

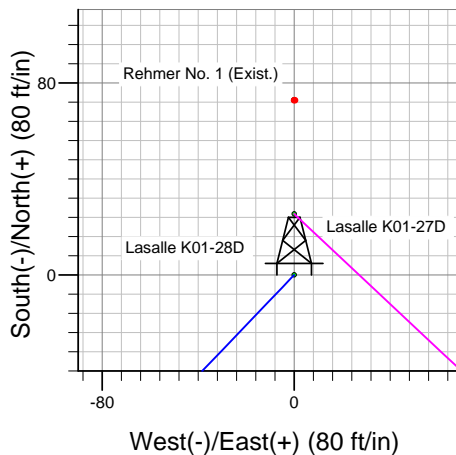
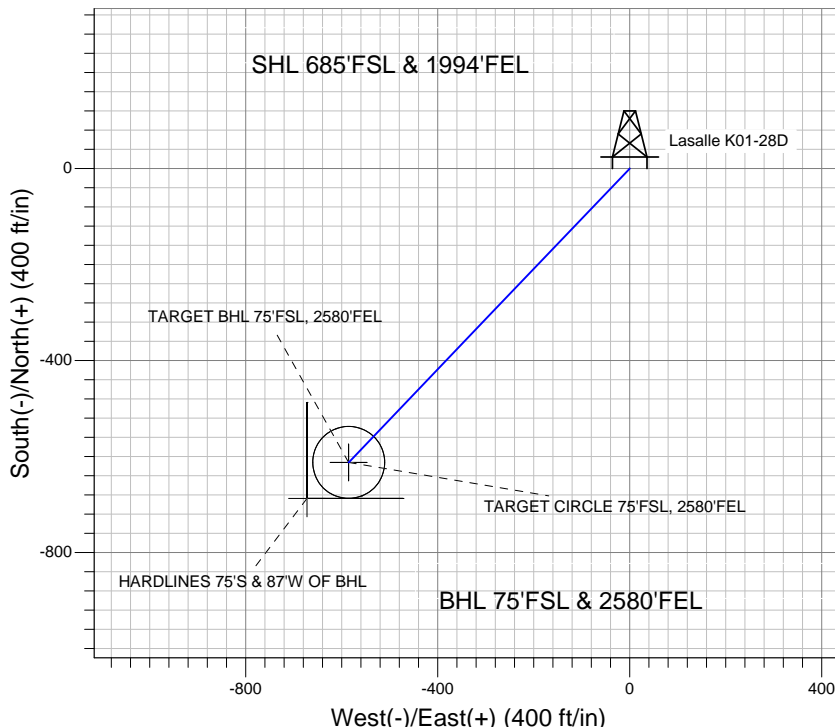
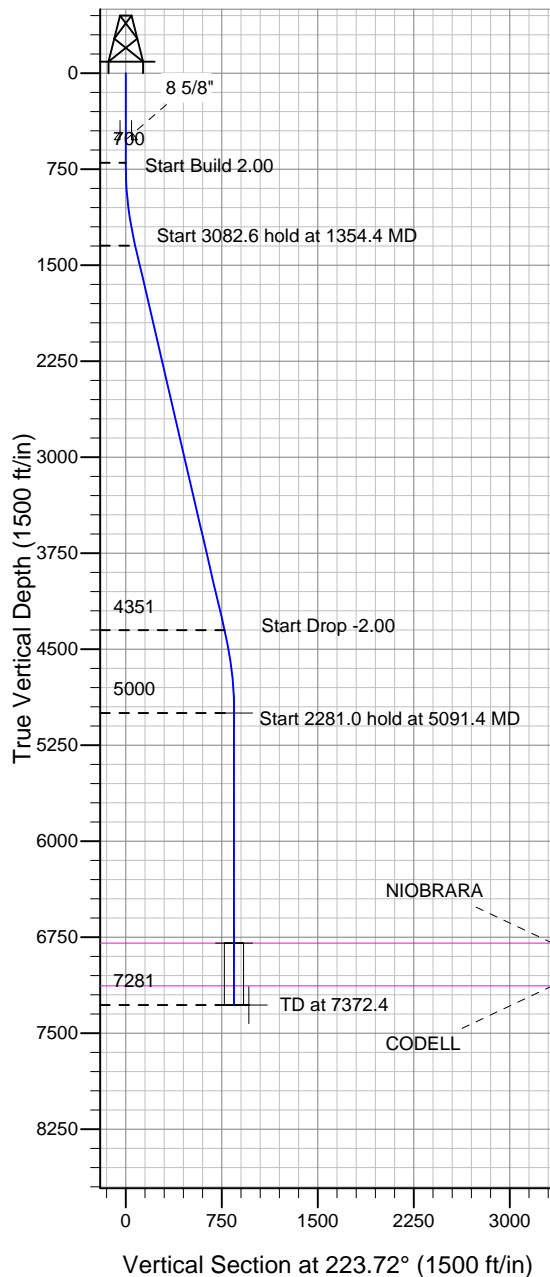
Well Name: Lasalle K01-28D

Surface Location: Lasalle K01-28D Pad Sec.36-T5N-R66W
North American Datum 1983, US State Plane 1983 Colorado Northern Zone

Ground Elevation: 4663.0

+N/-S +E/-W Northing Easting Latitude Longitude Slot
0.0 0.0 1371415.03 3216602.92 40° 21' 1.188 N 104° 43' 22.224 W
Original Well EleWELL @ 4676.0ft (Original Well Elev)

NOBLE ENERGY INC WELD COUNTY CO



Lasalle K01-28D Pad Sec.36-T5N-R66W
Lasalle K01-28D
Noble Lasalle K01-28D Plan #1 (9-03-10)
7:42, September 10 2010



Azimuths to True North
Magnetic North: 8.94°
Magnetic Field
Strength: 53193.7snT
Dip Angle: 67.04°
Date: 9/3/2010
Model: IGRF2010

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
TARGET BHL 75'FSL, 2580'FEL	5000.0	-612.0	-585.3	40° 20' 55.140 N	104° 43' 29.784 W	Point
TARGET CIRCLE 75'FSL, 2580'FEL	6796.0	-612.0	-585.3	40° 20' 55.140 N	104° 43' 29.784 W	Circle (Radius: 75.0)
HARDLINES 75'S & 87'W OF BHL	7281.0	-687.0	-672.3	40° 20' 54.399 N	104° 43' 30.907 W	Polygon

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	700.0	0.00	0.00	700.0	0.0	0.0	0.00	0.00	0.0	
3	1354.4	13.09	223.72	1348.7	-53.8	-51.4	2.00	223.72	74.4	
4	4437.0	13.09	223.72	4351.3	-558.2	-533.9	0.00	0.00	772.5	
5	5091.4	0.00	0.00	5000.0	-612.0	-585.3	2.00	180.00	846.9	TARGET BHL 75'FSL, 2580'FEL
6	7372.4	0.00	0.00	7281.0	-612.0	-585.3	0.00	0.00	846.9	



Directional

NOBLE ENERGY INC WELD COUNTY CO

SEC.36-T5N-R66W

Lasalle K01-28D Pad Sec.36-T5N-R66W

Lasalle K01-28D

Wellbore #1

Plan: Noble Lasalle K01-28D Plan #1 (9-03-10)

Standard Planning Report

10 September, 2010



Database:	Landmark	Local Co-ordinate Reference:	Well Lasalle K01-28D
Company:	NOBLE ENERGY INC WELD COUNTY CO	TVD Reference:	WELL @ 4676.0ft (Original Well Elev)
Project:	SEC.36-T5N-R66W	MD Reference:	WELL @ 4676.0ft (Original Well Elev)
Site:	Lasalle K01-28D Pad Sec.36-T5N-R66W	North Reference:	True
Well:	Lasalle K01-28D	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Noble Lasalle K01-28D Plan #1 (9-03-10)		

Project	SEC.36-T5N-R66W, 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 K01-28D Pad Sec.36-T5N-R66W											
Site Position:						Northing:			1,371,415.04 ft			Latitude:			40° 21' 1.188 N		
From:			Lat/Long			Easting:			3,216,602.92 ft			Longitude:			104° 43' 22.224 W		
Position Uncertainty:			0.0 ft			Slot Radius:			"			Grid Convergence:			0.50 °		

Well	Lasalle K01-28D					
Well Position	+N-S	0.0 ft	Northing:	1,371,415.03 ft	Latitude:	40° 21' 1.188 N
	+E-W	0.0 ft	Easting:	3,216,602.92 ft	Longitude:	104° 43' 22.224 W
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,663.0 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	9/3/2010	8.94	67.04	53,194

Design	Noble Lasalle K01-28D Plan #1 (9-03-10)			
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	223.72

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	
700.0	0.00	0.00	700.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,354.4	13.09	223.72	1,348.7	-53.8	-51.4	2.00	2.00	0.00	223.72	
4,437.0	13.09	223.72	4,351.3	-558.2	-533.9	0.00	0.00	0.00	0.00	
5,091.4	0.00	0.00	5,000.0	-612.0	-585.3	2.00	-2.00	0.00	180.00	TARGET BHL 75'F!
7,372.4	0.00	0.00	7,281.0	-612.0	-585.3	0.00	0.00	0.00	0.00	

Database:	Landmark	Local Co-ordinate Reference:	Well Lasalle K01-28D
Company:	NOBLE ENERGY INC WELD COUNTY CO	TVD Reference:	WELL @ 4676.0ft (Original Well Elev)
Project:	SEC.36-T5N-R66W	MD Reference:	WELL @ 4676.0ft (Original Well Elev)
Site:	Lasalle K01-28D Pad Sec.36-T5N-R66W	North Reference:	True
Well:	Lasalle K01-28D	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Noble Lasalle K01-28D Plan #1 (9-03-10)		

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
8 5/8"									
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
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
720.0	0.40	223.72	720.0	-0.1	0.0	0.1	2.00	2.00	0.00
760.0	1.20	223.72	760.0	-0.5	-0.4	0.6	2.00	2.00	0.00
800.0	2.00	223.72	800.0	-1.3	-1.2	1.7	2.00	2.00	0.00
840.0	2.80	223.72	839.9	-2.5	-2.4	3.4	2.00	2.00	0.00
880.0	3.60	223.72	879.9	-4.1	-3.9	5.7	2.00	2.00	0.00
920.0	4.40	223.72	919.8	-6.1	-5.8	8.4	2.00	2.00	0.00
960.0	5.20	223.72	959.6	-8.5	-8.1	11.8	2.00	2.00	0.00
1,000.0	6.00	223.72	999.5	-11.3	-10.8	15.7	2.00	2.00	0.00
1,040.0	6.80	223.72	1,039.2	-14.6	-13.9	20.2	2.00	2.00	0.00
1,080.0	7.60	223.72	1,078.9	-18.2	-17.4	25.2	2.00	2.00	0.00
1,120.0	8.40	223.72	1,118.5	-22.2	-21.2	30.7	2.00	2.00	0.00
1,160.0	9.20	223.72	1,158.0	-26.6	-25.5	36.9	2.00	2.00	0.00
1,200.0	10.00	223.72	1,197.5	-31.5	-30.1	43.5	2.00	2.00	0.00
1,240.0	10.80	223.72	1,236.8	-36.7	-35.1	50.7	2.00	2.00	0.00
1,280.0	11.60	223.72	1,276.0	-42.3	-40.4	58.5	2.00	2.00	0.00
1,320.0	12.40	223.72	1,315.2	-48.3	-46.2	66.8	2.00	2.00	0.00
1,354.4	13.09	223.72	1,348.7	-53.8	-51.4	74.4	2.00	2.00	0.00
1,360.0	13.09	223.72	1,354.2	-54.7	-52.3	75.7	0.00	0.00	0.00
1,400.0	13.09	223.72	1,393.1	-61.2	-58.6	84.7	0.00	0.00	0.00
1,440.0	13.09	223.72	1,432.1	-67.8	-64.8	93.8	0.00	0.00	0.00
1,480.0	13.09	223.72	1,471.1	-74.3	-71.1	102.9	0.00	0.00	0.00
1,520.0	13.09	223.72	1,510.0	-80.9	-77.4	111.9	0.00	0.00	0.00
1,560.0	13.09	223.72	1,549.0	-87.4	-83.6	121.0	0.00	0.00	0.00
1,600.0	13.09	223.72	1,587.9	-94.0	-89.9	130.0	0.00	0.00	0.00
1,640.0	13.09	223.72	1,626.9	-100.5	-96.1	139.1	0.00	0.00	0.00
1,680.0	13.09	223.72	1,665.9	-107.1	-102.4	148.1	0.00	0.00	0.00
1,720.0	13.09	223.72	1,704.8	-113.6	-108.7	157.2	0.00	0.00	0.00
1,760.0	13.09	223.72	1,743.8	-120.2	-114.9	166.3	0.00	0.00	0.00
1,800.0	13.09	223.72	1,782.7	-126.7	-121.2	175.3	0.00	0.00	0.00
1,840.0	13.09	223.72	1,821.7	-133.2	-127.4	184.4	0.00	0.00	0.00
1,880.0	13.09	223.72	1,860.7	-139.8	-133.7	193.4	0.00	0.00	0.00
1,920.0	13.09	223.72	1,899.6	-146.3	-140.0	202.5	0.00	0.00	0.00
1,960.0	13.09	223.72	1,938.6	-152.9	-146.2	211.6	0.00	0.00	0.00
2,000.0	13.09	223.72	1,977.6	-159.4	-152.5	220.6	0.00	0.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well Lasalle K01-28D
Company:	NOBLE ENERGY INC WELD COUNTY CO	TVD Reference:	WELL @ 4676.0ft (Original Well Elev)
Project:	SEC.36-T5N-R66W	MD Reference:	WELL @ 4676.0ft (Original Well Elev)
Site:	Lasalle K01-28D Pad Sec.36-T5N-R66W	North Reference:	True
Well:	Lasalle K01-28D	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Noble Lasalle K01-28D Plan #1 (9-03-10)		

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	13.09	223.72	2,016.5	-166.0	-158.7	229.7	0.00	0.00	0.00
2,080.0	13.09	223.72	2,055.5	-172.5	-165.0	238.7	0.00	0.00	0.00
2,120.0	13.09	223.72	2,094.4	-179.1	-171.3	247.8	0.00	0.00	0.00
2,160.0	13.09	223.72	2,133.4	-185.6	-177.5	256.8	0.00	0.00	0.00
2,200.0	13.09	223.72	2,172.4	-192.2	-183.8	265.9	0.00	0.00	0.00
2,240.0	13.09	223.72	2,211.3	-198.7	-190.0	275.0	0.00	0.00	0.00
2,280.0	13.09	223.72	2,250.3	-205.3	-196.3	284.0	0.00	0.00	0.00
2,320.0	13.09	223.72	2,289.2	-211.8	-202.6	293.1	0.00	0.00	0.00
2,360.0	13.09	223.72	2,328.2	-218.3	-208.8	302.1	0.00	0.00	0.00
2,400.0	13.09	223.72	2,367.2	-224.9	-215.1	311.2	0.00	0.00	0.00
2,440.0	13.09	223.72	2,406.1	-231.4	-221.3	320.2	0.00	0.00	0.00
2,480.0	13.09	223.72	2,445.1	-238.0	-227.6	329.3	0.00	0.00	0.00
2,520.0	13.09	223.72	2,484.0	-244.5	-233.9	338.4	0.00	0.00	0.00
2,560.0	13.09	223.72	2,523.0	-251.1	-240.1	347.4	0.00	0.00	0.00
2,600.0	13.09	223.72	2,562.0	-257.6	-246.4	356.5	0.00	0.00	0.00
2,640.0	13.09	223.72	2,600.9	-264.2	-252.6	365.5	0.00	0.00	0.00
2,680.0	13.09	223.72	2,639.9	-270.7	-258.9	374.6	0.00	0.00	0.00
2,720.0	13.09	223.72	2,678.9	-277.3	-265.2	383.6	0.00	0.00	0.00
2,760.0	13.09	223.72	2,717.8	-283.8	-271.4	392.7	0.00	0.00	0.00
2,800.0	13.09	223.72	2,756.8	-290.3	-277.7	401.8	0.00	0.00	0.00
2,840.0	13.09	223.72	2,795.7	-296.9	-284.0	410.8	0.00	0.00	0.00
2,880.0	13.09	223.72	2,834.7	-303.4	-290.2	419.9	0.00	0.00	0.00
2,920.0	13.09	223.72	2,873.7	-310.0	-296.5	428.9	0.00	0.00	0.00
2,960.0	13.09	223.72	2,912.6	-316.5	-302.7	438.0	0.00	0.00	0.00
3,000.0	13.09	223.72	2,951.6	-323.1	-309.0	447.1	0.00	0.00	0.00
3,040.0	13.09	223.72	2,990.5	-329.6	-315.3	456.1	0.00	0.00	0.00
3,080.0	13.09	223.72	3,029.5	-336.2	-321.5	465.2	0.00	0.00	0.00
3,120.0	13.09	223.72	3,068.5	-342.7	-327.8	474.2	0.00	0.00	0.00
3,160.0	13.09	223.72	3,107.4	-349.3	-334.0	483.3	0.00	0.00	0.00
3,200.0	13.09	223.72	3,146.4	-355.8	-340.3	492.3	0.00	0.00	0.00
3,240.0	13.09	223.72	3,185.3	-362.4	-346.6	501.4	0.00	0.00	0.00
3,280.0	13.09	223.72	3,224.3	-368.9	-352.8	510.5	0.00	0.00	0.00
3,320.0	13.09	223.72	3,263.3	-375.4	-359.1	519.5	0.00	0.00	0.00
3,360.0	13.09	223.72	3,302.2	-382.0	-365.3	528.6	0.00	0.00	0.00
3,400.0	13.09	223.72	3,341.2	-388.5	-371.6	537.6	0.00	0.00	0.00
3,440.0	13.09	223.72	3,380.1	-395.1	-377.9	546.7	0.00	0.00	0.00
3,480.0	13.09	223.72	3,419.1	-401.6	-384.1	555.7	0.00	0.00	0.00
3,520.0	13.09	223.72	3,458.1	-408.2	-390.4	564.8	0.00	0.00	0.00
3,560.0	13.09	223.72	3,497.0	-414.7	-396.6	573.9	0.00	0.00	0.00
3,600.0	13.09	223.72	3,536.0	-421.3	-402.9	582.9	0.00	0.00	0.00
3,640.0	13.09	223.72	3,575.0	-427.8	-409.2	592.0	0.00	0.00	0.00
3,680.0	13.09	223.72	3,613.9	-434.4	-415.4	601.0	0.00	0.00	0.00
3,720.0	13.09	223.72	3,652.9	-440.9	-421.7	610.1	0.00	0.00	0.00
3,760.0	13.09	223.72	3,691.8	-447.5	-427.9	619.1	0.00	0.00	0.00
3,800.0	13.09	223.72	3,730.8	-454.0	-434.2	628.2	0.00	0.00	0.00
3,840.0	13.09	223.72	3,769.8	-460.5	-440.5	637.3	0.00	0.00	0.00
3,880.0	13.09	223.72	3,808.7	-467.1	-446.7	646.3	0.00	0.00	0.00
3,920.0	13.09	223.72	3,847.7	-473.6	-453.0	655.4	0.00	0.00	0.00
3,960.0	13.09	223.72	3,886.6	-480.2	-459.2	664.4	0.00	0.00	0.00
4,000.0	13.09	223.72	3,925.6	-486.7	-465.5	673.5	0.00	0.00	0.00
4,040.0	13.09	223.72	3,964.6	-493.3	-471.8	682.6	0.00	0.00	0.00
4,080.0	13.09	223.72	4,003.5	-499.8	-478.0	691.6	0.00	0.00	0.00
4,120.0	13.09	223.72	4,042.5	-506.4	-484.3	700.7	0.00	0.00	0.00
4,160.0	13.09	223.72	4,081.4	-512.9	-490.5	709.7	0.00	0.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well Lasalle K01-28D
Company:	NOBLE ENERGY INC WELD COUNTY CO	TVD Reference:	WELL @ 4676.0ft (Original Well Elev)
Project:	SEC.36-T5N-R66W	MD Reference:	WELL @ 4676.0ft (Original Well Elev)
Site:	Lasalle K01-28D Pad Sec.36-T5N-R66W	North Reference:	True
Well:	Lasalle K01-28D	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Noble Lasalle K01-28D Plan #1 (9-03-10)		

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)
4,200.0	13.09	223.72	4,120.4	-519.5	-496.8	718.8	0.00	0.00	0.00
4,240.0	13.09	223.72	4,159.4	-526.0	-503.1	727.8	0.00	0.00	0.00
4,280.0	13.09	223.72	4,198.3	-532.5	-509.3	736.9	0.00	0.00	0.00
4,320.0	13.09	223.72	4,237.3	-539.1	-515.6	746.0	0.00	0.00	0.00
4,360.0	13.09	223.72	4,276.3	-545.6	-521.8	755.0	0.00	0.00	0.00
4,400.0	13.09	223.72	4,315.2	-552.2	-528.1	764.1	0.00	0.00	0.00
4,437.0	13.09	223.72	4,351.3	-558.2	-533.9	772.5	0.00	0.00	0.00
4,440.0	13.03	223.72	4,354.2	-558.7	-534.4	773.1	2.00	-2.00	0.00
4,480.0	12.23	223.72	4,393.2	-565.0	-540.4	781.9	2.00	-2.00	0.00
4,520.0	11.43	223.72	4,432.4	-571.0	-546.1	790.1	2.00	-2.00	0.00
4,560.0	10.63	223.72	4,471.6	-576.5	-551.4	797.7	2.00	-2.00	0.00
4,600.0	9.83	223.72	4,511.0	-581.6	-556.3	804.8	2.00	-2.00	0.00
4,640.0	9.03	223.72	4,550.4	-586.4	-560.8	811.4	2.00	-2.00	0.00
4,680.0	8.23	223.72	4,590.0	-590.7	-565.0	817.4	2.00	-2.00	0.00
4,720.0	7.43	223.72	4,629.6	-594.6	-568.7	822.8	2.00	-2.00	0.00
4,760.0	6.63	223.72	4,669.3	-598.2	-572.1	827.7	2.00	-2.00	0.00
4,800.0	5.83	223.72	4,709.1	-601.3	-575.1	832.1	2.00	-2.00	0.00
4,840.0	5.03	223.72	4,748.9	-604.1	-577.7	835.8	2.00	-2.00	0.00
4,880.0	4.23	223.72	4,788.8	-606.4	-580.0	839.1	2.00	-2.00	0.00
4,920.0	3.43	223.72	4,828.7	-608.3	-581.8	841.7	2.00	-2.00	0.00
4,960.0	2.63	223.72	4,868.6	-609.8	-583.3	843.9	2.00	-2.00	0.00
5,000.0	1.83	223.72	4,908.6	-611.0	-584.3	845.4	2.00	-2.00	0.00
5,040.0	1.03	223.72	4,948.6	-611.7	-585.0	846.4	2.00	-2.00	0.00
5,080.0	0.23	223.72	4,988.6	-612.0	-585.3	846.9	2.00	-2.00	0.00
5,091.4	0.00	0.00	5,000.0	-612.0	-585.3	846.9	2.00	-2.00	0.00
TARGET BHL 75'FSL, 2580'FEL									
5,120.0	0.00	0.00	5,028.6	-612.0	-585.3	846.9	0.00	0.00	0.00
5,160.0	0.00	0.00	5,068.6	-612.0	-585.3	846.9	0.00	0.00	0.00
5,200.0	0.00	0.00	5,108.6	-612.0	-585.3	846.9	0.00	0.00	0.00
5,240.0	0.00	0.00	5,148.6	-612.0	-585.3	846.9	0.00	0.00	0.00
5,280.0	0.00	0.00	5,188.6	-612.0	-585.3	846.9	0.00	0.00	0.00
5,320.0	0.00	0.00	5,228.6	-612.0	-585.3	846.9	0.00	0.00	0.00
5,360.0	0.00	0.00	5,268.6	-612.0	-585.3	846.9	0.00	0.00	0.00
5,400.0	0.00	0.00	5,308.6	-612.0	-585.3	846.9	0.00	0.00	0.00
5,440.0	0.00	0.00	5,348.6	-612.0	-585.3	846.9	0.00	0.00	0.00
5,480.0	0.00	0.00	5,388.6	-612.0	-585.3	846.9	0.00	0.00	0.00
5,520.0	0.00	0.00	5,428.6	-612.0	-585.3	846.9	0.00	0.00	0.00
5,560.0	0.00	0.00	5,468.6	-612.0	-585.3	846.9	0.00	0.00	0.00
5,600.0	0.00	0.00	5,508.6	-612.0	-585.3	846.9	0.00	0.00	0.00
5,640.0	0.00	0.00	5,548.6	-612.0	-585.3	846.9	0.00	0.00	0.00
5,680.0	0.00	0.00	5,588.6	-612.0	-585.3	846.9	0.00	0.00	0.00
5,720.0	0.00	0.00	5,628.6	-612.0	-585.3	846.9	0.00	0.00	0.00
5,760.0	0.00	0.00	5,668.6	-612.0	-585.3	846.9	0.00	0.00	0.00
5,800.0	0.00	0.00	5,708.6	-612.0	-585.3	846.9	0.00	0.00	0.00
5,840.0	0.00	0.00	5,748.6	-612.0	-585.3	846.9	0.00	0.00	0.00
5,880.0	0.00	0.00	5,788.6	-612.0	-585.3	846.9	0.00	0.00	0.00
5,920.0	0.00	0.00	5,828.6	-612.0	-585.3	846.9	0.00	0.00	0.00
5,960.0	0.00	0.00	5,868.6	-612.0	-585.3	846.9	0.00	0.00	0.00
6,000.0	0.00	0.00	5,908.6	-612.0	-585.3	846.9	0.00	0.00	0.00
6,040.0	0.00	0.00	5,948.6	-612.0	-585.3	846.9	0.00	0.00	0.00
6,080.0	0.00	0.00	5,988.6	-612.0	-585.3	846.9	0.00	0.00	0.00
6,120.0	0.00	0.00	6,028.6	-612.0	-585.3	846.9	0.00	0.00	0.00
6,160.0	0.00	0.00	6,068.6	-612.0	-585.3	846.9	0.00	0.00	0.00
6,200.0	0.00	0.00	6,108.6	-612.0	-585.3	846.9	0.00	0.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well Lasalle K01-28D
Company:	NOBLE ENERGY INC WELD COUNTY CO	TVD Reference:	WELL @ 4676.0ft (Original Well Elev)
Project:	SEC.36-T5N-R66W	MD Reference:	WELL @ 4676.0ft (Original Well Elev)
Site:	Lasalle K01-28D Pad Sec.36-T5N-R66W	North Reference:	True
Well:	Lasalle K01-28D	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Noble Lasalle K01-28D Plan #1 (9-03-10)		

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)
6,240.0	0.00	0.00	6,148.6	-612.0	-585.3	846.9	0.00	0.00	0.00
6,280.0	0.00	0.00	6,188.6	-612.0	-585.3	846.9	0.00	0.00	0.00
6,320.0	0.00	0.00	6,228.6	-612.0	-585.3	846.9	0.00	0.00	0.00
6,360.0	0.00	0.00	6,268.6	-612.0	-585.3	846.9	0.00	0.00	0.00
6,400.0	0.00	0.00	6,308.6	-612.0	-585.3	846.9	0.00	0.00	0.00
6,440.0	0.00	0.00	6,348.6	-612.0	-585.3	846.9	0.00	0.00	0.00
6,480.0	0.00	0.00	6,388.6	-612.0	-585.3	846.9	0.00	0.00	0.00
6,520.0	0.00	0.00	6,428.6	-612.0	-585.3	846.9	0.00	0.00	0.00
6,560.0	0.00	0.00	6,468.6	-612.0	-585.3	846.9	0.00	0.00	0.00
6,600.0	0.00	0.00	6,508.6	-612.0	-585.3	846.9	0.00	0.00	0.00
6,640.0	0.00	0.00	6,548.6	-612.0	-585.3	846.9	0.00	0.00	0.00
6,680.0	0.00	0.00	6,588.6	-612.0	-585.3	846.9	0.00	0.00	0.00
6,720.0	0.00	0.00	6,628.6	-612.0	-585.3	846.9	0.00	0.00	0.00
6,760.0	0.00	0.00	6,668.6	-612.0	-585.3	846.9	0.00	0.00	0.00
6,800.0	0.00	0.00	6,708.6	-612.0	-585.3	846.9	0.00	0.00	0.00
6,840.0	0.00	0.00	6,748.6	-612.0	-585.3	846.9	0.00	0.00	0.00
6,880.0	0.00	0.00	6,788.6	-612.0	-585.3	846.9	0.00	0.00	0.00
6,887.4	0.00	0.00	6,796.0	-612.0	-585.3	846.9	0.00	0.00	0.00
NIOBRARA - TARGET CIRCLE 75'FSL, 2580'FEL									
6,920.0	0.00	0.00	6,828.6	-612.0	-585.3	846.9	0.00	0.00	0.00
6,960.0	0.00	0.00	6,868.6	-612.0	-585.3	846.9	0.00	0.00	0.00
7,000.0	0.00	0.00	6,908.6	-612.0	-585.3	846.9	0.00	0.00	0.00
7,040.0	0.00	0.00	6,948.6	-612.0	-585.3	846.9	0.00	0.00	0.00
7,080.0	0.00	0.00	6,988.6	-612.0	-585.3	846.9	0.00	0.00	0.00
7,120.0	0.00	0.00	7,028.6	-612.0	-585.3	846.9	0.00	0.00	0.00
7,160.0	0.00	0.00	7,068.6	-612.0	-585.3	846.9	0.00	0.00	0.00
7,200.0	0.00	0.00	7,108.6	-612.0	-585.3	846.9	0.00	0.00	0.00
7,222.4	0.00	0.00	7,131.0	-612.0	-585.3	846.9	0.00	0.00	0.00
CODELL									
7,240.0	0.00	0.00	7,148.6	-612.0	-585.3	846.9	0.00	0.00	0.00
7,280.0	0.00	0.00	7,188.6	-612.0	-585.3	846.9	0.00	0.00	0.00
7,320.0	0.00	0.00	7,228.6	-612.0	-585.3	846.9	0.00	0.00	0.00
7,360.0	0.00	0.00	7,268.6	-612.0	-585.3	846.9	0.00	0.00	0.00
7,372.4	0.00	0.00	7,281.0	-612.0	-585.3	846.9	0.00	0.00	0.00
HARDLINES 75'S & 87'W OF BHL									

Database:	Landmark	Local Co-ordinate Reference:	Well Lasalle K01-28D
Company:	NOBLE ENERGY INC WELD COUNTY CO	TVD Reference:	WELL @ 4676.0ft (Original Well Elev)
Project:	SEC.36-T5N-R66W	MD Reference:	WELL @ 4676.0ft (Original Well Elev)
Site:	Lasalle K01-28D Pad Sec.36-T5N-R66W	North Reference:	True
Well:	Lasalle K01-28D	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Noble Lasalle K01-28D Plan #1 (9-03-10)		

Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N-S (ft)	+E-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
TARGET BHL 75'FSL - plan hits target - Point	0.00	0.00	5,000.0	-612.0	-585.3	1,370,797.93	3,216,022.99	40° 20' 55.140 N	104° 43' 29.784 W
TARGET CIRCLE 75' - plan hits target - Circle (radius 75.0)	0.00	0.00	6,796.0	-612.0	-585.3	1,370,797.93	3,216,022.99	40° 20' 55.140 N	104° 43' 29.784 W
HARDLINES 75'S & 8 - plan misses by 114.8ft at 7372.4ft MD (7281.0 TVD, -612.0 N, -585.3 E) - Polygon	0.00	0.00	7,281.0	-687.0	-672.3	1,370,722.19	3,215,936.70	40° 20' 54.399 N	104° 43' 30.907 W
Point 1			7,281.0	0.0	0.0	1,370,722.19	3,215,936.70		
Point 2			7,281.0	200.0	0.0	1,370,922.18	3,215,934.94		
Point 3			7,281.0	0.0	0.0	1,370,722.19	3,215,936.70		
Point 4			7,281.0	0.0	200.0	1,370,723.95	3,216,136.68		

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
520.0	520.0	8 5/8"	8-5/8	12-1/4	

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
6,887.4	6,796.0	NIOBRARA		0.00		
7,222.4	7,131.0	CODELL		0.00		