



# **US ROCKIES REGION PLANNING**

**COLORADO NORTHERN ZONE - 83**

**WELD\_DRY CREEK 12-35 PAD**

**P\_DRY CREEK 11-35**

**P\_DRY CREEK 11-35**

**Plan: PLAN #1 10-28-09 RHS**

## **Standard Planning Report**

**28 October, 2009**





Azimuths to True North  
Magnetic North: 9.06°  
Magnetic Field  
Strength: 53101.9nT  
Dip Angle: 66.78°  
Date: 10/28/2009  
Model: IGRF200510

#### WELL DETAILS: P\_DRY CREEK 11-35

+N/-S	+E/-W	Northing	Ground Level:	5029.00	Longitude	Slot
0.00	0.00	1245632.45	Easting	3177810.59	40° 0' 21.240 N	104° 51' 54.900 W

#### FORMATION TOP DETAILS

TVDPath	MDPath	Formation
3152.00	3367.31	PARKMAN TOP
4754.00	5032.58	SUSSEX TOP
7336.00	7614.58	NIO A TOP
7736.00	8014.58	CODELL TOP
8173.00	8451.58	JSAND TOP

#### SECTION DETAILS

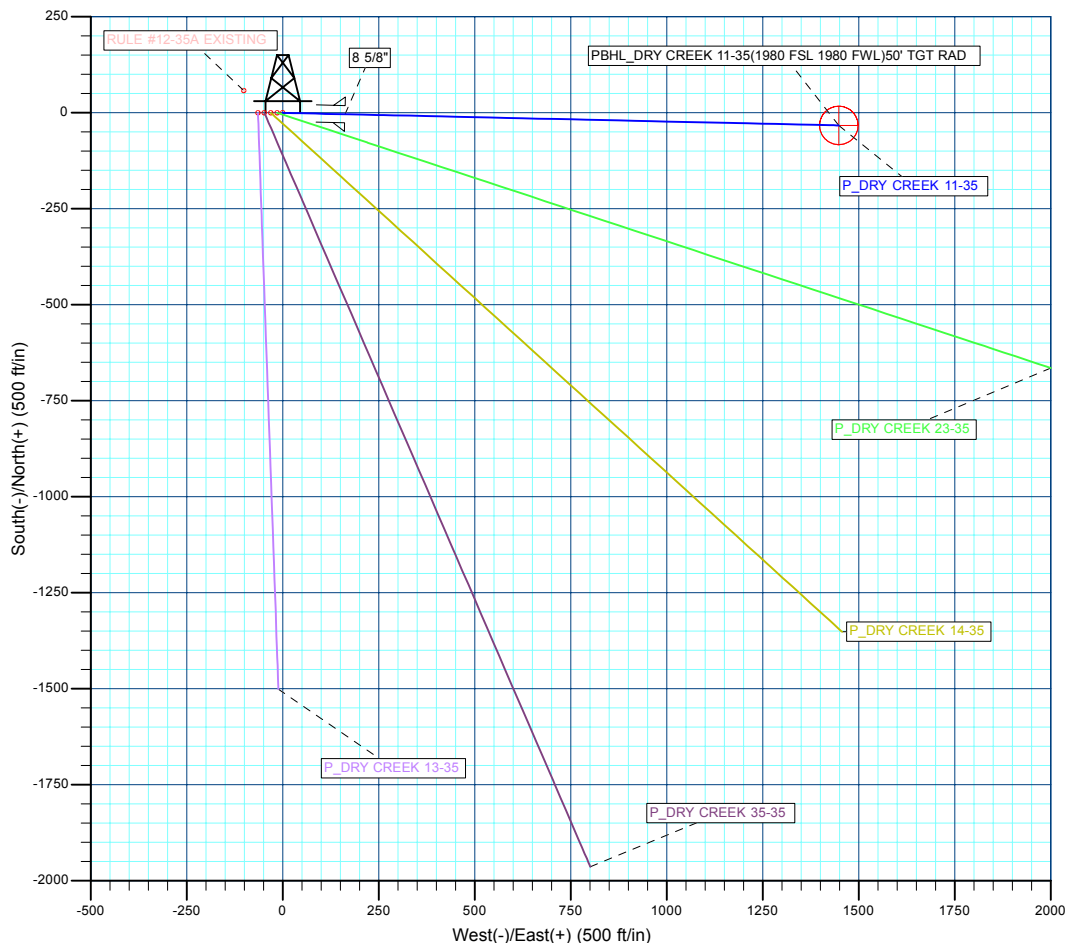
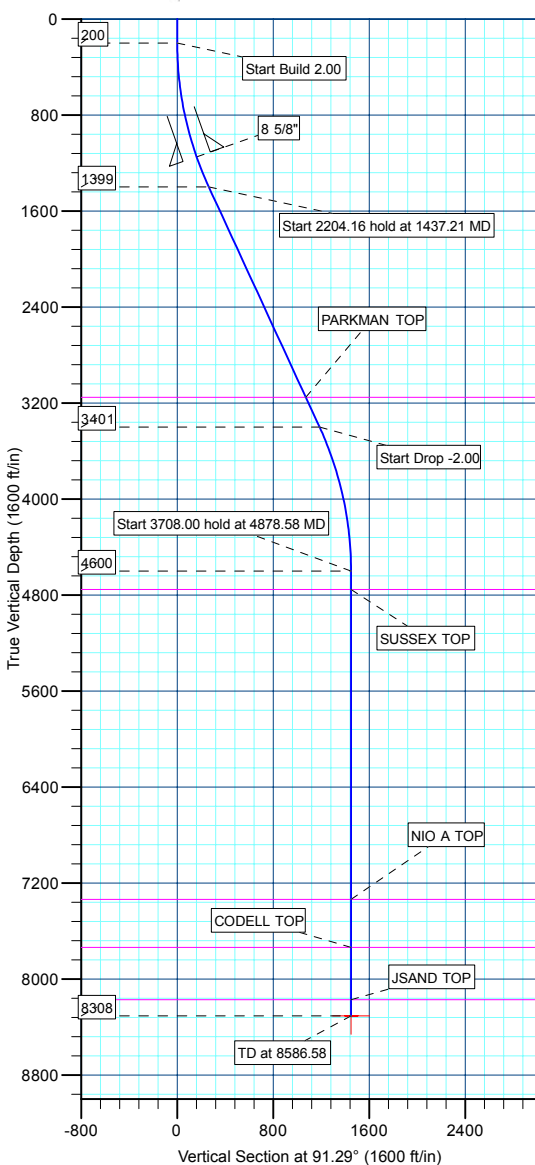
MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	
1437.21	24.74	91.29	1399.10	-5.94	262.96	2.00	91.29	263.03	
3641.37	24.74	91.29	3400.90	-26.79	1185.31	0.00	0.00	1185.62	
4878.58	0.00	0.00	4600.00	-32.74	1448.27	2.00	180.00	1448.64	
8586.58	0.00	0.00	8308.00	-32.74	1448.27	0.00	0.00	1448.64	PBHL_DRY CREEK 11-35(1980 FSL 1980 FWL)50' TGT RAD

#### CASING DETAILS

TVD	MD	Name	Size
1150.00	1168.33	8 5/8"	8.62



KB ELEV: WELL @ 5044.00ft (Original Well Elev)  
GRD ELEV: 5029.00



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

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
PBHL	8308.00	-32.74	1448.27	1245610.08	3179259.06	40° 0' 20.916 N	104° 51' 36.288 W	Circle (Radius: 50.00)

<b>Database:</b>	EDM 2003.21 Single User Db	<b>Local Co-ordinate Reference:</b>	Well P_DRY CREEK 11-35
<b>Company:</b>	US ROCKIES REGION PLANNING	<b>TVD Reference:</b>	WELL @ 5044.00ft (Original Well Elev)
<b>Project:</b>	COLORADO NOTHERN ZONE - 83	<b>MD Reference:</b>	WELL @ 5044.00ft (Original Well Elev)
<b>Site:</b>	WELD_DRY CREEK 12-35 PAD	<b>North Reference:</b>	True
<b>Well:</b>	P_DRY CREEK 11-35	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	P_DRY CREEK 11-35		
<b>Design:</b>	PLAN #1 10-28-09 RHS		

<b>Project</b>	COLORADO NOTHERN 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		

<b>Site</b>	WELD_DRY CREEK 12-35 PAD, SECTION 35 T1N R67W			
<b>Site Position:</b>		<b>Northing:</b>	1,245,632.45 ft	<b>Latitude:</b> 40° 0' 21.240 N
<b>From:</b>	Lat/Long	<b>Easting:</b>	3,177,810.59 ft	<b>Longitude:</b> 104° 51' 54.900 W
<b>Position Uncertainty:</b>	5,044.00 ft	<b>Slot Radius:</b>	in	<b>Grid Convergence:</b> 0.41 °

<b>Well</b>	P_DRY CREEK 11-35			
<b>Well Position</b>	<b>+N/-S</b>	0.00 ft	<b>Northing:</b>	1,245,632.45 ft
	<b>+E/-W</b>	0.00 ft	<b>Easting:</b>	3,177,810.59 ft
<b>Position Uncertainty</b>		0.00 ft	<b>Wellhead Elevation:</b>	ft
			<b>Ground Level:</b>	5,029.00 ft

<b>Wellbore</b>	P_DRY CREEK 11-35				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF200510	10/28/2009	9.07	66.78	53,102

<b>Design</b>	PLAN #1 10-28-09 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	91.29

<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	
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,437.21	24.74	91.29	1,399.10	-5.94	262.96	2.00	2.00	0.00	91.29	
3,641.37	24.74	91.29	3,400.90	-26.79	1,185.31	0.00	0.00	0.00	0.00	
4,878.58	0.00	0.00	4,600.00	-32.74	1,448.27	2.00	-2.00	0.00	180.00	
8,586.58	0.00	0.00	8,308.00	-32.74	1,448.27	0.00	0.00	0.00	0.00	PBHL_DRY CREEK

<b>Database:</b>	EDM 2003.21 Single User Db	<b>Local Co-ordinate Reference:</b>	Well P_DRY CREEK 11-35
<b>Company:</b>	US ROCKIES REGION PLANNING	<b>TVD Reference:</b>	WELL @ 5044.00ft (Original Well Elev)
<b>Project:</b>	COLORADO NOTHERN ZONE - 83	<b>MD Reference:</b>	WELL @ 5044.00ft (Original Well Elev)
<b>Site:</b>	WELD_DRY CREEK 12-35 PAD	<b>North Reference:</b>	True
<b>Well:</b>	P_DRY CREEK 11-35	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	P_DRY CREEK 11-35		
<b>Design:</b>	PLAN #1 10-28-09 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>									
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	2.00	91.29	299.98	-0.04	1.74	1.75	2.00	2.00	0.00
400.00	4.00	91.29	399.84	-0.16	6.98	6.98	2.00	2.00	0.00
500.00	6.00	91.29	499.45	-0.35	15.69	15.69	2.00	2.00	0.00
600.00	8.00	91.29	598.70	-0.63	27.87	27.88	2.00	2.00	0.00
700.00	10.00	91.29	697.47	-0.98	43.51	43.52	2.00	2.00	0.00
800.00	12.00	91.29	795.62	-1.41	62.59	62.60	2.00	2.00	0.00
900.00	14.00	91.29	893.06	-1.92	85.07	85.10	2.00	2.00	0.00
1,000.00	16.00	91.29	989.64	-2.51	110.95	110.98	2.00	2.00	0.00
1,100.00	18.00	91.29	1,085.27	-3.17	140.18	140.21	2.00	2.00	0.00
<b>8 5/8"</b>									
1,168.33	19.37	91.29	1,150.00	-3.66	162.06	162.10	2.00	2.00	0.00
1,200.00	20.00	91.29	1,179.82	-3.90	172.72	172.77	2.00	2.00	0.00
1,300.00	22.00	91.29	1,273.17	-4.71	208.55	208.60	2.00	2.00	0.00
1,400.00	24.00	91.29	1,365.21	-5.60	247.61	247.67	2.00	2.00	0.00
<b>Start 2204.16 hold at 1437.21 MD</b>									
1,437.21	24.74	91.29	1,399.10	-5.94	262.96	263.03	2.00	2.00	0.00
1,500.00	24.74	91.29	1,456.13	-6.54	289.24	289.31	0.00	0.00	0.00
1,600.00	24.74	91.29	1,546.95	-7.48	331.08	331.17	0.00	0.00	0.00
1,700.00	24.74	91.29	1,637.77	-8.43	372.93	373.02	0.00	0.00	0.00
1,800.00	24.74	91.29	1,728.59	-9.38	414.77	414.88	0.00	0.00	0.00
1,900.00	24.74	91.29	1,819.41	-10.32	456.62	456.74	0.00	0.00	0.00
2,000.00	24.74	91.29	1,910.23	-11.27	498.47	498.59	0.00	0.00	0.00
2,100.00	24.74	91.29	2,001.05	-12.21	540.31	540.45	0.00	0.00	0.00
2,200.00	24.74	91.29	2,091.86	-13.16	582.16	582.31	0.00	0.00	0.00
2,300.00	24.74	91.29	2,182.68	-14.11	624.00	624.16	0.00	0.00	0.00
2,400.00	24.74	91.29	2,273.50	-15.05	665.85	666.02	0.00	0.00	0.00
2,500.00	24.74	91.29	2,364.32	-16.00	707.70	707.88	0.00	0.00	0.00
2,600.00	24.74	91.29	2,455.14	-16.94	749.54	749.73	0.00	0.00	0.00
2,700.00	24.74	91.29	2,545.96	-17.89	791.39	791.59	0.00	0.00	0.00
2,800.00	24.74	91.29	2,636.78	-18.84	833.23	833.45	0.00	0.00	0.00
2,900.00	24.74	91.29	2,727.59	-19.78	875.08	875.30	0.00	0.00	0.00
3,000.00	24.74	91.29	2,818.41	-20.73	916.93	917.16	0.00	0.00	0.00
3,100.00	24.74	91.29	2,909.23	-21.67	958.77	959.02	0.00	0.00	0.00
3,200.00	24.74	91.29	3,000.05	-22.62	1,000.62	1,000.87	0.00	0.00	0.00
3,300.00	24.74	91.29	3,090.87	-23.56	1,042.46	1,042.73	0.00	0.00	0.00
<b>PARKMAN TOP</b>									
3,367.31	24.74	91.29	3,152.00	-24.20	1,070.63	1,070.90	0.00	0.00	0.00
3,400.00	24.74	91.29	3,181.69	-24.51	1,084.31	1,084.59	0.00	0.00	0.00
3,500.00	24.74	91.29	3,272.51	-25.46	1,126.16	1,126.44	0.00	0.00	0.00
3,600.00	24.74	91.29	3,363.32	-26.40	1,168.00	1,168.30	0.00	0.00	0.00
<b>Start Drop -2.00</b>									
3,641.37	24.74	91.29	3,400.90	-26.79	1,185.31	1,185.62	0.00	0.00	0.00
3,700.00	23.57	91.29	3,454.39	-27.34	1,209.30	1,209.61	2.00	-2.00	0.00
3,800.00	21.57	91.29	3,546.73	-28.20	1,247.67	1,247.99	2.00	-2.00	0.00
3,900.00	19.57	91.29	3,640.34	-29.00	1,282.80	1,283.13	2.00	-2.00	0.00
4,000.00	17.57	91.29	3,735.13	-29.72	1,314.64	1,314.98	2.00	-2.00	0.00
4,100.00	15.57	91.29	3,830.97	-30.36	1,343.15	1,343.49	2.00	-2.00	0.00
4,200.00	13.57	91.29	3,927.75	-30.93	1,368.30	1,368.65	2.00	-2.00	0.00
4,300.00	11.57	91.29	4,025.35	-31.42	1,390.06	1,390.42	2.00	-2.00	0.00
4,400.00	9.57	91.29	4,123.65	-31.84	1,408.40	1,408.76	2.00	-2.00	0.00
4,500.00	7.57	91.29	4,222.53	-32.17	1,423.30	1,423.67	2.00	-2.00	0.00

<b>Database:</b>	EDM 2003.21 Single User Db	<b>Local Co-ordinate Reference:</b>	Well P_DRY CREEK 11-35
<b>Company:</b>	US ROCKIES REGION PLANNING	<b>TVD Reference:</b>	WELL @ 5044.00ft (Original Well Elev)
<b>Project:</b>	COLORADO NOTHERN ZONE - 83	<b>MD Reference:</b>	WELL @ 5044.00ft (Original Well Elev)
<b>Site:</b>	WELD_DRY CREEK 12-35 PAD	<b>North Reference:</b>	True
<b>Well:</b>	P_DRY CREEK 11-35	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	P_DRY CREEK 11-35		
<b>Design:</b>	PLAN #1 10-28-09 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)
4,600.00	5.57	91.29	4,321.86	-32.43	1,434.74	1,435.11	2.00	-2.00	0.00
4,700.00	3.57	91.29	4,421.54	-32.61	1,442.71	1,443.08	2.00	-2.00	0.00
4,800.00	1.57	91.29	4,521.43	-32.71	1,447.20	1,447.57	2.00	-2.00	0.00
<b>Start 3708.00 hold at 4878.58 MD</b>									
4,878.58	0.00	0.00	4,600.00	-32.74	1,448.27	1,448.64	2.00	-2.00	-116.19
4,900.00	0.00	0.00	4,621.42	-32.74	1,448.27	1,448.64	0.00	0.00	0.00
5,000.00	0.00	0.00	4,721.42	-32.74	1,448.27	1,448.64	0.00	0.00	0.00
<b>SUSSEX TOP</b>									
5,032.58	0.00	0.00	4,754.00	-32.74	1,448.27	1,448.64	0.00	0.00	0.00
5,100.00	0.00	0.00	4,821.42	-32.74	1,448.27	1,448.64	0.00	0.00	0.00
5,200.00	0.00	0.00	4,921.42	-32.74	1,448.27	1,448.64	0.00	0.00	0.00
5,300.00	0.00	0.00	5,021.42	-32.74	1,448.27	1,448.64	0.00	0.00	0.00
5,400.00	0.00	0.00	5,121.42	-32.74	1,448.27	1,448.64	0.00	0.00	0.00
5,500.00	0.00	0.00	5,221.42	-32.74	1,448.27	1,448.64	0.00	0.00	0.00
5,600.00	0.00	0.00	5,321.42	-32.74	1,448.27	1,448.64	0.00	0.00	0.00
5,700.00	0.00	0.00	5,421.42	-32.74	1,448.27	1,448.64	0.00	0.00	0.00
5,800.00	0.00	0.00	5,521.42	-32.74	1,448.27	1,448.64	0.00	0.00	0.00
5,900.00	0.00	0.00	5,621.42	-32.74	1,448.27	1,448.64	0.00	0.00	0.00
6,000.00	0.00	0.00	5,721.42	-32.74	1,448.27	1,448.64	0.00	0.00	0.00
6,100.00	0.00	0.00	5,821.42	-32.74	1,448.27	1,448.64	0.00	0.00	0.00
6,200.00	0.00	0.00	5,921.42	-32.74	1,448.27	1,448.64	0.00	0.00	0.00
6,300.00	0.00	0.00	6,021.42	-32.74	1,448.27	1,448.64	0.00	0.00	0.00
6,400.00	0.00	0.00	6,121.42	-32.74	1,448.27	1,448.64	0.00	0.00	0.00
6,500.00	0.00	0.00	6,221.42	-32.74	1,448.27	1,448.64	0.00	0.00	0.00
6,600.00	0.00	0.00	6,321.42	-32.74	1,448.27	1,448.64	0.00	0.00	0.00
6,700.00	0.00	0.00	6,421.42	-32.74	1,448.27	1,448.64	0.00	0.00	0.00
6,800.00	0.00	0.00	6,521.42	-32.74	1,448.27	1,448.64	0.00	0.00	0.00
6,900.00	0.00	0.00	6,621.42	-32.74	1,448.27	1,448.64	0.00	0.00	0.00
7,000.00	0.00	0.00	6,721.42	-32.74	1,448.27	1,448.64	0.00	0.00	0.00
7,100.00	0.00	0.00	6,821.42	-32.74	1,448.27	1,448.64	0.00	0.00	0.00
7,200.00	0.00	0.00	6,921.42	-32.74	1,448.27	1,448.64	0.00	0.00	0.00
7,300.00	0.00	0.00	7,021.42	-32.74	1,448.27	1,448.64	0.00	0.00	0.00
7,400.00	0.00	0.00	7,121.42	-32.74	1,448.27	1,448.64	0.00	0.00	0.00
7,500.00	0.00	0.00	7,221.42	-32.74	1,448.27	1,448.64	0.00	0.00	0.00
7,600.00	0.00	0.00	7,321.42	-32.74	1,448.27	1,448.64	0.00	0.00	0.00
<b>NIO A TOP</b>									
7,614.58	0.00	0.00	7,336.00	-32.74	1,448.27	1,448.64	0.00	0.00	0.00
7,700.00	0.00	0.00	7,421.42	-32.74	1,448.27	1,448.64	0.00	0.00	0.00
7,800.00	0.00	0.00	7,521.42	-32.74	1,448.27	1,448.64	0.00	0.00	0.00
7,900.00	0.00	0.00	7,621.42	-32.74	1,448.27	1,448.64	0.00	0.00	0.00
8,000.00	0.00	0.00	7,721.42	-32.74	1,448.27	1,448.64	0.00	0.00	0.00
<b>CODELL TOP</b>									
8,014.58	0.00	0.00	7,736.00	-32.74	1,448.27	1,448.64	0.00	0.00	0.00
8,100.00	0.00	0.00	7,821.42	-32.74	1,448.27	1,448.64	0.00	0.00	0.00
8,200.00	0.00	0.00	7,921.42	-32.74	1,448.27	1,448.64	0.00	0.00	0.00
8,300.00	0.00	0.00	8,021.42	-32.74	1,448.27	1,448.64	0.00	0.00	0.00
8,400.00	0.00	0.00	8,121.42	-32.74	1,448.27	1,448.64	0.00	0.00	0.00
<b>JSAND TOP</b>									
8,451.58	0.00	0.00	8,173.00	-32.74	1,448.27	1,448.64	0.00	0.00	0.00
8,500.00	0.00	0.00	8,221.42	-32.74	1,448.27	1,448.64	0.00	0.00	0.00
<b>PBHL_DRY CREEK 11-35(1980 FSL 1980 FWL)50' TGT RAD</b>									
8,586.58	0.00	0.00	8,308.00	-32.74	1,448.27	1,448.64	0.00	0.00	0.00

<b>Database:</b>	EDM 2003.21 Single User Db	<b>Local Co-ordinate Reference:</b>	Well P_DRY CREEK 11-35
<b>Company:</b>	US ROCKIES REGION PLANNING	<b>TVD Reference:</b>	WELL @ 5044.00ft (Original Well Elev)
<b>Project:</b>	COLORADO NOTHERN ZONE - 83	<b>MD Reference:</b>	WELL @ 5044.00ft (Original Well Elev)
<b>Site:</b>	WELD_DRY CREEK 12-35 PAD	<b>North Reference:</b>	True
<b>Well:</b>	P_DRY CREEK 11-35	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	P_DRY CREEK 11-35		
<b>Design:</b>	PLAN #1 10-28-09 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_DRY CREEK 1	0.00	0.00	8,308.00	-32.74	1,448.27	1,245,610.08	3,179,259.06	40° 0' 20.916 N	104° 51' 36.288 W
- plan hits target center									
- Circle (radius 50.00)									

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)	
1,168.33	1,150.00	8 5/8"	8.62	11.00	

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
3,367.31	3,152.00	PARKMAN TOP				
5,032.58	4,754.00	SUSSEX TOP				
7,614.58	7,336.00	NIO A TOP				
8,014.58	7,736.00	CODELL TOP				
8,451.58	8,173.00	JSAND TOP				

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
200.00	200.00	0.00	0.00	Start Build 2.00	
1,437.21	1,399.10	-5.94	262.96	Start 2204.16 hold at 1437.21 MD	
3,641.37	3,400.90	-26.79	1,185.31	Start Drop -2.00	
4,878.58	4,600.00	-32.74	1,448.27	Start 3708.00 hold at 4878.58 MD	
8,586.58	8,308.00	-32.74	1,448.27	TD at 8586.58	



# **US ROCKIES REGION PLANNING**

**COLORADO NOTHERN ZONE - 83  
WELD\_DRY CREEK 12-35 PAD  
P\_DRY CREEK 11-35**

**P\_DRY CREEK 11-35  
PLAN #1 10-28-09 RHS**

## **Anticollision Report**

**28 October, 2009**



<b>Company:</b>	US ROCKIES REGION PLANNING	<b>Local Co-ordinate Reference:</b>	Well P_DRY CREEK 11-35
<b>Project:</b>	COLORADO NOTHERN ZONE - 83	<b>TVD Reference:</b>	WELL @ 5044.00ft (Original Well Elev)
<b>Reference Site:</b>	WELD_DRY CREEK 12-35 PAD	<b>MD Reference:</b>	WELL @ 5044.00ft (Original Well Elev)
<b>Site Error:</b>	5,044.00ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	P_DRY CREEK 11-35	<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_DRY CREEK 11-35	<b>Database:</b>	EDM 2003.21 Single User Db
<b>Reference Design:</b>	PLAN #1 10-28-09 RHS	<b>Offset TVD Reference:</b>	Offset Datum

<b>Reference</b>	PLAN #1 10-28-09 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>	10/28/2009		
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>
0.00	8,586.58	PLAN #1 10-28-09 RHS (P_DRY CREEK	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_DRY CREEK 12-35 PAD						
P_DRY CREEK 13-35 - P_DRY CREEK 13-35 - PLAN #	200.00	200.00	64.43	63.79	100.580	CC, ES
P_DRY CREEK 13-35 - P_DRY CREEK 13-35 - PLAN #	8,300.00	8,208.63	2,072.73	2,017.99	37.861	SF
P_DRY CREEK 14-35 - P_DRY CREEK 14-35 - PLAN #	200.00	200.00	30.81	30.17	48.103	CC, ES
P_DRY CREEK 14-35 - P_DRY CREEK 14-35 - PLAN #	800.00	801.56	62.19	58.35	16.179	SF
P_DRY CREEK 23-35 - P_DRY CREEK 23-35 - PLAN #	200.00	200.00	14.01	13.37	21.865	CC
P_DRY CREEK 23-35 - P_DRY CREEK 23-35 - PLAN #	400.00	400.91	14.47	12.98	9.734	ES
P_DRY CREEK 23-35 - P_DRY CREEK 23-35 - PLAN #	800.00	802.21	24.91	21.05	6.462	SF
P_DRY CREEK 35-35 - P_DRY CREEK 35-35 - PLAN #	200.00	200.00	47.62	46.98	74.342	CC, ES
P_DRY CREEK 35-35 - P_DRY CREEK 35-35 - PLAN #	700.00	698.88	83.50	80.44	27.233	SF
RULE #12-35A EXISTING - RULE #12-35A EXISTING -	200.00	181.00	116.53	110.97	20.958	CC
RULE #12-35A EXISTING - RULE #12-35A EXISTING -	300.00	280.98	118.07	108.30	12.087	ES
RULE #12-35A EXISTING - RULE #12-35A EXISTING -	8,586.58	8,289.00	1,552.05	1,202.67	4.442	SF

Offset Design		WELD_DRY CREEK 12-35 PAD - P_DRY CREEK 13-35 - P_DRY CREEK 13-35 - PLAN #1 10-28-09 F										Offset Site Error:		0.00 ft
Survey Program:		0-MWD										Offset Well Error:		0.00 ft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
0.00	0.00	0.00	0.00	0.00	0.00	-90.01	-0.01	-64.43	64.43					
100.00	100.00	100.00	100.00	0.10	0.10	-90.01	-0.01	-64.43	64.43	64.24	0.19	337.239		
200.00	200.00	200.00	200.00	0.32	0.32	-90.01	-0.01	-64.43	64.43	63.79	0.64	100.580	CC, ES	
300.00	299.98	300.02	300.00	0.53	0.52	177.22	-1.75	-64.37	66.13	65.08	1.05	62.757		
400.00	399.84	399.70	399.54	0.76	0.73	173.23	-6.96	-64.18	71.49	70.01	1.47	48.577		
500.00	499.45	498.70	498.16	1.01	0.97	167.80	-15.56	-63.88	81.02	79.08	1.93	41.919		
600.00	598.70	596.69	595.42	1.30	1.25	162.11	-27.41	-63.46	95.23	92.79	2.44	39.050		
700.00	697.47	693.36	690.93	1.63	1.57	156.92	-42.36	-62.93	114.39	111.39	2.99	38.199		
800.00	795.62	788.44	784.31	2.01	1.94	152.53	-60.19	-62.30	138.49	134.88	3.61	38.390		
900.00	893.06	881.64	875.23	2.46	2.35	148.94	-80.67	-61.57	167.40	163.12	4.28	39.089		
1,000.00	989.64	972.75	963.41	2.96	2.80	146.02	-103.53	-60.76	200.94	195.92	5.02	40.014		
1,100.00	1,085.27	1,061.55	1,048.62	3.53	3.28	143.62	-128.50	-59.87	238.90	233.07	5.83	41.005		
1,200.00	1,179.82	1,147.87	1,130.67	4.17	3.79	141.60	-155.29	-58.92	281.06	274.36	6.70	41.978		
1,300.00	1,273.17	1,231.56	1,209.41	4.88	4.33	139.88	-183.62	-57.92	327.23	319.60	7.63	42.891		
1,400.00	1,365.21	1,312.51	1,284.76	5.66	4.89	138.35	-213.19	-56.87	377.19	368.57	8.63	43.724		
1,437.21	1,399.10	1,341.91	1,311.91	5.97	5.11	137.82	-224.45	-56.47	396.72	387.70	9.02	43.994		

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_DRY CREEK 11-35
<b>Project:</b>	COLORADO NOTHERN ZONE - 83	<b>TVD Reference:</b>	WELL @ 5044.00ft (Original Well Elev)
<b>Reference Site:</b>	WELD_DRY CREEK 12-35 PAD	<b>MD Reference:</b>	WELL @ 5044.00ft (Original Well Elev)
<b>Site Error:</b>	5,044.00ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	P_DRY CREEK 11-35	<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_DRY CREEK 11-35	<b>Database:</b>	EDM 2003.21 Single User Db
<b>Reference Design:</b>	PLAN #1 10-28-09 RHS	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design WELD_DRY CREEK 12-35 PAD - P_DRY CREEK 13-35 - P_DRY CREEK 13-35 - PLAN #1 10-28-09 F												Offset Site Error:	0.00 ft
Survey Program: 0-MWD												Offset Well Error:	0.00 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Semi Major Axis Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
1,500.00	1,456.13	1,390.86	1,356.86	6.50	5.48	137.44	-243.82	-55.78	430.35	420.64	9.71	44.315	
1,600.00	1,546.95	1,469.60	1,428.49	7.35	6.10	136.74	-276.49	-54.62	484.94	474.09	10.85	44.675	
1,700.00	1,637.77	1,553.00	1,504.14	8.21	6.77	136.10	-311.59	-53.38	539.91	527.86	12.04	44.828	
1,800.00	1,728.59	1,636.40	1,579.78	9.08	7.44	135.57	-346.68	-52.13	594.91	581.67	13.24	44.929	
1,900.00	1,819.41	1,719.80	1,655.43	9.95	8.12	135.13	-381.78	-50.89	649.95	635.51	14.44	44.997	
2,000.00	1,910.23	1,803.19	1,731.07	10.82	8.80	134.76	-416.87	-49.65	705.01	689.36	15.65	45.042	
2,100.00	2,001.05	1,886.59	1,806.71	11.69	9.49	134.44	-451.96	-48.40	760.09	743.22	16.86	45.073	
2,200.00	2,091.86	1,969.99	1,882.36	12.57	10.17	134.16	-487.06	-47.16	815.18	797.10	18.08	45.094	
2,300.00	2,182.68	2,053.39	1,958.00	13.44	10.85	133.92	-522.15	-45.91	870.28	850.98	19.29	45.109	
2,400.00	2,273.50	2,136.78	2,033.64	14.32	11.54	133.71	-557.25	-44.67	925.39	904.88	20.51	45.120	
2,500.00	2,364.32	2,220.18	2,109.29	15.20	12.23	133.53	-592.34	-43.42	980.51	958.78	21.73	45.128	
2,600.00	2,455.14	2,303.58	2,184.93	16.08	12.92	133.36	-627.44	-42.18	1,035.63	1,012.69	22.95	45.134	
2,700.00	2,545.96	2,386.98	2,260.58	16.96	13.60	133.21	-662.53	-40.93	1,090.76	1,066.60	24.16	45.139	
2,800.00	2,636.78	2,470.37	2,336.22	17.84	14.29	133.07	-697.62	-39.69	1,145.90	1,120.51	25.38	45.143	
2,900.00	2,727.59	2,553.77	2,411.86	18.72	14.98	132.95	-732.72	-38.44	1,201.04	1,174.43	26.60	45.146	
3,000.00	2,818.41	2,637.17	2,487.51	19.60	15.67	132.83	-767.81	-37.20	1,256.18	1,228.36	27.82	45.150	
3,100.00	2,909.23	2,720.57	2,563.15	20.48	16.36	132.73	-802.91	-35.95	1,311.33	1,282.29	29.04	45.154	
3,200.00	3,000.05	2,803.96	2,638.80	21.36	17.05	132.64	-838.00	-34.71	1,366.48	1,336.22	30.26	45.158	
3,300.00	3,090.87	2,887.36	2,714.44	22.25	17.74	132.55	-873.10	-33.46	1,421.63	1,390.15	31.48	45.162	
3,400.00	3,181.69	2,970.76	2,790.08	23.13	18.43	132.47	-908.19	-32.22	1,476.78	1,444.09	32.70	45.166	
3,500.00	3,272.51	3,054.16	2,865.73	24.01	19.12	132.39	-943.29	-30.98	1,531.94	1,498.02	33.91	45.171	
3,600.00	3,363.32	3,137.55	2,941.37	24.90	19.82	132.32	-978.38	-29.73	1,587.09	1,551.96	35.13	45.176	
3,641.37	3,400.90	3,172.05	2,972.66	25.26	20.10	132.29	-992.90	-29.22	1,609.91	1,574.28	35.63	45.179	
3,700.00	3,454.39	3,221.16	3,017.21	25.72	20.51	132.80	-1,013.56	-28.48	1,641.91	1,605.55	36.36	45.157	
3,800.00	3,546.73	3,305.85	3,094.02	26.37	21.21	133.54	-1,049.20	-27.22	1,694.91	1,657.41	37.50	45.194	
3,900.00	3,640.34	3,391.62	3,171.82	26.97	21.92	134.14	-1,085.29	-25.94	1,745.87	1,707.26	38.61	45.213	
4,000.00	3,735.13	3,478.38	3,250.51	27.52	22.64	134.60	-1,121.80	-24.64	1,794.77	1,755.08	39.69	45.219	
4,100.00	3,830.97	3,566.00	3,329.99	28.01	23.37	134.95	-1,158.67	-23.34	1,841.57	1,800.84	40.73	45.216	
4,200.00	3,927.75	3,654.40	3,410.16	28.45	24.10	135.19	-1,195.87	-22.02	1,886.26	1,844.53	41.73	45.206	
4,300.00	4,025.35	3,743.46	3,490.94	28.83	24.84	135.33	-1,233.35	-20.69	1,928.84	1,886.16	42.68	45.194	
4,400.00	4,123.65	3,905.77	3,639.96	29.15	25.82	135.01	-1,297.61	-18.41	1,967.72	1,923.93	43.79	44.933	
4,500.00	4,222.53	4,079.09	3,802.81	29.43	26.69	134.68	-1,356.79	-16.31	2,000.81	1,956.04	44.78	44.683	
4,600.00	4,321.86	4,260.13	3,976.42	29.65	27.48	134.37	-1,407.99	-14.49	2,027.75	1,982.10	45.65	44.417	
4,700.00	4,421.54	4,447.74	4,159.37	29.82	28.15	134.10	-1,449.37	-13.03	2,048.20	2,001.80	46.39	44.149	
4,800.00	4,521.43	4,640.44	4,349.68	29.95	28.68	133.85	-1,479.33	-11.96	2,061.88	2,014.90	46.98	43.890	
4,878.58	4,600.00	4,794.29	4,502.81	30.01	28.97	-135.03	-1,494.03	-11.44	2,067.75	2,020.42	47.32	43.693	
4,900.00	4,621.42	4,836.47	4,544.92	30.02	29.03	-135.08	-1,496.62	-11.35	2,068.65	2,021.25	47.40	43.643	
5,000.00	4,721.42	5,013.06	4,721.42	30.09	29.21	-135.17	-1,500.82	-11.20	2,070.10	2,022.42	47.68	43.417	
5,100.00	4,821.42	5,113.06	4,821.42	30.17	29.27	-135.17	-1,500.82	-11.20	2,070.10	2,022.26	47.85	43.267	
5,200.00	4,921.42	5,213.06	4,921.42	30.24	29.33	-135.17	-1,500.82	-11.20	2,070.10	2,022.09	48.01	43.114	
5,300.00	5,021.42	5,313.06	5,021.42	30.32	29.40	-135.17	-1,500.82	-11.20	2,070.10	2,021.91	48.19	42.959	
5,400.00	5,121.42	5,413.06	5,121.42	30.40	29.46	-135.17	-1,500.82	-11.20	2,070.10	2,021.74	48.37	42.802	
5,500.00	5,221.42	5,513.06	5,221.42	30.48	29.53	-135.17	-1,500.82	-11.20	2,070.10	2,021.56	48.55	42.642	
5,600.00	5,321.42	5,613.06	5,321.42	30.56	29.60	-135.17	-1,500.82	-11.20	2,070.10	2,021.37	48.73	42.481	
5,700.00	5,421.42	5,713.06	5,421.42	30.64	29.67	-135.17	-1,500.82	-11.20	2,070.10	2,021.18	48.92	42.318	
5,800.00	5,521.42	5,813.06	5,521.42	30.72	29.74	-135.17	-1,500.82	-11.20	2,070.10	2,020.99	49.11	42.154	
5,900.00	5,621.42	5,913.06	5,621.42	30.81	29.82	-135.17	-1,500.82	-11.20	2,070.10	2,020.80	49.30	41.988	
6,000.00	5,721.42	6,013.06	5,721.42	30.90	29.89	-135.17	-1,500.82	-11.20	2,070.10	2,020.60	49.50	41.820	
6,100.00	5,821.42	6,113.06	5,821.42	30.98	29.97	-135.17	-1,500.82	-11.20	2,070.10	2,020.40	49.70	41.651	
6,200.00	5,921.42	6,213.06	5,921.42	31.07	30.05	-135.17	-1,500.82	-11.20	2,070.10	2,020.20	49.91	41.481	
6,300.00	6,021.42	6,313.06	6,021.42	31.16	30.13	-135.17	-1,500.82	-11.20	2,070.10	2,019.99	50.11	41.309	
6,400.00	6,121.42	6,413.06	6,121.42	31.26	30.21	-135.17	-1,500.82	-11.20	2,070.10	2,019.78	50.32	41.136	

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_DRY CREEK 11-35
<b>Project:</b>	COLORADO NOTHERN ZONE - 83	<b>TVD Reference:</b>	WELL @ 5044.00ft (Original Well Elev)
<b>Reference Site:</b>	WELD_DRY CREEK 12-35 PAD	<b>MD Reference:</b>	WELL @ 5044.00ft (Original Well Elev)
<b>Site Error:</b>	5,044.00ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	P_DRY CREEK 11-35	<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_DRY CREEK 11-35	<b>Database:</b>	EDM 2003.21 Single User Db
<b>Reference Design:</b>	PLAN #1 10-28-09 RHS	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design</b> WELD_DRY CREEK 12-35 PAD - P_DRY CREEK 13-35 - P_DRY CREEK 13-35 - PLAN #1 10-28-09 F												<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
6,500.00	6,221.42	6,513.06	6,221.42	31.35	30.29	-135.17	-1,500.82	-11.20	2,070.10	2,019.56	50.54	40.962	
6,600.00	6,321.42	6,613.06	6,321.42	31.44	30.38	-135.17	-1,500.82	-11.20	2,070.10	2,019.35	50.75	40.787	
6,700.00	6,421.42	6,713.06	6,421.42	31.54	30.46	-135.17	-1,500.82	-11.20	2,070.10	2,019.13	50.97	40.611	
6,800.00	6,521.42	6,813.06	6,521.42	31.64	30.55	-135.17	-1,500.82	-11.20	2,070.10	2,018.90	51.20	40.434	
6,900.00	6,621.42	6,913.06	6,621.42	31.74	30.64	-135.17	-1,500.82	-11.20	2,070.10	2,018.68	51.42	40.256	
7,000.00	6,721.42	7,013.06	6,721.42	31.84	30.73	-135.17	-1,500.82	-11.20	2,070.10	2,018.45	51.65	40.078	
7,100.00	6,821.42	7,113.06	6,821.42	31.94	30.82	-135.17	-1,500.82	-11.20	2,070.10	2,018.22	51.88	39.898	
7,200.00	6,921.42	7,213.06	6,921.42	32.04	30.91	-135.17	-1,500.82	-11.20	2,070.10	2,017.98	52.12	39.719	
7,300.00	7,021.42	7,313.06	7,021.42	32.14	31.00	-135.17	-1,500.82	-11.20	2,070.10	2,017.75	52.36	39.539	
7,400.00	7,121.42	7,413.06	7,121.42	32.25	31.10	-135.17	-1,500.82	-11.20	2,070.10	2,017.50	52.60	39.358	
7,500.00	7,221.42	7,513.06	7,221.42	32.36	31.19	-135.17	-1,500.82	-11.20	2,070.10	2,017.26	52.84	39.177	
7,600.00	7,321.42	7,613.06	7,321.42	32.46	31.29	-135.17	-1,500.82	-11.20	2,070.10	2,017.02	53.09	38.995	
7,700.00	7,421.42	7,713.06	7,421.42	32.57	31.39	-135.17	-1,500.82	-11.20	2,070.10	2,016.77	53.33	38.814	
7,800.00	7,521.42	7,813.06	7,521.42	32.68	31.49	-135.17	-1,500.82	-11.20	2,070.10	2,016.52	53.59	38.632	
7,900.00	7,621.42	7,913.06	7,621.42	32.79	31.59	-135.17	-1,500.82	-11.20	2,070.10	2,016.26	53.84	38.450	
8,000.00	7,721.42	8,013.06	7,721.42	32.90	31.70	-135.17	-1,500.82	-11.20	2,070.10	2,016.01	54.10	38.267	
8,100.00	7,821.42	8,113.06	7,821.42	33.02	31.80	-135.17	-1,500.82	-11.20	2,070.10	2,015.75	54.35	38.085	
8,165.12	7,886.55	8,178.18	7,886.55	33.09	31.87	-135.17	-1,500.82	-11.20	2,070.10	2,015.58	54.52	37.966	
8,200.00	7,921.42	8,208.63	7,917.00	33.13	31.90	-135.17	-1,500.82	-11.20	2,070.11	2,015.50	54.61	37.907	
8,300.00	8,021.42	8,208.63	7,917.00	33.25	31.90	-135.17	-1,500.82	-11.20	2,072.73	2,017.99	54.75	37.861 SF	
8,400.00	8,121.42	8,208.63	7,917.00	33.36	31.90	-135.17	-1,500.82	-11.20	2,080.17	2,025.29	54.88	37.903	
8,500.00	8,221.42	8,208.63	7,917.00	33.48	31.90	-135.17	-1,500.82	-11.20	2,092.37	2,037.35	55.02	38.030	
8,586.58	8,308.00	8,208.63	7,917.00	33.58	31.90	-135.17	-1,500.82	-11.20	2,106.70	2,051.57	55.14	38.208	

<b>Company:</b>	US ROCKIES REGION PLANNING	<b>Local Co-ordinate Reference:</b>	Well P_DRY CREEK 11-35
<b>Project:</b>	COLORADO NOTHERN ZONE - 83	<b>TVD Reference:</b>	WELL @ 5044.00ft (Original Well Elev)
<b>Reference Site:</b>	WELD_DRY CREEK 12-35 PAD	<b>MD Reference:</b>	WELL @ 5044.00ft (Original Well Elev)
<b>Site Error:</b>	5,044.00ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	P_DRY CREEK 11-35	<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_DRY CREEK 11-35	<b>Database:</b>	EDM 2003.21 Single User Db
<b>Reference Design:</b>	PLAN #1 10-28-09 RHS	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design WELD_DRY CREEK 12-35 PAD - P_DRY CREEK 14-35 - P_DRY CREEK 14-35 - PLAN #1 10-28-09 F													Offset Site Error: 0.00 ft
Survey Program: 0-MWD													Offset Well Error: 0.00 ft
Reference	Offset	Semi Major Axis		Distance		Warning							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
0.00	0.00	0.00	0.00	0.00	0.00	-90.01	0.00	-30.81	30.81				
100.00	100.00	100.00	100.00	0.10	0.10	-90.01	0.00	-30.81	30.81	30.62	0.19	161.288	
200.00	200.00	200.00	200.00	0.32	0.32	-90.01	0.00	-30.81	30.81	30.17	0.64	48.103 CC, ES	
300.00	299.98	300.79	300.77	0.53	0.53	176.59	-1.20	-29.50	31.28	30.22	1.06	29.520	
400.00	399.84	401.48	401.32	0.76	0.74	170.65	-4.77	-25.57	32.91	31.42	1.48	22.198	
500.00	499.45	502.00	501.44	1.01	0.99	162.13	-10.70	-19.04	36.29	34.34	1.95	18.606	
600.00	598.70	602.24	600.92	1.30	1.29	152.81	-18.96	-9.95	42.09	39.60	2.49	16.933	
700.00	697.47	702.12	699.55	1.63	1.62	144.24	-29.52	1.67	50.69	47.57	3.11	16.289	
800.00	795.62	801.56	797.15	2.01	2.01	137.14	-42.32	15.76	62.19	58.35	3.84	16.179 SF	
900.00	893.06	900.48	893.52	2.46	2.46	131.55	-57.30	32.26	76.53	71.84	4.69	16.328	
1,000.00	989.64	998.80	988.49	2.96	2.96	127.23	-74.40	51.08	93.57	87.92	5.64	16.580	
1,100.00	1,085.27	1,096.45	1,081.89	3.53	3.53	123.87	-93.55	72.16	113.17	106.46	6.71	16.859	
1,200.00	1,179.82	1,193.38	1,173.59	4.17	4.15	121.22	-114.66	95.39	135.22	127.33	7.90	17.128	
1,300.00	1,273.17	1,289.51	1,263.43	4.88	4.83	119.08	-137.64	120.69	159.64	150.45	9.19	17.369	
1,400.00	1,365.21	1,384.80	1,351.31	5.66	5.57	117.31	-162.41	147.96	186.32	175.72	10.60	17.574	
1,437.21	1,399.10	1,420.02	1,383.48	5.97	5.85	116.73	-172.06	158.58	196.81	185.65	11.16	17.640	
1,500.00	1,456.13	1,479.81	1,437.76	6.50	6.35	116.05	-188.91	177.12	214.86	202.73	12.13	17.708	
1,600.00	1,546.95	1,575.50	1,524.58	7.35	7.17	115.14	-215.96	206.90	243.69	229.98	13.71	17.775	
1,700.00	1,637.77	1,671.19	1,611.40	8.21	7.99	114.41	-243.02	236.68	272.56	257.26	15.30	17.818	
1,800.00	1,728.59	1,766.88	1,698.23	9.08	8.82	113.83	-270.07	266.46	301.46	284.57	16.89	17.847	
1,900.00	1,819.41	1,862.57	1,785.05	9.95	9.65	113.35	-297.13	296.24	330.39	311.90	18.49	17.866	
2,000.00	1,910.23	1,958.26	1,871.87	10.82	10.48	112.95	-324.18	326.02	359.33	339.24	20.10	17.880	
2,100.00	2,001.05	2,053.95	1,958.69	11.69	11.32	112.60	-351.23	355.80	388.29	366.59	21.71	17.889	
2,200.00	2,091.86	2,149.65	2,045.51	12.57	12.15	112.31	-378.29	385.58	417.26	393.95	23.32	17.896	
2,300.00	2,182.68	2,245.34	2,132.34	13.44	12.99	112.05	-405.34	415.36	446.24	421.31	24.93	17.901	
2,400.00	2,273.50	2,341.03	2,219.16	14.32	13.83	111.82	-432.39	445.14	475.23	448.69	26.54	17.905	
2,500.00	2,364.32	2,436.72	2,305.98	15.20	14.67	111.62	-459.45	474.92	504.22	476.06	28.16	17.908	
2,600.00	2,455.14	2,532.41	2,392.80	16.08	15.51	111.45	-486.50	504.70	533.22	503.44	29.77	17.910	
2,700.00	2,545.96	2,628.10	2,479.62	16.96	16.35	111.29	-513.56	534.48	562.22	530.83	31.39	17.913	
2,800.00	2,636.78	2,723.79	2,566.45	17.84	17.19	111.14	-540.61	564.26	591.22	558.22	33.00	17.914	
2,900.00	2,727.59	2,819.48	2,653.27	18.72	18.03	111.01	-567.66	594.04	620.23	585.61	34.62	17.916	
3,000.00	2,818.41	2,915.18	2,740.09	19.60	18.87	110.89	-594.72	623.82	649.24	613.00	36.24	17.917	
3,100.00	2,909.23	3,010.87	2,826.91	20.48	19.71	110.78	-621.77	653.60	678.25	640.40	37.85	17.919	
3,200.00	3,000.05	3,106.56	2,913.73	21.36	20.56	110.68	-648.83	683.38	707.27	667.80	39.47	17.920	
3,300.00	3,090.87	3,202.25	3,000.56	22.25	21.40	110.59	-675.88	713.16	736.28	695.20	41.08	17.921	
3,400.00	3,181.69	3,297.94	3,087.38	23.13	22.24	110.51	-702.93	742.94	765.30	722.60	42.70	17.923	
3,500.00	3,272.51	3,393.63	3,174.20	24.01	23.08	110.43	-729.99	772.72	794.32	750.01	44.32	17.924	
3,600.00	3,363.32	3,489.32	3,261.02	24.90	23.93	110.35	-757.04	802.50	823.34	777.41	45.93	17.926	
3,641.37	3,400.90	3,528.91	3,296.94	25.26	24.28	110.32	-768.23	814.82	835.35	788.75	46.60	17.926	
3,700.00	3,454.39	3,585.07	3,347.89	25.72	24.77	110.57	-784.11	832.30	852.16	804.65	47.52	17.935	
3,800.00	3,546.73	3,681.03	3,434.96	26.37	25.62	110.81	-811.24	862.16	879.92	830.97	48.95	17.974	
3,900.00	3,640.34	3,777.13	3,522.15	26.97	26.47	110.83	-838.41	892.07	906.53	856.17	50.35	18.003	
4,000.00	3,735.13	3,873.24	3,609.36	27.52	27.31	110.65	-865.58	921.98	932.03	880.30	51.73	18.018	
4,100.00	3,830.97	3,969.26	3,696.47	28.01	28.16	110.29	-892.73	951.86	956.49	903.45	53.05	18.031	
4,200.00	3,927.75	4,065.05	3,783.39	28.45	29.01	109.76	-919.81	981.67	980.02	925.72	54.30	18.049	
4,300.00	4,025.35	4,160.51	3,870.00	28.83	29.85	109.08	-946.80	1,011.38	1,002.72	947.24	55.48	18.074	
4,400.00	4,123.65	4,255.53	3,956.21	29.15	30.69	108.26	-973.66	1,040.95	1,024.74	968.16	56.58	18.112	
4,500.00	4,222.53	4,349.97	4,041.90	29.43	31.52	107.32	-1,000.37	1,070.34	1,046.23	988.64	57.59	18.166	
4,600.00	4,321.86	4,443.74	4,126.97	29.65	32.35	106.26	-1,026.88	1,099.52	1,067.37	1,008.85	58.52	18.240	
4,700.00	4,421.54	4,536.70	4,211.33	29.82	33.17	105.11	-1,053.16	1,128.45	1,088.33	1,028.99	59.34	18.339	
4,800.00	4,521.43	4,628.76	4,294.85	29.95	33.98	103.88	-1,079.19	1,157.10	1,109.32	1,049.25	60.07	18.468	
4,878.58	4,600.00	4,700.39	4,359.84	30.01	34.61	-165.85	-1,099.44	1,179.39	1,125.97	1,065.41	60.57	18.591	

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_DRY CREEK 11-35
<b>Project:</b>	COLORADO NOTHERN ZONE - 83	<b>TVD Reference:</b>	WELL @ 5044.00ft (Original Well Elev)
<b>Reference Site:</b>	WELD_DRY CREEK 12-35 PAD	<b>MD Reference:</b>	WELL @ 5044.00ft (Original Well Elev)
<b>Site Error:</b>	5,044.00ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	P_DRY CREEK 11-35	<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_DRY CREEK 11-35	<b>Database:</b>	EDM 2003.21 Single User Db
<b>Reference Design:</b>	PLAN #1 10-28-09 RHS	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design WELD_DRY CREEK 12-35 PAD - P_DRY CREEK 14-35 - P_DRY CREEK 14-35 - PLAN #1 10-28-09 F										Offset Site Error: 0.00 ft			
Survey Program: 0-MWD										Offset Well Error: 0.00 ft			
Reference		Offset		Semi Major Axis		Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)		Separation Factor
4,900.00	4,621.42	4,719.83	4,377.48	30.02	34.78	-166.23	-1,104.93	1,185.44	1,130.57	1,069.89	60.68	18.633	
5,000.00	4,721.42	4,810.56	4,459.80	30.09	35.58	-167.94	-1,130.58	1,213.68	1,152.71	1,091.54	61.17	18.844	
5,100.00	4,821.42	4,901.29	4,542.12	30.17	36.38	-169.59	-1,156.24	1,241.92	1,175.94	1,114.32	61.62	19.084	
5,200.00	4,921.42	5,002.46	4,634.04	30.24	37.23	-171.36	-1,184.65	1,273.19	1,200.06	1,138.03	62.02	19.349	
5,300.00	5,021.42	5,125.94	4,747.88	30.32	38.00	-173.27	-1,216.79	1,308.58	1,223.25	1,160.97	62.28	19.641	
5,400.00	5,121.42	5,253.76	4,867.77	30.40	38.73	-174.97	-1,246.57	1,341.35	1,244.65	1,182.15	62.49	19.916	
5,500.00	5,221.42	5,385.63	4,993.41	30.48	39.39	-176.44	-1,273.48	1,370.98	1,263.89	1,201.21	62.68	20.164	
5,600.00	5,321.42	5,521.15	5,124.31	30.56	39.97	-177.67	-1,297.06	1,396.93	1,280.63	1,217.78	62.84	20.378	
5,700.00	5,421.42	5,659.86	5,259.84	30.64	40.47	-178.68	-1,316.86	1,418.72	1,294.58	1,231.59	63.00	20.549	
5,800.00	5,521.42	5,801.20	5,399.25	30.72	40.88	-179.45	-1,332.47	1,435.91	1,305.52	1,242.36	63.16	20.671	
5,900.00	5,621.42	5,944.53	5,541.61	30.81	41.18	-179.99	-1,343.56	1,448.11	1,313.25	1,249.94	63.31	20.742	
6,000.00	5,721.42	6,089.17	5,685.93	30.90	41.39	179.70	-1,349.88	1,455.07	1,317.64	1,254.15	63.49	20.755	
6,100.00	5,821.42	6,224.70	5,821.42	30.98	41.50	179.63	-1,351.41	1,456.76	1,318.70	1,255.03	63.67	20.711	
6,200.00	5,921.42	6,324.70	5,921.42	31.07	41.56	179.63	-1,351.41	1,456.76	1,318.70	1,254.86	63.84	20.658	
6,300.00	6,021.42	6,424.70	6,021.42	31.16	41.62	179.63	-1,351.41	1,456.76	1,318.70	1,254.70	64.00	20.604	
6,400.00	6,121.42	6,524.70	6,121.42	31.26	41.68	179.63	-1,351.41	1,456.76	1,318.70	1,254.53	64.17	20.549	
6,500.00	6,221.42	6,624.70	6,221.42	31.35	41.75	179.63	-1,351.41	1,456.76	1,318.70	1,254.35	64.35	20.493	
6,600.00	6,321.42	6,724.70	6,321.42	31.44	41.81	179.63	-1,351.41	1,456.76	1,318.70	1,254.18	64.52	20.438	
6,700.00	6,421.42	6,824.70	6,421.42	31.54	41.87	179.63	-1,351.41	1,456.76	1,318.70	1,254.00	64.70	20.381	
6,800.00	6,521.42	6,924.70	6,521.42	31.64	41.94	179.63	-1,351.41	1,456.76	1,318.70	1,253.82	64.88	20.324	
6,900.00	6,621.42	7,024.70	6,621.42	31.74	42.01	179.63	-1,351.41	1,456.76	1,318.70	1,253.63	65.07	20.267	
7,000.00	6,721.42	7,124.70	6,721.42	31.84	42.08	179.63	-1,351.41	1,456.76	1,318.70	1,253.45	65.25	20.209	
7,100.00	6,821.42	7,224.70	6,821.42	31.94	42.14	179.63	-1,351.41	1,456.76	1,318.70	1,253.26	65.44	20.150	
7,200.00	6,921.42	7,324.70	6,921.42	32.04	42.22	179.63	-1,351.41	1,456.76	1,318.70	1,253.07	65.63	20.092	
7,300.00	7,021.42	7,424.70	7,021.42	32.14	42.29	179.63	-1,351.41	1,456.76	1,318.70	1,252.87	65.83	20.032	
7,400.00	7,121.42	7,524.70	7,121.42	32.25	42.36	179.63	-1,351.41	1,456.76	1,318.70	1,252.67	66.02	19.973	
7,500.00	7,221.42	7,624.70	7,221.42	32.36	42.43	179.63	-1,351.41	1,456.76	1,318.70	1,252.48	66.22	19.913	
7,600.00	7,321.42	7,724.70	7,321.42	32.46	42.51	179.63	-1,351.41	1,456.76	1,318.70	1,252.27	66.43	19.852	
7,700.00	7,421.42	7,824.70	7,421.42	32.57	42.58	179.63	-1,351.41	1,456.76	1,318.70	1,252.07	66.63	19.792	
7,800.00	7,521.42	7,924.70	7,521.42	32.68	42.66	179.63	-1,351.41	1,456.76	1,318.70	1,251.86	66.84	19.731	
7,900.00	7,621.42	8,024.70	7,621.42	32.79	42.74	179.63	-1,351.41	1,456.76	1,318.70	1,251.66	67.04	19.669	
8,000.00	7,721.42	8,124.70	7,721.42	32.90	42.82	179.63	-1,351.41	1,456.76	1,318.70	1,251.44	67.26	19.607	
8,100.00	7,821.42	8,224.70	7,821.42	33.02	42.90	179.63	-1,351.41	1,456.76	1,318.70	1,251.23	67.47	19.545	
8,200.00	7,921.42	8,324.70	7,921.42	33.13	42.98	179.63	-1,351.41	1,456.76	1,318.70	1,251.02	67.68	19.483	
8,300.00	8,021.42	8,424.70	8,021.42	33.25	43.06	179.63	-1,351.41	1,456.76	1,318.70	1,250.80	67.90	19.421	
8,400.00	8,121.42	8,524.70	8,121.42	33.36	43.14	179.63	-1,351.41	1,456.76	1,318.70	1,250.58	68.12	19.358	
8,500.00	8,221.42	8,624.70	8,221.42	33.48	43.22	179.63	-1,351.41	1,456.76	1,318.70	1,250.35	68.34	19.295	
8,586.58	8,308.00	8,711.27	8,308.00	33.58	43.30	179.63	-1,351.41	1,456.76	1,318.70	1,250.16	68.54	19.240	

<b>Company:</b>	US ROCKIES REGION PLANNING	<b>Local Co-ordinate Reference:</b>	Well P_DRY CREEK 11-35
<b>Project:</b>	COLORADO NOTHERN ZONE - 83	<b>TVD Reference:</b>	WELL @ 5044.00ft (Original Well Elev)
<b>Reference Site:</b>	WELD_DRY CREEK 12-35 PAD	<b>MD Reference:</b>	WELL @ 5044.00ft (Original Well Elev)
<b>Site Error:</b>	5,044.00ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	P_DRY CREEK 11-35	<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_DRY CREEK 11-35	<b>Database:</b>	EDM 2003.21 Single User Db
<b>Reference Design:</b>	PLAN #1 10-28-09 RHS	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design		WELD_DRY CREEK 12-35 PAD - P_DRY CREEK 23-35 - P_DRY CREEK 23-35 - PLAN #1 10-28-09 F										Offset Site Error:		0.00 ft	
Survey Program: 0-MWMD												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	-90.03	-0.01	-14.01	14.01						
100.00	100.00	100.00	100.00	0.10	0.10	-90.03	-0.01	-14.01	14.01	13.82	0.19	73.313			
200.00	200.00	200.00	200.00	0.32	0.32	-90.03	-0.01	-14.01	14.01	13.37	0.64	21.865	CC		
300.00	299.98	300.46	300.44	0.53	0.53	176.59	-0.56	-12.33	14.10	13.03	1.06	13.258			
400.00	399.84	400.91	400.75	0.76	0.75	170.54	-2.21	-7.32	14.47	12.98	1.49	9.734	ES		
500.00	499.45	501.32	500.77	1.01	1.00	161.31	-4.97	1.03	15.43	13.48	1.95	7.927			
600.00	598.70	601.69	600.37	1.30	1.30	150.51	-8.82	12.69	17.33	14.86	2.47	7.017			
700.00	697.47	701.99	699.42	1.63	1.63	140.05	-13.75	27.65	20.45	17.35	3.10	6.603			
800.00	795.62	802.21	797.78	2.01	2.02	131.18	-19.76	45.88	24.91	21.05	3.85	6.462	SF		
900.00	893.06	902.33	895.32	2.46	2.47	124.20	-26.84	67.34	30.67	25.92	4.75	6.463			
1,000.00	989.64	1,002.34	991.89	2.96	2.98	118.86	-34.98	92.00	37.66	31.89	5.77	6.530			
1,100.00	1,085.27	1,102.23	1,087.39	3.53	3.56	114.80	-44.15	119.80	45.81	38.89	6.92	6.621			
1,200.00	1,179.82	1,201.98	1,181.68	4.17	4.20	111.68	-54.34	150.71	55.06	46.86	8.20	6.713			
1,300.00	1,273.17	1,301.59	1,274.64	4.88	4.92	109.25	-65.54	184.66	65.37	55.75	9.62	6.795			
1,400.00	1,365.21	1,401.03	1,366.15	5.66	5.70	107.31	-77.73	221.60	76.68	65.51	11.17	6.864			
1,437.21	1,399.10	1,437.96	1,399.91	5.97	6.00	106.88	-82.42	235.83	81.15	69.37	11.78	6.890			
1,500.00	1,456.13	1,500.28	1,456.86	6.50	6.51	106.65	-90.35	259.86	88.81	76.01	12.81	6.935			
1,600.00	1,546.95	1,599.53	1,547.57	7.35	7.34	106.35	-102.97	298.13	101.02	86.56	14.46	6.986			
1,700.00	1,637.77	1,698.79	1,638.27	8.21	8.18	106.11	-115.59	336.39	113.22	97.09	16.13	7.021			
1,800.00	1,728.59	1,798.04	1,728.98	9.08	9.01	105.92	-128.21	374.66	125.43	107.63	17.80	7.045			
1,900.00	1,819.41	1,897.29	1,819.68	9.95	9.85	105.76	-140.84	412.92	137.64	118.15	19.49	7.064			
2,000.00	1,910.23	1,996.54	1,910.39	10.82	10.70	105.63	-153.46	451.18	149.85	128.67	21.17	7.077			
2,100.00	2,001.05	2,095.79	2,001.09	11.69	11.54	105.52	-166.08	489.45	162.06	139.19	22.86	7.088			
2,200.00	2,091.86	2,195.04	2,091.80	12.57	12.39	105.43	-178.70	527.71	174.27	149.71	24.56	7.096			
2,300.00	2,182.68	2,294.29	2,182.50	13.44	13.23	105.34	-191.33	565.98	186.48	160.22	26.26	7.102			
2,400.00	2,273.50	2,393.54	2,273.20	14.32	14.08	105.27	-203.95	604.24	198.69	170.73	27.96	7.107			
2,500.00	2,364.32	2,492.80	2,363.91	15.20	14.93	105.21	-216.57	642.51	210.90	181.24	29.66	7.111			
2,600.00	2,455.14	2,592.05	2,454.61	16.08	15.78	105.15	-229.19	680.77	223.11	191.75	31.36	7.114			
2,700.00	2,545.96	2,691.30	2,545.32	16.96	16.63	105.10	-241.81	719.04	235.32	202.26	33.06	7.117			
2,800.00	2,636.78	2,790.55	2,636.02	17.84	17.48	105.05	-254.44	757.30	247.54	212.77	34.77	7.119			
2,900.00	2,727.59	2,889.80	2,726.73	18.72	18.33	105.01	-267.06	795.56	259.75	223.27	36.47	7.121			
3,000.00	2,818.41	2,989.05	2,817.43	19.60	19.18	104.97	-279.68	833.83	271.96	233.78	38.18	7.123			
3,100.00	2,909.23	3,088.30	2,908.14	20.48	20.04	104.93	-292.30	872.09	284.17	244.28	39.89	7.124			
3,200.00	3,000.05	3,187.56	2,998.84	21.36	20.89	104.90	-304.92	910.36	296.39	254.79	41.60	7.125			
3,300.00	3,090.87	3,286.81	3,089.55	22.25	21.74	104.87	-317.55	948.62	308.60	265.29	43.30	7.126			
3,400.00	3,181.69	3,386.06	3,180.25	23.13	22.59	104.85	-330.17	986.89	320.81	275.80	45.01	7.127			
3,500.00	3,272.51	3,485.31	3,270.96	24.01	23.45	104.82	-342.79	1,025.15	333.02	286.30	46.72	7.128			
3,600.00	3,363.32	3,584.56	3,361.66	24.90	24.30	104.80	-355.41	1,063.42	345.24	296.80	48.43	7.128			
3,641.37	3,400.90	3,625.62	3,399.19	25.26	24.65	104.79	-360.63	1,079.24	350.29	301.15	49.14	7.128			
3,700.00	3,454.39	3,683.83	3,452.38	25.72	25.15	104.82	-368.04	1,101.68	357.30	307.20	50.10	7.132			
3,800.00	3,546.73	3,783.11	3,543.12	26.37	26.01	104.45	-380.66	1,139.96	368.57	316.94	51.63	7.139			
3,900.00	3,640.34	3,882.31	3,633.78	26.97	26.86	103.58	-393.28	1,178.21	379.06	325.92	53.14	7.133			
4,000.00	3,735.13	3,981.31	3,724.24	27.52	27.71	102.27	-405.87	1,216.37	388.93	334.32	54.61	7.122			
4,100.00	3,830.97	4,079.97	3,814.41	28.01	28.56	100.54	-418.42	1,254.41	398.42	342.42	56.00	7.115			
4,200.00	3,927.75	4,178.18	3,904.17	28.45	29.40	98.44	-430.91	1,292.27	407.82	350.53	57.29	7.119			
4,300.00	4,025.35	4,275.83	3,993.40	28.83	30.24	95.99	-443.32	1,329.92	417.49	359.07	58.43	7.146			
4,400.00	4,123.65	4,372.78	4,082.01	29.15	31.08	93.26	-455.65	1,367.30	427.84	368.45	59.38	7.205			
4,500.00	4,222.53	4,468.94	4,169.88	29.43	31.90	90.27	-467.88	1,404.37	439.28	379.16	60.12	7.307			
4,600.00	4,321.86	4,564.16	4,256.91	29.65	32.72	87.10	-479.99	1,441.08	452.29	391.68	60.61	7.462			
4,700.00	4,421.54	4,658.35	4,342.99	29.82	33.53	83.79	-491.97	1,477.39	467.31	406.48	60.83	7.682			
4,800.00	4,521.43	4,751.39	4,428.01	29.95	34.34	80.42	-503.80	1,513.26	484.78	424.00	60.78	7.976			
4,878.58	4,600.00	4,823.60	4,494.01	30.01	34.96	169.06	-512.99	1,541.10	500.49	439.93	60.56	8.265			

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_DRY CREEK 11-35
<b>Project:</b>	COLORADO NOTHERN ZONE - 83	<b>TVD Reference:</b>	WELL @ 5044.00ft (Original Well Elev)
<b>Reference Site:</b>	WELD_DRY CREEK 12-35 PAD	<b>MD Reference:</b>	WELL @ 5044.00ft (Original Well Elev)
<b>Site Error:</b>	5,044.00ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	P_DRY CREEK 11-35	<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_DRY CREEK 11-35	<b>Database:</b>	EDM 2003.21 Single User Db
<b>Reference Design:</b>	PLAN #1 10-28-09 RHS	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design WELD_DRY CREEK 12-35 PAD - P_DRY CREEK 23-35 - P_DRY CREEK 23-35 - PLAN #1 10-28-09 F												Offset Site Error:	0.00 ft
Survey Program: 0-MWD												Offset Well Error:	0.00 ft
Reference	Offset	Semi Major Axis		Distance									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
4,900.00	4,621.42	4,843.18	4,511.90	30.02	35.13	168.25	-515.48	1,548.65	505.08	444.64	60.44	8.356	
5,000.00	4,721.42	4,934.57	4,595.42	30.09	35.91	164.66	-527.10	1,583.89	527.88	468.03	59.85	8.820	
5,100.00	4,821.42	5,025.96	4,678.94	30.17	36.70	161.34	-538.72	1,619.12	552.73	493.56	59.17	9.342	
5,200.00	4,921.42	5,117.35	4,762.46	30.24	37.49	158.29	-550.34	1,654.35	579.35	520.92	58.44	9.914	
5,300.00	5,021.42	5,208.74	4,845.98	30.32	38.27	155.49	-561.96	1,689.59	607.53	549.84	57.69	10.530	
5,400.00	5,121.42	5,300.13	4,929.50	30.40	39.06	152.92	-573.59	1,724.82	637.05	580.09	56.96	11.185	
5,500.00	5,221.42	5,391.52	5,013.02	30.48	39.85	150.56	-585.21	1,760.05	667.73	611.48	56.25	11.871	
5,600.00	5,321.42	5,482.91	5,096.54	30.56	40.63	148.40	-596.83	1,795.29	699.42	643.84	55.58	12.584	
5,700.00	5,421.42	5,576.32	5,181.91	30.64	41.43	146.38	-608.71	1,831.28	731.98	677.05	54.94	13.324	
5,800.00	5,521.42	5,693.83	5,290.41	30.72	42.21	144.18	-622.84	1,874.14	763.51	709.36	54.15	14.100	
5,900.00	5,621.42	5,815.25	5,404.36	30.81	42.91	142.33	-635.97	1,913.93	792.37	738.86	53.50	14.810	
6,000.00	5,721.42	5,940.32	5,523.48	30.90	43.55	140.79	-647.90	1,950.09	818.19	765.18	53.00	15.437	
6,100.00	5,821.42	6,068.69	5,647.35	30.98	44.12	139.53	-658.44	1,982.04	840.66	788.02	52.64	15.970	
6,200.00	5,921.42	6,199.98	5,775.47	31.07	44.61	138.53	-667.40	2,009.23	859.52	807.11	52.41	16.401	
6,300.00	6,021.42	6,333.71	5,907.18	31.16	45.00	137.76	-674.64	2,031.16	874.56	822.27	52.28	16.727	
6,400.00	6,121.42	6,469.36	6,041.73	31.26	45.32	137.21	-680.00	2,047.42	885.60	833.33	52.27	16.943	
6,500.00	6,221.42	6,606.34	6,178.27	31.35	45.54	136.87	-683.39	2,057.69	892.52	840.16	52.36	17.047	
6,600.00	6,321.42	6,744.05	6,315.91	31.44	45.67	136.74	-684.73	2,061.75	895.25	842.71	52.54	17.040	
6,700.00	6,421.42	6,849.57	6,421.42	31.54	45.74	136.74	-684.75	2,061.81	895.29	842.54	52.75	16.971	
6,800.00	6,521.42	6,949.57	6,521.42	31.64	45.80	136.74	-684.75	2,061.81	895.29	842.32	52.97	16.902	
6,900.00	6,621.42	7,049.57	6,621.42	31.74	45.87	136.74	-684.75	2,061.81	895.29	842.10	53.19	16.832	
7,000.00	6,721.42	7,149.57	6,721.42	31.84	45.94	136.74	-684.75	2,061.81	895.29	841.88	53.41	16.762	
7,100.00	6,821.42	7,249.57	6,821.42	31.94	46.00	136.74	-684.75	2,061.81	895.29	841.66	53.64	16.692	
7,200.00	6,921.42	7,349.57	6,921.42	32.04	46.07	136.74	-684.75	2,061.81	895.29	841.43	53.86	16.622	
7,300.00	7,021.42	7,449.57	7,021.42	32.14	46.14	136.74	-684.75	2,061.81	895.29	841.20	54.09	16.551	
7,400.00	7,121.42	7,549.57	7,121.42	32.25	46.21	136.74	-684.75	2,061.81	895.29	840.97	54.33	16.480	
7,500.00	7,221.42	7,649.57	7,221.42	32.36	46.28	136.74	-684.75	2,061.81	895.29	840.73	54.56	16.409	
7,600.00	7,321.42	7,749.57	7,321.42	32.46	46.36	136.74	-684.75	2,061.81	895.29	840.49	54.80	16.338	
7,700.00	7,421.42	7,849.57	7,421.42	32.57	46.43	136.74	-684.75	2,061.81	895.29	840.25	55.04	16.266	
7,800.00	7,521.42	7,949.57	7,521.42	32.68	46.51	136.74	-684.75	2,061.81	895.29	840.01	55.28	16.195	
7,900.00	7,621.42	8,049.57	7,621.42	32.79	46.58	136.74	-684.75	2,061.81	895.29	839.76	55.53	16.123	
8,000.00	7,721.42	8,149.57	7,721.42	32.90	46.66	136.74	-684.75	2,061.81	895.29	839.52	55.78	16.051	
8,100.00	7,821.42	8,249.57	7,821.42	33.02	46.73	136.74	-684.75	2,061.81	895.29	839.26	56.03	15.979	
8,200.00	7,921.42	8,349.57	7,921.42	33.13	46.81	136.74	-684.75	2,061.81	895.29	839.01	56.28	15.907	
8,300.00	8,021.42	8,449.57	8,021.42	33.25	46.89	136.74	-684.75	2,061.81	895.29	838.76	56.54	15.835	
8,400.00	8,121.42	8,549.57	8,121.42	33.36	46.97	136.74	-684.75	2,061.81	895.29	838.50	56.80	15.763	
8,500.00	8,221.42	8,649.57	8,221.42	33.48	47.05	136.74	-684.75	2,061.81	895.29	838.24	57.06	15.691	
8,586.58	8,308.00	8,736.15	8,308.00	33.58	47.13	136.74	-684.75	2,061.81	895.29	838.01	57.28	15.629	



<b>Company:</b>	US ROCKIES REGION PLANNING	<b>Local Co-ordinate Reference:</b>	Well P_DRY CREEK 11-35
<b>Project:</b>	COLORADO NOTHERN ZONE - 83	<b>TVD Reference:</b>	WELL @ 5044.00ft (Original Well Elev)
<b>Reference Site:</b>	WELD_DRY CREEK 12-35 PAD	<b>MD Reference:</b>	WELL @ 5044.00ft (Original Well Elev)
<b>Site Error:</b>	5,044.00ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	P_DRY CREEK 11-35	<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_DRY CREEK 11-35	<b>Database:</b>	EDM 2003.21 Single User Db
<b>Reference Design:</b>	PLAN #1 10-28-09 RHS	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design WELD_DRY CREEK 12-35 PAD - P_DRY CREEK 35-35 - P_DRY CREEK 35-35 - PLAN #1 10-28-09 F												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	-90.01	0.00	-47.62	47.62				
100.00	100.00	100.00	100.00	0.10	0.10	-90.01	0.00	-47.62	47.62	47.43	0.19	249.263	
200.00	200.00	200.00	200.00	0.32	0.32	-90.01	0.00	-47.62	47.62	46.98	0.64	74.342 CC, ES	
300.00	299.98	300.63	300.61	0.53	0.52	176.84	-1.63	-46.92	48.70	47.64	1.06	46.104	
400.00	399.84	401.04	400.87	0.76	0.73	171.74	-6.48	-44.82	52.19	50.72	1.48	35.333	
500.00	499.45	501.02	500.47	1.01	0.98	164.72	-14.51	-41.35	58.78	56.83	1.95	30.211	
600.00	598.70	600.37	599.07	1.30	1.27	157.30	-25.64	-36.54	69.10	66.63	2.47	27.963	
700.00	697.47	698.88	696.36	1.63	1.60	150.58	-39.77	-30.43	83.50	80.44	3.07	27.233 SF	
800.00	795.62	796.37	792.07	2.01	1.98	145.00	-56.78	-23.08	102.06	98.32	3.74	27.285	
900.00	893.06	892.66	885.93	2.46	2.41	140.54	-76.49	-14.55	124.65	120.15	4.50	27.713	
1,000.00	989.64	987.58	977.70	2.96	2.89	137.00	-98.75	-4.93	151.11	145.76	5.34	28.281	
1,100.00	1,085.27	1,081.00	1,067.17	3.53	3.41	134.17	-123.37	5.71	181.26	174.98	6.28	28.853	
1,200.00	1,179.82	1,172.77	1,154.19	4.17	3.98	131.86	-150.15	17.29	214.95	207.64	7.31	29.400	
1,300.00	1,273.17	1,262.80	1,238.58	4.88	4.59	129.94	-178.89	29.72	252.02	243.59	8.43	29.896	
1,400.00	1,365.21	1,350.97	1,320.25	5.66	5.24	128.28	-209.39	42.90	292.33	282.70	9.64	30.338	
1,437.21	1,399.10	1,383.29	1,349.92	5.97	5.48	127.72	-221.14	47.98	308.13	298.02	10.10	30.494	
1,500.00	1,456.13	1,439.47	1,401.31	6.50	5.93	127.27	-241.99	57.00	335.23	324.28	10.95	30.627	
1,600.00	1,546.95	1,529.59	1,483.74	7.35	6.64	126.66	-275.45	71.46	378.42	366.12	12.30	30.758	
1,700.00	1,637.77	1,619.72	1,566.16	8.21	7.36	126.18	-308.91	85.93	421.64	407.97	13.67	30.839	
1,800.00	1,728.59	1,709.84	1,648.59	9.08	8.09	125.79	-342.37	100.39	464.89	449.84	15.05	30.891	
1,900.00	1,819.41	1,799.97	1,731.01	9.95	8.82	125.46	-375.83	114.86	508.14	491.71	16.43	30.924	
2,000.00	1,910.23	1,890.10	1,813.43	10.82	9.55	125.19	-409.29	129.33	551.41	533.59	17.82	30.945	
2,100.00	2,001.05	1,980.22	1,895.86	11.69	10.28	124.96	-442.75	143.79	594.69	575.48	19.21	30.959	
2,200.00	2,091.86	2,070.35	1,978.28	12.57	11.01	124.75	-476.21	158.26	637.97	617.37	20.60	30.967	
2,300.00	2,182.68	2,160.47	2,060.71	13.44	11.75	124.58	-509.67	172.73	681.26	659.27	22.00	30.973	
2,400.00	2,273.50	2,250.60	2,143.13	14.32	12.48	124.42	-543.13	187.19	724.55	701.16	23.39	30.976	
2,500.00	2,364.32	2,340.73	2,225.56	15.20	13.22	124.28	-576.59	201.66	767.85	743.07	24.79	30.978	
2,600.00	2,455.14	2,430.85	2,307.98	16.08	13.95	124.16	-610.05	216.13	811.15	784.97	26.18	30.980	
2,700.00	2,545.96	2,520.98	2,390.41	16.96	14.69	124.05	-643.52	230.59	854.46	826.88	27.58	30.980	
2,800.00	2,636.78	2,611.10	2,472.83	17.84	15.43	123.95	-676.98	245.06	897.76	868.79	28.98	30.981	
2,900.00	2,727.59	2,701.23	2,555.25	18.72	16.17	123.86	-710.44	259.52	941.07	910.70	30.38	30.981	
3,000.00	2,818.41	2,791.36	2,637.68	19.60	16.90	123.78	-743.90	273.99	984.38	952.61	31.77	30.982	
3,100.00	2,909.23	2,881.48	2,720.10	20.48	17.64	123.70	-777.36	288.46	1,027.69	994.52	33.17	30.983	
3,200.00	3,000.05	2,971.61	2,802.53	21.36	18.38	123.63	-810.82	302.92	1,071.01	1,036.44	34.57	30.984	
3,300.00	3,090.87	3,061.73	2,884.95	22.25	19.12	123.57	-844.28	317.39	1,114.32	1,078.36	35.96	30.985	
3,400.00	3,181.69	3,151.86	2,967.38	23.13	19.86	123.51	-877.74	331.86	1,157.63	1,120.27	37.36	30.986	
3,500.00	3,272.51	3,241.99	3,049.80	24.01	20.60	123.45	-911.20	346.32	1,200.95	1,162.19	38.76	30.988	
3,600.00	3,363.32	3,332.11	3,132.23	24.90	21.34	123.40	-944.66	360.79	1,244.27	1,204.12	40.15	30.990	
3,641.37	3,400.90	3,369.40	3,166.32	25.26	21.64	123.38	-958.50	366.77	1,262.19	1,221.46	40.73	30.991	
3,700.00	3,454.39	3,422.37	3,214.77	25.72	22.08	123.79	-978.17	375.28	1,287.29	1,245.75	41.54	30.990	
3,800.00	3,546.73	3,513.30	3,297.93	26.37	22.82	124.35	-1,011.93	389.87	1,328.70	1,285.88	42.81	31.034	
3,900.00	3,640.34	3,604.85	3,381.66	26.97	23.57	124.75	-1,045.92	404.57	1,368.34	1,324.29	44.05	31.063	
4,000.00	3,735.13	3,696.91	3,465.86	27.52	24.33	125.00	-1,080.10	419.34	1,406.19	1,360.95	45.24	31.080	
4,100.00	3,830.97	3,789.38	3,550.42	28.01	25.09	125.11	-1,114.43	434.19	1,442.27	1,395.87	46.39	31.089	
4,200.00	3,927.75	3,882.14	3,635.25	28.45	25.85	125.10	-1,148.87	449.07	1,476.59	1,429.10	47.49	31.092	
4,300.00	4,025.35	3,975.07	3,720.24	28.83	26.61	124.98	-1,183.37	463.99	1,509.20	1,460.66	48.54	31.093	
4,400.00	4,123.65	4,068.07	3,805.29	29.15	27.38	124.74	-1,217.90	478.92	1,540.14	1,490.61	49.53	31.094	
4,500.00	4,222.53	4,161.01	3,890.30	29.43	28.14	124.41	-1,252.41	493.84	1,569.47	1,519.01	50.47	31.099	
4,600.00	4,321.86	4,253.79	3,975.15	29.65	28.90	123.98	-1,286.85	508.73	1,597.27	1,545.93	51.34	31.110	
4,700.00	4,421.54	4,346.30	4,059.75	29.82	29.66	123.47	-1,321.20	523.58	1,623.62	1,571.47	52.16	31.131	
4,800.00	4,521.43	4,438.42	4,143.99	29.95	30.42	122.88	-1,355.40	538.36	1,648.61	1,595.71	52.90	31.163	
4,878.58	4,600.00	4,510.45	4,209.87	30.01	31.01	-146.35	-1,382.14	549.93	1,667.37	1,613.92	53.44	31.198	

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_DRY CREEK 11-35
<b>Project:</b>	COLORADO NOTHERN ZONE - 83	<b>TVD Reference:</b>	WELL @ 5044.00ft (Original Well Elev)
<b>Reference Site:</b>	WELD_DRY CREEK 12-35 PAD	<b>MD Reference:</b>	WELL @ 5044.00ft (Original Well Elev)
<b>Site Error:</b>	5,044.00ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	P_DRY CREEK 11-35	<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_DRY CREEK 11-35	<b>Database:</b>	EDM 2003.21 Single User Db
<b>Reference Design:</b>	PLAN #1 10-28-09 RHS	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design</b> WELD_DRY CREEK 12-35 PAD - P_DRY CREEK 35-35 - P_DRY CREEK 35-35 - PLAN #1 10-28-09 F												<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
4,900.00	4,621.42	4,530.04	4,227.79	30.02	31.17	-146.58	-1,389.41	553.07	1,672.39	1,618.80	53.59	31.206	
5,000.00	4,721.42	4,621.50	4,311.43	30.09	31.92	-147.66	-1,423.37	567.75	1,696.25	1,641.99	54.26	31.259	
5,100.00	4,821.42	4,712.95	4,395.07	30.17	32.68	-148.71	-1,457.32	582.43	1,720.73	1,665.81	54.91	31.335	
5,200.00	4,921.42	4,804.41	4,478.71	30.24	33.43	-149.73	-1,491.28	597.11	1,745.80	1,690.26	55.54	31.435	
5,300.00	5,021.42	4,895.86	4,562.35	30.32	34.18	-150.73	-1,525.23	611.79	1,771.44	1,715.28	56.16	31.544	
5,400.00	5,121.42	4,987.32	4,645.99	30.40	34.93	-151.70	-1,559.18	626.47	1,797.62	1,740.86	56.76	31.672	
5,500.00	5,221.42	5,078.77	4,729.63	30.48	35.68	-152.65	-1,593.14	641.15	1,824.32	1,766.99	57.34	31.816	
5,600.00	5,321.42	5,170.23	4,813.27	30.56	36.43	-153.57	-1,627.09	655.83	1,851.53	1,793.63	57.90	31.977	
5,700.00	5,421.42	5,261.68	4,896.91	30.64	37.18	-154.47	-1,661.05	670.51	1,879.21	1,820.76	58.45	32.152	
5,800.00	5,521.42	5,353.14	4,980.55	30.72	37.94	-155.34	-1,695.00	685.19	1,907.34	1,848.37	58.98	32.340	
5,900.00	5,621.42	5,444.59	5,064.19	30.81	38.69	-156.19	-1,728.95	699.87	1,935.92	1,876.42	59.49	32.540	
6,000.00	5,721.42	5,599.81	5,207.28	30.90	39.68	-157.53	-1,784.13	723.72	1,963.85	1,903.76	60.09	32.680	
6,100.00	5,821.42	5,788.61	5,385.34	30.98	40.63	-158.85	-1,841.66	748.60	1,987.95	1,927.30	60.65	32.778	
6,200.00	5,921.42	5,985.59	5,575.08	31.07	41.46	-159.93	-1,890.08	769.53	2,007.57	1,946.43	61.15	32.831	
6,300.00	6,021.42	6,189.32	5,774.66	31.16	42.13	-160.72	-1,927.44	785.68	2,022.33	1,960.74	61.59	32.837	
6,400.00	6,121.42	6,398.00	5,981.55	31.26	42.61	-161.24	-1,952.11	796.35	2,031.89	1,969.93	61.96	32.793	
6,500.00	6,221.42	6,609.54	6,192.71	31.35	42.88	-161.46	-1,962.95	801.03	2,036.04	1,973.78	62.27	32.699	
6,600.00	6,321.42	6,738.25	6,321.42	31.44	42.97	-161.47	-1,963.43	801.24	2,036.22	1,973.75	62.47	32.596	
6,700.00	6,421.42	6,838.25	6,421.42	31.54	43.02	-161.47	-1,963.43	801.24	2,036.22	1,973.58	62.65	32.503	
6,800.00	6,521.42	6,938.25	6,521.42	31.64	43.08	-161.47	-1,963.43	801.24	2,036.22	1,973.40	62.83	32.411	
6,900.00	6,621.42	7,038.25	6,621.42	31.74	43.14	-161.47	-1,963.43	801.24	2,036.22	1,973.22	63.01	32.317	
7,000.00	6,721.42	7,138.25	6,721.42	31.84	43.20	-161.47	-1,963.43	801.24	2,036.22	1,973.03	63.19	32.222	
7,100.00	6,821.42	7,238.25	6,821.42	31.94	43.26	-161.47	-1,963.43	801.24	2,036.22	1,972.84	63.38	32.127	
7,200.00	6,921.42	7,338.25	6,921.42	32.04	43.32	-161.47	-1,963.43	801.24	2,036.22	1,972.65	63.57	32.031	
7,300.00	7,021.42	7,438.25	7,021.42	32.14	43.38	-161.47	-1,963.43	801.24	2,036.22	1,972.46	63.76	31.934	
7,400.00	7,121.42	7,538.25	7,121.42	32.25	43.45	-161.47	-1,963.43	801.24	2,036.22	1,972.26	63.96	31.836	
7,500.00	7,221.42	7,638.25	7,221.42	32.36	43.51	-161.47	-1,963.43	801.24	2,036.22	1,972.07	64.16	31.738	
7,600.00	7,321.42	7,738.25	7,321.42	32.46	43.58	-161.47	-1,963.43	801.24	2,036.22	1,971.87	64.36	31.639	
7,700.00	7,421.42	7,838.25	7,421.42	32.57	43.64	-161.47	-1,963.43	801.24	2,036.22	1,971.66	64.56	31.540	
7,800.00	7,521.42	7,938.25	7,521.42	32.68	43.71	-161.47	-1,963.43	801.24	2,036.22	1,971.46	64.77	31.440	
7,900.00	7,621.42	8,038.25	7,621.42	32.79	43.78	-161.47	-1,963.43	801.24	2,036.22	1,971.25	64.97	31.339	
8,000.00	7,721.42	8,138.25	7,721.42	32.90	43.85	-161.47	-1,963.43	801.24	2,036.22	1,971.04	65.18	31.238	
8,100.00	7,821.42	8,238.25	7,821.42	33.02	43.92	-161.47	-1,963.43	801.24	2,036.22	1,970.83	65.40	31.136	
8,200.00	7,921.42	8,338.25	7,921.42	33.13	43.99	-161.47	-1,963.43	801.24	2,036.22	1,970.61	65.61	31.034	
8,300.00	8,021.42	8,438.25	8,021.42	33.25	44.07	-161.47	-1,963.43	801.24	2,036.22	1,970.39	65.83	30.932	
8,400.00	8,121.42	8,538.25	8,121.42	33.36	44.14	-161.47	-1,963.43	801.24	2,036.22	1,970.17	66.05	30.829	
8,500.00	8,221.42	8,638.25	8,221.42	33.48	44.22	-161.47	-1,963.43	801.24	2,036.22	1,969.95	66.27	30.725	
8,586.58	8,308.00	8,724.83	8,308.00	33.58	44.28	-161.47	-1,963.43	801.24	2,036.22	1,969.76	66.47	30.636	



<b>Company:</b>	US ROCKIES REGION PLANNING	<b>Local Co-ordinate Reference:</b>	Well P_DRY CREEK 11-35
<b>Project:</b>	COLORADO NOTHERN ZONE - 83	<b>TVD Reference:</b>	WELL @ 5044.00ft (Original Well Elev)
<b>Reference Site:</b>	WELD_DRY CREEK 12-35 PAD	<b>MD Reference:</b>	WELL @ 5044.00ft (Original Well Elev)
<b>Site Error:</b>	5,044.00ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	P_DRY CREEK 11-35	<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_DRY CREEK 11-35	<b>Database:</b>	EDM 2003.21 Single User Db
<b>Reference Design:</b>	PLAN #1 10-28-09 RHS	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design WELD_DRY CREEK 12-35 PAD - RULE #12-35A EXISTING - RULE #12-35A EXISTING - RULE #12-2												Offset Site Error:	0.00 ft
Survey Program: 0-UNKNOWN												Offset Well Error:	0.00 ft
Reference	Offset	Semi Major Axis		Distance		Warning							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Tooface (")	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	-60.21	57.90	-101.13	118.07				
100.00	100.00	81.00	81.00	0.10	1.62	-60.21	57.90	-101.13	116.53	114.81	1.72	67.926	
200.00	200.00	181.00	181.00	0.32	5.24	-60.21	57.90	-101.13	116.53	110.97	5.56	20.958 CC	
300.00	299.98	280.98	280.98	0.53	9.24	-151.89	57.90	-101.13	118.07	108.30	9.77	12.087 ES	
400.00	399.84	380.84	380.84	0.76	13.23	-153.00	57.90	-101.13	122.71	108.75	13.95	8.794	
500.00	499.45	480.45	480.45	1.01	17.22	-154.67	57.90	-101.13	130.54	112.43	18.11	7.208	
600.00	598.70	579.70	579.70	1.30	21.19	-156.69	57.90	-101.13	141.66	119.44	22.22	6.376	
700.00	697.47	678.47	678.47	1.63	25.14	-158.85	57.90	-101.13	156.17	129.91	26.25	5.949	
800.00	795.62	776.62	776.62	2.01	29.06	-160.99	57.90	-101.13	174.13	143.93	30.19	5.767	
900.00	893.06	874.06	874.06	2.46	32.96	-163.01	57.90	-101.13	195.58	161.55	34.02	5.748	
1,000.00	989.64	970.64	970.64	2.96	36.83	-164.83	57.90	-101.13	220.51	182.79	37.72	5.846	
1,100.00	1,085.27	1,066.27	1,066.27	3.53	40.65	-166.45	57.90	-101.13	248.91	207.64	41.27	6.031	
1,200.00	1,179.82	1,160.82	1,160.82	4.17	44.43	-167.86	57.90	-101.13	280.74	236.07	44.66	6.286	
1,300.00	1,273.17	1,254.17	1,254.17	4.88	48.17	-169.09	57.90	-101.13	315.94	268.07	47.88	6.599	
1,400.00	1,365.21	1,346.21	1,346.21	5.66	51.85	-170.14	57.90	-101.13	354.47	303.57	50.90	6.964	
1,437.21	1,399.10	1,380.10	1,380.10	5.97	53.20	-170.49	57.90	-101.13	369.64	317.67	51.98	7.112	
1,500.00	1,456.13	1,437.13	1,437.13	6.50	55.49	-171.12	57.90	-101.13	395.65	341.40	54.25	7.293	
1,600.00	1,546.95	1,527.95	1,527.95	7.35	59.12	-171.96	57.90	-101.13	437.13	379.25	57.88	7.552	
1,700.00	1,637.77	1,618.77	1,618.77	8.21	62.75	-172.66	57.90	-101.13	478.67	417.16	61.52	7.781	
1,800.00	1,728.59	1,709.59	1,709.59	9.08	66.38	-173.25	57.90	-101.13	520.27	455.11	65.16	7.985	
1,900.00	1,819.41	1,800.41	1,800.41	9.95	70.02	-173.75	57.90	-101.13	561.90	493.10	68.80	8.167	
2,000.00	1,910.23	1,891.23	1,891.23	10.82	73.65	-174.18	57.90	-101.13	603.57	531.12	72.45	8.330	
2,100.00	2,001.05	1,982.05	1,982.05	11.69	77.28	-174.56	57.90	-101.13	645.26	569.15	76.11	8.479	
2,200.00	2,091.86	2,072.86	2,072.86	12.57	80.91	-174.89	57.90	-101.13	686.97	607.21	79.76	8.613	
2,300.00	2,182.68	2,163.68	2,163.68	13.44	84.55	-175.18	57.90	-101.13	728.70	645.28	83.42	8.736	
2,400.00	2,273.50	2,254.50	2,254.50	14.32	88.18	-175.44	57.90	-101.13	770.44	683.37	87.07	8.848	
2,500.00	2,364.32	2,345.32	2,345.32	15.20	91.81	-175.68	57.90	-101.13	812.19	721.46	90.73	8.952	
2,600.00	2,455.14	2,436.14	2,436.14	16.08	95.45	-175.89	57.90	-101.13	853.96	759.56	94.39	9.047	
2,700.00	2,545.96	2,526.96	2,526.96	16.96	99.08	-176.08	57.90	-101.13	895.73	797.67	98.05	9.135	
2,800.00	2,636.78	2,617.78	2,617.78	17.84	102.71	-176.26	57.90	-101.13	937.51	835.79	101.72	9.217	
2,900.00	2,727.59	2,708.59	2,708.59	18.72	106.34	-176.42	57.90	-101.13	979.29	873.91	105.38	9.293	
3,000.00	2,818.41	2,799.41	2,799.41	19.60	109.98	-176.56	57.90	-101.13	1,021.09	912.04	109.04	9.364	
3,100.00	2,909.23	2,890.23	2,890.23	20.48	113.61	-176.70	57.90	-101.13	1,062.88	950.18	112.71	9.431	
3,200.00	3,000.05	2,981.05	2,981.05	21.36	117.24	-176.82	57.90	-101.13	1,104.68	988.31	116.37	9.493	
3,300.00	3,090.87	3,071.87	3,071.87	22.25	120.87	-176.94	57.90	-101.13	1,146.49	1,026.45	120.04	9.551	
3,400.00	3,181.69	3,162.69	3,162.69	23.13	124.51	-177.05	57.90	-101.13	1,188.30	1,064.60	123.70	9.606	
3,500.00	3,272.51	3,253.51	3,253.51	24.01	128.14	-177.15	57.90	-101.13	1,230.11	1,102.74	127.37	9.658	
3,600.00	3,363.32	3,344.32	3,344.32	24.90	131.77	-177.24	57.90	-101.13	1,271.93	1,140.89	131.03	9.707	
3,641.37	3,400.90	3,381.90	3,381.90	25.26	133.28	-177.28	57.90	-101.13	1,289.23	1,156.67	132.55	9.726	
3,700.00	3,454.39	3,435.39	3,435.39	25.72	135.42	-177.35	57.90	-101.13	1,313.20	1,177.36	135.84	9.667	
3,800.00	3,546.73	3,527.73	3,527.73	26.37	139.11	-177.46	57.90	-101.13	1,351.55	1,210.14	141.41	9.558	
3,900.00	3,640.34	3,621.34	3,621.34	26.97	142.85	-177.56	57.90	-101.13	1,386.65	1,239.72	146.94	9.437	
4,000.00	3,735.13	3,716.13	3,716.13	27.52	146.65	-177.64	57.90	-101.13	1,418.47	1,266.07	152.40	9.307	
4,100.00	3,830.97	3,811.97	3,811.97	28.01	150.48	-177.71	57.90	-101.13	1,446.97	1,289.18	157.79	9.170	
4,200.00	3,927.75	3,908.75	3,908.75	28.45	154.35	-177.77	57.90	-101.13	1,472.11	1,309.04	163.07	9.027	
4,300.00	4,025.35	4,006.35	4,006.35	28.83	158.25	-177.82	57.90	-101.13	1,493.86	1,325.62	168.24	8.879	
4,400.00	4,123.65	4,104.65	4,104.65	29.15	162.19	-177.86	57.90	-101.13	1,512.19	1,338.93	173.27	8.727	
4,500.00	4,222.53	4,203.53	4,203.53	29.43	166.14	-177.90	57.90	-101.13	1,527.09	1,348.95	178.14	8.573	
4,600.00	4,321.86	4,302.86	4,302.86	29.65	170.11	-177.92	57.90	-101.13	1,538.52	1,355.70	182.83	8.415	
4,700.00	4,421.54	4,402.54	4,402.54	29.82	174.10	-177.94	57.90	-101.13	1,546.49	1,359.17	187.32	8.256	
4,800.00	4,521.43	4,502.43	4,502.43	29.95	178.10	-177.94	57.90	-101.13	1,550.97	1,359.38	191.59	8.095	
4,878.58	4,600.00	4,581.00	4,581.00	30.01	181.24	-86.65	57.90	-101.13	1,552.05	1,357.27	194.78	7.968	

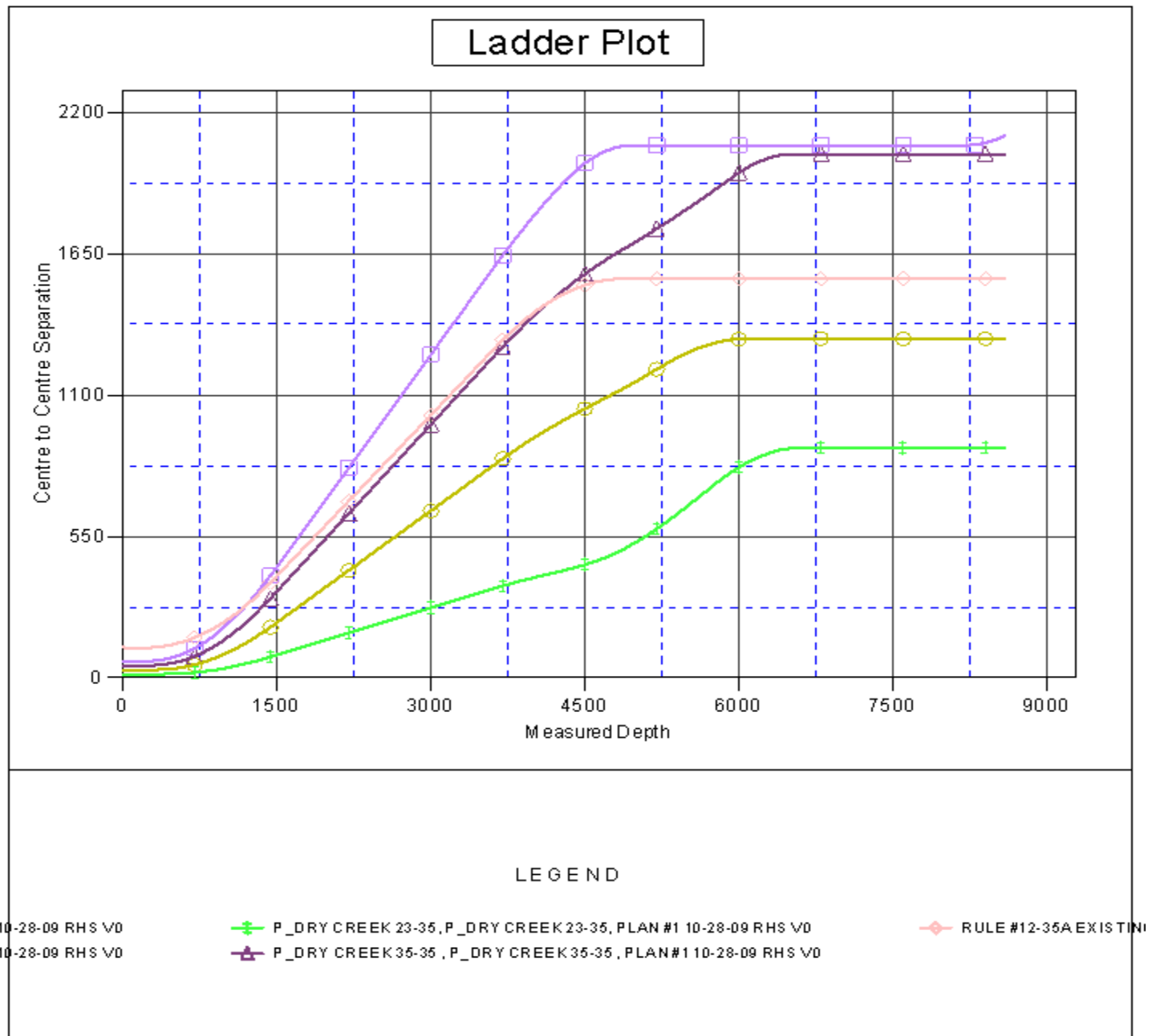
CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

<b>Company:</b>	US ROCKIES REGION PLANNING	<b>Local Co-ordinate Reference:</b>	Well P_DRY CREEK 11-35
<b>Project:</b>	COLORADO NOTHERN ZONE - 83	<b>TVD Reference:</b>	WELL @ 5044.00ft (Original Well Elev)
<b>Reference Site:</b>	WELD_DRY CREEK 12-35 PAD	<b>MD Reference:</b>	WELL @ 5044.00ft (Original Well Elev)
<b>Site Error:</b>	5,044.00ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	P_DRY CREEK 11-35	<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_DRY CREEK 11-35	<b>Database:</b>	EDM 2003.21 Single User Db
<b>Reference Design:</b>	PLAN #1 10-28-09 RHS	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design WELD_DRY CREEK 12-35 PAD - RULE #12-35A EXISTING - RULE #12-35A EXISTING - RULE #12-2												Offset Site Error:	0.00 ft
Survey Program: 0-UNKNOWN												Offset Well Error:	0.00 ft
Reference	Offset	Semi Major Axis					Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
4,900.00	4,621.42	4,602.42	4,602.42	30.02	182.10	-86.65	57.90	-101.13	1,552.05	1,356.38	195.67	7.932	
5,000.00	4,721.42	4,702.42	4,702.42	30.09	186.10	-86.65	57.90	-101.13	1,552.05	1,352.24	199.81	7.768	
5,100.00	4,821.42	4,802.42	4,802.42	30.17	190.10	-86.65	57.90	-101.13	1,552.05	1,348.09	203.95	7.610	
5,200.00	4,921.42	4,902.42	4,902.42	30.24	194.10	-86.65	57.90	-101.13	1,552.05	1,343.95	208.10	7.458	
5,300.00	5,021.42	5,002.42	5,002.42	30.32	198.10	-86.65	57.90	-101.13	1,552.05	1,339.80	212.25	7.312	
5,400.00	5,121.42	5,102.42	5,102.42	30.40	202.10	-86.65	57.90	-101.13	1,552.05	1,335.65	216.40	7.172	
5,500.00	5,221.42	5,202.42	5,202.42	30.48	206.10	-86.65	57.90	-101.13	1,552.05	1,331.50	220.55	7.037	
5,600.00	5,321.42	5,302.42	5,302.42	30.56	210.10	-86.65	57.90	-101.13	1,552.05	1,327.35	224.70	6.907	
5,700.00	5,421.42	5,402.42	5,402.42	30.64	214.10	-86.65	57.90	-101.13	1,552.05	1,323.19	228.86	6.782	
5,800.00	5,521.42	5,502.42	5,502.42	30.72	218.10	-86.65	57.90	-101.13	1,552.05	1,319.04	233.01	6.661	
5,900.00	5,621.42	5,602.42	5,602.42	30.81	222.10	-86.65	57.90	-101.13	1,552.05	1,314.88	237.17	6.544	
6,000.00	5,721.42	5,702.42	5,702.42	30.90	226.10	-86.65	57.90	-101.13	1,552.05	1,310.72	241.33	6.431	
6,100.00	5,821.42	5,802.42	5,802.42	30.98	230.10	-86.65	57.90	-101.13	1,552.05	1,306.56	245.49	6.322	
6,200.00	5,921.42	5,902.42	5,902.42	31.07	234.10	-86.65	57.90	-101.13	1,552.05	1,302.39	249.66	6.217	
6,300.00	6,021.42	6,002.42	6,002.42	31.16	238.10	-86.65	57.90	-101.13	1,552.05	1,298.23	253.82	6.115	
6,400.00	6,121.42	6,102.42	6,102.42	31.26	242.10	-86.65	57.90	-101.13	1,552.05	1,294.06	257.99	6.016	
6,500.00	6,221.42	6,202.42	6,202.42	31.35	246.10	-86.65	57.90	-101.13	1,552.05	1,289.89	262.16	5.920	
6,600.00	6,321.42	6,302.42	6,302.42	31.44	250.10	-86.65	57.90	-101.13	1,552.05	1,285.72	266.33	5.828	
6,700.00	6,421.42	6,402.42	6,402.42	31.54	254.10	-86.65	57.90	-101.13	1,552.05	1,281.55	270.50	5.738	
6,800.00	6,521.42	6,502.42	6,502.42	31.64	258.10	-86.65	57.90	-101.13	1,552.05	1,277.38	274.67	5.651	
6,900.00	6,621.42	6,602.42	6,602.42	31.74	262.10	-86.65	57.90	-101.13	1,552.05	1,273.21	278.84	5.566	
7,000.00	6,721.42	6,702.42	6,702.42	31.84	266.10	-86.65	57.90	-101.13	1,552.05	1,269.03	283.01	5.484	
7,100.00	6,821.42	6,802.42	6,802.42	31.94	270.10	-86.65	57.90	-101.13	1,552.05	1,264.86	287.19	5.404	
7,200.00	6,921.42	6,902.42	6,902.42	32.04	274.10	-86.65	57.90	-101.13	1,552.05	1,260.68	291.37	5.327	
7,300.00	7,021.42	7,002.42	7,002.42	32.14	278.10	-86.65	57.90	-101.13	1,552.05	1,256.50	295.54	5.251	
7,400.00	7,121.42	7,102.42	7,102.42	32.25	282.10	-86.65	57.90	-101.13	1,552.05	1,252.33	299.72	5.178	
7,500.00	7,221.42	7,202.42	7,202.42	32.36	286.10	-86.65	57.90	-101.13	1,552.05	1,248.15	303.90	5.107	
7,600.00	7,321.42	7,302.42	7,302.42	32.46	290.10	-86.65	57.90	-101.13	1,552.05	1,243.97	308.08	5.038	
7,700.00	7,421.42	7,402.42	7,402.42	32.57	294.10	-86.65	57.90	-101.13	1,552.05	1,239.78	312.27	4.970	
7,800.00	7,521.42	7,502.42	7,502.42	32.68	298.10	-86.65	57.90	-101.13	1,552.05	1,235.60	316.45	4.905	
7,900.00	7,621.42	7,602.42	7,602.42	32.79	302.10	-86.65	57.90	-101.13	1,552.05	1,231.42	320.63	4.841	
8,000.00	7,721.42	7,702.42	7,702.42	32.90	306.10	-86.65	57.90	-101.13	1,552.05	1,227.23	324.82	4.778	
8,100.00	7,821.42	7,802.42	7,802.42	33.02	310.10	-86.65	57.90	-101.13	1,552.05	1,223.05	329.00	4.717	
8,200.00	7,921.42	7,902.42	7,902.42	33.13	314.10	-86.65	57.90	-101.13	1,552.05	1,218.86	333.19	4.658	
8,300.00	8,021.42	8,002.42	8,002.42	33.25	318.10	-86.65	57.90	-101.13	1,552.05	1,214.67	337.38	4.600	
8,400.00	8,121.42	8,102.42	8,102.42	33.36	322.10	-86.65	57.90	-101.13	1,552.05	1,210.49	341.56	4.544	
8,500.00	8,221.42	8,202.42	8,202.42	33.48	326.10	-86.65	57.90	-101.13	1,552.05	1,206.30	345.75	4.489	
8,586.58	8,308.00	8,289.00	8,289.00	33.58	329.56	-86.65	57.90	-101.13	1,552.05	1,202.67	349.38	4.442 SF	

<b>Company:</b>	US ROCKIES REGION PLANNING	<b>Local Co-ordinate Reference:</b>	Well P_DRY CREEK 11-35
<b>Project:</b>	COLORADO NOTHERN ZONE - 83	<b>TVD Reference:</b>	WELL @ 5044.00ft (Original Well Elev)
<b>Reference Site:</b>	WELD_DRY CREEK 12-35 PAD	<b>MD Reference:</b>	WELL @ 5044.00ft (Original Well Elev)
<b>Site Error:</b>	5,044.00ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	P_DRY CREEK 11-35	<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_DRY CREEK 11-35	<b>Database:</b>	EDM 2003.21 Single User Db
<b>Reference Design:</b>	PLAN #1 10-28-09 RHS	<b>Offset TVD Reference:</b>	Offset Datum

Reference Depths are relative to WELL @ 5044.00ft (Original Well Elev) Coordinates are relative to: P\_DRY CREEK 11-35  
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: 0.41°



<b>Company:</b>	US ROCKIES REGION PLANNING	<b>Local Co-ordinate Reference:</b>	Well P_DRY CREEK 11-35
<b>Project:</b>	COLORADO NOTHERN ZONE - 83	<b>TVD Reference:</b>	WELL @ 5044.00ft (Original Well Elev)
<b>Reference Site:</b>	WELD_DRY CREEK 12-35 PAD	<b>MD Reference:</b>	WELL @ 5044.00ft (Original Well Elev)
<b>Site Error:</b>	5,044.00ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	P_DRY CREEK 11-35	<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_DRY CREEK 11-35	<b>Database:</b>	EDM 2003.21 Single User Db
<b>Reference Design:</b>	PLAN #1 10-28-09 RHS	<b>Offset TVD Reference:</b>	Offset Datum

Reference Depths are relative to WELL @ 5044.00ft (Original Well Elev) Coordinates are relative to: P\_DRY CREEK 11-35  
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: 0.41°

