

PETROLEUM DEVELOPMENT CORP Weld County CO

Well Name: **Peterson 14X-234**

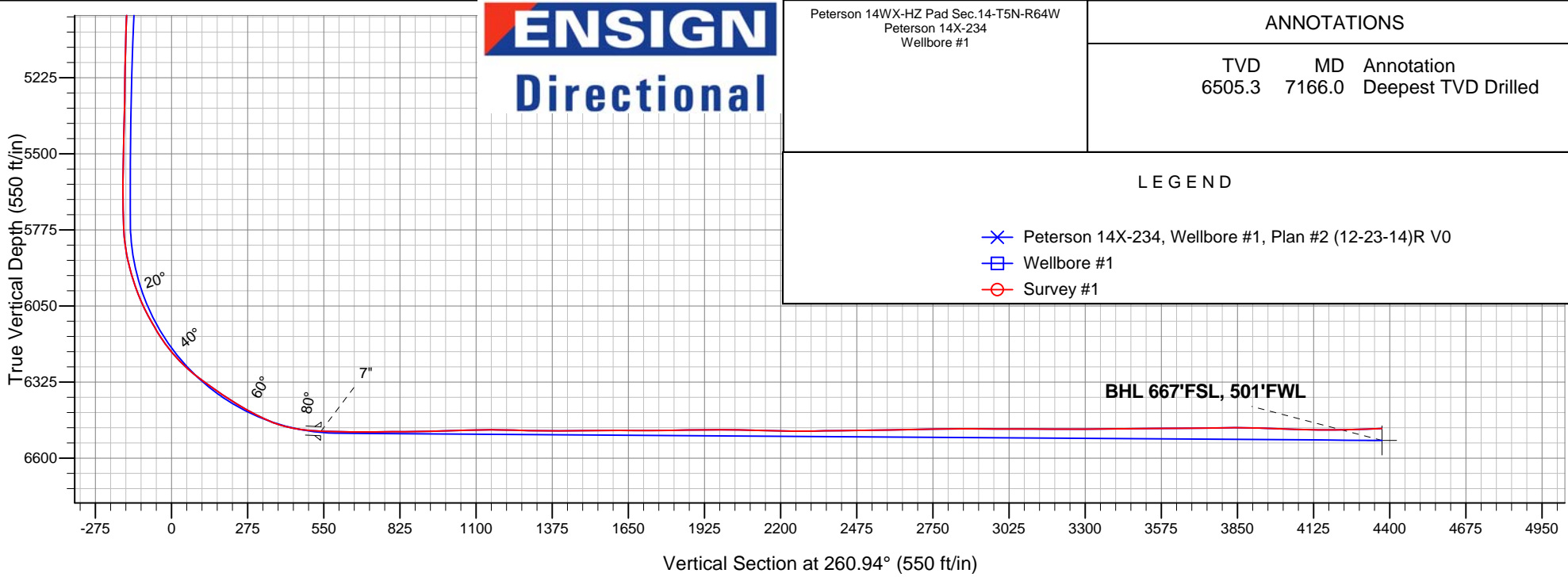
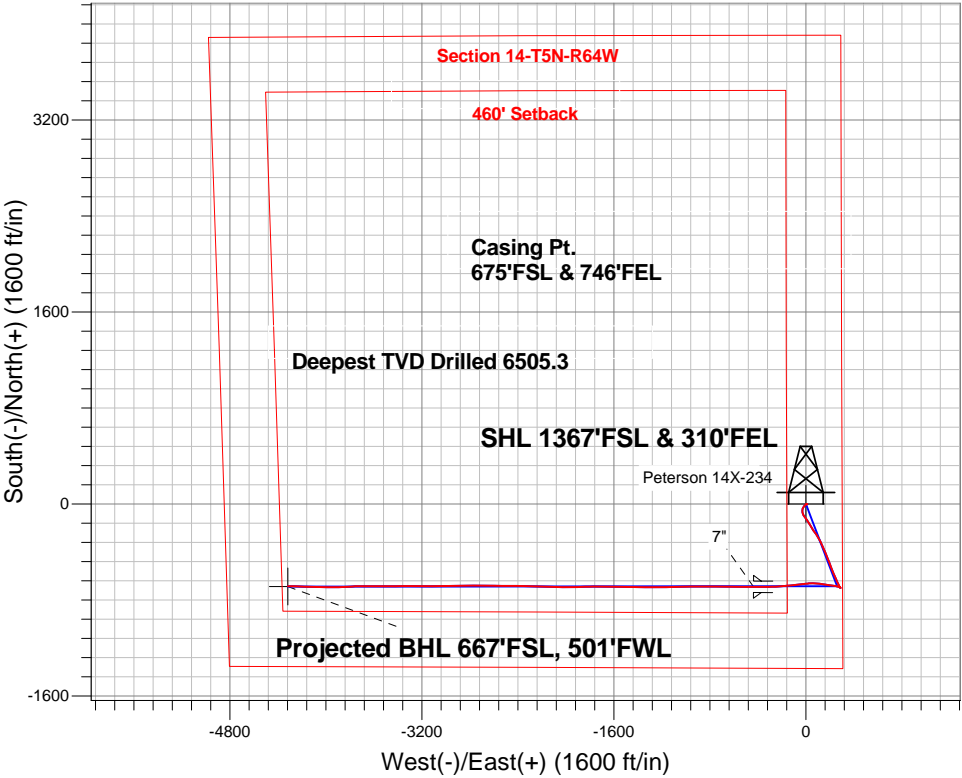
Surface Location: Peterson 14WX-HZ Pad Sec.14-T5N-R64W  
North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone

Ground Elevation: 4571.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1388564.76	3275959.50	40.395780	-104.509200	
Ensign Rig #32 - RKB - 15' WELL @ 4586.0ft (Ensign Rig #32 - RKB - 15')						

FINAL SURVEY

Projected Bottom Hole Location  
10848'MD 6493'TVD 686'S & 4317'W of SHL  
92.0 degree Incl @ 271.2 degree AZM





# **PETROLEUM DEVELOPMENT CORP Weld County CO**

**SEC.14-T5N-R64W**

**Peterson 14WX-HZ Pad Sec.14-T5N-R64W**

**Peterson 14X-234**

**Wellbore #1**

**Survey: Survey #1**

## **Standard Survey Report**

**15 January, 2015**

<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Peterson 14X-234
<b>Project:</b>	SEC.14-T5N-R64W	<b>TVD Reference:</b>	WELL @ 4586.0ft (Ensign Rig #32 - RKB - 15')
<b>Site:</b>	Peterson 14WX-HZ Pad Sec.14-T5N-R64W	<b>MD Reference:</b>	WELL @ 4586.0ft (Ensign Rig #32 - RKB - 15')
<b>Well:</b>	Peterson 14X-234	<b>North Reference:</b>	True
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Wellbore #1	<b>Database:</b>	Landmark

<b>Project</b>	SEC.14-T5N-R64W, Weld County, CO		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		Using Well Reference Point
<b>Map Zone:</b>	Colorado Northern Zone		Using geodetic scale factor

Site		Peterson 14WX-HZ Pad Sec.14-T5N-R64W			
Site Position:		Northing:	1,388,684.96 ft	Latitude:	40.396110
From:	Lat/Long	Easting:	3,275,955.37 ft	Longitude:	-104.509210
Position Uncertainty:	0.0 ft	Slot Radius:	"	Grid Convergence:	0.64 °

Well	Peterson 14X-234					
Well Position	+N-S	0.0 ft	Northing:	1,388,564.76 ft	Latitude:	40.395780
	+E-W	0.0 ft	Easting:	3,275,959.50 ft	Longitude:	-104.509200
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,571.0 ft

<b>Wellbore</b>	Wellbore #1				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	12/23/2014	8.25	66.97	52,786

<b>Design</b>	Wellbore #1				
<b>Audit Notes:</b>					
<b>Version:</b>	1.0	<b>Phase:</b>	ACTUAL	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>	
	0.0	0.0	0.0	260.94	

<b>Survey Program</b>	<b>Date</b>	1/15/2015			
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
54.0	10,848.0	Survey #1 (Wellbore #1)	MWD	MWD - Standard	

<b>Survey</b>										
<b>Measured Depth (ft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Vertical Section (ft)</b>	<b>Dogleg Rate (°/100ft)</b>	<b>Build Rate (°/100ft)</b>	<b>Turn Rate (°/100ft)</b>	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00	
1.0	0.00	0.00	1.0	0.0	0.0	0.0	0.00	0.00	0.00	
<b>SHL 1367'FSL &amp; 310'FEL</b>										
54.0	0.00	247.70	54.0	0.0	0.0	0.0	0.00	0.00	0.00	
146.0	0.90	96.70	146.0	-0.1	0.7	-0.7	0.98	0.98	0.00	
270.0	1.10	107.00	270.0	-0.5	2.8	-2.7	0.22	0.16	8.31	
394.0	1.80	100.70	393.9	-1.3	5.9	-5.6	0.58	0.56	-5.08	
518.0	1.40	77.50	517.9	-1.3	9.3	-8.9	0.61	-0.32	-18.71	
642.0	0.80	48.90	641.9	-0.4	11.4	-11.2	0.64	-0.48	-23.06	
770.0	0.30	242.60	769.9	0.0	11.8	-11.6	0.85	-0.39	-129.92	
882.0	0.50	152.00	881.9	-0.5	11.7	-11.5	0.52	0.18	-80.89	
952.0	0.70	152.90	951.9	-1.2	12.1	-11.7	0.29	0.29	1.29	

<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Peterson 14X-234
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<b>Site:</b>	Peterson 14WX-HZ Pad Sec.14-T5N-R64W	<b>MD Reference:</b>	WELL @ 4586.0ft (Ensign Rig #32 - RKB - 15')
<b>Well:</b>	Peterson 14X-234	<b>North Reference:</b>	True
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Wellbore #1	<b>Database:</b>	Landmark

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)
1,046.0	3.60	244.30	1,045.8	-3.0	9.7	-9.1	3.92	3.09	97.23
1,139.0	5.50	250.80	1,138.5	-5.7	2.8	-1.9	2.11	2.04	6.99
1,232.0	7.00	237.50	1,230.9	-10.2	-6.1	7.7	2.23	1.61	-14.30
1,296.0	8.40	223.20	1,294.4	-15.7	-12.6	15.0	3.69	2.19	-22.34
1,417.0	12.30	203.90	1,413.4	-34.0	-23.9	29.0	4.27	3.22	-15.95
1,538.0	12.80	180.00	1,531.6	-59.2	-29.1	38.1	4.28	0.41	-19.75
1,598.0	12.70	169.40	1,590.1	-72.3	-27.9	39.0	3.90	-0.17	-17.67
1,659.0	12.60	157.30	1,649.7	-85.0	-24.1	37.2	4.34	-0.16	-19.84
1,719.0	12.40	149.10	1,708.2	-96.6	-18.3	33.3	2.97	-0.33	-13.67
1,779.0	12.20	146.60	1,766.9	-107.4	-11.5	28.3	0.95	-0.33	-4.17
1,870.0	11.60	144.50	1,855.9	-122.9	-0.9	20.2	0.81	-0.66	-2.31
1,991.0	12.10	144.80	1,974.3	-143.1	13.5	9.2	0.42	0.41	0.25
2,112.0	11.10	145.70	2,092.9	-163.1	27.4	-1.3	0.84	-0.83	0.74
2,234.0	11.40	150.00	2,212.5	-183.3	40.0	-10.7	0.73	0.25	3.52
2,356.0	11.70	150.50	2,332.0	-204.5	52.1	-19.3	0.26	0.25	0.41
2,478.0	12.50	146.80	2,451.3	-226.3	65.4	-29.0	0.91	0.66	-3.03
2,604.0	11.80	143.10	2,574.5	-248.0	80.7	-40.6	0.83	-0.56	-2.94
2,731.0	12.10	146.60	2,698.8	-269.5	95.8	-52.2	0.62	0.24	2.76
2,857.0	12.70	150.80	2,821.8	-292.6	109.8	-62.4	0.86	0.48	3.33
2,983.0	12.80	155.40	2,944.7	-317.4	122.4	-70.9	0.81	0.08	3.65
3,110.0	11.80	154.90	3,068.8	-342.0	133.7	-78.2	0.79	-0.79	-0.39
3,236.0	11.00	154.70	3,192.3	-364.5	144.3	-85.2	0.64	-0.63	-0.16
3,362.0	11.60	157.30	3,315.9	-387.0	154.4	-91.5	0.62	0.48	2.06
3,489.0	11.30	158.40	3,440.4	-410.4	163.9	-97.2	0.29	-0.24	0.87
3,615.0	11.50	157.70	3,563.9	-433.5	173.2	-102.8	0.19	0.16	-0.56
3,741.0	11.70	157.10	3,687.3	-456.9	182.9	-108.7	0.19	0.16	-0.48
3,868.0	11.10	162.80	3,811.8	-480.4	191.5	-113.5	1.00	-0.47	4.49
3,995.0	10.50	160.80	3,936.5	-503.0	199.0	-117.3	0.56	-0.47	-1.57
4,121.0	11.30	158.20	4,060.3	-525.3	207.3	-122.1	0.75	0.63	-2.06
4,248.0	10.50	155.20	4,185.0	-547.4	216.8	-127.9	0.77	-0.63	-2.36
4,374.0	9.80	157.30	4,309.0	-567.7	225.8	-133.6	0.63	-0.56	1.67
4,501.0	10.80	157.80	4,434.0	-588.7	234.4	-138.8	0.79	0.79	0.39
4,627.0	10.10	157.00	4,557.9	-609.8	243.2	-144.2	0.57	-0.56	-0.63
4,753.0	9.40	156.30	4,682.0	-629.4	251.7	-149.4	0.56	-0.56	-0.56
4,880.0	9.10	155.60	4,807.4	-648.0	260.0	-154.7	0.25	-0.24	-0.55
5,006.0	7.40	153.80	4,932.1	-664.4	267.7	-159.8	1.36	-1.35	-1.43
5,132.0	6.30	153.40	5,057.2	-677.9	274.3	-164.2	0.87	-0.87	-0.32
5,258.0	4.40	157.30	5,182.6	-688.5	279.3	-167.5	1.53	-1.51	3.10
5,384.0	2.90	155.70	5,308.4	-695.9	282.5	-169.4	1.19	-1.19	-1.27
5,510.0	2.10	116.50	5,434.3	-699.8	285.9	-172.2	1.46	-0.63	-31.11
5,637.0	1.50	62.40	5,561.2	-700.1	289.4	-175.6	1.36	-0.47	-42.60
5,732.0	2.10	303.40	5,656.2	-698.5	289.1	-175.5	3.28	0.63	-125.26
5,796.0	1.90	301.80	5,720.1	-697.3	287.2	-173.8	0.32	-0.31	-2.50
5,827.0	1.80	304.80	5,751.1	-696.8	286.4	-173.1	0.45	-0.32	9.68
5,859.0	3.70	292.70	5,783.1	-696.1	285.0	-171.9	6.18	5.94	-37.81
5,891.0	7.40	292.10	5,814.9	-694.9	282.1	-169.2	11.56	11.56	-1.88
5,922.0	10.70	292.50	5,845.5	-693.1	277.6	-165.1	10.65	10.65	1.29
5,954.0	13.40	290.60	5,876.8	-690.6	271.4	-159.3	8.53	8.44	-5.94
5,986.0	15.40	285.60	5,907.8	-688.2	263.8	-152.2	7.35	6.25	-15.63
6,017.0	17.20	281.20	5,937.6	-686.2	255.4	-144.2	7.04	5.81	-14.19
6,049.0	19.60	279.10	5,967.9	-684.4	245.4	-134.6	7.78	7.50	-6.56
6,081.0	21.40	277.90	5,997.9	-682.8	234.3	-124.0	5.78	5.63	-3.75
6,113.0	23.90	278.10	6,027.4	-681.0	222.1	-112.2	7.82	7.81	0.63
6,144.0	26.40	277.50	6,055.5	-679.3	209.1	-99.6	8.11	8.06	-1.94

<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Peterson 14X-234
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<b>Well:</b>	Peterson 14X-234	<b>North Reference:</b>	True
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Wellbore #1	<b>Database:</b>	Landmark

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)
6,176.0	28.90	278.10	6,083.8	-677.2	194.4	-85.4	7.86	7.81	1.88
6,208.0	31.00	279.30	6,111.6	-674.8	178.6	-70.1	6.82	6.56	3.75
6,240.0	32.80	280.90	6,138.7	-671.8	161.9	-54.2	6.21	5.63	5.00
6,271.0	34.30	280.50	6,164.6	-668.7	145.1	-38.1	4.89	4.84	-1.29
6,303.0	37.40	275.30	6,190.5	-666.1	126.6	-20.1	13.57	9.69	-16.25
6,335.0	40.60	274.00	6,215.4	-664.5	106.5	-0.6	10.32	10.00	-4.06
6,366.0	43.30	273.90	6,238.4	-663.1	85.8	19.6	8.71	8.71	-0.32
6,398.0	45.90	271.90	6,261.2	-661.9	63.4	41.6	9.23	8.13	-6.25
6,429.0	49.20	267.70	6,282.1	-662.0	40.5	64.2	14.60	10.65	-13.55
6,460.0	52.00	265.60	6,301.8	-663.5	16.6	88.0	10.44	9.03	-6.77
6,492.0	53.60	264.40	6,321.2	-665.7	-8.8	113.4	5.82	5.00	-3.75
6,524.0	54.80	264.00	6,339.9	-668.3	-34.6	139.4	3.88	3.75	-1.25
6,556.0	56.00	263.10	6,358.1	-671.3	-60.8	165.7	4.41	3.75	-2.81
6,587.0	56.30	263.30	6,375.3	-674.3	-86.3	191.4	1.11	0.97	0.65
6,618.0	57.10	263.50	6,392.3	-677.3	-112.1	217.3	2.64	2.58	0.65
6,650.0	59.10	263.50	6,409.3	-680.4	-139.1	244.4	6.25	6.25	0.00
6,681.0	60.70	264.40	6,424.8	-683.2	-165.7	271.2	5.74	5.16	2.90
6,713.0	62.30	265.60	6,440.1	-685.6	-193.7	299.3	5.99	5.00	3.75
6,745.0	64.40	266.50	6,454.4	-687.6	-222.3	327.7	7.03	6.56	2.81
6,777.0	67.80	268.10	6,467.4	-689.0	-251.5	356.8	11.57	10.63	5.00
6,808.0	72.20	268.60	6,478.0	-689.8	-280.6	385.7	14.27	14.19	1.61
6,840.0	75.90	268.80	6,486.8	-690.5	-311.4	416.2	11.58	11.56	0.63
6,872.0	79.90	268.80	6,493.5	-691.2	-342.6	447.2	12.50	12.50	0.00
6,903.0	83.40	269.10	6,498.0	-691.7	-373.3	477.5	11.33	11.29	0.97
6,935.0	85.80	269.80	6,501.0	-692.0	-405.2	509.0	7.81	7.50	2.19
6,966.0	87.54	270.54	6,502.8	-691.9	-436.1	539.6	6.09	5.60	2.40
7"									
6,985.0	88.60	271.00	6,503.4	-691.7	-455.1	558.3	6.09	5.60	2.40
7,016.0	89.00	271.20	6,504.1	-691.1	-486.1	588.8	1.44	1.29	0.65
7,045.0	89.20	271.00	6,504.5	-690.5	-515.1	617.3	0.98	0.69	-0.69
7,075.0	89.30	270.30	6,504.9	-690.2	-545.1	646.9	2.36	0.33	-2.33
7,105.0	89.60	270.50	6,505.2	-690.0	-575.1	676.5	1.20	1.00	0.67
7,166.0	90.30	270.50	6,505.3	-689.4	-636.1	736.6	1.15	1.15	0.00
Deepest TVD Drilled									
7,228.0	90.70	270.20	6,504.7	-689.1	-698.1	797.8	0.81	0.65	-0.48
7,291.0	90.60	270.70	6,504.0	-688.6	-761.0	859.9	0.81	-0.16	0.79
7,355.0	90.80	270.20	6,503.2	-688.1	-825.0	923.1	0.84	0.31	-0.78
7,418.0	91.60	270.00	6,501.9	-688.0	-888.0	985.2	1.31	1.27	-0.32
7,482.0	91.90	268.80	6,500.0	-688.6	-952.0	1,048.5	1.93	0.47	-1.88
7,545.0	91.70	268.90	6,498.0	-689.9	-1,014.9	1,110.9	0.35	-0.32	0.16
7,608.0	88.40	268.40	6,497.9	-691.4	-1,077.9	1,173.3	5.30	-5.24	-0.79
7,671.0	89.20	268.20	6,499.2	-693.2	-1,140.9	1,235.8	1.31	1.27	-0.32
7,735.0	88.60	269.80	6,500.5	-694.4	-1,204.9	1,299.1	2.67	-0.94	2.50
7,798.0	89.60	269.30	6,501.5	-694.9	-1,267.8	1,361.4	1.77	1.59	-0.79
7,861.0	90.60	270.30	6,501.4	-695.1	-1,330.8	1,423.7	2.24	1.59	1.59
7,924.0	90.70	271.00	6,500.6	-694.4	-1,393.8	1,485.8	1.12	0.16	1.11
7,987.0	90.50	271.00	6,500.0	-693.3	-1,456.8	1,547.8	0.32	-0.32	0.00
8,051.0	90.20	271.90	6,499.6	-691.6	-1,520.8	1,610.7	1.48	-0.47	1.41
8,114.0	89.30	270.70	6,499.9	-690.2	-1,583.8	1,672.7	2.38	-1.43	-1.90
8,177.0	90.00	270.30	6,500.3	-689.7	-1,646.8	1,734.8	1.28	1.11	-0.63
8,241.0	90.90	270.50	6,499.7	-689.2	-1,710.8	1,797.9	1.44	1.41	0.31
8,304.0	91.10	270.30	6,498.7	-688.8	-1,773.8	1,860.1	0.45	0.32	-0.32
8,367.0	90.60	268.80	6,497.7	-689.3	-1,836.7	1,922.3	2.51	-0.79	-2.38

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<b>Design:</b>	Wellbore #1	<b>Database:</b>	Landmark

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)
8,430.0	89.90	268.40	6,497.4	-690.8	-1,899.7	1,984.8	1.28	-1.11	-0.63
8,494.0	89.20	268.40	6,497.9	-692.6	-1,963.7	2,048.2	1.09	-1.09	0.00
8,557.0	88.10	269.50	6,499.4	-693.8	-2,026.7	2,110.6	2.47	-1.75	1.75
8,620.0	88.50	271.60	6,501.3	-693.2	-2,089.6	2,172.7	3.39	0.63	3.33
8,683.0	89.60	272.10	6,502.3	-691.1	-2,152.6	2,234.5	1.92	1.75	0.79
8,746.0	90.80	273.20	6,502.1	-688.2	-2,215.5	2,296.2	2.58	1.90	1.75
8,810.0	90.80	271.70	6,501.2	-685.5	-2,279.5	2,358.9	2.34	0.00	-2.34
8,874.0	90.60	270.50	6,500.4	-684.2	-2,343.4	2,421.9	1.90	-0.31	-1.88
8,937.0	90.70	270.00	6,499.7	-684.0	-2,406.4	2,484.1	0.81	0.16	-0.79
9,000.0	91.20	270.30	6,498.7	-683.8	-2,469.4	2,546.3	0.93	0.79	0.48
9,063.0	90.70	270.90	6,497.6	-683.1	-2,532.4	2,608.4	1.24	-0.79	0.95
9,127.0	90.30	270.90	6,497.1	-682.1	-2,596.4	2,671.4	0.63	-0.63	0.00
9,190.0	91.20	270.50	6,496.3	-681.4	-2,659.4	2,733.5	1.56	1.43	-0.63
9,253.0	91.90	270.90	6,494.6	-680.6	-2,722.4	2,795.6	1.28	1.11	0.63
9,316.0	89.70	269.30	6,493.7	-680.5	-2,785.3	2,857.7	4.32	-3.49	-2.54
9,381.0	89.60	268.40	6,494.1	-681.8	-2,850.3	2,922.1	1.39	-0.15	-1.38
9,444.0	89.80	268.80	6,494.4	-683.3	-2,913.3	2,984.6	0.71	0.32	0.63
9,507.0	90.00	268.60	6,494.5	-684.8	-2,976.3	3,047.0	0.45	0.32	-0.32
9,571.0	89.80	270.50	6,494.6	-685.3	-3,040.3	3,110.3	2.99	-0.31	2.97
9,633.0	89.20	270.00	6,495.2	-685.0	-3,102.3	3,171.4	1.26	-0.97	-0.81
9,696.0	90.10	270.30	6,495.5	-684.8	-3,165.3	3,233.6	1.51	1.43	0.48
9,760.0	90.90	269.80	6,495.0	-684.8	-3,229.3	3,296.8	1.47	1.25	-0.78
9,823.0	90.30	270.00	6,494.3	-684.9	-3,292.3	3,359.0	1.00	-0.95	0.32
9,887.0	90.20	269.50	6,494.1	-685.2	-3,356.3	3,422.3	0.80	-0.16	-0.78
9,950.0	90.80	269.30	6,493.5	-685.8	-3,419.3	3,484.6	1.00	0.95	-0.32
10,013.0	90.60	270.20	6,492.7	-686.1	-3,482.3	3,546.9	1.46	-0.32	1.43
10,076.0	90.00	270.00	6,492.4	-686.0	-3,545.3	3,609.0	1.00	-0.95	-0.32
10,140.0	90.70	270.20	6,492.0	-685.9	-3,609.3	3,672.2	1.14	1.09	0.31
10,203.0	90.90	269.80	6,491.1	-685.9	-3,672.3	3,734.4	0.71	0.32	-0.63
10,266.0	90.10	268.80	6,490.6	-686.6	-3,735.2	3,796.8	2.03	-1.27	-1.59
10,329.0	89.70	266.80	6,490.7	-689.1	-3,798.2	3,859.3	3.24	-0.63	-3.17
10,392.0	89.40	267.40	6,491.2	-692.3	-3,861.1	3,921.9	1.06	-0.48	0.95
10,456.0	87.50	269.60	6,492.9	-693.9	-3,925.1	3,985.4	4.54	-2.97	3.44
10,519.0	87.70	270.70	6,495.6	-693.8	-3,988.0	4,047.5	1.77	0.32	1.75
10,582.0	89.00	271.40	6,497.4	-692.6	-4,051.0	4,109.5	2.34	2.06	1.11
10,646.0	90.00	271.90	6,497.9	-690.8	-4,114.9	4,172.4	1.75	1.56	0.78
10,709.0	91.10	271.60	6,497.3	-688.8	-4,177.9	4,234.3	1.81	1.75	-0.48
10,793.0	92.00	271.20	6,495.1	-686.8	-4,261.8	4,316.8	1.17	1.07	-0.48
10,847.1	92.00	271.20	6,493.2	-685.7	-4,315.9	4,370.1	0.00	0.00	0.00
BHL 664'FSL, 500'FWL									
10,848.0	92.00	271.20	6,493.1	-685.6	-4,316.8	4,370.9	0.00	0.00	0.00

Casing Points				
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
6,966.0	6,502.8	7"	7	7-1/2

<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Peterson 14X-234
<b>Project:</b>	SEC.14-T5N-R64W	<b>TVD Reference:</b>	WELL @ 4586.0ft (Ensign Rig #32 - RKB - 15')
<b>Site:</b>	Peterson 14WX-HZ Pad Sec.14-T5N-R64W	<b>MD Reference:</b>	WELL @ 4586.0ft (Ensign Rig #32 - RKB - 15')
<b>Well:</b>	Peterson 14X-234	<b>North Reference:</b>	True
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Wellbore #1	<b>Database:</b>	Landmark

Survey Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
+N/-S (ft)	+E/-W (ft)			
7,166.0	6,505.3	-689.4	-636.1	Deepest TVD Drilled

Checked By: _____	Approved By: _____	Date: _____
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