



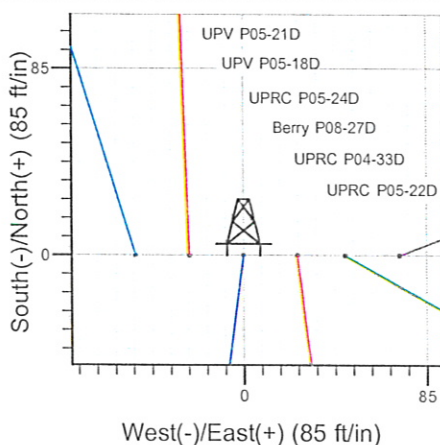
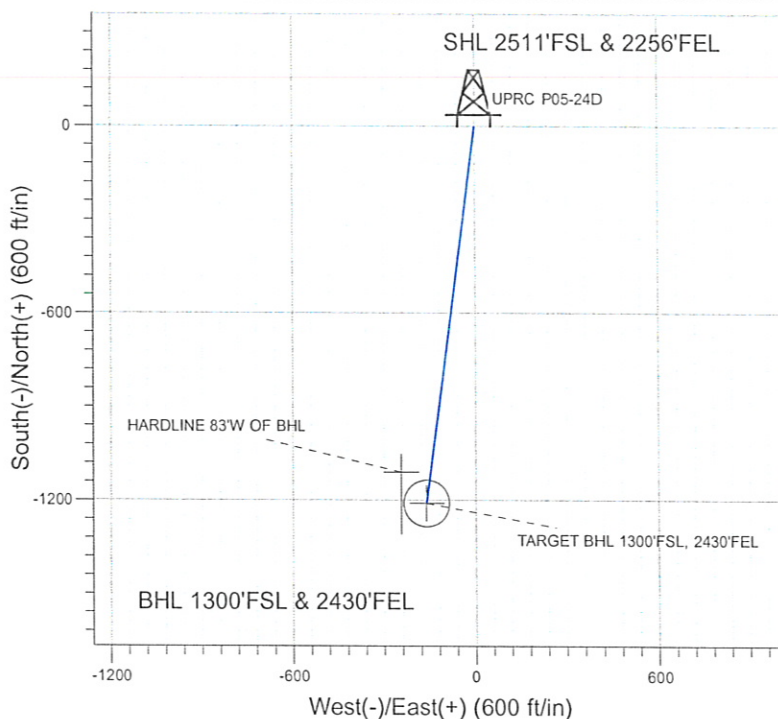
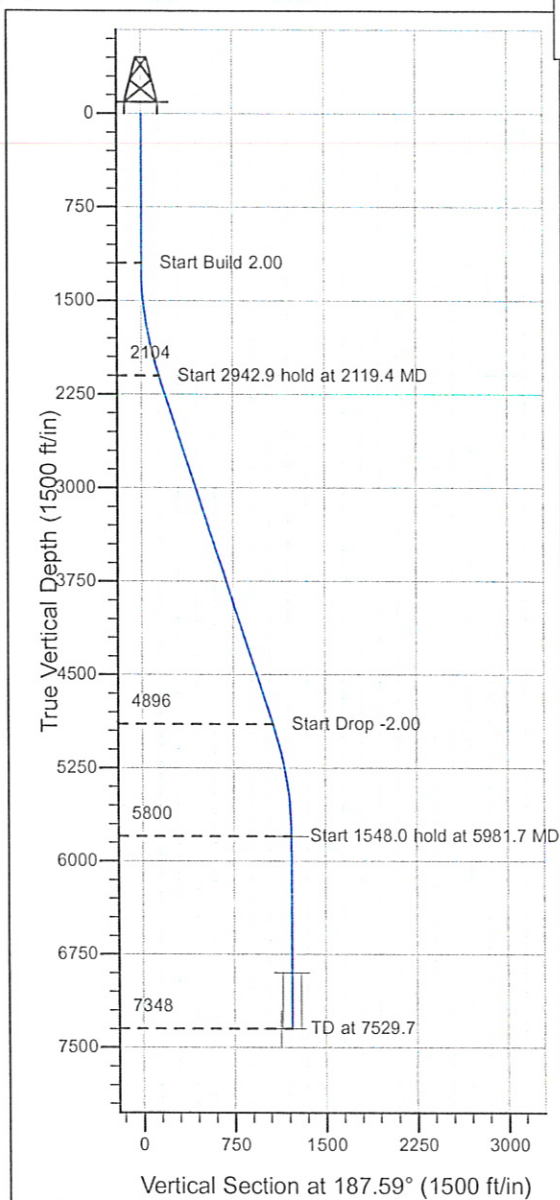
Directional

Well Name: UPRC P05-24D

Surface Location: UPV P05-21D Pad Sec.5-T3N-R67W
North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone

Ground Elevation: 4875.0
+N/-S+E/-W Northing Easting Latitude Longitude Slot
0.0 0.0 1336120.17 3163846.28 40° 15' 16.416 N 104° 54' 46.656 W
Original Well Elev WELL @ 4888.0ft (Original Well Elev)

NOBLE ENERGY INC WELD COUNTY CO



UPV P05-21D Pad Sec.5-T3N-R67W
UPRC P05-24D
Noble UPRC P05-24D Plan #2 (11-16-09)
10:03, November 17 2009



Azimuths to True North
Magnetic North: 9.12°

Magnetic Field
Strength: 53231.9snT
Dip Angle: 66.97°
Date: 10/19/2009
Model: IGRF200510

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
TARGET BHL 1300'FSL, 2430'FEL	5800.0	-1210.2	-161.3	40° 15' 4.457 N	104° 54' 48.736 W	Point
TARGET CIRCLE UPRV P05-24D	6898.0	-1210.2	-161.3	40° 15' 4.457 N	104° 54' 48.736 W	Circle (Radius: 75.0)
HARDLINE 83°W OF BHL	7348.0	-1110.2	-244.3	40° 15' 5.445 N	104° 54' 49.807 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	1200.0	0.00	0.00	1200.0	0.0	0.0	0.00	0.00	0.0	
3	2119.4	18.39	187.59	2103.7	-145.0	-19.3	2.00	187.59	146.3	
4	5062.3	18.39	187.59	4896.3	-1065.2	-141.9	0.00	0.00	1074.6	
5	5981.7	0.00	0.00	5800.0	-1210.2	-161.3	2.00	180.00	1220.9	TARGET BHL 1300'FSL, 2430'FEL
6	7529.7	0.00	0.00	7348.0	-1210.2	-161.3	0.00	0.00	1220.9	



Directional

NOBLE ENERGY INC WELD COUNTY CO

SEC.5-T3N-R67W

UPV P05-21D Pad Sec.5-T3N-R67W

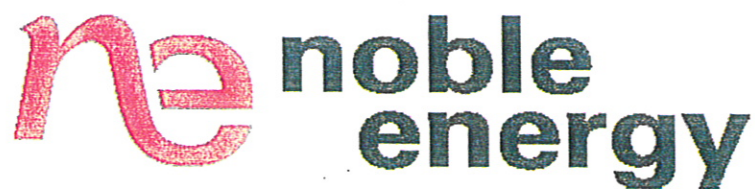
UPRC P05-24D

Wellbore #1

Plan: Noble UPRC P05-24D Plan #2 (11-16-09)

Standard Planning Report

17 November, 2009



Database: EDM den0-adp01 Server Data
 Company: NOBLE ENERGY INC WELD COUNTY CO
 Project: SEC.5-T3N-R67W
 Site: UPV P05-21D Pad Sec.5-T3N-R67W
 Well: UPRC P05-24D
 Wellbore: Wellbore #1
 Design: Noble UPRC P05-24D Plan #2 (11-16-09)

Local Co-ordinate Reference: Well UPRC P05-24D
 TVD Reference: WELL @ 4888.0ft (Original Well Elev)
 MD Reference: WELL @ 4888.0ft (Original Well Elev)
 North Reference: True
 Survey Calculation Method: Minimum Curvature

Project	SEC.5-T3N-R67W, Weld County, Colorado		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		Using geodetic scale factor

Site	UPV P05-21D Pad Sec.5-T3N-R67W		
Site Position:		Northing:	1,336,119.85 ft
From:	Lat/Long	Easting:	3,163,796.04 ft
Position Uncertainty:	0.0 ft	Slot Radius:	"
		Latitude:	40° 15' 16.416 N
		Longitude:	104° 54' 47.304 W
		Grid Convergence:	0.38 °

Well	UPRC P05-24D		
Well Position	+N/-S	0.0 ft	Northing:
	+E/-W	50.2 ft	Easting:
Position Uncertainty	0.0 ft	Wellhead Elevation:	ft
		Latitude:	40° 15' 16.416 N
		Longitude:	104° 54' 46.656 W
		Ground Level:	4,875.0 ft

Wellbore	Wellbore #1		
Magnetics	Model Name	Sample Date	Declination
	IGRF200510	10/19/2009	(°)
			9.12
			Dip Angle
			(°)
			66.97
			Field Strength
			(nT)
			53,232

Design	Noble UPRC P05-24D Plan #2 (11-16-09)		
Audit Notes:			
Version:	Phase:	PROTOTYPE	Tie On Depth:
			0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(ft)	(ft)	(ft)
	0.0	0.0	0.0
			Direction
			(°)
			187.59

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	
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,119.4	18.39	187.59	2,103.7	-145.0	-19.3	2.00	2.00	0.00	187.59	
5,062.3	18.39	187.59	4,896.3	-1,065.2	-141.9	0.00	0.00	0.00	0.00	
5,981.7	0.00	0.00	5,800.0	-1,210.2	-161.3	2.00	-2.00	0.00	180.00	TARGET BHL 130C
7,529.7	0.00	0.00	7,348.0	-1,210.2	-161.3	0.00	0.00	0.00	0.00	

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Local Co-ordinate Reference: Well UPRC P05-24D
TVD Reference: WELL @ 4888.0ft (Original Well Elev)
MD Reference: WELL @ 4888.0ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature

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
1,040.0	0.00	0.00	1,040.0	0.0	0.0	0.0	0.00	0.00	0.00
1,080.0	0.00	0.00	1,080.0	0.0	0.0	0.0	0.00	0.00	0.00
1,120.0	0.00	0.00	1,120.0	0.0	0.0	0.0	0.00	0.00	0.00
1,160.0	0.00	0.00	1,160.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,240.0	0.80	187.59	1,240.0	-0.3	0.0	0.3	2.00	2.00	0.00
1,280.0	1.60	187.59	1,280.0	-1.1	-0.1	1.1	2.00	2.00	0.00
1,320.0	2.40	187.59	1,320.0	-2.5	-0.3	2.5	2.00	2.00	0.00
1,360.0	3.20	187.59	1,359.9	-4.4	-0.6	4.5	2.00	2.00	0.00
1,400.0	4.00	187.59	1,399.8	-6.9	-0.9	7.0	2.00	2.00	0.00
1,440.0	4.80	187.59	1,439.7	-10.0	-1.3	10.0	2.00	2.00	0.00
1,480.0	5.60	187.59	1,479.6	-13.6	-1.8	13.7	2.00	2.00	0.00
1,520.0	6.40	187.59	1,519.3	-17.7	-2.4	17.9	2.00	2.00	0.00
1,560.0	7.20	187.59	1,559.1	-22.4	-3.0	22.6	2.00	2.00	0.00
1,600.0	8.00	187.59	1,598.7	-27.6	-3.7	27.9	2.00	2.00	0.00
1,640.0	8.80	187.59	1,638.3	-33.4	-4.5	33.7	2.00	2.00	0.00
1,680.0	9.60	187.59	1,677.8	-39.8	-5.3	40.1	2.00	2.00	0.00
1,720.0	10.40	187.59	1,717.1	-46.7	-6.2	47.1	2.00	2.00	0.00
1,760.0	11.20	187.59	1,756.4	-54.1	-7.2	54.6	2.00	2.00	0.00
1,800.0	12.00	187.59	1,795.6	-62.1	-8.3	62.6	2.00	2.00	0.00
1,840.0	12.80	187.59	1,834.7	-70.6	-9.4	71.2	2.00	2.00	0.00
1,880.0	13.60	187.59	1,873.6	-79.6	-10.6	80.3	2.00	2.00	0.00
1,920.0	14.40	187.59	1,912.4	-89.2	-11.9	90.0	2.00	2.00	0.00
1,960.0	15.20	187.59	1,951.1	-99.3	-13.2	100.2	2.00	2.00	0.00
2,000.0	16.00	187.59	1,989.6	-110.0	-14.7	111.0	2.00	2.00	0.00
2,040.0	16.80	187.59	2,028.0	-121.2	-16.1	122.3	2.00	2.00	0.00
2,080.0	17.60	187.59	2,066.2	-132.9	-17.7	134.1	2.00	2.00	0.00
2,119.4	18.39	187.59	2,103.7	-145.0	-19.3	146.3	2.00	2.00	0.00

Database: EDM den0-adp01 Server Data
Company: NOBLE ENERGY INC WELD COUNTY CO
Project: SEC.5-T3N-R67W
Site: UPV P05-21D Pad Sec.5-T3N-R67W
Well: UPRC P05-24D
Wellbore: Wellbore #1
Design: Noble UPRC P05-24D Plan #2 (11-16-09)

Local Co-ordinate Reference: Well UPRC P05-24D
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MD Reference: WELL @ 4888.0ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature

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)
2,120.0	18.39	187.59	2,104.3	-145.2	-19.3	146.5	0.00	0.00	0.00
2,160.0	18.39	187.59	2,142.2	-157.7	-21.0	159.1	0.00	0.00	0.00
2,200.0	18.39	187.59	2,180.2	-170.2	-22.7	171.7	0.00	0.00	0.00
2,240.0	18.39	187.59	2,218.1	-182.7	-24.3	184.3	0.00	0.00	0.00
2,280.0	18.39	187.59	2,256.1	-195.2	-26.0	196.9	0.00	0.00	0.00
2,320.0	18.39	187.59	2,294.1	-207.7	-27.7	209.5	0.00	0.00	0.00
2,360.0	18.39	187.59	2,332.0	-220.2	-29.3	222.2	0.00	0.00	0.00
2,400.0	18.39	187.59	2,370.0	-232.7	-31.0	234.8	0.00	0.00	0.00
2,440.0	18.39	187.59	2,407.9	-245.2	-32.7	247.4	0.00	0.00	0.00
2,480.0	18.39	187.59	2,445.9	-257.7	-34.3	260.0	0.00	0.00	0.00
2,520.0	18.39	187.59	2,483.8	-270.2	-36.0	272.6	0.00	0.00	0.00
2,560.0	18.39	187.59	2,521.8	-282.8	-37.7	285.3	0.00	0.00	0.00
2,600.0	18.39	187.59	2,559.8	-295.3	-39.3	297.9	0.00	0.00	0.00
2,640.0	18.39	187.59	2,597.7	-307.8	-41.0	310.5	0.00	0.00	0.00
2,680.0	18.39	187.59	2,635.7	-320.3	-42.7	323.1	0.00	0.00	0.00
2,720.0	18.39	187.59	2,673.6	-332.8	-44.3	335.7	0.00	0.00	0.00
2,760.0	18.39	187.59	2,711.6	-345.3	-46.0	348.3	0.00	0.00	0.00
2,800.0	18.39	187.59	2,749.5	-357.8	-47.7	361.0	0.00	0.00	0.00
2,840.0	18.39	187.59	2,787.5	-370.3	-49.3	373.6	0.00	0.00	0.00
2,880.0	18.39	187.59	2,825.5	-382.8	-51.0	386.2	0.00	0.00	0.00
2,920.0	18.39	187.59	2,863.4	-395.3	-52.7	398.8	0.00	0.00	0.00
2,960.0	18.39	187.59	2,901.4	-407.8	-54.3	411.4	0.00	0.00	0.00
3,000.0	18.39	187.59	2,939.3	-420.3	-56.0	424.1	0.00	0.00	0.00
3,040.0	18.39	187.59	2,977.3	-432.8	-57.7	436.7	0.00	0.00	0.00
3,080.0	18.39	187.59	3,015.3	-445.4	-59.3	449.3	0.00	0.00	0.00
3,120.0	18.39	187.59	3,053.2	-457.9	-61.0	461.9	0.00	0.00	0.00
3,160.0	18.39	187.59	3,091.2	-470.4	-62.7	474.5	0.00	0.00	0.00
3,200.0	18.39	187.59	3,129.1	-482.9	-64.3	487.1	0.00	0.00	0.00
3,240.0	18.39	187.59	3,167.1	-495.4	-66.0	499.8	0.00	0.00	0.00
3,280.0	18.39	187.59	3,205.0	-507.9	-67.7	512.4	0.00	0.00	0.00
3,320.0	18.39	187.59	3,243.0	-520.4	-69.3	525.0	0.00	0.00	0.00
3,360.0	18.39	187.59	3,281.0	-532.9	-71.0	537.6	0.00	0.00	0.00
3,400.0	18.39	187.59	3,318.9	-545.4	-72.7	550.2	0.00	0.00	0.00
3,440.0	18.39	187.59	3,356.9	-557.9	-74.3	562.8	0.00	0.00	0.00
3,480.0	18.39	187.59	3,394.8	-570.4	-76.0	575.5	0.00	0.00	0.00
3,520.0	18.39	187.59	3,432.8	-582.9	-77.7	588.1	0.00	0.00	0.00
3,560.0	18.39	187.59	3,470.7	-595.4	-79.3	600.7	0.00	0.00	0.00
3,600.0	18.39	187.59	3,508.7	-607.9	-81.0	613.3	0.00	0.00	0.00
3,640.0	18.39	187.59	3,546.7	-620.5	-82.7	625.9	0.00	0.00	0.00
3,680.0	18.39	187.59	3,584.6	-633.0	-84.3	638.6	0.00	0.00	0.00
3,720.0	18.39	187.59	3,622.6	-645.5	-86.0	651.2	0.00	0.00	0.00
3,760.0	18.39	187.59	3,660.5	-658.0	-87.7	663.8	0.00	0.00	0.00
3,800.0	18.39	187.59	3,698.5	-670.5	-89.3	676.4	0.00	0.00	0.00
3,840.0	18.39	187.59	3,736.5	-683.0	-91.0	689.0	0.00	0.00	0.00
3,880.0	18.39	187.59	3,774.4	-695.5	-92.7	701.6	0.00	0.00	0.00
3,920.0	18.39	187.59	3,812.4	-708.0	-94.3	714.3	0.00	0.00	0.00
3,960.0	18.39	187.59	3,850.3	-720.5	-96.0	726.9	0.00	0.00	0.00
4,000.0	18.39	187.59	3,888.3	-733.0	-97.7	739.5	0.00	0.00	0.00
4,040.0	18.39	187.59	3,926.2	-745.5	-99.3	752.1	0.00	0.00	0.00
4,080.0	18.39	187.59	3,964.2	-758.0	-101.0	764.7	0.00	0.00	0.00
4,120.0	18.39	187.59	4,002.2	-770.5	-102.7	777.4	0.00	0.00	0.00
4,160.0	18.39	187.59	4,040.1	-783.1	-104.3	790.0	0.00	0.00	0.00
4,200.0	18.39	187.59	4,078.1	-795.6	-106.0	802.6	0.00	0.00	0.00
4,240.0	18.39	187.59	4,116.0	-808.1	-107.7	815.2	0.00	0.00	0.00

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North Reference: True
Survey Calculation Method: Minimum Curvature

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)
4,280.0	18.39	187.59	4,154.0	-820.6	-109.3	827.8	0.00	0.00	0.00
4,320.0	18.39	187.59	4,191.9	-833.1	-111.0	840.4	0.00	0.00	0.00
4,360.0	18.39	187.59	4,229.9	-845.6	-112.7	853.1	0.00	0.00	0.00
4,400.0	18.39	187.59	4,267.9	-858.1	-114.3	865.7	0.00	0.00	0.00
4,440.0	18.39	187.59	4,305.8	-870.6	-116.0	878.3	0.00	0.00	0.00
4,480.0	18.39	187.59	4,343.8	-883.1	-117.7	890.9	0.00	0.00	0.00
4,520.0	18.39	187.59	4,381.7	-895.6	-119.3	903.5	0.00	0.00	0.00
4,560.0	18.39	187.59	4,419.7	-908.1	-121.0	916.2	0.00	0.00	0.00
4,600.0	18.39	187.59	4,457.6	-920.6	-122.7	928.8	0.00	0.00	0.00
4,640.0	18.39	187.59	4,495.6	-933.1	-124.3	941.4	0.00	0.00	0.00
4,680.0	18.39	187.59	4,533.6	-945.6	-126.0	954.0	0.00	0.00	0.00
4,720.0	18.39	187.59	4,571.5	-958.2	-127.7	966.6	0.00	0.00	0.00
4,760.0	18.39	187.59	4,609.5	-970.7	-129.3	979.2	0.00	0.00	0.00
4,800.0	18.39	187.59	4,647.4	-983.2	-131.0	991.9	0.00	0.00	0.00
4,840.0	18.39	187.59	4,685.4	-995.7	-132.7	1,004.5	0.00	0.00	0.00
4,880.0	18.39	187.59	4,723.4	-1,008.2	-134.3	1,017.1	0.00	0.00	0.00
4,920.0	18.39	187.59	4,761.3	-1,020.7	-136.0	1,029.7	0.00	0.00	0.00
4,960.0	18.39	187.59	4,799.3	-1,033.2	-137.7	1,042.3	0.00	0.00	0.00
5,000.0	18.39	187.59	4,837.2	-1,045.7	-139.3	1,054.9	0.00	0.00	0.00
5,040.0	18.39	187.59	4,875.2	-1,058.2	-141.0	1,067.6	0.00	0.00	0.00
5,062.3	18.39	187.59	4,896.3	-1,065.2	-141.9	1,074.6	0.00	0.00	0.00
5,080.0	18.03	187.59	4,913.2	-1,070.7	-142.7	1,080.1	2.00	-2.00	0.00
5,120.0	17.23	187.59	4,951.3	-1,082.7	-144.3	1,092.2	2.00	-2.00	0.00
5,160.0	16.43	187.59	4,989.6	-1,094.2	-145.8	1,103.8	2.00	-2.00	0.00
5,200.0	15.63	187.59	5,028.0	-1,105.1	-147.3	1,114.9	2.00	-2.00	0.00
5,240.0	14.83	187.59	5,066.6	-1,115.5	-148.6	1,125.4	2.00	-2.00	0.00
5,280.0	14.03	187.59	5,105.3	-1,125.4	-150.0	1,135.4	2.00	-2.00	0.00
5,320.0	13.23	187.59	5,144.2	-1,134.8	-151.2	1,144.8	2.00	-2.00	0.00
5,360.0	12.43	187.59	5,183.2	-1,143.6	-152.4	1,153.7	2.00	-2.00	0.00
5,400.0	11.63	187.59	5,222.3	-1,151.8	-153.5	1,162.0	2.00	-2.00	0.00
5,440.0	10.83	187.59	5,261.6	-1,159.6	-154.5	1,169.8	2.00	-2.00	0.00
5,480.0	10.03	187.59	5,300.9	-1,166.7	-155.5	1,177.0	2.00	-2.00	0.00
5,520.0	9.23	187.59	5,340.3	-1,173.4	-156.4	1,183.7	2.00	-2.00	0.00
5,560.0	8.43	187.59	5,379.9	-1,179.5	-157.2	1,189.9	2.00	-2.00	0.00
5,600.0	7.63	187.59	5,419.5	-1,185.0	-157.9	1,195.5	2.00	-2.00	0.00
5,640.0	6.83	187.59	5,459.2	-1,190.0	-158.6	1,200.5	2.00	-2.00	0.00
5,680.0	6.03	187.59	5,498.9	-1,194.4	-159.2	1,205.0	2.00	-2.00	0.00
5,720.0	5.23	187.59	5,538.7	-1,198.3	-159.7	1,208.9	2.00	-2.00	0.00
5,760.0	4.43	187.59	5,578.6	-1,201.7	-160.1	1,212.3	2.00	-2.00	0.00
5,800.0	3.63	187.59	5,618.5	-1,204.5	-160.5	1,215.1	2.00	-2.00	0.00
5,840.0	2.83	187.59	5,658.4	-1,206.7	-160.8	1,217.4	2.00	-2.00	0.00
5,880.0	2.03	187.59	5,698.4	-1,208.4	-161.0	1,219.1	2.00	-2.00	0.00
5,920.0	1.23	187.59	5,738.3	-1,209.5	-161.2	1,220.2	2.00	-2.00	0.00
5,960.0	0.43	187.59	5,778.3	-1,210.1	-161.2	1,220.8	2.00	-2.00	0.00
5,981.7	0.00	0.00	5,800.0	-1,210.2	-161.3	1,220.9	2.00	-2.00	0.00
TARGET BHL 1300'FSL, 2430'FEL									
6,000.0	0.00	0.00	5,818.3	-1,210.2	-161.3	1,220.9	0.00	0.00	0.00
6,040.0	0.00	0.00	5,858.3	-1,210.2	-161.3	1,220.9	0.00	0.00	0.00
6,080.0	0.00	0.00	5,898.3	-1,210.2	-161.3	1,220.9	0.00	0.00	0.00
6,120.0	0.00	0.00	5,938.3	-1,210.2	-161.3	1,220.9	0.00	0.00	0.00
6,160.0	0.00	0.00	5,978.3	-1,210.2	-161.3	1,220.9	0.00	0.00	0.00
6,200.0	0.00	0.00	6,018.3	-1,210.2	-161.3	1,220.9	0.00	0.00	0.00
6,240.0	0.00	0.00	6,058.3	-1,210.2	-161.3	1,220.9	0.00	0.00	0.00

Database: EDM den0-adp01 Server Data
Company: NOBLE ENERGY INC WELD COUNTY CO
Project: SEC.5-T3N-R67W
Site: UPV P05-21D Pad Sec.5-T3N-R67W
Well: UPRC P05-24D
Wellbore: Wellbore #1
Design: Noble UPRC P05-24D Plan #2 (11-16-09)

Local Co-ordinate Reference: Well UPRC P05-24D
TVD Reference: WELL @ 4888.0ft (Original Well Elev)
MD Reference: WELL @ 4888.0ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature

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)
6,280.0	0.00	0.00	6,098.3	-1,210.2	-161.3	1,220.9	0.00	0.00	0.00
6,320.0	0.00	0.00	6,138.3	-1,210.2	-161.3	1,220.9	0.00	0.00	0.00
6,360.0	0.00	0.00	6,178.3	-1,210.2	-161.3	1,220.9	0.00	0.00	0.00
6,400.0	0.00	0.00	6,218.3	-1,210.2	-161.3	1,220.9	0.00	0.00	0.00
6,440.0	0.00	0.00	6,258.3	-1,210.2	-161.3	1,220.9	0.00	0.00	0.00
6,480.0	0.00	0.00	6,298.3	-1,210.2	-161.3	1,220.9	0.00	0.00	0.00
6,520.0	0.00	0.00	6,338.3	-1,210.2	-161.3	1,220.9	0.00	0.00	0.00
6,560.0	0.00	0.00	6,378.3	-1,210.2	-161.3	1,220.9	0.00	0.00	0.00
6,600.0	0.00	0.00	6,418.3	-1,210.2	-161.3	1,220.9	0.00	0.00	0.00
6,640.0	0.00	0.00	6,458.3	-1,210.2	-161.3	1,220.9	0.00	0.00	0.00
6,680.0	0.00	0.00	6,498.3	-1,210.2	-161.3	1,220.9	0.00	0.00	0.00
6,720.0	0.00	0.00	6,538.3	-1,210.2	-161.3	1,220.9	0.00	0.00	0.00
6,760.0	0.00	0.00	6,578.3	-1,210.2	-161.3	1,220.9	0.00	0.00	0.00
6,800.0	0.00	0.00	6,618.3	-1,210.2	-161.3	1,220.9	0.00	0.00	0.00
6,840.0	0.00	0.00	6,658.3	-1,210.2	-161.3	1,220.9	0.00	0.00	0.00
6,880.0	0.00	0.00	6,698.3	-1,210.2	-161.3	1,220.9	0.00	0.00	0.00
6,920.0	0.00	0.00	6,738.3	-1,210.2	-161.3	1,220.9	0.00	0.00	0.00
6,960.0	0.00	0.00	6,778.3	-1,210.2	-161.3	1,220.9	0.00	0.00	0.00
7,000.0	0.00	0.00	6,818.3	-1,210.2	-161.3	1,220.9	0.00	0.00	0.00
7,040.0	0.00	0.00	6,858.3	-1,210.2	-161.3	1,220.9	0.00	0.00	0.00
7,079.7	0.00	0.00	6,898.0	-1,210.2	-161.3	1,220.9	0.00	0.00	0.00
NIOBRARA - TARGET CIRCLE UPRV P05-24D									
7,080.0	0.00	0.00	6,898.3	-1,210.2	-161.3	1,220.9	0.00	0.00	0.00
7,120.0	0.00	0.00	6,938.3	-1,210.2	-161.3	1,220.9	0.00	0.00	0.00
7,160.0	0.00	0.00	6,978.3	-1,210.2	-161.3	1,220.9	0.00	0.00	0.00
7,200.0	0.00	0.00	7,018.3	-1,210.2	-161.3	1,220.9	0.00	0.00	0.00
7,240.0	0.00	0.00	7,058.3	-1,210.2	-161.3	1,220.9	0.00	0.00	0.00
7,280.0	0.00	0.00	7,098.3	-1,210.2	-161.3	1,220.9	0.00	0.00	0.00
7,320.0	0.00	0.00	7,138.3	-1,210.2	-161.3	1,220.9	0.00	0.00	0.00
7,360.0	0.00	0.00	7,178.3	-1,210.2	-161.3	1,220.9	0.00	0.00	0.00
7,379.7	0.00	0.00	7,198.0	-1,210.2	-161.3	1,220.9	0.00	0.00	0.00
CODELL									
7,400.0	0.00	0.00	7,218.3	-1,210.2	-161.3	1,220.9	0.00	0.00	0.00
7,440.0	0.00	0.00	7,258.3	-1,210.2	-161.3	1,220.9	0.00	0.00	0.00
7,480.0	0.00	0.00	7,298.3	-1,210.2	-161.3	1,220.9	0.00	0.00	0.00
7,520.0	0.00	0.00	7,338.3	-1,210.2	-161.3	1,220.9	0.00	0.00	0.00
7,529.7	0.00	0.00	7,348.0	-1,210.2	-161.3	1,220.9	0.00	0.00	0.00
HARDLINE 83'W OF BHL									

Database: EDM den0-adp01 Server Data
Company: NOBLE ENERGY INC WELD COUNTY CO
Project: SEC.5-T3N-R67W
Site: UPV P05-21D Pad Sec.5-T3N-R67W
Well: UPRC P05-24D
Wellbore: Wellbore #1
Design: Noble UPRC P05-24D Plan #2 (11-16-09)

Local Co-ordinate Reference: Well UPRC P05-24D
TVD Reference: WELL @ 4888.0ft (Original Well Elev)
MD Reference: WELL @ 4888.0ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature

Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- hit/miss target									
- Shape									
TARGET CIRCLE UP	0.00	0.00	6,898.0	-1,210.2	-161.3	1,334,908.99	3,163,693.00	40° 15' 4.457 N	104° 54' 48.736 W
- plan misses target center by 0.1ft at 7079.7ft MD (6898.0 TVD, -1210.2 N, -161.3 E)									
- Circle (radius 75.0)									
TARGET BHL 1300'F	0.00	0.00	5,800.0	-1,210.2	-161.3	1,334,909.03	3,163,693.04	40° 15' 4.457 N	104° 54' 48.736 W
- plan hits target center									
- Point									
HARDLINE 83'W OF I	0.00	0.00	7,348.0	-1,110.2	-244.3	1,335,008.43	3,163,609.34	40° 15' 5.445 N	104° 54' 49.807 W
- plan misses target center by 130.0ft at 7529.7ft MD (7348.0 TVD, -1210.2 N, -161.3 E)									
- Polygon									
Point 1			7,348.0	0.0	0.0	1,335,008.43	3,163,609.34		
Point 2			7,348.0	-200.0	0.0	1,334,808.45	3,163,610.66		

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
7,079.7	6,898.0	NIOBRARA		0.00	
7,379.7	7,198.0	CODELL		0.00	