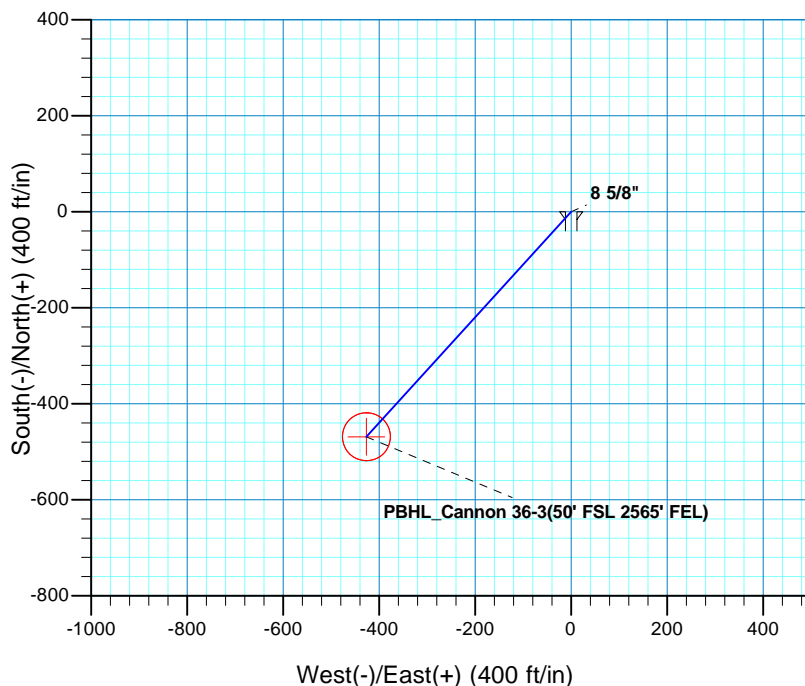
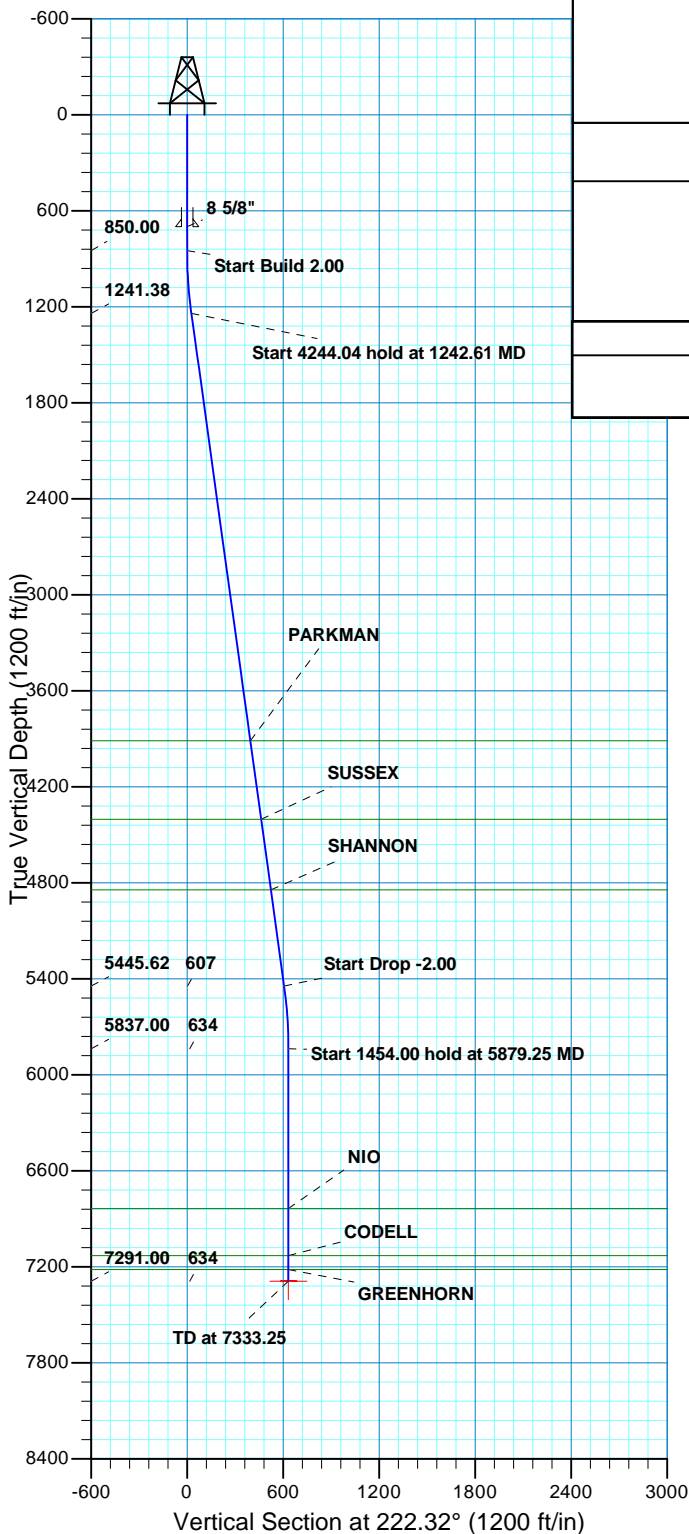


WELL DETAILS: P_Cannon 36-3					
GL 4853' & RKB 15' @ 4868.00ft (ASSUMED)					
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	1302973.19	3238093.09	40° 9' 42.901 N	104° 38' 53.153 W

DESIGN TARGET DETAILS								
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
PBHL	7291.00	-468.45	-426.51	1302500.66	3237671.11	40° 9' 38.272 N	104° 38' 58.646 W	Circle (Radius: 50.00)
- plan hits target center								

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		
850.00	0.00	0.00	850.00	0.00	0.00	0.00	0.00	0.00		
1242.61	7.85	222.32	1241.38	-19.86	-18.08	2.00	222.32	26.86		
5486.64	7.85	222.32	5445.62	-448.59	-408.43	0.00	0.00	606.67		
5879.25	0.00	0.00	5837.00	-468.45	-426.51	2.00	180.00	633.53		
7333.25	0.00	0.00	7291.00	-468.45	-426.51	0.00	0.00	633.53	PBHL_Cannon 36-3(50' FSL 2565' FEL)	
PROJECT DETAILS: COLORADO NORTHERN ZONE - 83						FORMATION TOP DETAILS				
						TVDPath	MDPath	Formation		
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						3912.00	3938.50	PARKMAN		
						4403.00	4434.15	SUSSEX		
						4845.00	4880.34	SHANNON		
						6837.00	6879.25	NIO		
						7131.00	7173.25	CODELL		
						7217.00	7259.25	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 15-3 PAD

P_Cannon 36-3

P_Cannon 36-3

Plan: PLAN #1 8-18-10 RHS

Standard Planning Report

18 August, 2010

Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well P_Cannon 36-3
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 4853' & RKB 15' @ 4868.00ft (ASSUMED)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	GL 4853' & RKB 15' @ 4868.00ft (ASSUMED)
Site:	WELD_CANNON 15-3 PAD	North Reference:	True
Well:	P_Cannon 36-3	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_Cannon 36-3		
Design:	PLAN #1 8-18-10 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 15-3 PAD, SECTION 3 T2N R65W			
Site Position:		Northing:	1,302,962.02 usft	Latitude:	40° 9' 42.790 N
From:	Lat/Long	Easting:	3,238,104.66 usft	Longitude:	104° 38' 53.005 W
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	Grid Convergence:	0.55 °

Well	P_Cannon 36-3, 518' FSL 2143' FEL					
Well Position	+N/-S	11.28 ft	Northing:	1,302,973.19 usft	Latitude:	40° 9' 42.901 N
	+E/-W	-11.46 ft	Easting:	3,238,093.10 usft	Longitude:	104° 38' 53.153 W
Position Uncertainty		0.00 ft	Wellhead Elevation:		Ground Level:	4,853.00 ft

Wellbore	P_Cannon 36-3				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	08/18/2010	8.89	66.91	53,106

Design	PLAN #1 8-18-10 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	222.32

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	
1,242.61	7.85	222.32	1,241.38	-19.86	-18.08	2.00	2.00	0.00	222.32	
5,486.64	7.85	222.32	5,445.62	-448.59	-408.43	0.00	0.00	0.00	0.00	
5,879.25	0.00	0.00	5,837.00	-468.45	-426.51	2.00	-2.00	0.00	180.00	
7,333.25	0.00	0.00	7,291.00	-468.45	-426.51	0.00	0.00	0.00	0.00	PBHL_Cannon 36-3(

Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well P_Cannon 36-3
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 4853' & RKB 15' @ 4868.00ft (ASSUMED)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	GL 4853' & RKB 15' @ 4868.00ft (ASSUMED)
Site:	WELD_CANNON 15-3 PAD	North Reference:	True
Well:	P_Cannon 36-3	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_Cannon 36-3		
Design:	PLAN #1 8-18-10 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	222.32	900.00	-0.32	-0.29	0.44	2.00	2.00	0.00
1,000.00	3.00	222.32	999.93	-2.90	-2.64	3.93	2.00	2.00	0.00
1,100.00	5.00	222.32	1,099.68	-8.06	-7.34	10.90	2.00	2.00	0.00
1,200.00	7.00	222.32	1,199.13	-15.79	-14.38	21.35	2.00	2.00	0.00
1,242.61	7.85	222.32	1,241.38	-19.86	-18.08	26.86	2.00	2.00	0.00
Start 4244.04 hold at 1242.61 MD									
1,300.00	7.85	222.32	1,298.23	-25.66	-23.36	34.70	0.00	0.00	0.00
1,400.00	7.85	222.32	1,397.30	-35.76	-32.56	48.36	0.00	0.00	0.00
1,500.00	7.85	222.32	1,496.36	-45.86	-41.76	62.02	0.00	0.00	0.00
1,600.00	7.85	222.32	1,595.42	-55.96	-50.95	75.69	0.00	0.00	0.00
1,700.00	7.85	222.32	1,694.48	-66.07	-60.15	89.35	0.00	0.00	0.00
1,800.00	7.85	222.32	1,793.55	-76.17	-69.35	103.01	0.00	0.00	0.00
1,900.00	7.85	222.32	1,892.61	-86.27	-78.55	116.67	0.00	0.00	0.00
2,000.00	7.85	222.32	1,991.67	-96.37	-87.74	130.33	0.00	0.00	0.00
2,100.00	7.85	222.32	2,090.73	-106.47	-96.94	143.99	0.00	0.00	0.00
2,200.00	7.85	222.32	2,189.80	-116.58	-106.14	157.66	0.00	0.00	0.00
2,300.00	7.85	222.32	2,288.86	-126.68	-115.34	171.32	0.00	0.00	0.00
2,400.00	7.85	222.32	2,387.92	-136.78	-124.53	184.98	0.00	0.00	0.00
2,500.00	7.85	222.32	2,486.98	-146.88	-133.73	198.64	0.00	0.00	0.00
2,600.00	7.85	222.32	2,586.05	-156.98	-142.93	212.30	0.00	0.00	0.00
2,700.00	7.85	222.32	2,685.11	-167.09	-152.13	225.96	0.00	0.00	0.00
2,800.00	7.85	222.32	2,784.17	-177.19	-161.32	239.63	0.00	0.00	0.00
2,900.00	7.85	222.32	2,883.23	-187.29	-170.52	253.29	0.00	0.00	0.00
3,000.00	7.85	222.32	2,982.29	-197.39	-179.72	266.95	0.00	0.00	0.00
3,100.00	7.85	222.32	3,081.36	-207.49	-188.92	280.61	0.00	0.00	0.00
3,200.00	7.85	222.32	3,180.42	-217.59	-198.11	294.27	0.00	0.00	0.00
3,300.00	7.85	222.32	3,279.48	-227.70	-207.31	307.93	0.00	0.00	0.00
3,400.00	7.85	222.32	3,378.54	-237.80	-216.51	321.60	0.00	0.00	0.00
3,500.00	7.85	222.32	3,477.61	-247.90	-225.71	335.26	0.00	0.00	0.00
3,600.00	7.85	222.32	3,576.67	-258.00	-234.90	348.92	0.00	0.00	0.00
3,700.00	7.85	222.32	3,675.73	-268.10	-244.10	362.58	0.00	0.00	0.00
3,800.00	7.85	222.32	3,774.79	-278.21	-253.30	376.24	0.00	0.00	0.00
3,900.00	7.85	222.32	3,873.86	-288.31	-262.49	389.90	0.00	0.00	0.00
3,938.50	7.85	222.32	3,912.00	-292.20	-266.04	395.16	0.00	0.00	0.00
PARKMAN									
4,000.00	7.85	222.32	3,972.92	-298.41	-271.69	403.57	0.00	0.00	0.00
4,100.00	7.85	222.32	4,071.98	-308.51	-280.89	417.23	0.00	0.00	0.00
4,200.00	7.85	222.32	4,171.04	-318.61	-290.09	430.89	0.00	0.00	0.00
4,300.00	7.85	222.32	4,270.11	-328.72	-299.28	444.55	0.00	0.00	0.00
4,400.00	7.85	222.32	4,369.17	-338.82	-308.48	458.21	0.00	0.00	0.00

Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well P_Cannon 36-3
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 4853' & RKB 15' @ 4868.00ft (ASSUMED)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	GL 4853' & RKB 15' @ 4868.00ft (ASSUMED)
Site:	WELD_CANNON 15-3 PAD	North Reference:	True
Well:	P_Cannon 36-3	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_Cannon 36-3		
Design:	PLAN #1 8-18-10 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)
4,434.15	7.85	222.32	4,403.00	-342.27	-311.62	462.88	0.00	0.00	0.00
SUSSEX									
4,500.00	7.85	222.32	4,468.23	-348.92	-317.68	471.87	0.00	0.00	0.00
4,600.00	7.85	222.32	4,567.29	-359.02	-326.88	485.54	0.00	0.00	0.00
4,700.00	7.85	222.32	4,666.36	-369.12	-336.07	499.20	0.00	0.00	0.00
4,800.00	7.85	222.32	4,765.42	-379.23	-345.27	512.86	0.00	0.00	0.00
4,880.34	7.85	222.32	4,845.00	-387.34	-352.66	523.83	0.00	0.00	0.00
SHANNON									
4,900.00	7.85	222.32	4,864.48	-389.33	-354.47	526.52	0.00	0.00	0.00
5,000.00	7.85	222.32	4,963.54	-399.43	-363.67	540.18	0.00	0.00	0.00
5,100.00	7.85	222.32	5,062.61	-409.53	-372.86	553.84	0.00	0.00	0.00
5,200.00	7.85	222.32	5,161.67	-419.63	-382.06	567.51	0.00	0.00	0.00
5,300.00	7.85	222.32	5,260.73	-429.73	-391.26	581.17	0.00	0.00	0.00
5,400.00	7.85	222.32	5,359.79	-439.84	-400.46	594.83	0.00	0.00	0.00
5,486.64	7.85	222.32	5,445.62	-448.59	-408.43	606.67	0.00	0.00	0.00
Start Drop -2.00									
5,500.00	7.58	222.32	5,458.86	-449.92	-409.63	608.46	2.00	-2.00	0.00
5,600.00	5.58	222.32	5,558.19	-458.39	-417.35	619.93	2.00	-2.00	0.00
5,700.00	3.58	222.32	5,657.87	-464.31	-422.73	627.92	2.00	-2.00	0.00
5,800.00	1.58	222.32	5,757.76	-467.64	-425.77	632.43	2.00	-2.00	0.00
5,879.25	0.00	0.00	5,837.00	-468.45	-426.51	633.53	2.00	-2.00	0.00
Start 1454.00 hold at 5879.25 MD									
5,900.00	0.00	0.00	5,857.75	-468.45	-426.51	633.53	0.00	0.00	0.00
6,000.00	0.00	0.00	5,957.75	-468.45	-426.51	633.53	0.00	0.00	0.00
6,100.00	0.00	0.00	6,057.75	-468.45	-426.51	633.53	0.00	0.00	0.00
6,200.00	0.00	0.00	6,157.75	-468.45	-426.51	633.53	0.00	0.00	0.00
6,300.00	0.00	0.00	6,257.75	-468.45	-426.51	633.53	0.00	0.00	0.00
6,400.00	0.00	0.00	6,357.75	-468.45	-426.51	633.53	0.00	0.00	0.00
6,500.00	0.00	0.00	6,457.75	-468.45	-426.51	633.53	0.00	0.00	0.00
6,600.00	0.00	0.00	6,557.75	-468.45	-426.51	633.53	0.00	0.00	0.00
6,700.00	0.00	0.00	6,657.75	-468.45	-426.51	633.53	0.00	0.00	0.00
6,800.00	0.00	0.00	6,757.75	-468.45	-426.51	633.53	0.00	0.00	0.00
6,879.25	0.00	0.00	6,837.00	-468.45	-426.51	633.53	0.00	0.00	0.00
NIO									
6,900.00	0.00	0.00	6,857.75	-468.45	-426.51	633.53	0.00	0.00	0.00
7,000.00	0.00	0.00	6,957.75	-468.45	-426.51	633.53	0.00	0.00	0.00
7,100.00	0.00	0.00	7,057.75	-468.45	-426.51	633.53	0.00	0.00	0.00
7,173.25	0.00	0.00	7,131.00	-468.45	-426.51	633.53	0.00	0.00	0.00
CODELL									
7,200.00	0.00	0.00	7,157.75	-468.45	-426.51	633.53	0.00	0.00	0.00
7,259.25	0.00	0.00	7,217.00	-468.45	-426.51	633.53	0.00	0.00	0.00
GREENHORN									
7,300.00	0.00	0.00	7,257.75	-468.45	-426.51	633.53	0.00	0.00	0.00
7,333.25	0.00	0.00	7,291.00	-468.45	-426.51	633.53	0.00	0.00	0.00
PBHL_Cannon 36-3(50' FSL 2565' FEL)									

Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well P_Cannon 36-3
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 4853' & RKB 15' @ 4868.00ft (ASSUMED)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	GL 4853' & RKB 15' @ 4868.00ft (ASSUMED)
Site:	WELD_CANNON 15-3 PAD	North Reference:	True
Well:	P_Cannon 36-3	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_Cannon 36-3		
Design:	PLAN #1 8-18-10 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 36-3(50' - plan hits target center - Circle (radius 50.00)	0.00	0.00	7,291.00	-468.45	-426.51	1,302,500.66	3,237,671.11	40° 9' 38.272 N	104° 38' 58.646 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 (°)	
3,938.50	3,912.00	PARKMAN				
4,434.15	4,403.00	SUSSEX				
4,880.34	4,845.00	SHANNON				
6,879.25	6,837.00	NIO				
7,173.25	7,131.00	CODELL				
7,259.25	7,217.00	GREENHORN				

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	
1,242.61	1,241.38	-19.86	-18.08	Start 4244.04 hold at 1242.61 MD	
5,486.64	5,445.62	-448.59	-408.43	Start Drop -2.00	
5,879.25	5,837.00	-468.45	-426.51	Start 1454.00 hold at 5879.25 MD	
7,333.25	7,291.00	-468.45	-426.51	TD at 7333.25	