

# PETROLEUM DEVELOPMENT CORP Weld County CO

Well Name: **LaSalle 25G-212**

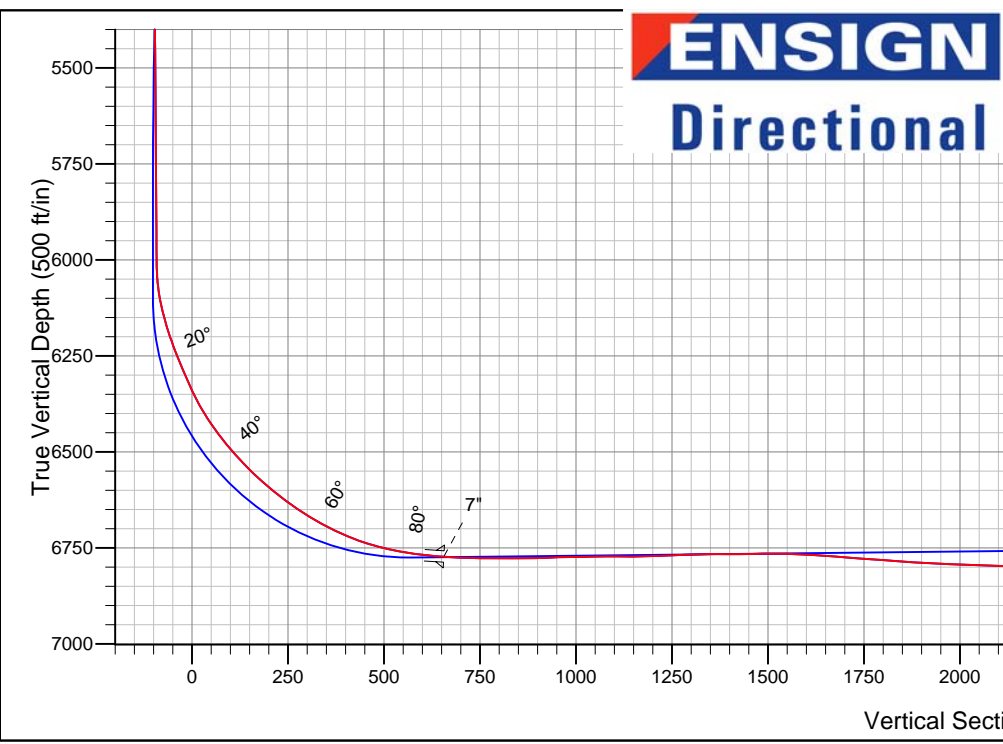
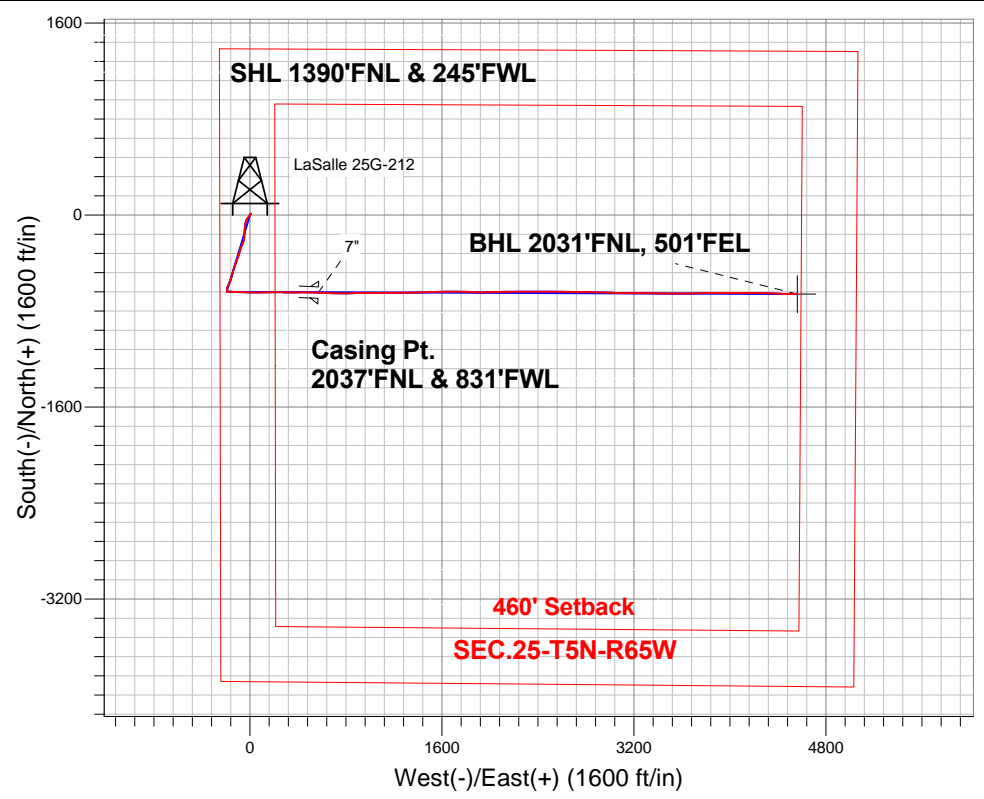
Surface Location: LaSalle 25F-HZ Pad Sec.25-T5N-R65W  
 North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone

Ground Elevation: 4640.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1380173.65	3245133.02	40.373640	-104.620170	
RKB - 15' WELL @ 4655.0ft (RKB - 15')						

## FINAL SURVEY

Projected Bottom Hole Location  
 11238'MD 6791'TVD 658'S & 4560'E of SHL  
 92.2 degree Incl @ 90.2 degree AZM

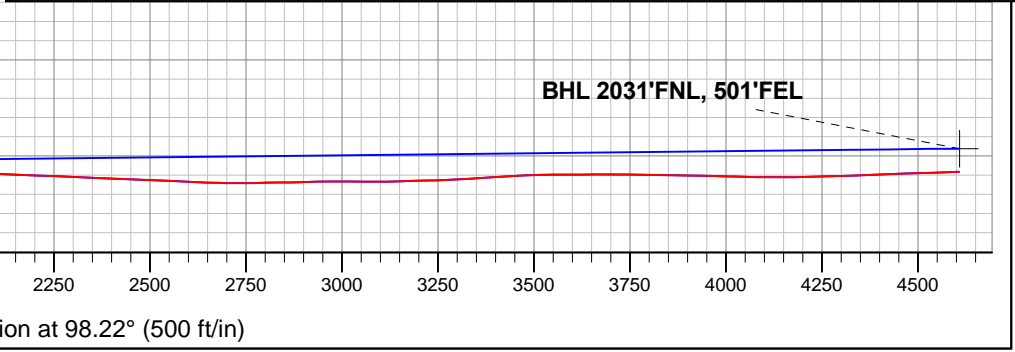


LaSalle 25F-HZ Pad Sec.25-T5N-R65W  
 LaSalle 25G-212  
 Wellbore #1  
 8:25, January 06 2014

**ANNOTATIONS**  
 No annotation data is available.

**LEGEND**

- LaSalle 25G-212, Wellbore #1, Plan #2 (12-16-13)R V0
- Wellbore #1
- Survey #1





# **PETROLEUM DEVELOPMENT CORP Weld County CO**

**SEC.25-T5N-R65W**

**LaSalle 25F-HZ Pad Sec.25-T5N-R65W**

**LaSalle 25G-212**

**Wellbore #1**

**Survey: Survey #1**

## **Standard Survey Report**

**06 January, 2014**



<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>Local Co-ordinate Reference:</b>	Well LaSalle 25G-212
<b>Project:</b>	SEC.25-T5N-R65W	<b>TVD Reference:</b>	WELL @ 4655.0ft (RKB - 15')
<b>Site:</b>	LaSalle 25F-HZ Pad Sec.25-T5N-R65W	<b>MD Reference:</b>	WELL @ 4655.0ft (RKB - 15')
<b>Well:</b>	LaSalle 25G-212	<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.25-T5N-R65W, Weld County, Colorado		
<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

<b>Site</b>	LaSalle 25F-HZ Pad Sec.25-T5N-R65W				
<b>Site Position:</b>		<b>Northing:</b>	1,380,231.95 ft	<b>Latitude:</b>	40.373800
<b>From:</b>	Lat/Long	<b>Easting:</b>	3,245,132.45 ft	<b>Longitude:</b>	-104.620170
<b>Position Uncertainty:</b>	0.0 ft	<b>Slot Radius:</b>	"	<b>Grid Convergence:</b>	0.57 °

<b>Well</b>	LaSalle 25G-212					
<b>Well Position</b>	<b>+N/-S</b>	0.0 ft	<b>Northing:</b>	1,380,173.65 ft	<b>Latitude:</b>	40.373640
	<b>+E/-W</b>	0.0 ft	<b>Easting:</b>	3,245,133.02 ft	<b>Longitude:</b>	-104.620170
<b>Position Uncertainty</b>		0.0 ft	<b>Wellhead Elevation:</b>	ft	<b>Ground Level:</b>	4,640.0 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	12/16/2013	8.45	66.97	52,870

<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	98.22

<b>Survey Program</b>	<b>Date</b>	1/6/2014			
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
125.0	11,238.0	Survey #1 (Wellbore #1)	MWD	MWD - Standard	

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
125.0	0.10	103.40	125.0	0.0	0.1	0.1	0.08	0.08	0.00
252.0	0.40	45.00	252.0	0.3	0.5	0.5	0.28	0.24	-45.98
378.0	0.40	44.30	378.0	0.9	1.1	1.0	0.00	0.00	-0.56
504.0	0.60	23.40	504.0	1.8	1.7	1.4	0.21	0.16	-16.59
630.0	0.70	11.40	630.0	3.2	2.1	1.7	0.13	0.08	-9.52
756.0	1.10	18.60	756.0	5.1	2.7	1.9	0.33	0.32	5.71
884.0	1.80	23.60	883.9	8.1	3.9	2.7	0.56	0.55	3.91
974.0	2.60	39.90	973.9	10.9	5.7	4.1	1.12	0.89	18.11
1,098.0	4.50	210.40	1,097.8	8.9	5.1	3.8	5.71	1.53	137.50
1,194.0	6.70	215.00	1,193.3	1.1	0.0	-0.2	2.34	2.29	4.79
1,320.0	8.60	218.00	1,318.2	-12.4	-10.1	-8.2	1.54	1.51	2.38

<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>Local Co-ordinate Reference:</b>	Well LaSalle 25G-212
<b>Project:</b>	SEC.25-T5N-R65W	<b>TVD Reference:</b>	WELL @ 4655.0ft (RKB - 15')
<b>Site:</b>	LaSalle 25F-HZ Pad Sec.25-T5N-R65W	<b>MD Reference:</b>	WELL @ 4655.0ft (RKB - 15')
<b>Well:</b>	LaSalle 25G-212	<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)
1,442.0	10.20	217.10	1,438.5	-28.2	-22.2	-17.9	1.32	1.31	-0.74
1,534.0	11.00	201.10	1,529.0	-42.9	-30.3	-23.8	3.30	0.87	-17.39
1,655.0	11.20	193.20	1,647.7	-65.1	-37.1	-27.4	1.27	0.17	-6.53
1,777.0	10.10	184.90	1,767.6	-87.3	-40.7	-27.8	1.54	-0.90	-6.80
1,898.0	11.30	187.20	1,886.5	-109.6	-43.1	-27.0	1.05	0.99	1.90
2,020.0	10.30	180.90	2,006.4	-132.4	-44.8	-25.4	1.27	-0.82	-5.16
2,142.0	11.40	184.60	2,126.2	-155.3	-45.9	-23.2	1.07	0.90	3.03
2,294.0	12.00	184.80	2,275.0	-186.0	-48.4	-21.4	0.40	0.39	0.13
2,447.0	10.70	196.40	2,425.0	-215.5	-53.8	-22.4	1.71	-0.85	7.58
2,604.0	12.30	202.90	2,578.9	-244.9	-64.4	-28.7	1.31	1.02	4.14
2,762.0	12.50	201.50	2,733.2	-276.3	-77.2	-36.9	0.23	0.13	-0.89
2,922.0	12.50	197.60	2,889.4	-308.9	-88.8	-43.7	0.53	0.00	-2.44
3,081.0	11.40	196.00	3,045.0	-340.4	-98.3	-48.7	0.72	-0.69	-1.01
3,239.0	10.30	195.50	3,200.1	-369.1	-106.4	-52.6	0.70	-0.70	-0.32
3,398.0	9.60	202.00	3,356.8	-395.0	-115.2	-57.5	0.83	-0.44	4.09
3,557.0	9.60	200.60	3,513.5	-419.8	-124.8	-63.5	0.15	0.00	-0.88
3,715.0	9.10	199.90	3,669.4	-443.8	-133.7	-68.9	0.32	-0.32	-0.44
3,874.0	9.70	195.80	3,826.3	-468.5	-141.6	-73.2	0.57	0.38	-2.58
4,034.0	8.90	194.10	3,984.2	-493.5	-148.3	-76.2	0.53	-0.50	-1.06
4,191.0	7.70	193.70	4,139.5	-515.5	-153.8	-78.5	0.77	-0.76	-0.25
4,350.0	8.40	202.30	4,297.0	-536.6	-160.7	-82.3	0.87	0.44	5.41
4,509.0	7.60	203.00	4,454.4	-557.0	-169.2	-87.8	0.51	-0.50	0.44
4,667.0	6.40	203.70	4,611.3	-574.7	-176.8	-92.8	0.76	-0.76	0.44
4,826.0	5.80	203.20	4,769.4	-590.2	-183.6	-97.3	0.38	-0.38	-0.31
4,985.0	5.10	203.20	4,927.6	-604.1	-189.5	-101.2	0.44	-0.44	0.00
5,144.0	5.20	175.60	5,086.0	-617.8	-191.7	-101.4	1.54	0.06	-17.36
5,303.0	4.00	173.00	5,244.5	-630.5	-190.5	-98.4	0.77	-0.75	-1.64
5,461.0	2.70	176.10	5,402.2	-639.7	-189.6	-96.2	0.83	-0.82	1.96
5,619.0	0.40	125.90	5,560.2	-643.7	-188.9	-94.9	1.56	-1.46	-31.77
5,778.0	0.80	41.40	5,719.2	-643.2	-187.7	-93.8	0.54	0.25	-53.14
5,936.0	0.80	33.60	5,877.1	-641.4	-186.4	-92.7	0.07	0.00	-4.94
6,031.0	2.00	19.70	5,972.1	-639.3	-185.4	-92.1	1.30	1.26	-14.63
6,064.0	2.10	24.30	6,005.1	-638.2	-185.0	-91.8	0.58	0.30	13.94
6,095.0	3.20	66.80	6,036.1	-637.4	-184.0	-90.9	7.02	3.55	137.10
6,127.0	6.70	86.30	6,067.9	-636.9	-181.3	-88.4	11.98	10.94	60.94
6,158.0	10.20	96.20	6,098.6	-637.1	-176.8	-83.8	12.19	11.29	31.94
6,190.0	13.50	99.20	6,129.9	-638.0	-170.2	-77.3	10.49	10.31	9.38
6,222.0	16.00	97.40	6,160.9	-639.1	-162.2	-69.1	7.94	7.81	-5.63
6,253.0	18.20	94.40	6,190.5	-640.1	-153.1	-60.0	7.64	7.10	-9.68
6,286.0	20.30	93.40	6,221.6	-640.8	-142.3	-49.2	6.44	6.36	-3.03
6,317.0	22.10	92.10	6,250.5	-641.3	-131.1	-38.0	6.00	5.81	-4.19
6,348.0	23.00	92.10	6,279.2	-641.8	-119.2	-26.2	2.90	2.90	0.00
6,380.0	23.10	91.80	6,308.6	-642.2	-106.7	-13.7	0.48	0.31	-0.94
6,412.0	24.90	91.80	6,337.8	-642.6	-93.7	-0.8	5.63	5.63	0.00
6,444.0	27.90	91.90	6,366.5	-643.1	-79.4	13.3	9.38	9.38	0.31
6,475.0	31.30	91.60	6,393.5	-643.5	-64.1	28.5	10.98	10.97	-0.97
6,507.0	33.90	90.20	6,420.4	-643.8	-46.9	45.6	8.46	8.13	-4.38
6,539.0	36.20	90.50	6,446.6	-643.9	-28.5	63.8	7.21	7.19	0.94
6,571.0	39.00	90.40	6,472.0	-644.1	-9.0	83.2	8.75	8.75	-0.31
6,602.0	41.50	90.40	6,495.6	-644.2	11.0	103.0	8.06	8.06	0.00
6,634.0	43.10	90.20	6,519.3	-644.3	32.6	124.4	5.02	5.00	-0.63
6,666.0	44.70	90.70	6,542.3	-644.5	54.7	146.3	5.12	5.00	1.56
6,698.0	47.00	91.20	6,564.6	-644.9	77.7	169.1	7.27	7.19	1.56

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Survey									
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6,729.0	49.70	90.00	6,585.2	-645.1	100.9	192.1	9.18	8.71	-3.87
6,761.0	51.70	88.60	6,605.5	-644.8	125.6	216.5	7.11	6.25	-4.38
6,793.0	53.40	88.40	6,625.0	-644.1	151.0	241.6	5.34	5.31	-0.63
6,825.0	55.40	88.80	6,643.6	-643.5	177.0	267.2	6.33	6.25	1.25
6,857.0	57.80	89.70	6,661.2	-643.2	203.7	293.6	7.86	7.50	2.81
6,889.0	60.10	90.90	6,677.7	-643.3	231.1	320.8	7.87	7.19	3.75
6,920.0	62.40	90.70	6,692.6	-643.7	258.3	347.7	7.44	7.42	-0.65
6,952.0	65.00	90.50	6,706.8	-644.0	287.0	376.1	8.14	8.13	-0.63
6,984.0	67.90	90.40	6,719.6	-644.2	316.3	405.2	9.07	9.06	-0.31
7,015.0	70.60	90.40	6,730.6	-644.4	345.3	433.9	8.71	8.71	0.00
7,047.0	73.20	90.40	6,740.5	-644.6	375.7	464.0	8.13	8.13	0.00
7,079.0	75.70	90.20	6,749.1	-644.8	406.6	494.6	7.84	7.81	-0.63
7,111.0	78.30	90.20	6,756.3	-644.9	437.7	525.4	8.13	8.13	0.00
7,142.0	80.70	89.70	6,761.9	-644.9	468.2	555.6	7.90	7.74	-1.61
7,174.0	82.70	90.40	6,766.5	-644.9	499.9	587.0	6.61	6.25	2.19
7,204.0	84.74	90.50	6,769.8	-645.1	529.7	616.5	6.81	6.80	0.33
7,244.0	86.50	92.00	6,772.9	-646.0	569.6	656.1	5.77	4.39	3.75
<b>7"</b>									
7,260.0	87.20	92.60	6,773.8	-646.6	585.5	672.0	5.77	4.40	3.74
7,292.0	87.30	92.80	6,775.3	-648.1	617.5	703.8	0.70	0.31	0.63
7,323.0	88.00	92.50	6,776.6	-649.6	648.4	734.6	2.46	2.26	-0.97
7,355.0	88.90	92.60	6,777.4	-651.0	680.4	766.4	2.83	2.81	0.31
7,387.0	89.70	92.10	6,777.8	-652.3	712.3	798.3	2.95	2.50	-1.56
7,419.0	90.60	90.90	6,777.7	-653.2	744.3	830.1	4.69	2.81	-3.75
7,450.0	90.90	88.80	6,777.3	-653.1	775.3	860.7	6.84	0.97	-6.77
7,482.0	91.60	88.60	6,776.6	-652.3	807.3	892.3	2.27	2.19	-0.63
7,514.0	92.20	88.40	6,775.6	-651.5	839.3	923.8	1.98	1.88	-0.63
7,545.0	91.80	88.40	6,774.5	-650.6	870.2	954.3	1.29	-1.29	0.00
7,577.0	91.20	88.80	6,773.6	-649.9	902.2	985.9	2.25	-1.88	1.25
7,609.0	91.10	89.70	6,773.0	-649.4	934.2	1,017.5	2.83	-0.31	2.81
7,641.0	90.60	89.70	6,772.5	-649.3	966.2	1,049.1	1.56	-1.56	0.00
7,672.0	90.00	89.70	6,772.4	-649.1	997.2	1,079.8	1.94	-1.94	0.00
7,704.0	90.20	90.00	6,772.3	-649.0	1,029.2	1,111.4	1.13	0.63	0.94
7,736.0	90.70	89.80	6,772.1	-649.0	1,061.2	1,143.1	1.68	1.56	-0.63
7,768.0	90.80	89.70	6,771.6	-648.8	1,093.2	1,174.7	0.44	0.31	-0.31
7,799.0	91.50	89.80	6,771.0	-648.7	1,124.2	1,205.4	2.28	2.26	0.32
7,831.0	91.80	89.50	6,770.1	-648.5	1,156.2	1,237.0	1.33	0.94	-0.94
7,863.0	92.90	90.40	6,768.8	-648.5	1,188.1	1,268.7	4.44	3.44	2.81
7,895.0	92.20	90.00	6,767.4	-648.6	1,220.1	1,300.3	2.52	-2.19	-1.25
7,927.0	91.50	90.40	6,766.3	-648.7	1,252.1	1,332.0	2.52	-2.19	1.25
7,958.0	90.00	89.00	6,765.9	-648.5	1,283.1	1,362.6	6.62	-4.84	-4.52
7,990.0	89.70	88.60	6,766.0	-647.9	1,315.1	1,394.2	1.56	-0.94	-1.25
8,022.0	90.10	88.60	6,766.1	-647.1	1,347.1	1,425.8	1.25	1.25	0.00
8,054.0	91.00	88.60	6,765.8	-646.3	1,379.1	1,457.3	2.81	2.81	0.00
8,085.0	90.70	87.20	6,765.3	-645.2	1,410.0	1,487.8	4.62	-0.97	-4.52
8,117.0	89.70	87.70	6,765.2	-643.7	1,442.0	1,519.2	3.49	-3.13	1.56
8,149.0	88.80	88.30	6,765.6	-642.6	1,474.0	1,550.7	3.38	-2.81	1.88
8,180.0	87.80	88.60	6,766.5	-641.8	1,505.0	1,581.3	3.37	-3.23	0.97
8,212.0	86.70	88.40	6,768.1	-641.0	1,536.9	1,612.8	3.49	-3.44	-0.63
8,243.0	85.60	88.60	6,770.1	-640.1	1,567.8	1,643.2	3.61	-3.55	0.65
8,275.0	85.30	89.10	6,772.7	-639.5	1,599.7	1,674.7	1.82	-0.94	1.56
8,307.0	85.50	89.00	6,775.2	-639.0	1,631.6	1,706.2	0.70	0.63	-0.31
8,339.0	85.70	88.60	6,777.7	-638.3	1,663.5	1,737.7	1.39	0.63	-1.25

<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>Local Co-ordinate Reference:</b>	Well LaSalle 25G-212
<b>Project:</b>	SEC.25-T5N-R65W	<b>TVD Reference:</b>	WELL @ 4655.0ft (RKB - 15')
<b>Site:</b>	LaSalle 25F-HZ Pad Sec.25-T5N-R65W	<b>MD Reference:</b>	WELL @ 4655.0ft (RKB - 15')
<b>Well:</b>	LaSalle 25G-212	<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)
8,370.0	86.10	89.30	6,779.9	-637.7	1,694.4	1,768.2	2.60	1.29	2.26
8,402.0	86.50	90.90	6,782.0	-637.8	1,726.4	1,799.8	5.14	1.25	5.00
8,434.0	86.10	91.90	6,784.0	-638.6	1,758.3	1,831.5	3.36	-1.25	3.13
8,465.0	86.30	92.50	6,786.1	-639.8	1,789.2	1,862.3	2.04	0.65	1.94
8,497.0	86.40	91.90	6,788.1	-641.0	1,821.1	1,894.0	1.90	0.31	-1.88
8,529.0	86.70	92.10	6,790.1	-642.1	1,853.0	1,925.8	1.13	0.94	0.63
8,560.0	87.00	91.90	6,791.8	-643.2	1,884.0	1,956.6	1.16	0.97	-0.65
8,592.0	87.60	90.90	6,793.3	-644.0	1,915.9	1,988.3	3.64	1.88	-3.13
8,624.0	88.30	89.10	6,794.4	-644.0	1,947.9	2,020.0	6.03	2.19	-5.63
8,656.0	88.60	88.80	6,795.3	-643.4	1,979.9	2,051.5	1.33	0.94	-0.94
8,687.0	88.20	88.60	6,796.2	-642.7	2,010.9	2,082.1	1.44	-1.29	-0.65
8,719.0	87.60	89.00	6,797.3	-642.0	2,042.8	2,113.6	2.25	-1.88	1.25
8,751.0	87.40	88.60	6,798.7	-641.3	2,074.8	2,145.2	1.40	-0.63	-1.25
8,782.0	87.80	88.60	6,800.0	-640.6	2,105.8	2,175.7	1.29	1.29	0.00
8,814.0	88.30	89.00	6,801.1	-639.9	2,137.7	2,207.3	2.00	1.56	1.25
8,846.0	87.80	89.10	6,802.2	-639.4	2,169.7	2,238.8	1.59	-1.56	0.31
8,877.0	87.40	89.30	6,803.5	-638.9	2,200.7	2,269.4	1.44	-1.29	0.65
8,909.0	87.10	90.00	6,805.0	-638.8	2,232.6	2,301.0	2.38	-0.94	2.19
8,942.0	87.60	90.00	6,806.6	-638.8	2,265.6	2,333.7	1.52	1.52	0.00
8,974.0	88.00	90.00	6,807.8	-638.8	2,297.6	2,365.3	1.25	1.25	0.00
9,005.0	87.80	90.20	6,808.9	-638.8	2,328.6	2,396.0	0.91	-0.65	0.65
9,037.0	87.90	90.30	6,810.1	-638.9	2,360.5	2,427.6	0.44	0.31	0.31
9,068.0	87.70	90.70	6,811.3	-639.2	2,391.5	2,458.3	1.44	-0.65	1.29
9,100.0	87.60	89.50	6,812.6	-639.3	2,423.5	2,490.0	3.76	-0.31	-3.75
9,132.0	87.80	89.50	6,813.9	-639.0	2,455.5	2,521.6	0.63	0.63	0.00
9,163.0	87.10	89.70	6,815.3	-638.8	2,486.4	2,552.2	2.35	-2.26	0.65
9,195.0	87.00	89.50	6,816.9	-638.6	2,518.4	2,583.8	0.70	-0.31	-0.63
9,227.0	87.80	90.20	6,818.4	-638.5	2,550.3	2,615.4	3.32	2.50	2.19
9,259.0	88.20	90.90	6,819.5	-638.8	2,582.3	2,647.1	2.52	1.25	2.19
9,290.0	88.50	91.10	6,820.4	-639.3	2,613.3	2,677.9	1.16	0.97	0.65
9,322.0	89.50	90.50	6,821.0	-639.8	2,645.3	2,709.6	3.64	3.13	-1.88
9,354.0	90.50	90.70	6,821.0	-640.1	2,677.3	2,741.3	3.19	3.13	0.63
9,385.0	90.90	90.90	6,820.6	-640.5	2,708.3	2,772.0	1.44	1.29	0.65
9,417.0	91.30	90.90	6,820.0	-641.0	2,740.3	2,803.8	1.25	1.25	0.00
9,448.0	90.60	91.10	6,819.4	-641.6	2,771.3	2,834.5	2.35	-2.26	0.65
9,480.0	90.90	91.40	6,819.0	-642.3	2,803.3	2,866.3	1.33	0.94	0.94
9,512.0	91.80	91.20	6,818.3	-643.0	2,835.2	2,898.0	2.88	2.81	-0.63
9,544.0	91.50	91.10	6,817.4	-643.6	2,867.2	2,929.8	0.99	-0.94	-0.31
9,576.0	90.80	90.70	6,816.7	-644.1	2,899.2	2,961.5	2.52	-2.19	-1.25
9,608.0	89.90	91.60	6,816.5	-644.8	2,931.2	2,993.3	3.98	-2.81	2.81
9,639.0	89.10	92.10	6,816.8	-645.8	2,962.2	3,024.1	3.04	-2.58	1.61
9,671.0	89.30	92.10	6,817.2	-647.0	2,994.2	3,055.9	0.63	0.63	0.00
9,703.0	90.00	92.10	6,817.4	-648.1	3,026.1	3,087.7	2.19	2.19	0.00
9,734.0	91.40	92.50	6,817.0	-649.4	3,057.1	3,118.6	4.70	4.52	1.29
9,766.0	91.90	91.60	6,816.1	-650.5	3,089.1	3,150.4	3.22	1.56	-2.81
9,798.0	91.60	91.10	6,815.1	-651.3	3,121.1	3,182.1	1.82	-0.94	-1.56
9,829.0	91.30	90.60	6,814.4	-651.7	3,152.0	3,212.8	1.88	-0.97	-1.61
9,861.0	91.40	89.80	6,813.6	-651.8	3,184.0	3,244.5	2.52	0.31	-2.50
9,893.0	92.20	89.80	6,812.6	-651.7	3,216.0	3,276.2	2.50	2.50	0.00
9,925.0	93.20	89.70	6,811.1	-651.6	3,248.0	3,307.8	3.14	3.13	-0.31
9,956.0	94.00	89.80	6,809.2	-651.5	3,278.9	3,338.4	2.60	2.58	0.32
9,988.0	93.90	90.50	6,806.9	-651.5	3,310.8	3,370.0	2.20	-0.31	2.19
10,019.0	92.90	90.70	6,805.1	-651.9	3,341.8	3,400.7	3.29	-3.23	0.65

<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>Local Co-ordinate Reference:</b>	Well LaSalle 25G-212
<b>Project:</b>	SEC.25-T5N-R65W	<b>TVD Reference:</b>	WELL @ 4655.0ft (RKB - 15')
<b>Site:</b>	LaSalle 25F-HZ Pad Sec.25-T5N-R65W	<b>MD Reference:</b>	WELL @ 4655.0ft (RKB - 15')
<b>Well:</b>	LaSalle 25G-212	<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)
10,051.0	93.40	90.70	6,803.4	-652.3	3,373.7	3,432.3	1.56	1.56	0.00
10,083.0	93.10	90.40	6,801.5	-652.6	3,405.7	3,464.0	1.32	-0.94	-0.94
10,115.0	92.20	90.50	6,800.1	-652.8	3,437.6	3,495.7	2.83	-2.81	0.31
10,146.0	91.20	90.70	6,799.1	-653.1	3,468.6	3,526.4	3.29	-3.23	0.65
10,177.0	90.50	90.70	6,798.7	-653.5	3,499.6	3,557.1	2.26	-2.26	0.00
10,209.0	89.50	90.00	6,798.7	-653.7	3,531.6	3,588.8	3.81	-3.13	-2.19
10,240.0	89.80	89.80	6,798.9	-653.7	3,562.6	3,619.5	1.16	0.97	-0.65
10,272.0	90.50	89.80	6,798.8	-653.5	3,594.6	3,651.1	2.19	2.19	0.00
10,304.0	90.40	89.50	6,798.5	-653.4	3,626.6	3,682.8	0.99	-0.31	-0.94
10,336.0	90.30	88.40	6,798.3	-652.8	3,658.6	3,714.4	3.45	-0.31	-3.44
10,367.0	89.80	88.60	6,798.3	-652.0	3,689.6	3,744.9	1.74	-1.61	0.65
10,399.0	88.60	89.00	6,798.8	-651.3	3,721.6	3,776.5	3.95	-3.75	1.25
10,431.0	88.80	89.10	6,799.5	-650.8	3,753.6	3,808.1	0.70	0.63	0.31
10,462.0	88.90	89.00	6,800.1	-650.2	3,784.6	3,838.7	0.46	0.32	-0.32
10,494.0	88.90	89.30	6,800.7	-649.8	3,816.6	3,870.2	0.94	0.00	0.94
10,526.0	89.10	89.30	6,801.3	-649.4	3,848.6	3,901.9	0.63	0.63	0.00
10,558.0	89.10	89.80	6,801.8	-649.1	3,880.5	3,933.5	1.56	0.00	1.56
10,589.0	88.60	90.70	6,802.4	-649.3	3,911.5	3,964.2	3.32	-1.61	2.90
10,621.0	88.90	90.50	6,803.1	-649.6	3,943.5	3,995.9	1.13	0.94	-0.63
10,653.0	88.30	90.20	6,803.9	-649.8	3,975.5	4,027.6	2.10	-1.88	-0.94
10,684.0	88.40	89.30	6,804.8	-649.7	4,006.5	4,058.2	2.92	0.32	-2.90
10,716.0	89.30	90.00	6,805.4	-649.5	4,038.5	4,089.9	3.56	2.81	2.19
10,748.0	89.80	89.50	6,805.7	-649.3	4,070.5	4,121.5	2.21	1.56	-1.56
10,780.0	90.50	90.50	6,805.6	-649.3	4,102.5	4,153.2	3.81	2.19	3.13
10,811.0	90.80	90.40	6,805.2	-649.6	4,133.5	4,183.9	1.02	0.97	-0.32
10,843.0	90.80	90.00	6,804.8	-649.7	4,165.5	4,215.6	1.25	0.00	-1.25
10,875.0	91.00	89.80	6,804.3	-649.6	4,197.5	4,247.2	0.88	0.63	-0.63
10,906.0	92.00	90.90	6,803.5	-649.8	4,228.5	4,277.9	4.79	3.23	3.55
10,938.0	92.50	91.90	6,802.2	-650.6	4,260.4	4,309.7	3.49	1.56	3.13
10,969.0	92.90	92.60	6,800.8	-651.8	4,291.4	4,340.5	2.60	1.29	2.26
11,001.0	92.20	91.90	6,799.3	-653.1	4,323.3	4,372.3	3.09	-2.19	-2.19
11,033.0	92.20	91.80	6,798.1	-654.1	4,355.3	4,404.1	0.31	0.00	-0.31
11,063.0	91.90	91.80	6,797.0	-655.0	4,385.2	4,433.8	1.00	-1.00	0.00
11,096.0	91.80	92.10	6,796.0	-656.2	4,418.2	4,466.6	0.96	-0.30	0.91
11,128.0	91.40	91.20	6,795.1	-657.1	4,450.2	4,498.4	3.08	-1.25	-2.81
11,160.0	92.20	90.70	6,794.1	-657.6	4,482.2	4,530.1	2.95	2.50	-1.56
11,185.0	92.20	90.20	6,793.1	-657.8	4,507.1	4,554.9	2.00	0.00	-2.00
11,238.0	92.20	90.20	6,791.1	-658.0	4,560.1	4,607.3	0.00	0.00	0.00
<b>BHL 2030°FNL, 500°FEL</b>									

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
7,244.0	6,772.9	7"	7	7-1/2	

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_