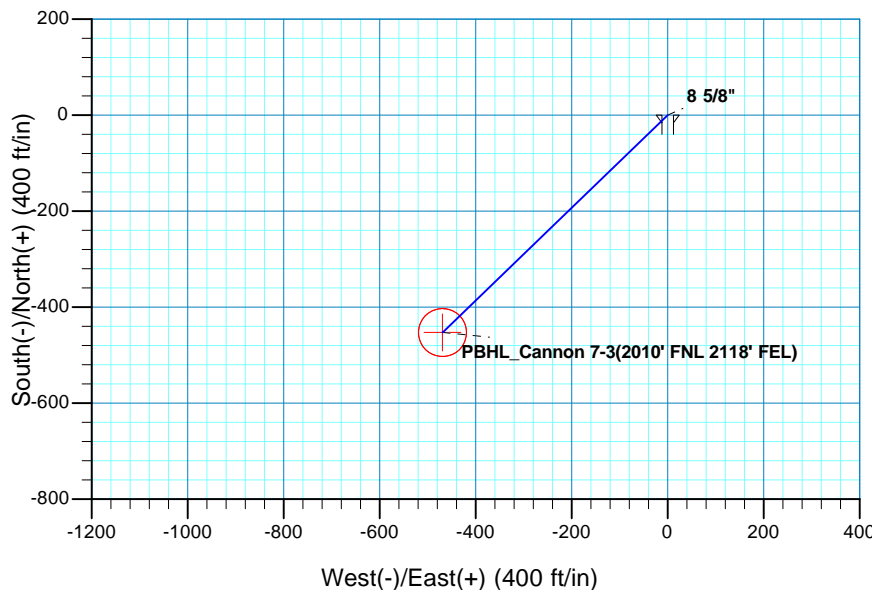
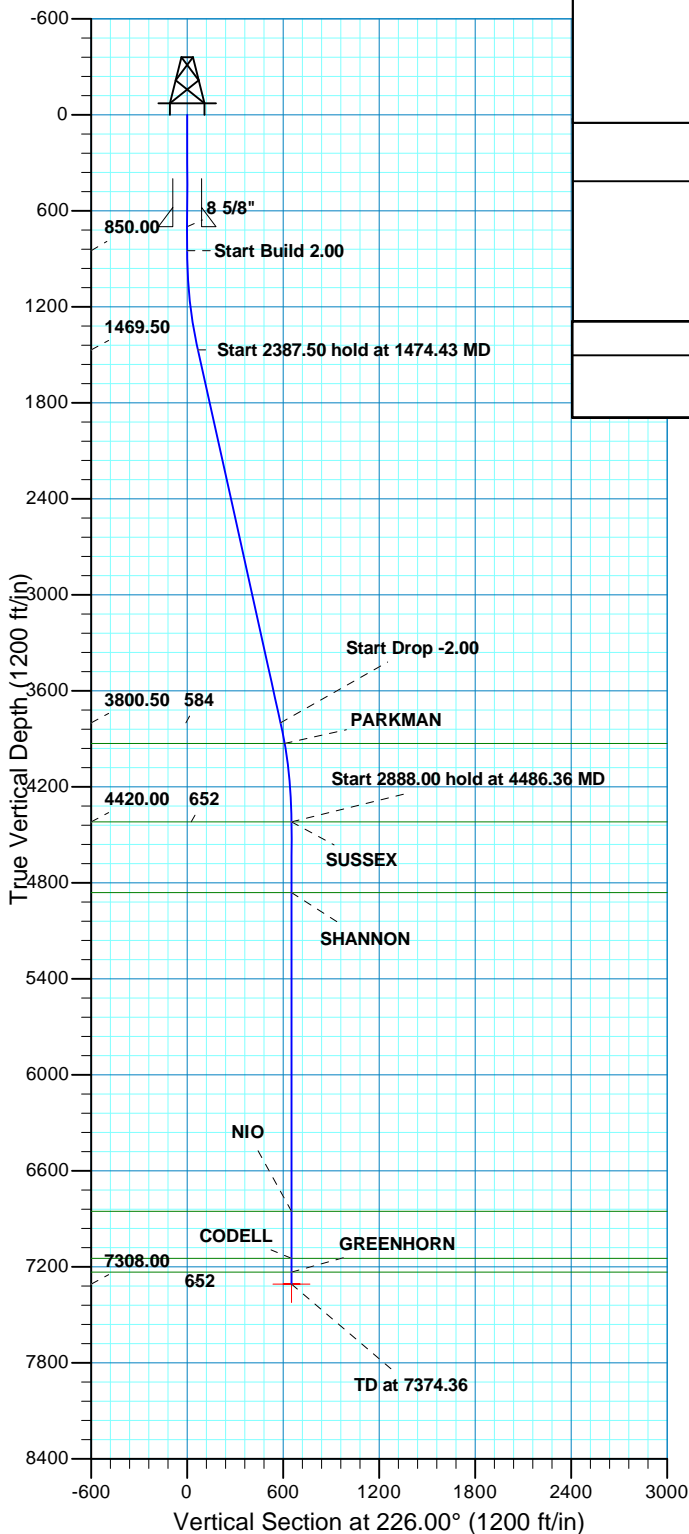


WELL DETAILS: P_Cannon 7-3					
GL 4844' & 15' RKB @ 4859.00ft (ASSUMED)					
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	1306043.51	3238587.60	40° 10' 13.195 N	104° 38' 46.403 W

DESIGN TARGET DETAILS							
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
PBHL	7308.00	-452.78	-468.93	1305586.23	3238123.05	40° 10' 8.720 N	104° 38' 52.444 W
- plan hits target center							
Shape							
Circle (Radius: 50.00)							

SECTION DETAILS										
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
850.00	0.00	0.00	850.00	0.00	0.00	0.00	0.00	0.00		
1474.43	12.49	226.00	1469.50	-47.08	-48.76	2.00	226.00	67.78		
3861.93	12.49	226.00	3800.50	-405.70	-420.17	0.00	0.00	584.07		
4486.36	0.00	0.00	4420.00	-452.78	-468.93	2.00	180.00	651.85		
7374.36	0.00	0.00	7308.00	-452.78	-468.93	0.00	0.00	651.85	PBHL_Cannon 7-3(2010' FNL 2118' FEL)	
PROJECT DETAILS: COLORADO NORTHERN ZONE - 83 Geodetic System: US State Plane 1983 Datum: North American Datum 1983 Ellipsoid: GRS 1980 Zone: Colorado Northern Zone Location: SECTION 3 T2N R65W System Datum: Mean Sea Level						FORMATION TOP DETAILS				
						TVDPath	MDPath	Formation		
						3929.00	3992.92	PARKMAN		
						4420.00	4486.36	SUSSEX		
						4862.00	4928.36	SHANNON		
						6854.00	6920.36	NIO		
						7148.00	7214.36	CODELL		
						7234.00	7300.36	GREENHORN		
						CASING DETAILS				
			TVD	MD	Name	Size				
			700.00	700.00	8 5/8"	8.625				



US ROCKIES REGION PLANNING

COLORADO NORTHERN ZONE - 83

WELD_CANNON 17-3 PAD

P_Cannon 7-3

P_Cannon 7-3

Plan: Plan #2 9-13-10 RHS

Standard Planning Report

13 September, 2010

Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well P_Cannon 7-3
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 4844' & 15' RKB @ 4859.00ft (ASSUMED)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	GL 4844' & 15' RKB @ 4859.00ft (ASSUMED)
Site:	WELD_CANNON 17-3 PAD	North Reference:	True
Well:	P_Cannon 7-3	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_Cannon 7-3		
Design:	Plan #2 9-13-10 RHS		

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

Site		WELD_CANNON 17-3 PAD, SECTION 3 T2N R65W			
Site Position:		Northing:	1,306,054.71 usft	Latitude:	40° 10' 13.307 N
From:	Lat/Long	Easting:	3,238,576.31 usft	Longitude:	104° 38' 46.547 W
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	Grid Convergence:	0.55 °

Well	P_Cannon 7-3, 1554' FSL 1657' FEL					
Well Position	+N/-S	-11.31 ft	Northing:	1,306,043.51 usft	Latitude:	40° 10' 13.195 N
	+E/-W	11.18 ft	Easting:	3,238,587.60 usft	Longitude:	104° 38' 46.403 W
Position Uncertainty		0.00 ft	Wellhead Elevation:		Ground Level:	4,844.00 ft

Wellbore	P_Cannon 7-3				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	08/17/2010	8.89	66.91	53,111

Design	Plan #2 9-13-10 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	226.00

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	
850.00	0.00	0.00	850.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,474.43	12.49	226.00	1,469.50	-47.08	-48.76	2.00	2.00	0.00	226.00	
3,861.93	12.49	226.00	3,800.50	-405.70	-420.17	0.00	0.00	0.00	0.00	
4,486.36	0.00	0.00	4,420.00	-452.78	-468.93	2.00	-2.00	0.00	180.00	
7,374.36	0.00	0.00	7,308.00	-452.78	-468.93	0.00	0.00	0.00	0.00	PBHL_Cannon 7-3(2C

Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well P_Cannon 7-3
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 4844' & 15' RKB @ 4859.00ft (ASSUMED)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	GL 4844' & 15' RKB @ 4859.00ft (ASSUMED)
Site:	WELD_CANNON 17-3 PAD	North Reference:	True
Well:	P_Cannon 7-3	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_Cannon 7-3		
Design:	Plan #2 9-13-10 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)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	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
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
8 5/8"									
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
850.00	0.00	0.00	850.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 2.00									
900.00	1.00	226.00	900.00	-0.30	-0.31	0.44	2.00	2.00	0.00
1,000.00	3.00	226.00	999.93	-2.73	-2.82	3.93	2.00	2.00	0.00
1,100.00	5.00	226.00	1,099.68	-7.57	-7.84	10.90	2.00	2.00	0.00
1,200.00	7.00	226.00	1,199.13	-14.83	-15.36	21.35	2.00	2.00	0.00
1,300.00	9.00	226.00	1,298.15	-24.50	-25.37	35.27	2.00	2.00	0.00
1,400.00	11.00	226.00	1,396.63	-36.56	-37.86	52.63	2.00	2.00	0.00
1,474.43	12.49	226.00	1,469.50	-47.08	-48.76	67.78	2.00	2.00	0.00
Start 2387.50 hold at 1474.43 MD									
1,500.00	12.49	226.00	1,494.46	-50.92	-52.74	73.31	0.00	0.00	0.00
1,600.00	12.49	226.00	1,592.10	-65.94	-68.30	94.94	0.00	0.00	0.00
1,700.00	12.49	226.00	1,689.73	-80.97	-83.85	116.56	0.00	0.00	0.00
1,800.00	12.49	226.00	1,787.36	-95.99	-99.41	138.19	0.00	0.00	0.00
1,900.00	12.49	226.00	1,885.00	-111.01	-114.97	159.81	0.00	0.00	0.00
2,000.00	12.49	226.00	1,982.63	-126.03	-130.52	181.44	0.00	0.00	0.00
2,100.00	12.49	226.00	2,080.27	-141.05	-146.08	203.06	0.00	0.00	0.00
2,200.00	12.49	226.00	2,177.90	-156.07	-161.64	224.68	0.00	0.00	0.00
2,300.00	12.49	226.00	2,275.53	-171.09	-177.19	246.31	0.00	0.00	0.00
2,400.00	12.49	226.00	2,373.17	-186.11	-192.75	267.93	0.00	0.00	0.00
2,500.00	12.49	226.00	2,470.80	-201.13	-208.30	289.56	0.00	0.00	0.00
2,600.00	12.49	226.00	2,568.44	-216.15	-223.86	311.18	0.00	0.00	0.00
2,700.00	12.49	226.00	2,666.07	-231.17	-239.42	332.81	0.00	0.00	0.00
2,800.00	12.49	226.00	2,763.70	-246.19	-254.97	354.43	0.00	0.00	0.00
2,900.00	12.49	226.00	2,861.34	-261.21	-270.53	376.06	0.00	0.00	0.00
3,000.00	12.49	226.00	2,958.97	-276.23	-286.09	397.68	0.00	0.00	0.00
3,100.00	12.49	226.00	3,056.61	-291.25	-301.64	419.30	0.00	0.00	0.00
3,200.00	12.49	226.00	3,154.24	-306.27	-317.20	440.93	0.00	0.00	0.00
3,300.00	12.49	226.00	3,251.87	-321.29	-332.76	462.55	0.00	0.00	0.00
3,400.00	12.49	226.00	3,349.51	-336.31	-348.31	484.18	0.00	0.00	0.00
3,500.00	12.49	226.00	3,447.14	-351.34	-363.87	505.80	0.00	0.00	0.00
3,600.00	12.49	226.00	3,544.77	-366.36	-379.42	527.43	0.00	0.00	0.00
3,700.00	12.49	226.00	3,642.41	-381.38	-394.98	549.05	0.00	0.00	0.00
3,800.00	12.49	226.00	3,740.04	-396.40	-410.54	570.68	0.00	0.00	0.00
3,861.93	12.49	226.00	3,800.50	-405.70	-420.17	584.07	0.00	0.00	0.00
Start Drop -2.00									
3,900.00	11.73	226.00	3,837.73	-411.25	-425.92	592.05	2.00	-2.00	0.00
3,992.92	9.87	226.00	3,929.00	-423.34	-438.44	609.46	2.00	-2.00	0.00
PARKMAN									
4,000.00	9.73	226.00	3,935.98	-424.17	-439.30	610.67	2.00	-2.00	0.00
4,100.00	7.73	226.00	4,034.81	-434.71	-450.22	625.84	2.00	-2.00	0.00

Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well P_Cannon 7-3
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 4844' & 15' RKB @ 4859.00ft (ASSUMED)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	GL 4844' & 15' RKB @ 4859.00ft (ASSUMED)
Site:	WELD_CANNON 17-3 PAD	North Reference:	True
Well:	P_Cannon 7-3	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_Cannon 7-3		
Design:	Plan #2 9-13-10 RHS		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,200.00	5.73	226.00	4,134.12	-442.85	-458.65	637.55	2.00	-2.00	0.00
4,300.00	3.73	226.00	4,233.78	-448.57	-464.57	645.79	2.00	-2.00	0.00
4,400.00	1.73	226.00	4,333.66	-451.88	-468.00	650.55	2.00	-2.00	0.00
4,486.36	0.00	0.00	4,420.00	-452.78	-468.93	651.85	2.00	-2.00	0.00
Start 2888.00 hold at 4486.36 MD - SUSSEX									
4,500.00	0.00	0.00	4,433.64	-452.78	-468.93	651.85	0.00	0.00	0.00
4,600.00	0.00	0.00	4,533.64	-452.78	-468.93	651.85	0.00	0.00	0.00
4,700.00	0.00	0.00	4,633.64	-452.78	-468.93	651.85	0.00	0.00	0.00
4,800.00	0.00	0.00	4,733.64	-452.78	-468.93	651.85	0.00	0.00	0.00
4,900.00	0.00	0.00	4,833.64	-452.78	-468.93	651.85	0.00	0.00	0.00
4,928.36	0.00	0.00	4,862.00	-452.78	-468.93	651.85	0.00	0.00	0.00
SHANNON									
5,000.00	0.00	0.00	4,933.64	-452.78	-468.93	651.85	0.00	0.00	0.00
5,100.00	0.00	0.00	5,033.64	-452.78	-468.93	651.85	0.00	0.00	0.00
5,200.00	0.00	0.00	5,133.64	-452.78	-468.93	651.85	0.00	0.00	0.00
5,300.00	0.00	0.00	5,233.64	-452.78	-468.93	651.85	0.00	0.00	0.00
5,400.00	0.00	0.00	5,333.64	-452.78	-468.93	651.85	0.00	0.00	0.00
5,500.00	0.00	0.00	5,433.64	-452.78	-468.93	651.85	0.00	0.00	0.00
5,600.00	0.00	0.00	5,533.64	-452.78	-468.93	651.85	0.00	0.00	0.00
5,700.00	0.00	0.00	5,633.64	-452.78	-468.93	651.85	0.00	0.00	0.00
5,800.00	0.00	0.00	5,733.64	-452.78	-468.93	651.85	0.00	0.00	0.00
5,900.00	0.00	0.00	5,833.64	-452.78	-468.93	651.85	0.00	0.00	0.00
6,000.00	0.00	0.00	5,933.64	-452.78	-468.93	651.85	0.00	0.00	0.00
6,100.00	0.00	0.00	6,033.64	-452.78	-468.93	651.85	0.00	0.00	0.00
6,200.00	0.00	0.00	6,133.64	-452.78	-468.93	651.85	0.00	0.00	0.00
6,300.00	0.00	0.00	6,233.64	-452.78	-468.93	651.85	0.00	0.00	0.00
6,400.00	0.00	0.00	6,333.64	-452.78	-468.93	651.85	0.00	0.00	0.00
6,500.00	0.00	0.00	6,433.64	-452.78	-468.93	651.85	0.00	0.00	0.00
6,600.00	0.00	0.00	6,533.64	-452.78	-468.93	651.85	0.00	0.00	0.00
6,700.00	0.00	0.00	6,633.64	-452.78	-468.93	651.85	0.00	0.00	0.00
6,800.00	0.00	0.00	6,733.64	-452.78	-468.93	651.85	0.00	0.00	0.00
6,900.00	0.00	0.00	6,833.64	-452.78	-468.93	651.85	0.00	0.00	0.00
6,920.36	0.00	0.00	6,854.00	-452.78	-468.93	651.85	0.00	0.00	0.00
NIO									
7,000.00	0.00	0.00	6,933.64	-452.78	-468.93	651.85	0.00	0.00	0.00
7,100.00	0.00	0.00	7,033.64	-452.78	-468.93	651.85	0.00	0.00	0.00
7,200.00	0.00	0.00	7,133.64	-452.78	-468.93	651.85	0.00	0.00	0.00
7,214.36	0.00	0.00	7,148.00	-452.78	-468.93	651.85	0.00	0.00	0.00
CODELL									
7,300.00	0.00	0.00	7,233.64	-452.78	-468.93	651.85	0.00	0.00	0.00
7,300.36	0.00	0.00	7,234.00	-452.78	-468.93	651.85	0.00	0.00	0.00
GREENHORN									
7,374.36	0.00	0.00	7,308.00	-452.78	-468.93	651.85	0.00	0.00	0.00
PBHL_Cannon 7-3(2010' FNL 2118' FEL)									

Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well P_Cannon 7-3
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 4844' & 15' RKB @ 4859.00ft (ASSUMED)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	GL 4844' & 15' RKB @ 4859.00ft (ASSUMED)
Site:	WELD_CANNON 17-3 PAD	North Reference:	True
Well:	P_Cannon 7-3	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_Cannon 7-3		
Design:	Plan #2 9-13-10 RHS		

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
PBHL_Cannon 7-3(201C - plan hits target center - Circle (radius 50.00)	0.00	0.00	7,308.00	-452.78	-468.93	1,305,586.23	3,238,123.05	40° 10' 8.720 N	104° 38' 52.444 W

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)	
700.00	700.00	8 5/8"	8.625	11.000	

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
3,992.92	3,929.00	PARKMAN		0.00		
4,486.36	4,420.00	SUSSEX		0.00		
4,928.36	4,862.00	SHANNON		0.00		
6,920.36	6,854.00	NIO		0.00		
7,214.36	7,148.00	CODELL		0.00		
7,300.36	7,234.00	GREENHORN		0.00		

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
850.00	850.00	0.00	0.00	Start Build 2.00	
1,474.43	1,469.50	-47.08	-48.76	Start 2387.50 hold at 1474.43 MD	
3,861.93	3,800.50	-405.70	-420.17	Start Drop -2.00	
4,486.36	4,420.00	-452.78	-468.93	Start 2888.00 hold at 4486.36 MD	
7,374.36	7,308.00	-452.78	-468.93	TD at 7374.36	