



US ROCKIES REGION PLANNING

COLORADO NORTHERN ZONE - 83

WELD_FRICO PAD

P_FRICO 9-10A

P_FRICO 9-10A

Plan: PLAN #1 2-10-10 RHS

Standard Planning Report

01 April, 2010





Project: COLORADO NORTHERN ZONE - 83
 Site: WELD_FRICO PAD
 Well: P_FRICO 9-10A
 Wellbore: P_FRICO 9-10A
 Section: SECTION 6 T3N R65W
 SHL: 1676 FWL 2160 FSL
 Design: PLAN #1 2-10-10 RHS
 Latitude: 40° 14' 20.349 N
 Longitude: 104° 38' 2.173 W
 GL: 4779.00
 KB: WELL @ 4794.00ft (Original Well Elev)



Weatherford®



Azimuths to True North
 Magnetic North: 8.96°
 Magnetic Field
 Strength: 53203.2snT
 Dip Angle: 66.99°
 Date: 2/10/2010
 Model: IGRF2010

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
3780.00	4091.81	PARKMAN
4306.00	4681.14	SUSSEX
6800.00	7271.91	NIO A
7080.00	7551.91	CODELL
7160.00	7631.91	GRNHRN
7530.00	8001.91	JSAND TOP

CASING DETAILS

TVD	MD	Name	Size
800.00	802.57	8 5/8"	8.62

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	Start Build 2.00
1640.31	26.81	265.22	1591.94	-25.64	-306.79	2.00	265.22	307.66	Start 3491.30 hold at 1640.31 MD
5131.61	26.81	265.22	4708.06	-156.76	-1875.80	0.00	0.00	1882.34	Start Drop -2.00
6471.91	0.00	0.00	6000.00	-182.40	-2182.59	2.00	180.00	2190.19	Start 1680.00 hold at 6471.91 MD
8151.91	0.00	0.00	7680.00	-182.40	-2182.59	0.00	0.00	2190.19	TD at 8151.91

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

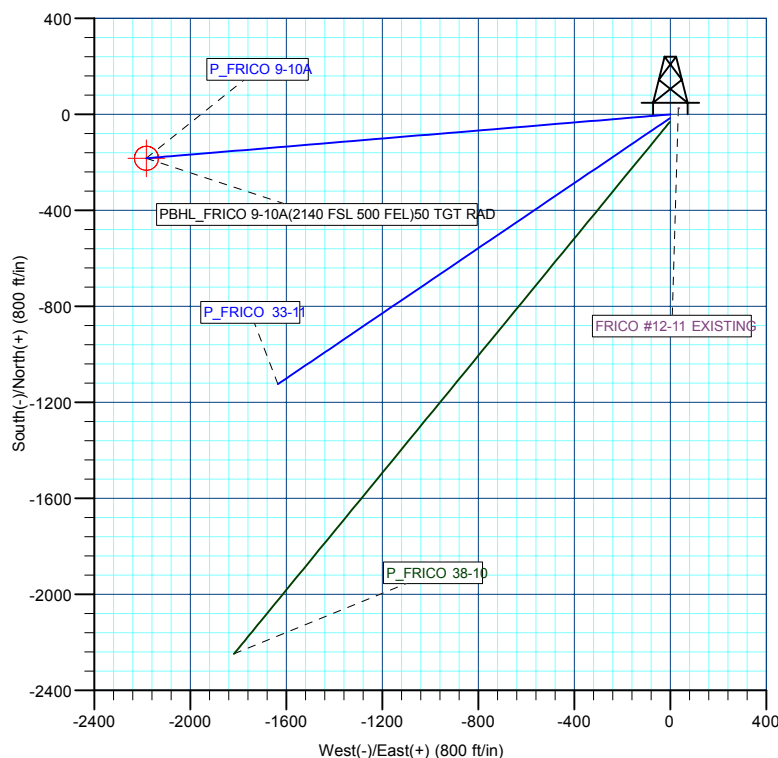
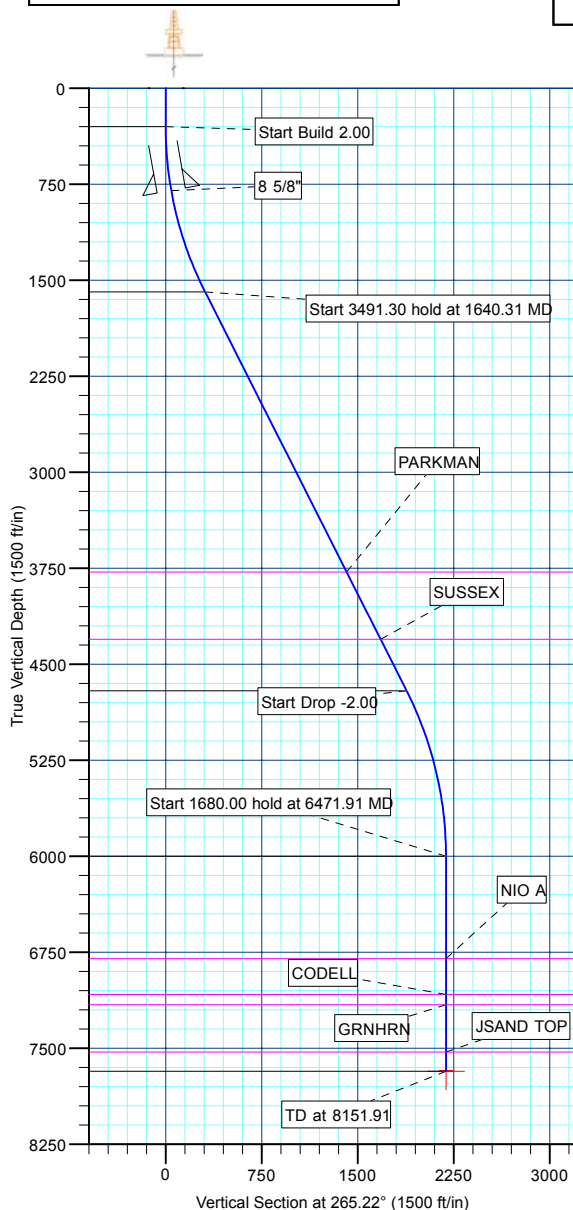
Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
PBHL	7680.00	-182.40	-2182.59	40° 14' 18.546 N	104° 38' 30.318 W	Circle (Radius: 50.00)

WELL DETAILS: P_FRICO 9-10A

+N/-S	+E/-W	Northing	Ground Level:	4779.00	Latitude	Longitude	Slot
0.00	0.00	1331085.13	Easting	3241776.55	40° 14' 20.349 N	104° 38' 2.173 W	

LEGEND

- FRICO #12-11 EXISTING, FRICO #12-11 EXISTING, FRICO #12 EXISTING V0
- P_FRICO 33-11, P_FRICO 33-11, PLAN #1 2-10-10 RHS V0
- P_FRICO 38-10, P_FRICO 38-10, PLAN #1 2-10-10 RHS V0
- PLAN #1 2-10-10 RHS



Plan: PLAN #1 2-10-10 RHS (P_FRICO 9-10A/P_FRICO 9-10A)

Created By: Robert H. Scott Date: 10:09, April 01 2010

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well P_FRICO 9-10A
Company:	US ROCKIES REGION PLANNING	TVD Reference:	WELL @ 4794.00ft (Original Well Elev)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	WELL @ 4794.00ft (Original Well Elev)
Site:	WELD_FRICO PAD	North Reference:	True
Well:	P_FRICO 9-10A	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_FRICO 9-10A		
Design:	PLAN #1 2-10-10 RHS		

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

Site						WELD_FRICO PAD, SECTION 6 T3N R65W											
Site Position:			Northing:			1,331,069.47 ft			Latitude:			40° 14' 20.195 N					
From:			Lat/Long			Easting:			3,241,775.58 ft			Longitude:			104° 38' 2.188 W		
Position Uncertainty:			0.00 ft			Slot Radius:			in			Grid Convergence:			0.56 °		

Well	P_FRICO 9-10A,					
Well Position	+N/-S	15.66 ft	Northing:	1,331,085.13 ft	Latitude:	40° 14' 20.349 N
	+E/-W	1.12 ft	Easting:	3,241,776.55 ft	Longitude:	104° 38' 2.173 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	4,779.00 ft

Wellbore	P_FRICO 9-10A				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	2/10/2010	8.96	66.99	53,203

Design	PLAN #1 2-10-10 RHS			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	265.22

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	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,640.31	26.81	265.22	1,591.94	-25.64	-306.79	2.00	2.00	0.00	265.22	
5,131.61	26.81	265.22	4,708.06	-156.76	-1,875.80	0.00	0.00	0.00	0.00	
6,471.91	0.00	0.00	6,000.00	-182.40	-2,182.59	2.00	-2.00	0.00	180.00	
8,151.91	0.00	0.00	7,680.00	-182.40	-2,182.59	0.00	0.00	0.00	0.00	PBHL_FRICO 9-10.

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Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	WELL @ 4794.00ft (Original Well Elev)
Site:	WELD_FRICO PAD	North Reference:	True
Well:	P_FRICO 9-10A	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_FRICO 9-10A		
Design:	PLAN #1 2-10-10 RHS		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
Start Build 2.00									
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	2.00	265.22	399.98	-0.15	-1.74	1.75	2.00	2.00	0.00
500.00	4.00	265.22	499.84	-0.58	-6.95	6.98	2.00	2.00	0.00
600.00	6.00	265.22	599.45	-1.31	-15.64	15.69	2.00	2.00	0.00
700.00	8.00	265.22	698.70	-2.32	-27.78	27.88	2.00	2.00	0.00
800.00	10.00	265.22	797.47	-3.62	-43.37	43.52	2.00	2.00	0.00
8 5/8"									
802.57	10.05	265.22	800.00	-3.66	-43.82	43.97	2.00	2.00	0.00
900.00	12.00	265.22	895.62	-5.21	-62.39	62.60	2.00	2.00	0.00
1,000.00	14.00	265.22	993.06	-7.09	-84.80	85.10	2.00	2.00	0.00
1,100.00	16.00	265.22	1,089.64	-9.24	-110.59	110.98	2.00	2.00	0.00
1,200.00	18.00	265.22	1,185.27	-11.68	-139.73	140.21	2.00	2.00	0.00
1,300.00	20.00	265.22	1,279.82	-14.39	-172.17	172.77	2.00	2.00	0.00
1,400.00	22.00	265.22	1,373.17	-17.37	-207.88	208.60	2.00	2.00	0.00
1,500.00	24.00	265.22	1,465.21	-20.63	-246.81	247.67	2.00	2.00	0.00
1,600.00	26.00	265.22	1,555.84	-24.15	-288.93	289.93	2.00	2.00	0.00
Start 3491.30 hold at 1640.31 MD									
1,640.31	26.81	265.22	1,591.94	-25.64	-306.79	307.86	2.00	2.00	0.00
1,700.00	26.81	265.22	1,645.22	-27.88	-333.61	334.78	0.00	0.00	0.00
1,800.00	26.81	265.22	1,734.48	-31.64	-378.55	379.87	0.00	0.00	0.00
1,900.00	26.81	265.22	1,823.73	-35.39	-423.50	424.97	0.00	0.00	0.00
2,000.00	26.81	265.22	1,912.98	-39.15	-468.44	470.07	0.00	0.00	0.00
2,100.00	26.81	265.22	2,002.24	-42.90	-513.38	515.17	0.00	0.00	0.00
2,200.00	26.81	265.22	2,091.49	-46.66	-558.32	560.26	0.00	0.00	0.00
2,300.00	26.81	265.22	2,180.74	-50.41	-603.26	605.36	0.00	0.00	0.00
2,400.00	26.81	265.22	2,270.00	-54.17	-648.20	650.46	0.00	0.00	0.00
2,500.00	26.81	265.22	2,359.25	-57.93	-693.14	695.56	0.00	0.00	0.00
2,600.00	26.81	265.22	2,448.51	-61.68	-738.08	740.65	0.00	0.00	0.00
2,700.00	26.81	265.22	2,537.76	-65.44	-783.02	785.75	0.00	0.00	0.00
2,800.00	26.81	265.22	2,627.01	-69.19	-827.96	830.85	0.00	0.00	0.00
2,900.00	26.81	265.22	2,716.27	-72.95	-872.90	875.94	0.00	0.00	0.00
3,000.00	26.81	265.22	2,805.52	-76.70	-917.84	921.04	0.00	0.00	0.00
3,100.00	26.81	265.22	2,894.77	-80.46	-962.78	966.14	0.00	0.00	0.00
3,200.00	26.81	265.22	2,984.03	-84.22	-1,007.72	1,011.24	0.00	0.00	0.00
3,300.00	26.81	265.22	3,073.28	-87.97	-1,052.66	1,056.33	0.00	0.00	0.00
3,400.00	26.81	265.22	3,162.54	-91.73	-1,097.60	1,101.43	0.00	0.00	0.00
3,500.00	26.81	265.22	3,251.79	-95.48	-1,142.55	1,146.53	0.00	0.00	0.00
3,600.00	26.81	265.22	3,341.04	-99.24	-1,187.49	1,191.63	0.00	0.00	0.00
3,700.00	26.81	265.22	3,430.30	-102.99	-1,232.43	1,236.72	0.00	0.00	0.00
3,800.00	26.81	265.22	3,519.55	-106.75	-1,277.37	1,281.82	0.00	0.00	0.00
3,900.00	26.81	265.22	3,608.80	-110.51	-1,322.31	1,326.92	0.00	0.00	0.00
4,000.00	26.81	265.22	3,698.06	-114.26	-1,367.25	1,372.01	0.00	0.00	0.00
PARKMAN									
4,091.81	26.81	265.22	3,780.00	-117.71	-1,408.51	1,413.42	0.00	0.00	0.00
4,100.00	26.81	265.22	3,787.31	-118.02	-1,412.19	1,417.11	0.00	0.00	0.00
4,200.00	26.81	265.22	3,876.57	-121.77	-1,457.13	1,462.21	0.00	0.00	0.00
4,300.00	26.81	265.22	3,965.82	-125.53	-1,502.07	1,507.31	0.00	0.00	0.00
4,400.00	26.81	265.22	4,055.07	-129.28	-1,547.01	1,552.40	0.00	0.00	0.00
4,500.00	26.81	265.22	4,144.33	-133.04	-1,591.95	1,597.50	0.00	0.00	0.00
4,600.00	26.81	265.22	4,233.58	-136.80	-1,636.89	1,642.60	0.00	0.00	0.00
SUSSEX									
4,681.14	26.81	265.22	4,306.00	-139.84	-1,673.36	1,679.19	0.00	0.00	0.00

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Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	WELL @ 4794.00ft (Original Well Elev)
Site:	WELD_FRICO PAD	North Reference:	True
Well:	P_FRICO 9-10A	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_FRICO 9-10A		
Design:	PLAN #1 2-10-10 RHS		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,700.00	26.81	265.22	4,322.83	-140.55	-1,681.83	1,687.70	0.00	0.00	0.00
4,800.00	26.81	265.22	4,412.09	-144.31	-1,726.77	1,732.79	0.00	0.00	0.00
4,900.00	26.81	265.22	4,501.34	-148.06	-1,771.71	1,777.89	0.00	0.00	0.00
5,000.00	26.81	265.22	4,590.60	-151.82	-1,816.65	1,822.99	0.00	0.00	0.00
5,100.00	26.81	265.22	4,679.85	-155.57	-1,861.60	1,868.08	0.00	0.00	0.00
Start Drop -2.00									
5,131.61	26.81	265.22	4,708.06	-156.76	-1,875.80	1,882.34	0.00	0.00	0.00
5,200.00	25.44	265.22	4,769.47	-159.27	-1,905.81	1,912.45	2.00	-2.00	0.00
5,300.00	23.44	265.22	4,860.50	-162.71	-1,947.03	1,953.82	2.00	-2.00	0.00
5,400.00	21.44	265.22	4,952.93	-165.89	-1,985.07	1,991.99	2.00	-2.00	0.00
5,500.00	19.44	265.22	5,046.63	-168.80	-2,019.86	2,026.90	2.00	-2.00	0.00
5,600.00	17.44	265.22	5,141.49	-171.43	-2,051.38	2,058.53	2.00	-2.00	0.00
5,700.00	15.44	265.22	5,237.40	-173.79	-2,079.58	2,086.83	2.00	-2.00	0.00
5,800.00	13.44	265.22	5,334.23	-175.87	-2,104.42	2,111.76	2.00	-2.00	0.00
5,900.00	11.44	265.22	5,431.88	-177.66	-2,125.89	2,133.30	2.00	-2.00	0.00
6,000.00	9.44	265.22	5,530.22	-179.17	-2,143.94	2,151.41	2.00	-2.00	0.00
6,100.00	7.44	265.22	5,629.13	-180.39	-2,158.56	2,166.09	2.00	-2.00	0.00
6,200.00	5.44	265.22	5,728.50	-181.32	-2,169.74	2,177.30	2.00	-2.00	0.00
6,300.00	3.44	265.22	5,828.19	-181.97	-2,177.45	2,185.04	2.00	-2.00	0.00
6,400.00	1.44	265.22	5,928.10	-182.32	-2,181.69	2,189.29	2.00	-2.00	0.00
Start 1680.00 hold at 6471.91 MD									
6,471.91	0.00	0.00	6,000.00	-182.40	-2,182.59	2,190.19	2.00	-2.00	131.80
6,500.00	0.00	0.00	6,028.09	-182.40	-2,182.59	2,190.19	0.00	0.00	0.00
6,600.00	0.00	0.00	6,128.09	-182.40	-2,182.59	2,190.19	0.00	0.00	0.00
6,700.00	0.00	0.00	6,228.09	-182.40	-2,182.59	2,190.19	0.00	0.00	0.00
6,800.00	0.00	0.00	6,328.09	-182.40	-2,182.59	2,190.19	0.00	0.00	0.00
6,900.00	0.00	0.00	6,428.09	-182.40	-2,182.59	2,190.19	0.00	0.00	0.00
7,000.00	0.00	0.00	6,528.09	-182.40	-2,182.59	2,190.19	0.00	0.00	0.00
7,100.00	0.00	0.00	6,628.09	-182.40	-2,182.59	2,190.19	0.00	0.00	0.00
7,200.00	0.00	0.00	6,728.09	-182.40	-2,182.59	2,190.19	0.00	0.00	0.00
NIO A									
7,271.91	0.00	0.00	6,800.00	-182.40	-2,182.59	2,190.19	0.00	0.00	0.00
7,300.00	0.00	0.00	6,828.09	-182.40	-2,182.59	2,190.19	0.00	0.00	0.00
7,400.00	0.00	0.00	6,928.09	-182.40	-2,182.59	2,190.19	0.00	0.00	0.00
7,500.00	0.00	0.00	7,028.09	-182.40	-2,182.59	2,190.19	0.00	0.00	0.00
CODELL									
7,551.91	0.00	0.00	7,080.00	-182.40	-2,182.59	2,190.19	0.00	0.00	0.00
7,600.00	0.00	0.00	7,128.09	-182.40	-2,182.59	2,190.19	0.00	0.00	0.00
GRNHRN									
7,631.91	0.00	0.00	7,160.00	-182.40	-2,182.59	2,190.19	0.00	0.00	0.00
7,700.00	0.00	0.00	7,228.09	-182.40	-2,182.59	2,190.19	0.00	0.00	0.00
7,800.00	0.00	0.00	7,328.09	-182.40	-2,182.59	2,190.19	0.00	0.00	0.00
7,900.00	0.00	0.00	7,428.09	-182.40	-2,182.59	2,190.19	0.00	0.00	0.00
8,000.00	0.00	0.00	7,528.09	-182.40	-2,182.59	2,190.19	0.00	0.00	0.00
JSAND TOP									
8,001.91	0.00	0.00	7,530.00	-182.40	-2,182.59	2,190.19	0.00	0.00	0.00
8,100.00	0.00	0.00	7,628.09	-182.40	-2,182.59	2,190.19	0.00	0.00	0.00
PBHL_FRICO 9-10A(2140 FSL 500 FEL)50 TGT RAD									
8,151.91	0.00	0.00	7,680.00	-182.40	-2,182.59	2,190.19	0.00	0.00	0.00

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Company:	US ROCKIES REGION PLANNING	TVD Reference:	WELL @ 4794.00ft (Original Well Elev)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	WELL @ 4794.00ft (Original Well Elev)
Site:	WELD_FRICO PAD	North Reference:	True
Well:	P_FRICO 9-10A	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_FRICO 9-10A		
Design:	PLAN #1 2-10-10 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_FRICO 9-10A(0.00	0.00	7,680.00	-182.40	-2,182.59	1,330,881.42	3,239,595.85	40° 14' 18.546 N	104° 38' 30.318 W
- plan hits target center									
- Circle (radius 50.00)									

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)	
802.57	800.00	8 5/8"	8.62	11.00	

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
4,091.81	3,780.00	PARKMAN				
4,681.14	4,306.00	SUSSEX				
7,271.91	6,800.00	NIO A				
7,551.91	7,080.00	CODELL				
7,631.91	7,160.00	GRNHRN				
8,001.91	7,530.00	JSAND TOP				

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
300.00	300.00	0.00	0.00	Start Build 2.00	
1,640.31	1,591.94	-25.64	-306.79	Start 3491.30 hold at 1640.31 MD	
5,131.61	4,708.06	-156.76	-1,875.80	Start Drop -2.00	
6,471.91	6,000.00	-182.40	-2,182.59	Start 1680.00 hold at 6471.91 MD	
8,151.91	7,680.00	-182.40	-2,182.59	TD at 8151.91	



US ROCKIES REGION PLANNING

**COLORADO NORTHERN ZONE - 83
WELD_FRICO PAD
P_FRICO 9-10A**

**P_FRICO 9-10A
PLAN #1 2-10-10 RHS**

Anticollision Report

01 April, 2010



Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_FRICO 9-10A
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 4794.00ft (Original Well Elev)
Reference Site:	WELD_FRICO PAD	MD Reference:	WELL @ 4794.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_FRICO 9-10A	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_FRICO 9-10A	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 2-10-10 RHS	Offset TVD Reference:	Offset Datum

Reference	PLAN #1 2-10-10 RHS		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	Stations	Error Model:	ISCWSA
Depth Range:	0.00 to 20,000.00ft	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 10,000.00ft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma		

Survey Tool Program	Date 4/1/2010			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.00	8,151.91	PLAN #1 2-10-10 RHS (P_FRICO 9-10A)	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_FRICO PAD						
FRICO #12-11 EXISTING - FRICO #12-11 EXISTING - F	300.00	286.00	42.54	32.55	4.260	CC
FRICO #12-11 EXISTING - FRICO #12-11 EXISTING - F	400.00	385.98	44.02	29.83	3.102	ES
FRICO #12-11 EXISTING - FRICO #12-11 EXISTING - F	600.00	585.45	56.39	33.89	2.506	SF
P_FRICO 33-11 - P_FRICO 33-11 - PLAN #1 2-10-10 R	417.68	417.65	15.51	13.90	9.647	CC, ES
P_FRICO 33-11 - P_FRICO 33-11 - PLAN #1 2-10-10 R	500.00	499.84	16.17	14.20	8.208	SF
P_FRICO 38-10 - P_FRICO 38-10 - PLAN #1 2-10-10 R	300.00	300.00	31.78	30.69	29.149	CC, ES
P_FRICO 38-10 - P_FRICO 38-10 - PLAN #1 2-10-10 R	700.00	695.27	51.33	48.41	17.616	SF

Offset Design WELD_FRICO PAD - FRICO #12-11 EXISTING - FRICO #12-11 EXISTING - FRICO #12 EXISTING												
Survey Program: 0-UNKNOWN												
Offset Site Error: 0.00 ft												
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
0.00	0.00	0.00	0.00	0.00	0.00	52.57	25.85	33.78	44.78			
100.00	100.00	86.00	86.00	0.10	1.72	52.57	25.85	33.78	42.54	40.72	1.82	23.429
200.00	200.00	186.00	186.00	0.32	5.44	52.57	25.85	33.78	42.54	36.78	5.76	7.385
300.00	300.00	286.00	286.00	0.55	9.44	52.57	25.85	33.78	42.54	32.55	9.99	4.260 CC
400.00	399.98	385.98	385.98	0.76	13.44	148.56	25.85	33.78	44.02	29.83	14.19	3.102 ES
500.00	499.84	485.84	485.84	0.97	17.43	151.74	25.85	33.78	48.56	30.19	18.37	2.644
600.00	599.45	585.45	585.45	1.22	21.42	155.87	25.85	33.78	56.39	33.89	22.50	2.506 SF
700.00	698.70	684.70	684.70	1.50	25.39	160.01	25.85	33.78	67.70	41.13	26.58	2.547
800.00	797.47	783.47	783.47	1.82	29.34	163.63	25.85	33.78	82.59	52.02	30.57	2.702
900.00	895.62	881.62	881.62	2.20	33.26	166.59	25.85	33.78	101.06	66.61	34.45	2.933
1,000.00	993.06	979.06	979.06	2.64	37.16	168.93	25.85	33.78	123.07	84.85	38.22	3.220
1,100.00	1,089.64	1,075.64	1,075.64	3.14	41.03	170.76	25.85	33.78	148.58	106.72	41.85	3.550
1,200.00	1,185.27	1,171.27	1,171.27	3.70	44.85	172.19	25.85	33.78	177.52	132.18	45.34	3.915
1,300.00	1,279.82	1,265.82	1,265.82	4.34	48.63	173.32	25.85	33.78	209.84	161.18	48.66	4.312
1,400.00	1,373.17	1,359.17	1,359.17	5.04	52.37	174.22	25.85	33.78	245.49	193.69	51.81	4.739
1,500.00	1,465.21	1,451.21	1,451.21	5.82	56.05	174.94	25.85	33.78	284.42	229.66	54.76	5.194
1,600.00	1,555.84	1,541.84	1,541.84	6.67	59.67	175.52	25.85	33.78	326.56	269.05	57.51	5.678
1,640.31	1,591.94	1,577.94	1,577.94	7.04	61.12	175.72	25.85	33.78	344.44	285.88	58.56	5.882
1,700.00	1,645.22	1,631.22	1,631.22	7.59	63.25	176.03	25.85	33.78	371.30	310.64	60.67	6.120
1,800.00	1,734.48	1,720.48	1,720.48	8.52	66.82	176.46	25.85	33.78	416.32	352.12	64.20	6.484
1,900.00	1,823.73	1,809.73	1,809.73	9.46	70.39	176.81	25.85	33.78	461.36	393.61	67.75	6.810

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_FRICO 9-10A
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 4794.00ft (Original Well Elev)
Reference Site:	WELD_FRICO PAD	MD Reference:	WELL @ 4794.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_FRICO 9-10A	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_FRICO 9-10A	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 2-10-10 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						
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
2,000.00	1,912.98	1,898.98	1,898.98	10.40	73.96	177.09	25.85	33.78	506.40	435.10	71.30	7.102	
2,100.00	2,002.24	1,988.24	1,988.24	11.35	77.53	177.33	25.85	33.78	551.46	476.60	74.85	7.367	
2,200.00	2,091.49	2,077.49	2,077.49	12.30	81.10	177.53	25.85	33.78	596.52	518.11	78.41	7.608	
2,300.00	2,180.74	2,166.74	2,166.74	13.25	84.67	177.70	25.85	33.78	641.59	559.61	81.97	7.827	
2,400.00	2,270.00	2,256.00	2,256.00	14.20	88.24	177.85	25.85	33.78	686.66	601.12	85.53	8.028	
2,500.00	2,359.25	2,345.25	2,345.25	15.16	91.81	177.99	25.85	33.78	731.73	642.63	89.10	8.213	
2,600.00	2,448.51	2,434.51	2,434.51	16.12	95.38	178.10	25.85	33.78	776.81	684.14	92.66	8.383	
2,700.00	2,537.76	2,523.76	2,523.76	17.08	98.95	178.21	25.85	33.78	821.89	725.66	96.23	8.541	
2,800.00	2,627.01	2,613.01	2,613.01	18.04	102.52	178.30	25.85	33.78	866.97	767.17	99.80	8.687	
2,900.00	2,716.27	2,702.27	2,702.27	19.00	106.09	178.38	25.85	33.78	912.05	808.68	103.37	8.824	
3,000.00	2,805.52	2,791.52	2,791.52	19.96	109.66	178.46	25.85	33.78	957.13	850.20	106.93	8.951	
3,100.00	2,894.77	2,880.77	2,880.77	20.92	113.23	178.53	25.85	33.78	1,002.22	891.71	110.50	9.069	
3,200.00	2,984.03	2,970.03	2,970.03	21.88	116.80	178.59	25.85	33.78	1,047.30	933.23	114.07	9.181	
3,300.00	3,073.28	3,059.28	3,059.28	22.85	120.37	178.65	25.85	33.78	1,092.39	974.74	117.65	9.285	
3,400.00	3,162.54	3,148.54	3,148.54	23.81	123.94	178.70	25.85	33.78	1,137.48	1,016.26	121.22	9.384	
3,500.00	3,251.79	3,237.79	3,237.79	24.77	127.51	178.75	25.85	33.78	1,182.57	1,057.78	124.79	9.476	
3,600.00	3,341.04	3,327.04	3,327.04	25.74	131.08	178.80	25.85	33.78	1,227.66	1,099.29	128.36	9.564	
3,700.00	3,430.30	3,416.30	3,416.30	26.70	134.65	178.84	25.85	33.78	1,272.74	1,140.81	131.93	9.647	
3,800.00	3,519.55	3,505.55	3,505.55	27.66	138.22	178.88	25.85	33.78	1,317.84	1,182.33	135.51	9.725	
3,900.00	3,608.80	3,594.80	3,594.80	28.63	141.79	178.92	25.85	33.78	1,362.93	1,223.85	139.08	9.800	
4,000.00	3,698.06	3,684.06	3,684.06	29.59	145.36	178.95	25.85	33.78	1,408.02	1,265.36	142.65	9.870	
4,100.00	3,787.31	3,773.31	3,773.31	30.56	148.93	178.99	25.85	33.78	1,453.11	1,306.88	146.23	9.937	
4,200.00	3,876.57	3,862.57	3,862.57	31.52	152.50	179.02	25.85	33.78	1,498.20	1,348.40	149.80	10.001	
4,300.00	3,965.82	3,951.82	3,951.82	32.49	156.07	179.05	25.85	33.78	1,543.29	1,389.92	153.38	10.062	
4,400.00	4,055.07	4,041.07	4,041.07	33.45	159.64	179.07	25.85	33.78	1,588.38	1,431.43	156.95	10.120	
4,500.00	4,144.33	4,130.33	4,130.33	34.42	163.21	179.10	25.85	33.78	1,633.48	1,472.95	160.53	10.176	
4,600.00	4,233.58	4,219.58	4,219.58	35.38	166.78	179.12	25.85	33.78	1,678.57	1,514.47	164.10	10.229	
4,700.00	4,322.83	4,308.83	4,308.83	36.35	170.35	179.15	25.85	33.78	1,723.66	1,555.99	167.67	10.280	
4,800.00	4,412.09	4,398.09	4,398.09	37.32	173.92	179.17	25.85	33.78	1,768.76	1,597.51	171.25	10.329	
4,900.00	4,501.34	4,487.34	4,487.34	38.28	177.49	179.19	25.85	33.78	1,813.85	1,639.03	174.82	10.375	
5,000.00	4,590.60	4,576.60	4,576.60	39.25	181.06	179.21	25.85	33.78	1,858.94	1,680.54	178.40	10.420	
5,100.00	4,679.85	4,665.85	4,665.85	40.21	184.63	179.23	25.85	33.78	1,904.04	1,722.06	181.98	10.463	
5,131.61	4,708.06	4,694.06	4,694.06	40.52	185.76	179.23	25.85	33.78	1,918.29	1,735.18	183.11	10.476	
5,200.00	4,769.47	4,755.47	4,755.47	41.10	188.22	179.25	25.85	33.78	1,948.40	1,760.87	187.54	10.390	
5,300.00	4,860.50	4,846.50	4,846.50	41.81	191.86	179.28	25.85	33.78	1,989.77	1,795.83	193.94	10.260	
5,400.00	4,952.93	4,938.93	4,938.93	42.46	195.56	179.30	25.85	33.78	2,027.93	1,827.69	200.24	10.128	
5,500.00	5,046.63	5,032.63	5,032.63	43.06	199.31	179.32	25.85	33.78	2,062.85	1,856.42	206.42	9.993	
5,600.00	5,141.49	5,127.49	5,127.49	43.60	203.10	179.34	25.85	33.78	2,094.47	1,882.00	212.47	9.858	
5,700.00	5,237.40	5,223.40	5,223.40	44.08	206.94	179.36	25.85	33.78	2,122.77	1,904.41	218.36	9.721	
5,800.00	5,334.23	5,320.23	5,320.23	44.50	210.81	179.37	25.85	33.78	2,147.70	1,923.63	224.07	9.585	
5,900.00	5,431.88	5,417.88	5,417.88	44.87	214.72	179.38	25.85	33.78	2,169.23	1,939.65	229.59	9.448	
6,000.00	5,530.22	5,516.22	5,516.22	45.19	218.65	179.39	25.85	33.78	2,187.35	1,952.46	234.89	9.312	
6,100.00	5,629.13	5,615.13	5,615.13	45.45	222.61	179.40	25.85	33.78	2,202.02	1,962.07	239.95	9.177	
6,200.00	5,728.50	5,714.50	5,714.50	45.65	226.58	179.40	25.85	33.78	2,213.23	1,968.47	244.76	9.042	
6,300.00	5,828.19	5,814.19	5,814.19	45.81	230.57	179.41	25.85	33.78	2,220.97	1,971.68	249.29	8.909	
6,400.00	5,928.10	5,914.10	5,914.10	45.92	234.56	179.41	25.85	33.78	2,225.23	1,971.70	253.53	8.777	
6,471.91	6,000.00	5,986.00	5,986.00	45.97	237.44	84.63	25.85	33.78	2,226.13	1,969.75	256.38	8.683	
6,500.00	6,028.09	6,014.09	6,014.09	45.98	238.56	84.63	25.85	33.78	2,226.13	1,968.59	257.54	8.644	
6,600.00	6,128.09	6,114.09	6,114.09	46.04	242.56	84.63	25.85	33.78	2,226.13	1,964.46	261.67	8.507	
6,700.00	6,228.09	6,214.09	6,214.09	46.11	246.56	84.63	25.85	33.78	2,226.13	1,960.33	265.80	8.375	
6,800.00	6,328.09	6,314.09	6,314.09	46.17	250.56	84.63	25.85	33.78	2,226.13	1,956.19	269.93	8.247	
6,900.00	6,428.09	6,414.09	6,414.09	46.24	254.56	84.63	25.85	33.78	2,226.13	1,952.06	274.07	8.123	

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_FRICO 9-10A
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 4794.00ft (Original Well Elev)
Reference Site:	WELD_FRICO PAD	MD Reference:	WELL @ 4794.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_FRICO 9-10A	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_FRICO 9-10A	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 2-10-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design WELD_FRICO PAD - FRICO #12-11 EXISTING - FRICO #12-11 EXISTING - FRICO #12 EXISTING												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
7,000.00	6,528.09	6,514.09	6,514.09	46.30	258.56	84.63	25.85	33.78	2,226.13	1,947.92	278.20	8.002	
7,100.00	6,628.09	6,614.09	6,614.09	46.37	262.56	84.63	25.85	33.78	2,226.13	1,943.79	282.34	7.885	
7,200.00	6,728.09	6,714.09	6,714.09	46.44	266.56	84.63	25.85	33.78	2,226.13	1,939.65	286.48	7.771	
7,300.00	6,828.09	6,814.09	6,814.09	46.51	270.56	84.63	25.85	33.78	2,226.13	1,935.51	290.62	7.660	
7,400.00	6,928.09	6,914.09	6,914.09	46.58	274.56	84.63	25.85	33.78	2,226.13	1,931.36	294.76	7.552	
7,500.00	7,028.09	7,014.09	7,014.09	46.65	278.56	84.63	25.85	33.78	2,226.13	1,927.22	298.91	7.448	
7,600.00	7,128.09	7,114.09	7,114.09	46.72	282.56	84.63	25.85	33.78	2,226.13	1,923.07	303.05	7.346	
7,700.00	7,228.09	7,214.09	7,214.09	46.79	286.56	84.63	25.85	33.78	2,226.13	1,918.93	307.20	7.247	
7,800.00	7,328.09	7,314.09	7,314.09	46.87	290.56	84.63	25.85	33.78	2,226.13	1,914.78	311.35	7.150	
7,900.00	7,428.09	7,414.09	7,414.09	46.94	294.56	84.63	25.85	33.78	2,226.13	1,910.63	315.50	7.056	
8,000.00	7,528.09	7,514.09	7,514.09	47.02	298.56	84.63	25.85	33.78	2,226.13	1,906.48	319.65	6.964	
8,100.00	7,628.09	7,614.09	7,614.09	47.09	302.56	84.63	25.85	33.78	2,226.13	1,902.33	323.80	6.875	
8,151.91	7,680.00	7,666.00	7,666.00	47.13	304.64	84.63	25.85	33.78	2,226.13	1,900.17	325.96	6.830	

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_FRICO 9-10A
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 4794.00ft (Original Well Elev)
Reference Site:	WELD_FRICO PAD	MD Reference:	WELL @ 4794.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_FRICO 9-10A	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_FRICO 9-10A	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 2-10-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design WELD_FRICO PAD - P_FRICO 33-11 - P_FRICO 33-11 - PLAN #1 2-10-10 RHS												Offset Site Error:	0.00 ft
Survey Program: 0-MWD												Offset Well Error:	0.00 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	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	-175.92	-15.66	-1.12	15.70				
100.00	100.00	100.00	100.00	0.10	0.10	-175.92	-15.66	-1.12	15.70	15.50	0.19	82.155	
200.00	200.00	200.00	200.00	0.32	0.32	-175.92	-15.66	-1.12	15.70	15.06	0.64	24.502	
300.00	300.00	300.00	300.00	0.55	0.55	-175.92	-15.66	-1.12	15.70	14.61	1.09	14.398	
400.00	399.98	399.98	399.98	0.76	0.77	-87.52	-15.66	-1.12	15.52	14.00	1.53	10.160	
417.68	417.65	417.65	417.65	0.80	0.81	-90.00	-15.66	-1.12	15.51	13.90	1.61	9.647 CC, ES	
500.00	499.84	499.84	499.84	0.97	0.99	-106.35	-15.66	-1.12	16.17	14.20	1.97	8.208 SF	
600.00	599.45	599.45	599.45	1.22	1.22	-130.41	-15.66	-1.12	20.42	17.99	2.42	8.431	
700.00	698.70	698.70	698.70	1.50	1.44	-148.41	-15.66	-1.12	29.81	26.95	2.86	10.406	
800.00	797.47	797.47	797.47	1.82	1.66	-159.04	-15.66	-1.12	43.93	40.63	3.30	13.302	
900.00	895.62	895.62	895.62	2.20	1.88	-165.24	-15.66	-1.12	62.15	58.41	3.74	16.619	
1,000.00	993.06	995.16	995.14	2.64	2.09	-168.41	-16.54	-2.42	82.94	78.78	4.17	19.904	
1,100.00	1,089.64	1,095.28	1,095.13	3.14	2.28	-169.40	-19.39	-6.62	104.61	100.01	4.60	22.762	
1,200.00	1,185.27	1,195.87	1,195.34	3.70	2.49	-169.28	-24.22	-13.75	127.00	121.95	5.05	25.144	
1,300.00	1,279.82	1,296.90	1,295.63	4.34	2.72	-168.55	-31.06	-23.83	150.10	144.56	5.54	27.079	
1,400.00	1,373.17	1,398.32	1,395.81	5.04	3.00	-167.44	-39.92	-36.90	173.94	167.86	6.09	28.573	
1,500.00	1,465.21	1,500.10	1,495.72	5.82	3.32	-166.09	-50.81	-52.94	198.56	191.86	6.70	29.647	
1,600.00	1,555.84	1,602.21	1,595.20	6.67	3.69	-164.59	-63.72	-71.99	224.01	216.62	7.39	30.312	
1,640.31	1,591.94	1,643.44	1,635.13	7.04	3.87	-163.95	-69.50	-80.50	234.50	226.81	7.70	30.456	
1,700.00	1,645.22	1,704.74	1,694.20	7.59	4.14	-163.04	-78.68	-94.05	249.75	241.53	8.22	30.386	
1,800.00	1,734.48	1,808.20	1,793.07	8.52	4.66	-161.27	-95.79	-119.26	273.46	264.27	9.19	29.753	
1,900.00	1,823.73	1,912.40	1,891.46	9.46	5.25	-159.24	-115.03	-147.63	295.01	284.71	10.30	28.637	
2,000.00	1,912.98	2,017.06	1,988.97	10.40	5.93	-156.96	-136.36	-179.09	314.56	302.99	11.57	27.186	
2,100.00	2,002.24	2,121.57	2,084.89	11.35	6.68	-154.43	-159.64	-213.41	332.32	319.31	13.01	25.547	
2,200.00	2,091.49	2,219.09	2,173.74	12.30	7.43	-152.11	-182.20	-246.67	349.66	335.15	14.51	24.099	
2,300.00	2,180.74	2,316.60	2,262.59	13.25	8.20	-150.00	-204.76	-279.93	367.51	351.44	16.07	22.871	
2,400.00	2,270.00	2,414.12	2,351.44	14.20	8.98	-148.08	-227.32	-313.19	385.80	368.13	17.67	21.830	
2,500.00	2,359.25	2,511.64	2,440.29	15.16	9.77	-146.34	-249.88	-346.45	404.48	385.17	19.31	20.944	
2,600.00	2,448.51	2,609.16	2,529.15	16.12	10.56	-144.75	-272.44	-379.72	423.49	402.51	20.98	20.186	
2,700.00	2,537.76	2,706.68	2,618.00	17.08	11.37	-143.30	-295.00	-412.98	442.80	420.13	22.67	19.535	
2,800.00	2,627.01	2,804.20	2,706.85	18.04	12.17	-141.97	-317.55	-446.24	462.35	437.98	24.37	18.972	
2,900.00	2,716.27	2,901.72	2,795.70	19.00	12.98	-140.74	-340.11	-479.50	482.13	456.05	26.09	18.483	
3,000.00	2,805.52	2,999.23	2,884.55	19.96	13.80	-139.62	-362.67	-512.76	502.11	474.30	27.81	18.055	
3,100.00	2,894.77	3,096.75	2,973.41	20.92	14.61	-138.57	-385.23	-546.02	522.26	492.72	29.54	17.678	
3,200.00	2,984.03	3,194.27	3,062.26	21.88	15.43	-137.61	-407.79	-579.28	542.57	511.29	31.28	17.345	
3,300.00	3,073.28	3,291.79	3,151.11	22.85	16.25	-136.71	-430.35	-612.54	563.02	529.99	33.02	17.050	
3,400.00	3,162.54	3,389.31	3,239.96	23.81	17.07	-135.88	-452.91	-645.80	583.59	548.82	34.77	16.786	
3,500.00	3,251.79	3,486.83	3,328.81	24.77	17.89	-135.10	-475.47	-679.06	604.27	567.75	36.51	16.549	
3,600.00	3,341.04	3,584.35	3,417.67	25.74	18.72	-134.37	-498.03	-712.32	625.05	586.78	38.26	16.336	
3,700.00	3,430.30	3,681.86	3,506.52	26.70	19.54	-133.70	-520.58	-745.58	645.92	605.90	40.01	16.143	
3,800.00	3,519.55	3,779.38	3,595.37	27.66	20.37	-133.06	-543.14	-778.85	666.87	625.10	41.76	15.968	
3,900.00	3,608.80	3,876.90	3,684.22	28.63	21.20	-132.46	-565.70	-812.11	687.89	644.38	43.51	15.809	
4,000.00	3,698.06	3,974.42	3,773.07	29.59	22.02	-131.90	-588.26	-845.37	708.99	663.72	45.26	15.663	
4,100.00	3,787.31	4,071.94	3,861.93	30.56	22.85	-131.37	-610.82	-878.63	730.14	683.13	47.01	15.530	
4,200.00	3,876.57	4,169.46	3,950.78	31.52	23.68	-130.87	-633.38	-911.89	751.36	702.59	48.76	15.408	
4,300.00	3,965.82	4,266.98	4,039.63	32.49	24.51	-130.39	-655.94	-945.15	772.62	722.11	50.51	15.295	
4,400.00	4,055.07	4,364.49	4,128.48	33.45	25.34	-129.95	-678.50	-978.41	793.93	741.67	52.26	15.191	
4,500.00	4,144.33	4,462.01	4,217.33	34.42	26.17	-129.52	-701.06	-1,011.67	815.29	761.28	54.01	15.095	
4,600.00	4,233.58	4,559.53	4,306.19	35.38	27.00	-129.12	-723.61	-1,044.93	836.69	780.93	55.76	15.005	
4,700.00	4,322.83	4,657.05	4,395.04	36.35	27.83	-128.74	-746.17	-1,078.19	858.12	800.62	57.51	14.922	
4,800.00	4,412.09	4,754.57	4,483.89	37.32	28.66	-128.37	-768.73	-1,111.45	879.59	820.34	59.25	14.845	
4,900.00	4,501.34	4,852.09	4,572.74	38.28	29.50	-128.02	-791.29	-1,144.71	901.09	840.10	61.00	14.773	

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_FRICO 9-10A
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 4794.00ft (Original Well Elev)
Reference Site:	WELD_FRICO PAD	MD Reference:	WELL @ 4794.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_FRICO 9-10A	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_FRICO 9-10A	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 2-10-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 ft
Survey Program: 0-MWD												Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5,000.00	4,590.60	4,949.60	4,661.59	39.25	30.33	-127.69	-813.85	-1,177.97	922.63	859.89	62.74	14.705	
5,100.00	4,679.85	5,047.12	4,750.45	40.21	31.16	-127.38	-836.41	-1,211.24	944.19	879.70	64.48	14.642	
5,131.61	4,708.06	5,077.94	4,778.53	40.52	31.42	-127.28	-843.54	-1,221.75	951.01	885.97	65.03	14.623	
5,200.00	4,769.47	5,144.71	4,839.36	41.10	31.99	-127.27	-858.98	-1,244.52	965.29	899.13	66.17	14.589	
5,300.00	4,860.50	5,242.51	4,928.47	41.81	32.83	-127.10	-881.61	-1,277.88	984.48	916.72	67.76	14.530	
5,400.00	4,952.93	5,340.43	5,017.69	42.46	33.66	-126.75	-904.26	-1,311.27	1,001.69	932.32	69.36	14.441	
5,500.00	5,046.63	5,438.35	5,106.90	43.06	34.50	-126.24	-926.91	-1,344.67	1,016.98	946.00	70.98	14.328	
5,600.00	5,141.49	5,536.14	5,196.00	43.60	35.33	-125.57	-949.53	-1,378.02	1,030.44	957.84	72.60	14.193	
5,700.00	5,237.40	5,633.68	5,284.88	44.08	36.17	-124.75	-972.10	-1,411.29	1,042.19	967.97	74.22	14.042	
5,800.00	5,334.23	5,728.95	5,371.91	44.50	36.88	-123.83	-993.84	-1,443.35	1,052.39	976.70	75.69	13.904	
5,900.00	5,431.88	5,823.61	5,459.52	44.87	37.45	-122.93	-1,013.95	-1,473.01	1,061.32	984.38	76.94	13.794	
6,000.00	5,530.22	5,919.09	5,549.05	45.19	37.98	-122.03	-1,032.58	-1,500.47	1,068.98	990.89	78.09	13.689	
6,100.00	5,629.13	6,015.40	5,640.41	45.45	38.47	-121.13	-1,049.67	-1,525.66	1,075.33	996.19	79.14	13.588	
6,200.00	5,728.50	6,112.50	5,733.51	45.65	38.92	-120.24	-1,065.14	-1,548.47	1,080.33	1,000.26	80.07	13.492	
6,300.00	5,828.19	6,210.37	5,828.25	45.81	39.33	-119.34	-1,078.93	-1,568.81	1,083.96	1,003.06	80.91	13.397	
6,400.00	5,928.10	6,309.00	5,924.50	45.92	39.69	-118.43	-1,090.98	-1,586.58	1,086.20	1,004.56	81.64	13.305	
6,471.91	6,000.00	6,380.36	5,994.59	45.97	39.92	147.45	-1,098.54	-1,597.72	1,086.93	1,004.83	82.10	13.239	
6,500.00	6,028.09	6,408.36	6,022.17	45.98	40.01	147.70	-1,101.23	-1,601.69	1,087.07	1,004.79	82.28	13.212	
6,600.00	6,128.09	6,508.75	6,121.42	46.04	40.28	148.49	-1,109.66	-1,614.11	1,087.66	1,004.82	82.84	13.129	
6,700.00	6,228.09	6,610.08	6,222.08	46.11	40.50	149.10	-1,116.18	-1,623.72	1,088.26	1,004.96	83.30	13.064	
6,800.00	6,328.09	6,712.12	6,323.79	46.17	40.67	149.52	-1,120.72	-1,630.42	1,088.74	1,005.08	83.65	13.015	
6,900.00	6,428.09	6,814.61	6,426.18	46.24	40.79	149.76	-1,123.23	-1,634.12	1,089.02	1,005.12	83.91	12.979	
7,000.00	6,528.09	6,916.53	6,528.09	46.30	40.88	149.81	-1,123.76	-1,634.91	1,089.09	1,005.01	84.07	12.954	
7,100.00	6,628.09	7,016.53	6,628.09	46.37	40.94	149.81	-1,123.76	-1,634.91	1,089.09	1,004.88	84.21	12.933	
7,200.00	6,728.09	7,116.53	6,728.09	46.44	41.02	149.81	-1,123.76	-1,634.91	1,089.09	1,004.73	84.36	12.911	
7,300.00	6,828.09	7,216.53	6,828.09	46.51	41.09	149.81	-1,123.76	-1,634.91	1,089.09	1,004.59	84.50	12.889	
7,400.00	6,928.09	7,316.53	6,928.09	46.58	41.16	149.81	-1,123.76	-1,634.91	1,089.09	1,004.44	84.65	12.866	
7,500.00	7,028.09	7,416.53	7,028.09	46.65	41.23	149.81	-1,123.76	-1,634.91	1,089.09	1,004.29	84.79	12.844	
7,600.00	7,128.09	7,516.53	7,128.09	46.72	41.31	149.81	-1,123.76	-1,634.91	1,089.09	1,004.14	84.94	12.821	
7,700.00	7,228.09	7,616.53	7,228.09	46.79	41.38	149.81	-1,123.76	-1,634.91	1,089.09	1,003.99	85.10	12.798	
7,800.00	7,328.09	7,716.53	7,328.09	46.87	41.46	149.81	-1,123.76	-1,634.91	1,089.09	1,003.84	85.25	12.775	
7,900.00	7,428.09	7,816.53	7,428.09	46.94	41.54	149.81	-1,123.76	-1,634.91	1,089.09	1,003.68	85.41	12.751	
8,000.00	7,528.09	7,916.53	7,528.09	47.02	41.62	149.81	-1,123.76	-1,634.91	1,089.09	1,003.52	85.57	12.728	
8,100.00	7,628.09	8,016.53	7,628.09	47.09	41.70	149.81	-1,123.76	-1,634.91	1,089.09	1,003.36	85.73	12.704	
8,151.91	7,680.00	8,068.44	7,680.00	47.13	41.74	149.81	-1,123.76	-1,634.91	1,089.09	1,003.27	85.81	12.691	

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_FRICO 9-10A
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 4794.00ft (Original Well Elev)
Reference Site:	WELD_FRICO PAD	MD Reference:	WELL @ 4794.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_FRICO 9-10A	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_FRICO 9-10A	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 2-10-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design WELD_FRICO PAD - P_FRICO 38-10 - P_FRICO 38-10 - PLAN #1 2-10-10 RHS													Offset Site Error:	0.00 ft
Survey Program: 0-MWMD													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	-175.97	-31.70	-2.23	31.78					
100.00	100.00	100.00	100.00	0.10	0.10	-175.97	-31.70	-2.23	31.78	31.58	0.19	166.320		
200.00	200.00	200.00	200.00	0.32	0.32	-175.97	-31.70	-2.23	31.78	31.14	0.64	49.604		
300.00	300.00	300.00	300.00	0.55	0.55	-175.97	-31.70	-2.23	31.78	30.69	1.09	29.149 CC, ES		
400.00	399.98	399.08	399.07	0.76	0.75	-82.42	-33.02	-3.32	32.93	31.42	1.50	21.899		
500.00	499.84	498.06	497.90	0.97	0.95	-85.62	-36.99	-6.57	36.46	34.55	1.92	19.013		
600.00	599.45	596.82	596.29	1.22	1.18	-89.74	-43.58	-11.97	42.55	40.17	2.38	17.857		
700.00	698.70	695.27	694.01	1.50	1.45	-93.79	-52.76	-19.49	51.33	48.41	2.91	17.616 SF		
800.00	797.47	793.29	790.86	1.82	1.76	-97.27	-64.47	-29.08	62.85	59.32	3.53	17.822		
900.00	895.62	890.79	886.61	2.20	2.13	-100.04	-78.65	-40.71	77.10	72.87	4.23	18.213		
1,000.00	993.06	987.68	981.10	2.64	2.54	-102.16	-95.23	-54.29	94.04	89.00	5.04	18.649		
1,100.00	1,089.64	1,083.88	1,074.13	3.14	3.01	-103.76	-114.13	-69.78	113.62	107.66	5.96	19.064		
1,200.00	1,185.27	1,179.29	1,165.55	3.70	3.54	-104.93	-135.26	-87.09	135.76	128.78	6.99	19.429		
1,300.00	1,279.82	1,273.84	1,255.19	4.34	4.11	-105.78	-158.50	-106.13	160.42	152.29	8.13	19.737		
1,400.00	1,373.17	1,367.47	1,342.94	5.04	4.74	-106.38	-183.76	-126.83	187.53	178.15	9.38	19.991		
1,500.00	1,465.21	1,460.12	1,428.67	5.82	5.42	-106.78	-210.92	-149.09	217.02	206.28	10.75	20.197		
1,600.00	1,555.84	1,551.73	1,512.28	6.67	6.14	-107.02	-239.88	-172.81	248.84	236.62	12.22	20.361		
1,640.31	1,591.94	1,588.35	1,545.36	7.04	6.44	-107.08	-252.03	-182.77	262.30	249.46	12.84	20.422		
1,700.00	1,645.22	1,642.33	1,593.75	7.59	6.91	-107.42	-270.53	-197.93	282.74	268.93	13.81	20.478		
1,800.00	1,734.48	1,732.15	1,673.24	8.52	7.72	-107.51	-302.87	-224.43	317.92	302.48	15.45	20.581		
1,900.00	1,823.73	1,821.06	1,750.59	9.46	8.57	-107.13	-336.77	-252.20	354.29	337.16	17.12	20.689		
2,000.00	1,912.98	1,908.90	1,825.65	10.40	9.45	-106.44	-372.07	-281.13	391.85	373.03	18.83	20.811		
2,100.00	2,002.24	2,001.02	1,903.57	11.35	10.42	-105.64	-410.06	-312.25	430.10	409.51	20.59	20.887		
2,200.00	2,091.49	2,093.26	1,981.61	12.30	11.39	-104.97	-448.11	-343.43	468.41	446.06	22.36	20.949		
2,300.00	2,180.74	2,185.50	2,059.65	13.25	12.36	-104.40	-486.15	-374.60	506.77	482.64	24.13	21.002		
2,400.00	2,270.00	2,277.74	2,137.68	14.20	13.34	-103.91	-524.20	-405.78	545.16	519.26	25.90	21.047		
2,500.00	2,359.25	2,369.99	2,215.72	15.16	14.32	-103.49	-562.24	-436.95	583.59	555.91	27.68	21.086		
2,600.00	2,448.51	2,462.23	2,293.75	16.12	15.30	-103.11	-600.29	-468.12	622.03	592.58	29.45	21.121		
2,700.00	2,537.76	2,554.47	2,371.79	17.08	16.28	-102.79	-638.34	-499.30	660.50	629.27	31.23	21.152		
2,800.00	2,627.01	2,646.72	2,449.82	18.04	17.27	-102.49	-676.38	-530.47	698.98	665.98	33.00	21.179		
2,900.00	2,716.27	2,738.96	2,527.86	19.00	18.25	-102.23	-714.43	-561.64	737.48	702.70	34.78	21.204		
3,000.00	2,805.52	2,831.20	2,605.89	19.96	19.24	-102.00	-752.47	-592.82	775.99	739.43	36.56	21.227		
3,100.00	2,894.77	2,923.45	2,683.93	20.92	20.22	-101.78	-790.52	-623.99	814.51	776.17	38.33	21.248		
3,200.00	2,984.03	3,015.69	2,761.97	21.88	21.21	-101.59	-828.56	-655.16	853.03	812.92	40.11	21.267		
3,300.00	3,073.28	3,107.93	2,840.00	22.85	22.20	-101.41	-866.61	-686.34	891.57	849.68	41.89	21.285		
3,400.00	3,162.54	3,200.18	2,918.04	23.81	23.19	-101.25	-904.66	-717.51	930.11	886.45	43.66	21.302		
3,500.00	3,251.79	3,292.42	2,996.07	24.77	24.18	-101.10	-942.70	-748.68	968.66	923.22	45.44	21.318		
3,600.00	3,341.04	3,384.66	3,074.11	25.74	25.17	-100.96	-980.75	-779.86	1,007.21	960.00	47.21	21.333		
3,700.00	3,430.30	3,476.91	3,152.14	26.70	26.16	-100.83	-1,018.79	-811.03	1,045.77	996.78	48.99	21.347		
3,800.00	3,519.55	3,569.15	3,230.18	27.66	27.15	-100.71	-1,056.84	-842.21	1,084.33	1,033.56	50.76	21.360		
3,900.00	3,608.80	3,661.39	3,308.21	28.63	28.14	-100.60	-1,094.88	-873.38	1,122.90	1,070.36	52.54	21.372		
4,000.00	3,698.06	3,753.64	3,386.25	29.59	29.13	-100.50	-1,132.93	-904.55	1,161.46	1,107.15	54.31	21.384		
4,100.00	3,787.31	3,845.88	3,464.29	30.56	30.12	-100.40	-1,170.98	-935.73	1,200.04	1,143.95	56.09	21.396		
4,200.00	3,876.57	3,938.12	3,542.32	31.52	31.11	-100.31	-1,209.02	-966.90	1,238.61	1,180.75	57.86	21.407		
4,300.00	3,965.82	4,030.37	3,620.36	32.49	32.10	-100.22	-1,247.07	-998.07	1,277.19	1,217.56	59.63	21.418		
4,400.00	4,055.07	4,122.61	3,698.39	33.45	33.10	-100.14	-1,285.11	-1,029.25	1,315.77	1,254.36	61.40	21.428		
4,500.00	4,144.33	4,214.85	3,776.43	34.42	34.09	-100.07	-1,323.16	-1,060.42	1,354.35	1,291.17	63.18	21.438		
4,600.00	4,233.58	4,307.10	3,854.46	35.38	35.08	-99.99	-1,361.20	-1,091.59	1,392.93	1,327.99	64.95	21.448		
4,700.00	4,322.83	4,399.34	3,932.50	36.35	36.07	-99.93	-1,399.25	-1,122.77	1,431.52	1,364.80	66.72	21.457		
4,800.00	4,412.09	4,491.58	4,010.53	37.32	37.06	-99.86	-1,437.30	-1,153.94	1,470.10	1,401.62	68.49	21.466		
4,900.00	4,501.34	4,583.83	4,088.57	38.28	38.06	-99.80	-1,475.34	-1,185.11	1,508.69	1,438.44	70.25	21.475		
5,000.00	4,590.60	4,676.07	4,166.61	39.25	39.05	-99.74	-1,513.39	-1,216.29	1,547.28	1,475.26	72.02	21.483		

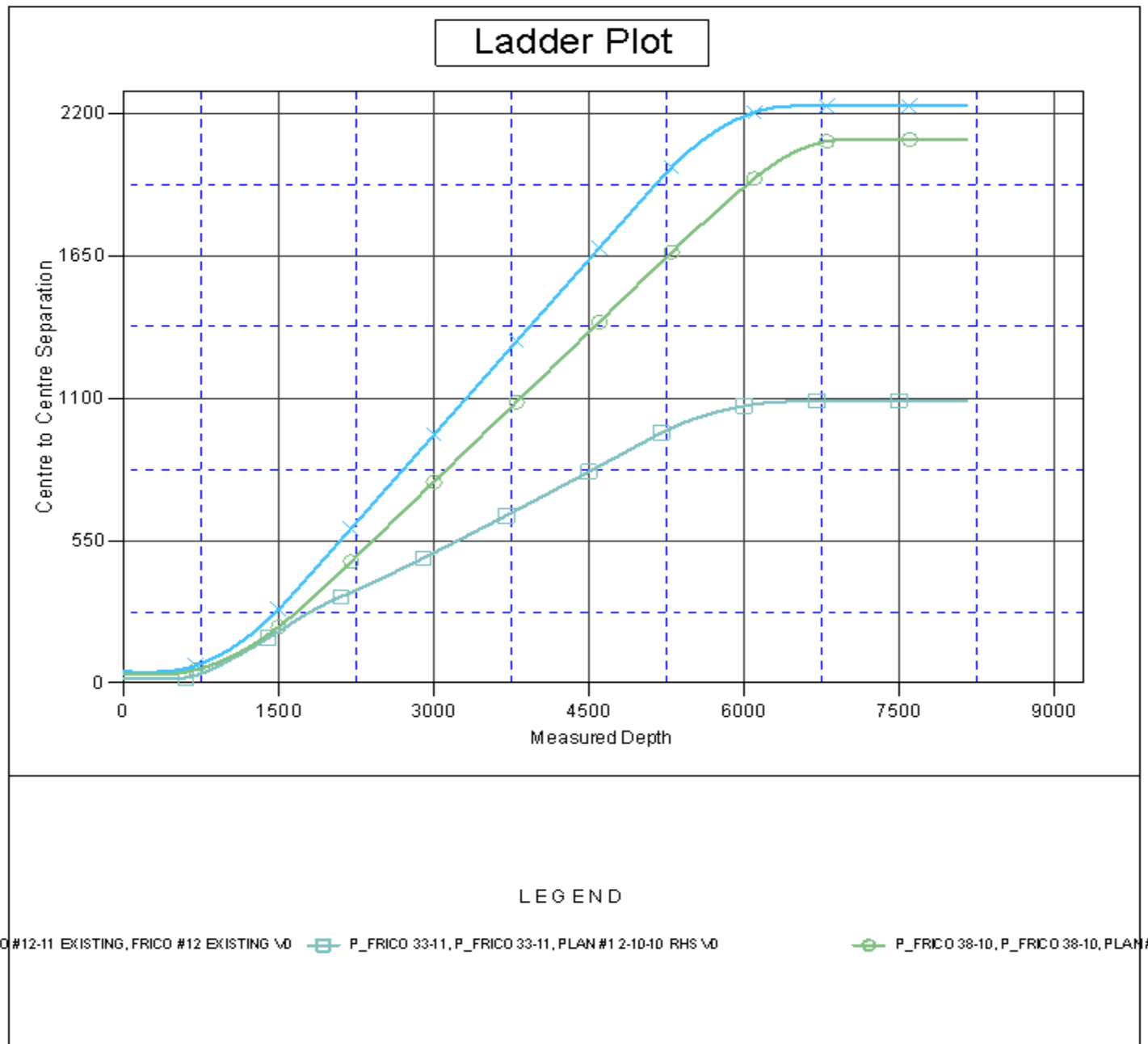
CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_FRICO 9-10A
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 4794.00ft (Original Well Elev)
Reference Site:	WELD_FRICO PAD	MD Reference:	WELL @ 4794.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_FRICO 9-10A	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_FRICO 9-10A	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 2-10-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design WELD_FRICO PAD - P_FRICO 38-10 - P_FRICO 38-10 - PLAN #1 2-10-10 RHS												Offset Site Error:	0.00 ft
Survey Program: 0-MWD												Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5,100.00	4,679.85	4,768.31	4,244.64	40.21	40.04	-99.69	-1,551.43	-1,247.46	1,585.87	1,512.08	73.79	21.492	
5,131.61	4,708.06	4,797.47	4,269.30	40.52	40.35	-99.67	-1,563.46	-1,257.31	1,598.07	1,523.72	74.35	21.494	
5,200.00	4,769.47	4,860.59	4,322.71	41.10	41.03	-100.17	-1,589.49	-1,278.65	1,624.34	1,548.73	75.61	21.484	
5,300.00	4,860.50	4,952.96	4,400.85	41.81	42.03	-100.77	-1,627.59	-1,309.86	1,662.27	1,584.98	77.28	21.509	
5,400.00	4,952.93	5,045.31	4,478.98	42.46	43.02	-101.25	-1,665.68	-1,341.07	1,699.62	1,620.75	78.87	21.549	
5,500.00	5,046.63	5,137.54	4,557.00	43.06	44.01	-101.60	-1,703.72	-1,372.24	1,736.41	1,656.04	80.38	21.604	
5,600.00	5,141.49	5,229.53	4,634.82	43.60	45.00	-101.85	-1,741.66	-1,403.33	1,772.65	1,690.86	81.79	21.673	
5,700.00	5,237.40	5,321.16	4,712.34	44.08	45.99	-101.99	-1,779.46	-1,434.30	1,808.38	1,725.26	83.12	21.756	
5,800.00	5,334.23	5,412.34	4,789.47	44.50	46.97	-102.04	-1,817.06	-1,465.11	1,843.64	1,759.28	84.36	21.854	
5,900.00	5,431.88	5,502.94	4,866.12	44.87	47.95	-102.00	-1,854.43	-1,495.73	1,878.49	1,792.98	85.52	21.967	
6,000.00	5,530.22	5,592.86	4,942.19	45.19	48.92	-101.89	-1,891.52	-1,526.12	1,913.01	1,826.43	86.58	22.096	
6,100.00	5,629.13	5,717.58	5,048.42	45.45	50.09	-101.38	-1,942.05	-1,567.52	1,946.79	1,859.16	87.63	22.215	
6,200.00	5,728.50	5,870.70	5,182.44	45.65	51.22	-100.62	-1,999.30	-1,614.43	1,977.77	1,889.27	88.51	22.346	
6,300.00	5,828.19	6,029.85	5,325.72	45.81	52.29	-99.84	-2,052.86	-1,658.31	2,005.54	1,916.28	89.26	22.469	
6,400.00	5,928.10	6,194.93	5,478.16	45.92	53.28	-99.03	-2,101.81	-1,698.43	2,029.88	1,940.01	89.88	22.585	
6,471.91	6,000.00	6,317.19	5,593.27	45.97	53.92	166.79	-2,133.65	-1,724.51	2,045.15	1,954.92	90.23	22.666	
6,500.00	6,028.09	6,365.78	5,639.49	45.98	54.16	167.13	-2,145.24	-1,734.01	2,050.60	1,960.29	90.31	22.706	
6,600.00	6,128.09	6,542.87	5,809.94	46.04	54.93	168.19	-2,182.32	-1,764.40	2,067.80	1,977.22	90.58	22.828	
6,700.00	6,228.09	6,725.55	5,988.53	46.11	55.56	169.02	-2,211.97	-1,788.68	2,081.27	1,990.45	90.82	22.915	
6,800.00	6,328.09	6,912.56	6,173.49	46.17	56.03	169.60	-2,233.13	-1,806.03	2,090.74	1,999.70	91.04	22.965	
6,900.00	6,428.09	7,102.41	6,362.68	46.24	56.33	169.92	-2,245.02	-1,815.77	2,096.01	2,004.77	91.23	22.974	
7,000.00	6,528.09	7,267.87	6,528.09	46.30	56.45	169.98	-2,247.57	-1,817.86	2,097.13	2,005.73	91.40	22.945	
7,100.00	6,628.09	7,367.87	6,628.09	46.37	56.50	169.98	-2,247.57	-1,817.86	2,097.13	2,005.61	91.53	22.913	
7,200.00	6,728.09	7,467.87	6,728.09	46.44	56.55	169.98	-2,247.57	-1,817.86	2,097.13	2,005.48	91.65	22.881	
7,300.00	6,828.09	7,567.87	6,828.09	46.51	56.59	169.98	-2,247.57	-1,817.86	2,097.13	2,005.35	91.78	22.849	
7,400.00	6,928.09	7,667.87	6,928.09	46.58	56.64	169.98	-2,247.57	-1,817.86	2,097.13	2,005.21	91.92	22.816	
7,500.00	7,028.09	7,767.87	7,028.09	46.65	56.69	169.98	-2,247.57	-1,817.86	2,097.13	2,005.08	92.05	22.782	
7,600.00	7,128.09	7,867.87	7,128.09	46.72	56.74	169.98	-2,247.57	-1,817.86	2,097.13	2,004.94	92.19	22.748	
7,700.00	7,228.09	7,967.87	7,228.09	46.79	56.79	169.98	-2,247.57	-1,817.86	2,097.13	2,004.81	92.33	22.714	
7,800.00	7,328.09	8,067.87	7,328.09	46.87	56.85	169.98	-2,247.57	-1,817.86	2,097.13	2,004.66	92.47	22.680	
7,900.00	7,428.09	8,167.87	7,428.09	46.94	56.90	169.98	-2,247.57	-1,817.86	2,097.13	2,004.52	92.61	22.645	
8,000.00	7,528.09	8,267.87	7,528.09	47.02	56.95	169.98	-2,247.57	-1,817.86	2,097.13	2,004.38	92.75	22.610	
8,100.00	7,628.09	8,367.87	7,628.09	47.09	57.01	169.98	-2,247.57	-1,817.86	2,097.13	2,004.23	92.90	22.574	
8,151.91	7,680.00	8,419.78	7,680.00	47.13	57.03	169.98	-2,247.57	-1,817.86	2,097.13	2,004.15	92.98	22.555	

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_FRICO 9-10A
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 4794.00ft (Original Well Elev)
Reference Site:	WELD_FRICO PAD	MD Reference:	WELL @ 4794.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_FRICO 9-10A	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_FRICO 9-10A	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 2-10-10 RHS	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 4794.00ft (Original Well Elev) Coordinates are relative to: P_FRICO 9-10A
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: 0.56°



Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_FRICO 9-10A
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 4794.00ft (Original Well Elev)
Reference Site:	WELD_FRICO PAD	MD Reference:	WELL @ 4794.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_FRICO 9-10A	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_FRICO 9-10A	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 2-10-10 RHS	Offset TVD Reference:	Offset Datum

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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: 0.56°

