

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

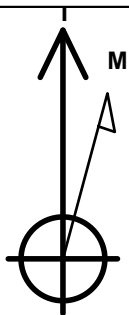
Ground Elevation: 4640.0

+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')

WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape Point
BHL 2030'FNL, 500'FEL	6731.0	-659.0	4561.3	



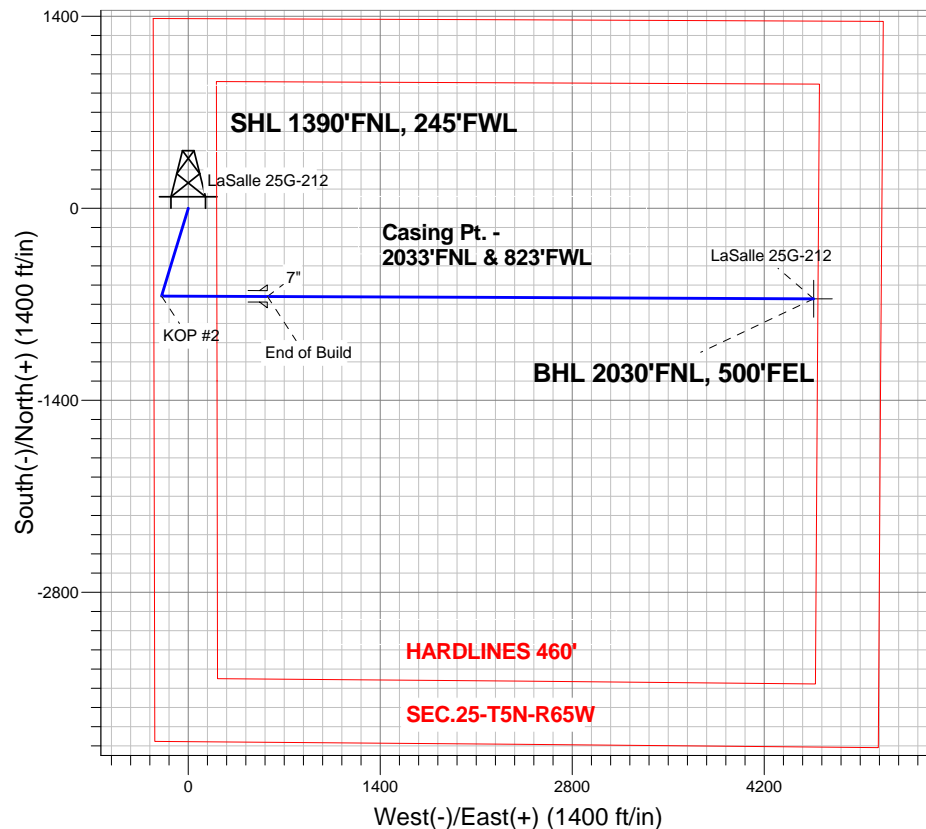
Azimuths to True North
Magnetic North: 8.56°

Magnetic Field
Strength: 52955.3nT
Dip Angle: 66.99°
Date: 2/25/2013
Model: IGRF2010

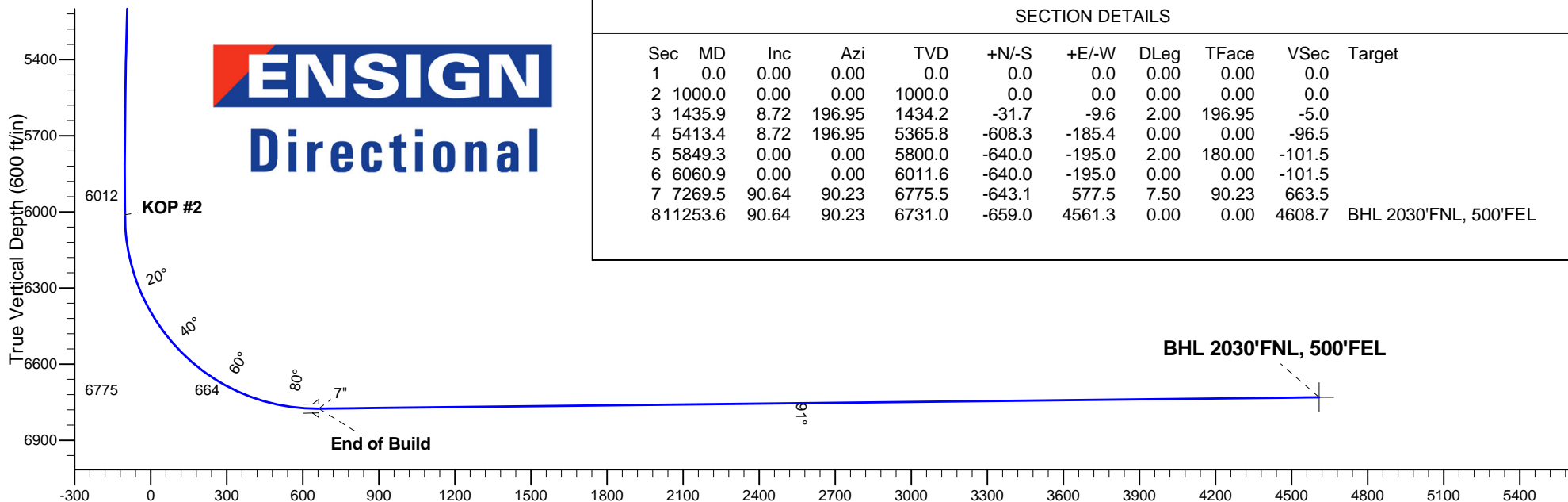
ANNOTATIONS

TVD	MD	Annotation
1000.0	1000.0	KOP #1
6011.6	6060.9	KOP #2
6775.5	7269.5	End of Build

LaSalle 25F-HZ Pad Sec.25-T5N-R65W
LaSalle 25G-212
Plan #1 (2-25-13)



ENSIGN
Directional



SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	1000.0	0.00	0.00	1000.0	0.0	0.0	0.00	0.00	0.0	
3	1435.9	8.72	196.95	1434.2	-31.7	-9.6	2.00	196.95	-5.0	
4	5413.4	8.72	196.95	5365.8	-608.3	-185.4	0.00	0.00	-96.5	
5	5849.3	0.00	0.00	5800.0	-640.0	-195.0	2.00	180.00	-101.5	
6	6060.9	0.00	0.00	6011.6	-640.0	-195.0	0.00	0.00	-101.5	
7	7269.5	90.64	90.23	6775.5	-643.1	577.5	7.50	90.23	663.5	
8	11253.6	90.64	90.23	6731.0	-659.0	4561.3	0.00	0.00	4608.7	BHL 2030'FNL, 500'FEL

Vertical Section at 98.22° (600 ft/in)



Directional

PETROLEUM DEVELOPMENT CORP Weld County CO

SEC.25-T5N-R65W

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

LaSalle 25G-212

Wellbore #1

Plan: Plan #1 (2-25-13)

Standard Planning Report

01 March, 2013

Database:	Landmark	Local Co-ordinate Reference:	Well LaSalle 25G-212
Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	TVD Reference:	WELL @ 4655.0ft (RKB - 15')
Project:	SEC.25-T5N-R65W	MD Reference:	WELL @ 4655.0ft (RKB - 15')
Site:	LaSalle 25F-HZ Pad Sec.25-T5N-R65W	North Reference:	True
Well:	LaSalle 25G-212	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (2-25-13)		

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

Well	LaSalle 25G-212		
Well Position	+N/-S	-58.3 ft	Northing:
	+E/-W	0.0 ft	Easting:
Position Uncertainty		0.0 ft	Wellhead Elevation:
			Latitude:
			Longitude:
			Ground Level:

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	2/25/2013	8.56	66.99	52,955

Design	Plan #1 (2-25-13)			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	98.22

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
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,435.9	8.72	196.95	1,434.2	-31.7	-9.6	2.00	2.00	0.00	196.95	
5,413.4	8.72	196.95	5,365.8	-608.3	-185.4	0.00	0.00	0.00	0.00	
5,849.3	0.00	0.00	5,800.0	-640.0	-195.0	2.00	-2.00	0.00	180.00	
6,060.9	0.00	0.00	6,011.6	-640.0	-195.0	0.00	0.00	0.00	0.00	
7,269.5	90.64	90.23	6,775.5	-643.1	577.5	7.50	7.50	0.00	90.23	
11,253.6	90.64	90.23	6,731.0	-659.0	4,561.3	0.00	0.00	0.00	0.00	BHL 2030'FNL, 500

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Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	TVD Reference:	WELL @ 4655.0ft (RKB - 15')
Project:	SEC.25-T5N-R65W	MD Reference:	WELL @ 4655.0ft (RKB - 15')
Site:	LaSalle 25F-HZ Pad Sec.25-T5N-R65W	North Reference:	True
Well:	LaSalle 25G-212	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (2-25-13)		

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)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
40.0	0.00	0.00	40.0	0.0	0.0	0.0	0.00	0.00	0.00
80.0	0.00	0.00	80.0	0.0	0.0	0.0	0.00	0.00	0.00
120.0	0.00	0.00	120.0	0.0	0.0	0.0	0.00	0.00	0.00
160.0	0.00	0.00	160.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
240.0	0.00	0.00	240.0	0.0	0.0	0.0	0.00	0.00	0.00
280.0	0.00	0.00	280.0	0.0	0.0	0.0	0.00	0.00	0.00
320.0	0.00	0.00	320.0	0.0	0.0	0.0	0.00	0.00	0.00
360.0	0.00	0.00	360.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
440.0	0.00	0.00	440.0	0.0	0.0	0.0	0.00	0.00	0.00
480.0	0.00	0.00	480.0	0.0	0.0	0.0	0.00	0.00	0.00
520.0	0.00	0.00	520.0	0.0	0.0	0.0	0.00	0.00	0.00
560.0	0.00	0.00	560.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
640.0	0.00	0.00	640.0	0.0	0.0	0.0	0.00	0.00	0.00
680.0	0.00	0.00	680.0	0.0	0.0	0.0	0.00	0.00	0.00
720.0	0.00	0.00	720.0	0.0	0.0	0.0	0.00	0.00	0.00
760.0	0.00	0.00	760.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
840.0	0.00	0.00	840.0	0.0	0.0	0.0	0.00	0.00	0.00
880.0	0.00	0.00	880.0	0.0	0.0	0.0	0.00	0.00	0.00
920.0	0.00	0.00	920.0	0.0	0.0	0.0	0.00	0.00	0.00
960.0	0.00	0.00	960.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
KOP #1									
1,040.0	0.80	196.95	1,040.0	-0.3	-0.1	0.0	2.00	2.00	0.00
1,080.0	1.60	196.95	1,080.0	-1.1	-0.3	-0.2	2.00	2.00	0.00
1,120.0	2.40	196.95	1,120.0	-2.4	-0.7	-0.4	2.00	2.00	0.00
1,160.0	3.20	196.95	1,159.9	-4.3	-1.3	-0.7	2.00	2.00	0.00
1,200.0	4.00	196.95	1,199.8	-6.7	-2.0	-1.1	2.00	2.00	0.00
1,240.0	4.80	196.95	1,239.7	-9.6	-2.9	-1.5	2.00	2.00	0.00
1,280.0	5.60	196.95	1,279.6	-13.1	-4.0	-2.1	2.00	2.00	0.00
1,320.0	6.40	196.95	1,319.3	-17.1	-5.2	-2.7	2.00	2.00	0.00
1,360.0	7.20	196.95	1,359.1	-21.6	-6.6	-3.4	2.00	2.00	0.00
1,400.0	8.00	196.95	1,398.7	-26.7	-8.1	-4.2	2.00	2.00	0.00
1,435.9	8.72	196.95	1,434.2	-31.7	-9.6	-5.0	2.00	2.00	0.00
1,440.0	8.72	196.95	1,438.3	-32.3	-9.8	-5.1	0.00	0.00	0.00
1,480.0	8.72	196.95	1,477.8	-38.1	-11.6	-6.0	0.00	0.00	0.00
1,520.0	8.72	196.95	1,517.3	-43.9	-13.4	-7.0	0.00	0.00	0.00
1,560.0	8.72	196.95	1,556.9	-49.7	-15.1	-7.9	0.00	0.00	0.00
1,600.0	8.72	196.95	1,596.4	-55.5	-16.9	-8.8	0.00	0.00	0.00
1,640.0	8.72	196.95	1,636.0	-61.3	-18.7	-9.7	0.00	0.00	0.00
1,680.0	8.72	196.95	1,675.5	-67.1	-20.4	-10.6	0.00	0.00	0.00
1,720.0	8.72	196.95	1,715.0	-72.9	-22.2	-11.6	0.00	0.00	0.00
1,760.0	8.72	196.95	1,754.6	-78.7	-24.0	-12.5	0.00	0.00	0.00
1,800.0	8.72	196.95	1,794.1	-84.5	-25.7	-13.4	0.00	0.00	0.00
1,840.0	8.72	196.95	1,833.7	-90.2	-27.5	-14.3	0.00	0.00	0.00
1,880.0	8.72	196.95	1,873.2	-96.0	-29.3	-15.2	0.00	0.00	0.00
1,920.0	8.72	196.95	1,912.7	-101.8	-31.0	-16.2	0.00	0.00	0.00
1,960.0	8.72	196.95	1,952.3	-107.6	-32.8	-17.1	0.00	0.00	0.00
2,000.0	8.72	196.95	1,991.8	-113.4	-34.6	-18.0	0.00	0.00	0.00

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Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	TVD Reference:	WELL @ 4655.0ft (RKB - 15')
Project:	SEC.25-T5N-R65W	MD Reference:	WELL @ 4655.0ft (RKB - 15')
Site:	LaSalle 25F-HZ Pad Sec.25-T5N-R65W	North Reference:	True
Well:	LaSalle 25G-212	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (2-25-13)		

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)
2,040.0	8.72	196.95	2,031.3	-119.2	-36.3	-18.9	0.00	0.00	0.00
2,080.0	8.72	196.95	2,070.9	-125.0	-38.1	-19.8	0.00	0.00	0.00
2,120.0	8.72	196.95	2,110.4	-130.8	-39.9	-20.7	0.00	0.00	0.00
2,160.0	8.72	196.95	2,150.0	-136.6	-41.6	-21.7	0.00	0.00	0.00
2,200.0	8.72	196.95	2,189.5	-142.4	-43.4	-22.6	0.00	0.00	0.00
2,240.0	8.72	196.95	2,229.0	-148.2	-45.2	-23.5	0.00	0.00	0.00
2,280.0	8.72	196.95	2,268.6	-154.0	-46.9	-24.4	0.00	0.00	0.00
2,320.0	8.72	196.95	2,308.1	-159.8	-48.7	-25.3	0.00	0.00	0.00
2,360.0	8.72	196.95	2,347.6	-165.6	-50.5	-26.3	0.00	0.00	0.00
2,400.0	8.72	196.95	2,387.2	-171.4	-52.2	-27.2	0.00	0.00	0.00
2,440.0	8.72	196.95	2,426.7	-177.2	-54.0	-28.1	0.00	0.00	0.00
2,480.0	8.72	196.95	2,466.3	-183.0	-55.8	-29.0	0.00	0.00	0.00
2,520.0	8.72	196.95	2,505.8	-188.8	-57.5	-29.9	0.00	0.00	0.00
2,560.0	8.72	196.95	2,545.3	-194.6	-59.3	-30.9	0.00	0.00	0.00
2,600.0	8.72	196.95	2,584.9	-200.4	-61.1	-31.8	0.00	0.00	0.00
2,640.0	8.72	196.95	2,624.4	-206.2	-62.8	-32.7	0.00	0.00	0.00
2,680.0	8.72	196.95	2,663.9	-212.0	-64.6	-33.6	0.00	0.00	0.00
2,720.0	8.72	196.95	2,703.5	-217.8	-66.4	-34.5	0.00	0.00	0.00
2,760.0	8.72	196.95	2,743.0	-223.6	-68.1	-35.5	0.00	0.00	0.00
2,800.0	8.72	196.95	2,782.6	-229.4	-69.9	-36.4	0.00	0.00	0.00
2,840.0	8.72	196.95	2,822.1	-235.2	-71.7	-37.3	0.00	0.00	0.00
2,880.0	8.72	196.95	2,861.6	-241.0	-73.4	-38.2	0.00	0.00	0.00
2,920.0	8.72	196.95	2,901.2	-246.8	-75.2	-39.1	0.00	0.00	0.00
2,960.0	8.72	196.95	2,940.7	-252.6	-77.0	-40.1	0.00	0.00	0.00
3,000.0	8.72	196.95	2,980.3	-258.4	-78.7	-41.0	0.00	0.00	0.00
3,040.0	8.72	196.95	3,019.8	-264.2	-80.5	-41.9	0.00	0.00	0.00
3,080.0	8.72	196.95	3,059.3	-270.0	-82.3	-42.8	0.00	0.00	0.00
3,120.0	8.72	196.95	3,098.9	-275.8	-84.0	-43.7	0.00	0.00	0.00
3,160.0	8.72	196.95	3,138.4	-281.6	-85.8	-44.7	0.00	0.00	0.00
3,200.0	8.72	196.95	3,177.9	-287.4	-87.6	-45.6	0.00	0.00	0.00
3,240.0	8.72	196.95	3,217.5	-293.2	-89.3	-46.5	0.00	0.00	0.00
3,280.0	8.72	196.95	3,257.0	-299.0	-91.1	-47.4	0.00	0.00	0.00
3,320.0	8.72	196.95	3,296.6	-304.8	-92.9	-48.3	0.00	0.00	0.00
3,360.0	8.72	196.95	3,336.1	-310.6	-94.6	-49.3	0.00	0.00	0.00
3,400.0	8.72	196.95	3,375.6	-316.4	-96.4	-50.2	0.00	0.00	0.00
3,440.0	8.72	196.95	3,415.2	-322.2	-98.2	-51.1	0.00	0.00	0.00
3,480.0	8.72	196.95	3,454.7	-328.0	-99.9	-52.0	0.00	0.00	0.00
3,520.0	8.72	196.95	3,494.2	-333.8	-101.7	-52.9	0.00	0.00	0.00
3,560.0	8.72	196.95	3,533.8	-339.6	-103.5	-53.9	0.00	0.00	0.00
3,600.0	8.72	196.95	3,573.3	-345.4	-105.2	-54.8	0.00	0.00	0.00
3,640.0	8.72	196.95	3,612.9	-351.2	-107.0	-55.7	0.00	0.00	0.00
3,680.0	8.72	196.95	3,652.4	-357.0	-108.8	-56.6	0.00	0.00	0.00
3,720.0	8.72	196.95	3,691.9	-362.8	-110.5	-57.5	0.00	0.00	0.00
3,760.0	8.72	196.95	3,731.5	-368.6	-112.3	-58.5	0.00	0.00	0.00
3,800.0	8.72	196.95	3,771.0	-374.4	-114.1	-59.4	0.00	0.00	0.00
3,840.0	8.72	196.95	3,810.5	-380.2	-115.8	-60.3	0.00	0.00	0.00
3,880.0	8.72	196.95	3,850.1	-386.0	-117.6	-61.2	0.00	0.00	0.00
3,920.0	8.72	196.95	3,889.6	-391.8	-119.4	-62.1	0.00	0.00	0.00
3,960.0	8.72	196.95	3,929.2	-397.6	-121.1	-63.1	0.00	0.00	0.00
4,000.0	8.72	196.95	3,968.7	-403.4	-122.9	-64.0	0.00	0.00	0.00
4,040.0	8.72	196.95	4,008.2	-409.2	-124.7	-64.9	0.00	0.00	0.00
4,080.0	8.72	196.95	4,047.8	-415.0	-126.4	-65.8	0.00	0.00	0.00
4,120.0	8.72	196.95	4,087.3	-420.8	-128.2	-66.7	0.00	0.00	0.00

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Site:	LaSalle 25F-HZ Pad Sec.25-T5N-R65W	North Reference:	True
Well:	LaSalle 25G-212	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (2-25-13)		

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)
4,160.0	8.72	196.95	4,126.8	-426.6	-130.0	-67.6	0.00	0.00	0.00
4,200.0	8.72	196.95	4,166.4	-432.4	-131.8	-68.6	0.00	0.00	0.00
4,240.0	8.72	196.95	4,205.9	-438.2	-133.5	-69.5	0.00	0.00	0.00
4,280.0	8.72	196.95	4,245.5	-444.0	-135.3	-70.4	0.00	0.00	0.00
4,320.0	8.72	196.95	4,285.0	-449.8	-137.1	-71.3	0.00	0.00	0.00
4,360.0	8.72	196.95	4,324.5	-455.6	-138.8	-72.2	0.00	0.00	0.00
4,400.0	8.72	196.95	4,364.1	-461.4	-140.6	-73.2	0.00	0.00	0.00
4,440.0	8.72	196.95	4,403.6	-467.2	-142.4	-74.1	0.00	0.00	0.00
4,480.0	8.72	196.95	4,443.2	-473.0	-144.1	-75.0	0.00	0.00	0.00
4,520.0	8.72	196.95	4,482.7	-478.8	-145.9	-75.9	0.00	0.00	0.00
4,560.0	8.72	196.95	4,522.2	-484.6	-147.7	-76.8	0.00	0.00	0.00
4,600.0	8.72	196.95	4,561.8	-490.4	-149.4	-77.8	0.00	0.00	0.00
4,640.0	8.72	196.95	4,601.3	-496.2	-151.2	-78.7	0.00	0.00	0.00
4,680.0	8.72	196.95	4,640.8	-502.0	-153.0	-79.6	0.00	0.00	0.00
4,720.0	8.72	196.95	4,680.4	-507.8	-154.7	-80.5	0.00	0.00	0.00
4,760.0	8.72	196.95	4,719.9	-513.6	-156.5	-81.4	0.00	0.00	0.00
4,800.0	8.72	196.95	4,759.5	-519.4	-158.3	-82.4	0.00	0.00	0.00
4,840.0	8.72	196.95	4,799.0	-525.2	-160.0	-83.3	0.00	0.00	0.00
4,880.0	8.72	196.95	4,838.5	-531.0	-161.8	-84.2	0.00	0.00	0.00
4,920.0	8.72	196.95	4,878.1	-536.8	-163.6	-85.1	0.00	0.00	0.00
4,960.0	8.72	196.95	4,917.6	-542.6	-165.3	-86.0	0.00	0.00	0.00
5,000.0	8.72	196.95	4,957.1	-548.4	-167.1	-87.0	0.00	0.00	0.00
5,040.0	8.72	196.95	4,996.7	-554.2	-168.9	-87.9	0.00	0.00	0.00
5,080.0	8.72	196.95	5,036.2	-560.0	-170.6	-88.8	0.00	0.00	0.00
5,120.0	8.72	196.95	5,075.8	-565.8	-172.4	-89.7	0.00	0.00	0.00
5,160.0	8.72	196.95	5,115.3	-571.6	-174.2	-90.6	0.00	0.00	0.00
5,200.0	8.72	196.95	5,154.8	-577.4	-175.9	-91.6	0.00	0.00	0.00
5,240.0	8.72	196.95	5,194.4	-583.2	-177.7	-92.5	0.00	0.00	0.00
5,280.0	8.72	196.95	5,233.9	-589.0	-179.5	-93.4	0.00	0.00	0.00
5,320.0	8.72	196.95	5,273.4	-594.8	-181.2	-94.3	0.00	0.00	0.00
5,360.0	8.72	196.95	5,313.0	-600.6	-183.0	-95.2	0.00	0.00	0.00
5,400.0	8.72	196.95	5,352.5	-606.4	-184.8	-96.2	0.00	0.00	0.00
5,413.4	8.72	196.95	5,365.8	-608.3	-185.4	-96.5	0.00	0.00	0.00
5,440.0	8.19	196.95	5,392.1	-612.1	-186.5	-97.1	2.00	-2.00	0.00
5,480.0	7.39	196.95	5,431.7	-617.3	-188.1	-97.9	2.00	-2.00	0.00
5,520.0	6.59	196.95	5,471.4	-621.9	-189.5	-98.6	2.00	-2.00	0.00
5,560.0	5.79	196.95	5,511.2	-626.0	-190.7	-99.3	2.00	-2.00	0.00
5,600.0	4.99	196.95	5,551.0	-629.6	-191.8	-99.8	2.00	-2.00	0.00
5,640.0	4.19	196.95	5,590.9	-632.7	-192.8	-100.3	2.00	-2.00	0.00
5,680.0	3.39	196.95	5,630.8	-635.2	-193.5	-100.7	2.00	-2.00	0.00
5,720.0	2.59	196.95	5,670.7	-637.2	-194.1	-101.0	2.00	-2.00	0.00
5,760.0	1.79	196.95	5,710.7	-638.7	-194.6	-101.3	2.00	-2.00	0.00
5,800.0	0.99	196.95	5,750.7	-639.6	-194.9	-101.4	2.00	-2.00	0.00
5,840.0	0.19	196.95	5,790.7	-640.0	-195.0	-101.5	2.00	-2.00	0.00
5,849.3	0.00	0.00	5,800.0	-640.0	-195.0	-101.5	2.00	-2.00	0.00
5,880.0	0.00	0.00	5,830.7	-640.0	-195.0	-101.5	0.00	0.00	0.00
5,920.0	0.00	0.00	5,870.7	-640.0	-195.0	-101.5	0.00	0.00	0.00
5,960.0	0.00	0.00	5,910.7	-640.0	-195.0	-101.5	0.00	0.00	0.00
6,000.0	0.00	0.00	5,950.7	-640.0	-195.0	-101.5	0.00	0.00	0.00
6,040.0	0.00	0.00	5,990.7	-640.0	-195.0	-101.5	0.00	0.00	0.00
6,060.9	0.00	0.00	6,011.6	-640.0	-195.0	-101.5	0.00	0.00	0.00
KOP #2									
6,080.0	1.43	90.23	6,030.7	-640.0	-194.8	-101.2	7.49	7.49	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well LaSalle 25G-212
Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	TVD Reference:	WELL @ 4655.0ft (RKB - 15')
Project:	SEC.25-T5N-R65W	MD Reference:	WELL @ 4655.0ft (RKB - 15')
Site:	LaSalle 25F-HZ Pad Sec.25-T5N-R65W	North Reference:	True
Well:	LaSalle 25G-212	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (2-25-13)		

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)
6,120.0	4.43	90.23	6,070.6	-640.0	-192.7	-99.2	7.50	7.50	0.00
6,160.0	7.43	90.23	6,110.4	-640.0	-188.6	-95.1	7.50	7.50	0.00
6,200.0	10.43	90.23	6,149.9	-640.1	-182.4	-89.0	7.50	7.50	0.00
6,240.0	13.43	90.23	6,189.1	-640.1	-174.1	-80.8	7.50	7.50	0.00
6,280.0	16.43	90.23	6,227.7	-640.1	-163.8	-70.6	7.50	7.50	0.00
6,320.0	19.43	90.23	6,265.8	-640.2	-151.5	-58.4	7.50	7.50	0.00
6,360.0	22.43	90.23	6,303.1	-640.2	-137.2	-44.2	7.50	7.50	0.00
6,400.0	25.43	90.23	6,339.7	-640.3	-121.0	-28.2	7.50	7.50	0.00
6,440.0	28.43	90.23	6,375.3	-640.4	-102.9	-10.2	7.50	7.50	0.00
6,480.0	31.43	90.23	6,410.0	-640.4	-82.9	9.5	7.50	7.50	0.00
6,520.0	34.43	90.23	6,443.6	-640.5	-61.2	31.1	7.50	7.50	0.00
6,560.0	37.43	90.23	6,475.9	-640.6	-37.7	54.3	7.50	7.50	0.00
6,600.0	40.43	90.23	6,507.0	-640.7	-12.6	79.2	7.50	7.50	0.00
6,640.0	43.43	90.23	6,536.8	-640.8	14.2	105.7	7.50	7.50	0.00
6,680.0	46.43	90.23	6,565.1	-640.9	42.4	133.6	7.50	7.50	0.00
6,720.0	49.43	90.23	6,591.9	-641.1	72.1	163.0	7.50	7.50	0.00
6,760.0	52.43	90.23	6,617.1	-641.2	103.2	193.8	7.50	7.50	0.00
6,800.0	55.43	90.23	6,640.7	-641.3	135.5	225.8	7.50	7.50	0.00
6,840.0	58.43	90.23	6,662.5	-641.5	169.0	259.0	7.50	7.50	0.00
6,880.0	61.43	90.23	6,682.5	-641.6	203.6	293.3	7.50	7.50	0.00
6,920.0	64.43	90.23	6,700.7	-641.7	239.2	328.5	7.50	7.50	0.00
6,960.0	67.43	90.23	6,717.0	-641.9	275.7	364.7	7.50	7.50	0.00
7,000.0	70.43	90.23	6,731.4	-642.0	313.1	401.6	7.50	7.50	0.00
7,040.0	73.43	90.23	6,743.8	-642.2	351.1	439.3	7.50	7.50	0.00
7,080.0	76.43	90.23	6,754.2	-642.3	389.7	477.5	7.50	7.50	0.00
7,120.0	79.43	90.23	6,762.6	-642.5	428.8	516.3	7.50	7.50	0.00
7,160.0	82.43	90.23	6,768.9	-642.6	468.3	555.4	7.50	7.50	0.00
7,200.0	85.43	90.23	6,773.1	-642.8	508.1	594.8	7.50	7.50	0.00
7,240.0	88.43	90.23	6,775.3	-643.0	548.0	634.3	7.50	7.50	0.00
7,269.5	90.64	90.23	6,775.5	-643.1	577.5	663.5	7.49	7.49	0.00
End of Build - 7"									
7,280.0	90.64	90.23	6,775.4	-643.1	588.0	673.9	0.00	0.00	0.00
7,320.0	90.64	90.23	6,774.9	-643.3	628.0	713.5	0.00	0.00	0.00
7,360.0	90.64	90.23	6,774.5	-643.4	668.0	753.2	0.00	0.00	0.00
7,400.0	90.64	90.23	6,774.0	-643.6	708.0	792.8	0.00	0.00	0.00
7,440.0	90.64	90.23	6,773.6	-643.8	748.0	832.4	0.00	0.00	0.00
7,480.0	90.64	90.23	6,773.2	-643.9	788.0	872.0	0.00	0.00	0.00
7,520.0	90.64	90.23	6,772.7	-644.1	828.0	911.6	0.00	0.00	0.00
7,560.0	90.64	90.23	6,772.3	-644.2	868.0	951.2	0.00	0.00	0.00
7,600.0	90.64	90.23	6,771.8	-644.4	908.0	990.8	0.00	0.00	0.00
7,640.0	90.64	90.23	6,771.4	-644.6	948.0	1,030.4	0.00	0.00	0.00
7,680.0	90.64	90.23	6,770.9	-644.7	988.0	1,070.0	0.00	0.00	0.00
7,720.0	90.64	90.23	6,770.5	-644.9	1,028.0	1,109.6	0.00	0.00	0.00
7,760.0	90.64	90.23	6,770.0	-645.0	1,068.0	1,149.2	0.00	0.00	0.00
7,800.0	90.64	90.23	6,769.6	-645.2	1,108.0	1,188.9	0.00	0.00	0.00
7,840.0	90.64	90.23	6,769.1	-645.4	1,148.0	1,228.5	0.00	0.00	0.00
7,880.0	90.64	90.23	6,768.7	-645.5	1,188.0	1,268.1	0.00	0.00	0.00
7,920.0	90.64	90.23	6,768.2	-645.7	1,228.0	1,307.7	0.00	0.00	0.00
7,960.0	90.64	90.23	6,767.8	-645.8	1,268.0	1,347.3	0.00	0.00	0.00
8,000.0	90.64	90.23	6,767.3	-646.0	1,308.0	1,386.9	0.00	0.00	0.00
8,040.0	90.64	90.23	6,766.9	-646.2	1,348.0	1,426.5	0.00	0.00	0.00
8,080.0	90.64	90.23	6,766.4	-646.3	1,388.0	1,466.1	0.00	0.00	0.00
8,120.0	90.64	90.23	6,766.0	-646.5	1,428.0	1,505.7	0.00	0.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well LaSalle 25G-212
Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	TVD Reference:	WELL @ 4655.0ft (RKB - 15')
Project:	SEC.25-T5N-R65W	MD Reference:	WELL @ 4655.0ft (RKB - 15')
Site:	LaSalle 25F-HZ Pad Sec.25-T5N-R65W	North Reference:	True
Well:	LaSalle 25G-212	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (2-25-13)		

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)
8,160.0	90.64	90.23	6,765.6	-646.6	1,468.0	1,545.3	0.00	0.00	0.00
8,200.0	90.64	90.23	6,765.1	-646.8	1,508.0	1,584.9	0.00	0.00	0.00
8,240.0	90.64	90.23	6,764.7	-647.0	1,548.0	1,624.6	0.00	0.00	0.00
8,280.0	90.64	90.23	6,764.2	-647.1	1,588.0	1,664.2	0.00	0.00	0.00
8,320.0	90.64	90.23	6,763.8	-647.3	1,627.9	1,703.8	0.00	0.00	0.00
8,360.0	90.64	90.23	6,763.3	-647.4	1,667.9	1,743.4	0.00	0.00	0.00
8,400.0	90.64	90.23	6,762.9	-647.6	1,707.9	1,783.0	0.00	0.00	0.00
8,440.0	90.64	90.23	6,762.4	-647.7	1,747.9	1,822.6	0.00	0.00	0.00
8,480.0	90.64	90.23	6,762.0	-647.9	1,787.9	1,862.2	0.00	0.00	0.00
8,520.0	90.64	90.23	6,761.5	-648.1	1,827.9	1,901.8	0.00	0.00	0.00
8,560.0	90.64	90.23	6,761.1	-648.2	1,867.9	1,941.4	0.00	0.00	0.00
8,600.0	90.64	90.23	6,760.6	-648.4	1,907.9	1,981.0	0.00	0.00	0.00
8,640.0	90.64	90.23	6,760.2	-648.5	1,947.9	2,020.6	0.00	0.00	0.00
8,680.0	90.64	90.23	6,759.7	-648.7	1,987.9	2,060.3	0.00	0.00	0.00
8,720.0	90.64	90.23	6,759.3	-648.9	2,027.9	2,099.9	0.00	0.00	0.00
8,760.0	90.64	90.23	6,758.9	-649.0	2,067.9	2,139.5	0.00	0.00	0.00
8,800.0	90.64	90.23	6,758.4	-649.2	2,107.9	2,179.1	0.00	0.00	0.00
8,840.0	90.64	90.23	6,758.0	-649.3	2,147.9	2,218.7	0.00	0.00	0.00
8,880.0	90.64	90.23	6,757.5	-649.5	2,187.9	2,258.3	0.00	0.00	0.00
8,920.0	90.64	90.23	6,757.1	-649.7	2,227.9	2,297.9	0.00	0.00	0.00
8,960.0	90.64	90.23	6,756.6	-649.8	2,267.9	2,337.5	0.00	0.00	0.00
9,000.0	90.64	90.23	6,756.2	-650.0	2,307.9	2,377.1	0.00	0.00	0.00
9,040.0	90.64	90.23	6,755.7	-650.1	2,347.9	2,416.7	0.00	0.00	0.00
9,080.0	90.64	90.23	6,755.3	-650.3	2,387.9	2,456.3	0.00	0.00	0.00
9,120.0	90.64	90.23	6,754.8	-650.5	2,427.9	2,496.0	0.00	0.00	0.00
9,160.0	90.64	90.23	6,754.4	-650.6	2,467.9	2,535.6	0.00	0.00	0.00
9,200.0	90.64	90.23	6,753.9	-650.8	2,507.9	2,575.2	0.00	0.00	0.00
9,240.0	90.64	90.23	6,753.5	-650.9	2,547.9	2,614.8	0.00	0.00	0.00
9,280.0	90.64	90.23	6,753.0	-651.1	2,587.9	2,654.4	0.00	0.00	0.00
9,320.0	90.64	90.23	6,752.6	-651.3	2,627.9	2,694.0	0.00	0.00	0.00
9,360.0	90.64	90.23	6,752.2	-651.4	2,667.9	2,733.6	0.00	0.00	0.00
9,400.0	90.64	90.23	6,751.7	-651.6	2,707.9	2,773.2	0.00	0.00	0.00
9,440.0	90.64	90.23	6,751.3	-651.7	2,747.9	2,812.8	0.00	0.00	0.00
9,480.0	90.64	90.23	6,750.8	-651.9	2,787.9	2,852.4	0.00	0.00	0.00
9,520.0	90.64	90.23	6,750.4	-652.1	2,827.9	2,892.0	0.00	0.00	0.00
9,560.0	90.64	90.23	6,749.9	-652.2	2,867.9	2,931.6	0.00	0.00	0.00
9,600.0	90.64	90.23	6,749.5	-652.4	2,907.9	2,971.3	0.00	0.00	0.00
9,640.0	90.64	90.23	6,749.0	-652.5	2,947.9	3,010.9	0.00	0.00	0.00
9,680.0	90.64	90.23	6,748.6	-652.7	2,987.9	3,050.5	0.00	0.00	0.00
9,720.0	90.64	90.23	6,748.1	-652.9	3,027.8	3,090.1	0.00	0.00	0.00
9,760.0	90.64	90.23	6,747.7	-653.0	3,067.8	3,129.7	0.00	0.00	0.00
9,800.0	90.64	90.23	6,747.2	-653.2	3,107.8	3,169.3	0.00	0.00	0.00
9,840.0	90.64	90.23	6,746.8	-653.3	3,147.8	3,208.9	0.00	0.00	0.00
9,880.0	90.64	90.23	6,746.3	-653.5	3,187.8	3,248.5	0.00	0.00	0.00
9,920.0	90.64	90.23	6,745.9	-653.7	3,227.8	3,288.1	0.00	0.00	0.00
9,960.0	90.64	90.23	6,745.4	-653.8	3,267.8	3,327.7	0.00	0.00	0.00
10,000.0	90.64	90.23	6,745.0	-654.0	3,307.8	3,367.3	0.00	0.00	0.00
10,040.0	90.64	90.23	6,744.6	-654.1	3,347.8	3,407.0	0.00	0.00	0.00
10,080.0	90.64	90.23	6,744.1	-654.3	3,387.8	3,446.6	0.00	0.00	0.00
10,120.0	90.64	90.23	6,743.7	-654.4	3,427.8	3,486.2	0.00	0.00	0.00
10,160.0	90.64	90.23	6,743.2	-654.6	3,467.8	3,525.8	0.00	0.00	0.00
10,200.0	90.64	90.23	6,742.8	-654.8	3,507.8	3,565.4	0.00	0.00	0.00
10,240.0	90.64	90.23	6,742.3	-654.9	3,547.8	3,605.0	0.00	0.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well LaSalle 25G-212
Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	TVD Reference:	WELL @ 4655.0ft (RKB - 15')
Project:	SEC.25-T5N-R65W	MD Reference:	WELL @ 4655.0ft (RKB - 15')
Site:	LaSalle 25F-HZ Pad Sec.25-T5N-R65W	North Reference:	True
Well:	LaSalle 25G-212	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (2-25-13)		

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)
10,280.0	90.64	90.23	6,741.9	-655.1	3,587.8	3,644.6	0.00	0.00	0.00
10,320.0	90.64	90.23	6,741.4	-655.2	3,627.8	3,684.2	0.00	0.00	0.00
10,360.0	90.64	90.23	6,741.0	-655.4	3,667.8	3,723.8	0.00	0.00	0.00
10,400.0	90.64	90.23	6,740.5	-655.6	3,707.8	3,763.4	0.00	0.00	0.00
10,440.0	90.64	90.23	6,740.1	-655.7	3,747.8	3,803.0	0.00	0.00	0.00
10,480.0	90.64	90.23	6,739.6	-655.9	3,787.8	3,842.7	0.00	0.00	0.00
10,520.0	90.64	90.23	6,739.2	-656.0	3,827.8	3,882.3	0.00	0.00	0.00
10,560.0	90.64	90.23	6,738.7	-656.2	3,867.8	3,921.9	0.00	0.00	0.00
10,600.0	90.64	90.23	6,738.3	-656.4	3,907.8	3,961.5	0.00	0.00	0.00
10,640.0	90.64	90.23	6,737.9	-656.5	3,947.8	4,001.1	0.00	0.00	0.00
10,680.0	90.64	90.23	6,737.4	-656.7	3,987.8	4,040.7	0.00	0.00	0.00
10,720.0	90.64	90.23	6,737.0	-656.8	4,027.8	4,080.3	0.00	0.00	0.00
10,760.0	90.64	90.23	6,736.5	-657.0	4,067.8	4,119.9	0.00	0.00	0.00
10,800.0	90.64	90.23	6,736.1	-657.2	4,107.8	4,159.5	0.00	0.00	0.00
10,840.0	90.64	90.23	6,735.6	-657.3	4,147.8	4,199.1	0.00	0.00	0.00
10,880.0	90.64	90.23	6,735.2	-657.5	4,187.8	4,238.7	0.00	0.00	0.00
10,920.0	90.64	90.23	6,734.7	-657.6	4,227.8	4,278.4	0.00	0.00	0.00
10,960.0	90.64	90.23	6,734.3	-657.8	4,267.8	4,318.0	0.00	0.00	0.00
11,000.0	90.64	90.23	6,733.8	-658.0	4,307.8	4,357.6	0.00	0.00	0.00
11,040.0	90.64	90.23	6,733.4	-658.1	4,347.8	4,397.2	0.00	0.00	0.00
11,080.0	90.64	90.23	6,732.9	-658.3	4,387.8	4,436.8	0.00	0.00	0.00
11,120.0	90.64	90.23	6,732.5	-658.4	4,427.8	4,476.4	0.00	0.00	0.00
11,160.0	90.64	90.23	6,732.0	-658.6	4,467.7	4,516.0	0.00	0.00	0.00
11,200.0	90.64	90.23	6,731.6	-658.8	4,507.7	4,555.6	0.00	0.00	0.00
11,240.0	90.64	90.23	6,731.2	-658.9	4,547.7	4,595.2	0.00	0.00	0.00
11,253.6	90.64	90.23	6,731.0	-659.0	4,561.3	4,608.7	0.00	0.00	0.00

Casing Points				
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
7,269.5	6,775.5	7"	7	8-3/4

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
1,000.0	1,000.0	0.0	0.0	KOP #1
6,060.9	6,011.6	-640.0	-195.0	KOP #2
7,269.5	6,775.5	-643.1	577.5	End of Build



Directional

PETROLEUM DEVELOPMENT CORP Weld County CO

SEC.25-T5N-R65W

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

LaSalle 25G-212

Wellbore #1

Plan #1 (2-25-13)

Anticollision Report

01 March, 2013



Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well LaSalle 25G-212
Project:	SEC.25-T5N-R65W	TVD Reference:	WELL @ 4655.0ft (RKB - 15')
Reference Site:	LaSalle 25F-HZ Pad Sec.25-T5N-R65W	MD Reference:	WELL @ 4655.0ft (RKB - 15')
Site Error:	0.0ft	North Reference:	True
Reference Well:	LaSalle 25G-212	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (2-25-13)	Offset TVD Reference:	Offset Datum

Offset Design LaSalle 25F-HZ Pad Sec.25-T5N-R65W - LaSalle 25F-332 - Wellbore #1 - Plan #1 (2-25-13)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Semi Major Axis	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
2,200.0	2,189.5	2,189.5	2,189.5	5.3	4.8	177.22	177.22	29.1	0.0	177.0	167.6	9.38	18.879	
2,300.0	2,288.3	2,288.3	2,288.3	5.7	5.0	177.44	177.44	29.1	0.0	192.1	182.3	9.83	19.554	
2,400.0	2,387.2	2,387.2	2,387.2	6.0	5.3	177.62	177.62	29.1	0.0	207.3	197.0	10.28	20.167	
2,500.0	2,486.0	2,486.0	2,486.0	6.3	5.5	177.79	177.79	29.1	0.0	222.4	211.7	10.73	20.725	
2,600.0	2,584.9	2,584.9	2,584.9	6.7	5.7	177.93	177.93	29.1	0.0	237.6	226.4	11.19	21.236	
2,700.0	2,683.7	2,683.7	2,683.7	7.0	5.9	178.05	178.05	29.1	0.0	252.7	241.1	11.64	21.705	
2,800.0	2,782.6	2,782.6	2,782.6	7.4	6.1	178.16	178.16	29.1	0.0	267.9	255.8	12.10	22.136	
2,900.0	2,881.4	2,881.4	2,881.4	7.7	6.4	178.26	178.26	29.1	0.0	283.0	270.5	12.56	22.534	
3,000.0	2,980.3	2,980.3	2,980.3	8.1	6.6	178.35	178.35	29.1	0.0	298.2	285.1	13.02	22.903	
3,100.0	3,079.1	3,079.1	3,079.1	8.4	6.8	178.31	178.31	28.2	-1.0	312.3	298.8	13.48	23.175	
3,200.0	3,177.9	3,177.9	3,177.9	8.8	7.0	177.89	177.89	24.5	-4.9	323.2	309.3	13.91	23.233	
3,300.0	3,276.8	3,307.3	3,306.7	9.2	7.2	177.12	177.12	17.8	-11.9	331.0	316.6	14.36	23.052	
3,400.0	3,375.6	3,408.5	3,407.3	9.5	7.4	176.21	176.21	10.0	-20.2	336.7	321.9	14.80	22.759	
3,500.0	3,474.5	3,508.2	3,506.4	9.9	7.6	175.35	175.35	2.3	-28.3	342.5	327.3	15.24	22.479	
3,600.0	3,573.3	3,607.9	3,605.4	10.2	7.8	174.51	174.51	-5.4	-36.4	348.4	332.7	15.69	22.211	
3,700.0	3,672.2	3,707.6	3,704.5	10.6	8.0	173.70	173.70	-13.1	-44.5	354.3	338.2	16.14	21.953	
3,800.0	3,771.0	3,807.3	3,803.6	11.0	8.3	172.92	172.92	-20.8	-52.7	360.4	343.8	16.60	21.706	
3,900.0	3,869.9	3,907.0	3,902.6	11.3	8.5	172.17	172.17	-28.5	-60.8	366.4	349.4	17.07	21.468	
4,000.0	3,968.7	4,006.7	4,001.7	11.7	8.7	171.44	171.44	-36.2	-68.9	372.6	355.0	17.54	21.239	
4,100.0	4,067.5	4,106.4	4,100.8	12.1	9.0	170.73	170.73	-44.0	-77.1	378.8	360.8	18.02	21.019	
4,200.0	4,166.4	4,206.1	4,199.8	12.4	9.2	170.05	170.05	-51.7	-85.2	385.0	366.5	18.50	20.807	
4,300.0	4,265.2	4,305.8	4,298.9	12.8	9.4	169.38	169.38	-59.4	-93.3	391.4	372.4	18.99	20.604	
4,400.0	4,364.1	4,405.5	4,398.0	13.1	9.7	168.74	168.74	-67.1	-101.4	397.7	378.2	19.49	20.407	
4,500.0	4,462.9	4,505.2	4,497.0	13.5	9.9	168.12	168.12	-74.8	-109.6	404.1	384.1	19.99	20.218	
4,600.0	4,561.8	4,604.9	4,596.1	13.9	10.2	167.52	167.52	-82.5	-117.7	410.6	390.1	20.49	20.036	
4,700.0	4,660.6	4,704.6	4,695.2	14.2	10.5	166.94	166.94	-90.2	-125.8	417.1	396.1	21.00	19.861	
4,800.0	4,759.5	4,804.3	4,794.3	14.6	10.7	166.37	166.37	-97.9	-133.9	423.6	402.1	21.51	19.691	
4,900.0	4,858.3	4,904.0	4,893.3	15.0	11.0	165.83	165.83	-105.6	-142.1	430.2	408.2	22.03	19.528	
5,000.0	4,957.1	5,003.7	4,992.4	15.3	11.3	165.29	165.29	-113.3	-150.2	436.8	414.3	22.55	19.370	
5,100.0	5,056.0	5,103.4	5,091.5	15.7	11.5	164.78	164.78	-121.1	-158.3	443.5	420.4	23.07	19.218	
5,200.0	5,154.8	5,203.1	5,190.5	16.1	11.8	164.28	164.28	-128.8	-166.5	450.1	426.5	23.60	19.071	
5,300.0	5,253.7	5,302.8	5,289.6	16.4	12.1	163.79	163.79	-136.5	-174.6	456.9	432.7	24.14	18.930	
5,400.0	5,352.5	5,400.0	5,386.2	16.8	12.4	163.34	163.34	-144.0	-182.5	463.6	439.0	24.66	18.799	
5,500.0	5,451.6	5,491.1	5,476.8	17.1	12.6	163.06	163.06	-149.9	-188.7	470.5	445.3	25.15	18.704	
5,600.0	5,551.0	5,590.7	5,566.3	17.3	12.8	162.93	162.93	-153.7	-192.7	476.2	450.6	25.57	18.620	
5,700.0	5,650.8	5,670.3	5,655.8	17.5	12.9	162.94	162.94	-155.6	-194.8	480.7	454.7	25.94	18.528	
5,800.0	5,750.7	5,765.2	5,750.7	17.7	13.1	163.04	163.04	-155.9	-195.0	483.7	457.5	26.28	18.409	
5,900.0	5,850.7	5,865.2	5,850.7	17.8	13.3	0.00	0.00	-155.9	-195.0	484.1	453.8	30.30	15.979	
6,000.0	5,950.7	5,965.2	5,950.7	17.9	13.5	0.00	0.00	-155.9	-195.0	484.1	453.5	30.64	15.803	
6,045.1	5,995.8	6,010.3	5,995.8	18.0	13.6	-90.29	-90.29	-155.9	-195.0	484.2	457.0	27.19	17.804	
6,100.0	6,050.7	6,065.1	6,050.7	18.1	13.7	-90.35	-90.35	-155.9	-195.0	484.2	456.7	27.40	17.667	
6,200.0	6,149.9	6,165.1	6,150.6	18.2	13.9	-91.58	-91.58	-155.9	-193.9	484.3	456.5	27.81	17.414	
6,300.0	6,246.8	6,267.0	6,251.7	18.3	14.1	-93.06	-93.06	-155.9	-181.6	484.8	456.7	28.14	17.233	
6,400.0	6,339.7	6,370.6	6,351.8	18.3	14.2	-94.50	-94.50	-156.0	-155.5	485.7	457.3	28.38	17.113	
6,500.0	6,426.9	6,476.0	6,449.2	18.4	14.3	-95.87	-95.87	-156.2	-115.2	486.7	458.1	28.61	17.011	
6,600.0	6,507.0	6,583.2	6,541.6	18.4	14.4	-97.14	-97.14	-156.4	-60.9	488.0	459.0	28.95	16.854	
6,700.0	6,578.7	6,692.1	6,626.7	18.5	14.5	-98.29	-98.29	-156.6	6.9	489.3	459.7	29.58	16.544	
6,800.0	6,640.7	6,802.7	6,702.3	18.6	15.0	-99.29	-99.29	-157.0	87.3	490.6	459.9	30.69	15.987	
6,900.0	6,691.9	6,914.6	6,766.2	18.9	16.0	-100.11	-100.11	-157.3	179.1	491.8	459.4	32.49	15.138	
7,000.0	6,731.4	7,027.7	6,816.6	19.5	17.4	-100.74	-100.74	-157.7	280.2	492.8	457.8	35.07	14.052	
7,100.0	6,758.7	7,141.6	6,851.6	20.7	19.2	-101.17	-101.17	-158.1	388.5	493.6	455.1	38.42	12.847	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well LaSalle 25G-212
Project:	SEC.25-T5N-R65W	TVD Reference:	WELL @ 4655.0ft (RKB - 15')
Reference Site:	LaSalle 25F-HZ Pad Sec.25-T5N-R65W	MD Reference:	WELL @ 4655.0ft (RKB - 15')
Site Error:	0.0ft	North Reference:	True
Reference Well:	LaSalle 25G-212	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (2-25-13)	Offset TVD Reference:	Offset Datum

Offset Design LaSalle 25F-HZ Pad Sec.25-T5N-R65W - LaSalle 25F-332 - Wellbore #1 - Plan #1 (2-25-13)												Offset Site Error: 0.0 ft	
Survey Program: 0-MWD												Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance					Warning	
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Minimum Separation	Separation Factor		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)		
7,200.0	6,773.1	7,256.1	6,870.2	22.4	21.4	-101.38	-158.6	501.4	493.9	451.5	42.41	11.647	
7,300.0	6,775.2	7,366.4	6,872.6	24.3	23.7	-101.38	-159.0	611.6	493.9	447.2	46.73	10.570	
7,400.0	6,774.0	7,466.4	6,870.9	26.4	25.9	-101.31	-159.4	711.6	493.8	442.8	51.05	9.674	
7,500.0	6,772.9	7,566.4	6,869.2	28.7	28.2	-101.24	-159.8	811.5	493.7	438.1	55.57	8.885	
7,600.0	6,771.8	7,666.4	6,867.5	31.0	30.6	-101.18	-160.2	911.5	493.6	433.3	60.26	8.191	
7,700.0	6,770.7	7,766.4	6,865.8	33.4	33.0	-101.11	-160.6	1,011.5	493.5	428.4	65.09	7.582	
7,800.0	6,769.6	7,866.4	6,864.1	35.9	35.5	-101.04	-161.0	1,111.5	493.4	423.4	70.02	7.047	
7,900.0	6,768.5	7,966.4	6,862.3	38.4	38.1	-100.97	-161.3	1,211.5	493.3	418.2	75.03	6.574	
8,000.0	6,767.3	8,066.4	6,860.6	40.9	40.7	-100.91	-161.7	1,311.5	493.2	413.1	80.12	6.155	
8,100.0	6,766.2	8,166.4	6,858.9	43.5	43.3	-100.84	-162.1	1,411.4	493.1	407.8	85.26	5.783	
8,200.0	6,765.1	8,266.4	6,857.2	46.1	45.9	-100.77	-162.5	1,511.4	493.0	402.5	90.46	5.450	
8,300.0	6,764.0	8,366.4	6,855.5	48.8	48.6	-100.70	-162.9	1,611.4	492.9	397.2	95.69	5.151	
8,400.0	6,762.9	8,466.4	6,853.8	51.4	51.2	-100.63	-163.3	1,711.4	492.8	391.8	100.96	4.881	
8,500.0	6,761.8	8,566.4	6,852.1	54.1	53.9	-100.57	-163.7	1,811.4	492.7	386.4	106.26	4.637	
8,600.0	6,760.6	8,666.4	6,850.4	56.8	56.6	-100.50	-164.1	1,911.4	492.6	381.0	111.58	4.414	
8,700.0	6,759.5	8,766.4	6,848.7	59.4	59.3	-100.43	-164.5	2,011.3	492.5	375.5	116.93	4.212	
8,800.0	6,758.4	8,866.4	6,847.0	62.1	62.0	-100.36	-164.9	2,111.3	492.4	370.1	122.29	4.026	
8,900.0	6,757.3	8,966.4	6,845.2	64.9	64.8	-100.29	-165.2	2,211.3	492.3	364.6	127.68	3.856	
9,000.0	6,756.2	9,066.4	6,843.5	67.6	67.5	-100.23	-165.6	2,311.3	492.2	359.1	133.08	3.698	
9,100.0	6,755.1	9,166.4	6,841.8	70.3	70.2	-100.16	-166.0	2,411.3	492.1	353.6	138.49	3.553	
9,200.0	6,753.9	9,266.4	6,840.1	73.0	73.0	-100.09	-166.4	2,511.3	492.0	348.1	143.92	3.418	
9,300.0	6,752.8	9,366.4	6,838.4	75.8	75.7	-100.02	-166.8	2,611.2	491.9	342.5	149.36	3.293	
9,400.0	6,751.7	9,466.4	6,836.7	78.5	78.5	-99.95	-167.2	2,711.2	491.8	337.0	154.81	3.177	
9,500.0	6,750.6	9,566.4	6,835.0	81.3	81.2	-99.88	-167.6	2,811.2	491.7	331.4	160.27	3.068	
9,600.0	6,749.5	9,666.4	6,833.3	84.0	84.0	-99.82	-168.0	2,911.2	491.6	325.9	165.73	2.966	
9,700.0	6,748.4	9,766.4	6,831.6	86.8	86.7	-99.75	-168.4	3,011.2	491.5	320.3	171.21	2.871	
9,800.0	6,747.2	9,866.4	6,829.9	89.5	89.5	-99.68	-168.8	3,111.1	491.4	314.7	176.69	2.781	
9,900.0	6,746.1	9,966.3	6,828.1	92.3	92.3	-99.61	-169.2	3,211.1	491.3	309.1	182.19	2.697	
10,000.0	6,745.0	10,066.3	6,826.4	95.1	95.1	-99.54	-169.5	3,311.1	491.2	303.6	187.68	2.617	
10,100.0	6,743.9	10,166.3	6,824.7	97.8	97.8	-99.47	-169.9	3,411.1	491.1	298.0	193.19	2.542	
10,200.0	6,742.8	10,266.3	6,823.0	100.6	100.6	-99.41	-170.3	3,511.1	491.1	292.4	198.70	2.471	
10,300.0	6,741.7	10,366.3	6,821.3	103.4	103.4	-99.34	-170.7	3,611.1	491.0	286.8	204.21	2.404	
10,400.0	6,740.5	10,466.3	6,819.6	106.1	106.1	-99.27	-171.1	3,711.0	490.9	281.1	209.73	2.341	
10,500.0	6,739.4	10,566.3	6,817.9	108.9	108.9	-99.20	-171.5	3,811.0	490.8	275.5	215.26	2.280	
10,600.0	6,738.3	10,666.3	6,816.2	111.7	111.7	-99.13	-171.9	3,911.0	490.7	269.9	220.79	2.223	
10,700.0	6,737.2	10,766.3	6,814.5	114.5	114.5	-99.06	-172.3	4,011.0	490.6	264.3	226.32	2.168	
10,800.0	6,736.1	10,866.3	6,812.7	117.2	117.3	-98.99	-172.7	4,111.0	490.5	258.7	231.86	2.116	
10,900.0	6,734.9	10,966.3	6,811.0	120.0	120.1	-98.93	-173.1	4,211.0	490.5	253.0	237.40	2.066	
11,000.0	6,733.8	11,066.3	6,809.3	122.8	122.8	-98.86	-173.4	4,310.9	490.4	247.4	242.95	2.018	
11,100.0	6,732.7	11,166.3	6,807.6	125.6	125.6	-98.79	-173.8	4,410.9	490.3	241.8	248.50	1.973	
11,200.0	6,731.6	11,266.3	6,805.9	128.4	128.4	-98.72	-174.2	4,510.9	490.2	236.1	254.05	1.930	
11,251.7	6,731.0	11,318.0	6,805.0	129.8	129.9	-98.68	-174.4	4,562.6	490.2	233.2	256.93	1.908	
11,253.6	6,731.0	11,319.4	6,805.0	129.9	129.9	-98.68	-174.4	4,564.0	490.2	233.1	257.02	1.907 SF	

Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well LaSalle 25G-212
Project:	SEC.25-T5N-R65W	TVD Reference:	WELL @ 4655.0ft (RKB - 15')
Reference Site:	LaSalle 25F-HZ Pad Sec.25-T5N-R65W	MD Reference:	WELL @ 4655.0ft (RKB - 15')
Site Error:	0.0ft	North Reference:	True
Reference Well:	LaSalle 25G-212	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (2-25-13)	Offset TVD Reference:	Offset Datum

Offset Design LaSalle 25F-HZ Pad Sec.25-T5N-R65W - LaSalle 25G-402 - Wellbore #1 - Plan #1 (2-25-13)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Semi Major Axis	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-180.00	-180.00	-32.8	0.0	32.8				
100.0	100.0	100.0	100.0	0.1	0.1	-180.00	-180.00	-32.8	0.0	32.8	32.6	0.22	145.858	
200.0	200.0	200.0	200.0	0.3	0.3	-180.00	-180.00	-32.8	0.0	32.8	32.1	0.67	48.619 CC, ES	
300.0	300.0	298.8	298.8	0.6	0.5	-179.46	-179.46	-34.5	-0.3	34.5	33.4	1.10	31.344	
400.0	400.0	397.5	397.3	0.8	0.7	-178.11	-178.11	-39.5	-1.3	39.6	38.0	1.53	25.841	
500.0	500.0	495.6	495.1	1.0	1.0	-176.51	-176.51	-47.7	-2.9	48.1	46.1	1.98	24.272	
600.0	600.0	593.1	591.8	1.2	1.3	-175.03	-175.03	-59.2	-5.1	60.0	57.5	2.44	24.558	
700.0	700.0	689.6	687.2	1.5	1.6	-173.82	-173.82	-73.8	-8.0	75.3	72.4	2.91	25.823	
800.0	800.0	786.2	782.2	1.7	1.9	-172.89	-172.89	-91.2	-11.4	93.6	90.2	3.40	27.553	
900.0	900.0	884.4	878.5	1.9	2.3	-172.23	-172.23	-109.6	-15.0	112.7	108.8	3.88	29.069	
1,000.0	1,000.0	982.5	974.9	2.1	2.7	-171.75	-171.75	-128.0	-18.5	131.7	127.4	4.36	30.233	
1,100.0	1,100.0	1,081.0	1,071.6	2.3	3.1	-8.40	-8.40	-146.4	-22.1	149.1	144.4	4.72	31.613	
1,200.0	1,199.8	1,180.0	1,168.8	2.5	3.6	-8.33	-8.33	-165.0	-25.7	163.0	157.9	5.13	31.754	
1,300.0	1,299.5	1,279.5	1,266.4	2.7	4.0	-8.45	-8.45	-183.6	-29.4	173.6	168.0	5.56	31.197	
1,400.0	1,398.7	1,379.2	1,364.3	2.9	4.4	-8.73	-8.73	-202.2	-33.0	180.6	174.6	6.00	30.092	
1,500.0	1,497.6	1,479.1	1,462.4	3.2	4.8	-9.13	-9.13	-221.0	-36.7	185.0	178.5	6.46	28.637	
1,600.0	1,596.4	1,579.0	1,560.4	3.4	5.2	-9.53	-9.53	-239.7	-40.3	189.1	182.2	6.93	27.290	
1,700.0	1,695.3	1,678.9	1,658.5	3.7	5.7	-9.92	-9.92	-258.4	-43.9	193.3	185.9	7.41	26.091	
1,800.0	1,794.1	1,778.8	1,756.6	4.0	6.1	-10.29	-10.29	-277.1	-47.6	197.5	189.6	7.89	25.020	
1,900.0	1,893.0	1,878.7	1,854.6	4.3	6.5	-10.64	-10.64	-295.8	-51.2	201.6	193.2	8.38	24.057	
2,000.0	1,991.8	1,978.6	1,952.7	4.7	7.0	-10.98	-10.98	-314.5	-54.9	205.8	196.9	8.87	23.190	
2,100.0	2,090.6	2,078.5	2,050.8	5.0	7.4	-11.31	-11.31	-333.2	-58.5	210.0	200.6	9.37	22.405	
2,200.0	2,189.5	2,178.4	2,148.9	5.3	7.8	-11.62	-11.62	-351.9	-62.2	214.2	204.3	9.87	21.692	
2,300.0	2,288.3	2,278.4	2,246.9	5.7	8.2	-11.92	-11.92	-370.6	-65.8	218.4	208.0	10.38	21.042	
2,400.0	2,387.2	2,378.3	2,345.0	6.0	8.7	-12.21	-12.21	-389.3	-69.4	222.6	211.7	10.88	20.447	
2,500.0	2,486.0	2,478.2	2,443.1	6.3	9.1	-12.49	-12.49	-408.0	-73.1	226.8	215.4	11.39	19.901	
2,600.0	2,584.9	2,578.1	2,541.1	6.7	9.5	-12.76	-12.76	-426.7	-76.7	231.0	219.1	11.91	19.398	
2,700.0	2,683.7	2,678.0	2,639.2	7.0	9.9	-13.02	-13.02	-445.4	-80.4	235.2	222.8	12.42	18.934	
2,800.0	2,782.6	2,777.9	2,737.3	7.4	10.4	-13.27	-13.27	-464.1	-84.0	239.4	226.5	12.94	18.504	
2,900.0	2,881.4	2,877.8	2,835.4	7.7	10.8	-13.51	-13.51	-482.8	-87.7	243.6	230.2	13.46	18.104	
3,000.0	2,980.3	2,977.7	2,933.4	8.1	11.2	-13.74	-13.74	-501.5	-91.3	247.9	233.9	13.98	17.733	
3,100.0	3,079.1	3,077.6	3,031.5	8.4	11.7	-13.97	-13.97	-520.2	-95.0	252.1	237.6	14.50	17.386	
3,200.0	3,177.9	3,177.5	3,129.6	8.8	12.1	-14.18	-14.18	-538.9	-98.6	256.3	241.3	15.02	17.062	
3,300.0	3,276.8	3,277.4	3,227.6	9.2	12.5	-14.39	-14.39	-557.6	-102.2	260.6	245.0	15.55	16.759	
3,400.0	3,375.6	3,377.3	3,325.7	9.5	13.0	-14.60	-14.60	-576.3	-105.9	264.8	248.8	16.08	16.474	
3,500.0	3,474.5	3,477.2	3,423.8	9.9	13.4	-14.80	-14.80	-595.0	-109.5	269.1	252.5	16.60	16.206	
3,600.0	3,573.3	3,577.1	3,521.9	10.2	13.8	-14.99	-14.99	-613.7	-113.2	273.3	256.2	17.13	15.953	
3,700.0	3,672.2	3,677.0	3,619.9	10.6	14.2	-15.17	-15.17	-632.4	-116.8	277.6	259.9	17.66	15.715	
3,800.0	3,771.0	3,776.9	3,718.0	11.0	14.7	-15.35	-15.35	-651.1	-120.5	281.8	263.6	18.19	15.490	
3,900.0	3,869.9	3,876.8	3,816.1	11.3	15.1	-15.53	-15.53	-669.9	-124.1	286.1	267.4	18.73	15.277	
4,000.0	3,968.7	3,976.7	3,914.1	11.7	15.5	-15.70	-15.70	-688.6	-127.7	290.4	271.1	19.26	15.075	
4,100.0	4,067.5	4,076.7	4,012.2	12.1	16.0	-15.86	-15.86	-707.3	-131.4	294.6	274.8	19.80	14.883	
4,200.0	4,166.4	4,176.6	4,110.3	12.4	16.4	-16.02	-16.02	-726.0	-135.0	298.9	278.6	20.33	14.701	
4,300.0	4,265.2	4,276.5	4,208.4	12.8	16.8	-16.18	-16.18	-744.7	-138.7	303.2	282.3	20.87	14.528	
4,400.0	4,364.1	4,376.4	4,306.4	13.1	17.2	-16.33	-16.33	-763.4	-142.3	307.4	286.0	21.40	14.363	
4,500.0	4,462.9	4,476.3	4,404.5	13.5	17.7	-16.47	-16.47	-782.1	-146.0	311.7	289.8	21.94	14.206	
4,600.0	4,561.8	4,576.2	4,502.6	13.9	18.1	-16.62	-16.62	-800.8	-149.6	316.0	293.5	22.48	14.055	
4,700.0	4,660.6	4,676.1	4,600.6	14.2	18.5	-16.76	-16.76	-819.5	-153.3	320.2	297.2	23.02	13.912	
4,800.0	4,759.5	4,776.0	4,698.7	14.6	19.0	-16.89	-16.89	-838.2	-156.9	324.5	301.0	23.56	13.774	
4,900.0	4,858.3	4,875.9	4,796.8	15.0	19.4	-17.02	-17.02	-856.9	-160.5	328.8	304.7	24.10	13.643	
5,000.0	4,957.1	4,975.8	4,894.8	15.3	19.8	-17.15	-17.15	-875.6	-164.2	333.1	308.4	24.64	13.517	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well LaSalle 25G-212
Project:	SEC.25-T5N-R65W	TVD Reference:	WELL @ 4655.0ft (RKB - 15')
Reference Site:	LaSalle 25F-HZ Pad Sec.25-T5N-R65W	MD Reference:	WELL @ 4655.0ft (RKB - 15')
Site Error:	0.0ft	North Reference:	True
Reference Well:	LaSalle 25G-212	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (2-25-13)	Offset TVD Reference:	Offset Datum

Offset Design LaSalle 25F-HZ Pad Sec.25-T5N-R65W - LaSalle 25G-402 - Wellbore #1 - Plan #1 (2-25-13)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Semi Major Axis	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5,100.0	5,056.0	5,075.7	4,992.9	15.7	20.3	-17.28	-894.3	-167.8	337.4	312.2	25.18	13.396		
5,200.0	5,154.8	5,175.6	5,091.0	16.1	20.7	-17.40	-913.0	-171.5	341.7	315.9	25.73	13.280		
5,300.0	5,253.7	5,275.5	5,189.1	16.4	21.1	-17.52	-931.7	-175.1	345.9	319.7	26.27	13.168		
5,400.0	5,352.5	5,375.4	5,287.1	16.8	21.5	-17.64	-950.4	-178.8	350.2	323.4	26.81	13.061		
5,500.0	5,451.6	5,475.3	5,385.1	17.1	22.0	-17.71	-969.1	-182.4	355.8	328.4	27.32	13.023		
5,600.0	5,551.0	5,579.1	5,487.1	17.3	22.4	-17.65	-988.4	-186.2	364.4	336.7	27.75	13.134		
5,700.0	5,650.8	5,693.1	5,599.6	17.5	22.7	-17.50	-1,006.2	-189.6	373.4	345.4	28.10	13.292		
5,800.0	5,750.7	5,807.5	5,713.2	17.7	23.0	-17.31	-1,019.7	-192.2	381.9	353.5	28.39	13.454		
5,900.0	5,850.7	5,922.4	5,827.7	17.8	23.2	-17.85	-1,028.7	-194.0	389.4	360.9	40.35	9.650		
6,000.0	5,950.7	6,037.8	5,943.0	17.9	23.3	-179.98	-1,033.2	-194.9	393.3	352.6	40.65	9.674		
6,100.0	6,050.7	6,145.4	6,050.7	18.1	23.4	89.92	-1,033.8	-195.0	393.8	364.4	29.37	13.406		
6,112.0	6,062.6	6,157.4	6,062.6	18.1	23.5	90.02	-1,033.8	-195.0	393.8	364.4	29.39	13.396		
6,200.0	6,149.9	6,244.7	6,149.9	18.2	23.5	91.58	-1,033.8	-195.0	393.9	364.5	29.46	13.372		
6,300.0	6,246.8	6,344.6	6,249.7	18.3	23.6	94.61	-1,033.8	-191.9	395.1	365.7	29.40	13.441		
6,400.0	6,339.7	6,448.1	6,351.9	18.3	23.7	97.70	-1,033.9	-175.7	397.5	368.2	29.37	13.537		
6,500.0	6,426.9	6,554.9	6,454.0	18.4	23.8	100.67	-1,034.0	-144.6	401.0	371.6	29.41	13.633		
6,600.0	6,507.0	6,665.3	6,553.9	18.4	23.8	103.45	-1,034.2	-97.9	405.3	375.7	29.60	13.694		
6,700.0	6,578.7	6,779.3	6,648.9	18.5	23.9	105.99	-1,034.4	-35.1	410.1	380.1	29.99	13.675		
6,800.0	6,640.7	6,896.9	6,736.0	18.6	23.9	108.23	-1,034.7	43.7	415.0	384.3	30.70	13.521		
6,900.0	6,691.9	7,017.8	6,811.9	18.9	24.0	110.11	-1,035.1	137.8	419.7	387.8	31.86	13.174		
7,000.0	6,731.4	7,141.7	6,873.2	19.5	24.3	111.59	-1,035.5	245.2	423.7	390.1	33.61	12.607		
7,100.0	6,758.7	7,268.0	6,917.0	20.7	24.8	112.63	-1,035.9	363.5	426.6	390.6	36.03	11.842		
7,200.0	6,773.1	7,395.8	6,941.0	22.4	25.8	113.20	-1,036.4	488.9	428.3	389.2	39.09	10.958		
7,300.0	6,775.2	7,499.9	6,951.5	24.3	27.1	114.11	-1,036.8	592.5	431.6	389.4	42.15	10.239		
7,400.0	6,774.0	7,615.8	6,954.9	26.4	29.0	114.68	-1,037.3	708.3	433.2	387.0	46.19	9.380		
7,500.0	6,772.9	7,715.8	6,953.9	28.7	30.9	114.69	-1,037.7	808.3	433.3	382.9	50.33	8.608		
7,600.0	6,771.8	7,815.8	6,952.9	31.0	33.0	114.70	-1,038.0	908.3	433.3	378.7	54.64	7.929		
7,700.0	6,770.7	7,915.8	6,951.9	33.4	35.2	114.72	-1,038.4	1,008.3	433.3	374.3	59.09	7.334		
7,800.0	6,769.6	8,015.8	6,950.9	35.9	37.5	114.73	-1,038.8	1,108.3	433.4	369.7	63.64	6.810		
7,900.0	6,768.5	8,115.8	6,949.9	38.4	39.9	114.74	-1,039.2	1,208.3	433.4	365.2	68.27	6.349		
8,000.0	6,767.3	8,215.8	6,948.8	40.9	42.3	114.76	-1,039.6	1,308.3	433.5	360.5	72.97	5.941		
8,100.0	6,766.2	8,315.8	6,947.8	43.5	44.8	114.77	-1,040.0	1,408.2	433.5	355.8	77.72	5.578		
8,200.0	6,765.1	8,415.8	6,946.8	46.1	47.3	114.78	-1,040.4	1,508.2	433.5	351.0	82.52	5.254		
8,300.0	6,764.0	8,515.8	6,945.8	48.8	49.9	114.80	-1,040.8	1,608.2	433.6	346.2	87.35	4.964		
8,400.0	6,762.9	8,615.8	6,944.8	51.4	52.5	114.81	-1,041.2	1,708.2	433.6	341.4	92.22	4.702		
8,500.0	6,761.8	8,715.8	6,943.8	54.1	55.1	114.82	-1,041.6	1,808.2	433.7	336.6	97.11	4.466		
8,600.0	6,760.6	8,815.8	6,942.8	56.8	57.7	114.83	-1,042.0	1,908.2	433.7	331.7	102.02	4.251		
8,700.0	6,759.5	8,915.8	6,941.8	59.4	60.3	114.85	-1,042.4	2,008.2	433.7	326.8	106.96	4.055		
8,800.0	6,758.4	9,015.8	6,940.8	62.1	63.0	114.86	-1,042.8	2,108.2	433.8	321.9	111.91	3.876		
8,900.0	6,757.3	9,115.8	6,939.8	64.9	65.7	114.87	-1,043.2	2,208.2	433.8	316.9	116.87	3.712		
9,000.0	6,756.2	9,215.8	6,938.7	67.6	68.4	114.89	-1,043.6	2,308.2	433.9	312.0	121.85	3.561		
9,100.0	6,755.1	9,315.8	6,937.7	70.3	71.0	114.90	-1,044.0	2,408.2	433.9	307.1	126.84	3.421		
9,200.0	6,753.9	9,415.8	6,936.7	73.0	73.8	114.91	-1,044.3	2,508.2	433.9	302.1	131.84	3.292		
9,300.0	6,752.8	9,515.8	6,935.7	75.8	76.5	114.93	-1,044.7	2,608.2	434.0	297.1	136.84	3.171		
9,400.0	6,751.7	9,615.8	6,934.7	78.5	79.2	114.94	-1,045.1	2,708.2	434.0	292.2	141.86	3.060		
9,500.0	6,750.6	9,715.8	6,933.7	81.3	81.9	114.95	-1,045.5	2,808.2	434.1	287.2	146.87	2.955		
9,600.0	6,749.5	9,815.8	6,932.7	84.0	84.6	114.96	-1,045.9	2,908.2	434.1	282.2	151.90	2.858		
9,700.0	6,748.4	9,915.8	6,931.7	86.8	87.4	114.98	-1,046.3	3,008.2	434.1	277.2	156.93	2.766		
9,800.0	6,747.2	10,015.8	6,930.7	89.5	90.1	114.99	-1,046.7	3,108.1	434.2	272.2	161.97	2.681		
9,900.0	6,746.1	10,115.8	6,929.6	92.3	92.8	115.00	-1,047.1	3,208.1	434.2	267.2	167.01	2.600		
10,000.0	6,745.0	10,215.8	6,928.6	95.1	95.6	115.02	-1,047.5	3,308.1	434.3	262.2	172.05	2.524		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

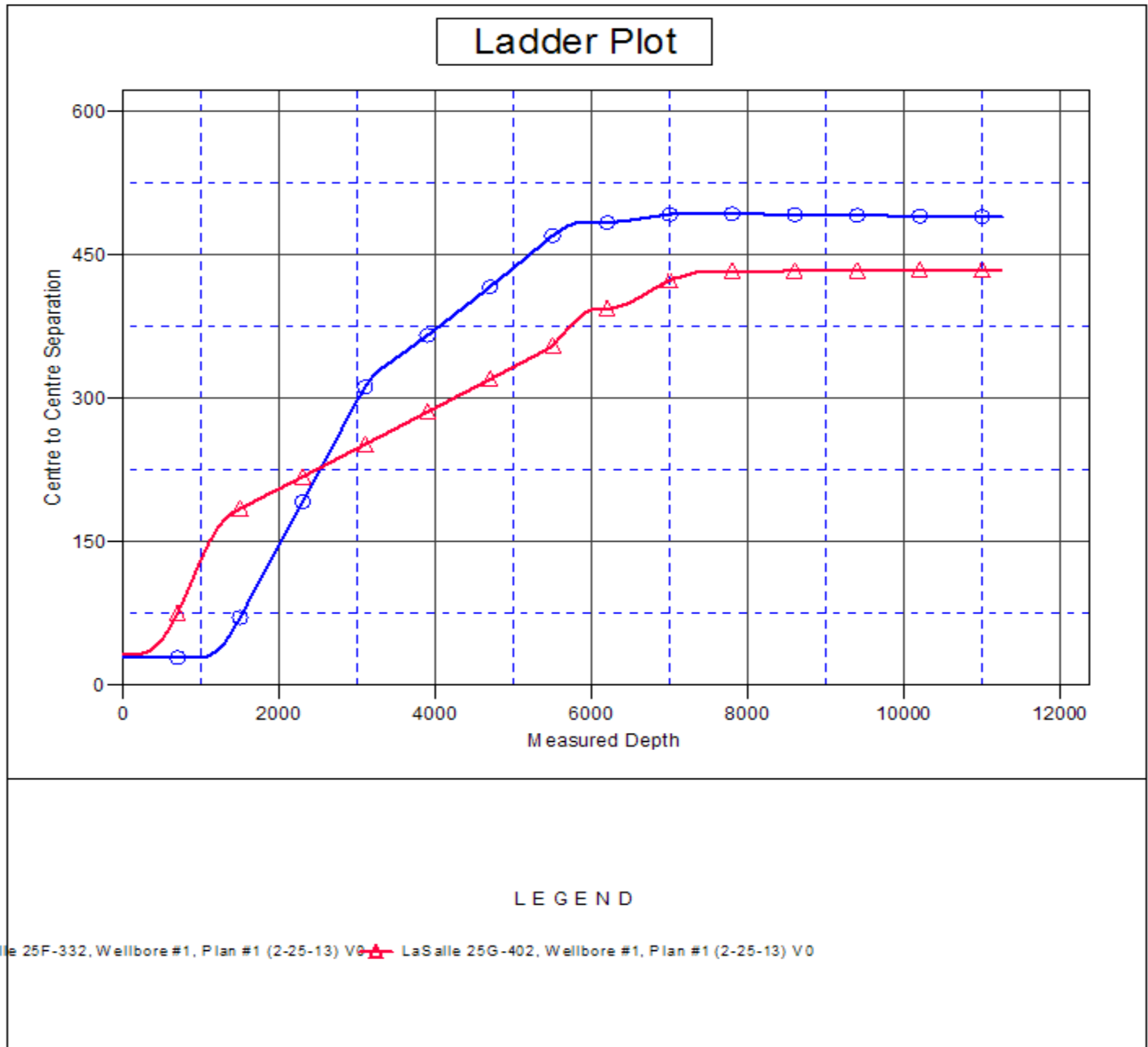
Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well LaSalle 25G-212
Project:	SEC.25-T5N-R65W	TVD Reference:	WELL @ 4655.0ft (RKB - 15')
Reference Site:	LaSalle 25F-HZ Pad Sec.25-T5N-R65W	MD Reference:	WELL @ 4655.0ft (RKB - 15')
Site Error:	0.0ft	North Reference:	True
Reference Well:	LaSalle 25G-212	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (2-25-13)	Offset TVD Reference:	Offset Datum

Offset Design LaSalle 25F-HZ Pad Sec.25-T5N-R65W - LaSalle 25G-402 - Wellbore #1 - Plan #1 (2-25-13)												Offset Site Error:	0.0 ft
Survey Program: 0-MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (ft)	Separation Factor	Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)			
10,100.0	6,743.9	10,315.8	6,927.6	97.8	98.3	115.03	-1,047.9	3,408.1	434.3	257.2	177.09	2.452	
10,200.0	6,742.8	10,415.8	6,926.6	100.6	101.1	115.04	-1,048.3	3,508.1	434.3	252.2	182.14	2.385	
10,300.0	6,741.7	10,515.8	6,925.6	103.4	103.8	115.06	-1,048.7	3,608.1	434.4	247.2	187.19	2.321	
10,400.0	6,740.5	10,615.8	6,924.6	106.1	106.6	115.07	-1,049.1	3,708.1	434.4	242.2	192.25	2.260	
10,500.0	6,739.4	10,715.8	6,923.6	108.9	109.4	115.08	-1,049.5	3,808.1	434.5	237.2	197.30	2.202	
10,600.0	6,738.3	10,815.8	6,922.6	111.7	112.1	115.09	-1,049.9	3,908.1	434.5	232.1	202.36	2.147	
10,700.0	6,737.2	10,915.8	6,921.6	114.5	114.9	115.11	-1,050.3	4,008.1	434.6	227.1	207.42	2.095	
10,800.0	6,736.1	11,015.8	6,920.6	117.2	117.7	115.12	-1,050.6	4,108.1	434.6	222.1	212.48	2.045	
10,900.0	6,734.9	11,115.8	6,919.5	120.0	120.4	115.13	-1,051.0	4,208.1	434.6	217.1	217.54	1.998	
11,000.0	6,733.8	11,215.8	6,918.5	122.8	123.2	115.15	-1,051.4	4,308.1	434.7	212.1	222.60	1.953	
11,100.0	6,732.7	11,315.8	6,917.5	125.6	126.0	115.16	-1,051.8	4,408.1	434.7	207.0	227.67	1.909	
11,200.0	6,731.6	11,415.8	6,916.5	128.4	128.8	115.17	-1,052.2	4,508.1	434.8	202.0	232.73	1.868	
11,227.3	6,731.3	11,443.1	6,916.2	129.1	129.5	115.18	-1,052.3	4,535.3	434.8	200.7	234.11	1.857	
11,253.6	6,731.0	11,466.4	6,916.0	129.9	130.2	115.18	-1,052.4	4,558.6	434.8	199.4	235.37	1.847 SF	

Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well LaSalle 25G-212
Project:	SEC.25-T5N-R65W	TVD Reference:	WELL @ 4655.0ft (RKB - 15')
Reference Site:	LaSalle 25F-HZ Pad Sec.25-T5N-R65W	MD Reference:	WELL @ 4655.0ft (RKB - 15')
Site Error:	0.0ft	North Reference:	True
Reference Well:	LaSalle 25G-212	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (2-25-13)	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 4655.0ft (RKB - 15')
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000 °

Coordinates are relative to: LaSalle 25G-212
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.57°



Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well LaSalle 25G-212
Project:	SEC.25-T5N-R65W	TVD Reference:	WELL @ 4655.0ft (RKB - 15')
Reference Site:	LaSalle 25F-HZ Pad Sec.25-T5N-R65W	MD Reference:	WELL @ 4655.0ft (RKB - 15')
Site Error:	0.0ft	North Reference:	True
Reference Well:	LaSalle 25G-212	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
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