



END OF WELL REPORT

Prepared For:

**EnCana Oil & Gas (USA) Inc
Ruhl 1B-32H-B264
H&P 278
Weld County, CO**

Prepared By:

***Seth Burstad
Rockies Region Well Planner
Scientific Drilling***

Scientific Drilling International
7237 W. Barton Rd., Casper, WY 82604
P.O. Box 1600, Mills, WY 82644
(307) 472-6621
seth.burstad@scientificdrilling.com



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Project: DJ Wattenberg
Site: S32-T2N-R64W (Newnam/Ruhl)
Well: Ruhl 1B-32H-B264
Wellbore: Hz
Design: Plan 2



Plan: Plan 2 (Ruhl 1B-32H-B264/Hz)

Created By: Seth Burstad Date: 1-27-15

WELL DETAILS: Ruhl 1B-32H-B264

Northing	KB @ 4955.00ft (No KB)	Easting	Latitude	Longitude
1281151.92	4955.00	3259114.16	40.101439	-104.573705

PROJECT DETAILS: DJ Wattenberg

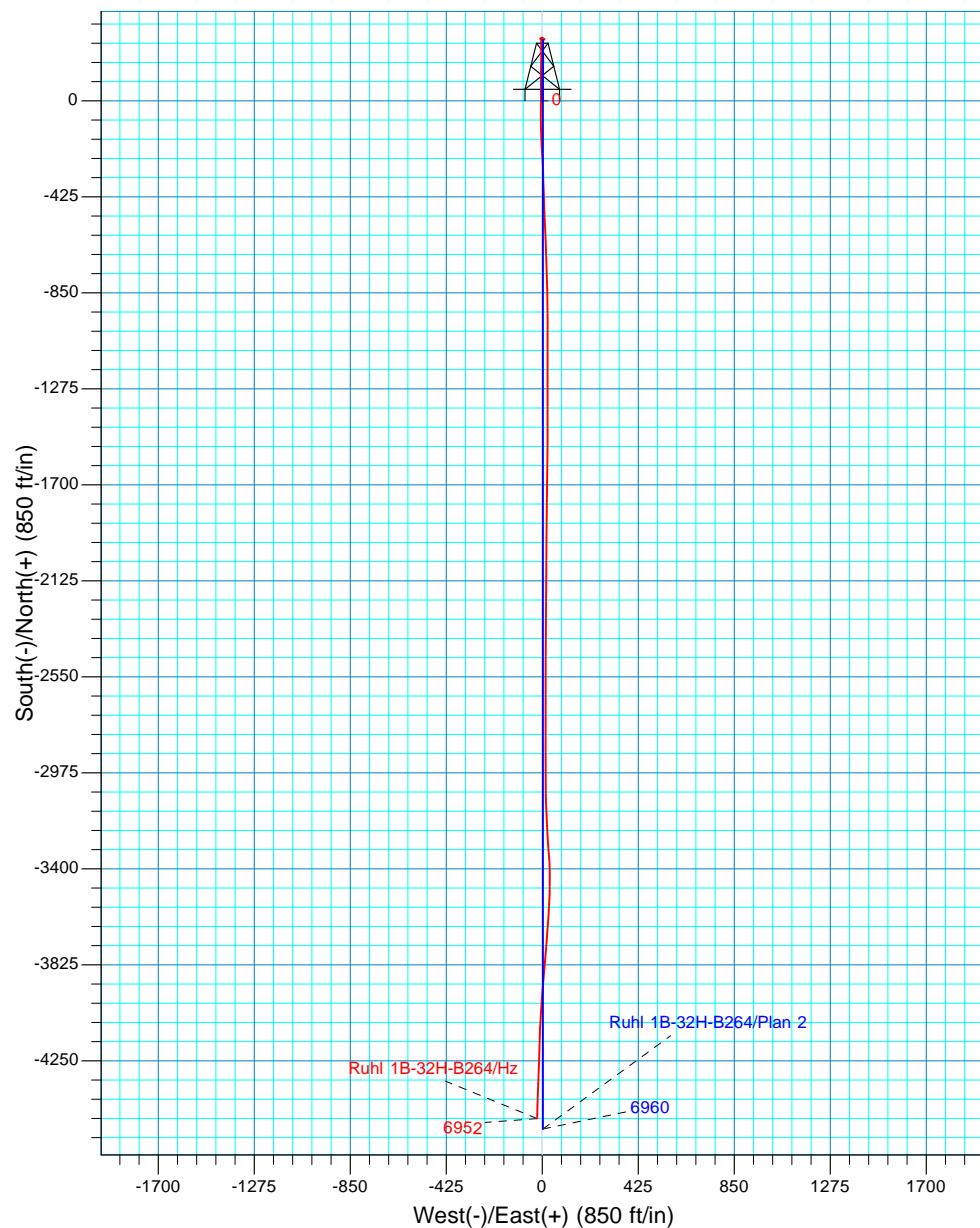
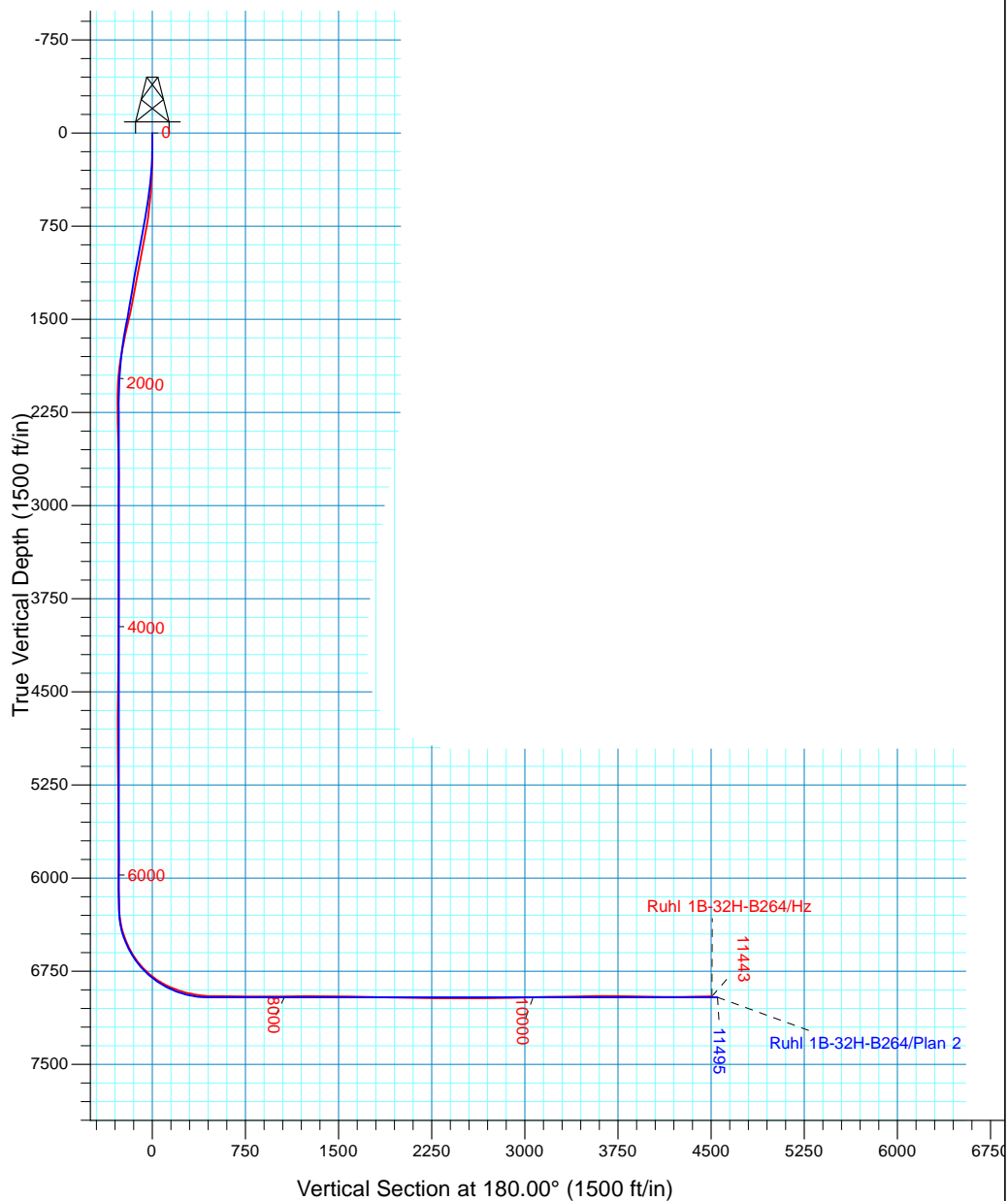
Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: Colorado Northern Zone

System Datum: Mean Sea Level
Local North: True



Azimuths to True North
Magnetic North: 8.37°

Magnetic Field
Strength: 52514.8snT
Dip Angle: 66.71°
Date: 12/3/2014
Model: BGGM2014





EnCana Oil & Gas (USA)

DJ Wattenberg

S32-T2N-R64W (Newnam/Ruhl)

Ruhl 1B-32H-B264

Hz

Design: Hz

Standard Survey Report

27 January, 2015





Company:	EnCana Oil & Gas (USA)	Local Co-ordinate Reference:	Well Ruhl 1B-32H-B264
Project:	DJ Wattenberg	TVD Reference:	KB @ 4955.00ft (No KB)
Site:	S32-T2N-R64W (Newnam/Ruhl)	MD Reference:	KB @ 4955.00ft (No KB)
Well:	Ruhl 1B-32H-B264	North Reference:	True
Wellbore:	Hz	Survey Calculation Method:	Minimum Curvature
Design:	Hz	Database:	Casper District

Project	DJ Wattenberg, Weld County, CO		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		

Site	S32-T2N-R64W (Newnam/Ruhl)				
Site Position:		Northing:	1,281,148.07 usft	Latitude:	40.101468
From:	Lat/Long	Easting:	3,257,728.03 usft	Longitude:	-104.578660
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	Grid Convergence:	0.60 °

Well	Ruhl 1B-32H-B264					
Well Position	+N/-S	0.00 ft	Northing:	1,281,151.92 usft	Latitude:	40.101439
	+E/-W	0.00 ft	Easting:	3,259,114.16 usft	Longitude:	-104.573705
Position Uncertainty		0.00 ft	Wellhead Elevation:	0.00 ft	Ground Level:	4,955.00 ft

Wellbore	Hz				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2014	12/3/2014	8.37	66.71	52,515

Design	Hz				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	0.00	0.00	0.00	180.00	

Survey Program	Date	1/27/2015			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
244.00	1,151.00	Survey #1 - Surface (Hz)	SDI MWD	SDI MWD - Standard ver 1.0.1	
1,277.00	7,332.00	Survey #2 - Intermediate (Hz)	SDI MWD	SDI MWD - Standard ver 1.0.1	
7,425.00	11,443.00	Survey #3 - Lateral (Hz)	SDI MWD	SDI MWD - Standard ver 1.0.1	

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)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
244.00	0.90	17.92	243.99	1.82	0.59	-1.82	0.37	0.37	0.00	
First SDI MWD Survey										
334.00	1.82	358.99	333.96	3.92	0.78	-3.92	1.12	1.02	-21.03	
424.00	3.81	355.83	423.85	8.34	0.54	-8.34	2.22	2.21	-3.51	
515.00	5.53	359.72	514.55	15.74	0.30	-15.74	1.92	1.89	4.27	
605.00	6.45	357.59	604.05	25.12	0.06	-25.12	1.05	1.02	-2.37	
694.00	7.64	2.06	692.38	36.03	0.07	-36.03	1.47	1.34	5.02	
784.00	10.61	2.93	781.23	50.29	0.71	-50.29	3.30	3.30	0.97	

Company:	EnCana Oil & Gas (USA)	Local Co-ordinate Reference:	Well Ruhl 1B-32H-B264
Project:	DJ Wattenberg	TVD Reference:	KB @ 4955.00ft (No KB)
Site:	S32-T2N-R64W (Newnam/Ruhl)	MD Reference:	KB @ 4955.00ft (No KB)
Well:	Ruhl 1B-32H-B264	North Reference:	True
Wellbore:	Hz	Survey Calculation Method:	Minimum Curvature
Design:	Hz	Database:	Casper District

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)
874.00	10.82	2.47	869.66	67.00	1.49	-67.00	0.25	0.23	-0.51
965.00	11.31	0.83	958.97	84.46	1.99	-84.46	0.64	0.54	-1.80
1,057.00	11.24	2.52	1,049.20	102.44	2.52	-102.44	0.37	-0.08	1.84
1,151.00	10.31	359.76	1,141.54	120.00	2.88	-120.00	1.13	-0.99	-2.94
Last SDI MWD Surface Survey									
1,277.00	9.97	4.18	1,265.57	142.16	3.63	-142.16	0.67	-0.27	3.51
First SDI MWD Inter.Survey									
1,459.00	12.45	359.17	1,444.09	177.49	4.50	-177.49	1.46	1.36	-2.75
1,641.00	12.40	357.83	1,621.83	216.64	3.47	-216.64	0.16	-0.03	-0.74
1,822.00	9.86	354.59	1,799.41	251.49	1.27	-251.49	1.44	-1.40	-1.79
2,003.00	4.65	357.20	1,978.90	274.26	-0.55	-274.26	2.88	-2.88	1.44
2,183.00	1.22	153.65	2,158.74	279.84	-0.05	-279.84	3.22	-1.91	86.92
2,366.00	1.47	131.45	2,341.69	276.54	2.57	-276.54	0.31	0.14	-12.13
2,549.00	1.73	130.28	2,524.61	273.20	6.44	-273.20	0.14	0.14	-0.64
2,731.00	0.27	61.72	2,706.59	271.62	8.91	-271.62	0.91	-0.80	-37.67
2,912.00	0.33	98.40	2,887.58	271.75	9.80	-271.75	0.11	0.03	20.27
3,092.00	0.90	257.52	3,067.58	271.37	8.94	-271.37	0.67	0.32	88.40
3,275.00	0.84	259.57	3,250.56	270.81	6.21	-270.81	0.04	-0.03	1.12
3,457.00	0.83	281.68	3,432.54	270.84	3.61	-270.84	0.18	-0.01	12.15
3,637.00	0.34	260.16	3,612.53	271.01	1.81	-271.01	0.29	-0.27	-11.96
3,823.00	0.65	73.07	3,798.52	271.23	2.27	-271.23	0.53	0.17	92.96
4,013.00	0.77	36.73	3,988.51	272.56	4.07	-272.56	0.24	0.06	-19.13
4,203.00	0.54	253.46	4,178.51	273.33	3.97	-273.33	0.66	-0.12	-75.41
4,391.00	1.71	313.03	4,366.47	274.99	1.07	-274.99	0.80	0.62	31.69
4,581.00	1.16	286.12	4,556.41	277.46	-2.85	-277.46	0.45	-0.29	-14.16
4,771.00	0.76	215.50	4,746.39	276.97	-5.43	-276.97	0.61	-0.21	-37.17
4,961.00	0.93	325.87	4,936.38	277.22	-7.02	-277.22	0.73	0.09	58.09
5,151.00	1.47	207.51	5,126.36	276.34	-9.01	-276.34	1.09	0.28	-62.29
5,341.00	0.65	77.93	5,316.34	274.40	-9.09	-274.40	1.03	-0.43	-68.20
5,530.00	0.54	113.27	5,505.33	274.27	-7.22	-274.27	0.20	-0.06	18.70
5,720.00	1.04	165.35	5,695.31	272.25	-5.96	-272.25	0.43	0.26	27.41
5,910.00	0.50	142.45	5,885.29	269.92	-5.02	-269.92	0.32	-0.28	-12.05
6,100.00	0.13	153.66	6,075.29	269.07	-4.42	-269.07	0.20	-0.19	5.90
6,194.00	0.17	297.52	6,169.29	269.04	-4.50	-269.04	0.30	0.04	153.04
6,241.00	0.19	171.58	6,216.29	269.00	-4.55	-269.00	0.68	0.04	-267.96
6,289.00	3.71	177.81	6,264.25	267.37	-4.47	-267.37	7.34	7.33	12.98
6,336.00	7.39	181.64	6,311.03	262.82	-4.50	-262.82	7.87	7.83	8.15
6,384.00	10.84	182.57	6,358.41	255.23	-4.79	-255.23	7.19	7.19	1.94
6,431.00	13.70	179.19	6,404.34	245.24	-4.91	-245.24	6.27	6.09	-7.19
6,479.00	17.38	176.62	6,450.57	232.40	-4.41	-232.40	7.80	7.67	-5.35
6,526.00	21.56	178.20	6,494.88	216.75	-3.73	-216.75	8.96	8.89	3.36
6,574.00	24.77	182.00	6,539.00	197.88	-3.80	-197.88	7.37	6.69	7.92
6,621.00	27.61	182.64	6,581.17	177.16	-4.64	-177.16	6.07	6.04	1.36
6,668.00	31.47	182.39	6,622.06	154.01	-5.66	-154.01	8.22	8.21	-0.53

Company:	EnCana Oil & Gas (USA)	Local Co-ordinate Reference:	Well Ruhl 1B-32H-B264
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Well:	Ruhl 1B-32H-B264	North Reference:	True
Wellbore:	Hz	Survey Calculation Method:	Minimum Curvature
Design:	Hz	Database:	Casper District

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)
6,716.00	35.08	180.05	6,662.18	127.69	-6.19	-127.69	7.98	7.52	-4.88
6,763.00	40.26	179.24	6,699.37	98.98	-6.00	-98.98	11.07	11.02	-1.72
6,810.00	45.41	180.07	6,733.83	67.04	-5.82	-67.04	11.02	10.96	1.77
6,858.00	49.94	179.93	6,766.14	31.56	-5.82	-31.56	9.44	9.44	-0.29
6,905.00	51.90	180.85	6,795.77	-4.92	-6.07	4.92	4.44	4.17	1.96
6,953.00	56.39	180.48	6,823.87	-43.81	-6.52	43.81	9.37	9.35	-0.77
7,000.00	61.43	179.93	6,848.14	-84.05	-6.66	84.05	10.77	10.72	-1.17
7,048.00	64.91	177.93	6,869.80	-126.86	-5.85	126.86	8.15	7.25	-4.17
7,095.00	67.44	177.13	6,888.78	-169.82	-3.99	169.82	5.60	5.38	-1.70
7,143.00	70.86	176.19	6,905.87	-214.59	-1.38	214.59	7.36	7.13	-1.96
7,190.00	75.36	176.82	6,919.52	-259.47	1.36	259.47	9.66	9.57	1.34
7,237.00	77.40	178.45	6,930.58	-305.10	3.24	305.10	5.50	4.34	3.47
7,284.00	79.91	177.81	6,939.83	-351.15	4.75	351.15	5.50	5.34	-1.36
7,332.00	84.02	178.05	6,946.54	-398.64	6.47	398.64	8.58	8.56	0.50
Last SDI MWD Inter. Survey									
7,425.00	90.40	178.25	6,951.06	-491.44	9.46	491.44	6.86	6.86	0.22
First SDI MWD Lateral Survey									
7,515.00	89.09	177.28	6,951.46	-581.36	12.97	581.36	1.81	-1.46	-1.08
7,606.00	88.66	177.42	6,953.25	-672.25	17.18	672.25	0.50	-0.47	0.15
7,697.00	89.53	178.23	6,954.69	-763.17	20.63	763.17	1.31	0.96	0.89
7,792.00	90.03	179.83	6,955.05	-858.15	22.24	858.15	1.76	0.53	1.68
7,887.00	90.03	179.24	6,955.00	-953.15	23.01	953.15	0.62	0.00	-0.62
7,982.00	90.60	180.22	6,954.48	-1,048.14	23.46	1,048.14	1.19	0.60	1.03
8,077.00	90.74	180.05	6,953.37	-1,143.14	23.23	1,143.14	0.23	0.15	-0.18
8,171.00	90.40	179.97	6,952.43	-1,237.13	23.22	1,237.13	0.37	-0.36	-0.09
8,266.00	90.03	179.85	6,952.08	-1,332.13	23.37	1,332.13	0.41	-0.39	-0.13
8,360.00	89.46	180.10	6,952.50	-1,426.13	23.41	1,426.13	0.66	-0.61	0.27
8,455.00	89.40	180.25	6,953.44	-1,521.12	23.12	1,521.12	0.17	-0.06	0.16
8,550.00	89.26	180.31	6,954.55	-1,616.12	22.65	1,616.12	0.16	-0.15	0.06
8,644.00	88.89	180.63	6,956.07	-1,710.10	21.88	1,710.10	0.52	-0.39	0.34
8,739.00	87.95	180.78	6,958.69	-1,805.06	20.71	1,805.06	1.00	-0.99	0.16
8,835.00	88.69	180.76	6,961.50	-1,901.01	19.42	1,901.01	0.77	0.77	-0.02
8,930.00	88.52	180.77	6,963.82	-1,995.97	18.16	1,995.97	0.18	-0.18	0.01
9,025.00	88.96	180.38	6,965.90	-2,090.94	17.20	2,090.94	0.62	0.46	-0.41
9,119.00	90.00	181.03	6,966.76	-2,184.93	16.05	2,184.93	1.30	1.11	0.69
9,214.00	90.57	179.80	6,966.29	-2,279.92	15.36	2,279.92	1.43	0.60	-1.29
9,309.00	89.16	180.66	6,966.51	-2,374.92	14.98	2,374.92	1.74	-1.48	0.91
9,404.00	89.46	180.11	6,967.65	-2,469.91	14.34	2,469.91	0.66	0.32	-0.58
9,499.00	89.63	179.60	6,968.41	-2,564.91	14.58	2,564.91	0.57	0.18	-0.54
9,594.00	91.04	179.44	6,967.85	-2,659.90	15.38	2,659.90	1.49	1.48	-0.17
9,689.00	91.38	180.57	6,965.85	-2,754.88	15.37	2,754.88	1.24	0.36	1.19
9,783.00	90.54	180.53	6,964.27	-2,848.86	14.47	2,848.86	0.89	-0.89	-0.04
9,878.00	90.94	179.38	6,963.04	-2,943.85	14.54	2,943.85	1.28	0.42	-1.21

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Site:	S32-T2N-R64W (Newnam/Ruhl)	MD Reference:	KB @ 4955.00ft (No KB)
Well:	Ruhl 1B-32H-B264	North Reference:	True
Wellbore:	Hz	Survey Calculation Method:	Minimum Curvature
Design:	Hz	Database:	Casper District

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)	
9,973.00	91.28	179.75	6,961.20	-3,038.83	15.26	3,038.83	0.53	0.36	0.39	
10,069.00	91.61	177.41	6,958.78	-3,134.76	17.64	3,134.76	2.46	0.34	-2.44	
10,163.00	91.01	176.96	6,956.63	-3,228.62	22.25	3,228.62	0.80	-0.64	-0.48	
10,258.00	89.97	175.51	6,955.82	-3,323.41	28.49	3,323.41	1.88	-1.09	-1.53	
10,353.00	92.18	178.21	6,954.04	-3,418.23	33.69	3,418.23	3.67	2.33	2.84	
10,447.00	91.21	183.31	6,951.26	-3,512.15	32.45	3,512.15	5.52	-1.03	5.43	
10,542.00	90.10	182.62	6,950.17	-3,607.02	27.53	3,607.02	1.38	-1.17	-0.73	
10,637.00	90.00	185.02	6,950.09	-3,701.80	21.21	3,701.80	2.53	-0.11	2.53	
10,732.00	89.23	185.48	6,950.73	-3,796.40	12.51	3,796.40	0.94	-0.81	0.48	
10,827.00	88.26	184.56	6,952.81	-3,891.01	4.20	3,891.01	1.41	-1.02	-0.97	
10,921.00	88.56	184.04	6,955.41	-3,984.71	-2.84	3,984.71	0.64	0.32	-0.55	
11,016.00	88.96	182.61	6,957.47	-4,079.52	-8.35	4,079.52	1.56	0.42	-1.51	
11,111.00	90.17	181.91	6,958.19	-4,174.44	-12.10	4,174.44	1.47	1.27	-0.74	
11,206.00	90.77	181.85	6,957.41	-4,269.39	-15.21	4,269.39	0.63	0.63	-0.06	
11,301.00	91.41	181.70	6,955.61	-4,364.33	-18.16	4,364.33	0.69	0.67	-0.16	
11,380.00	91.21	182.19	6,953.80	-4,443.26	-20.84	4,443.26	0.67	-0.25	0.62	
Last SDI MWD Survey										
11,443.00	91.21	182.19	6,952.47	-4,506.20	-23.24	4,506.20	0.00	0.00	0.00	
Projection to TD										

Design Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
244.00	243.99	1.82	0.59	First SDI MWD Survey	
1,151.00	1,141.54	120.00	2.88	Last SDI MWD Surface Survey	
1,277.00	1,265.57	142.16	3.63	First SDI MWD Inter.Survey	
7,332.00	6,946.54	-398.64	6.47	Last SDI MWD Inter. Survey	
7,425.00	6,951.06	-491.44	9.46	First SDI MWD Lateral Survey	
11,380.00	6,953.80	-4,443.26	-20.84	Last SDI MWD Survey	
11,443.00	6,952.47	-4,506.20	-23.24	Projection to TD	

Checked By: _____	Approved By: _____	Date: _____
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JOB NO.: 232793 Company: EnCana Oil & Gas (USA) Inc. LOCATION: Ruhl Pad RIG NAME: H&P 278 STATE: Colorado COUNTY: Weld WELL NAME: Ruhl 1B-32H-B264 Lead Directional : Paul Turner (10972)		Report Time: 2400 API JOB # 05-123-40284 WORK ORDER# 232793 FIELD: DJ Basin Township: 2N Range/Section 64W 32 Company Man Randy / Quiz 2nd Dir Hand : Ben Ezeaku (10012)									
From Tuesday, December 09, 2014 at 0000 to Tuesday, December 09, 2014 at 2400											
DAILY TOTALS		ASSEMBLY TOTALS									
Start Depth	149.00	BHA #	Motor SN / R.S. SN	Slide Ftg	Slide Hrs	Rotate Ftg	Rotate Hrs	Circ Hrs	D & C Hrs	BHA Ftg	Avg ROP
End Depth	877.00	1	836	289.00	1.25	785.00	4.00	5.58	10.83	1,074.00	99.91
Below Rot Hrs.	8.25										
Total Drilled:	728.00										
Avg. Total ROP:	198.55										
Slide Footage:	247.00	Drilling Parameters		Mud Record		Bit Record		Current BHA # 1			
Slide Hours	1.00	WOB:	14	Weight:	0	Bit No:	1	DP 606S SDI 8" Drill Motor 6 1/2" Steel X-Over NM Pony Collar MWD NMDC 6 1/2" Orient Sub 6 1/2" Gap Sub NM Pony Collar NMDC 6 1/2" Steel X-Over			
Avg. Slide ROP:	247.00	Rot Wt:	0	Visc:	0	Model	DP 606S				
Rotate Footage:	481.00	Pick UP:	0	Chlorides:	0	SN.:	7032254				
Rotary Hours	2.67	Slack Off:	0	YP:	0	MFG.	BAKER				
Avg. Rot ROP:	180.38	SPP:	1402	PV:	0	Type	PDC				
Circ Hours	2.83	Flow:	0 - 560	PH:	0	IADC					
Ream Hours	0.00	SPM:	146	GAS:	0	JETS	9-12				
Rotary Hrs%:	72.73	Rot. RPM	0 - 50	SAND:	0	TFA:	0.994				
Slide Hrs%:	27.27	Mot RPM:	0 - 50	WL:	0	Hole ID:	12.25				
Rotary Ftg%:	66.07	Incl. In:	0	SOLID:	0	Bit Hrs:	5.25				
Slide Ftg%:	33.93	Azm. In:	0	BHT°:	0	Bit Ftg:	1074.00				
CASING		Incl. Out:	10.61	Flow T°:	0	PUMPS					
Size	Lb/Ft	MD	Azm. Out:	2.93	Oil %:	0	Liner	0	0		
		COST BREAKDOWN					Stroke	0	0		
							Effic.	95.00%	95.00%		
							Gal/Stk	0.00	0.00		
							BBL/Stk	0.000	0.000		
GENERAL COMMENT											
Start Time	End Time	Hours	Start Depth	End Depth	Delta Depth	ROP	Activity Code	COMMENT			
00:00	15:45	15.75	0	0	0	.00	Standby				
15:45	16:00	0.25	0	0	0	.00	Other				
16:00	16:30	0.50	0	0	0	.00	Change BHA	Change BHA			
16:30	16:45	0.25	149	149	0	.00	TIH	TIH			
16:45	17:00	0.25	149	159	10	40.00	Drilling	TIH			
17:00	17:05	0.08	159	174	15	180.00	Sliding	TIH			
17:05	17:10	0.08	174	186	12	144.00	Drilling	Drilling - (WOB:0;GPM :0;RPM:0)			
17:10	17:15	0.08	186	186	0	.00	Other	Connection			
17:15	17:25	0.17	186	216	30	180.00	Drilling	Drilling - (WOB:0;GPM :0;RPM:0)			
17:25	17:30	0.08	216	216	0	.00	Other	Check Shot @ Connection			
17:30	18:40	1.17	216	216	0	.00	Circulating	Circulating			
18:40	18:45	0.08	216	216	0	.00	MWD Survey	MWD Survey@0' Inc 0° Azm 0.0000001°			
18:45	18:55	0.17	216	236	20	120.00	Sliding	Sliding - (WOB:0;GPM :0;TFO:350M))			
18:55	19:10	0.25	236	307	71	284.00	Drilling	Drilling - (WOB:10;GPM :0;RPM:50)			

Winserve II Daily Report for Tuesday,
December 09, 2014

License: NP2245

Daily Report for JOB#: 232793 - Page 1 of 2

Start Time	End Time	Hours	Start Depth	End Depth	Delta Depth	ROP	Activity Code	COMMENT
19:10	20:15	1.08	307	307	0	.00	Circulating	Circulating
20:15	20:20	0.08	307	307	0	.00	Survey & Conn.	Survey & Conn. @244' Inc 0.9° Azm 17.92°
20:20	20:25	0.08	307	337	30	360.00	Sliding	Sliding - (WOB:0;GPM :0;TFO:350M))
20:25	20:45	0.33	337	397	60	180.00	Drilling	Drilling - (WOB:14;GPM :0;RPM:50)
20:45	21:15	0.50	397	397	0	.00	Circulating	Circulating
21:15	21:20	0.08	397	397	0	.00	Survey & Conn.	Survey & Conn. @334' Inc 1.82° Azm 358.99°
21:20	21:30	0.17	397	447	50	300.00	Sliding	Sliding - (WOB:0;GPM :0;TFO:350M))
21:30	21:45	0.25	447	487	40	160.00	Drilling	Drilling - (WOB:14;GPM :0;RPM:50)
23:25	23:35	0.17	757	804	47	282.00	Sliding	Sliding - (WOB:0;GPM :560;TFO:15L))
23:35	23:50	0.25	804	847	43	172.00	Drilling	Drilling - (WOB:14;GPM :560;RPM:50)
23:50	23:55	0.08	847	847	0	.00	Survey & Conn.	Survey & Conn. @784' Inc 10.61° Azm 2.93°
23:55	24:00	0.08	847	877	30	360.00	Drilling	Drilling - (WOB:14;GPM :560;RPM:50)
21:45	21:50	0.08	487	487	0	.00	Survey & Conn.	Survey & Conn. @424' Inc 3.81° Azm 355.83°
21:50	21:55	0.08	487	512	25	300.00	Sliding	Sliding - (WOB:0;GPM :0;TFO:350M))
21:55	22:20	0.42	512	578	66	158.40	Drilling	Drilling - (WOB:14;GPM :0;RPM:50)
22:20	22:25	0.08	578	578	0	.00	Survey & Conn.	Survey & Conn. @515' Inc 5.53° Azm 359.72°
22:25	22:30	0.08	578	588	10	120.00	Sliding	Sliding - (WOB:0;GPM :560;TFO:350M))
22:30	22:45	0.25	588	668	80	320.00	Drilling	Drilling - (WOB:14;GPM :560;RPM:50)
22:45	22:50	0.08	668	668	0	.00	Survey & Conn.	Survey & Conn. @605' Inc 6.45° Azm 357.59°
22:50	23:00	0.17	668	718	50	300.00	Sliding	Sliding - (WOB:0;GPM :560;TFO:5R))
23:00	23:20	0.33	718	757	39	117.00	Drilling	Drilling - (WOB:14;GPM :560;RPM:50)
23:20	23:25	0.08	757	757	0	.00	Survey & Conn.	Survey & Conn. @694' Inc 7.64° Azm 2.06°

From Wednesday, December 10, 2014 at 0000 to Wednesday, December 10, 2014 at 2400

GENERAL COMMENT	
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Start Time	End Time	Hours	Start Depth	End Depth	Delta Depth	ROP	Activity Code	COMMENT
04:45	05:30	0.75	1223	1223	0	.00	POOH	POOH to 200'
05:30	08:30	3.00	1223	1223	0	.00	Other	Wiper Trip
08:30	09:00	0.50	1223	1223	0	.00	Other	Rack BHA

JOB NO.:	248161	Report Time:	2400	1 of 8
Company:	EnCana Oil & Gas (USA) Inc.	API JOB #	05-123-40281-00	
LOCATION:	Ruhl Pad	WORK ORDER#		
RIG NAME:	H&P 278	FIELD:	Wattenburg	
STATE:	Colorado	Township:	2N	
COUNTY:	Weld	Range/Section	64N	32
WELL NAME:	Ruhl 1B-32H-B264	Company Man	George / Quiz	
Lead Directional :	Paul Turner (10972)	2nd Dir Hand :	Ben Ezeaku (10012)	

From Wednesday, January 21, 2015 at 0000 to Wednesday, January 21, 2015 at 2400

DAILY TOTALS		ASSEMBLY TOTALS									
Start Depth	0.00	BHA #	Motor SN / R.S. SN	Slide Ftg	Slide Hrs	Rotate Ftg	Rotate Hrs	Circ Hrs	D & C Hrs	BHA Ftg	Avg ROP
End Depth	0.00										
Below Rot Hrs.	0.00										
Total Drilled:	0.00	Drilling Parameters		Mud Record		Bit Record		Current BHA # 0			
Avg. Total ROP:	NA										
Slide Footage:	0.00	WOB:	0	Weight:	0	Bit No:					
Slide Hours	0.00	Rot Wt:	0	Visc:	0	Model					
Avg. Slide ROP:	NA	Pick UP:	0	Chlorides:	0	SN.:					
Rotate Footage:	0.00	Slack Off:	0	YP:	0	MFG.					
Rotary Hours	0.00	SPP:	0	PV:	0	Type					
Avg. Rot ROP:	NA	Flow:	0 - 0	PH:	0	IADC					
Circ Hours	0.00	SPM:	0	GAS:	0	JETS					
Ream Hours	0.00	Rot. RPM	-	SAND:	0	TFA:					
Rotary Hrs%:	NA	Mot RPM:	-	WL:	0	Hole ID: N/A					
Slide Hrs%:	NA	Incl. In:	10.31	SOLID:	0	Bit Hrs:					
Rotary Ftg%:	NA	Azm. In:	359.76	BHT°:	0	Bit Ftg:					
Slide Ftg%:	NA	Incl. Out:	0	Flow T°:	0	PUMPS					
Casing		Azm. Out:	0	Oil %:	0	Liner	0	0			
Size	Lb/Ft	MD						Stroke	0	0	
			COST BREAKDOWN					Effic.	95.00%	95.00%	
								Gal/Stk	0.00	0.00	
								BBL/Stk	0.000	0.000	

Start Time	End Time	Hours	Start Depth	End Depth	Delta Depth	ROP	Activity Code	COMMENT
06:55	07:10	0.25	1353	1432	79	316.00	Drilling	Drilling - (WOB:20;GPM :580;RPM:50)
07:10	07:15	0.08	1432	1432	0	.00	Other	Connection
07:15	07:20	0.08	1432	1438	6	72.00	Sliding	Sliding - (WOB:20;GPM :580;TFO:80L))
07:20	07:35	0.25	1438	1523	85	340.00	Drilling	Drilling - (WOB:20;GPM :580;RPM:50)
07:35	07:40	0.08	1523	1523	0	.00	Survey & Conn.	Survey & Conn.@1459' Inc 12.45° Azm 359.17°
07:40	08:20	0.67	1523	1705	182	273.00	Drilling	Drilling - (WOB:20;GPM :580;RPM:50)
08:20	08:25	0.08	1705	1705	0	.00	Survey & Conn.	Survey & Conn.@1641' Inc 12.4° Azm 357.83°
08:25	08:40	0.25	1705	1796	91	364.00	Drilling	Drilling - (WOB:20;GPM :580;RPM:50)
08:40	08:45	0.08	1796	1796	0	.00	Other	Connection
08:45	08:50	0.08	1796	1816	20	240.00	Sliding	Sliding - (WOB:20;GPM :580;TFO:80L))
08:50	09:05	0.25	1816	1886	70	280.00	Drilling	Drilling - (WOB:20;GPM :580;RPM:50)
09:05	09:10	0.08	1886	1886	0	.00	Survey & Conn.	Survey & Conn.@1822' Inc 9.86° Azm 354.59°
09:10	09:15	0.08	1886	1906	20	240.00	Sliding	Sliding - (WOB:20;GPM :580;TFO:80L))
09:15	09:30	0.25	1906	1976	70	280.00	Drilling	Drilling - (WOB:20;GPM :580;RPM:50)
09:30	09:35	0.08	1976	1976	0	.00	Other	Connection
09:35	09:45	0.17	1976	2004	28	168.00	Sliding	Sliding - (WOB:20;GPM :580;TFO:80L))
09:45	09:55	0.17	2004	2067	63	378.00	Drilling	Drilling - (WOB:20;GPM :580;RPM:50)
09:55	10:00	0.08	2067	2067	0	.00	Survey & Conn.	Survey & Conn.@2003' Inc 4.65° Azm 357.2°
10:00	10:10	0.17	2067	2089	22	132.00	Sliding	Sliding - (WOB:20;GPM :580;TFO:160R))
10:10	10:20	0.17	2089	2158	69	414.00	Drilling	Drilling - (WOB:20;GPM :580;RPM:50)
10:20	10:40	0.33	2158	2158	0	.00	Rig Service-Inhole	Rig Service-Inhole
10:40	10:45	0.08	2158	2158	0	.00	Other	Connection
10:45	10:55	0.17	2158	2178	20	120.00	Sliding	Sliding - (WOB:20;GPM :580;TFO:160R))
10:55	11:00	0.08	2178	2247	69	828.00	Drilling	Drilling - (WOB:20;GPM :580;RPM:50)
11:00	11:05	0.08	2247	2247	0	.00	Survey & Conn.	Survey & Conn.@2183' Inc 1.22° Azm 153.65°
11:05	11:40	0.58	2247	2430	183	313.71	Drilling	Drilling - (WOB:20;GPM :580;RPM:50)
11:40	11:50	0.17	2430	2430	0	.00	Survey & Conn.	Survey & Conn.@2366' Inc 1.47° Azm 131.45°
11:50	12:20	0.50	2430	2613	183	366.00	Drilling	Drilling - (WOB:25;GPM :580;RPM:50)
12:20	12:25	0.08	2613	2613	0	.00	Survey & Conn.	Survey & Conn.@2549' Inc 1.73° Azm 130.28°
12:25	12:35	0.17	2613	2627	14	84.00	Sliding	Sliding - (WOB:20;GPM :580;TFO:160R)
12:35	13:10	0.58	2627	2795	168	288.00	Drilling	Drilling - (WOB:25;GPM :580;RPM:50)
13:10	13:25	0.25	2795	2795	0	.00	Rig repair	Rig repair - ST80
13:25	13:30	0.08	2795	2795	0	.00	Survey & Conn.	Survey & Conn.@2731' Inc 0.27° Azm 61.72°
13:30	14:00	0.50	2795	2976	181	362.00	Drilling	Drilling - (WOB:25;GPM :580;RPM:50)
14:00	14:05	0.08	2976	2976	0	.00	Survey & Conn.	Survey & Conn.@2912' Inc 0.33° Azm 98.4°
14:05	14:10	0.08	2976	2984	8	96.00	Sliding	Sliding - (WOB:20;GPM :580;TFO:250M))
14:10	14:45	0.58	2984	3156	172	294.86	Drilling	Drilling - (WOB:25;GPM :580;RPM:50)
14:45	14:50	0.08	3156	3156	0	.00	Survey & Conn.	Survey & Conn.@3092' Inc 0.9° Azm 257.52°
14:50	15:30	0.67	3156	3339	183	274.50	Drilling	Drilling - (WOB:25;GPM :580;RPM:50)
15:30	15:35	0.08	3339	3339	0	.00	Survey & Conn.	Survey & Conn.@3275' Inc 0.84° Azm 259.57°
15:35	16:10	0.58	3339	3521	182	312.00	Drilling	Drilling - (WOB:25;GPM :580;RPM:50)
16:10	16:15	0.08	3521	3521	0	.00	Survey & Conn.	Survey & Conn.@3457' Inc 0.83° Azm 281.68°
16:15	16:55	0.67	3521	3701	180	270.00	Drilling	Drilling - (WOB:25;GPM :580;RPM:50)
16:55	17:00	0.08	3701	3701	0	.00	Survey & Conn.	Survey & Conn.@3637' Inc 0.34° Azm 260.16°
17:00	17:40	0.67	3701	3887	186	279.00	Drilling	Drilling - (WOB:25;GPM :580;RPM:50)
17:40	17:45	0.08	3887	3887	0	.00	Survey & Conn.	Survey & Conn.@3823' Inc 0.65° Azm 73.07°
17:45	18:15	0.50	3887	3982	95	190.00	Drilling	Drilling - (WOB:25;GPM :580;RPM:70)
18:15	18:20	0.08	3982	3990	8	96.00	Sliding	Sliding - (WOB:24;GPM :580;TFO:240M))

Start Time	End Time	Hours	Start Depth	End Depth	Delta Depth	ROP	Activity Code	COMMENT
18:20	18:35	0.25	3990	4077	87	348.00	Drilling	Drilling - (WOB:27;GPM :580;RPM:70)
18:35	18:40	0.08	4077	4077	0	.00	Survey & Conn.	Survey & Conn.@4013' Inc 0.77° Azm 36.73°
18:40	19:05	0.42	4077	4172	95	228.00	Drilling	Drilling - (WOB:27;GPM :580;RPM:70)
19:05	19:10	0.08	4172	4180	8	96.00	Sliding	Sliding - (WOB:24;GPM :580;TFO:240M))
19:10	19:25	0.25	4180	4267	87	348.00	Drilling	Drilling - (WOB:27;GPM :580;RPM:70)
19:25	19:30	0.08	4267	4267	0	.00	Survey & Conn.	Survey & Conn.@4203' Inc 0.54° Azm 253.46°
19:30	19:55	0.42	4267	4361	94	225.60	Drilling	Drilling - (WOB:27;GPM :580;RPM:70)
19:55	20:00	0.08	4361	4367	6	72.00	Sliding	Sliding - (WOB:24;GPM :580;TFO:90M))
20:00	20:15	0.25	4367	4455	88	352.00	Drilling	Drilling - (WOB:27;GPM :580;RPM:70)
20:15	20:25	0.17	4455	4455	0	.00	Survey & Conn.	Survey & Conn.@4391' Inc 1.71° Azm 313.03°
20:25	20:35	0.17	4455	4463	8	48.00	Sliding	Sliding - (WOB:24;GPM :580;TFO:150M))
20:35	21:10	0.58	4463	4550	87	149.14	Drilling	Drilling - (WOB:27;GPM :580;RPM:70)
21:10	21:20	0.17	4550	4559	9	54.00	Sliding	Sliding - (WOB:24;GPM :580;TFO:150M))
21:20	21:40	0.33	4559	4645	86	258.00	Drilling	Drilling - (WOB:27;GPM :580;RPM:70)
21:40	21:45	0.08	4645	4645	0	.00	Survey & Conn.	Survey & Conn.@4581' Inc 1.16° Azm 286.12°
21:45	22:00	0.25	4645	4654	9	36.00	Sliding	Sliding - (WOB:24;GPM :580;TFO:150M))
22:00	22:50	0.83	4654	4748	94	112.80	Drilling	Drilling - (WOB:27;GPM :580;RPM:70)
22:50	23:00	0.17	4748	4748	0	.00	Sliding	Sliding - (WOB:24;GPM :580;TFO:90M))
23:00	23:20	0.33	4748	4835	87	261.00	Drilling	Drilling - (WOB:27;GPM :580;RPM:70)
23:20	23:55	0.58	4835	4930	95	162.86	Drilling	Drilling - (WOB:27;GPM :580;RPM:70)
23:55	24:00	0.08	4930	4930	0	.00	MWD Survey	MWD Survey@4961' Inc 0.93° Azm 325.87°

Report Time:	2400	3 of 8
API JOB #	05-123-40281-00	
WORK ORDER#		
FIELD:	Wattenburg	
Township:	2N	
Range/Section	64N	32
Company Man	George / Quiz	
2nd Dir Hand :	Ben Ezeaku (10012)	

DAILY TOTALS		ASSEMBLY TOTALS									
Start Depth	4930.00	BHA #	Motor SN / R.S. SN	Slide Ftg	Slide Hrs	Rotate Ftg	Rotate Hrs	Circ Hrs	D & C Hrs	BHA Ftg	Avg ROP
End Depth	7223.00	1	6694	1,029.00	16.00	5,146.00	21.92	4.92	42.83	6,185.00	145.53
Below Rot Hrs.	24.00										
Total Drilled:	2293.00	Drilling Parameters		Mud Record		Bit Record		Current BHA # 1			
Avg. Total ROP:	123.95	WOB: 38		Weight: 0		Bit No: 2		Smith 8.75 PDC 6.75 SDI Motor 6 1/4" NMPC 6 1/2" NMDC Flex 6 1/2" Pulser Sub 6 1/2" NMDC Flex 6 1/2" NMPC 6 1/2" Steel X-Over 10 Stnds. DP (30 Jnts) 30 Stnds. (90 Jnts.) HWDP			
Slide Footage:	733.00	Rot Wt: 133		Visc: 0		Model Smith 8.75					
Slide Hours	10.42	Pick UP: 147		Chlorides: 0		SN.: JK0686					
Avg. Slide ROP:	70.37	Slack Off: 118		YP: 0		MFG. SMITH					
Rotate Footage:	1560.00	SPP: 4260		PV: 0		Type PDC					
Rotary Hours	8.08	Flow: 580 - 580		PH: 0		IADC					
Avg. Rot ROP:	192.99	SPM: 150		GAS: 0		JETS 6-13					
Circ Hours	0.92	Rot. RPM 70 - 70		SAND: 0		TFA: 0.777					
Ream Hours	0.00	Mot RPM: 70 - 70		WL: 0		Hole ID: 8.75					
Rotary Hrs%:	43.69	Incl. In: 0.93		SOLID: 0		Bit Hrs: 37.92					
Slide Hrs%:	56.31	Azm. In: 325.87		BHT°: 0		Bit Ftg: 6175.00					
Rotary Ftg%:	68.03	Incl. Out: 70.86		Flow T°: 0		PUMPS					
Slide Ftg%:	31.97	Azm. Out: 176.19		Oil %: 0		Liner 0 0					
Casing		COST BREAKDOWN				Stroke 0 0					
Size	Lb/Ft	MD					Effic. 95.00% 95.00%				
							Gal/Stk 0.00 0.00				
							BBL/Stk 0.000 0.000				

Start Time	End Time	Hours	Start Depth	End Depth	Delta Depth	ROP	Activity Code	COMMENT
00:00	00:20	0.33	4930	5025	95	285.00	Drilling	Drilling - (WOB:27;GPM :580;RPM:70)
00:20	00:25	0.08	5025	5025	0	.00	Survey & Conn.	Survey & Conn.@4961' Inc 0.93° Azm 325.87°
00:25	00:35	0.17	5025	5035	10	60.00	Sliding	Sliding - (WOB:24;GPM :580;TFO:180M))
00:35	01:00	0.42	5035	5120	85	204.00	Drilling	Drilling - (WOB:27;GPM :580;RPM:70)
01:00	01:10	0.17	5120	5130	10	60.00	Sliding	Sliding - (WOB:24;GPM :580;TFO:180M))
01:10	01:30	0.33	5130	5215	85	255.00	Drilling	Drilling - (WOB:27;GPM :580;RPM:70)
01:30	01:40	0.17	5215	5215	0	.00	Survey & Conn.	Survey & Conn.@5151' Inc 1.47° Azm 207.51°
01:40	01:50	0.17	5215	5224	9	54.00	Sliding	Sliding - (WOB:24;GPM :580;TFO:60M))
01:50	02:15	0.42	5224	5310	86	206.40	Drilling	Drilling - (WOB:27;GPM :580;RPM:70)
02:15	02:20	0.08	5310	5316	6	72.00	Sliding	Sliding - (WOB:24;GPM :580;TFO:360M))
02:20	02:45	0.42	5316	5405	89	213.60	Drilling	Drilling - (WOB:27;GPM :580;RPM:70)
02:45	02:55	0.17	5405	5405	0	.00	Survey & Conn.	Survey & Conn.@5341' Inc 0.65° Azm 77.93°
02:55	03:10	0.25	5405	5499	94	376.00	Drilling	Drilling - (WOB:27;GPM :580;RPM:70)
03:10	03:15	0.08	5499	5499	0	.00	MWD Survey	MWD Survey@5530' Inc 0.54° Azm 113.27°

Start Time	End Time	Hours	Start Depth	End Depth	Delta Depth	ROP	Activity Code	COMMENT
03:15	03:30	0.25	5499	5594	95	380.00	Drilling	Drilling - (WOB:27;GPM :580;RPM:70)
03:30	03:35	0.08	5594	5594	0	.00	Survey & Conn.	Survey & Conn.@5530' Inc 0.54° Azm 113.27°
03:35	04:05	0.50	5594	5689	95	190.00	Drilling	Drilling - (WOB:27;GPM :580;RPM:70)
04:05	04:10	0.08	5689	5697	8	96.00	Sliding	Sliding - (WOB:24;GPM :580;TFO:360M))
04:10	04:25	0.25	5697	5784	87	348.00	Drilling	Drilling - (WOB:27;GPM :580;RPM:70)
04:25	04:35	0.17	5784	5784	0	.00	Survey & Conn.	Survey & Conn.@5720' Inc 1.04° Azm 165.35°
04:35	04:45	0.17	5784	5790	6	36.00	Sliding	Sliding - (WOB:24;GPM :580;TFO:330M))
04:45	05:10	0.42	5790	5879	89	213.60	Drilling	Drilling - (WOB:27;GPM :580;RPM:70)
05:10	05:20	0.17	5879	5885	6	36.00	Sliding	Sliding - (WOB:24;GPM :580;TFO:165M))
05:20	05:40	0.33	5885	5974	89	267.00	Drilling	Drilling - (WOB:27;GPM :580;RPM:70)
05:40	05:45	0.08	5974	5974	0	.00	Survey & Conn.	Survey & Conn.@5910' Inc 0.5° Azm 142.45°
05:45	06:00	0.25	5974	5979	5	20.00	Sliding	Sliding - (WOB:24;GPM :580;TFO:160M))
06:00	06:45	0.75	5979	6164	185	246.67	Drilling	Drilling - (WOB:27;GPM :580;RPM:70)
06:45	06:50	0.08	6164	6164	0	.00	Survey & Conn.	Survey & Conn.@6100' Inc 0.13° Azm 153.66°
06:50	07:05	0.25	6164	6258	94	376.00	Drilling	Drilling - (WOB:27;GPM :580;RPM:70)
07:05	07:55	0.83	6258	6258	0	.00	Circulating	Pump Sweep / Trough
07:55	08:00	0.08	6258	6258	0	.00	Survey & Conn.	Survey & Conn.@6194' Inc 0.17° Azm 297.52°
08:00	08:25	0.42	6258	6258	0	.00	Rig repair	Rig repair - Replaced Washed stand
08:25	08:50	0.42	6258	6292	34	81.60	Sliding	Sliding - (WOB:24;GPM :580;TFO:160M))
08:50	08:55	0.08	6292	6305	13	156.00	Drilling	Drilling - (WOB:27;GPM :580;RPM:70)
08:55	09:05	0.17	6305	6305	0	.00	Survey & Conn.	Survey & Conn.@6241' Inc 0.19° Azm 171.58°
09:05	09:20	0.25	6305	6335	30	120.00	Sliding	Sliding - (WOB:24;GPM :580;TFO:180M))
09:20	09:35	0.25	6335	6353	18	72.00	Drilling	Drilling - (WOB:27;GPM :580;RPM:70)
09:35	09:40	0.08	6353	6353	0	.00	Survey & Conn.	Survey & Conn.@6289' Inc 3.71° Azm 177.81°
09:40	10:05	0.42	6353	6384	31	74.40	Sliding	Sliding - (WOB:24;GPM :580;TFO:180M))
10:05	10:15	0.17	6384	6400	16	96.00	Drilling	Drilling - (WOB:27;GPM :580;RPM:70)
10:15	10:20	0.08	6400	6400	0	.00	Survey & Conn.	Survey & Conn.@6336' Inc 7.39° Azm 181.64°
10:20	10:45	0.42	6400	6433	33	79.20	Sliding	Sliding - (WOB:24;GPM :580;TFO:15L))
10:45	11:05	0.33	6433	6448	15	45.00	Drilling	Drilling - (WOB:27;GPM :580;RPM:70)
11:05	11:15	0.17	6448	6448	0	.00	Survey & Conn.	Survey & Conn.@6384' Inc 10.84° Azm 182.57°
11:15	11:50	0.58	6448	6492	44	75.43	Sliding	Sliding - (WOB:38;GPM :580;TFO:15L))
11:50	11:55	0.08	6492	6495	3	36.00	Drilling	Drilling - (WOB:27;GPM :580;RPM:70)
11:55	12:05	0.17	6495	6495	0	.00	Survey & Conn.	Survey & Conn.@6431' Inc 13.7° Azm 179.19°
12:05	12:25	0.33	6495	6543	48	144.00	Sliding	Sliding - (WOB:38;GPM :580;TFO:0L))
12:25	12:35	0.17	6543	6543	0	.00	Survey & Conn.	Survey & Conn.@6479' Inc 17.38° Azm 176.62°
12:35	13:00	0.42	6543	6576	33	79.20	Sliding	Sliding - (WOB:38;GPM :580;TFO:30R))
13:00	13:15	0.25	6576	6576	0	.00	Survey & Conn.	Survey & Conn.@6526' Inc 21.56° Azm 178.2°
13:15	14:00	0.75	6576	6620	44	58.67	Sliding	Sliding - (WOB:38;GPM :580;TFO:0R))
14:00	14:05	0.08	6620	6638	18	216.00	Drilling	Drilling - (WOB:27;GPM :580;RPM:70)
14:05	14:20	0.25	6638	6638	0	.00	Survey & Conn.	Survey & Conn.@6574' Inc 24.77° Azm 182°
14:20	14:50	0.50	6638	6676	38	76.00	Sliding	Sliding - (WOB:38;GPM :580;TFO:0R))
14:50	15:05	0.25	6676	6685	9	36.00	Drilling	Drilling - (WOB:27;GPM :580;RPM:70)
15:05	15:15	0.17	6685	6685	0	.00	Survey & Conn.	Survey & Conn.@6621' Inc 27.61° Azm 182.64°
15:15	15:50	0.58	6685	6733	48	82.29	Sliding	Sliding - (WOB:38;GPM :580;TFO:15L))
15:50	16:05	0.25	6733	6733	0	.00	Survey & Conn.	Survey & Conn.@6668' Inc 31.47° Azm 182.39°
16:05	16:55	0.83	6733	6769	36	43.20	Sliding	Sliding - (WOB:38;GPM :580;TFO:15L))
16:55	17:00	0.08	6769	6780	11	132.00	Drilling	Drilling - (WOB:27;GPM :580;RPM:70)
17:00	17:05	0.08	6780	6780	0	.00	Survey & Conn.	Survey & Conn.@6716' Inc 35.08° Azm 180.05°

Start Time	End Time	Hours	Start Depth	End Depth	Delta Depth	ROP	Activity Code	COMMENT
17:05	17:25	0.33	6780	6820	40	120.00	Sliding	Sliding - (WOB:38;GPM :580;TFO:15L)
17:25	17:35	0.17	6820	6827	7	42.00	Drilling	Drilling - (WOB:27;GPM :580;RPM:70)
17:35	17:50	0.25	6827	6827	0	.00	Survey & Conn.	Survey & Conn.@6763' Inc 40.26° Azm 179.24°
17:50	18:05	0.25	6827	6857	30	120.00	Sliding	Sliding - (WOB:38;GPM :580;TFO:15L))
18:05	18:15	0.17	6857	6874	17	102.00	Drilling	Drilling - (WOB:27;GPM :580;RPM:70)
18:15	18:20	0.08	6874	6874	0	.00	Survey & Conn.	Survey & Conn.@6810' Inc 45.41° Azm 180.07°
18:20	18:45	0.42	6874	6894	20	48.00	Sliding	Sliding - (WOB:38;GPM :580;TFO:0))
18:45	18:55	0.17	6894	6922	28	168.00	Drilling	Drilling - (WOB:27;GPM :580;RPM:70)
18:55	19:05	0.17	6922	6922	0	.00	Survey & Conn.	Survey & Conn.@6858' Inc 49.94° Azm 179.93°
19:05	19:25	0.33	6922	6954	32	96.00	Sliding	Sliding - (WOB:38;GPM :580;TFO:0)
19:25	19:35	0.17	6954	6969	15	90.00	Drilling	Drilling - (WOB:27;GPM :580;RPM:70)
19:35	19:45	0.17	6969	6969	0	.00	Survey & Conn.	Survey & Conn.@6905' Inc 51.9° Azm 180.85°
19:45	20:05	0.33	6969	7004	35	105.00	Sliding	Sliding - (WOB:38;GPM :580;TFO:20L))
20:05	20:20	0.25	7004	7017	13	52.00	Drilling	Drilling - (WOB:27;GPM :580;RPM:70)
20:20	20:25	0.08	7017	7017	0	.00	Survey & Conn.	Survey & Conn.@6953' Inc 56.39° Azm 180.48°
20:25	20:40	0.25	7017	7037	20	80.00	Sliding	Sliding - (WOB:38;GPM :580;TFO:5L))
20:40	20:50	0.17	7037	7064	27	162.00	Drilling	Drilling - (WOB:27;GPM :580;RPM:70)
20:50	21:00	0.17	7064	7064	0	.00	Survey & Conn.	Survey & Conn.@7000' Inc 61.43° Azm 179.93°
21:00	21:30	0.50	7064	7082	18	36.00	Sliding	Sliding - (WOB:38;GPM :580;TFO:5L))
21:30	21:45	0.25	7082	7112	30	120.00	Drilling	Drilling - (WOB:27;GPM :580;RPM:70)
21:45	21:55	0.17	7112	7112	0	.00	Survey & Conn.	Survey & Conn.@7048' Inc 64.91° Azm 177.93°
21:55	22:10	0.25	7112	7130	18	72.00	Sliding	Sliding - (WOB:38;GPM :580;TFO:5R))
22:10	22:25	0.25	7130	7159	29	116.00	Drilling	Drilling - (WOB:27;GPM :580;RPM:70)
22:25	22:35	0.17	7159	7159	0	.00	Survey & Conn.	Survey & Conn.@7095' Inc 67.44° Azm 177.13°
22:35	23:00	0.42	7159	7184	25	60.00	Sliding	Sliding - (WOB:38;GPM :580;TFO:5R))
23:00	23:15	0.25	7184	7207	23	92.00	Drilling	Drilling - (WOB:27;GPM :580;RPM:70)
23:15	23:25	0.17	7207	7207	0	.00	Survey & Conn.	Survey & Conn.@7143' Inc 70.86° Azm 176.19°
23:25	24:00	0.58	7207	7223	16	27.43	Sliding	Sliding - (WOB:38;GPM :580;TFO:5R)

JOB NO.:	248161	Report Time:	2400	4 of 8
Company:	EnCana Oil & Gas (USA) Inc.	API JOB #	05-123-40281-00	
LOCATION:	Ruhl Pad	WORK ORDER#		
RIG NAME:	H&P 278	FIELD:	Wattenburg	
STATE:	Colorado	Township:	2N	
COUNTY:	Weld	Range/Section	64N	32
WELL NAME:	Ruhl 1B-32H-B264	Company Man	George / Quiz	
Lead Directional :	Paul Turner (10972)	2nd Dir Hand :	Ben Ezeaku (10012)	

From Saturday, January 24, 2015 at 0000 to Saturday, January 24, 2015 at 2400

DAILY TOTALS		ASSEMBLY TOTALS																		
Start Depth	7223.00	BHA #	Motor SN / R.S. SN	Slide Ftg	Slide Hrs	Rotate Ftg	Rotate Hrs	Circ Hrs	D & C Hrs	BHA Ftg	Avg ROP									
End Depth	7408.00	1	6694	1,029.00	16.00	5,146.00	21.92	4.92	42.83	6,185.00	145.53									
Below Rot Hrs.	12.17																			
Total Drilled:	185.00	<div>Drilling Parameters</div> <div>WOB: 27</div> <div>Rot Wt: 133</div> <div>Pick UP: 147</div> <div>Slack Off: 118</div> <div>SPP: 4260</div> <div>Flow: 580 - 580</div> <div>SPM: 150</div> <div>Rot. RPM 70 - 70</div> <div>Mot RPM: 70 - 70</div> <div>Incl. In: 70.86</div> <div>Azm. In: 176.19</div> <div>Incl. Out: 0</div> <div>Azm. Out: 0</div>		<div>Mud Record</div> <div>Weight: 0</div> <div>Visc: 0</div> <div>Chlorides: 0</div> <div>YP: 0</div> <div>PV: 0</div> <div>PH: 0</div> <div>GAS: 0</div> <div>SAND: 0</div> <div>WL: 0</div> <div>SOLID: 0</div> <div>BHT°: 0</div> <div>Flow T°: 0</div> <div>Oil %: 0</div>		<div>Bit Record</div> <div>Bit No: 2</div> <div>Model Smith 8.75</div> <div>SN.: JK0686</div> <div>MFG. SMITH</div> <div>Type PDC</div> <div>IADC</div> <div>JETS 6-13</div> <div>TFA: 0.777</div> <div>Hole ID: 8.75</div> <div>Bit Hrs: 37.92</div> <div>Bit Ftg: 6175.00</div>		<div>Current BHA # 1</div> <div>Smith 8.75 PDC</div> <div>6.75 SDI Motor</div> <div>6 1/4" NMPC</div> <div>6 1/2" NMDC Flex</div> <div>6 1/2" Pulser Sub</div> <div>6 1/2" NMDC Flex</div> <div>6 1/2" NMPC</div> <div>6 1/2" Steel X-Over</div> <div>10 Stnds. DP (30 Jnts)</div> <div>30 Stnds. (90 Jnts.) HWDP</div>												
Avg. Total ROP:	41.89																			
Slide Footage:	98.00																			
Slide Hours	3.50																			
Avg. Slide ROP:	28.00																			
Rotate Footage:	87.00																			
Rotary Hours	0.92																			
Avg. Rot ROP:	94.91																			
Circ Hours	2.92																			
Ream Hours	0.00																			
Rotary Hrs%:	20.75																			
Slide Hrs%:	79.25																			
Rotary Ftg%:	47.03																			
Slide Ftg%:	52.97																			
CASING																				
Size	Lb/Ft	MD																		
		COST BREAKDOWN																		

Start Time	End Time	Hours	Start Depth	End Depth	Delta Depth	ROP	Activity Code	COMMENT
12:00	12:10	0.17	7408	7408	0	.00	Other	JSA with Rig Crew
12:10	24:00	11.83	7408	7408	0	.00	Standby	Standby

JOB NO.:248161

Company:EnCana Oil & Gas (USA) Inc.

LOCATION:Ruhl Pad

RIG NAME:H&P 278

STATE:Colorado

COUNTY:Weld

WELL NAME:Ruhl 1B-32H-B264

Lead Directional : Paul Turner (10972)

Report Time:2400

API JOB #05-123-40281-00

WORK ORDER#

FIELD:Wattenburg

Township:2N

Range/Section64N32

Company ManGeorge / Quiz

2nd Dir Hand : Ben Ezeaku (10012)

5 of 8

From Sunday, January 25, 2015 at 0000 to Sunday, January 25, 2015 at 2400

DAILY TOTALS

Start Depth0.00

End Depth0.00

Below Rot Hrs.5.50

Total Drilled:0.00

Avg. Total ROP:NA

Slide Footage:0.00

Slide Hours0.00

Avg. Slide ROP:NA

Rotate Footage:0.00

Rotary Hours0.00

Avg. Rot ROP:NA

Circ Hours0.00

Ream Hours0.00

Rotary Hrs%:NA

Slide Hrs%:NA

Rotary Ftg%:NA

Slide Ftg%:NA

CASING

SizeLb/FtMD

ASSEMBLY TOTALS

BHA #2

Motor SN / R.S. SN262

Slide Ftg256.00

Slide Hrs9.42

Rotate Ftg3,779.00

Rotate Hrs16.42

Circ Hrs10.25

D & C Hrs36.08

BHA Ftg4,035.00

Avg ROP112.34

Drilling Parameters

WOB:27

Rot Wt:133

Pick UP:147

Slack Off:118

SPP:4260

Flow:580 - 580

SPM:150

Rot. RPM-

Mot RPM:-

Incl. In:0

Azm. In:0

Incl. Out:0

Azm. Out:0

Mud Record

Weight:0

Visc:0

Chlorides:0

YP:0

PV:0

PH:0

GAS:0

SAND:0

WL:0

SOLID:0

BHT°:0

Flow T°:0

Oil %:0

Bit Record

Bit No:2

ModelUlterra 6.125 ;

SN.:27819

MFG.Ulterra

TypePDC

IADC

JETS5-15

TFA:0.862

Hole ID:6.125

Bit Hrs:25.83

Bit Ftg:4035.00

PUMPS

Liner00

Stroke00

Effic.95.00%95.00%

Gal/Stk0.000.00

BBL/Stk0.0000.000

Current BHA # 2

Ulterra 6.125 ; U516S

Hunting 5" 5/6 8.3

4.75 NMPony

4.75 NMDC

4 3/4" Pulser Sub

4.75 NMDC

4.75 NMPony

5" Steel XO

1 Stnd. HWDP (3 Jnts.)

18 Stnds. DP (54 Jnts.)

NOV Agotator

4 Stnds. (12 Jnts.) 4" DP

1 Jnt 4" HWDP

14 Stnds. (42 Jnts.) 4" DP

1 Jnt. 4" HWDP

14 Stnds. DP (42 Jnts.)

30 Stnds. (90 Jnts.) HWDP

COST BREAKDOWN

GENERAL COMMENT

Start Time	End Time	Hours	Start Depth	End Depth	Delta Depth	ROP	Activity Code	COMMENT
00:00	18:30	18.50	7408	7408	0	.00	Standby	Standby
18:30	18:40	0.17	7408	7408	0	.00	Other	JSA with Rig Crew
18:40	20:20	1.67	7408	7408	0	.00	Change BHA	Change BHA
20:20	21:00	0.67	7408	7408	0	.00	TIH	TIH to 213'
21:00	21:10	0.17	7408	7408	0	.00	Other	Surface Test MWD Tool - Successful
21:10	22:30	1.33	7408	7408	0	.00	Other	TIH to 1948' Test Agitator - Successful
22:30	24:00	1.50	7408	7408	0	.00	TIH	TIH to 5331"

Winserve II Daily Report for Sunday, January 25, 2015

License: NP2245

Daily Report for JOB#: 248161 - Page 1 of 1

Report Time:	2400	6 of 8
API JOB #	05-123-40281-00	
WORK ORDER#		
FIELD:	Wattenburg	
Township:	2N	
Range/Section	64N	32
Company Man	George / Quiz	
2nd Dir Hand :	Paul Turner (10972)	

From Monday, January 26, 2015 at 0000 to Monday, January 26, 2015 at 2400

DAILY TOTALS			ASSEMBLY TOTALS									
Start Depth	7408.00		BHA #	Motor SN / R.S. SN	Slide Ftg	Slide Hrs	Rotate Ftg	Rotate Hrs	Circ Hrs	D & C Hrs	BHA Ftg	Avg ROP
End Depth	10416.00		2	262	256.00	9.42	3,779.00	16.42	10.25	36.08	4,035.00	112.34
Below Rot Hrs.	24.00											
Total Drilled:	3008.00		Drilling Parameters		Mud Record		Bit Record		Current BHA # 2			
Avg. Total ROP:	167.11											
Slide Footage:	249.00		WOB:		35	Weight:	0	Model	Ulterra 6.125 ; U516S			
Slide Hours	5.67		Rot Wt:		140	Visc:	0	SN.:	Hunting 5" 5/6 8.3			
Avg. Slide ROP:	43.94		Pick UP:		183	Chlorides:	0	MFG.	4.75 NMPony			
Rotate Footage:	2759.00		Slack Off:		100	YP:	0	Type	4 3/4" Pulser Sub			
Rotary Hours	12.33		SPP:		4390	PV:	0	IADC	4.75 NMDC			
Avg. Rot ROP:	223.70		Flow:		0 - 300	PH:	0	JETS	4.75 NMPony			
Circ Hours	1.00		SPM:		75	GAS:	0	TFA:	5" Steel XO			
Ream Hours	0.00		Rot. RPM		70 - 90	SAND:	0	Hole ID:	1 Std. HWDP (3 Jnts.)			
Rotary Hrs%:	68.52		Mot RPM:		90 - 90	WL:	0	Bit Hrs:	18 Stnds. DP (54 Jnts.)			
Slide Hrs%:	31.48		Incl. In:		0	SOLID:	0	Bit Ftg:	NOV Agotator			
Rotary Ftg%:	91.72		Azm. In:		0	BHT°:	0	PUMPS		4 Stnds. (12 Jnts.) 4" DP		
Slide Ftg%:	8.28		Incl. Out:		89.97	Flow T°:	0			1 Jnt 4" HWDP		
Casing			Azm. Out:		175.51	Oil %:	0	Liner	0	0	14 Stnds. DP (42 Jnts.)	
Size	Lb/Ft	MD	COST BREAKDOWN				Effic.		95.00%	95.00%	30 Stnds. (90 Jnts.) HWDP	
								Gal/Stk	0.00	0.00		
								BBL/Stk	0.000	0.000		

GENERAL COMMENT

- Target Change - Target is now Plan #2 -5'TVD as per goe email @ 1400

Start Time	End Time	Hours	Start Depth	End Depth	Delta Depth	ROP	Activity Code	COMMENT
00:00	00:40	0.67	7408	7408	0	.00	TIH	TIH
00:40	01:45	1.08	7408	7408	0	.00	Drilling Cement	Drill out Float @ 7344' ; Shoe @ 7391'
01:45	02:00	0.25	7408	7418	10	40.00	Drilling	Drilling - (WOB:18;GPM :260;RPM:70)
02:00	02:45	0.75	7418	7418	0	.00	Circulating	Circulating BU
02:45	03:35	0.83	7418	7418	0	.00	Other	FIT Test
03:35	03:40	0.08	7418	7418	0	.00	MWD Survey	MWD Survey@7332' Inc 84.02° Azm 178.05°
03:40	03:55	0.25	7418	7488	70	280.00	Drilling	Drilling - (WOB:27;GPM :270;RPM:90)
03:55	04:10	0.25	7488	7488	0	.00	Survey & Conn.	Survey & Conn.@7425' Inc 90.4° Azm 178.25°
04:10	04:30	0.33	7488	7578	90	270.00	Drilling	Drilling - (WOB:28;GPM :270;RPM:90)
04:30	04:40	0.17	7578	7578	0	.00	Survey & Conn.	Survey & Conn.@7515' Inc 89.09° Azm 177.28°
04:40	04:45	0.08	7578	7585	7	84.00	Sliding	Sliding - (WOB:38;GPM :300;TFO:65R))
04:45	05:10	0.42	7585	7669	84	201.60	Drilling	Drilling - (WOB:28;GPM :300;RPM:90)
05:10	05:15	0.08	7669	7669	0	.00	Survey & Conn.	Survey & Conn.@7606' Inc 88.66° Azm 177.42°
05:15	05:30	0.25	7669	7684	15	60.00	Sliding	Sliding - (WOB:38;GPM :300;TFO:65R))

Start Time	End Time	Hours	Start Depth	End Depth	Delta Depth	ROP	Activity Code	COMMENT
05:30	05:55	0.42	7684	7760	76	182.40	Drilling	Drilling - (WOB:28;GPM :300;RPM:90)
05:55	06:05	0.17	7760	7760	0	.00	Survey & Conn.	Survey & Conn.@7697' Inc 89.53° Azm 178.23°
06:05	06:15	0.17	7760	7772	12	72.00	Sliding	Sliding - (WOB:38;GPM :300;TFO:90R))
06:15	06:35	0.33	7772	7855	83	249.00	Drilling	Drilling - (WOB:35;GPM :300;RPM:90)
06:35	06:40	0.08	7855	7855	0	.00	Survey & Conn.	Survey & Conn.@7792' Inc 90.03° Azm 179.83°
06:40	07:00	0.33	7855	7950	95	285.00	Drilling	Drilling - (WOB:35;GPM :300;RPM:90)
07:00	07:05	0.08	7950	7950	0	.00	Survey & Conn.	Survey & Conn.@7887' Inc 90.03° Azm 179.24°
07:05	07:20	0.25	7950	7965	15	60.00	Sliding	Sliding - (WOB:38;GPM :300;TFO:90R)
07:20	07:40	0.33	7965	8045	80	240.00	Drilling	Drilling - (WOB:35;GPM :300;RPM:90)
07:40	07:50	0.17	8045	8045	0	.00	Survey & Conn.	Survey & Conn.@7982' Inc 90.6° Azm 180.22°
07:50	08:10	0.33	8045	8140	95	285.00	Drilling	Drilling - (WOB:35;GPM :300;RPM:90)
08:10	08:15	0.08	8140	8140	0	.00	Survey & Conn.	Survey & Conn.@8077' Inc 90.74° Azm 180.05°
08:15	08:35	0.33	8140	8234	94	282.00	Drilling	Drilling - (WOB:35;GPM :300;RPM:90)
08:35	08:40	0.08	8234	8234	0	.00	Survey & Conn.	Survey & Conn.@8171' Inc 90.4° Azm 179.97°
08:40	09:05	0.42	8234	8329	95	228.00	Drilling	Drilling - (WOB:35;GPM :300;RPM:90)
09:05	09:10	0.08	8329	8329	0	.00	Survey & Conn.	Survey & Conn.@8266' Inc 90.03° Azm 179.85°
09:10	09:35	0.42	8329	8423	94	225.60	Drilling	Drilling - (WOB:35;GPM :300;RPM:90)
09:35	09:40	0.08	8423	8423	0	.00	Survey & Conn.	Survey & Conn.@8360' Inc 89.46° Azm 180.1°
09:40	10:05	0.42	8423	8518	95	228.00	Drilling	Drilling - (WOB:35;GPM :300;RPM:90)
10:05	10:10	0.08	8518	8518	0	.00	Survey & Conn.	Survey & Conn.@8455' Inc 89.4° Azm 180.25°
10:10	10:30	0.33	8518	8613	95	285.00	Drilling	Drilling - (WOB:35;GPM :300;RPM:90)
10:30	10:35	0.08	8613	8613	0	.00	Survey & Conn.	Survey & Conn.@8550' Inc 89.26° Azm 180.31°
10:35	11:00	0.42	8613	8707	94	225.60	Drilling	Drilling - (WOB:35;GPM :300;RPM:90)
11:00	11:05	0.08	8707	8707	0	.00	Survey & Conn.	Survey & Conn.@8644' Inc 88.89° Azm 180.63°
11:05	11:25	0.33	8707	8802	95	285.00	Drilling	Drilling - (WOB:35;GPM :300;RPM:90)
11:25	11:30	0.08	8802	8802	0	.00	Survey & Conn.	Survey & Conn.@8739' Inc 87.95° Azm 180.78°
11:30	11:40	0.17	8802	8817	15	90.00	Sliding	Sliding - (WOB:38;GPM :300;TFO:5R))
11:40	12:05	0.42	8817	8898	81	194.40	Drilling	Drilling - (WOB:35;GPM :300;RPM:90)
12:05	12:10	0.08	8898	8898	0	.00	Survey & Conn.	Survey & Conn.@8835' Inc 88.69° Azm 180.76°
12:10	12:20	0.17	8898	8908	10	60.00	Sliding	Sliding - (WOB:38;GPM :300;TFO:5R))
12:20	12:40	0.33	8908	8993	85	255.00	Drilling	Drilling - (WOB:35;GPM :300;RPM:90)
12:40	12:45	0.08	8993	8993	0	.00	Survey & Conn.	Survey & Conn.@8930' Inc 88.52° Azm 180.77°
12:45	12:55	0.17	8993	9008	15	90.00	Sliding	Sliding - (WOB:38;GPM :300;TFO:5R))
12:55	13:15	0.33	9008	9088	80	240.00	Drilling	Drilling - (WOB:35;GPM :300;RPM:90)
13:15	13:20	0.08	9088	9088	0	.00	Survey & Conn.	Survey & Conn.@9025' Inc 88.96° Azm 180.38°
13:20	13:30	0.17	9088	9103	15	90.00	Sliding	Sliding - (WOB:38;GPM :300;TFO:5R))
13:30	13:50	0.33	9103	9182	79	237.00	Drilling	Drilling - (WOB:35;GPM :300;RPM:90)
13:50	13:55	0.08	9182	9182	0	.00	Survey & Conn.	Survey & Conn.@9119' Inc 90° Azm 181.03°
13:55	14:05	0.17	9182	9192	10	60.00	Sliding	Sliding - (WOB:38;GPM :300;TFO:5R))
14:05	14:30	0.42	9192	9277	85	204.00	Drilling	Drilling - (WOB:35;GPM :300;RPM:90)
14:30	14:35	0.08	9277	9277	0	.00	Survey & Conn.	Survey & Conn.@9214' Inc 90.57° Azm 179.8°
14:35	15:00	0.42	9277	9372	95	228.00	Drilling	Drilling - (WOB:35;GPM :300;RPM:90)
15:00	15:05	0.08	9372	9372	0	.00	Survey & Conn.	Survey & Conn.@9309' Inc 89.16° Azm 180.66°
15:05	15:20	0.25	9372	9390	18	72.00	Sliding	Sliding - (WOB:38;GPM :300;TFO:15L))
15:20	15:40	0.33	9390	9467	77	231.00	Drilling	Drilling - (WOB:35;GPM :300;RPM:90)
15:40	15:45	0.08	9467	9467	0	.00	Survey & Conn.	Survey & Conn.@9404' Inc 89.46° Azm 180.11°
15:45	15:55	0.17	9467	9482	15	90.00	Sliding	Sliding - (WOB:38;GPM :300;TFO:15L)
15:55	16:20	0.42	9482	9562	80	192.00	Drilling	Drilling - (WOB:35;GPM :300;RPM:90)

Start Time	End Time	Hours	Start Depth	End Depth	Delta Depth	ROP	Activity Code	COMMENT
16:20	16:25	0.08	9562	9562	0	.00	Survey & Conn.	Survey & Conn.@9499' Inc 89.63° Azm 179.6°
16:25	16:40	0.25	9562	9582	20	80.00	Sliding	Sliding - (WOB:38;GPM :300;TFO:15L))
16:40	17:00	0.33	9582	9657	75	225.00	Drilling	Drilling - (WOB:35;GPM :300;RPM:90)
17:00	17:05	0.08	9657	9657	0	.00	Survey & Conn.	Survey & Conn.@9594' Inc 91.04° Azm 179.44°
17:05	17:15	0.17	9657	9665	8	48.00	Sliding	Sliding - (WOB:38;GPM :300;TFO:15R))
17:15	17:30	0.25	9665	9752	87	348.00	Drilling	Drilling - (WOB:35;GPM :300;RPM:90)
17:30	17:40	0.17	9752	9752	0	.00	Circulating	Rig Service
17:40	17:45	0.08	9752	9752	0	.00	Survey & Conn.	Survey & Conn.@9689' Inc 91.38° Azm 180.57°
17:45	18:00	0.25	9752	9846	94	376.00	Drilling	Drilling - (WOB:35;GPM :300;RPM:90)
18:00	18:10	0.17	9846	9846	0	.00	Survey & Conn.	Survey & Conn.@9783' Inc 90.54° Azm 180.53°
18:10	18:45	0.58	9846	9856	10	17.14	Sliding	Sliding - (WOB:38;GPM :300;TFO:0))
18:45	19:00	0.25	9856	9941	85	340.00	Drilling	Drilling - (WOB:35;GPM :300;RPM:90)
19:00	19:05	0.08	9941	9941	0	.00	Survey & Conn.	Survey & Conn.@9878' Inc 90.94° Azm 179.38°
19:05	19:30	0.42	9941	10036	95	228.00	Drilling	Drilling - (WOB:35;GPM :300;RPM:90)
19:30	19:35	0.08	10036	10036	0	.00	Survey & Conn.	Survey & Conn.@9973' Inc 91.28° Azm 179.75°
19:35	19:55	0.33	10036	10132	96	288.00	Drilling	Drilling - (WOB:35;GPM :300;RPM:90)
19:55	20:00	0.08	10132	10132	0	.00	Survey & Conn.	Survey & Conn.@10069' Inc 91.61° Azm 177.41°
20:00	20:45	0.75	10132	10148	16	21.33	Sliding	Sliding - (WOB:38;GPM :300;TFO:60R))
20:45	21:00	0.25	10148	10226	78	312.00	Drilling	Drilling - (WOB:35;GPM :300;RPM:90)
21:00	21:05	0.08	10226	10226	0	.00	Survey & Conn.	Survey & Conn.@10163' Inc 91.01° Azm 176.96°
21:05	21:25	0.33	10226	10234	8	24.00	Sliding	Sliding - (WOB:38;GPM :300;TFO:110R))
21:25	21:40	0.25	10234	10234	0	.00	Other	Switch Pumps
21:40	21:50	0.17	10234	10240	6	36.00	Sliding	Sliding - (WOB:38;GPM :300;TFO:110R))
21:50	22:05	0.25	10240	10321	81	324.00	Drilling	Drilling - (WOB:35;GPM :285;RPM:90)
22:05	22:15	0.17	10321	10321	0	.00	Survey & Conn.	Survey & Conn.@10258' Inc 89.97° Azm 175.51°
22:15	23:30	1.25	10321	10343	22	17.60	Sliding	Sliding - (WOB:38;GPM :300;TFO:90))
23:30	23:40	0.17	10343	10368	25	150.00	Drilling	Drilling - (WOB:35;GPM :285;RPM:90)
23:40	23:50	0.17	10368	10380	12	72.00	Sliding	Sliding - (WOB:38;GPM :300;TFO:120))
23:50	23:55	0.08	10380	10416	36	432.00	Drilling	Drilling - (WOB:35;GPM :285;RPM:90)
23:55	24:00	0.08	10416	10416	0	.00	Survey & Conn.	Survey & Conn.@10353' Inc 92.18° Azm 178.21°

JOB NO.: 248161 Company: EnCana Oil & Gas (USA) Inc. LOCATION: Ruhl Pad RIG NAME: H&P 278 STATE: Colorado COUNTY: Weld WELL NAME: Ruhl 1B-32H-B264 Lead Directional : Steven Schlamp (10800)		Report Time: 2400 API JOB # 05-123-40281-00 WORK ORDER# FIELD: Wattenburg Township: 2N Range/Section 64N 32 Company Man George / Quiz 2nd Dir Hand : Paul Turner (10972)	
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From Tuesday, January 27, 2015 at 0000 to Tuesday, January 27, 2015 at 2400											
DAILY TOTALS		ASSEMBLY TOTALS									
Start Depth	10416.00	BHA #	Motor SN / R.S. SN	Slide Ftg	Slide Hrs	Rotate Ftg	Rotate Hrs	Circ Hrs	D & C Hrs	BHA Ftg	Avg ROP
End Depth	11443.00	2	262	256.00	9.42	3,779.00	16.42	10.25	36.08	4,035.00	112.34
Below Rot Hrs.	23.00										
Total Drilled:	1027.00										
Avg. Total ROP:	115.18										
Slide Footage:	7.00	Drilling Parameters		Mud Record		Bit Record		Current BHA # 2			
Slide Hours	3.75	WOB: 33		Weight: 0		Bit No: 2		Ulterra 6.125 ; U516S Hunting 5" 5/6 8.3 4.75 NMPony 4.75 NMDC 4 3/4" Pulser Sub 4.75 NMDC 4.75 NMPony 5" Steel XO 1 Stnd. HWDP (3 Jnts.) 18 Stnds. DP (54 Jnts.) NOV Agotator 4 Stnds. (12 Jnts.) 4" DP 1 Jnt 4" HWDP 14 Stnds. (42 Jnts.) 4" DP 1 Jnt. 4" HWDP 14 Stnds. DP (42 Jnts.) 30 Stnds. (90 Jnts.) HWDP			
Avg. Slide ROP:	1.87	Rot Wt: 138		Visc: 0		Model: Ulterra 6.125 ;					
Rotate Footage:	1020.00	Pick UP: 224		Chlorides: 0		SN.: 27819					
Rotary Hours	5.17	Slack Off: 79		YP: 0		MFG. Ulterra					
Avg. Rot ROP:	197.42	SPP: 4400		PV: 0		Type PDC					
Circ Hours	8.17	Flow: 285 - 300		PH: 0		IADC					
Ream Hours	0.00	SPM: 75		GAS: 0		JETS 5-15					
Rotary Hrs%:	57.94	Rot. RPM 90 - 90		SAND: 0		TFA: 0.862					
Slide Hrs%:	42.06	Mot RPM: 90 - 90		WL: 0		Hole ID: 6.125					
Rotary Ftg%:	99.32	Incl. In: 89.97		SOLID: 0		Bit Hrs: 25.83					
Slide Ftg%:	.68	Azm. In: 175.51		BHT°: 0		Bit Ftg: 4035.00					
CASING		Incl. Out: 91.21		Flow T°: 0		PUMPS					
Size	Lb/Ft	MD	Azm. Out: 182.19		Oil %: 0		Liner 0 0				
						Stroke 0 0					
						Effic. 95.00% 95.00%					
						Gal/Stk 0.00 0.00					
						BBL/Stk 0.000 0.000					
COST BREAKDOWN											
GENERAL COMMENT											

Start Time	End Time	Hours	Start Depth	End Depth	Delta Depth	ROP	Activity Code	COMMENT
00:00	00:50	0.83	10416	10436	20	24.00	Sliding	Sliding - (WOB:38;GPM :300;TFO:135R))
00:50	01:10	0.33	10436	10466	30	90.00	Drilling	Drilling - (WOB:35;GPM :285;RPM:90)
01:10	01:15	0.08	10466	10466	0	.00	Circulating	Check Shot
01:15	01:40	0.42	10466	10474	8	19.20	Sliding	Sliding - (WOB:38;GPM :300;TFO:135R))
01:40	01:50	0.17	10474	10510	36	216.00	Drilling	Drilling - (WOB:35;GPM :285;RPM:90)
01:50	02:00	0.17	10510	10510	0	.00	Survey & Conn.	Survey & Conn.@10447' Inc 91.21° Azm 183.31°
02:00	02:25	0.42	10510	10557	47	112.80	Drilling	Drilling - (WOB:35;GPM :285;RPM:90)
02:25	02:30	0.08	10557	10557	0	.00	Circulating	Check Shot
02:30	02:45	0.25	10557	10605	48	192.00	Drilling	Drilling - (WOB:35;GPM :285;RPM:90)
02:45	04:15	1.50	10605	10605	0	.00	Circulating	Ream Four Stands
04:15	04:20	0.08	10605	10605	0	.00	Survey & Conn.	Survey & Conn.@10542' Inc 90.1° Azm 182.62°
04:20	05:10	0.83	10605	10617	12	14.40	Sliding	Sliding - (WOB:38;GPM :300;TFO:105R))
05:10	05:35	0.42	10617	10700	83	199.20	Drilling	Drilling - (WOB:35;GPM :285;RPM:90)
05:35	05:40	0.08	10700	10700	0	.00	Survey & Conn.	Survey & Conn.@10637' Inc 90° Azm 185.02°

Winserve II Daily Report for Tuesday,
 January 27, 2015

License: NP2245

Daily Report for JOB#: 248161 - Page 1 of 2

Start Time	End Time	Hours	Start Depth	End Depth	Delta Depth	ROP	Activity Code	COMMENT
05:40	06:05	0.42	10700	10795	95	228.00	Drilling	Drilling - (WOB:35;GPM :285;RPM:90)
06:05	06:10	0.08	10795	10795	0	.00	Survey & Conn.	Survey & Conn.@10732' Inc 89.23° Azm 185.48°
06:10	06:30	0.33	10795	10807	12	36.00	Sliding	Sliding - (WOB:38;GPM :300;TFO:75L))
06:30	06:55	0.42	10807	10890	83	199.20	Drilling	Drilling - (WOB:33;GPM :287;RPM:90)
06:55	07:00	0.08	10890	10890	0	.00	Survey & Conn.	Survey & Conn.@10827' Inc 88.26° Azm 184.56°
07:00	07:25	0.42	10890	10906	16	38.40	Sliding	Sliding - (WOB:38;GPM :300;TFO:75L))
07:25	07:45	0.33	10906	10984	78	234.00	Drilling	Drilling - (WOB:33;GPM :287;RPM:90)
07:45	07:50	0.08	10984	10984	0	.00	Survey & Conn.	Survey & Conn.@10921' Inc 88.56° Azm 184.04°
07:50	08:20	0.50	10984	10903	-81	-162.00	Sliding	Sliding - (WOB:38;GPM :300;TFO:30L))
08:20	08:50	0.50	10903	11079	176	352.00	Drilling	Drilling - (WOB:33;GPM :287;RPM:90)
08:50	08:55	0.08	11079	11079	0	.00	Survey & Conn.	Survey & Conn.@11016' Inc 88.96° Azm 182.61°
08:55	09:20	0.42	11079	11099	20	48.00	Sliding	Sliding - (WOB:38;GPM :300;TFO:30L))
09:20	09:45	0.42	11099	11174	75	180.00	Drilling	Drilling - (WOB:33;GPM :287;RPM:90)
09:45	09:50	0.08	11174	11174	0	.00	Survey & Conn.	Survey & Conn.@11111' Inc 90.17° Azm 181.91°
09:50	10:25	0.58	11174	11269	95	162.86	Drilling	Drilling - (WOB:33;GPM :287;RPM:90)
10:25	10:30	0.08	11269	11269	0	.00	Survey & Conn.	Survey & Conn.@11206' Inc 90.77° Azm 181.85°
10:30	10:55	0.42	11269	11364	95	228.00	Drilling	Drilling - (WOB:33;GPM :287;RPM:90)
10:55	11:00	0.08	11364	11364	0	.00	Survey & Conn.	Survey & Conn.@11301' Inc 91.41° Azm 181.7°
11:00	11:30	0.50	11364	11443	79	158.00	Drilling	Drilling - (WOB:33;GPM :287;RPM:90)
11:30	11:35	0.08	11443	11443	0	.00	MWD Survey	MWD Survey@11380' Inc 91.21° Azm 182.19°
11:35	18:00	6.42	11443	11443	0	.00	Circulating	Circulating
18:00	22:30	4.50	11443	11443	0	.00	TIH	TIH
22:30	23:00	0.50	11443	11443	0	.00	Change BHA	Rack BHA
23:00	24:00	1.00	11443	11443	0	.00	Standby	Standby

JOB NO.: 248161
Company: EnCana Oil & Gas (USA) Inc.
LOCATION: Ruhl Pad
RIG NAME: H&P 278
STATE: Colorado
COUNTY: Weld
WELL NAME: Ruhl 1B-32H-B264
Lead Directional : Steven Schlamp (10800)

Report Time: 2400 **8 of 8**
API JOB # 05-123-40281-00
WORK ORDER#
FIELD: Wattenburg
Township: 2N
Range/Section 64N 32
Company Man George / Quiz
2nd Dir Hand : Paul Turner (10972)

From Wednesday, January 28, 2015 at 0000 to Wednesday, January 28, 2015 at 2400

DAILY TOTALS		ASSEMBLY TOTALS									
Start Depth	10416.00	BHA #	Motor SN / R.S. SN	Slide Ftg	Slide Hrs	Rotate Ftg	Rotate Hrs	Circ Hrs	D & C Hrs	BHA Ftg	Avg ROP
End Depth	11443.00										
Below Rot Hrs.	23.00										
Total Drilled:	1027.00	Drilling Parameters		Mud Record		Bit Record			Current BHA # 0		
Avg. Total ROP:	115.18										
Slide Footage:	7.00	WOB: 33		Weight: 0		Bit No:					
Slide Hours	3.75	Rot Wt: 138		Visc: 0		Model					
Avg. Slide ROP:	1.87	Pick UP: 224		Chlorides: 0		SN.:					
Rotate Footage:	1020.00	Slack Off: 79		YP: 0		MFG.					
Rotary Hours	5.17	SPP: 4400		PV: 0		Type					
Avg. Rot ROP:	197.42	Flow: 287 - 287		PH: 0		IADC					
Circ Hours	8.17	SPM: 75		GAS: 0		JETS					
Ream Hours	0.00	Rot. RPM -		SAND: 0		TFA:					
Rotary Hrs%:	57.94	Mot RPM: -		WL: 0		Hole ID: N/A					
Slide Hrs%:	42.06	Incl. In: 91.21		SOLID: 0		Bit Hrs:					
Rotary Ftg%:	99.32	Azm. In: 182.19		BHT°: 0		Bit Ftg:					
Slide Ftg%:	.68	Incl. Out: 0		Flow T°: 0		PUMPS					
Casing		Azm. Out: 0		Oil %: 0		Liner 0 0					
Size	Lb/Ft	MD	COST BREAKDOWN			Stroke 0 0					
						Effic. 95.00% 95.00%					
						Gal/Stk 0.00 0.00					
						BBL/Stk 0.000 0.000					

GENERAL COMMENT

Start Time	End Time	Hours	Start Depth	End Depth	Delta Depth	ROP	Activity Code	COMMENT
00:00	24:00	24.00	11443	11443	0	.00	Standby	Standby

BHA # 1

JOB NO.:	232793	Work Order:	232793	FIELD:	DJ Basin
Company:	EnCana Oil & Gas (USA) Inc.	Township:	2N	SECT. RANGE:	32 64W
LOCATION:	Ruhl Pad	Lead DD:	Paul Turner (10972)	Co. Man:	Randy / Quiz
RIG NAME:	H&P 278	BHA TYPE:	Steerable Assembly	BHA WT:	12443
STATE:	Colorado	Wt @ Jars:	N/A		
COUNTY:	Weld				
WELL NAME:	Ruhl 1B-32H-B264				

Time and Depths	MOTOR DATA	Drilling Parameters
Date In: 09-Dec-14 @ 16:00	SDI Drill Motor	SO/PU: 0 - 49 / 0-54
Date Out: 10-Dec-14 @ 09:00	MFG.: SDI	Rot Strg Wt: 0-50
Hrs In Hole: 17.00	Pad OD: 8.27	WOB: 0 - 22
Start Depth: 149.00	NB Stab: 0	TORQ: 0 - 5
End Depth: 1223.00	Bit to Bend: 6.9	SPP: 0 - 1402
Total Drilled: 1074.00	Bent Hsg/Sub°: 2.25 / 2.25	Motor RPM: - 90
Avg. Total ROP: 204.57	Lobe/Stage: 7/8 / 4	Rotary RPM: 0 - 50
Circ Hrs: Tot/Only 10.83 / 5.58	Rev/GAL: 0.16	Flow Rate: 0 - 560
Percent Slide: 26.91	Rotor Jet: 0	Avg Diff:
Percent Hrs: 23.81	Prop BUR:	Stall Pres.:
Slide Hours: 1.25	Act BUR:	Off Bot Pres.:
Total Sliding: 289.00		
Avg. Slide ROP: 231.20		
Percent Rotary: 73.09		
Percent Hrs: 76.19		
Rotary Hours: 4.00		
Total Rotary: 785.00		
Avg. Rotary ROP: 196.25		
Reason POOH: TD		

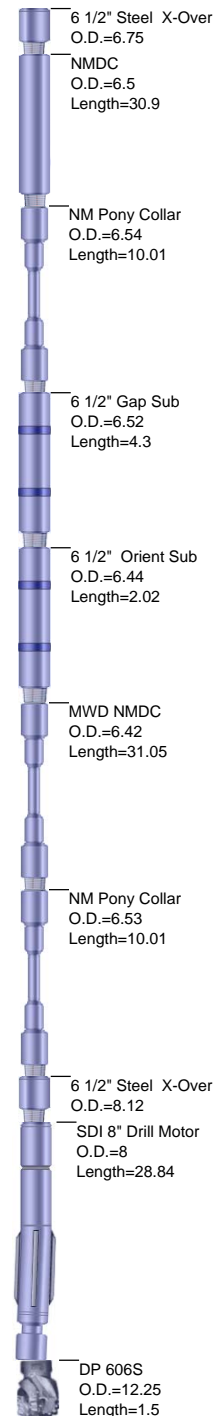
MWD Spacing	Gamma: 0	Restiv: 0	Sensor: 0	Last Casing	O.D.
	GYRO: 0	DNSSC: 0	Sonic: 0	Shoe @:	Hanger @:

INC IN: .0 INC OUT: .0 AZM IN: .00 AZM OUT: .00

- SDI 8" Drill Motor 7/8 4.0stg 2.25FBH
- Speed Ratio: 0.16RPG
- Max Flow: 900 GPM
- Max Diff: 900
- EM TFO: 342.5
- Gyro TFO: N/A

- Bit to Sensor: 60.90'
- Bit to Survey: 63'
- Bit to Gyro: N/A

BHA Detail							
Description	Serial #	I.D.	O.D.	Length	Sum	Top Conn	MFG.
DP 606S	7032254		12.25	1.50	1.50	6 5/8 REGP	BAKER
SDI 8" Drill Motor	836		8	28.84	30.34	6 5/8 REGB	SDI
6 1/2" Steel X-Over	1-858	3.25	8.12	4.04	34.38	4 1/2 XHB	SDI
NM Pony Collar	125-074	3.37	6.53	10.01	44.39	4 1/2 XHB	SDI
MWD NMDC	122-969	3.25	6.42	31.05	75.44	4 1/2 XHB	SDI
6 1/2" Orient Sub	8-741	3.31	6.44	2.02	77.46	4 1/2 XHB	SDI
6 1/2" Gap Sub	69-911	3	6.52	4.30	81.76	4 1/2 XHB	SDI
NM Pony Collar	125-412	3.25	6.54	10.01	91.77	4 1/2 XHB	SDI
NMDC	DR 9338	3.25	6.5	30.90	122.67	4 1/2 XHB	OTHER
6 1/2" Steel X-Over	SD11583	3.25	6.75	3.04	125.71	XT39B	SDI



JOB NO.: 232793
Company: EnCana Oil & Gas (USA) Inc.
LOCATION: Ruhl Pad
RIG NAME: H&P 278
STATE: Colorado
COUNTY: Country
WELL NAME: Ruhl 1B-32H-B264

FIELD: DJ Basin
Township: 2N
Range 64W

MOTOR INFORMATION

Desc: SDI Drill Motor
 Bent Hsg/Sub: $\frac{2.2}{5}$ / $\frac{2.2}{5}$ Bit to Bend: 6.9
 Pad OD: 8.27 NB Stab:

Slide Report for BHA # 1

Note: Surveys listed are interpolated from the actual surveys

#	Date	Drill Mode	Start Time	End Time	Hours	Start MD	End MD	Depth Drilled	WOB	ROP	RPM	Surf. Torque	Flow Rate	SPP	TFO	INC	AZM	DLS	Note
1	9-Dec	Drilling	16:45	17:00	0.25	149	159	10		40.0	0	0				0.00	0.00	0.00	
1	9-Dec	Sliding	17:00	17:05	0.08	159	174	15		180.0	0	0			350M	0.00	0.00	0.00	
1	9-Dec	Drilling	17:05	17:10	0.08	174	186	12		144.0	0	0				0.00	0.00	0.00	
1	9-Dec	Drilling	17:15	17:25	0.17	186	216	30		180.0	0	0				0.00	0.00	0.00	
1	9-Dec	Sliding	18:45	18:55	0.17	216	236	20		120.0	0	2		850	350M	0.00	0.00	0.00	
1	9-Dec	Drilling	18:55	19:10	0.25	236	307	71	10	284.0	50	2		850		0.90	17.92	0.00	
1	9-Dec	Sliding	20:20	20:25	0.08	307	337	30		360.0	50	2		850	350M	1.82	358.99	0.00	
1	9-Dec	Drilling	20:25	20:45	0.33	337	397	60	14	180.0	50	5		960		1.82	358.99	0.00	
1	9-Dec	Sliding	21:20	21:30	0.17	397	447	50		300.0	50	5		960	350M	3.81	355.83	0.00	
1	9-Dec	Drilling	21:30	21:45	0.25	447	487	40	14	160.0	50	5		960		3.81	355.83	0.00	
1	9-Dec	Sliding	21:50	21:55	0.08	487	512	25		300.0	50	5		960	350M	3.81	355.83	0.00	
1	9-Dec	Drilling	21:55	22:20	0.42	512	578	66	14	158.4	50	5	560	1402		5.53	359.72	0.00	
1	9-Dec	Sliding	22:25	22:30	0.08	578	588	10		120.0	50	5	560	1402	350M	5.53	359.72	0.00	
1	9-Dec	Drilling	22:30	22:45	0.25	588	668	80	14	320.0	50	5	560	1402		6.45	357.59	0.00	
1	9-Dec	Sliding	22:50	23:00	0.17	668	718	50		300.0	50	5	560	1402	5R	7.64	2.06	0.00	
1	9-Dec	Drilling	23:00	23:20	0.33	718	757	39	14	117.0	50	5	560	1402		7.64	2.06	0.00	
1	9-Dec	Sliding	23:25	23:35	0.17	757	804	47		282.0	50	5	560	1402	15L	10.61	2.93	0.00	
1	9-Dec	Drilling	23:35	23:50	0.25	804	847	43	14	172.0	50	5	560	1402		10.61	2.93	0.00	
1	9-Dec	Drilling	23:55	24:00	0.08	847	877	30	14	360.0	50	5	560	1402		10.82	2.47	0.00	
1	10-Dec	Drilling	00:00	00:20	0.33	877	937	60	14	180.0	50	5	560	1402		10.82	2.47	0.00	
1	10-Dec	Sliding	00:25	00:30	0.08	937	952	15	18	180.0	50	5	560	1402	15L	10.82	2.47	0.00	
1	10-Dec	Drilling	00:30	00:45	0.25	952	1028	76	14	304.0	50	5	560	1402		11.31	0.83	0.00	
1	10-Dec	Sliding	03:10	03:15	0.08	1028	1040	12	18	144.0	50	5	560	1402		11.31	0.83	0.00	
1	10-Dec	Drilling	03:15	03:40	0.42	1040	1128	88	20	211.2	50	5	560	1402		11.24	2.52	0.00	
1	10-Dec	Sliding	03:45	03:50	0.08	1128	1143	15	18	180.0	50	5	560	1402		11.24	2.52	0.00	
1	10-Dec	Drilling	03:50	04:05	0.25	1143	1214	71	22	284.0	50	5	560	1402		0.00	0.00	0.00	

Slide Report for BHA # 1

Note: Surveys listed are interpolated from the actual surveys

#	Date	Drill Mode	Start Time	End Time	Hours	Start MD	End MD	Depth Drilled	WOB	ROP	RPM	Surf. Torque	Flow Rate	SPP	TFO	INC	AZM	DLS	Note
1	10-Dec	Drilling	04:15	04:20	0.08	1214	1223	9	22	108.0	50	5	560	1402		0.00	0.00	0.00	

Total Drilled: 1074 **Avg. Total ROP:** 204.57 **DEPTH% - TIME %**

Total Rotary Drilled: 785 **Avg. Rotary ROP:** 196.25 **Percent Rotary:** 73.09 - 76.19

Total Drilled Sliding: 289 **Avg. Slide ROP:** 231.20 **Percent Slide:** 26.91 - 23.81

BHA # 1

JOB NO.:	248161	Work Order:	FIELD:	Wattenburg
Company:	EnCana Oil & Gas (USA) Inc.		Township:	2N
LOCATION:	Ruhl Pad		SECT. RANGE:	32 64N
RIG NAME:	H&P 278		Lead DD:	Paul Turner (10972)
STATE:	Colorado		Co. Man:	George / Quiz
COUNTY:	Weld		BHA TYPE:	Steerable Assembly
WELL NAME:	Ruhl 1B-32H-B264		BHA WT:	80972
			Wt @ Jars:	N/A

Time and Depths	MOTOR DATA	Drilling Parameters
Date In: 22-Jan-15 @ 00:40	6.75 Drill Motor	SO/PU: 0 - 118 / 0-147
Date Out: 24-Jan-15 @ 12:10	MFG.: SDI	Rot Strg Wt: 0-133
Hrs In Hole: 59.50	Pad OD: 7.46	WOB: 10 - 38
Start Depth: 1223.00	NB Stab: 0	TORQ: 2 - 12
End Depth: 7408.00	Bit to Bend: 2.77	SPP: 621 - 4260
Total Drilled: 6185.00	Bent Hsg/Sub°: 1.83 /	Motor RPM: 168
Avg. Total ROP: 159.61	Lobe/Stage: 7/8 / 6.4	Rotary RPM: 40 - 70
Circ Hrs: Tot/Only 43.17 / 4.42	Rev/GAL: 0.29	Flow Rate: 306 - 580
Percent Slide: 16.64	Rotor Jet: 0	Avg Diff:
Percent Hrs: 41.29	Prop BUR:	Stall Pres.:
Slide Hours: 16.00	Act BUR:	Off Bot Pres.:
Total Sliding: 1029.00		
Avg. Slide ROP: 64.31		
Percent Rotary: 83.36		
Percent Hrs: 58.71		
Rotary Hours: 22.75		
Total Rotary: 5156.00		
Avg. Rotary ROP: 226.64		
Reason POOH: TD		

MWD Spacing	Gamma: 53.47	Restiv: 0	Sensor: 62.14	Last Casing	O.D.
	GYRO: 0	DNSC: 1223	Sonic: 0	Shoe @:	Hanger @:

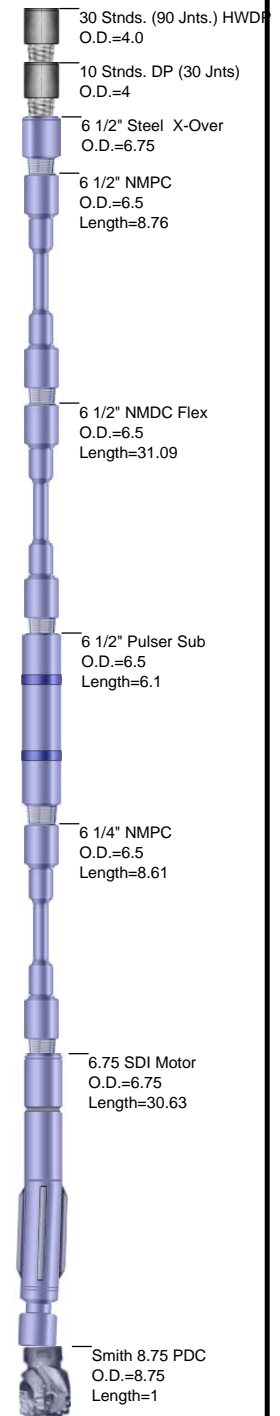
INC IN: .0 INC OUT: .0 AZM IN: .00 AZM OUT: .00

- 6 3/4" SDI Titan TD Drill Motor 7/8 6.4stg 1.83FBH
- Speed Ratio: 0.29RPG
- TFO: 337.06

- Bit to Sensor - 62.08'
- Bit to Survey - 64.00'
- Bit to Gamma - 53.43'

BHA Detail

Description	Serial #	I.D.	O.D.	Length	Sum	Top Conn	MFG.
Smith 8.75 PDC	JK0686		8.75	1.00	1.00	4 1/2 REGP	SMITH
6.75 SDI Motor	6694	2.0	6.75	30.63	31.63	4 1/2 XHB	SDI
6 1/4" NMPC	40386	3.25	6.5	8.61	40.24	4 1/2 XHB	SDI
6 1/2" NMDC Flex	122-329F	3.25	6.5	31.02	71.26	4 1/2 XHB	SDI
6 1/2" Pulser Sub	129-070		6.5	6.10	77.36	4 1/2 XHB	SDI
6 1/2" NMDC Flex	122-466F	3.25	6.5	31.09	108.45	4 1/2 XHB	SDI
6 1/2" NMPC	38678	3.25	6.5	8.76	117.21	4 1/2 XHB	SDI
6 1/2" Steel X-Over	11583	3.25	6.75	3.04	120.25	XT39B	SDI
10 Stnds. DP (30 Jnts)	RIG111	3.25	4	948.96	1069.21	XT39B	Other
30 Stnds. (90 Jnts.) HWDP	RIG123	2.88	4.0	2,723.90	3793.11	XT39	Other



JOB NO.: 248161
Company: EnCana Oil & Gas (USA) Inc.
LOCATION: Ruhl Pad
RIG NAME: H&P 278
STATE: Colorado
COUNTY: Country
WELL NAME: Ruhl 1B-32H-B264

FIELD: Wattenburg
Township: 2N
Range 64N

MOTOR INFORMATION

Desc: 6.75 Drill Motor
 Bent Hsg/Sub: $1.8 / 0$ Bit to Bend: 2.77
 Pad OD: 7.46 NB Stab:

Slide Report for BHA # 1

Note: Surveys listed are interpolated from the actual surveys

#	Date	Drill Mode	Start Time	End Time	Hours	Start MD	End MD	Depth Drilled	WOB	ROP	RPM	Surf. Torque	Flow Rate	SPP	TFO	INC	AZM	DLS	Note
1	22-Jan	Drilling	05:20	05:30	0.17	1233	1249	16	10	96.0	40	2	412	621		10.31	359.76	0.00	
1	22-Jan	Drilling	06:25	06:45	0.33	1249	1341	92	20	276.0	50	4	580	2125		9.97	4.18	0.00	
1	22-Jan	Sliding	06:50	06:55	0.08	1341	1353	12	20	144.0	50	4	580	2125	20L	9.97	4.18	0.00	
1	22-Jan	Drilling	06:55	07:10	0.25	1353	1432	79	20	316.0	50	4	580	2125		9.97	4.18	0.00	
1	22-Jan	Sliding	07:15	07:20	0.08	1432	1438	6	20	72.0	50	4	580	2125	80L	9.97	4.18	0.00	
1	22-Jan	Drilling	07:20	07:35	0.25	1438	1523	85	20	340.0	50	4	580	2125		12.45	359.17	0.00	
1	22-Jan	Drilling	07:40	08:20	0.67	1523	1705	182	20	273.0	50	4	580	2125		12.40	357.83	0.00	
1	22-Jan	Drilling	08:25	08:40	0.25	1705	1796	91	20	364.0	50	4	580	2125		12.40	357.83	0.00	
1	22-Jan	Sliding	08:45	08:50	0.08	1796	1816	20	20	240.0	50	4	580	2125	80L	12.40	357.83	0.00	
1	22-Jan	Drilling	08:50	09:05	0.25	1816	1886	70	20	280.0	50	4	580	2125		9.86	354.59	0.00	
1	22-Jan	Sliding	09:10	09:15	0.08	1886	1906	20	20	240.0	50	4	580	2125	80L	9.86	354.59	0.00	
1	22-Jan	Drilling	09:15	09:30	0.25	1906	1976	70	20	280.0	50	4	580	2125		9.86	354.59	0.00	
1	22-Jan	Sliding	09:35	09:45	0.17	1976	2004	28	20	168.0	50	4	580	2125	80L	4.65	357.20	0.00	
1	22-Jan	Drilling	09:45	09:55	0.17	2004	2067	63	20	378.0	50	4	580	2125		4.65	357.20	0.00	
1	22-Jan	Sliding	10:00	10:10	0.17	2067	2089	22	20	132.0	50	4	580	2125	160R	4.65	357.20	0.00	
1	22-Jan	Drilling	10:10	10:20	0.17	2089	2158	69	20	414.0	50	4	580	2125		4.65	357.20	0.00	
1	22-Jan	Sliding	10:45	10:55	0.17	2158	2178	20	20	120.0	50	4	580	2125	160R	4.65	357.20	0.00	
1	22-Jan	Drilling	10:55	11:00	0.08	2178	2247	69	20	828.0	50	4	580	2125		1.22	153.65	0.00	
1	22-Jan	Drilling	11:05	11:40	0.58	2247	2430	183	25	313.7	50	6	580	2600		1.47	131.45	0.00	
1	22-Jan	Drilling	11:50	12:20	0.50	2430	2613	183	25	366.0	50	6	580	2600		1.73	130.28	0.00	
1	22-Jan	Sliding	12:25	12:35	0.17	2613	2627	14	20	84.0	50	6	580	2600	160R	1.73	130.28	0.00	
1	22-Jan	Drilling	12:35	13:10	0.58	2627	2795	168	25	288.0	50	6	580	2600		0.27	61.72	0.00	
1	22-Jan	Drilling	13:30	14:00	0.50	2795	2976	181	25	362.0	50	6	580	2600		0.33	98.40	0.00	
1	22-Jan	Sliding	14:05	14:10	0.08	2976	2984	8	20	96.0	50	6	580	2600	250M	0.33	98.40	0.00	
1	22-Jan	Drilling	14:10	14:45	0.58	2984	3156	172	25	294.9	50	6	580	2600		0.90	257.52	0.00	
1	22-Jan	Drilling	14:50	15:30	0.67	3156	3339	183	25	274.5	50	6	580	2600		0.84	259.57	0.00	

Slide Report for BHA # 1

Note: Surveys listed are interpolated from the actual surveys

#	Date	Drill Mode	Start Time	End Time	Hours	Start MD	End MD	Depth Drilled	WOB	ROP	RPM	Surf. Torque	Flow Rate	SPP	TFO	INC	AZM	DLS	Note
1	22-Jan	Drilling	15:35	16:10	0.58	3339	3521	182	25	312.0	50	6	580	2600		0.83	281.68	0.00	
1	22-Jan	Drilling	16:15	16:55	0.67	3521	3701	180	25	270.0	50	6	580	2600		0.34	260.16	0.00	
1	22-Jan	Drilling	17:00	17:40	0.67	3701	3887	186	25	279.0	50	6	580	2600		0.65	73.07	0.00	
1	22-Jan	Drilling	17:45	18:15	0.50	3887	3982	95	27	190.0	70	6	580	2600		0.65	73.07	0.00	
1	22-Jan	Sliding	18:15	18:20	0.08	3982	3990	8	24	96.0	70	6	580	2600	240M	0.65	73.07	0.00	
1	22-Jan	Drilling	18:20	18:35	0.25	3990	4077	87	27	348.0	70	6.8	580	3495		0.77	36.73	0.00	
1	22-Jan	Drilling	18:40	19:05	0.42	4077	4172	95	27	228.0	70	6.8	580	3495		0.77	36.73	0.00	
1	22-Jan	Sliding	19:05	19:10	0.08	4172	4180	8	24	96.0	70	6.8	580	3495	240M	0.77	36.73	0.00	
1	22-Jan	Drilling	19:10	19:25	0.25	4180	4267	87	27	348.0	70	6.8	580	3495		0.54	253.46	0.00	
1	22-Jan	Drilling	19:30	19:55	0.42	4267	4361	94	27	225.6	70	6.8	580	3495		0.54	253.46	0.00	
1	22-Jan	Sliding	19:55	20:00	0.08	4361	4367	6	24	72.0	70	6.8	580	3495	90M	0.54	253.46	0.00	
1	22-Jan	Drilling	20:00	20:15	0.25	4367	4455	88	27	352.0	70	6.8	580	3495		1.71	313.03	0.00	
1	22-Jan	Sliding	20:25	20:35	0.17	4455	4463	8	24	48.0	70	6.8	580	3495	150M	1.71	313.03	0.00	
1	22-Jan	Drilling	20:35	21:10	0.58	4463	4550	87	27	149.1	70	6.8	580	3495		1.71	313.03	0.00	
1	22-Jan	Sliding	21:10	21:20	0.17	4550	4559	9	24	54.0	70	6.8	580	3495	150M	1.71	313.03	0.00	
1	22-Jan	Drilling	21:20	21:40	0.33	4559	4645	86	27	258.0	70	6.8	580	3495		1.16	286.12	0.00	
1	22-Jan	Sliding	21:45	22:00	0.25	4645	4654	9	24	36.0	70	6.8	580	3495	150M	1.16	286.12	0.00	
1	22-Jan	Drilling	22:00	22:50	0.83	4654	4748	94	27	112.8	70	8.2	580	3668		1.16	286.12	0.00	
1	22-Jan	Sliding	22:50	23:00	0.17	4748	4748	0	24	0.0	70	8.2	580	3668	90M	1.16	286.12	0.00	
1	22-Jan	Drilling	23:00	23:20	0.33	4748	4835	87	27	261.0	70	8.2	580	3668		0.76	215.50	0.00	
1	22-Jan	Drilling	23:20	23:55	0.58	4835	4930	95	27	162.9	70	8.2	580	3668		0.76	215.50	0.00	
1	23-Jan	Drilling	00:00	00:20	0.33	4930	5025	95	27	285.0	70	8.2	580	3668		0.93	325.87	0.00	
1	23-Jan	Sliding	00:25	00:35	0.17	5025	5035	10	24	60.0	70	8.2	580	3668	180M	0.93	325.87	0.00	
1	23-Jan	Drilling	00:35	01:00	0.42	5035	5120	85	27	204.0	70	8.2	580	3668		0.93	325.87	0.00	
1	23-Jan	Sliding	01:00	01:10	0.17	5120	5130	10	24	60.0	70	8.2	580	3668	180M	0.93	325.87	0.00	
1	23-Jan	Drilling	01:10	01:30	0.33	5130	5215	85	27	255.0	70	8.2	580	3668		1.47	207.51	0.00	
1	23-Jan	Sliding	01:40	01:50	0.17	5215	5224	9	24	54.0	70	8.2	580	3668	60M	1.47	207.51	0.00	
1	23-Jan	Drilling	01:50	02:15	0.42	5224	5310	86	27	206.4	70	8.2	580	3668		1.47	207.51	0.00	
1	23-Jan	Sliding	02:15	02:20	0.08	5310	5316	6	24	72.0	70	8.2	580	3668	360M	1.47	207.51	0.00	
1	23-Jan	Drilling	02:20	02:45	0.42	5316	5405	89	27	213.6	70	8.2	580	3668		0.65	77.93	0.00	
1	23-Jan	Drilling	02:55	03:10	0.25	5405	5499	94	27	376.0	70	8.2	580	3668		0.65	77.93	0.00	
1	23-Jan	Drilling	03:15	03:30	0.25	5499	5594	95	27	380.0	70	8.5	580	3668		0.54	113.27	0.00	
1	23-Jan	Drilling	03:35	04:05	0.50	5594	5689	95	27	190.0	70	8.5	580	3668		0.54	113.27	0.00	
1	23-Jan	Sliding	04:05	04:10	0.08	5689	5697	8	24	96.0	70	8.5	580	3668	360M	0.54	113.27	0.00	
1	23-Jan	Drilling	04:10	04:25	0.25	5697	5784	87	27	348.0	70	8.5	580	3668		1.04	165.35	0.00	

Slide Report for BHA # 1

Note: Surveys listed are interpolated from the actual surveys

#	Date	Drill Mode	Start Time	End Time	Hours	Start MD	End MD	Depth Drilled	WOB	ROP	RPM	Surf. Torque	Flow Rate	SPP	TFO	INC	AZM	DLS	Note
1	23-Jan	Sliding	04:35	04:45	0.17	5784	5790	6	24	36.0	70	9.5	580	3668	330M	1.04	165.35	0.00	
1	23-Jan	Drilling	04:45	05:10	0.42	5790	5879	89	27	213.6	70	9.5	580	3668		1.04	165.35	0.00	
1	23-Jan	Sliding	05:10	05:20	0.17	5879	5885	6	24	36.0	70	9.5	580	3668	165M	1.04	165.35	0.00	
1	23-Jan	Drilling	05:20	05:40	0.33	5885	5974	89	27	267.0	70	9.5	580	3668		0.50	142.45	0.00	
1	23-Jan	Sliding	05:45	06:00	0.25	5974	5979	5	24	20.0	70	9.5	580	3668	160M	0.50	142.45	0.00	
1	23-Jan	Drilling	06:00	06:45	0.75	5979	6164	185	27	246.7	70	9.5	580	3668		0.13	153.66	0.00	
1	23-Jan	Drilling	06:50	07:05	0.25	6164	6258	94	27	376.0	70	9.5	580	3668		0.19	171.58	0.00	
1	23-Jan	Sliding	08:25	08:50	0.42	6258	6292	34	24	81.6	70	9.5	580	3668	160M	3.71	177.81	0.00	
1	23-Jan	Drilling	08:50	08:55	0.08	6292	6305	13	27	156.0	70	9.5	580	3668		3.71	177.81	0.00	
1	23-Jan	Sliding	09:05	09:20	0.25	6305	6335	30	24	120.0	70	9.5	580	3668	180M	3.71	177.81	0.00	
1	23-Jan	Drilling	09:20	09:35	0.25	6335	6353	18	27	72.0	70	9.5	580	3668		7.39	181.64	0.00	
1	23-Jan	Sliding	09:40	10:05	0.42	6353	6384	31	24	74.4	70	9.5	580	3668	180M	7.39	181.64	0.00	
1	23-Jan	Drilling	10:05	10:15	0.17	6384	6400	16	27	96.0	70	9.5	580	3668		10.84	182.57	0.00	
1	23-Jan	Sliding	10:20	10:45	0.42	6400	6433	33	24	79.2	70	9.5	580	3668	15L	13.70	179.19	0.00	
1	23-Jan	Drilling	10:45	11:05	0.33	6433	6448	15	27	45.0	70	9.5	580	3668		13.70	179.19	0.00	
1	23-Jan	Sliding	11:15	11:50	0.58	6448	6492	44	38	75.4	70	9.5	580	3668	15L	17.38	176.62	0.00	
1	23-Jan	Drilling	11:50	11:55	0.08	6492	6495	3	27	36.0	70	9.5	580	3668		17.38	176.62	0.00	
1	23-Jan	Sliding	12:05	12:25	0.33	6495	6543	48	38	144.0	70	9.5	580	3668	0L	21.56	178.20	0.00	
1	23-Jan	Sliding	12:35	13:00	0.42	6543	6576	33	38	79.2	70	9.5	580	3668	30R	24.77	182.00	0.00	
1	23-Jan	Sliding	13:15	14:00	0.75	6576	6620	44	38	58.7	70	9.5	580	3668	0R	24.77	182.00	0.00	
1	23-Jan	Drilling	14:00	14:05	0.08	6620	6638	18	27	216.0	70	9.5	580	3668		27.61	182.64	0.00	
1	23-Jan	Sliding	14:20	14:50	0.50	6638	6676	38	38	76.0	70	9.5	580	3668	0R	31.47	182.39	0.00	
1	23-Jan	Drilling	14:50	15:05	0.25	6676	6685	9	27	36.0	70	9.5	580	3668		31.47	182.39	0.00	
1	23-Jan	Sliding	15:15	15:50	0.58	6685	6733	48	38	82.3	70	9.5	580	3668	15L	35.08	180.05	0.00	
1	23-Jan	Sliding	16:05	16:55	0.83	6733	6769	36	38	43.2	70	9.5	580	3668	15L	40.26	179.24	0.00	
1	23-Jan	Drilling	16:55	17:00	0.08	6769	6780	11	27	132.0	70	9.5	580	3668		40.26	179.24	0.00	
1	23-Jan	Sliding	17:05	17:25	0.33	6780	6820	40	38	120.0	70	9.5	580	3668	15L	45.41	180.07	0.00	
1	23-Jan	Drilling	17:25	17:35	0.17	6820	6827	7	27	42.0	70	9.5	580	3668		45.41	180.07	0.00	
1	23-Jan	Sliding	17:50	18:05	0.25	6827	6857	30	38	120.0	70	9.5	580	3668	15L	45.41	180.07	0.00	
1	23-Jan	Drilling	18:05	18:15	0.17	6857	6874	17	27	102.0	70	9.5	580	3668		49.94	179.93	0.00	
1	23-Jan	Sliding	18:20	18:45	0.42	6874	6894	20	38	48.0	70	9.5	580	3668		49.94	179.93	0.00	
1	23-Jan	Drilling	18:45	18:55	0.17	6894	6922	28	27	168.0	70	9.5	580	3668		51.90	180.85	0.00	
1	23-Jan	Sliding	19:05	19:25	0.33	6922	6954	32	38	96.0	70	9.5	580	3668		56.39	180.48	0.00	
1	23-Jan	Drilling	19:25	19:35	0.17	6954	6969	15	27	90.0	70	9.5	580	3668		56.39	180.48	0.00	
1	23-Jan	Sliding	19:45	20:05	0.33	6969	7004	35	38	105.0	70	9.5	580	3668	20L	61.43	179.93	0.00	

Slide Report for BHA # 1

Note: Surveys listed are interpolated from the actual surveys

#	Date	Drill Mode	Start Time	End Time	Hours	Start MD	End MD	Depth Drilled	WOB	ROP	RPM	Surf. Torque	Flow Rate	SPP	TFO	INC	AZM	DLS	Note
1	23-Jan	Drilling	20:05	20:20	0.25	7004	7017	13	27	52.0	70	11	580	3668		61.43	179.93	0.00	
1	23-Jan	Sliding	20:25	20:40	0.25	7017	7037	20	38	80.0	70	11	580	3668	5L	61.43	179.93	0.00	
1	23-Jan	Drilling	20:40	20:50	0.17	7037	7064	27	27	162.0	70	11	580	3668		64.91	177.93	0.00	
1	23-Jan	Sliding	21:00	21:30	0.50	7064	7082	18	38	36.0	70	11	580	3668	5L	64.91	177.93	0.00	
1	23-Jan	Drilling	21:30	21:45	0.25	7082	7112	30	27	120.0	70	11	580	4260		67.44	177.13	0.00	
1	23-Jan	Sliding	21:55	22:10	0.25	7112	7130	18	38	72.0	70	11	580	4260	5R	67.44	177.13	0.00	
1	23-Jan	Drilling	22:10	22:25	0.25	7130	7159	29	27	116.0	70	11	580	4260		70.86	176.19	0.00	
1	23-Jan	Sliding	22:35	23:00	0.42	7159	7184	25	38	60.0	70	11	580	4260	5R	70.86	176.19	0.00	
1	23-Jan	Drilling	23:00	23:15	0.25	7184	7207	23	27	92.0	70	11	580	4260		75.36	176.82	0.00	
1	23-Jan	Sliding	23:25	24:00	0.58	7207	7223	16	38	27.4	70	12	580	4260	5R	75.36	176.82	0.00	
1	24-Jan	Drilling	00:00	00:15	0.25	7223	7254	31	27	124.0	70	12	580	4260		77.40	178.45	0.00	
1	24-Jan	Sliding	00:25	01:05	0.67	7254	7274	20	38	30.0	70	12	580	4260	5R	77.40	178.45	0.00	
1	24-Jan	Drilling	01:05	01:20	0.25	7274	7301	27	27	108.0	70	12	580	4260		79.91	177.81	0.00	
1	24-Jan	Sliding	01:30	02:50	1.33	7301	7337	36	38	27.0	70	12	580	4260	5R	84.02	178.05	0.00	
1	24-Jan	Drilling	02:50	03:00	0.17	7337	7348	11	27	66.0	70	12	580	4260		84.02	178.05	0.00	
1	24-Jan	Sliding	03:10	04:40	1.50	7348	7390	42	38	28.0	70	12	580	4260	5R	84.02	178.05	0.00	
1	24-Jan	Drilling	04:40	04:45	0.08	7390	7396	6	27	72.0	70	12	580	4260		84.02	178.05	0.00	
1	24-Jan	Drilling	04:55	05:05	0.17	7396	7408	12	27	72.0	70	12	580	4260		84.02	178.05	0.00	

Total Drilled: 6185 **Avg. Total ROP:** 159.61

DEPTH% - TIME %

Total Rotary Drilled: 5156 **Avg. Rotary ROP:** 226.64

Percent Rotary: 83.36 - 58.71

Total Drilled Sliding: 1029 **Avg. Slide ROP:** 64.31

Percent Slide: 16.64 - 41.29

BHA # 2

JOB NO.: 248161	Work Order:	FIELD: Wattenburg
Company: EnCana Oil & Gas (USA) Inc.		Township: 2N
LOCATION: Ruhl Pad		SECT. RANGE: 32 64N
RIG NAME: H&P 278		Lead DD: Steven Schlamp (10800)
STATE: Colorado		Co. Man: George / Quiz
COUNTY: Weld		BHA TYPE: Steerable Assembly
WELL NAME: Ruhl 1B-32H-B264		BHA WT: 165334 Wt @ Jars: N/A

Time and Depths		MOTOR DATA		Drilling Parameters	
Date In:	25-Jan-15 @ 18:40	4.75 Drill Motor		SO/PU:	73 - 118 / 147-224
Date Out:	27-Jan-15 @ 23:00	MFG.: Hunting		Rot Strg Wt:	133-144
Hrs In Hole:	52.33	Pad OD:	5.15	WOB:	18 - 38
Start Depth:	7408.00	NB Stab:	0	TORQ:	3 - 16
End Depth:	11443.00	Bit to Bend:	5.05	SPP:	980 - 4700
Total Drilled:	4035.00	Bent Hsg/Sub°:	1.5 / 1.5	Motor RPM:	No Rev/Gal Input
Avg. Total ROP:	149.91	Lobe/Stage:	5.6 / 8.3	Rotary RPM:	70 - 90
Circ Hrs: Tot/Only	36.08 / 9.17	Rev/GAL:	0	Flow Rate:	260 - 300
Percent Slide:	6.34	Rotor Jet:	0	Avg Diff:	
Percent Hrs:	34.98	Prop BUR:		Stall Pres.:	
Slide Hours:	9.42	Act BUR:		Off Bot Pres.:	
Total Sliding:	256.00	Mud Data		Bit Record	
Avg. Slide ROP:	27.19	Type		Ulterra / Ulterra 6.125 ; U516S	
Percent Rotary:	93.66	WT:	0	GAS:	0
Percent Hrs:	65.02	Vis:	0	PV:	0
Rotary Hours:	17.50	WL:	0	PH:	0
Total Rotary:	3779.00	SOL:	0	SAND:	0
Avg. Rotary ROP:	215.94	Oil %:	0	T °:	0
Reason POOH:	TD	Chlor:	0	YP:	0
MWD Spacing		Gamma: 0	Restiv: 0	Sensor: 0	Last Casing O.D.
		GYRO: 0	DNSC: 11585	Sonic: 0	Shoe @: Hanger @:

INC IN: .0 **INC OUT:** .0 **AZM IN:** .00 **AZM OUT:** .00

- 5.00" Hunting 5/6 8.3stg Drill Motor 1.50FBH
 - Speed Ratio: 1.00RPG
 - Max Diff: 1600
 -Min/Max Flow: 190-300
 - TFO: 104.08

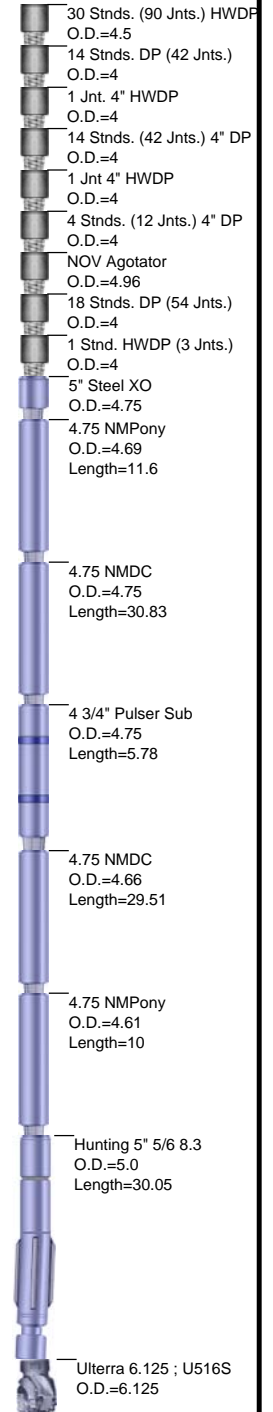
- Bit to Sensor - 61.01'
 - Bit to Survey - 63'
 - Bit to Gamma - 52.41'

BHA Detail

Description	Serial #	I.D.	O.D.	Length	Sum	Top Conn	MFG.
Ulterra 6.125 ; U516S	27819		6.125	1.00	1.00	3 1/2 REGP	Ulterra
Hunting 5" 5/6 8.3	262		5.0	30.05	31.05	3 1/2 IFB	HUNTING
4.75 NMPony	17-349	2.68	4.61	10.00	41.05	3 1/2 IFB	SDI
4.75 NMDC	121-193	2.68	4.66	29.51	70.56	3 1/2 IFB	SDI
4 3/4" Pulser Sub	65-230	2.68	4.75	5.78	76.34	3 1/2 IFB	SDI
4.75 NMDC	121-583	2.68	4.75	30.83	107.17	3 1/2 IFB	SDI
4.75 NMPony	16-042	2.68	4.69	11.60	118.77	3 1/2 IFB	SDI
5" Steel XO	107235	2.675	4.75	1.54	120.31	XT39B	SDI
1 Std. HWDP (3 Jnts.)	RIG222	2.88	4	91.61	211.92	XT39B	Other
18 Stnds. DP (54 Jnts.)	RIG789	3.25	4	1,706.34	1918.26	XT39B	Other
NOV Agotator	W1-750002-3		4.96	22.63	1940.89	XT39B	NOV
4 Stnds. (12 Jnts.) 4" DP	789	3.25	4	379.91	2320.80	XT39B	Other
1 Jnt 4" HWDP	456	3.25	4	30.39	2351.19	XT39B	Other
14 Stnds. (42 Jnts.) 4" DP	ABC	3.25	4	1,327.69	3678.88	XT39B	Other

BHA Detail

Description	Serial #	I.D.	O.D.	Length	Sum	Top Conn	MFG.
1 Jnt. 4" HWDP	123	3.25	4	29.68	3708.56	XT39B	Other
14 Stnds. DP (42 Jnts.)	RIG456	3.25	4	1,327.76	5036.32	XT39B	Other
30 Stnds. (90 Jnts.) HWDP	RIG123	2.88	4.5	2,724.43	7760.75	XT39B	Other



JOB NO.: 248161
Company: EnCana Oil & Gas (USA) Inc.
LOCATION: Ruhl Pad
RIG NAME: H&P 278
STATE: Colorado
COUNTY: Country
WELL NAME: Ruhl 1B-32H-B264

FIELD: Wattenburg
Township: 2N
Range 64N

MOTOR INFORMATION

Desc: 4.75 Drill Motor
Bent Hsg/Sub: 1.5 / 1.5 **Bit to Bend:** 5.05
Pad OD: 5.15 **NB Stab:**

Slide Report for BHA # 2

Note: Surveys listed are interpolated from the actual surveys

#	Date	Drill Mode	Start Time	End Time	Hours	Start MD	End MD	Depth Drilled	WOB	ROP	RPM	Surf. Torque	Flow Rate	SPP	TFO	INC	AZM	DLS	Note
2	26-Jan	Drilling	01:45	02:00	0.25	7408	7418	10	18	40.0	70	3	260	980		84.02	178.05	0.00	
2	26-Jan	Drilling	03:40	03:55	0.25	7418	7488	70	27	280.0	90	3	270	4167		90.40	178.25	0.00	
2	26-Jan	Drilling	04:10	04:30	0.33	7488	7578	90	28	270.0	90	9	270	4167		89.09	177.28	0.00	
2	26-Jan	Sliding	04:40	04:45	0.08	7578	7585	7	38	84.0	90	9	300	4167	65R	89.09	177.28	0.00	
2	26-Jan	Drilling	04:45	05:10	0.42	7585	7669	84	28	201.6	90	9	300	4167		88.66	177.42	0.00	
2	26-Jan	Sliding	05:15	05:30	0.25	7669	7684	15	38	60.0	90	9	300	4167	65R	88.66	177.42	0.00	
2	26-Jan	Drilling	05:30	05:55	0.42	7684	7760	76	28	182.4	90	9	300	4167		89.53	178.23	0.00	
2	26-Jan	Sliding	06:05	06:15	0.17	7760	7772	12	38	72.0	90	9	300	4167	90R	89.53	178.23	0.00	
2	26-Jan	Drilling	06:15	06:35	0.33	7772	7855	83	35	249.0	90	9	300	4300		90.03	179.83	0.00	
2	26-Jan	Drilling	06:40	07:00	0.33	7855	7950	95	35	285.0	90	9	300	4300		90.03	179.24	0.00	
2	26-Jan	Sliding	07:05	07:20	0.25	7950	7965	15	38	60.0	90	9	300	4300	90R	90.03	179.24	0.00	
2	26-Jan	Drilling	07:20	07:40	0.33	7965	8045	80	35	240.0	90	9	300	4300		90.60	180.22	0.00	
2	26-Jan	Drilling	07:50	08:10	0.33	8045	8140	95	35	285.0	90	9	300	4300		90.74	180.05	0.00	
2	26-Jan	Drilling	08:15	08:35	0.33	8140	8234	94	35	282.0	90	9	300	4300		90.40	179.97	0.00	
2	26-Jan	Drilling	08:40	09:05	0.42	8234	8329	95	35	228.0	90	9	300	4300		90.03	179.85	0.00	
2	26-Jan	Drilling	09:10	09:35	0.42	8329	8423	94	35	225.6	90	9	300	4300		89.46	180.10	0.00	
2	26-Jan	Drilling	09:40	10:05	0.42	8423	8518	95	35	228.0	90	11	300	4500		89.40	180.25	0.00	
2	26-Jan	Drilling	10:10	10:30	0.33	8518	8613	95	35	285.0	90	11	300	4500		89.26	180.31	0.00	
2	26-Jan	Drilling	10:35	11:00	0.42	8613	8707	94	35	225.6	90	11	300	4500		88.89	180.63	0.00	
2	26-Jan	Drilling	11:05	11:25	0.33	8707	8802	95	35	285.0	90	11	300	4500		87.95	180.78	0.00	
2	26-Jan	Sliding	11:30	11:40	0.17	8802	8817	15	38	90.0	90	11	300	4500	5R	87.95	180.78	0.00	
2	26-Jan	Drilling	11:40	12:05	0.42	8817	8898	81	35	194.4	90	11	300	4500		88.69	180.76	0.00	
2	26-Jan	Sliding	12:10	12:20	0.17	8898	8908	10	38	60.0	90	11	300	4500	5R	88.69	180.76	0.00	
2	26-Jan	Drilling	12:20	12:40	0.33	8908	8993	85	35	255.0	90	11	300	4500		88.52	180.77	0.00	
2	26-Jan	Sliding	12:45	12:55	0.17	8993	9008	15	38	90.0	90	11	300	4500	5R	88.52	180.77	0.00	
2	26-Jan	Drilling	12:55	13:15	0.33	9008	9088	80	35	240.0	90	11	300	4500		88.96	180.38	0.00	

Slide Report for BHA # 2

Note: Surveys listed are interpolated from the actual surveys

#	Date	Drill Mode	Start Time	End Time	Hours	Start MD	End MD	Depth Drilled	WOB	ROP	RPM	Surf. Torque	Flow Rate	SPP	TFO	INC	AZM	DLS	Note
2	26-Jan	Sliding	13:20	13:30	0.17	9088	9103	15	38	90.0	90	11	300	4500	5R	88.96	180.38	0.00	
2	26-Jan	Drilling	13:30	13:50	0.33	9103	9182	79	35	237.0	90	12.6	300	4700		90.00	181.03	0.00	
2	26-Jan	Sliding	13:55	14:05	0.17	9182	9192	10	38	60.0	90	12.6	300	4700	5R	90.00	181.03	0.00	
2	26-Jan	Drilling	14:05	14:30	0.42	9192	9277	85	35	204.0	90	12.6	300	4700		90.57	179.80	0.00	
2	26-Jan	Drilling	14:35	15:00	0.42	9277	9372	95	35	228.0	90	12.6	300	4700		89.16	180.66	0.00	
2	26-Jan	Sliding	15:05	15:20	0.25	9372	9390	18	38	72.0	90	12.6	300	4700	15L	89.16	180.66	0.00	
2	26-Jan	Drilling	15:20	15:40	0.33	9390	9467	77	35	231.0	90	12.6	300	4700		89.46	180.11	0.00	
2	26-Jan	Sliding	15:45	15:55	0.17	9467	9482	15	38	90.0	90	12.6	300	4700	15L	89.46	180.11	0.00	
2	26-Jan	Drilling	15:55	16:20	0.42	9482	9562	80	35	192.0	90	12.6	300	4700		89.63	179.60	0.00	
2	26-Jan	Sliding	16:25	16:40	0.25	9562	9582	20	38	80.0	90	12.6	300	4700	15R	89.63	179.60	0.00	
2	26-Jan	Drilling	16:40	17:00	0.33	9582	9657	75	35	225.0	90	12.6	300	4700		91.04	179.44	0.00	
2	26-Jan	Sliding	17:05	17:15	0.17	9657	9665	8	38	48.0	90	12.6	300	4700	60R	91.04	179.44	0.00	
2	26-Jan	Drilling	17:15	17:30	0.25	9665	9752	87	35	348.0	90	12.6	300	4700		91.38	180.57	0.00	
2	26-Jan	Drilling	17:45	18:00	0.25	9752	9846	94	35	376.0	90	12.6	300	4700		90.54	180.53	0.00	
2	26-Jan	Sliding	18:10	18:45	0.58	9846	9856	10	38	17.1	90	12.6	300	4700		90.54	180.53	0.00	
2	26-Jan	Drilling	18:45	19:00	0.25	9856	9941	85	35	340.0	90	12.6	300	4700		90.94	179.38	0.00	
2	26-Jan	Drilling	19:05	19:30	0.42	9941	10036	95	35	228.0	90	12.6	300	4700		91.28	179.75	0.00	
2	26-Jan	Drilling	19:35	19:55	0.33	10036	10132	96	35	288.0	90	12.6	300	4700		91.61	177.41	0.00	
2	26-Jan	Sliding	20:00	20:45	0.75	10132	10148	16	38	21.3	90	12.6	300	4700	120R	91.61	177.41	0.00	
2	26-Jan	Drilling	20:45	21:00	0.25	10148	10226	78	35	312.0	90	12.6	300	4700		91.01	176.96	0.00	
2	26-Jan	Sliding	21:05	21:25	0.33	10226	10234	8	38	24.0	90	12.6	300	4700	110R	91.01	176.96	0.00	
2	26-Jan	Sliding	21:40	21:50	0.17	10234	10240	6	38	36.0	90	12.6	300	4700	110R	91.01	176.96	0.00	
2	26-Jan	Drilling	21:50	22:05	0.25	10240	10321	81	35	324.0	90	16	285	4390		89.97	175.51	0.00	
2	26-Jan	Sliding	22:15	23:30	1.25	10321	10343	22	38	17.6	90	16	300	4390	90	89.97	175.51	0.00	
2	26-Jan	Drilling	23:30	23:40	0.17	10343	10368	25	35	150.0	90	16	285	4390		92.18	178.21	0.00	
2	26-Jan	Sliding	23:40	23:50	0.17	10368	10380	12	38	72.0	90	16	300	4390	120	92.18	178.21	0.00	
2	26-Jan	Drilling	23:50	23:55	0.08	10380	10416	36	35	432.0	90	16	285	4390		92.18	178.21	0.00	
2	27-Jan	Sliding	00:00	00:50	0.83	10416	10436	20	38	24.0	90	16	300	4390	135R	92.18	178.21	0.00	
2	27-Jan	Drilling	00:50	01:10	0.33	10436	10466	30	35	90.0	90	16	285	4390		91.21	183.31	0.00	
2	27-Jan	Sliding	01:15	01:40	0.42	10466	10474	8	38	19.2	90	16	300	4390	135R	91.21	183.31	0.00	
2	27-Jan	Drilling	01:40	01:50	0.17	10474	10510	36	35	216.0	90	16	285	4390		91.21	183.31	0.00	
2	27-Jan	Drilling	02:00	02:25	0.42	10510	10557	47	35	112.8	90	16	285	4390		90.10	182.62	0.00	
2	27-Jan	Drilling	02:30	02:45	0.25	10557	10605	48	35	192.0	90	16	285	4390		90.10	182.62	0.00	
2	27-Jan	Sliding	04:20	05:10	0.83	10605	10617	12	38	14.4	90	16	300	4390	105R	90.10	182.62	0.00	
2	27-Jan	Drilling	05:10	05:35	0.42	10617	10700	83	35	199.2	90	16	285	4390		90.00	185.02	0.00	

Slide Report for BHA # 2

Note: Surveys listed are interpolated from the actual surveys

#	Date	Drill Mode	Start Time	End Time	Hours	Start MD	End MD	Depth Drilled	WOB	ROP	RPM	Surf. Torque	Flow Rate	SPP	TFO	INC	AZM	DLS	Note
2	27-Jan	Drilling	05:40	06:05	0.42	10700	10795	95	35	228.0	90	16	285	4390		89.23	185.48	0.00	
2	27-Jan	Sliding	06:10	06:30	0.33	10795	10807	12	38	36.0	90	16	300	4390	75L	89.23	185.48	0.00	
2	27-Jan	Drilling	06:30	06:55	0.42	10807	10890	83	33	199.2	90	16	287	4400		88.26	184.56	0.00	
2	27-Jan	Sliding	07:00	07:25	0.42	10890	10906	16	38	38.4	90	16	300	4400	30L	88.26	184.56	0.00	
2	27-Jan	Drilling	07:25	07:45	0.33	10906	10984	78	33	234.0	90	16	287	4400		88.56	184.04	0.00	
2	27-Jan	Sliding	07:50	08:20	0.50	10984	10903	-81	38	-162.0	90	16	300	4400	30L	88.26	184.56	0.00	
2	27-Jan	Drilling	08:20	08:50	0.50	10903	11079	176	33	352.0	90	16	287	4400		88.96	182.61	0.00	
2	27-Jan	Sliding	08:55	09:20	0.42	11079	11099	20	38	48.0	90	16	300	4400	0L	88.96	182.61	0.00	
2	27-Jan	Drilling	09:20	09:45	0.42	11099	11174	75	33	180.0	90	16	287	4400		90.17	181.91	0.00	
2	27-Jan	Drilling	09:50	10:25	0.58	11174	11269	95	33	162.9	90	16	287	4400		90.77	181.85	0.00	
2	27-Jan	Drilling	10:30	10:55	0.42	11269	11364	95	33	228.0	90	16	287	4400		91.41	181.70	0.00	
2	27-Jan	Drilling	11:00	11:30	0.50	11364	11443	79	33	158.0	90	16	287	4400		91.21	182.19	0.00	

Total Drilled: 4035 **Avg. Total ROP:** 149.91

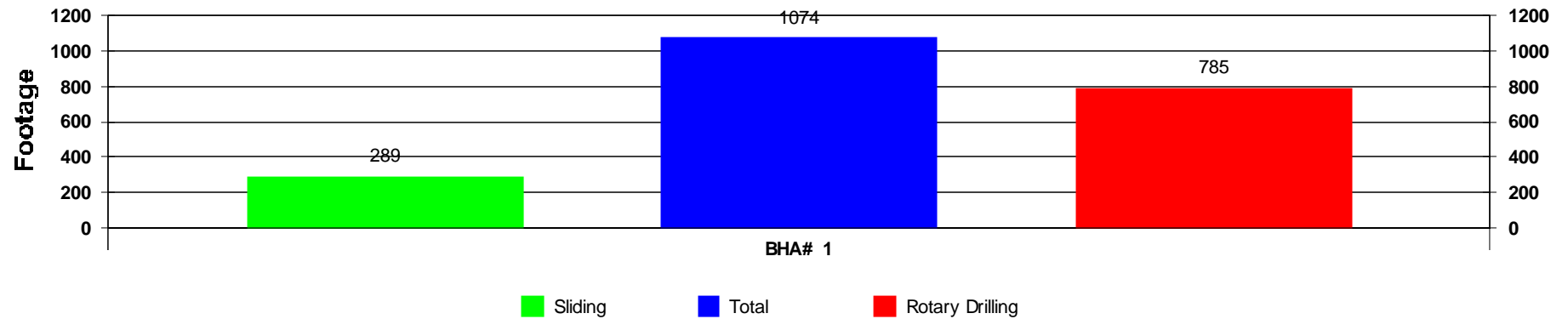
DEPTH% - TIME %

Total Rotary Drilled: 3779 **Avg. Rotary ROP:** 215.94 **Percent Rotary:** 93.66 - 65.02

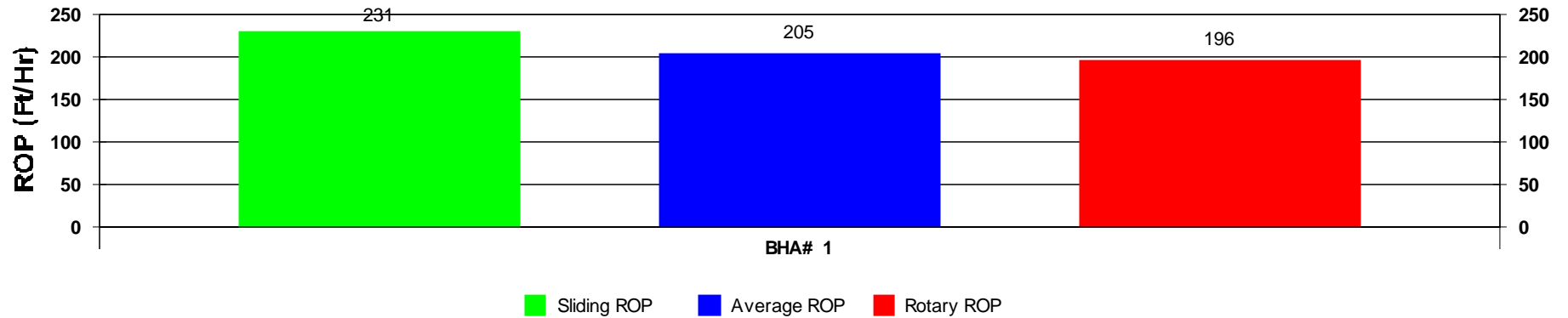
Total Drilled Sliding: 256 **Avg. Slide ROP:** 27.19 **Percent Slide:** 6.34 - 34.98

JOB NO.:	232793	FIELD:	DJ Basin	
Company:	EnCana Oil & Gas (USA) Inc.	Township:	2N	
LOCATION:	Ruhl Pad	SECTRANGE:	32	64W
RIG NAME:	H&P 278	COMMENT		
STATE:	Colorado			
COUNTY:	Weld			
WELL NAME:	Ruhl 1B-32H-B264			

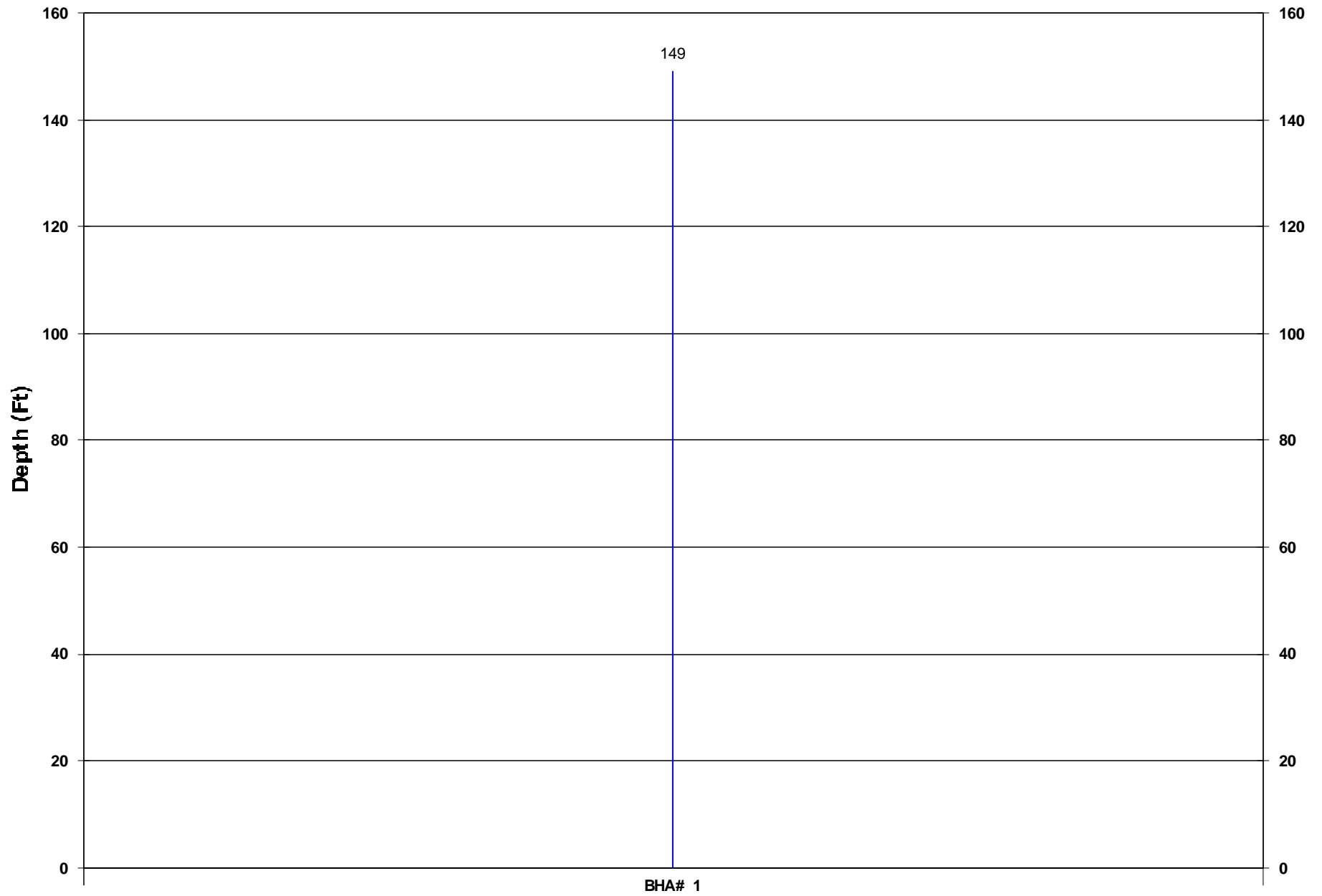
Footage Drilled with BHA



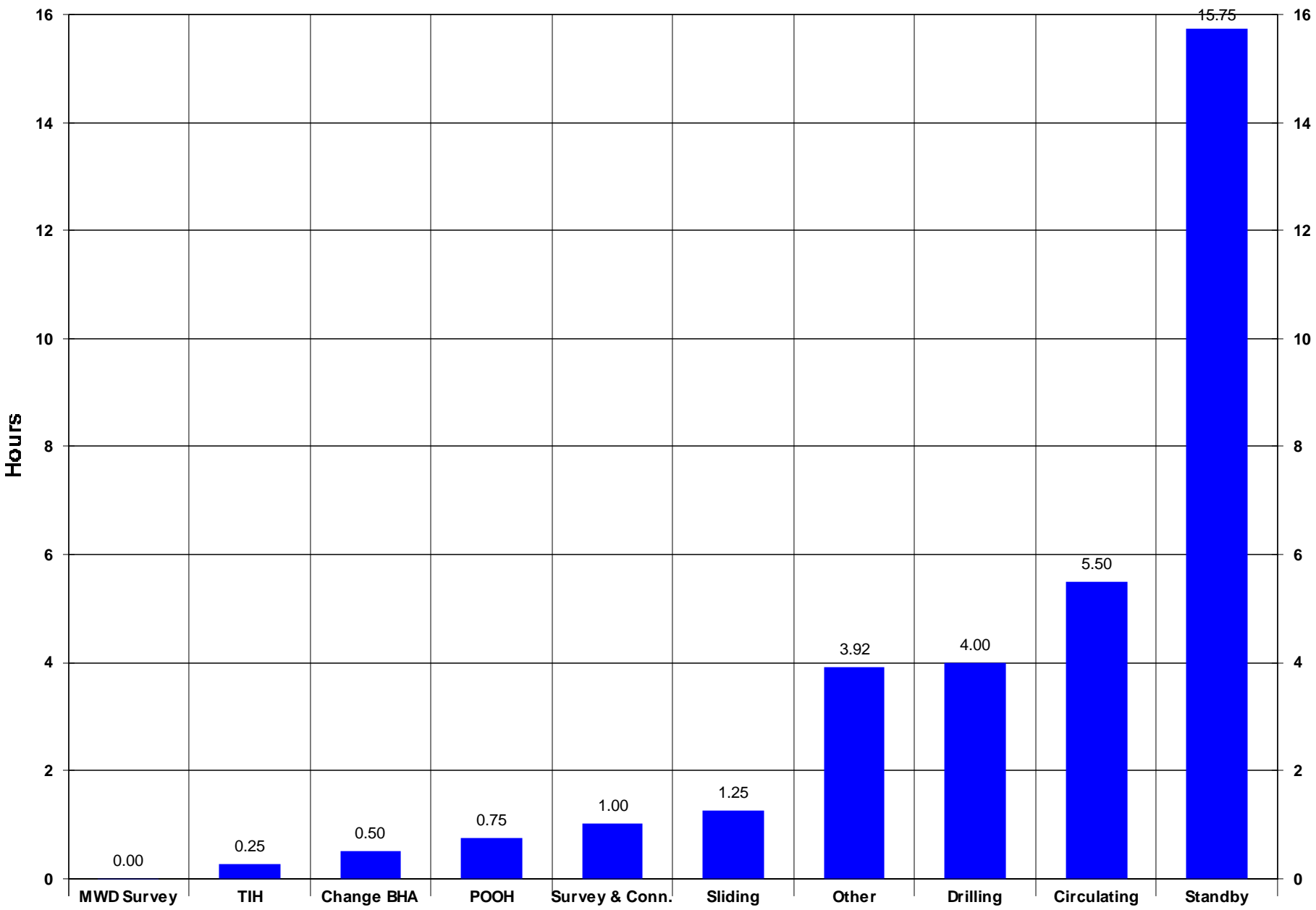
ROP vs BHA



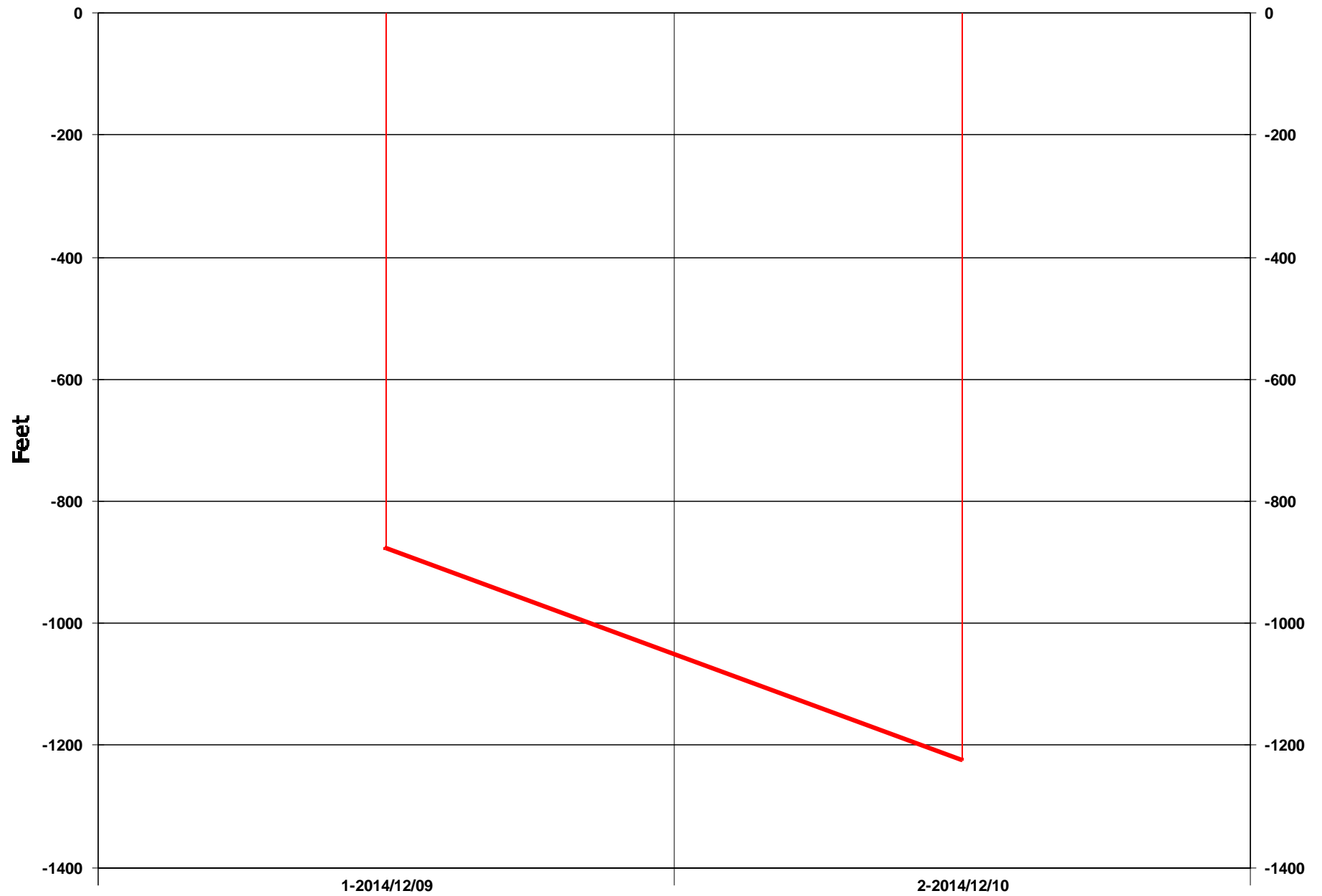
Depth vs BHA



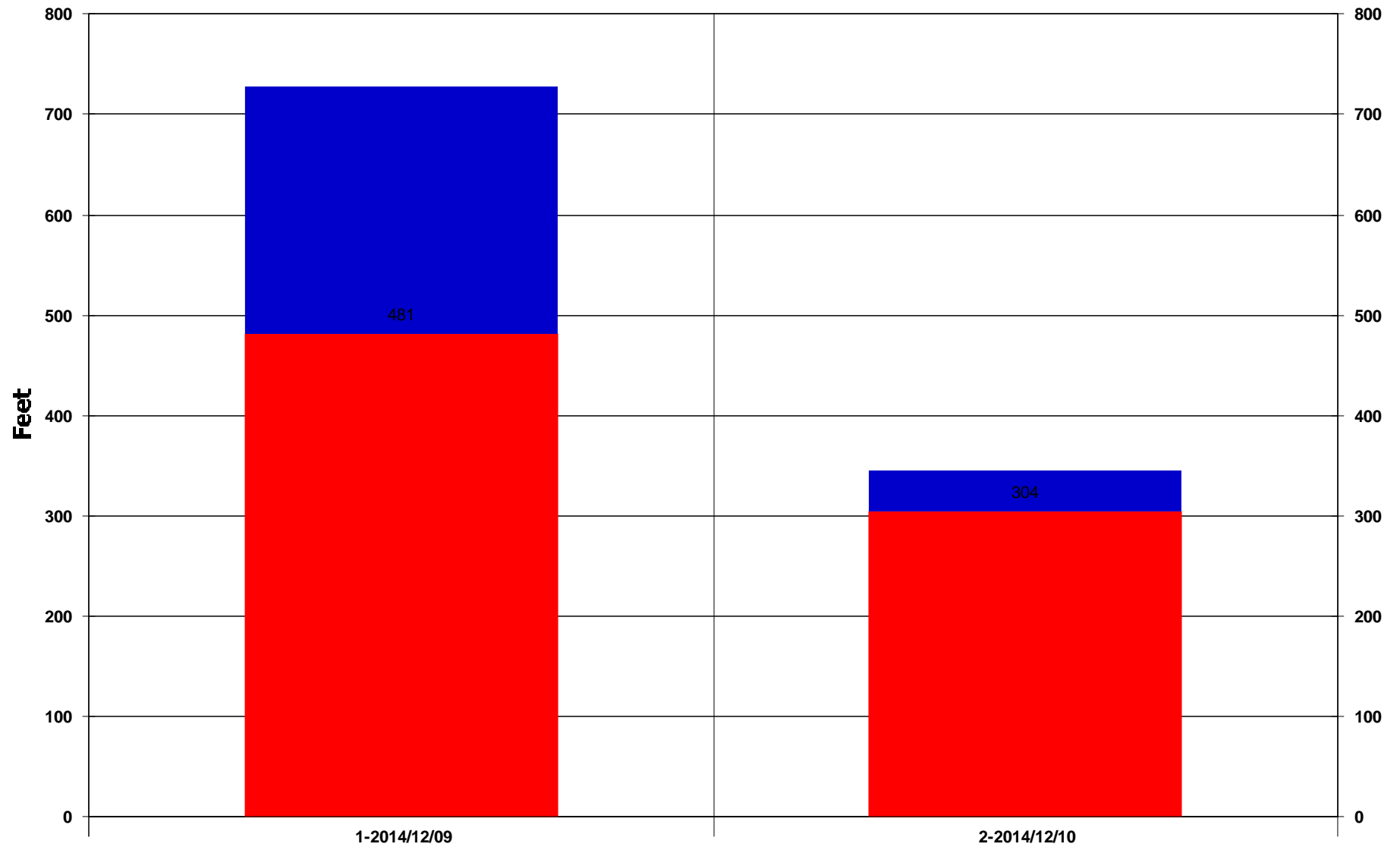
Activity Histogram



Measured Depth vs Days

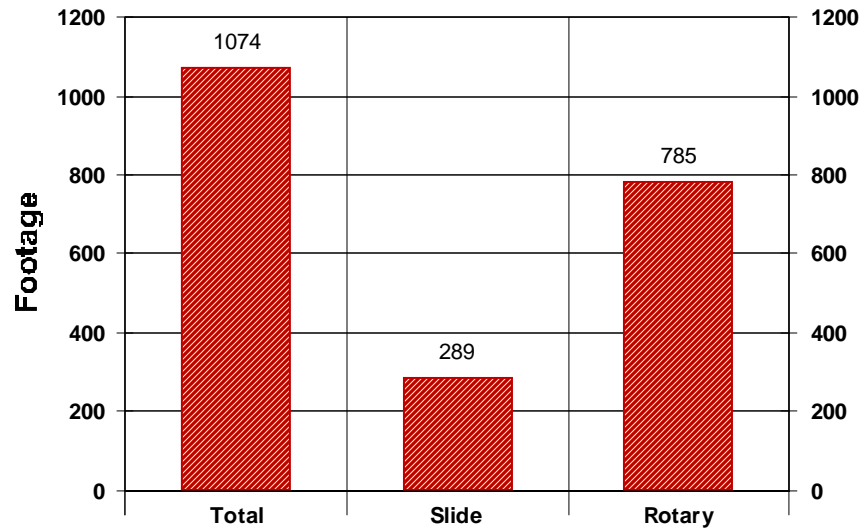


Daily Footage

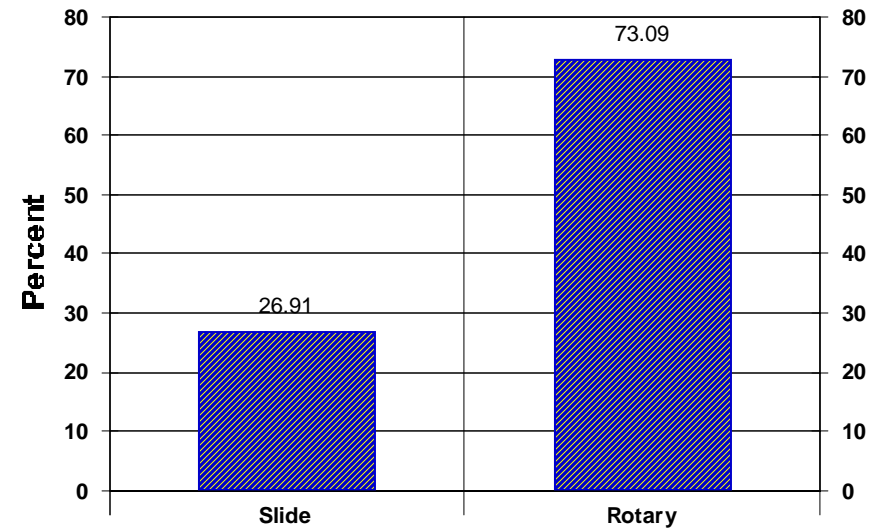


Rotary Drilling Sliding

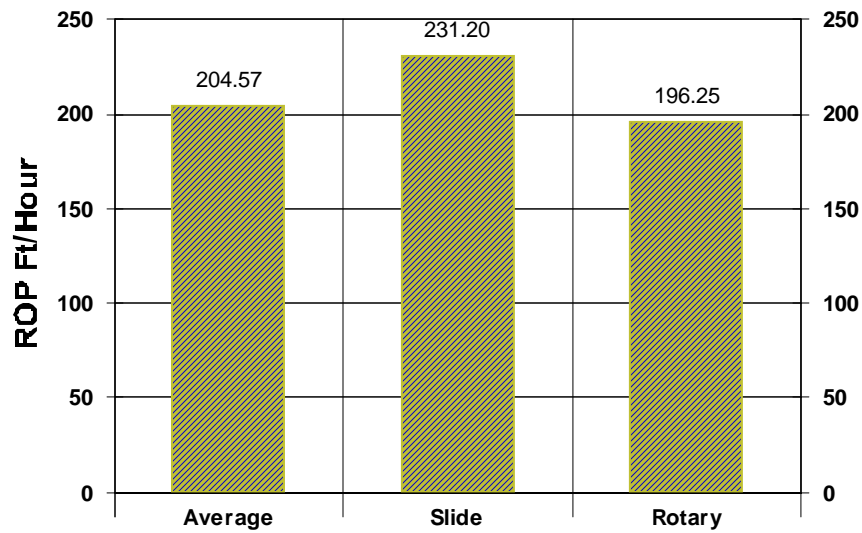
Footage Drilled Totals



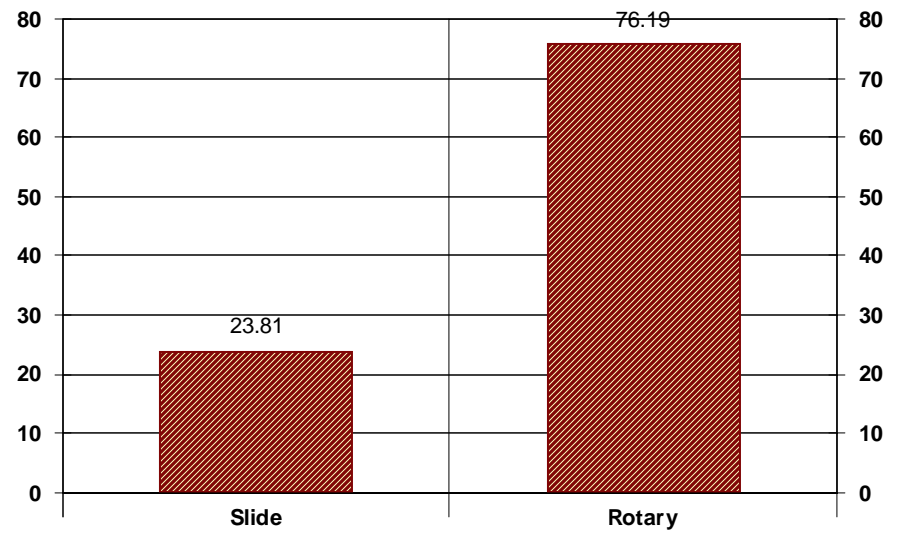
Footage Percent



Rate of Penetration Totals

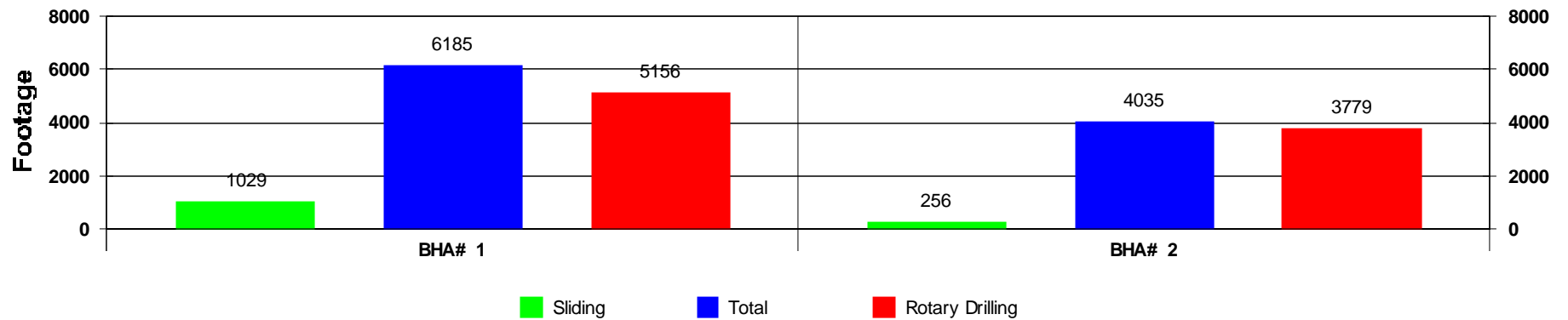


Time Percent

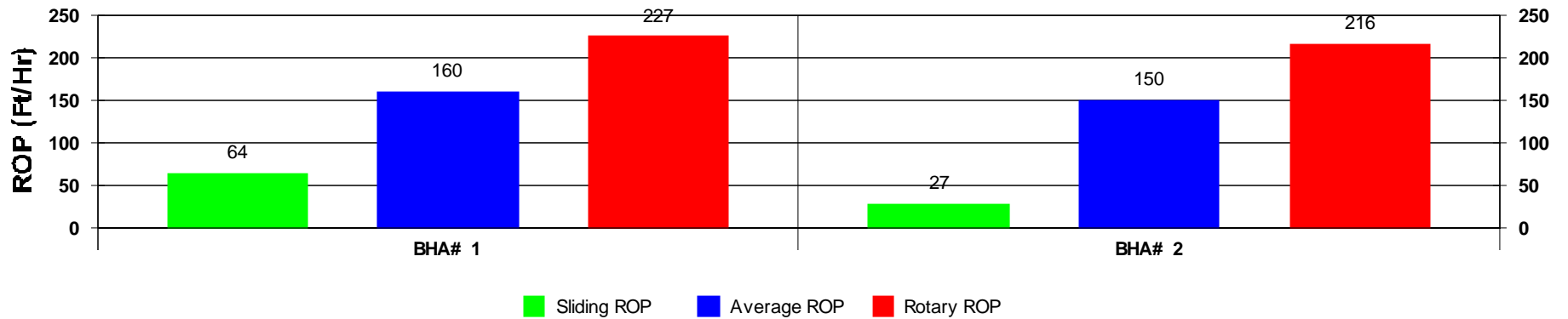


JOB NO.:	248161	FIELD:	Wattenburg	
Company:	EnCana Oil & Gas (USA) Inc.	Township:	2N	
LOCATION:	Ruhl Pad	SECTRANGE:	32	64N
RIG NAME:	H&P 278	COMMENT		
STATE:	Colorado			
COUNTY:	Weld			
WELL NAME:	Ruhl 1B-32H-B264			

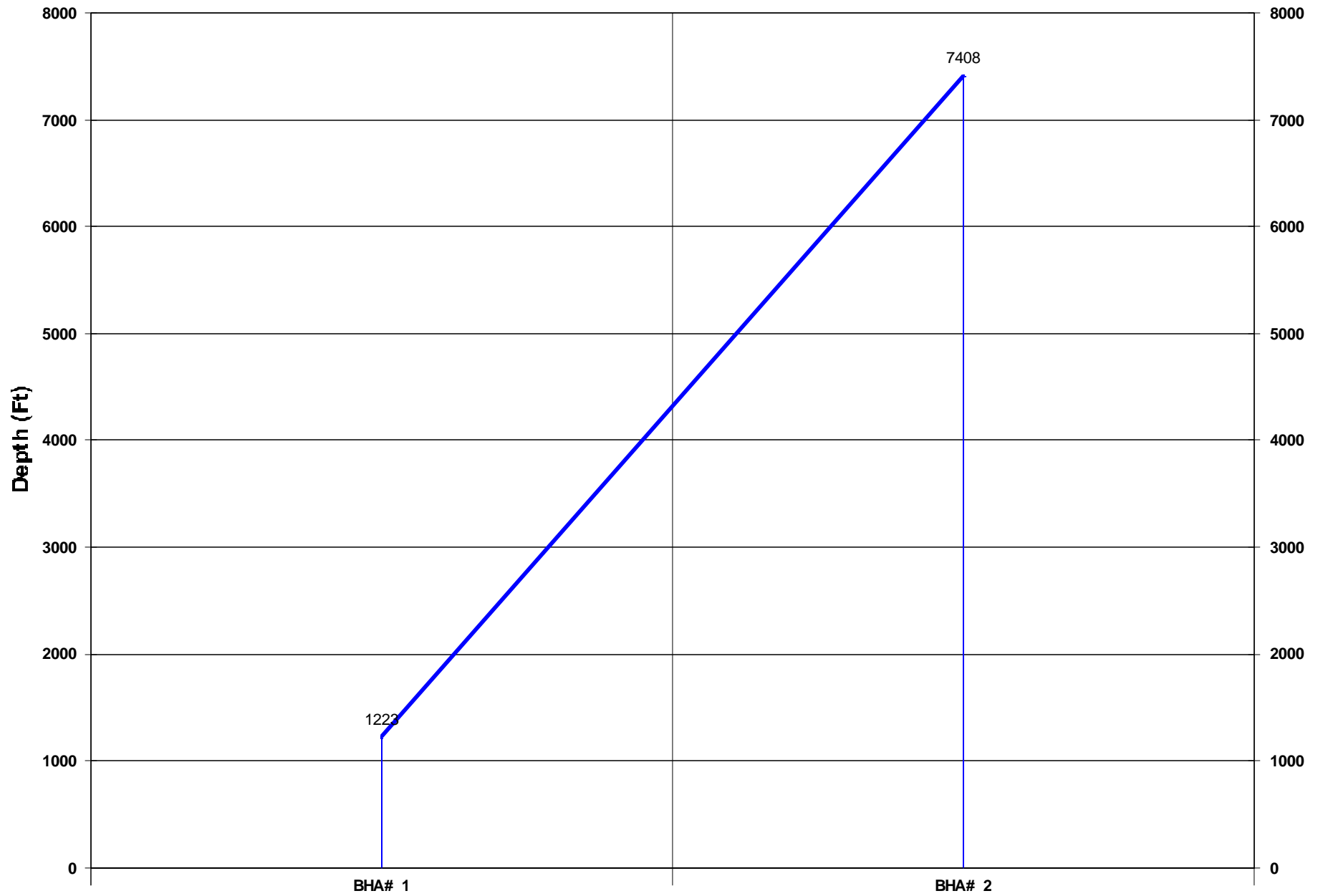
Footage Drilled with BHA



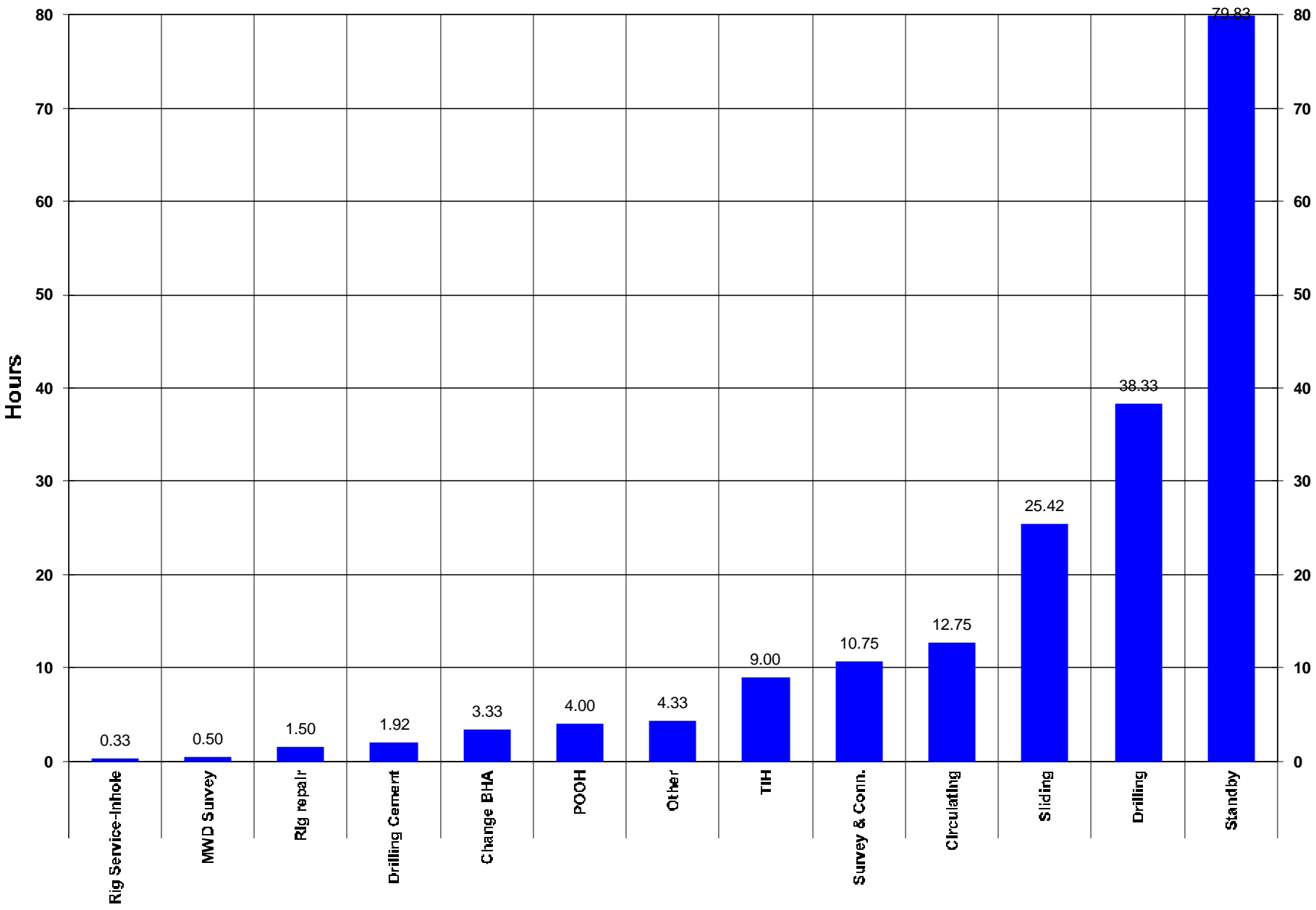
ROP vs BHA



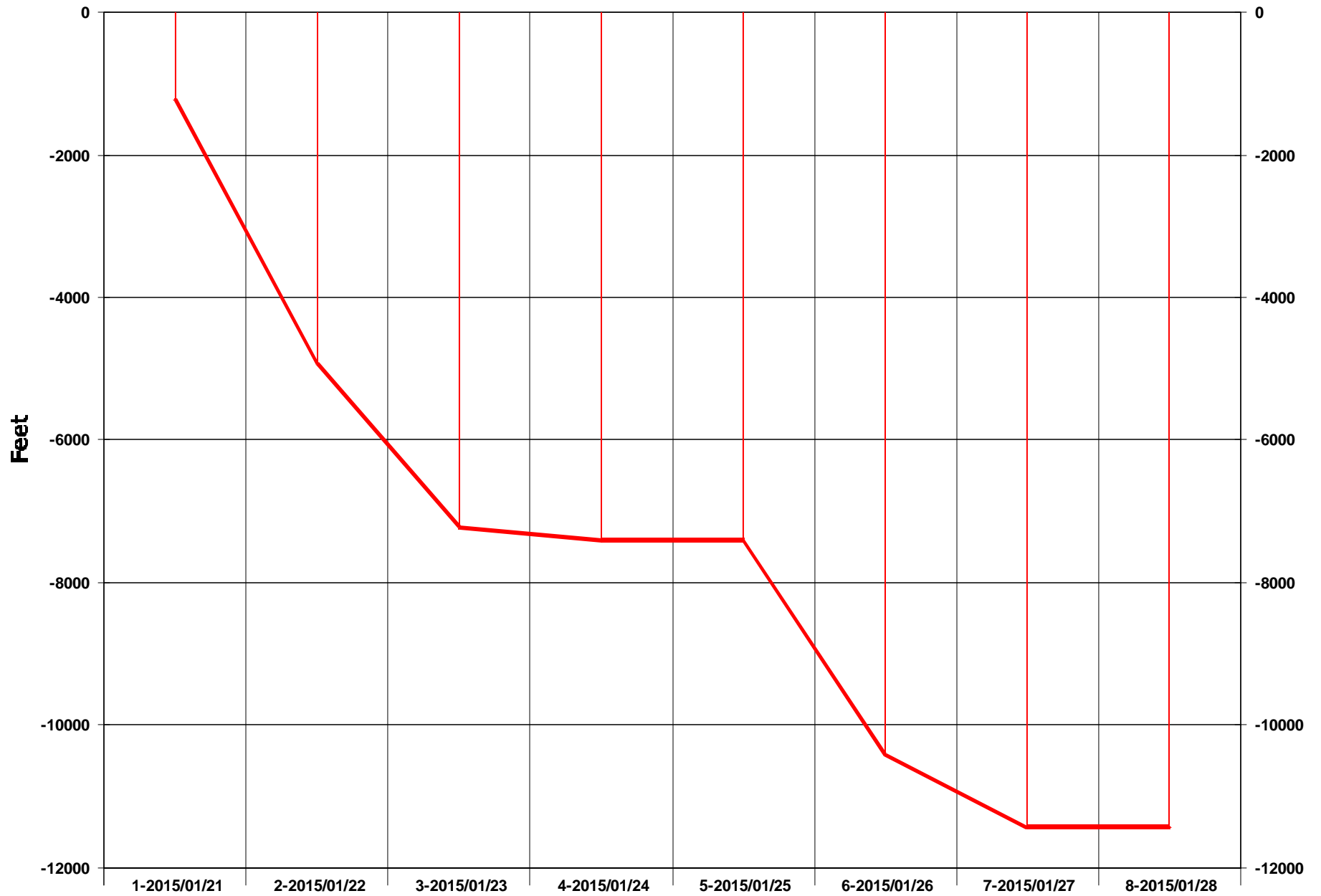
Depth vs BHA



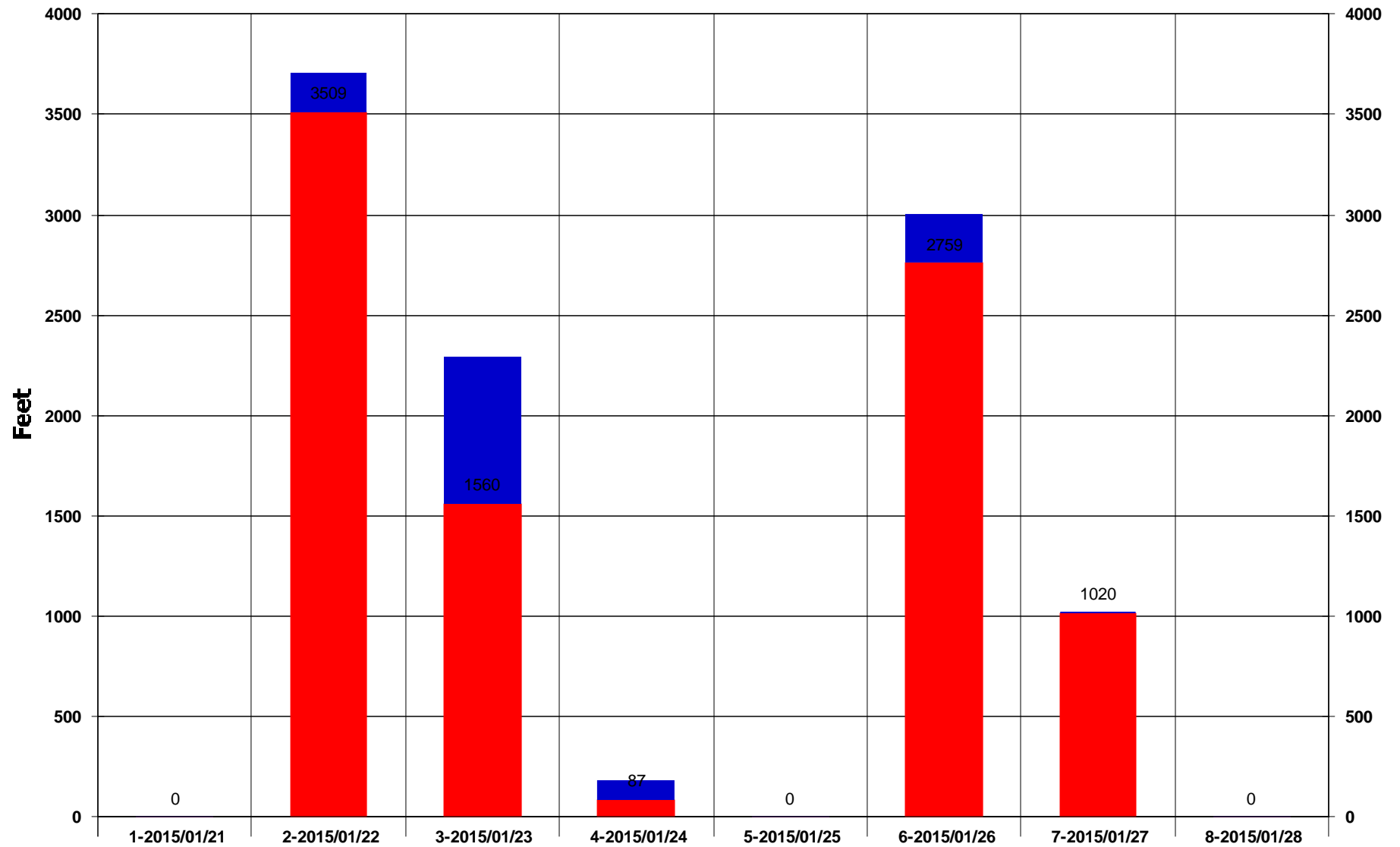
Activity Histogram



Measured Depth vs Days

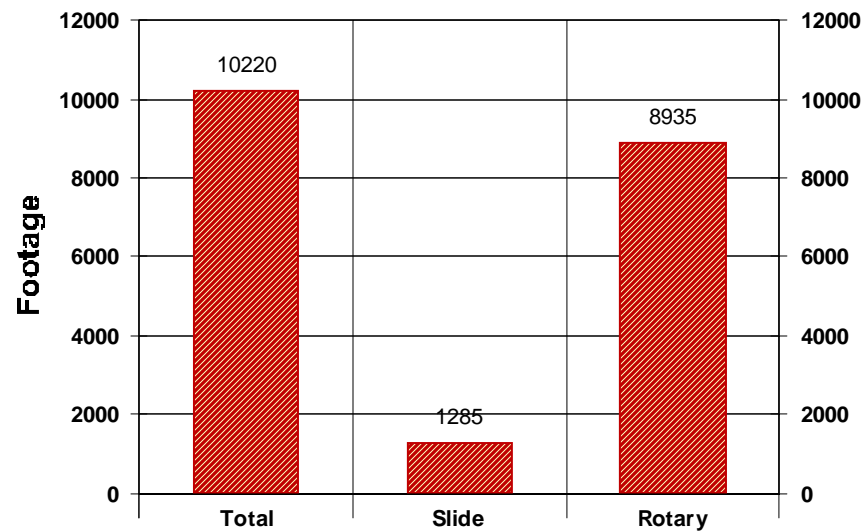


Daily Footage

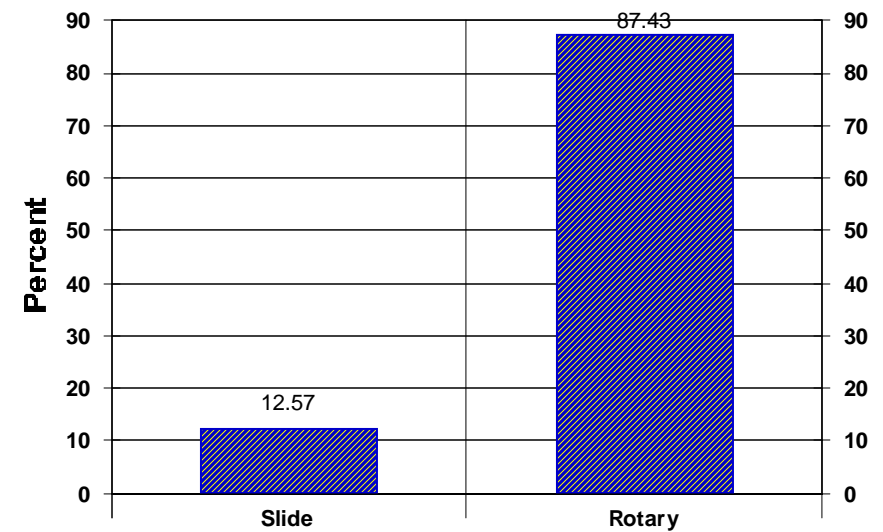


Rotary Drilling Sliding

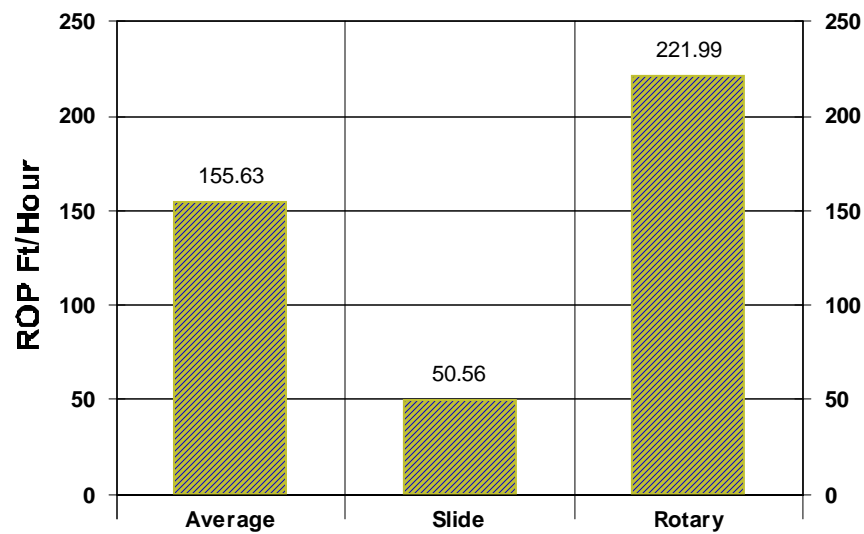
Footage Drilled Totals



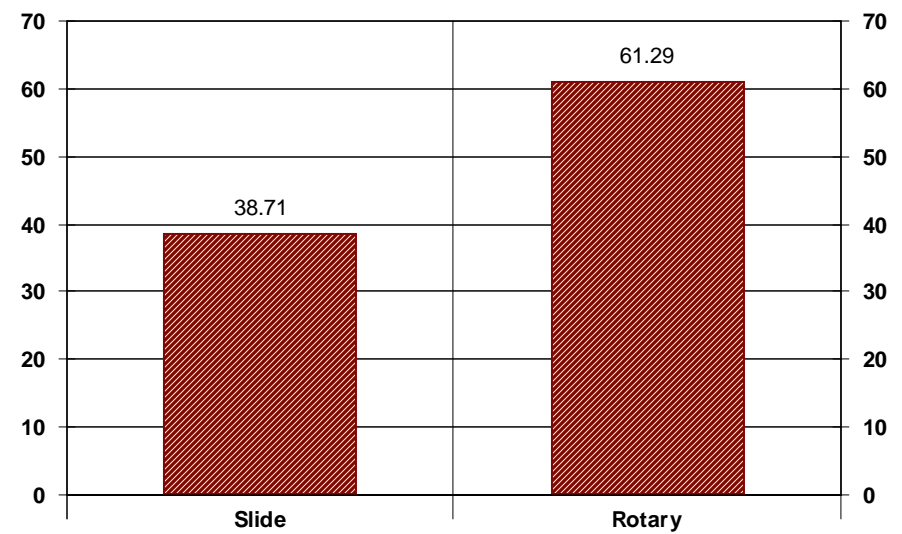
Footage Percent



Rate of Penetration Totals



Time Percent





SUPPORT STAFF

D'Arcy Quinn - Northern USA Region Manager
(307) 472-6621

darcy.quinn@scientificdrilling.com

Dee Bailey – Casper, WY Base Manager
(307) 472-6621

dee.bailey@scientificdrilling.com

Jack Potter – Grand Junction, CO Base Manager
(970) 245-9447

jack.potter@scientificdrilling.com

Mark Houston – Farmington, NM Base Manager
(505) 325-1787

mark.houston@scientificdrilling.com

Directional Drillers:
P. Turner, B. Ezeaku

MWD Operators:
S. Waxler, C. Wilson

7237 W. Barton Rd., Casper, WY 82604
P.O. Box 1600, Mills, WY 82644
(307) 472-6621