



Company: Extraction Oil & Gas
Field: Weld Co., Co
Location: Sec.14-T07N-R65W
Well: Burroughs North #01
Borehole: Original Hole
Rig: Xtreme 7
Plan: Rev 0

PATHFINDER
A Schlumberger Company

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Annotation
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	Begin Nudge
3	1081.30	9.63	34.67	1079.04	33.17	22.94	2.00	34.67	-19.44	Hold Tangent
4	6140.84	9.63	34.67	6067.34	729.02	504.18	0.00	0.00	-427.20	Begin Drop
5	6622.14	0.00	0.00	6546.38	762.19	527.12	2.00	180.00	-446.64	Vertical Point
6	6722.14	0.00	0.00	6646.38	762.19	527.12	0.00	0.00	-446.64	KOP, Build 9 7/100' DLS
7	7722.14	90.00	270.00	7283.00	762.19	-109.50	9.00	270.00	186.66	LP, Begin Turn
8	7866.32	90.00	271.44	7283.00	764.00	-253.66	1.00	90.00	330.26	EOT, Hold to TD
9	17408.99	90.00	271.44	7283.00	1004.11	-9793.31	0.00	0.00	9844.65	PBHL/TD

WELL DETAILS: Burroughs North #01

+N/-S	+E/-W	GL 4947.00	KB @ 4963.00usft (Xtreme 7 - 16')	Longitude
0.00	0.00	Northing 1454767.97	Easting 3244017.30	40° 34' 42.308 N 104° 37' 17.479 W

WELLBORE TARGET DETAILS

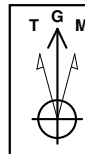
Name	TVD	+N/-S	+E/-W	Shape
KOP BN 01	6546.38	762.19	527.12	Point
LP BN 01	7283.00	762.19	-109.50	Point
PBHL Burroughs North 1	7283.00	1004.11	-9793.31	Point

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
3640.00	3678.83	Parkman
4455.00	4505.47	Sussex
5860.00	5930.54	Shannon
6974.00	7066.28	Niobrara
7261.00	7554.29	Fort Hays
7283.00	7722.14	Codell

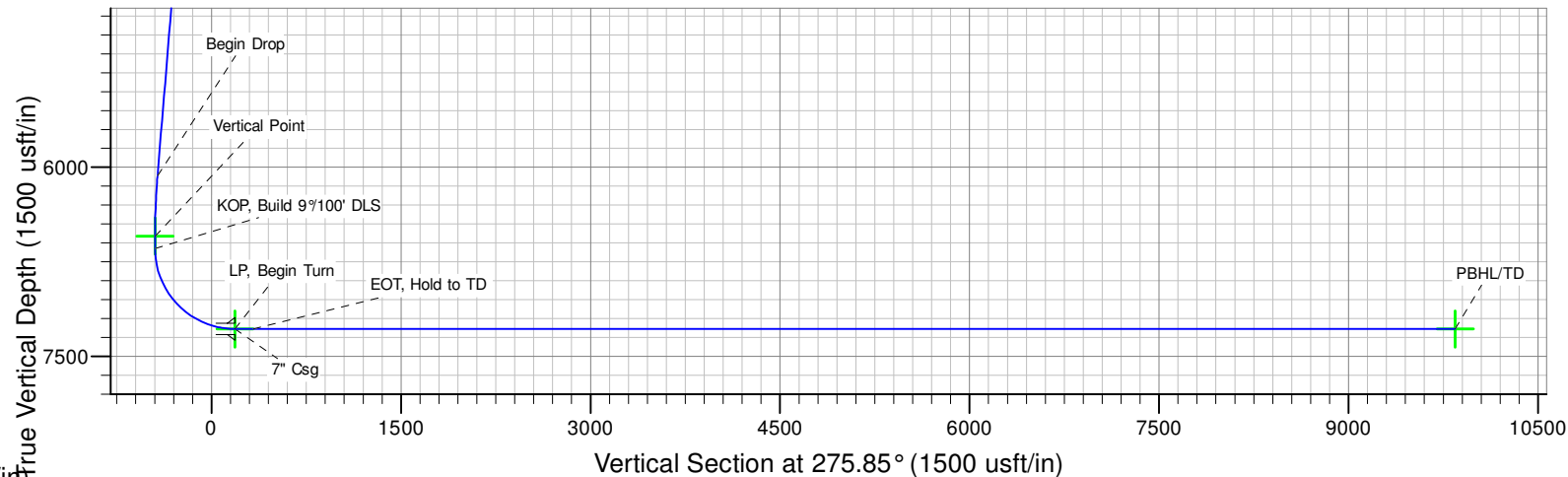
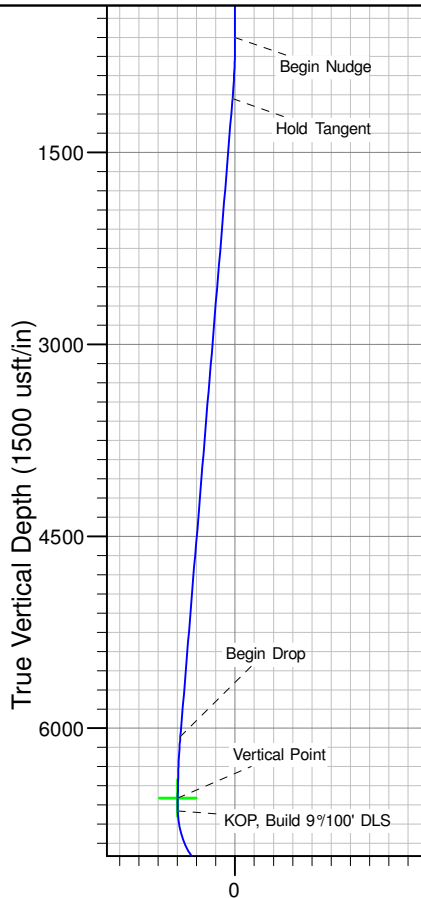
CASING DETAILS

TVD	MD	Name	Size
7283.00	7722.14	7" Csg	7



Azimuths to Grid North
True North: -0.57°
Magnetic North: 7.82°

Magnetic Field
Strength: 52913.5nT
Dip Angle: 67.11°
Date: 7/15/2014
Model: IGRF2010

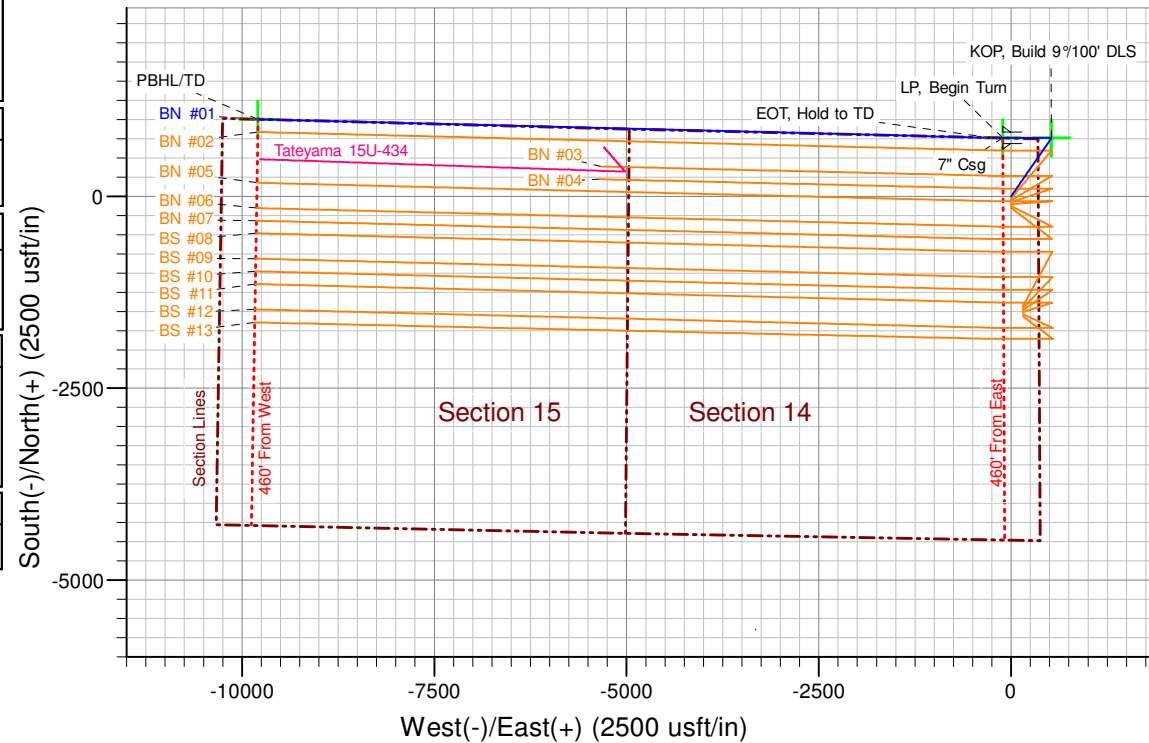


SHL: 760' FNL & 355' FEL
(Sec.14-T07N-R65W)
PBHL: 0' FNL & 460' FWL
(Sec.15-T07N-R65W)

Notice:
Section Lines and Hardlines
are estimates only and are
subject to customer approval

Burroughs North #01 Rev 0

Created By: J Rieke Date: 13:29, July 16 2014





Extraction Oil & Gas

**Weld Co., Co
Sec.14-T07N-R65W
Burroughs North #01**

Original Hole

Plan: Rev 0

Standard Planning Report

16 July, 2014



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Burroughs North #01
Company:	Extraction Oil & Gas	TVD Reference:	KB @ 4963.00usft (Xtreme 7 - 16")
Project:	Weld Co., Co	MD Reference:	KB @ 4963.00usft (Xtreme 7 - 16")
Site:	Sec.14-T07N-R65W	North Reference:	Grid
Well:	Burroughs North #01	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	Rev 0		

Project	Weld Co., Co		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		

Site	Sec.14-T07N-R65W			
Site Position:		Northing:	1,454,767.97 usft	Latitude: 40° 34' 42.308 N
From:	Lat/Long	Easting:	3,244,017.31 usft	Longitude: 104° 37' 17.479 W
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence: 0.57 °

Well	Burroughs North #01			
Well Position	+N/-S	0.00 usft	Northing:	1,454,767.97 usft
	+E/-W	0.00 usft	Easting:	3,244,017.31 usft
Position Uncertainty	0.00 usft		Wellhead Elevation:	4,963.00 usft
			Ground Level:	4,947.00 usft

Wellbore	Original Hole				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	7/15/2014	8.39	67.11	52,913

Design	Rev 0			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	275.85

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,081.30	9.63	34.67	1,079.04	33.17	22.94	2.00	2.00	0.00	34.67	
6,140.84	9.63	34.67	6,067.34	729.02	504.18	0.00	0.00	0.00	0.00	
6,622.14	0.00	0.00	6,546.38	762.19	527.12	2.00	-2.00	0.00	180.00	KOP BN 01
6,722.14	0.00	0.00	6,646.38	762.19	527.12	0.00	0.00	0.00	0.00	
7,722.14	90.00	270.00	7,283.00	762.19	-109.50	9.00	9.00	0.00	270.00	
7,866.32	90.00	271.44	7,283.00	764.00	-253.66	1.00	0.00	1.00	90.00	
17,408.99	90.00	271.44	7,283.00	1,004.11	-9,793.31	0.00	0.00	0.00	0.00	PBHL Burroughs Nort



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Burroughs North #01
Company:	Extraction Oil & Gas	TVD Reference:	KB @ 4963.00usft (Xtreme 7 - 16')
Project:	Weld Co., Co	MD Reference:	KB @ 4963.00usft (Xtreme 7 - 16')
Site:	Sec.14-T07N-R65W	North Reference:	Grid
Well:	Burroughs North #01	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	Rev 0		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
Begin Nudge									
700.00	2.00	34.67	699.98	1.44	0.99	-0.84	2.00	2.00	0.00
800.00	4.00	34.67	799.84	5.74	3.97	-3.36	2.00	2.00	0.00
900.00	6.00	34.67	899.45	12.91	8.93	-7.56	2.00	2.00	0.00
1,000.00	8.00	34.67	998.70	22.93	15.86	-13.44	2.00	2.00	0.00
1,081.30	9.63	34.67	1,079.04	33.17	22.94	-19.44	2.00	2.00	0.00
Hold Tangent									
1,100.00	9.63	34.67	1,097.48	35.75	24.72	-20.95	0.00	0.00	0.00
1,200.00	9.63	34.67	1,196.07	49.50	34.23	-29.01	0.00	0.00	0.00
1,300.00	9.63	34.67	1,294.66	63.25	43.74	-37.07	0.00	0.00	0.00
1,400.00	9.63	34.67	1,393.25	77.01	53.26	-45.12	0.00	0.00	0.00
1,500.00	9.63	34.67	1,491.84	90.76	62.77	-53.18	0.00	0.00	0.00
1,600.00	9.63	34.67	1,590.44	104.51	72.28	-61.24	0.00	0.00	0.00
1,700.00	9.63	34.67	1,689.03	118.26	81.79	-69.30	0.00	0.00	0.00
1,800.00	9.63	34.67	1,787.62	132.02	91.30	-77.36	0.00	0.00	0.00
1,900.00	9.63	34.67	1,886.21	145.77	100.81	-85.42	0.00	0.00	0.00
2,000.00	9.63	34.67	1,984.80	159.52	110.32	-93.48	0.00	0.00	0.00
2,100.00	9.63	34.67	2,083.40	173.28	119.84	-101.54	0.00	0.00	0.00
2,200.00	9.63	34.67	2,181.99	187.03	129.35	-109.60	0.00	0.00	0.00
2,300.00	9.63	34.67	2,280.58	200.78	138.86	-117.66	0.00	0.00	0.00
2,400.00	9.63	34.67	2,379.17	214.54	148.37	-125.72	0.00	0.00	0.00
2,500.00	9.63	34.67	2,477.76	228.29	157.88	-133.78	0.00	0.00	0.00
2,600.00	9.63	34.67	2,576.36	242.04	167.39	-141.83	0.00	0.00	0.00
2,700.00	9.63	34.67	2,674.95	255.80	176.90	-149.89	0.00	0.00	0.00
2,800.00	9.63	34.67	2,773.54	269.55	186.42	-157.95	0.00	0.00	0.00
2,900.00	9.63	34.67	2,872.13	283.30	195.93	-166.01	0.00	0.00	0.00
3,000.00	9.63	34.67	2,970.72	297.05	205.44	-174.07	0.00	0.00	0.00
3,100.00	9.63	34.67	3,069.32	310.81	214.95	-182.13	0.00	0.00	0.00
3,200.00	9.63	34.67	3,167.91	324.56	224.46	-190.19	0.00	0.00	0.00
3,300.00	9.63	34.67	3,266.50	338.31	233.97	-198.25	0.00	0.00	0.00
3,400.00	9.63	34.67	3,365.09	352.07	243.48	-206.31	0.00	0.00	0.00
3,500.00	9.63	34.67	3,463.68	365.82	253.00	-214.37	0.00	0.00	0.00
3,600.00	9.63	34.67	3,562.28	379.57	262.51	-222.43	0.00	0.00	0.00
3,678.83	9.63	34.67	3,640.00	390.41	270.01	-228.78	0.00	0.00	0.00
Parkman									
3,700.00	9.63	34.67	3,660.87	393.33	272.02	-230.49	0.00	0.00	0.00
3,800.00	9.63	34.67	3,759.46	407.08	281.53	-238.55	0.00	0.00	0.00
3,900.00	9.63	34.67	3,858.05	420.83	291.04	-246.60	0.00	0.00	0.00
4,000.00	9.63	34.67	3,956.64	434.58	300.55	-254.66	0.00	0.00	0.00
4,100.00	9.63	34.67	4,055.24	448.34	310.06	-262.72	0.00	0.00	0.00
4,200.00	9.63	34.67	4,153.83	462.09	319.58	-270.78	0.00	0.00	0.00
4,300.00	9.63	34.67	4,252.42	475.84	329.09	-278.84	0.00	0.00	0.00
4,400.00	9.63	34.67	4,351.01	489.60	338.60	-286.90	0.00	0.00	0.00
4,500.00	9.63	34.67	4,449.60	503.35	348.11	-294.96	0.00	0.00	0.00
4,505.47	9.63	34.67	4,455.00	504.10	348.63	-295.40	0.00	0.00	0.00
Sussex									
4,600.00	9.63	34.67	4,548.20	517.10	357.62	-303.02	0.00	0.00	0.00



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Burroughs North #01
Company:	Extraction Oil & Gas	TVD Reference:	KB @ 4963.00usft (Xtreme 7 - 16')
Project:	Weld Co., Co	MD Reference:	KB @ 4963.00usft (Xtreme 7 - 16')
Site:	Sec.14-T07N-R65W	North Reference:	Grid
Well:	Burroughs North #01	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	Rev 0		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,700.00	9.63	34.67	4,646.79	530.86	367.13	-311.08	0.00	0.00	0.00
4,800.00	9.63	34.67	4,745.38	544.61	376.64	-319.14	0.00	0.00	0.00
4,900.00	9.63	34.67	4,843.97	558.36	386.16	-327.20	0.00	0.00	0.00
5,000.00	9.63	34.67	4,942.56	572.12	395.67	-335.26	0.00	0.00	0.00
5,100.00	9.63	34.67	5,041.16	585.87	405.18	-343.31	0.00	0.00	0.00
5,200.00	9.63	34.67	5,139.75	599.62	414.69	-351.37	0.00	0.00	0.00
5,300.00	9.63	34.67	5,238.34	613.37	424.20	-359.43	0.00	0.00	0.00
5,400.00	9.63	34.67	5,336.93	627.13	433.71	-367.49	0.00	0.00	0.00
5,500.00	9.63	34.67	5,435.52	640.88	443.22	-375.55	0.00	0.00	0.00
5,600.00	9.63	34.67	5,534.12	654.63	452.74	-383.61	0.00	0.00	0.00
5,700.00	9.63	34.67	5,632.71	668.39	462.25	-391.67	0.00	0.00	0.00
5,800.00	9.63	34.67	5,731.30	682.14	471.76	-399.73	0.00	0.00	0.00
5,900.00	9.63	34.67	5,829.89	695.89	481.27	-407.79	0.00	0.00	0.00
5,930.54	9.63	34.67	5,860.00	700.09	484.17	-410.25	0.00	0.00	0.00
Shannon									
6,000.00	9.63	34.67	5,928.48	709.65	490.78	-415.85	0.00	0.00	0.00
6,100.00	9.63	34.67	6,027.08	723.40	500.29	-423.91	0.00	0.00	0.00
6,140.84	9.63	34.67	6,067.34	729.02	504.18	-427.20	0.00	0.00	0.00
Begin Drop									
6,200.00	8.44	34.67	6,125.77	736.66	509.46	-431.67	2.00	-2.00	0.00
6,300.00	6.44	34.67	6,224.92	747.31	516.83	-437.92	2.00	-2.00	0.00
6,400.00	4.44	34.67	6,324.46	755.11	522.22	-442.49	2.00	-2.00	0.00
6,500.00	2.44	34.67	6,424.28	760.05	525.64	-445.38	2.00	-2.00	0.00
6,600.00	0.44	34.67	6,524.24	762.12	527.07	-446.60	2.00	-2.00	0.00
6,622.14	0.00	0.00	6,546.38	762.19	527.12	-446.64	2.00	-2.00	0.00
Vertical Point									
6,700.00	0.00	0.00	6,624.24	762.19	527.12	-446.64	0.00	0.00	0.00
6,722.14	0.00	0.00	6,646.38	762.19	527.12	-446.64	0.00	0.00	0.00
KOP, Build 9°/100' DLS									
6,800.00	7.01	270.00	6,724.05	762.19	522.36	-441.91	9.00	9.00	0.00
6,900.00	16.01	270.00	6,821.94	762.19	502.44	-422.08	9.00	9.00	0.00
7,000.00	25.01	270.00	6,915.50	762.19	467.44	-387.27	9.00	9.00	0.00
7,066.28	30.97	270.00	6,974.00	762.19	436.35	-356.34	9.00	9.00	0.00
Niobrara									
7,100.00	34.01	270.00	7,002.44	762.19	418.24	-338.32	9.00	9.00	0.00
7,200.00	43.01	270.00	7,080.61	762.19	356.04	-276.45	9.00	9.00	0.00
7,300.00	52.01	270.00	7,148.09	762.19	282.38	-203.17	9.00	9.00	0.00
7,400.00	61.01	270.00	7,203.22	762.19	199.07	-120.30	9.00	9.00	0.00
7,500.00	70.01	270.00	7,244.64	762.19	108.16	-29.86	9.00	9.00	0.00
7,554.29	74.89	270.00	7,261.00	762.19	56.41	21.62	9.00	9.00	0.00
Fort Hays									
7,600.00	79.01	270.00	7,271.32	762.19	11.89	65.90	9.00	9.00	0.00
7,700.00	88.01	270.00	7,282.62	762.19	-87.37	164.64	9.00	9.00	0.00
7,722.14	90.00	270.00	7,283.00	762.19	-109.50	186.66	9.00	9.00	0.00
LP, Begin Turn - Codell - 7" Csg									
7,800.00	90.00	270.78	7,283.00	762.72	-187.36	264.17	1.00	0.00	1.00
7,866.32	90.00	271.44	7,283.00	764.00	-253.66	330.26	1.00	0.00	1.00
EOT, Hold to TD									
7,900.00	90.00	271.44	7,283.00	764.85	-287.33	363.84	0.00	0.00	0.00
8,000.00	90.00	271.44	7,283.00	767.37	-387.30	463.55	0.00	0.00	0.00
8,100.00	90.00	271.44	7,283.00	769.88	-487.27	563.25	0.00	0.00	0.00
8,200.00	90.00	271.44	7,283.00	772.40	-587.24	662.95	0.00	0.00	0.00
8,300.00	90.00	271.44	7,283.00	774.92	-687.21	762.66	0.00	0.00	0.00



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Site:	Sec.14-T07N-R65W	North Reference:	Grid
Well:	Burroughs North #01	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	Rev 0		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
8,400.00	90.00	271.44	7,283.00	777.43	-787.18	862.36	0.00	0.00	0.00
8,500.00	90.00	271.44	7,283.00	779.95	-887.14	962.06	0.00	0.00	0.00
8,600.00	90.00	271.44	7,283.00	782.46	-987.11	1,061.77	0.00	0.00	0.00
8,700.00	90.00	271.44	7,283.00	784.98	-1,087.08	1,161.47	0.00	0.00	0.00
8,800.00	90.00	271.44	7,283.00	787.50	-1,187.05	1,261.17	0.00	0.00	0.00
8,900.00	90.00	271.44	7,283.00	790.01	-1,287.02	1,360.88	0.00	0.00	0.00
9,000.00	90.00	271.44	7,283.00	792.53	-1,386.99	1,460.58	0.00	0.00	0.00
9,100.00	90.00	271.44	7,283.00	795.04	-1,486.95	1,560.29	0.00	0.00	0.00
9,200.00	90.00	271.44	7,283.00	797.56	-1,586.92	1,659.99	0.00	0.00	0.00
9,300.00	90.00	271.44	7,283.00	800.08	-1,686.89	1,759.69	0.00	0.00	0.00
9,400.00	90.00	271.44	7,283.00	802.59	-1,786.86	1,859.40	0.00	0.00	0.00
9,500.00	90.00	271.44	7,283.00	805.11	-1,886.83	1,959.10	0.00	0.00	0.00
9,600.00	90.00	271.44	7,283.00	807.63	-1,986.80	2,058.80	0.00	0.00	0.00
9,700.00	90.00	271.44	7,283.00	810.14	-2,086.76	2,158.51	0.00	0.00	0.00
9,800.00	90.00	271.44	7,283.00	812.66	-2,186.73	2,258.21	0.00	0.00	0.00
9,900.00	90.00	271.44	7,283.00	815.17	-2,286.70	2,357.92	0.00	0.00	0.00
10,000.00	90.00	271.44	7,283.00	817.69	-2,386.67	2,457.62	0.00	0.00	0.00
10,100.00	90.00	271.44	7,283.00	820.21	-2,486.64	2,557.32	0.00	0.00	0.00
10,200.00	90.00	271.44	7,283.00	822.72	-2,586.61	2,657.03	0.00	0.00	0.00
10,300.00	90.00	271.44	7,283.00	825.24	-2,686.57	2,756.73	0.00	0.00	0.00
10,400.00	90.00	271.44	7,283.00	827.75	-2,786.54	2,856.43	0.00	0.00	0.00
10,500.00	90.00	271.44	7,283.00	830.27	-2,886.51	2,956.14	0.00	0.00	0.00
10,600.00	90.00	271.44	7,283.00	832.79	-2,986.48	3,055.84	0.00	0.00	0.00
10,700.00	90.00	271.44	7,283.00	835.30	-3,086.45	3,155.54	0.00	0.00	0.00
10,800.00	90.00	271.44	7,283.00	837.82	-3,186.42	3,255.25	0.00	0.00	0.00
10,900.00	90.00	271.44	7,283.00	840.33	-3,286.39	3,354.95	0.00	0.00	0.00
11,000.00	90.00	271.44	7,283.00	842.85	-3,386.35	3,454.66	0.00	0.00	0.00
11,100.00	90.00	271.44	7,283.00	845.37	-3,486.32	3,554.36	0.00	0.00	0.00
11,200.00	90.00	271.44	7,283.00	847.88	-3,586.29	3,654.06	0.00	0.00	0.00
11,300.00	90.00	271.44	7,283.00	850.40	-3,686.26	3,753.77	0.00	0.00	0.00
11,400.00	90.00	271.44	7,283.00	852.91	-3,786.23	3,853.47	0.00	0.00	0.00
11,500.00	90.00	271.44	7,283.00	855.43	-3,886.20	3,953.17	0.00	0.00	0.00
11,600.00	90.00	271.44	7,283.00	857.95	-3,986.16	4,052.88	0.00	0.00	0.00
11,700.00	90.00	271.44	7,283.00	860.46	-4,086.13	4,152.58	0.00	0.00	0.00
11,800.00	90.00	271.44	7,283.00	862.98	-4,186.10	4,252.29	0.00	0.00	0.00
11,900.00	90.00	271.44	7,283.00	865.50	-4,286.07	4,351.99	0.00	0.00	0.00
12,000.00	90.00	271.44	7,283.00	868.01	-4,386.04	4,451.69	0.00	0.00	0.00
12,100.00	90.00	271.44	7,283.00	870.53	-4,486.01	4,551.40	0.00	0.00	0.00
12,200.00	90.00	271.44	7,283.00	873.04	-4,585.97	4,651.10	0.00	0.00	0.00
12,300.00	90.00	271.44	7,283.00	875.56	-4,685.94	4,750.80	0.00	0.00	0.00
12,400.00	90.00	271.44	7,283.00	878.08	-4,785.91	4,850.51	0.00	0.00	0.00
12,500.00	90.00	271.44	7,283.00	880.59	-4,885.88	4,950.21	0.00	0.00	0.00
12,600.00	90.00	271.44	7,283.00	883.11	-4,985.85	5,049.92	0.00	0.00	0.00
12,700.00	90.00	271.44	7,283.00	885.62	-5,085.82	5,149.62	0.00	0.00	0.00
12,800.00	90.00	271.44	7,283.00	888.14	-5,185.78	5,249.32	0.00	0.00	0.00
12,900.00	90.00	271.44	7,283.00	890.66	-5,285.75	5,349.03	0.00	0.00	0.00
13,000.00	90.00	271.44	7,283.00	893.17	-5,385.72	5,448.73	0.00	0.00	0.00
13,100.00	90.00	271.44	7,283.00	895.69	-5,485.69	5,548.43	0.00	0.00	0.00
13,200.00	90.00	271.44	7,283.00	898.20	-5,585.66	5,648.14	0.00	0.00	0.00
13,300.00	90.00	271.44	7,283.00	900.72	-5,685.63	5,747.84	0.00	0.00	0.00
13,400.00	90.00	271.44	7,283.00	903.24	-5,785.59	5,847.54	0.00	0.00	0.00
13,500.00	90.00	271.44	7,283.00	905.75	-5,885.56	5,947.25	0.00	0.00	0.00
13,600.00	90.00	271.44	7,283.00	908.27	-5,985.53	6,046.95	0.00	0.00	0.00
13,700.00	90.00	271.44	7,283.00	910.78	-6,085.50	6,146.66	0.00	0.00	0.00



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Burroughs North #01
Company:	Extraction Oil & Gas	TVD Reference:	KB @ 4963.00usft (Xtreme 7 - 16')
Project:	Weld Co., Co	MD Reference:	KB @ 4963.00usft (Xtreme 7 - 16')
Site:	Sec.14-T07N-R65W	North Reference:	Grid
Well:	Burroughs North #01	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	Rev 0		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
13,800.00	90.00	271.44	7,283.00	913.30	-6,185.47	6,246.36	0.00	0.00	0.00	
13,900.00	90.00	271.44	7,283.00	915.82	-6,285.44	6,346.06	0.00	0.00	0.00	
14,000.00	90.00	271.44	7,283.00	918.33	-6,385.40	6,445.77	0.00	0.00	0.00	
14,100.00	90.00	271.44	7,283.00	920.85	-6,485.37	6,545.47	0.00	0.00	0.00	
14,200.00	90.00	271.44	7,283.00	923.37	-6,585.34	6,645.17	0.00	0.00	0.00	
14,300.00	90.00	271.44	7,283.00	925.88	-6,685.31	6,744.88	0.00	0.00	0.00	
14,400.00	90.00	271.44	7,283.00	928.40	-6,785.28	6,844.58	0.00	0.00	0.00	
14,500.00	90.00	271.44	7,283.00	930.91	-6,885.25	6,944.29	0.00	0.00	0.00	
14,600.00	90.00	271.44	7,283.00	933.43	-6,985.21	7,043.99	0.00	0.00	0.00	
14,700.00	90.00	271.44	7,283.00	935.95	-7,085.18	7,143.69	0.00	0.00	0.00	
14,800.00	90.00	271.44	7,283.00	938.46	-7,185.15	7,243.40	0.00	0.00	0.00	
14,900.00	90.00	271.44	7,283.00	940.98	-7,285.12	7,343.10	0.00	0.00	0.00	
15,000.00	90.00	271.44	7,283.00	943.49	-7,385.09	7,442.80	0.00	0.00	0.00	
15,100.00	90.00	271.44	7,283.00	946.01	-7,485.06	7,542.51	0.00	0.00	0.00	
15,200.00	90.00	271.44	7,283.00	948.53	-7,585.02	7,642.21	0.00	0.00	0.00	
15,300.00	90.00	271.44	7,283.00	951.04	-7,684.99	7,741.91	0.00	0.00	0.00	
15,400.00	90.00	271.44	7,283.00	953.56	-7,784.96	7,841.62	0.00	0.00	0.00	
15,500.00	90.00	271.44	7,283.00	956.07	-7,884.93	7,941.32	0.00	0.00	0.00	
15,600.00	90.00	271.44	7,283.00	958.59	-7,984.90	8,041.03	0.00	0.00	0.00	
15,700.00	90.00	271.44	7,283.00	961.11	-8,084.87	8,140.73	0.00	0.00	0.00	
15,800.00	90.00	271.44	7,283.00	963.62	-8,184.83	8,240.43	0.00	0.00	0.00	
15,900.00	90.00	271.44	7,283.00	966.14	-8,284.80	8,340.14	0.00	0.00	0.00	
16,000.00	90.00	271.44	7,283.00	968.66	-8,384.77	8,439.84	0.00	0.00	0.00	
16,100.00	90.00	271.44	7,283.00	971.17	-8,484.74	8,539.54	0.00	0.00	0.00	
16,200.00	90.00	271.44	7,283.00	973.69	-8,584.71	8,639.25	0.00	0.00	0.00	
16,300.00	90.00	271.44	7,283.00	976.20	-8,684.68	8,738.95	0.00	0.00	0.00	
16,400.00	90.00	271.44	7,283.00	978.72	-8,784.64	8,838.66	0.00	0.00	0.00	
16,500.00	90.00	271.44	7,283.00	981.24	-8,884.61	8,938.36	0.00	0.00	0.00	
16,600.00	90.00	271.44	7,283.00	983.75	-8,984.58	9,038.06	0.00	0.00	0.00	
16,700.00	90.00	271.44	7,283.00	986.27	-9,084.55	9,137.77	0.00	0.00	0.00	
16,800.00	90.00	271.44	7,283.00	988.78	-9,184.52	9,237.47	0.00	0.00	0.00	
16,900.00	90.00	271.44	7,283.00	991.30	-9,284.49	9,337.17	0.00	0.00	0.00	
17,000.00	90.00	271.44	7,283.00	993.82	-9,384.45	9,436.88	0.00	0.00	0.00	
17,100.00	90.00	271.44	7,283.00	996.33	-9,484.42	9,536.58	0.00	0.00	0.00	
17,200.00	90.00	271.44	7,283.00	998.85	-9,584.39	9,636.28	0.00	0.00	0.00	
17,300.00	90.00	271.44	7,283.00	1,001.36	-9,684.36	9,735.99	0.00	0.00	0.00	
17,400.00	90.00	271.44	7,283.00	1,003.88	-9,784.33	9,835.69	0.00	0.00	0.00	
17,408.99	90.00	271.44	7,283.00	1,004.11	-9,793.31	9,844.65	0.00	0.00	0.00	
PBHL/TD										



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Burroughs North #01
Company:	Extraction Oil & Gas	TVD Reference:	KB @ 4963.00usft (Xtreme 7 - 16')
Project:	Weld Co., Co	MD Reference:	KB @ 4963.00usft (Xtreme 7 - 16')
Site:	Sec.14-T07N-R65W	North Reference:	Grid
Well:	Burroughs North #01	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	Rev 0		

Design Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
KOP BN 01	0.00	0.00	6,546.38	762.19	527.12	1,455,530.16	3,244,544.43	40° 34' 49.788 N	104° 37' 10.550 W
- plan hits target center									
- Point									
PBHL Burroughs North 1	0.00	0.00	7,283.00	1,004.11	-9,793.31	1,455,772.08	3,234,224.00	40° 34' 53.170 N	104° 39' 24.271 W
- plan hits target center									
- Point									
LP BN 01	0.00	0.00	7,283.00	762.19	-109.50	1,455,530.16	3,243,907.81	40° 34' 49.850 N	104° 37' 18.800 W
- plan hits target center									
- Point									

Casing Points				
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
7,722.14	7,283.00	7" Csg	7	7-1/2

Formations					
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,678.83	3,640.00	Parkman		0.00	
4,505.47	4,455.00	Sussex		0.00	
5,930.54	5,860.00	Shannon		0.00	
7,066.28	6,974.00	Niobrara		0.00	
7,554.29	7,261.00	Fort Hays		0.00	
7,722.14	7,283.00	Codell		0.00	

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
600.00	600.00	0.00	0.00	Begin Nudge
1,081.30	1,079.04	33.17	22.94	Hold Tangent
6,140.84	6,067.34	729.02	504.18	Begin Drop
6,622.14	6,546.38	762.19	527.12	Vertical Point
6,722.14	6,646.38	762.19	527.12	KOP, Build 9"/100' DLS
7,722.14	7,283.00	762.19	-109.50	LP, Begin Turn
7,866.32	7,283.00	764.00	-253.66	EOT, Hold to TD
17,408.99	7,283.00	1,004.11	-9,793.31	PBHL/TD