



# **US ROCKIES REGION PLANNING**

**COLORADO NORTHERN ZONE - 83**

**WELD\_WINTERS 5-3 PAD**

**P\_WINTERS 29-3**

**P\_WINTERS 29-3**

**Plan: PLAN #1 3-10-10 RHS**

## **Standard Planning Report**

**10 March, 2010**

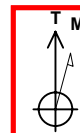




Project: COLORADO NORTHERN ZONE - 83  
 Site: WELD\_WINTERS 5-3 PAD  
 Well: P\_WINTERS 29-3  
 Wellbore: P\_WINTERS 29-3  
 Section: SECTION 3 T5N R65W  
 SHL: 1895 FNL 517 FWL  
 Design: PLAN #1 3-10-10 RHS  
 Latitude: 40° 25' 48.410 N  
 Longitude: 104° 39' 24.966 W  
 GL: 4657.00  
 KB: WELL @ 4672.00ft (Original Well Elev)



**Weatherford**



Azimuths to True North  
 Magnetic North: 8.98°  
 Magnetic Field  
 Strength: 53294.0snT  
 Dip Angle: 67.14°  
 Date: 3/10/2010  
 Model: IGRF2010

#### FORMATION TOP DETAILS

TVDPath	MDPath	Formation
3553.00	3796.88	PARKMAN
4280.00	4596.72	SUSSEX
6700.00	7096.99	NIO A
7010.00	7406.99	CODELL
7086.00	7482.99	GREENHORN

#### CASING DETAILS

TVD	MD	Name	Size
530.00	530.25	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
1532.08	24.64	23.14	1494.45	239.90	102.52	2.00	23.14	260.89	Start 3532.82 hold at 1532.08 MD
5064.91	24.64	23.14	4705.55	1594.38	681.36	0.00	0.00	1733.87	Start Drop -2.00
6296.99	0.00	0.00	5900.00	1834.28	783.88	2.00	180.00	1994.76	Start 1270.00 hold at 6296.99 MD
7566.99	0.00	0.00	7170.00	1834.28	783.88	0.00	0.00	1994.76	TD at 7566.99

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

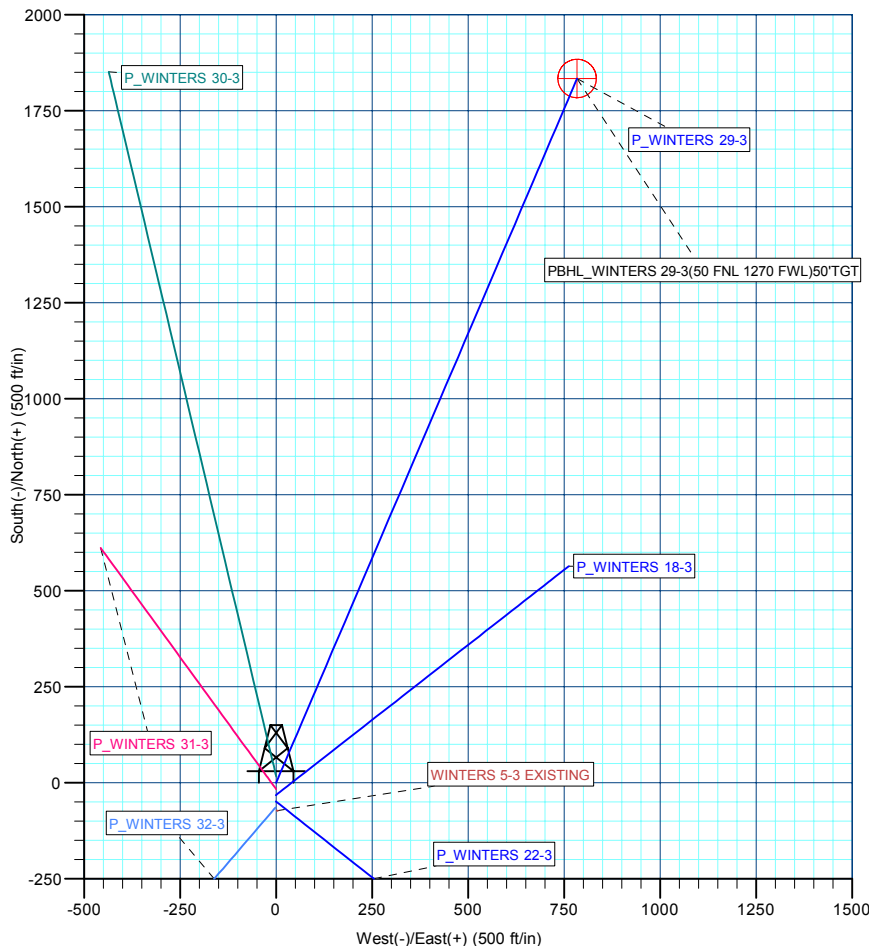
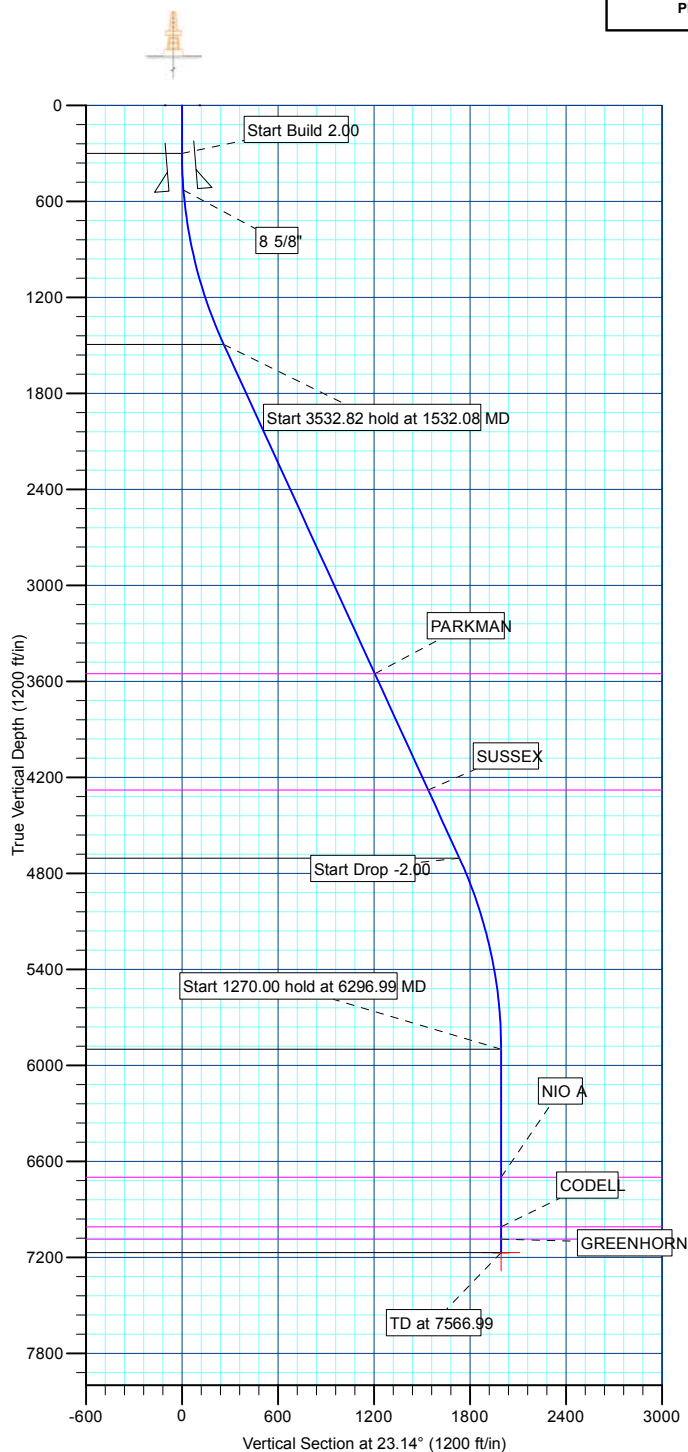
Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
PBHL	7170.00	1834.28	783.88	40° 26' 6.536 N	104° 39' 14.828 W	Circle (Radius: 50.00)

#### WELL DETAILS: P\_WINTERS 29-3

+N/-S	+E/-W	Northing	Ground Level: Easting	4657.00 Latitude	Longitude	Slot
0.00	0.00	1400646.52	3234694.50	40° 25' 48.410 N	104° 39' 24.966 W	

#### LEGEND

- P\_WINTERS 18-3, P\_WINTERS 18-3, PLAN #1 3-10-10 RHS V0
- P\_WINTERS 22-3, P\_WINTERS 22-3, PLAN #1 3-10-10 RHS V0
- P\_WINTERS 30-3, P\_WINTERS 30-3, PLAN #1 3-10-10 RHS V0
- P\_WINTERS 31-3, P\_WINTERS 31-3, PLAN #1 3-10-10 RHS V0
- P\_WINTERS 32-3, P\_WINTERS 32-3, PLAN #1 3-10-10 RHS V0
- WINTERS 5-3 EXISTING, WINTERS 5-3 EXISTING V0
- PLAN #1 3-10-10 RHS



Plan: PLAN #1 3-10-10 RHS (P\_WINTERS 29-3/P\_WINTERS 29-3)

Created By: Robert H. Scott Date: 11:40, March 10 2010

<b>Database:</b>	EDM 2003.21 Single User Db	<b>Local Co-ordinate Reference:</b>	Well P_WINTERS 29-3
<b>Company:</b>	US ROCKIES REGION PLANNING	<b>TVD Reference:</b>	WELL @ 4672.00ft (Original Well Elev)
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>MD Reference:</b>	WELL @ 4672.00ft (Original Well Elev)
<b>Site:</b>	WELD_WINTERS 5-3 PAD	<b>North Reference:</b>	True
<b>Well:</b>	P_WINTERS 29-3	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	P_WINTERS 29-3		
<b>Design:</b>	PLAN #1 3-10-10 RHS		

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

Site						WELD_WINTERS 5-3 PAD, SECTION 3 T5N R65W											
Site Position:						Northing:			1,400,614.48 ft			Latitude:			40° 25' 48.094 N		
From:			Lat/Long			Easting:			3,234,694.25 ft			Longitude:			104° 39' 24.973 W		
Position Uncertainty:			0.00 ft			Slot Radius:			in			Grid Convergence:			0.54 °		

Well	P_WINTERS 29-3					
Well Position	+N/-S	32.04 ft	Northing:	1,400,646.52 ft	Latitude:	40° 25' 48.410 N
	+E/-W	0.56 ft	Easting:	3,234,694.50 ft	Longitude:	104° 39' 24.966 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	4,657.00 ft

<b>Wellbore</b>	P_WINTERS 29-3				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	3/10/2010	8.98	67.14	53,294

<b>Design</b>	PLAN #1 3-10-10 RHS			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>
	0.00	0.00	0.00	23.14

<b>Plan Sections</b>										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,532.08	24.64	23.14	1,494.45	239.90	102.52	2.00	2.00	0.00	23.14	
5,064.91	24.64	23.14	4,705.55	1,594.38	681.36	0.00	0.00	0.00	0.00	
6,296.99	0.00	0.00	5,900.00	1,834.28	783.88	2.00	-2.00	0.00	180.00	
7,566.99	0.00	0.00	7,170.00	1,834.28	783.88	0.00	0.00	0.00	0.00	PBHL_WINTERS 2

<b>Database:</b>	EDM 2003.21 Single User Db	<b>Local Co-ordinate Reference:</b>	Well P_WINTERS 29-3
<b>Company:</b>	US ROCKIES REGION PLANNING	<b>TVD Reference:</b>	WELL @ 4672.00ft (Original Well Elev)
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>MD Reference:</b>	WELL @ 4672.00ft (Original Well Elev)
<b>Site:</b>	WELD_WINTERS 5-3 PAD	<b>North Reference:</b>	True
<b>Well:</b>	P_WINTERS 29-3	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	P_WINTERS 29-3		
<b>Design:</b>	PLAN #1 3-10-10 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)
<b>Start Build 2.00</b>									
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	2.00	23.14	399.98	1.60	0.69	1.75	2.00	2.00	0.00
500.00	4.00	23.14	499.84	6.42	2.74	6.98	2.00	2.00	0.00
<b>8 5/8"</b>									
530.25	4.60	23.14	530.00	8.50	3.63	9.25	2.00	2.00	0.00
600.00	6.00	23.14	599.45	14.43	6.17	15.69	2.00	2.00	0.00
700.00	8.00	23.14	698.70	25.64	10.96	27.88	2.00	2.00	0.00
800.00	10.00	23.14	797.47	40.02	17.10	43.52	2.00	2.00	0.00
900.00	12.00	23.14	895.62	57.57	24.60	62.60	2.00	2.00	0.00
1,000.00	14.00	23.14	993.06	78.25	33.44	85.10	2.00	2.00	0.00
1,100.00	16.00	23.14	1,089.64	102.05	43.61	110.98	2.00	2.00	0.00
1,200.00	18.00	23.14	1,185.27	128.93	55.10	140.21	2.00	2.00	0.00
1,300.00	20.00	23.14	1,279.82	158.87	67.89	172.77	2.00	2.00	0.00
1,400.00	22.00	23.14	1,373.17	191.82	81.97	208.60	2.00	2.00	0.00
1,500.00	24.00	23.14	1,465.21	227.75	97.33	247.67	2.00	2.00	0.00
<b>Start 3532.82 hold at 1532.08 MD</b>									
1,532.08	24.64	23.14	1,494.45	239.90	102.52	260.89	2.00	2.00	0.00
1,600.00	24.64	23.14	1,556.18	265.94	113.65	289.20	0.00	0.00	0.00
1,700.00	24.64	23.14	1,647.08	304.28	130.03	330.90	0.00	0.00	0.00
1,800.00	24.64	23.14	1,737.97	342.62	146.42	372.59	0.00	0.00	0.00
1,900.00	24.64	23.14	1,828.86	380.96	162.80	414.29	0.00	0.00	0.00
2,000.00	24.64	23.14	1,919.76	419.30	179.19	455.98	0.00	0.00	0.00
2,100.00	24.64	23.14	2,010.65	457.64	195.57	497.68	0.00	0.00	0.00
2,200.00	24.64	23.14	2,101.54	495.98	211.96	539.37	0.00	0.00	0.00
2,300.00	24.64	23.14	2,192.44	534.32	228.34	581.06	0.00	0.00	0.00
2,400.00	24.64	23.14	2,283.33	572.66	244.73	622.76	0.00	0.00	0.00
2,500.00	24.64	23.14	2,374.22	611.00	261.11	664.45	0.00	0.00	0.00
2,600.00	24.64	23.14	2,465.12	649.34	277.49	706.15	0.00	0.00	0.00
2,700.00	24.64	23.14	2,556.01	687.68	293.88	747.84	0.00	0.00	0.00
2,800.00	24.64	23.14	2,646.90	726.02	310.26	789.54	0.00	0.00	0.00
2,900.00	24.64	23.14	2,737.80	764.36	326.65	831.23	0.00	0.00	0.00
3,000.00	24.64	23.14	2,828.69	802.70	343.03	872.92	0.00	0.00	0.00
3,100.00	24.64	23.14	2,919.58	841.04	359.42	914.62	0.00	0.00	0.00
3,200.00	24.64	23.14	3,010.48	879.38	375.80	956.31	0.00	0.00	0.00
3,300.00	24.64	23.14	3,101.37	917.72	392.19	998.01	0.00	0.00	0.00
3,400.00	24.64	23.14	3,192.26	956.06	408.57	1,039.70	0.00	0.00	0.00
3,500.00	24.64	23.14	3,283.16	994.40	424.96	1,081.39	0.00	0.00	0.00
3,600.00	24.64	23.14	3,374.05	1,032.74	441.34	1,123.09	0.00	0.00	0.00
3,700.00	24.64	23.14	3,464.94	1,071.08	457.73	1,164.78	0.00	0.00	0.00
<b>PARKMAN</b>									
3,796.88	24.64	23.14	3,553.00	1,108.22	473.60	1,205.18	0.00	0.00	0.00
3,800.00	24.64	23.14	3,555.84	1,109.42	474.11	1,206.48	0.00	0.00	0.00
3,900.00	24.64	23.14	3,646.73	1,147.76	490.49	1,248.17	0.00	0.00	0.00
4,000.00	24.64	23.14	3,737.62	1,186.10	506.88	1,289.87	0.00	0.00	0.00
4,100.00	24.64	23.14	3,828.52	1,224.44	523.26	1,331.56	0.00	0.00	0.00
4,200.00	24.64	23.14	3,919.41	1,262.78	539.65	1,373.25	0.00	0.00	0.00
4,300.00	24.64	23.14	4,010.30	1,301.12	556.03	1,414.95	0.00	0.00	0.00
4,400.00	24.64	23.14	4,101.19	1,339.46	572.42	1,456.64	0.00	0.00	0.00
4,500.00	24.64	23.14	4,192.09	1,377.80	588.80	1,498.34	0.00	0.00	0.00
<b>SUSSEX</b>									
4,596.72	24.64	23.14	4,280.00	1,414.88	604.65	1,538.66	0.00	0.00	0.00
4,600.00	24.64	23.14	4,282.98	1,416.14	605.19	1,540.03	0.00	0.00	0.00

<b>Database:</b>	EDM 2003.21 Single User Db	<b>Local Co-ordinate Reference:</b>	Well P_WINTERS 29-3
<b>Company:</b>	US ROCKIES REGION PLANNING	<b>TVD Reference:</b>	WELL @ 4672.00ft (Original Well Elev)
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>MD Reference:</b>	WELL @ 4672.00ft (Original Well Elev)
<b>Site:</b>	WELD_WINTERS 5-3 PAD	<b>North Reference:</b>	True
<b>Well:</b>	P_WINTERS 29-3	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	P_WINTERS 29-3		
<b>Design:</b>	PLAN #1 3-10-10 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	24.64	23.14	4,373.87	1,454.48	621.57	1,581.72	0.00	0.00	0.00
4,800.00	24.64	23.14	4,464.77	1,492.82	637.96	1,623.42	0.00	0.00	0.00
4,900.00	24.64	23.14	4,555.66	1,531.16	654.34	1,665.11	0.00	0.00	0.00
5,000.00	24.64	23.14	4,646.55	1,569.50	670.72	1,706.81	0.00	0.00	0.00
<b>Start Drop -2.00</b>									
5,064.91	24.64	23.14	4,705.55	1,594.38	681.36	1,733.87	0.00	0.00	0.00
5,100.00	23.94	23.14	4,737.54	1,607.66	687.03	1,748.31	2.00	-2.00	0.00
5,200.00	21.94	23.14	4,829.62	1,643.50	702.35	1,787.28	2.00	-2.00	0.00
5,300.00	19.94	23.14	4,923.01	1,676.36	716.39	1,823.02	2.00	-2.00	0.00
5,400.00	17.94	23.14	5,017.60	1,706.20	729.15	1,855.47	2.00	-2.00	0.00
5,500.00	15.94	23.14	5,113.25	1,732.99	740.59	1,884.61	2.00	-2.00	0.00
5,600.00	13.94	23.14	5,209.87	1,756.70	750.73	1,910.39	2.00	-2.00	0.00
5,700.00	11.94	23.14	5,307.32	1,777.29	759.52	1,932.78	2.00	-2.00	0.00
5,800.00	9.94	23.14	5,405.50	1,794.74	766.98	1,951.76	2.00	-2.00	0.00
5,900.00	7.94	23.14	5,504.28	1,809.03	773.09	1,967.29	2.00	-2.00	0.00
6,000.00	5.94	23.14	5,603.54	1,820.14	777.84	1,979.38	2.00	-2.00	0.00
6,100.00	3.94	23.14	5,703.17	1,828.06	781.22	1,987.99	2.00	-2.00	0.00
6,200.00	1.94	23.14	5,803.03	1,832.77	783.23	1,993.11	2.00	-2.00	0.00
<b>Start 1270.00 hold at 6296.99 MD</b>									
6,296.99	0.00	0.00	5,900.00	1,834.28	783.88	1,994.76	2.00	-2.00	0.00
6,300.00	0.00	0.00	5,903.01	1,834.28	783.88	1,994.76	0.00	0.00	0.00
6,400.00	0.00	0.00	6,003.01	1,834.28	783.88	1,994.76	0.00	0.00	0.00
6,500.00	0.00	0.00	6,103.01	1,834.28	783.88	1,994.76	0.00	0.00	0.00
6,600.00	0.00	0.00	6,203.01	1,834.28	783.88	1,994.76	0.00	0.00	0.00
6,700.00	0.00	0.00	6,303.01	1,834.28	783.88	1,994.76	0.00	0.00	0.00
6,800.00	0.00	0.00	6,403.01	1,834.28	783.88	1,994.76	0.00	0.00	0.00
6,900.00	0.00	0.00	6,503.01	1,834.28	783.88	1,994.76	0.00	0.00	0.00
7,000.00	0.00	0.00	6,603.01	1,834.28	783.88	1,994.76	0.00	0.00	0.00
<b>NIO A</b>									
7,096.99	0.00	0.00	6,700.00	1,834.28	783.88	1,994.76	0.00	0.00	0.00
7,100.00	0.00	0.00	6,703.01	1,834.28	783.88	1,994.76	0.00	0.00	0.00
7,200.00	0.00	0.00	6,803.01	1,834.28	783.88	1,994.76	0.00	0.00	0.00
7,300.00	0.00	0.00	6,903.01	1,834.28	783.88	1,994.76	0.00	0.00	0.00
7,400.00	0.00	0.00	7,003.01	1,834.28	783.88	1,994.76	0.00	0.00	0.00
<b>CODELL</b>									
7,406.99	0.00	0.00	7,010.00	1,834.28	783.88	1,994.76	0.00	0.00	0.00
<b>GREENHORN</b>									
7,482.99	0.00	0.00	7,086.00	1,834.28	783.88	1,994.76	0.00	0.00	0.00
7,500.00	0.00	0.00	7,103.01	1,834.28	783.88	1,994.76	0.00	0.00	0.00
<b>PBHL_WINTERS 29-3(50 FNL 1270 FWL)50'TGT</b>									
7,566.99	0.00	0.00	7,170.00	1,834.28	783.88	1,994.76	0.00	0.00	0.00

#### Design Targets

##### Target Name

- hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
PBHL_WINTERS 29-3: - plan hits target center - Circle (radius 50.00)	0.00	0.00	7,170.00	1,834.28	783.88	1,402,488.17	3,235,460.90	40° 26' 6.536 N	104° 39' 14.828 W

<b>Database:</b>	EDM 2003.21 Single User Db	<b>Local Co-ordinate Reference:</b>	Well P_WINTERS 29-3
<b>Company:</b>	US ROCKIES REGION PLANNING	<b>TVD Reference:</b>	WELL @ 4672.00ft (Original Well Elev)
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>MD Reference:</b>	WELL @ 4672.00ft (Original Well Elev)
<b>Site:</b>	WELD_WINTERS 5-3 PAD	<b>North Reference:</b>	True
<b>Well:</b>	P_WINTERS 29-3	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	P_WINTERS 29-3		
<b>Design:</b>	PLAN #1 3-10-10 RHS		

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)	
530.25	530.00	8 5/8"	8.62	11.00	

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
3,796.88	3,553.00	PARKMAN				
4,596.72	4,280.00	SUSSEX				
7,096.99	6,700.00	NIO A				
7,406.99	7,010.00	CODELL				
7,482.99	7,086.00	GREENHORN				

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	
1,532.08	1,494.45	239.90	102.52	Start 3532.82 hold at 1532.08 MD	
5,064.91	4,705.55	1,594.38	681.36	Start Drop -2.00	
6,296.99	5,900.00	1,834.28	783.88	Start 1270.00 hold at 6296.99 MD	
7,566.99	7,170.00	1,834.28	783.88	TD at 7566.99	



# **US ROCKIES REGION PLANNING**

**COLORADO NORTHERN ZONE - 83  
WELD\_WINTERS 5-3 PAD  
P\_WINTERS 29-3**

**P\_WINTERS 29-3  
PLAN #1 3-10-10 RHS**

## **Anticollision Report**

**10 March, 2010**



<b>Company:</b>	US ROCKIES REGION PLANNING	<b>Local Co-ordinate Reference:</b>	Well P_WINTERS 29-3
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>TVD Reference:</b>	WELL @ 4672.00ft (Original Well Elev)
<b>Reference Site:</b>	WELD_WINTERS 5-3 PAD	<b>MD Reference:</b>	WELL @ 4672.00ft (Original Well Elev)
<b>Site Error:</b>	0.00ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	P_WINTERS 29-3	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	P_WINTERS 29-3	<b>Database:</b>	EDM 2003.21 Single User Db
<b>Reference Design:</b>	PLAN #1 3-10-10 RHS	<b>Offset TVD Reference:</b>	Offset Datum

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

<b>Survey Tool Program</b>	<b>Date</b> 3/10/2010			
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>
0.00	7,566.99	PLAN #1 3-10-10 RHS (P_WINTERS 29-3	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_WINTERS 5-3 PAD						
P_WINTERS 18-3 - P_WINTERS 18-3 - PLAN #1 3-10-1	300.00	300.00	32.05	30.96	29.398	CC, ES
P_WINTERS 18-3 - P_WINTERS 18-3 - PLAN #1 3-10-1	600.00	599.45	46.96	44.53	19.311	SF
P_WINTERS 22-3 - P_WINTERS 22-3 - PLAN #1 3-10-1	300.00	300.00	48.09	47.00	44.115	CC, ES
P_WINTERS 22-3 - P_WINTERS 22-3 - PLAN #1 3-10-1	600.00	599.45	62.91	60.47	25.863	SF
P_WINTERS 30-3 - P_WINTERS 30-3 - PLAN #1 3-10-1	300.00	300.00	16.03	14.94	14.709	CC
P_WINTERS 30-3 - P_WINTERS 30-3 - PLAN #1 3-10-1	400.00	399.45	16.12	14.58	10.488	ES
P_WINTERS 30-3 - P_WINTERS 30-3 - PLAN #1 3-10-1	600.00	598.07	19.13	16.68	7.805	SF
P_WINTERS 31-3 - P_WINTERS 31-3 - PLAN #1 3-10-1	300.00	300.00	16.03	14.94	14.703	CC, ES
P_WINTERS 31-3 - P_WINTERS 31-3 - PLAN #1 3-10-1	500.00	499.84	22.64	20.66	11.410	SF
P_WINTERS 32-3 - P_WINTERS 32-3 - PLAN #1 3-10-1	300.00	300.00	64.13	63.04	58.830	CC, ES
P_WINTERS 32-3 - P_WINTERS 32-3 - PLAN #1 3-10-1	700.00	696.91	91.27	88.41	31.914	SF
WINTERS 5-3 EXISTING - WINTERS 5-3 EXISTING - W	300.00	278.00	72.89	67.13	12.661	CC
WINTERS 5-3 EXISTING - WINTERS 5-3 EXISTING - W	400.00	377.98	74.48	66.45	9.279	ES
WINTERS 5-3 EXISTING - WINTERS 5-3 EXISTING - W	700.00	676.70	98.91	84.25	6.749	SF

Offset Design		WELD_WINTERS 5-3 PAD - P_WINTERS 18-3 - P_WINTERS 18-3 - PLAN #1 3-10-10 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	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning	
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
0.00	0.00	0.00	0.00	0.00	0.00	-179.00	-32.04	-0.56	32.05					
100.00	100.00	100.00	100.00	0.10	0.10	-179.00	-32.04	-0.56	32.05	31.86	0.19	167.740		
200.00	200.00	200.00	200.00	0.32	0.32	-179.00	-32.04	-0.56	32.05	31.41	0.64	50.028		
300.00	300.00	300.00	300.00	0.55	0.55	-179.00	-32.04	-0.56	32.05	30.96	1.09	29.398	CC, ES	
400.00	399.98	399.98	399.98	0.77	0.77	158.96	-32.04	-0.56	33.67	32.13	1.54	21.891		
500.00	499.84	499.84	499.84	1.00	0.99	161.72	-32.04	-0.56	38.60	36.62	1.98	19.447		
600.00	599.45	599.45	599.45	1.24	1.22	165.01	-32.04	-0.56	46.96	44.53	2.43	19.311	SF	
700.00	698.70	699.77	699.77	1.52	1.44	167.52	-31.52	0.11	58.19	55.31	2.88	20.222		
800.00	797.47	800.74	800.64	1.83	1.66	167.98	-28.91	3.45	70.34	67.02	3.33	21.152		
900.00	895.62	901.94	901.54	2.19	1.89	167.18	-24.10	9.61	83.24	79.45	3.79	21.963		
1,000.00	993.06	1,003.34	1,002.28	2.60	2.15	165.64	-17.08	18.58	96.92	92.64	4.28	22.637		
1,100.00	1,089.64	1,104.88	1,102.71	3.08	2.43	163.65	-7.86	30.38	111.47	106.66	4.81	23.153		
1,200.00	1,185.27	1,206.53	1,202.64	3.61	2.76	161.40	3.56	45.00	126.97	121.57	5.41	23.486		
1,300.00	1,279.82	1,306.09	1,299.98	4.20	3.13	159.27	16.44	61.48	143.99	137.93	6.06	23.762		

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

<b>Company:</b>	US ROCKIES REGION PLANNING	<b>Local Co-ordinate Reference:</b>	Well P_WINTERS 29-3
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>TVD Reference:</b>	WELL @ 4672.00ft (Original Well Elev)
<b>Reference Site:</b>	WELD_WINTERS 5-3 PAD	<b>MD Reference:</b>	WELL @ 4672.00ft (Original Well Elev)
<b>Site Error:</b>	0.00ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	P_WINTERS 29-3	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	P_WINTERS 29-3	<b>Database:</b>	EDM 2003.21 Single User Db
<b>Reference Design:</b>	PLAN #1 3-10-10 RHS	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design WELD_WINTERS 5-3 PAD - P_WINTERS 18-3 - P_WINTERS 18-3 - PLAN #1 3-10-10 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
1,400.00	1,373.17	1,403.98	1,395.64	4.86	3.51	157.97	29.25	77.87	164.17	157.42	6.75	24.339	
1,500.00	1,465.21	1,501.20	1,490.63	5.58	3.90	157.30	41.97	94.14	187.54	180.09	7.45	25.169	
1,532.08	1,494.45	1,532.22	1,520.95	5.82	4.03	157.20	46.03	99.33	195.70	188.02	7.68	25.478	
1,600.00	1,556.18	1,597.81	1,585.05	6.35	4.30	157.16	54.61	110.31	213.32	205.11	8.20	26.005	
1,700.00	1,647.08	1,694.39	1,679.42	7.13	4.71	157.11	67.25	126.48	239.26	230.27	8.98	26.633	
1,800.00	1,737.97	1,790.97	1,773.79	7.91	5.13	157.07	79.88	142.65	265.20	255.42	9.77	27.132	
1,900.00	1,828.86	1,887.55	1,868.16	8.70	5.54	157.04	92.52	158.81	291.13	280.56	10.57	27.536	
2,000.00	1,919.76	1,984.12	1,962.54	9.50	5.97	157.01	105.15	174.98	317.07	305.70	11.38	27.868	
2,100.00	2,010.65	2,080.70	2,056.91	10.30	6.39	156.99	117.79	191.14	343.01	330.83	12.19	28.145	
2,200.00	2,101.54	2,177.28	2,151.28	11.10	6.82	156.97	130.42	207.31	368.95	355.95	13.00	28.378	
2,300.00	2,192.44	2,273.85	2,245.65	11.90	7.25	156.96	143.06	223.48	394.89	381.08	13.82	28.577	
2,400.00	2,283.33	2,370.43	2,340.03	12.70	7.68	156.94	155.69	239.64	420.83	406.20	14.64	28.748	
2,500.00	2,374.22	2,467.01	2,434.40	13.51	8.11	156.93	168.33	255.81	446.77	431.31	15.46	28.896	
2,600.00	2,465.12	2,563.58	2,528.77	14.31	8.54	156.92	180.96	271.98	472.71	456.43	16.29	29.026	
2,700.00	2,556.01	2,660.16	2,623.14	15.12	8.98	156.91	193.60	288.14	498.65	481.54	17.11	29.141	
2,800.00	2,646.90	2,756.74	2,717.51	15.93	9.41	156.90	206.23	304.31	524.59	506.65	17.94	29.243	
2,900.00	2,737.80	2,853.31	2,811.89	16.74	9.85	156.89	218.87	320.47	550.53	531.77	18.77	29.333	
3,000.00	2,828.69	2,949.89	2,906.26	17.55	10.28	156.88	231.50	336.64	576.47	556.88	19.60	29.414	
3,100.00	2,919.58	3,046.47	3,000.63	18.35	10.72	156.88	244.14	352.81	602.41	581.99	20.43	29.488	
3,200.00	3,010.48	3,143.05	3,095.00	19.16	11.16	156.87	256.77	368.97	628.35	607.09	21.26	29.554	
3,300.00	3,101.37	3,239.62	3,189.38	19.97	11.60	156.86	269.41	385.14	654.29	632.20	22.09	29.614	
3,400.00	3,192.26	3,336.20	3,283.75	20.78	12.03	156.86	282.04	401.31	680.23	657.31	22.93	29.669	
3,500.00	3,283.16	3,432.78	3,378.12	21.59	12.47	156.85	294.68	417.47	706.17	682.41	23.76	29.720	
3,600.00	3,374.05	3,529.35	3,472.49	22.40	12.91	156.85	307.31	433.64	732.11	707.52	24.60	29.766	
3,700.00	3,464.94	3,625.93	3,566.86	23.22	13.35	156.84	319.95	449.80	758.06	732.62	25.43	29.809	
3,800.00	3,555.84	3,722.51	3,661.24	24.03	13.79	156.84	332.58	465.97	784.00	757.73	26.27	29.848	
3,900.00	3,646.73	3,819.08	3,755.61	24.84	14.23	156.84	345.22	482.14	809.94	782.83	27.10	29.885	
4,000.00	3,737.62	3,915.66	3,849.98	25.65	14.67	156.83	357.85	498.30	835.88	807.94	27.94	29.919	
4,100.00	3,828.52	4,012.24	3,944.35	26.46	15.11	156.83	370.49	514.47	861.82	833.04	28.77	29.951	
4,200.00	3,919.41	4,108.82	4,038.73	27.27	15.55	156.83	383.12	530.64	887.76	858.14	29.61	29.980	
4,300.00	4,010.30	4,205.39	4,133.10	28.08	15.99	156.82	395.76	546.80	913.70	883.25	30.45	30.008	
4,400.00	4,101.19	4,301.97	4,227.47	28.90	16.43	156.82	408.39	562.97	939.64	908.35	31.29	30.034	
4,500.00	4,192.09	4,398.55	4,321.84	29.71	16.87	156.82	421.03	579.13	965.58	933.45	32.12	30.058	
4,600.00	4,282.98	4,495.12	4,416.21	30.52	17.31	156.82	433.66	595.30	991.52	958.55	32.96	30.081	
4,700.00	4,373.87	4,591.70	4,510.59	31.33	17.75	156.81	446.30	611.47	1,017.46	983.66	33.80	30.103	
4,800.00	4,464.77	4,688.28	4,604.96	32.14	18.19	156.81	458.93	627.63	1,043.40	1,008.76	34.64	30.123	
4,900.00	4,555.66	4,784.85	4,699.33	32.96	18.63	156.81	471.57	643.80	1,069.34	1,033.86	35.48	30.143	
5,000.00	4,646.55	4,881.43	4,793.70	33.77	19.07	156.81	484.20	659.97	1,095.28	1,058.96	36.31	30.161	
5,064.91	4,705.55	4,944.11	4,854.96	34.30	19.36	156.81	492.40	670.46	1,112.11	1,075.25	36.86	30.172	
5,100.00	4,737.54	4,978.06	4,888.12	34.54	19.51	156.87	496.84	676.14	1,121.03	1,083.86	37.17	30.162	
5,200.00	4,829.62	5,075.30	4,983.14	35.13	19.96	157.00	509.57	692.42	1,144.32	1,106.31	38.00	30.110	
5,300.00	4,923.01	5,173.20	5,078.82	35.68	20.41	157.03	522.38	708.81	1,164.48	1,125.64	38.84	29.984	
5,400.00	5,017.60	5,254.06	5,157.99	36.19	20.70	157.04	532.47	721.72	1,182.13	1,142.63	39.50	29.931	
5,500.00	5,113.25	5,332.33	5,235.04	36.66	20.95	157.08	540.94	732.56	1,198.29	1,158.23	40.06	29.916	
5,600.00	5,209.87	5,410.61	5,312.45	37.08	21.17	157.14	548.11	741.74	1,212.97	1,172.43	40.54	29.921	
5,700.00	5,307.32	5,488.91	5,390.16	37.46	21.36	157.21	553.98	749.24	1,226.15	1,185.21	40.94	29.950	
5,800.00	5,405.50	5,567.19	5,468.09	37.79	21.53	157.30	558.54	755.08	1,237.84	1,196.58	41.26	30.002	
5,900.00	5,504.28	5,645.45	5,546.17	38.07	21.67	157.40	561.78	759.23	1,248.02	1,206.53	41.50	30.075	
6,000.00	5,603.54	5,723.67	5,624.32	38.31	21.79	157.53	563.71	761.70	1,256.70	1,215.04	41.65	30.169	
6,100.00	5,703.17	5,802.52	5,703.17	38.49	21.89	157.66	564.33	762.49	1,263.87	1,222.13	41.73	30.285	
6,200.00	5,803.03	5,902.39	5,803.03	38.63	22.01	157.79	564.33	762.49	1,268.61	1,226.83	41.79	30.360	
6,296.99	5,900.00	5,999.36	5,900.00	38.72	22.13	-179.03	564.33	762.49	1,270.13	1,228.30	41.83	30.362	

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

<b>Company:</b>	US ROCKIES REGION PLANNING	<b>Local Co-ordinate Reference:</b>	Well P_WINTERS 29-3
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>TVD Reference:</b>	WELL @ 4672.00ft (Original Well Elev)
<b>Reference Site:</b>	WELD_WINTERS 5-3 PAD	<b>MD Reference:</b>	WELL @ 4672.00ft (Original Well Elev)
<b>Site Error:</b>	0.00ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	P_WINTERS 29-3	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	P_WINTERS 29-3	<b>Database:</b>	EDM 2003.21 Single User Db
<b>Reference Design:</b>	PLAN #1 3-10-10 RHS	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design</b> WELD_WINTERS 5-3 PAD - P_WINTERS 18-3 - P_WINTERS 18-3 - PLAN #1 3-10-10 RHS												<b>Offset Site Error:</b>	0.00 ft
Survey Program: 0-MWD												<b>Offset Well Error:</b>	0.00 ft
Reference	Offset	Semi Major Axis		Distance									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
6,300.00	5,903.01	6,002.37	5,903.01	38.72	22.13	-179.03	564.33	762.49	1,270.13	1,228.29	41.84	30.356	
6,400.00	6,003.01	6,102.37	6,003.01	38.79	22.26	-179.03	564.33	762.49	1,270.13	1,228.03	42.11	30.166	
6,500.00	6,103.01	6,202.37	6,103.01	38.86	22.39	-179.03	564.33	762.49	1,270.13	1,227.76	42.37	29.975	
6,600.00	6,203.01	6,302.37	6,203.01	38.93	22.51	-179.03	564.33	762.49	1,270.13	1,227.49	42.64	29.785	
6,700.00	6,303.01	6,402.37	6,303.01	39.00	22.65	-179.03	564.33	762.49	1,270.13	1,227.22	42.92	29.595	
6,800.00	6,403.01	6,502.37	6,403.01	39.07	22.78	-179.03	564.33	762.49	1,270.13	1,226.94	43.19	29.406	
6,900.00	6,503.01	6,602.37	6,503.01	39.14	22.91	-179.03	564.33	762.49	1,270.13	1,226.66	43.47	29.217	
7,000.00	6,603.01	6,702.37	6,603.01	39.22	23.05	-179.03	564.33	762.49	1,270.13	1,226.38	43.75	29.029	
7,100.00	6,703.01	6,802.37	6,703.01	39.29	23.18	-179.03	564.33	762.49	1,270.13	1,226.09	44.04	28.841	
7,200.00	6,803.01	6,902.37	6,803.01	39.37	23.32	-179.03	564.33	762.49	1,270.13	1,225.81	44.33	28.654	
7,300.00	6,903.01	7,002.37	6,903.01	39.45	23.46	-179.03	564.33	762.49	1,270.13	1,225.52	44.62	28.468	
7,400.00	7,003.01	7,102.37	7,003.01	39.53	23.60	-179.03	564.33	762.49	1,270.13	1,225.22	44.91	28.282	
7,500.00	7,103.01	7,202.37	7,103.01	39.61	23.74	-179.03	564.33	762.49	1,270.13	1,224.93	45.20	28.098	
7,566.99	7,170.00	7,269.36	7,170.00	39.66	23.84	-179.03	564.33	762.49	1,270.13	1,224.73	45.40	27.974	

<b>Company:</b>	US ROCKIES REGION PLANNING	<b>Local Co-ordinate Reference:</b>	Well P_WINTERS 29-3
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>TVD Reference:</b>	WELL @ 4672.00ft (Original Well Elev)
<b>Reference Site:</b>	WELD_WINTERS 5-3 PAD	<b>MD Reference:</b>	WELL @ 4672.00ft (Original Well Elev)
<b>Site Error:</b>	0.00ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	P_WINTERS 29-3	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	P_WINTERS 29-3	<b>Database:</b>	EDM 2003.21 Single User Db
<b>Reference Design:</b>	PLAN #1 3-10-10 RHS	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design WELD_WINTERS 5-3 PAD - P_WINTERS 22-3 - P_WINTERS 22-3 - PLAN #1 3-10-10 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	-179.00	-48.08	-0.84	48.09				
100.00	100.00	100.00	100.00	0.10	0.10	-179.00	-48.08	-0.84	48.09	47.90	0.19	251.717	
200.00	200.00	200.00	200.00	0.32	0.32	-179.00	-48.08	-0.84	48.09	47.45	0.64	75.073	
300.00	300.00	300.00	300.00	0.55	0.55	-179.00	-48.08	-0.84	48.09	47.00	1.09	44.115 CC, ES	
400.00	399.98	399.98	399.98	0.77	0.77	158.60	-48.08	-0.84	49.71	48.17	1.54	32.320	
500.00	499.84	499.84	499.84	1.00	0.99	160.57	-48.08	-0.84	54.62	52.63	1.99	27.515	
600.00	599.45	599.45	599.45	1.24	1.22	163.16	-48.08	-0.84	62.91	60.47	2.43	25.863 SF	
700.00	698.70	697.83	697.82	1.52	1.42	165.25	-48.58	-0.21	75.06	72.20	2.86	26.216	
800.00	797.47	794.95	794.85	1.83	1.61	165.45	-51.03	2.89	92.19	88.91	3.28	28.130	
900.00	895.62	890.74	890.38	2.19	1.81	164.52	-55.44	8.47	114.27	110.56	3.71	30.787	
1,000.00	993.06	984.83	983.92	2.60	2.03	163.07	-61.69	16.38	141.27	137.10	4.17	33.854	
1,100.00	1,089.64	1,076.83	1,075.02	3.08	2.28	161.47	-69.65	26.45	173.17	168.50	4.67	37.102	
1,200.00	1,185.27	1,166.43	1,163.30	3.61	2.56	159.88	-79.13	38.45	209.88	204.68	5.20	40.371	
1,300.00	1,279.82	1,254.62	1,249.71	4.20	2.87	158.38	-90.06	52.28	251.23	245.46	5.77	43.549	
1,400.00	1,373.17	1,344.00	1,337.14	4.86	3.21	157.29	-101.55	66.82	295.96	289.59	6.38	46.399	
1,500.00	1,465.21	1,431.92	1,423.16	5.58	3.57	156.60	-112.85	81.12	343.57	336.56	7.01	49.039	
1,532.08	1,494.45	1,459.81	1,450.44	5.82	3.68	156.44	-116.44	85.65	359.44	352.23	7.21	49.846	
1,600.00	1,556.18	1,518.66	1,508.01	6.35	3.92	156.43	-124.00	95.22	393.33	385.65	7.69	51.167	
1,700.00	1,647.08	1,605.32	1,592.79	7.13	4.29	156.42	-135.14	109.32	443.24	434.84	8.40	52.768	
1,800.00	1,737.97	1,691.97	1,677.56	7.91	4.66	156.42	-146.28	123.41	493.15	484.03	9.12	54.055	
1,900.00	1,828.86	1,778.63	1,762.34	8.70	5.04	156.41	-157.41	137.50	543.06	533.20	9.85	55.108	
2,000.00	1,919.76	1,865.28	1,847.11	9.50	5.42	156.41	-168.55	151.60	592.96	582.37	10.59	55.983	
2,100.00	2,010.65	1,951.94	1,931.88	10.30	5.80	156.41	-179.69	165.69	642.87	631.54	11.33	56.719	
2,200.00	2,101.54	2,038.60	2,016.66	11.10	6.19	156.40	-190.83	179.78	692.78	680.70	12.08	57.344	
2,300.00	2,192.44	2,125.25	2,101.43	11.90	6.57	156.40	-201.96	193.87	742.69	729.85	12.83	57.882	
2,400.00	2,283.33	2,211.91	2,186.21	12.70	6.96	156.40	-213.10	207.97	792.59	779.01	13.58	58.347	
2,500.00	2,374.22	2,298.56	2,270.98	13.51	7.35	156.40	-224.24	222.06	842.50	828.16	14.34	58.754	
2,600.00	2,465.12	2,385.22	2,355.75	14.31	7.74	156.40	-235.38	236.15	892.41	877.31	15.10	59.111	
2,700.00	2,556.01	2,471.88	2,440.53	15.12	8.13	156.39	-246.52	250.25	942.31	926.46	15.86	59.428	
2,800.00	2,646.90	2,558.53	2,525.30	15.93	8.53	156.39	-257.65	264.34	992.22	975.60	16.62	59.710	
2,900.00	2,737.80	2,645.19	2,610.07	16.74	8.92	156.39	-268.79	278.43	1,042.13	1,024.75	17.38	59.963	
3,000.00	2,828.69	2,731.84	2,694.85	17.55	9.32	156.39	-279.93	292.52	1,092.04	1,073.89	18.14	60.191	
3,100.00	2,919.58	2,818.50	2,779.62	18.35	9.71	156.39	-291.07	306.62	1,141.94	1,123.04	18.91	60.397	
3,200.00	3,010.48	2,905.16	2,864.40	19.16	10.11	156.39	-302.20	320.71	1,191.85	1,172.18	19.67	60.585	
3,300.00	3,101.37	2,991.81	2,949.17	19.97	10.50	156.39	-313.34	334.80	1,241.76	1,221.32	20.44	60.756	
3,400.00	3,192.26	3,078.47	3,033.94	20.78	10.90	156.39	-324.48	348.90	1,291.67	1,270.46	21.21	60.912	
3,500.00	3,283.16	3,165.12	3,118.72	21.59	11.30	156.39	-335.62	362.99	1,341.57	1,319.60	21.97	61.056	
3,600.00	3,374.05	3,251.78	3,203.49	22.40	11.69	156.39	-346.75	377.08	1,391.48	1,368.74	22.74	61.188	
3,700.00	3,464.94	3,338.44	3,288.27	23.22	12.09	156.39	-357.89	391.17	1,441.39	1,417.88	23.51	61.311	
3,800.00	3,555.84	3,425.09	3,373.04	24.03	12.49	156.38	-369.03	405.27	1,491.29	1,467.02	24.28	61.424	
3,900.00	3,646.73	3,511.75	3,457.81	24.84	12.89	156.38	-380.17	419.36	1,541.20	1,516.15	25.05	61.530	
4,000.00	3,737.62	3,598.40	3,542.59	25.65	13.29	156.38	-391.31	433.45	1,591.11	1,565.29	25.82	61.628	
4,100.00	3,828.52	3,685.06	3,627.36	26.46	13.68	156.38	-402.44	447.54	1,641.02	1,614.43	26.59	61.720	
4,200.00	3,919.41	3,771.72	3,712.13	27.27	14.08	156.38	-413.58	461.64	1,690.92	1,663.57	27.36	61.806	
4,300.00	4,010.30	3,858.37	3,796.91	28.08	14.48	156.38	-424.72	475.73	1,740.83	1,712.70	28.13	61.886	
4,400.00	4,101.19	3,945.03	3,881.68	28.90	14.88	156.38	-435.86	489.82	1,790.74	1,761.84	28.90	61.962	
4,500.00	4,192.09	4,031.68	3,966.46	29.71	15.28	156.38	-446.99	503.92	1,840.65	1,810.97	29.67	62.033	
4,600.00	4,282.98	4,118.34	4,051.23	30.52	15.68	156.38	-458.13	518.01	1,890.55	1,860.11	30.44	62.100	
4,700.00	4,373.87	4,205.00	4,136.00	31.33	16.08	156.38	-469.27	532.10	1,940.46	1,909.25	31.22	62.164	
4,800.00	4,464.77	4,291.65	4,220.78	32.14	16.48	156.38	-480.41	546.19	1,990.37	1,958.38	31.99	62.224	
4,900.00	4,555.66	4,378.31	4,305.55	32.96	16.88	156.38	-491.54	560.29	2,040.28	2,007.52	32.76	62.280	
5,000.00	4,646.55	4,464.96	4,390.33	33.77	17.28	156.38	-502.68	574.38	2,090.18	2,056.65	33.53	62.334	

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

<b>Company:</b>	US ROCKIES REGION PLANNING	<b>Local Co-ordinate Reference:</b>	Well P_WINTERS 29-3
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>TVD Reference:</b>	WELL @ 4672.00ft (Original Well Elev)
<b>Reference Site:</b>	WELD_WINTERS 5-3 PAD	<b>MD Reference:</b>	WELL @ 4672.00ft (Original Well Elev)
<b>Site Error:</b>	0.00ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	P_WINTERS 29-3	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	P_WINTERS 29-3	<b>Database:</b>	EDM 2003.21 Single User Db
<b>Reference Design:</b>	PLAN #1 3-10-10 RHS	<b>Offset TVD Reference:</b>	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
5,064.91	4,705.55	4,521.21	4,445.35	34.30	17.54	156.38	-509.91	583.53	2,122.57	2,088.54	34.03	62.367	
5,100.00	4,737.54	4,551.72	4,475.19	34.54	17.68	156.54	-513.83	588.49	2,139.92	2,105.57	34.35	62.301	
5,200.00	4,829.62	4,639.69	4,561.26	35.13	18.08	156.93	-525.14	602.80	2,187.44	2,152.25	35.19	62.154	
5,300.00	4,923.01	4,729.11	4,648.74	35.68	18.49	157.24	-536.63	617.34	2,232.12	2,196.10	36.02	61.972	
5,400.00	5,017.60	4,819.88	4,737.53	36.19	18.91	157.49	-548.30	632.10	2,273.90	2,237.09	36.82	61.763	
5,500.00	5,113.25	4,911.87	4,827.53	36.66	19.34	157.67	-560.12	647.06	2,312.74	2,275.16	37.58	61.534	
5,600.00	5,209.87	5,004.99	4,918.62	37.08	19.77	157.79	-572.09	662.20	2,348.60	2,310.28	38.32	61.290	
5,700.00	5,307.32	5,099.12	5,010.70	37.46	20.20	157.85	-584.19	677.51	2,381.45	2,342.43	39.02	61.036	
5,800.00	5,405.50	5,194.13	5,103.65	37.79	20.64	157.86	-596.40	692.96	2,411.25	2,371.58	39.68	60.775	
5,900.00	5,504.28	5,389.35	5,295.83	38.07	21.23	157.67	-617.55	719.72	2,436.09	2,395.62	40.48	60.182	
6,000.00	5,603.54	5,593.54	5,498.83	38.31	21.68	157.62	-630.93	736.65	2,453.65	2,412.55	41.10	59.702	
6,100.00	5,703.17	5,798.04	5,703.17	38.49	21.97	157.72	-635.31	742.20	2,463.68	2,422.17	41.51	59.357	
6,200.00	5,803.03	5,897.90	5,803.03	38.63	22.08	157.80	-635.31	742.20	2,468.42	2,426.75	41.68	59.230	
6,296.99	5,900.00	5,994.87	5,900.00	38.72	22.19	-179.03	-635.31	742.20	2,469.94	2,428.15	41.79	59.101	
6,300.00	5,903.01	5,997.88	5,903.01	38.72	22.19	-179.03	-635.31	742.20	2,469.94	2,428.15	41.80	59.091	
6,400.00	6,003.01	6,097.88	6,003.01	38.79	22.31	-179.03	-635.31	742.20	2,469.94	2,427.90	42.05	58.740	
6,500.00	6,103.01	6,197.88	6,103.01	38.86	22.42	-179.03	-635.31	742.20	2,469.94	2,427.64	42.30	58.388	
6,600.00	6,203.01	6,297.88	6,203.01	38.93	22.54	-179.03	-635.31	742.20	2,469.94	2,427.39	42.56	58.036	
6,700.00	6,303.01	6,397.88	6,303.01	39.00	22.66	-179.03	-635.31	742.20	2,469.94	2,427.13	42.82	57.684	
6,800.00	6,403.01	6,497.88	6,403.01	39.07	22.78	-179.03	-635.31	742.20	2,469.94	2,426.86	43.08	57.332	
6,900.00	6,503.01	6,597.88	6,503.01	39.14	22.90	-179.03	-635.31	742.20	2,469.94	2,426.60	43.35	56.981	
7,000.00	6,603.01	6,697.88	6,603.01	39.22	23.02	-179.03	-635.31	742.20	2,469.94	2,426.33	43.62	56.629	
7,100.00	6,703.01	6,797.88	6,703.01	39.29	23.15	-179.03	-635.31	742.20	2,469.94	2,426.06	43.89	56.279	
7,200.00	6,803.01	6,897.88	6,803.01	39.37	23.27	-179.03	-635.31	742.20	2,469.94	2,425.78	44.16	55.929	
7,300.00	6,903.01	6,997.88	6,903.01	39.45	23.40	-179.03	-635.31	742.20	2,469.94	2,425.50	44.44	55.579	
7,400.00	7,003.01	7,097.88	7,003.01	39.53	23.53	-179.03	-635.31	742.20	2,469.94	2,425.22	44.72	55.231	
7,500.00	7,103.01	7,197.88	7,103.01	39.61	23.66	-179.03	-635.31	742.20	2,469.94	2,424.94	45.00	54.883	
7,566.99	7,170.00	7,264.87	7,170.00	39.66	23.75	-179.03	-635.31	742.20	2,469.94	2,424.75	45.19	54.651	

<b>Company:</b>	US ROCKIES REGION PLANNING	<b>Local Co-ordinate Reference:</b>	Well P_WINTERS 29-3
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>TVD Reference:</b>	WELL @ 4672.00ft (Original Well Elev)
<b>Reference Site:</b>	WELD_WINTERS 5-3 PAD	<b>MD Reference:</b>	WELL @ 4672.00ft (Original Well Elev)
<b>Site Error:</b>	0.00ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	P_WINTERS 29-3	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	P_WINTERS 29-3	<b>Database:</b>	EDM 2003.21 Single User Db
<b>Reference Design:</b>	PLAN #1 3-10-10 RHS	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design WELD_WINTERS 5-3 PAD - P_WINTERS 30-3 - P_WINTERS 30-3 - PLAN #1 3-10-10 RHS												Offset Site Error:	0.00 ft
Survey Program: 0-MWMD												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	1.99	16.03	0.56	16.03				
100.00	100.00	100.00	100.00	0.10	0.10	1.99	16.03	0.56	16.03	15.84	0.19	83.929	
200.00	200.00	200.00	200.00	0.32	0.32	1.99	16.03	0.56	16.03	15.39	0.64	25.032	
300.00	300.00	300.00	300.00	0.55	0.55	1.99	16.03	0.56	16.03	14.94	1.09	14.709 CC	
400.00	399.98	399.45	399.43	0.77	0.77	-25.00	17.70	0.16	16.12	14.58	1.54	10.488 ES	
500.00	499.84	498.83	498.67	1.00	1.00	-36.09	22.74	-1.04	16.79	14.81	1.99	8.457	
600.00	599.45	598.07	597.54	1.24	1.24	-51.70	31.10	-3.03	19.13	16.68	2.45	7.805 SF	
700.00	698.70	697.11	695.84	1.52	1.51	-66.84	42.76	-5.80	24.13	21.16	2.97	8.134	
800.00	797.47	795.87	793.39	1.83	1.82	-78.33	57.67	-9.35	32.06	28.50	3.56	9.001	
900.00	895.62	894.28	890.03	2.19	2.17	-86.16	75.78	-13.65	42.73	38.48	4.25	10.054	
1,000.00	993.06	992.30	985.58	2.60	2.58	-91.38	97.01	-18.70	55.91	50.88	5.04	11.097	
1,100.00	1,089.64	1,089.86	1,079.89	3.08	3.04	-94.91	121.29	-24.47	71.42	65.49	5.93	12.043	
1,200.00	1,185.27	1,186.90	1,172.80	3.61	3.55	-97.33	148.53	-30.95	89.13	82.20	6.93	12.866	
1,300.00	1,279.82	1,283.38	1,264.18	4.20	4.12	-99.03	178.62	-38.10	108.95	100.92	8.03	13.566	
1,400.00	1,373.17	1,379.25	1,353.90	4.86	4.74	-100.23	211.48	-45.92	130.82	121.58	9.24	14.158	
1,500.00	1,465.21	1,474.46	1,441.84	5.58	5.41	-101.08	246.98	-54.36	154.68	144.12	10.55	14.658	
1,532.08	1,494.45	1,504.86	1,469.65	5.82	5.64	-101.29	258.91	-57.19	162.74	151.75	10.99	14.808	
1,600.00	1,556.18	1,570.17	1,529.15	6.35	6.14	-101.92	285.11	-63.42	180.15	168.19	11.96	15.060	
1,700.00	1,647.08	1,666.79	1,617.15	7.13	6.89	-102.63	323.93	-72.65	205.82	192.41	13.41	15.346	
1,800.00	1,737.97	1,763.41	1,705.15	7.91	7.65	-103.19	362.74	-81.88	231.52	216.65	14.88	15.564	
1,900.00	1,828.86	1,860.03	1,793.15	8.70	8.41	-103.63	401.56	-91.11	257.24	240.89	16.35	15.734	
2,000.00	1,919.76	1,956.65	1,881.14	9.50	9.18	-104.00	440.37	-100.34	282.97	265.14	17.83	15.870	
2,100.00	2,010.65	2,053.27	1,969.14	10.30	9.95	-104.30	479.19	-109.57	308.70	289.39	19.32	15.981	
2,200.00	2,101.54	2,149.89	2,057.14	11.10	10.72	-104.56	518.00	-118.80	334.45	313.64	20.81	16.073	
2,300.00	2,192.44	2,246.51	2,145.14	11.90	11.49	-104.78	556.82	-128.03	360.20	337.89	22.30	16.150	
2,400.00	2,283.33	2,343.13	2,233.13	12.70	12.27	-104.97	595.63	-137.26	385.95	362.15	23.80	16.215	
2,500.00	2,374.22	2,439.75	2,321.13	13.51	13.04	-105.13	634.45	-146.48	411.71	386.40	25.30	16.272	
2,600.00	2,465.12	2,536.37	2,409.13	14.31	13.82	-105.28	673.26	-155.71	437.47	410.66	26.80	16.321	
2,700.00	2,556.01	2,632.99	2,497.13	15.12	14.60	-105.41	712.08	-164.94	463.23	434.92	28.31	16.363	
2,800.00	2,646.90	2,729.61	2,585.12	15.93	15.38	-105.53	750.89	-174.17	488.99	459.18	29.81	16.401	
2,900.00	2,737.80	2,826.23	2,673.12	16.74	16.16	-105.63	789.71	-183.40	514.76	483.44	31.32	16.435	
3,000.00	2,828.69	2,922.85	2,761.12	17.55	16.94	-105.73	828.52	-192.63	540.52	507.70	32.83	16.465	
3,100.00	2,919.58	3,019.47	2,849.12	18.35	17.72	-105.81	867.34	-201.86	566.29	531.96	34.34	16.492	
3,200.00	3,010.48	3,116.09	2,937.11	19.16	18.50	-105.89	906.15	-211.09	592.06	556.21	35.85	16.516	
3,300.00	3,101.37	3,212.71	3,025.11	19.97	19.28	-105.97	944.97	-220.32	617.83	580.48	37.36	16.538	
3,400.00	3,192.26	3,309.33	3,113.11	20.78	20.06	-106.03	983.78	-229.55	643.60	604.74	38.87	16.558	
3,500.00	3,283.16	3,405.94	3,201.11	21.59	20.85	-106.09	1,022.60	-238.77	669.38	629.00	40.38	16.577	
3,600.00	3,374.05	3,502.56	3,289.10	22.40	21.63	-106.15	1,061.41	-248.00	695.15	653.26	41.89	16.594	
3,700.00	3,464.94	3,599.18	3,377.10	23.22	22.41	-106.20	1,100.23	-257.23	720.92	677.52	43.40	16.609	
3,800.00	3,555.84	3,695.80	3,465.10	24.03	23.19	-106.25	1,139.04	-266.46	746.70	701.78	44.92	16.624	
3,900.00	3,646.73	3,792.42	3,553.10	24.84	23.98	-106.30	1,177.86	-275.69	772.47	726.04	46.43	16.637	
4,000.00	3,737.62	3,889.04	3,641.09	25.65	24.76	-106.34	1,216.67	-284.92	798.25	750.30	47.94	16.650	
4,100.00	3,828.52	3,985.66	3,729.09	26.46	25.54	-106.38	1,255.49	-294.15	824.02	774.56	49.46	16.661	
4,200.00	3,919.41	4,082.28	3,817.09	27.27	26.33	-106.42	1,294.30	-303.38	849.80	798.82	50.97	16.672	
4,300.00	4,010.30	4,178.90	3,905.09	28.08	27.11	-106.46	1,333.11	-312.61	875.57	823.09	52.49	16.682	
4,400.00	4,101.19	4,275.52	3,993.08	28.90	27.89	-106.49	1,371.93	-321.83	901.35	847.35	54.00	16.692	
4,500.00	4,192.09	4,372.14	4,081.08	29.71	28.68	-106.52	1,410.74	-331.06	927.12	871.61	55.51	16.700	
4,600.00	4,282.98	4,468.76	4,169.08	30.52	29.46	-106.55	1,449.56	-340.29	952.90	895.87	57.03	16.709	
4,700.00	4,373.87	4,565.38	4,257.08	31.33	30.25	-106.58	1,488.37	-349.52	978.68	920.13	58.54	16.717	
4,800.00	4,464.77	4,662.00	4,345.08	32.14	31.03	-106.61	1,527.19	-358.75	1,004.46	944.40	60.06	16.724	
4,900.00	4,555.66	4,758.62	4,433.07	32.96	31.81	-106.63	1,566.00	-367.98	1,030.23	968.66	61.58	16.731	
5,000.00	4,646.55	4,855.76	4,521.55	33.77	32.60	-106.66	1,605.03	-377.26	1,056.01	992.92	63.09	16.738	

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

<b>Company:</b>	US ROCKIES REGION PLANNING	<b>Local Co-ordinate Reference:</b>	Well P_WINTERS 29-3
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>TVD Reference:</b>	WELL @ 4672.00ft (Original Well Elev)
<b>Reference Site:</b>	WELD_WINTERS 5-3 PAD	<b>MD Reference:</b>	WELL @ 4672.00ft (Original Well Elev)
<b>Site Error:</b>	0.00ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	P_WINTERS 29-3	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	P_WINTERS 29-3	<b>Database:</b>	EDM 2003.21 Single User Db
<b>Reference Design:</b>	PLAN #1 3-10-10 RHS	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design WELD_WINTERS 5-3 PAD - P_WINTERS 30-3 - P_WINTERS 30-3 - PLAN #1 3-10-10 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
5,064.91	4,705.55	4,926.03	4,585.95	34.30	33.06	-106.73	1,632.38	-383.76	1,072.49	1,008.45	64.04	16.748	
5,100.00	4,737.54	4,964.12	4,621.14	34.54	33.29	-106.96	1,646.56	-387.13	1,081.15	1,016.64	64.51	16.759	
5,200.00	4,829.62	5,073.16	4,722.90	35.13	33.89	-107.59	1,684.63	-396.19	1,104.47	1,038.74	65.73	16.802	
5,300.00	4,923.01	5,182.87	4,826.72	35.68	34.46	-108.19	1,719.11	-404.38	1,125.71	1,058.84	66.87	16.834	
5,400.00	5,017.60	5,293.17	4,932.39	36.19	34.97	-108.76	1,749.84	-411.69	1,144.85	1,076.93	67.92	16.856	
5,500.00	5,113.25	5,403.97	5,039.69	36.66	35.43	-109.29	1,776.71	-418.08	1,161.83	1,092.96	68.87	16.871	
5,600.00	5,209.87	5,515.18	5,148.38	37.08	35.83	-109.80	1,799.60	-423.52	1,176.64	1,106.93	69.71	16.879	
5,700.00	5,307.32	5,626.70	5,258.20	37.46	36.17	-110.28	1,818.41	-427.99	1,189.25	1,118.80	70.44	16.882	
5,800.00	5,405.50	5,738.43	5,368.90	37.79	36.46	-110.73	1,833.08	-431.48	1,199.63	1,128.56	71.07	16.880	
5,900.00	5,504.28	5,850.26	5,480.21	38.07	36.68	-111.17	1,843.54	-433.97	1,207.79	1,136.21	71.58	16.873	
6,000.00	5,603.54	5,962.09	5,591.85	38.31	36.84	-111.58	1,849.77	-435.45	1,213.70	1,141.72	71.98	16.862	
6,100.00	5,703.17	6,073.43	5,703.17	38.49	36.95	-111.98	1,851.75	-435.92	1,217.37	1,145.11	72.26	16.846	
6,200.00	5,803.03	6,173.30	5,803.03	38.63	37.02	-112.24	1,851.75	-435.92	1,219.30	1,146.84	72.46	16.827	
6,296.99	5,900.00	6,270.27	5,900.00	38.72	37.09	-89.18	1,851.75	-435.92	1,219.93	1,147.32	72.61	16.801	
6,300.00	5,903.01	6,273.28	5,903.01	38.72	37.09	-89.18	1,851.75	-435.92	1,219.93	1,147.31	72.61	16.800	
6,400.00	6,003.01	6,373.28	6,003.01	38.79	37.16	-89.18	1,851.75	-435.92	1,219.93	1,147.17	72.76	16.767	
6,500.00	6,103.01	6,473.28	6,103.01	38.86	37.23	-89.18	1,851.75	-435.92	1,219.93	1,147.02	72.90	16.734	
6,600.00	6,203.01	6,573.28	6,203.01	38.93	37.31	-89.18	1,851.75	-435.92	1,219.93	1,146.88	73.05	16.700	
6,700.00	6,303.01	6,673.28	6,303.01	39.00	37.38	-89.18	1,851.75	-435.92	1,219.93	1,146.73	73.20	16.666	
6,800.00	6,403.01	6,773.28	6,403.01	39.07	37.46	-89.18	1,851.75	-435.92	1,219.93	1,146.57	73.35	16.631	
6,900.00	6,503.01	6,873.28	6,503.01	39.14	37.54	-89.18	1,851.75	-435.92	1,219.93	1,146.42	73.51	16.596	
7,000.00	6,603.01	6,973.28	6,603.01	39.22	37.61	-89.18	1,851.75	-435.92	1,219.93	1,146.26	73.66	16.561	
7,100.00	6,703.01	7,073.28	6,703.01	39.29	37.69	-89.18	1,851.75	-435.92	1,219.93	1,146.10	73.82	16.525	
7,200.00	6,803.01	7,173.28	6,803.01	39.37	37.77	-89.18	1,851.75	-435.92	1,219.93	1,145.94	73.99	16.489	
7,300.00	6,903.01	7,273.28	6,903.01	39.45	37.86	-89.18	1,851.75	-435.92	1,219.93	1,145.78	74.15	16.452	
7,400.00	7,003.01	7,373.28	7,003.01	39.53	37.94	-89.18	1,851.75	-435.92	1,219.93	1,145.61	74.32	16.415	
7,500.00	7,103.01	7,473.28	7,103.01	39.61	38.02	-89.18	1,851.75	-435.92	1,219.93	1,145.44	74.49	16.378	
7,566.99	7,170.00	7,540.27	7,170.00	39.66	38.08	-89.18	1,851.75	-435.92	1,219.93	1,145.33	74.60	16.353	

<b>Company:</b>	US ROCKIES REGION PLANNING	<b>Local Co-ordinate Reference:</b>	Well P_WINTERS 29-3
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>TVD Reference:</b>	WELL @ 4672.00ft (Original Well Elev)
<b>Reference Site:</b>	WELD_WINTERS 5-3 PAD	<b>MD Reference:</b>	WELL @ 4672.00ft (Original Well Elev)
<b>Site Error:</b>	0.00ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	P_WINTERS 29-3	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	P_WINTERS 29-3	<b>Database:</b>	EDM 2003.21 Single User Db
<b>Reference Design:</b>	PLAN #1 3-10-10 RHS	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design WELD_WINTERS 5-3 PAD - P_WINTERS 31-3 - P_WINTERS 31-3 - PLAN #1 3-10-10 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	-179.00	-16.03	-0.28	16.03				
100.00	100.00	100.00	100.00	0.10	0.10	-179.00	-16.03	-0.28	16.03	15.84	0.19	83.891	
200.00	200.00	200.00	200.00	0.32	0.32	-179.00	-16.03	-0.28	16.03	15.39	0.64	25.020	
300.00	300.00	300.00	300.00	0.55	0.55	-179.00	-16.03	-0.28	16.03	14.94	1.09	14.703 CC, ES	
400.00	399.98	399.98	399.98	0.77	0.77	159.98	-16.03	-0.28	17.66	16.12	1.54	11.479	
500.00	499.84	499.84	499.84	1.00	0.99	164.49	-16.03	-0.28	22.64	20.66	1.98	11.410 SF	
600.00	599.45	599.45	599.45	1.24	1.22	168.75	-16.03	-0.28	31.13	28.70	2.43	12.809	
700.00	698.70	699.34	699.34	1.52	1.44	172.78	-15.35	-0.77	42.63	39.76	2.87	14.830	
800.00	797.47	799.35	799.25	1.83	1.66	178.19	-11.98	-3.22	55.86	52.54	3.32	16.832	
900.00	895.62	899.06	898.66	2.19	1.89	-176.08	-5.81	-7.70	71.20	67.43	3.77	18.865	
1,000.00	993.06	998.30	997.29	2.60	2.14	-170.61	3.09	-14.18	89.08	84.82	4.26	20.909	
1,100.00	1,089.64	1,096.92	1,094.86	3.08	2.42	-165.63	14.68	-22.61	109.75	104.96	4.80	22.877	
1,200.00	1,185.27	1,193.85	1,190.44	3.61	2.72	-161.77	27.73	-32.10	133.69	128.30	5.39	24.806	
1,300.00	1,279.82	1,289.86	1,285.10	4.20	3.03	-159.43	40.68	-41.52	161.15	155.13	6.02	26.790	
1,400.00	1,373.17	1,384.97	1,378.87	4.86	3.36	-158.08	53.51	-50.85	191.85	185.18	6.66	28.787	
1,500.00	1,465.21	1,479.06	1,471.65	5.58	3.68	-157.36	66.20	-60.08	225.65	218.32	7.33	30.785	
1,532.08	1,494.45	1,509.02	1,501.19	5.82	3.79	-157.22	70.24	-63.02	237.14	229.59	7.55	31.427	
1,600.00	1,556.18	1,572.31	1,563.59	6.35	4.01	-157.18	78.77	-69.23	261.78	253.74	8.04	32.544	
1,700.00	1,647.08	1,665.49	1,655.47	7.13	4.35	-157.13	91.34	-78.37	298.07	289.28	8.79	33.921	
1,800.00	1,737.97	1,758.68	1,747.35	7.91	4.68	-157.09	103.91	-87.51	334.35	324.81	9.54	35.050	
1,900.00	1,828.86	1,851.86	1,839.23	8.70	5.02	-157.05	116.48	-96.65	370.64	360.34	10.30	35.989	
2,000.00	1,919.76	1,945.04	1,931.11	9.50	5.37	-157.03	129.04	-105.79	406.93	395.86	11.06	36.780	
2,100.00	2,010.65	2,038.23	2,022.99	10.30	5.71	-157.01	141.61	-114.93	443.21	431.38	11.83	37.455	
2,200.00	2,101.54	2,131.41	2,114.86	11.10	6.06	-156.99	154.18	-124.07	479.50	466.89	12.61	38.036	
2,300.00	2,192.44	2,224.60	2,206.74	11.90	6.40	-156.97	166.75	-133.21	515.78	502.40	13.38	38.541	
2,400.00	2,283.33	2,317.78	2,298.62	12.70	6.75	-156.96	179.32	-142.35	552.07	537.91	14.16	38.984	
2,500.00	2,374.22	2,410.96	2,390.50	13.51	7.10	-156.94	191.88	-151.50	588.36	573.41	14.94	39.375	
2,600.00	2,465.12	2,504.15	2,482.38	14.31	7.45	-156.93	204.45	-160.64	624.64	608.92	15.73	39.722	
2,700.00	2,556.01	2,597.33	2,574.26	15.12	7.80	-156.92	217.02	-169.78	660.93	644.42	16.51	40.033	
2,800.00	2,646.90	2,690.52	2,666.14	15.93	8.15	-156.91	229.59	-178.92	697.22	679.92	17.30	40.312	
2,900.00	2,737.80	2,783.70	2,758.02	16.74	8.51	-156.91	242.16	-188.06	733.50	715.42	18.08	40.565	
3,000.00	2,828.69	2,876.89	2,849.90	17.55	8.86	-156.90	254.73	-197.20	769.79	750.92	18.87	40.794	
3,100.00	2,919.58	2,970.07	2,941.78	18.35	9.21	-156.89	267.29	-206.34	806.08	786.42	19.66	41.002	
3,200.00	3,010.48	3,063.25	3,033.66	19.16	9.57	-156.89	279.86	-215.48	842.36	821.91	20.45	41.194	
3,300.00	3,101.37	3,156.44	3,125.53	19.97	9.92	-156.88	292.43	-224.62	878.65	857.41	21.24	41.369	
3,400.00	3,192.26	3,249.62	3,217.41	20.78	10.27	-156.88	305.00	-233.76	914.94	892.91	22.03	41.531	
3,500.00	3,283.16	3,342.81	3,309.29	21.59	10.63	-156.87	317.57	-242.91	951.22	928.40	22.82	41.680	
3,600.00	3,374.05	3,435.99	3,401.17	22.40	10.98	-156.87	330.13	-252.05	987.51	963.90	23.61	41.819	
3,700.00	3,464.94	3,529.17	3,493.05	23.22	11.34	-156.86	342.70	-261.19	1,023.80	999.39	24.41	41.948	
3,800.00	3,555.84	3,622.36	3,584.93	24.03	11.69	-156.86	355.27	-270.33	1,060.08	1,034.88	25.20	42.068	
3,900.00	3,646.73	3,715.54	3,676.81	24.84	12.05	-156.86	367.84	-279.47	1,096.37	1,070.38	25.99	42.180	
4,000.00	3,737.62	3,808.73	3,768.69	25.65	12.40	-156.85	380.41	-288.61	1,132.66	1,105.87	26.79	42.285	
4,100.00	3,828.52	3,901.91	3,860.57	26.46	12.76	-156.85	392.97	-297.75	1,168.94	1,141.36	27.58	42.383	
4,200.00	3,919.41	3,995.09	3,952.45	27.27	13.11	-156.85	405.54	-306.89	1,205.23	1,176.85	28.37	42.475	
4,300.00	4,010.30	4,088.28	4,044.33	28.08	13.47	-156.84	418.11	-316.03	1,241.52	1,212.35	29.17	42.562	
4,400.00	4,101.19	4,181.46	4,136.20	28.90	13.82	-156.84	430.68	-325.18	1,277.80	1,247.84	29.96	42.644	
4,500.00	4,192.09	4,274.65	4,228.08	29.71	14.18	-156.84	443.25	-334.32	1,314.09	1,283.33	30.76	42.722	
4,600.00	4,282.98	4,367.83	4,319.96	30.52	14.54	-156.84	455.81	-343.46	1,350.37	1,318.82	31.55	42.795	
4,700.00	4,373.87	4,461.02	4,411.84	31.33	14.89	-156.84	468.38	-352.60	1,386.66	1,354.31	32.35	42.865	
4,800.00	4,464.77	4,554.20	4,503.72	32.14	15.25	-156.83	480.95	-361.74	1,422.95	1,389.80	33.15	42.930	
4,900.00	4,555.66	4,647.38	4,595.60	32.96	15.60	-156.83	493.52	-370.88	1,459.23	1,425.29	33.94	42.993	
5,000.00	4,646.55	4,740.57	4,687.48	33.77	15.96	-156.83	506.09	-380.02	1,495.52	1,460.78	34.74	43.053	

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

<b>Company:</b>	US ROCKIES REGION PLANNING	<b>Local Co-ordinate Reference:</b>	Well P_WINTERS 29-3
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>TVD Reference:</b>	WELL @ 4672.00ft (Original Well Elev)
<b>Reference Site:</b>	WELD_WINTERS 5-3 PAD	<b>MD Reference:</b>	WELL @ 4672.00ft (Original Well Elev)
<b>Site Error:</b>	0.00ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	P_WINTERS 29-3	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	P_WINTERS 29-3	<b>Database:</b>	EDM 2003.21 Single User Db
<b>Reference Design:</b>	PLAN #1 3-10-10 RHS	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design WELD_WINTERS 5-3 PAD - P_WINTERS 31-3 - P_WINTERS 31-3 - PLAN #1 3-10-10 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
5,064.91	4,705.55	4,801.05	4,747.11	34.30	16.19	-156.83	514.24	-385.95	1,519.07	1,483.82	35.25	43.090	
5,100.00	4,737.54	4,833.82	4,779.43	34.54	16.32	-156.93	518.66	-389.17	1,531.62	1,496.06	35.56	43.073	
5,200.00	4,829.62	4,927.95	4,872.24	35.13	16.68	-157.16	531.36	-398.40	1,565.35	1,528.96	36.38	43.023	
5,300.00	4,923.01	5,023.09	4,966.04	35.68	17.04	-157.32	544.19	-407.74	1,596.03	1,558.84	37.19	42.913	
5,400.00	5,017.60	5,119.12	5,060.73	36.19	17.41	-157.39	557.14	-417.16	1,623.64	1,585.66	37.98	42.750	
5,500.00	5,113.25	5,215.93	5,156.18	36.66	17.78	-157.40	570.20	-426.65	1,648.15	1,609.40	38.74	42.538	
5,600.00	5,209.87	5,310.91	5,249.85	37.08	18.12	-157.35	582.90	-435.89	1,669.57	1,630.12	39.45	42.320	
5,700.00	5,307.32	5,400.00	5,338.04	37.46	18.37	-157.33	593.11	-443.32	1,688.21	1,648.21	40.00	42.207	
5,800.00	5,405.50	5,491.74	5,429.21	37.79	18.58	-157.34	601.31	-449.28	1,704.15	1,663.70	40.45	42.126	
5,900.00	5,504.28	5,582.86	5,520.05	38.07	18.77	-157.39	607.11	-453.49	1,717.37	1,676.56	40.81	42.082	
6,000.00	5,603.54	5,674.27	5,611.36	38.31	18.92	-157.47	610.57	-456.02	1,727.86	1,686.79	41.07	42.073	
6,100.00	5,703.17	5,766.09	5,703.17	38.49	19.05	-157.59	611.68	-456.82	1,735.60	1,694.37	41.23	42.095	
6,200.00	5,803.03	5,865.96	5,803.03	38.63	19.19	-157.69	611.68	-456.82	1,740.35	1,698.99	41.35	42.085	
6,296.99	5,900.00	5,962.93	5,900.00	38.72	19.33	-134.58	611.68	-456.82	1,741.86	1,700.42	41.45	42.028	
6,300.00	5,903.01	5,965.94	5,903.01	38.72	19.33	-134.58	611.68	-456.82	1,741.86	1,700.41	41.45	42.020	
6,400.00	6,003.01	6,065.94	6,003.01	38.79	19.48	-134.58	611.68	-456.82	1,741.86	1,700.15	41.72	41.755	
6,500.00	6,103.01	6,165.94	6,103.01	38.86	19.63	-134.58	611.68	-456.82	1,741.86	1,699.88	41.98	41.489	
6,600.00	6,203.01	6,265.94	6,203.01	38.93	19.78	-134.58	611.68	-456.82	1,741.86	1,699.61	42.25	41.224	
6,700.00	6,303.01	6,365.94	6,303.01	39.00	19.93	-134.58	611.68	-456.82	1,741.86	1,699.34	42.53	40.960	
6,800.00	6,403.01	6,465.94	6,403.01	39.07	20.08	-134.58	611.68	-456.82	1,741.86	1,699.06	42.80	40.696	
6,900.00	6,503.01	6,565.94	6,503.01	39.14	20.23	-134.58	611.68	-456.82	1,741.86	1,698.78	43.08	40.432	
7,000.00	6,603.01	6,665.94	6,603.01	39.22	20.39	-134.58	611.68	-456.82	1,741.86	1,698.50	43.36	40.170	
7,100.00	6,703.01	6,765.94	6,703.01	39.29	20.55	-134.58	611.68	-456.82	1,741.86	1,698.22	43.65	39.908	
7,200.00	6,803.01	6,865.94	6,803.01	39.37	20.70	-134.58	611.68	-456.82	1,741.86	1,697.93	43.93	39.647	
7,300.00	6,903.01	6,965.94	6,903.01	39.45	20.86	-134.58	611.68	-456.82	1,741.86	1,697.64	44.22	39.387	
7,400.00	7,003.01	7,065.94	7,003.01	39.53	21.02	-134.58	611.68	-456.82	1,741.86	1,697.35	44.52	39.129	
7,500.00	7,103.01	7,165.94	7,103.01	39.61	21.18	-134.58	611.68	-456.82	1,741.86	1,697.05	44.81	38.871	
7,566.99	7,170.00	7,232.93	7,170.00	39.66	21.29	-134.58	611.68	-456.82	1,741.86	1,696.85	45.01	38.699	

<b>Company:</b>	US ROCKIES REGION PLANNING	<b>Local Co-ordinate Reference:</b>	Well P_WINTERS 29-3
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>TVD Reference:</b>	WELL @ 4672.00ft (Original Well Elev)
<b>Reference Site:</b>	WELD_WINTERS 5-3 PAD	<b>MD Reference:</b>	WELL @ 4672.00ft (Original Well Elev)
<b>Site Error:</b>	0.00ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	P_WINTERS 29-3	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	P_WINTERS 29-3	<b>Database:</b>	EDM 2003.21 Single User Db
<b>Reference Design:</b>	PLAN #1 3-10-10 RHS	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design WELD_WINTERS 5-3 PAD - P_WINTERS 32-3 - P_WINTERS 32-3 - PLAN #1 3-10-10 RHS													Offset Site Error: 0.00 ft
Survey Program: 0-MWMD													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	-178.76	-64.12	-1.39	64.13				
100.00	100.00	100.00	100.00	0.10	0.10	-178.76	-64.12	-1.39	64.13	63.94	0.19	335.679	
200.00	200.00	200.00	200.00	0.32	0.32	-178.76	-64.12	-1.39	64.13	63.49	0.64	100.115	
300.00	300.00	300.00	300.00	0.55	0.55	-178.76	-64.12	-1.39	64.13	63.04	1.09	58.830 CC, ES	
400.00	399.98	399.98	399.98	0.77	0.77	158.66	-64.12	-1.39	65.75	64.22	1.54	42.751	
500.00	499.84	499.84	499.84	1.00	0.99	160.17	-64.12	-1.39	70.65	68.67	1.99	35.593	
600.00	599.45	599.45	599.45	1.24	1.22	162.27	-64.12	-1.39	78.91	76.48	2.43	32.439	
700.00	698.70	696.91	696.91	1.52	1.42	164.78	-64.71	-1.90	91.27	88.41	2.86	31.914 SF	
800.00	797.47	792.13	792.05	1.83	1.60	167.87	-67.60	-4.38	109.87	106.61	3.26	33.693	
900.00	895.62	885.19	884.85	2.19	1.79	170.89	-72.73	-8.80	134.94	131.27	3.67	36.805	
1,000.00	993.06	975.53	974.70	2.60	2.00	173.51	-79.90	-14.96	166.41	162.33	4.07	40.843	
1,100.00	1,089.64	1,062.68	1,061.04	3.08	2.22	175.67	-88.85	-22.65	204.08	199.60	4.48	45.532	
1,200.00	1,185.27	1,151.67	1,148.94	3.61	2.48	177.43	-99.35	-31.68	246.91	242.01	4.90	50.366	
1,300.00	1,279.82	1,240.21	1,236.39	4.20	2.76	178.72	-109.84	-40.70	293.06	287.73	5.33	55.015	
1,400.00	1,373.17	1,327.07	1,322.19	4.86	3.04	179.68	-120.13	-49.55	342.36	336.61	5.75	59.500	
1,500.00	1,465.21	1,412.17	1,406.24	5.58	3.32	-179.59	-130.21	-58.21	394.73	388.54	6.18	63.844	
1,532.08	1,494.45	1,439.08	1,432.82	5.82	3.42	-179.40	-133.40	-60.95	412.16	405.84	6.32	65.206	
1,600.00	1,556.18	1,495.83	1,488.88	6.35	3.61	-179.04	-140.12	-66.73	449.39	442.73	6.67	67.424	
1,700.00	1,647.08	1,579.40	1,571.42	7.13	3.90	-178.61	-150.02	-75.25	504.24	497.06	7.18	70.231	
1,800.00	1,737.97	1,662.97	1,653.96	7.91	4.19	-178.26	-159.92	-83.76	559.09	551.39	7.70	72.609	
1,900.00	1,828.86	1,746.53	1,736.50	8.70	4.49	-177.98	-169.82	-92.27	613.96	605.74	8.23	74.642	
2,000.00	1,919.76	1,830.10	1,819.04	9.50	4.79	-177.74	-179.72	-100.78	668.84	660.09	8.75	76.397	
2,100.00	2,010.65	1,913.67	1,901.58	10.30	5.09	-177.54	-189.62	-109.29	723.73	714.44	9.29	77.925	
2,200.00	2,101.54	1,997.23	1,984.12	11.10	5.40	-177.37	-199.52	-117.80	778.62	768.80	9.82	79.265	
2,300.00	2,192.44	2,080.80	2,066.66	11.90	5.70	-177.21	-209.42	-126.31	833.51	823.15	10.36	80.447	
2,400.00	2,283.33	2,164.37	2,149.20	12.70	6.01	-177.08	-219.32	-134.82	888.41	877.51	10.90	81.498	
2,500.00	2,374.22	2,247.93	2,231.75	13.51	6.31	-176.97	-229.22	-143.33	943.32	931.87	11.44	82.438	
2,600.00	2,465.12	2,331.50	2,314.29	14.31	6.62	-176.86	-239.12	-151.84	998.22	986.23	11.99	83.283	
2,700.00	2,556.01	2,415.07	2,396.83	15.12	6.93	-176.77	-249.02	-160.35	1,053.13	1,040.60	12.53	84.047	
2,800.00	2,646.90	2,498.63	2,479.37	15.93	7.24	-176.69	-258.92	-168.86	1,108.03	1,094.96	13.08	84.740	
2,900.00	2,737.80	2,582.20	2,561.91	16.74	7.55	-176.61	-268.82	-177.37	1,162.94	1,149.32	13.62	85.371	
3,000.00	2,828.69	2,665.77	2,644.45	17.55	7.86	-176.54	-278.72	-185.88	1,217.85	1,203.68	14.17	85.948	
3,100.00	2,919.58	2,749.33	2,726.99	18.35	8.17	-176.48	-288.62	-194.40	1,272.77	1,258.05	14.72	86.478	
3,200.00	3,010.48	2,832.90	2,809.53	19.16	8.48	-176.42	-298.52	-202.91	1,327.68	1,312.41	15.27	86.966	
3,300.00	3,101.37	2,916.47	2,892.07	19.97	8.79	-176.37	-308.42	-211.42	1,382.59	1,366.78	15.82	87.417	
3,400.00	3,192.26	3,000.03	2,974.61	20.78	9.10	-176.32	-318.32	-219.93	1,437.51	1,421.14	16.37	87.835	
3,500.00	3,283.16	3,083.60	3,057.15	21.59	9.42	-176.27	-328.22	-228.44	1,492.42	1,475.50	16.92	88.223	
3,600.00	3,374.05	3,167.17	3,139.69	22.40	9.73	-176.23	-338.12	-236.95	1,547.34	1,529.87	17.47	88.584	
3,700.00	3,464.94	3,250.73	3,222.23	23.22	10.04	-176.19	-348.02	-245.46	1,602.25	1,584.23	18.02	88.921	
3,800.00	3,555.84	3,334.30	3,304.77	24.03	10.35	-176.15	-357.92	-253.97	1,657.17	1,638.60	18.57	89.236	
3,900.00	3,646.73	3,417.87	3,387.31	24.84	10.67	-176.12	-367.82	-262.48	1,712.09	1,692.96	19.12	89.532	
4,000.00	3,737.62	3,501.43	3,469.85	25.65	10.98	-176.09	-377.72	-270.99	1,767.01	1,747.33	19.68	89.809	
4,100.00	3,828.52	3,585.00	3,552.39	26.46	11.29	-176.06	-387.62	-279.50	1,821.92	1,801.70	20.23	90.070	
4,200.00	3,919.41	3,668.57	3,634.93	27.27	11.61	-176.03	-397.52	-288.01	1,876.84	1,856.06	20.78	90.316	
4,300.00	4,010.30	3,752.13	3,717.48	28.08	11.92	-176.00	-407.42	-296.52	1,931.76	1,910.43	21.33	90.549	
4,400.00	4,101.19	3,835.70	3,800.02	28.90	12.23	-175.98	-417.32	-305.03	1,986.68	1,964.79	21.89	90.768	
4,500.00	4,192.09	3,919.27	3,882.56	29.71	12.55	-175.95	-427.22	-313.54	2,041.60	2,019.16	22.44	90.976	
4,600.00	4,282.98	4,002.83	3,965.10	30.52	12.86	-175.93	-437.12	-322.06	2,096.52	2,073.52	22.99	91.174	
4,700.00	4,373.87	4,086.40	4,047.64	31.33	13.18	-175.91	-447.02	-330.57	2,151.44	2,127.89	23.55	91.361	
4,800.00	4,464.77	4,169.97	4,130.18	32.14	13.49	-175.89	-456.92	-339.08	2,206.36	2,182.25	24.10	91.539	
4,900.00	4,555.66	4,253.53	4,212.72	32.96	13.80	-175.87	-466.82	-347.59	2,261.28	2,236.62	24.66	91.708	
5,000.00	4,646.55	4,337.10	4,295.26	33.77	14.12	-175.85	-476.72	-356.10	2,316.20	2,290.99	25.21	91.870	

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

<b>Company:</b>	US ROCKIES REGION PLANNING	<b>Local Co-ordinate Reference:</b>	Well P_WINTERS 29-3
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>TVD Reference:</b>	WELL @ 4672.00ft (Original Well Elev)
<b>Reference Site:</b>	WELD_WINTERS 5-3 PAD	<b>MD Reference:</b>	WELL @ 4672.00ft (Original Well Elev)
<b>Site Error:</b>	0.00ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	P_WINTERS 29-3	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	P_WINTERS 29-3	<b>Database:</b>	EDM 2003.21 Single User Db
<b>Reference Design:</b>	PLAN #1 3-10-10 RHS	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design WELD_WINTERS 5-3 PAD - P_WINTERS 32-3 - P_WINTERS 32-3 - PLAN #1 3-10-10 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
5,064.91	4,705.55	4,391.34	4,348.83	34.30	14.32	-175.84	-483.14	-361.62	2,351.84	2,326.27	25.57	91.971	
5,100.00	4,737.54	4,420.78	4,377.92	34.54	14.43	-175.86	-486.63	-364.62	2,370.94	2,345.11	25.83	91.789	
5,200.00	4,829.62	4,505.93	4,462.02	35.13	14.75	-175.93	-496.72	-373.29	2,423.36	2,396.83	26.53	91.353	
5,300.00	4,923.01	4,592.85	4,547.87	35.68	15.08	-175.98	-507.02	-382.15	2,472.78	2,445.59	27.19	90.947	
5,400.00	5,017.60	4,681.44	4,635.37	36.19	15.41	-176.02	-517.51	-391.17	2,519.15	2,491.33	27.81	90.572	
5,500.00	5,113.25	4,771.58	4,724.41	36.66	15.75	-176.05	-528.19	-400.35	2,562.40	2,534.00	28.40	90.228	
5,600.00	5,209.87	4,863.17	4,814.87	37.08	16.10	-176.06	-539.04	-409.68	2,602.49	2,573.55	28.94	89.914	
5,700.00	5,307.32	4,956.09	4,906.65	37.46	16.45	-176.07	-550.05	-419.14	2,639.37	2,609.92	29.45	89.632	
5,800.00	5,405.50	5,050.24	4,999.64	37.79	16.80	-176.07	-561.20	-428.73	2,672.99	2,643.09	29.91	89.381	
5,900.00	5,504.28	5,145.49	5,093.73	38.07	17.16	-176.05	-572.49	-438.43	2,703.32	2,673.00	30.32	89.161	
6,000.00	5,603.54	5,241.74	5,188.79	38.31	17.53	-176.03	-583.89	-448.23	2,730.31	2,699.62	30.69	88.974	
6,100.00	5,703.17	5,341.75	5,288.80	38.49	17.89	-175.90	-618.20	-477.72	2,751.20	2,719.40	31.80	86.528	
6,200.00	5,803.03	5,441.61	5,388.66	38.63	18.21	-175.91	-618.20	-477.72	2,756.31	2,724.32	32.00	86.147	
6,296.99	5,900.00	5,535.58	5,482.00	38.72	18.93	-152.78	-618.20	-477.72	2,757.95	2,725.82	32.13	85.824	
6,300.00	5,903.01	5,538.59	5,485.01	38.72	18.94	-152.78	-618.20	-477.72	2,757.95	2,725.81	32.14	85.799	
6,400.00	6,003.01	5,638.59	5,585.01	38.79	19.06	-152.78	-618.20	-477.72	2,757.95	2,725.49	32.46	84.964	
6,500.00	6,103.01	5,738.59	5,685.01	38.86	19.19	-152.78	-618.20	-477.72	2,757.95	2,725.17	32.78	84.136	
6,600.00	6,203.01	5,838.59	5,785.01	38.93	19.32	-152.78	-618.20	-477.72	2,757.95	2,724.85	33.10	83.318	
6,700.00	6,303.01	5,938.59	5,885.01	39.00	19.45	-152.78	-618.20	-477.72	2,757.95	2,724.52	33.43	82.507	
6,800.00	6,403.01	6,038.59	5,985.01	39.07	19.58	-152.78	-618.20	-477.72	2,757.95	2,724.20	33.75	81.706	
6,900.00	6,503.01	6,138.59	6,085.01	39.14	19.72	-152.78	-618.20	-477.72	2,757.95	2,723.86	34.09	80.913	
7,000.00	6,603.01	6,238.59	6,185.01	39.22	19.86	-152.78	-618.20	-477.72	2,757.95	2,723.53	34.42	80.130	
7,100.00	6,703.01	6,338.59	6,285.01	39.29	19.99	-152.78	-618.20	-477.72	2,757.95	2,723.20	34.75	79.356	
7,200.00	6,803.01	6,438.59	6,385.01	39.37	20.13	-152.78	-618.20	-477.72	2,757.95	2,722.86	35.09	78.591	
7,300.00	6,903.01	6,538.59	6,485.01	39.45	20.27	-152.78	-618.20	-477.72	2,757.95	2,722.52	35.43	77.835	
7,400.00	7,003.01	6,638.59	6,585.01	39.53	20.42	-152.78	-618.20	-477.72	2,757.95	2,722.17	35.78	77.089	
7,500.00	7,103.01	6,738.59	6,685.01	39.61	20.56	-152.78	-618.20	-477.72	2,757.95	2,721.83	36.12	76.352	
7,566.99	7,170.00	6,805.58	6,752.00	39.66	20.66	-152.78	-618.20	-477.72	2,757.95	2,721.60	36.35	75.864	

<b>Company:</b>	US ROCKIES REGION PLANNING	<b>Local Co-ordinate Reference:</b>	Well P_WINTERS 29-3
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>TVD Reference:</b>	WELL @ 4672.00ft (Original Well Elev)
<b>Reference Site:</b>	WELD_WINTERS 5-3 PAD	<b>MD Reference:</b>	WELL @ 4672.00ft (Original Well Elev)
<b>Site Error:</b>	0.00ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	P_WINTERS 29-3	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	P_WINTERS 29-3	<b>Database:</b>	EDM 2003.21 Single User Db
<b>Reference Design:</b>	PLAN #1 3-10-10 RHS	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design WELD_WINTERS 5-3 PAD - WINTERS 5-3 EXISTING - WINTERS 5-3 EXISTING - WINTERS 5-3 EXISTING												Offset Site Error:	0.00 ft
Survey Program: 0-INC												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	178.47	-72.86	1.95	76.13				
100.00	100.00	78.00	78.00	0.10	1.04	178.47	-72.86	1.95	72.89	71.75	1.13	64.272	
200.00	200.00	178.00	178.00	0.32	3.10	178.47	-72.86	1.95	72.89	69.47	3.42	21.341	
300.00	300.00	278.00	278.00	0.55	5.21	178.47	-72.86	1.95	72.89	67.13	5.76	12.661 CC	
400.00	399.98	377.98	377.98	0.77	7.26	155.88	-72.86	1.95	74.48	66.45	8.03	9.279 ES	
500.00	499.84	477.84	477.84	1.00	9.29	157.38	-72.86	1.95	79.28	69.02	10.27	7.723	
600.00	599.45	577.45	577.45	1.24	11.30	159.52	-72.86	1.95	87.39	74.92	12.48	7.004	
700.00	698.70	676.70	676.70	1.52	13.31	161.92	-72.86	1.95	98.91	84.25	14.66	6.749 SF	
800.00	797.47	775.47	775.47	1.83	15.30	164.28	-72.86	1.95	113.89	97.10	16.79	6.782	
900.00	895.62	873.62	873.62	2.19	17.28	166.43	-72.86	1.95	132.38	113.50	18.88	7.011	
1,000.00	993.06	971.06	971.06	2.60	19.24	168.29	-72.86	1.95	154.36	133.45	20.91	7.382	
1,100.00	1,089.64	1,067.64	1,067.64	3.08	21.19	169.87	-72.86	1.95	179.80	156.93	22.87	7.860	
1,200.00	1,185.27	1,163.27	1,163.27	3.61	23.12	171.19	-72.86	1.95	208.68	183.91	24.77	8.425	
1,300.00	1,279.82	1,257.82	1,257.82	4.20	25.02	172.29	-72.86	1.95	240.93	214.35	26.58	9.064	
1,400.00	1,373.17	1,351.17	1,351.17	4.86	26.90	173.19	-72.86	1.95	276.51	248.20	28.31	9.767	
1,500.00	1,465.21	1,443.21	1,443.21	5.58	28.75	173.94	-72.86	1.95	315.38	285.43	29.95	10.530	
1,532.08	1,494.45	1,472.45	1,472.45	5.82	29.34	174.16	-72.86	1.95	328.53	298.08	30.46	10.787	
1,600.00	1,556.18	1,534.18	1,534.18	6.35	30.58	174.62	-72.86	1.95	356.74	324.93	31.81	11.214	
1,700.00	1,647.08	1,625.08	1,625.08	7.13	32.41	175.18	-72.86	1.95	398.30	364.48	33.81	11.780	
1,800.00	1,737.97	1,715.97	1,715.97	7.91	34.24	175.64	-72.86	1.95	439.88	404.06	35.82	12.281	
1,900.00	1,828.86	1,806.86	1,806.86	8.70	36.07	176.02	-72.86	1.95	481.48	443.65	37.83	12.728	
2,000.00	1,919.76	1,897.76	1,897.76	9.50	37.90	176.33	-72.86	1.95	523.10	483.26	39.84	13.129	
2,100.00	2,010.65	1,988.65	1,988.65	10.30	39.73	176.60	-72.86	1.95	564.73	522.87	41.86	13.491	
2,200.00	2,101.54	2,079.54	2,079.54	11.10	41.55	176.84	-72.86	1.95	606.37	562.49	43.88	13.820	
2,300.00	2,192.44	2,170.44	2,170.44	11.90	43.38	177.04	-72.86	1.95	648.01	602.11	45.90	14.119	
2,400.00	2,283.33	2,261.33	2,261.33	12.70	45.21	177.22	-72.86	1.95	689.66	641.74	47.92	14.393	
2,500.00	2,374.22	2,352.22	2,352.22	13.51	47.04	177.38	-72.86	1.95	731.32	681.38	49.94	14.644	
2,600.00	2,465.12	2,443.12	2,443.12	14.31	48.87	177.52	-72.86	1.95	772.98	721.01	51.96	14.875	
2,700.00	2,556.01	2,534.01	2,534.01	15.12	50.70	177.65	-72.86	1.95	814.64	760.65	53.99	15.089	
2,800.00	2,646.90	2,624.90	2,624.90	15.93	52.52	177.76	-72.86	1.95	856.31	800.29	56.01	15.287	
2,900.00	2,737.80	2,715.80	2,715.80	16.74	54.35	177.86	-72.86	1.95	897.98	839.94	58.04	15.472	
3,000.00	2,828.69	2,806.69	2,806.69	17.55	56.18	177.96	-72.86	1.95	939.65	879.58	60.07	15.643	
3,100.00	2,919.58	2,897.58	2,897.58	18.35	58.01	178.05	-72.86	1.95	981.32	919.23	62.09	15.804	
3,200.00	3,010.48	2,988.48	2,988.48	19.16	59.84	178.13	-72.86	1.95	1,023.00	958.88	64.12	15.954	
3,300.00	3,101.37	3,079.37	3,079.37	19.97	61.67	178.20	-72.86	1.95	1,064.67	998.52	66.15	16.095	
3,400.00	3,192.26	3,170.26	3,170.26	20.78	63.49	178.27	-72.86	1.95	1,106.35	1,038.17	68.18	16.227	
3,500.00	3,283.16	3,261.16	3,261.16	21.59	65.32	178.33	-72.86	1.95	1,148.03	1,077.82	70.21	16.352	
3,600.00	3,374.05	3,352.05	3,352.05	22.40	67.15	178.39	-72.86	1.95	1,189.71	1,117.47	72.24	16.470	
3,700.00	3,464.94	3,442.94	3,442.94	23.22	68.98	178.44	-72.86	1.95	1,231.39	1,157.13	74.27	16.581	
3,800.00	3,555.84	3,533.84	3,533.84	24.03	70.81	178.49	-72.86	1.95	1,273.07	1,196.78	76.29	16.686	
3,900.00	3,646.73	3,624.73	3,624.73	24.84	72.63	178.54	-72.86	1.95	1,314.76	1,236.43	78.32	16.786	
4,000.00	3,737.62	3,715.62	3,715.62	25.65	74.46	178.59	-72.86	1.95	1,356.44	1,276.08	80.35	16.881	
4,100.00	3,828.52	3,806.52	3,806.52	26.46	76.29	178.63	-72.86	1.95	1,398.12	1,315.74	82.39	16.971	
4,200.00	3,919.41	3,897.41	3,897.41	27.27	78.12	178.67	-72.86	1.95	1,439.81	1,355.39	84.42	17.056	
4,300.00	4,010.30	3,988.30	3,988.30	28.08	79.95	178.71	-72.86	1.95	1,481.49	1,395.05	86.45	17.138	
4,400.00	4,101.19	4,079.19	4,079.19	28.90	81.77	178.74	-72.86	1.95	1,523.18	1,434.70	88.48	17.216	
4,500.00	4,192.09	4,170.09	4,170.09	29.71	83.60	178.77	-72.86	1.95	1,564.86	1,474.36	90.51	17.290	
4,600.00	4,282.98	4,260.98	4,260.98	30.52	85.43	178.81	-72.86	1.95	1,606.55	1,514.01	92.54	17.361	
4,700.00	4,373.87	4,351.87	4,351.87	31.33	87.26	178.84	-72.86	1.95	1,648.24	1,553.67	94.57	17.429	
4,800.00	4,464.77	4,442.77	4,442.77	32.14	89.09	178.87	-72.86	1.95	1,689.93	1,593.32	96.60	17.494	
4,900.00	4,555.66	4,533.66	4,533.66	32.96	90.91	178.89	-72.86	1.95	1,731.61	1,632.98	98.63	17.556	
5,000.00	4,646.55	4,624.55	4,624.55	33.77	92.74	178.92	-72.86	1.95	1,773.30	1,672.64	100.67	17.616	

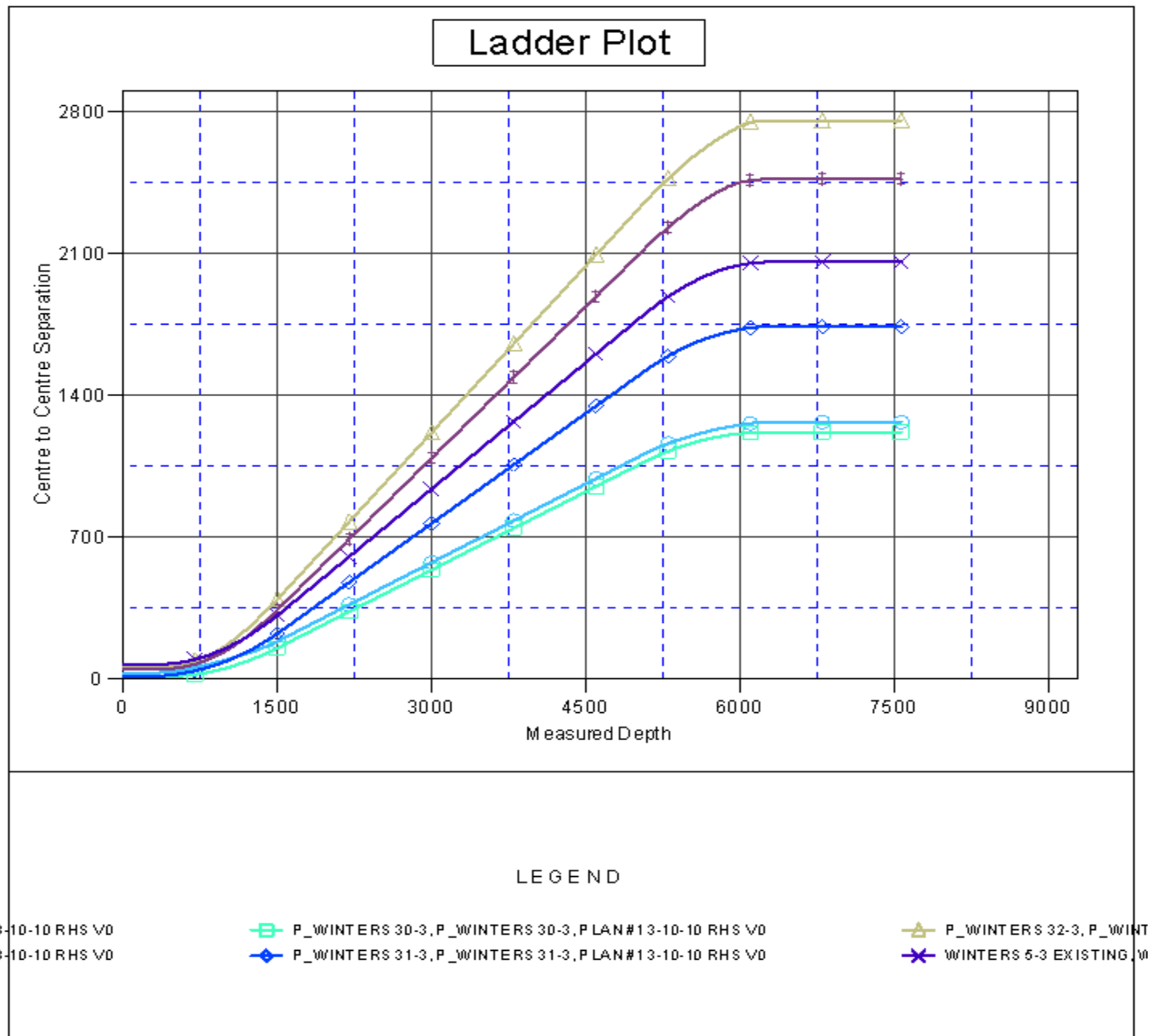
CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

<b>Company:</b>	US ROCKIES REGION PLANNING	<b>Local Co-ordinate Reference:</b>	Well P_WINTERS 29-3
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>TVD Reference:</b>	WELL @ 4672.00ft (Original Well Elev)
<b>Reference Site:</b>	WELD_WINTERS 5-3 PAD	<b>MD Reference:</b>	WELL @ 4672.00ft (Original Well Elev)
<b>Site Error:</b>	0.00ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	P_WINTERS 29-3	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	P_WINTERS 29-3	<b>Database:</b>	EDM 2003.21 Single User Db
<b>Reference Design:</b>	PLAN #1 3-10-10 RHS	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design WELD_WINTERS 5-3 PAD - WINTERS 5-3 EXISTING - WINTERS 5-3 EXISTING - WINTERS 5-3 EXISTING													Offset Site Error:	0.00 ft
Survey Program: 0-INC													Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,064.91	4,705.55	4,683.55	4,683.55	34.30	93.93	178.93	-72.86	1.95	1,800.36	1,698.37	101.98	17.653		
5,100.00	4,737.54	4,715.54	4,715.54	34.54	94.57	178.95	-72.86	1.95	1,814.79	1,711.66	103.13	17.596		
5,200.00	4,829.62	4,807.62	4,807.62	35.13	96.42	178.99	-72.86	1.95	1,853.76	1,747.33	106.43	17.417		
5,300.00	4,923.01	4,901.01	4,901.01	35.68	98.30	179.02	-72.86	1.95	1,889.49	1,779.80	109.69	17.226		
5,400.00	5,017.60	4,995.60	4,995.60	36.19	100.20	179.05	-72.86	1.95	1,921.95	1,809.08	112.87	17.028		
5,500.00	5,113.25	5,091.25	5,091.25	36.66	102.13	179.07	-72.86	1.95	1,951.08	1,835.13	115.95	16.827		
5,600.00	5,209.87	5,187.87	5,187.87	37.08	104.07	179.09	-72.86	1.95	1,976.85	1,857.92	118.93	16.622		
5,700.00	5,307.32	5,285.32	5,285.32	37.46	106.03	179.11	-72.86	1.95	1,999.24	1,877.44	121.80	16.414		
5,800.00	5,405.50	5,383.50	5,383.50	37.79	108.00	179.12	-72.86	1.95	2,018.22	1,893.67	124.55	16.204		
5,900.00	5,504.28	5,482.28	5,482.28	38.07	109.99	179.13	-72.86	1.95	2,033.75	1,906.59	127.16	15.993		
6,000.00	5,603.54	5,581.54	5,581.54	38.31	111.99	179.14	-72.86	1.95	2,045.84	1,916.20	129.63	15.782		
6,100.00	5,703.17	5,681.17	5,681.17	38.49	113.99	179.15	-72.86	1.95	2,054.44	1,922.50	131.95	15.570		
6,200.00	5,803.03	5,781.03	5,781.03	38.63	116.00	179.15	-72.86	1.95	2,059.57	1,925.47	134.10	15.358		
6,296.99	5,900.00	5,878.00	5,878.00	38.72	117.95	-157.71	-72.86	1.95	2,061.21	1,925.19	136.03	15.153		
6,300.00	5,903.01	5,881.01	5,881.01	38.72	118.01	-157.71	-72.86	1.95	2,061.21	1,925.12	136.09	15.146		
6,400.00	6,003.01	5,981.01	5,981.01	38.79	120.02	-157.71	-72.86	1.95	2,061.21	1,922.97	138.25	14.910		
6,500.00	6,103.01	6,081.01	6,081.01	38.86	122.03	-157.71	-72.86	1.95	2,061.21	1,920.81	140.40	14.680		
6,600.00	6,203.01	6,181.01	6,181.01	38.93	124.04	-157.71	-72.86	1.95	2,061.21	1,918.65	142.56	14.458		
6,700.00	6,303.01	6,281.01	6,281.01	39.00	126.05	-157.71	-72.86	1.95	2,061.21	1,916.49	144.72	14.242		
6,800.00	6,403.01	6,381.01	6,381.01	39.07	128.06	-157.71	-72.86	1.95	2,061.21	1,914.33	146.89	14.033		
6,900.00	6,503.01	6,481.01	6,481.01	39.14	130.08	-157.71	-72.86	1.95	2,061.21	1,912.16	149.05	13.829		
7,000.00	6,603.01	6,581.01	6,581.01	39.22	132.09	-157.71	-72.86	1.95	2,061.21	1,910.00	151.21	13.631		
7,100.00	6,703.01	6,681.01	6,681.01	39.29	134.10	-157.71	-72.86	1.95	2,061.21	1,907.83	153.38	13.439		
7,200.00	6,803.01	6,781.01	6,781.01	39.37	136.11	-157.71	-72.86	1.95	2,061.21	1,905.67	155.55	13.251		
7,300.00	6,903.01	6,881.01	6,881.01	39.45	138.12	-157.71	-72.86	1.95	2,061.21	1,903.50	157.72	13.069		
7,400.00	7,003.01	6,981.01	6,981.01	39.53	140.13	-157.71	-72.86	1.95	2,061.21	1,901.33	159.89	12.892		
7,500.00	7,103.01	7,081.01	7,081.01	39.61	142.14	-157.71	-72.86	1.95	2,061.21	1,899.15	162.06	12.719		
7,566.99	7,170.00	7,148.00	7,148.00	39.66	143.49	-157.71	-72.86	1.95	2,061.21	1,897.70	163.51	12.606		

<b>Company:</b>	US ROCKIES REGION PLANNING	<b>Local Co-ordinate Reference:</b>	Well P_WINTERS 29-3
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>TVD Reference:</b>	WELL @ 4672.00ft (Original Well Elev)
<b>Reference Site:</b>	WELD_WINTERS 5-3 PAD	<b>MD Reference:</b>	WELL @ 4672.00ft (Original Well Elev)
<b>Site Error:</b>	0.00ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	P_WINTERS 29-3	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	P_WINTERS 29-3	<b>Database:</b>	EDM 2003.21 Single User Db
<b>Reference Design:</b>	PLAN #1 3-10-10 RHS	<b>Offset TVD Reference:</b>	Offset Datum

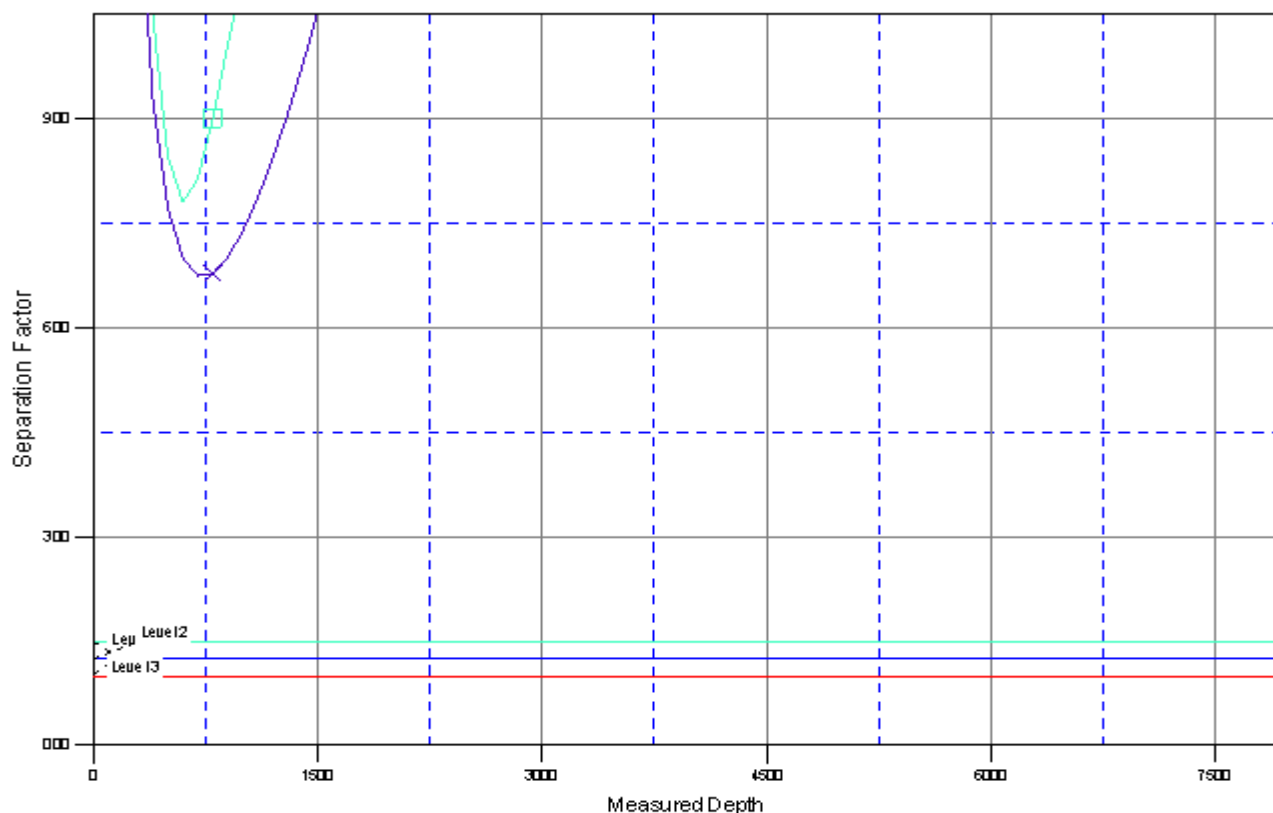
Reference Depths are relative to WELL @ 4672.00ft (Original Well Elev) Coordinates are relative to: P\_WINTERS 29-3  
Offset Depths are relative to Offset Datum Coordinate System is US State Plane 1983, Colorado Northern Zone  
Central Meridian is 105° 30' 0.000 W ° Grid Convergence at Surface is: 0.54°







<b>Company:</b>	US ROCKIES REGION PLANNING	<b>Local Co-ordinate Reference:</b>	Well P_WINTERS 29-3
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>TVD Reference:</b>	WELL @ 4672.00ft (Original Well Elev)
<b>Reference Site:</b>	WELD_WINTERS 5-3 PAD	<b>MD Reference:</b>	WELL @ 4672.00ft (Original Well Elev)
<b>Site Error:</b>	0.00ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	P_WINTERS 29-3	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	P_WINTERS 29-3	<b>Database:</b>	EDM 2003.21 Single User Db
<b>Reference Design:</b>	PLAN #1 3-10-10 RHS	<b>Offset TVD Reference:</b>	Offset Datum

Reference Depths are relative to WELL @ 4672.00ft (Original Well Elev) Coordinates are relative to: P\_WINTERS 29-3  
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: 0.54°

## Separation Factor Plot



### LEGEND

3-10-10 RHS VD	 P_WINTERS 30-3, P_WINTERS 30-3, PLAN #13-10-10 RHS VD	 P_WINTERS 32-3, P_WINTERS 32-3, PLAN #13-10-10 RHS VD
3-10-10 RHS VD	 P_WINTERS 31-3, P_WINTERS 31-3, PLAN #13-10-10 RHS VD	 WINTERS 5-3 EXISTING, WINTERS 5-3 EXISTING, PLAN #13-10-10 RHS VD