57	29.53	18.660		
4,400.00	4,337.50	4,348.55	4,245.08	15.30	17.46	95.66	-778.83	36.78	569.72	539.28	30.43	18.719		
4,500.00	4,435.35	4,446.79	4,339.61	15.75	18.01	95.52	-805.49	39.13	588.33	556.99	31.34	18.774		
4,600.00	4,533.21	4,545.03	4,434.14	16.21	18.56	95.38	-832.14	41.48	606.95	574.71	32.24	18.826		
4,700.00	4,631.07	4,643.28	4,528.67	16.66	19.12	95.26	-858.79	43.83	625.57	592.43	33.14	18.875		
4,800.00	4,728.93	4,741.52	4,623.20	17.12	19.67	95.14	-885.44	46.18	644.19	610.15	34.05	18.921		
4,900.00	4,826.79	4,839.76	4,717.73	17.57	20.22	95.03	-912.09	48.53	662.82	627.87	34.95	18.964		

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

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_NRC 6-9
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 5036.00ft (Original Well Elev)
Reference Site:	WELD_NRC 18-9 PAD	MD Reference:	WELL @ 5036.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_NRC 6-9	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_NRC 6-9	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 1-6-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design WELD_NRC 18-9 PAD - P_NRC 22-9 - P_NRC 22-9 - 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	4,924.65	4,938.00	4,812.26	18.03	20.77	94.93	-938.74	50.88	681.45	645.59	35.86	19.005	
5,100.00	5,022.51	5,036.24	4,906.79	18.48	21.32	94.83	-965.39	53.23	700.08	663.32	36.76	19.044	
5,200.00	5,120.37	5,134.49	5,001.32	18.94	21.87	94.74	-992.04	55.58	718.71	681.04	37.67	19.081	
5,300.00	5,218.23	5,232.73	5,095.84	19.39	22.43	94.65	-1,018.69	57.93	737.34	698.77	38.57	19.116	
5,400.00	5,316.08	5,330.97	5,190.37	19.85	22.98	94.56	-1,045.34	60.28	755.98	716.50	39.48	19.149	
5,500.00	5,413.94	5,429.21	5,284.90	20.30	23.53	94.48	-1,071.99	62.63	774.62	734.23	40.38	19.181	
5,600.00	5,511.80	5,527.46	5,379.43	20.76	24.09	94.40	-1,098.65	64.98	793.25	751.96	41.29	19.211	
5,700.00	5,609.66	5,625.70	5,473.96	21.22	24.64	94.33	-1,125.30	67.33	811.89	769.70	42.20	19.240	
5,800.00	5,707.52	5,723.94	5,568.49	21.67	25.19	94.26	-1,151.95	69.68	830.53	787.43	43.11	19.267	
5,892.83	5,798.37	5,827.49	5,668.34	22.10	25.69	94.23	-1,179.27	72.09	847.44	803.49	43.95	19.284	
5,900.00	5,805.38	5,836.13	5,676.70	22.12	25.72	94.26	-1,181.40	72.28	848.66	804.66	44.01	19.285	
6,000.00	5,903.63	5,957.14	5,794.58	22.44	26.14	94.64	-1,208.64	74.68	864.26	819.49	44.77	19.306	
6,100.00	6,002.46	6,079.08	5,914.42	22.71	26.52	94.94	-1,231.06	76.66	877.00	831.56	45.44	19.301	
6,200.00	6,101.77	6,201.77	6,035.85	22.95	26.84	95.18	-1,248.46	78.19	886.84	840.82	46.01	19.273	
6,300.00	6,201.42	6,325.03	6,158.48	23.15	27.09	95.34	-1,260.71	79.27	893.73	847.25	46.49	19.225	
6,400.00	6,301.30	6,448.64	6,281.88	23.31	27.28	95.44	-1,267.71	79.89	897.67	850.81	46.86	19.155	
6,486.71	6,388.00	6,554.78	6,388.00	23.42	27.41	-132.83	-1,269.49	80.05	898.68	851.56	47.12	19.071	
6,500.00	6,401.29	6,568.07	6,401.29	23.44	27.42	-132.83	-1,269.49	80.05	898.68	851.53	47.16	19.058	
6,600.00	6,501.29	6,668.07	6,501.29	23.55	27.52	-132.83	-1,269.49	80.05	898.68	851.30	47.38	18.967	
6,700.00	6,601.29	6,768.07	6,601.29	23.67	27.61	-132.83	-1,269.49	80.05	898.68	851.08	47.61	18.878	
6,800.00	6,701.29	6,868.07	6,701.29	23.79	27.70	-132.83	-1,269.49	80.05	898.68	850.85	47.83	18.788	
6,900.00	6,801.29	6,968.07	6,801.29	23.91	27.79	-132.83	-1,269.49	80.05	898.68	850.62	48.06	18.697	
7,000.00	6,901.29	7,068.07	6,901.29	24.03	27.89	-132.83	-1,269.49	80.05	898.68	850.38	48.30	18.607	
7,100.00	7,001.29	7,168.07	7,001.29	24.16	27.99	-132.83	-1,269.49	80.05	898.68	850.15	48.54	18.516	
7,200.00	7,101.29	7,268.07	7,101.29	24.28	28.09	-132.83	-1,269.49	80.05	898.68	849.90	48.78	18.425	
7,300.00	7,201.29	7,368.07	7,201.29	24.41	28.19	-132.83	-1,269.49	80.05	898.68	849.66	49.02	18.333	
7,400.00	7,301.29	7,468.07	7,301.29	24.53	28.29	-132.83	-1,269.49	80.05	898.68	849.42	49.27	18.242	
7,500.00	7,401.29	7,568.07	7,401.29	24.66	28.39	-132.83	-1,269.49	80.05	898.68	849.17	49.51	18.150	
7,600.00	7,501.29	7,668.07	7,501.29	24.79	28.50	-132.83	-1,269.49	80.05	898.68	848.91	49.77	18.058	
7,700.00	7,601.29	7,768.07	7,601.29	24.93	28.60	-132.83	-1,269.49	80.05	898.68	848.66	50.02	17.966	
7,800.00	7,701.29	7,868.07	7,701.29	25.06	28.71	-132.83	-1,269.49	80.05	898.68	848.40	50.28	17.874	
7,900.00	7,801.29	7,968.07	7,801.29	25.19	28.82	-132.83	-1,269.49	80.05	898.68	848.14	50.54	17.782	
8,000.00	7,901.29	8,068.07	7,901.29	25.33	28.93	-132.83	-1,269.49	80.05	898.68	847.88	50.80	17.690	
8,100.00	8,001.29	8,168.07	8,001.29	25.47	29.04	-132.83	-1,269.49	80.05	898.68	847.62	51.07	17.598	
8,200.00	8,101.29	8,268.07	8,101.29	25.60	29.15	-132.83	-1,269.49	80.05	898.68	847.35	51.33	17.507	
8,300.00	8,201.29	8,368.07	8,201.29	25.74	29.26	-132.83	-1,269.49	80.05	898.68	847.08	51.60	17.415	
8,400.00	8,301.29	8,468.07	8,301.29	25.89	29.38	-132.83	-1,269.49	80.05	898.68	846.80	51.88	17.323	
8,500.00	8,401.29	8,474.78	8,308.00	26.03	29.39	-132.83	-1,269.49	80.05	903.51	851.48	52.03	17.366	
8,600.00	8,501.29	8,474.78	8,308.00	26.17	29.39	-132.83	-1,269.49	80.05	919.23	867.06	52.17	17.620	
8,666.71	8,568.00	8,474.78	8,308.00	26.27	29.39	-132.83	-1,269.49	80.05	935.54	883.27	52.27	17.900	

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_NRC 6-9
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 5036.00ft (Original Well Elev)
Reference Site:	WELD_NRC 18-9 PAD	MD Reference:	WELL @ 5036.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_NRC 6-9	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_NRC 6-9	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 1-6-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design WELD_NRC 18-9 PAD - P_NRC 25-9 - P_NRC 25-9 - PLAN #1 1-6-10 RHS												Offset Site Error:	0.00 ft
Survey Program: 0-MWD												Offset Well Error:	0.00 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Semi Major Axis Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	-89.89	0.03	-15.95	15.95				
100.00	100.00	100.00	100.00	0.10	0.10	-89.89	0.03	-15.95	15.95	15.76	0.19	83.499	
200.00	200.00	200.00	200.00	0.32	0.32	-89.89	0.03	-15.95	15.95	15.31	0.64	24.903	
300.00	300.00	300.00	300.00	0.55	0.55	-89.89	0.03	-15.95	15.95	14.86	1.09	14.634	
400.00	400.00	400.37	400.35	0.77	0.75	-94.56	-1.17	-14.67	14.72	13.20	1.52	9.690	
500.00	500.00	500.49	500.33	0.99	0.96	-113.70	-4.75	-10.82	11.82	9.88	1.94	6.092	
558.58	558.58	558.93	558.58	1.13	1.09	-137.03	-7.94	-7.40	10.85	8.64	2.21	4.917 CC, ES	
600.00	600.00	600.13	599.58	1.22	1.19	-157.33	-10.68	-4.46	11.58	9.17	2.41	4.811 SF	
700.00	700.00	699.04	697.75	1.44	1.47	167.02	-18.88	4.35	19.51	16.59	2.92	6.678	
800.00	800.00	797.00	794.51	1.67	1.78	152.08	-29.28	15.52	33.59	30.14	3.45	24.663	
900.00	900.00	893.81	889.56	1.89	2.15	145.30	-41.76	28.92	51.86	47.86	4.00	12.951	
1,000.00	1,000.00	989.25	982.62	2.12	2.56	141.68	-56.21	44.43	73.73	69.13	4.60	16.040	
1,085.00	1,085.00	1,069.18	1,059.98	2.31	2.95	139.77	-69.93	59.16	94.95	89.82	5.13	18.504	
1,100.00	1,100.00	1,083.18	1,073.46	2.34	3.02	7.79	-72.48	61.90	98.90	94.26	4.64	21.300	
1,200.00	1,199.97	1,176.02	1,162.43	2.52	3.54	6.43	-90.55	81.30	125.16	120.08	5.07	24.663	
1,300.00	1,299.80	1,268.12	1,249.80	2.71	4.11	5.57	-110.40	102.62	151.21	145.69	5.52	27.392	
1,400.00	1,399.37	1,359.50	1,335.51	2.92	4.73	4.98	-131.98	125.79	177.01	171.03	5.98	29.606	
1,500.00	1,498.55	1,450.19	1,419.53	3.15	5.40	4.57	-155.23	150.75	202.52	196.07	6.45	31.397	
1,600.00	1,597.23	1,540.20	1,501.83	3.42	6.12	4.27	-180.09	177.44	227.72	220.79	6.94	32.834	
1,678.88	1,674.63	1,610.75	1,565.50	3.66	6.73	4.09	-200.80	199.68	247.36	240.04	7.33	33.760	
1,700.00	1,695.30	1,629.56	1,582.34	3.73	6.90	4.05	-206.50	205.80	252.66	245.22	7.44	33.966	
1,800.00	1,793.16	1,717.70	1,660.54	4.07	7.71	3.89	-234.21	235.55	279.54	271.58	7.97	35.089	
1,900.00	1,891.02	1,800.00	1,732.39	4.43	8.52	3.73	-261.55	264.91	309.38	300.89	8.49	36.449	
2,000.00	1,988.88	1,889.15	1,808.89	4.81	9.46	3.58	-292.75	298.40	342.00	332.95	9.05	37.789	
2,100.00	2,086.74	1,972.24	1,878.88	5.20	10.39	3.44	-323.27	331.17	377.40	367.80	9.60	39.304	
2,200.00	2,184.60	2,054.01	1,946.46	5.61	11.34	3.31	-354.64	364.86	415.48	405.32	10.16	40.906	
2,300.00	2,282.46	2,145.98	2,021.80	6.02	12.44	3.18	-390.59	403.45	454.74	443.97	10.76	42.252	
2,400.00	2,380.32	2,237.94	2,097.14	6.43	13.54	3.08	-426.54	442.05	494.00	482.62	11.37	43.437	
2,500.00	2,478.18	2,329.91	2,172.47	6.86	14.66	2.99	-462.48	480.65	533.26	521.27	11.99	44.481	
2,600.00	2,576.03	2,421.88	2,247.81	7.28	15.77	2.91	-498.43	519.25	572.53	559.92	12.61	45.406	
2,700.00	2,673.89	2,513.84	2,323.15	7.71	16.89	2.84	-534.38	557.84	611.79	598.56	13.23	46.232	
2,800.00	2,771.75	2,605.81	2,398.49	8.15	18.01	2.78	-570.33	596.44	651.06	637.19	13.86	46.971	
2,900.00	2,869.61	2,697.78	2,473.83	8.59	19.13	2.73	-606.28	635.04	690.32	675.83	14.49	47.636	
3,000.00	2,967.47	2,789.74	2,549.17	9.03	20.25	2.68	-642.22	673.64	729.59	714.46	15.12	48.238	
3,100.00	3,065.33	2,881.71	2,624.50	9.47	21.38	2.64	-678.17	712.23	768.85	753.09	15.76	48.784	
3,200.00	3,163.19	2,973.68	2,699.84	9.91	22.50	2.60	-714.12	750.83	808.12	791.72	16.40	49.282	
3,300.00	3,261.05	3,065.64	2,775.18	10.35	23.63	2.56	-750.07	789.43	847.39	830.35	17.04	49.737	
3,400.00	3,358.91	3,157.61	2,850.52	10.80	24.75	2.53	-786.02	828.03	886.66	868.98	17.68	50.155	
3,500.00	3,456.76	3,249.58	2,925.86	11.25	25.88	2.50	-821.96	866.62	925.93	907.60	18.32	50.540	
3,600.00	3,554.62	3,341.54	3,001.19	11.69	27.01	2.48	-857.91	905.22	965.19	946.23	18.96	50.896	
3,700.00	3,652.48	3,433.51	3,076.53	12.14	28.14	2.45	-893.86	943.82	1,004.46	984.85	19.61	51.225	
3,800.00	3,750.34	3,547.77	3,170.50	12.59	29.40	2.42	-938.15	991.38	1,043.31	1,022.98	20.33	51.309	
3,900.00	3,848.20	3,696.60	3,296.31	13.04	30.80	2.40	-992.32	1,049.54	1,078.20	1,057.03	21.17	50.924	
4,000.00	3,946.06	3,850.91	3,430.94	13.49	32.13	2.38	-1,043.71	1,104.72	1,108.08	1,086.07	22.01	50.349	
4,100.00	4,043.92	4,010.09	3,573.84	13.94	33.37	2.38	-1,091.46	1,155.99	1,132.69	1,109.86	22.83	49.605	
4,200.00	4,141.78	4,173.34	3,724.21	14.40	34.49	2.39	-1,134.74	1,202.45	1,151.82	1,128.18	23.64	48.732	
4,300.00	4,239.64	4,339.71	3,880.92	14.85	35.48	2.40	-1,172.76	1,243.28	1,165.27	1,140.86	24.40	47.747	
4,400.00	4,337.50	4,508.16	4,042.62	15.30	36.32	2.43	-1,204.88	1,277.76	1,172.90	1,147.77	25.13	46.667	
4,500.00	4,435.35	4,677.55	4,207.73	15.75	36.99	2.46	-1,230.59	1,305.37	1,174.65	1,148.84	25.81	45.513	
4,600.00	4,533.21	4,846.69	4,374.53	16.21	37.50	2.50	-1,249.58	1,325.76	1,170.49	1,144.06	26.43	44.288	
4,700.00	4,631.07	5,014.41	4,541.28	16.66	37.86	2.56	-1,261.76	1,338.84	1,160.46	1,133.47	26.99	42.992	
4,800.00	4,728.93	5,179.62	4,706.27	17.12	38.06	2.63	-1,267.24	1,344.71	1,144.68	1,117.18	27.50	41.630	

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

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_NRC 6-9
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 5036.00ft (Original Well Elev)
Reference Site:	WELD_NRC 18-9 PAD	MD Reference:	WELL @ 5036.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_NRC 6-9	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_NRC 6-9	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 1-6-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design WELD_NRC 18-9 PAD - P_NRC 25-9 - P_NRC 25-9 - 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
4,900.00	4,826.79	5,300.15	4,826.79	17.57	38.13	2.69	-1,267.62	1,345.13	1,124.45	1,096.54	27.91	40.287	
5,000.00	4,924.65	5,398.00	4,924.65	18.03	38.19	2.74	-1,267.62	1,345.13	1,103.89	1,075.60	28.29	39.014	
5,100.00	5,022.51	5,495.86	5,022.51	18.48	38.24	2.79	-1,267.62	1,345.13	1,083.33	1,054.65	28.68	37.772	
5,200.00	5,120.37	5,593.72	5,120.37	18.94	38.30	2.84	-1,267.62	1,345.13	1,062.78	1,033.71	29.07	36.560	
5,300.00	5,218.23	5,691.58	5,218.23	19.39	38.35	2.90	-1,267.62	1,345.13	1,042.22	1,012.76	29.46	35.377	
5,400.00	5,316.08	5,789.44	5,316.08	19.85	38.41	2.96	-1,267.62	1,345.13	1,021.66	991.81	29.85	34.223	
5,500.00	5,413.94	5,887.30	5,413.94	20.30	38.47	3.02	-1,267.62	1,345.13	1,001.11	970.86	30.25	33.097	
5,600.00	5,511.80	5,985.16	5,511.80	20.76	38.53	3.08	-1,267.62	1,345.13	980.55	949.91	30.64	31.997	
5,700.00	5,609.66	6,083.02	5,609.66	21.22	38.60	3.15	-1,267.62	1,345.13	960.00	928.96	31.04	30.924	
5,800.00	5,707.52	6,180.88	5,707.52	21.67	38.66	3.22	-1,267.62	1,345.13	939.45	908.00	31.45	29.876	
5,892.83	5,798.37	6,271.72	5,798.37	22.10	38.72	3.28	-1,267.62	1,345.13	920.37	888.55	31.82	28.925	
5,900.00	5,805.38	6,278.74	5,805.38	22.12	38.72	3.29	-1,267.62	1,345.13	918.91	887.07	31.84	28.861	
6,000.00	5,903.63	6,376.98	5,903.63	22.44	38.79	3.33	-1,267.62	1,345.13	900.31	868.24	32.08	28.068	
6,100.00	6,002.46	6,475.82	6,002.46	22.71	38.86	3.37	-1,267.62	1,345.13	885.15	852.88	32.27	27.430	
6,200.00	6,101.77	6,575.12	6,101.77	22.95	38.92	3.40	-1,267.62	1,345.13	873.45	841.03	32.42	26.942	
6,300.00	6,201.42	6,674.78	6,201.42	23.15	38.99	3.43	-1,267.62	1,345.13	865.21	832.68	32.53	26.601	
6,400.00	6,301.30	6,774.66	6,301.30	23.31	39.07	3.44	-1,267.62	1,345.13	860.45	827.86	32.59	26.405	
6,486.71	6,388.00	6,861.36	6,388.00	23.42	39.13	3.44	-1,267.62	1,345.13	859.14	826.53	32.61	26.344	
6,500.00	6,401.29	6,874.64	6,401.29	23.44	39.14	3.44	-1,267.62	1,345.13	859.14	826.48	32.66	26.308	
6,600.00	6,501.29	6,974.64	6,501.29	23.55	39.21	3.44	-1,267.62	1,345.13	859.14	826.15	32.99	26.046	
6,700.00	6,601.29	7,074.64	6,601.29	23.67	39.29	3.44	-1,267.62	1,345.13	859.14	825.82	33.32	25.787	
6,800.00	6,701.29	7,174.64	6,701.29	23.79	39.36	3.44	-1,267.62	1,345.13	859.14	825.49	33.65	25.531	
6,900.00	6,801.29	7,274.64	6,801.29	23.91	39.44	3.44	-1,267.62	1,345.13	859.14	825.15	33.99	25.278	
7,000.00	6,901.29	7,374.64	6,901.29	24.03	39.52	3.44	-1,267.62	1,345.13	859.14	824.81	34.33	25.028	
7,100.00	7,001.29	7,474.64	7,001.29	24.16	39.60	3.44	-1,267.62	1,345.13	859.14	824.47	34.67	24.781	
7,200.00	7,101.29	7,574.64	7,101.29	24.28	39.68	3.44	-1,267.62	1,345.13	859.14	824.12	35.01	24.537	
7,300.00	7,201.29	7,674.64	7,201.29	24.41	39.76	3.44	-1,267.62	1,345.13	859.14	823.78	35.36	24.297	
7,400.00	7,301.29	7,774.64	7,301.29	24.53	39.84	3.44	-1,267.62	1,345.13	859.14	823.43	35.71	24.059	
7,500.00	7,401.29	7,874.64	7,401.29	24.66	39.93	3.44	-1,267.62	1,345.13	859.14	823.08	36.06	23.825	
7,600.00	7,501.29	7,974.64	7,501.29	24.79	40.01	3.44	-1,267.62	1,345.13	859.14	822.72	36.41	23.594	
7,700.00	7,601.29	8,074.64	7,601.29	24.93	40.10	3.44	-1,267.62	1,345.13	859.14	822.37	36.77	23.366	
7,800.00	7,701.29	8,174.64	7,701.29	25.06	40.19	3.44	-1,267.62	1,345.13	859.14	822.01	37.13	23.141	
7,900.00	7,801.29	8,274.64	7,801.29	25.19	40.27	3.44	-1,267.62	1,345.13	859.14	821.65	37.49	22.919	
8,000.00	7,901.29	8,374.64	7,901.29	25.33	40.36	3.44	-1,267.62	1,345.13	859.14	821.29	37.85	22.700	
8,100.00	8,001.29	8,474.64	8,001.29	25.47	40.45	3.44	-1,267.62	1,345.13	859.14	820.93	38.21	22.484	
8,200.00	8,101.29	8,574.64	8,101.29	25.60	40.55	3.44	-1,267.62	1,345.13	859.14	820.56	38.58	22.272	
8,300.00	8,201.29	8,674.64	8,201.29	25.74	40.64	3.44	-1,267.62	1,345.13	859.14	820.20	38.94	22.062	
8,400.00	8,301.29	8,774.64	8,301.29	25.89	40.73	3.44	-1,267.62	1,345.13	859.14	819.83	39.31	21.855	
8,500.00	8,401.29	8,874.64	8,401.29	26.03	40.76	3.44	-1,267.62	1,345.13	862.26	822.71	39.55	21.802	
8,600.00	8,501.29	8,974.64	8,501.29	26.17	40.76	3.44	-1,267.62	1,345.13	876.44	836.70	39.74	22.053	
8,666.71	8,568.00	8,974.64	8,568.00	26.27	40.76	3.44	-1,267.62	1,345.13	892.03	852.16	39.87	22.372	

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_NRC 6-9
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 5036.00ft (Original Well Elev)
Reference Site:	WELD_NRC 18-9 PAD	MD Reference:	WELL @ 5036.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_NRC 6-9	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_NRC 6-9	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 1-6-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design WELD_NRC 18-9 PAD - P_NRC 3-9 - P_NRC 3-9 - PLAN #1 1-6-10 RHS												Offset Site Error:	0.00 ft
Survey Program: 0-MWD												Offset Well Error:	0.00 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Semi Major Axis Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	-89.98	0.02	-47.86	47.86				
100.00	100.00	100.00	100.00	0.10	0.10	-89.98	0.02	-47.86	47.86	47.67	0.19	250.497	
200.00	200.00	200.00	200.00	0.32	0.32	-89.98	0.02	-47.86	47.86	47.22	0.64	74.710	
300.00	300.00	300.00	300.00	0.55	0.55	-89.98	0.02	-47.86	47.86	46.77	1.09	43.902	
400.00	400.00	400.00	400.00	0.77	0.77	-89.98	0.02	-47.86	47.86	46.32	1.54	31.084	
500.00	500.00	500.00	500.00	0.99	0.99	-89.98	0.02	-47.86	47.86	45.87	1.99	24.059	
600.00	600.00	600.00	600.00	1.22	1.22	-89.98	0.02	-47.86	47.86	45.42	2.44	19.624	
700.00	700.00	700.00	700.00	1.44	1.44	-89.98	0.02	-47.86	47.86	44.97	2.89	16.570	
800.00	800.00	800.00	800.00	1.67	1.67	-89.98	0.02	-47.86	47.86	44.52	3.34	14.338	
900.00	900.00	900.00	900.00	1.89	1.89	-89.98	0.02	-47.86	47.86	44.07	3.79	12.636	
1,000.00	1,000.00	1,000.00	1,000.00	2.12	2.12	-89.98	0.02	-47.86	47.86	43.62	4.24	11.296	
1,085.00	1,085.00	1,085.00	1,085.00	2.31	2.31	-89.98	0.02	-47.86	47.86	43.24	4.62	10.361	
1,100.00	1,100.00	1,100.19	1,100.19	2.34	2.34	138.38	0.04	-47.83	47.86	43.17	4.68	10.221	
1,150.58	1,150.57	1,151.41	1,151.41	2.43	2.45	139.52	0.51	-47.27	47.85	42.96	4.88	9.799 CC	
1,200.00	1,199.97	1,201.41	1,201.37	2.52	2.56	142.00	1.54	-46.05	47.89	42.81	5.08	9.433 ES	
1,300.00	1,299.80	1,302.25	1,302.04	2.71	2.78	150.98	5.32	-41.56	48.82	43.34	5.48	8.914 SF	
1,400.00	1,399.37	1,402.41	1,401.76	2.92	3.01	164.04	11.33	-34.42	52.62	46.74	5.88	8.947	
1,500.00	1,498.55	1,501.57	1,500.11	3.15	3.26	178.22	19.50	-24.74	61.49	55.19	6.30	9.762	
1,600.00	1,597.23	1,599.46	1,596.70	3.42	3.53	-169.46	29.70	-12.62	76.60	69.85	6.75	11.352	
1,678.88	1,674.63	1,675.60	1,671.43	3.66	3.76	-161.81	39.10	-1.46	92.89	85.75	7.14	13.015	
1,700.00	1,695.30	1,695.82	1,691.21	3.73	3.83	-160.08	41.81	1.76	97.80	90.54	7.25	13.485	
1,800.00	1,793.16	1,791.90	1,785.01	4.07	4.16	-153.41	55.19	17.64	122.18	114.34	7.84	15.593	
1,900.00	1,891.02	1,888.07	1,878.90	4.43	4.51	-148.96	68.61	33.56	147.63	139.18	8.45	17.476	
2,000.00	1,988.88	1,984.24	1,972.79	4.81	4.88	-145.82	82.02	49.49	173.67	164.59	9.08	19.126	
2,100.00	2,086.74	2,080.42	2,066.69	5.20	5.25	-143.49	95.43	65.41	200.08	190.35	9.73	20.561	
2,200.00	2,184.60	2,176.59	2,160.58	5.61	5.64	-141.71	108.85	81.33	226.73	216.33	10.40	21.808	
2,300.00	2,282.46	2,272.76	2,254.47	6.02	6.04	-140.30	122.26	97.26	253.53	242.46	11.07	22.897	
2,400.00	2,380.32	2,368.93	2,348.36	6.43	6.44	-139.16	135.68	113.18	280.45	268.69	11.76	23.850	
2,500.00	2,478.18	2,465.11	2,442.25	6.86	6.85	-138.22	149.09	129.10	307.46	295.00	12.45	24.688	
2,600.00	2,576.03	2,561.28	2,536.14	7.28	7.26	-137.44	162.51	145.03	334.53	321.37	13.15	25.430	
2,700.00	2,673.89	2,657.45	2,630.04	7.71	7.68	-136.77	175.92	160.95	361.64	347.78	13.86	26.089	
2,800.00	2,771.75	2,753.63	2,723.93	8.15	8.10	-136.19	189.34	176.88	388.80	374.23	14.57	26.678	
2,900.00	2,869.61	2,849.80	2,817.82	8.59	8.52	-135.69	202.75	192.80	415.99	400.70	15.29	27.207	
3,000.00	2,967.47	2,945.97	2,911.71	9.03	8.95	-135.25	216.17	208.72	443.21	427.20	16.01	27.683	
3,100.00	3,065.33	3,042.14	3,005.60	9.47	9.37	-134.86	229.58	224.65	470.45	453.72	16.73	28.114	
3,200.00	3,163.19	3,138.32	3,099.49	9.91	9.80	-134.51	242.99	240.57	497.71	480.25	17.46	28.506	
3,300.00	3,261.05	3,234.49	3,193.39	10.35	10.23	-134.20	256.41	256.50	524.98	506.79	18.19	28.864	
3,400.00	3,358.91	3,330.66	3,287.28	10.80	10.66	-133.92	269.82	272.42	552.26	533.34	18.92	29.191	
3,500.00	3,456.76	3,426.83	3,381.17	11.25	11.10	-133.67	283.24	288.34	579.55	559.90	19.65	29.491	
3,600.00	3,554.62	3,523.01	3,475.06	11.69	11.53	-133.44	296.65	304.27	606.86	586.47	20.39	29.768	
3,700.00	3,652.48	3,619.18	3,568.95	12.14	11.96	-133.23	310.07	320.19	634.17	613.05	21.12	30.024	
3,800.00	3,750.34	3,715.35	3,662.85	12.59	12.40	-133.03	323.48	336.11	661.49	639.63	21.86	30.261	
3,900.00	3,848.20	3,811.52	3,756.74	13.04	12.84	-132.86	336.90	352.04	688.82	666.22	22.60	30.481	
4,000.00	3,946.06	3,907.70	3,850.63	13.49	13.27	-132.69	350.31	367.96	716.15	692.81	23.34	30.685	
4,100.00	4,043.92	4,003.87	3,944.52	13.94	13.71	-132.54	363.73	383.89	743.49	719.41	24.08	30.876	
4,200.00	4,141.78	4,100.04	4,038.41	14.40	14.15	-132.40	377.14	399.81	770.83	746.01	24.82	31.055	
4,300.00	4,239.64	4,196.22	4,132.30	14.85	14.59	-132.27	390.55	415.73	798.18	772.61	25.56	31.222	
4,400.00	4,337.50	4,292.39	4,226.20	15.30	15.02	-132.14	403.97	431.66	825.53	799.22	26.31	31.379	
4,500.00	4,435.35	4,388.56	4,320.09	15.75	15.46	-132.03	417.38	447.58	852.88	825.83	27.05	31.527	
4,600.00	4,533.21	4,484.73	4,413.98	16.21	15.90	-131.92	430.80	463.50	880.23	852.44	27.80	31.666	
4,700.00	4,631.07	4,580.91	4,507.87	16.66	16.34	-131.82	444.21	479.43	907.59	879.05	28.54	31.798	
4,800.00	4,728.93	4,677.08	4,601.76	17.12	16.78	-131.72	457.63	495.35	934.95	905.67	29.29	31.922	

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

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_NRC 6-9
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 5036.00ft (Original Well Elev)
Reference Site:	WELD_NRC 18-9 PAD	MD Reference:	WELL @ 5036.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_NRC 6-9	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_NRC 6-9	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 1-6-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design WELD_NRC 18-9 PAD - P_NRC 3-9 - P_NRC 3-9 - 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
4,900.00	4,826.79	4,773.25	4,695.65	17.57	17.22	-131.63	471.04	511.28	962.32	932.28	30.04	32.039	
5,000.00	4,924.65	4,869.42	4,789.55	18.03	17.66	-131.55	484.46	527.20	989.68	958.90	30.78	32.151	
5,100.00	5,022.51	4,965.60	4,883.44	18.48	18.11	-131.47	497.87	543.12	1,017.05	985.52	31.53	32.256	
5,200.00	5,120.37	5,061.77	4,977.33	18.94	18.55	-131.39	511.29	559.05	1,044.42	1,012.14	32.28	32.357	
5,300.00	5,218.23	5,157.94	5,071.22	19.39	18.99	-131.32	524.70	574.97	1,071.79	1,038.76	33.03	32.452	
5,400.00	5,316.08	5,254.11	5,165.11	19.85	19.43	-131.25	538.11	590.90	1,099.16	1,065.39	33.78	32.543	
5,500.00	5,413.94	5,350.29	5,259.01	20.30	19.87	-131.18	551.53	606.82	1,126.54	1,092.01	34.52	32.630	
5,600.00	5,511.80	5,446.46	5,352.90	20.76	20.31	-131.12	564.94	622.74	1,153.91	1,118.64	35.27	32.713	
5,700.00	5,609.66	5,542.63	5,446.79	21.22	20.76	-131.06	578.36	638.67	1,181.29	1,145.26	36.02	32.792	
5,800.00	5,707.52	5,638.81	5,540.68	21.67	21.20	-131.00	591.77	654.59	1,208.66	1,171.89	36.77	32.867	
5,892.83	5,798.37	5,728.08	5,627.84	22.10	21.61	-130.95	604.23	669.37	1,234.08	1,196.61	37.47	32.935	
5,900.00	5,805.38	5,734.98	5,634.57	22.12	21.64	-130.98	605.19	670.52	1,236.04	1,198.51	37.53	32.935	
6,000.00	5,903.63	5,833.88	5,731.13	22.44	22.09	-131.26	618.97	686.88	1,262.15	1,223.86	38.29	32.961	
6,100.00	6,002.46	5,970.14	5,864.89	22.71	22.57	-131.40	635.68	706.71	1,284.38	1,245.34	39.04	32.901	
6,200.00	6,101.77	6,108.91	6,002.22	22.95	22.96	-131.52	648.46	721.88	1,301.34	1,261.67	39.67	32.807	
6,300.00	6,201.42	6,249.51	6,142.18	23.15	23.26	-131.63	657.02	732.05	1,312.90	1,272.71	40.19	32.668	
6,400.00	6,301.30	6,391.23	6,283.74	23.31	23.49	-131.72	661.17	736.97	1,319.00	1,278.39	40.61	32.479	
6,486.71	6,388.00	6,495.50	6,388.00	23.42	23.62	-0.07	661.56	737.44	1,320.15	1,279.27	40.88	32.292	
6,500.00	6,401.29	6,508.79	6,401.29	23.44	23.63	-0.07	661.56	737.44	1,320.15	1,279.23	40.92	32.263	
6,600.00	6,501.29	6,608.79	6,501.29	23.55	23.76	-0.07	661.56	737.44	1,320.15	1,278.95	41.20	32.039	
6,700.00	6,601.29	6,708.79	6,601.29	23.67	23.89	-0.07	661.56	737.44	1,320.15	1,278.66	41.49	31.817	
6,800.00	6,701.29	6,808.79	6,701.29	23.79	24.02	-0.07	661.56	737.44	1,320.15	1,278.37	41.78	31.596	
6,900.00	6,801.29	6,908.79	6,801.29	23.91	24.16	-0.07	661.56	737.44	1,320.15	1,278.07	42.08	31.375	
7,000.00	6,901.29	7,008.79	6,901.29	24.03	24.29	-0.07	661.56	737.44	1,320.15	1,277.78	42.37	31.156	
7,100.00	7,001.29	7,108.79	7,001.29	24.16	24.43	-0.07	661.56	737.44	1,320.15	1,277.48	42.67	30.938	
7,200.00	7,101.29	7,208.79	7,101.29	24.28	24.56	-0.07	661.56	737.44	1,320.15	1,277.18	42.97	30.721	
7,300.00	7,201.29	7,308.79	7,201.29	24.41	24.70	-0.07	661.56	737.44	1,320.15	1,276.87	43.28	30.505	
7,400.00	7,301.29	7,408.79	7,301.29	24.53	24.84	-0.07	661.56	737.44	1,320.15	1,276.57	43.58	30.290	
7,500.00	7,401.29	7,508.79	7,401.29	24.66	24.98	-0.07	661.56	737.44	1,320.15	1,276.26	43.89	30.077	
7,600.00	7,501.29	7,608.79	7,501.29	24.79	25.12	-0.07	661.56	737.44	1,320.15	1,275.95	44.20	29.865	
7,700.00	7,601.29	7,708.79	7,601.29	24.93	25.27	-0.07	661.56	737.44	1,320.15	1,275.63	44.52	29.654	
7,800.00	7,701.29	7,808.79	7,701.29	25.06	25.41	-0.07	661.56	737.44	1,320.15	1,275.32	44.83	29.445	
7,900.00	7,801.29	7,908.79	7,801.29	25.19	25.56	-0.07	661.56	737.44	1,320.15	1,275.00	45.15	29.237	
8,000.00	7,901.29	8,008.79	7,901.29	25.33	25.70	-0.07	661.56	737.44	1,320.15	1,274.68	45.47	29.031	
8,100.00	8,001.29	8,108.79	8,001.29	25.47	25.85	-0.07	661.56	737.44	1,320.15	1,274.35	45.80	28.826	
8,200.00	8,101.29	8,208.79	8,101.29	25.60	26.00	-0.07	661.56	737.44	1,320.15	1,274.03	46.12	28.623	
8,300.00	8,201.29	8,308.79	8,201.29	25.74	26.15	-0.07	661.56	737.44	1,320.15	1,273.70	46.45	28.422	
8,400.00	8,301.29	8,408.79	8,301.29	25.89	26.30	-0.07	661.56	737.44	1,320.15	1,273.37	46.78	28.222	
8,500.00	8,401.29	8,508.79	8,401.29	26.03	26.45	-0.07	661.56	737.44	1,320.15	1,273.04	47.11	28.024	
8,600.00	8,501.29	8,608.79	8,501.29	26.17	26.61	-0.07	661.56	737.44	1,320.15	1,272.71	47.44	27.827	
8,666.71	8,568.00	8,630.50	8,523.00	26.27	26.64	-0.07	661.56	737.44	1,320.92	1,273.33	47.59	27.757	

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_NRC 6-9
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 5036.00ft (Original Well Elev)
Reference Site:	WELD_NRC 18-9 PAD	MD Reference:	WELL @ 5036.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_NRC 6-9	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_NRC 6-9	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 1-6-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design WELD_NRC 18-9 PAD - P_NRC 5-9 - P_NRC 5-9 - 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	
0.00	0.00	0.00	0.00	0.00	0.00	-89.99	0.01	-64.09	64.09				
100.00	100.00	100.00	100.00	0.10	0.10	-89.99	0.01	-64.09	64.09	63.90	0.19	335.461	
200.00	200.00	200.00	200.00	0.32	0.32	-89.99	0.01	-64.09	64.09	63.45	0.64	100.050	
300.00	300.00	300.00	300.00	0.55	0.55	-89.99	0.01	-64.09	64.09	63.00	1.09	58.792	
400.00	400.00	400.00	400.00	0.77	0.77	-89.99	0.01	-64.09	64.09	62.55	1.54	41.627	
500.00	500.00	500.00	500.00	0.99	0.99	-89.99	0.01	-64.09	64.09	62.10	1.99	32.219	
600.00	600.00	600.00	600.00	1.22	1.22	-89.99	0.01	-64.09	64.09	61.65	2.44	26.280	
700.00	700.00	700.00	700.00	1.44	1.44	-89.99	0.01	-64.09	64.09	61.20	2.89	22.190	
800.00	800.00	800.00	800.00	1.67	1.67	-89.99	0.01	-64.09	64.09	60.75	3.34	19.201	
900.00	900.00	900.00	900.00	1.89	1.89	-89.99	0.01	-64.09	64.09	60.30	3.79	16.922	
1,000.00	1,000.00	1,000.00	1,000.00	2.12	2.12	-89.99	0.01	-64.09	64.09	59.85	4.24	15.127	
1,085.00	1,085.00	1,085.00	1,085.00	2.31	2.31	-89.99	0.01	-64.09	64.09	59.47	4.62	13.876 CC	
1,100.00	1,100.00	1,099.80	1,099.80	2.34	2.34	138.30	-0.02	-64.11	64.14	59.47	4.68	13.711 ES	
1,200.00	1,199.97	1,198.35	1,198.32	2.52	2.51	138.05	-1.76	-65.47	67.22	62.19	5.03	13.365 SF	
1,300.00	1,299.80	1,296.53	1,296.34	2.71	2.70	137.49	-6.14	-68.90	75.00	69.61	5.39	13.910	
1,400.00	1,399.37	1,394.01	1,393.41	2.92	2.89	136.78	-13.11	-74.35	87.48	81.71	5.77	15.157	
1,500.00	1,498.55	1,490.47	1,489.12	3.15	3.11	136.05	-22.56	-81.74	104.60	98.42	6.18	16.935	
1,600.00	1,597.23	1,585.74	1,583.19	3.42	3.35	135.35	-34.38	-90.98	126.28	119.66	6.62	19.085	
1,678.88	1,674.63	1,662.15	1,658.46	3.66	3.57	135.18	-44.76	-99.09	145.84	138.84	7.00	20.838	
1,700.00	1,695.30	1,682.56	1,678.56	3.73	3.63	135.28	-47.53	-101.26	151.28	144.17	7.11	21.281	
1,800.00	1,793.16	1,779.18	1,773.73	4.07	3.93	135.69	-60.66	-111.53	177.03	169.38	7.65	23.142	
1,900.00	1,891.02	1,875.80	1,868.91	4.43	4.24	136.00	-73.79	-121.79	202.79	194.58	8.22	24.680	
2,000.00	1,988.88	1,972.42	1,964.08	4.81	4.56	136.24	-86.92	-132.06	228.56	219.75	8.80	25.960	
2,100.00	2,086.74	2,069.04	2,059.25	5.20	4.89	136.43	-100.05	-142.32	254.33	244.92	9.41	27.032	
2,200.00	2,184.60	2,165.66	2,154.42	5.61	5.23	136.58	-113.18	-152.59	280.10	270.07	10.03	27.938	
2,300.00	2,282.46	2,262.28	2,249.60	6.02	5.58	136.71	-126.30	-162.85	305.87	295.21	10.65	28.709	
2,400.00	2,380.32	2,358.90	2,344.77	6.43	5.93	136.82	-139.43	-173.12	331.64	320.35	11.29	29.371	
2,500.00	2,478.18	2,455.52	2,439.94	6.86	6.28	136.91	-152.56	-183.38	357.41	345.48	11.94	29.943	
2,600.00	2,576.03	2,552.14	2,535.11	7.28	6.64	136.99	-165.69	-193.65	383.19	370.60	12.59	30.442	
2,700.00	2,673.89	2,648.76	2,630.28	7.71	7.01	137.06	-178.82	-203.91	408.96	395.72	13.24	30.879	
2,800.00	2,771.75	2,745.38	2,725.46	8.15	7.37	137.13	-191.95	-214.18	434.74	420.83	13.90	31.265	
2,900.00	2,869.61	2,842.00	2,820.63	8.59	7.74	137.18	-205.08	-224.44	460.51	445.94	14.57	31.609	
3,000.00	2,967.47	2,938.62	2,915.80	9.03	8.11	137.23	-218.20	-234.71	486.29	471.05	15.24	31.915	
3,100.00	3,065.33	3,035.24	3,010.97	9.47	8.48	137.27	-231.33	-244.97	512.06	496.16	15.91	32.191	
3,200.00	3,163.19	3,131.86	3,106.14	9.91	8.85	137.31	-244.46	-255.24	537.84	521.26	16.58	32.440	
3,300.00	3,261.05	3,228.48	3,201.32	10.35	9.23	137.35	-257.59	-265.50	563.62	546.36	17.25	32.666	
3,400.00	3,358.91	3,325.10	3,296.49	10.80	9.60	137.38	-270.72	-275.77	589.39	571.46	17.93	32.872	
3,500.00	3,456.76	3,421.72	3,391.66	11.25	9.98	137.41	-283.85	-286.03	615.17	596.56	18.61	33.060	
3,600.00	3,554.62	3,518.34	3,486.83	11.69	10.36	137.44	-296.98	-296.30	640.95	621.66	19.29	33.233	
3,700.00	3,652.48	3,614.96	3,582.00	12.14	10.74	137.47	-310.10	-306.56	666.72	646.76	19.97	33.393	
3,800.00	3,750.34	3,711.58	3,677.18	12.59	11.11	137.49	-323.23	-316.83	692.50	671.86	20.65	33.541	
3,900.00	3,848.20	3,808.20	3,772.35	13.04	11.49	137.51	-336.36	-327.09	718.28	696.95	21.33	33.679	
4,000.00	3,946.06	3,904.82	3,867.52	13.49	11.87	137.54	-349.49	-337.36	744.06	722.05	22.01	33.807	
4,100.00	4,043.92	4,001.44	3,962.69	13.94	12.26	137.55	-362.62	-347.62	769.83	747.14	22.69	33.927	
4,200.00	4,141.78	4,098.06	4,057.86	14.40	12.64	137.57	-375.75	-357.89	795.61	772.24	23.37	34.039	
4,300.00	4,239.64	4,194.68	4,153.04	14.85	13.02	137.59	-388.88	-368.15	821.39	797.33	24.06	34.144	
4,400.00	4,337.50	4,291.30	4,248.21	15.30	13.40	137.61	-402.00	-378.42	847.17	822.43	24.74	34.244	
4,500.00	4,435.35	4,387.92	4,343.38	15.75	13.78	137.62	-415.13	-388.68	872.95	847.52	25.42	34.338	
4,600.00	4,533.21	4,484.54	4,438.55	16.21	14.17	137.63	-428.26	-398.95	898.72	872.62	26.11	34.427	
4,700.00	4,631.07	4,581.16	4,533.72	16.66	14.55	137.65	-441.39	-409.21	924.50	897.71	26.79	34.504	
4,800.00	4,728.93	4,677.78	4,628.90	17.12	14.93	137.66	-454.52	-419.48	950.28	922.79	27.49	34.571	
4,900.00	4,826.79	4,774.40	4,724.07	17.57	15.32	137.67	-467.65	-429.74	976.06	947.88	28.18	34.634	

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

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_NRC 6-9
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 5036.00ft (Original Well Elev)
Reference Site:	WELD_NRC 18-9 PAD	MD Reference:	WELL @ 5036.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_NRC 6-9	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_NRC 6-9	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 1-6-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design WELD_NRC 18-9 PAD - P_NRC 5-9 - P_NRC 5-9 - 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	4,924.65	4,871.02	4,819.24	18.03	15.70	137.68	-480.78	-440.01	1,001.84	972.96	28.88	34.693	
5,100.00	5,022.51	4,967.64	4,914.41	18.48	16.09	137.69	-493.90	-450.27	1,027.61	998.04	29.57	34.749	
5,200.00	5,120.37	5,064.26	5,009.58	18.94	16.47	137.70	-507.03	-460.54	1,053.39	1,023.12	30.27	34.802	
5,300.00	5,218.23	5,160.88	5,104.76	19.39	16.86	137.71	-520.16	-470.80	1,079.17	1,048.21	30.96	34.852	
5,400.00	5,316.08	5,257.50	5,199.93	19.85	17.24	137.72	-533.29	-481.07	1,104.95	1,073.29	31.66	34.900	
5,500.00	5,413.94	5,354.12	5,295.10	20.30	17.63	137.73	-546.42	-491.33	1,130.73	1,098.37	32.36	34.945	
5,600.00	5,511.80	5,450.74	5,390.27	20.76	18.01	137.74	-559.55	-501.60	1,156.51	1,123.45	33.05	34.988	
5,700.00	5,609.66	5,547.36	5,485.44	21.22	18.40	137.75	-572.68	-511.86	1,182.28	1,148.53	33.75	35.029	
5,800.00	5,707.52	5,643.98	5,580.62	21.67	18.78	137.76	-585.81	-522.13	1,208.06	1,173.61	34.45	35.067	
5,892.83	5,798.37	5,733.68	5,668.97	22.10	19.14	137.76	-597.99	-531.66	1,231.99	1,196.90	35.10	35.102	
5,900.00	5,805.38	5,740.61	5,675.79	22.12	19.17	137.79	-598.93	-532.39	1,233.83	1,198.68	35.15	35.100	
6,000.00	5,903.63	5,837.59	5,771.32	22.44	19.56	138.07	-612.11	-542.70	1,258.18	1,222.34	35.84	35.108	
6,100.00	6,002.46	5,935.11	5,867.38	22.71	19.94	138.21	-625.36	-553.06	1,280.00	1,243.51	36.49	35.078	
6,200.00	6,101.77	6,066.39	5,997.08	22.95	20.34	138.19	-641.26	-565.49	1,298.19	1,261.08	37.12	34.977	
6,300.00	6,201.42	6,204.13	6,134.02	23.15	20.65	138.18	-652.91	-574.59	1,310.94	1,273.31	37.63	34.835	
6,400.00	6,301.30	6,343.23	6,272.87	23.31	20.89	138.19	-659.39	-579.67	1,318.15	1,280.10	38.05	34.642	
6,486.71	6,388.00	6,458.39	6,388.00	23.42	21.05	-90.09	-660.77	-580.74	1,319.90	1,281.55	38.35	34.417	
6,500.00	6,401.29	6,471.68	6,401.29	23.44	21.07	-90.09	-660.77	-580.74	1,319.90	1,281.51	38.39	34.382	
6,600.00	6,501.29	6,571.68	6,501.29	23.55	21.19	-90.09	-660.77	-580.74	1,319.90	1,281.24	38.66	34.140	
6,700.00	6,601.29	6,671.68	6,601.29	23.67	21.32	-90.09	-660.77	-580.74	1,319.90	1,280.97	38.93	33.902	
6,800.00	6,701.29	6,771.68	6,701.29	23.79	21.44	-90.09	-660.77	-580.74	1,319.90	1,280.70	39.21	33.664	
6,900.00	6,801.29	6,871.68	6,801.29	23.91	21.57	-90.09	-660.77	-580.74	1,319.90	1,280.42	39.49	33.427	
7,000.00	6,901.29	6,971.68	6,901.29	24.03	21.70	-90.09	-660.77	-580.74	1,319.90	1,280.14	39.77	33.191	
7,100.00	7,001.29	7,071.68	7,001.29	24.16	21.83	-90.09	-660.77	-580.74	1,319.90	1,279.85	40.05	32.955	
7,200.00	7,101.29	7,171.68	7,101.29	24.28	21.96	-90.09	-660.77	-580.74	1,319.90	1,279.56	40.34	32.720	
7,300.00	7,201.29	7,271.68	7,201.29	24.41	22.10	-90.09	-660.77	-580.74	1,319.90	1,279.27	40.63	32.487	
7,400.00	7,301.29	7,371.68	7,301.29	24.53	22.23	-90.09	-660.77	-580.74	1,319.90	1,278.98	40.92	32.254	
7,500.00	7,401.29	7,471.68	7,401.29	24.66	22.37	-90.09	-660.77	-580.74	1,319.90	1,278.68	41.22	32.022	
7,600.00	7,501.29	7,571.68	7,501.29	24.79	22.51	-90.09	-660.77	-580.74	1,319.90	1,278.39	41.52	31.792	
7,700.00	7,601.29	7,671.68	7,601.29	24.93	22.65	-90.09	-660.77	-580.74	1,319.90	1,278.08	41.82	31.563	
7,800.00	7,701.29	7,771.68	7,701.29	25.06	22.79	-90.09	-660.77	-580.74	1,319.90	1,277.78	42.12	31.335	
7,900.00	7,801.29	7,871.68	7,801.29	25.19	22.93	-90.09	-660.77	-580.74	1,319.90	1,277.47	42.43	31.108	
8,000.00	7,901.29	7,971.68	7,901.29	25.33	23.08	-90.09	-660.77	-580.74	1,319.90	1,277.16	42.74	30.883	
8,100.00	8,001.29	8,071.68	8,001.29	25.47	23.22	-90.09	-660.77	-580.74	1,319.90	1,276.85	43.05	30.660	
8,200.00	8,101.29	8,171.68	8,101.29	25.60	23.37	-90.09	-660.77	-580.74	1,319.90	1,276.54	43.36	30.438	
8,300.00	8,201.29	8,271.68	8,201.29	25.74	23.51	-90.09	-660.77	-580.74	1,319.90	1,276.22	43.68	30.217	
8,400.00	8,301.29	8,371.68	8,301.29	25.89	23.66	-90.09	-660.77	-580.74	1,319.90	1,275.90	44.00	29.998	
8,500.00	8,401.29	8,471.68	8,401.29	26.03	23.81	-90.09	-660.77	-580.74	1,319.90	1,275.58	44.32	29.781	
8,600.00	8,501.29	8,571.68	8,501.29	26.17	23.96	-90.09	-660.77	-580.74	1,319.90	1,275.26	44.64	29.565	
8,638.02	8,539.31	8,609.70	8,539.31	26.22	24.02	-90.09	-660.77	-580.74	1,319.90	1,275.14	44.77	29.484	
8,666.71	8,568.00	8,623.39	8,553.00	26.27	24.04	-90.09	-660.77	-580.74	1,319.99	1,275.15	44.84	29.440	

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_NRC 6-9
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 5036.00ft (Original Well Elev)
Reference Site:	WELD_NRC 18-9 PAD	MD Reference:	WELL @ 5036.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_NRC 6-9	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_NRC 6-9	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 1-6-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 ft
Survey Program: 0-UNKNOWN												Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
0.00	0.00	0.00	0.00	0.00	0.00	-128.92	-50.62	-62.69	83.02				
100.00	100.00	80.00	80.00	0.10	1.60	-128.92	-50.62	-62.69	80.58	78.88	1.70	47.523	
200.00	200.00	180.00	180.00	0.32	5.20	-128.92	-50.62	-62.69	80.58	75.06	5.52	14.597	
300.00	300.00	280.00	280.00	0.55	9.20	-128.92	-50.62	-62.69	80.58	70.83	9.75	8.269	
400.00	400.00	380.00	380.00	0.77	13.20	-128.92	-50.62	-62.69	80.58	66.61	13.97	5.768	
500.00	500.00	480.00	480.00	0.99	17.20	-128.92	-50.62	-62.69	80.58	62.38	18.19	4.429	
600.00	600.00	580.00	580.00	1.22	21.20	-128.92	-50.62	-62.69	80.58	58.16	22.42	3.594	
700.00	700.00	680.00	680.00	1.44	25.20	-128.92	-50.62	-62.69	80.58	53.93	26.64	3.024	
800.00	800.00	780.00	780.00	1.67	29.20	-128.92	-50.62	-62.69	80.58	49.71	30.87	2.610	
900.00	900.00	880.00	880.00	1.89	33.20	-128.92	-50.62	-62.69	80.58	45.48	35.09	2.296	
1,000.00	1,000.00	980.00	980.00	2.12	37.20	-128.92	-50.62	-62.69	80.58	41.26	39.32	2.049	
1,085.00	1,085.00	1,065.00	1,065.00	2.31	40.60	-128.92	-50.62	-62.69	80.58	37.67	42.91	1.878 CC	
1,100.00	1,100.00	1,080.00	1,080.00	2.34	41.20	99.41	-50.62	-62.69	80.58	37.04	43.54	1.851	
1,200.00	1,199.97	1,179.97	1,179.97	2.52	45.20	100.98	-50.62	-62.69	80.99	33.27	47.72	1.697	
1,300.00	1,299.80	1,279.80	1,279.80	2.71	49.19	104.89	-50.62	-62.69	82.28	30.38	51.90	1.585	
1,400.00	1,399.37	1,379.37	1,379.37	2.92	53.17	110.83	-50.62	-62.69	85.13	29.06	56.06	1.518 ES	
1,500.00	1,498.55	1,478.55	1,478.55	3.15	57.14	118.23	-50.62	-62.69	90.45	30.28	60.17	1.503 SF	
1,600.00	1,597.23	1,577.23	1,577.23	3.42	61.09	126.27	-50.62	-62.69	99.18	35.02	64.15	1.546	
1,678.88	1,674.63	1,654.63	1,654.63	3.66	64.19	132.51	-50.62	-62.69	108.93	41.75	67.17	1.622	
1,700.00	1,695.30	1,675.30	1,675.30	3.73	65.01	134.13	-50.62	-62.69	111.95	43.94	68.01	1.646	
1,800.00	1,793.16	1,773.16	1,773.16	4.07	68.93	140.74	-50.62	-62.69	127.28	55.31	71.97	1.768	
1,900.00	1,891.02	1,871.02	1,871.02	4.43	72.84	145.90	-50.62	-62.69	143.93	67.98	75.95	1.895	
2,000.00	1,988.88	1,968.88	1,968.88	4.81	76.76	149.97	-50.62	-62.69	161.49	81.53	79.95	2.020	
2,100.00	2,086.74	2,066.74	2,066.74	5.20	80.67	153.25	-50.62	-62.69	179.69	95.72	83.97	2.140	
2,200.00	2,184.60	2,164.60	2,164.60	5.61	84.58	155.91	-50.62	-62.69	198.35	110.36	88.00	2.254	
2,300.00	2,282.46	2,262.46	2,262.46	6.02	88.50	158.12	-50.62	-62.69	217.37	125.33	92.03	2.362	
2,400.00	2,380.32	2,360.32	2,360.32	6.43	92.41	159.97	-50.62	-62.69	236.64	140.56	96.08	2.463	
2,500.00	2,478.18	2,458.18	2,458.18	6.86	96.33	161.55	-50.62	-62.69	256.12	155.99	100.13	2.558	
2,600.00	2,576.03	2,556.03	2,556.03	7.28	100.24	162.90	-50.62	-62.69	275.76	171.57	104.19	2.647	
2,700.00	2,673.89	2,653.89	2,653.89	7.71	104.16	164.07	-50.62	-62.69	295.53	187.27	108.26	2.730	
2,800.00	2,771.75	2,751.75	2,751.75	8.15	108.07	165.10	-50.62	-62.69	315.40	203.08	112.32	2.808	
2,900.00	2,869.61	2,849.61	2,849.61	8.59	111.98	166.00	-50.62	-62.69	335.36	218.97	116.39	2.881	
3,000.00	2,967.47	2,947.47	2,947.47	9.03	115.90	166.80	-50.62	-62.69	355.39	234.92	120.47	2.950	
3,100.00	3,065.33	3,045.33	3,045.33	9.47	119.81	167.52	-50.62	-62.69	375.48	250.94	124.54	3.015	
3,200.00	3,163.19	3,143.19	3,143.19	9.91	123.73	168.16	-50.62	-62.69	395.62	267.00	128.62	3.076	
3,300.00	3,261.05	3,241.05	3,241.05	10.35	127.64	168.74	-50.62	-62.69	415.80	283.10	132.70	3.133	
3,400.00	3,358.91	3,338.91	3,338.91	10.80	131.56	169.27	-50.62	-62.69	436.02	299.24	136.78	3.188	
3,500.00	3,456.76	3,436.76	3,436.76	11.25	135.47	169.75	-50.62	-62.69	456.27	315.41	140.86	3.239	
3,600.00	3,554.62	3,534.62	3,534.62	11.69	139.38	170.19	-50.62	-62.69	476.55	331.61	144.94	3.288	
3,700.00	3,652.48	3,632.48	3,632.48	12.14	143.30	170.59	-50.62	-62.69	496.86	347.83	149.03	3.334	
3,800.00	3,750.34	3,730.34	3,730.34	12.59	147.21	170.97	-50.62	-62.69	517.19	364.07	153.11	3.378	
3,900.00	3,848.20	3,828.20	3,828.20	13.04	151.13	171.31	-50.62	-62.69	537.53	380.34	157.20	3.419	
4,000.00	3,946.06	3,926.06	3,926.06	13.49	155.04	171.63	-50.62	-62.69	557.90	396.61	161.28	3.459	
4,100.00	4,043.92	4,023.92	4,023.92	13.94	158.96	171.93	-50.62	-62.69	578.28	412.90	165.37	3.497	
4,200.00	4,141.78	4,121.78	4,121.78	14.40	162.87	172.20	-50.62	-62.69	598.67	429.21	169.46	3.533	
4,300.00	4,239.64	4,219.64	4,219.64	14.85	166.79	172.46	-50.62	-62.69	619.08	445.53	173.55	3.567	
4,400.00	4,337.50	4,317.50	4,317.50	15.30	170.70	172.70	-50.62	-62.69	639.49	461.85	177.64	3.600	
4,500.00	4,435.35	4,415.35	4,415.35	15.75	174.61	172.93	-50.62	-62.69	659.92	478.19	181.73	3.631	
4,600.00	4,533.21	4,513.21	4,513.21	16.21	178.53	173.14	-50.62	-62.69	680.36	494.54	185.82	3.661	
4,700.00	4,631.07	4,611.07	4,611.07	16.66	182.44	173.34	-50.62	-62.69	700.80	510.89	189.91	3.690	
4,800.00	4,728.93	4,708.93	4,708.93	17.12	186.36	173.53	-50.62	-62.69	721.26	527.25	194.00	3.718	
4,900.00	4,826.79	4,806.79	4,806.79	17.57	190.27	173.71	-50.62	-62.69	741.72	543.62	198.09	3.744	

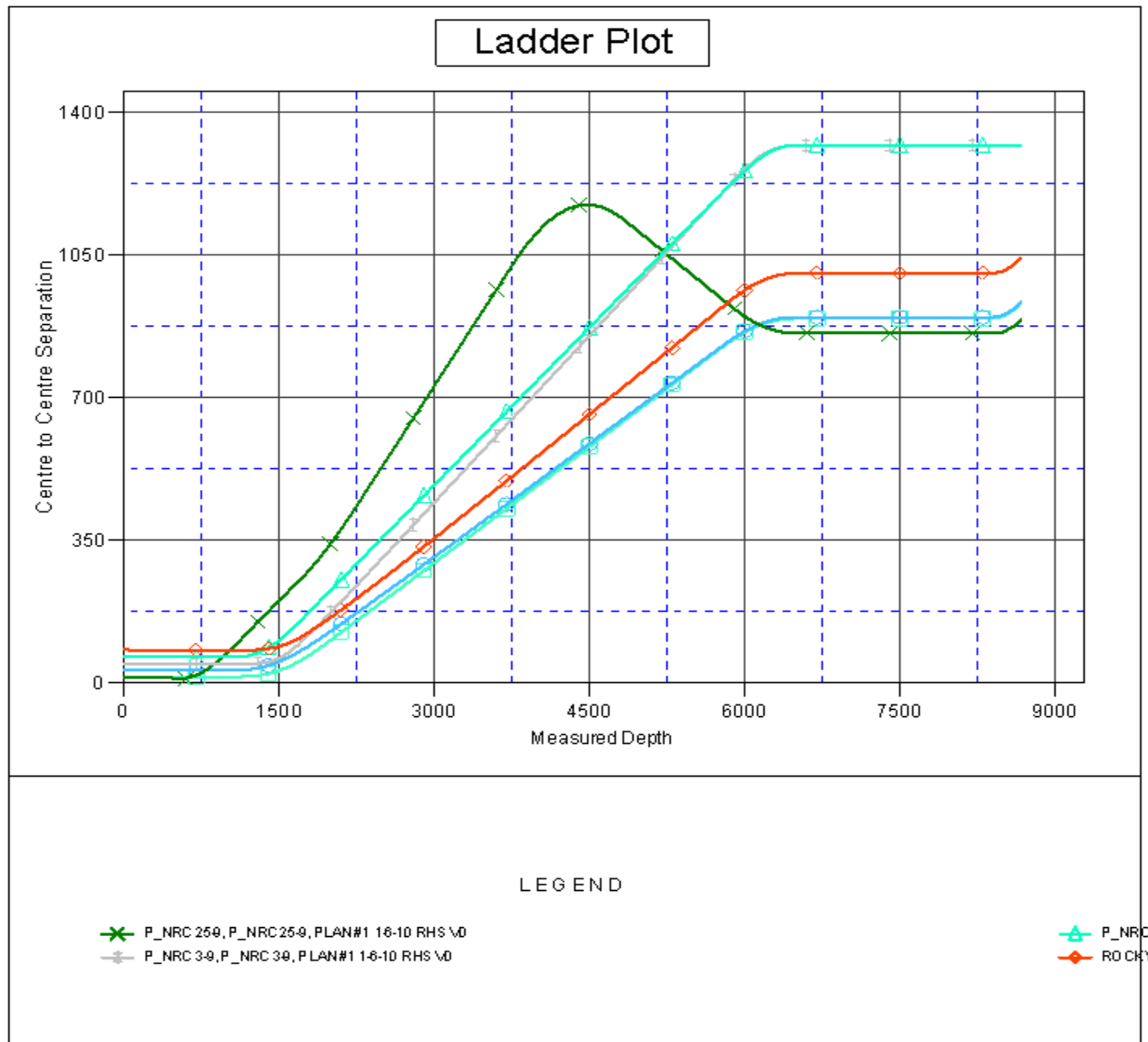
CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_NRC 6-9
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 5036.00ft (Original Well Elev)
Reference Site:	WELD_NRC 18-9 PAD	MD Reference:	WELL @ 5036.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_NRC 6-9	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_NRC 6-9	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 1-6-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design WELD_NRC 18-9 PAD - ROCKY MTN FUEL CO UNIT G #2 EXISTING - ROCKY MTN FUEL CO UNIT												Offset Site Error:	0.00 ft
Survey Program: 0-UNKNOWN												Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5,000.00	4,924.65	4,904.65	4,904.65	18.03	194.19	173.88	-50.62	-62.69	762.18	560.00	202.18	3.770	
5,100.00	5,022.51	5,002.51	5,002.51	18.48	198.10	174.04	-50.62	-62.69	782.65	576.38	206.28	3.794	
5,200.00	5,120.37	5,100.37	5,100.37	18.94	202.01	174.20	-50.62	-62.69	803.13	592.76	210.37	3.818	
5,300.00	5,218.23	5,198.23	5,198.23	19.39	205.93	174.34	-50.62	-62.69	823.62	609.16	214.46	3.840	
5,400.00	5,316.08	5,296.08	5,296.08	19.85	209.84	174.48	-50.62	-62.69	844.11	625.55	218.55	3.862	
5,500.00	5,413.94	5,393.94	5,393.94	20.30	213.76	174.61	-50.62	-62.69	864.60	641.95	222.65	3.883	
5,600.00	5,511.80	5,491.80	5,491.80	20.76	217.67	174.73	-50.62	-62.69	885.09	658.35	226.74	3.904	
5,700.00	5,609.66	5,589.66	5,589.66	21.22	221.59	174.85	-50.62	-62.69	905.60	674.76	230.84	3.923	
5,800.00	5,707.52	5,687.52	5,687.52	21.67	225.50	174.97	-50.62	-62.69	926.10	691.17	234.93	3.942	
5,892.83	5,798.37	5,778.37	5,778.37	22.10	229.13	175.07	-50.62	-62.69	945.14	706.41	238.73	3.959	
5,900.00	5,805.38	5,785.38	5,785.38	22.12	229.42	175.08	-50.62	-62.69	946.60	707.47	239.13	3.959	
6,000.00	5,903.63	5,883.63	5,883.63	22.44	233.35	175.21	-50.62	-62.69	965.16	720.57	244.59	3.946	
6,100.00	6,002.46	5,982.46	5,982.46	22.71	237.30	175.31	-50.62	-62.69	980.29	730.36	249.93	3.922	
6,200.00	6,101.77	6,081.77	6,081.77	22.95	241.27	175.38	-50.62	-62.69	991.98	736.96	255.02	3.890	
6,300.00	6,201.42	6,181.42	6,181.42	23.15	245.26	175.43	-50.62	-62.69	1,000.21	740.38	259.83	3.849	
6,400.00	6,301.30	6,281.30	6,281.30	23.31	249.25	175.46	-50.62	-62.69	1,004.96	740.62	264.34	3.802	
6,486.71	6,388.00	6,368.00	6,368.00	23.42	252.72	-52.83	-50.62	-62.69	1,006.27	738.26	268.01	3.755	
6,500.00	6,401.29	6,381.29	6,381.29	23.44	253.25	-52.83	-50.62	-62.69	1,006.27	737.70	268.57	3.747	
6,600.00	6,501.29	6,481.29	6,481.29	23.55	257.25	-52.83	-50.62	-62.69	1,006.27	733.53	272.74	3.689	
6,700.00	6,601.29	6,581.29	6,581.29	23.67	261.25	-52.83	-50.62	-62.69	1,006.27	729.36	276.91	3.634	
6,800.00	6,701.29	6,681.29	6,681.29	23.79	265.25	-52.83	-50.62	-62.69	1,006.27	725.18	281.09	3.580	
6,900.00	6,801.29	6,781.29	6,781.29	23.91	269.25	-52.83	-50.62	-62.69	1,006.27	721.01	285.26	3.528	
7,000.00	6,901.29	6,881.29	6,881.29	24.03	273.25	-52.83	-50.62	-62.69	1,006.27	716.83	289.44	3.477	
7,100.00	7,001.29	6,981.29	6,981.29	24.16	277.25	-52.83	-50.62	-62.69	1,006.27	712.65	293.62	3.427	
7,200.00	7,101.29	7,081.29	7,081.29	24.28	281.25	-52.83	-50.62	-62.69	1,006.27	708.47	297.80	3.379	
7,300.00	7,201.29	7,181.29	7,181.29	24.41	285.25	-52.83	-50.62	-62.69	1,006.27	704.29	301.98	3.332	
7,400.00	7,301.29	7,281.29	7,281.29	24.53	289.25	-52.83	-50.62	-62.69	1,006.27	700.11	306.16	3.287	
7,500.00	7,401.29	7,381.29	7,381.29	24.66	293.25	-52.83	-50.62	-62.69	1,006.27	695.93	310.34	3.242	
7,600.00	7,501.29	7,481.29	7,481.29	24.79	297.25	-52.83	-50.62	-62.69	1,006.27	691.75	314.52	3.199	
7,700.00	7,601.29	7,581.29	7,581.29	24.93	301.25	-52.83	-50.62	-62.69	1,006.27	687.56	318.71	3.157	
7,800.00	7,701.29	7,681.29	7,681.29	25.06	305.25	-52.83	-50.62	-62.69	1,006.27	683.38	322.89	3.116	
7,900.00	7,801.29	7,781.29	7,781.29	25.19	309.25	-52.83	-50.62	-62.69	1,006.27	679.19	327.08	3.077	
8,000.00	7,901.29	7,881.29	7,881.29	25.33	313.25	-52.83	-50.62	-62.69	1,006.27	675.01	331.26	3.038	
8,100.00	8,001.29	7,981.29	7,981.29	25.47	317.25	-52.83	-50.62	-62.69	1,006.27	670.82	335.45	3.000	
8,200.00	8,101.29	8,081.29	8,081.29	25.60	321.25	-52.83	-50.62	-62.69	1,006.27	666.63	339.64	2.963	
8,300.00	8,201.29	8,181.29	8,181.29	25.74	325.25	-52.83	-50.62	-62.69	1,006.27	662.44	343.83	2.927	
8,366.23	8,267.52	8,247.52	8,247.52	25.84	327.90	-52.83	-50.62	-62.69	1,006.27	659.67	346.60	2.903	
8,400.00	8,301.29	8,280.00	8,280.00	25.89	329.20	-52.83	-50.62	-62.69	1,006.27	658.30	347.97	2.892	
8,500.00	8,401.29	8,280.00	8,280.00	26.03	329.20	-52.83	-50.62	-62.69	1,011.36	663.20	348.16	2.905	
8,600.00	8,501.29	8,280.00	8,280.00	26.17	329.20	-52.83	-50.62	-62.69	1,026.20	677.85	348.35	2.946	
8,666.71	8,568.00	8,280.00	8,280.00	26.27	329.20	-52.83	-50.62	-62.69	1,041.35	692.87	348.48	2.988	

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_NRC 6-9
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 5036.00ft (Original Well Elev)
Reference Site:	WELD_NRC 18-9 PAD	MD Reference:	WELL @ 5036.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_NRC 6-9	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_NRC 6-9	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 1-6-10 RHS	Offset TVD Reference:	Offset Datum

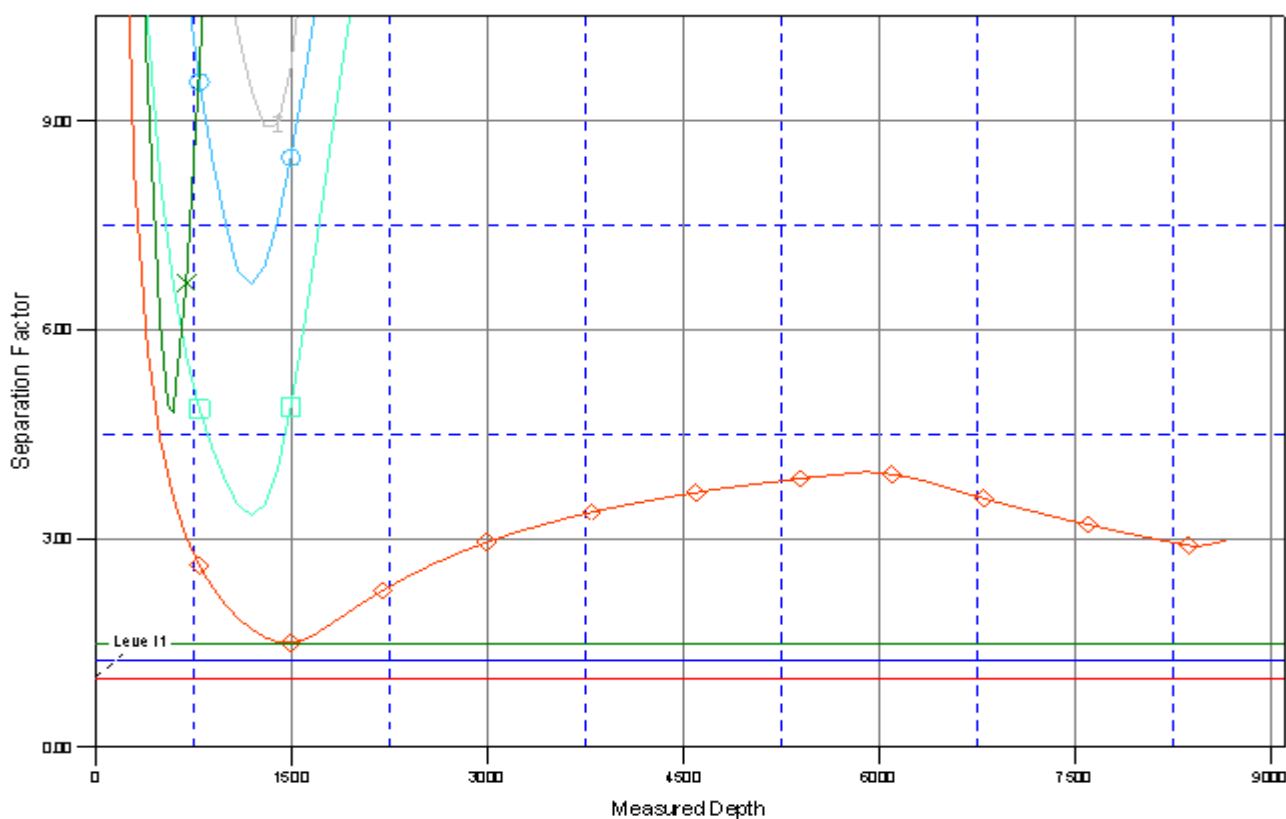
Reference Depths are relative to WELL @ 5036.00ft (Original Well Elev) Coordinates are relative to: P_NRC 6-9
Offset Depths are relative to Offset Datum Coordinate System is US State Plane 1983, Colorado Northern Zone
Central Meridian is 105° 30' 0.000 W ° Grid Convergence at Surface is: 0.39°



Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_NRC 6-9
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 5036.00ft (Original Well Elev)
Reference Site:	WELD_NRC 18-9 PAD	MD Reference:	WELL @ 5036.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_NRC 6-9	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_NRC 6-9	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 1-6-10 RHS	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 5036.00ft (Original Well Elev) Coordinates are relative to: P_NRC 6-9
Offset Depths are relative to Offset Datum Coordinate System is US State Plane 1983, Colorado Northern Zone
Central Meridian is 105° 30' 0.000 W ° Grid Convergence at Surface is: 0.39°

Separation Factor Plot



LEGEND

✕ P_NRC 25-9, P_NRC 25-9, PLAN #1 1-6-10 RHS V0
+ P_NRC 3-9, P_NRC 3-9, PLAN #1 1-6-10 RHS V0

△ P_NRC:
◇ ROCKY