



Company: Extraction Oil & Gas  
Field: Weld Co., Co  
Location: Sec.14-T07N-R65W  
Well: Burroughs North #02  
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	700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	Begin Nudge
3	1156.19	9.12	40.30	1154.27	27.65	23.44	2.00	40.30	-20.92	Hold Tangent
4	5844.35	9.12	40.30	5783.11	594.64	504.23	0.00	0.00	-450.02	Begin Drop
5	6300.55	0.00	0.00	6237.38	622.29	527.67	2.00	180.00	-470.94	Vertical Point
6	6400.55	0.00	0.00	6337.38	622.29	527.67	0.00	0.00	-470.94	KOP, Build 9°/100' DLS
7	7400.55	90.00	270.00	6974.00	622.29	-108.95	9.00	270.00	163.21	LP, Begin Turn
8	7544.66	90.00	271.44	6974.00	624.10	-253.05	1.00	90.00	306.92	EOT, Hold to TD
9	17090.51	90.00	271.44	6974.00	864.18	-9795.88	0.00	0.00	9833.92	PBHL/TD

#### WELL DETAILS: Burroughs North #02

+N/-S	+E/-W	GL 4947.00	KB @ 4963.00usft (Xtreme 7 - 16')	Longitude
0.00	0.00	Northing 1454742.83	Easting 3244017.55	40° 34' 42.060 N 104° 37' 17.479 W

#### WELLBORE TARGET DETAILS

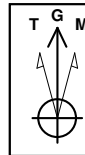
Name	TVD	+N/-S	+E/-W	Shape
KOP BN 2	6237.38	622.29	527.67	Point
LP BN 2	6974.00	622.29	-108.95	Point
PBHL Burroughs North 2	6974.00	864.18	-9795.88	Point

#### FORMATION TOP DETAILS

TVDPath	MDPath	Formation
3640.00	3673.78	Parkman
4455.00	4499.22	Sussex
5860.00	5922.07	Shannon
6974.00	7400.55	Niobrara

#### CASING DETAILS

TVD	MD	Name	Size
6974.00	7400.55	7" Csg	7



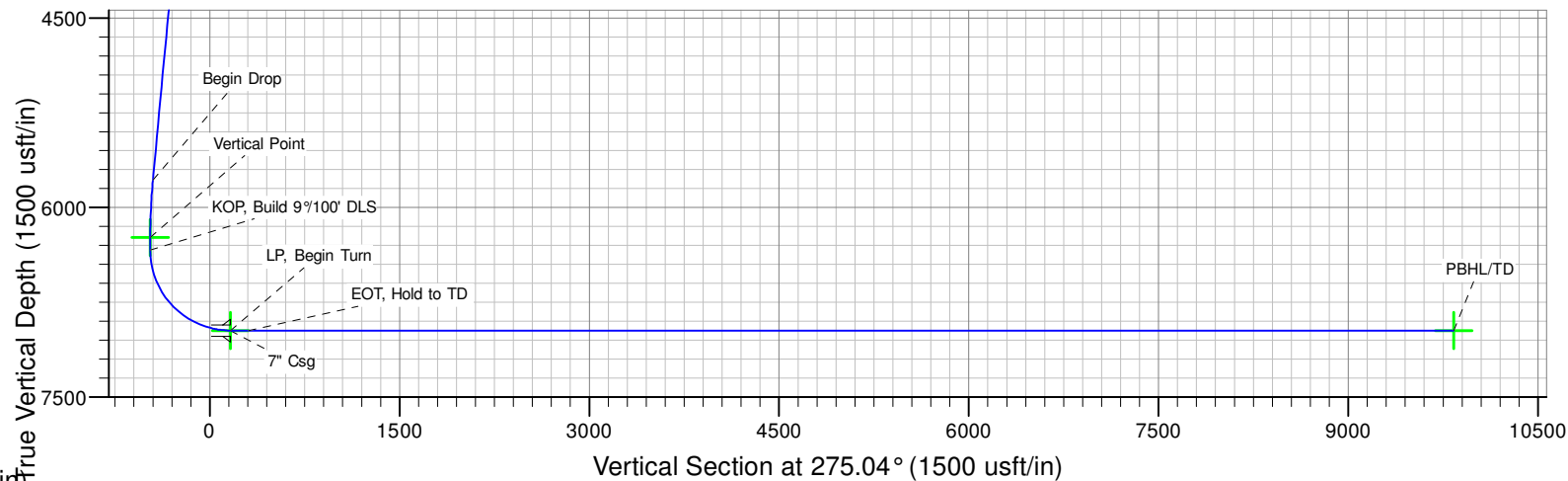
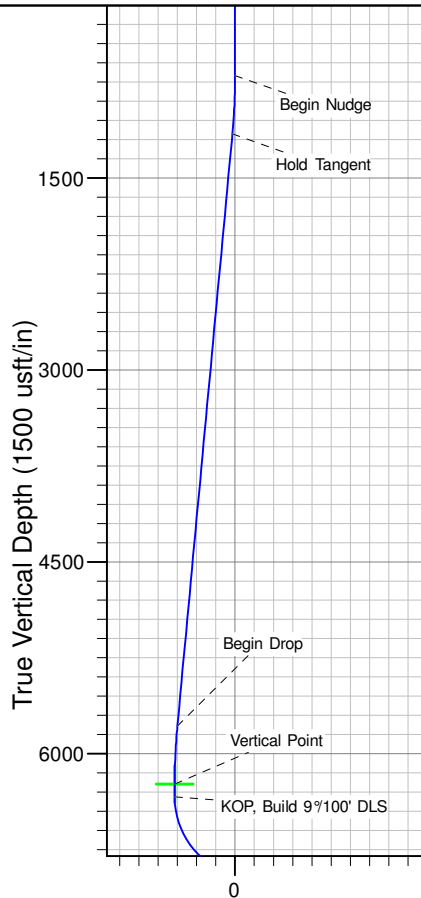
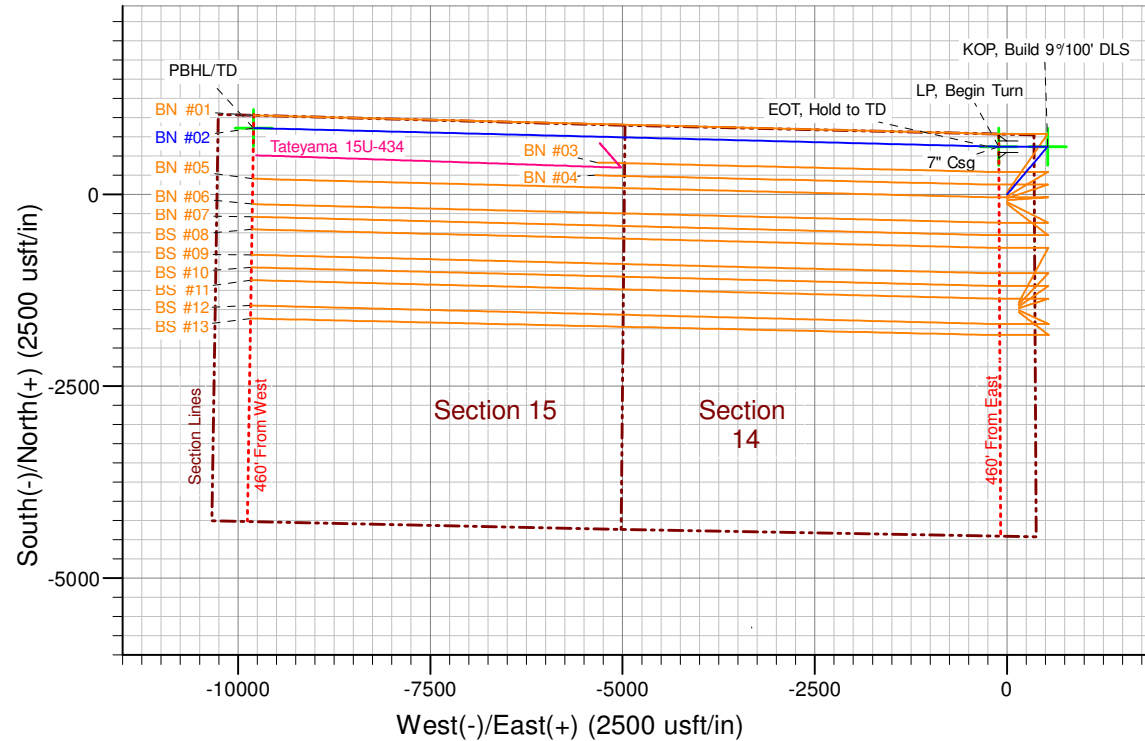
Azimuths to Grid North  
True North: -0.57°  
Magnetic North: 7.82°  
  
Magnetic Field  
Strength: 52913.4nT  
Dip Angle: 67.11°  
Date: 7/15/2014  
Model: IGRF2010

SHL: 785' FNL & 355' FEL  
(Sec.14-T07N-R65W)  
PBHL: 165' FNL & 460' FWL  
(Sec.15-T07N-R65W)

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

Burroughs North #02 Rev 0

Created By: J Rieke Date: 14:45, July 16 2014





# **Extraction Oil & Gas**

**Weld Co., Co  
Sec.14-T07N-R65W  
Burroughs North #02**

**Original Hole**

**Plan: Rev 0**

## **Standard Planning Report**

**16 July, 2014**



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well Burroughs North #02
<b>Company:</b>	Extraction Oil & Gas	<b>TVD Reference:</b>	KB @ 4963.00usft (Xtreme 7 - 16')
<b>Project:</b>	Weld Co., Co	<b>MD Reference:</b>	KB @ 4963.00usft (Xtreme 7 - 16')
<b>Site:</b>	Sec.14-T07N-R65W	<b>North Reference:</b>	Grid
<b>Well:</b>	Burroughs North #02	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Original Hole		
<b>Design:</b>	Rev 0		

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

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

<b>Well</b>	Burroughs North #02			
<b>Well Position</b>	<b>+N/-S</b>	-25.14 usft	<b>Northing:</b>	1,454,742.83 usft
	<b>+E/-W</b>	0.25 usft	<b>Easting:</b>	3,244,017.55 usft
<b>Position Uncertainty</b>	0.00 usft		<b>Wellhead Elevation:</b>	4,963.00 usft
			<b>Ground Level:</b>	4,947.00 usft

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

<b>Design</b>	Rev 0			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PROTOTYPE	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (°)</b>
	0.00	0.00	0.00	275.04

<b>Plan Sections</b>										
<b>Measured Depth (usft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Dogleg Rate (°/100usft)</b>	<b>Build Rate (°/100usft)</b>	<b>Turn Rate (°/100usft)</b>	<b>TFO (°)</b>	<b>Target</b>
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,156.19	9.12	40.30	1,154.27	27.65	23.44	2.00	2.00	0.00	40.30	
5,844.35	9.12	40.30	5,783.11	594.64	504.23	0.00	0.00	0.00	0.00	
6,300.55	0.00	0.00	6,237.38	622.29	527.67	2.00	-2.00	0.00	180.00	KOP BN 2
6,400.55	0.00	0.00	6,337.38	622.29	527.67	0.00	0.00	0.00	0.00	
7,400.55	90.00	270.00	6,974.00	622.29	-108.95	9.00	9.00	0.00	270.00	
7,544.66	90.00	271.44	6,974.00	624.10	-253.05	1.00	0.00	1.00	90.00	
17,090.51	90.00	271.44	6,974.00	864.18	-9,795.88	0.00	0.00	0.00	0.00	PBHL Burroughs Nort



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<b>Project:</b>	Weld Co., Co	<b>MD Reference:</b>	KB @ 4963.00usft (Xtreme 7 - 16')
<b>Site:</b>	Sec.14-T07N-R65W	<b>North Reference:</b>	Grid
<b>Well:</b>	Burroughs North #02	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Original Hole		
<b>Design:</b>	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
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
Begin Nudge									
800.00	2.00	40.30	799.98	1.33	1.13	-1.01	2.00	2.00	0.00
900.00	4.00	40.30	899.84	5.32	4.51	-4.03	2.00	2.00	0.00
1,000.00	6.00	40.30	999.45	11.97	10.15	-9.06	2.00	2.00	0.00
1,100.00	8.00	40.30	1,098.70	21.26	18.03	-16.09	2.00	2.00	0.00
1,156.19	9.12	40.30	1,154.27	27.65	23.44	-20.92	2.00	2.00	0.00
Hold Tangent									
1,200.00	9.12	40.30	1,197.52	32.94	27.93	-24.93	0.00	0.00	0.00
1,300.00	9.12	40.30	1,296.25	45.04	38.19	-34.08	0.00	0.00	0.00
1,400.00	9.12	40.30	1,394.99	57.13	48.44	-43.24	0.00	0.00	0.00
1,500.00	9.12	40.30	1,493.72	69.23	58.70	-52.39	0.00	0.00	0.00
1,600.00	9.12	40.30	1,592.46	81.32	68.96	-61.54	0.00	0.00	0.00
1,700.00	9.12	40.30	1,691.19	93.41	79.21	-70.70	0.00	0.00	0.00
1,800.00	9.12	40.30	1,789.93	105.51	89.47	-79.85	0.00	0.00	0.00
1,900.00	9.12	40.30	1,888.66	117.60	99.72	-89.00	0.00	0.00	0.00
2,000.00	9.12	40.30	1,987.40	129.70	109.98	-98.15	0.00	0.00	0.00
2,100.00	9.12	40.30	2,086.13	141.79	120.23	-107.31	0.00	0.00	0.00
2,200.00	9.12	40.30	2,184.87	153.89	130.49	-116.46	0.00	0.00	0.00
2,300.00	9.12	40.30	2,283.60	165.98	140.74	-125.61	0.00	0.00	0.00
2,400.00	9.12	40.30	2,382.34	178.07	151.00	-134.77	0.00	0.00	0.00
2,500.00	9.12	40.30	2,481.07	190.17	161.25	-143.92	0.00	0.00	0.00
2,600.00	9.12	40.30	2,579.81	202.26	171.51	-153.07	0.00	0.00	0.00
2,700.00	9.12	40.30	2,678.54	214.36	181.76	-162.22	0.00	0.00	0.00
2,800.00	9.12	40.30	2,777.28	226.45	192.02	-171.38	0.00	0.00	0.00
2,900.00	9.12	40.30	2,876.01	238.55	202.27	-180.53	0.00	0.00	0.00
3,000.00	9.12	40.30	2,974.75	250.64	212.53	-189.68	0.00	0.00	0.00
3,100.00	9.12	40.30	3,073.48	262.73	222.79	-198.84	0.00	0.00	0.00
3,200.00	9.12	40.30	3,172.22	274.83	233.04	-207.99	0.00	0.00	0.00
3,300.00	9.12	40.30	3,270.95	286.92	243.30	-217.14	0.00	0.00	0.00
3,400.00	9.12	40.30	3,369.69	299.02	253.55	-226.29	0.00	0.00	0.00
3,500.00	9.12	40.30	3,468.42	311.11	263.81	-235.45	0.00	0.00	0.00
3,600.00	9.12	40.30	3,567.15	323.21	274.06	-244.60	0.00	0.00	0.00
3,673.78	9.12	40.30	3,640.00	332.13	281.63	-251.35	0.00	0.00	0.00
Parkman									
3,700.00	9.12	40.30	3,665.89	335.30	284.32	-253.75	0.00	0.00	0.00
3,800.00	9.12	40.30	3,764.62	347.39	294.57	-262.91	0.00	0.00	0.00
3,900.00	9.12	40.30	3,863.36	359.49	304.83	-272.06	0.00	0.00	0.00
4,000.00	9.12	40.30	3,962.09	371.58	315.08	-281.21	0.00	0.00	0.00
4,100.00	9.12	40.30	4,060.83	383.68	325.34	-290.36	0.00	0.00	0.00
4,200.00	9.12	40.30	4,159.56	395.77	335.59	-299.52	0.00	0.00	0.00
4,300.00	9.12	40.30	4,258.30	407.87	345.85	-308.67	0.00	0.00	0.00
4,400.00	9.12	40.30	4,357.03	419.96	356.11	-317.82	0.00	0.00	0.00
4,499.22	9.12	40.30	4,455.00	431.96	366.28	-326.90	0.00	0.00	0.00
Sussex									
4,500.00	9.12	40.30	4,455.77	432.05	366.36	-326.98	0.00	0.00	0.00
4,600.00	9.12	40.30	4,554.50	444.15	376.62	-336.13	0.00	0.00	0.00



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<b>Project:</b>	Weld Co., Co	<b>MD Reference:</b>	KB @ 4963.00usft (Xtreme 7 - 16')
<b>Site:</b>	Sec.14-T07N-R65W	<b>North Reference:</b>	Grid
<b>Well:</b>	Burroughs North #02	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Original Hole		
<b>Design:</b>	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	9.12	40.30	4,653.24	456.24	386.87	-345.28	0.00	0.00	0.00
4,800.00	9.12	40.30	4,751.97	468.34	397.13	-354.43	0.00	0.00	0.00
4,900.00	9.12	40.30	4,850.71	480.43	407.38	-363.59	0.00	0.00	0.00
5,000.00	9.12	40.30	4,949.44	492.53	417.64	-372.74	0.00	0.00	0.00
5,100.00	9.12	40.30	5,048.18	504.62	427.89	-381.89	0.00	0.00	0.00
5,200.00	9.12	40.30	5,146.91	516.71	438.15	-391.04	0.00	0.00	0.00
5,300.00	9.12	40.30	5,245.65	528.81	448.40	-400.20	0.00	0.00	0.00
5,400.00	9.12	40.30	5,344.38	540.90	458.66	-409.35	0.00	0.00	0.00
5,500.00	9.12	40.30	5,443.12	553.00	468.91	-418.50	0.00	0.00	0.00
5,600.00	9.12	40.30	5,541.85	565.09	479.17	-427.66	0.00	0.00	0.00
5,700.00	9.12	40.30	5,640.59	577.19	489.42	-436.81	0.00	0.00	0.00
5,800.00	9.12	40.30	5,739.32	589.28	499.68	-445.96	0.00	0.00	0.00
5,844.35	9.12	40.30	5,783.11	594.64	504.23	-450.02	0.00	0.00	0.00
Begin Drop									
5,900.00	8.01	40.30	5,838.14	600.97	509.59	-454.81	2.00	-2.00	0.00
5,922.07	7.57	40.30	5,860.00	603.25	511.52	-456.53	2.00	-2.00	0.00
Shannon									
6,000.00	6.01	40.30	5,937.38	610.28	517.48	-461.85	2.00	-2.00	0.00
6,100.00	4.01	40.30	6,037.00	616.94	523.13	-466.89	2.00	-2.00	0.00
6,200.00	2.01	40.30	6,136.85	620.94	526.53	-469.92	2.00	-2.00	0.00
6,300.00	0.01	40.30	6,236.83	622.29	527.67	-470.94	2.00	-2.00	0.00
6,300.55	0.00	0.00	6,237.38	622.29	527.67	-470.94	2.00	-2.00	-7,368.31
Vertical Point									
6,400.00	0.00	0.00	6,336.83	622.29	527.67	-470.94	0.00	0.00	0.00
6,400.55	0.00	0.00	6,337.38	622.29	527.67	-470.94	0.00	0.00	0.00
KOP, Build 9°/100' DLS									
6,500.00	8.95	270.00	6,436.43	622.29	519.92	-463.22	9.00	9.00	0.00
6,600.00	17.95	270.00	6,533.59	622.29	496.68	-440.07	9.00	9.00	0.00
6,700.00	26.95	270.00	6,625.91	622.29	458.53	-402.07	9.00	9.00	0.00
6,800.00	35.95	270.00	6,711.13	622.29	406.41	-350.15	9.00	9.00	0.00
6,900.00	44.95	270.00	6,787.15	622.29	341.59	-285.59	9.00	9.00	0.00
7,000.00	53.95	270.00	6,852.09	622.29	265.69	-209.97	9.00	9.00	0.00
7,100.00	62.95	270.00	6,904.36	622.29	180.56	-125.17	9.00	9.00	0.00
7,200.00	71.95	270.00	6,942.67	622.29	88.30	-33.27	9.00	9.00	0.00
7,300.00	80.95	270.00	6,966.08	622.29	-8.82	63.47	9.00	9.00	0.00
7,400.00	89.95	270.00	6,974.00	622.29	-108.40	162.67	9.00	9.00	0.00
7,400.55	90.00	270.00	6,974.00	622.29	-108.95	163.22	8.95	8.95	0.00
LP, Begin Turn - Niobrara - 7" Csg									
7,500.00	90.00	270.99	6,974.00	623.15	-208.40	262.35	1.00	0.00	1.00
7,544.66	90.00	271.44	6,974.00	624.10	-253.05	306.92	1.00	0.00	1.00
EOT, Hold to TD									
7,600.00	90.00	271.44	6,974.00	625.49	-308.37	362.14	0.00	0.00	0.00
7,700.00	90.00	271.44	6,974.00	628.01	-408.34	461.95	0.00	0.00	0.00
7,800.00	90.00	271.44	6,974.00	630.52	-508.31	561.75	0.00	0.00	0.00
7,900.00	90.00	271.44	6,974.00	633.04	-608.28	661.55	0.00	0.00	0.00
8,000.00	90.00	271.44	6,974.00	635.55	-708.24	761.35	0.00	0.00	0.00
8,100.00	90.00	271.44	6,974.00	638.07	-808.21	861.16	0.00	0.00	0.00
8,200.00	90.00	271.44	6,974.00	640.58	-908.18	960.96	0.00	0.00	0.00
8,300.00	90.00	271.44	6,974.00	643.10	-1,008.15	1,060.76	0.00	0.00	0.00
8,400.00	90.00	271.44	6,974.00	645.61	-1,108.12	1,160.57	0.00	0.00	0.00
8,500.00	90.00	271.44	6,974.00	648.13	-1,208.09	1,260.37	0.00	0.00	0.00
8,600.00	90.00	271.44	6,974.00	650.64	-1,308.05	1,360.17	0.00	0.00	0.00
8,700.00	90.00	271.44	6,974.00	653.16	-1,408.02	1,459.97	0.00	0.00	0.00



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well Burroughs North #02
<b>Company:</b>	Extraction Oil & Gas	<b>TVD Reference:</b>	KB @ 4963.00usft (Xtreme 7 - 16')
<b>Project:</b>	Weld Co., Co	<b>MD Reference:</b>	KB @ 4963.00usft (Xtreme 7 - 16')
<b>Site:</b>	Sec.14-T07N-R65W	<b>North Reference:</b>	Grid
<b>Well:</b>	Burroughs North #02	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Original Hole		
<b>Design:</b>	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)	
8,800.00	90.00	271.44	6,974.00	655.67	-1,507.99	1,559.78	0.00	0.00	0.00	
8,900.00	90.00	271.44	6,974.00	658.19	-1,607.96	1,659.58	0.00	0.00	0.00	
9,000.00	90.00	271.44	6,974.00	660.70	-1,707.93	1,759.38	0.00	0.00	0.00	
9,100.00	90.00	271.44	6,974.00	663.22	-1,807.90	1,859.18	0.00	0.00	0.00	
9,200.00	90.00	271.44	6,974.00	665.73	-1,907.86	1,958.99	0.00	0.00	0.00	
9,300.00	90.00	271.44	6,974.00	668.25	-2,007.83	2,058.79	0.00	0.00	0.00	
9,400.00	90.00	271.44	6,974.00	670.76	-2,107.80	2,158.59	0.00	0.00	0.00	
9,500.00	90.00	271.44	6,974.00	673.28	-2,207.77	2,258.39	0.00	0.00	0.00	
9,600.00	90.00	271.44	6,974.00	675.79	-2,307.74	2,358.20	0.00	0.00	0.00	
9,700.00	90.00	271.44	6,974.00	678.31	-2,407.71	2,458.00	0.00	0.00	0.00	
9,800.00	90.00	271.44	6,974.00	680.82	-2,507.67	2,557.80	0.00	0.00	0.00	
9,900.00	90.00	271.44	6,974.00	683.34	-2,607.64	2,657.60	0.00	0.00	0.00	
10,000.00	90.00	271.44	6,974.00	685.85	-2,707.61	2,757.41	0.00	0.00	0.00	
10,100.00	90.00	271.44	6,974.00	688.37	-2,807.58	2,857.21	0.00	0.00	0.00	
10,200.00	90.00	271.44	6,974.00	690.88	-2,907.55	2,957.01	0.00	0.00	0.00	
10,300.00	90.00	271.44	6,974.00	693.40	-3,007.52	3,056.82	0.00	0.00	0.00	
10,400.00	90.00	271.44	6,974.00	695.92	-3,107.48	3,156.62	0.00	0.00	0.00	
10,500.00	90.00	271.44	6,974.00	698.43	-3,207.45	3,256.42	0.00	0.00	0.00	
10,600.00	90.00	271.44	6,974.00	700.95	-3,307.42	3,356.22	0.00	0.00	0.00	
10,700.00	90.00	271.44	6,974.00	703.46	-3,407.39	3,456.03	0.00	0.00	0.00	
10,800.00	90.00	271.44	6,974.00	705.98	-3,507.36	3,555.83	0.00	0.00	0.00	
10,900.00	90.00	271.44	6,974.00	708.49	-3,607.33	3,655.63	0.00	0.00	0.00	
11,000.00	90.00	271.44	6,974.00	711.01	-3,707.29	3,755.43	0.00	0.00	0.00	
11,100.00	90.00	271.44	6,974.00	713.52	-3,807.26	3,855.24	0.00	0.00	0.00	
11,200.00	90.00	271.44	6,974.00	716.04	-3,907.23	3,955.04	0.00	0.00	0.00	
11,300.00	90.00	271.44	6,974.00	718.55	-4,007.20	4,054.84	0.00	0.00	0.00	
11,400.00	90.00	271.44	6,974.00	721.07	-4,107.17	4,154.64	0.00	0.00	0.00	
11,500.00	90.00	271.44	6,974.00	723.58	-4,207.14	4,254.45	0.00	0.00	0.00	
11,600.00	90.00	271.44	6,974.00	726.10	-4,307.11	4,354.25	0.00	0.00	0.00	
11,700.00	90.00	271.44	6,974.00	728.61	-4,407.07	4,454.05	0.00	0.00	0.00	
11,800.00	90.00	271.44	6,974.00	731.13	-4,507.04	4,553.85	0.00	0.00	0.00	
11,900.00	90.00	271.44	6,974.00	733.64	-4,607.01	4,653.66	0.00	0.00	0.00	
12,000.00	90.00	271.44	6,974.00	736.16	-4,706.98	4,753.46	0.00	0.00	0.00	
12,100.00	90.00	271.44	6,974.00	738.67	-4,806.95	4,853.26	0.00	0.00	0.00	
12,200.00	90.00	271.44	6,974.00	741.19	-4,906.92	4,953.07	0.00	0.00	0.00	
12,300.00	90.00	271.44	6,974.00	743.70	-5,006.88	5,052.87	0.00	0.00	0.00	
12,400.00	90.00	271.44	6,974.00	746.22	-5,106.85	5,152.67	0.00	0.00	0.00	
12,500.00	90.00	271.44	6,974.00	748.73	-5,206.82	5,252.47	0.00	0.00	0.00	
12,600.00	90.00	271.44	6,974.00	751.25	-5,306.79	5,352.28	0.00	0.00	0.00	
12,700.00	90.00	271.44	6,974.00	753.76	-5,406.76	5,452.08	0.00	0.00	0.00	
12,800.00	90.00	271.44	6,974.00	756.28	-5,506.73	5,551.88	0.00	0.00	0.00	
12,900.00	90.00	271.44	6,974.00	758.79	-5,606.69	5,651.68	0.00	0.00	0.00	
13,000.00	90.00	271.44	6,974.00	761.31	-5,706.66	5,751.49	0.00	0.00	0.00	
13,100.00	90.00	271.44	6,974.00	763.82	-5,806.63	5,851.29	0.00	0.00	0.00	
13,200.00	90.00	271.44	6,974.00	766.34	-5,906.60	5,951.09	0.00	0.00	0.00	
13,300.00	90.00	271.44	6,974.00	768.85	-6,006.57	6,050.89	0.00	0.00	0.00	
13,400.00	90.00	271.44	6,974.00	771.37	-6,106.54	6,150.70	0.00	0.00	0.00	
13,500.00	90.00	271.44	6,974.00	773.88	-6,206.50	6,250.50	0.00	0.00	0.00	
13,600.00	90.00	271.44	6,974.00	776.40	-6,306.47	6,350.30	0.00	0.00	0.00	
13,700.00	90.00	271.44	6,974.00	778.91	-6,406.44	6,450.10	0.00	0.00	0.00	
13,800.00	90.00	271.44	6,974.00	781.43	-6,506.41	6,549.91	0.00	0.00	0.00	
13,900.00	90.00	271.44	6,974.00	783.94	-6,606.38	6,649.71	0.00	0.00	0.00	
14,000.00	90.00	271.44	6,974.00	786.46	-6,706.35	6,749.51	0.00	0.00	0.00	
14,100.00	90.00	271.44	6,974.00	788.97	-6,806.31	6,849.32	0.00	0.00	0.00	



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well Burroughs North #02
<b>Company:</b>	Extraction Oil & Gas	<b>TVD Reference:</b>	KB @ 4963.00usft (Xtreme 7 - 16')
<b>Project:</b>	Weld Co., Co	<b>MD Reference:</b>	KB @ 4963.00usft (Xtreme 7 - 16')
<b>Site:</b>	Sec.14-T07N-R65W	<b>North Reference:</b>	Grid
<b>Well:</b>	Burroughs North #02	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Original Hole		
<b>Design:</b>	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)
14,200.00	90.00	271.44	6,974.00	791.49	-6,906.28	6,949.12	0.00	0.00	0.00
14,300.00	90.00	271.44	6,974.00	794.00	-7,006.25	7,048.92	0.00	0.00	0.00
14,400.00	90.00	271.44	6,974.00	796.52	-7,106.22	7,148.72	0.00	0.00	0.00
14,500.00	90.00	271.44	6,974.00	799.03	-7,206.19	7,248.53	0.00	0.00	0.00
14,600.00	90.00	271.44	6,974.00	801.55	-7,306.16	7,348.33	0.00	0.00	0.00
14,700.00	90.00	271.44	6,974.00	804.06	-7,406.12	7,448.13	0.00	0.00	0.00
14,800.00	90.00	271.44	6,974.00	806.58	-7,506.09	7,547.93	0.00	0.00	0.00
14,900.00	90.00	271.44	6,974.00	809.09	-7,606.06	7,647.74	0.00	0.00	0.00
15,000.00	90.00	271.44	6,974.00	811.61	-7,706.03	7,747.54	0.00	0.00	0.00
15,100.00	90.00	271.44	6,974.00	814.12	-7,806.00	7,847.34	0.00	0.00	0.00
15,200.00	90.00	271.44	6,974.00	816.64	-7,905.97	7,947.14	0.00	0.00	0.00
15,300.00	90.00	271.44	6,974.00	819.15	-8,005.93	8,046.95	0.00	0.00	0.00
15,400.00	90.00	271.44	6,974.00	821.67	-8,105.90	8,146.75	0.00	0.00	0.00
15,500.00	90.00	271.44	6,974.00	824.18	-8,205.87	8,246.55	0.00	0.00	0.00
15,600.00	90.00	271.44	6,974.00	826.70	-8,305.84	8,346.35	0.00	0.00	0.00
15,700.00	90.00	271.44	6,974.00	829.21	-8,405.81	8,446.16	0.00	0.00	0.00
15,800.00	90.00	271.44	6,974.00	831.73	-8,505.78	8,545.96	0.00	0.00	0.00
15,900.00	90.00	271.44	6,974.00	834.24	-8,605.74	8,645.76	0.00	0.00	0.00
16,000.00	90.00	271.44	6,974.00	836.76	-8,705.71	8,745.57	0.00	0.00	0.00
16,100.00	90.00	271.44	6,974.00	839.27	-8,805.68	8,845.37	0.00	0.00	0.00
16,200.00	90.00	271.44	6,974.00	841.79	-8,905.65	8,945.17	0.00	0.00	0.00
16,300.00	90.00	271.44	6,974.00	844.30	-9,005.62	9,044.97	0.00	0.00	0.00
16,400.00	90.00	271.44	6,974.00	846.82	-9,105.59	9,144.78	0.00	0.00	0.00
16,500.00	90.00	271.44	6,974.00	849.33	-9,205.56	9,244.58	0.00	0.00	0.00
16,600.00	90.00	271.44	6,974.00	851.85	-9,305.52	9,344.38	0.00	0.00	0.00
16,700.00	90.00	271.44	6,974.00	854.36	-9,405.49	9,444.18	0.00	0.00	0.00
16,800.00	90.00	271.44	6,974.00	856.88	-9,505.46	9,543.99	0.00	0.00	0.00
16,900.00	90.00	271.44	6,974.00	859.39	-9,605.43	9,643.79	0.00	0.00	0.00
17,000.00	90.00	271.44	6,974.00	861.91	-9,705.40	9,743.59	0.00	0.00	0.00
17,090.51	90.00	271.44	6,974.00	864.18	-9,795.88	9,833.92	0.00	0.00	0.00
PBHL/TD									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
KOP BN 2 - hit/miss target - Shape	0.00	0.00	6,237.38	622.29	527.67	1,455,365.12	3,244,545.22	40° 34' 48.157 N	104° 37' 10.561 W
LP BN 2 - plan hits target center - Point	0.00	0.00	6,974.00	622.29	-108.95	1,455,365.13	3,243,908.61	40° 34' 48.220 N	104° 37' 18.811 W
PBHL Burroughs North 2 - plan hits target center - Point	0.00	0.01	6,974.00	864.18	-9,795.88	1,455,607.01	3,234,221.68	40° 34' 51.539 N	104° 39' 24.322 W



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well Burroughs North #02
<b>Company:</b>	Extraction Oil & Gas	<b>TVD Reference:</b>	KB @ 4963.00usft (Xtreme 7 - 16')
<b>Project:</b>	Weld Co., Co	<b>MD Reference:</b>	KB @ 4963.00usft (Xtreme 7 - 16')
<b>Site:</b>	Sec.14-T07N-R65W	<b>North Reference:</b>	Grid
<b>Well:</b>	Burroughs North #02	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Original Hole		
<b>Design:</b>	Rev 0		

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")	
7,400.55	6,974.00	7" Csg	7	7-1/2	

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,673.78	3,640.00	Parkman		0.00	
4,499.22	4,455.00	Sussex		0.00	
5,922.07	5,860.00	Shannon		0.00	
7,400.55	6,974.00	Niobrara		0.00	

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
700.00	700.00	0.00	0.00	Begin Nudge	
1,156.19	1,154.27	27.65	23.44	Hold Tangent	
5,844.35	5,783.11	594.64	504.23	Begin Drop	
6,300.55	6,237.38	622.29	527.67	Vertical Point	
6,400.55	6,337.38	622.29	527.67	KOP, Build 9°/100' DLS	
7,400.55	6,974.00	622.29	-108.95	LP, Begin Turn	
7,544.66	6,974.00	624.10	-253.05	EOT, Hold to TD	
17,090.51	6,974.00	864.18	-9,795.88	PBHL/TD	