

Well Name: **Coors Energy 43-25D**

Surface Location: Coors Energy 33-25D Pad Sec.25-T3N-R64W
North American Datum 1983 US State Plane 1983 Colorado Northern Zone

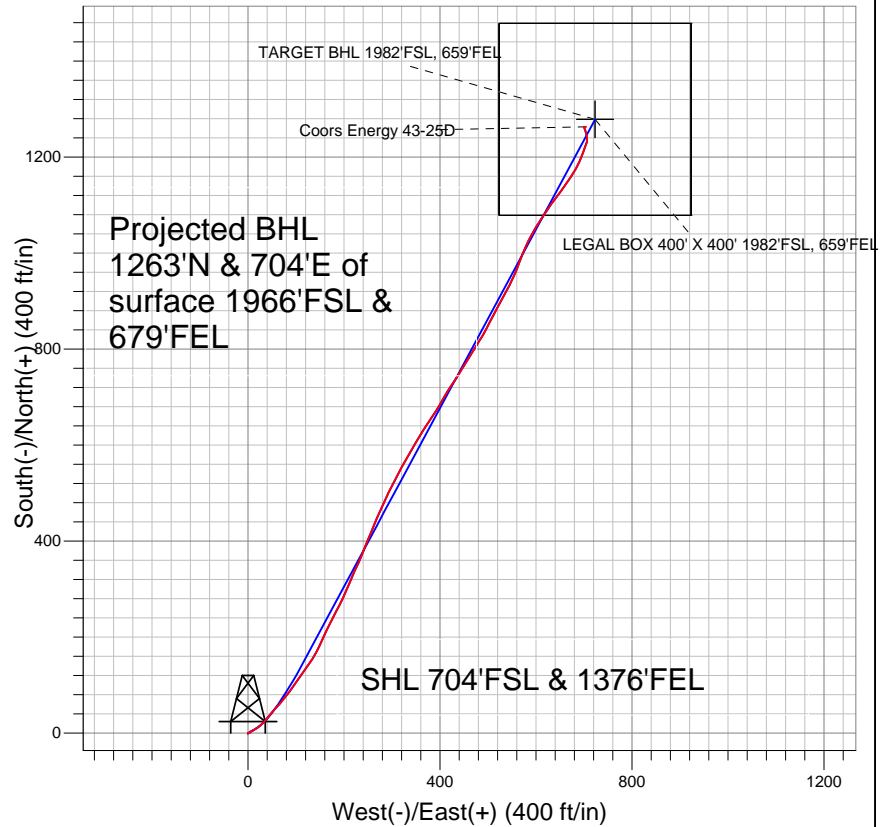
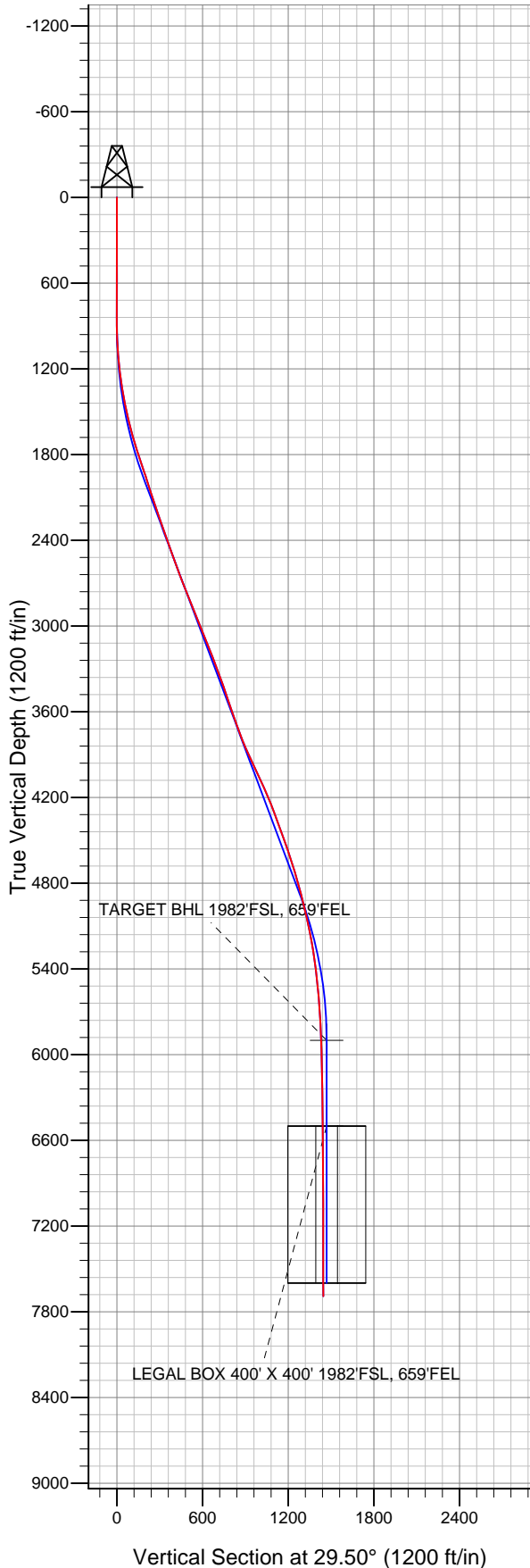
Ground Elevation: 4790.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	1314046.82	3280681.20	40° 11' 27.924 N	104° 29' 43.008 W

Original Well Elev WELL @ 4803.0ft (Original Well Elev)

Slot

PETROLEUM DEVELOPMENT CORP Weld County CO



LEGEND

- ◆ Coors Energy 43-25D, Wellbore #1, Plan #2 (5-02-11) V0
- Wellbore #1
- Survey #1

Final Survey Plot

Projected Final Survey -
7928'MD & 7691'TVD @ 1446'VS
0.4 deg Inc 49.0 deg AZ

Project: SEC.25-T3N-R64W
Site: Coors Energy 33-25D Pad Sec.25-T3N-R64W
Well: Coors Energy 43-25D
Plan: Wellbore #1



Directional

PETROLEUM DEVELOPMENT CORP Weld County CO

SEC.25-T3N-R64W

Coors Energy 33-25D Pad Sec.25-T3N-R64W

Coors Energy 43-25D

Wellbore #1

Survey: Survey #1

Standard Survey Report

08 August, 2011

Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well Coors Energy 43-25D
Project:	SEC.25-T3N-R64W	TVD Reference:	WELL @ 4803.0ft (Original Well Elev)
Site:	Coors Energy 33-25D Pad Sec.25-T3N-R64W	MD Reference:	WELL @ 4803.0ft (Original Well Elev)
Well:	Coors Energy 43-25D	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Landmark

Project	SEC.25-T3N-R64W, 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	Coors Energy 33-25D Pad Sec.25-T3N-R64W				
Site Position:		Northing:	1,314,068.69ft	Latitude:	40° 11' 28.140 N
From:	Lat/Long	Easting:	3,280,680.96ft	Longitude:	104° 29' 43.008 W
Position Uncertainty:	0.0 ft	Slot Radius:	"	Grid Convergence:	0.65 °

Well	Coors Energy 43-25D					
Well Position	+N-S	0.0 ft	Northing:	1,314,046.82 ft	Latitude:	40° 11' 27.924 N
	+E-W	0.0 ft	Easting:	3,280,681.20 ft	Longitude:	104° 29' 43.008 W
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,790.0 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	5/2/2011	8.72	66.93	53,064

Design	Wellbore #1				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (ft)	+N-S (ft)	+E-W (ft)	Direction (°)	
	0.0	0.0	0.0	29.50	

Survey Program	Date	8/8/2011			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
801.0	7,928.0	Survey #1 (Wellbore #1)	MWD	MWD - Standard	

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N-S (ft)	+E-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00	
801.0	0.20	199.10	801.0	-1.3	-0.5	-1.4	0.02	0.02	0.00	
896.0	1.00	68.20	896.0	-1.2	0.3	-0.9	1.20	0.84	-137.79	
991.0	2.90	58.90	990.9	0.4	3.1	1.8	2.02	2.00	-9.79	
1,086.0	4.60	54.90	1,085.7	3.8	8.3	7.4	1.81	1.79	-4.21	
1,181.0	6.60	61.90	1,180.3	8.6	16.2	15.4	2.22	2.11	7.37	
1,276.0	8.40	47.00	1,274.5	15.9	26.1	26.7	2.77	1.89	-15.68	
1,371.0	10.40	40.40	1,368.2	27.1	36.7	41.7	2.39	2.11	-6.95	
1,465.0	11.90	39.80	1,460.4	41.1	48.4	59.6	1.60	1.60	-0.64	
1,560.0	13.10	41.00	1,553.2	56.7	61.8	79.8	1.29	1.26	1.26	
1,655.0	15.50	41.40	1,645.2	74.4	77.2	102.7	2.53	2.53	0.42	
1,750.0	16.80	33.40	1,736.5	95.3	93.2	128.9	2.71	1.37	-8.42	

Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well Coors Energy 43-25D
Project:	SEC.25-T3N-R64W	TVD Reference:	WELL @ 4803.0ft (Original Well Elev)
Site:	Coors Energy 33-25D Pad Sec.25-T3N-R64W	MD Reference:	WELL @ 4803.0ft (Original Well Elev)
Well:	Coors Energy 43-25D	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Landmark

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
1,845.0	19.10	36.80	1,826.8	119.2	110.0	158.0	2.66	2.42	3.58
1,943.0	19.00	34.10	1,919.5	145.3	128.6	189.8	0.90	-0.10	-2.76
2,039.0	17.90	27.00	2,010.5	171.4	144.1	220.1	2.60	-1.15	-7.40
2,134.0	17.70	23.60	2,101.0	197.6	156.5	249.1	1.11	-0.21	-3.58
2,229.0	18.70	26.80	2,191.3	224.5	169.1	278.6	1.49	1.05	3.37
2,323.0	20.00	27.80	2,279.9	252.1	183.4	309.8	1.43	1.38	1.06
2,418.0	19.80	24.80	2,369.3	281.1	197.7	342.0	1.10	-0.21	-3.16
2,514.0	19.50	22.60	2,459.7	310.7	210.7	374.1	0.83	-0.31	-2.29
2,608.0	19.50	25.40	2,548.3	339.3	223.5	405.4	0.99	0.00	2.98
2,703.0	20.70	22.30	2,637.5	369.2	236.6	437.8	1.69	1.26	-3.26
2,796.0	22.20	21.80	2,724.1	400.7	249.4	471.6	1.62	1.61	-0.54
2,889.0	21.50	24.00	2,810.4	432.6	262.9	505.9	1.16	-0.75	2.37
2,984.0	22.10	23.30	2,898.6	464.9	277.0	541.0	0.69	0.63	-0.74
3,078.0	22.80	24.40	2,985.5	497.7	291.5	576.8	0.87	0.74	1.17
3,173.0	22.50	27.50	3,073.1	530.6	307.5	613.3	1.30	-0.32	3.26
3,268.0	20.80	30.10	3,161.4	561.3	324.4	648.3	2.05	-1.79	2.74
3,363.0	21.10	30.90	3,250.2	590.6	341.6	682.3	0.44	0.32	0.84
3,458.0	19.40	29.90	3,339.3	619.0	358.3	715.1	1.83	-1.79	-1.05
3,552.0	19.00	33.80	3,428.1	645.2	374.6	746.0	1.43	-0.43	4.15
3,647.0	19.20	32.70	3,517.8	671.2	391.6	777.0	0.43	0.21	-1.16
3,742.0	19.60	29.10	3,607.4	698.3	407.8	808.5	1.33	0.42	-3.79
3,837.0	20.00	34.70	3,696.8	725.6	424.8	840.7	2.04	0.42	5.89
3,932.0	20.80	31.40	3,785.9	753.3	442.8	873.7	1.47	0.84	-3.47
4,027.0	24.50	31.60	3,873.5	784.5	461.9	910.3	3.90	3.89	0.21
4,122.0	25.10	32.00	3,959.8	818.4	482.9	950.1	0.66	0.63	0.42
4,217.0	25.00	26.70	4,045.8	853.4	502.6	990.3	2.36	-0.11	-5.58
4,311.0	24.40	28.10	4,131.2	888.3	520.7	1,029.5	0.89	-0.64	1.49
4,406.0	22.20	29.10	4,218.5	921.3	538.7	1,067.1	2.35	-2.32	1.05
4,501.0	20.30	23.70	4,307.0	952.0	554.0	1,101.4	2.87	-2.00	-5.68
4,596.0	20.10	19.40	4,396.2	982.5	566.1	1,133.9	1.58	-0.21	-4.53
4,691.0	20.10	25.10	4,485.4	1,012.7	578.4	1,166.2	2.06	0.00	6.00
4,786.0	18.70	28.80	4,575.0	1,040.8	592.7	1,197.8	1.96	-1.47	3.89
4,881.0	17.80	32.90	4,665.3	1,066.4	607.9	1,227.5	1.65	-0.95	4.32
4,976.0	16.80	34.20	4,756.0	1,089.9	623.5	1,255.7	1.13	-1.05	1.37
5,070.0	14.30	37.40	4,846.5	1,110.4	638.2	1,280.7	2.81	-2.66	3.40
5,165.0	14.00	36.50	4,938.6	1,128.9	652.2	1,303.7	0.39	-0.32	-0.95
5,260.0	13.50	33.90	5,030.9	1,147.4	665.2	1,326.2	0.84	-0.53	-2.74
5,355.0	11.60	32.30	5,123.6	1,164.7	676.5	1,346.8	2.03	-2.00	-1.68
5,450.0	9.90	28.90	5,217.0	1,179.9	685.5	1,364.5	1.91	-1.79	-3.58
5,544.0	8.40	21.90	5,309.8	1,193.3	692.0	1,379.4	1.98	-1.60	-7.45
5,639.0	7.20	18.90	5,403.9	1,205.4	696.5	1,392.1	1.33	-1.26	-3.16
5,735.0	6.30	20.40	5,499.2	1,216.0	700.3	1,403.2	0.96	-0.94	1.56
5,829.0	5.30	22.30	5,592.7	1,224.9	703.8	1,412.6	1.08	-1.06	2.02
5,924.0	3.60	9.40	5,687.4	1,231.9	705.9	1,419.8	2.07	-1.79	-13.58
6,019.0	3.20	0.00	5,782.3	1,237.5	706.4	1,424.9	0.72	-0.42	-9.89
6,114.0	2.60	353.00	5,877.2	1,242.3	706.1	1,428.9	0.73	-0.63	-7.37
6,138.2	2.52	351.61	5,901.4	1,243.3	706.0	1,429.8	0.42	-0.33	-5.75
TARGET BHL 1982'FSL, 659'FEL									
6,209.0	2.30	347.00	5,972.1	1,246.3	705.4	1,432.1	0.42	-0.31	-6.51
6,304.0	1.90	343.00	6,067.0	1,249.6	704.6	1,434.6	0.45	-0.42	-4.21
6,399.0	1.60	344.00	6,162.0	1,252.4	703.7	1,436.6	0.32	-0.32	1.05
6,494.0	1.30	340.10	6,256.9	1,254.7	703.0	1,438.2	0.33	-0.32	-4.11
6,590.0	1.10	335.90	6,352.9	1,256.6	702.2	1,439.5	0.23	-0.21	-4.38

Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well Coors Energy 43-25D
Project:	SEC.25-T3N-R64W	TVD Reference:	WELL @ 4803.0ft (Original Well Elev)
Site:	Coors Energy 33-25D Pad Sec.25-T3N-R64W	MD Reference:	WELL @ 4803.0ft (Original Well Elev)
Well:	Coors Energy 43-25D	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Landmark

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
6,685.0	0.90	340.10	6,447.9	1,258.1	701.6	1,440.5	0.22	-0.21	4.42
6,737.3	0.79	340.98	6,500.2	1,258.8	701.4	1,441.0	0.21	-0.21	1.68
LEGAL BOX 400' X 400' 1982'FSL, 659'FEL									
6,780.0	0.70	341.90	6,542.9	1,259.3	701.2	1,441.4	0.21	-0.21	2.16
6,875.0	0.70	350.40	6,637.9	1,260.5	700.9	1,442.2	0.11	0.00	8.95
6,970.0	0.40	5.00	6,732.9	1,261.4	700.8	1,443.0	0.35	-0.32	15.37
7,064.0	0.40	346.00	6,826.9	1,262.0	700.8	1,443.5	0.14	0.00	-20.21
7,159.0	0.20	353.60	6,921.9	1,262.5	700.7	1,443.9	0.21	-0.21	8.00
7,254.0	0.20	22.20	7,016.9	1,262.8	700.7	1,444.2	0.10	0.00	30.11
7,349.0	0.20	83.50	7,111.9	1,263.0	701.0	1,444.4	0.21	0.00	64.53
7,444.0	0.10	103.20	7,206.9	1,263.0	701.2	1,444.5	0.12	-0.11	20.74
7,540.0	0.30	137.70	7,302.9	1,262.8	701.5	1,444.5	0.23	0.21	35.94
7,635.0	0.40	129.50	7,397.9	1,262.4	701.9	1,444.4	0.12	0.11	-8.63
7,730.0	0.50	79.80	7,492.9	1,262.3	702.5	1,444.6	0.41	0.11	-52.32
7,824.0	0.40	52.40	7,586.9	1,262.5	703.2	1,445.1	0.25	-0.11	-29.15
7,928.0	0.40	49.00	7,690.9	1,263.0	703.8	1,445.8	0.02	0.00	-3.27

Checked By: _____	Approved By: _____	Date: _____
-------------------	--------------------	-------------