



US ROCKIES REGION PLANNING

COLORADO NORTHERN ZONE - 83

LARIMER_ENCORE 3-12 PAD

P_ENCORE 3-12

P_ENCORE 3-12

Plan: PLAN #1 3-22-10 RHS

Standard Planning Report

22 March, 2010





Project: COLORADO NORTHERN ZONE - 83
 Site: LARIMER_ENCORE 3-12 PAD
 Well: P_ENCORE 3-12
 Wellbore: P_ENCORE 3-12
 Section: SECTION 12 T5N R68W
 SHL: 500 FNL 2410 FWL
 Design: PLAN #1 3-22-10 RHS
 Latitude: 40° 25' 12.615 N
 Longitude: 104° 57' 19.580 W
 GL: 4979.00
 KB: WELL @ 4994.00ft (Original Well Elev)



Weatherford®



Azimuths to True North
 Magnetic North: 9.13°
 Magnetic Field
 Strength: 53249.9nT
 Dip Angle: 67.08°
 Date: 3/22/2010
 Model: IGRF2010

FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
3505.00	3516.29	PARKMAN
4095.00	4109.23	SUSSEX
4545.00	4561.48	SHANNON
6905.00	6927.31	NIO A
7227.00	7249.31	CODELL
7709.00	7731.31	JSAND

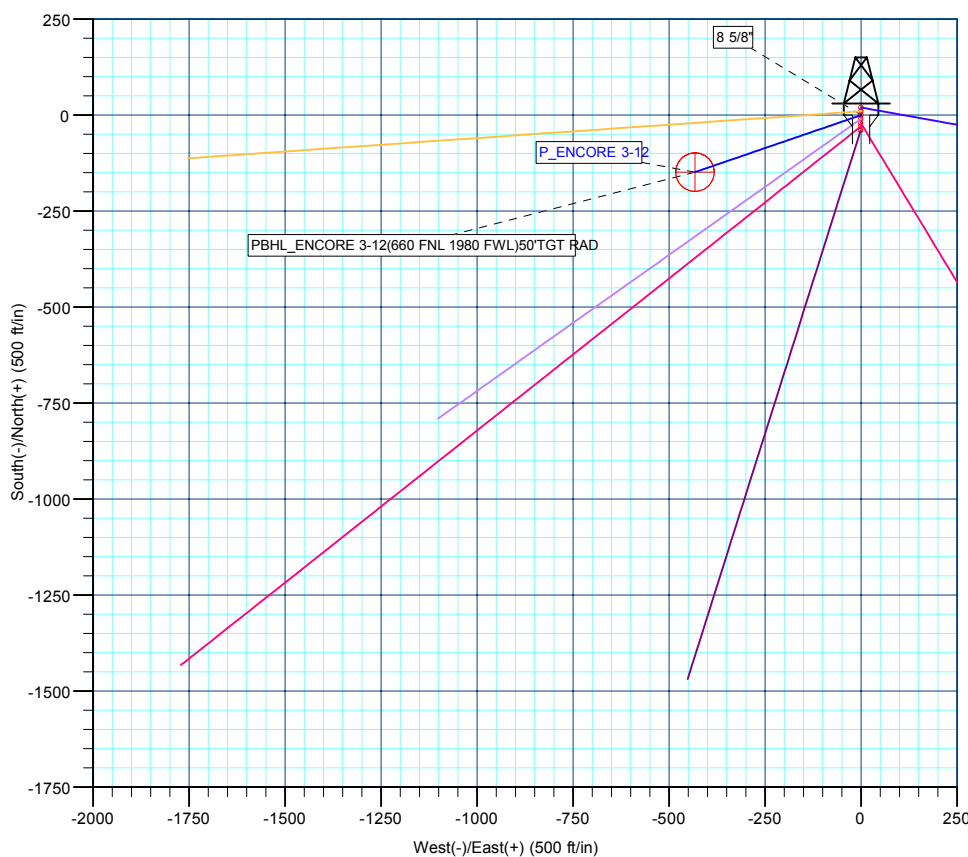
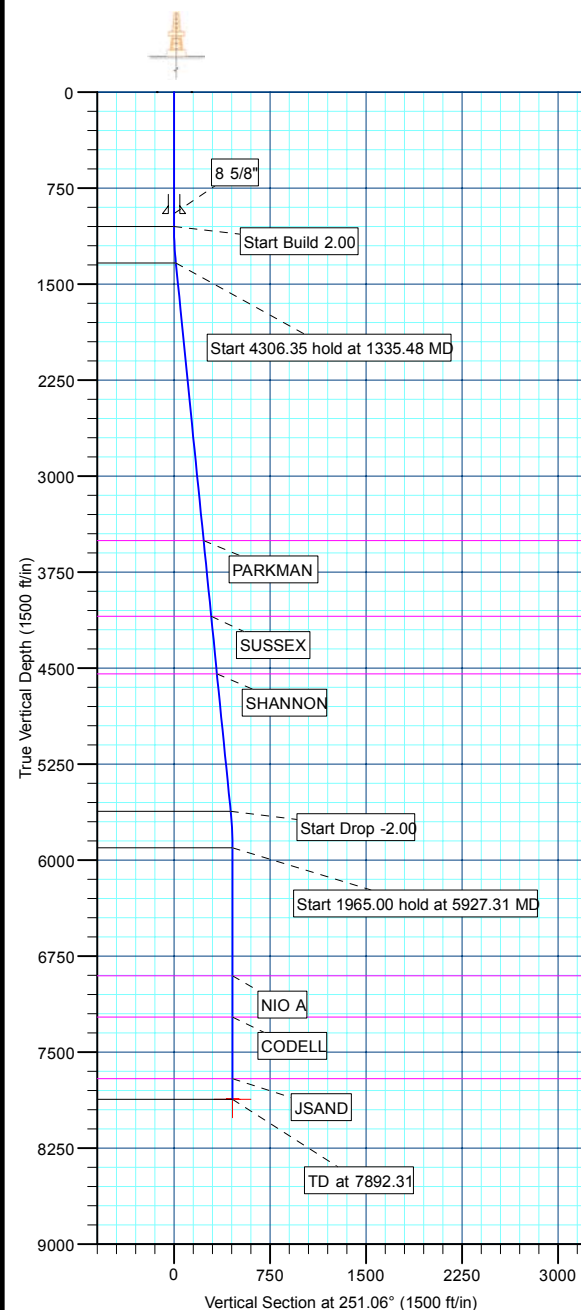
CASING DETAILS			
TVD	MD	Name	Size
950.00	950.00	8 5/8"	8.62

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	
1050.00	0.00	0.00	1050.00	0.00	0.00	0.00	0.00	0.00	Start Build 2.00
1335.48	5.71	251.06	1335.01	-4.61	-13.44	2.00	251.06	14.21	Start 4306.35 hold at 1335.48 MD
5641.83	5.71	251.06	5619.99	-143.64	-418.68	0.00	0.00	442.63	Start Drop -2.00
5927.31	0.00	0.00	5905.00	-148.25	-432.12	2.00	180.00	456.85	Start 1965.00 hold at 5927.31 MD
7892.31	0.00	0.00	7870.00	-148.25	-432.12	0.00	0.00	456.85	TD at 7892.31

WELLBORE TARGET DETAILS (MAP CO-ORDINATES AND LAT/LONG)							
Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape	
PBHL	7870.00	-148.25	-432.12	40° 25' 11.150 N	104° 57' 25.168 W	Circle (Radius: 50.00)	

WELL DETAILS: P_ENCORE 3-12						
+N/-S	+E/-W	Northing	Ground Level: Easting	4979.00 Latitude	Longitude	Slot
0.00	0.00	1396374.19	3151619.80	40° 25' 12.615 N	104° 57' 19.580 W	

LEGEND	
P_ENCORE 18-12, P_ENCORE 18-12, PLAN #1 3-22-10 RHS V0	
P_ENCORE 21-12, P_ENCORE 21-12, PLAN #1 3-22-10 RHS V0	
P_ENCORE 2-12, P_ENCORE 2-12, PLAN #1 3-22-10 RHS V0	
P_ENCORE 4-12, P_ENCORE 4-12, PLAN #1 3-22-10 RHS V0	
P_ENCORE 5-12, P_ENCORE 5-12, PLAN #1 3-22-10 RHS V0	
P_ENCORE 6-12, P_ENCORE 6-12, PLAN #1 3-22-10 RHS V0	
PLAN #1 3-22-10 RHS	



Plan: PLAN #1 3-22-10 RHS (P_ENCORE 3-12/P_ENCORE 3-12)	
Created By: Robert H. Scott	Date: 14:41, March 22 2010

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well P_ENCORE 3-12
Company:	US ROCKIES REGION PLANNING	TVD Reference:	WELL @ 4994.00ft (Original Well Elev)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	WELL @ 4994.00ft (Original Well Elev)
Site:	LARIMER_ENCORE 3-12 PAD	North Reference:	True
Well:	P_ENCORE 3-12	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_ENCORE 3-12		
Design:	PLAN #1 3-22-10 RHS		

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

Site						LARIMER_ENCORE 3-12 PAD, SECTION 12 T5N R68W							
Site Position:						Northing:		1,396,364.36 ft		Latitude:		40° 25' 12.518 N	
From:			Lat/Long			Easting:		3,151,619.58 ft		Longitude:		104° 57' 19.584 W	
Position Uncertainty:			0.00 ft			Slot Radius:		in		Grid Convergence:		0.35 °	

Well	P_ENCORE 3-12					
Well Position	+N/-S	9.82 ft	Northing:	1,396,374.19 ft	Latitude:	40° 25' 12.615 N
	+E/-W	0.28 ft	Easting:	3,151,619.80 ft	Longitude:	104° 57' 19.580 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	4,979.00 ft

Wellbore	P_ENCORE 3-12				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	3/22/2010	9.13	67.08	53,250

Design	PLAN #1 3-22-10 RHS			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	251.06

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,050.00	0.00	0.00	1,050.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,335.48	5.71	251.06	1,335.01	-4.61	-13.44	2.00	2.00	0.00	251.06	
5,641.83	5.71	251.06	5,619.99	-143.64	-418.68	0.00	0.00	0.00	0.00	
5,927.31	0.00	0.00	5,905.00	-148.25	-432.12	2.00	-2.00	0.00	180.00	
7,892.31	0.00	0.00	7,870.00	-148.25	-432.12	0.00	0.00	0.00	0.00	PBHL_ENCORE 3-

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well P_ENCORE 3-12
Company:	US ROCKIES REGION PLANNING	TVD Reference:	WELL @ 4994.00ft (Original Well Elev)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	WELL @ 4994.00ft (Original Well Elev)
Site:	LARIMER_ENCORE 3-12 PAD	North Reference:	True
Well:	P_ENCORE 3-12	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_ENCORE 3-12		
Design:	PLAN #1 3-22-10 RHS		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
Start Build 2.00									
1,050.00	0.00	0.00	1,050.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	1.00	251.06	1,100.00	-0.14	-0.41	0.44	2.00	2.00	0.00
1,200.00	3.00	251.06	1,199.93	-1.27	-3.71	3.93	2.00	2.00	0.00
1,300.00	5.00	251.06	1,299.68	-3.54	-10.31	10.90	2.00	2.00	0.00
Start 4306.35 hold at 1335.48 MD									
1,335.48	5.71	251.06	1,335.01	-4.61	-13.44	14.21	2.00	2.00	0.00
1,400.00	5.71	251.06	1,399.21	-6.70	-19.51	20.63	0.00	0.00	0.00
1,500.00	5.71	251.06	1,498.71	-9.92	-28.92	30.58	0.00	0.00	0.00
1,600.00	5.71	251.06	1,598.22	-13.15	-38.34	40.53	0.00	0.00	0.00
1,700.00	5.71	251.06	1,697.72	-16.38	-47.75	50.48	0.00	0.00	0.00
1,800.00	5.71	251.06	1,797.22	-19.61	-57.16	60.43	0.00	0.00	0.00
1,900.00	5.71	251.06	1,896.73	-22.84	-66.57	70.37	0.00	0.00	0.00
2,000.00	5.71	251.06	1,996.23	-26.07	-75.98	80.32	0.00	0.00	0.00
2,100.00	5.71	251.06	2,095.73	-29.29	-85.39	90.27	0.00	0.00	0.00
2,200.00	5.71	251.06	2,195.24	-32.52	-94.80	100.22	0.00	0.00	0.00
2,300.00	5.71	251.06	2,294.74	-35.75	-104.21	110.17	0.00	0.00	0.00
2,400.00	5.71	251.06	2,394.25	-38.98	-113.62	120.12	0.00	0.00	0.00
2,500.00	5.71	251.06	2,493.75	-42.21	-123.03	130.07	0.00	0.00	0.00
2,600.00	5.71	251.06	2,593.25	-45.44	-132.44	140.01	0.00	0.00	0.00
2,700.00	5.71	251.06	2,692.76	-48.67	-141.85	149.96	0.00	0.00	0.00
2,800.00	5.71	251.06	2,792.26	-51.89	-151.26	159.91	0.00	0.00	0.00
2,900.00	5.71	251.06	2,891.77	-55.12	-160.67	169.86	0.00	0.00	0.00
3,000.00	5.71	251.06	2,991.27	-58.35	-170.08	179.81	0.00	0.00	0.00
3,100.00	5.71	251.06	3,090.77	-61.58	-179.49	189.76	0.00	0.00	0.00
3,200.00	5.71	251.06	3,190.28	-64.81	-188.90	199.71	0.00	0.00	0.00
3,300.00	5.71	251.06	3,289.78	-68.04	-198.31	209.66	0.00	0.00	0.00
3,400.00	5.71	251.06	3,389.29	-71.26	-207.72	219.60	0.00	0.00	0.00
3,500.00	5.71	251.06	3,488.79	-74.49	-217.13	229.55	0.00	0.00	0.00
PARKMAN									
3,516.29	5.71	251.06	3,505.00	-75.02	-218.66	231.17	0.00	0.00	0.00
3,600.00	5.71	251.06	3,588.29	-77.72	-226.54	239.50	0.00	0.00	0.00
3,700.00	5.71	251.06	3,687.80	-80.95	-235.95	249.45	0.00	0.00	0.00
3,800.00	5.71	251.06	3,787.30	-84.18	-245.36	259.40	0.00	0.00	0.00
3,900.00	5.71	251.06	3,886.81	-87.41	-254.77	269.35	0.00	0.00	0.00
4,000.00	5.71	251.06	3,986.31	-90.64	-264.18	279.30	0.00	0.00	0.00
4,100.00	5.71	251.06	4,085.81	-93.86	-273.59	289.24	0.00	0.00	0.00
SUSSEX									
4,109.23	5.71	251.06	4,095.00	-94.16	-274.46	290.16	0.00	0.00	0.00
4,200.00	5.71	251.06	4,185.32	-97.09	-283.00	299.19	0.00	0.00	0.00
4,300.00	5.71	251.06	4,284.82	-100.32	-292.41	309.14	0.00	0.00	0.00
4,400.00	5.71	251.06	4,384.32	-103.55	-301.82	319.09	0.00	0.00	0.00
4,500.00	5.71	251.06	4,483.83	-106.78	-311.23	329.04	0.00	0.00	0.00
SHANNON									
4,561.48	5.71	251.06	4,545.00	-108.76	-317.02	335.15	0.00	0.00	0.00
4,600.00	5.71	251.06	4,583.33	-110.01	-320.64	338.99	0.00	0.00	0.00
4,700.00	5.71	251.06	4,682.84	-113.23	-330.05	348.94	0.00	0.00	0.00
4,800.00	5.71	251.06	4,782.34	-116.46	-339.46	358.88	0.00	0.00	0.00
4,900.00	5.71	251.06	4,881.84	-119.69	-348.87	368.83	0.00	0.00	0.00
5,000.00	5.71	251.06	4,981.35	-122.92	-358.28	378.78	0.00	0.00	0.00
5,100.00	5.71	251.06	5,080.85	-126.15	-367.69	388.73	0.00	0.00	0.00
5,200.00	5.71	251.06	5,180.36	-129.38	-377.10	398.68	0.00	0.00	0.00
5,300.00	5.71	251.06	5,279.86	-132.61	-386.51	408.63	0.00	0.00	0.00

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well P_ENCORE 3-12
Company:	US ROCKIES REGION PLANNING	TVD Reference:	WELL @ 4994.00ft (Original Well Elev)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	WELL @ 4994.00ft (Original Well Elev)
Site:	LARIMER_ENCORE 3-12 PAD	North Reference:	True
Well:	P_ENCORE 3-12	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_ENCORE 3-12		
Design:	PLAN #1 3-22-10 RHS		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,400.00	5.71	251.06	5,379.36	-135.83	-395.92	418.58	0.00	0.00	0.00
5,500.00	5.71	251.06	5,478.87	-139.06	-405.33	428.52	0.00	0.00	0.00
5,600.00	5.71	251.06	5,578.37	-142.29	-414.74	438.47	0.00	0.00	0.00
Start Drop -2.00									
5,641.83	5.71	251.06	5,619.99	-143.64	-418.68	442.63	0.00	0.00	0.00
5,700.00	4.55	251.06	5,677.93	-145.33	-423.60	447.83	2.00	-2.00	0.00
5,800.00	2.55	251.06	5,777.73	-147.34	-429.45	454.02	2.00	-2.00	0.00
5,900.00	0.55	251.06	5,877.69	-148.21	-432.00	456.72	2.00	-2.00	0.00
Start 1965.00 hold at 5927.31 MD									
5,927.31	0.00	0.00	5,905.00	-148.25	-432.12	456.85	2.00	-2.00	398.91
6,000.00	0.00	0.00	5,977.69	-148.25	-432.12	456.85	0.00	0.00	0.00
6,100.00	0.00	0.00	6,077.69	-148.25	-432.12	456.85	0.00	0.00	0.00
6,200.00	0.00	0.00	6,177.69	-148.25	-432.12	456.85	0.00	0.00	0.00
6,300.00	0.00	0.00	6,277.69	-148.25	-432.12	456.85	0.00	0.00	0.00
6,400.00	0.00	0.00	6,377.69	-148.25	-432.12	456.85	0.00	0.00	0.00
6,500.00	0.00	0.00	6,477.69	-148.25	-432.12	456.85	0.00	0.00	0.00
6,600.00	0.00	0.00	6,577.69	-148.25	-432.12	456.85	0.00	0.00	0.00
6,700.00	0.00	0.00	6,677.69	-148.25	-432.12	456.85	0.00	0.00	0.00
6,800.00	0.00	0.00	6,777.69	-148.25	-432.12	456.85	0.00	0.00	0.00
6,900.00	0.00	0.00	6,877.69	-148.25	-432.12	456.85	0.00	0.00	0.00
NIO A									
6,927.31	0.00	0.00	6,905.00	-148.25	-432.12	456.85	0.00	0.00	0.00
7,000.00	0.00	0.00	6,977.69	-148.25	-432.12	456.85	0.00	0.00	0.00
7,100.00	0.00	0.00	7,077.69	-148.25	-432.12	456.85	0.00	0.00	0.00
7,200.00	0.00	0.00	7,177.69	-148.25	-432.12	456.85	0.00	0.00	0.00
CODELL									
7,249.31	0.00	0.00	7,227.00	-148.25	-432.12	456.85	0.00	0.00	0.00
7,300.00	0.00	0.00	7,277.69	-148.25	-432.12	456.85	0.00	0.00	0.00
7,400.00	0.00	0.00	7,377.69	-148.25	-432.12	456.85	0.00	0.00	0.00
7,500.00	0.00	0.00	7,477.69	-148.25	-432.12	456.85	0.00	0.00	0.00
7,600.00	0.00	0.00	7,577.69	-148.25	-432.12	456.85	0.00	0.00	0.00
7,700.00	0.00	0.00	7,677.69	-148.25	-432.12	456.85	0.00	0.00	0.00
JSAND									
7,731.31	0.00	0.00	7,709.00	-148.25	-432.12	456.85	0.00	0.00	0.00
7,800.00	0.00	0.00	7,777.69	-148.25	-432.12	456.85	0.00	0.00	0.00
PBHL_ENCORE 3-12(660 FNL 1980 FWL)50'TGT RAD									
7,892.31	0.00	0.00	7,870.00	-148.25	-432.12	456.85	0.00	0.00	0.00

Design Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- hit/miss target									
- Shape									
PBHL_ENCORE 3-12	0.00	0.00	7,870.00	-148.25	-432.12	1,396,223.28	3,151,188.60	40° 25' 11.150 N	104° 57' 25.168 W
- plan hits target center									
- Circle (radius 50.00)									

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well P_ENCORE 3-12
Company:	US ROCKIES REGION PLANNING	TVD Reference:	WELL @ 4994.00ft (Original Well Elev)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	WELL @ 4994.00ft (Original Well Elev)
Site:	LARIMER_ENCORE 3-12 PAD	North Reference:	True
Well:	P_ENCORE 3-12	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_ENCORE 3-12		
Design:	PLAN #1 3-22-10 RHS		

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)	
950.00	950.00	8 5/8"	8.62	11.00	

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
3,516.29	3,505.00	PARKMAN				
4,109.23	4,095.00	SUSSEX				
4,561.48	4,545.00	SHANNON				
6,927.31	6,905.00	NIO A				
7,249.31	7,227.00	CODELL				
7,731.31	7,709.00	JSAND				

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
1,050.00	1,050.00	0.00	0.00	Start Build 2.00	
1,335.48	1,335.01	-4.61	-13.44	Start 4306.35 hold at 1335.48 MD	
5,641.83	5,619.99	-143.64	-418.68	Start Drop -2.00	
5,927.31	5,905.00	-148.25	-432.12	Start 1965.00 hold at 5927.31 MD	
7,892.31	7,870.00	-148.25	-432.12	TD at 7892.31	



US ROCKIES REGION PLANNING

**COLORADO NORTHERN ZONE - 83
LARIMER_ENCORE 3-12 PAD
P_ENCORE 3-12**

**P_ENCORE 3-12
PLAN #1 3-22-10 RHS**

Anticollision Report

22 March, 2010



Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_ENCORE 3-12
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 4994.00ft (Original Well Elev)
Reference Site:	LARIMER_ENCORE 3-12 PAD	MD Reference:	WELL @ 4994.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_ENCORE 3-12	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_ENCORE 3-12	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 3-22-10 RHS	Offset TVD Reference:	Offset Datum

Reference	PLAN #1 3-22-10 RHS		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	Stations	Error Model:	ISCWSA
Depth Range:	0.00 to 20,000.00ft	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 10,000.00ft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma		

Survey Tool Program	Date 3/22/2010			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.00	7,892.31	PLAN #1 3-22-10 RHS (P_ENCORE 3-12)	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						
LARIMER_ENCORE 3-12 PAD						
P_ENCORE 18-12 - P_ENCORE 18-12 - PLAN #1 3-22-	1,050.00	1,050.00	9.84	5.37	2.205	CC
P_ENCORE 18-12 - P_ENCORE 18-12 - PLAN #1 3-22-	1,100.00	1,099.90	9.94	5.28	2.132	ES, SF
P_ENCORE 21-12 - P_ENCORE 21-12 - PLAN #1 3-22-	1,050.00	1,050.00	20.04	15.58	4.493	CC, ES
P_ENCORE 21-12 - P_ENCORE 21-12 - PLAN #1 3-22-	1,100.00	1,099.70	20.27	15.60	4.346	SF
P_ENCORE 2-12 - P_ENCORE 2-12 - PLAN #1 3-22-10	1,050.00	1,050.00	20.03	15.57	4.490	CC
P_ENCORE 2-12 - P_ENCORE 2-12 - PLAN #1 3-22-10	1,100.00	1,100.04	20.13	15.46	4.311	ES, SF
P_ENCORE 4-12 - P_ENCORE 4-12 - PLAN #1 3-22-10	1,050.00	1,050.00	10.20	5.74	2.286	CC
P_ENCORE 4-12 - P_ENCORE 4-12 - PLAN #1 3-22-10	1,100.00	1,100.02	10.31	5.64	2.208	ES, SF
P_ENCORE 5-12 - P_ENCORE 5-12 - PLAN #1 3-22-10	300.00	300.00	29.88	28.79	27.410	CC, ES
P_ENCORE 5-12 - P_ENCORE 5-12 - PLAN #1 3-22-10	600.00	596.93	41.62	39.22	17.292	SF
P_ENCORE 6-12 - P_ENCORE 6-12 - PLAN #1 3-22-10	1,050.00	1,050.00	40.09	35.62	8.985	CC, ES
P_ENCORE 6-12 - P_ENCORE 6-12 - PLAN #1 3-22-10	1,200.00	1,197.93	42.53	37.50	8.463	SF

Offset Design LARIMER_ENCORE 3-12 PAD - P_ENCORE 18-12 - P_ENCORE 18-12 - PLAN #1 3-22-10 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	-178.38	-9.83	-0.28	9.84				
100.00	100.00	100.00	100.00	0.10	0.10	-178.38	-9.83	-0.28	9.84	9.64	0.19	51.483	
200.00	200.00	200.00	200.00	0.32	0.32	-178.38	-9.83	-0.28	9.84	9.20	0.64	15.355	
300.00	300.00	300.00	300.00	0.55	0.55	-178.38	-9.83	-0.28	9.84	8.75	1.09	9.023	
400.00	400.00	400.00	400.00	0.77	0.77	-178.38	-9.83	-0.28	9.84	8.30	1.54	6.388	
500.00	500.00	500.00	500.00	0.99	0.99	-178.38	-9.83	-0.28	9.84	7.85	1.99	4.945	
600.00	600.00	600.00	600.00	1.22	1.22	-178.38	-9.83	-0.28	9.84	7.40	2.44	4.033	
700.00	700.00	700.00	700.00	1.44	1.44	-178.38	-9.83	-0.28	9.84	6.95	2.89	3.406	
800.00	800.00	800.00	800.00	1.67	1.67	-178.38	-9.83	-0.28	9.84	6.50	3.34	2.947	
900.00	900.00	900.00	900.00	1.89	1.89	-178.38	-9.83	-0.28	9.84	6.05	3.79	2.597	
1,000.00	1,000.00	1,000.00	1,000.00	2.12	2.12	-178.38	-9.83	-0.28	9.84	5.60	4.24	2.322	
1,050.00	1,050.00	1,050.00	1,050.00	2.23	2.23	-178.38	-9.83	-0.28	9.84	5.37	4.46	2.205 CC	
1,100.00	1,100.00	1,099.90	1,099.89	2.33	2.33	-69.79	-10.08	-0.63	9.94	5.28	4.67	2.132 ES, SF	
1,200.00	1,199.93	1,199.68	1,199.61	2.53	2.52	-72.30	-12.09	-3.47	10.83	5.78	5.04	2.147	
1,300.00	1,299.68	1,299.45	1,299.13	2.73	2.71	-76.25	-16.11	-9.13	12.64	7.19	5.44	2.321	
1,335.48	1,335.01	1,334.84	1,334.37	2.81	2.79	-77.75	-18.01	-11.82	13.51	7.92	5.60	2.414	

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

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_ENCORE 3-12
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 4994.00ft (Original Well Elev)
Reference Site:	LARIMER_ENCORE 3-12 PAD	MD Reference:	WELL @ 4994.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_ENCORE 3-12	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_ENCORE 3-12	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 3-22-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 ft
Survey Program: 0-MWMD												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
1,400.00	1,399.21	1,399.17	1,398.30	2.95	2.93	-77.80	-22.12	-17.62	15.57	9.69	5.88	2.648	
1,500.00	1,498.71	1,498.71	1,496.87	3.19	3.17	-70.76	-30.11	-28.89	20.27	13.93	6.34	3.199	
1,600.00	1,598.22	1,597.82	1,594.49	3.43	3.45	-60.89	-40.02	-42.89	27.51	20.71	6.80	4.048	
1,700.00	1,697.72	1,696.29	1,690.82	3.68	3.78	-52.00	-51.80	-59.51	37.95	30.71	7.25	5.237	
1,800.00	1,797.22	1,793.87	1,785.54	3.94	4.15	-45.12	-65.35	-78.64	51.87	44.17	7.70	6.739	
1,900.00	1,896.73	1,890.37	1,878.37	4.20	4.58	-40.03	-80.58	-100.13	69.27	61.12	8.15	8.501	
2,000.00	1,996.23	1,985.59	1,969.04	4.47	5.06	-36.27	-97.37	-123.83	90.08	81.47	8.61	10.466	
2,100.00	2,095.73	2,081.99	2,060.12	4.74	5.60	-33.51	-115.64	-149.61	113.35	104.28	9.07	12.491	
2,200.00	2,195.24	2,179.10	2,151.83	5.01	6.17	-31.67	-134.10	-175.65	136.89	127.34	9.56	14.322	
2,300.00	2,294.74	2,276.21	2,243.55	5.29	6.76	-30.37	-152.56	-201.70	160.53	150.48	10.05	15.972	
2,400.00	2,394.25	2,373.32	2,335.26	5.57	7.36	-29.40	-171.01	-227.75	184.22	173.67	10.55	17.461	
2,500.00	2,493.75	2,470.43	2,426.97	5.85	7.97	-28.65	-189.47	-253.80	207.96	196.90	11.06	18.809	
2,600.00	2,593.25	2,567.54	2,518.69	6.13	8.59	-28.06	-207.93	-279.85	231.72	220.15	11.57	20.032	
2,700.00	2,692.76	2,664.65	2,610.40	6.41	9.22	-27.57	-226.38	-305.90	255.50	243.41	12.08	21.145	
2,800.00	2,792.26	2,761.76	2,702.11	6.70	9.85	-27.17	-244.84	-331.94	279.29	266.69	12.60	22.162	
2,900.00	2,891.77	2,858.88	2,793.83	6.98	10.49	-26.83	-263.30	-357.99	303.09	289.97	13.12	23.094	
3,000.00	2,991.27	2,955.99	2,885.54	7.27	11.13	-26.54	-281.76	-384.04	326.91	313.26	13.65	23.950	
3,100.00	3,090.77	3,053.10	2,977.26	7.55	11.77	-26.29	-300.21	-410.09	350.73	336.55	14.18	24.738	
3,200.00	3,190.28	3,150.21	3,068.97	7.84	12.42	-26.08	-318.67	-436.14	374.55	359.84	14.71	25.467	
3,300.00	3,289.78	3,247.32	3,160.68	8.13	13.07	-25.88	-337.13	-462.18	398.38	383.14	15.24	26.142	
3,400.00	3,389.29	3,344.43	3,252.40	8.42	13.72	-25.71	-355.58	-488.23	422.21	406.44	15.77	26.769	
3,500.00	3,488.79	3,441.54	3,344.11	8.71	14.37	-25.56	-374.04	-514.28	446.05	429.74	16.31	27.352	
3,600.00	3,588.29	3,538.65	3,435.82	9.00	15.03	-25.42	-392.50	-540.33	469.89	453.04	16.84	27.896	
3,700.00	3,687.80	3,635.76	3,527.54	9.29	15.68	-25.30	-410.96	-566.38	493.73	476.35	17.38	28.405	
3,800.00	3,787.30	3,732.88	3,619.25	9.58	16.34	-25.19	-429.41	-592.43	517.57	499.65	17.92	28.881	
3,900.00	3,886.81	3,829.99	3,710.97	9.87	16.99	-25.09	-447.87	-618.47	541.42	522.96	18.46	29.329	
4,000.00	3,986.31	3,927.10	3,802.68	10.16	17.65	-24.99	-466.33	-644.52	565.26	546.26	19.00	29.749	
4,100.00	4,085.81	4,024.21	3,894.39	10.45	18.31	-24.91	-484.78	-670.57	589.11	569.57	19.54	30.145	
4,200.00	4,185.32	4,121.32	3,986.11	10.74	18.97	-24.83	-503.24	-696.62	612.96	592.88	20.09	30.518	
4,300.00	4,284.82	4,218.43	4,077.82	11.03	19.63	-24.75	-521.70	-722.67	636.81	616.18	20.63	30.870	
4,400.00	4,384.32	4,315.54	4,169.53	11.33	20.29	-24.69	-540.16	-748.71	660.66	639.49	21.17	31.204	
4,500.00	4,483.83	4,412.65	4,261.25	11.62	20.95	-24.62	-558.61	-774.76	684.51	662.80	21.72	31.520	
4,600.00	4,583.33	4,509.76	4,352.96	11.91	21.61	-24.56	-577.07	-800.81	708.37	686.10	22.26	31.820	
4,700.00	4,682.84	4,606.88	4,444.67	12.20	22.27	-24.51	-595.53	-826.86	732.22	709.41	22.81	32.105	
4,800.00	4,782.34	4,703.99	4,536.39	12.50	22.94	-24.46	-613.98	-852.91	756.07	732.72	23.35	32.376	
4,900.00	4,881.84	4,801.10	4,628.10	12.79	23.60	-24.41	-632.44	-878.96	779.93	756.03	23.90	32.633	
5,000.00	4,981.35	4,898.21	4,719.82	13.08	24.26	-24.36	-650.90	-905.00	803.78	779.33	24.45	32.879	
5,100.00	5,080.85	4,995.32	4,811.53	13.38	24.93	-24.32	-669.36	-931.05	827.64	802.64	24.99	33.114	
5,200.00	5,180.36	5,092.43	4,903.24	13.67	25.59	-24.28	-687.81	-957.10	851.49	825.95	25.54	33.338	
5,300.00	5,279.86	5,208.24	5,012.83	13.96	26.31	-24.24	-709.46	-987.65	874.89	848.75	26.14	33.475	
5,400.00	5,379.36	5,349.55	5,148.28	14.26	26.94	-24.25	-732.72	-1,020.47	894.28	867.52	26.76	33.415	
5,500.00	5,478.87	5,493.27	5,287.90	14.55	27.50	-24.32	-752.38	-1,048.23	908.82	881.44	27.38	33.194	
5,600.00	5,578.37	5,638.73	5,430.76	14.85	27.97	-24.45	-768.14	-1,070.47	918.40	890.42	27.98	32.829	
5,641.83	5,619.99	5,699.91	5,491.24	14.97	28.14	-24.53	-773.51	-1,078.05	920.91	892.69	28.22	32.632	
5,700.00	5,677.93	5,785.17	5,575.81	15.11	28.35	-24.65	-779.75	-1,086.85	923.48	895.00	28.49	32.417	
5,800.00	5,777.73	5,932.04	5,722.11	15.30	28.63	-24.79	-787.07	-1,097.19	926.41	897.55	28.86	32.096	
5,900.00	5,877.69	6,079.10	5,869.07	15.47	28.81	-24.86	-790.05	-1,101.39	927.43	898.26	29.17	31.797	
5,927.31	5,905.00	6,115.03	5,905.00	15.51	28.85	-133.80	-790.13	-1,101.50	927.40	898.16	29.24	31.721	
6,000.00	5,977.69	6,187.73	5,977.69	15.63	28.91	-133.80	-790.13	-1,101.50	927.40	897.91	29.49	31.449	
6,100.00	6,077.69	6,287.73	6,077.69	15.80	29.00	-133.80	-790.13	-1,101.50	927.40	897.56	29.84	31.082	
6,200.00	6,177.69	6,387.73	6,177.69	15.97	29.10	-133.80	-790.13	-1,101.50	927.40	897.21	30.19	30.721	
6,300.00	6,277.69	6,487.73	6,277.69	16.14	29.19	-133.80	-790.13	-1,101.50	927.40	896.85	30.54	30.365	

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

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_ENCORE 3-12
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 4994.00ft (Original Well Elev)
Reference Site:	LARIMER_ENCORE 3-12 PAD	MD Reference:	WELL @ 4994.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_ENCORE 3-12	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_ENCORE 3-12	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 3-22-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design LARIMER_ENCORE 3-12 PAD - P_ENCORE 18-12 - P_ENCORE 18-12 - PLAN #1 3-22-10 RHS												Offset Site Error:	0.00 ft
Survey Program: 0-MWD												Offset Well Error:	0.00 ft
Reference	Offset	Semi Major Axis		Distance									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
6,400.00	6,377.69	6,587.73	6,377.69	16.31	29.28	-133.80	-790.13	-1,101.50	927.40	896.50	30.90	30.016	
6,500.00	6,477.69	6,687.73	6,477.69	16.49	29.38	-133.80	-790.13	-1,101.50	927.40	896.14	31.26	29.672	
6,600.00	6,577.69	6,787.73	6,577.69	16.66	29.47	-133.80	-790.13	-1,101.50	927.40	895.78	31.62	29.333	
6,700.00	6,677.69	6,887.73	6,677.69	16.84	29.57	-133.80	-790.13	-1,101.50	927.40	895.42	31.98	29.001	
6,800.00	6,777.69	6,987.73	6,777.69	17.01	29.67	-133.80	-790.13	-1,101.50	927.40	895.05	32.34	28.674	
6,900.00	6,877.69	7,087.73	6,877.69	17.19	29.77	-133.80	-790.13	-1,101.50	927.40	894.69	32.71	28.352	
7,000.00	6,977.69	7,187.73	6,977.69	17.37	29.87	-133.80	-790.13	-1,101.50	927.40	894.32	33.08	28.036	
7,100.00	7,077.69	7,287.73	7,077.69	17.55	29.98	-133.80	-790.13	-1,101.50	927.40	893.95	33.45	27.725	
7,200.00	7,177.69	7,387.73	7,177.69	17.73	30.08	-133.80	-790.13	-1,101.50	927.40	893.57	33.82	27.420	
7,300.00	7,277.69	7,487.73	7,277.69	17.91	30.19	-133.80	-790.13	-1,101.50	927.40	893.20	34.20	27.120	
7,400.00	7,377.69	7,587.73	7,377.69	18.10	30.30	-133.80	-790.13	-1,101.50	927.40	892.82	34.57	26.825	
7,500.00	7,477.69	7,687.73	7,477.69	18.28	30.40	-133.80	-790.13	-1,101.50	927.40	892.45	34.95	26.535	
7,600.00	7,577.69	7,787.73	7,577.69	18.47	30.51	-133.80	-790.13	-1,101.50	927.40	892.07	35.33	26.250	
7,700.00	7,677.69	7,887.73	7,677.69	18.65	30.63	-133.80	-790.13	-1,101.50	927.40	891.69	35.71	25.969	
7,800.00	7,777.69	7,987.73	7,777.69	18.84	30.74	-133.80	-790.13	-1,101.50	927.40	891.30	36.09	25.694	
7,892.31	7,870.00	8,080.03	7,870.00	19.01	30.84	-133.80	-790.13	-1,101.50	927.40	890.95	36.45	25.444	

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_ENCORE 3-12
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 4994.00ft (Original Well Elev)
Reference Site:	LARIMER_ENCORE 3-12 PAD	MD Reference:	WELL @ 4994.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_ENCORE 3-12	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_ENCORE 3-12	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 3-22-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 ft
Survey Program: 0-MWD												Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	-178.41	-20.04	-0.56	20.04				
100.00	100.00	100.00	100.00	0.10	0.10	-178.41	-20.04	-0.56	20.04	19.85	0.19	104.915	
200.00	200.00	200.00	200.00	0.32	0.32	-178.41	-20.04	-0.56	20.04	19.40	0.64	31.291	
300.00	300.00	300.00	300.00	0.55	0.55	-178.41	-20.04	-0.56	20.04	18.95	1.09	18.387	
400.00	400.00	400.00	400.00	0.77	0.77	-178.41	-20.04	-0.56	20.04	18.50	1.54	13.019	
500.00	500.00	500.00	500.00	0.99	0.99	-178.41	-20.04	-0.56	20.04	18.06	1.99	10.077	
600.00	600.00	600.00	600.00	1.22	1.22	-178.41	-20.04	-0.56	20.04	17.61	2.44	8.219	
700.00	700.00	700.00	700.00	1.44	1.44	-178.41	-20.04	-0.56	20.04	17.16	2.89	6.940	
800.00	800.00	800.00	800.00	1.67	1.67	-178.41	-20.04	-0.56	20.04	16.71	3.34	6.005	
900.00	900.00	900.00	900.00	1.89	1.89	-178.41	-20.04	-0.56	20.04	16.26	3.79	5.292	
1,000.00	1,000.00	1,000.00	1,000.00	2.12	2.12	-178.41	-20.04	-0.56	20.04	15.81	4.24	4.731	
1,050.00	1,050.00	1,050.00	1,050.00	2.23	2.23	-178.41	-20.04	-0.56	20.04	15.58	4.46	4.493 CC, ES	
1,100.00	1,100.00	1,099.70	1,099.70	2.33	2.33	-71.28	-20.41	-0.33	20.27	15.60	4.66	4.346 SF	
1,200.00	1,199.93	1,198.88	1,198.81	2.53	2.51	-84.08	-23.35	1.45	22.69	17.66	5.03	4.510	
1,300.00	1,299.68	1,297.41	1,297.10	2.73	2.69	-101.40	-29.17	4.97	29.95	24.54	5.41	5.532	
1,335.48	1,335.01	1,332.13	1,331.67	2.81	2.76	-106.77	-31.91	6.63	34.05	28.50	5.55	6.130	
1,400.00	1,399.21	1,394.96	1,394.13	2.95	2.90	-114.03	-37.78	10.19	43.29	37.48	5.81	7.451	
1,500.00	1,498.71	1,491.55	1,489.81	3.19	3.12	-119.77	-49.09	17.03	61.03	54.81	6.22	9.806	
1,600.00	1,598.22	1,587.01	1,583.87	3.43	3.38	-122.08	-62.97	25.43	82.18	75.52	6.66	12.347	
1,700.00	1,697.72	1,681.62	1,676.52	3.68	3.68	-122.81	-79.33	35.34	106.37	99.27	7.10	14.973	
1,800.00	1,797.22	1,778.38	1,771.04	3.94	4.02	-123.09	-97.02	46.04	131.64	124.06	7.58	17.376	
1,900.00	1,896.73	1,875.13	1,865.56	4.20	4.38	-123.28	-114.71	56.75	156.91	148.85	8.06	19.469	
2,000.00	1,996.23	1,971.88	1,960.08	4.47	4.76	-123.42	-132.40	67.46	182.18	173.62	8.55	21.297	
2,100.00	2,095.73	2,068.64	2,054.60	4.74	5.15	-123.52	-150.09	78.17	207.45	198.39	9.06	22.901	
2,200.00	2,195.24	2,165.39	2,149.11	5.01	5.55	-123.60	-167.78	88.88	232.72	223.15	9.57	24.316	
2,300.00	2,294.74	2,262.14	2,243.63	5.29	5.96	-123.67	-185.47	99.59	257.99	247.90	10.09	25.570	
2,400.00	2,394.25	2,358.90	2,338.15	5.57	6.37	-123.72	-203.16	110.30	283.26	272.65	10.61	26.687	
2,500.00	2,493.75	2,455.65	2,432.67	5.85	6.79	-123.77	-220.85	121.00	308.54	297.39	11.14	27.687	
2,600.00	2,593.25	2,552.40	2,527.19	6.13	7.22	-123.80	-238.54	131.71	333.81	322.13	11.68	28.586	
2,700.00	2,692.76	2,649.16	2,621.70	6.41	7.65	-123.84	-256.23	142.42	359.08	346.87	12.21	29.397	
2,800.00	2,792.26	2,745.91	2,716.22	6.70	8.08	-123.87	-273.92	153.13	384.36	371.60	12.76	30.132	
2,900.00	2,891.77	2,842.66	2,810.74	6.98	8.52	-123.89	-291.61	163.84	409.63	396.33	13.30	30.802	
3,000.00	2,991.27	2,939.42	2,905.26	7.27	8.95	-123.91	-309.30	174.55	434.90	421.06	13.84	31.413	
3,100.00	3,090.77	3,036.17	2,999.78	7.55	9.39	-123.93	-326.99	185.25	460.17	445.78	14.39	31.972	
3,200.00	3,190.28	3,132.92	3,094.29	7.84	9.84	-123.95	-344.68	195.96	485.45	470.50	14.94	32.487	
3,300.00	3,289.78	3,229.68	3,188.81	8.13	10.28	-123.97	-362.37	206.67	510.72	495.23	15.49	32.961	
3,400.00	3,389.29	3,326.43	3,283.33	8.42	10.72	-123.98	-380.06	217.38	535.99	519.95	16.05	33.400	
3,500.00	3,488.79	3,423.19	3,377.85	8.71	11.17	-123.99	-397.75	228.09	561.27	544.66	16.60	33.806	
3,600.00	3,588.29	3,519.94	3,472.37	9.00	11.61	-124.01	-415.44	238.80	586.54	569.38	17.16	34.183	
3,700.00	3,687.80	3,616.69	3,566.88	9.29	12.06	-124.02	-433.13	249.50	611.81	594.10	17.72	34.535	
3,800.00	3,787.30	3,713.45	3,661.40	9.58	12.51	-124.03	-450.82	260.21	637.09	618.81	18.27	34.863	
3,900.00	3,886.81	3,810.20	3,755.92	9.87	12.96	-124.04	-468.51	270.92	662.36	643.53	18.83	35.170	
4,000.00	3,986.31	3,906.95	3,850.44	10.16	13.41	-124.04	-486.20	281.63	687.63	668.24	19.39	35.458	
4,100.00	4,085.81	4,003.71	3,944.96	10.45	13.86	-124.05	-503.89	292.34	712.91	692.95	19.95	35.728	
4,200.00	4,185.32	4,100.46	4,039.47	10.74	14.31	-124.06	-521.58	303.05	738.18	717.67	20.52	35.982	
4,300.00	4,284.82	4,197.21	4,133.99	11.03	14.76	-124.07	-539.27	313.76	763.45	742.38	21.08	36.222	
4,400.00	4,384.32	4,293.97	4,228.51	11.33	15.21	-124.07	-556.96	324.46	788.73	767.09	21.64	36.448	
4,500.00	4,483.83	4,390.72	4,323.03	11.62	15.66	-124.08	-574.65	335.17	814.00	791.80	22.20	36.661	
4,600.00	4,583.33	4,487.47	4,417.55	11.91	16.11	-124.09	-592.34	345.88	839.27	816.51	22.77	36.863	
4,700.00	4,682.84	4,584.23	4,512.06	12.20	16.56	-124.09	-610.03	356.59	864.55	841.22	23.33	37.055	
4,800.00	4,782.34	4,680.98	4,606.58	12.50	17.02	-124.10	-627.72	367.30	889.82	865.93	23.90	37.237	
4,900.00	4,881.84	4,777.73	4,701.10	12.79	17.47	-124.10	-645.41	378.01	915.10	890.63	24.46	37.410	

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

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_ENCORE 3-12
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 4994.00ft (Original Well Elev)
Reference Site:	LARIMER_ENCORE 3-12 PAD	MD Reference:	WELL @ 4994.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_ENCORE 3-12	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_ENCORE 3-12	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 3-22-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design LARIMER_ENCORE 3-12 PAD - P_ENCORE 21-12 - P_ENCORE 21-12 - PLAN #1 3-22-10 RHS												Offset Site Error:	0.00 ft
Survey Program: 0-MWD												Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5,000.00	4,981.35	4,874.49	4,795.62	13.08	17.92	-124.11	-663.10	388.71	940.37	915.34	25.03	37.574	
5,100.00	5,080.85	4,971.24	4,890.13	13.38	18.38	-124.11	-680.79	399.42	965.64	940.05	25.59	37.731	
5,200.00	5,180.36	5,068.00	4,984.65	13.67	18.83	-124.11	-698.48	410.13	990.92	964.76	26.16	37.880	
5,300.00	5,279.86	5,164.75	5,079.17	13.96	19.28	-124.12	-716.17	420.84	1,016.19	989.46	26.73	38.023	
5,400.00	5,379.36	5,261.50	5,173.69	14.26	19.74	-124.12	-733.86	431.55	1,041.46	1,014.17	27.29	38.159	
5,500.00	5,478.87	5,358.26	5,268.21	14.55	20.19	-124.12	-751.55	442.26	1,066.74	1,038.88	27.86	38.289	
5,600.00	5,578.37	5,497.24	5,404.48	14.85	20.68	-124.18	-774.85	456.36	1,090.50	1,062.02	28.49	38.283	
5,641.83	5,619.99	5,560.50	5,466.91	14.97	20.86	-124.25	-783.60	461.66	1,099.09	1,070.34	28.75	38.235	
5,700.00	5,677.93	5,649.38	5,554.97	15.11	21.08	-124.52	-793.91	467.90	1,109.29	1,080.17	29.13	38.087	
5,800.00	5,777.73	5,804.30	5,709.19	15.30	21.41	-124.85	-806.26	475.37	1,121.42	1,091.73	29.69	37.777	
5,900.00	5,877.69	5,960.81	5,865.57	15.47	21.65	-124.99	-811.47	478.53	1,126.56	1,096.39	30.17	37.340	
5,927.31	5,905.00	6,000.25	5,905.00	15.51	21.70	126.07	-811.64	478.63	1,126.75	1,096.46	30.29	37.198	
6,000.00	5,977.69	6,072.94	5,977.69	15.63	21.78	126.07	-811.64	478.63	1,126.75	1,096.22	30.53	36.909	
6,100.00	6,077.69	6,172.94	6,077.69	15.80	21.89	126.07	-811.64	478.63	1,126.75	1,095.89	30.85	36.519	
6,200.00	6,177.69	6,272.94	6,177.69	15.97	22.01	126.07	-811.64	478.63	1,126.75	1,095.56	31.18	36.133	
6,300.00	6,277.69	6,372.94	6,277.69	16.14	22.12	126.07	-811.64	478.63	1,126.75	1,095.23	31.52	35.752	
6,400.00	6,377.69	6,472.94	6,377.69	16.31	22.24	126.07	-811.64	478.63	1,126.75	1,094.90	31.85	35.376	
6,500.00	6,477.69	6,572.94	6,477.69	16.49	22.36	126.07	-811.64	478.63	1,126.75	1,094.56	32.19	35.004	
6,600.00	6,577.69	6,672.94	6,577.69	16.66	22.48	126.07	-811.64	478.63	1,126.75	1,094.22	32.53	34.638	
6,700.00	6,677.69	6,772.94	6,677.69	16.84	22.60	126.07	-811.64	478.63	1,126.75	1,093.88	32.87	34.276	
6,800.00	6,777.69	6,872.94	6,777.69	17.01	22.72	126.07	-811.64	478.63	1,126.75	1,093.53	33.22	33.919	
6,900.00	6,877.69	6,972.94	6,877.69	17.19	22.85	126.07	-811.64	478.63	1,126.75	1,093.18	33.57	33.567	
7,000.00	6,977.69	7,072.94	6,977.69	17.37	22.97	126.07	-811.64	478.63	1,126.75	1,092.83	33.92	33.220	
7,100.00	7,077.69	7,172.94	7,077.69	17.55	23.10	126.07	-811.64	478.63	1,126.75	1,092.48	34.27	32.878	
7,200.00	7,177.69	7,272.94	7,177.69	17.73	23.23	126.07	-811.64	478.63	1,126.75	1,092.12	34.63	32.541	
7,300.00	7,277.69	7,372.94	7,277.69	17.91	23.36	126.07	-811.64	478.63	1,126.75	1,091.77	34.98	32.209	
7,400.00	7,377.69	7,472.94	7,377.69	18.10	23.49	126.07	-811.64	478.63	1,126.75	1,091.41	35.34	31.881	
7,500.00	7,477.69	7,572.94	7,477.69	18.28	23.63	126.07	-811.64	478.63	1,126.75	1,091.04	35.70	31.558	
7,600.00	7,577.69	7,672.94	7,577.69	18.47	23.76	126.07	-811.64	478.63	1,126.75	1,090.68	36.07	31.240	
7,700.00	7,677.69	7,772.94	7,677.69	18.65	23.90	126.07	-811.64	478.63	1,126.75	1,090.32	36.43	30.927	
7,800.00	7,777.69	7,872.94	7,777.69	18.84	24.04	126.07	-811.64	478.63	1,126.75	1,089.95	36.80	30.619	
7,892.31	7,870.00	7,965.25	7,870.00	19.01	24.16	126.07	-811.64	478.63	1,126.75	1,089.61	37.14	30.338	

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_ENCORE 3-12
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 4994.00ft (Original Well Elev)
Reference Site:	LARIMER_ENCORE 3-12 PAD	MD Reference:	WELL @ 4994.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_ENCORE 3-12	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_ENCORE 3-12	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 3-22-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 ft
Survey Program: 0-MWD												Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	0.80	20.03	0.28	20.03				
100.00	100.00	100.00	100.00	0.10	0.10	0.80	20.03	0.28	20.03	19.84	0.19	104.864	
200.00	200.00	200.00	200.00	0.32	0.32	0.80	20.03	0.28	20.03	19.39	0.64	31.275	
300.00	300.00	300.00	300.00	0.55	0.55	0.80	20.03	0.28	20.03	18.94	1.09	18.378	
400.00	400.00	400.00	400.00	0.77	0.77	0.80	20.03	0.28	20.03	18.49	1.54	13.012	
500.00	500.00	500.00	500.00	0.99	0.99	0.80	20.03	0.28	20.03	18.05	1.99	10.072	
600.00	600.00	600.00	600.00	1.22	1.22	0.80	20.03	0.28	20.03	17.60	2.44	8.215	
700.00	700.00	700.00	700.00	1.44	1.44	0.80	20.03	0.28	20.03	17.15	2.89	6.937	
800.00	800.00	800.00	800.00	1.67	1.67	0.80	20.03	0.28	20.03	16.70	3.34	6.002	
900.00	900.00	900.00	900.00	1.89	1.89	0.80	20.03	0.28	20.03	16.25	3.79	5.290	
1,000.00	1,000.00	1,000.00	1,000.00	2.12	2.12	0.80	20.03	0.28	20.03	15.80	4.24	4.729	
1,050.00	1,050.00	1,050.00	1,050.00	2.23	2.23	0.80	20.03	0.28	20.03	15.57	4.46	4.490 CC	
1,100.00	1,100.00	1,100.04	1,100.04	2.33	2.33	112.13	19.96	0.71	20.13	15.46	4.67	4.311 ES, SF	
1,200.00	1,199.93	1,199.79	1,199.72	2.53	2.53	129.71	19.34	4.13	22.06	17.00	5.06	4.364	
1,300.00	1,299.68	1,298.51	1,298.20	2.73	2.74	153.10	18.13	10.88	30.35	24.90	5.44	5.576	
1,335.48	1,335.01	1,333.17	1,332.71	2.81	2.82	159.82	17.57	14.04	35.39	29.81	5.58	6.345	
1,400.00	1,399.21	1,395.73	1,394.89	2.95	2.96	169.01	16.36	20.79	46.63	40.80	5.83	7.993	
1,500.00	1,498.71	1,491.54	1,489.79	3.19	3.20	177.96	14.04	33.70	67.65	61.41	6.24	10.841	
1,600.00	1,598.22	1,585.79	1,582.68	3.43	3.47	-176.50	11.22	49.45	92.42	85.77	6.65	13.889	
1,700.00	1,697.72	1,678.34	1,673.31	3.68	3.77	-172.76	7.93	67.83	120.60	113.53	7.08	17.044	
1,800.00	1,797.22	1,769.03	1,761.51	3.94	4.11	-170.05	4.20	88.63	151.98	144.47	7.50	20.255	
1,900.00	1,896.73	1,860.10	1,849.43	4.20	4.49	-167.99	0.01	112.01	186.14	178.20	7.94	23.444	
2,000.00	1,996.23	1,953.73	1,939.69	4.47	4.92	-166.48	-4.38	136.48	220.92	212.52	8.39	26.327	
2,100.00	2,095.73	2,047.35	2,029.95	4.74	5.36	-165.38	-8.76	160.95	255.79	246.94	8.85	28.906	
2,200.00	2,195.24	2,140.98	2,120.22	5.01	5.82	-164.54	-13.15	185.42	290.73	281.42	9.31	31.218	
2,300.00	2,294.74	2,234.60	2,210.48	5.29	6.29	-163.88	-17.53	209.89	325.71	315.93	9.78	33.299	
2,400.00	2,394.25	2,328.22	2,300.74	5.57	6.76	-163.35	-21.92	234.36	360.72	350.47	10.25	35.178	
2,500.00	2,493.75	2,421.85	2,391.00	5.85	7.25	-162.92	-26.30	258.83	395.75	385.02	10.73	36.881	
2,600.00	2,593.25	2,515.47	2,481.27	6.13	7.74	-162.55	-30.69	283.30	430.81	419.60	11.21	38.430	
2,700.00	2,692.76	2,609.09	2,571.53	6.41	8.24	-162.24	-35.07	307.77	465.87	454.18	11.69	39.842	
2,800.00	2,792.26	2,702.72	2,661.79	6.70	8.74	-161.98	-39.46	332.24	500.94	488.76	12.18	41.135	
2,900.00	2,891.77	2,796.34	2,752.06	6.98	9.24	-161.75	-43.84	356.71	536.02	523.36	12.67	42.322	
3,000.00	2,991.27	2,889.96	2,842.32	7.27	9.75	-161.54	-48.23	381.18	571.11	557.96	13.15	43.415	
3,100.00	3,090.77	2,983.59	2,932.58	7.55	10.26	-161.36	-52.61	405.65	606.21	592.56	13.65	44.425	
3,200.00	3,190.28	3,077.21	3,022.84	7.84	10.77	-161.20	-57.00	430.12	641.31	627.17	14.14	45.359	
3,300.00	3,289.78	3,170.84	3,113.11	8.13	11.28	-161.06	-61.38	454.59	676.41	661.78	14.63	46.227	
3,400.00	3,389.29	3,264.46	3,203.37	8.42	11.80	-160.93	-65.77	479.06	711.52	696.39	15.13	47.034	
3,500.00	3,488.79	3,358.08	3,293.63	8.71	12.31	-160.81	-70.15	503.53	746.63	731.00	15.62	47.786	
3,600.00	3,588.29	3,451.71	3,383.90	9.00	12.83	-160.71	-74.54	528.00	781.74	765.62	16.12	48.490	
3,700.00	3,687.80	3,545.33	3,474.16	9.29	13.35	-160.61	-78.92	552.47	816.85	800.23	16.62	49.148	
3,800.00	3,787.30	3,638.95	3,564.42	9.58	13.87	-160.52	-83.31	576.94	851.97	834.85	17.12	49.766	
3,900.00	3,886.81	3,732.58	3,654.68	9.87	14.38	-160.44	-87.69	601.41	887.08	869.46	17.62	50.346	
4,000.00	3,986.31	3,826.20	3,744.95	10.16	14.91	-160.36	-92.08	625.88	922.20	904.08	18.12	50.893	
4,100.00	4,085.81	3,919.83	3,835.21	10.45	15.43	-160.29	-96.46	650.35	957.32	938.70	18.62	51.408	
4,200.00	4,185.32	4,013.45	3,925.47	10.74	15.95	-160.23	-100.85	674.82	992.44	973.32	19.12	51.895	
4,300.00	4,284.82	4,107.07	4,015.74	11.03	16.47	-160.16	-105.23	699.29	1,027.57	1,007.94	19.63	52.355	
4,400.00	4,384.32	4,200.70	4,106.00	11.33	16.99	-160.11	-109.62	723.76	1,062.69	1,042.56	20.13	52.791	
4,500.00	4,483.83	4,294.32	4,196.26	11.62	17.52	-160.05	-114.00	748.23	1,097.81	1,077.18	20.63	53.205	
4,600.00	4,583.33	4,387.94	4,286.52	11.91	18.04	-160.00	-118.39	772.70	1,132.94	1,111.80	21.14	53.597	
4,700.00	4,682.84	4,481.57	4,376.79	12.20	18.57	-159.96	-122.77	797.17	1,168.07	1,146.42	21.64	53.971	
4,800.00	4,782.34	4,575.19	4,467.05	12.50	19.09	-159.91	-127.16	821.64	1,203.19	1,181.04	22.15	54.326	
4,900.00	4,881.84	4,668.82	4,557.31	12.79	19.61	-159.87	-131.54	846.11	1,238.32	1,215.67	22.65	54.665	

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

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_ENCORE 3-12
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 4994.00ft (Original Well Elev)
Reference Site:	LARIMER_ENCORE 3-12 PAD	MD Reference:	WELL @ 4994.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_ENCORE 3-12	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_ENCORE 3-12	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 3-22-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design LARIMER_ENCORE 3-12 PAD - P_ENCORE 2-12 - P_ENCORE 2-12 - PLAN #1 3-22-10 RHS												Offset Site Error:	0.00 ft
Survey Program: 0-MWD												Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5,000.00	4,981.35	4,762.44	4,647.58	13.08	20.14	-159.83	-135.93	870.58	1,273.45	1,250.29	23.16	54.988	
5,100.00	5,080.85	4,856.06	4,737.84	13.38	20.67	-159.79	-140.31	895.05	1,308.57	1,284.91	23.66	55.297	
5,200.00	5,180.36	4,949.69	4,828.10	13.67	21.19	-159.76	-144.70	919.52	1,343.70	1,319.53	24.17	55.592	
5,300.00	5,279.86	5,043.31	4,918.36	13.96	21.72	-159.72	-149.09	943.99	1,378.83	1,354.15	24.68	55.874	
5,400.00	5,379.36	5,136.93	5,008.63	14.26	22.24	-159.69	-153.47	968.46	1,413.96	1,388.78	25.18	56.144	
5,500.00	5,478.87	5,230.56	5,098.89	14.55	22.77	-159.66	-157.86	992.93	1,449.09	1,423.40	25.69	56.403	
5,600.00	5,578.37	5,375.04	5,238.63	14.85	23.44	-159.63	-164.33	1,029.05	1,483.39	1,457.09	26.30	56.405	
5,641.83	5,619.99	5,456.93	5,318.54	14.97	23.74	-159.63	-167.48	1,046.62	1,496.17	1,469.59	26.59	56.278	
5,700.00	5,677.93	5,573.45	5,433.06	15.11	24.12	-159.75	-171.26	1,067.73	1,511.51	1,484.47	27.05	55.883	
5,800.00	5,777.73	5,780.08	5,637.94	15.30	24.64	-159.89	-175.94	1,093.83	1,529.94	1,502.18	27.76	55.107	
5,900.00	5,877.69	5,991.65	5,849.13	15.47	24.98	-159.95	-178.02	1,105.43	1,537.98	1,509.59	28.39	54.165	
5,927.31	5,905.00	6,047.52	5,905.00	15.51	25.04	91.11	-178.11	1,105.92	1,538.34	1,509.78	28.55	53.876	
6,000.00	5,977.69	6,120.21	5,977.69	15.63	25.11	91.11	-178.11	1,105.92	1,538.34	1,509.52	28.81	53.390	
6,100.00	6,077.69	6,220.21	6,077.69	15.80	25.23	91.11	-178.11	1,105.92	1,538.34	1,509.17	29.17	52.736	
6,200.00	6,177.69	6,320.21	6,177.69	15.97	25.34	91.11	-178.11	1,105.92	1,538.34	1,508.81	29.53	52.093	
6,300.00	6,277.69	6,420.21	6,277.69	16.14	25.45	91.11	-178.11	1,105.92	1,538.34	1,508.44	29.89	51.462	
6,400.00	6,377.69	6,520.21	6,377.69	16.31	25.57	91.11	-178.11	1,105.92	1,538.34	1,508.08	30.26	50.842	
6,500.00	6,477.69	6,620.21	6,477.69	16.49	25.68	91.11	-178.11	1,105.92	1,538.34	1,507.71	30.62	50.232	
6,600.00	6,577.69	6,720.21	6,577.69	16.66	25.80	91.11	-178.11	1,105.92	1,538.34	1,507.34	30.99	49.634	
6,700.00	6,677.69	6,820.21	6,677.69	16.84	25.92	91.11	-178.11	1,105.92	1,538.34	1,506.97	31.36	49.047	
6,800.00	6,777.69	6,920.21	6,777.69	17.01	26.04	91.11	-178.11	1,105.92	1,538.34	1,506.60	31.74	48.470	
6,900.00	6,877.69	7,020.21	6,877.69	17.19	26.16	91.11	-178.11	1,105.92	1,538.34	1,506.22	32.11	47.904	
7,000.00	6,977.69	7,120.21	6,977.69	17.37	26.29	91.11	-178.11	1,105.92	1,538.34	1,505.85	32.49	47.348	
7,100.00	7,077.69	7,220.21	7,077.69	17.55	26.41	91.11	-178.11	1,105.92	1,538.34	1,505.47	32.87	46.803	
7,200.00	7,177.69	7,320.21	7,177.69	17.73	26.54	91.11	-178.11	1,105.92	1,538.34	1,505.09	33.25	46.267	
7,300.00	7,277.69	7,420.21	7,277.69	17.91	26.67	91.11	-178.11	1,105.92	1,538.34	1,504.71	33.63	45.742	
7,400.00	7,377.69	7,520.21	7,377.69	18.10	26.80	91.11	-178.11	1,105.92	1,538.34	1,504.32	34.01	45.225	
7,500.00	7,477.69	7,620.21	7,477.69	18.28	26.93	91.11	-178.11	1,105.92	1,538.34	1,503.94	34.40	44.719	
7,600.00	7,577.69	7,720.21	7,577.69	18.47	27.06	91.11	-178.11	1,105.92	1,538.34	1,503.55	34.79	44.221	
7,700.00	7,677.69	7,820.21	7,677.69	18.65	27.19	91.11	-178.11	1,105.92	1,538.34	1,503.16	35.18	43.733	
7,800.00	7,777.69	7,920.21	7,777.69	18.84	27.32	91.11	-178.11	1,105.92	1,538.34	1,502.77	35.57	43.254	
7,892.31	7,870.00	8,012.52	7,870.00	19.01	27.45	91.11	-178.11	1,105.92	1,538.34	1,502.41	35.93	42.819	

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_ENCORE 3-12
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 4994.00ft (Original Well Elev)
Reference Site:	LARIMER_ENCORE 3-12 PAD	MD Reference:	WELL @ 4994.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_ENCORE 3-12	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_ENCORE 3-12	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 3-22-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 ft
Survey Program: 0-MWD												Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis			Distance						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	1.56	10.20	0.28	10.20				
100.00	100.00	100.00	100.00	0.10	0.10	1.56	10.20	0.28	10.20	10.01	0.19	53.389	
200.00	200.00	200.00	200.00	0.32	0.32	1.56	10.20	0.28	10.20	9.56	0.64	15.923	
300.00	300.00	300.00	300.00	0.55	0.55	1.56	10.20	0.28	10.20	9.11	1.09	9.357	
400.00	400.00	400.00	400.00	0.77	0.77	1.56	10.20	0.28	10.20	8.66	1.54	6.625	
500.00	500.00	500.00	500.00	0.99	0.99	1.56	10.20	0.28	10.20	8.21	1.99	5.128	
600.00	600.00	600.00	600.00	1.22	1.22	1.56	10.20	0.28	10.20	7.76	2.44	4.183	
700.00	700.00	700.00	700.00	1.44	1.44	1.56	10.20	0.28	10.20	7.31	2.89	3.532	
800.00	800.00	800.00	800.00	1.67	1.67	1.56	10.20	0.28	10.20	6.86	3.34	3.056	
900.00	900.00	900.00	900.00	1.89	1.89	1.56	10.20	0.28	10.20	6.41	3.79	2.693	
1,000.00	1,000.00	1,000.00	1,000.00	2.12	2.12	1.56	10.20	0.28	10.20	5.96	4.24	2.407	
1,050.00	1,050.00	1,050.00	1,050.00	2.23	2.23	1.56	10.20	0.28	10.20	5.74	4.46	2.286 CC	
1,100.00	1,100.00	1,100.02	1,100.01	2.33	2.34	110.36	10.17	-0.16	10.31	5.64	4.67	2.208 ES, SF	
1,200.00	1,199.93	1,200.04	1,199.98	2.53	2.54	109.30	9.92	-3.64	11.20	6.13	5.06	2.212	
1,300.00	1,299.68	1,300.05	1,299.74	2.73	2.75	107.61	9.44	-10.60	12.98	7.50	5.48	2.369	
1,335.48	1,335.01	1,335.53	1,335.06	2.81	2.83	106.96	9.21	-13.90	13.83	8.19	5.63	2.454	
1,400.00	1,399.21	1,400.02	1,399.15	2.95	2.98	103.25	8.71	-21.03	15.48	9.55	5.93	2.611	
1,500.00	1,498.71	1,499.81	1,497.97	3.19	3.23	90.09	7.74	-34.88	18.66	12.24	6.42	2.907	
1,600.00	1,598.22	1,599.18	1,595.82	3.43	3.52	73.57	6.54	-52.07	24.13	17.22	6.91	3.491	
1,700.00	1,697.72	1,697.89	1,692.38	3.68	3.85	59.24	5.12	-72.50	33.21	25.83	7.38	4.501	
1,800.00	1,797.22	1,795.72	1,787.33	3.94	4.23	48.86	3.47	-96.00	46.26	38.43	7.83	5.909	
1,900.00	1,896.73	1,892.46	1,880.37	4.20	4.67	41.72	1.63	-122.41	63.12	54.85	8.28	7.628	
2,000.00	1,996.23	1,987.91	1,971.25	4.47	5.16	36.77	-0.40	-151.52	83.60	74.88	8.73	9.579	
2,100.00	2,095.73	2,081.89	2,059.72	4.74	5.70	33.23	-2.61	-183.12	107.52	98.33	9.19	11.703	
2,200.00	2,195.24	2,174.22	2,145.59	5.01	6.31	30.62	-4.97	-216.97	134.72	125.07	9.65	13.955	
2,300.00	2,294.74	2,264.78	2,228.70	5.29	6.96	28.63	-7.47	-252.83	165.07	154.94	10.13	16.292	
2,400.00	2,394.25	2,357.73	2,313.13	5.57	7.68	27.07	-10.18	-291.62	197.72	187.10	10.63	18.604	
2,500.00	2,493.75	2,452.09	2,398.78	5.85	8.43	25.93	-12.94	-331.10	230.59	219.45	11.14	20.702	
2,600.00	2,593.25	2,546.45	2,484.44	6.13	9.21	25.07	-15.70	-370.58	263.51	251.85	11.66	22.604	
2,700.00	2,692.76	2,640.81	2,570.10	6.41	9.99	24.40	-18.45	-410.07	296.48	284.30	12.18	24.334	
2,800.00	2,792.26	2,735.17	2,655.76	6.70	10.78	23.86	-21.21	-449.55	329.47	316.76	12.72	25.911	
2,900.00	2,891.77	2,829.53	2,741.41	6.98	11.58	23.43	-23.96	-489.03	362.49	349.24	13.25	27.353	
3,000.00	2,991.27	2,923.89	2,827.07	7.27	12.39	23.06	-26.72	-528.52	395.52	381.73	13.79	28.674	
3,100.00	3,090.77	3,018.25	2,912.73	7.55	13.20	22.75	-29.48	-568.00	428.57	414.23	14.34	29.889	
3,200.00	3,190.28	3,112.61	2,998.39	7.84	14.02	22.49	-32.23	-607.48	461.62	446.74	14.89	31.009	
3,300.00	3,289.78	3,206.96	3,084.04	8.13	14.83	22.26	-34.99	-646.96	494.68	479.25	15.44	32.044	
3,400.00	3,389.29	3,301.32	3,169.70	8.42	15.66	22.06	-37.75	-686.45	527.75	511.76	15.99	33.003	
3,500.00	3,488.79	3,395.68	3,255.36	8.71	16.48	21.88	-40.50	-725.93	560.82	544.28	16.55	33.893	
3,600.00	3,588.29	3,490.04	3,341.02	9.00	17.30	21.73	-43.26	-765.41	593.90	576.80	17.10	34.721	
3,700.00	3,687.80	3,584.40	3,426.67	9.29	18.13	21.59	-46.02	-804.89	626.98	609.32	17.66	35.494	
3,800.00	3,787.30	3,678.76	3,512.33	9.58	18.96	21.46	-48.77	-844.38	660.06	641.84	18.23	36.217	
3,900.00	3,886.81	3,773.12	3,597.99	9.87	19.79	21.35	-51.53	-883.86	693.15	674.36	18.79	36.893	
4,000.00	3,986.31	3,867.48	3,683.65	10.16	20.62	21.24	-54.29	-923.34	726.24	706.89	19.35	37.528	
4,100.00	4,085.81	3,961.84	3,769.30	10.45	21.45	21.15	-57.04	-962.83	759.33	739.41	19.92	38.124	
4,200.00	4,185.32	4,056.20	3,854.96	10.74	22.29	21.06	-59.80	-1,002.31	792.42	771.94	20.48	38.686	
4,300.00	4,284.82	4,150.56	3,940.62	11.03	23.12	20.98	-62.56	-1,041.79	825.51	804.46	21.05	39.216	
4,400.00	4,384.32	4,244.92	4,026.28	11.33	23.96	20.91	-65.31	-1,081.27	858.61	836.99	21.62	39.716	
4,500.00	4,483.83	4,339.28	4,111.93	11.62	24.79	20.84	-68.07	-1,120.76	891.70	869.52	22.19	40.189	
4,600.00	4,583.33	4,433.64	4,197.59	11.91	25.63	20.77	-70.82	-1,160.24	924.80	902.04	22.76	40.637	
4,700.00	4,682.84	4,528.00	4,283.25	12.20	26.47	20.71	-73.58	-1,199.72	957.90	934.57	23.33	41.062	
4,800.00	4,782.34	4,622.36	4,368.91	12.50	27.30	20.66	-76.34	-1,239.21	991.00	967.10	23.90	41.466	
4,900.00	4,881.84	4,716.71	4,454.56	12.79	28.14	20.61	-79.09	-1,278.69	1,024.10	999.63	24.47	41.850	

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

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_ENCORE 3-12
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 4994.00ft (Original Well Elev)
Reference Site:	LARIMER_ENCORE 3-12 PAD	MD Reference:	WELL @ 4994.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_ENCORE 3-12	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_ENCORE 3-12	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 3-22-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 ft
Survey Program: 0-MWD												Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5,000.00	4,981.35	4,811.07	4,540.22	13.08	28.98	20.56	-81.85	-1,318.17	1,057.20	1,032.15	25.04	42.215	
5,100.00	5,080.85	4,905.43	4,625.88	13.38	29.82	20.51	-84.61	-1,357.65	1,090.30	1,064.68	25.62	42.563	
5,200.00	5,180.36	4,999.79	4,711.54	13.67	30.66	20.47	-87.36	-1,397.14	1,123.40	1,097.21	26.19	42.895	
5,300.00	5,279.86	5,094.15	4,797.19	13.96	31.49	20.43	-90.12	-1,436.62	1,156.50	1,129.74	26.76	43.213	
5,400.00	5,379.36	5,188.51	4,882.85	14.26	32.33	20.39	-92.88	-1,476.10	1,189.60	1,162.27	27.34	43.516	
5,500.00	5,478.87	5,330.91	5,013.03	14.55	33.43	20.35	-96.89	-1,533.65	1,221.43	1,193.38	28.05	43.547	
5,600.00	5,578.37	5,499.75	5,170.79	14.85	34.45	20.35	-101.08	-1,593.58	1,247.99	1,219.19	28.80	43.339	
5,641.83	5,619.99	5,571.90	5,239.24	14.97	34.83	20.36	-102.67	-1,616.35	1,257.40	1,228.30	29.10	43.205	
5,700.00	5,677.93	5,673.37	5,336.42	15.11	35.32	20.46	-104.70	-1,645.43	1,269.32	1,239.88	29.43	43.124	
5,800.00	5,777.73	5,850.24	5,508.07	15.30	36.05	20.57	-107.66	-1,687.87	1,287.60	1,257.69	29.91	43.053	
5,900.00	5,877.69	6,029.88	5,684.76	15.47	36.63	20.61	-109.91	-1,720.07	1,303.00	1,272.71	30.29	43.017	
5,927.31	5,905.00	6,079.37	5,733.76	15.51	36.76	-88.33	-110.39	-1,726.99	1,306.69	1,276.31	30.38	43.009	
6,000.00	5,977.69	6,212.05	5,865.64	15.63	37.04	-88.39	-111.40	-1,741.38	1,314.56	1,283.80	30.76	42.739	
6,100.00	6,077.69	6,396.19	6,049.48	15.80	37.29	-88.43	-112.08	-1,751.22	1,319.89	1,288.66	31.23	42.258	
6,200.00	6,177.69	6,524.40	6,177.69	15.97	37.39	-88.43	-112.13	-1,751.88	1,320.25	1,288.64	31.61	41.770	
6,300.00	6,277.69	6,624.40	6,277.69	16.14	37.47	-88.43	-112.13	-1,751.88	1,320.25	1,288.30	31.95	41.328	
6,400.00	6,377.69	6,724.40	6,377.69	16.31	37.55	-88.43	-112.13	-1,751.88	1,320.25	1,287.96	32.29	40.892	
6,500.00	6,477.69	6,824.40	6,477.69	16.49	37.63	-88.43	-112.13	-1,751.88	1,320.25	1,287.62	32.63	40.461	
6,600.00	6,577.69	6,924.40	6,577.69	16.66	37.71	-88.43	-112.13	-1,751.88	1,320.25	1,287.27	32.98	40.037	
6,700.00	6,677.69	7,024.40	6,677.69	16.84	37.80	-88.43	-112.13	-1,751.88	1,320.25	1,286.92	33.32	39.619	
6,800.00	6,777.69	7,124.40	6,777.69	17.01	37.88	-88.43	-112.13	-1,751.88	1,320.25	1,286.57	33.67	39.206	
6,900.00	6,877.69	7,224.40	6,877.69	17.19	37.97	-88.43	-112.13	-1,751.88	1,320.25	1,286.22	34.03	38.800	
7,000.00	6,977.69	7,324.40	6,977.69	17.37	38.05	-88.43	-112.13	-1,751.88	1,320.25	1,285.87	34.38	38.399	
7,100.00	7,077.69	7,424.40	7,077.69	17.55	38.14	-88.43	-112.13	-1,751.88	1,320.25	1,285.51	34.74	38.005	
7,200.00	7,177.69	7,524.40	7,177.69	17.73	38.23	-88.43	-112.13	-1,751.88	1,320.25	1,285.15	35.10	37.616	
7,300.00	7,277.69	7,624.40	7,277.69	17.91	38.32	-88.43	-112.13	-1,751.88	1,320.25	1,284.79	35.46	37.233	
7,400.00	7,377.69	7,724.40	7,377.69	18.10	38.41	-88.43	-112.13	-1,751.88	1,320.25	1,284.43	35.82	36.856	
7,500.00	7,477.69	7,824.40	7,477.69	18.28	38.50	-88.43	-112.13	-1,751.88	1,320.25	1,284.06	36.19	36.484	
7,600.00	7,577.69	7,924.40	7,577.69	18.47	38.60	-88.43	-112.13	-1,751.88	1,320.25	1,283.70	36.55	36.118	
7,700.00	7,677.69	8,024.40	7,677.69	18.65	38.69	-88.43	-112.13	-1,751.88	1,320.25	1,283.33	36.92	35.758	
7,800.00	7,777.69	8,124.40	7,777.69	18.84	38.79	-88.43	-112.13	-1,751.88	1,320.25	1,282.96	37.29	35.403	
7,892.31	7,870.00	8,216.71	7,870.00	19.01	38.87	-88.43	-112.13	-1,751.88	1,320.25	1,282.61	37.63	35.081	

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_ENCORE 3-12
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 4994.00ft (Original Well Elev)
Reference Site:	LARIMER_ENCORE 3-12 PAD	MD Reference:	WELL @ 4994.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_ENCORE 3-12	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_ENCORE 3-12	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 3-22-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 ft
Survey Program: 0-MWD												Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	-178.40	-29.87	-0.84	29.88				
100.00	100.00	100.00	100.00	0.10	0.10	-178.40	-29.87	-0.84	29.88	29.69	0.19	156.398	
200.00	200.00	200.00	200.00	0.32	0.32	-178.40	-29.87	-0.84	29.88	29.24	0.64	46.645	
300.00	300.00	300.00	300.00	0.55	0.55	-178.40	-29.87	-0.84	29.88	28.79	1.09	27.410 CC, ES	
400.00	400.00	399.29	399.27	0.77	0.75	-175.96	-30.94	-2.18	31.02	29.50	1.52	20.438	
500.00	500.00	498.35	498.19	0.99	0.95	-169.68	-34.13	-6.22	34.74	32.79	1.95	17.849	
600.00	600.00	596.93	596.40	1.22	1.19	-161.89	-39.42	-12.89	41.62	39.22	2.41	17.292 SF	
700.00	700.00	694.82	693.57	1.44	1.46	-154.66	-46.73	-22.13	52.11	49.20	2.91	17.911	
800.00	800.00	791.78	789.37	1.67	1.77	-148.86	-56.01	-33.84	66.30	62.84	3.46	19.175	
900.00	900.00	887.62	883.51	1.89	2.13	-144.50	-67.16	-47.91	84.13	80.07	4.05	20.750	
1,000.00	1,000.00	982.15	975.72	2.12	2.54	-141.27	-80.06	-64.20	105.45	100.75	4.70	22.436	
1,050.00	1,050.00	1,028.86	1,021.02	2.23	2.76	-139.99	-87.13	-73.12	117.38	112.34	5.04	23.278	
1,100.00	1,100.00	1,075.29	1,065.86	2.33	2.99	-29.92	-94.61	-82.57	129.77	125.13	4.64	27.970	
1,200.00	1,199.93	1,167.56	1,154.36	2.53	3.50	-28.46	-110.81	-103.02	154.72	149.64	5.08	30.454	
1,300.00	1,299.68	1,259.07	1,241.25	2.73	4.05	-27.71	-128.62	-125.50	179.80	174.27	5.54	32.468	
1,335.48	1,335.01	1,291.35	1,271.69	2.81	4.26	-27.56	-135.32	-133.95	188.72	183.02	5.70	33.095	
1,400.00	1,399.21	1,349.66	1,326.34	2.95	4.66	-27.47	-147.94	-149.89	205.57	199.56	6.01	34.187	
1,500.00	1,498.71	1,438.73	1,408.98	3.19	5.30	-27.28	-168.55	-175.92	234.14	227.64	6.50	36.023	
1,600.00	1,598.22	1,526.23	1,489.13	3.43	5.98	-27.04	-190.35	-203.43	265.62	258.63	6.99	37.986	
1,700.00	1,697.72	1,620.67	1,575.07	3.68	6.76	-26.79	-214.66	-234.12	298.49	290.96	7.52	39.683	
1,800.00	1,797.22	1,715.11	1,661.01	3.94	7.54	-26.60	-238.97	-264.81	331.35	323.30	8.06	41.126	
1,900.00	1,896.73	1,809.54	1,746.94	4.20	8.33	-26.44	-263.28	-295.50	364.23	355.63	8.60	42.359	
2,000.00	1,996.23	1,903.98	1,832.88	4.47	9.12	-26.30	-287.59	-326.20	397.10	387.96	9.14	43.423	
2,100.00	2,095.73	1,998.42	1,918.82	4.74	9.91	-26.19	-311.91	-356.89	429.98	420.28	9.70	44.348	
2,200.00	2,195.24	2,092.86	2,004.76	5.01	10.71	-26.09	-336.22	-387.58	462.85	452.60	10.25	45.158	
2,300.00	2,294.74	2,187.30	2,090.70	5.29	11.51	-26.01	-360.53	-418.27	495.73	484.93	10.81	45.872	
2,400.00	2,394.25	2,281.73	2,176.64	5.57	12.31	-25.93	-384.84	-448.96	528.61	517.25	11.37	46.507	
2,500.00	2,493.75	2,376.17	2,262.58	5.85	13.11	-25.87	-409.15	-479.66	561.49	549.56	11.93	47.075	
2,600.00	2,593.25	2,470.61	2,348.52	6.13	13.91	-25.81	-433.47	-510.35	594.37	581.88	12.49	47.584	
2,700.00	2,692.76	2,565.05	2,434.46	6.41	14.72	-25.76	-457.78	-541.04	627.25	614.20	13.06	48.043	
2,800.00	2,792.26	2,659.49	2,520.40	6.70	15.52	-25.71	-482.09	-571.73	660.13	646.51	13.62	48.460	
2,900.00	2,891.77	2,753.93	2,606.33	6.98	16.33	-25.67	-506.40	-602.42	693.02	678.83	14.19	48.839	
3,000.00	2,991.27	2,848.36	2,692.27	7.27	17.13	-25.63	-530.71	-633.12	725.90	711.14	14.76	49.185	
3,100.00	3,090.77	2,942.80	2,778.21	7.55	17.94	-25.60	-555.02	-663.81	758.78	743.45	15.33	49.503	
3,200.00	3,190.28	3,037.24	2,864.15	7.84	18.74	-25.56	-579.34	-694.50	791.66	775.76	15.90	49.795	
3,300.00	3,289.78	3,131.68	2,950.09	8.13	19.55	-25.53	-603.65	-725.19	824.55	808.08	16.47	50.064	
3,400.00	3,389.29	3,226.12	3,036.03	8.42	20.36	-25.51	-627.96	-755.88	857.43	840.39	17.04	50.314	
3,500.00	3,488.79	3,320.55	3,121.97	8.71	21.16	-25.48	-652.27	-786.57	890.31	872.70	17.61	50.545	
3,600.00	3,588.29	3,414.99	3,207.91	9.00	21.97	-25.46	-676.58	-817.27	923.19	905.01	18.19	50.760	
3,700.00	3,687.80	3,509.43	3,293.85	9.29	22.78	-25.44	-700.90	-847.96	956.08	937.32	18.76	50.961	
3,800.00	3,787.30	3,603.87	3,379.79	9.58	23.59	-25.41	-725.21	-878.65	988.96	969.63	19.34	51.148	
3,900.00	3,886.81	3,698.31	3,465.72	9.87	24.39	-25.40	-749.52	-909.34	1,021.84	1,001.94	19.91	51.324	
4,000.00	3,986.31	3,792.75	3,551.66	10.16	25.20	-25.38	-773.83	-940.03	1,054.73	1,034.24	20.48	51.489	
4,100.00	4,085.81	3,887.18	3,637.60	10.45	26.01	-25.36	-798.14	-970.73	1,087.61	1,066.55	21.06	51.643	
4,200.00	4,185.32	3,981.62	3,723.54	10.74	26.82	-25.34	-822.45	-1,001.42	1,120.50	1,098.86	21.64	51.789	
4,300.00	4,284.82	4,076.06	3,809.48	11.03	27.63	-25.33	-846.77	-1,032.11	1,153.38	1,131.17	22.21	51.927	
4,400.00	4,384.32	4,170.50	3,895.42	11.33	28.44	-25.32	-871.08	-1,062.80	1,186.26	1,163.48	22.79	52.057	
4,500.00	4,483.83	4,264.94	3,981.36	11.62	29.24	-25.30	-895.39	-1,093.49	1,219.15	1,195.78	23.36	52.180	
4,600.00	4,583.33	4,359.37	4,067.30	11.91	30.05	-25.29	-919.70	-1,124.19	1,252.03	1,228.09	23.94	52.296	
4,700.00	4,682.84	4,453.81	4,153.24	12.20	30.86	-25.28	-944.01	-1,154.88	1,284.92	1,260.40	24.52	52.407	
4,800.00	4,782.34	4,548.25	4,239.18	12.50	31.67	-25.27	-968.33	-1,185.57	1,317.80	1,292.70	25.10	52.512	
4,900.00	4,881.84	4,642.69	4,325.11	12.79	32.48	-25.26	-992.64	-1,216.26	1,350.68	1,325.01	25.67	52.612	

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

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_ENCORE 3-12
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 4994.00ft (Original Well Elev)
Reference Site:	LARIMER_ENCORE 3-12 PAD	MD Reference:	WELL @ 4994.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_ENCORE 3-12	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_ENCORE 3-12	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 3-22-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design LARIMER_ENCORE 3-12 PAD - P_ENCORE 5-12 - P_ENCORE 5-12 - PLAN #1 3-22-10 RHS												Offset Site Error:	0.00 ft
Survey Program: 0-MWD												Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
5,000.00	4,981.35	4,737.13	4,411.05	13.08	33.29	-25.24	-1,016.95	-1,246.95	1,383.57	1,357.32	26.25	52.707	
5,100.00	5,080.85	4,831.57	4,496.99	13.38	34.10	-25.23	-1,041.26	-1,277.65	1,416.45	1,389.62	26.83	52.797	
5,200.00	5,180.36	4,926.00	4,582.93	13.67	34.91	-25.23	-1,065.57	-1,308.34	1,449.34	1,421.93	27.41	52.884	
5,300.00	5,279.86	5,020.44	4,668.87	13.96	35.72	-25.22	-1,089.89	-1,339.03	1,482.22	1,454.24	27.98	52.967	
5,400.00	5,379.36	5,114.88	4,754.81	14.26	36.53	-25.21	-1,114.20	-1,369.72	1,515.11	1,486.54	28.56	53.046	
5,500.00	5,478.87	5,209.32	4,840.75	14.55	37.34	-25.20	-1,138.51	-1,400.41	1,547.99	1,518.85	29.14	53.121	
5,600.00	5,578.37	5,303.76	4,926.69	14.85	38.15	-25.19	-1,162.82	-1,431.11	1,580.87	1,551.16	29.72	53.194	
5,641.83	5,619.99	5,343.26	4,962.63	14.97	38.48	-25.19	-1,172.99	-1,443.94	1,594.63	1,564.67	29.96	53.223	
5,700.00	5,677.93	5,398.02	5,012.46	15.11	38.95	-25.35	-1,187.09	-1,461.74	1,614.26	1,584.05	30.21	53.432	
5,800.00	5,777.73	5,491.25	5,097.31	15.30	39.75	-25.62	-1,211.09	-1,492.04	1,650.35	1,619.77	30.58	53.961	
5,900.00	5,877.69	5,583.27	5,181.05	15.47	40.54	-25.87	-1,234.78	-1,521.95	1,689.36	1,658.45	30.91	54.652	
5,927.31	5,905.00	5,608.17	5,203.71	15.51	40.75	-134.87	-1,241.19	-1,530.04	1,700.51	1,669.52	31.00	54.864	
6,000.00	5,977.69	5,674.32	5,263.90	15.63	41.32	-134.76	-1,258.22	-1,551.54	1,730.49	1,699.15	31.34	55.214	
6,100.00	6,077.69	5,825.89	5,402.51	15.80	42.46	-134.52	-1,296.28	-1,599.58	1,771.10	1,739.11	31.99	55.365	
6,200.00	6,177.69	6,073.96	5,635.48	15.97	43.79	-134.22	-1,349.06	-1,666.21	1,805.24	1,772.39	32.85	54.961	
6,300.00	6,277.69	6,336.38	5,888.95	16.14	44.88	-134.00	-1,391.05	-1,719.23	1,830.93	1,797.27	33.66	54.392	
6,400.00	6,377.69	6,609.70	6,158.35	16.31	45.66	-133.86	-1,419.29	-1,754.88	1,847.52	1,813.12	34.40	53.708	
6,500.00	6,477.69	6,889.41	6,437.25	16.49	46.07	-133.80	-1,431.56	-1,770.37	1,854.56	1,819.54	35.02	52.953	
6,600.00	6,577.69	7,029.86	6,577.69	16.66	46.17	-133.80	-1,431.98	-1,770.91	1,854.80	1,819.40	35.40	52.395	
6,700.00	6,677.69	7,129.86	6,677.69	16.84	46.23	-133.80	-1,431.98	-1,770.91	1,854.80	1,819.08	35.72	51.923	
6,800.00	6,777.69	7,229.86	6,777.69	17.01	46.29	-133.80	-1,431.98	-1,770.91	1,854.80	1,818.76	36.05	51.455	
6,900.00	6,877.69	7,329.86	6,877.69	17.19	46.35	-133.80	-1,431.98	-1,770.91	1,854.80	1,818.43	36.37	50.993	
7,000.00	6,977.69	7,429.86	6,977.69	17.37	46.41	-133.80	-1,431.98	-1,770.91	1,854.80	1,818.10	36.70	50.535	
7,100.00	7,077.69	7,529.86	7,077.69	17.55	46.48	-133.80	-1,431.98	-1,770.91	1,854.80	1,817.77	37.03	50.083	
7,200.00	7,177.69	7,629.86	7,177.69	17.73	46.54	-133.80	-1,431.98	-1,770.91	1,854.80	1,817.44	37.37	49.635	
7,300.00	7,277.69	7,729.86	7,277.69	17.91	46.61	-133.80	-1,431.98	-1,770.91	1,854.80	1,817.10	37.70	49.193	
7,400.00	7,377.69	7,829.86	7,377.69	18.10	46.67	-133.80	-1,431.98	-1,770.91	1,854.80	1,816.76	38.04	48.756	
7,500.00	7,477.69	7,929.86	7,477.69	18.28	46.74	-133.80	-1,431.98	-1,770.91	1,854.80	1,816.42	38.38	48.324	
7,600.00	7,577.69	8,029.86	7,577.69	18.47	46.81	-133.80	-1,431.98	-1,770.91	1,854.80	1,816.08	38.72	47.897	
7,700.00	7,677.69	8,129.86	7,677.69	18.65	46.88	-133.80	-1,431.98	-1,770.91	1,854.80	1,815.74	39.07	47.475	
7,800.00	7,777.69	8,229.86	7,777.69	18.84	46.95	-133.80	-1,431.98	-1,770.91	1,854.80	1,815.39	39.42	47.058	
7,892.31	7,870.00	8,322.17	7,870.00	19.01	47.01	-133.80	-1,431.98	-1,770.91	1,854.80	1,815.07	39.74	46.678	

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_ENCORE 3-12
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 4994.00ft (Original Well Elev)
Reference Site:	LARIMER_ENCORE 3-12 PAD	MD Reference:	WELL @ 4994.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_ENCORE 3-12	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_ENCORE 3-12	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 3-22-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 ft
Survey Program: 0-MWD												Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis			Distance						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	-178.81	-40.08	-0.84	40.09				
100.00	100.00	100.00	100.00	0.10	0.10	-178.81	-40.08	-0.84	40.09	39.89	0.19	209.816	
200.00	200.00	200.00	200.00	0.32	0.32	-178.81	-40.08	-0.84	40.09	39.45	0.64	62.577	
300.00	300.00	300.00	300.00	0.55	0.55	-178.81	-40.08	-0.84	40.09	39.00	1.09	36.772	
400.00	400.00	400.00	400.00	0.77	0.77	-178.81	-40.08	-0.84	40.09	38.55	1.54	26.036	
500.00	500.00	500.00	500.00	0.99	0.99	-178.81	-40.08	-0.84	40.09	38.10	1.99	20.152	
600.00	600.00	600.00	600.00	1.22	1.22	-178.81	-40.08	-0.84	40.09	37.65	2.44	16.437	
700.00	700.00	700.00	700.00	1.44	1.44	-178.81	-40.08	-0.84	40.09	37.20	2.89	13.879	
800.00	800.00	800.00	800.00	1.67	1.67	-178.81	-40.08	-0.84	40.09	36.75	3.34	12.010	
900.00	900.00	900.00	900.00	1.89	1.89	-178.81	-40.08	-0.84	40.09	36.30	3.79	10.584	
1,000.00	1,000.00	1,000.00	1,000.00	2.12	2.12	-178.81	-40.08	-0.84	40.09	35.85	4.24	9.461	
1,050.00	1,050.00	1,050.00	1,050.00	2.23	2.23	-178.81	-40.08	-0.84	40.09	35.62	4.46	8.985 CC, ES	
1,100.00	1,100.00	1,099.33	1,099.33	2.33	2.33	-70.27	-40.48	-0.96	40.35	35.69	4.66	8.656	
1,200.00	1,199.93	1,197.93	1,197.87	2.53	2.50	-73.28	-43.72	-1.98	42.53	37.50	5.03	8.463 SF	
1,300.00	1,299.68	1,296.32	1,296.01	2.73	2.68	-78.41	-50.17	-4.02	47.20	41.79	5.41	8.723	
1,335.48	1,335.01	1,331.14	1,330.69	2.81	2.75	-80.49	-53.22	-4.98	49.53	43.98	5.56	8.916	
1,400.00	1,399.21	1,394.37	1,393.54	2.95	2.88	-83.71	-59.79	-7.05	54.83	49.01	5.82	9.415	
1,500.00	1,498.71	1,492.01	1,490.26	3.19	3.11	-86.26	-72.53	-11.07	65.65	59.39	6.26	10.487	
1,600.00	1,598.22	1,589.02	1,585.85	3.43	3.36	-86.70	-88.30	-16.04	79.35	72.63	6.72	11.810	
1,700.00	1,697.72	1,685.19	1,680.00	3.68	3.66	-85.92	-106.96	-21.92	95.84	88.64	7.20	13.311	
1,800.00	1,797.22	1,780.31	1,772.42	3.94	4.01	-84.51	-128.38	-28.68	115.14	107.44	7.70	14.956	
1,900.00	1,896.73	1,874.19	1,862.87	4.20	4.40	-82.83	-152.37	-36.24	137.28	129.07	8.21	16.720	
2,000.00	1,996.23	1,966.67	1,951.11	4.47	4.84	-81.10	-178.76	-44.56	162.29	153.56	8.73	18.586	
2,100.00	2,095.73	2,057.58	2,036.94	4.74	5.33	-79.42	-207.33	-53.57	190.18	180.92	9.26	20.537	
2,200.00	2,195.24	2,147.01	2,120.40	5.01	5.86	-77.84	-237.96	-63.23	220.91	211.12	9.79	22.561	
2,300.00	2,294.74	2,241.55	2,208.13	5.29	6.46	-76.44	-271.55	-73.82	253.03	242.68	10.35	24.447	
2,400.00	2,394.25	2,336.10	2,295.87	5.57	7.08	-75.36	-305.14	-84.41	285.26	274.34	10.91	26.135	
2,500.00	2,493.75	2,430.64	2,383.61	5.85	7.72	-74.50	-338.73	-95.00	317.56	306.07	11.49	27.648	
2,600.00	2,593.25	2,525.18	2,471.34	6.13	8.36	-73.79	-372.32	-105.59	349.91	337.85	12.06	29.008	
2,700.00	2,692.76	2,619.72	2,559.08	6.41	9.02	-73.21	-405.91	-116.18	382.30	369.66	12.64	30.235	
2,800.00	2,792.26	2,714.26	2,646.82	6.70	9.68	-72.71	-439.50	-126.77	414.72	401.49	13.23	31.346	
2,900.00	2,891.77	2,808.81	2,734.55	6.98	10.35	-72.29	-473.09	-137.36	447.17	433.35	13.82	32.356	
3,000.00	2,991.27	2,903.35	2,822.29	7.27	11.02	-71.92	-506.68	-147.95	479.63	465.22	14.41	33.278	
3,100.00	3,090.77	2,997.89	2,910.03	7.55	11.70	-71.60	-540.28	-158.54	512.11	497.10	15.01	34.120	
3,200.00	3,190.28	3,092.43	2,997.76	7.84	12.37	-71.32	-573.87	-169.13	544.60	529.00	15.61	34.893	
3,300.00	3,289.78	3,186.98	3,085.50	8.13	13.06	-71.07	-607.46	-179.73	577.11	560.90	16.21	35.605	
3,400.00	3,389.29	3,281.52	3,173.24	8.42	13.74	-70.85	-641.05	-190.32	609.62	592.81	16.81	36.262	
3,500.00	3,488.79	3,376.06	3,260.97	8.71	14.43	-70.65	-674.64	-200.91	642.14	624.72	17.42	36.870	
3,600.00	3,588.29	3,470.60	3,348.71	9.00	15.11	-70.47	-708.23	-211.50	674.66	656.64	18.02	37.435	
3,700.00	3,687.80	3,565.15	3,436.45	9.29	15.80	-70.31	-741.82	-222.09	707.19	688.56	18.63	37.960	
3,800.00	3,787.30	3,659.69	3,524.19	9.58	16.49	-70.16	-775.41	-232.68	739.73	720.49	19.24	38.449	
3,900.00	3,886.81	3,754.23	3,611.92	9.87	17.18	-70.02	-809.00	-243.27	772.27	752.42	19.85	38.906	
4,000.00	3,986.31	3,848.77	3,699.66	10.16	17.88	-69.89	-842.59	-253.86	804.81	784.35	20.46	39.334	
4,100.00	4,085.81	3,943.32	3,787.40	10.45	18.57	-69.78	-876.19	-264.45	837.36	816.28	21.07	39.736	
4,200.00	4,185.32	4,037.86	3,875.13	10.74	19.26	-69.67	-909.78	-275.04	869.90	848.22	21.69	40.113	
4,300.00	4,284.82	4,132.40	3,962.87	11.03	19.96	-69.57	-943.37	-285.63	902.46	880.16	22.30	40.468	
4,400.00	4,384.32	4,226.94	4,050.61	11.33	20.65	-69.48	-976.96	-296.23	935.01	912.09	22.92	40.803	
4,500.00	4,483.83	4,321.48	4,138.34	11.62	21.35	-69.39	-1,010.55	-306.82	967.57	944.03	23.53	41.119	
4,600.00	4,583.33	4,416.03	4,226.08	11.91	22.05	-69.31	-1,044.14	-317.41	1,000.12	975.98	24.15	41.418	
4,700.00	4,682.84	4,510.57	4,313.82	12.20	22.74	-69.23	-1,077.73	-328.00	1,032.68	1,007.92	24.76	41.701	
4,800.00	4,782.34	4,605.11	4,401.55	12.50	23.44	-69.16	-1,111.32	-338.59	1,065.24	1,039.86	25.38	41.969	
4,900.00	4,881.84	4,699.65	4,489.29	12.79	24.14	-69.09	-1,144.91	-349.18	1,097.81	1,071.81	26.00	42.224	

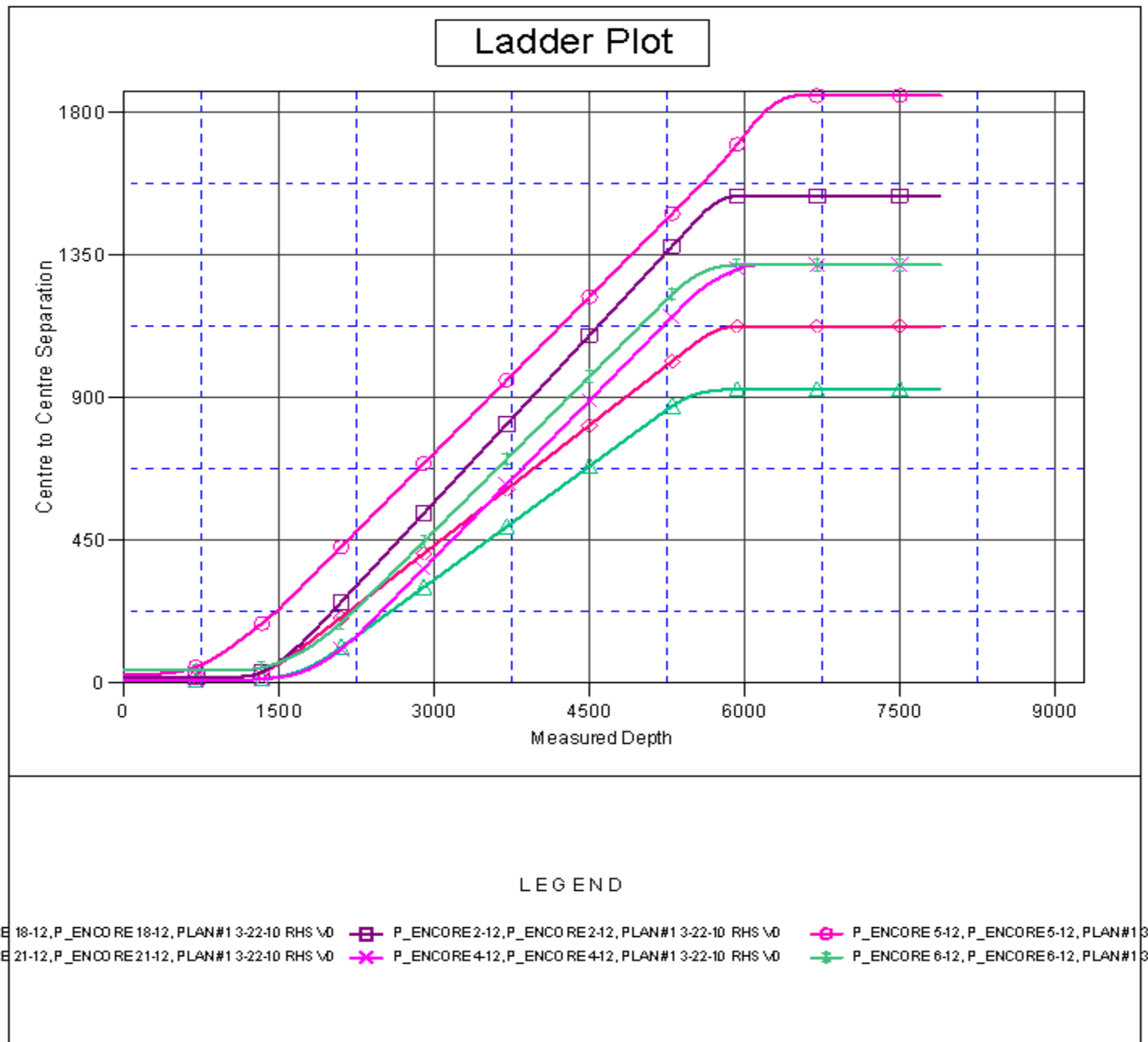
CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_ENCORE 3-12
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 4994.00ft (Original Well Elev)
Reference Site:	LARIMER_ENCORE 3-12 PAD	MD Reference:	WELL @ 4994.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_ENCORE 3-12	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_ENCORE 3-12	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 3-22-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design LARIMER_ENCORE 3-12 PAD - P_ENCORE 6-12 - P_ENCORE 6-12 - PLAN #1 3-22-10 RHS												Offset Site Error:	0.00 ft
Survey Program: 0-MWD												Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5,000.00	4,981.35	4,794.20	4,577.03	13.08	24.84	-69.03	-1,178.50	-359.77	1,130.37	1,103.75	26.62	42.466	
5,100.00	5,080.85	4,888.74	4,664.76	13.38	25.53	-68.97	-1,212.10	-370.36	1,162.93	1,135.70	27.24	42.697	
5,200.00	5,180.36	4,983.28	4,752.50	13.67	26.23	-68.91	-1,245.69	-380.95	1,195.50	1,167.64	27.86	42.917	
5,300.00	5,279.86	5,093.29	4,854.68	13.96	27.00	-68.86	-1,284.55	-393.21	1,227.93	1,199.41	28.52	43.053	
5,400.00	5,379.36	5,257.51	5,009.48	14.26	27.80	-68.86	-1,336.77	-409.67	1,256.69	1,227.38	29.31	42.882	
5,500.00	5,478.87	5,426.72	5,171.99	14.55	28.52	-68.99	-1,381.64	-423.82	1,280.05	1,249.96	30.09	42.541	
5,600.00	5,578.37	5,599.92	5,340.92	14.85	29.14	-69.24	-1,418.01	-435.29	1,297.79	1,266.93	30.86	42.048	
5,641.83	5,619.99	5,673.29	5,413.11	14.97	29.36	-69.38	-1,430.47	-439.21	1,303.51	1,272.33	31.18	41.805	
5,700.00	5,677.93	5,775.98	5,514.66	15.11	29.63	-69.70	-1,444.93	-443.77	1,309.98	1,278.40	31.58	41.484	
5,800.00	5,777.73	5,953.86	5,691.65	15.30	30.00	-70.07	-1,461.75	-449.08	1,317.38	1,285.24	32.13	40.999	
5,900.00	5,877.69	6,132.70	5,870.34	15.47	30.22	-70.23	-1,468.06	-451.07	1,320.01	1,287.44	32.57	40.534	
5,927.31	5,905.00	6,167.37	5,905.00	15.51	30.26	-179.18	-1,468.11	-451.08	1,319.99	1,287.34	32.65	40.433	
6,000.00	5,977.69	6,240.06	5,977.69	15.63	30.31	-179.18	-1,468.11	-451.08	1,319.99	1,287.12	32.87	40.157	
6,100.00	6,077.69	6,340.06	6,077.69	15.80	30.39	-179.18	-1,468.11	-451.08	1,319.99	1,286.81	33.18	39.781	
6,200.00	6,177.69	6,440.06	6,177.69	15.97	30.47	-179.18	-1,468.11	-451.08	1,319.99	1,286.50	33.49	39.409	
6,300.00	6,277.69	6,540.06	6,277.69	16.14	30.55	-179.18	-1,468.11	-451.08	1,319.99	1,286.18	33.81	39.040	
6,400.00	6,377.69	6,640.06	6,377.69	16.31	30.63	-179.18	-1,468.11	-451.08	1,319.99	1,285.86	34.13	38.674	
6,500.00	6,477.69	6,740.06	6,477.69	16.49	30.72	-179.18	-1,468.11	-451.08	1,319.99	1,285.54	34.45	38.313	
6,600.00	6,577.69	6,840.06	6,577.69	16.66	30.80	-179.18	-1,468.11	-451.08	1,319.99	1,285.21	34.78	37.954	
6,700.00	6,677.69	6,940.06	6,677.69	16.84	30.89	-179.18	-1,468.11	-451.08	1,319.99	1,284.89	35.11	37.600	
6,800.00	6,777.69	7,040.06	6,777.69	17.01	30.98	-179.18	-1,468.11	-451.08	1,319.99	1,284.55	35.44	37.249	
6,900.00	6,877.69	7,140.06	6,877.69	17.19	31.07	-179.18	-1,468.11	-451.08	1,319.99	1,284.22	35.77	36.903	
7,000.00	6,977.69	7,240.06	6,977.69	17.37	31.16	-179.18	-1,468.11	-451.08	1,319.99	1,283.89	36.10	36.560	
7,100.00	7,077.69	7,340.06	7,077.69	17.55	31.25	-179.18	-1,468.11	-451.08	1,319.99	1,283.55	36.44	36.221	
7,200.00	7,177.69	7,440.06	7,177.69	17.73	31.34	-179.18	-1,468.11	-451.08	1,319.99	1,283.21	36.78	35.886	
7,300.00	7,277.69	7,540.06	7,277.69	17.91	31.44	-179.18	-1,468.11	-451.08	1,319.99	1,282.87	37.13	35.555	
7,400.00	7,377.69	7,640.06	7,377.69	18.10	31.53	-179.18	-1,468.11	-451.08	1,319.99	1,282.52	37.47	35.228	
7,500.00	7,477.69	7,740.06	7,477.69	18.28	31.63	-179.18	-1,468.11	-451.08	1,319.99	1,282.17	37.82	34.905	
7,600.00	7,577.69	7,840.06	7,577.69	18.47	31.73	-179.18	-1,468.11	-451.08	1,319.99	1,281.83	38.17	34.586	
7,700.00	7,677.69	7,940.06	7,677.69	18.65	31.83	-179.18	-1,468.11	-451.08	1,319.99	1,281.47	38.52	34.270	
7,800.00	7,777.69	8,040.06	7,777.69	18.84	31.93	-179.18	-1,468.11	-451.08	1,319.99	1,281.12	38.87	33.959	
7,892.31	7,870.00	8,132.37	7,870.00	19.01	32.02	-179.18	-1,468.11	-451.08	1,319.99	1,280.79	39.20	33.676	

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_ENCORE 3-12
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 4994.00ft (Original Well Elev)
Reference Site:	LARIMER_ENCORE 3-12 PAD	MD Reference:	WELL @ 4994.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_ENCORE 3-12	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_ENCORE 3-12	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 3-22-10 RHS	Offset TVD Reference:	Offset Datum

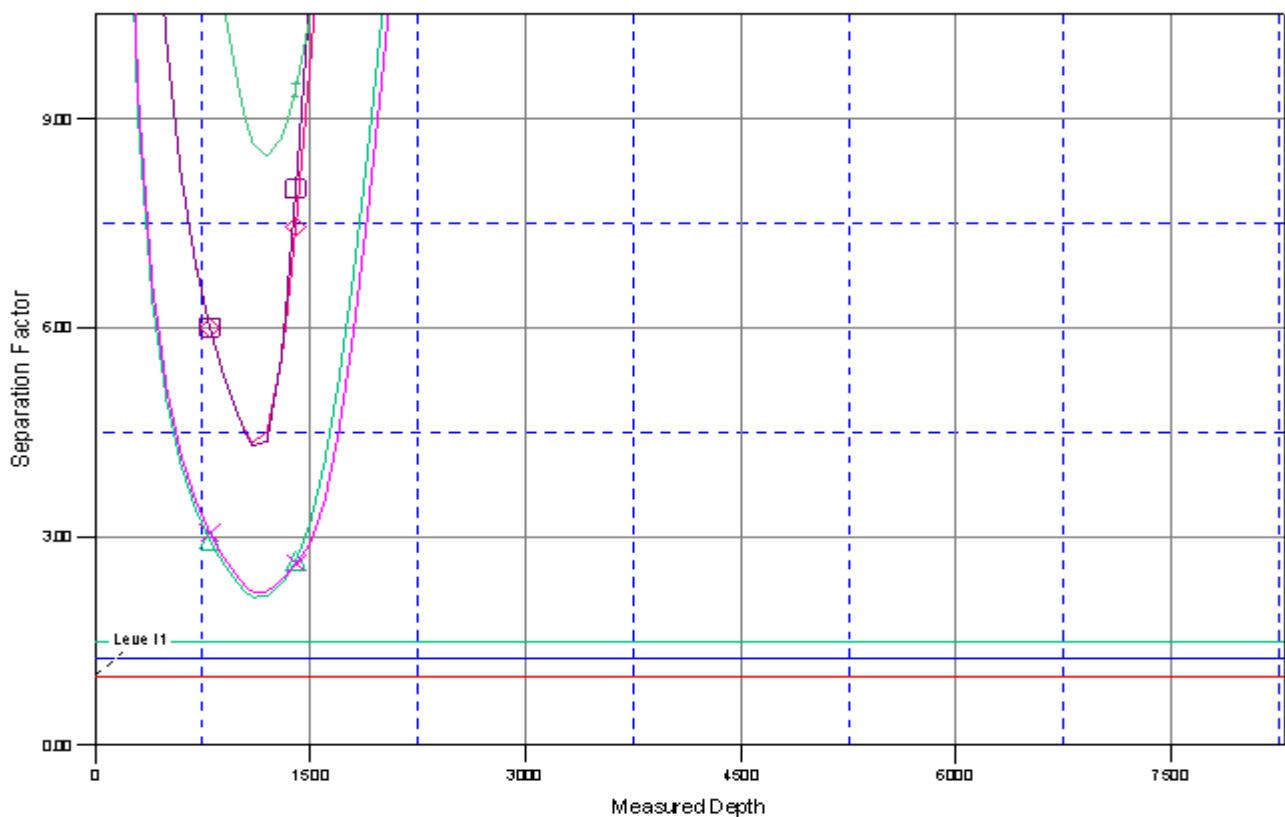
Reference Depths are relative to WELL @ 4994.00ft (Original Well Elev) Coordinates are relative to: P_ENCORE 3-12
Offset Depths are relative to Offset Datum Coordinate System is US State Plane 1983, Colorado Northern Zone
Central Meridian is 105° 30' 0.000 W ° Grid Convergence at Surface is: 0.35°



Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_ENCORE 3-12
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 4994.00ft (Original Well Elev)
Reference Site:	LARIMER_ENCORE 3-12 PAD	MD Reference:	WELL @ 4994.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_ENCORE 3-12	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_ENCORE 3-12	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 3-22-10 RHS	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 4994.00ft (Original Well Elev) Coordinates are relative to: P_ENCORE 3-12
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: 0.35°

Separation Factor Plot



LEGEND

RE 18-12,P_ENCORE 18-12,PLAN#1 3-22-10 RHS \0 P_ENCORE 2-12,P_ENCORE 2-12,PLAN#1 3-22-10 RHS \0 P_ENCORE 5-12,P_ENCORE 5-12,PLAN#1 3-22-10 RHS \0
RE 21-12,P_ENCORE 21-12,PLAN#1 3-22-10 RHS \0 P_ENCORE 4-12,P_ENCORE 4-12,PLAN#1 3-22-10 RHS \0 P_ENCORE 6-12,P_ENCORE 6-12,PLAN#1 3-22-10 RHS \0