



END OF WELL REPORT

Prepared For:

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

Prepared By:

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

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- 2. Daily Drilling Reports**
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Project: DJ Wattenberg
Site: S32-T2N-R64W (Newnam/Ruhl)
Well: Ruhl 1C-32H-B264
Wellbore: Hz
Design: Plan 3



Plan: Plan 3 (Ruhl 1C-32H-B264/Hz)

Created By: Seth Burstad Date: 1-19-15



Azimuths to True North
Magnetic North: 8.37°

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

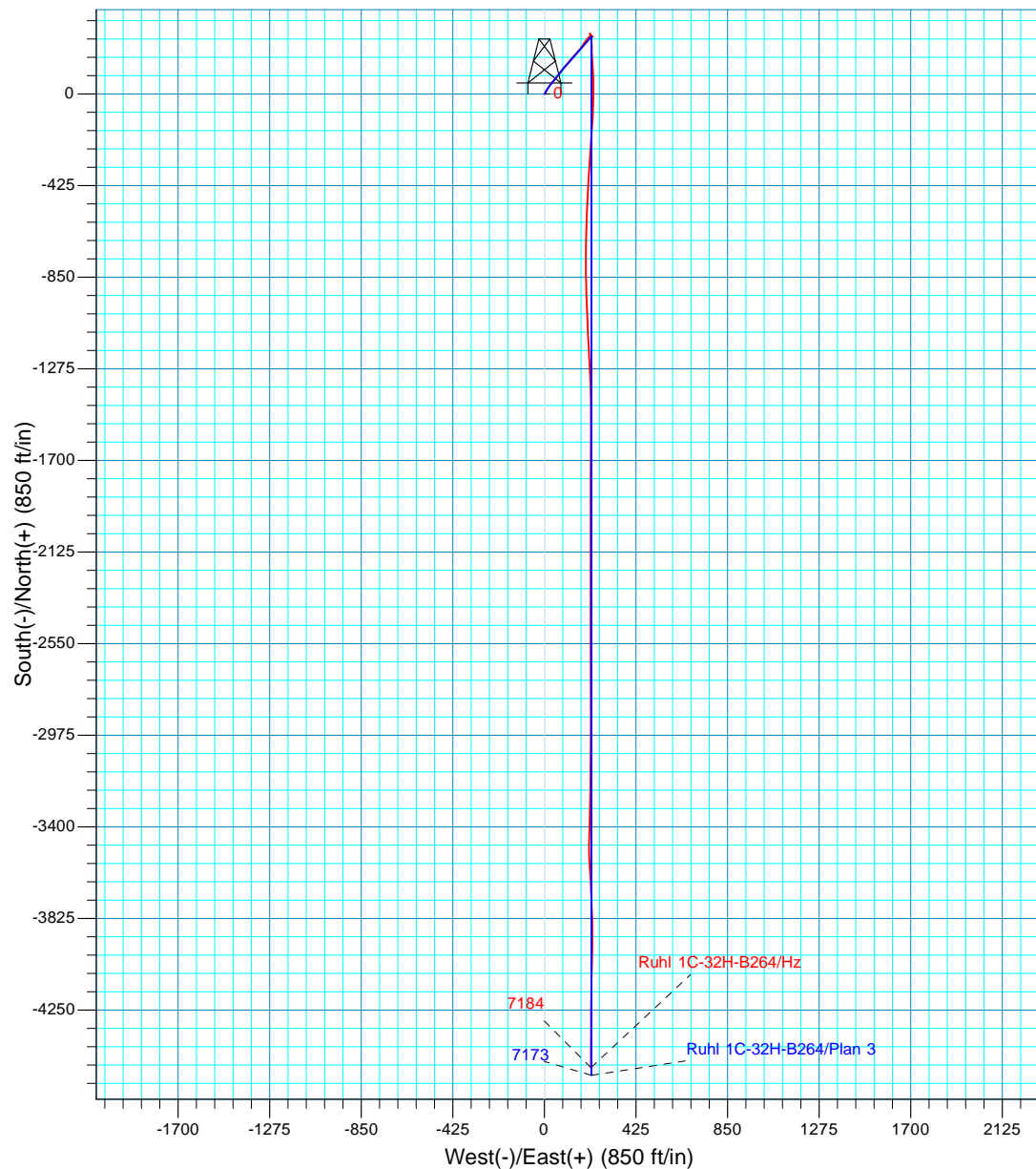
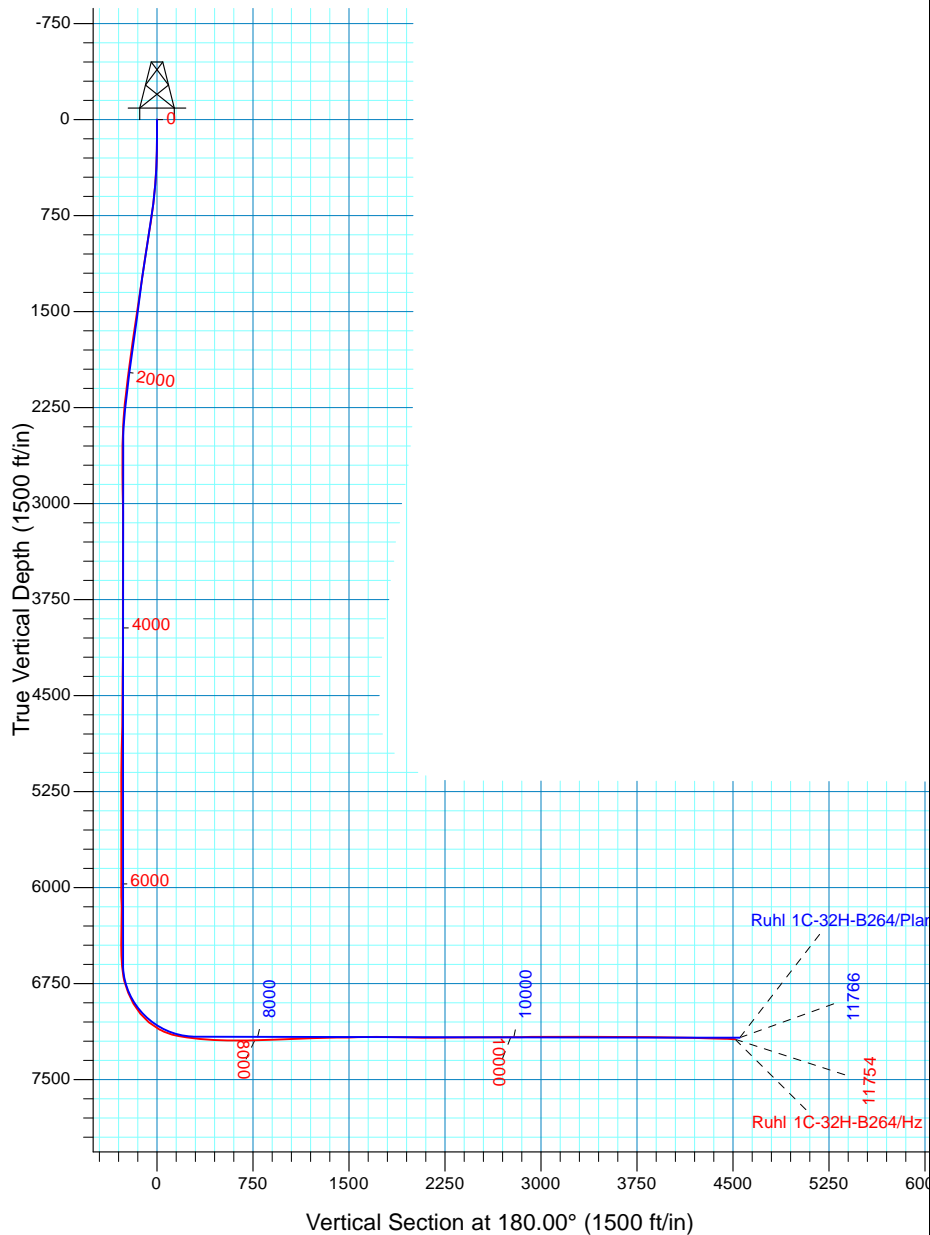
WELL DETAILS: Ruhl 1C-32H-B264

Northing	Easting	KB @ 4955.00ft (No KB)	4955.00	Latitude	Longitude
1281152.02	3259124.23			40.101439	-104.573669

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





EnCana Oil & Gas (USA)

DJ Wattenberg

S32-T2N-R64W (Newnam/Ruhl)

Ruhl 1C-32H-B264

Hz

Design: Hz

Standard Survey Report

20 January, 2015





Company:	EnCana Oil & Gas (USA)	Local Co-ordinate Reference:	Well Ruhl 1C-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 1C-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 1C-32H-B264			
Well Position	+N/-S	0.00 ft	Northing:	1,281,152.03 usft
	+E/-W	0.00 ft	Easting:	3,259,124.23 usft
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	1/20/2015		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
244.00	1,153.00	Survey #1 - Surface (Hz)	SDI MWD	SDI MWD - Standard ver 1.0.1
1,276.00	7,385.00	Survey #2 - Intermediate (Hz)	SDI MWD	SDI MWD - Standard ver 1.0.1
7,513.00	11,754.00	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	1.31	45.90	243.98	1.94	2.00	-1.94	0.54	0.54	0.00
First SDI MWD Survey									
336.00	2.39	31.78	335.93	4.30	3.77	-4.30	1.27	1.17	-15.35
428.00	3.80	33.93	427.79	8.46	6.48	-8.46	1.54	1.53	2.34
519.00	5.50	24.71	518.49	14.93	9.99	-14.93	2.03	1.87	-10.13
611.00	6.90	30.17	609.95	23.71	14.61	-23.71	1.65	1.52	5.93
701.00	8.68	33.85	699.12	34.03	21.11	-34.03	2.05	1.98	4.09
791.00	11.56	39.34	787.71	46.64	30.61	-46.64	3.37	3.20	6.10

Company:	EnCana Oil & Gas (USA)	Local Co-ordinate Reference:	Well Ruhl 1C-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 1C-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)
882.00	11.32	40.18	876.90	60.52	42.15	-60.52	0.32	-0.26	0.92
973.00	11.82	40.38	966.05	74.44	53.95	-74.44	0.55	0.55	0.22
1,062.00	11.42	37.36	1,053.23	88.39	65.20	-88.39	0.82	-0.45	-3.39
1,153.00	10.74	36.49	1,142.53	102.37	75.71	-102.37	0.77	-0.75	-0.96
Last SDI MWD Surface Survey									
1,276.00	10.15	37.00	1,263.50	120.24	89.05	-120.24	0.49	-0.48	0.41
First SDI MWD Inter. Survey									
1,367.00	11.84	42.24	1,352.82	133.55	100.15	-133.55	2.16	1.86	5.76
1,459.00	10.48	41.79	1,443.08	146.78	112.08	-146.78	1.48	-1.48	-0.49
1,552.00	10.69	41.00	1,534.50	159.60	123.37	-159.60	0.27	0.23	-0.85
1,641.00	11.36	39.61	1,621.86	172.58	134.37	-172.58	0.81	0.75	-1.56
1,821.00	10.76	42.29	1,798.51	198.67	156.98	-198.67	0.44	-0.33	1.49
2,003.00	9.02	33.80	1,977.81	223.09	176.35	-223.09	1.24	-0.96	-4.66
2,183.00	7.75	33.95	2,155.88	244.89	190.98	-244.89	0.71	-0.71	0.08
2,366.00	5.33	46.42	2,337.69	260.98	204.03	-260.98	1.53	-1.32	6.81
2,549.00	2.27	60.33	2,520.27	268.64	213.34	-268.64	1.73	-1.67	7.60
2,731.00	0.50	153.59	2,702.22	269.71	216.83	-269.71	1.29	-0.97	51.24
2,912.00	1.10	144.33	2,883.20	267.59	218.19	-267.59	0.34	0.33	-5.12
3,092.00	1.00	101.57	3,063.17	265.88	220.74	-265.88	0.43	-0.06	-23.76
3,275.00	0.81	97.00	3,246.15	265.40	223.59	-265.40	0.11	-0.10	-2.50
3,457.00	0.91	300.24	3,428.14	265.97	223.61	-265.97	0.93	0.05	-86.13
3,637.00	0.40	327.90	3,608.13	267.22	222.05	-267.22	0.33	-0.28	15.37
3,823.00	0.51	227.07	3,794.13	267.21	221.09	-267.21	0.38	0.06	-54.21
4,013.00	0.20	243.06	3,984.12	266.48	220.18	-266.48	0.17	-0.16	8.42
4,202.00	0.26	290.32	4,173.12	266.48	219.48	-266.48	0.10	0.03	25.01
4,391.00	1.01	339.82	4,362.11	268.19	218.51	-268.19	0.46	0.40	26.19
4,581.00	0.30	236.80	4,552.10	269.49	217.51	-269.49	0.59	-0.37	-54.22
4,770.00	1.19	329.94	4,741.08	270.92	216.12	-270.92	0.66	0.47	49.28
4,961.00	2.11	327.06	4,932.00	275.59	213.21	-275.59	0.48	0.48	-1.51
5,150.00	1.01	276.63	5,120.94	278.70	209.66	-278.70	0.88	-0.58	-26.68
5,340.00	0.65	81.42	5,310.93	279.05	209.07	-279.05	0.87	-0.19	86.73
5,530.00	0.13	172.28	5,500.93	279.00	210.16	-279.00	0.35	-0.27	47.82
5,720.00	0.24	74.63	5,690.93	278.89	210.57	-278.89	0.15	0.06	-51.39
5,909.00	0.26	70.36	5,879.92	279.14	211.36	-279.14	0.01	0.01	-2.26
6,100.00	0.85	118.61	6,070.91	278.61	213.01	-278.61	0.37	0.31	25.26
6,289.00	0.41	135.55	6,259.90	277.46	214.72	-277.46	0.25	-0.23	8.96
6,478.00	0.39	290.80	6,448.90	277.20	214.59	-277.20	0.41	-0.01	82.14
6,573.00	0.54	274.65	6,543.90	277.35	213.84	-277.35	0.21	0.16	-17.00
6,668.00	7.12	162.31	6,638.66	271.77	215.18	-271.77	7.73	6.93	-118.25
6,763.00	14.31	174.13	6,731.95	254.46	218.18	-254.46	7.88	7.57	12.44
6,858.00	21.42	177.84	6,822.32	225.41	220.03	-225.41	7.58	7.48	3.91
6,952.00	29.98	181.17	6,906.94	184.70	220.20	-184.70	9.23	9.11	3.54
7,047.00	39.26	172.76	6,985.08	131.00	223.51	-131.00	10.97	9.77	-8.85
7,142.00	50.43	179.67	7,052.37	64.31	227.53	-64.31	12.81	11.76	7.27

Company:	EnCana Oil & Gas (USA)	Local Co-ordinate Reference:	Well Ruhl 1C-32H-B264
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Site:	S32-T2N-R64W (Newnam/Ruhl)	MD Reference:	KB @ 4955.00ft (No KB)
Well:	Ruhl 1C-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)
7,237.00	61.18	180.22	7,105.68	-14.15	227.58	14.15	11.33	11.32	0.58
7,332.00	72.32	183.46	7,143.13	-101.23	224.68	101.23	12.14	11.73	3.41
7,385.00	78.76	183.98	7,156.36	-152.42	221.35	152.42	12.19	12.15	0.98
Last SDI MWD Inter. Survey									
7,513.00	83.47	183.84	7,176.13	-278.55	212.73	278.55	3.68	3.68	-0.11
First SDI MWD Lateral Survey									
7,604.00	85.26	183.38	7,185.06	-368.93	207.03	368.93	2.03	1.97	-0.51
7,695.00	87.01	183.86	7,191.20	-459.54	201.29	459.54	1.99	1.92	0.53
7,790.00	88.69	182.19	7,194.76	-554.33	196.29	554.33	2.49	1.77	-1.76
7,885.00	91.41	180.93	7,194.68	-649.29	193.70	649.29	3.16	2.86	-1.33
7,980.00	91.08	180.50	7,192.61	-744.26	192.51	744.26	0.57	-0.35	-0.45
8,075.00	91.88	179.14	7,190.16	-839.22	192.81	839.22	1.66	0.84	-1.43
8,169.00	92.05	177.89	7,186.94	-933.13	195.25	933.13	1.34	0.18	-1.33
8,264.00	91.71	177.49	7,183.82	-1,028.00	199.07	1,028.00	0.55	-0.36	-0.42
8,358.00	92.79	177.79	7,180.13	-1,121.85	202.94	1,121.85	1.19	1.15	0.32
8,453.00	91.82	176.45	7,176.31	-1,216.65	207.71	1,216.65	1.74	-1.02	-1.41
8,548.00	91.38	177.41	7,173.65	-1,311.48	212.80	1,311.48	1.11	-0.46	1.01
8,643.00	90.91	179.54	7,171.76	-1,406.42	215.32	1,406.42	2.30	-0.49	2.24
8,737.00	90.17	178.91	7,170.87	-1,500.40	216.60	1,500.40	1.03	-0.79	-0.67
8,833.00	92.45	181.07	7,168.68	-1,596.37	216.61	1,596.37	3.27	2.38	2.25
8,928.00	89.90	180.31	7,166.73	-1,691.33	215.47	1,691.33	2.80	-2.68	-0.80
9,023.00	89.70	180.58	7,167.06	-1,786.33	214.73	1,786.33	0.35	-0.21	0.28
9,117.00	88.76	180.04	7,168.32	-1,880.32	214.22	1,880.32	1.15	-1.00	-0.57
9,212.00	88.49	179.69	7,170.60	-1,975.29	214.45	1,975.29	0.47	-0.28	-0.37
9,307.00	89.19	180.14	7,172.53	-2,070.27	214.59	2,070.27	0.88	0.74	0.47
9,402.00	90.20	180.13	7,173.03	-2,165.27	214.36	2,165.27	1.06	1.06	-0.01
9,497.00	90.10	179.65	7,172.78	-2,260.26	214.55	2,260.26	0.52	-0.11	-0.51
9,592.00	91.88	180.81	7,171.14	-2,355.24	214.17	2,355.24	2.24	1.87	1.22
9,687.00	90.84	180.12	7,168.89	-2,450.21	213.40	2,450.21	1.31	-1.09	-0.73
9,782.00	89.56	179.49	7,168.55	-2,545.21	213.72	2,545.21	1.50	-1.35	-0.66
9,876.00	89.87	178.99	7,169.02	-2,639.20	214.97	2,639.20	0.63	0.33	-0.53
9,972.00	90.47	179.82	7,168.74	-2,735.19	215.96	2,735.19	1.07	0.63	0.86
10,067.00	90.54	180.11	7,167.90	-2,830.19	216.02	2,830.19	0.31	0.07	0.31
10,161.00	90.77	180.13	7,166.83	-2,924.18	215.82	2,924.18	0.25	0.24	0.02
10,256.00	89.76	180.49	7,166.39	-3,019.18	215.31	3,019.18	1.13	-1.06	0.38
10,351.00	89.70	180.34	7,166.83	-3,114.17	214.62	3,114.17	0.17	-0.06	-0.16
10,446.00	91.38	181.94	7,165.94	-3,209.15	212.73	3,209.15	2.44	1.77	1.68
10,540.00	88.15	180.19	7,166.32	-3,303.11	210.98	3,303.11	3.91	-3.44	-1.86
10,635.00	90.77	182.08	7,167.22	-3,398.08	209.10	3,398.08	3.40	2.76	1.99
10,730.00	89.93	180.14	7,166.64	-3,493.05	207.26	3,493.05	2.23	-0.88	-2.04
10,825.00	90.20	175.89	7,166.53	-3,587.97	210.55	3,587.97	4.48	0.28	-4.47
10,920.00	89.80	177.22	7,166.53	-3,682.80	216.26	3,682.80	1.46	-0.42	1.40
11,014.00	89.03	178.28	7,167.49	-3,776.72	219.95	3,776.72	1.39	-0.82	1.13

Company:	EnCana Oil & Gas (USA)	Local Co-ordinate Reference:	Well Ruhl 1C-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 1C-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)	
11,109.00	89.83	179.24	7,168.44	-3,871.69	222.01	3,871.69	1.32	0.84	1.01	
11,204.00	89.46	180.85	7,169.02	-3,966.69	221.93	3,966.69	1.74	-0.39	1.69	
11,299.00	88.63	181.49	7,170.61	-4,061.65	219.99	4,061.65	1.10	-0.87	0.67	
11,394.00	88.42	180.96	7,173.05	-4,156.60	217.96	4,156.60	0.60	-0.22	-0.56	
11,489.00	88.42	180.11	7,175.67	-4,251.56	217.08	4,251.56	0.89	0.00	-0.89	
11,583.00	88.13	180.25	7,178.50	-4,345.51	216.78	4,345.51	0.34	-0.31	0.15	
11,678.00	88.02	180.02	7,181.69	-4,440.46	216.56	4,440.46	0.27	-0.12	-0.24	
11,689.00	87.95	180.22	7,182.08	-4,451.45	216.53	4,451.45	1.93	-0.64	1.82	
Last SDI MWD Survey										
11,754.00	87.95	180.22	7,184.41	-4,516.41	216.28	4,516.41	0.00	0.00	0.00	
Projection to TD										

Design Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
244.00	243.98	1.94	2.00	First SDI MWD Survey
1,153.00	1,142.53	102.37	75.71	Last SDI MWD Surface Survey
1,276.00	1,263.50	120.24	89.05	First SDI MWD Inter. Survey
7,385.00	7,156.36	-152.42	221.35	Last SDI MWD Inter. Survey
7,513.00	7,176.13	-278.55	212.73	First SDI MWD Lateral Survey
11,689.00	7,182.08	-4,451.45	216.53	Last SDI MWD Survey
11,754.00	7,184.41	-4,516.41	216.28	Projection to TD

Checked By: _____ Approved By: _____ Date: _____



JOB NO.: 232801
COMPANY: EnCana Oil & Gas USA (Inc)
LOCATION: Ruhl
RIG NAME: HP 278
STATE: Colorado
COUNTY: Weld
WELL NAME: Ruhl 1C-32H-B264
Lead Directional : Paul Turner (10972)

Report Time: 2400 1 of 2
API JOB # 05-123-40279-00
WORK ORDER#
FIELD: Wattenberg
Township: 2N
Range/Section 64W 32
Company Man Randy / Joe
2nd Dir Hand : Ben Ezeaku (10012)

From Wednesday, December 10, 2014 at 0000 to Wednesday, December 10, 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	491.00		1	836	322.00	1.42	745.00	3.08	2.33	6.83	1,067.00	158.07
Below Rot Hrs.	4.00											
Total Drilled:	342.00		Drilling Parameters		Mud Record		Bit Record		Current BHA # 1			
Avg. Total ROP:	164.16											
Slide Footage:	102.00		WOB:	22	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			
Slide Hours	0.58		Rot Wt:	0	Visc:	0	Model	DP 606S				
Avg. Slide ROP:	174.86		Pick UP:	0	Chlorides:	0	SN.:	7032254				
Rotate Footage:	240.00		Slack Off:	0	YP:	0	MFG.	BAKER				
Rotary Hours	1.50		SPP:	1150	PV:	0	Type	PDC				
Avg. Rot ROP:	160.00		Flow:	0 - 537	PH:	0	IADC					
Circ Hours	0.08		SPM:	140	GAS:	0	JETS	9-12				
Ream Hours	0.00		Rot. RPM	50 - 50	SAND:	0	TFA:	0.994				
Rotary Hrs%:	72.00		Mot RPM:	50 - 50	WL:	0	Hole ID:	12.25				
Slide Hrs%:	28.00		Incl. In:	0	SOLID:	0	Bit Hrs:	4.50				
Rotary Ftg%:	70.18		Azm. In:	0	BHT°:	0	Bit Ftg:	1067.00				
Slide Ftg%:	29.82		Incl. Out:	2.39	Flow T°:	0	PUMPS					
cASING			Azm. Out:	31.78	Oil %:	0						
Size	Lb/Ft	MD	COST BREAKDOWN				Liner	0	0			
							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	20:00	20.00	0	0	0	.00	Standby	StandBy
20:00	20:15	0.25	0	0	0	.00	Other	JSA with Rig Crew
20:15	20:45	0.50	0	125	125	250.00	Change BHA	Change BHA
20:45	21:30	0.75	125	149	24	32.00	TIH	TIH
21:30	21:35	0.08	149	159	10	120.00	Drilling	Drilling - (WOB:12;GPM :0;RPM:50)
21:35	21:40	0.08	159	174	15	180.00	Sliding	Sliding - (WOB:18;GPM :422;TFO:20M))
21:40	22:00	0.33	174	186	12	36.00	Drilling	Drilling - (WOB:4;GPM :422;RPM:50)
22:00	22:10	0.17	186	186	0	.00	Connection	Connection
22:10	22:15	0.08	186	216	30	360.00	Drilling	Drilling - (WOB:4;GPM :422;RPM:50)
22:15	22:20	0.08	216	216	0	.00	MWD Survey	MWD Survey@0' Inc 0° Azm 0.0000001°
22:20	22:35	0.25	216	240	24	96.00	Sliding	Sliding - (WOB:18;GPM :499;TFO:20M))
22:35	23:05	0.50	240	307	67	134.00	Drilling	Drilling - (WOB:14;GPM :422;RPM:50)
23:05	23:10	0.08	307	307	0	.00	Survey & Conn.	Survey & Conn.@244' Inc 1.31° Azm 45.9°
23:10	23:20	0.17	307	335	28	168.00	Sliding	Sliding - (WOB:18;GPM :499;TFO:20M))

Start Time	End Time	Hours	Start Depth	End Depth	Delta Depth	ROP	Activity Code	COMMENT
23:20	23:35	0.25	335	399	64	256.00	Drilling	Drilling - (WOB:22;GPM :537;RPM:50)
23:35	23:40	0.08	399	399	0	.00	Survey & Conn.	Survey & Conn.@336' Inc 2.39° Azm 31.78°
23:40	23:45	0.08	399	434	35	420.00	Sliding	Sliding - (WOB:18;GPM :537;TFO:20M))
23:45	24:00	0.25	434	491	57	228.00	Drilling	Drilling - (WOB:22;GPM :537;RPM:50)



JOB NO.: 232801
COMPANY: EnCana Oil & Gas USA (Inc)
LOCATION: Ruhl
RIG NAME: HP 278
STATE: Colorado
COUNTY: Weld
WELL NAME: Ruhl 1C-32H-B264
Lead Directional : Paul Turner (10972)

Report Time: 2400 **2 of 2**
API JOB # 05-123-40279-00
WORK ORDER#
FIELD: Wattenberg
Township: 2N
Range/Section 64W 32
Company Man Randy / Joe
2nd Dir Hand : Ben Ezeaku (10012)

From Thursday, December 11, 2014 at 0000 to Thursday, December 11, 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	491.00		1	836	322.00	1.42	745.00	3.08	2.33	6.83	1,067.00	158.07
Below Rot Hrs.	4.00											
Total Drilled:	342.00		Drilling Parameters		Mud Record		Bit Record		Current BHA # 1			
Avg. Total ROP:	164.16											
Slide Footage:	102.00		WOB:	27	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			
Slide Hours	0.58		Rot Wt:	0	Visc:	0	Model	DP 606S				
Avg. Slide ROP:	174.86		Pick UP:	0	Chlorides:	0	SN.:	7032254				
Rotate Footage:	240.00		Slack Off:	0	YP:	0	MFG.	BAKER				
Rotary Hours	1.50		SPP:	1480	PV:	0	Type	PDC				
Avg. Rot ROP:	160.00		Flow:	537 - 537	PH:	0	IADC					
Circ Hours	0.08		SPM:	140	GAS:	0	JETS	9-12				
Ream Hours	0.00		Rot. RPM	50 - 50	SAND:	0	TFA:	0.994				
Rotary Hrs%:	72.00		Mot RPM:	50 - 50	WL:	0	Hole ID:	12.25				
Slide Hrs%:	28.00		Incl. In:	2.39	SOLID:	0	Bit Hrs:	4.50				
Rotary Ftg%:	70.18		Azm. In:	31.78	BHT°:	0	Bit Ftg:	1067.00				
Slide Ftg%:	29.82		Incl. Out:	0	Flow T°:	0	PUMPS					
cASING			Azm. Out:	0	Oil %:	0						
Size	Lb/Ft	MD	COST BREAKDOWN				Liner	0	0			
							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	00:05	0.08	491	491	0	.00	Survey & Conn.	Survey & Conn.@428' Inc 3.8° Azm 33.93°
00:05	00:15	0.17	491	534	43	258.00	Sliding	Sliding - (WOB:14;GPM :537;TFO:20M))
00:15	00:30	0.25	534	582	48	192.00	Drilling	Drilling - (WOB:24;GPM :537;RPM:50)
00:30	00:35	0.08	582	582	0	.00	Survey & Conn.	Survey & Conn.@519' Inc 5.5° Azm 24.71°
00:35	00:40	0.08	582	621	39	468.00	Sliding	Sliding - (WOB:14;GPM :537;TFO:30R))
00:40	00:55	0.25	621	674	53	212.00	Drilling	Drilling - (WOB:24;GPM :537;RPM:50)
00:55	01:00	0.08	674	674	0	.00	Survey & Conn.	Survey & Conn.@611' Inc 6.9° Azm 30.17°
01:00	01:10	0.17	674	718	44	264.00	Sliding	Sliding - (WOB:14;GPM :537;TFO:30R))
01:10	01:20	0.17	718	764	46	276.00	Drilling	Drilling - (WOB:24;GPM :537;RPM:50)
01:20	01:25	0.08	764	764	0	.00	Survey & Conn.	Survey & Conn.@701' Inc 8.68° Azm 33.85°
01:25	01:35	0.17	764	814	50	300.00	Sliding	Sliding - (WOB:14;GPM :537;TFO:30R))
01:35	01:45	0.17	814	854	40	240.00	Drilling	Drilling - (WOB:27;GPM :537;RPM:50)
01:45	01:55	0.17	854	854	0	.00	Survey & Conn.	Survey & Conn.@791' Inc 11.56° Azm 39.34°
01:55	02:05	0.17	854	945	91	546.00	Drilling	Drilling - (WOB:27;GPM :537;RPM:50)

Start Time	End Time	Hours	Start Depth	End Depth	Delta Depth	ROP	Activity Code	COMMENT
02:05	02:10	0.08	945	945	0	.00	Survey & Conn.	Survey & Conn.@882' Inc 11.32° Azm 40.18°
02:10	02:15	0.08	945	969	24	288.00	Sliding	Sliding - (WOB:14;GPM :537;TFO:5R))
02:15	02:25	0.17	969	1036	67	402.00	Drilling	Drilling - (WOB:27;GPM :537;RPM:50)
02:25	02:30	0.08	1036	1036	0	.00	Survey & Conn.	Survey & Conn.@973' Inc 11.82° Azm 40.38°
02:30	02:35	0.08	1036	1044	8	96.00	Sliding	Sliding - (WOB:14;GPM :537;TFO:5R)
02:35	02:45	0.17	1044	1125	81	486.00	Drilling	Drilling - (WOB:27;GPM :537;RPM:50)
02:45	02:50	0.08	1125	1125	0	.00	Survey & Conn.	Survey & Conn.@1062' Inc 11.42° Azm 37.36°
02:50	02:55	0.08	1125	1137	12	144.00	Sliding	Sliding - (WOB:14;GPM :537;TFO:5R))
02:55	03:10	0.25	1137	1216	79	316.00	Drilling	Drilling - (WOB:27;GPM :537;RPM:50)
03:10	03:15	0.08	1216	1216	0	.00	Survey & Conn.	Survey & Conn.@1062' Inc 11.42° Azm 37.36°
03:15	05:30	2.25	1216	1216	0	.00	Circulating	Circulating / Wiper Trip
05:30	06:00	0.50	1216	1216	0	.00	POOH	POOH
06:00	07:00	1.00	1216	1216	0	.00	Change BHA	Rack BHA
07:00	24:00	17.00	1216	1216	0	.00	Standby	Standby

JOB NO.: 244541		Report Time: 2400		1 of 9	
Company: EnCana Oil & Gas (USA) Inc.		API JOB # 05-123-40279			
LOCATION: Ruhi Pad		WORK ORDER# 244541			
RIG NAME: HP 278		FIELD: DJ Basin			
STATE: Colorado		Township: 2N			
COUNTY: Weld		Range/Section 64W		32	
WELL NAME: Ruhi 1C-32H-B264		Company Man Randy / Joe			
Lead Directional : Steven Schlamp (10800)		2nd Dir Hand : Ben Ezeaku (10012)			

From Monday, January 12, 2015 at 0000 to Monday, January 12, 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	1	65055	916.00	13.25	5,326.00	20.08	9.08	42.42	6,242.00	150.11	
Below Rot Hrs.	2.17											
Total Drilled:	0.00	Drilling Parameters		Mud Record		Bit Record		Current BHA # 1				
Avg. Total ROP:	NA	WOB: 0		Weight: 0		Bit No: 2		SDi611				
Slide Footage:	0.00	Rot Wt: 0		Visc: 0		Model SDi611		6.75 SDI Motor				
Slide Hours	0.00	Pick UP: 0		Chlorides: 0		SN.: JJ9804		6 1/4" NMPC				
Avg. Slide ROP:	NA	Slack Off: 0		YP: 0		MFG. SMITH		6 1/2" NMDC Flex				
Rotate Footage:	0.00	SPP: 0		PV: 0		Type PDC		6 1/2" NMDC Flex				
Rotary Hours	0.00	Flow: 0 - 0		PH: 0		IADC		6 1/2" NMPC				
Avg. Rot ROP:	NA	SPM: 0		GAS: 0		JETS 6-13		6 1/2" Steel X-Over				
Circ Hours	0.00	Rot. RPM -		SAND: 0		TFA: 0.777		10 Stnds. DP (30 Jnts.)				
Ream Hours	0.00	Mot RPM: -		WL: 0		Hole ID: 8.75		30 Stnds. (90 Jnts.) HWDP				
Rotary Hrs%:	NA	Incl. In: 0		SOLID: 0		Bit Hrs: 33.33						
Slide Hrs%:	NA	Az. In: 0		BHT°: 0		Bit Ftg: 6242.00						
Rotary Ftg%:	NA	Incl. Out: 0		Flow T°: 0		PUMPS						
Slide Ftg%:	NA	Az. Out: 0		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					

GENERAL COMMENT	
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Start Time	End Time	Hours	Start Depth	End Depth	Delta Depth	ROP	Activity Code	COMMENT
00:00	21:40	21.67	0	0	0	.00	Standby	Standby
21:40	21:50	0.17	0	0	0	.00	Other	JSA with Rig Crew
21:50	22:50	1.00	120.92	120.92	0	.00	Change BHA	Pick up BHA
22:50	23:30	0.67	212	212	0	.00	TIH	TIH
23:30	23:40	0.17	212	212	0	.00	Standby	Surface Test MWD Tool
23:40	24:00	0.33	498	498	0	.00	TIH	TIH

JOB NO.:	244541	Report Time:	2400	2 of 9
Company:	EnCana Oil & Gas (USA) Inc.	API JOB #	05-123-40279	
LOCATION:	Ruhl Pad	WORK ORDER#	244541	
RIG NAME:	HP 278	FIELD:	DJ Basin	
STATE:	Colorado	Township:	2N	
COUNTY:	Weld	Range/Section	64W	32
WELL NAME:	Ruhl 1C-32H-B264	Company Man	Randy / Joe	
Lead Directional :	Steven Schlamp (10800)	2nd Dir Hand :	Ben Ezeaku (10012)	

From Tuesday, January 13, 2015 at 0000 to Tuesday, January 13, 2015 at 2400

DAILY TOTALS		ASSEMBLY TOTALS									
Start Depth	1208.00	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	4931.00	1	65055	916.00	13.25	5,326.00	20.08	9.08	42.42	6,242.00	150.11
Below Rot Hrs.	24.00										
Total Drilled:	3723.00	Drilling Parameters		Mud Record		Bit Record		Current BHA # 1			
Avg. Total ROP:	249.59										
Slide Footage:	133.00	WOB:	29	Weight:	0	Bit No:	2	SDi611 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 Hours	1.58	Rot Wt:	122	Visc:	0	Model	SDi611				
Avg. Slide ROP:	84.00	Pick UP:	131	Chlorides:	0	SN.:	JJ9804				
Rotate Footage:	3590.00	Slack Off:	109	YP:	0	MFG.	SMITH				
Rotary Hours	13.33	SPP:	3705	PV:	0	Type	PDC				
Avg. Rot ROP:	269.25	Flow:	0 - 580	PH:	0	IADC					
Circ Hours	1.67	SPM:	140	GAS:	0	JETS	6-13				
Ream Hours	0.00	Rot. RPM	50 - 70	SAND:	0	TFA:	0.777				
Rotary Hrs%:	89.39	Mot RPM:	60 - 70	WL:	0	Hole ID:	8.75				
Slide Hrs%:	10.61	Incl. In:	0	SOLID:	0	Bit Hrs:	33.33				
Rotary Ftg%:	96.43	Azm. In:	0	BHT°:	0	Bit Ftg:	6242.00				
Slide Ftg%:	3.57	Incl. Out:	1.19	Flow T°:	0	PUMPS					
COST BREAKDOWN		Azm. Out:	329.94	Oil %:	0	Liner	0	0			
Size		Lb/Ft	MD								

Start Time	End Time	Hours	Start Depth	End Depth	Delta Depth	ROP	Activity Code	COMMENT
04:30	04:35	0.08	1616	1616	0	.00	Survey & Conn.	Survey & Conn.@1552' Inc 10.69° Azm 41°
04:35	04:50	0.25	1616	1706	90	360.00	Drilling	Drilling - (WOB:18;GPM :537;RPM:70)
04:50	05:00	0.17	1706	1706	0	.00	Survey & Conn.	Survey & Conn.@1641' Inc 11.36° Azm 39.61°
05:00	05:05	0.08	1706	1714	8	96.00	Sliding	Sliding - (WOB:18;GPM :537;TFO:105R))
05:05	05:20	0.25	1714	1796	82	328.00	Drilling	Drilling - (WOB:18;GPM :537;RPM:70)
05:20	05:25	0.08	1796	1804	8	96.00	Sliding	Sliding - (WOB:18;GPM :537;TFO:180))
05:25	05:35	0.17	1804	1886	82	492.00	Drilling	Drilling - (WOB:18;GPM :537;RPM:70)
05:35	05:40	0.08	1886	1886	0	.00	Survey & Conn.	Survey & Conn.@1821' Inc 10.76° Azm 42.29°
05:40	05:50	0.17	1886	1977	91	546.00	Drilling	Drilling - (WOB:18;GPM :537;RPM:70)
05:50	05:55	0.08	1977	1977	0	.00	Survey & Conn.	Survey & Conn.@2003' Inc 9.02° Azm 33.8°
05:55	06:10	0.25	1977	1990	13	52.00	Sliding	Sliding - (WOB:18;GPM :537;TFO:180))
06:10	06:20	0.17	1990	2068	78	468.00	Drilling	Drilling - (WOB:18;GPM :537;RPM:70)
06:20	06:25	0.08	2068	2068	0	.00	Survey & Conn.	Survey & Conn.@2003' Inc 9.02° Azm 33.8°
06:25	06:30	0.08	2068	2075	7	84.00	Sliding	Sliding - (WOB:18;GPM :537;TFO:105R))
06:30	06:45	0.25	2075	2248	173	692.00	Drilling	Drilling - (WOB:18;GPM :537;RPM:70)
06:45	07:30	0.75	2248	2248	0	.00	Circulating	Troubleshoot MWD
07:30	08:00	0.50	2248	2248	0	.00	Circulating	Circulating
08:00	10:00	2.00	2248	2248	0	.00	POOH	POOH
10:00	10:10	0.17	2248	2248	0	.00	Other	Safety meeting w. rig crew & review JSA
10:10	11:00	0.83	2248	2248	0	.00	Other	XO MWD / Check Scribe
11:00	11:25	0.42	2248	2248	0	.00	Other	Install rotating head & surface test MWD
11:25	12:20	0.92	2248	2248	0	.00	TIH	TIH
12:20	12:25	0.08	2248	2248	0	.00	Survey & Conn.	Survey & Conn.@2183' Inc 7.75° Azm 33.95°
12:25	12:30	0.08	2248	2261	13	156.00	Sliding	Sliding - (WOB:18;GPM :537;TFO:135R))
12:30	13:05	0.58	2261	2431	170	291.43	Drilling	Drilling - (WOB:18;GPM :537;RPM:70)
13:05	13:10	0.08	2431	2431	0	.00	Survey & Conn.	Survey & Conn.@2366' Inc 5.33° Azm 46.42°
13:10	13:15	0.08	2431	2446	15	180.00	Sliding	Sliding - (WOB:18;GPM :537;TFO:165R))
13:15	13:45	0.50	2446	2614	168	336.00	Drilling	Drilling - (WOB:18;GPM :537;RPM:70)
13:45	13:50	0.08	2614	2614	0	.00	Survey & Conn.	Survey & Conn.@2549' Inc 2.27° Azm 60.33°
13:50	14:00	0.17	2614	2626	12	72.00	Sliding	Sliding - (WOB:18;GPM :537;TFO:165R))
14:00	14:25	0.42	2626	2796	170	408.00	Drilling	Drilling - (WOB:18;GPM :537;RPM:70)
14:25	14:30	0.08	2796	2796	0	.00	Survey & Conn.	Survey & Conn.@2731' Inc 0.5° Azm 153.59°
14:30	15:00	0.50	2796	2977	181	362.00	Drilling	Drilling - (WOB:30;GPM :580;RPM:70)
15:00	15:05	0.08	2977	2977	0	.00	Survey & Conn.	Survey & Conn.@2912' Inc 1.1° Azm 144.33°
15:05	15:10	0.08	2977	2987	10	120.00	Sliding	Sliding - (WOB:18;GPM :537;TFO:0M))
15:10	15:40	0.50	2987	3157	170	340.00	Drilling	Drilling - (WOB:30;GPM :580;RPM:70)
15:40	15:45	0.08	3157	3157	0	.00	Survey & Conn.	Survey & Conn.@3092' Inc 1° Azm 101.57°
15:45	16:15	0.50	3157	3340	183	366.00	Drilling	Drilling - (WOB:30;GPM :580;RPM:70)
16:15	16:20	0.08	3340	3340	0	.00	Survey & Conn.	Survey & Conn.@3275' Inc 0.81° Azm 97°
16:20	16:25	0.08	3340	3352	12	144.00	Sliding	Sliding - (WOB:18;GPM :580;TFO:285M))
16:25	16:55	0.50	3352	3522	170	340.00	Drilling	Drilling - (WOB:30;GPM :580;RPM:70)
16:55	17:00	0.08	3522	3522	0	.00	Survey & Conn.	Survey & Conn.@3457' Inc 0.91° Azm 300.24°
17:00	17:30	0.50	3522	3702	180	360.00	Drilling	Drilling - (WOB:31;GPM :580;RPM:70)
17:30	17:35	0.08	3702	3702	0	.00	Survey & Conn.	Survey & Conn.@3637' Inc 0.4° Azm 327.9°
17:35	18:40	1.08	3702	3888	186	171.69	Drilling	Drilling - (WOB:31;GPM :580;RPM:70)
18:40	18:45	0.08	3888	3888	0	.00	Survey & Conn.	Survey & Conn.@3823' Inc 0.51° Azm 227.07°
18:45	19:20	0.58	3888	4078	190	325.71	Drilling	Drilling - (WOB:31;GPM :580;RPM:70)
19:20	19:30	0.17	4078	4078	0	.00	Survey & Conn.	Survey & Conn.@4013' Inc 0.2° Azm 243.06°

Start Time	End Time	Hours	Start Depth	End Depth	Delta Depth	ROP	Activity Code	COMMENT
19:30	20:05	0.58	4078	4267	189	324.00	Drilling	Drilling - (WOB:31;GPM :580;RPM:70)
20:05	20:10	0.08	4267	4267	0	.00	Survey & Conn.	Survey & Conn.@4202' Inc 0.26° Azm 290.32°
20:10	20:55	0.75	4267	4456	189	252.00	Drilling	Drilling - (WOB:31;GPM :580;RPM:70)
20:55	21:05	0.17	4456	4456	0	.00	MWD Survey	MWD Survey@4391' Inc 1.01° Azm 339.82°
21:05	21:10	0.08	4456	4466	10	120.00	Sliding	Sliding - (WOB:24;GPM :580;TFO:180M))
21:10	22:20	1.17	4466	4646	180	154.29	Drilling	Drilling - (WOB:31;GPM :534;RPM:70)
22:20	22:25	0.08	4646	4646	0	.00	Survey & Conn.	Survey & Conn.@4581' Inc 0.3° Azm 236.8°
22:25	23:10	0.75	4646	4835	189	252.00	Drilling	Drilling - (WOB:31;GPM :534;RPM:70)
23:10	23:15	0.08	4835	4835	0	.00	Survey & Conn.	Survey & Conn.@4770' Inc 1.19° Azm 329.94°
23:15	23:35	0.33	4835	4847	12	36.00	Sliding	Sliding - (WOB:24;GPM :580;TFO:180M))
23:35	24:00	0.42	4847	4931	84	201.60	Drilling	Drilling - (WOB:31;GPM :534;RPM:70)

JOB NO.:	244541	Report Time:	2400	3 of 9
Company:	EnCana Oil & Gas (USA) Inc.	API JOB #	05-123-40279	
LOCATION:	Ruhl Pad	WORK ORDER#	244541	
RIG NAME:	HP 278	FIELD:	DJ Basin	
STATE:	Colorado	Township:	2N	
COUNTY:	Weld	Range/Section	64W	32
WELL NAME:	Ruhl 1C-32H-B264	Company Man	Randy / Joe	
Lead Directional :	Steven Schlamp (10800)	2nd Dir Hand :	Ben Ezeaku (10012)	

From Wednesday, January 14, 2015 at 0000 to Wednesday, January 14, 2015 at 2400

DAILY TOTALS		ASSEMBLY TOTALS									
Start Depth	4931.00	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	7420.00	1	65055	916.00	13.25	5,326.00	20.08	9.08	42.42	6,242.00	150.11
Below Rot Hrs.	24.00										
Total Drilled:	2489.00	Drilling Parameters		Mud Record		Bit Record		Current BHA # 1			
Avg. Total ROP:	137.01										
Slide Footage:	755.00	WOB:	29	Weight:	0	Bit No:	2	SDi611 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 Hours	9.92	Rot Wt:	122	Visc:	0	Model	SDi611				
Avg. Slide ROP:	76.13	Pick UP:	131	Chlorides:	0	SN.:	JJ9804				
Rotate Footage:	1734.00	Slack Off:	109	YP:	0	MFG.	SMITH				
Rotary Hours	8.25	SPP:	4062	PV:	0	Type	PDC				
Avg. Rot ROP:	210.18	Flow:	534 - 580	PH:	0	IADC					
Circ Hours	1.75	SPM:	140	GAS:	0	JETS	6-13				
Ream Hours	0.00	Rot. RPM	70 - 70	SAND:	0	TFA:	0.777				
Rotary Hrs%:	45.41	Mot RPM:	9 - 70	WL:	0	Hole ID:	8.75				
Slide Hrs%:	54.59	Incl. In:	1.19	SOLID:	0	Bit Hrs:	33.33				
Rotary Ftg%:	69.67	Azm. In:	329.94	BHT°:	0	Bit Ftg:	6242.00				
Slide Ftg%:	30.33	Incl. Out:	78.76	Flow T°:	0	PUMPS					
COST BREAKDOWN		Azm. Out:	183.98	Oil %:	0	Liner	0	0			
Size		Lb/Ft	MD								

Start Time	End Time	Hours	Start Depth	End Depth	Delta Depth	ROP	Activity Code	COMMENT
02:50	03:00	0.17	5279	5289	10	60.00	Sliding	Sliding - (WOB:24;GPM :580;TFO:60M))
03:00	03:15	0.25	5289	5405	116	464.00	Drilling	Drilling - (WOB:29;GPM :534;RPM:70)
03:15	03:25	0.17	5405	5405	0	.00	Survey & Conn.	Survey & Conn.@5340' Inc 0.65° Azm 81.42°
03:25	04:10	0.75	5405	5595	190	253.33	Drilling	Drilling - (WOB:29;GPM :534;RPM:70)
04:10	04:20	0.17	5595	5595	0	.00	Survey & Conn.	Survey & Conn.@5530' Inc 0.13° Azm 172.28°
04:20	05:00	0.67	5595	5785	190	285.00	Drilling	Drilling - (WOB:29;GPM :534;RPM:70)
05:00	05:10	0.17	5785	5785	0	.00	Survey & Conn.	Survey & Conn.@5720' Inc 0.24° Azm 74.63°
05:10	05:45	0.58	5785	5974	189	324.00	Drilling	Drilling - (WOB:29;GPM :534;RPM:70)
05:45	05:50	0.08	5974	5974	0	.00	Survey & Conn.	Survey & Conn.@5909' Inc 0.26° Azm 70.36°
05:50	06:25	0.58	5974	6069	95	162.86	Drilling	Drilling - (WOB:29;GPM :534;RPM:70)
06:25	07:20	0.92	6069	6069	0	.00	Other	LO 2 washed Jnts. DP
07:20	07:25	0.08	6069	6069	0	.00	Survey & Conn.	Survey & Conn.@6100' Inc 0.85° Azm 118.61°
07:25	07:35	0.17	6069	6079	10	60.00	Sliding	Sliding - (WOB:24;GPM :580;TFO:60M))
07:35	08:00	0.42	6079	6165	86	206.40	Drilling	Drilling - (WOB:29;GPM :534;RPM:70)
08:00	08:05	0.08	6165	6165	0	.00	Survey & Conn.	Survey & Conn.@6100' Inc 0.85° Azm 118.61°
08:05	08:50	0.75	6165	6365	200	266.67	Drilling	Drilling - (WOB:29;GPM :534;RPM:70)
08:50	08:55	0.08	6365	6365	0	.00	Survey & Conn.	Survey & Conn.@6289' Inc 0.41° Azm 135.55°
08:55	09:40	0.75	6365	6543	178	237.33	Drilling	Drilling - (WOB:29;GPM :534;RPM:70)
09:40	09:45	0.08	6543	6543	0	.00	Survey & Conn.	Survey & Conn.@6478' Inc 0.39° Azm 290.8°
09:45	09:55	0.17	6543	6605	62	372.00	Drilling	Drilling - (WOB:29;GPM :534;RPM:70)
09:55	10:10	0.25	6605	6605	0	.00	Circulating	4 Point roll test
10:10	11:15	1.08	6605	6605	0	.00	Circulating	Pump 40 BBL sweep / Trough KOP
11:15	11:50	0.58	6605	6638	33	56.57	Sliding	Sliding - (WOB:29;GPM :534;TFO:180M))
11:50	11:55	0.08	6638	6638	0	.00	Survey & Conn.	Survey & Conn.@6573' Inc 0.54° Azm 274.65°
11:55	12:25	0.50	6638	6702	64	128.00	Sliding	Sliding - (WOB:29;GPM :534;TFO:180M))
12:25	12:45	0.33	6702	6733	31	93.00	Drilling	Drilling - (WOB:29;GPM :534;RPM:70)
12:45	12:50	0.08	6733	6733	0	.00	Survey & Conn.	Survey & Conn.@6668' Inc 7.12° Azm 162.31°
12:50	13:25	0.58	6733	6809	76	130.29	Sliding	Sliding - (WOB:29;GPM :534;TFO:30R))
13:25	13:40	0.25	6809	6828	19	76.00	Drilling	Drilling - (WOB:29;GPM :534;RPM:70)
13:40	14:50	1.17	6828	6828	0	.00	Survey & Conn.	Survey & Conn.@6763' Inc 14.31° Azm 174.13°
14:50	15:35	0.75	6828	7005	177	236.00	Sliding	Sliding - (WOB:29;GPM :534;TFO:30R))
15:35	15:40	0.08	7005	7017	12	144.00	Drilling	Drilling - (WOB:29;GPM :534;RPM:70)
15:40	15:55	0.25	7017	7017	0	.00	Survey & Conn.	Survey & Conn.@6952' Inc 29.98° Azm 181.17°
15:55	17:15	1.33	7017	7112	95	71.25	Sliding	Sliding - (WOB:29;GPM :534;TFO:30R))
17:15	17:20	0.08	7112	7112	0	.00	Survey & Conn.	Survey & Conn.@7047' Inc 39.26° Azm 172.76°
17:20	18:00	0.67	7112	7176	64	96.00	Sliding	Sliding - (WOB:29;GPM :534;TFO:45R))
18:00	18:25	0.42	7176	7207	31	74.40	Drilling	Drilling - (WOB:29;GPM :534;RPM:70)
18:25	18:30	0.08	7207	7207	0	.00	Survey & Conn.	Survey & Conn.@7142' Inc 50.43° Azm 179.67°
18:30	19:45	1.25	7207	7297	90	72.00	Sliding	Sliding - (WOB:29;GPM :534;TFO:45R))
19:45	19:55	0.17	7297	7302	5	30.00	Drilling	Drilling - (WOB:29;GPM :534;RPM:70)
19:55	20:05	0.17	7302	7302	0	.00	Survey & Conn.	Survey & Conn.@7237' Inc 61.18° Azm 180.22°
20:05	21:20	1.25	7302	7380	78	62.40	Sliding	Sliding - (WOB:29;GPM :534;TFO:15R))
21:20	21:50	0.50	7380	7397	17	34.00	Drilling	Drilling - (WOB:29;GPM :534;RPM:70)
21:50	21:55	0.08	7397	7397	0	.00	Survey & Conn.	Survey & Conn.@7332' Inc 72.32° Azm 183.46°
21:55	24:00	2.08	7397	7420	23	11.04	Sliding	Sliding - (WOB:29;GPM :534;TFO:15R)

JOB NO.: 244541
Company: EnCana Oil & Gas (USA) Inc.
LOCATION: Ruhl Pad
RIG NAME: HP 278
STATE: Colorado
COUNTY: Weld
WELL NAME: Ruhl 1C-32H-B264
Lead Directional : Steven Schlamp (10800)

Report Time: 2400 **4 of 9**
API JOB # 05-123-40279
WORK ORDER# 244541
FIELD: DJ Basin
Township: 2N
Range/Section 64W 32
Company Man George / Joe
2nd Dir Hand : Ben Ezeaku (10012)

From Thursday, January 15, 2015 at 0000 to Thursday, January 15, 2015 at 2400

DAILY TOTALS		ASSEMBLY TOTALS									
Start Depth	7420.00	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	7450.00	1	65055	916.00	13.25	5,326.00	20.08	9.08	42.42	6,242.00	150.11
Below Rot Hrs.	9.92										
Total Drilled:	30.00	Drilling Parameters		Mud Record		Bit Record		Current BHA # 1			
Avg. Total ROP:	15.65	WOB: 29		Weight: 0		Bit No: 2		SDi611 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:	28.00	Rot Wt: 122		Visc: 0		Model SDi611					
Slide Hours	1.75	Pick UP: 131		Chlorides: 0		SN.: JJ9804					
Avg. Slide ROP:	16.00	Slack Off: 109		YP: 0		MFG. SMITH					
Rotate Footage:	2.00	SPP: 4062		PV: 0		Type PDC					
Rotary Hours	0.17	Flow: 534 - 534		PH: 0		IADC					
Avg. Rot ROP:	12.00	SPM: 140		GAS: 0		JETS 6-13					
Circ Hours	4.00	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%:	8.70	Incl. In: 78.76		SOLID: 0		Bit Hrs: 33.33					
Slide Hrs%:	91.30	Azm. In: 183.98		BHT°: 0		Bit Ftg: 6242.00					
Rotary Ftg%:	6.67	Incl. Out: 78.76		Flow T°: 0		PUMPS					
Slide Ftg%:	93.33	Azm. Out: 183.98		Oil %: 0		Liner 0 0					
Casing						Stroke 0 0					
Size	Lb/Ft	MD	COST BREAKDOWN			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	01:45	1.75	7420	7448	28	16.00	Sliding	Sliding - (WOB:29;GPM :534;TFO:15R)
01:45	01:55	0.17	7448	7450	2	12.00	Drilling	Drilling - (WOB:29;GPM :534;RPM:70)
01:55	02:00	0.08	7450	7450	0	.00	Survey & Conn.	Survey & Conn. @7385' Inc 78.76° Azm 183.98°
02:00	06:00	4.00	7450	7450	0	.00	Circulating	Circulating - Pump Sweeps / Encana SOP Clean up Cycle
06:00	09:05	3.08	7450	7450	0	.00	POOH	POOH
09:05	09:15	0.17	7450	7450	0	.00	Other	JSA with Rig Crew
09:15	09:55	0.67	7450	7450	0	.00	Other	Lay down Bit and Motor
09:55	24:00	14.08	7450	7450	0	.00	Standby	Standby

JOB NO.: 244541		Report Time: 2400		5 of 9	
Company: EnCana Oil & Gas (USA) Inc.		API JOB # 05-123-40279			
LOCATION: Ruhi Pad		WORK ORDER# 244541			
RIG NAME: HP 278		FIELD: DJ Basin			
STATE: Colorado		Township: 2N			
COUNTY: Weld		Range/Section 64W		32	
WELL NAME: Ruhi 1C-32H-B264		Company Man George / Joe			
Lead Directional : Paul Turner (10972)		2nd Dir Hand : Ben Ezeaku (10012)			

From Friday, January 16, 2015 at 0000 to Friday, January 16, 2015 at 2400

DAILY TOTALS		ASSEMBLY TOTALS											
Start Depth	7450.00	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	7578.00	2	226	421.00	18.17	3,714.00	21.83	3.92	43.92	4,135.00	94.33		
Below Rot Hrs.	10.00												
Total Drilled:	128.00	Drilling Parameters		Mud Record		Bit Record		Current BHA # 2					
Avg. Total ROP:	35.72	WOB: 29		Weight: 0		Bit No: 2		SKH156M-E2 5.00" Hunting Drill 4.75 NM Pony 4 3/4" NMDC 4 3/4" Pulser Sub 4 3/4" NMDC 4.75 NM Pony 5" Steel XO 1 Stnd. HWDP (3 Jnts.) 18 Stnds. DP (54 Jnts.) NOV SS/Agitator 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					
Slide Footage:	14.00	Rot Wt: 149		Visc: 0		Model SKH156M-E2							
Slide Hours	0.17	Pick UP: 174		Chlorides: 0		SN.: A209109							
Avg. Slide ROP:	84.00	Slack Off: 124		YP: 0		MFG. NOV							
Rotate Footage:	114.00	SPP: 3900		PV: 0		Type PDC							
Rotary Hours	3.42	Flow: 0 - 296		PH: 0		IADC							
Avg. Rot ROP:	33.37	SPM: 77		GAS: 0		JETS 5-14							
Circ Hours	0.42	Rot. RPM 60 - 90		SAND: 0		TFA: 0.751							
Ream Hours	0.00	Mot RPM: 90 - 90		WL: 0		Hole ID: 6.125							
Rotary Hrs%:	95.35	Incl. In: 78.76		SOLID: 0		Bit Hrs: 40.00							
Slide Hrs%:	4.65	Azm. In: 183.98		BHT°: 0		Bit Ftg: 4135.00							
Rotary Ftg%:	89.06	Incl. Out: 83.47		Flow T°: 0		PUMPS							
Slide Ftg%:	10.94	Azm. Out: 183.84		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					

GENERAL COMMENT	
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Start Time	End Time	Hours	Start Depth	End Depth	Delta Depth	ROP	Activity Code	COMMENT
00:00	14:00	14.00	7450	7450	0	.00	Standby	Standby
14:00	15:00	1.00	7450	7450	0	.00	Change BHA	PU BHA
15:00	15:15	0.25	7450	7450	0	.00	Circulating	Surface Check MWD
15:15	16:20	1.08	7450	7450	0	.00	TIH	TIH
16:20	16:25	0.08	7450	7450	0	.00	Circulating	Surface Check Agitator
16:25	19:00	2.58	7450	7450	0	.00	TIH	TIH
19:00	19:30	0.50	7450	7450	0	.00	Other	Install Rot Head
19:30	22:00	2.50	7450	7450	0	.00	Drilling Cement	Tag Cement @7394/ Shoe @ 7441/ Drill Cemnt
22:00	22:10	0.17	7450	7460	10	60.00	Drilling	Drilling - (WOB:29;GPM :296;RPM:0)
22:10	23:00	0.83	7460	7460	0	.00	Other	FIT Test
23:00	23:10	0.17	7460	7474	14	84.00	Sliding	Sliding - (WOB:29;GPM :296;TFO:20L))
23:10	23:20	0.17	7474	7488	14	84.00	Drilling	Drilling - (WOB:29;GPM :296;RPM:70)
23:20	23:25	0.08	7488	7488	0	.00	MWD Survey	MWD Survey@7385' Inc 78.76° Azm 183.98°
23:25	24:00	0.58	7488	7578	90	154.29	Drilling	Drilling - (WOB:29;GPM :296;RPM:70)

JOB NO.:	244541	Report Time:	2400	6 of 9
Company:	EnCana Oil & Gas (USA) Inc.	API JOB #	05-123-40279	
LOCATION:	Ruhl Pad	WORK ORDER#	244541	
RIG NAME:	HP 278	FIELD:	DJ Basin	
STATE:	Colorado	Township:	2N	
COUNTY:	Weld	Range/Section	64W	32
WELL NAME:	Ruhl 1C-32H-B264	Company Man	George / Joe	
Lead Directional :	Paul Turner (10972)	2nd Dir Hand :	Ben Ezeaku (10012)	

From Saturday, January 17, 2015 at 0000 to Saturday, January 17, 2015 at 2400

DAILY TOTALS		ASSEMBLY TOTALS									
Start Depth	7578.00	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	10321.00	2	226	421.00	18.17	3,714.00	21.83	3.92	43.92	4,135.00	94.33
Below Rot Hrs.	24.00										
Total Drilled:	2743.00	Drilling Parameters		Mud Record		Bit Record		Current BHA # 2			
Avg. Total ROP:	141.88										
Slide Footage:	303.00	WOB:	23	Weight:	0	Bit No:	2	SKH156M-E2 5.00" Hunting Drill 4.75 NM Pony 4 3/4" NMDC 4 3/4" Pulser Sub 4 3/4" NMDC 4.75 NM Pony 5" Steel XO 1 Stnd. HWDP (3 Jnts.) 18 Stnds. DP (54 Jnts.) NOV SS/Agitator 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			
Slide Hours	6.42	Rot Wt:	143	Visc:	0	Model	SKH156M-E2				
Avg. Slide ROP:	47.22	Pick UP:	234	Chlorides:	0	SN.:	A209109				
Rotate Footage:	2440.00	Slack Off:	64	YP:	0	MFG.	NOV				
Rotary Hours	12.92	SPP:	4160	PV:	0	Type	PDC				
Avg. Rot ROP:	188.90	Flow:	285 - 296	PH:	0	IADC					
Circ Hours	0.00	SPM:	76	GAS:	0	JETS	5-14				
Ream Hours	0.00	Rot. RPM	90 - 90	SAND:	0	TFA:	0.751				
Rotary Hrs%:	66.81	Mot RPM:	90 - 90	WL:	0	Hole ID:	6.125				
Slide Hrs%:	33.19	Incl. In:	83.47	SOLID:	0	Bit Hrs:	40.00				
Rotary Ftg%:	88.95	Azm. In:	183.84	BHT°:	0	Bit Ftg:	4135.00				
Slide Ftg%:	11.05	Incl. Out:	89.76	Flow T°:	0	PUMPS					
Casing		Azm. Out:	180.49	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

1-17 11:00 AM Per CM George we are now Plan 3 +5
1-17 13:30 AM Per CM George we are now Plan 3

Start Time	End Time	Hours	Start Depth	End Depth	Delta Depth	ROP	Activity Code	COMMENT
00:00	00:05	0.08	7578	7578	0	.00	Survey & Conn.	Survey & Conn.@7513' Inc 83.47° Azm 183.84°
00:05	00:15	0.17	7578	7593	15	90.00	Sliding	Sliding - (WOB:29;GPM :296;TFO:20L))
00:15	00:40	0.42	7593	7669	76	182.40	Drilling	Drilling - (WOB:29;GPM :296;RPM:90)
00:40	00:50	0.17	7669	7669	0	.00	Survey & Conn.	Survey & Conn.@7604' Inc 85.26° Azm 183.38°
00:50	01:00	0.17	7669	7687	18	108.00	Sliding	Sliding - (WOB:29;GPM :296;TFO:30L))
01:00	01:15	0.25	7687	7760	73	292.00	Drilling	Drilling - (WOB:29;GPM :296;RPM:90)
01:15	01:25	0.17	7760	7760	0	.00	Survey & Conn.	Survey & Conn.@7695' Inc 87.01° Azm 183.86°
01:25	01:35	0.17	7760	7780	20	120.00	Sliding	Sliding - (WOB:29;GPM :296;TFO:30L))
01:35	02:00	0.42	7780	7823	43	103.20	Drilling	Drilling - (WOB:29;GPM :296;RPM:90)
02:00	02:05	0.08	7823	7829	6	72.00	Sliding	Sliding - (WOB:29;GPM :296;TFO:30L))
02:05	02:10	0.08	7829	7855	26	312.00	Drilling	Drilling - (WOB:29;GPM :296;RPM:90)
02:10	02:25	0.25	7855	7855	0	.00	Survey & Conn.	Survey & Conn.@7790' Inc 88.69° Azm 182.19°
02:25	02:40	0.25	7855	7873	18	72.00	Sliding	Sliding - (WOB:29;GPM :296;TFO:30L))
02:40	02:55	0.25	7873	7950	77	308.00	Drilling	Drilling - (WOB:29;GPM :296;RPM:90)

Start Time	End Time	Hours	Start Depth	End Depth	Delta Depth	ROP	Activity Code	COMMENT
02:55	03:10	0.25	7950	7950	0	.00	Survey & Conn.	Survey & Conn.@7885' Inc 91.41° Azm 180.93°
03:10	03:55	0.75	7950	8045	95	126.67	Drilling	Drilling - (WOB:29;GPM :296;RPM:90)
03:55	04:05	0.17	8045	8045	0	.00	Survey & Conn.	Survey & Conn.@7980' Inc 91.08° Azm 180.5°
04:05	04:15	0.17	8045	8060	15	90.00	Sliding	Sliding - (WOB:29;GPM :296;TFO:65L))
04:15	04:50	0.58	8060	8140	80	137.14	Drilling	Drilling - (WOB:29;GPM :296;RPM:90)
04:50	05:00	0.17	8140	8140	0	.00	Survey & Conn.	Survey & Conn.@8075' Inc 91.88° Azm 179.14°
05:00	05:15	0.25	8140	8149	9	36.00	Sliding	Sliding - (WOB:29;GPM :296;TFO:65L))
05:15	05:35	0.33	8149	8234	85	255.00	Drilling	Drilling - (WOB:29;GPM :296;RPM:90)
05:35	05:40	0.08	8234	8234	0	.00	Survey & Conn.	Survey & Conn.@8169' Inc 92.05° Azm 177.89°
05:40	06:00	0.33	8234	8329	95	285.00	Drilling	Drilling - (WOB:29;GPM :296;RPM:90)
06:00	06:10	0.17	8329	8329	0	.00	Survey & Conn.	Survey & Conn.@8264' Inc 91.71° Azm 177.49°
06:10	06:25	0.25	8329	8338	9	36.00	Sliding	Sliding - (WOB:29;GPM :296;TFO:0))
06:25	06:35	0.17	8338	8423	85	510.00	Drilling	Drilling - (WOB:29;GPM :296;RPM:90)
06:35	06:45	0.17	8423	8423	0	.00	Survey & Conn.	Survey & Conn.@8358' Inc 92.79° Azm 177.79°
06:45	07:05	0.33	8423	8518	95	285.00	Drilling	Drilling - (WOB:29;GPM :296;RPM:90)
07:05	07:10	0.08	8518	8518	0	.00	Survey & Conn.	Survey & Conn.@8453' Inc 91.82° Azm 176.45°
07:10	07:25	0.25	8518	8530	12	48.00	Sliding	Sliding - (WOB:29;GPM :296;TFO:70R))
07:25	08:05	0.67	8530	8530	0	.00	Survey & Conn.	Survey & Conn.@8453' Inc 91.82° Azm 176.45°
08:05	08:30	0.42	8530	8629	99	237.60	Sliding	Sliding - (WOB:29;GPM :296;TFO:70R))
08:30	08:45	0.25	8629	8708	79	316.00	Drilling	Drilling - (WOB:29;GPM :296;RPM:90)
08:45	08:55	0.17	8708	8708	0	.00	Survey & Conn.	Survey & Conn.@8643' Inc 90.91° Azm 179.54°
08:55	09:10	0.25	8708	8802	94	376.00	Drilling	Drilling - (WOB:29;GPM :296;RPM:90)
09:10	09:20	0.17	8802	8802	0	.00	Survey & Conn.	Survey & Conn.@8737' Inc 90.17° Azm 178.91°
09:20	09:40	0.33	8802	8816	14	42.00	Sliding	Sliding - (WOB:29;GPM :296;TFO:80R))
09:40	10:00	0.33	8816	8898	82	246.00	Drilling	Drilling - (WOB:29;GPM :296;RPM:90)
10:00	10:05	0.08	8898	8898	0	.00	Survey & Conn.	Survey & Conn.@8833' Inc 92.45° Azm 181.07°
10:05	10:20	0.25	8898	8912	14	56.00	Sliding	Sliding - (WOB:29;GPM :296;TFO:80R))
10:20	10:35	0.25	8912	8998	86	344.00	Drilling	Drilling - (WOB:29;GPM :296;RPM:90)
10:35	10:40	0.08	8998	8998	0	.00	Survey & Conn.	Survey & Conn.@8928' Inc 89.9° Azm 180.31°
10:40	11:10	0.50	8998	9088	90	180.00	Drilling	Drilling - (WOB:29;GPM :296;RPM:90)
11:10	11:15	0.08	9088	9088	0	.00	Survey & Conn.	Survey & Conn.@9023' Inc 89.7° Azm 180.58°
11:15	11:45	0.50	9088	9182	94	188.00	Drilling	Drilling - (WOB:29;GPM :296;RPM:90)
11:45	11:50	0.08	9182	9182	0	.00	Survey & Conn.	Survey & Conn.@9117' Inc 88.76° Azm 180.04°
11:50	12:25	0.58	9182	9277	95	162.86	Drilling	Drilling - (WOB:29;GPM :296;RPM:90)
12:25	12:35	0.17	9277	9277	0	.00	Survey & Conn.	Survey & Conn.@9212' Inc 88.49° Azm 179.69°
12:35	13:00	0.42	9277	9287	10	24.00	Sliding	Sliding - (WOB:26;GPM :285;TFO:30R))
13:00	13:20	0.33	9287	9372	85	255.00	Drilling	Drilling - (WOB:29;GPM :296;RPM:90)
13:20	13:25	0.08	9372	9372	0	.00	Survey & Conn.	Survey & Conn.@9307' Inc 89.19° Azm 180.14°
13:25	13:35	0.17	9372	9380	8	48.00	Sliding	Sliding - (WOB:26;GPM :285;TFO:160L))
13:35	14:40	1.08	9380	9467	87	80.31	Drilling	Drilling - (WOB:29;GPM :296;RPM:90)
14:40	14:45	0.08	9467	9467	0	.00	Survey & Conn.	Survey & Conn.@9402' Inc 90.2° Azm 180.13°
14:45	15:10	0.42	9467	9562	95	228.00	Drilling	Drilling - (WOB:29;GPM :296;RPM:90)
15:10	15:20	0.17	9562	9562	0	.00	Survey & Conn.	Survey & Conn.@9497' Inc 90.1° Azm 179.65°
15:20	15:40	0.33	9562	9570	8	24.00	Sliding	Sliding - (WOB:26;GPM :285;TFO:20R))
15:40	16:00	0.33	9570	9657	87	261.00	Drilling	Drilling - (WOB:29;GPM :296;RPM:90)
16:00	16:05	0.08	9657	9657	0	.00	Survey & Conn.	Survey & Conn.@9592' Inc 91.88° Azm 180.81°
16:05	16:40	0.58	9657	9752	95	162.86	Drilling	Drilling - (WOB:29;GPM :296;RPM:90)
16:40	16:50	0.17	9752	9752	0	.00	Rig repair	Rig repair / Rig service

Start Time	End Time	Hours	Start Depth	End Depth	Delta Depth	ROP	Activity Code	COMMENT
16:50	16:55	0.08	9752	9752	0	.00	Survey & Conn.	Survey & Conn.@9687' Inc 90.84° Azm 180.12°
16:55	17:30	0.58	9752	9847	95	162.86	Drilling	Drilling - (WOB:29;GPM :296;RPM:90)
17:30	17:35	0.08	9847	9847	0	.00	Survey & Conn.	Survey & Conn.@9782' Inc 89.56° Azm 179.49°
17:35	19:15	1.67	9847	9857	10	6.00	Sliding	Sliding - (WOB:26;GPM :285;TFO:15R))
19:15	20:00	0.75	9857	9941	84	112.00	Drilling	Drilling - (WOB:23;GPM :296;RPM:90)
20:00	20:10	0.17	9941	9941	0	.00	Survey & Conn.	Survey & Conn.@9876' Inc 89.87° Azm 178.99°
20:10	21:00	0.83	9941	9951	10	12.00	Sliding	Sliding - (WOB:40;GPM :285;TFO:30R))
21:00	21:25	0.42	9951	10037	86	206.40	Drilling	Drilling - (WOB:23;GPM :296;RPM:90)
21:25	21:35	0.17	10037	10037	0	.00	Survey & Conn.	Survey & Conn.@9972' Inc 90.47° Azm 179.82°
21:35	22:05	0.50	10037	10132	95	190.00	Drilling	Drilling - (WOB:23;GPM :285;RPM:90)
22:05	22:10	0.08	10132	10132	0	.00	Survey & Conn.	Survey & Conn.@10067' Inc 90.54° Azm 180.11°
22:10	22:45	0.58	10132	10226	94	161.14	Drilling	Drilling - (WOB:23;GPM :285;RPM:90)
22:45	23:00	0.25	10226	10226	0	.00	Survey & Conn.	Survey & Conn.@10161' Inc 90.77° Azm 180.13°
23:00	23:15	0.25	10226	10234	8	32.00	Sliding	Sliding - (WOB:40;GPM :292;TFO:170L))
23:15	24:00	0.75	10234	10321	87	116.00	Drilling	Drilling - (WOB:23;GPM :292;RPM:90)

Start Time	End Time	Hours	Start Depth	End Depth	Delta Depth	ROP	Activity Code	COMMENT
05:35	05:55	0.33	10795	10799	4	12.00	Sliding	Sliding - (WOB:40;GPM :292;TFO:105L)
05:55	06:20	0.42	10799	10890	91	218.40	Drilling	Drilling - (WOB:23;GPM :292;RPM:90)
06:20	06:30	0.17	10890	10890	0	.00	Survey & Conn.	Survey & Conn.@10825' Inc 90.2° Azm 175.89°
06:30	07:00	0.50	10890	10890	0	.00	Other	Consult w/ Encana - Hard Left on Rotate
07:00	08:00	1.00	10890	10902	12	12.00	Sliding	Sliding - (WOB:40;GPM :292;TFO:90R))
08:00	08:25	0.42	10902	10985	83	199.20	Drilling	Drilling - (WOB:23;GPM :292;RPM:90)
08:25	08:30	0.08	10985	10985	0	.00	Survey & Conn.	Survey & Conn.@10920' Inc 89.8° Azm 177.22°
08:30	09:50	1.33	10985	10995	10	7.50	Sliding	Sliding - (WOB:40;GPM :292;TFO:75R))
09:50	10:25	0.58	10995	11079	84	144.00	Drilling	Drilling - (WOB:23;GPM :292;RPM:90)
10:25	10:45	0.33	11079	11079	0	.00	Circulating	Ream
10:45	10:50	0.08	11079	11079	0	.00	Survey & Conn.	Survey & Conn.@11014' Inc 89.03° Azm 178.28°
10:50	12:30	1.67	11079	11093	14	8.40	Sliding	Sliding - (WOB:40;GPM :292;TFO:75R)
12:30	13:10	0.67	11093	11174	81	121.50	Drilling	Drilling - (WOB:23;GPM :292;RPM:90)
13:10	13:15	0.08	11174	11174	0	.00	Survey & Conn.	Survey & Conn.@11109' Inc 89.83° Azm 179.24°
13:15	14:55	1.67	11174	11188	14	8.40	Sliding	Sliding - (WOB:40;GPM :292;TFO:75R)
14:55	15:30	0.58	11188	11269	81	138.86	Drilling	Drilling - (WOB:23;GPM :292;RPM:90)
15:30	15:40	0.17	11269	11269	0	.00	Survey & Conn.	Survey & Conn.@11204' Inc 89.46° Azm 180.85°
15:40	16:35	0.92	11269	11275	6	6.55	Sliding	Sliding - (WOB:40;GPM :292;TFO:75R))
16:35	17:20	0.75	11275	11364	89	118.67	Drilling	Drilling - (WOB:23;GPM :292;RPM:90)
17:20	17:30	0.17	11364	11364	0	.00	Survey & Conn.	Survey & Conn.@11299' Inc 88.63° Azm 181.49°
17:30	18:35	1.08	11364	11372	8	7.38	Sliding	Sliding - (WOB:40;GPM :292;TFO:5R))
18:35	19:20	0.75	11372	11459	87	116.00	Drilling	Drilling - (WOB:18;GPM :292;RPM:90)
19:20	19:30	0.17	11459	11459	0	.00	Survey & Conn.	Survey & Conn.@11394' Inc 88.42° Azm 180.96°
19:30	21:15	1.75	11459	11469	10	5.71	Sliding	Sliding - (WOB:40;GPM :292;TFO:5R))
21:15	22:15	1.00	11469	11554	85	85.00	Drilling	Drilling - (WOB:18;GPM :292;RPM:90)
22:15	23:15	1.00	11554	11554	0	.00	Other	Fix MWD
23:15	23:20	0.08	11554	11585	31	372.00	Drilling	Drilling - (WOB:18;GPM :292;RPM:90)
23:20	24:00	0.67	11585	11585	0	.00	Circulating	Circulating

Report Time:	2400	8 of 9
API JOB #	05-123-40279	
WORK ORDER#	244541	
FIELD:	DJ Basin	
Township:	2N	
Range/Section	64W	32
Company Man	George / Joe	
2nd Dir Hand :	Ben Ezeaku (10012)	

DAILY TOTALS		ASSEMBLY TOTALS									
Start Depth	11585.00	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	11754.00	2	226	421.00	18.17	3,714.00	21.83	3.92	43.92	4,135.00	94.33
Below Rot Hrs.	24.00	3	085	0.00	0.00	169.00	1.00	6.08	7.08	169.00	0.00
Total Drilled:	169.00	Drilling Parameters		Mud Record		Bit Record		Current BHA # 3			
Avg. Total ROP:	169.00	WOB: 18		Weight: 0		Bit No: 2		SKH156M-E2 Hunting 5.00" Drill Motor 4.75 NM Pony 4 3/4" NMDC 4 3/4" Pulser Sub 4 3/4" NMDC 4.75 NM Pony 5" Steel XO 1 Std. HWDP (3 Jnts.) 18 Stnds. DP (54 Jnts.) NOV SS/Agitator 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			
Slide Footage:	0.00	Rot Wt: 142		Visc: 0		Model SKH156M-E2					
Slide Hours	0.00	Pick UP: 265		Chlorides: 0		SN.: A209109					
Avg. Slide ROP:	NA	Slack Off: 90		YP: 0		MFG. NOV					
Rotate Footage:	169.00	SPP: 3960		PV: 0		Type PDC					
Rotary Hours	1.00	Flow: 292 - 292		PH: 0		IADC					
Avg. Rot ROP:	169.00	SPM: 76		GAS: 0		JETS 5-14					
Circ Hours	6.08	Rot. RPM 90 - 90		SAND: 0		TFA: 0.751					
Ream Hours	0.00	Mot RPM: -		WL: 0		Hole ID: 6.125					
Rotary Hrs%:	100.00	Incl. In: 88.42		SOLID: 0		Bit Hrs: 40.00					
Slide Hrs%:	.00	Azm. In: 180.96		BHT°: 0		Bit Ftg: 4135.00					
Rotary Ftg%:	100.00	Incl. Out: 0		Flow T°: 0		PUMPS					
Slide Ftg%:	.00	Azm. Out: 0		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	06:30	6.50	11585	11585	0	.00	POOH	POOH
06:30	07:15	0.75	11585	11585	0	.00	Other	Rack BHA
07:15	07:30	0.25	11585	11585	0	.00	Other	Consult with Encana - Bit / Motor
07:30	07:45	0.25	11585	11585	0	.00	Change BHA	Rack BHA
07:45	08:40	0.92	11585	11585	0	.00	Other	Cut Drill Line
08:40	09:30	0.83	11585	11585	0	.00	Change BHA	Pick up new motor and MWD
09:30	09:50	0.33	11585	11585	0	.00	TIH	TIH
09:50	09:55	0.08	11585	11585	0	.00	Circulating	MWD Surface Test
09:55	10:55	1.00	11585	11585	0	.00	TIH	TIH
10:55	11:05	0.17	11585	11585	0	.00	Circulating	Surface test agitator
11:05	16:40	5.58	11585	11585	0	.00	TIH	TIH
16:40	16:45	0.08	11585	11585	0	.00	Circulating	Survey @ 11554 MD
16:45	17:15	0.50	11585	11648	63	126.00	Drilling	Drilling - (WOB:18;GPM :292;RPM:90)
17:15	17:30	0.25	11648	11648	0	.00	Survey & Conn.	Survey & Conn.@11583' Inc 88.13° Azm 180.25°

Start Time	End Time	Hours	Start Depth	End Depth	Delta Depth	ROP	Activity Code	COMMENT
17:30	18:00	0.50	11648	11754	106	212.00	Drilling	Drilling - (WOB:18;GPM :292;RPM:90)
18:00	18:15	0.25	11754	11754	0	.00	Survey & Conn.	Survey & Conn.@11689' Inc 87.95° Azm 180.22°
18:15	24:00	5.75	11754	11754	0	.00	Circulating	Circulating / Encana Clean up Cycle

JOB NO.:	244541	Report Time:	2400	9 of 9
Company:	EnCana Oil & Gas (USA) Inc.	API JOB #	05-123-40279	
LOCATION:	Ruhl Pad	WORK ORDER#	244541	
RIG NAME:	HP 278	FIELD:	DJ Basin	
STATE:	Colorado	Township:	2N	
COUNTY:	Weld	Range/Section	64W	32
WELL NAME:	Ruhl 1C-32H-B264	Company Man	George / Joe	
Lead Directional :	Paul Turner (10972)	2nd Dir Hand :	Ben Ezeaku (10012)	

From Tuesday, January 20, 2015 at 0000 to Tuesday, January 20, 2015 at 2400

DAILY TOTALS		ASSEMBLY TOTALS									
Start Depth	11585.00	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	11754.00	3	085			169.00	1.00	6.08	7.08	169.00	23.86
Below Rot Hrs.	24.00										
Total Drilled:	169.00	Drilling Parameters		Mud Record		Bit Record		Current BHA # 3			
Avg. Total ROP:	169.00										
Slide Footage:	0.00	WOB:	18	Weight:	0	Bit No:	2	SKH156M-E2 Hunting 5.00" Drill Motor 4.75 NM Pony 4 3/4" NMDC 4 3/4" Pulser Sub 4 3/4" NMDC 4.75 NM Pony 5" Steel XO 1 Stnd. HWDP (3 Jnts.) 18 Stnds. DP (54 Jnts.) NOV SS/Agitator 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			
Slide Hours	0.00	Rot Wt:	142	Visc:	0	Model	SKH156M-E2				
Avg. Slide ROP:	NA	Pick UP:	265	Chlorides:	0	SN.:	A209109				
Rotate Footage:	169.00	Slack Off:	90	YP:	0	MFG.	NOV				
Rotary Hours	1.00	SPP:	3960	PV:	0	Type	PDC				
Avg. Rot ROP:	169.00	Flow:	292 - 292	PH:	0	IADC					
Circ Hours	6.08	SPM:	76	GAS:	0	JETS	5-14				
Ream Hours	0.00	Rot. RPM	-	SAND:	0	TFA:	0.751				
Rotary Hrs%:	100.00	Mot RPM:	-	WL:	0	Hole ID:	6.125				
Slide Hrs%:	.00	Incl. In:	0	SOLID:	0	Bit Hrs:	40.00				
Rotary Ftg%:	100.00	Azm. In:	0	BHT°:	0	Bit Ftg:	4135.00				
Slide Ftg%:	.00	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				

BHA # 1

PDT

JOB NO.: 232801 Work Order:
 COMPANY: EnCana Oil & Gas USA (Inc)
 LOCATION: Ruhl
 RIG NAME: HP 278
 STATE: Colorado
 COUNTY: Weld
 WELL NAME: Ruhl 1C-32H-B264

FIELD: Wattenberg
 Township: 2N
 SECT. RANGE: 32 64W
 Lead DD: Paul Turner (10972)
 Co. Man: Randy / Joe
 BHA TYPE: Steerable Assembly
 BHA WT: 12443 Wt @ Jars: N/A

Time and Depths	MOTOR DATA	Drilling Parameters
Date In: 10-Dec-14 @ 20:15	SDI Drill Motor	SO/PU: 0 - 0 / 0-0
Date Out: 11-Dec-14 @ 07:00	MFG.: SDI	Rot Strg Wt: 0-0
Hrs In Hole: 10.75	Pad OD: 8.27	WOB: 12 - 27
Start Depth: 149.00	NB Stab: 0	TORQ: 1 - 8
End Depth: 1216.00	Bit to Bend: 6.9	SPP: 0 - 1480
Total Drilled: 1067.00	Bent Hsg/Sub: 2.25 / 2.25	Motor RPM: 68 - 86
Avg. Total ROP: 237.11	Lobe/Stage: 7/8 / 4	Rotary RPM: 50 - 50
Circ Hrs: Tot/Only 6.83 / 2.33	Rev/GAL: 0.16	Flow Rate: 0 - 537
Percent Slide: 30.18	Rotor Jet: 0	Avg Diff:
Percent Hrs: 31.48	Prop BUR:	Stall Pres.:
Slide Hours: 1.42	Act BUR:	Off Bot Pres.:
Total Sliding: 322.00		
Avg. Slide ROP: 227.29		
Percent Rotary: 69.82		
Percent Hrs: 68.52		
Rotary Hours: 3.08		
Total Rotary: 745.00		
Avg. Rotary ROP: 241.62		
Reason POOH: TD		

MWD Spacing	Gamma: 0	Restiv: 0	Sensor: 0	Last Casing
	GYRO: 0	DNSC: 0	Sonic: 0	Shoe @: Hanger @:

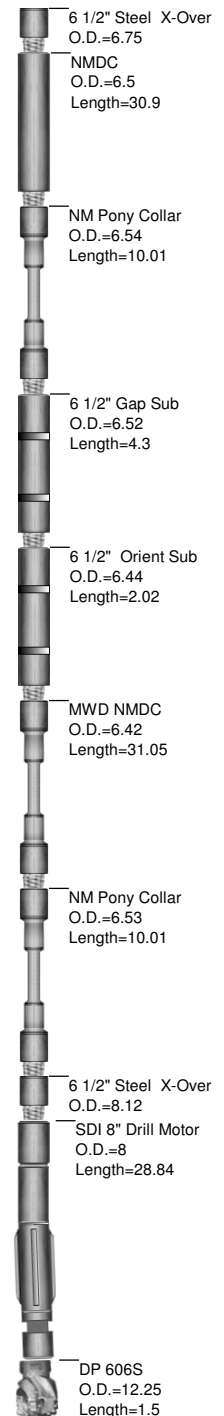
INC IN: .0 INC OUT: .0 AZM IN: .00 AZM OUT: .00

- 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.: 232801
COMPANY: EnCana Oil & Gas USA (Inc)
LOCATION: Ruhl
RIG NAME: HP 278
STATE: Colorado
COUNTY: Country
WELL NAME: Ruhl 1C-32H-B264

FIELD: Wattenberg
Township: 2N
Range 64W

MOTOR INFORMATION

Desc: SDI Drill Motor
Bent Hsg/Sub: 2.25/ 2.25 **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	10-Dec	Drilling	21:30	21:35	0.08	149	159	10	12	120.0	50	1				5.30	0.00	3.34	
1	10-Dec	Sliding	21:35	21:40	0.08	159	174	15	18	180.0	50	1	422		20M	5.80	0.00	3.34	
1	10-Dec	Drilling	21:40	22:00	0.33	174	186	12	14	36.0	50	2	422			6.20	0.00	3.34	
1	10-Dec	Drilling	22:10	22:15	0.08	186	216	30	14	360.0	50	2	422			7.21	0.00	3.34	
1	10-Dec	Sliding	22:20	22:35	0.25	216	240	24	18	96.0	50	2	499	890	20M	8.01	0.00	3.34	
1	10-Dec	Drilling	22:35	23:05	0.50	240	307	67	14	134.0	50	2	422	890		1.31	45.90	0.00	
1	10-Dec	Sliding	23:10	23:20	0.17	307	335	28	18	168.0	50	2	499	890	20M	1.31	45.90	0.00	
1	10-Dec	Drilling	23:20	23:35	0.25	335	399	64	22	256.0	50	4	537	1150		2.39	31.78	0.00	
1	10-Dec	Sliding	23:40	23:45	0.08	399	434	35	18	420.0	50	4	537	1150	20M	3.80	33.93	0.00	
1	10-Dec	Drilling	23:45	24:00	0.25	434	491	57	22	228.0	50	4	537	1150		3.80	33.93	0.00	
1	11-Dec	Sliding	00:05	00:15	0.17	491	534	43	14	258.0	50	4	537	1150	20M	5.50	24.71	0.00	
1	11-Dec	Drilling	00:15	00:30	0.25	534	582	48	24	192.0	50	4	537	1150		5.50	24.71	0.00	
1	11-Dec	Sliding	00:35	00:40	0.08	582	621	39	14	468.0	50	8	537	1480	30R	6.90	30.17	0.00	
1	11-Dec	Drilling	00:40	00:55	0.25	621	674	53	24	212.0	50	8	537	1480		6.90	30.17	0.00	
1	11-Dec	Sliding	01:00	01:10	0.17	674	718	44	14	264.0	50	8	537	1480	30R	8.68	33.85	0.00	
1	11-Dec	Drilling	01:10	01:20	0.17	718	764	46	24	276.0	50	8	537	1480		8.68	33.85	0.00	
1	11-Dec	Sliding	01:25	01:35	0.17	764	814	50	14	300.0	50	8	537	1480	30R	11.56	39.34	0.00	
1	11-Dec	Drilling	01:35	01:45	0.17	814	854	40	27	240.0	50	8	537	1480		11.56	39.34	0.00	
1	11-Dec	Drilling	01:55	02:05	0.17	854	945	91	27	546.0	50	8	537	1480		11.32	40.18	0.00	
1	11-Dec	Sliding	02:10	02:15	0.08	945	969	24	14	288.0	50	8	537	1480	5R	11.32	40.18	0.00	
1	11-Dec	Drilling	02:15	02:25	0.17	969	1036	67	27	402.0	50	8	537	1480		11.82	40.38	0.00	
1	11-Dec	Sliding	02:30	02:35	0.08	1036	1044	8	14	96.0	50	8	537	1480	5R	11.82	40.38	0.00	
1	11-Dec	Drilling	02:35	02:45	0.17	1044	1125	81	27	486.0	50	8	537	1480		0.00	0.00	0.00	
1	11-Dec	Sliding	02:50	02:55	0.08	1125	1137	12	14	144.0	50	8	537	1480	5R	0.00	0.00	0.00	
1	11-Dec	Drilling	02:55	03:10	0.25	1137	1216	79	27	316.0	50	8	537	1480		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
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Total Drilled: 1067 **Avg. Total ROP:** 237.11 **DEPTH% - TIME %**

Total Rotary Drilled: 745 **Avg. Rotary ROP:** 241.62 **Percent Rotary:** 69.82 - 68.52

Total Drilled Sliding: 322 **Avg. Slide ROP:** 227.29 **Percent Slide:** 30.18 - 31.48

BHA # 1

JOB NO.:	244541	Work Order:	244541	FIELD:	DJ Basin
Company:	EnCana Oil & Gas (USA) Inc.	Township:	2N	SECT. RANGE:	32 64W
LOCATION:	Ruhl Pad	Lead DD:	Steven Schlamp (10800)	Co. Man:	George / Joe
RIG NAME:	HP 278	BHA TYPE:	Steerable Assembly	BHA WT:	81047
STATE:	Colorado	Wt @ Jars:	N/A		
COUNTY:	Weld				
WELL NAME:	Ruhl 1C-32H-B264				

Time and Depths	MOTOR DATA	Drilling Parameters
Date In: 12-Jan-15 @ 21:50	6.75 Drill Motor	SO/PU: 0 - 109 / 0-131
Date Out: 15-Jan-15 @ 09:55	MFG.: SDI	Rot Strg Wt: 0-122
Hrs In Hole: 59.92	Pad OD: 7.46	WOB: 0 - 31
Start Depth: 1208.00	NB Stab: 0	TORQ: 2 - 9.5
End Depth: 7450.00	Bit to Bend: 2.77	SPP: 0 - 4062
Total Drilled: 6242.00	Bent Hsg/Sub°: 1.83 /	Motor RPM: 155 - 168
Avg. Total ROP: 178.34	Lobe/Stage: 7/8 / 6.4	Rotary RPM: 50 - 70
Circ Hrs: Tot/Only 42.42 / 7.42	Rev/GAL: 0.29	Flow Rate: 0 - 580
Percent Slide: 14.67	Rotor Jet: 0	Avg Diff:
Percent Hrs: 37.86	Prop BUR:	Stall Pres.:
Slide Hours: 13.25	Act BUR:	Off Bot Pres.:
Total Sliding: 916.00		
Avg. Slide ROP: 69.13		
Percent Rotary: 85.33		
Percent Hrs: 62.14		
Rotary Hours: 21.75		
Total Rotary: 5326.00		
Avg. Rotary ROP: 244.87		
Reason POOH: TD		

MWD Spacing	Gamma: 53.47	Restiv: 0	Sensor: 62.14	Last Casing	O.D.
	GYRO: 0	DNSC: 1225	Sonic: 0	Shoe @:	Hanger @:

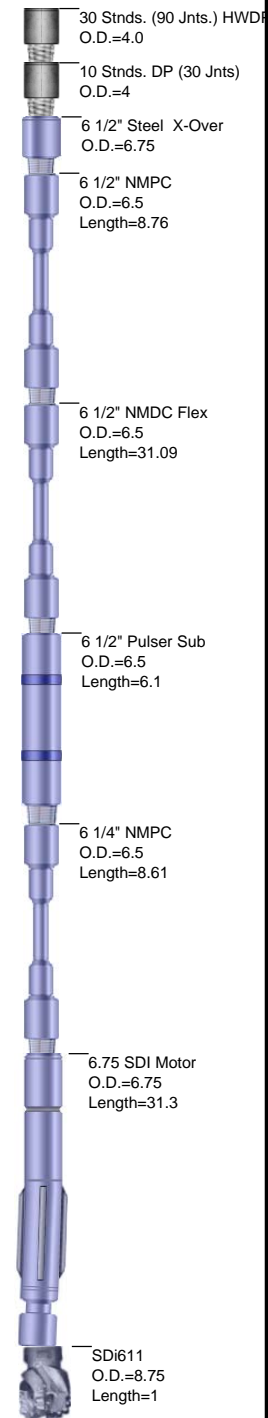
INC IN: .0 INC OUT: .0 AZM IN: .00 AZM OUT: .00

- 6 3/4" SDI Titan TD Drill Motor 7/8 6.4stg 1.83FBH
- Speed Ratio: 0.29RPG
- TFO: 31.28

- Bit to Sensor - 62.76'
- Bit to Survey - 65'
- Bit to Gamma - 54.11'

BHA Detail

Description	Serial #	I.D.	O.D.	Length	Sum	Top Conn	MFG.
SDi611	JJ9804		8.75	1.00	1.00	4 1/2 OHP	SMITH
6.75 SDI Motor	65055	2.0	6.75	31.30	32.30	4 1/2 XHB	SDI
6 1/4" NMPC	40386	3.25	6.5	8.61	40.91	4 1/2 XHB	SDI
6 1/2" NMDC Flex	122-329F	3.25	6.5	31.02	71.93	4 1/2 XHB	SDI
6 1/2" Pulser Sub	129-070		6.5	6.10	78.03	4 1/2 XHB	SDI
6 1/2" NMDC Flex	122-466F	3.25	6.5	31.09	109.12	4 1/2 XHB	SDI
6 1/2" NMPC	38678	3.25	6.5	8.76	117.88	4 1/2 XHB	SDI
6 1/2" Steel X-Over	11583	3.25	6.75	3.04	120.92	XT39B	SDI
10 Stnds. DP (30 Jnts)	RIG111	3.25	4	948.96	1069.88	XT39B	Other
30 Stnds. (90 Jnts.) HWD	RIG123	2.88	4.0	2,723.90	3793.78	XT39	Other



JOB NO.: 244541
Company: EnCana Oil & Gas (USA) Inc.
LOCATION: Ruhl Pad
RIG NAME: HP 278
STATE: Colorado
COUNTY: Country
WELL NAME: Ruhl 1C-32H-B264

FIELD: DJ Basin
Township: 2N
Range 64W

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	13-Jan	Drilling	02:40	02:50	0.17	1208	1250	42	8	252.0	50	2	537	1208		10.74	36.49	0.00	
1	13-Jan	Drilling	02:55	03:10	0.25	1250	1341	91	18	364.0	60	3.5	537	1435		10.15	37.00	0.00	
1	13-Jan	Sliding	03:20	03:25	0.08	1341	1349	8	18	96.0	60	3.5	537	1435	75R	10.15	37.00	0.00	
1	13-Jan	Drilling	03:25	03:40	0.25	1349	1432	83	18	332.0	60	3.5	537	1435		11.84	42.24	0.00	
1	13-Jan	Sliding	03:55	04:00	0.08	1432	1437	5	18	60.0	60	3.5	537	1435	180	11.84	42.24	0.00	
1	13-Jan	Drilling	04:00	04:15	0.25	1437	1585	148	18	592.0	60	3.5	537	1435		10.69	41.00	0.00	
1	13-Jan	Drilling	04:20	04:30	0.17	1585	1616	31	18	186.0	70	4.5	537	1435		10.69	41.00	0.00	
1	13-Jan	Drilling	04:35	04:50	0.25	1616	1706	90	18	360.0	70	4.5	537	1435		11.36	39.61	0.00	
1	13-Jan	Sliding	05:00	05:05	0.08	1706	1714	8	18	96.0	70	4.5	537	1435	105R	11.36	39.61	0.00	
1	13-Jan	Drilling	05:05	05:20	0.25	1714	1796	82	18	328.0	70	4.5	537	1435		11.36	39.61	0.00	
1	13-Jan	Sliding	05:20	05:25	0.08	1796	1804	8	18	96.0	70	4.5	537	1435	180	11.36	39.61	0.00	
1	13-Jan	Drilling	05:25	05:35	0.17	1804	1886	82	18	492.0	70	4.5	537	1435		10.76	42.29	0.00	
1	13-Jan	Drilling	05:40	05:50	0.17	1886	1977	91	18	546.0	70	4.5	537	1435		10.76	42.29	0.00	
1	13-Jan	Sliding	05:55	06:10	0.25	1977	1990	13	18	52.0	70	4.5	537	1435	180	10.76	42.29	0.00	
1	13-Jan	Drilling	06:10	06:20	0.17	1990	2068	78	18	468.0	70	4.5	537	1435		9.02	33.80	0.00	
1	13-Jan	Sliding	06:25	06:30	0.08	2068	2075	7	18	84.0	70	4.5	537	1435	105R	9.02	33.80	0.00	
1	13-Jan	Drilling	06:30	06:45	0.25	2075	2248	173	18	692.0	70	4.5	537	1435		7.75	33.95	0.00	
1	13-Jan	Sliding	12:25	12:30	0.08	2248	2261	13	18	156.0	70	4.5	537	1435	135R	7.75	33.95	0.00	
1	13-Jan	Drilling	12:30	13:05	0.58	2261	2431	170	18	291.4	70	4.5	537	1435		5.33	46.42	0.00	
1	13-Jan	Sliding	13:10	13:15	0.08	2431	2446	15	18	180.0	70	4.5	537	1435	165R	5.33	46.42	0.00	
1	13-Jan	Drilling	13:15	13:45	0.50	2446	2614	168	18	336.0	70	4.5	537	1435	165R	2.27	60.33	0.00	
1	13-Jan	Sliding	13:50	14:00	0.17	2614	2626	12	18	72.0	70	4.5	537	1435	240M	2.27	60.33	0.00	
1	13-Jan	Drilling	14:00	14:25	0.42	2626	2796	170	18	408.0	70	4.5	537	1435		0.50	153.59	0.00	
1	13-Jan	Drilling	14:30	15:00	0.50	2796	2977	181	30	362.0	70	4.5	580	2650		1.10	144.33	0.00	
1	13-Jan	Sliding	15:05	15:10	0.08	2977	2987	10	18	120.0	70	4.5	537	2650	0M	1.10	144.33	0.00	
1	13-Jan	Drilling	15:10	15:40	0.50	2987	3157	170	30	340.0	70	4.5	580	2650		1.00	101.57	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	13-Jan	Drilling	15:45	16:15	0.50	3157	3340	183	30	366.0	70	7.5	580	3300		0.81	97.00	0.00	
1	13-Jan	Sliding	16:20	16:25	0.08	3340	3352	12	18	144.0	70	7.5	580	3300	285M	0.81	97.00	0.00	
1	13-Jan	Drilling	16:25	16:55	0.50	3352	3522	170	31	340.0	70	7.8	580	3665		0.91	300.24	0.00	
1	13-Jan	Drilling	17:00	17:30	0.50	3522	3702	180	31	360.0	70	7.8	580	3665		0.40	327.90	0.00	
1	13-Jan	Drilling	17:35	18:40	1.08	3702	3888	186	31	171.7	70	7.8	580	3665		0.51	227.07	0.00	
1	13-Jan	Drilling	18:45	19:20	0.58	3888	4078	190	31	325.7	70	7.8	580	3665		0.20	243.06	0.00	
1	13-Jan	Drilling	19:30	20:05	0.58	4078	4267	189	31	324.0	70	7.8	580	3665		0.26	290.32	0.00	
1	13-Jan	Drilling	20:10	20:55	0.75	4267	4456	189	31	252.0	70	7.8	580	3665		1.01	339.82	0.00	
1	13-Jan	Sliding	21:05	21:10	0.08	4456	4466	10	24	120.0	70	7.8	580	3665	180M	1.01	339.82	0.00	
1	13-Jan	Drilling	21:10	22:20	1.17	4466	4646	180	29	154.3	70	8.2	534	3705		0.30	236.80	0.00	
1	13-Jan	Drilling	22:25	23:10	0.75	4646	4835	189	29	252.0	70	8.2	534	3705		1.19	329.94	0.00	
1	13-Jan	Sliding	23:15	23:35	0.33	4835	4847	12	24	36.0	70	8.2	580	3705	180M	1.19	329.94	0.00	
1	13-Jan	Drilling	23:35	24:00	0.42	4847	4931	84	29	201.6	70	8.2	534	3705		1.19	329.94	0.00	
1	14-Jan	Sliding	00:10	00:15	0.08	4931	4939	8	24	96.0	70	8.2	580	3705	150M	1.19	329.94	0.00	
1	14-Jan	Drilling	00:15	00:35	0.33	4939	5026	87	29	261.0	70	8.2	534	3705		2.11	327.06	0.00	
1	14-Jan	Sliding	00:40	00:50	0.17	5026	5034	8	24	48.0	70	8.2	580	3705	150M	2.11	327.06	0.00	
1	14-Jan	Drilling	00:50	01:10	0.33	5034	5121	87	29	261.0	70	8.2	534	3705		2.11	327.06	0.00	
1	14-Jan	Sliding	01:20	01:30	0.17	5121	5132	11	24	66.0	70	8.2	580	3705	130M	2.11	327.06	0.00	
1	14-Jan	Drilling	01:30	02:00	0.50	5132	5215	83	29	166.0	70	8.2	534	3705		1.01	276.63	0.00	
1	14-Jan	Sliding	02:05	02:15	0.17	5215	5223	8	24	48.0	70	8.2	580	3705	145M	1.01	276.63	0.00	
1	14-Jan	Drilling	02:15	02:40	0.42	5223	5279	56	29	134.4	70	9.5	534	3705		1.01	276.63	0.00	
1	14-Jan	Sliding	02:50	03:00	0.17	5279	5289	10	24	60.0	70	9.5	580	4062	60M	1.01	276.63	0.00	
1	14-Jan	Drilling	03:00	03:15	0.25	5289	5405	116	29	464.0	70	9.5	534	4062		0.65	81.42	0.00	
1	14-Jan	Drilling	03:25	04:10	0.75	5405	5595	190	29	253.3	70	9.5	534	4062		0.13	172.28	0.00	
1	14-Jan	Drilling	04:20	05:00	0.67	5595	5785	190	29	285.0	70	9.5	534	4062		0.24	74.63	0.00	
1	14-Jan	Drilling	05:10	05:45	0.58	5785	5974	189	29	324.0	70	9.5	534	4062		0.26	70.36	0.00	
1	14-Jan	Drilling	05:50	06:25	0.58	5974	6069	95	29	162.9	70	9.5	534	4062		0.26	70.36	0.00	
1	14-Jan	Sliding	07:25	07:35	0.17	6069	6079	10	24	60.0	70	9.5	580	4062	240M	0.26	70.36	0.00	
1	14-Jan	Drilling	07:35	08:00	0.42	6079	6165	86	29	206.4	70	9.5	534	4062		0.85	118.61	0.00	
1	14-Jan	Drilling	08:05	08:50	0.75	6165	6365	200	29	266.7	70	9.5	534	4062		0.41	135.55	0.00	
1	14-Jan	Drilling	08:55	09:40	0.75	6365	6543	178	29	237.3	70	9.5	534	4062		0.39	290.80	0.00	
1	14-Jan	Drilling	09:45	09:55	0.17	6543	6605	62	29	372.0	70	9.5	534	4062		0.54	274.65	0.00	
1	14-Jan	Sliding	11:15	11:50	0.58	6605	6638	33	29	56.6	70	9.5	534	4062	180M	0.54	274.65	0.00	
1	14-Jan	Sliding	11:55	12:25	0.50	6638	6702	64	29	128.0	70	9.5	534	4062	180M	7.12	162.31	0.00	
1	14-Jan	Drilling	12:25	12:45	0.33	6702	6733	31	29	93.0	70	9.5	534	4062		7.12	162.31	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	14-Jan	Sliding	12:50	13:25	0.58	6733	6809	76	29	130.3	9	9.5	534	4062	30R	14.31	174.13	0.00	
1	14-Jan	Drilling	13:25	13:40	0.25	6809	6828	19	29	76.0	70	9.5	534	4062		14.31	174.13	0.00	
1	14-Jan	Sliding	14:50	15:35	0.75	6828	7005	177	29	236.0	70	9.5	534	4062	30R	29.98	181.17	0.00	
1	14-Jan	Drilling	15:35	15:40	0.08	7005	7017	12	29	144.0	70	9.5	534	4062		29.98	181.17	0.00	
1	14-Jan	Sliding	15:55	17:15	1.33	7017	7112	95	29	71.3	70	9.5	534	4062	30R	39.26	172.76	0.00	
1	14-Jan	Sliding	17:20	18:00	0.67	7112	7176	64	29	96.0	70	9.5	534	4062	45R	50.43	179.67	0.00	
1	14-Jan	Drilling	18:00	18:25	0.42	7176	7207	31	29	74.4	70	9.5	534	4062		50.43	179.67	0.00	
1	14-Jan	Sliding	18:30	19:45	1.25	7207	7297	90	29	72.0	70	9.5	534	4062	45R	61.18	180.22	0.00	
1	14-Jan	Drilling	19:45	19:55	0.17	7297	7302	5	29	30.0	70	9.5	534	4062		61.18	180.22	0.00	
1	14-Jan	Sliding	20:05	21:20	1.25	7302	7380	78	29	62.4	70	9.5	534	4062	15R	72.32	183.46	0.00	
1	14-Jan	Drilling	21:20	21:50	0.50	7380	7397	17	29	34.0	70	9.5	534	4062		78.76	183.98	0.00	
1	14-Jan	Sliding	21:55	24:00	2.08	7397	7420	23	29	11.0	70	9.5	534	4062	15R	78.76	183.98	0.00	
1	15-Jan	Sliding	00:00	01:45	1.75	7420	7448	28	29	16.0	70	9.5	534	4062	15R	78.76	183.98	0.00	
1	15-Jan	Drilling	01:45	01:55	0.17	7448	7450	2	29	12.0	70	9.5	534	4062		78.76	183.98	0.00	

Total Drilled: 6242 **Avg. Total ROP:** 178.34 **DEPTH% - TIME %**

Total Rotary Drilled: 5326 **Avg. Rotary ROP:** 244.87 **Percent Rotary:** 85.33 - 62.14

Total Drilled Sliding: 916 **Avg. Slide ROP:** 69.13 **Percent Slide:** 14.67 - 37.86

BHA # 2

JOB NO.:	244541	Work Order:	244541	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:	George / Joe
RIG NAME:	HP 278	BHA TYPE:	Steerable Assembly	BHA WT:	-1961781 Wt @ Jars: N/A
STATE:	Colorado				
COUNTY:	Weld				
WELL NAME:	Ruhl 1C-32H-B264				

Time and Depths		MOTOR DATA		Drilling Parameters	
Date In:	16-Jan-15 @ 14:00	4.75 Drill Motor		SO/PU:	0 - 124 / 0-265
Date Out:	19-Jan-15 @ 07:45	MFG.: Hunting		Rot Strg Wt:	0-149
Hrs In Hole:	65.75	Pad OD:	5.125	WOB:	0 - 40
Start Depth:	7450.00	NB Stab:	0	TORQ:	8.5 - 15.5
End Depth:	11585.00	Bit to Bend:	5	SPP:	0 - 4250
Total Drilled:	4135.00	Bent Hsg/Sub°:	1.5 / 1.5	Motor RPM:	No Rev/Gal Input
Avg. Total ROP:	97.29	Lobe/Stage:	5.6 / 8.3	Rotary RPM:	60 - 90
Circ Hrs: Tot/Only	43.92 / 1.42	Rev/GAL:	0	Flow Rate:	0 - 296
Percent Slide:	10.18	Rotor Jet:	0	Avg Diff:	
Percent Hrs:	42.75	Prop BUR:		Stall Pres.:	
Slide Hours:	18.17	Act BUR:		Off Bot Pres.:	
Total Sliding:	421.00	Mud Data		Bit Record	
Avg. Slide ROP:	23.17	Type		NOV / SKH156M-E2	
Percent Rotary:	89.82	WT:	0	GAS:	0
Percent Hrs:	57.25	Vis:	0	PV:	0
Rotary Hours:	24.33	WL:	0	PH:	0
Total Rotary:	3714.00	SOL:	0	SAND:	0
Avg. Rotary ROP:	152.63	Oil %:	0	T °:	0
Reason POOH:	DTF	Chlor:	0	YP:	0
MWD Spacing		Gamma: 0	Restiv: 0	Sensor: 0	Last Casing O.D.
		GYRO: 0	DNSC: 7344	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
- TFO: 122.26

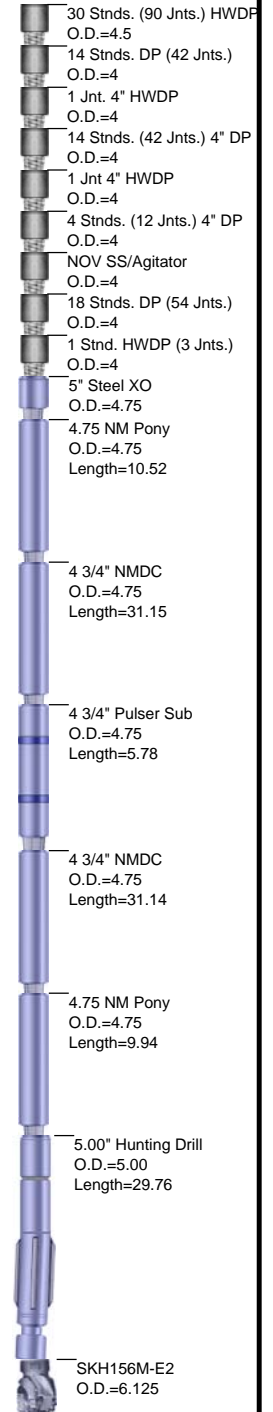
- Bit to Sensor - 62.34'
- Bit to Survey - 65'
- Bit to Gamma - 53.69'

BHA Detail

Description	Serial #	I.D.	O.D.	Length	Sum	Top Conn	MFG.
SKH156M-E2	A209109		6.125	1.00	1.00	3 1/2 REGP	NOV
5.00" Hunting Drill	226		5.00	29.76	30.76	3 1/2 IFB	HUNTING
4.75 NM Pony	51707	2.75	4.75	9.94	40.70	3 1/2 IFB	OTHER
4 3/4" NMDC	DR28956	2.75	4.75	31.14	71.84	3 1/2 IFB	SDI
4 3/4" Pulser Sub	65-230	2.625	4.75	5.78	77.62	3 1/2 IFB	SDI
4 3/4" NMDC	DR28964	2.75	4.75	31.15	108.77	3 1/2 IFB	SDI
4.75 NM Pony	52833	2.75	4.75	10.52	119.29	3 1/2 IFB	OTHER
5" Steel XO	107235	2.75	4.75	1.54	120.83	XT39B	SDI
1 Stnd. HWDP (3 Jnts.)	RIG222	2.88	4	91.61	212.44	XT39B	Other
18 Stnds. DP (54 Jnts.)	RIG789	3.25	4	1,706.34	1918.78	XT39B	Other
NOV SS/Agitator	1006966-1`	3.25	4	22.21	1940.99	XT39B	NOV
4 Stnds. (12 Jnts.) 4" DP	789	3.25	4	379.91	2320.90	XT39B	Other
1 Jnt 4" HWDP	456	3.25	4	30.58	2351.48	XT39B	Other
14 Stnds. (42 Jnts.) 4" DP	ABC	3.25	4	1,327.69	3679.17	XT39B	Other
1 Jnt. 4" HWDP	123	3.25	4	30.55	3709.72	XT39B	Other

BHA Detail

Description	Serial #	I.D.	O.D.	Length	Sum	Top Conn	MFG.
14 Stnds. DP (42 Jnts.)	RIG456	3.25	4	1,327.65	5037.37	XT39B	Other
30 Stnds. (90 Jnts.) HWDP	RIG123	2.88	4.5	2,723.47	7760.84	XT39B	Other



JOB NO.: 244541
Company: EnCana Oil & Gas (USA) Inc.
LOCATION: Ruhl Pad
RIG NAME: HP 278
STATE: Colorado
COUNTY: Country
WELL NAME: Ruhl 1C-32H-B264

FIELD: DJ Basin
Township: 2N
Range 64W

MOTOR INFORMATION

Desc: 4.75 Drill Motor
Bent Hsg/Sub: 1.5 / 1.5 **Bit to Bend:** 5
Pad OD: 5.125 **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	16-Jan	Drilling	22:00	22:10	0.17	7450	7460	10	29	60.0	60	8.5	296	3900		78.76	183.98	0.00	
2	16-Jan	Sliding	23:00	23:10	0.17	7460	7474	14	29	84.0	90	8.5	296	3900	20L	78.76	183.98	0.00	
2	16-Jan	Drilling	23:10	23:20	0.17	7474	7488	14	29	84.0	90	8.5	296	3900		78.76	183.98	0.00	
2	16-Jan	Drilling	23:25	24:00	0.58	7488	7578	90	29	154.3	90	8.5	296	3900		83.47	183.84	0.00	
2	17-Jan	Sliding	00:05	00:15	0.17	7578	7593	15	29	90.0	90	8.5	296	3900	20L	83.47	183.84	0.00	
2	17-Jan	Drilling	00:15	00:40	0.42	7593	7669	76	29	182.4	90	8.5	296	3900		85.26	183.38	0.00	
2	17-Jan	Sliding	00:50	01:00	0.17	7669	7687	18	29	108.0	90	8.5	296	3900	30L	85.26	183.38	0.00	
2	17-Jan	Drilling	01:00	01:15	0.25	7687	7760	73	29	292.0	90	8.5	296	3900		87.01	183.86	0.00	
2	17-Jan	Sliding	01:25	01:35	0.17	7760	7780	20	29	120.0	90	8.5	296	3900	30L	87.01	183.86	0.00	
2	17-Jan	Drilling	01:35	02:00	0.42	7780	7823	43	29	103.2	90	8.5	296	3900		88.69	182.19	0.00	
2	17-Jan	Sliding	02:00	02:05	0.08	7823	7829	6	29	72.0	90	8.5	296	3900	30L	88.69	182.19	0.00	
2	17-Jan	Drilling	02:05	02:10	0.08	7829	7855	26	29	312.0	90	8.5	296	3900		88.69	182.19	0.00	
2	17-Jan	Sliding	02:25	02:40	0.25	7855	7873	18	29	72.0	90	8.5	296	3900	30L	88.69	182.19	0.00	
2	17-Jan	Drilling	02:40	02:55	0.25	7873	7950	77	29	308.0	90	8.5	296	3900		91.41	180.93	0.00	
2	17-Jan	Drilling	03:10	03:55	0.75	7950	8045	95	29	126.7	90	8.5	296	3900		91.08	180.50	0.00	
2	17-Jan	Sliding	04:05	04:15	0.17	8045	8060	15	29	90.0	90	8.5	296	3900	65L	91.08	180.50	0.00	
2	17-Jan	Drilling	04:15	04:50	0.58	8060	8140	80	29	137.1	90	8.5	296	3900		91.88	179.14	0.00	
2	17-Jan	Sliding	05:00	05:15	0.25	8140	8149	9	29	36.0	90	8.5	296	3950	65L	91.88	179.14	0.00	
2	17-Jan	Drilling	05:15	05:35	0.33	8149	8234	85	29	255.0	90	8.5	296	3950		92.05	177.89	0.00	
2	17-Jan	Drilling	05:40	06:00	0.33	8234	8329	95	29	285.0	90	8.5	296	3950		91.71	177.49	0.00	
2	17-Jan	Sliding	06:10	06:25	0.25	8329	8338	9	29	36.0	90	8.5	296	3950		91.71	177.49	0.00	
2	17-Jan	Drilling	06:25	06:35	0.17	8338	8423	85	29	510.0	90	8.5	296	3950		92.79	177.79	0.00	
2	17-Jan	Drilling	06:45	07:05	0.33	8423	8518	95	29	285.0	90	8.5	296	3950		91.82	176.45	0.00	
2	17-Jan	Sliding	07:10	07:25	0.25	8518	8530	12	29	48.0	90	8.5	296	3950	70R	91.82	176.45	0.00	
2	17-Jan	Sliding	08:05	08:30	0.42	8530	8629	99	29	237.6	90	8.5	296	3950	110R	91.38	177.41	0.00	
2	17-Jan	Drilling	08:30	08:45	0.25	8629	8708	79	29	316.0	90	8.5	296	3950		90.91	179.54	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	17-Jan	Drilling	08:55	09:10	0.25	8708	8802	94	29	376.0	90	8.5	296	3950		90.17	178.91	0.00	
2	17-Jan	Sliding	09:20	09:40	0.33	8802	8816	14	29	42.0	90	8.5	296	3950	80R	90.17	178.91	0.00	
2	17-Jan	Drilling	09:40	10:00	0.33	8816	8898	82	29	246.0	90	12	296	4250		92.45	181.07	0.00	
2	17-Jan	Sliding	10:05	10:20	0.25	8898	8912	14	29	56.0	90	12	296	4250	160L	92.45	181.07	0.00	
2	17-Jan	Drilling	10:20	10:35	0.25	8912	8998	86	29	344.0	90	12	296	4250		89.90	180.31	0.00	
2	17-Jan	Drilling	10:40	11:10	0.50	8998	9088	90	29	180.0	90	12	296	4250		89.70	180.58	0.00	
2	17-Jan	Drilling	11:15	11:45	0.50	9088	9182	94	29	188.0	90	12	296	4250		88.76	180.04	0.00	
2	17-Jan	Drilling	11:50	12:25	0.58	9182	9277	95	29	162.9	90	12	296	4250		88.49	179.69	0.00	
2	17-Jan	Sliding	12:35	13:00	0.42	9277	9287	10	26	24.0	90	12	285	3700	30R	88.49	179.69	0.00	
2	17-Jan	Drilling	13:00	13:20	0.33	9287	9372	85	29	255.0	90	12	296	3700		89.19	180.14	0.00	
2	17-Jan	Sliding	13:25	13:35	0.17	9372	9380	8	26	48.0	90	12	285	3700		89.19	180.14	0.00	
2	17-Jan	Drilling	13:35	14:40	1.08	9380	9467	87	29	80.3	90	12	296	3700		90.20	180.13	0.00	
2	17-Jan	Drilling	14:45	15:10	0.42	9467	9562	95	29	228.0	90	12	296	3700		90.10	179.65	0.00	
2	17-Jan	Sliding	15:20	15:40	0.33	9562	9570	8	26	24.0	90	12	285	3700	20R	90.10	179.65	0.00	
2	17-Jan	Drilling	15:40	16:00	0.33	9570	9657	87	29	261.0	90	12	296	3700		91.88	180.81	0.00	
2	17-Jan	Drilling	16:05	16:40	0.58	9657	9752	95	29	162.9	90	12	296	3700		90.84	180.12	0.00	
2	17-Jan	Drilling	16:55	17:30	0.58	9752	9847	95	29	162.9	90	12	296	3700		89.56	179.49	0.00	
2	17-Jan	Sliding	17:35	19:15	1.67	9847	9857	10	26	6.0	90	12	285	3700	15R	89.56	179.49	0.00	
2	17-Jan	Drilling	19:15	20:00	0.75	9857	9941	84	23	112.0	90	13.5	296	4050		89.87	178.99	0.00	
2	17-Jan	Sliding	20:10	21:00	0.83	9941	9951	10	40	12.0	90	13.5	292	4050	30R	89.87	178.99	0.00	
2	17-Jan	Drilling	21:00	21:25	0.42	9951	10037	86	23	206.4	90	13.5	292	4050		90.47	179.82	0.00	
2	17-Jan	Drilling	21:35	22:05	0.50	10037	10132	95	23	190.0	90	13.5	292	4050		90.54	180.11	0.00	
2	17-Jan	Drilling	22:10	22:45	0.58	10132	10226	94	23	161.1	90	13.5	292	4160		90.77	180.13	0.00	
2	17-Jan	Sliding	23:00	23:15	0.25	10226	10234	8	40	32.0	90	13.5	292	4160	170L	90.77	180.13	0.00	
2	17-Jan	Drilling	23:15	24:00	0.75	10234	10321	87	23	116.0	90	15.5	292	4160		89.76	180.49	0.00	
2	18-Jan	Drilling	00:05	00:30	0.42	10321	10416	95	23	228.0	90	15.5	292	4160		89.70	180.34	0.00	
2	18-Jan	Drilling	00:45	01:15	0.50	10416	10511	95	23	190.0	90	15.5	292	4160		91.38	181.94	0.00	
2	18-Jan	Sliding	01:35	01:55	0.33	10511	10522	11	40	33.0	90	15.5	292	4160	170L	91.38	181.94	0.00	
2	18-Jan	Drilling	01:55	02:40	0.75	10522	10605	83	23	110.7	90	15.5	292	4175		88.15	180.19	0.00	
2	18-Jan	Sliding	02:45	03:55	1.17	10605	10615	10	40	8.6	90	15.5	292	4175	30L	88.15	180.19	0.00	
2	18-Jan	Drilling	03:55	04:30	0.58	10615	10700	85	23	145.7	90	15.5	292	4175		90.77	182.08	0.00	
2	18-Jan	Sliding	04:35	04:55	0.33	10700	10705	5	40	15.0	90	15.5	292	4175	105L	90.77	182.08	0.00	
2	18-Jan	Drilling	04:55	05:25	0.50	10705	10795	90	23	180.0	90	15.5	292	4175		89.93	180.14	0.00	
2	18-Jan	Sliding	05:35	05:55	0.33	10795	10799	4	40	12.0	90	15.5	292	4175	105L	89.93	180.14	0.00	
2	18-Jan	Drilling	05:55	06:20	0.42	10799	10890	91	23	218.4	90	15.5	292	4175		90.20	175.89	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	18-Jan	Sliding	07:00	08:00	1.00	10890	10902	12	40	12.0	90	15.5	292	4175	90R	90.20	175.89	0.00	
2	18-Jan	Drilling	08:00	08:25	0.42	10902	10985	83	23	199.2	90	15.5	292	4175		89.80	177.22	0.00	
2	18-Jan	Sliding	08:30	09:50	1.33	10985	10995	10	40	7.5	90	15.5	292	4175	75R	89.80	177.22	0.00	
2	18-Jan	Drilling	09:50	10:25	0.58	10995	11079	84	23	144.0	90	15.5	292	4175		89.03	178.28	0.00	
2	18-Jan	Sliding	10:50	12:30	1.67	11079	11093	14	40	8.4	90	15.5	292	4175	75R	89.03	178.28	0.00	
2	18-Jan	Drilling	12:30	13:10	0.67	11093	11174	81	23	121.5	90	15.5	292	4175		89.83	179.24	0.00	
2	18-Jan	Sliding	13:15	14:55	1.67	11174	11188	14	40	8.4	90	15.5	292	4175	75R	89.83	179.24	0.00	
2	18-Jan	Drilling	14:55	15:30	0.58	11188	11269	81	23	138.9	90	15.5	292	4175		89.46	180.85	0.00	
2	18-Jan	Sliding	15:40	16:35	0.92	11269	11275	6	40	6.5	90	15.5	292	4175	75R	89.46	180.85	0.00	
2	18-Jan	Drilling	16:35	17:20	0.75	11275	11364	89	23	118.7	90	15.5	292	4175		88.63	181.49	0.00	
2	18-Jan	Sliding	17:30	18:35	1.08	11364	11372	8	40	7.4	90	15.5	292	4175	5R	88.63	181.49	0.00	
2	18-Jan	Drilling	18:35	19:20	0.75	11372	11459	87	18	116.0	90	14	292	3960		88.42	180.96	0.00	
2	18-Jan	Sliding	19:30	21:15	1.75	11459	11469	10	40	5.7	90	14	292	3960	5R	88.42	180.96	0.00	
2	18-Jan	Drilling	21:15	22:15	1.00	11469	11554	85	18	85.0	90	14	292	3960		88.42	180.11	0.00	
2	18-Jan	Drilling	23:15	23:20	0.08	11554	11585	31	18	372.0	90	14	292	3960		88.13	180.25	0.00	

Total Drilled:

4135

Avg. Total ROP:

97.29

DEPTH% - TIME %

Total Rotary Drilled:

3714

Avg. Rotary ROP:

152.63

Percent Rotary:

89.82 - 57.25

Total Drilled Sliding:

421

Avg. Slide ROP:

23.17

Percent Slide:

10.18 - 42.75

BHA # 3

JOB NO.:	244541	Work Order:	244541	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:	George / Joe
RIG NAME:	HP 278	BHA TYPE:	Steerable Assembly	BHA WT:	-1960632 Wt @ Jars: N/A
STATE:	Colorado				
COUNTY:	Weld				
WELL NAME:	Ruhl 1C-32H-B264				

Time and Depths	MOTOR DATA	Drilling Parameters
Date In: 19-Jan-15 @ 08:40	4.75 Drill Motor	SO/PU: 90 - 90 / 265-265
Date Out: 20-Jan-15 @ 07:15	MFG.: Hunting	Rot Strg Wt: 142-142
Hrs In Hole: 22.58	Pad OD: 5.125	WOB: 18 - 18
Start Depth: 11585.00	NB Stab: 0	TORQ: 14 - 14
End Depth: 11754.00	Bit to Bend: 5.02	SPP: 3960 - 3960
Total Drilled: 169.00	Bent Hsg/Sub°: 1.5 / 1.5	Motor RPM: No Rev/Gal Input
Avg. Total ROP: 169.00	Lobe/Stage: 5.6 / 8.3	Rotary RPM: 90 - 90
Circ Hrs: Tot/Only 7.08 / 6.08	Rev/GAL: 0	Flow Rate: 292 - 292
Percent Slide: .00	Rotor Jet: 0	Avg Diff:
Percent Hrs: .00	Prop BUR:	Stall Pres.:
Slide Hours: .00	Act BUR:	Off Bot Pres.:
Total Sliding: .00		
Avg. Slide ROP: NA		
Percent Rotary: 100.00		
Percent Hrs: 100.00		
Rotary Hours: 1.00		
Total Rotary: 169.00		
Avg. Rotary ROP: 169.00		
Reason POOH: TD		

MWD Spacing	Gamma: 0	Restiv: 0	Sensor: 0	Last Casing	O.D.
	GYRO: 0	DNSC: 7344	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
- TFO: 278.84

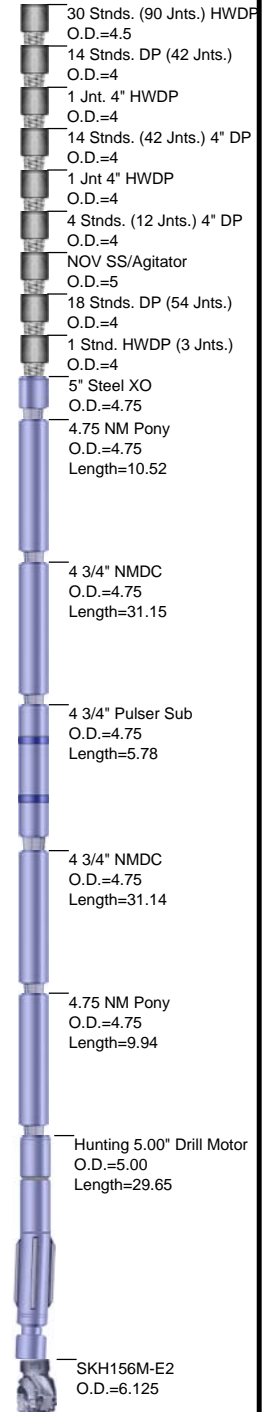
- Bit to Sensor - 62.23'
- Bit to Survey - 65'
- Bit to Gamma - 53.58'

BHA Detail

Description	Serial #	I.D.	O.D.	Length	Sum	Top Conn	MFG.
SKH156M-E2	A209109		6.125	1.00	1.00	3 1/2 REGP	NOV
Hunting 5.00" Drill Motor	085		5.00	29.65	30.65	3 1/2 IFB	HUNTING
4.75 NM Pony	51707	2.75	4.75	9.94	40.59	3 1/2 IFB	OTHER
4 3/4" NMDC	DR28956	2.75	4.75	31.14	71.73	3 1/2 IFB	SDI
4 3/4" Pulser Sub	65-230	2.625	4.75	5.78	77.51	3 1/2 IFB	SDI
4 3/4" NMDC	DR28964	2.75	4.75	31.15	108.66	3 1/2 IFB	SDI
4.75 NM Pony	52833	2.75	4.75	10.52	119.18	3 1/2 IFB	OTHER
5" Steel XO	107235	2.75	4.75	1.54	120.72	XT39B	SDI
1 Std. HWDP (3 Jnts.)	RIG222	2.88	4	91.61	212.33	XT39B	Other
18 Stnds. DP (54 Jnts.)	RIG789	3.25	4	1,706.34	1918.67	XT39B	Other
NOV SS/Agitator	1300941-01-08		5	22.10	1940.77	XT39B	Other
4 Stnds. (12 Jnts.) 4" DP	789	3.25	4	379.91	2320.68	XT39B	Other
1 Jnt 4" HWDP	456	3.25	4	30.58	2351.26	XT39B	Other
14 Stnds. (42 Jnts.) 4" DP	ABC	3.25	4	1,327.69	3678.95	XT39B	Other
1 Jnt. 4" HWDP	123	3.25	4	30.55	3709.50	XT39B	Other

BHA Detail

Description	Serial #	I.D.	O.D.	Length	Sum	Top Conn	MFG.
14 Stnds. DP (42 Jnts.)	RIG456	3.25	4	1,327.65	5037.15	XT39B	Other
30 Stnds. (90 Jnts.) HWDP	RIG123	2.88	4.5	2,723.47	7760.62	XT39B	Other



JOB NO.: 244541
Company: EnCana Oil & Gas (USA) Inc.
LOCATION: Ruhl Pad
RIG NAME: HP 278
STATE: Colorado
COUNTY: Country
WELL NAME: Ruhl 1C-32H-B264

FIELD: DJ Basin
Township: 2N
Range 64W

MOTOR INFORMATION

Desc: 4.75 Drill Motor
Bent Hsg/Sub: 1.5 / 1.5 **Bit to Bend:** 5.02
Pad OD: 5.125 **NB Stab:**

Slide Report for BHA # 3

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
3	19-Jan	Drilling	16:45	17:15	0.50	11585	11648	63	18	126.0	90	14	292	3960		88.13	180.25	0.00	
3	19-Jan	Drilling	17:30	18:00	0.50	11648	11754	106	18	212.0	90	14	292	3960		87.95	180.22	0.00	

Total Drilled: 169 **Avg. Total ROP:** 169.00 **DEPTH% - TIME %**

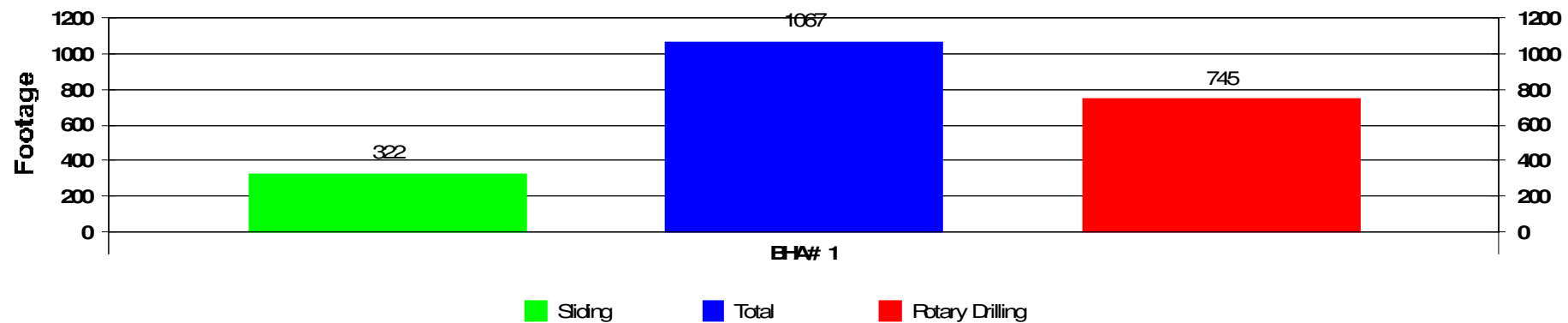
Total Rotary Drilled: 169 **Avg. Rotary ROP:** 169.00 **Percent Rotary:** 100.00 - 100.00

Total Drilled Sliding: 0 **Avg. Slide ROP:** NA **Percent Slide:** .00 - .00

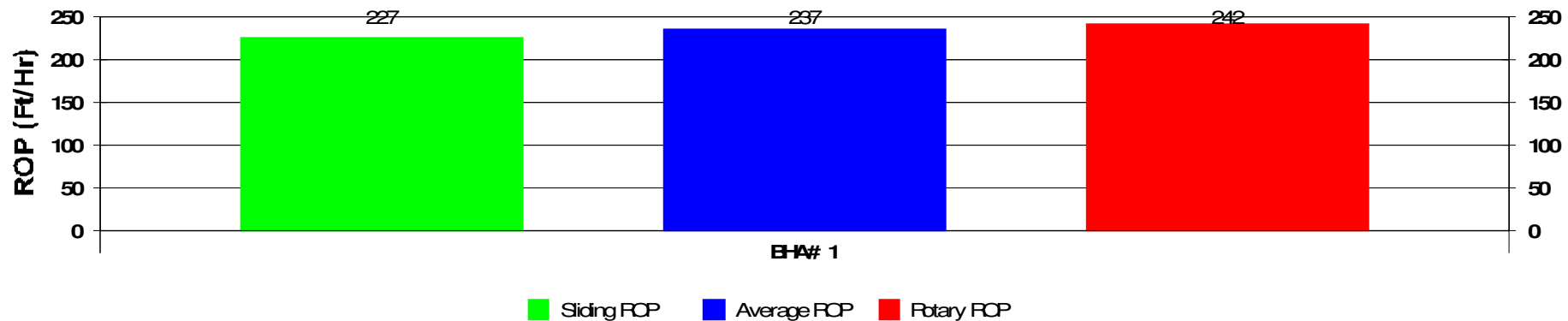


JOB NO.:	232801	FIELD:	Wattenberg	
COMPANY:	EnCana Oil & Gas USA (Inc)	Township:	2N	
LOCATION:	Ruhl	SECT\	RANGE:	32 64W
RIG NAME:	HP 278	COMMENT		
STATE:	Colorado			
COUNTY:	Weld			
WELL NAME:	Ruhl 1C-32H-B264			

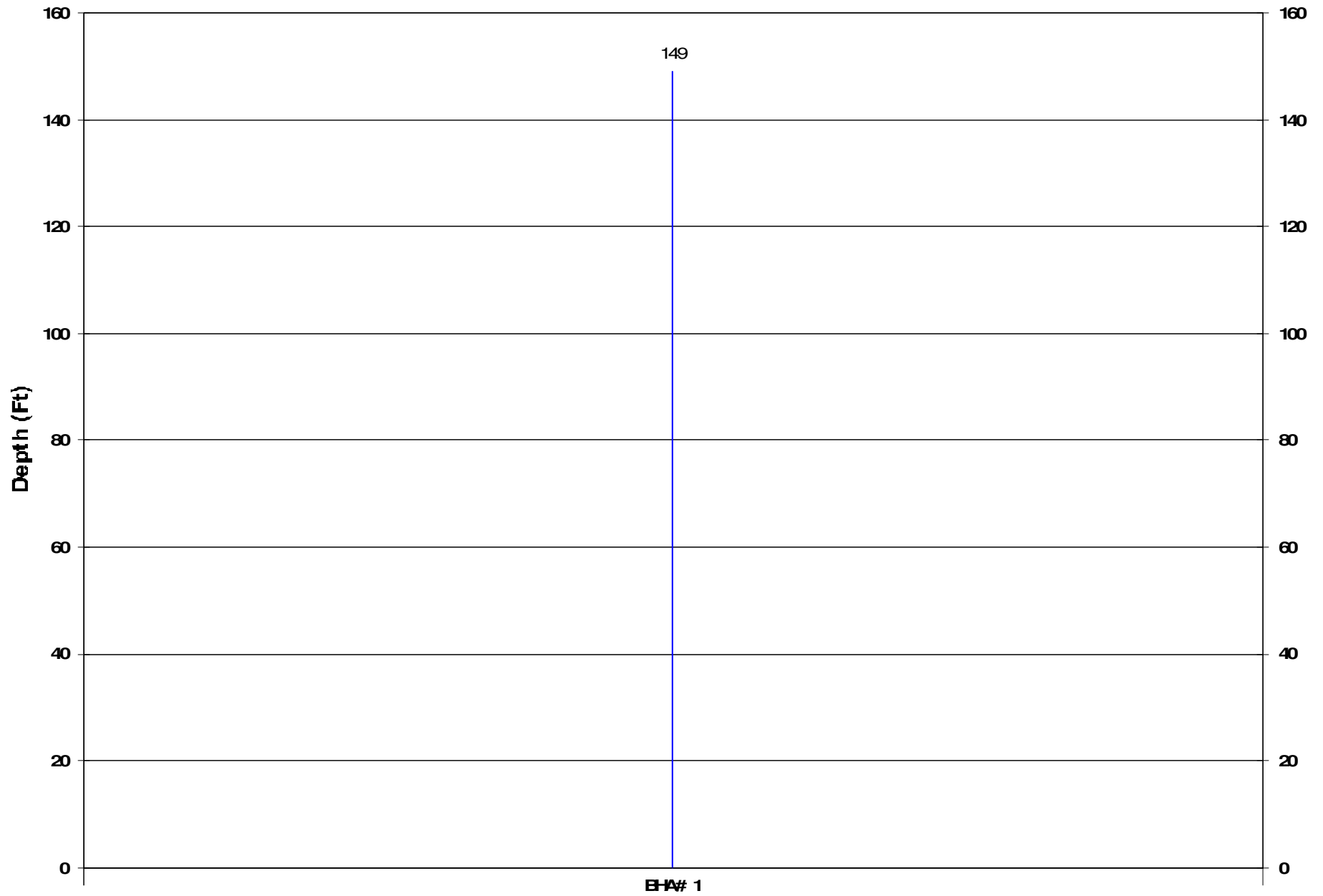
Footage Drilled with BHA



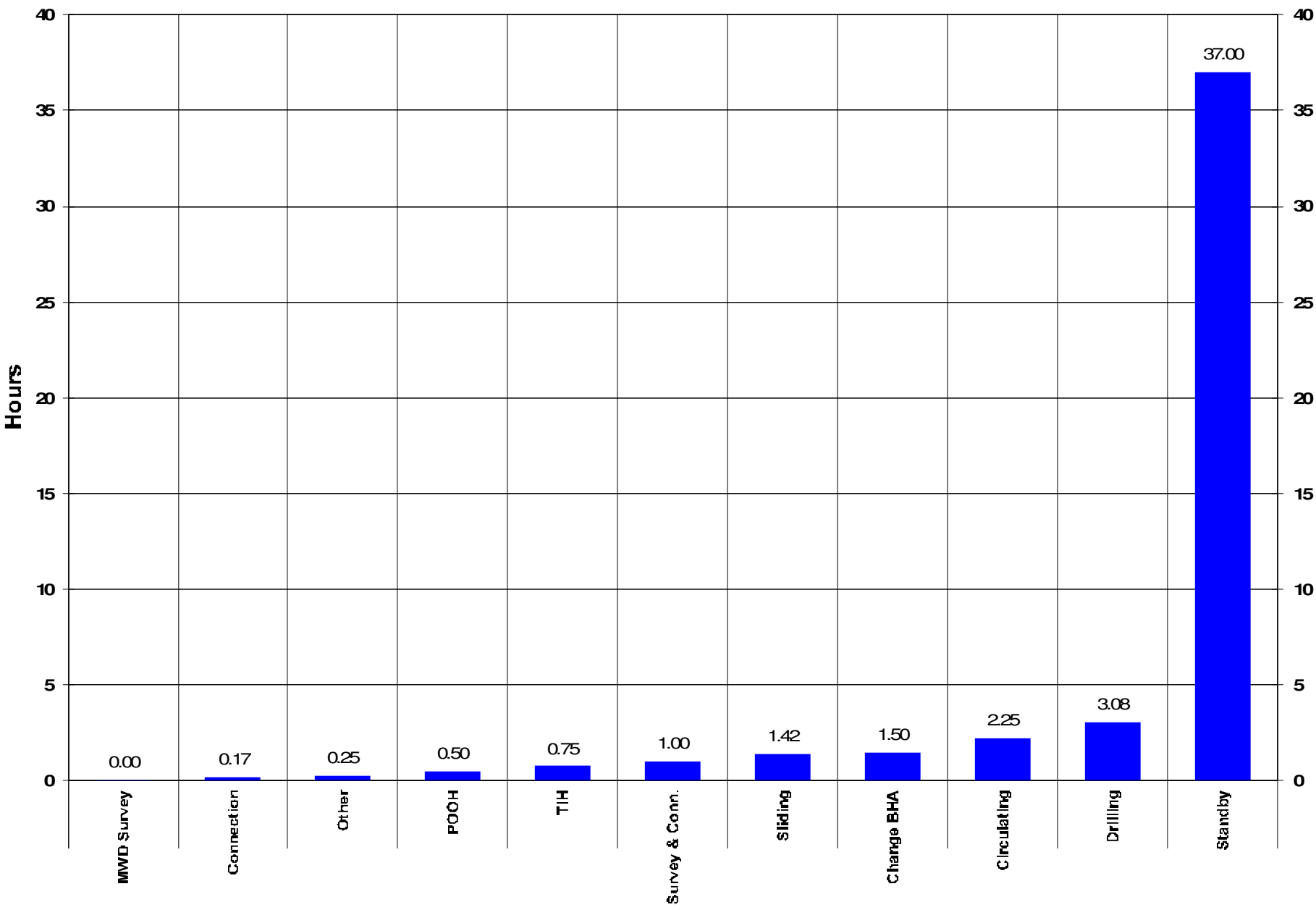
ROP vs BHA



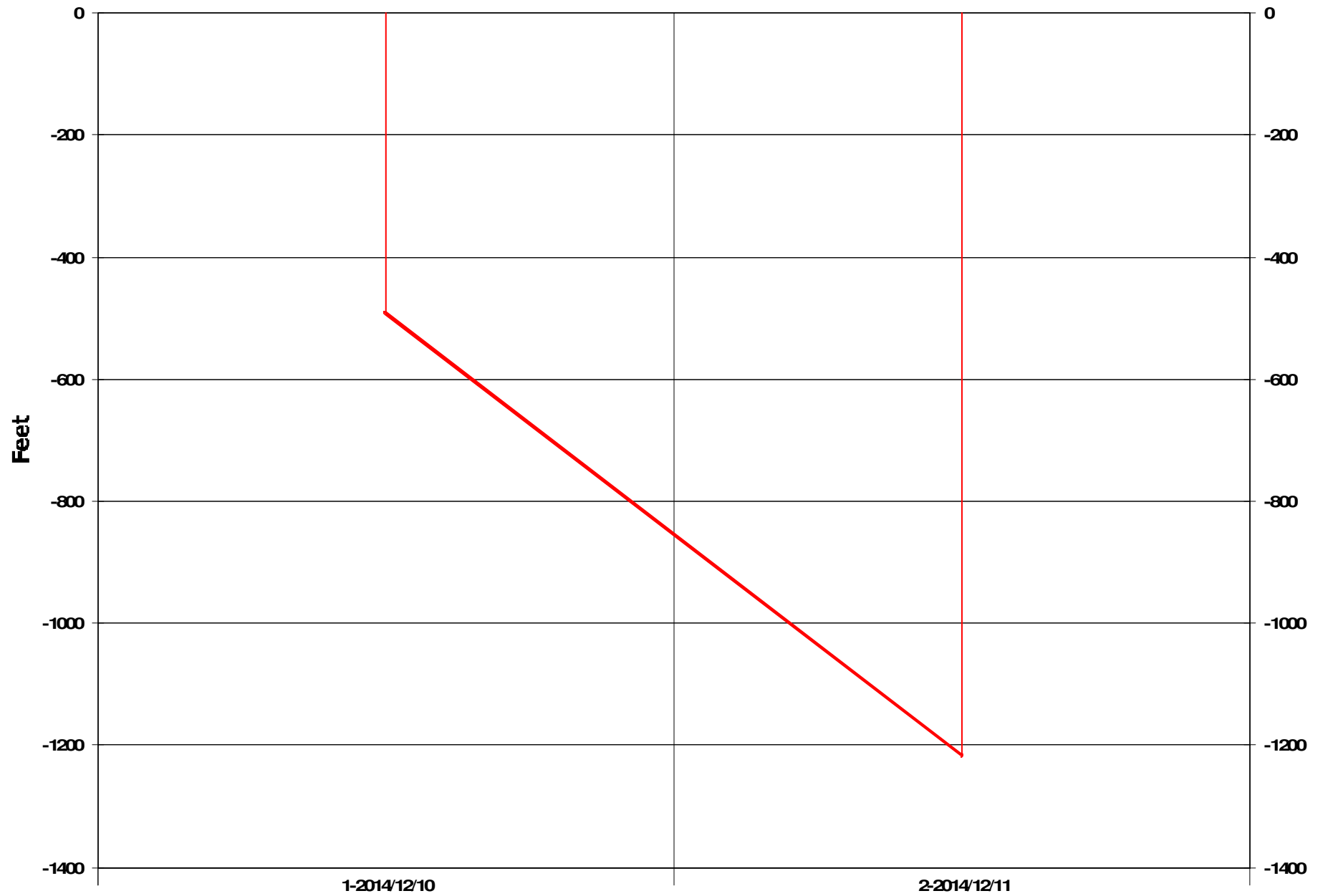
Depth vs BHA



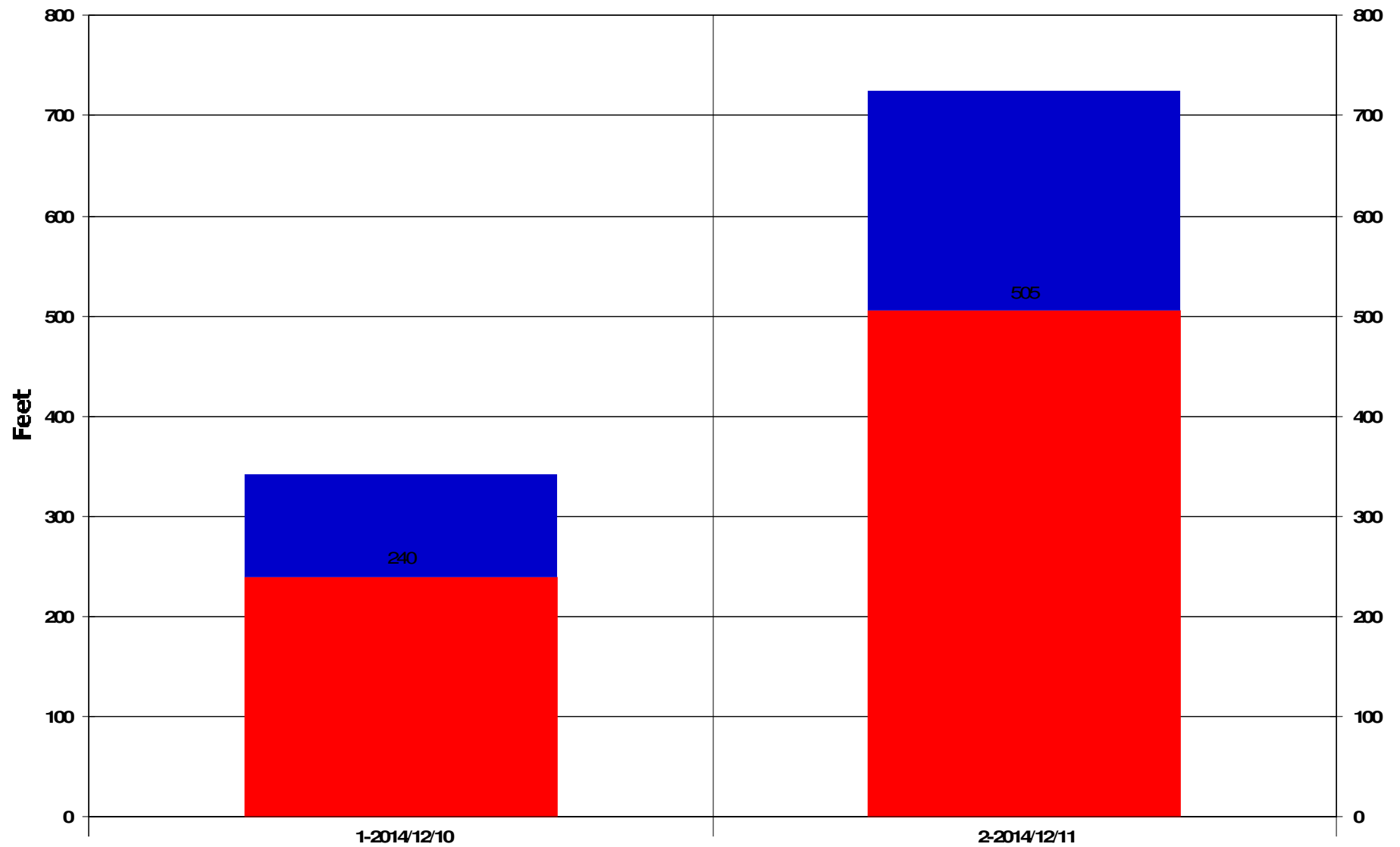
Activity Histogram



Measured Depth vs Days

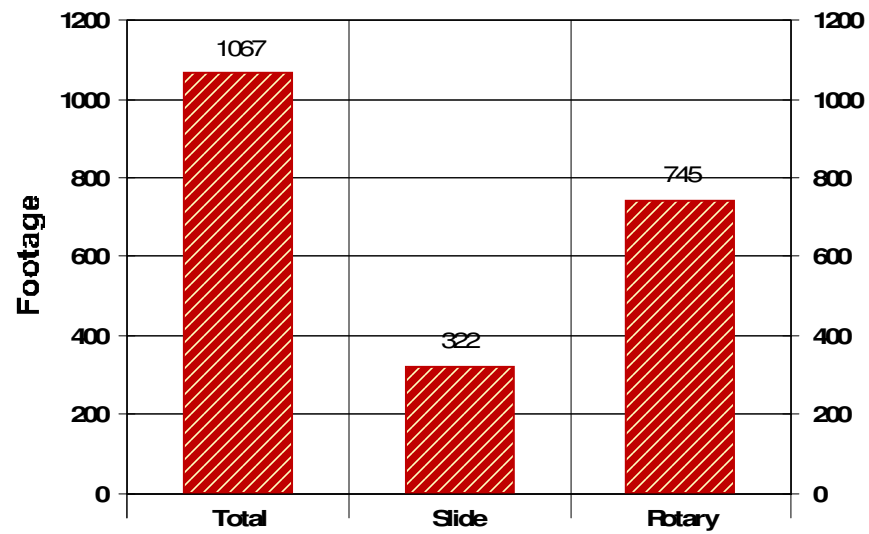


Daily Footage

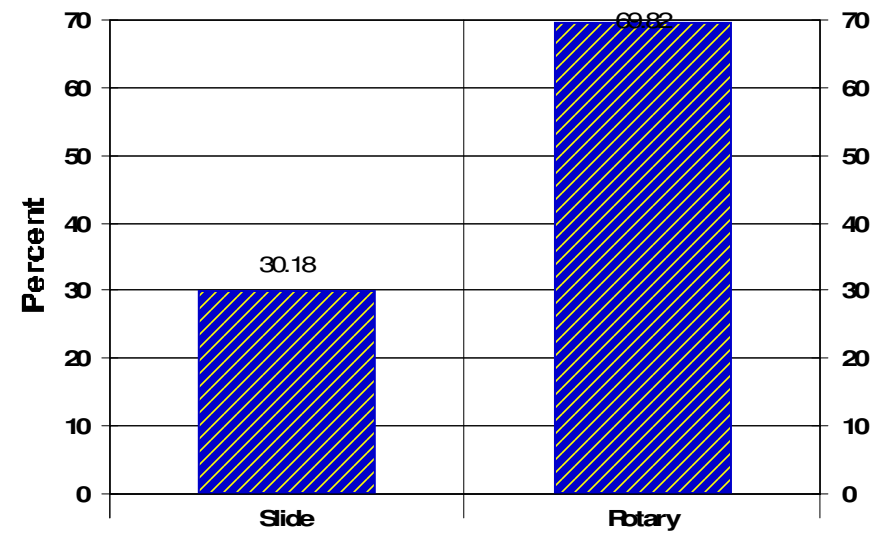


Rotary Drilling Siding

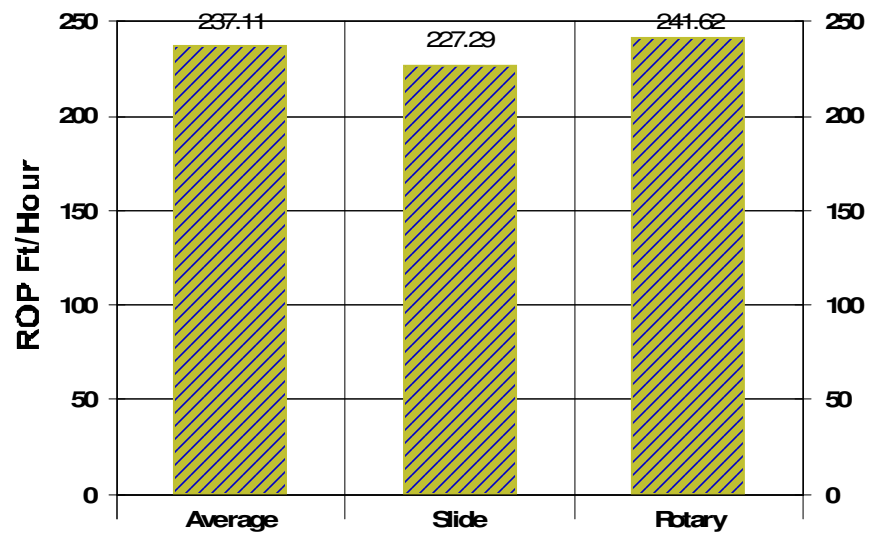
Footage Drilled Totals



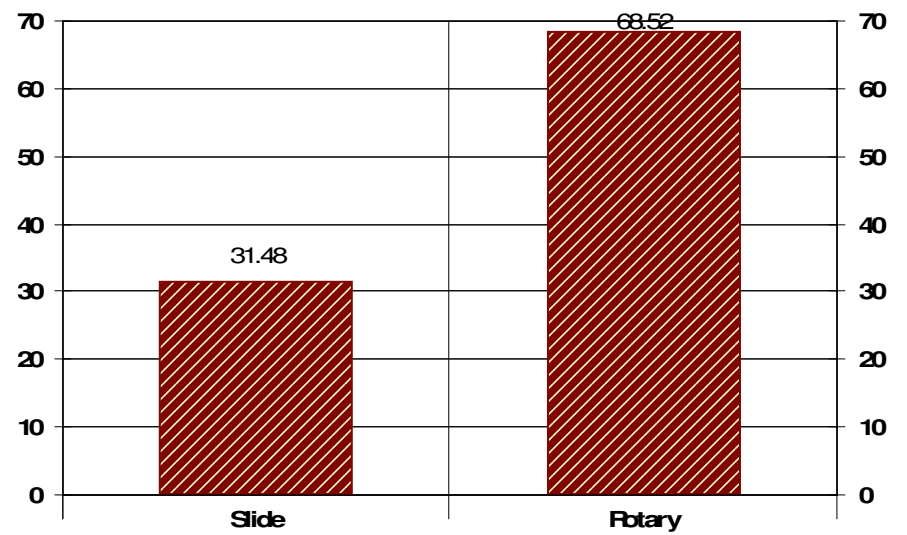
Footage Percent



Rate of Penetration Totals

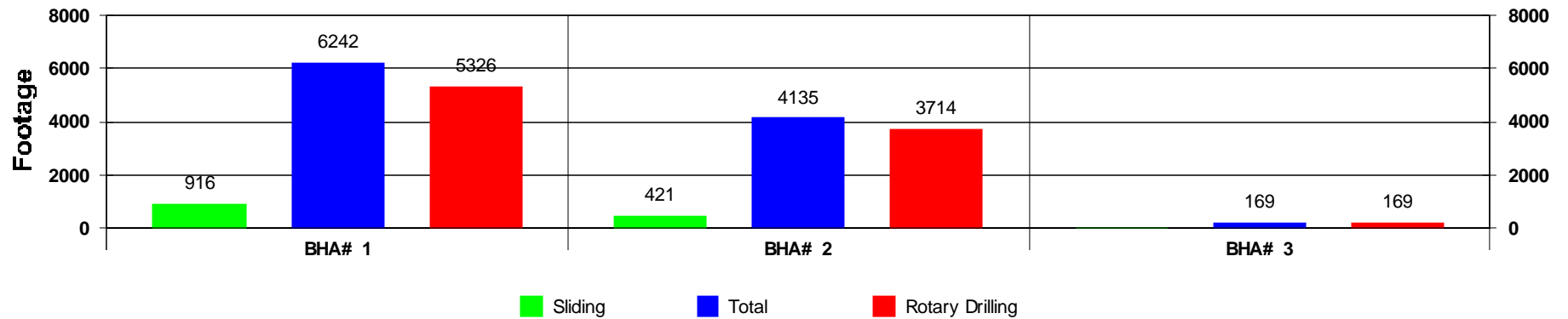


Time Percent

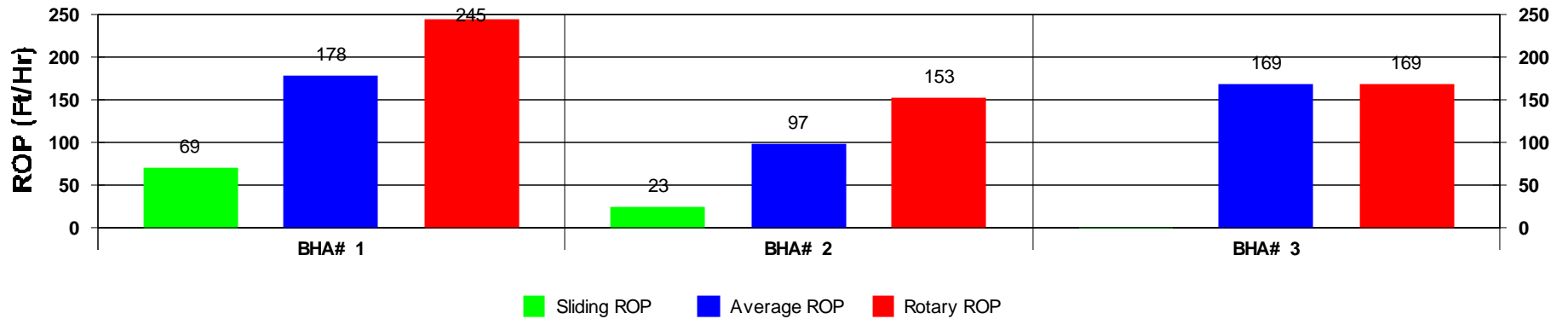


JOB NO.:	244541	FIELD:	DJ Basin
Company:	EnCana Oil & Gas (USA) Inc.	Township:	2N
LOCATION:	Ruhl Pad	SECTRANGE:	32 64W
RIG NAME:	HP 278	COMMENT	
STATE:	Colorado		
COUNTY:	Weld		
WELL NAME:	Ruhl 1C-32H-B264		

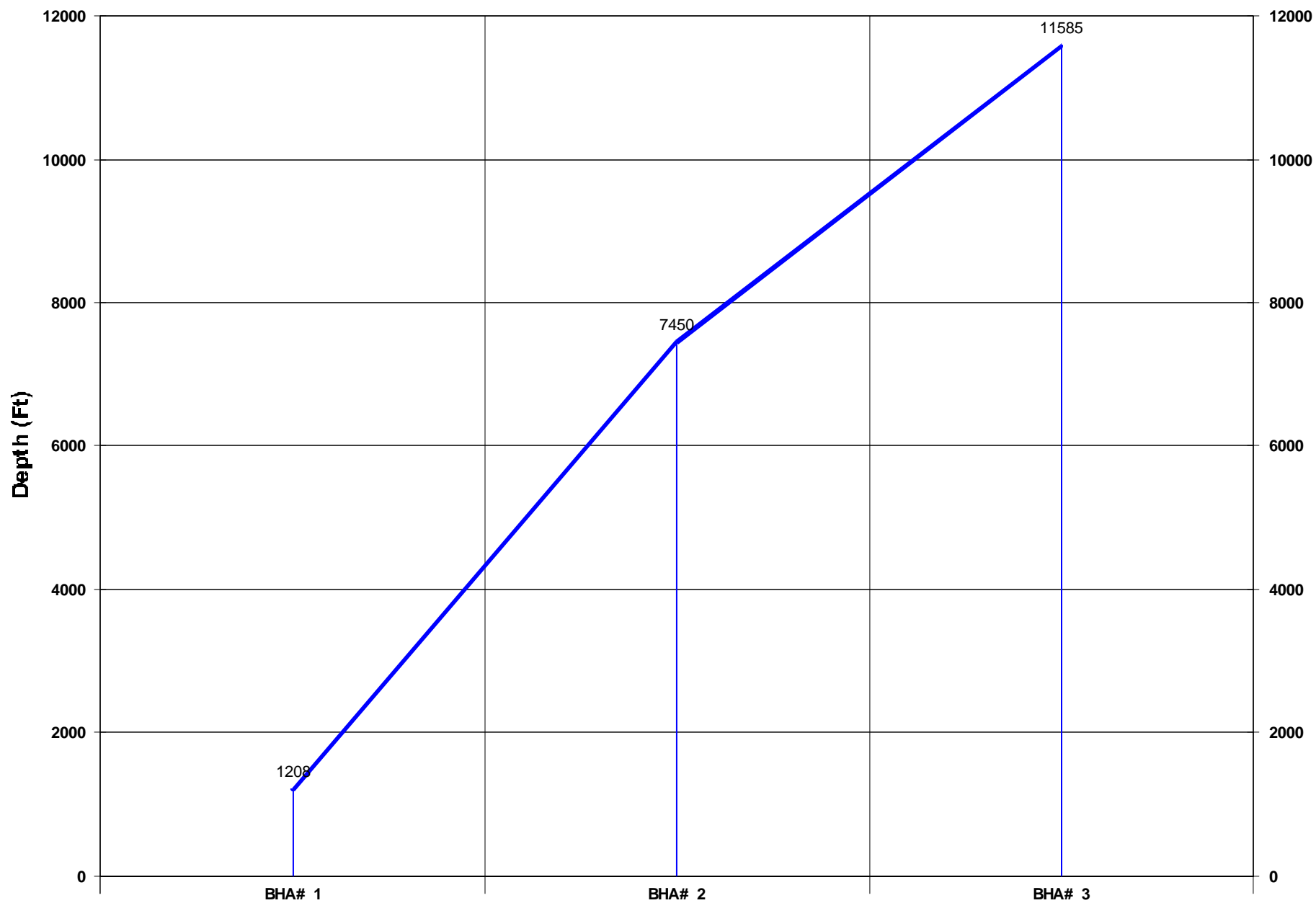
Footage Drilled with BHA



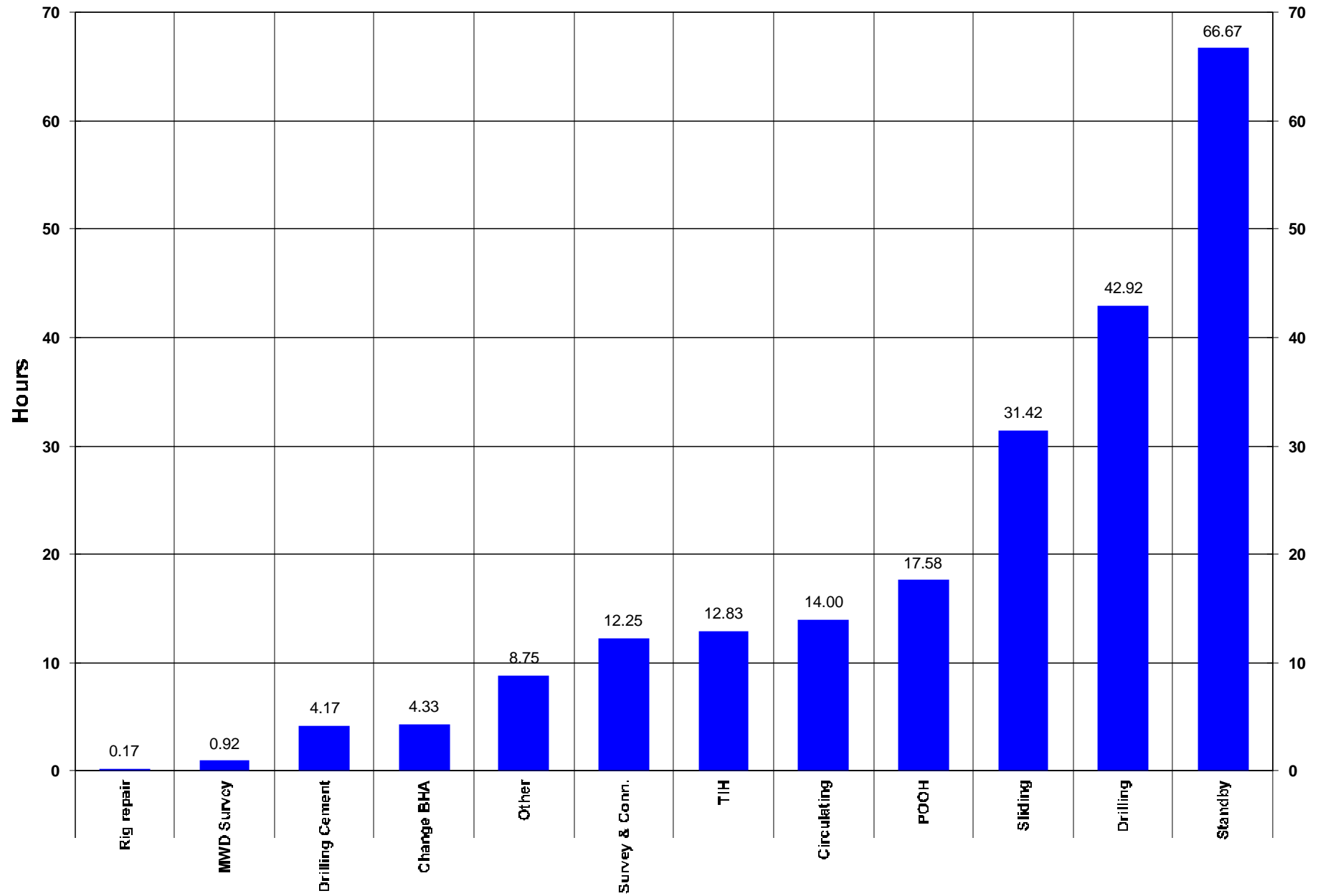
ROP vs BHA



Depth vs BHA



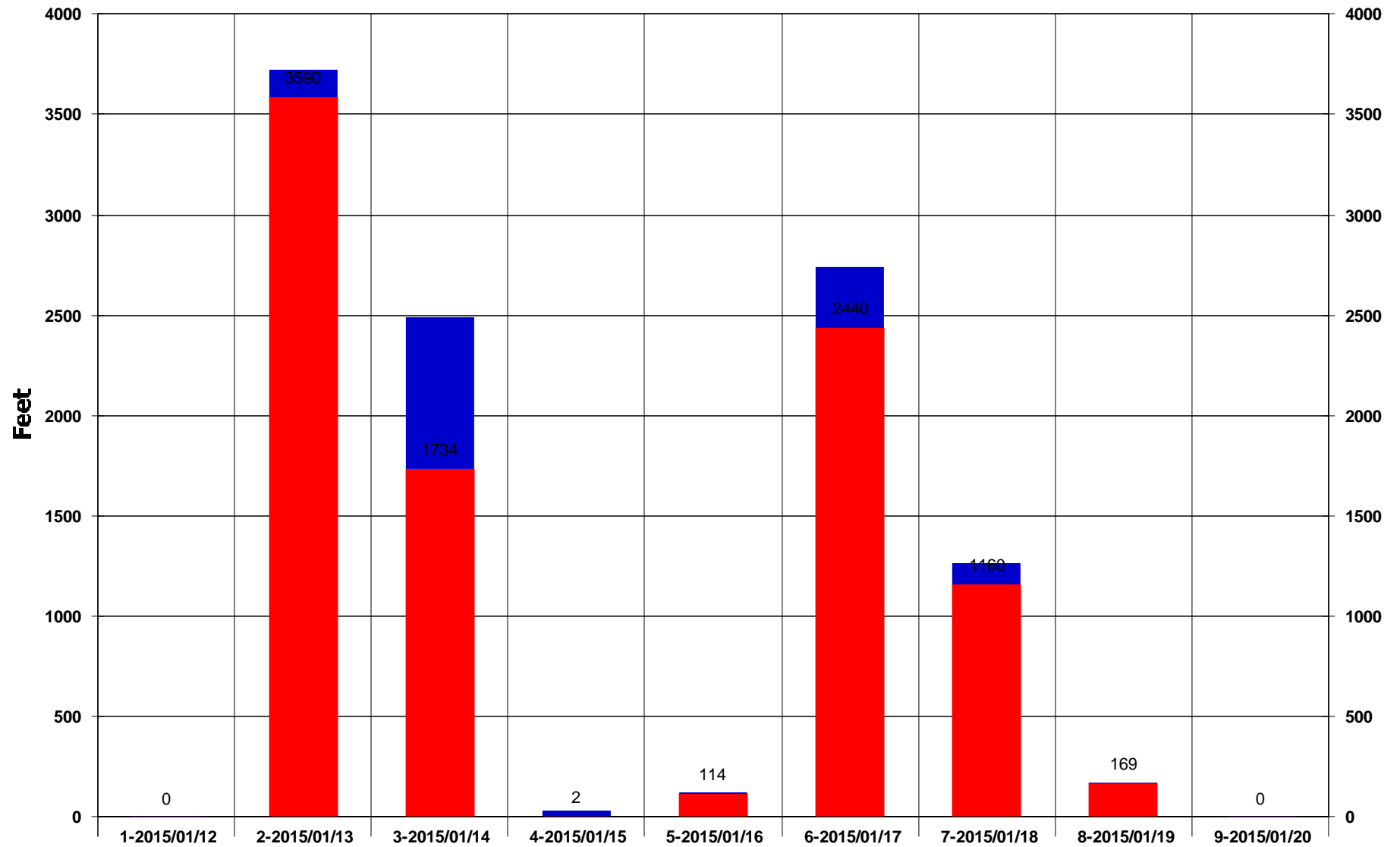
Activity Histogram



Measured Depth vs Days

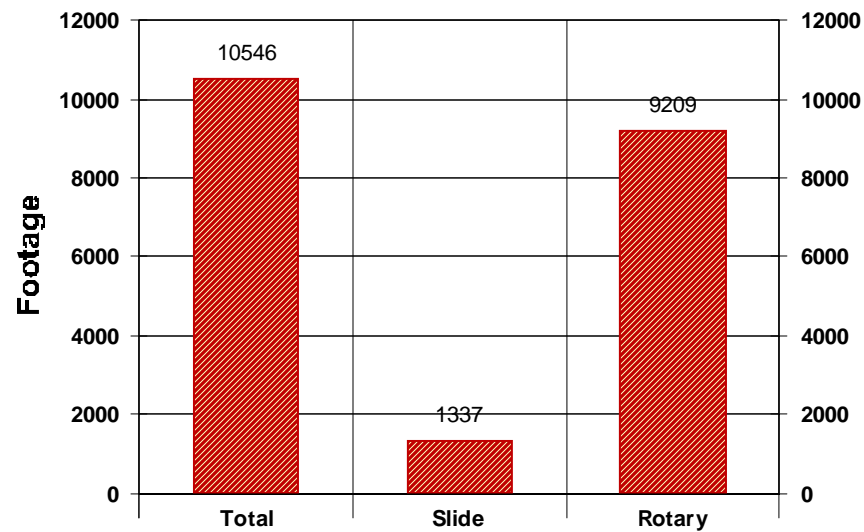


Daily Footage

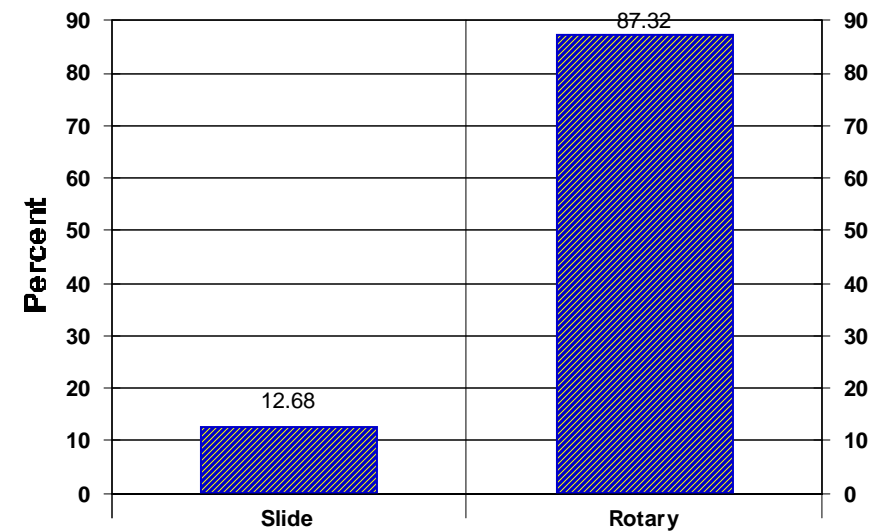


Rotary Drilling Sliding

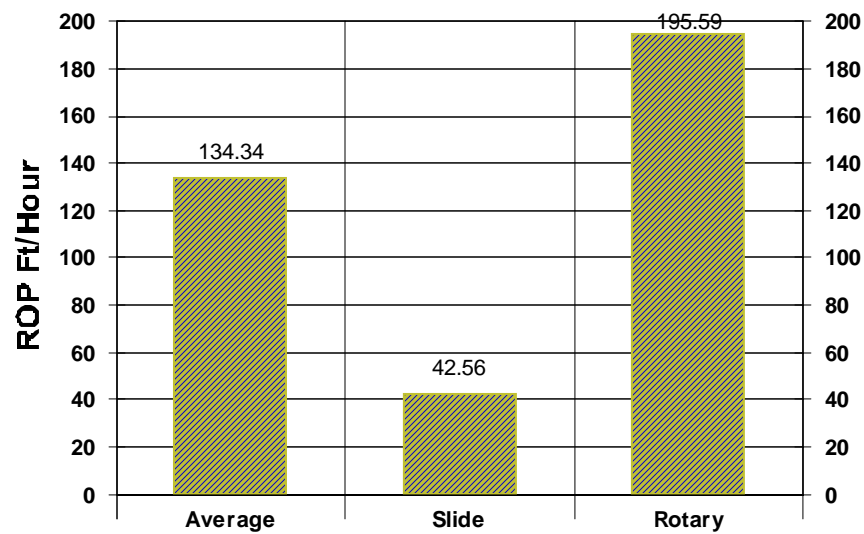
Footage Drilled Totals



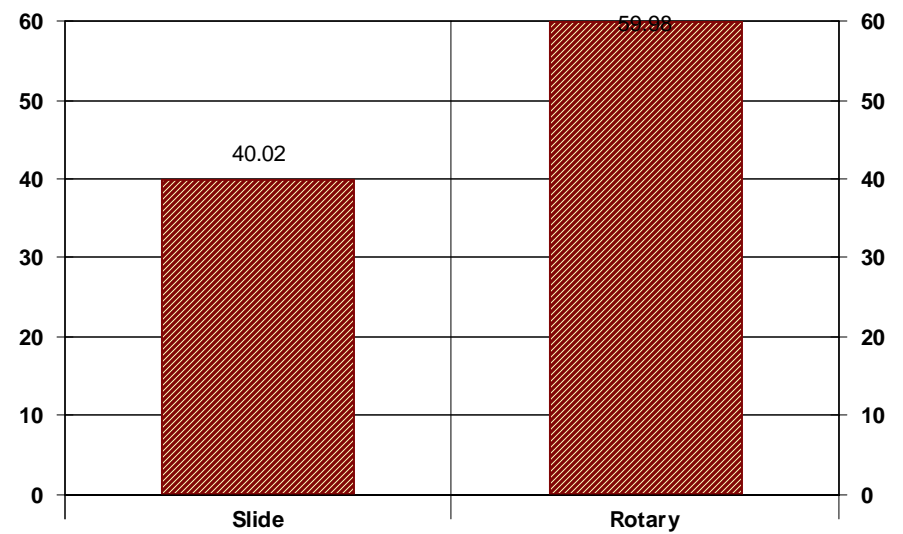
Footage Percent



Rate of Penetration Totals



Time Percent





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