

PETROLEUM DEVELOPMENT CORP Weld County CO

Well Name: **Peterson 14Y-304**

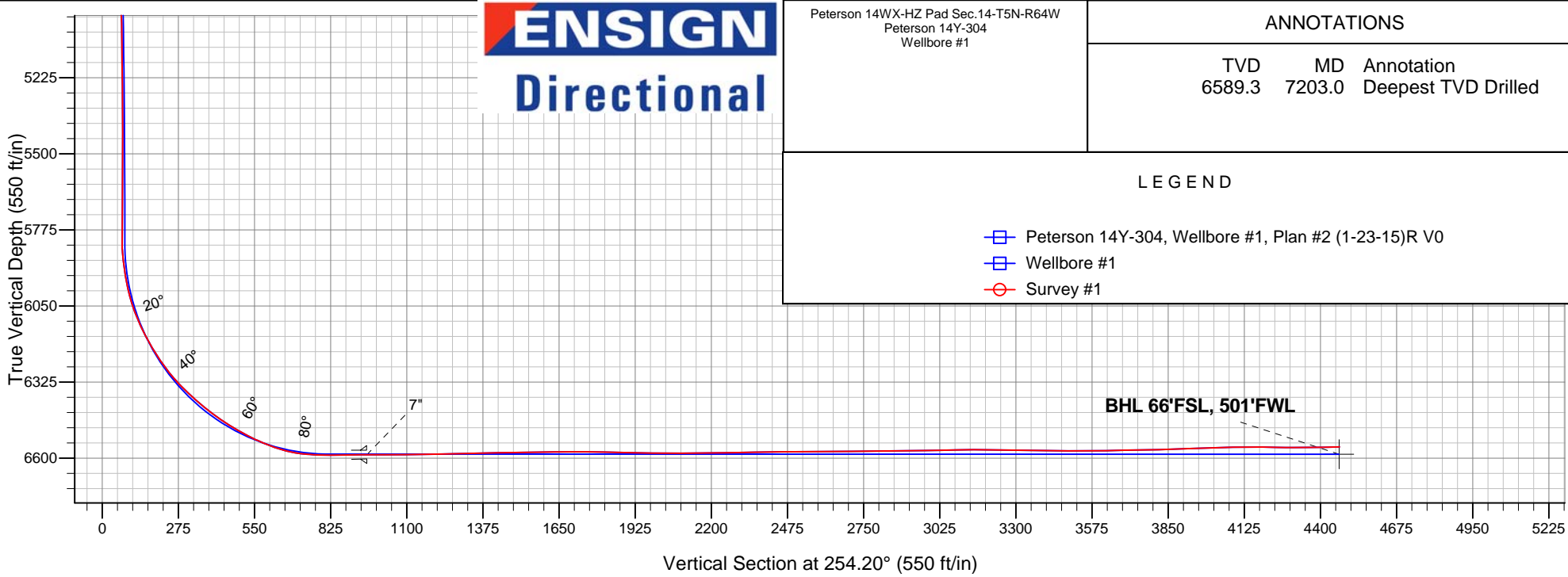
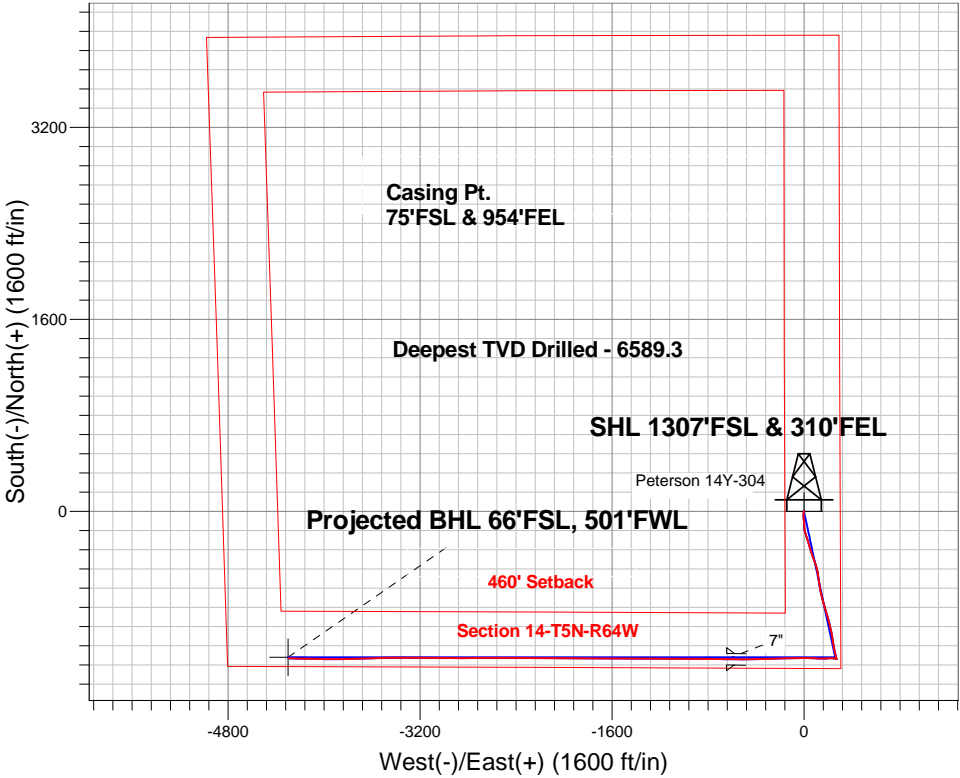
Surface Location: Peterson 14WX-HZ Pad Sec.14-T5N-R64W
North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone

Ground Elevation: 4571.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1388502.84	3275960.19	40.395610	-104.509200	
Ensign Rig #32 - RKB - 15' WELL @ 4586.0ft (Ensign Rig #32 - RKB - 15')						

FINAL SURVEY

Projected Bottom Hole Location
10979'MD 6559.7'TVD 1225'S & 4297'W of
SHL 91.0 degree Incl @ 271.0 degree AZM



Peterson 14WX-HZ Pad Sec.14-T5N-R64W Peterson 14Y-304 Wellbore #1	ANNOTATIONS		
	TVD 6589.3	MD 7203.0	Annotation Deepest TVD Drilled
LEGEND			
Peterson 14Y-304, Wellbore #1, Plan #2 (1-23-15)R V0			
Wellbore #1			
Survey #1			



PETROLEUM DEVELOPMENT CORP Weld County CO

SEC.14-T5N-R64W

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

Peterson 14Y-304

Wellbore #1

Survey: Survey #1

Standard Survey Report

09 February, 2015

Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well Peterson 14Y-304
Project:	SEC.14-T5N-R64W	TVD Reference:	WELL @ 4586.0ft (Ensign Rig #32 - RKB - 15')
Site:	Peterson 14WX-HZ Pad Sec.14-T5N-R64W	MD Reference:	WELL @ 4586.0ft (Ensign Rig #32 - RKB - 15')
Well:	Peterson 14Y-304	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Landmark

Project	SEC.14-T5N-R64W, Weld County, CO		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		Using Well Reference Point
Map Zone:	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 14Y-304					
Well Position	+N-S	0.0 ft	Northing:	1,388,502.84 ft	Latitude:	40.395610
	+E-W	0.0 ft	Easting:	3,275,960.19 ft	Longitude:	-104.509200
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,571.0 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	1/23/2015	8.24	66.96	52,777

Design	Wellbore #1				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	0.0	0.0	0.0	254.20	

Survey Program	Date	2/9/2015			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
53.0	10,979.0	Survey #1 (Wellbore #1)	MWD	MWD - Standard	

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)	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00	
1.0	0.00	301.80	1.0	0.0	0.0	0.0	0.38	0.38	0.00	
SHL 1307'FSL & 310'FEL										
53.0	0.20	301.80	53.0	0.0	-0.1	0.1	0.38	0.38	0.00	
145.0	0.20	281.90	145.0	0.2	-0.4	0.3	0.08	0.00	-21.63	
238.0	0.90	188.30	238.0	-0.5	-0.6	0.8	1.00	0.75	-100.65	
332.0	2.20	185.30	332.0	-3.0	-0.9	1.7	1.39	1.38	-3.19	
425.0	3.80	191.60	424.8	-7.8	-1.7	3.8	1.75	1.72	6.77	
518.0	5.20	189.80	517.5	-15.0	-3.0	7.0	1.51	1.51	-1.94	
611.0	5.70	182.60	610.1	-23.8	-4.0	10.3	0.91	0.54	-7.74	
705.0	6.20	178.10	703.6	-33.5	-4.0	13.0	0.73	0.53	-4.79	
798.0	7.10	175.90	796.0	-44.3	-3.4	15.4	1.01	0.97	-2.37	

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Site:	Peterson 14WX-HZ Pad Sec.14-T5N-R64W	MD Reference:	WELL @ 4586.0ft (Ensign Rig #32 - RKB - 15')
Well:	Peterson 14Y-304	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	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)
883.0	8.10	176.60	880.2	-55.5	-2.7	17.7	1.18	1.18	0.82
968.0	8.40	174.40	964.4	-67.6	-1.7	20.1	0.51	0.35	-2.59
1,062.0	10.90	172.20	1,057.0	-83.3	0.1	22.5	2.69	2.66	-2.34
1,155.0	13.40	176.10	1,147.9	-102.8	2.1	26.0	2.83	2.69	4.19
1,252.0	15.60	179.60	1,241.8	-127.0	2.9	31.8	2.44	2.27	3.61
1,342.0	16.40	172.20	1,328.4	-151.7	4.7	36.8	2.43	0.89	-8.22
1,433.0	16.50	163.10	1,415.7	-176.8	10.2	38.3	2.83	0.11	-10.00
1,524.0	15.30	164.00	1,503.2	-200.7	17.3	38.0	1.35	-1.32	0.99
1,614.0	14.70	162.20	1,590.1	-223.0	24.1	37.6	0.84	-0.67	-2.00
1,705.0	15.20	163.30	1,678.0	-245.4	31.0	37.0	0.63	0.55	1.21
1,797.0	14.70	160.10	1,766.9	-267.9	38.5	36.0	1.05	-0.54	-3.48
1,888.0	15.80	163.30	1,854.7	-290.7	46.0	34.9	1.52	1.21	3.52
1,978.0	15.20	163.30	1,941.4	-313.7	52.9	34.6	0.67	-0.67	0.00
2,070.0	16.70	162.60	2,029.9	-337.9	60.3	34.0	1.64	1.63	-0.76
2,161.0	15.90	160.60	2,117.2	-362.1	68.3	32.9	1.07	-0.88	-2.20
2,251.0	15.90	159.10	2,203.8	-385.3	76.8	31.0	0.46	0.00	-1.67
2,372.0	15.80	161.00	2,320.2	-416.3	88.1	28.6	0.44	-0.08	1.57
2,493.0	16.70	165.20	2,436.4	-448.7	97.9	28.0	1.22	0.74	3.47
2,614.0	15.70	165.00	2,552.6	-481.3	106.6	28.5	0.83	-0.83	-0.17
2,736.0	15.40	169.60	2,670.1	-513.2	113.8	30.3	1.04	-0.25	3.77
2,861.0	15.90	170.10	2,790.5	-546.4	119.7	33.6	0.41	0.40	0.40
2,988.0	16.40	173.70	2,912.4	-581.4	124.7	38.3	0.88	0.39	2.83
3,114.0	14.80	172.20	3,033.8	-615.0	128.8	43.5	1.31	-1.27	-1.19
3,240.0	14.70	166.80	3,155.7	-646.5	134.7	46.5	1.09	-0.08	-4.29
3,367.0	13.50	168.00	3,278.8	-676.7	141.4	48.2	0.97	-0.94	0.94
3,493.0	14.10	167.30	3,401.2	-706.0	147.8	50.0	0.49	0.48	-0.56
3,620.0	16.10	166.80	3,523.8	-738.3	155.3	51.6	1.58	1.57	-0.39
3,747.0	16.50	163.30	3,645.7	-772.7	164.5	52.2	0.84	0.31	-2.76
3,873.0	16.10	163.50	3,766.6	-806.6	174.6	51.7	0.32	-0.32	0.16
4,000.0	15.70	162.20	3,888.8	-839.8	184.8	50.9	0.42	-0.31	-1.02
4,126.0	15.80	163.60	4,010.0	-872.5	194.9	50.1	0.31	0.08	1.11
4,253.0	14.80	162.20	4,132.5	-904.5	204.7	49.3	0.84	-0.79	-1.10
4,379.0	15.10	167.30	4,254.3	-935.9	213.3	49.7	1.07	0.24	4.05
4,506.0	16.50	168.90	4,376.5	-969.7	220.4	52.0	1.15	1.10	1.26
4,632.0	15.00	167.70	4,497.7	-1,003.2	227.3	54.5	1.22	-1.19	-0.95
4,759.0	15.70	170.80	4,620.2	-1,036.2	233.5	57.5	0.85	0.55	2.44
4,885.0	16.30	171.70	4,741.3	-1,070.6	238.8	61.7	0.52	0.48	0.71
5,011.0	15.00	170.10	4,862.7	-1,104.1	244.2	65.7	1.09	-1.03	-1.27
5,138.0	13.40	169.40	4,985.8	-1,134.8	249.7	68.8	1.27	-1.26	-0.55
5,265.0	11.40	166.80	5,109.8	-1,161.5	255.3	70.7	1.63	-1.57	-2.05
5,393.0	9.90	167.80	5,235.6	-1,184.5	260.5	71.9	1.18	-1.17	0.78
5,488.0	8.60	165.20	5,329.4	-1,199.4	264.0	72.6	1.44	-1.37	-2.74
5,583.0	6.60	174.20	5,423.5	-1,211.7	266.4	73.6	2.44	-2.11	9.47
5,677.0	4.60	158.70	5,517.1	-1,220.6	268.3	74.2	2.65	-2.13	-16.49
5,773.0	2.70	143.90	5,612.9	-1,226.0	271.0	73.1	2.19	-1.98	-15.42
5,867.0	0.50	106.30	5,706.8	-1,227.9	272.7	71.9	2.47	-2.34	-40.00
5,931.0	0.60	88.40	5,770.8	-1,228.0	273.3	71.4	0.31	0.16	-27.97
5,963.0	0.30	104.20	5,802.8	-1,228.0	273.6	71.1	1.01	-0.94	49.38
5,994.0	2.00	262.80	5,833.8	-1,228.1	273.1	71.6	7.36	5.48	511.61
6,026.0	5.80	270.90	5,865.8	-1,228.1	271.0	73.7	11.97	11.88	25.31
6,058.0	7.70	276.30	5,897.5	-1,227.8	267.2	77.3	6.25	5.94	16.88
6,089.0	9.50	278.10	5,928.2	-1,227.3	262.6	81.5	5.87	5.81	5.81
6,121.0	11.40	277.90	5,959.6	-1,226.5	256.9	86.8	5.94	5.94	-0.63
6,152.0	13.60	275.80	5,989.9	-1,225.7	250.2	93.0	7.25	7.10	-6.77

Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well Peterson 14Y-304
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Site:	Peterson 14WX-HZ Pad Sec.14-T5N-R64W	MD Reference:	WELL @ 4586.0ft (Ensign Rig #32 - RKB - 15')
Well:	Peterson 14Y-304	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	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)
6,184.0	16.30	272.40	6,020.8	-1,225.1	242.0	100.8	8.87	8.44	-10.63
6,215.0	19.30	270.50	6,050.3	-1,224.9	232.5	109.8	9.86	9.68	-6.13
6,247.0	22.20	269.80	6,080.3	-1,224.8	221.2	120.7	9.10	9.06	-2.19
6,279.0	24.10	269.30	6,109.7	-1,224.9	208.6	132.9	5.97	5.94	-1.56
6,310.0	26.70	268.20	6,137.7	-1,225.2	195.3	145.7	8.52	8.39	-3.55
6,342.0	29.20	267.00	6,165.9	-1,225.9	180.3	160.3	8.01	7.81	-3.75
6,373.0	31.60	269.80	6,192.7	-1,226.3	164.6	175.5	8.99	7.74	9.03
6,405.0	32.90	270.90	6,219.7	-1,226.2	147.6	191.9	4.46	4.06	3.44
6,436.0	35.10	271.20	6,245.4	-1,225.9	130.2	208.5	7.12	7.10	0.97
6,468.0	37.50	270.90	6,271.2	-1,225.5	111.3	226.6	7.52	7.50	-0.94
6,500.0	40.80	271.40	6,296.0	-1,225.1	91.1	246.0	10.36	10.31	1.56
6,531.0	43.20	271.40	6,319.1	-1,224.6	70.4	265.8	7.74	7.74	0.00
6,563.0	45.50	270.90	6,342.0	-1,224.2	48.0	287.2	7.27	7.19	-1.56
6,595.0	47.30	269.80	6,364.0	-1,224.0	24.8	309.4	6.15	5.63	-3.44
6,626.0	49.20	270.30	6,384.7	-1,224.0	1.7	331.7	6.25	6.13	1.61
6,658.0	51.10	270.30	6,405.2	-1,223.9	-22.9	355.3	5.94	5.94	0.00
6,689.0	53.00	270.30	6,424.2	-1,223.7	-47.3	378.8	6.13	6.13	0.00
6,721.0	54.60	270.00	6,443.1	-1,223.7	-73.1	403.6	5.06	5.00	-0.94
6,752.0	56.50	269.50	6,460.7	-1,223.8	-98.7	428.2	6.27	6.13	-1.61
6,784.0	58.30	268.90	6,477.9	-1,224.2	-125.6	454.3	5.84	5.63	-1.88
6,816.0	60.40	269.10	6,494.2	-1,224.7	-153.2	480.9	6.58	6.56	0.63
6,847.0	62.00	269.30	6,509.2	-1,225.0	-180.3	507.1	5.19	5.16	0.65
6,879.0	64.10	269.10	6,523.7	-1,225.4	-208.9	534.7	6.59	6.56	-0.63
6,910.0	66.40	268.60	6,536.6	-1,226.0	-237.0	561.9	7.56	7.42	-1.61
6,942.0	68.50	268.40	6,548.9	-1,226.8	-266.5	590.5	6.59	6.56	-0.63
6,975.0	69.20	268.60	6,554.3	-1,227.1	-280.5	604.1	4.83	4.67	1.33
6,988.0	71.90	268.00	6,564.6	-1,228.0	-309.7	632.4	8.90	8.71	-1.94
7,020.0	76.00	267.90	6,573.5	-1,229.1	-340.5	662.3	12.82	12.81	-0.31
7,051.0	80.50	267.70	6,579.8	-1,230.3	-370.8	691.8	14.53	14.52	-0.65
7,079.0	83.40	267.70	6,583.7	-1,231.4	-398.5	718.8	10.36	10.36	0.00
7,110.0	86.30	267.70	6,586.5	-1,232.6	-429.3	748.8	9.35	9.35	0.00
7,140.0	87.30	268.70	6,588.2	-1,233.6	-459.3	777.8	4.71	3.33	3.33
7,203.0	90.60	271.20	6,589.3	-1,233.6	-522.2	838.4	6.57	5.24	3.97
Deepest TVD Drilled									
7,267.0	91.50	270.70	6,588.2	-1,232.6	-586.2	899.7	1.61	1.41	-0.78
7,325.0	90.12	270.70	6,587.3	-1,231.8	-644.2	955.3	2.38	-2.38	0.00
7"									
7,330.0	90.00	270.70	6,587.3	-1,231.8	-649.2	960.1	2.38	-2.38	0.00
7,393.0	90.00	270.50	6,587.3	-1,231.1	-712.2	1,020.6	0.32	0.00	-0.32
7,458.0	90.00	271.20	6,587.3	-1,230.2	-777.2	1,082.8	1.08	0.00	1.08
7,521.0	90.80	271.20	6,586.9	-1,228.8	-840.2	1,143.1	1.27	1.27	0.00
7,584.0	91.40	271.00	6,585.7	-1,227.6	-903.2	1,203.3	1.00	0.95	-0.32
7,647.0	91.50	270.70	6,584.1	-1,226.7	-966.1	1,263.7	0.50	0.16	-0.48
7,711.0	91.20	270.30	6,582.6	-1,226.1	-1,030.1	1,325.1	0.78	-0.47	-0.63
7,774.0	90.70	270.20	6,581.5	-1,225.9	-1,093.1	1,385.6	0.81	-0.79	-0.16
7,837.0	90.60	269.80	6,580.8	-1,225.9	-1,156.1	1,446.2	0.65	-0.16	-0.63
7,900.0	90.80	269.60	6,580.1	-1,226.2	-1,219.1	1,506.9	0.45	0.32	-0.32
7,964.0	91.20	268.90	6,578.9	-1,227.0	-1,283.1	1,568.7	1.26	0.63	-1.09
8,027.0	90.90	269.50	6,577.8	-1,227.9	-1,346.1	1,629.6	1.06	-0.48	0.95
8,090.0	90.30	270.30	6,577.1	-1,228.0	-1,409.1	1,690.2	1.59	-0.95	1.27
8,154.0	89.40	270.90	6,577.3	-1,227.4	-1,473.1	1,751.6	1.69	-1.41	0.94
8,217.0	89.00	271.00	6,578.2	-1,226.3	-1,536.0	1,811.9	0.65	-0.63	0.16
8,280.0	88.90	270.70	6,579.3	-1,225.4	-1,599.0	1,872.3	0.50	-0.16	-0.48

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Well:	Peterson 14Y-304	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	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)
8,344.0	88.50	270.90	6,580.8	-1,224.5	-1,663.0	1,933.6	0.70	-0.63	0.31
8,407.0	89.60	269.60	6,581.8	-1,224.2	-1,726.0	1,994.1	2.70	1.75	-2.06
8,471.0	89.90	269.50	6,582.1	-1,224.7	-1,790.0	2,055.8	0.49	0.47	-0.16
8,534.0	90.00	269.30	6,582.2	-1,225.4	-1,853.0	2,116.6	0.35	0.16	-0.32
8,597.0	90.70	269.60	6,581.8	-1,226.0	-1,916.0	2,177.4	1.21	1.11	0.48
8,660.0	90.80	271.00	6,580.9	-1,225.6	-1,979.0	2,237.9	2.23	0.16	2.22
8,724.0	90.70	271.60	6,580.1	-1,224.2	-2,042.9	2,299.1	0.95	-0.16	0.94
8,787.0	91.50	270.90	6,578.9	-1,222.8	-2,105.9	2,359.3	1.69	1.27	-1.11
8,850.0	91.20	270.20	6,577.4	-1,222.2	-2,168.9	2,419.8	1.21	-0.48	-1.11
8,913.0	90.10	270.30	6,576.7	-1,221.9	-2,231.9	2,480.3	1.75	-1.75	0.16
8,976.0	90.00	269.80	6,576.6	-1,221.9	-2,294.9	2,540.9	0.81	-0.16	-0.79
9,040.0	90.70	269.80	6,576.3	-1,222.1	-2,358.9	2,602.5	1.09	1.09	0.00
9,103.0	90.10	270.20	6,575.8	-1,222.1	-2,421.9	2,663.2	1.14	-0.95	0.63
9,166.0	90.30	270.30	6,575.6	-1,221.8	-2,484.9	2,723.7	0.35	0.32	0.16
9,229.0	91.00	270.00	6,574.9	-1,221.7	-2,547.9	2,784.3	1.21	1.11	-0.48
9,290.0	90.70	270.20	6,574.0	-1,221.6	-2,608.9	2,842.9	0.59	-0.49	0.33
9,352.0	90.30	270.20	6,573.4	-1,221.3	-2,670.9	2,902.5	0.65	-0.65	0.00
9,416.0	90.70	269.60	6,572.9	-1,221.5	-2,734.9	2,964.1	1.13	0.63	-0.94
9,479.0	91.30	268.60	6,571.8	-1,222.4	-2,797.9	3,025.0	1.85	0.95	-1.59
9,542.0	91.20	269.50	6,570.4	-1,223.5	-2,860.8	3,085.9	1.44	-0.16	1.43
9,606.0	90.10	270.30	6,569.7	-1,223.6	-2,924.8	3,147.5	2.13	-1.72	1.25
9,669.0	89.60	270.30	6,569.8	-1,223.3	-2,987.8	3,208.0	0.79	-0.79	0.00
9,732.0	89.10	270.70	6,570.6	-1,222.7	-3,050.8	3,268.5	1.02	-0.79	0.63
9,795.0	88.50	271.20	6,571.9	-1,221.7	-3,113.8	3,328.8	1.24	-0.95	0.79
9,858.0	89.20	271.00	6,573.1	-1,220.5	-3,176.8	3,389.1	1.16	1.11	-0.32
9,921.0	89.40	270.90	6,573.9	-1,219.4	-3,239.8	3,449.4	0.35	0.32	-0.16
9,985.0	90.60	269.60	6,573.9	-1,219.1	-3,303.7	3,510.9	2.76	1.88	-2.03
10,048.0	91.00	270.00	6,573.0	-1,219.4	-3,366.7	3,571.6	0.90	0.63	0.63
10,111.0	90.70	269.30	6,572.1	-1,219.7	-3,429.7	3,632.3	1.21	-0.48	-1.11
10,175.0	90.70	268.70	6,571.3	-1,220.9	-3,493.7	3,694.1	0.94	0.00	-0.94
10,238.0	90.90	267.90	6,570.4	-1,222.7	-3,556.7	3,755.2	1.31	0.32	-1.27
10,301.0	91.30	267.50	6,569.2	-1,225.3	-3,619.6	3,816.5	0.90	0.63	-0.63
10,365.0	91.90	268.70	6,567.4	-1,227.4	-3,683.6	3,878.6	2.10	0.94	1.88
10,428.0	92.40	268.60	6,565.1	-1,228.9	-3,746.5	3,939.6	0.81	0.79	-0.16
10,491.0	91.40	268.00	6,563.0	-1,230.7	-3,809.4	4,000.6	1.85	-1.59	-0.95
10,555.0	91.40	269.30	6,561.4	-1,232.2	-3,873.4	4,062.6	2.03	0.00	2.03
10,618.0	91.00	270.90	6,560.1	-1,232.1	-3,936.4	4,123.1	2.62	-0.63	2.54
10,681.0	89.30	271.40	6,559.9	-1,230.9	-3,999.4	4,183.4	2.81	-2.70	0.79
10,744.0	88.60	271.70	6,561.1	-1,229.2	-4,062.3	4,243.5	1.21	-1.11	0.48
10,807.0	90.20	270.70	6,561.8	-1,227.8	-4,125.3	4,303.8	2.99	2.54	-1.59
10,871.0	90.50	270.90	6,561.4	-1,226.9	-4,189.3	4,365.1	0.56	0.47	0.31
10,923.0	91.00	271.00	6,560.7	-1,226.1	-4,241.3	4,414.9	0.98	0.96	0.19
10,979.0	91.00	271.00	6,559.7	-1,225.1	-4,297.3	4,468.5	0.00	0.00	0.00
BHL 75'FSL, 500'FWL									

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
7,325.0	6,587.3	7"	7	7-1/2	

Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well Peterson 14Y-304
Project:	SEC.14-T5N-R64W	TVD Reference:	WELL @ 4586.0ft (Ensign Rig #32 - RKB - 15')
Site:	Peterson 14WX-HZ Pad Sec.14-T5N-R64W	MD Reference:	WELL @ 4586.0ft (Ensign Rig #32 - RKB - 15')
Well:	Peterson 14Y-304	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Landmark

Survey Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
+N/-S (ft)	+E/-W (ft)			
7,203.0	6,589.3	-1,233.6	-522.2	Deepest TVD Drilled

Checked By: _____	Approved By: _____	Date: _____
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