



Company: Extraction Oil & Gas
Field: Weld Co., Co
Location: Sec.14-T07N-R65W
Well: Burroughs South #11
Borehole: Original Hole
Rig: Xtreme 7
Plan: Rev 1

PATHFINDER
A Schlumberger Company

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	Annotation
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	Begin Nudge
3	1089.06	3.78	73.83	1088.93	1.74	5.99	2.00	73.83	-5.92	Hold Tangent
4	6376.79	3.78	73.83	6365.15	98.83	340.91	0.00	0.00	-337.03	KOP, Build 10°/100' DLS
5	7312.84	90.00	271.43	6974.00	125.24	-230.43	10.00	-162.37	234.90	LP, Hold to TD
6	17046.08	90.00	271.43	6974.00	367.81	-9960.65	0.00	0.00	9967.44	PBHL/TD

WELL DETAILS: Burroughs South #11

+N/-S	+E/-W	GL 4944.00	KB @ 4960.00usft (Xtreme 7 - 16')	Longitude
0.00	0.00	Northing 1453259.49	Easting 3244150.32	40° 34' 27.390 N 104° 37' 15.949 W

WELLBORE TARGET DETAILS

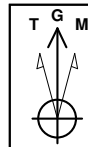
Name	TVD	+N/-S	+E/-W	Shape
LP BS 11	6974.00	125.24	-230.43	Point
PBHL Burroughs South 11	6974.00	367.81	-9960.65	Point

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
3640.00	3645.70	Parkman
4455.00	4462.48	Sussex
5860.00	5870.55	Shannon
6974.00	7312.84	Niobrara

CASING DETAILS

TVD	MD	Name	Size
6974.00	7312.84	7" Csg	7



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

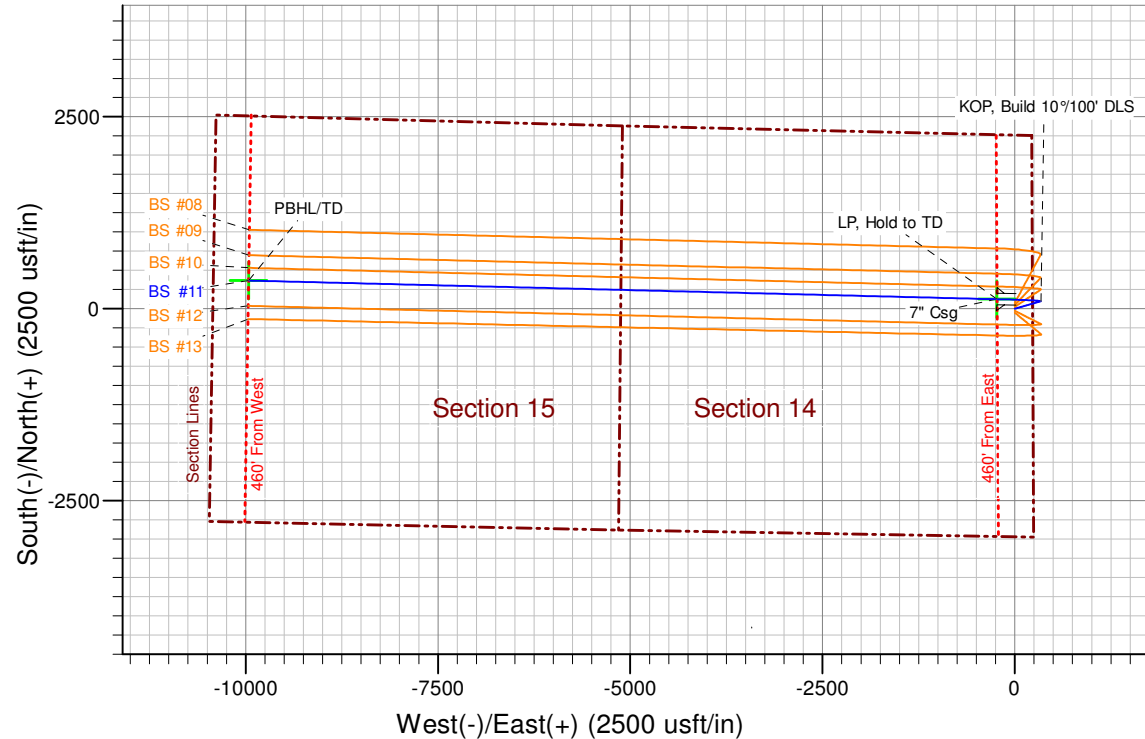
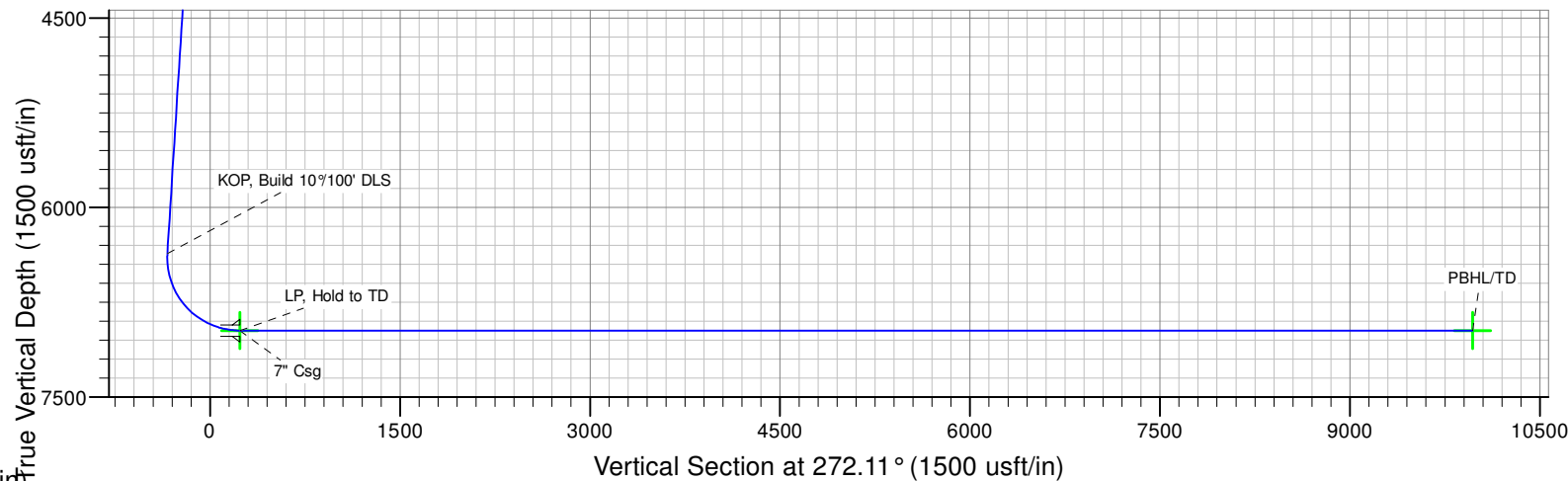
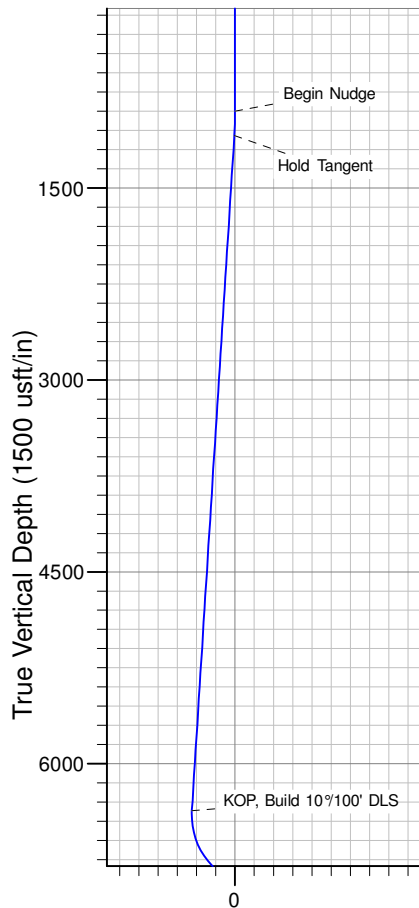
Magnetic Field
Strength: 52911.1nT
Dip Angle: 67.11°
Date: 7/16/2014
Model: IGRF2010

SHL: 2266' FNL & 230' FEL
(Sec.14-T07N-R65W)
PBHL: 2145' FNL & 460' FWL
(Sec.15-T07N-R65W)

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

Burroughs South #11 Rev 1

Created By: J Rieke Date: 13:09, October 07 2014





Extraction Oil & Gas

**Weld Co., Co
Sec.14-T07N-R65W
Burroughs South #11**

Original Hole

Plan: Rev 1

Standard Planning Report

07 October, 2014



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Burroughs South #11
Company:	Extraction Oil & Gas	TVD Reference:	KB @ 4960.00usft (Xtreme 7 - 16')
Project:	Weld Co., Co	MD Reference:	KB @ 4960.00usft (Xtreme 7 - 16')
Site:	Sec.14-T07N-R65W	North Reference:	Grid
Well:	Burroughs South #11	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	Rev 1		

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 South #11			
Well Position	+N/-S	-1,508.48 usft	Northing:	1,453,259.50 usft
	+E/-W	133.01 usft	Easting:	3,244,150.32 usft
Position Uncertainty	0.00 usft	Wellhead Elevation:	4,960.00 usft	Ground Level: 4,944.00 usft

Wellbore	Original Hole				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	7/16/2014	8.39	67.11	52,911

Design	Rev 1			
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	272.11

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	
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,089.06	3.78	73.83	1,088.93	1.74	5.99	2.00	2.00	0.00	73.83	
6,376.79	3.78	73.83	6,365.15	98.83	340.91	0.00	0.00	0.00	0.00	
7,312.84	90.00	271.43	6,974.00	125.24	-230.43	10.00	9.21	-17.35	-162.37	LP BS 11
17,046.08	90.00	271.43	6,974.00	367.81	-9,960.65	0.00	0.00	0.00	0.00	PBHL Burroughs Sour



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Burroughs South #11
Company:	Extraction Oil & Gas	TVD Reference:	KB @ 4960.00usft (Xtreme 7 - 16')
Project:	Weld Co., Co	MD Reference:	KB @ 4960.00usft (Xtreme 7 - 16')
Site:	Sec.14-T07N-R65W	North Reference:	Grid
Well:	Burroughs South #11	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	Rev 1		

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
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
Begin Nudge									
1,000.00	2.00	73.83	999.98	0.49	1.68	-1.66	2.00	2.00	0.00
1,089.06	3.78	73.83	1,088.92	1.74	5.99	-5.92	2.00	2.00	0.00
Hold Tangent									
1,100.00	3.78	73.83	1,099.84	1.94	6.68	-6.61	0.00	0.00	0.00
1,200.00	3.78	73.83	1,199.62	3.77	13.02	-12.87	0.00	0.00	0.00
1,300.00	3.78	73.83	1,299.40	5.61	19.35	-19.13	0.00	0.00	0.00
1,400.00	3.78	73.83	1,399.19	7.45	25.68	-25.39	0.00	0.00	0.00
1,500.00	3.78	73.83	1,498.97	9.28	32.02	-31.65	0.00	0.00	0.00
1,600.00	3.78	73.83	1,598.75	11.12	38.35	-37.92	0.00	0.00	0.00
1,700.00	3.78	73.83	1,698.53	12.95	44.69	-44.18	0.00	0.00	0.00
1,800.00	3.78	73.83	1,798.32	14.79	51.02	-50.44	0.00	0.00	0.00
1,900.00	3.78	73.83	1,898.10	16.63	57.35	-56.70	0.00	0.00	0.00
2,000.00	3.78	73.83	1,997.88	18.46	63.69	-62.96	0.00	0.00	0.00
2,100.00	3.78	73.83	2,097.66	20.30	70.02	-69.23	0.00	0.00	0.00
2,200.00	3.78	73.83	2,197.44	22.14	76.36	-75.49	0.00	0.00	0.00
2,300.00	3.78	73.83	2,297.23	23.97	82.69	-81.75	0.00	0.00	0.00
2,400.00	3.78	73.83	2,397.01	25.81	89.02	-88.01	0.00	0.00	0.00
2,500.00	3.78	73.83	2,496.79	27.64	95.36	-94.27	0.00	0.00	0.00
2,600.00	3.78	73.83	2,596.57	29.48	101.69	-100.53	0.00	0.00	0.00
2,700.00	3.78	73.83	2,696.36	31.32	108.03	-106.80	0.00	0.00	0.00
2,800.00	3.78	73.83	2,796.14	33.15	114.36	-113.06	0.00	0.00	0.00
2,900.00	3.78	73.83	2,895.92	34.99	120.69	-119.32	0.00	0.00	0.00
3,000.00	3.78	73.83	2,995.70	36.82	127.03	-125.58	0.00	0.00	0.00
3,100.00	3.78	73.83	3,095.49	38.66	133.36	-131.84	0.00	0.00	0.00
3,200.00	3.78	73.83	3,195.27	40.50	139.70	-138.11	0.00	0.00	0.00
3,300.00	3.78	73.83	3,295.05	42.33	146.03	-144.37	0.00	0.00	0.00
3,400.00	3.78	73.83	3,394.83	44.17	152.36	-150.63	0.00	0.00	0.00
3,500.00	3.78	73.83	3,494.61	46.01	158.70	-156.89	0.00	0.00	0.00
3,600.00	3.78	73.83	3,594.40	47.84	165.03	-163.15	0.00	0.00	0.00
3,645.70	3.78	73.83	3,640.00	48.68	167.93	-166.02	0.00	0.00	0.00
Parkman									
3,700.00	3.78	73.83	3,694.18	49.68	171.37	-169.42	0.00	0.00	0.00
3,800.00	3.78	73.83	3,793.96	51.51	177.70	-175.68	0.00	0.00	0.00
3,900.00	3.78	73.83	3,893.74	53.35	184.03	-181.94	0.00	0.00	0.00
4,000.00	3.78	73.83	3,993.53	55.19	190.37	-188.20	0.00	0.00	0.00
4,100.00	3.78	73.83	4,093.31	57.02	196.70	-194.46	0.00	0.00	0.00
4,200.00	3.78	73.83	4,193.09	58.86	203.03	-200.72	0.00	0.00	0.00
4,300.00	3.78	73.83	4,292.87	60.70	209.37	-206.99	0.00	0.00	0.00
4,400.00	3.78	73.83	4,392.66	62.53	215.70	-213.25	0.00	0.00	0.00
4,462.48	3.78	73.83	4,455.00	63.68	219.66	-217.16	0.00	0.00	0.00
Sussex									
4,500.00	3.78	73.83	4,492.44	64.37	222.04	-219.51	0.00	0.00	0.00
4,600.00	3.78	73.83	4,592.22	66.20	228.37	-225.77	0.00	0.00	0.00



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Company:	Extraction Oil & Gas	TVD Reference:	KB @ 4960.00usft (Xtreme 7 - 16')
Project:	Weld Co., Co	MD Reference:	KB @ 4960.00usft (Xtreme 7 - 16')
Site:	Sec.14-T07N-R65W	North Reference:	Grid
Well:	Burroughs South #11	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	Rev 1		

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	3.78	73.83	4,692.00	68.04	234.70	-232.03	0.00	0.00	0.00
4,800.00	3.78	73.83	4,791.78	69.88	241.04	-238.30	0.00	0.00	0.00
4,900.00	3.78	73.83	4,891.57	71.71	247.37	-244.56	0.00	0.00	0.00
5,000.00	3.78	73.83	4,991.35	73.55	253.71	-250.82	0.00	0.00	0.00
5,100.00	3.78	73.83	5,091.13	75.39	260.04	-257.08	0.00	0.00	0.00
5,200.00	3.78	73.83	5,190.91	77.22	266.37	-263.34	0.00	0.00	0.00
5,300.00	3.78	73.83	5,290.70	79.06	272.71	-269.61	0.00	0.00	0.00
5,400.00	3.78	73.83	5,390.48	80.89	279.04	-275.87	0.00	0.00	0.00
5,500.00	3.78	73.83	5,490.26	82.73	285.38	-282.13	0.00	0.00	0.00
5,600.00	3.78	73.83	5,590.04	84.57	291.71	-288.39	0.00	0.00	0.00
5,700.00	3.78	73.83	5,689.83	86.40	298.04	-294.65	0.00	0.00	0.00
5,800.00	3.78	73.83	5,789.61	88.24	304.38	-300.91	0.00	0.00	0.00
5,870.55	3.78	73.83	5,860.00	89.53	308.85	-305.33	0.00	0.00	0.00
Shannon									
5,900.00	3.78	73.83	5,889.39	90.07	310.71	-307.18	0.00	0.00	0.00
6,000.00	3.78	73.83	5,989.17	91.91	317.05	-313.44	0.00	0.00	0.00
6,100.00	3.78	73.83	6,088.95	93.75	323.38	-319.70	0.00	0.00	0.00
6,200.00	3.78	73.83	6,188.74	95.58	329.71	-325.96	0.00	0.00	0.00
6,300.00	3.78	73.83	6,288.52	97.42	336.05	-332.22	0.00	0.00	0.00
6,376.79	3.78	73.83	6,365.14	98.83	340.91	-337.03	0.00	0.00	0.00
KOP, Build 10°/100' DLS									
6,400.00	1.72	49.71	6,388.32	99.27	341.91	-338.02	10.00	-8.88	-103.93
6,500.00	8.79	278.85	6,487.97	101.42	335.49	-331.52	10.00	7.07	-130.86
6,600.00	18.75	274.80	6,584.97	103.95	311.86	-307.82	10.00	9.96	-4.05
6,700.00	28.74	273.52	6,676.39	106.77	271.75	-267.63	10.00	9.99	-1.29
6,800.00	38.73	272.86	6,759.45	109.81	216.37	-212.17	10.00	9.99	-0.66
6,900.00	48.73	272.43	6,831.62	112.98	147.41	-143.14	10.00	10.00	-0.42
7,000.00	58.72	272.12	6,890.71	116.16	66.96	-62.62	10.00	10.00	-0.31
7,100.00	68.72	271.87	6,934.93	119.28	-22.54	26.93	10.00	10.00	-0.25
7,200.00	78.72	271.66	6,962.93	122.23	-118.36	122.79	10.00	10.00	-0.22
7,300.00	88.72	271.45	6,973.86	124.92	-217.60	222.06	10.00	10.00	-0.20
7,312.84	90.00	271.43	6,974.00	125.24	-230.44	234.90	10.00	9.99	-0.20
LP, Hold to TD - Niobrara - 7" Csg									
7,400.00	90.00	271.43	6,974.00	127.41	-317.57	322.05	0.00	0.00	0.00
7,500.00	90.00	271.43	6,974.00	129.91	-417.54	422.05	0.00	0.00	0.00
7,600.00	90.00	271.43	6,974.00	132.40	-517.51	522.04	0.00	0.00	0.00
7,700.00	90.00	271.43	6,974.00	134.89	-617.48	622.03	0.00	0.00	0.00
7,800.00	90.00	271.43	6,974.00	137.38	-717.44	722.03	0.00	0.00	0.00
7,900.00	90.00	271.43	6,974.00	139.87	-817.41	822.02	0.00	0.00	0.00
8,000.00	90.00	271.43	6,974.00	142.37	-917.38	922.01	0.00	0.00	0.00
8,100.00	90.00	271.43	6,974.00	144.86	-1,017.35	1,022.00	0.00	0.00	0.00
8,200.00	90.00	271.43	6,974.00	147.35	-1,117.32	1,122.00	0.00	0.00	0.00
8,300.00	90.00	271.43	6,974.00	149.84	-1,217.29	1,221.99	0.00	0.00	0.00
8,400.00	90.00	271.43	6,974.00	152.34	-1,317.26	1,321.98	0.00	0.00	0.00
8,500.00	90.00	271.43	6,974.00	154.83	-1,417.23	1,421.98	0.00	0.00	0.00
8,600.00	90.00	271.43	6,974.00	157.32	-1,517.20	1,521.97	0.00	0.00	0.00
8,700.00	90.00	271.43	6,974.00	159.81	-1,617.17	1,621.96	0.00	0.00	0.00
8,800.00	90.00	271.43	6,974.00	162.30	-1,717.13	1,721.95	0.00	0.00	0.00
8,900.00	90.00	271.43	6,974.00	164.80	-1,817.10	1,821.95	0.00	0.00	0.00
9,000.00	90.00	271.43	6,974.00	167.29	-1,917.07	1,921.94	0.00	0.00	0.00
9,100.00	90.00	271.43	6,974.00	169.78	-2,017.04	2,021.93	0.00	0.00	0.00
9,200.00	90.00	271.43	6,974.00	172.27	-2,117.01	2,121.93	0.00	0.00	0.00
9,300.00	90.00	271.43	6,974.00	174.76	-2,216.98	2,221.92	0.00	0.00	0.00



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Site:	Sec.14-T07N-R65W	North Reference:	Grid
Well:	Burroughs South #11	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	Rev 1		

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)	
9,400.00	90.00	271.43	6,974.00	177.26	-2,316.95	2,321.91	0.00	0.00	0.00	
9,500.00	90.00	271.43	6,974.00	179.75	-2,416.92	2,421.90	0.00	0.00	0.00	
9,600.00	90.00	271.43	6,974.00	182.24	-2,516.89	2,521.90	0.00	0.00	0.00	
9,700.00	90.00	271.43	6,974.00	184.73	-2,616.85	2,621.89	0.00	0.00	0.00	
9,800.00	90.00	271.43	6,974.00	187.23	-2,716.82	2,721.88	0.00	0.00	0.00	
9,900.00	90.00	271.43	6,974.00	189.72	-2,816.79	2,821.88	0.00	0.00	0.00	
10,000.00	90.00	271.43	6,974.00	192.21	-2,916.76	2,921.87	0.00	0.00	0.00	
10,100.00	90.00	271.43	6,974.00	194.70	-3,016.73	3,021.86	0.00	0.00	0.00	
10,200.00	90.00	271.43	6,974.00	197.19	-3,116.70	3,121.85	0.00	0.00	0.00	
10,300.00	90.00	271.43	6,974.00	199.69	-3,216.67	3,221.85	0.00	0.00	0.00	
10,400.00	90.00	271.43	6,974.00	202.18	-3,316.64	3,321.84	0.00	0.00	0.00	
10,500.00	90.00	271.43	6,974.00	204.67	-3,416.61	3,421.83	0.00	0.00	0.00	
10,600.00	90.00	271.43	6,974.00	207.16	-3,516.58	3,521.82	0.00	0.00	0.00	
10,700.00	90.00	271.43	6,974.00	209.66	-3,616.54	3,621.82	0.00	0.00	0.00	
10,800.00	90.00	271.43	6,974.00	212.15	-3,716.51	3,721.81	0.00	0.00	0.00	
10,900.00	90.00	271.43	6,974.00	214.64	-3,816.48	3,821.80	0.00	0.00	0.00	
11,000.00	90.00	271.43	6,974.00	217.13	-3,916.45	3,921.80	0.00	0.00	0.00	
11,100.00	90.00	271.43	6,974.00	219.62	-4,016.42	4,021.79	0.00	0.00	0.00	
11,200.00	90.00	271.43	6,974.00	222.12	-4,116.39	4,121.78	0.00	0.00	0.00	
11,300.00	90.00	271.43	6,974.00	224.61	-4,216.36	4,221.77	0.00	0.00	0.00	
11,400.00	90.00	271.43	6,974.00	227.10	-4,316.33	4,321.77	0.00	0.00	0.00	
11,500.00	90.00	271.43	6,974.00	229.59	-4,416.30	4,421.76	0.00	0.00	0.00	
11,600.00	90.00	271.43	6,974.00	232.09	-4,516.26	4,521.75	0.00	0.00	0.00	
11,700.00	90.00	271.43	6,974.00	234.58	-4,616.23	4,621.75	0.00	0.00	0.00	
11,800.00	90.00	271.43	6,974.00	237.07	-4,716.20	4,721.74	0.00	0.00	0.00	
11,900.00	90.00	271.43	6,974.00	239.56	-4,816.17	4,821.73	0.00	0.00	0.00	
12,000.00	90.00	271.43	6,974.00	242.05	-4,916.14	4,921.72	0.00	0.00	0.00	
12,100.00	90.00	271.43	6,974.00	244.55	-5,016.11	5,021.72	0.00	0.00	0.00	
12,200.00	90.00	271.43	6,974.00	247.04	-5,116.08	5,121.71	0.00	0.00	0.00	
12,300.00	90.00	271.43	6,974.00	249.53	-5,216.05	5,221.70	0.00	0.00	0.00	
12,400.00	90.00	271.43	6,974.00	252.02	-5,316.02	5,321.70	0.00	0.00	0.00	
12,500.00	90.00	271.43	6,974.00	254.52	-5,415.99	5,421.69	0.00	0.00	0.00	
12,600.00	90.00	271.43	6,974.00	257.01	-5,515.95	5,521.68	0.00	0.00	0.00	
12,700.00	90.00	271.43	6,974.00	259.50	-5,615.92	5,621.67	0.00	0.00	0.00	
12,800.00	90.00	271.43	6,974.00	261.99	-5,715.89	5,721.67	0.00	0.00	0.00	
12,900.00	90.00	271.43	6,974.00	264.48	-5,815.86	5,821.66	0.00	0.00	0.00	
13,000.00	90.00	271.43	6,974.00	266.98	-5,915.83	5,921.65	0.00	0.00	0.00	
13,100.00	90.00	271.43	6,974.00	269.47	-6,015.80	6,021.65	0.00	0.00	0.00	
13,200.00	90.00	271.43	6,974.00	271.96	-6,115.77	6,121.64	0.00	0.00	0.00	
13,300.00	90.00	271.43	6,974.00	274.45	-6,215.74	6,221.63	0.00	0.00	0.00	
13,400.00	90.00	271.43	6,974.00	276.95	-6,315.71	6,321.62	0.00	0.00	0.00	
13,500.00	90.00	271.43	6,974.00	279.44	-6,415.67	6,421.62	0.00	0.00	0.00	
13,600.00	90.00	271.43	6,974.00	281.93	-6,515.64	6,521.61	0.00	0.00	0.00	
13,700.00	90.00	271.43	6,974.00	284.42	-6,615.61	6,621.60	0.00	0.00	0.00	
13,800.00	90.00	271.43	6,974.00	286.91	-6,715.58	6,721.60	0.00	0.00	0.00	
13,900.00	90.00	271.43	6,974.00	289.41	-6,815.55	6,821.59	0.00	0.00	0.00	
14,000.00	90.00	271.43	6,974.00	291.90	-6,915.52	6,921.58	0.00	0.00	0.00	
14,100.00	90.00	271.43	6,974.00	294.39	-7,015.49	7,021.57	0.00	0.00	0.00	
14,200.00	90.00	271.43	6,974.00	296.88	-7,115.46	7,121.57	0.00	0.00	0.00	
14,300.00	90.00	271.43	6,974.00	299.38	-7,215.43	7,221.56	0.00	0.00	0.00	
14,400.00	90.00	271.43	6,974.00	301.87	-7,315.40	7,321.55	0.00	0.00	0.00	
14,500.00	90.00	271.43	6,974.00	304.36	-7,415.36	7,421.54	0.00	0.00	0.00	
14,600.00	90.00	271.43	6,974.00	306.85	-7,515.33	7,521.54	0.00	0.00	0.00	
14,700.00	90.00	271.43	6,974.00	309.34	-7,615.30	7,621.53	0.00	0.00	0.00	



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Burroughs South #11
Company:	Extraction Oil & Gas	TVD Reference:	KB @ 4960.00usft (Xtreme 7 - 16')
Project:	Weld Co., Co	MD Reference:	KB @ 4960.00usft (Xtreme 7 - 16')
Site:	Sec.14-T07N-R65W	North Reference:	Grid
Well:	Burroughs South #11	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	Rev 1		

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)	
14,800.00	90.00	271.43	6,974.00	311.84	-7,715.27	7,721.52	0.00	0.00	0.00	
14,900.00	90.00	271.43	6,974.00	314.33	-7,815.24	7,821.52	0.00	0.00	0.00	
15,000.00	90.00	271.43	6,974.00	316.82	-7,915.21	7,921.51	0.00	0.00	0.00	
15,100.00	90.00	271.43	6,974.00	319.31	-8,015.18	8,021.50	0.00	0.00	0.00	
15,200.00	90.00	271.43	6,974.00	321.81	-8,115.15	8,121.49	0.00	0.00	0.00	
15,300.00	90.00	271.43	6,974.00	324.30	-8,215.12	8,221.49	0.00	0.00	0.00	
15,400.00	90.00	271.43	6,974.00	326.79	-8,315.08	8,321.48	0.00	0.00	0.00	
15,500.00	90.00	271.43	6,974.00	329.28	-8,415.05	8,421.47	0.00	0.00	0.00	
15,600.00	90.00	271.43	6,974.00	331.77	-8,515.02	8,521.47	0.00	0.00	0.00	
15,700.00	90.00	271.43	6,974.00	334.27	-8,614.99	8,621.46	0.00	0.00	0.00	
15,800.00	90.00	271.43	6,974.00	336.76	-8,714.96	8,721.45	0.00	0.00	0.00	
15,900.00	90.00	271.43	6,974.00	339.25	-8,814.93	8,821.44	0.00	0.00	0.00	
16,000.00	90.00	271.43	6,974.00	341.74	-8,914.90	8,921.44	0.00	0.00	0.00	
16,100.00	90.00	271.43	6,974.00	344.23	-9,014.87	9,021.43	0.00	0.00	0.00	
16,200.00	90.00	271.43	6,974.00	346.73	-9,114.84	9,121.42	0.00	0.00	0.00	
16,300.00	90.00	271.43	6,974.00	349.22	-9,214.81	9,221.42	0.00	0.00	0.00	
16,400.00	90.00	271.43	6,974.00	351.71	-9,314.77	9,321.41	0.00	0.00	0.00	
16,500.00	90.00	271.43	6,974.00	354.20	-9,414.74	9,421.40	0.00	0.00	0.00	
16,600.00	90.00	271.43	6,974.00	356.70	-9,514.71	9,521.39	0.00	0.00	0.00	
16,700.00	90.00	271.43	6,974.00	359.19	-9,614.68	9,621.39	0.00	0.00	0.00	
16,800.00	90.00	271.43	6,974.00	361.68	-9,714.65	9,721.38	0.00	0.00	0.00	
16,900.00	90.00	271.43	6,974.00	364.17	-9,814.62	9,821.37	0.00	0.00	0.00	
17,000.00	90.00	271.43	6,974.00	366.66	-9,914.59	9,921.37	0.00	0.00	0.00	
17,046.08	90.00	271.43	6,974.00	367.81	-9,960.65	9,967.44	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
- hit/miss target									
- Shape									
LP BS 11	0.00	0.00	6,974.00	125.24	-230.43	1,453,384.74	3,243,919.89	40° 34' 28.650 N	104° 37' 18.919 W
- plan hits target center									
- Point									
PBHL Burroughs South	0.00	0.00	6,974.00	367.81	-9,960.65	1,453,627.31	3,234,189.67	40° 34' 31.980 N	104° 39' 24.980 W
- plan hits target center									
- Point									

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")	
7,312.84	6,974.00	7" Csg	7	7-1/2	



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Burroughs South #11
Company:	Extraction Oil & Gas	TVD Reference:	KB @ 4960.00usft (Xtreme 7 - 16')
Project:	Weld Co., Co	MD Reference:	KB @ 4960.00usft (Xtreme 7 - 16')
Site:	Sec.14-T07N-R65W	North Reference:	Grid
Well:	Burroughs South #11	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	Rev 1		

Formations					
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,645.70	3,640.00	Parkman		0.00	
4,462.48	4,455.00	Sussex		0.00	
5,870.55	5,860.00	Shannon		0.00	
7,312.84	6,974.00	Niobrara		0.00	

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
900.00	900.00	0.00	0.00	Begin Nudge
1,089.06	1,088.92	1.74	5.99	Hold Tangent
6,376.79	6,365.14	98.83	340.91	KOP, Build 10°/100' DLS
7,312.84	6,974.00	125.24	-230.44	LP, Hold to TD
17,046.08	6,974.00	367.81	-9,960.65	PBHL/TD