

WELL DETAILS: P\_BADDING 14-35SX

WELL @ 5123.00ft (Original Well Elev) 5108.00  
+N/-S 0.00 +E/-W 0.00 Northing 1276563.18 Easting 3210447.78 Latitude 40° 5' 24.385 N Longitude 104° 44' 52.116 W

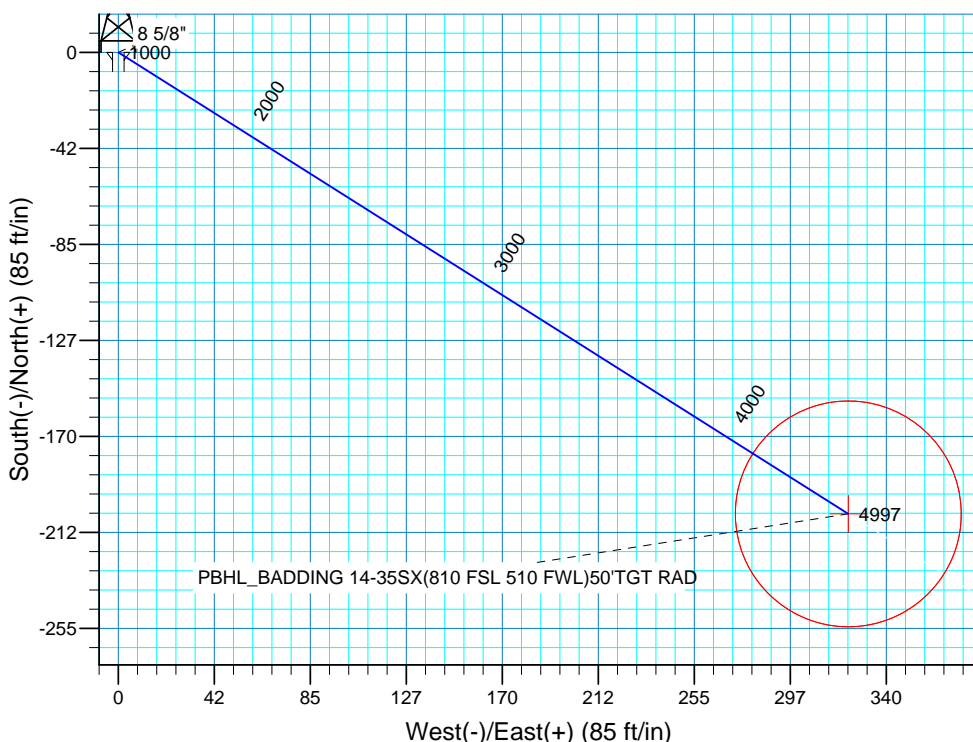
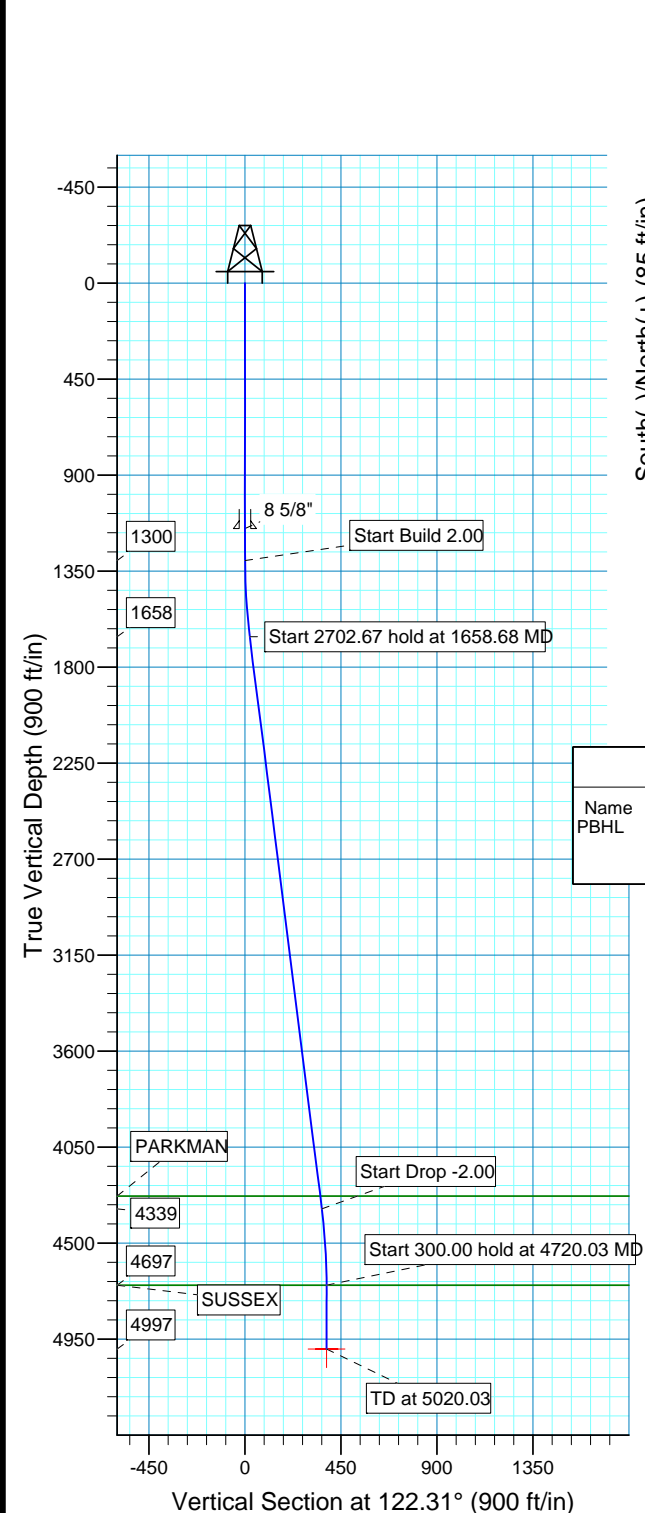
SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	1300.00	0.00	0.00	1300.00	0.00	0.00	0.00	0.00	0.00	
3	1658.68	7.17	122.31	1657.74	-11.99	18.95	2.00	122.31	22.42	
4	4361.35	7.17	122.31	4339.26	-192.37	304.20	0.00	0.00	359.92	
5	4720.03	0.00	0.00	4697.00	-204.35	323.15	2.00	180.00	382.35	
6	5020.03	0.00	0.00	4997.00	-204.35	323.15	0.00	0.00	382.35	PBHL_BADDING 14-35SX(810 FSL 510 FWL)50'TGT RAD



Azimuths to True North  
Magnetic North: 8.99°

Magnetic Field  
Strength: 53140.5nT  
Dip Angle: 66.86°  
Date: 12/31/2009  
Model: IGRF200510



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

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
PBHL	4997.00	-204.35	323.15	1276361.58	3210772.65	40° 5' 22.366 N	104° 44' 47.958 W	Circle (Radius: 50.00)

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
4279.00	4300.62	PARKMAN
4697.00	4720.03	SUSSEX

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 35 T2N R66W  
System Datum: Mean Sea Level  
Local North: True

# **US ROCKIES REGION PLANNING**

**COLORADO NORTHERN ZONE - 83**

**WELD\_BADDING 19-35 PAD**

**P\_BADDING 14-35SX**

**P\_BADDING 14-35SX**

**Plan: PLAN #1 7-19-10 RHS**

## **Standard Planning Report**

**20 July, 2010**

<b>Database:</b>	EDM 2003.16 Single User Db	<b>Local Co-ordinate Reference:</b>	Well P_BADDING 14-35SX
<b>Company:</b>	US ROCKIES REGION PLANNING	<b>TVD Reference:</b>	WELL @ 5123.00ft (Original Well Elev)
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>MD Reference:</b>	WELL @ 5123.00ft (Original Well Elev)
<b>Site:</b>	WELD_BADDING 19-35 PAD	<b>North Reference:</b>	True
<b>Well:</b>	P_BADDING 14-35SX	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	P_BADDING 14-35SX		
<b>Design:</b>	PLAN #1 7-19-10 RHS		

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

Site		WELD_BADDING 19-35 PAD, SECTION 35 T2N R66W			
Site Position:		Northing:	1,276,562.14 ft	Latitude:	40° 5' 24.382 N
From:	Lat/Long	Easting:	3,210,367.76 ft	Longitude:	104° 44' 53.146 W
Position Uncertainty:	0.00 ft	Slot Radius:	in	Grid Convergence:	0.49 °

Well		P_BADDING 14-35SX, 1017 FSL 1627 FWL				
Well Position	+N-S	0.00 ft	Northing:	1,276,563.18 ft	Latitude:	40° 5' 24.385 N
	+E-W	0.00 ft	Easting:	3,210,447.78 ft	Longitude:	104° 44' 52.116 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	5,108.00 ft

<b>Wellbore</b>	P_BADDING 14-35SX				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF200510	12/31/2009	8.99	66.86	53,141

<b>Design</b>	PLAN #1 7-19-10 RHS			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>
	0.00	0.00	0.00	122.31

<b>Plan Sections</b>										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,658.68	7.17	122.31	1,657.74	-11.99	18.95	2.00	2.00	0.00	122.31	
4,361.35	7.17	122.31	4,339.26	-192.37	304.20	0.00	0.00	0.00	0.00	
4,720.03	0.00	0.00	4,697.00	-204.35	323.15	2.00	-2.00	0.00	180.00	
5,020.03	0.00	0.00	4,997.00	-204.35	323.15	0.00	0.00	0.00	0.00	PBHL_BADDING 14-35SX

<b>Database:</b>	EDM 2003.16 Single User Db	<b>Local Co-ordinate Reference:</b>	Well P_BADDING 14-35SX
<b>Company:</b>	US ROCKIES REGION PLANNING	<b>TVD Reference:</b>	WELL @ 5123.00ft (Original Well Elev)
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>MD Reference:</b>	WELL @ 5123.00ft (Original Well Elev)
<b>Site:</b>	WELD_BADDING 19-35 PAD	<b>North Reference:</b>	True
<b>Well:</b>	P_BADDING 14-35SX	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	P_BADDING 14-35SX		
<b>Design:</b>	PLAN #1 7-19-10 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
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,150.00	0.00	0.00	1,150.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>8 5/8"</b>									
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Start Build 2.00</b>									
1,400.00	2.00	122.31	1,399.98	-0.93	1.47	1.75	2.00	2.00	0.00
1,500.00	4.00	122.31	1,499.84	-3.73	5.90	6.98	2.00	2.00	0.00
1,600.00	6.00	122.31	1,599.45	-8.39	13.26	15.69	2.00	2.00	0.00
1,658.68	7.17	122.31	1,657.74	-11.99	18.95	22.42	2.00	2.00	0.00
<b>Start 2702.67 hold at 1658.68 MD</b>									
1,700.00	7.17	122.31	1,698.74	-14.74	23.31	27.58	0.00	0.00	0.00
1,800.00	7.17	122.31	1,797.96	-21.42	33.87	40.07	0.00	0.00	0.00
1,900.00	7.17	122.31	1,897.17	-28.09	44.42	52.56	0.00	0.00	0.00
2,000.00	7.17	122.31	1,996.39	-34.77	54.98	65.05	0.00	0.00	0.00
2,100.00	7.17	122.31	2,095.61	-41.44	65.53	77.53	0.00	0.00	0.00
2,200.00	7.17	122.31	2,194.83	-48.11	76.09	90.02	0.00	0.00	0.00
2,300.00	7.17	122.31	2,294.04	-54.79	86.64	102.51	0.00	0.00	0.00
2,400.00	7.17	122.31	2,393.26	-61.46	97.19	115.00	0.00	0.00	0.00
2,500.00	7.17	122.31	2,492.48	-68.14	107.75	127.48	0.00	0.00	0.00
2,600.00	7.17	122.31	2,591.70	-74.81	118.30	139.97	0.00	0.00	0.00
2,700.00	7.17	122.31	2,690.91	-81.49	128.86	152.46	0.00	0.00	0.00
2,800.00	7.17	122.31	2,790.13	-88.16	139.41	164.95	0.00	0.00	0.00
2,900.00	7.17	122.31	2,889.35	-94.83	149.97	177.43	0.00	0.00	0.00
3,000.00	7.17	122.31	2,988.56	-101.51	160.52	189.92	0.00	0.00	0.00
3,100.00	7.17	122.31	3,087.78	-108.18	171.07	202.41	0.00	0.00	0.00
3,200.00	7.17	122.31	3,187.00	-114.86	181.63	214.90	0.00	0.00	0.00
3,300.00	7.17	122.31	3,286.22	-121.53	192.18	227.39	0.00	0.00	0.00
3,400.00	7.17	122.31	3,385.43	-128.21	202.74	239.87	0.00	0.00	0.00
3,500.00	7.17	122.31	3,484.65	-134.88	213.29	252.36	0.00	0.00	0.00
3,600.00	7.17	122.31	3,583.87	-141.55	223.85	264.85	0.00	0.00	0.00
3,700.00	7.17	122.31	3,683.09	-148.23	234.40	277.34	0.00	0.00	0.00
3,800.00	7.17	122.31	3,782.30	-154.90	244.95	289.82	0.00	0.00	0.00
3,900.00	7.17	122.31	3,881.52	-161.58	255.51	302.31	0.00	0.00	0.00
4,000.00	7.17	122.31	3,980.74	-168.25	266.06	314.80	0.00	0.00	0.00
4,100.00	7.17	122.31	4,079.95	-174.93	276.62	327.29	0.00	0.00	0.00
4,200.00	7.17	122.31	4,179.17	-181.60	287.17	339.77	0.00	0.00	0.00
4,300.00	7.17	122.31	4,278.39	-188.27	297.73	352.26	0.00	0.00	0.00
4,300.62	7.17	122.31	4,279.00	-188.32	297.79	352.34	0.00	0.00	0.00
<b>PARKMAN</b>									
4,361.35	7.17	122.31	4,339.26	-192.37	304.20	359.92	0.00	0.00	0.00
<b>Start Drop -2.00</b>									

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<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>MD Reference:</b>	WELL @ 5123.00ft (Original Well Elev)
<b>Site:</b>	WELD_BADDING 19-35 PAD	<b>North Reference:</b>	True
<b>Well:</b>	P_BADDING 14-35SX	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	P_BADDING 14-35SX		
<b>Design:</b>	PLAN #1 7-19-10 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)
4,400.00	6.40	122.31	4,377.64	-194.81	308.06	364.49	2.00	-2.00	0.00
4,500.00	4.40	122.31	4,477.19	-199.84	316.02	373.90	2.00	-2.00	0.00
4,600.00	2.40	122.31	4,577.01	-203.01	321.03	379.83	2.00	-2.00	0.00
4,700.00	0.40	122.31	4,676.97	-204.32	323.09	382.28	2.00	-2.00	0.00
4,720.03	0.00	0.00	4,697.00	-204.35	323.15	382.35	2.00	-2.00	0.00
<b>Start 300.00 hold at 4720.03 MD - SUSSEX</b>									
4,800.00	0.00	0.00	4,776.97	-204.35	323.15	382.35	0.00	0.00	0.00
4,900.00	0.00	0.00	4,876.97	-204.35	323.15	382.35	0.00	0.00	0.00
5,000.00	0.00	0.00	4,976.97	-204.35	323.15	382.35	0.00	0.00	0.00
5,020.03	0.00	0.00	4,997.00	-204.35	323.15	382.35	0.00	0.00	0.00
<b>PBHL_BADDING 14-35SX(810 FSL 510 FWL)50'TGT RAD</b>									

#### 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_BADDING 14-35SX	0.00	0.49	4,997.00	-204.35	323.15	1,276,361.58	3,210,772.65	40° 5' 22.366 N	104° 44' 47.958 W
- plan hits target center									
- Circle (radius 50.00)									

#### Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)
1,150.00	1,150.00	8 5/8"	8.620	11.000

#### Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
4,720.03	4,697.00	SUSSEX			
4,300.62	4,279.00	PARKMAN			

#### Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
1,300.00	1,300.00	0.00	0.00	Start Build 2.00
1,658.68	1,657.74	-11.99	18.95	Start 2702.67 hold at 1658.68 MD
4,361.35	4,339.26	-192.37	304.20	Start Drop -2.00
4,720.03	4,697.00	-204.35	323.15	Start 300.00 hold at 4720.03 MD
5,020.03	4,997.00	-204.35	323.15	TD at 5020.03