



END OF WELL REPORT

Prepared For:

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

Prepared By:

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Scientific Drilling***

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TABLE OF CONTENTS

- 1. Directional Plot and Surveys**
- 2. Daily Drilling Reports**
- 3. BHA Summary Reports and Slide Sheets**
- 4. Graphical Job History**
- 5. Support Staff**



Project: DJ Wattenberg
Site: S32-T2N-R64W (Newnam/Ruhl)
Well: Ruhl 1F-32H-B264
Wellbore: Hz
Design: Plan 4



Plan: Plan 4 (Ruhl 1F-32H-B264/Hz)

Created By: Seth Burstad Date: 12-29-2014

WELL DETAILS: Ruhl 1F-32H-B264

PROJECT DETAILS: DJ Wattenberg

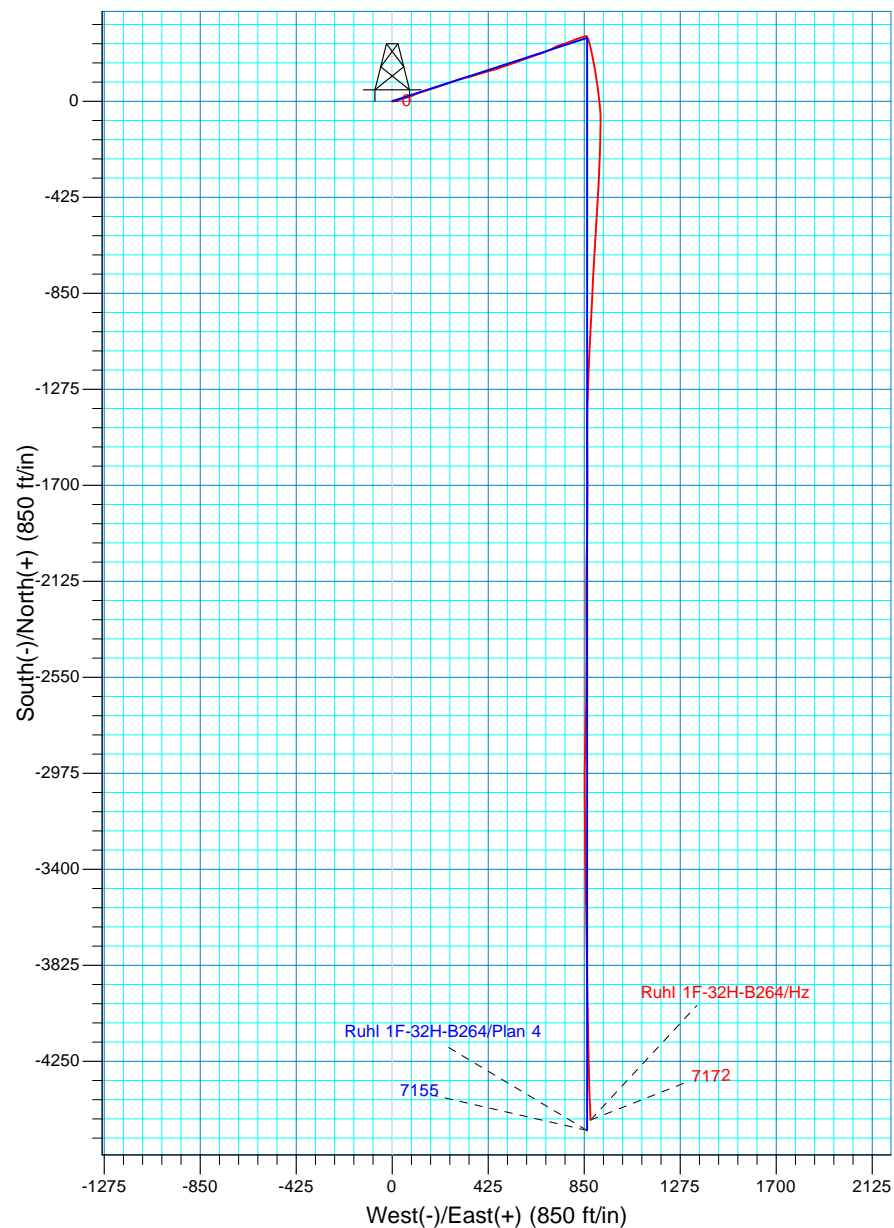
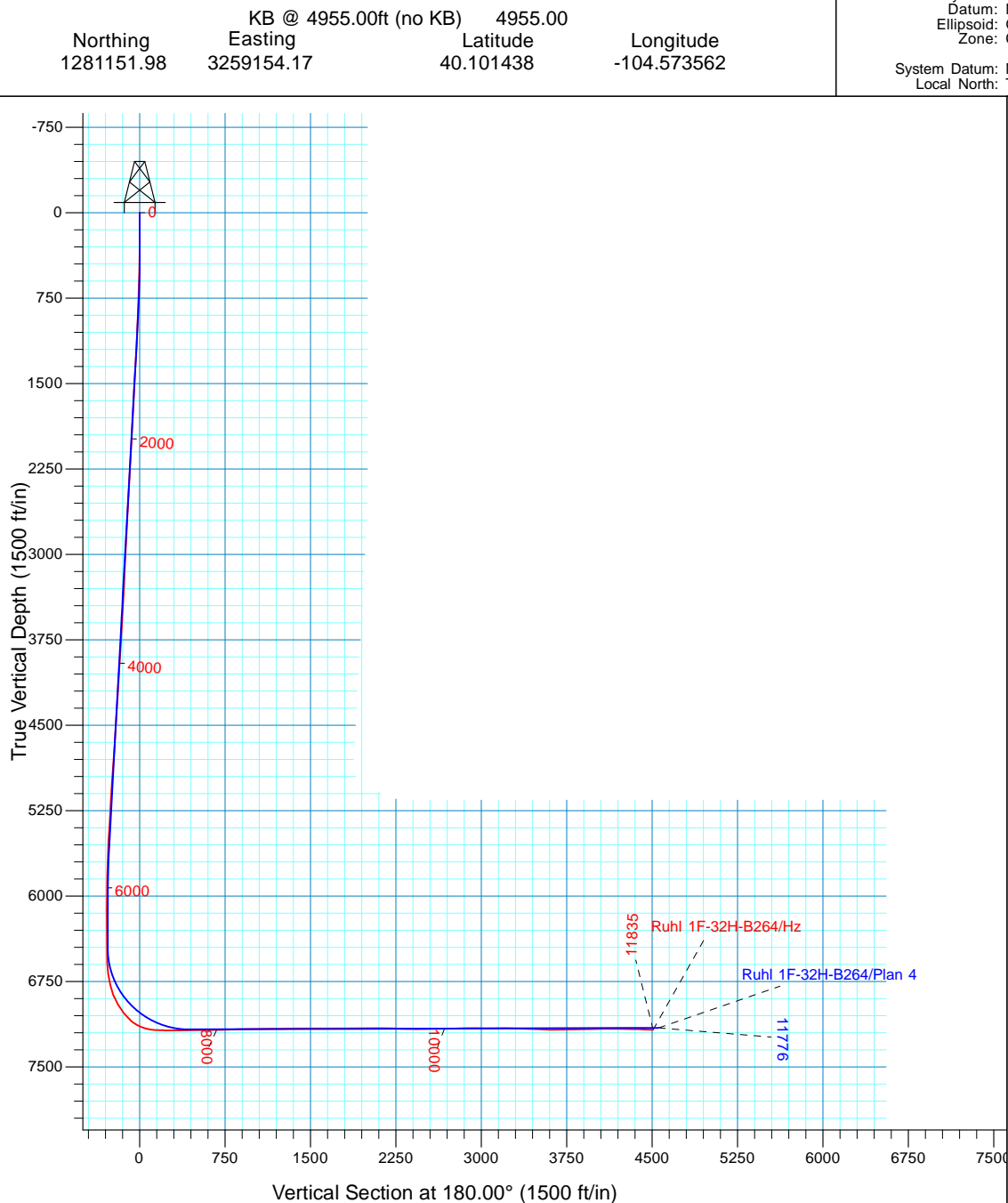
Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: Colorado Northern Zone

System Datum: Mean Sea Level
Local North: True



Azimuths to True North
Magnetic North: 8.37°

Magnetic Field
Strength: 52511.2snT
Dip Angle: 66.71°
Date: 12/13/2014
Model: BGGM2014





EnCana Oil & Gas (USA)

DJ Wattenberg

S32-T2N-R64W (Newnam/Ruhl)

Ruhl 1F-32H-B264

Hz

Design: Hz

Standard Survey Report

29 December, 2014





Company:	EnCana Oil & Gas (USA)	Local Co-ordinate Reference:	Well Ruhl 1F-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 1F-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 1F-32H-B264					
Well Position	+N/-S	0.00 ft	Northing:	1,281,151.98 usft	Latitude:	40.101438
	+E/-W	0.00 ft	Easting:	3,259,154.17 usft	Longitude:	-104.573562
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	12/13/2014	8.37	66.71	52,511

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	12/29/2014			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
245.00	1,162.00	Survey #1 - Surface (Hz)	SDI MWD	SDI MWD - Standard ver 1.0.1	
1,326.00	7,449.00	Survey #2 - Intermediate (Hz)	SDI MWD	SDI MWD - Standard ver 1.0.1	
7,541.00	11,835.00	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
245.00	2.63	93.85	244.91	-0.38	5.61	0.38	1.07	1.07	0.00
First SDI MWD Survey									
336.00	3.21	83.75	335.80	-0.24	10.23	0.24	0.85	0.64	-11.10
427.00	3.84	72.48	426.62	0.95	15.66	-0.95	1.03	0.69	-12.38
519.00	5.02	68.79	518.35	3.34	22.35	-3.34	1.32	1.28	-4.01
608.00	5.63	70.48	606.96	6.21	30.10	-6.21	0.71	0.69	1.90
698.00	6.16	73.42	696.49	9.06	38.89	-9.06	0.68	0.59	3.27
789.00	7.62	74.95	786.83	12.02	49.39	-12.02	1.62	1.60	1.68

Company:	EnCana Oil & Gas (USA)	Local Co-ordinate Reference:	Well Ruhl 1F-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 1F-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)
879.00	7.35	77.73	876.06	14.79	60.78	-14.79	0.50	-0.30	3.09
970.00	7.49	73.46	966.30	17.72	72.16	-17.72	0.63	0.15	-4.69
1,060.00	7.50	67.42	1,055.53	21.64	83.20	-21.64	0.88	0.01	-6.71
1,162.00	7.33	64.36	1,156.68	27.01	95.22	-27.01	0.42	-0.17	-3.00
Last SDI MWD Surface Survey									
1,326.00	8.30	70.13	1,319.16	35.56	115.78	-35.56	0.76	0.59	3.52
First SDI MWD Intr. Survey									
1,510.00	8.99	72.46	1,501.07	44.41	141.98	-44.41	0.42	0.38	1.27
1,693.00	10.09	73.51	1,681.53	53.27	170.98	-53.27	0.61	0.60	0.57
1,873.00	10.37	70.07	1,858.67	63.27	201.33	-63.27	0.37	0.16	-1.91
2,055.00	10.36	71.16	2,037.70	74.14	232.22	-74.14	0.11	-0.01	0.60
2,236.00	9.99	70.72	2,215.86	84.58	262.44	-84.58	0.21	-0.20	-0.24
2,418.00	9.58	72.12	2,395.21	94.44	291.76	-94.44	0.26	-0.23	0.77
2,599.00	10.07	76.21	2,573.56	102.83	321.46	-102.83	0.47	0.27	2.26
2,780.00	10.06	75.31	2,751.77	110.62	352.12	-110.62	0.09	-0.01	-0.50
2,969.00	11.22	71.45	2,937.52	120.65	385.52	-120.65	0.72	0.61	-2.04
3,159.00	10.64	73.32	3,124.07	131.57	419.85	-131.57	0.36	-0.31	0.98
3,348.00	9.70	78.11	3,310.10	139.86	452.14	-139.86	0.67	-0.50	2.53
3,538.00	9.32	64.87	3,497.52	149.69	481.74	-149.69	1.17	-0.20	-6.97
3,727.00	10.31	76.40	3,683.77	160.17	512.04	-160.17	1.16	0.52	6.10
3,917.00	9.36	66.09	3,870.99	170.43	542.69	-170.43	1.05	-0.50	-5.43
4,106.00	11.03	72.64	4,057.00	182.05	574.00	-182.05	1.07	0.88	3.47
4,295.00	9.58	68.82	4,242.95	193.13	605.92	-193.13	0.85	-0.77	-2.02
4,484.00	11.40	71.97	4,428.78	204.59	638.35	-204.59	1.01	0.96	1.67
4,673.00	9.54	70.62	4,614.63	215.57	670.89	-215.57	0.99	-0.98	-0.71
4,863.00	10.05	61.93	4,801.87	228.60	700.38	-228.60	0.82	0.27	-4.57
5,052.00	9.41	65.76	4,988.15	242.70	729.02	-242.70	0.48	-0.34	2.03
5,242.00	9.28	74.71	5,175.64	253.12	757.96	-253.12	0.77	-0.07	4.71
5,432.00	8.99	66.50	5,363.24	263.08	786.35	-263.08	0.70	-0.15	-4.32
5,621.00	8.64	70.87	5,550.01	273.62	813.30	-273.62	0.40	-0.19	2.31
5,811.00	6.68	71.03	5,738.30	281.89	837.24	-281.89	1.03	-1.03	0.08
6,000.00	3.90	72.40	5,926.48	287.41	853.77	-287.41	1.47	-1.47	0.72
6,190.00	0.71	206.48	6,116.35	288.31	859.40	-288.31	2.33	-1.68	70.57
6,379.00	0.76	125.03	6,305.34	286.54	859.91	-286.54	0.51	0.03	-43.10
6,474.00	0.54	43.23	6,400.33	286.51	860.73	-286.51	0.91	-0.23	-86.11
6,569.00	0.58	27.05	6,495.33	287.26	861.26	-287.26	0.17	0.04	-17.03
6,663.00	3.39	147.48	6,589.28	285.34	862.97	-285.34	3.95	2.99	128.12
6,758.00	8.79	159.19	6,683.71	276.18	867.06	-276.18	5.80	5.68	12.33
6,852.00	13.44	162.88	6,775.92	259.02	872.83	-259.02	5.00	4.95	3.93
6,947.00	21.41	166.88	6,866.49	231.53	880.03	-231.53	8.48	8.39	4.21
7,042.00	30.40	169.17	6,951.86	190.95	888.50	-190.95	9.52	9.46	2.41
7,136.00	39.21	170.57	7,028.97	138.18	897.85	-138.18	9.41	9.37	1.49
7,230.00	49.70	172.26	7,095.97	73.17	907.57	-73.17	11.23	11.16	1.80
7,273.00	58.05	172.36	7,121.30	38.78	912.22	-38.78	19.42	19.42	0.23

Company:	EnCana Oil & Gas (USA)	Local Co-ordinate Reference:	Well Ruhl 1F-32H-B264
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Site:	S32-T2N-R64W (Newnam/Ruhl)	MD Reference:	KB @ 4955.00ft (no KB)
Well:	Ruhl 1F-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)
7,325.00	66.44	173.19	7,145.50	-6.84	917.99	6.84	16.20	16.13	1.60
7,372.00	74.62	176.31	7,161.15	-50.92	922.01	50.92	18.49	17.40	6.64
7,419.00	82.02	180.01	7,170.66	-96.88	923.46	96.88	17.53	15.74	7.87
7,449.00	85.32	180.89	7,173.97	-126.70	923.23	126.70	11.38	11.00	2.93
Last SDI MWD Inter. Survey									
7,541.00	89.80	182.56	7,177.89	-218.54	920.46	218.54	5.20	4.87	1.82
First SDI MWD Lateral Survey									
7,635.00	90.40	183.15	7,177.72	-312.43	915.78	312.43	0.90	0.64	0.63
7,730.00	90.20	182.87	7,177.23	-407.29	910.79	407.29	0.36	-0.21	-0.29
7,825.00	89.83	183.07	7,177.20	-502.17	905.87	502.17	0.44	-0.39	0.21
7,920.00	91.71	183.12	7,175.92	-597.01	900.74	597.01	1.98	1.98	0.05
8,014.00	91.17	183.12	7,173.56	-690.85	895.62	690.85	0.57	-0.57	0.00
8,109.00	92.08	183.41	7,170.87	-785.65	890.22	785.65	1.01	0.96	0.31
8,204.00	91.55	183.16	7,167.86	-880.45	884.78	880.45	0.62	-0.56	-0.26
8,299.00	90.74	182.88	7,165.96	-975.30	879.77	975.30	0.90	-0.85	-0.29
8,393.00	90.70	183.00	7,164.78	-1,069.16	874.95	1,069.16	0.13	-0.04	0.13
8,488.00	90.30	182.60	7,163.95	-1,164.05	870.31	1,164.05	0.60	-0.42	-0.42
8,582.00	90.74	181.71	7,163.10	-1,257.98	866.78	1,257.98	1.06	0.47	-0.95
8,676.00	90.97	181.19	7,161.69	-1,351.93	864.40	1,351.93	0.60	0.24	-0.55
8,771.00	89.60	179.78	7,161.22	-1,446.93	863.59	1,446.93	2.07	-1.44	-1.48
8,866.00	90.07	179.57	7,161.50	-1,541.92	864.13	1,541.92	0.54	0.49	-0.22
8,960.00	89.56	179.65	7,161.80	-1,635.92	864.77	1,635.92	0.55	-0.54	0.09
9,055.00	90.64	180.33	7,161.63	-1,730.92	864.79	1,730.92	1.34	1.14	0.72
9,150.00	90.10	180.66	7,161.02	-1,825.91	863.97	1,825.91	0.67	-0.57	0.35
9,245.00	91.34	180.94	7,159.83	-1,920.89	862.64	1,920.89	1.34	1.31	0.29
9,339.00	89.60	180.53	7,159.06	-2,014.88	861.44	2,014.88	1.90	-1.85	-0.44
9,434.00	89.73	180.44	7,159.61	-2,109.87	860.63	2,109.87	0.17	0.14	-0.09
9,529.00	88.99	180.48	7,160.67	-2,204.86	859.87	2,204.86	0.78	-0.78	0.04
9,624.00	88.09	179.72	7,163.09	-2,299.83	859.70	2,299.83	1.24	-0.95	-0.80
9,719.00	89.19	179.84	7,165.35	-2,394.80	860.07	2,394.80	1.16	1.16	0.13
9,813.00	90.07	180.16	7,165.95	-2,488.80	860.07	2,488.80	1.00	0.94	0.34
9,908.00	90.91	180.46	7,165.14	-2,583.79	859.55	2,583.79	0.94	0.88	0.32
10,003.00	90.77	180.98	7,163.75	-2,678.78	858.36	2,678.78	0.57	-0.15	0.55
10,097.00	92.02	181.39	7,161.46	-2,772.73	856.42	2,772.73	1.40	1.33	0.44
10,192.00	91.04	181.01	7,158.92	-2,867.67	854.43	2,867.67	1.11	-1.03	-0.40
10,287.00	89.23	180.59	7,158.70	-2,962.66	853.10	2,962.66	1.96	-1.91	-0.44
10,352.00	89.00	180.00	7,159.70	-3,027.65	852.77	3,027.65	0.97	-0.35	-0.91
10,382.00	88.96	179.80	7,160.24	-3,057.64	852.82	3,057.64	0.68	-0.13	-0.67
10,476.00	89.97	179.72	7,161.12	-3,151.64	853.21	3,151.64	1.08	1.07	-0.09
10,571.00	90.10	179.40	7,161.06	-3,246.63	853.94	3,246.63	0.36	0.14	-0.34
10,666.00	88.05	178.98	7,162.59	-3,341.61	855.29	3,341.61	2.20	-2.16	-0.44
10,761.00	87.48	179.12	7,166.30	-3,436.52	856.86	3,436.52	0.62	-0.60	0.15
10,856.00	87.95	179.30	7,170.08	-3,531.44	858.17	3,531.44	0.53	0.49	0.19



Company:	EnCana Oil & Gas (USA)	Local Co-ordinate Reference:	Well Ruhl 1F-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 1F-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)
10,951.00	88.99	179.44	7,172.62	-3,626.39	859.21	3,626.39	1.10	1.09	0.15
11,045.00	90.84	178.77	7,172.76	-3,720.38	860.68	3,720.38	2.09	1.97	-0.71
11,140.00	92.48	179.18	7,170.01	-3,815.32	862.38	3,815.32	1.78	1.73	0.43
11,235.00	91.31	179.06	7,166.87	-3,910.25	863.84	3,910.25	1.24	-1.23	-0.13
11,330.00	89.90	178.77	7,165.86	-4,005.23	865.64	4,005.23	1.52	-1.48	-0.31
11,424.00	91.21	179.26	7,164.95	-4,099.21	867.25	4,099.21	1.49	1.39	0.52
11,519.00	89.87	178.90	7,164.06	-4,194.19	868.78	4,194.19	1.46	-1.41	-0.38
11,614.00	88.12	178.79	7,165.72	-4,289.15	870.69	4,289.15	1.85	-1.84	-0.12
11,709.00	88.45	178.18	7,168.57	-4,384.08	873.20	4,384.08	0.73	0.35	-0.64
11,770.00	88.49	177.55	7,170.20	-4,445.01	875.47	4,445.01	1.03	0.07	-1.03
Last SDI MWD Survey									
11,835.00	88.49	177.55	7,171.91	-4,509.93	878.25	4,509.93	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)	
245.00	244.91	-0.38	5.61	First SDI MWD Survey
1,162.00	1,156.68	27.01	95.22	Last SDI MWD Surface Survey
1,326.00	1,319.16	35.56	115.78	First SDI MWD Intr. Survey
7,449.00	7,173.97	-126.70	923.23	Last SDI MWD Inter. Survey
7,541.00	7,177.89	-218.54	920.46	First SDI MWD Lateral Survey
11,770.00	7,170.20	-4,445.01	875.47	Last SDI MWD Survey
11,835.00	7,171.91	-4,509.93	878.25	Projection to TD

Checked By: _____	Approved By: _____	Date: _____
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JOB NO.:	232835	Report Time:	2400	1 of 13
Company:	EnCana Oil & Gas (USA) Inc.	API JOB #	05-123-40283-00	
LOCATION:	Ruhl Pad	WORK ORDER#		
RIG NAME:	H&P 278	FIELD:	Wattenberg	
STATE:	Colorado	Township:	2N	
COUNTY:	Weld	Range/Section	64W	32
WELL NAME:	Ruhl 1F 32H-B264	Company Man	Randy / Joe	
Lead Directional :	Paul Turner (10972)	2nd Dir Hand :	Ben Ezeaku (10012)	

From Saturday, December 13, 2014 at 0000 to Saturday, December 13, 2014 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	1225.00		1	836	194.00	0.92	882.00	2.92	2.42	6.25	1,076.00	172.16
Below Rot Hrs.	11.50											
Total Drilled:	1076.00		Drilling Parameters		Mud Record		Bit Record		Current BHA # 1			
Avg. Total ROP:	280.70											
Slide Footage:	194.00		WOB:	0	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	0.92		Rot Wt:	0	Visc:	0	Model	DP 606S				
Avg. Slide ROP:	211.64		Pick UP:	0	Chlorides:	0	SN.:	7032254				
Rotate Footage:	882.00		Slack Off:	0	YP:	0	MFG.	BAKER				
Rotary Hours	2.92		SPP:	0	PV:	0	Type	PDC				
Avg. Rot ROP:	302.40		Flow:	0 - 0	PH:	0	IADC					
Circ Hours	2.42		SPM:	0	GAS:	0	JETS	9-12				
Ream Hours	0.00		Rot. RPM	0 - 0	SAND:	0	TFA:	0.994				
Rotary Hrs%:	76.09		Mot RPM:	0 - 0	WL:	0	Hole ID:	12.25				
Slide Hrs%:	23.91		Incl. In:	7.33	SOLID:	0	Bit Hrs:	3.83				
Rotary Ftg%:	81.97		Azm. In:	64.36	BHT°:	0	Bit Ftg:	1076.00				
Slide Ftg%:	18.03		Incl. Out:	9.36	Flow T°:	0	PUMPS					
COST BREAKDOWN			Azm. Out:	66.09	Oil %:	0	Liner	0	0			
Size			Lb/Ft	MD								

Start Time	End Time	Hours	Start Depth	End Depth	Delta Depth	ROP	Activity Code	COMMENT
15:10	15:20	0.17	399	399	0	.00	Survey & Conn.	Survey & Conn.@336' Inc 3.21° Azm 83.75°
15:20	15:25	0.08	399	411	12	144.00	Sliding	Sliding - (WOB:0;GPM :0;TFO:50M))
15:25	15:35	0.17	411	490	79	474.00	Drilling	Drilling - (WOB:0;GPM :0;RPM:0)
15:35	15:40	0.08	490	490	0	.00	Survey & Conn.	Survey & Conn.@427' Inc 3.84° Azm 72.48°
15:40	15:45	0.08	490	508	18	216.00	Sliding	Sliding - (WOB:0;GPM :0;TFO:65M))
15:45	16:00	0.25	508	582	74	296.00	Drilling	Drilling - (WOB:0;GPM :0;RPM:0)
16:00	16:05	0.08	582	582	0	.00	Survey & Conn.	Survey & Conn.@519' Inc 5.02° Azm 68.79°
16:05	16:10	0.08	582	612	30	360.00	Sliding	Sliding - (WOB:0;GPM :0;TFO:30R))
16:10	16:25	0.25	612	671	59	236.00	Drilling	Drilling - (WOB:0;GPM :0;RPM:0)
16:25	16:30	0.08	671	671	0	.00	Survey & Conn.	Survey & Conn.@608' Inc 5.63° Azm 70.48°
16:30	16:35	0.08	671	691	20	240.00	Sliding	Sliding - (WOB:0;GPM :0;TFO:15R))
16:35	16:40	0.08	691	761	70	840.00	Drilling	Drilling - (WOB:0;GPM :0;RPM:0)
16:40	16:45	0.08	761	761	0	.00	Survey & Conn.	Survey & Conn.@698' Inc 6.16° Azm 73.42°
16:45	16:50	0.08	761	781	20	240.00	Sliding	Sliding - (WOB:0;GPM :0;TFO:15R))
16:50	17:05	0.25	781	852	71	284.00	Drilling	Drilling - (WOB:0;GPM :0;RPM:0)
17:05	17:10	0.08	852	852	0	.00	Survey & Conn.	Survey & Conn.@789' Inc 7.62° Azm 74.95°
17:10	17:20	0.17	852	942	90	540.00	Drilling	Drilling - (WOB:0;GPM :0;RPM:0)
17:20	17:25	0.08	942	942	0	.00	Survey & Conn.	Survey & Conn.@879' Inc 7.35° Azm 77.73°
17:25	17:30	0.08	942	958	16	192.00	Sliding	Sliding - (WOB:0;GPM :0;TFO:40L))
17:30	17:40	0.17	958	1033	75	450.00	Drilling	Drilling - (WOB:0;GPM :0;RPM:0)
17:40	17:45	0.08	1033	1033	0	.00	Survey & Conn.	Survey & Conn.@970' Inc 7.49° Azm 73.46°
17:45	17:50	0.08	1033	1045	12	144.00	Sliding	Sliding - (WOB:0;GPM :0;TFO:30L))
17:50	18:00	0.17	1045	1123	78	468.00	Drilling	Drilling - (WOB:0;GPM :0;RPM:0)
18:00	18:05	0.08	1123	1123	0	.00	Survey & Conn.	Survey & Conn.@1060' Inc 7.5° Azm 67.42°
18:05	18:10	0.08	1123	1139	16	192.00	Sliding	Sliding - (WOB:0;GPM :0;TFO:30L))
18:10	18:40	0.50	1139	1225	86	172.00	Drilling	Drilling - (WOB:0;GPM :0;RPM:0)
18:40	18:45	0.08	1225	1225	0	.00	Survey & Conn.	Survey & Conn.@1162' Inc 7.33° Azm 64.36°
18:45	21:10	2.42	1225	1225	0	.00	Circulating	Circulating / Wiper Trip
21:10	21:25	0.25	1225	1225	0	.00	Other	JSA with Rig Crew
21:25	22:30	1.08	1225	1225	0	.00	Change BHA	Lay down BHA
22:30	24:00	1.50	1225	1225	0	.00	Standby	Standby

JOB NO.: 232835
Company: EnCana Oil & Gas (USA) Inc.
LOCATION: Ruhl Pad
RIG NAME: H&P 278
STATE: Colorado
COUNTY: Weld
WELL NAME: Ruhl 1F 32H-B264
Lead Directional : Steven Schlamp (10800)

Report Time: 2400 2 of 13
API JOB # 05-123-40283-00
WORK ORDER#
FIELD: Wattenberg
Township: 2N
Range/Section 64W 32
Company Man Randy / Joe
2nd Dir Hand : Paul Turner (10972)

From Sunday, December 14, 2014 at 0000 to Sunday, December 14, 2014 at 2400

DAILY TOTALS		ASSEMBLY TOTALS									
Start Depth	0.00	BHA #	Motor SN / R.S. SN	Slide Ftg	Slide Hrs	Rotate Ftg	Rotate Hrs	Circ Hrs	D & C Hrs	BHA Ftg	Avg ROP
End Depth	0.00										
Below Rot Hrs.	0.00										
Total Drilled:	0.00	Drilling Parameters		Mud Record		Bit Record		Current BHA # 0			
Avg. Total ROP:	NA										
Slide Footage:	0.00	WOB:	0	Weight:	0	Bit No:					
Slide Hours	0.00	Rot Wt:	0	Visc:	0	Model					
Avg. Slide ROP:	NA	Pick UP:	0	Chlorides:	0	SN.:					
Rotate Footage:	0.00	Slack Off:	0	YP:	0	MFG.					
Rotary Hours	0.00	SPP:	0	PV:	0	Type					
Avg. Rot ROP:	NA	Flow:	0 - 0	PH:	0	IADC					
Circ Hours	0.00	SPM:	0	GAS:	0	JETS					
Ream Hours	0.00	Rot. RPM	-	SAND:	0	TFA:					
Rotary Hrs%:	NA	Mot RPM:	-	WL:	0	Hole ID: N/A					
Slide Hrs%:	NA	Incl. In:	7.33	SOLID:	0	Bit Hrs:					
Rotary Ftg%:	NA	Azm. In:	64.36	BHT°:	0	Bit Ftg:					
Slide Ftg%:	NA	Incl. Out:	7.33	Flow T°:	0	PUMPS					
CASING		Azm. Out:	64.36	Oil %:	0	Liner	0	0			
Size	Lb/Ft	MD	COST BREAKDOWN					Stroke	0	0	
								Effic.	95.00%	95.00%	
								Gal/Stk	0.00	0.00	
								BBL/Stk	0.000	0.000	

GENERAL COMMENT

Start Time	End Time	Hours	Start Depth	End Depth	Delta Depth	ROP	Activity Code	COMMENT
00:00	24:00	24.00	1225	1225	0	.00	Standby	Standby

JOB NO.:	232835	Report Time:	2400	3 of 13
Company:	EnCana Oil & Gas (USA) Inc.	API JOB #	05-123-40283-00	
LOCATION:	Ruhl Pad	WORK ORDER#		
RIG NAME:	H&P 278	FIELD:	Wattenberg	
STATE:	Colorado	Township:	2N	
COUNTY:	Weld	Range/Section	64W	32
WELL NAME:	Ruhl 1F 32H-B264	Company Man	Randy / Joe	
Lead Directional :	Steven Schlamp (10800)	2nd Dir Hand :	Paul Turner (10972)	

From Monday, December 15, 2014 at 0000 to Monday, December 15, 2014 at 2400

DAILY TOTALS		ASSEMBLY TOTALS									
Start Depth	1225.00	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	3982.00	2	6694			10.00	0.17	3.83	4.00	10.00	2.50
Below Rot Hrs.	23.50	3	65055	194.00	1.75	2,553.00	6.08	.00	7.83	2,747.00	0.00
Total Drilled:	2757.00	Drilling Parameters		Mud Record		Bit Record		Current BHA # 3			
Avg. Total ROP:	239.74	WOB:	25	Weight:	0	Bit No:	2	Reed SK516-S1 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 30 Stnds. (90 Jnts.) HWDP			
Slide Footage:	194.00	Rot Wt:	85	Visc:	0	Model	Reed				
Slide Hours	1.75	Pick UP:	107	Chlorides:	0	SN.:	A206418				
Avg. Slide ROP:	110.86	Slack Off:	78	YP:	0	MFG.	REED				
Rotate Footage:	2563.00	SPP:	2900	PV:	0	Type	PDC				
Rotary Hours	9.75	Flow:	0 - 598	PH:	0	IADC					
Avg. Rot ROP:	262.87	SPM:	156	GAS:	0	JETS	3-13,4-14				
Circ Hours	0.33	Rot. RPM	0 - 70	SAND:	0	TFA:	0.99				
Ream Hours	0.00	Mot RPM:	70 - 70	WL:	0	Hole ID:	8.75				
Rotary Hrs%:	84.78	Incl. In:	7.33	SOLID:	0	Bit Hrs:	25.00				
Slide Hrs%:	15.22	Azm. In:	64.36	BHT°:	0	Bit Ftg:	5682.00				
Rotary Ftg%:	92.96	Incl. Out:	9.36	Flow T°:	0	PUMPS					
Slide Ftg%:	7.04	Azm. Out:	66.09	Oil %:	0	Liner	0	0			
COST BREAKDOWN						Stroke	0	0			
						Effic.	95.00%	95.00%			
						Gal/Stk	0.00	0.00			
						BBL/Stk	0.000	0.000			

Start Time	End Time	Hours	Start Depth	End Depth	Delta Depth	ROP	Activity Code	COMMENT
13:30	14:15	0.75	1235	1235	0	.00	TIH	TIH
14:15	14:25	0.17	1235	1300	65	390.00	Drilling	Drilling - (WOB:20;GPM :598;RPM:70)
14:25	14:30	0.08	1300	1300	0	.00	Survey & Conn.	Survey & Conn.@1162' Inc 7.33° Azm 64.36°
14:30	14:40	0.17	1300	1315	15	90.00	Sliding	Sliding - (WOB:0;GPM :0;TFO:30L))
14:40	14:50	0.17	1315	1391	76	456.00	Drilling	Drilling - (WOB:20;GPM :598;RPM:70)
14:50	14:55	0.08	1391	1391	0	.00	Survey & Conn.	Survey & Conn.@1326' Inc 8.3° Azm 70.13°
14:55	15:00	0.08	1391	1403	12	144.00	Sliding	Sliding - (WOB:0;GPM :0;TFO:30R)
15:00	15:25	0.42	1403	1575	172	412.80	Drilling	Drilling - (WOB:20;GPM :598;RPM:70)
15:25	15:30	0.08	1575	1575	0	.00	Survey & Conn.	Survey & Conn.@1510' Inc 8.99° Azm 72.46°
15:30	15:35	0.08	1575	1587	12	144.00	Sliding	Sliding - (WOB:0;GPM :0;TFO:15R))
15:35	16:00	0.42	1587	1758	171	410.40	Drilling	Drilling - (WOB:20;GPM :598;RPM:70)
16:00	16:05	0.08	1758	1758	0	.00	Survey & Conn.	Survey & Conn.@1693' Inc 10.09° Azm 73.51°
16:05	16:30	0.42	1758	1938	180	432.00	Drilling	Drilling - (WOB:20;GPM :598;RPM:70)
16:30	16:40	0.17	1938	1938	0	.00	Survey & Conn.	Survey & Conn.@1873' Inc 10.37° Azm 70.07°
16:40	16:45	0.08	1938	1945	7	84.00	Sliding	Sliding - (WOB:0;GPM :0;TFO:60R))
16:45	17:10	0.42	1945	2120	175	420.00	Drilling	Drilling - (WOB:20;GPM :598;RPM:70)
17:10	17:20	0.17	2120	2120	0	.00	Survey & Conn.	Survey & Conn.@2055' Inc 10.36° Azm 71.16°
17:20	17:25	0.08	2120	2128	8	96.00	Sliding	Sliding - (WOB:0;GPM :0;TFO:60R)
17:25	17:45	0.33	2128	2301	173	519.00	Drilling	Drilling - (WOB:25;GPM :598;RPM:70)
17:45	17:50	0.08	2301	2301	0	.00	Survey & Conn.	Survey & Conn.@2236' Inc 9.99° Azm 70.72°
17:50	18:00	0.17	2301	2317	16	96.00	Sliding	Sliding - (WOB:0;GPM :0;TFO:60R))
18:00	18:30	0.50	2317	2483	166	332.00	Drilling	Drilling - (WOB:25;GPM :598;RPM:70)
18:30	18:35	0.08	2483	2483	0	.00	Survey & Conn.	Survey & Conn.@2418' Inc 9.58° Azm 72.12°
18:35	18:40	0.08	2483	2499	16	192.00	Sliding	Sliding - (WOB:0;GPM :0;TFO:40))
18:40	19:00	0.33	2499	2664	165	495.00	Drilling	Drilling - (WOB:25;GPM :598;RPM:70)
19:00	19:05	0.08	2664	2664	0	.00	Survey & Conn.	Survey & Conn.@2599' Inc 10.07° Azm 76.21°
19:05	19:10	0.08	2664	2676	12	144.00	Sliding	Sliding - (WOB:0;GPM :0;TFO:0))
19:10	19:45	0.58	2676	2845	169	289.71	Drilling	Drilling - (WOB:25;GPM :598;RPM:70)
19:45	19:50	0.08	2845	2845	0	.00	Survey & Conn.	Survey & Conn.@2780' Inc 10.06° Azm 75.31°
19:50	20:00	0.17	2845	2857	12	72.00	Sliding	Sliding - (WOB:0;GPM :0;TFO:0)
20:00	20:10	0.17	2857	2940	83	498.00	Drilling	Drilling - (WOB:25;GPM :598;RPM:70)
20:10	20:15	0.08	2940	2940	0	.00	Other	Check Shot
20:15	20:20	0.08	2940	2952	12	144.00	Sliding	Sliding - (WOB:0;GPM :0;TFO:30L))
20:20	20:30	0.17	2952	3034	82	492.00	Drilling	Drilling - (WOB:25;GPM :598;RPM:70)
20:30	20:35	0.08	3034	3034	0	.00	Survey & Conn.	Survey & Conn.@2969' Inc 11.22° Azm 71.45°
20:35	20:50	0.25	3034	3129	95	380.00	Drilling	Drilling - (WOB:25;GPM :598;RPM:70)
20:50	20:55	0.08	3129	3129	0	.00	Other	Check Shot
20:55	21:00	0.08	3129	3139	10	120.00	Sliding	Sliding - (WOB:0;GPM :0;TFO:30L))
21:00	21:10	0.17	3139	3224	85	510.00	Drilling	Drilling - (WOB:25;GPM :598;RPM:70)
21:10	21:15	0.08	3224	3224	0	.00	Survey & Conn.	Survey & Conn.@3159' Inc 10.64° Azm 73.32°
21:15	21:25	0.17	3224	3319	95	570.00	Drilling	Drilling - (WOB:25;GPM :598;RPM:70)
21:25	21:30	0.08	3319	3319	0	.00	Other	Check Shot
21:30	21:35	0.08	3319	3333	14	168.00	Sliding	Sliding - (WOB:0;GPM :0;TFO:30R))
21:35	21:45	0.17	3333	3413	80	480.00	Drilling	Drilling - (WOB:25;GPM :598;RPM:70)
21:45	21:50	0.08	3413	3413	0	.00	Survey & Conn.	Survey & Conn.@3348' Inc 9.7° Azm 78.11°
21:50	22:00	0.17	3413	3427	14	84.00	Sliding	Sliding - (WOB:0;GPM :0;TFO:30L))
22:00	22:15	0.25	3427	3508	81	324.00	Drilling	Drilling - (WOB:25;GPM :598;RPM:70)
22:15	22:20	0.08	3508	3508	0	.00	Other	Check Shot

Start Time	End Time	Hours	Start Depth	End Depth	Delta Depth	ROP	Activity Code	COMMENT
22:20	22:30	0.17	3508	3603	95	570.00	Drilling	Drilling - (WOB:25;GPM :598;RPM:70)
22:30	22:35	0.08	3603	3603	0	.00	Survey & Conn.	Survey & Conn. @3538' Inc 9.32° Azm 64.87°
22:35	22:55	0.33	3603	3698	95	285.00	Drilling	Drilling - (WOB:25;GPM :598;RPM:70)
22:55	23:00	0.08	3698	3698	0	.00	Other	Check Shot
23:00	23:10	0.17	3698	3712	14	84.00	Sliding	Sliding - (WOB:0;GPM :0;TFO:0))
23:10	23:15	0.08	3712	3792	80	960.00	Drilling	Drilling - (WOB:25;GPM :598;RPM:70)
23:15	23:20	0.08	3792	3792	0	.00	Survey & Conn.	Survey & Conn. @3727' Inc 10.31° Azm 76.4°
23:20	23:35	0.25	3792	3887	95	380.00	Drilling	Drilling - (WOB:25;GPM :598;RPM:70)
23:35	23:40	0.08	3887	3887	0	.00	Other	Check Shot
23:40	23:50	0.17	3887	3907	20	120.00	Sliding	Sliding - (WOB:0;GPM :0;TFO:0))
23:50	24:00	0.17	3907	3982	75	450.00	Drilling	Drilling - (WOB:25;GPM :598;RPM:70)

JOB NO.:	232835	Report Time:	2400	4 of 13
Company:	EnCana Oil & Gas (USA) Inc.	API JOB #	05-123-40283-00	
LOCATION:	Ruhl Pad	WORK ORDER#		
RIG NAME:	H&P 278	FIELD:	Wattenberg	
STATE:	Colorado	Township:	2N	
COUNTY:	Weld	Range/Section	64W	32
WELL NAME:	Ruhl 1F 32H-B264	Company Man	Randy / Joe	
Lead Directional :	Steven Schlamp (10800)	2nd Dir Hand :	Paul Turner (10972)	

From Tuesday, December 16, 2014 at 0000 to Tuesday, December 16, 2014 at 2400

DAILY TOTALS		ASSEMBLY TOTALS									
Start Depth	3982.00	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	6815.00	3	65055	826.00	11.00	4,856.00	14.00	5.42	30.42	5,682.00	186.81
Below Rot Hrs.	24.00										
Total Drilled:	2833.00	Drilling Parameters		Mud Record		Bit Record		Current BHA # 3			
Avg. Total ROP:	177.99										
Slide Footage:	530.00	WOB:	0	Weight:	0	Bit No:	2	Reed SK516-S1 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 30 Stnds. (90 Jnts.) HWDP			
Slide Hours	8.00	Rot Wt:	117	Visc:	0	Model	Reed				
Avg. Slide ROP:	66.25	Pick UP:	122	Chlorides:	0	SN.:	A206418				
Rotate Footage:	2303.00	Slack Off:	105	YP:	0	MFG.	REED				
Rotary Hours	7.92	SPP:	4370	PV:	0	Type	PDC				
Avg. Rot ROP:	290.91	Flow:	0 - 598	PH:	0	IADC					
Circ Hours	4.25	SPM:	156	GAS:	0	JETS	3-13,4-14				
Ream Hours	0.00	Rot. RPM	70 - 70	SAND:	0	TFA:	0.99				
Rotary Hrs%:	49.74	Mot RPM:	70 - 70	WL:	0	Hole ID:	8.75				
Slide Hrs%:	50.26	Incl. In:	9.36	SOLID:	0	Bit Hrs:	25.00				
Rotary Ftg%:	81.29	Azm. In:	66.09	BHT°:	0	Bit Ftg:	5682.00				
Slide Ftg%:	18.71	Incl. Out:	3.39	Flow T°:	0	PUMPS					
CASING		Azm. Out:	147.48	Oil %:	0	Liner	0	0			
Size	Lb/Ft	MD	COST BREAKDOWN			Stroke	0	0			
					Effic.	95.00%	95.00%				
					Gal/Stk	0.00	0.00				
					BBL/Stk	0.000	0.000				

GENERAL COMMENT

Start Time	End Time	Hours	Start Depth	End Depth	Delta Depth	ROP	Activity Code	COMMENT
00:00	00:05	0.08	3982	3982	0	.00	Survey & Conn.	Survey & Conn. @3917' Inc 9.36° Azm 66.09°
00:05	00:20	0.25	3982	4002	20	80.00	Sliding	Sliding - (WOB:0;GPM :0;TFO:30R))
00:20	00:30	0.17	4002	4076	74	444.00	Drilling	Drilling - (WOB:25;GPM :598;RPM:70)
00:30	00:35	0.08	4076	4076	0	.00	Other	Check Shot
00:35	00:50	0.25	4076	4094	18	72.00	Sliding	Sliding - (WOB:0;GPM :0;TFO:20R))
00:50	00:55	0.08	4094	4171	77	924.00	Drilling	Drilling - (WOB:25;GPM :598;RPM:70)
00:55	01:00	0.08	4171	4171	0	.00	Survey & Conn.	Survey & Conn. @4106' Inc 11.03° Azm 72.64°
01:00	01:30	0.50	4171	4360	189	378.00	Drilling	Drilling - (WOB:25;GPM :598;RPM:70)
01:30	01:35	0.08	4360	4360	0	.00	Survey & Conn.	Survey & Conn. @4295' Inc 9.58° Azm 68.82°
01:35	01:45	0.17	4360	4374	14	84.00	Sliding	Sliding - (WOB:0;GPM :0;TFO:20R))
01:45	02:10	0.42	4374	4454	80	192.00	Drilling	Drilling - (WOB:25;GPM :440;RPM:70)
02:10	02:20	0.17	4454	4470	16	96.00	Sliding	Sliding - (WOB:0;GPM :0;TFO:40R))
02:20	02:30	0.17	4470	4549	79	474.00	Drilling	Drilling - (WOB:25;GPM :440;RPM:70)
02:30	02:35	0.08	4549	4549	0	.00	Survey & Conn.	Survey & Conn. @4484' Inc 11.4° Azm 71.97°

Start Time	End Time	Hours	Start Depth	End Depth	Delta Depth	ROP	Activity Code	COMMENT
02:35	03:05	0.50	4549	4738	189	378.00	Drilling	Drilling - (WOB:25;GPM :598;RPM:70)
03:05	03:10	0.08	4738	4738	0	.00	Survey & Conn.	Survey & Conn.@4673' Inc 9.54° Azm 70.62°
03:10	03:20	0.17	4738	4752	14	84.00	Sliding	Sliding - (WOB:0;GPM :0;TFO:0))
03:20	03:50	0.50	4752	4928	176	352.00	Drilling	Drilling - (WOB:25;GPM :440;RPM:70)
03:50	03:55	0.08	4928	4928	0	.00	Survey & Conn.	Survey & Conn.@4863' Inc 10.05° Azm 61.93°
03:55	04:05	0.17	4928	4940	12	72.00	Sliding	Sliding - (WOB:0;GPM :598;TFO:80R))
04:05	04:20	0.25	4940	5023	83	332.00	Drilling	Drilling - (WOB:25;GPM :440;RPM:70)
04:20	04:30	0.17	5023	5043	20	120.00	Sliding	Sliding - (WOB:0;GPM :598;TFO:70R))
04:30	04:40	0.17	5043	5117	74	444.00	Drilling	Drilling - (WOB:25;GPM :598;RPM:70)
04:40	04:45	0.08	5117	5117	0	.00	Survey & Conn.	Survey & Conn.@5052' Inc 9.41° Azm 65.76°
04:45	05:00	0.25	5117	5135	18	72.00	Sliding	Sliding - (WOB:0;GPM :598;TFO:70R))
05:00	05:10	0.17	5135	5212	77	462.00	Drilling	Drilling - (WOB:25;GPM :598;RPM:70)
05:10	05:15	0.08	5212	5212	0	.00	Other	Check Shot
05:15	05:30	0.25	5212	5232	20	80.00	Sliding	Sliding - (WOB:0;GPM :598;TFO:70R))
05:30	05:50	0.33	5232	5307	75	225.00	Drilling	Drilling - (WOB:25;GPM :598;RPM:70)
05:50	07:15	1.42	5307	5307	0	.00	Rig repair	Mud Line
07:15	07:20	0.08	5307	5320	13	156.00	Sliding	Sliding - (WOB:0;GPM :598;TFO:70R))
07:20	08:05	0.75	5320	5497	177	236.00	Drilling	Drilling - (WOB:25;GPM :598;RPM:70)
08:05	08:15	0.17	5497	5497	0	.00	Survey & Conn.	Survey & Conn.@5432' Inc 8.99° Azm 66.5°
08:15	08:35	0.33	5497	5527	30	90.00	Sliding	Sliding - (WOB:0;GPM :598;TFO:15R))
08:35	09:05	0.50	5527	5686	159	318.00	Drilling	Drilling - (WOB:25;GPM :598;RPM:70)
09:05	09:15	0.17	5686	5686	0	.00	Survey & Conn.	Survey & Conn.@5621' Inc 8.64° Azm 70.87°
09:15	09:25	0.17	5686	5698	12	72.00	Sliding	Sliding - (WOB:0;GPM :598;TFO:60R))
09:25	10:00	0.58	5698	5876	178	305.14	Drilling	Drilling - (WOB:25;GPM :598;RPM:70)
10:00	10:10	0.17	5876	5876	0	.00	Survey & Conn.	Survey & Conn.@5811' Inc 6.68° Azm 71.03°
10:10	10:20	0.17	5876	5890	14	84.00	Sliding	Sliding - (WOB:0;GPM :598;TFO:90R))
10:20	11:00	0.67	5890	6065	175	262.50	Drilling	Drilling - (WOB:25;GPM :598;RPM:70)
11:00	11:10	0.17	6065	6065	0	.00	Survey & Conn.	Survey & Conn.@6000' Inc 3.9° Azm 72.4°
11:10	11:20	0.17	6065	6098	33	198.00	Sliding	Sliding - (WOB:0;GPM :598;TFO:135R))
11:20	12:10	0.83	6098	6255	157	188.40	Drilling	Drilling - (WOB:25;GPM :598;RPM:70)
12:10	12:20	0.17	6255	6255	0	.00	Survey & Conn.	Survey & Conn.@6190' Inc 0.71° Azm 206.48°
12:20	13:20	1.00	6255	6444	189	189.00	Drilling	Drilling - (WOB:25;GPM :598;RPM:70)
13:20	13:30	0.17	6444	6444	0	.00	Survey & Conn.	Survey & Conn.@6379' Inc 0.76° Azm 125.03°
13:30	13:50	0.33	6444	6539	95	285.00	Drilling	Drilling - (WOB:25;GPM :598;RPM:70)
13:50	15:05	1.25	6539	6539	0	.00	Circulating	Pump 70bbl sweep & trough KOP
15:05	15:15	0.17	6539	6539	0	.00	Survey & Conn.	Survey & Conn.@6474' Inc 0.54° Azm 43.23°
15:15	17:15	2.00	6539	6569	30	15.00	Sliding	Attempted Slide
17:15	17:45	0.50	6569	6569	0	.00	Circulating	Pump Sweep
17:45	18:15	0.50	6569	6591	22	44.00	Sliding	Attempt Slide
18:15	20:45	2.50	6591	6591	0	.00	Circulating	Ream 5 stds / Sweep
20:45	21:30	0.75	6591	6674	83	110.67	Sliding	Sliding - (WOB:0;GPM :598;TFO:180M))
21:30	21:45	0.25	6674	6674	0	.00	Survey & Conn.	Survey & Conn.@6569' Inc 0.58° Azm 27.05°
21:45	22:45	1.00	6674	6728	54	54.00	Sliding	Sliding - (WOB:0;GPM :598;TFO:180M))
22:45	23:00	0.25	6728	6728	0	.00	Survey & Conn.	Survey & Conn.@6663' Inc 3.39° Azm 147.48°
23:00	24:00	1.00	6728	6815	87	87.00	Sliding	Sliding - (WOB:0;GPM :598;TFO:180M))

JOB NO.: 232835		Report Time: 2400		5 of 13	
Company: EnCana Oil & Gas (USA) Inc.		API JOB # 05-123-40283-00			
LOCATION: Ruhl Pad		WORK ORDER#			
RIG NAME: H&P 278		FIELD: Wattenberg			
STATE: Colorado		Township: 2N			
COUNTY: Weld		Range/Section 64W		32	
WELL NAME: Ruhl 1F 32H-B264		Company Man Randy / Joe			
Lead Directional : Steven Schlamp (10800)		2nd Dir Hand : Paul Turner (10972)			

From Wednesday, December 17, 2014 at 0000 to Wednesday, December 17, 2014 at 2400											
DAILY TOTALS		ASSEMBLY TOTALS									
Start Depth	6815.00	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	6917.00	3	65055	826.00	11.00	4,856.00	14.00	5.42	30.42	5,682.00	186.81
Below Rot Hrs.	24.00	4	6854	0.00	0.00	0.00	0.00	.00	0.00	0.00	0.00
Total Drilled:	102.00	Drilling Parameters		Mud Record		Bit Record		Current BHA # 4			
Avg. Total ROP:	81.60	WOB: 0		Weight: 0		Bit No: 3		Smith 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 30 Stnds. (90 Jnts.) HWDP			
Slide Footage:	102.00	Rot Wt: 117		Visc: 0		Model Smith					
Slide Hours	1.25	Pick UP: 122		Chlorides: 0		SN.: JK0686					
Avg. Slide ROP:	81.60	Slack Off: 105		YP: 0		MFG. SMITH					
Rotate Footage:	0.00	SPP: 4370		PV: 0		Type PDC					
Rotary Hours	0.00	Flow: 598 - 598		PH: 0		IADC					
Avg. Rot ROP:	NA	SPM: 156		GAS: 0		JETS 6-13					
Circ Hours	1.17	Rot. RPM -		SAND: 0		TFA: 0.777					
Ream Hours	0.00	Mot RPM: 70 - 70		WL: 0		Hole ID: 8.75					
Rotary Hrs%:	.00	Incl. In: 3.39		SOLID: 0		Bit Hrs:					
Slide Hrs%:	100.00	Azm. In: 147.48		BHT°: 0		Bit Ftg:					
Rotary Ftg%:	.00	Incl. Out: 21.41		Flow T°: 0		PUMPS					
Slide Ftg%:	100.00	Azm. Out: 166.88		Oil %: 0		Liner 0 0					
CASING											
Size	Lb/Ft	MD									
		COST BREAKDOWN									

GENERAL COMMENT											

Start Time	End Time	Hours	Start Depth	End Depth	Delta Depth	ROP	Activity Code	COMMENT
00:00	00:30	0.50	6815	6823	8	16.00	Sliding	Sliding - (WOB:0;GPM :598;TFO:180M))
00:30	00:45	0.25	6823	6823	0	.00	Survey & Conn.	Survey & Conn.@6758' Inc 8.79° Azm 159.19°
00:45	01:30	0.75	6823	6917	94	125.33	Sliding	Sliding - (WOB:0;GPM :598;TFO:180M))
01:30	01:40	0.17	6917	6917	0	.00	Survey & Conn.	Survey & Conn.@6852' Inc 13.44° Azm 162.88°
01:40	01:50	0.17	6917	6917	0	.00	Other	Consult w. Encana / Decision to TOO H & XO curve assembly
01:50	03:00	1.17	6917	6917	0	.00	Circulating	Circulating
03:00	06:00	3.00	6917	6917	0	.00	POOH	POOH
06:00	07:00	1.00	6917	6917	0	.00	Other	Rack BHA in Derrick & LO Bit & Motor
07:00	10:15	3.25	6917	6917	0	.00	Change BHA	PU new Motor & bit / adj motor to 2.75
10:15	10:45	0.50	6917	6917	0	.00	Other	Install rotating head
10:45	15:00	4.25	6917	6917	0	.00	TIH	TIH / very tight / only RIH 230'
15:00	15:10	0.17	6917	6917	0	.00	Other	Consult w. Encana / decision to TOO H and examine BHA
15:10	16:00	0.83	6917	6917	0	.00	POOH	POOH
16:00	16:15	0.25	6917	6917	0	.00	Other	Consult w. Encana / decision to adj motor to 2.50

Winserve II Daily Report for Wednesday,
December 17, 2014
License: NP2245

Daily Report for JOB#: 232835 - Page 1 of 2

Start Time	End Time	Hours	Start Depth	End Depth	Delta Depth	ROP	Activity Code	COMMENT
16:15	17:15	1.00	6917	6917	0	.00	Other	Adj motor to 2.50 / Scribe tools & re-orient MWD
17:15	24:00	6.75	6917	6917	0	.00	TIH	TIH

JOB NO.: 232835 Company: EnCana Oil & Gas (USA) Inc. LOCATION: Ruhl Pad RIG NAME: H&P 278 STATE: Colorado COUNTY: Weld WELL NAME: Ruhl 1F 32H-B264 Lead Directional : Steven Schlamp (10800)		Report Time: 2400 API JOB # 05-123-40283-00 WORK ORDER# FIELD: Wattenberg Township: 2N Range/Section 64W 32 Company Man Randy / Joe 2nd Dir Hand : Paul Turner (10972)									
From Thursday, December 18, 2014 at 0000 to Thursday, December 18, 2014 at 2400											
DAILY TOTALS		ASSEMBLY TOTALS									
Start Depth	6917.00	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	7225.00	4	6854	308.00	3.83			.75	4.58	308.00	67.20
Below Rot Hrs.	24.00	5	65297	0.00	0.00	0.00	0.00	.00	0.00	0.00	0.00
Total Drilled:	308.00	Drilling Parameters		Mud Record		Bit Record		Current BHA # 5			
Avg. Total ROP:	80.35	WOB: 0		Weight: 0		Bit No: 3		Smith SDI 6.75 Motor 6 1/4" NMPC Flex 6 1/2" NMDC Flex 6 1/2" Pulser Sub 6 1/2" NMDC Flex 6 1/2" NMPC Flex 6 1/2" Steel X-Over 10 Stnds. DP (30 Jnts.) 30 Stnds. (90 Jnts.) HWDP			
Slide Footage:	308.00	Rot Wt: 117		Visc: 0		Model Smith					
Slide Hours	3.83	Pick UP: 122		Chlorides: 0		SN.: JK0686					
Avg. Slide ROP:	80.35	Slack Off: 105		YP: 0		MFG. SMITH					
Rotate Footage:	0.00	SPP: 4370		PV: 0		Type PDC					
Rotary Hours	0.00	Flow: 598 - 598		PH: 0		IADC					
Avg. Rot ROP:	NA	SPM: 156		GAS: 0		JETS 6-13					
Circ Hours	0.75	Rot. RPM -		SAND: 0		TFA: 0.777					
Ream Hours	0.00	Mot RPM: 70 - 70		WL: 0		Hole ID: 8.75					
Rotary Hrs%:	.00	Incl. In: 21.41		SOLID: 0		Bit Hrs:					
Slide Hrs%:	100.00	Azm. In: 166.88		BHT°: 0		Bit Ftg:					
Rotary Ftg%:	.00	Incl. Out: 49.7		Flow T°: 0		PUMPS					
Slide Ftg%:	100.00	Azm. Out: 172.26		Oil %: 0		Liner 0 0					
CASING						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											
Start Time	End Time	Hours	Start Depth	End Depth	Delta Depth	ROP	Activity Code	COMMENT			
00:00	02:45	2.75	6917	6917	0	.00	TIH	TIH			
02:45	03:30	0.75	6917	6917	0	.00	Circulating	Sweep			
03:30	04:30	1.00	6917	7007	90	90.00	Sliding	Sliding - (WOB:0;GPM :598;TFO:30R))			
04:30	04:50	0.33	7007	7007	0	.00	Survey & Conn.	Survey & Conn.@6947' Inc 21.41° Azm 166.88°			
04:50	06:00	1.17	7007	7102	95	81.43	Sliding	Sliding - (WOB:0;GPM :598;TFO:30R))			
06:00	06:10	0.17	7102	7102	0	.00	Survey & Conn.	Survey & Conn.@7042' Inc 30.4° Azm 169.17°			
06:10	07:25	1.25	7102	7196	94	75.20	Sliding	Sliding - (WOB:0;GPM :598;TFO:30R)			
07:25	07:35	0.17	7196	7196	0	.00	Survey & Conn.	Survey & Conn.@7136' Inc 39.21° Azm 170.57°			
07:35	08:00	0.42	7196	7225	29	69.60	Sliding	Sliding - (WOB:0;GPM :598;TFO:30R)			
08:00	12:15	4.25	7225	7225	0	.00	POOH	TOOH to casing shoe			
12:15	15:00	2.75	7225	7225	0	.00	Other	Wait on Mud Motor			
15:00	16:30	1.50	7225	7225	0	.00	POOH	POOH to Surface			
16:30	20:00	3.50	7225	7225	0	.00	Change BHA	Change BHA and work into casing			
20:00	24:00	4.00	7225	7225	0	.00	TIH	TIH			

Winserve II Daily Report for Thursday,
December 18, 2014

License: NP2245

Daily Report for JOB#: 232835 - Page 1 of 1

JOB NO.:	232835	Report Time:	2400	7 of 13
Company:	EnCana Oil & Gas (USA) Inc.	API JOB #	05-123-40283-00	
LOCATION:	Ruhl Pad	WORK ORDER#		
RIG NAME:	H&P 278	FIELD:	Wattenberg	
STATE:	Colorado	Township:	2N	
COUNTY:	Weld	Range/Section	64W	32
WELL NAME:	Ruhl 1F 32H-B264	Company Man	Randy / Joe	
Lead Directional :	Steven Schlamp (10800)	2nd Dir Hand :	Paul Turner (10972)	

From Friday, December 19, 2014 at 0000 to Friday, December 19, 2014 at 2400

DAILY TOTALS		ASSEMBLY TOTALS									
Start Depth	7225.00	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	7512.00	5	65297	240.00	6.75	47.00	2.42	6.08	15.25	287.00	18.82
Below Rot Hrs.	22.50										
Total Drilled:	287.00										
Avg. Total ROP:	31.31	Drilling Parameters		Mud Record		Bit Record		Current BHA # 5			
Slide Footage:	240.00	WOB:	25	Weight:	0	Bit No:	3	Smith SDI 6.75 Motor 6 1/4" NMPC Flex 6 1/2" NMDC Flex 6 1/2" Pulser Sub 6 1/2" NMDC Flex 6 1/2" NMPC Flex 6 1/2" Steel X-Over 10 Stnds. DP (30 Jnts.) 30 Stnds. (90 Jnts.) HWDP			
Slide Hours	6.75	Rot Wt:	117	Visc:	0	Model	Smith				
Avg. Slide ROP:	35.56	Pick UP:	122	Chlorides:	0	SN.:	JK0686				
Rotate Footage:	47.00	Slack Off:	105	YP:	0	MFG.	SMITH				
Rotary Hours	2.42	SPP:	4370	PV:	0	Type	PDC				
Avg. Rot ROP:	19.45	Flow:	598 - 598	PH:	0	IADC					
Circ Hours	6.08	SPM:	156	GAS:	0	JETS	6-13				
Ream Hours	0.00	Rot. RPM	70 - 70	SAND:	0	TFA:	0.777				
Rotary Hrs%:	26.36	Mot RPM:	70 - 70	WL:	0	Hole ID:	8.75				
Slide Hrs%:	73.64	Incl. In:	49.7	SOLID:	0	Bit Hrs:					
Rotary Ftg%:	16.38	Azm. In:	172.26	BHT°:	0	Bit Ftg:					
Slide Ftg%:	83.62	Incl. Out:	90.2	Flow T°:	0	PUMPS					
Casing		Azm. Out:	181	Oil %:	0	Liner	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			

Start Time	End Time	Hours	Start Depth	End Depth	Delta Depth	ROP	Activity Code	COMMENT
12:25	13:20	0.92	7497	7512	15	16.36	Drilling	Drilling - (WOB:25; :598;RPM:70)
13:20	17:00	3.67	7512	7512	0	.00	Circulating	Circulating
17:00	21:15	4.25	7512	7512	0	.00	POOH	POOH
21:15	22:30	1.25	7512	7512	0	.00	Change BHA	Rack BHA
22:30	24:00	1.50	7512	7512	0	.00	Standby	Standby

JOB NO.: 232835
Company: EnCana Oil & Gas (USA) Inc.
LOCATION: Ruhl Pad
RIG NAME: H&P 278
STATE: Colorado
COUNTY: Weld
WELL NAME: Ruhl 1F 32H-B264
Lead Directional : Steven Schlamp (10800)

Report Time: 2400 8 of 13
API JOB # 05-123-40283-00
WORK ORDER#
FIELD: Wattenberg
Township: 2N
Range/Section 64W 32
Company Man Randy / Joe
2nd Dir Hand : Paul Turner (10972)

From Saturday, December 20, 2014 at 0000 to Saturday, December 20, 2014 at 2400

DAILY TOTALS		ASSEMBLY TOTALS									
Start Depth	0.00	BHA #	Motor SN / R.S. SN	Slide Ftg	Slide Hrs	Rotate Ftg	Rotate Hrs	Circ Hrs	D & C Hrs	BHA Ftg	Avg ROP
End Depth	0.00										
Below Rot Hrs.	0.00										
Total Drilled:	0.00	Drilling Parameters		Mud Record		Bit Record			Current BHA # 0		
Avg. Total ROP:	NA	WOB: 25 Rot Wt: 117 Pick UP: 122 Slack Off: 105 SPP: 4370 Flow: 598 - 598 SPM: 156 Rot. RPM - Mot RPM: - Incl. In: 90.2 Azm. In: 181 Incl. Out: 90.2 Azm. Out: 181		Weight: 0		Bit No: Model					
Slide Footage:	0.00			Visc: 0		SN.:					
Slide Hours	0.00			Chlorides: 0		MFG.					
Avg. Slide ROP:	NA			YP: 0		Type					
Rotate Footage:	0.00			PV: 0		IADC					
Rotary Hours	0.00			PH: 0		JETS					
Avg. Rot ROP:	NA			GAS: 0		TFA:					
Circ Hours	0.00			SAND: 0		Hole ID: N/A					
Ream Hours	0.00			WL: 0		Bit Hrs:					
Rotary Hrs%:	NA			SOLID: 0		Bit Ftg:					
Slide Hrs%:	NA			BHT°: 0		PUMPS					
Rotary Ftg%:	NA			Flow T°: 0		Liner 0 0					
Slide Ftg%:	NA	Oil %: 0		Stroke 0 0							
Casing		COST BREAKDOWN				Effic. 95.00% 95.00%					
Size Lb/Ft MD						Gal/Stk 0.00 0.00					
						BBL/Stk 0.000 0.000					

GENERAL COMMENT

Start Time	End Time	Hours	Start Depth	End Depth	Delta Depth	ROP	Activity Code	COMMENT
00:00	24:00	24.00	7512	7512	0	.00	Standby	Standby

JOB NO.: 232835		Report Time: 2400		9 of 13	
Company: EnCana Oil & Gas (USA) Inc.		API JOB # 05-123-40283-00			
LOCATION: Ruhl Pad		WORK ORDER#			
RIG NAME: H&P 278		FIELD: Wattenberg			
STATE: Colorado		Township: 2N			
COUNTY: Weld		Range/Section 64W		32	
WELL NAME: Ruhl 1F 32H-B264		Company Man Randy / Joe			
Lead Directional : Steven Schlamp (10800)		2nd Dir Hand : Paul Turner (10972)			

From Sunday, December 21, 2014 at 0000 to Sunday, December 21, 2014 at 2400												
DAILY TOTALS		ASSEMBLY TOTALS										
Start Depth	7512.00	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	8647.00	6	159	286.00	24.67	4,088.00	31.00	7.17	62.83	4,374.00	69.71	
Below Rot Hrs.	22.75											
Total Drilled:	1135.00											
Avg. Total ROP:	143.37											
Slide Footage:	54.00	Drilling Parameters		Mud Record		Bit Record		Current BHA # 6				
Slide Hours	1.42	WOB: 20		Weight: 0		Bit No: Model Reed		Reed SKH1516M-C1 Hunting 4.75" 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 31 Stnds. DP (93 Jnts) 30 Stnds. (90 Jnts.) HWDP				
Avg. Slide ROP:	38.12	Rot Wt: 147		Visc: 0		SN.: A200205						
Rotate Footage:	1081.00	Pick UP: 165		Chlorides: 0		MFG.						
Rotary Hours	6.50	Slack Off: 133		YP: 0		Type						
Avg. Rot ROP:	166.31	SPP: 4200		PV: 0		IADC						
Circ Hours	2.25	Flow: 249 - 598		PH: 0		JETS 5-14						
Ream Hours	0.00	SPM: 78		GAS: 0		TFA: 0.751						
Rotary Hrs%:	82.11	Rot. RPM 15 - 90		SAND: 0		Hole ID: 6.12						
Slide Hrs%:	17.89	Mot RPM: 15 - 90		WL: 0		Bit Hrs: 55.67						
Rotary Ftg%:	95.24	Incl. In: 90.2		SOLID: 0		Bit Ftg: 4374.00						
Slide Ftg%:	4.76	Azm. In: 181		BHT°: 0		PUMPS						
CASING		Incl. Out: 90.3		Flow T°: 0		Liner 0 0						
Size	Lb/Ft	MD	Azm. Out: 182.6		Oil %: 0		Stroke 0 0					
						Effic. 95.00% 95.00%						
						Gal/Stk 0.00 0.00						
						BBL/Stk 0.000 0.000						

GENERAL COMMENT										
1900: Call from CM Joe stated Jerry called for a plan change. Plan 4 Minus 5.										

Start Time	End Time	Hours	Start Depth	End Depth	Delta Depth	ROP	Activity Code	COMMENT
00:00	01:15	1.25	7512	7512	0	.00	Standby	StandBy
01:15	01:30	0.25	7512	7512	0	.00	Other	JSA
01:30	02:30	1.00	7512	7512	0	.00	Change BHA	Change BHA
02:30	06:00	3.50	7512	7512	0	.00	TIH	TIH singles to 2640
06:00	07:15	1.25	7512	7512	0	.00	Other	Install rotating head & surface test MWD
07:15	08:30	1.25	7512	7512	0	.00	TIH	TIH singles
08:30	09:00	0.50	7512	7512	0	.00	TIH	TIH stands
09:00	10:00	1.00	7512	7512	0	.00	Other	Safety Stand Down
10:00	11:20	1.33	7512	7512	0	.00	TIH	TIH to tag cement @7413' / Float @7447 / Shoe @ 7494
11:20	13:00	1.67	7512	7512	0	.00	Circulating	Drill cement & float equipment
13:00	13:10	0.17	7512	7522	10	60.00	Drilling	Drilling - (WOB:10;GPM :249;RPM:15)
13:10	13:45	0.58	7522	7522	0	.00	Circulating	Circulate BU
13:45	14:35	0.83	7522	7522	0	.00	Other	FIT
14:35	15:00	0.42	7522	7537	15	36.00	Sliding	Sliding - (WOB:0;GPM :598;TFO:30R))

Winserve II Daily Report for Sunday, December 21, 2014

License: NP2245

Daily Report for JOB#: 232835 - Page 1 of 2

Start Time	End Time	Hours	Start Depth	End Depth	Delta Depth	ROP	Activity Code	COMMENT
15:00	15:35	0.58	7537	7606	69	118.29	Drilling	Drilling - (WOB:15;GPM :299;RPM:70)
15:35	15:45	0.17	7606	7606	0	.00	Survey & Conn.	Survey & Conn.@7541' Inc 89.8° Azm 182.56°
15:45	16:20	0.58	7606	7700	94	161.14	Drilling	Drilling - (WOB:20;GPM :299;RPM:90)
16:20	16:25	0.08	7700	7700	0	.00	Survey & Conn.	Survey & Conn.@7635' Inc 90.4° Azm 183.15°
16:25	16:50	0.42	7700	7795	95	228.00	Drilling	Drilling - (WOB:20;GPM :299;RPM:90)
16:50	16:55	0.08	7795	7795	0	.00	Survey & Conn.	Survey & Conn.@7730' Inc 90.2° Azm 182.87°
16:55	17:10	0.25	7795	7805	10	40.00	Sliding	Sliding - (WOB:0;GPM :598;TFO:15R))
17:10	18:10	1.00	7805	7890	85	85.00	Drilling	Drilling - (WOB:20;GPM :299;RPM:90)
18:10	18:20	0.17	7890	7890	0	.00	Survey & Conn.	Survey & Conn.@7825' Inc 89.83° Azm 183.07°
18:20	18:30	0.17	7890	7900	10	60.00	Sliding	Sliding - (WOB:0;GPM :598;TFO:0))
18:30	19:25	0.92	7900	7985	85	92.73	Drilling	Drilling - (WOB:20;GPM :299;RPM:90)
19:25	19:30	0.08	7985	7985	0	.00	Survey & Conn.	Survey & Conn.@7920' Inc 91.71° Azm 183.12°
19:30	19:55	0.42	7985	8079	94	225.60	Drilling	Drilling - (WOB:20;GPM :299;RPM:90)
19:55	20:05	0.17	8079	8079	0	.00	Survey & Conn.	Survey & Conn.@8014' Inc 91.17° Azm 183.12°
20:05	20:15	0.17	8079	8086	7	42.00	Sliding	Sliding - (WOB:0;GPM :598;TFO:0)
20:15	20:35	0.33	8086	8174	88	264.00	Drilling	Drilling - (WOB:20;GPM :299;RPM:90)
20:35	20:45	0.17	8174	8174	0	.00	Survey & Conn.	Survey & Conn.@8109' Inc 92.08° Azm 183.41°
20:45	21:15	0.50	8174	8269	95	190.00	Drilling	Drilling - (WOB:20;GPM :299;RPM:90)
21:15	21:25	0.17	8269	8269	0	.00	Survey & Conn.	Survey & Conn.@8204' Inc 91.55° Azm 183.16°
21:25	21:50	0.42	8269	8364	95	228.00	Drilling	Drilling - (WOB:20;GPM :299;RPM:90)
21:50	22:00	0.17	8364	8364	0	.00	Survey & Conn.	Survey & Conn.@8299' Inc 90.74° Azm 182.88°
22:00	22:15	0.25	8364	8458	94	376.00	Drilling	Drilling - (WOB:20;GPM :299;RPM:90)
22:15	22:25	0.17	8458	8458	0	.00	Survey & Conn.	Survey & Conn.@8393' Inc 90.7° Azm 183°
22:25	22:45	0.33	8458	8553	95	285.00	Drilling	Drilling - (WOB:20;GPM :299;RPM:90)
22:45	23:00	0.25	8553	8553	0	.00	Survey & Conn.	Survey & Conn.@8488' Inc 90.3° Azm 182.6°
23:00	23:25	0.42	8553	8565	12	28.80	Sliding	Sliding - (WOB:0;GPM :598;TFO:90L))
23:25	24:00	0.58	8565	8647	82	140.57	Drilling	Drilling - (WOB:20;GPM :299;RPM:90)

JOB NO.:		232835		Report Time:		2400		10 of 13			
Company:		EnCana Oil & Gas (USA) Inc.		API JOB #		05-123-40283-00					
LOCATION:		Ruhl Pad		WORK ORDER#							
RIG NAME:		H&P 278		FIELD:		Wattenberg					
STATE:		Colorado		Township:		2N					
COUNTY:		Weld		Range/Section		64W		32			
WELL NAME:		Ruhl 1F 32H-B264		Company Man		Randy / Joe					
Lead Directional :		Steven Schlamp (10800)		2nd Dir Hand :		Paul Turner (10972)					
From Monday, December 22, 2014 at 0000 to Monday, December 22, 2014 at 2400											
DAILY TOTALS		ASSEMBLY TOTALS									
Start Depth	8647.00	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	10352.00	6	159	286.00	24.67	4,088.00	31.00	7.17	62.83	4,374.00	69.71
Below Rot Hrs.	24.00										
Total Drilled:	1705.00										
Avg. Total ROP:	83.17	Drilling Parameters		Mud Record		Bit Record		Current BHA # 6			
Slide Footage:	123.00	WOB: 15		Weight: 0		Bit No: Reed		Reed SKHI516M-C1			
Slide Hours	10.08	Rot Wt: 143		Visc: 0		Model Reed		Hunting 4.75" Drill Motor			
Avg. Slide ROP:	12.20	Pick UP: 225		Chlorides: 0		SN.: A200205		4.75 NM Pony			
Rotate Footage:	1582.00	Slack Off: 80		YP: 0		MFG.		4 3/4" Pulser Sub			
Rotary Hours	10.42	SPP: 3900		PV: 0		Type		4 3/4" NMDC			
Avg. Rot ROP:	151.87	Flow: 275 - 598		PH: 0		IADC		4.75 NM Pony			
Circ Hours	0.75	SPM: 72		GAS: 0		JETS 5-14		5" Steel XO			
Ream Hours	0.00	Rot. RPM 90 - 90		SAND: 0		TFA: 0.751		1 Std. HWDP (3 Jnts.)			
Rotary Hrs%:	50.81	Mot RPM: 90 - 90		WL: 0		Hole ID: 6.12		18 Stnds. DP (54 Jnts.)			
Slide Hrs%:	49.19	Incl. In: 90.3		SOLID: 0		Bit Hrs: 55.67		NOV SS/Agitator			
Rotary Ftg%:	92.79	Incl. Out: 89.23		BHT°: 0		Bit Ftg: 4374.00		31 Stnds. DP (93 Jnts.)			
Slide Ftg%:	7.21	Azm. In: 182.6		Flow T°: 0		PUMPS		30 Stnds. (90 Jnts.) HWDP			
Casing		Azm. Out: 180.59		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											
- 21:30 Joe called with a plan change per Jerry to Plan 4 Plus 5'. A 10' change down.											
Start Time	End Time	Hours	Start Depth	End Depth	Delta Depth	ROP	Activity Code	COMMENT			
00:00	00:10	0.17	8647	8647	0	.00	Survey & Conn.	Survey & Conn.@8582' Inc 90.74° Azm 181.71°			
00:10	00:35	0.42	8647	8741	94	225.60	Drilling	Drilling - (WOB:24;GPM :299;RPM:90)			
00:35	00:45	0.17	8741	8741	0	.00	Survey & Conn.	Survey & Conn.@8676' Inc 90.97° Azm 181.19°			
00:45	01:25	0.67	8741	8756	15	22.50	Sliding	Sliding - (WOB:0;GPM :598;TFO:135L))			
01:25	01:55	0.50	8756	8836	80	160.00	Drilling	Drilling - (WOB:24;GPM :299;RPM:90)			
01:55	02:10	0.25	8836	8836	0	.00	Survey & Conn.	Survey & Conn.@8771' Inc 89.6° Azm 179.78°			
02:10	02:35	0.42	8836	8931	95	228.00	Drilling	Drilling - (WOB:24;GPM :299;RPM:90)			
02:35	02:45	0.17	8931	8931	0	.00	Survey & Conn.	Survey & Conn.@8866' Inc 90.07° Azm 179.57°			
02:45	03:05	0.33	8931	8939	8	24.00	Sliding	Sliding - (WOB:0;GPM :299;TFO:160R))			
03:05	03:30	0.42	8939	9025	86	206.40	Drilling	Drilling - (WOB:24;GPM :299;RPM:90)			
03:30	03:40	0.17	9025	9025	0	.00	Survey & Conn.	Survey & Conn.@8960' Inc 89.56° Azm 179.65°			
03:40	04:15	0.58	9025	9120	95	162.86	Drilling	Drilling - (WOB:24;GPM :299;RPM:90)			
04:15	04:25	0.17	9120	9120	0	.00	Survey & Conn.	Survey & Conn.@9055' Inc 90.64° Azm 180.33°			
04:25	05:15	0.83	9120	9130	10	12.00	Sliding	Sliding - (WOB:0;GPM :299;TFO:180))			
Winserve II Daily Report for Monday, December 22, 2014 License: NP2245 Daily Report for JOB#: 232835 - Page 1 of 2											

Start Time	End Time	Hours	Start Depth	End Depth	Delta Depth	ROP	Activity Code	COMMENT
05:15	05:40	0.42	9130	9215	85	204.00	Drilling	Drilling - (WOB:24;GPM :299;RPM:90)
05:40	05:50	0.17	9215	9215	0	.00	Survey & Conn.	Survey & Conn.@9150' Inc 90.1° Azm 180.66°
05:50	06:15	0.42	9215	9310	95	228.00	Drilling	Drilling - (WOB:24;GPM :299;RPM:90)
06:15	06:20	0.08	9310	9310	0	.00	Survey & Conn.	Survey & Conn.@9245' Inc 91.34° Azm 180.94°
06:20	06:50	0.50	9310	9325	15	30.00	Sliding	Sliding - (WOB:0;GPM :299;TFO:165L))
06:50	07:10	0.33	9325	9404	79	237.00	Drilling	Drilling - (WOB:24;GPM :275;RPM:90)
07:10	07:15	0.08	9404	9404	0	.00	Survey & Conn.	Survey & Conn.@9339' Inc 89.6° Azm 180.53°
07:15	07:30	0.25	9404	9499	95	380.00	Drilling	Drilling - (WOB:24;GPM :275;RPM:90)
07:30	07:35	0.08	9499	9499	0	.00	Survey & Conn.	Survey & Conn.@9434' Inc 89.73° Azm 180.44°
07:35	08:10	0.58	9499	9594	95	162.86	Drilling	Drilling - (WOB:24;GPM :275;RPM:90)
08:10	08:15	0.08	9594	9594	0	.00	Survey & Conn.	Survey & Conn.@9529' Inc 88.99° Azm 180.48°
08:15	08:50	0.58	9594	9689	95	162.86	Drilling	Drilling - (WOB:24;GPM :275;RPM:90)
08:50	08:55	0.08	9689	9689	0	.00	Survey & Conn.	Survey & Conn.@9624' Inc 88.09° Azm 179.72°
08:55	10:10	1.25	9689	9704	15	12.00	Sliding	Sliding - (WOB:0;GPM :299;TFO:15R))
10:10	10:35	0.42	9704	9784	80	192.00	Drilling	Drilling - (WOB:24;GPM :275;RPM:90)
10:35	10:40	0.08	9784	9784	0	.00	Survey & Conn.	Survey & Conn.@9719' Inc 89.19° Azm 179.84°
10:40	11:40	1.00	9784	9799	15	15.00	Sliding	Sliding - (WOB:0;GPM :299;TFO:15R))
11:40	12:30	0.83	9799	9878	79	94.80	Drilling	Drilling - (WOB:24;GPM :275;RPM:90)
12:30	12:35	0.08	9878	9878	0	.00	Survey & Conn.	Survey & Conn.@9813' Inc 90.07° Azm 180.16°
12:35	14:15	1.67	9878	9893	15	9.00	Sliding	Sliding - (WOB:0;GPM :299;TFO:15R))
14:15	15:00	0.75	9893	9973	80	106.67	Drilling	Drilling - (WOB:24;GPM :275;RPM:90)
15:00	15:15	0.25	9973	9973	0	.00	Survey & Conn.	Survey & Conn.@9908' Inc 90.91° Azm 180.46°
15:15	16:00	0.75	9973	10068	95	126.67	Drilling	Drilling - (WOB:15;GPM :275;RPM:90)
16:00	16:15	0.25	10068	10068	0	.00	Survey & Conn.	Survey & Conn.@10003' Inc 90.77° Azm 180.98°
16:15	16:55	0.67	10068	10162	94	141.00	Drilling	Drilling - (WOB:15;GPM :275;RPM:90)
16:55	17:20	0.42	10162	10162	0	.00	Rig Service-Inhole	Rig Service-Inhole
17:20	17:25	0.08	10162	10162	0	.00	Survey & Conn.	Survey & Conn.@10097' Inc 92.02° Azm 181.39°
17:25	19:00	1.58	10162	10177	15	9.47	Sliding	Sliding - (WOB:0;GPM :299;TFO:150L))
19:00	19:55	0.92	10177	10257	80	87.27	Drilling	Drilling - (WOB:15;GPM :275;RPM:90)
19:55	20:15	0.33	10257	10257	0	.00	Circulating	Ream and Toolface
20:15	20:25	0.17	10257	10257	0	.00	Survey & Conn.	Survey & Conn.@10192' Inc 91.04° Azm 181.01°
20:25	22:40	2.25	10257	10272	15	6.67	Sliding	Sliding - (WOB:0;GPM :299;TFO:160L))
22:40	23:50	1.17	10272	10352	80	68.57	Drilling	Drilling - (WOB:15;GPM :275;RPM:90)
23:50	24:00	0.17	10352	10352	0	.00	Survey & Conn.	Survey & Conn.@10287' Inc 89.23° Azm 180.59°

JOB NO.: 232835 Company: EnCana Oil & Gas (USA) Inc. LOCATION: Ruhl Pad RIG NAME: H&P 278 STATE: Colorado COUNTY: Weld WELL NAME: Ruhl 1F 32H-B264 Lead Directional : Steven Schlamp (10800)		Report Time: 2400 API JOB # 05-123-40283-00 WORK ORDER# FIELD: Wattenberg Township: 2N Range/Section 64W 32 Company Man Randy / Joe 2nd Dir Hand : Ben Ezeaku (10012)										
From Tuesday, December 23, 2014 at 0000 to Tuesday, December 23, 2014 at 2400												
DAILY TOTALS		ASSEMBLY TOTALS										
Start Depth	10352.00	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	10987.00	6	159	286.00	24.67	4,088.00	31.00	7.17	62.83	4,374.00	69.71	
Below Rot Hrs.	24.00											
Total Drilled:	635.00											
Avg. Total ROP:	45.09											
Slide Footage:	54.00	Drilling Parameters		Mud Record		Bit Record		Current BHA # 6				
Slide Hours	6.50	WOB: 15		Weight: 0		Bit No: Model Reed		Reed SKH1516M-C1 Hunting 4.75" 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 31 Stnds. DP (93 Jnts) 30 Stnds. (90 Jnts.) HWDP				
Avg. Slide ROP:	8.31	Rot Wt: 144		Visc: 0		SN.: A200205						
Rotate Footage:	581.00	Pick UP: 246		Chlorides: 0		MFG.						
Rotary Hours	7.58	Slack Off: 30		YP: 0		Type						
Avg. Rot ROP:	76.62	SPP: 4295		PV: 0		IADC						
Circ Hours	3.58	Flow: 275 - 300		PH: 0		JETS 5-14						
Ream Hours	0.00	SPM: 78		GAS: 0		TFA: 0.751						
Rotary Hrs%:	53.85	Rot. RPM 90 - 90		SAND: 0		Hole ID: 6.12						
Slide Hrs%:	46.15	Mot RPM: 90 - 90		WL: 0		Bit Hrs: 55.67						
Rotary Ftg%:	91.50	Incl. In: 89.23		SOLID: 0		Bit Ftg: 4374.00						
Slide Ftg%:	8.50	Azm. In: 180.59		BHT°: 0		PUMPS						
CASING		Incl. Out: 87.95		Flow T°: 0		Liner 0 0						
Size	Lb/Ft	MD	Azm. Out: 179.3		Oil %: 0		Stroke 0 0					
						Effic. 95.00% 95.00%						
						Gal/Stk 0.00 0.00						
						BBL/Stk 0.000 0.000						
GENERAL COMMENT												
- Target Change - Plan #4 +10'TVD as per geo email @0700												
Start Time	End Time	Hours	Start Depth	End Depth	Delta Depth	ROP	Activity Code	COMMENT				
00:00	00:15	0.25	10352	10362	10	40.00	Drilling	Drilling - (WOB:15;GPM :275;RPM:90)				
00:15	01:05	0.83	10362	10362	0	.00	Circulating	Ream / Toolface				
01:05	01:50	0.75	10362	10368	6	8.00	Sliding	Sliding - (WOB:0;GPM :299;TFO:180))				
01:50	03:10	1.33	10368	10447	79	59.25	Drilling	Drilling - (WOB:15;GPM :275;RPM:90)				
03:10	03:20	0.17	10447	10447	0	.00	Survey & Conn.	Survey & Conn. @10382' Inc 88.96° Azm 179.8°				
03:20	04:20	1.00	10447	10541	94	94.00	Drilling	Drilling - (WOB:15;GPM :275;RPM:90)				
04:20	04:30	0.17	10541	10541	0	.00	Survey & Conn.	Survey & Conn. @10476' Inc 89.97° Azm 179.72°				
04:30	06:00	1.50	10541	10550	9	6.00	Sliding	Sliding - (WOB:0;GPM :299;TFO:180))				
06:00	07:45	1.75	10550	10636	86	49.14	Drilling	Drilling - (WOB:15;GPM :275;RPM:90)				
07:45	07:50	0.08	10636	10636	0	.00	MWD Survey	MWD Survey@10571' Inc 90.1° Azm 179.4°				
07:50	11:20	3.50	10636	10636	0	.00	Short Trip	Wiper trip to 7" casing shoe				
11:20	13:10	1.83	10636	10636	0	.00	TIH	TIH on elevators to 9500'				
13:10	15:50	2.67	10636	10636	0	.00	Circulating	Wash & ream to bottom / pump 80bbl sweep around				
Winserve II Daily Report for Tuesday, December 23, 2014 License: NP2245												
Daily Report for JOB#: 232835 - Page 1 of 2												

Start Time	End Time	Hours	Start Depth	End Depth	Delta Depth	ROP	Activity Code	COMMENT
15:50	16:00	0.17	10636	10636	0	.00	Survey & Conn.	Survey & Conn.@10571' Inc 90.1° Azm 179.4°
16:00	17:00	1.00	10636	10648	12	12.00	Sliding	Sliding - (WOB:0;GPM :299;TFO:180))
17:00	17:40	0.67	10648	10731	83	124.50	Drilling	Drilling - (WOB:15;GPM :300;RPM:90)
17:40	17:50	0.17	10731	10731	0	.00	Survey & Conn.	Survey & Conn.@10666' Inc 88.05° Azm 178.98°
17:50	18:55	1.08	10731	10826	95	87.69	Drilling	Drilling - (WOB:15;GPM :300;RPM:90)
18:55	19:05	0.17	10826	10826	0	.00	Survey & Conn.	Survey & Conn.@10761' Inc 87.48° Azm 179.12°
19:05	21:05	2.00	10826	10838	12	6.00	Sliding	Sliding - (WOB:0;GPM :300;TFO:15R))
21:05	22:10	1.08	10838	10921	83	76.62	Drilling	Drilling - (WOB:15;GPM :300;RPM:90)
22:10	22:20	0.17	10921	10921	0	.00	Survey & Conn.	Survey & Conn.@10856' Inc 87.95° Azm 179.3°
22:20	23:35	1.25	10921	10936	15	12.00	Sliding	Sliding - (WOB:0;GPM :300;TFO:5R))
23:35	24:00	0.42	10936	10987	51	122.40	Drilling	Drilling - (WOB:15;GPM :300;RPM:90)

JOB NO.:	232835	Report Time:	2400	12 of 13
Company:	EnCana Oil & Gas (USA) Inc.	API JOB #	05-123-40283-00	
LOCATION:	Ruhl Pad	WORK ORDER#		
RIG NAME:	H&P 278	FIELD:	Wattenberg	
STATE:	Colorado	Township:	2N	
COUNTY:	Weld	Range/Section	64W	32
WELL NAME:	Ruhl 1F 32H-B264	Company Man	Joe / Quiz	
Lead Directional :	Paul Turner (10972)	2nd Dir Hand :	Ben Ezeaku (10012)	

From Wednesday, December 24, 2014 at 0000 to Wednesday, December 24, 2014 at 2400

DAILY TOTALS		ASSEMBLY TOTALS									
Start Depth	10936.00	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	11835.00	6	159	286.00	24.67	4,088.00	31.00	7.17	62.83	4,374.00	69.71
Below Rot Hrs.	24.00										
Total Drilled:	899.00										
Avg. Total ROP:	68.28										
Slide Footage:	55.00	Drilling Parameters		Mud Record		Bit Record		Current BHA # 6			
Slide Hours	6.67	WOB:	21	Weight:	0	Bit No:		Reed SKH1516M-C1 Hunting 4.75" 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 31 Stnds. DP (93 Jnts) 30 Stnds. (90 Jnts.) HWDP			
Avg. Slide ROP:	8.25	Rot Wt:	145	Visc:	0	Model	Reed				
Rotate Footage:	844.00	Pick UP:	251	Chlorides:	0	SN.:	A200205				
Rotary Hours	6.50	Slack Off:	94	YP:	0	MFG.					
Avg. Rot ROP:	129.85	SPP:	4295	PV:	0	Type					
Circ Hours	1.00	Flow:	0 - 300	PH:	0	IADC					
Ream Hours	0.00	SPM:	78	GAS:	0	JETS	5-14				
Rotary Hrs%:	49.37	Rot. RPM	90 - 90	SAND:	0	TFA:	0.751				
Slide Hrs%:	50.63	Mot RPM:	0 - 90	WL:	0	Hole ID:	6.12				
Rotary Ftg%:	93.88	Incl. In:	87.95	SOLID:	0	Bit Hrs:	55.67				
Slide Ftg%:	6.12	Azm. In:	179.3	BHT°:	0	Bit Ftg:	4374.00				
CASING		Incl. Out:	0	Flow T°:	0	PUMPS					
Size	Lb/Ft	MD	Azm. Out:	0	Oil %:	0	Liner	0	0		
		COST BREAKDOWN					Stroke	0	0		
							Effic.	95.00%	95.00%		
							Gal/Stk	0.00	0.00		
							BBL/Stk	0.000	0.000		

GENERAL COMMENT

Start Time	End Time	Hours	Start Depth	End Depth	Delta Depth	ROP	Activity Code	COMMENT
00:00	00:05	0.08	10936	10945	9	108.00	Drilling	
00:05	00:25	0.33	10945	11016	71	213.00	Drilling	
00:25	00:35	0.17	11016	11016	0	.00	Survey & Conn.	Survey & Conn.@10951' Inc 88.99° Azm 179.44°
00:35	01:30	0.92	11016	11026	10	10.91	Sliding	Sliding - (WOB:0;GPM :300;TFO:5R))
01:30	02:10	0.67	11026	11110	84	126.00	Drilling	Drilling - (WOB:21;GPM :0;RPM:90)
02:10	02:15	0.08	11110	11110	0	.00	Survey & Conn.	Survey & Conn.@11045' Inc 90.84° Azm 178.77°
02:15	03:00	0.75	11110	11205	95	126.67	Drilling	Drilling - (WOB:21;GPM :300;RPM:90)
03:00	03:25	0.42	11205	11205	0	.00	Survey & Conn.	Survey & Conn.@11140' Inc 92.48° Azm 179.18°
03:25	04:30	1.08	11205	11216	11	10.15	Sliding	Sliding - (WOB:21;GPM :300;TFO:180))
04:30	05:15	0.75	11216	11300	84	112.00	Drilling	Drilling - (WOB:21;GPM :300;RPM:90)
05:15	05:25	0.17	11300	11300	0	.00	Survey & Conn.	Survey & Conn.@11235' Inc 91.31° Azm 179.06°
05:25	06:05	0.67	11300	11310	10	15.00	Sliding	Sliding - (WOB:21;GPM :300;TFO:180))
06:05	06:45	0.67	11310	11395	85	127.50	Drilling	Drilling - (WOB:21;GPM :300;RPM:90)
06:45	06:50	0.08	11395	11395	0	.00	Survey & Conn.	Survey & Conn.@11330' Inc 89.9° Azm 178.77°

Start Time	End Time	Hours	Start Depth	End Depth	Delta Depth	ROP	Activity Code	COMMENT
06:50	07:30	0.67	11395	11489	94	141.00	Drilling	Drilling - (WOB:21;GPM :300;RPM:90)
07:30	07:40	0.17	11489	11489	0	.00	Survey & Conn.	Survey & Conn.@11424' Inc 91.21° Azm 179.26°
07:40	10:25	2.75	11489	11503	14	5.09	Sliding	Sliding - (WOB:21;GPM :300;TFO:180))
10:25	11:05	0.67	11503	11584	81	121.50	Drilling	Drilling - (WOB:21;GPM :300;RPM:90)
11:05	11:15	0.17	11584	11584	0	.00	Survey & Conn.	Survey & Conn.@11519' Inc 89.87° Azm 178.9°
11:15	12:30	1.25	11584	11594	10	8.00	Sliding	Sliding - (WOB:21;GPM :300;TFO:160))
12:30	13:10	0.67	11594	11679	85	127.50	Drilling	Drilling - (WOB:21;GPM :300;RPM:90)
13:10	13:20	0.17	11679	11679	0	.00	Survey & Conn.	Survey & Conn.@11614' Inc 88.12° Azm 178.79°
13:20	14:10	0.83	11679	11774	95	114.00	Drilling	Drilling - (WOB:21;GPM :300;RPM:90)
14:10	14:25	0.25	11774	11774	0	.00	Survey & Conn.	Survey & Conn.@11770' Inc 88.49° Azm 177.55°
14:25	14:50	0.42	11774	11835	61	146.40	Drilling	Drilling - (WOB:21;GPM :300;RPM:90)
14:50	15:00	0.17	11835	11835	0	.00	Survey & Conn.	Survey & Conn.@11770' Inc 88.49° Azm 177.55°
15:00	16:00	1.00	11835	11835	0	.00	Circulating	Circulating
16:00	24:00	8.00	11835	11835	0	.00	POOH	POOH

JOB NO.: 232835
Company: EnCana Oil & Gas (USA) Inc.
LOCATION: Ruhl Pad
RIG NAME: H&P 278
STATE: Colorado
COUNTY: Weld
WELL NAME: Ruhl 1F 32H-B264
Lead Directional : Paul Turner (10972)

Report Time: 2400 **13 of 13**
API JOB # 05-123-40283-00
WORK ORDER#
FIELD: Wattenberg
Township: 2N
Range/Section 64W 32
Company Man Joe / Quiz
2nd Dir Hand : Ben Ezeaku (10012)

From Thursday, December 25, 2014 at 0000 to Thursday, December 25, 2014 at 2400

DAILY TOTALS		ASSEMBLY TOTALS										
Start Depth	10936.00	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	11835.00	6	159	286.00	24.67	4,088.00	31.00	7.17	62.83	4,374.00	69.71	
Below Rot Hrs.	24.00											
Total Drilled:	899.00											
Avg. Total ROP:	68.28											
Slide Footage:	55.00	Drilling Parameters		Mud Record		Bit Record		Current BHA # 6				
Slide Hours	6.67											
Avg. Slide ROP:	8.25	WOB:	21	Weight:	0	Bit No:	Reed SKHI516M-C1 Hunting 4.75" 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 31 Stnds. DP (93 Jnts.) 30 Stnds. (90 Jnts.) HWDP					
Rotate Footage:	844.00	Rot Wt:	145	Visc:	0	Model						Reed
Rotary Hours	6.50	Pick UP:	251	Chlorides:	0	SN.:						A200205
Avg. Rot ROP:	129.85	Slack Off:	94	YP:	0	MFG.						
Circ Hours	1.00	SPP:	4295	PV:	0	Type						
Ream Hours	0.00	Flow:	300 - 300	PH:	0	IADC						
Rotary Hrs%:	49.37	SPM:	78	GAS:	0	JETS						5-14
Slide Hrs%:	50.63	Rot. RPM	-	SAND:	0	TFA:						0.751
Rotary Ftg%:	93.88	Mot RPM:	-	WL:	0	Hole ID:						6.12
Slide Ftg%:	6.12	Incl. In:	0	SOLID:	0	Bit Hrs:						55.67
Casing		Azm. In:	0	BHT°:	0	Bit Ftg:	4374.00					
Size	Lb/Ft	MD	PUMPS				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	01:40	1.67	11835	11835	0	.00	POOH	POOH
01:40	01:50	0.17	11835	11835	0	.00	Other	JSA with Rig Crew
01:50	02:15	0.42	11835	11835	0	.00	Change BHA	Rack BHA and Lay down Motor & Bit
02:15	24:00	21.75	11835	11835	0	.00	Standby	Standby

BHA # 1

JOB NO.: 232835 Work Order:
Company: EnCana Oil & Gas (USA) Inc.
LOCATION: Ruhl Pad
RIG NAME: H&P 278
STATE: Colorado
COUNTY: Weld
WELL NAME: Ruhl 1F 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:	13-Dec-14 @ 11:15	SDI Drill Motor		SO/PU:	0 - 0 / 0-0
Date Out:	13-Dec-14 @ 22:30	MFG.: SDI		Rot Strg Wt:	0-0
Hrs In Hole:	11.25	Pad OD:	8.27	WOB:	0 - 0
Start Depth:	.00	NB Stab:	0	TORQ:	0 - 0
End Depth:	1225.00	Bit to Bend:	6.9	SPP:	0 - 0
Total Drilled:	1076.00	Bent Hsg/Sub°:	2.25 / 2.25	Motor RPM:	
Avg. Total ROP:	280.70	Lobe/Stage:	7/8 / 4	Rotary RPM:	0 - 0
Circ Hrs: Tot/Only	6.25 / 2.42	Rev/GAL:	0.16	Flow Rate:	0 - 0
Percent Slide:	18.03	Rotor Jet:	0	Avg Diff:	
Percent Hrs:	23.91	Prop BUR:		Stall Pres.:	
Slide Hours:	.92	Act BUR:		Off Bot Pres.:	
Total Sliding:	194.00	Mud Data		Bit Record	
Avg. Slide ROP:	211.64	Type		BAKER / DP 606S	
Percent Rotary:	81.97	WT:	0	GAS:	0
Percent Hrs:	76.09	Vis:	0	PV:	0
Rotary Hours:	2.92	WL:	0	PH:	0
Total Rotary:	882.00	SOL:	0	SAND:	0
Avg. Rotary ROP:	302.40	Oil %:	0	T °:	0
Reason POOH:	TD	Chlor:	0	YP:	0
				Run #:	1
				Type Bit:	PDC
				IADC#:	TFA: 0.994
				JETS:	9-12
				Bit Drop:	0 PSI @ GPM
				Cond.:	Good

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

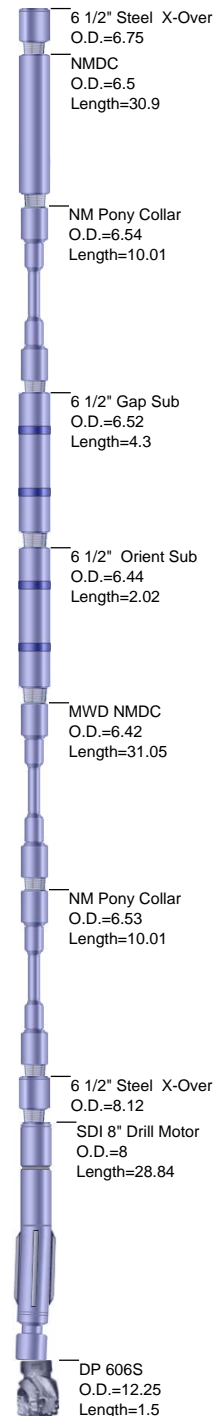
INC IN: .0 INC OUT: .0 AZM IN: .00 AZM OUT: .00

- 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.: 232835
Company: EnCana Oil & Gas (USA) Inc.
LOCATION: Ruhl Pad
RIG NAME: H&P 278
STATE: Colorado
COUNTY: Country
WELL NAME: Ruhl 1F 32H-B264

FIELD: Wattenberg
Township: 2N
Range 64W

MOTOR INFORMATION

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

Slide Report for BHA # 1

Note: Surveys listed are interpolated from the actual surveys

#	Date	Drill Mode	Start Time	End Time	Hours	Start MD	End MD	Depth Drilled	WOB	ROP	RPM	Surf. Torque	Flow Rate	SPP	TFO	INC	AZM	DLS	Note
1	13-Dec	Drilling	11:45	12:00	0.25	0	0	0		0.0	0	0				0.00	0.00	0.00	
1	13-Dec	Sliding	12:05	12:10	0.08	149	159	10		120.0	0	0			80M	0.00	0.00	0.00	
1	13-Dec	Drilling	14:05	14:20	0.25	159	217	58		232.0	0	0				0.00	0.00	0.00	
1	13-Dec	Sliding	14:30	14:35	0.08	217	239	22		264.0	0	0			80M	0.00	0.00	0.00	
1	13-Dec	Drilling	14:35	14:50	0.25	239	308	69		276.0	0	0				2.63	93.85	0.00	
1	13-Dec	Sliding	14:55	15:00	0.08	308	326	18		216.0	0	0			60M	2.63	93.85	0.00	
1	13-Dec	Drilling	15:00	15:10	0.17	326	399	73		438.0	0	0				3.21	83.75	0.00	
1	13-Dec	Sliding	15:20	15:25	0.08	399	411	12		144.0	0	0			50M	3.21	83.75	0.00	
1	13-Dec	Drilling	15:25	15:35	0.17	411	490	79		474.0	0	0				3.84	72.48	0.00	
1	13-Dec	Sliding	15:40	15:45	0.08	490	508	18		216.0	0	0			65M	3.84	72.48	0.00	
1	13-Dec	Drilling	15:45	16:00	0.25	508	582	74		296.0	0	0				5.02	68.79	0.00	
1	13-Dec	Sliding	16:05	16:10	0.08	582	612	30		360.0	0	0			30R	5.63	70.48	0.00	
1	13-Dec	Drilling	16:10	16:25	0.25	612	671	59		236.0	0	0				5.63	70.48	0.00	
1	13-Dec	Sliding	16:30	16:35	0.08	671	691	20		240.0	0	0			15R	5.63	70.48	0.00	
1	13-Dec	Drilling	16:35	16:40	0.08	691	761	70		840.0	0	0				6.16	73.42	0.00	
1	13-Dec	Sliding	16:45	16:50	0.08	761	781	20		240.0	0	0			15R	6.16	73.42	0.00	
1	13-Dec	Drilling	16:50	17:05	0.25	781	852	71		284.0	0	0				7.62	74.95	0.00	
1	13-Dec	Drilling	17:10	17:20	0.17	852	942	90		540.0	0	0				7.35	77.73	0.00	
1	13-Dec	Sliding	17:25	17:30	0.08	942	958	16		192.0	0	0			40L	7.35	77.73	0.00	
1	13-Dec	Drilling	17:30	17:40	0.17	958	1033	75		450.0	0	0				7.49	73.46	0.00	
1	13-Dec	Sliding	17:45	17:50	0.08	1033	1045	12		144.0	0	0			30L	7.49	73.46	0.00	
1	13-Dec	Drilling	17:50	18:00	0.17	1045	1123	78		468.0	0	0				7.50	67.42	0.00	
1	13-Dec	Sliding	18:05	18:10	0.08	1123	1139	16		192.0	0	0			30L	7.50	67.42	0.00	
1	13-Dec	Drilling	18:10	18:40	0.50	1139	1225	86		172.0	0	0				7.33	64.36	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: 1076 **Avg. Total ROP:** 280.70 **DEPTH% - TIME %**

Total Rotary Drilled: 882 **Avg. Rotary ROP:** 302.40 **Percent Rotary:** 81.97 - 76.09

Total Drilled Sliding: 194 **Avg. Slide ROP:** 211.64 **Percent Slide:** 18.03 - 23.91

BHA # 2

JOB NO.:	232835	Work Order:	FIELD:	Wattenberg
Company:	EnCana Oil & Gas (USA) Inc.		Township:	2N
LOCATION:	Ruhl Pad		SECT. RANGE:	32 64W
RIG NAME:	H&P 278		Lead DD:	Steven Schlamp (10800)
STATE:	Colorado		Co. Man:	Randy / Joe
COUNTY:	Weld		BHA TYPE:	Steerable Assembly
WELL NAME:	Ruhl 1F 32H-B264		BHA WT:	98325
			Wt @ Jars:	N/A

Time and Depths	MOTOR DATA	Drilling Parameters
Date In: 15-Dec-14 @ 00:30	6.75 Drill Motor	SO/PU: 0 - 0 / 0-0
Date Out: 15-Dec-14 @ 13:00	MFG.: SDI	Rot Strg Wt: 0-0
Hrs In Hole: 12.50	Pad OD: 7.46	WOB: 0 - 0
Start Depth: 1225.00	NB Stab: 0	TORQ: 0 - 0
End Depth: 1235.00	Bit to Bend: 3.17	SPP: 0 - 0
Total Drilled: 10.00	Bent Hsg/Sub°: 1.83 /	Motor RPM: -
Avg. Total ROP: 2.73	Lobe/Stage: 7/8 / 6.4	Rotary RPM: 0 - 0
Circ Hrs: Tot/Only 4.00 / .33	Rev/GAL: 0.29	Flow Rate: 0 - 0
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: 3.67		
Total Rotary: 10.00		
Avg. Rotary ROP: 2.73		
Reason POOH: TD		

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

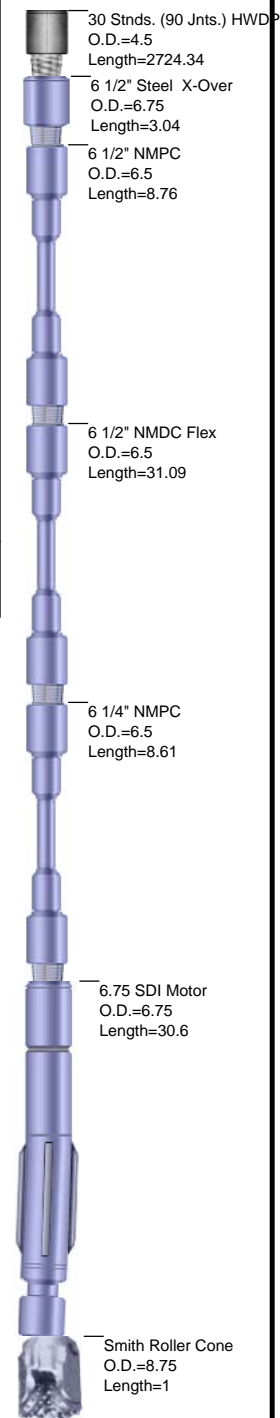
INC IN: .0 INC OUT: .0 AZM IN: .00 AZM OUT: .00

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

- Bit to Sensor - '
- Bit to Survey - '
- Bit to Gamma - '

BHA Detail

Description	Serial #	I.D.	O.D.	Length	Sum	Top Conn	MFG.
Smith Roller Cone	PY8002	2	8.75	1.00	1.00	4 1/2 REGP	SMITH
6.75 SDI Motor	6694	2.0	6.75	30.60	31.60	4 1/2 XHB	SDI
6 1/4" NMPC	40386	2.8	6.5	8.61	40.21	4 1/2 XHB	SDI
6 1/2" NMDC Flex	122-329F	2.7	6.5	31.02	71.23	4 1/2 XHB	SDI
6 1/2" NMDC Flex	122-466F	2.7	6.5	31.09	102.32	4 1/2 XHB	SDI
6 1/2" NMPC	38678	2.8	6.5	8.76	111.08	4 1/2 XHB	SDI
6 1/2" Steel X-Over	11583	3.25	6.75	3.04	114.12	XT39B	SDI
30 Stnds. (90 Jnts.) HWD	RIG123	2.88	4.5	2,724.34	2838.46	XT39	Other



JOB NO.: 232835
Company: EnCana Oil & Gas (USA) Inc.
LOCATION: Ruhl Pad
RIG NAME: H&P 278
STATE: Colorado
COUNTY: Country
WELL NAME: Ruhl 1F 32H-B264

FIELD: Wattenberg
Township: 2N
Range 64W

MOTOR INFORMATION

Desc: 6.75 Drill Motor
 Bent Hsg/Sub: $\frac{1.8}{3}$ / 0 Bit to Bend: 3.17
 Pad OD: 7.46 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	15-Dec	Drilling	05:30	05:40	0.17	1225	1235	10		60.0	0	0				7.33	64.36	0.00	

Total Drilled: 10 **Avg. Total ROP:** 2.73 **DEPTH% - TIME %**

Total Rotary Drilled: 10 **Avg. Rotary ROP:** 2.73 **Percent Rotary:** 100.00 - 100.00

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

BHA # 3

JOB NO.:	232835	Work Order:	FIELD:	Wattenberg
Company:	EnCana Oil & Gas (USA) Inc.		Township:	2N
LOCATION:	Ruhl Pad		SECT. RANGE:	32 64W
RIG NAME:	H&P 278		Lead DD:	Steven Schlamp (10800)
STATE:	Colorado		Co. Man:	Randy / Joe
COUNTY:	Weld		BHA TYPE:	Steerable Assembly
WELL NAME:	Ruhl 1F 32H-B264		BHA WT:	98874
			Wt @ Jars:	N/A

Time and Depths	MOTOR DATA	Drilling Parameters
Date In: 15-Dec-14 @ 13:00	6.75 Drill Motor	SO/PU: 66 - 105 / 76-122
Date Out: 17-Dec-14 @ 10:15	MFG.: SDI	Rot Strg Wt: 71-117
Hrs In Hole: 45.25	Pad OD: 7.46	WOB: 0 - 25
Start Depth: 1235.00	NB Stab: 0	TORQ: 3.2 - 8
End Depth: 6917.00	Bit to Bend: 3.17	SPP: 2300 - 4370
Total Drilled: 5682.00	Bent Hsg/Sub°: 1.83 /	Motor RPM: - 173
Avg. Total ROP: 227.28	Lobe/Stage: 7/8 / 6.4	Rotary RPM: 70 - 70
Circ Hrs: Tot/Only 30.42 / 5.42	Rev/GAL: 0.29	Flow Rate: 0 - 598
Percent Slide: 14.54	Rotor Jet: 0	Avg Diff:
Percent Hrs: 44.00	Prop BUR:	Stall Pres.:
Slide Hours: 11.00	Act BUR:	Off Bot Pres.:
Total Sliding: 826.00		
Avg. Slide ROP: 75.09		
Percent Rotary: 85.46		
Percent Hrs: 56.00		
Rotary Hours: 14.00		
Total Rotary: 4856.00		
Avg. Rotary ROP: 346.86		
Reason POOH: BHA		

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

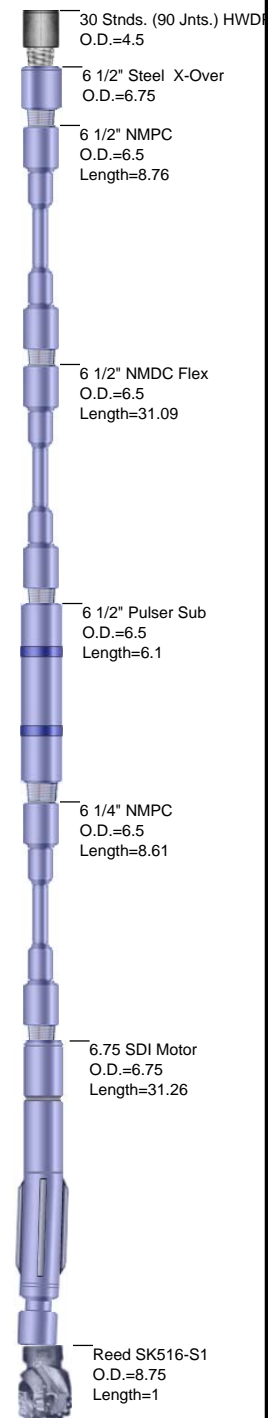
INC IN: .0 INC OUT: .0 AZM IN: .00 AZM OUT: .00

- 6 3/4" SDI Titan TD Drill Motor 7/8 6.4stg 1.83FBH
- Speed Ratio: 0.29RPG
- TFO: 76.18

- Bit to Sensor - 62.73'
- Bit to Survey - 65'
- Bit to Gamma - 54.06'

BHA Detail

Description	Serial #	I.D.	O.D.	Length	Sum	Top Conn	MFG.
Reed SK516-S1	A206418		8.75	1.00	1.00	4 1/2 REGP	REED
6.75 SDI Motor	65055	2.0	6.75	31.26	32.26	4 1/2 XHB	SDI
6 1/4" NMPC	40386	2.8	6.5	8.61	40.87	4 1/2 XHB	SDI
6 1/2" NMDC Flex	122-329F	2.7	6.5	31.02	71.89	4 1/2 XHB	SDI
6 1/2" Pulser Sub	129-070		6.5	6.10	77.99	4 1/2 XHB	SDI
6 1/2" NMDC Flex	122-466F	2.7	6.5	31.09	109.08	4 1/2 XHB	SDI
6 1/2" NMPC	38678	2.8	6.5	8.76	117.84	4 1/2 XHB	SDI
6 1/2" Steel X-Over	11583	3.25	6.75	3.04	120.88	XT39B	SDI
30 Stnds. (90 Jnts.) HWD	RIG123	2.88	4.5	2,724.34	2845.22	XT39	Other



JOB NO.: 232835
Company: EnCana Oil & Gas (USA) Inc.
LOCATION: Ruhl Pad
RIG NAME: H&P 278
STATE: Colorado
COUNTY: Country
WELL NAME: Ruhl 1F 32H-B264

FIELD: Wattenberg
Township: 2N
Range 64W

MOTOR INFORMATION

Desc: 6.75 Drill Motor
Bent Hsg/Sub: 1.8 / 0 **Bit to Bend:** 3.17
Pad OD: 7.46 **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	15-Dec	Drilling	14:15	14:25	0.17	1235	1300	65	20	390.0	70	3.2	598	2300		7.33	64.36	0.00	
3	15-Dec	Sliding	14:30	14:40	0.17	1300	1315	15		90.0	70	3.2		2300	30R	7.33	64.36	0.00	
3	15-Dec	Drilling	14:40	14:50	0.17	1315	1391	76	20	456.0	70	3.2	598	2300		8.30	70.13	0.00	
3	15-Dec	Sliding	14:55	15:00	0.08	1391	1403	12		144.0	70	3.2		2300	30R	8.30	70.13	0.00	
3	15-Dec	Drilling	15:00	15:25	0.42	1403	1575	172	20	412.8	70	3.2	598	2300		8.99	72.46	0.00	
3	15-Dec	Sliding	15:30	15:35	0.08	1575	1587	12		144.0	70	3.2		2300	15R	8.99	72.46	0.00	
3	15-Dec	Drilling	15:35	16:00	0.42	1587	1758	171	20	410.4	70	3.2	598	2300		10.09	73.51	0.00	
3	15-Dec	Drilling	16:05	16:30	0.42	1758	1938	180	20	432.0	70	3.2	598	2300		10.37	70.07	0.00	
3	15-Dec	Sliding	16:40	16:45	0.08	1938	1945	7		84.0	70	3.2		2300	60R	10.37	70.07	0.00	
3	15-Dec	Drilling	16:45	17:10	0.42	1945	2120	175	20	420.0	70	3.2	598	2300		10.36	71.16	0.00	
3	15-Dec	Sliding	17:20	17:25	0.08	2120	2128	8		96.0	70	3.2		2300	60R	10.36	71.16	0.00	
3	15-Dec	Drilling	17:25	17:45	0.33	2128	2301	173	25	519.0	70	6.5	598	2900		9.99	70.72	0.00	
3	15-Dec	Sliding	17:50	18:00	0.17	2301	2317	16		96.0	70	6.5		2900	60R	9.99	70.72	0.00	
3	15-Dec	Drilling	18:00	18:30	0.50	2317	2483	166	25	332.0	70	6.5	598	2900		9.58	72.12	0.00	
3	15-Dec	Sliding	18:35	18:40	0.08	2483	2499	16		192.0	70	6.5		2900	40	9.58	72.12	0.00	
3	15-Dec	Drilling	18:40	19:00	0.33	2499	2664	165	25	495.0	70	6.5	598	2900		10.07	76.21	0.00	
3	15-Dec	Sliding	19:05	19:10	0.08	2664	2676	12		144.0	70	6.5		2900		10.07	76.21	0.00	
3	15-Dec	Drilling	19:10	19:45	0.58	2676	2845	169	25	289.7	70	6.5	598	2900		10.06	75.31	0.00	
3	15-Dec	Sliding	19:50	20:00	0.17	2845	2857	12		72.0	70	6.5		2900		10.06	75.31	0.00	
3	15-Dec	Drilling	20:00	20:10	0.17	2857	2940	83	25	498.0	70	6.5	598	2900		10.06	75.31	0.00	
3	15-Dec	Sliding	20:15	20:20	0.08	2940	2952	12		144.0	70	6.5		2900	30L	10.06	75.31	0.00	
3	15-Dec	Drilling	20:20	20:30	0.17	2952	3034	82	25	492.0	70	6.5	598	2900		11.22	71.45	0.00	
3	15-Dec	Drilling	20:35	20:50	0.25	3034	3129	95	25	380.0	70	6.5	598	2900		11.22	71.45	0.00	
3	15-Dec	Sliding	20:55	21:00	0.08	3129	3139	10		120.0	70	6.5		2900	30L	11.22	71.45	0.00	
3	15-Dec	Drilling	21:00	21:10	0.17	3139	3224	85	25	510.0	70	6.5	598	2900		10.64	73.32	0.00	
3	15-Dec	Drilling	21:15	21:25	0.17	3224	3319	95	25	570.0	70	6.5	598	2900		10.64	73.32	0.00	

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	15-Dec	Sliding	21:30	21:35	0.08	3319	3333	14		168.0	70	6.5		2900	30R	10.64	73.32	0.00	
3	15-Dec	Drilling	21:35	21:45	0.17	3333	3413	80	25	480.0	70	6.5	598	2900		9.70	78.11	0.00	
3	15-Dec	Sliding	21:50	22:00	0.17	3413	3427	14		84.0	70	6.5		2900	30L	9.70	78.11	0.00	
3	15-Dec	Drilling	22:00	22:15	0.25	3427	3508	81	25	324.0	70	6.5	598	2900		9.70	78.11	0.00	
3	15-Dec	Drilling	22:20	22:30	0.17	3508	3603	95	25	570.0	70	6.5	598	2900		9.32	64.87	0.00	
3	15-Dec	Drilling	22:35	22:55	0.33	3603	3698	95	25	285.0	70	6.5	598	2900		9.32	64.87	0.00	
3	15-Dec	Sliding	23:00	23:10	0.17	3698	3712	14		84.0	70	6.5		2900		9.32	64.87	0.00	
3	15-Dec	Drilling	23:10	23:15	0.08	3712	3792	80	25	960.0	70	6.5	598	2900		10.31	76.40	0.00	
3	15-Dec	Drilling	23:20	23:35	0.25	3792	3887	95	25	380.0	70	6.5	598	2900		10.31	76.40	0.00	
3	15-Dec	Sliding	23:40	23:50	0.17	3887	3907	20		120.0	70	6.5		2900		10.31	76.40	0.00	
3	15-Dec	Drilling	23:50	24:00	0.17	3907	3982	75	25	450.0	70	6.5	598	2900		9.36	66.09	0.00	
3	16-Dec	Sliding	00:05	00:20	0.25	3982	4002	20		80.0	70	6.5		2900	30R	9.36	66.09	0.00	
3	16-Dec	Drilling	00:20	00:30	0.17	4002	4076	74	25	444.0	70	6.5	598	2900		9.36	66.09	0.00	
3	16-Dec	Sliding	00:35	00:50	0.25	4076	4094	18		72.0	70	6.5		2900	20R	9.36	66.09	0.00	
3	16-Dec	Drilling	00:50	00:55	0.08	4094	4171	77	25	924.0	70	6.5	598	2900		11.03	72.64	0.00	
3	16-Dec	Drilling	01:00	01:30	0.50	4171	4360	189	25	378.0	70	6.5	598	2900		9.58	68.82	0.00	
3	16-Dec	Sliding	01:35	01:45	0.17	4360	4374	14		84.0	70	6.5		2900	20R	9.58	68.82	0.00	
3	16-Dec	Drilling	01:45	02:10	0.42	4374	4454	80	25	192.0	70	8	440	2540		9.58	68.82	0.00	
3	16-Dec	Sliding	02:10	02:20	0.17	4454	4470	16		96.0	70	8		2540	40R	9.58	68.82	0.00	
3	16-Dec	Drilling	02:20	02:30	0.17	4470	4549	79	25	474.0	70	8	440	2540		11.40	71.97	0.00	
3	16-Dec	Drilling	02:35	03:05	0.50	4549	4738	189	25	378.0	70	8	598	4370		9.54	70.62	0.00	
3	16-Dec	Sliding	03:10	03:20	0.17	4738	4752	14		84.0	70	8	598	4370		9.54	70.62	0.00	
3	16-Dec	Drilling	03:20	03:50	0.50	4752	4928	176	25	352.0	70	8	598	4370		10.05	61.93	0.00	
3	16-Dec	Sliding	03:55	04:05	0.17	4928	4940	12		72.0	70	8	598	4370	80R	10.05	61.93	0.00	
3	16-Dec	Drilling	04:05	04:20	0.25	4940	5023	83	25	332.0	70	8	598	4370		10.05	61.93	0.00	
3	16-Dec	Sliding	04:20	04:30	0.17	5023	5043	20		120.0	70	8	598	4370	70R	10.05	61.93	0.00	
3	16-Dec	Drilling	04:30	04:40	0.17	5043	5117	74	25	444.0	70	8	598	4370		9.41	65.76	0.00	
3	16-Dec	Sliding	04:45	05:00	0.25	5117	5135	18		72.0	70	8	598	4370	70R	9.41	65.76	0.00	
3	16-Dec	Drilling	05:00	05:10	0.17	5135	5212	77	25	462.0	70	8	598	4370		9.41	65.76	0.00	
3	16-Dec	Sliding	05:15	05:30	0.25	5212	5232	20		80.0	70	8	598	4370	70R	9.41	65.76	0.00	
3	16-Dec	Drilling	05:30	05:50	0.33	5232	5307	75	25	225.0	70	8	598	4370		9.28	74.71	0.00	
3	16-Dec	Sliding	07:15	07:20	0.08	5307	5320	13		156.0	70	8	598	4370	15R	9.28	74.71	0.00	
3	16-Dec	Drilling	07:20	08:05	0.75	5320	5497	177	25	236.0	70	8	598	4370		8.99	66.50	0.00	
3	16-Dec	Sliding	08:15	08:35	0.33	5497	5527	30		90.0	70	8	598	4370	60R	8.99	66.50	0.00	
3	16-Dec	Drilling	08:35	09:05	0.50	5527	5686	159	25	318.0	70	8	598	4370		8.64	70.87	0.00	

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	16-Dec	Sliding	09:15	09:25	0.17	5686	5698	12		72.0	70	8	598	4370	90R	8.64	70.87	0.00	
3	16-Dec	Drilling	09:25	10:00	0.58	5698	5876	178	25	305.1	70	8	598	4370		6.68	71.03	0.00	
3	16-Dec	Sliding	10:10	10:20	0.17	5876	5890	14		84.0	70	8	598	4370	135R	6.68	71.03	0.00	
3	16-Dec	Drilling	10:20	11:00	0.67	5890	6065	175	25	262.5	70	8	598	4370		3.90	72.40	0.00	
3	16-Dec	Sliding	11:10	11:20	0.17	6065	6098	33		198.0	70	8	598	4370	150R	3.90	72.40	0.00	
3	16-Dec	Drilling	11:20	12:10	0.83	6098	6255	157	25	188.4	70	8	598	4370		0.71	206.48	0.00	
3	16-Dec	Drilling	12:20	13:20	1.00	6255	6444	189	25	189.0	70	8	598	4370		0.76	125.03	0.00	
3	16-Dec	Drilling	13:30	13:50	0.33	6444	6539	95	25	285.0	70	8	598	4370		0.54	43.23	0.00	
3	16-Dec	Sliding	15:15	17:15	2.00	6539	6569	30		15.0	70	8	598	4370	150R	0.54	43.23	0.00	
3	16-Dec	Sliding	17:45	18:15	0.50	6569	6591	22		44.0	70	8	598	4370	150R	0.58	27.05	0.00	
3	16-Dec	Sliding	20:45	21:30	0.75	6591	6674	83		110.7	70	8	598	4370	180M	3.39	147.48	0.00	
3	16-Dec	Sliding	21:45	22:45	1.00	6674	6728	54		54.0	70	8	598	4370	180M	3.39	147.48	0.00	
3	16-Dec	Sliding	23:00	24:00	1.00	6728	6815	87		87.0	70	8	598	4370	180M	8.79	159.19	0.00	
3	17-Dec	Sliding	00:00	00:30	0.50	6815	6823	8		16.0	70	8	598	4370	180M	8.79	159.19	0.00	
3	17-Dec	Sliding	00:45	01:30	0.75	6823	6917	94		125.3	70	8	598	4370	180M	13.44	162.88	0.00	

Total Drilled:

5682

Avg. Total ROP:

227.28

DEPTH% - TIME %

Total Rotary Drilled:

4856

Avg. Rotary ROP:

346.86

Percent Rotary:

85.46 - 56.00

Total Drilled Sliding:

826

Avg. Slide ROP:

75.09

Percent Slide:

14.54 - 44.00

BHA # 4

JOB NO.:	232835	Work Order:	FIELD:	Wattenberg
Company:	EnCana Oil & Gas (USA) Inc.		Township:	2N
LOCATION:	Ruhl Pad		SECT. RANGE:	32 64W
RIG NAME:	H&P 278		Lead DD:	Steven Schlamp (10800)
STATE:	Colorado		Co. Man:	Randy / Joe
COUNTY:	Weld		BHA TYPE:	Steerable Assembly
WELL NAME:	Ruhl 1F 32H-B264		BHA WT:	98309 Wt @ Jars: N/A

Time and Depths	MOTOR DATA	Drilling Parameters
Date In: 17-Dec-14 @ 10:15	6.75 Drill Motor	SO/PU: 105 - 105 / 122-122
Date Out: 18-Dec-14 @ 20:00	MFG.: SDI	Rot Strg Wt: 117-117
Hrs In Hole: 33.75	Pad OD: 7.32	WOB: 0 - 0
Start Depth: 6917.00	NB Stab: 0	TORQ: -
End Depth: 7225.00	Bit to Bend: 6.47	SPP: 4370 - 4370
Total Drilled: 308.00	Bent Hsg/Sub°: 2.75 /	Motor RPM: 167
Avg. Total ROP: 80.35	Lobe/Stage: 7/8 / 5	Rotary RPM: -
Circ Hrs: Tot/Only 4.58 / .75	Rev/GAL: 0.28	Flow Rate: 598 - 598
Percent Slide: 100.00	Rotor Jet: 0	Avg Diff: -
Percent Hrs: 100.00	Prop BUR: -	Stall Pres.: -
Slide Hours: 3.83	Act BUR: -	Off Bot Pres.: -
Total Sliding: 308.00		
Avg. Slide ROP: 80.35		
Percent Rotary: .00		
Percent Hrs: .00		
Rotary Hours: .00		
Total Rotary: .00		
Avg. Rotary ROP: NA		
Reason POOH: BHA		

MWD Spacing	Gamma: 53.47	Restiv: 0	Sensor: 62.14	Last Casing	O.D.
	GYRO: 0	DNSC: 6917	Sonic: 0	Shoe @:	Hanger @:

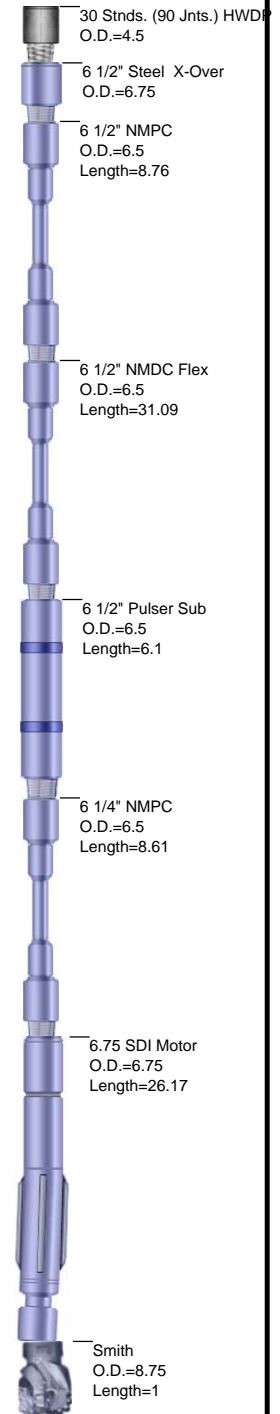
INC IN: .0 INC OUT: .0 AZM IN: .00 AZM OUT: .00

- 6 3/4" SDI Titan TD Drill Motor 7/8 6.4stg 1.83FBH
- Speed Ratio: 0.29RPG
- TFO: 76.18

- Bit to Sensor - 57.64'
- Bit to Survey - 60'
- Bit to Gamma - 48.97'

BHA Detail

Description	Serial #	I.D.	O.D.	Length	Sum	Top Conn	MFG.
Smith	JK0686		8.75	1.00	1.00	4 1/2 REGP	SMITH
6.75 SDI Motor	6854	2.0	6.75	26.17	27.17	4 1/2 XHB	SDI
6 1/4" NMPC	40386	2.8	6.5	8.61	35.78	4 1/2 XHB	SDI
6 1/2" NMDC Flex	122-329F	2.7	6.5	31.02	66.80	4 1/2 XHB	SDI
6 1/2" Pulser Sub	129-070		6.5	6.10	72.90	4 1/2 XHB	SDI
6 1/2" NMDC Flex	122-466F	2.7	6.5	31.09	103.99	4 1/2 XHB	SDI
6 1/2" NMPC	38678	2.8	6.5	8.76	112.75	4 1/2 XHB	SDI
6 1/2" Steel X-Over	11583	3.25	6.75	3.04	115.79	XT39B	SDI
30 Stnds. (90 Jnts.) HWD	RIG123	2.88	4.5	2,724.34	2840.13	XT39	Other



JOB NO.: 232835
Company: EnCana Oil & Gas (USA) Inc.
LOCATION: Ruhl Pad
RIG NAME: H&P 278
STATE: Colorado
COUNTY: Country
WELL NAME: Ruhl 1F 32H-B264

FIELD: Wattenberg
Township: 2N
Range 64W

MOTOR INFORMATION

Desc: 6.75 Drill Motor
 Bent Hsg/Sub: 2.7 / 0 Bit to Bend: 6.47
 Pad OD: 7.32 NB Stab:

Slide Report for BHA # 4

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
4	18-Dec	Sliding	03:30	04:30	1.00	6917	7007	90		90.0	70	8	598	4370	30R	21.41	166.88	0.00	
4	18-Dec	Sliding	04:50	06:00	1.17	7007	7102	95		81.4	70	8	598	4370	30R	30.40	169.17	0.00	
4	18-Dec	Sliding	06:10	07:25	1.25	7102	7196	94		75.2	70	8	598	4370	30R	39.21	170.57	0.00	
4	18-Dec	Sliding	07:35	08:00	0.42	7196	7225	29		69.6	70	8	598	4370	30R	39.21	170.57	0.00	

Total Drilled: 308 **Avg. Total ROP:** 80.35 **DEPTH% - TIME %**

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

Total Drilled Sliding: 308 **Avg. Slide ROP:** 80.35 **Percent Slide:** 100.00 - 100.00

BHA # 5

JOB NO.:	232835	Work Order:	FIELD:	Wattenberg
Company:	EnCana Oil & Gas (USA) Inc.		Township:	2N
LOCATION:	Ruhl Pad		SECT. RANGE:	32 64W
RIG NAME:	H&P 278		Lead DD:	Steven Schlamp (10800)
STATE:	Colorado		Co. Man:	Randy / Joe
COUNTY:	Weld		BHA TYPE:	Steerable Assembly
WELL NAME:	Ruhl 1F 32H-B264		BHA WT:	111884
			Wt @ Jars:	N/A

Time and Depths	MOTOR DATA	Drilling Parameters
Date In: 18-Dec-14 @ 20:00	6.75 Drill Motor	SO/PU: 105 - 105 / 122-122
Date Out: 19-Dec-14 @ 22:30	MFG.: SDI	Rot Strg Wt: 117-117
Hrs In Hole: 26.50	Pad OD: 7.25	WOB: 0 - 25
Start Depth: 7225.00	NB Stab: 0	TORQ: 8 - 8
End Depth: 7512.00	Bit to Bend: 4.04	SPP: 4370 - 4370
Total Drilled: 287.00	Bent Hsg/Sub°: 2.75 /	Motor RPM: 167
Avg. Total ROP: 31.31	Lobe/Stage: 7/8 / 5	Rotary RPM: 70 - 70
Circ Hrs: Tot/Only 15.25 / 6.08	Rev/GAL: 0.28	Flow Rate: 598 - 598
Percent Slide: 83.62	Rotor Jet: 0	Avg Diff:
Percent Hrs: 73.64	Prop BUR:	Stall Pres.:
Slide Hours: 6.75	Act BUR:	Off Bot Pres.:
Total Sliding: 240.00		
Avg. Slide ROP: 35.56		
Percent Rotary: 16.38		
Percent Hrs: 26.36		
Rotary Hours: 2.42		
Total Rotary: 47.00		
Avg. Rotary ROP: 19.45		
Reason POOH: TD		

MWD Spacing	Gamma: 53.47	Restiv: 0	Sensor: 62.14	Last Casing	O.D.
	GYRO: 0	DNSC: 7196	Sonic: 0	Shoe @:	Hanger @:

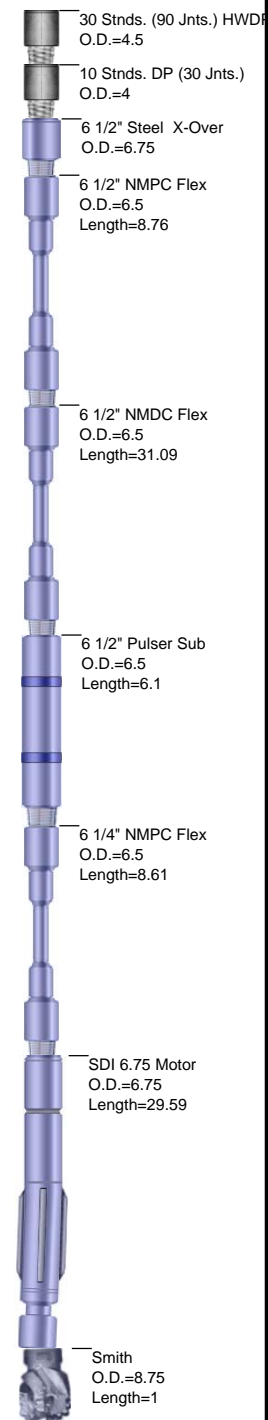
INC IN: .0 INC OUT: .0 AZM IN: .00 AZM OUT: .00

- 6 3/4" SDI Titan TD Drill Motor 7/8 5.0stg 2.75FBH
- Speed Ratio: 0.29RPG
- TFO: 248.55

- Bit to Sensor - 61.04'
- Bit to Survey - 63'
- Bit to Gamma - 52.39'

BHA Detail

Description	Serial #	I.D.	O.D.	Length	Sum	Top Conn	MFG.
Smith	JK0686		8.75	1.00	1.00	4 1/2 REGP	SMITH
SDI 6.75 Motor	65297		6.75	29.59	30.59	4 1/2 XHB	SDI
6 1/4" NMPC Flex	40386	2.8	6.5	8.61	39.20	4 1/2 XHB	SDI
6 1/2" NMDC Flex	122-329F	2.7	6.5	31.02	70.22	4 1/2 XHB	SDI
6 1/2" Pulser Sub	129-070		6.5	6.10	76.32	4 1/2 XHB	SDI
6 1/2" NMDC Flex	122-466F	2.7	6.5	31.09	107.41	4 1/2 XHB	SDI
6 1/2" NMPC Flex	38678	2.8	6.5	8.76	116.17	4 1/2 XHB	SDI
6 1/2" Steel X-Over	11583	3.25	6.75	3.04	119.21	XT39B	SDI
10 Stnds. DP (30 Jnts.)	RIG456	3.25	4	948.23	1067.44	XT39B	Other
30 Stnds. (90 Jnts.) HWD	RIG123	2.88	4.5	2,724.34	3791.78	XT39	Other



JOB NO.: 232835
Company: EnCana Oil & Gas (USA) Inc.
LOCATION: Ruhl Pad
RIG NAME: H&P 278
STATE: Colorado
COUNTY: Country
WELL NAME: Ruhl 1F 32H-B264

FIELD: Wattenberg
Township: 2N
Range 64W

MOTOR INFORMATION

Desc: 6.75 Drill Motor
 Bent Hsg/Sub: 2.7 / 0 Bit to Bend: 4.04
 Pad OD: 7.25 NB Stab:

Slide Report for BHA # 5

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
5	19-Dec	Sliding	01:45	03:10	1.42	7225	7293	68		48.0	70	8	598	4370	20R	58.05	172.36	0.00	
5	19-Dec	Sliding	03:25	04:30	1.08	7293	7336	43		39.7	70	8	598	4370	20R	66.44	173.19	0.00	
5	19-Dec	Sliding	06:20	08:35	2.25	7336	7388	52		23.1	70	8	598	4370	30R	74.62	176.31	0.00	
5	19-Dec	Sliding	08:45	09:45	1.00	7388	7435	47		47.0	70	8	598	4370	30R	82.02	180.01	0.00	
5	19-Dec	Sliding	09:55	10:10	0.25	7435	7450	15		60.0	70	8	598	4370	30R	85.32	180.89	0.00	
5	19-Dec	Drilling	10:10	11:40	1.50	7450	7482	32	25	21.3	70	8	598	4370		85.32	180.89	0.00	
5	19-Dec	Sliding	11:40	12:25	0.75	7482	7497	15		20.0	70	8	598	4370	30R	85.32	180.89	0.00	
5	19-Dec	Drilling	12:25	13:20	0.92	7497	7512	15	25	16.4	70	8	598	4370		85.32	180.89	0.00	

Total Drilled: 287 **Avg. Total ROP:** 31.31 **DEPTH% - TIME %**

Total Rotary Drilled: 47 **Avg. Rotary ROP:** 19.45 **Percent Rotary:** 16.38 - 26.36

Total Drilled Sliding: 240 **Avg. Slide ROP:** 35.56 **Percent Slide:** 83.62 - 73.64

BHA # 6

JOB NO.:	232835	Work Order:	FIELD:	Wattenberg
Company:	EnCana Oil & Gas (USA) Inc.		Township:	2N
LOCATION:	Ruhl Pad		SECT. RANGE:	32 64W
RIG NAME:	H&P 278		Lead DD:	Paul Turner (10972)
STATE:	Colorado		Co. Man:	Joe / Quiz
COUNTY:	Weld		BHA TYPE:	Steerable Assembly
WELL NAME:	Ruhl 1F 32H-B264		BHA WT:	-1962987 Wt @ Jars: N/A

Time and Depths	MOTOR DATA	Drilling Parameters
Date In: 21-Dec-14 @ 01:30	4.75 Drill Motor	SO/PU: 0 - 133 / 0-251
Date Out: 25-Dec-14 @ 02:15	MFG.: Hunting	Rot Strg Wt: 0-147
Hrs In Hole: 96.75	Pad OD: 5.125	WOB: 0 - 25
Start Depth: 7512.00	NB Stab: 0	TORQ: 7 - 16
End Depth: 11835.00	Bit to Bend: 5	SPP: 0 - 4420
Total Drilled: 4374.00	Bent Hsg/Sub°: 1.5 /	Motor RPM: No Rev/Gal Input
Avg. Total ROP: 78.57	Lobe/Stage: 5.6 / 8.3	Rotary RPM: 15 - 90
Circ Hrs: Tot/Only 63.25 / 7.58	Rev/GAL: 0	Flow Rate: 0 - 598
Percent Slide: 6.54	Rotor Jet: 0	Avg Diff:
Percent Hrs: 44.31	Prop BUR: 0	Stall Pres.:
Slide Hours: 24.67	Act BUR:	Off Bot Pres.:
Total Sliding: 286.00		
Avg. Slide ROP: 11.59		
Percent Rotary: 93.46		
Percent Hrs: 55.69		
Rotary Hours: 31.00		
Total Rotary: 4088.00		
Avg. Rotary ROP: 131.87		
Reason POOH: TD		

MWD Spacing	Gamma: 0	Restiv: 0	Sensor: 0	Last Casing	O.D.
	GYRO: 0	DNSC: 7512	Sonic: 0	Shoe @:	Hanger @:

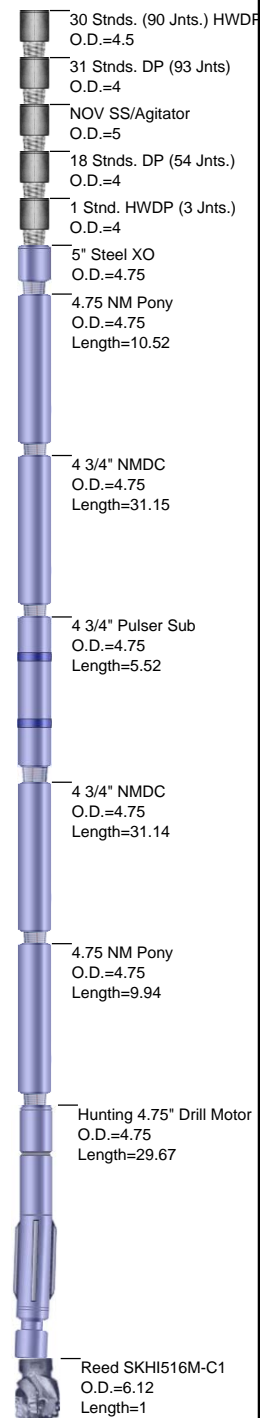
INC IN: .0 INC OUT: .0 AZM IN: .00 AZM OUT: .00

- 4.75" Hunting 5/6 8.3stg Drill Motor 1.50FBH
- Speed Ratio: 1.04RPG
- TFO: 330.94

- Bit to Sensor - 62.49'
- Bit to Survey - 65'
- Bit to Gamma - 53.84'

BHA Detail

Description	Serial #	I.D.	O.D.	Length	Sum	Top Conn	MFG.
Reed SKHI516M-C1	A200205		6.12	1.00	1.00	3 1/2 REGP	REED
Hunting 4.75" Drill Motor	159		4.75	29.67	30.67	3 1/2 IFB	HUNTING
4.75 NM Pony	51707	2.75	4.75	9.94	40.61	3 1/2 IFB	OTHER
4 3/4" NMDC	DR28956	2.75	4.75	31.14	71.75	3 1/2 IFB	SDI
4 3/4" Pulser Sub	65-105	2.75	4.75	5.52	77.27	3 1/2 IFB	SDI
4 3/4" NMDC	DR28964	2.75	4.75	31.15	108.42	3 1/2 IFB	SDI
4.75 NM Pony	52833	2.75	4.75	10.52	118.94	3 1/2 IFB	OTHER
5" Steel XO	107235	2.75	4.75	1.54	120.48	XT39B	SDI
1 Stnd. HWDP (3 Jnts.)	RIG222	2.88	4	91.61	212.09	XT39B	Other
18 Stnds. DP (54 Jnts.)	RIG789	3.25	4	1,706.34	1918.43	XT39B	Other
NOV SS/Agitator	1583003-2		5	22.75	1941.18	XT39B	Other
31 Stnds. DP (93 Jnts)	RIG111	3.25	4	2,940.61	4881.79	XT39B	Other
30 Stnds. (90 Jnts.) HWDP	RIG123	2.88	4.5	2,724.42	7606.21	XT39B	Other



JOB NO.: 232835
Company: EnCana Oil & Gas (USA) Inc.
LOCATION: Ruhl Pad
RIG NAME: H&P 278
STATE: Colorado
COUNTY: Country
WELL NAME: Ruhl 1F 32H-B264

FIELD: Wattenberg
Township: 2N
Range 64W

MOTOR INFORMATION

Desc: 4.75 Drill Motor
Bent Hsg/Sub: 1.5 / 0 **Bit to Bend:** 5
Pad OD: 5.125 **NB Stab:**

Slide Report for BHA # 6

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
6	21-Dec	Drilling	13:00	13:10	0.17	7512	7522	10	10	60.0	15	7	249	2500		85.32	180.89	0.00	
6	21-Dec	Sliding	14:35	15:00	0.42	7522	7537	15		36.0	15	7	598	2500	15R	85.32	180.89	0.00	
6	21-Dec	Drilling	15:00	15:35	0.58	7537	7606	69	15	118.3	70	10	299	4200		89.80	182.56	0.00	
6	21-Dec	Drilling	15:45	16:20	0.58	7606	7700	94	20	161.1	90	10	299	4200		90.40	183.15	0.00	
6	21-Dec	Drilling	16:25	16:50	0.42	7700	7795	95	20	228.0	90	10	299	4200		90.20	182.87	0.00	
6	21-Dec	Sliding	16:55	17:10	0.25	7795	7805	10		40.0	90	10	598	4200	15R	90.20	182.87	0.00	
6	21-Dec	Drilling	17:10	18:10	1.00	7805	7890	85	20	85.0	90	10	299	4200		89.83	183.07	0.00	
6	21-Dec	Sliding	18:20	18:30	0.17	7890	7900	10		60.0	90	10	598	4200		89.83	183.07	0.00	
6	21-Dec	Drilling	18:30	19:25	0.92	7900	7985	85	20	92.7	90	10	299	4200		91.71	183.12	0.00	
6	21-Dec	Drilling	19:30	19:55	0.42	7985	8079	94	20	225.6	90	10	299	4200		91.17	183.12	0.00	
6	21-Dec	Sliding	20:05	20:15	0.17	8079	8086	7		42.0	90	10	598	4200		91.17	183.12	0.00	
6	21-Dec	Drilling	20:15	20:35	0.33	8086	8174	88	20	264.0	90	10	299	4200		92.08	183.41	0.00	
6	21-Dec	Drilling	20:45	21:15	0.50	8174	8269	95	20	190.0	90	10	299	4200		91.55	183.16	0.00	
6	21-Dec	Drilling	21:25	21:50	0.42	8269	8364	95	20	228.0	90	10	299	4200		90.74	182.88	0.00	
6	21-Dec	Drilling	22:00	22:15	0.25	8364	8458	94	20	376.0	90	10	299	4200		90.70	183.00	0.00	
6	21-Dec	Drilling	22:25	22:45	0.33	8458	8553	95	20	285.0	90	10	299	4200		90.30	182.60	0.00	
6	21-Dec	Sliding	23:00	23:25	0.42	8553	8565	12		28.8	90	10	598	4200	90L	90.30	182.60	0.00	
6	21-Dec	Drilling	23:25	24:00	0.58	8565	8647	82	20	140.6	90	10	299	4200		90.74	181.71	0.00	
6	22-Dec	Drilling	00:10	00:35	0.42	8647	8741	94	24	225.6	90	10	299	4420		90.97	181.19	0.00	
6	22-Dec	Sliding	00:45	01:25	0.67	8741	8756	15		22.5	90	10	598	4420	135L	90.97	181.19	0.00	
6	22-Dec	Drilling	01:25	01:55	0.50	8756	8836	80	24	160.0	90	10	299	4420		89.60	179.78	0.00	
6	22-Dec	Drilling	02:10	02:35	0.42	8836	8931	95	24	228.0	90	10	299	4420		90.07	179.57	0.00	
6	22-Dec	Sliding	02:45	03:05	0.33	8931	8939	8		24.0	90	10	299	4420	160R	90.07	179.57	0.00	
6	22-Dec	Drilling	03:05	03:30	0.42	8939	9025	86	24	206.4	90	10	299	4420		89.56	179.65	0.00	
6	22-Dec	Drilling	03:40	04:15	0.58	9025	9120	95	24	162.9	90	10	299	4420		90.64	180.33	0.00	
6	22-Dec	Sliding	04:25	05:15	0.83	9120	9130	10		12.0	90	10	299	4420	180	90.64	180.33	0.00	

Slide Report for BHA # 6

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
6	22-Dec	Drilling	05:15	05:40	0.42	9130	9215	85	24	204.0	90	10	299	4420		90.10	180.66	0.00	
6	22-Dec	Drilling	05:50	06:15	0.42	9215	9310	95	24	228.0	90	10	299	4420		91.34	180.94	0.00	
6	22-Dec	Sliding	06:20	06:50	0.50	9310	9325	15		30.0	90	10	299	4420	165L	91.34	180.94	0.00	
6	22-Dec	Drilling	06:50	07:10	0.33	9325	9404	79	24	237.0	90	11	275	3900		89.60	180.53	0.00	
6	22-Dec	Drilling	07:15	07:30	0.25	9404	9499	95	24	380.0	90	11	275	3900		89.73	180.44	0.00	
6	22-Dec	Drilling	07:35	08:10	0.58	9499	9594	95	24	162.9	90	11	275	3900		88.99	180.48	0.00	
6	22-Dec	Drilling	08:15	08:50	0.58	9594	9689	95	24	162.9	90	11	275	3900		88.09	179.72	0.00	
6	22-Dec	Sliding	08:55	10:10	1.25	9689	9704	15		12.0	90	11	299	3900	15R	88.09	179.72	0.00	
6	22-Dec	Drilling	10:10	10:35	0.42	9704	9784	80	24	192.0	90	11	275	3900		89.19	179.84	0.00	
6	22-Dec	Sliding	10:40	11:40	1.00	9784	9799	15		15.0	90	11	299	3900	15R	89.19	179.84	0.00	
6	22-Dec	Drilling	11:40	12:30	0.83	9799	9878	79	24	94.8	90	11	275	3900		90.07	180.16	0.00	
6	22-Dec	Sliding	12:35	14:15	1.67	9878	9893	15		9.0	90	11	299	3900	15R	90.07	180.16	0.00	
6	22-Dec	Drilling	14:15	15:00	0.75	9893	9973	80	24	106.7	90	11	275	3900		90.91	180.46	0.00	
6	22-Dec	Drilling	15:15	16:00	0.75	9973	10068	95	15	126.7	90	12.5	275	3900		90.77	180.98	0.00	
6	22-Dec	Drilling	16:15	16:55	0.67	10068	10162	94	15	141.0	90	12.5	275	3900		92.02	181.39	0.00	
6	22-Dec	Sliding	17:25	19:00	1.58	10162	10177	15		9.5	90	12.5	299	3900	150L	92.02	181.39	0.00	
6	22-Dec	Drilling	19:00	19:55	0.92	10177	10257	80	15	87.3	90	12.5	275	3900		91.04	181.01	0.00	
6	22-Dec	Sliding	20:25	22:40	2.25	10257	10272	15		6.7	90	12.5	299	3900	160L	91.04	181.01	0.00	
6	22-Dec	Drilling	22:40	23:50	1.17	10272	10352	80	15	68.6	90	12.5	275	3900		89.23	180.59	0.00	
6	23-Dec	Drilling	00:00	00:15	0.25	10352	10362	10	15	40.0	90	12.5	275	3900		89.00	180.00	0.00	
6	23-Dec	Sliding	01:05	01:50	0.75	10362	10368	6		8.0	90	12.5	299	3900	180	89.00	180.00	0.00	
6	23-Dec	Drilling	01:50	03:10	1.33	10368	10447	79	15	59.3	90	12.5	275	3900		88.96	179.80	0.00	
6	23-Dec	Drilling	03:20	04:20	1.00	10447	10541	94	15	94.0	90	12.5	275	3900		89.97	179.72	0.00	
6	23-Dec	Sliding	04:30	06:00	1.50	10541	10550	9		6.0	90	12.5	299	3900	165L	89.97	179.72	0.00	
6	23-Dec	Drilling	06:00	07:45	1.75	10550	10636	86	15	49.1	90	12.5	275	3900		90.10	179.40	0.00	
6	23-Dec	Sliding	16:00	17:00	1.00	10636	10648	12		12.0	90	12.5	299	3900	180	90.10	179.40	0.00	
6	23-Dec	Drilling	17:00	17:40	0.67	10648	10731	83	15	124.5	90	16	300	3900		88.05	178.98	0.00	
6	23-Dec	Drilling	17:50	18:55	1.08	10731	10826	95	15	87.7	90	16	300	3260		87.48	179.12	0.00	
6	23-Dec	Sliding	19:05	21:05	2.00	10826	10838	12		6.0	90	16	300	4295	15R	87.48	179.12	0.00	
6	23-Dec	Drilling	21:05	22:10	1.08	10838	10921	83	15	76.6	90	16	300	4295		87.95	179.30	0.00	
6	23-Dec	Sliding	22:20	23:35	1.25	10921	10936	15		12.0	90	14	300	4295	5R	87.95	179.30	0.00	
6	23-Dec	Drilling	23:35	24:00	0.42	10936	10987	51	15	122.4	90	14	300	4295		88.99	179.44	0.00	
6	24-Dec	Drilling	00:00	00:05	0.08	10936	10945	9	21	108.0	90	14				87.95	179.30	0.00	
6	24-Dec	Drilling	00:05	00:25	0.33	10945	11016	71	21	213.0	90	14				88.99	179.44	0.00	
6	24-Dec	Sliding	00:35	01:30	0.92	11016	11026	10	21	10.9	0	0	300	4295	5R	88.99	179.44	0.00	

Slide Report for BHA # 6

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
6	24-Dec	Drilling	01:30	02:10	0.67	11026	11110	84	21	126.0	90	14		4295		90.84	178.77	0.00	
6	24-Dec	Drilling	02:15	03:00	0.75	11110	11205	95	21	126.7	90	14	300	4295		92.48	179.18	0.00	
6	24-Dec	Sliding	03:25	04:30	1.08	11205	11216	11	21	10.2	90	14	300	4295	180	92.48	179.18	0.00	
6	24-Dec	Drilling	04:30	05:15	0.75	11216	11300	84	21	112.0	90	14	300	4295		91.31	179.06	0.00	
6	24-Dec	Sliding	05:25	06:05	0.67	11300	11310	10	21	15.0	90	14	300	4295	180	91.31	179.06	0.00	
6	24-Dec	Drilling	06:05	06:45	0.67	11310	11395	85	21	127.5	90	14	300	4295		89.90	178.77	0.00	
6	24-Dec	Drilling	06:50	07:30	0.67	11395	11489	94	21	141.0	90	14	300	4295		91.21	179.26	0.00	
6	24-Dec	Sliding	07:40	10:25	2.75	11489	11503	14	21	5.1	90	14	300	4295	180	91.21	179.26	0.00	
6	24-Dec	Drilling	10:25	11:05	0.67	11503	11584	81	21	121.5	90	14	300	4295		89.87	178.90	0.00	
6	24-Dec	Sliding	11:15	12:30	1.25	11584	11594	10	21	8.0	90	14	300	4295	160	89.87	178.90	0.00	
6	24-Dec	Drilling	12:30	13:10	0.67	11594	11679	85	21	127.5	90	14	300	4295		88.12	178.79	0.00	
6	24-Dec	Drilling	13:20	14:10	0.83	11679	11774	95	21	114.0	90	14	300	4295		88.49	177.55	0.00	
6	24-Dec	Drilling	14:25	14:50	0.42	11774	11835	61	21	146.4	90	14	300	4295		88.49	177.55	0.00	

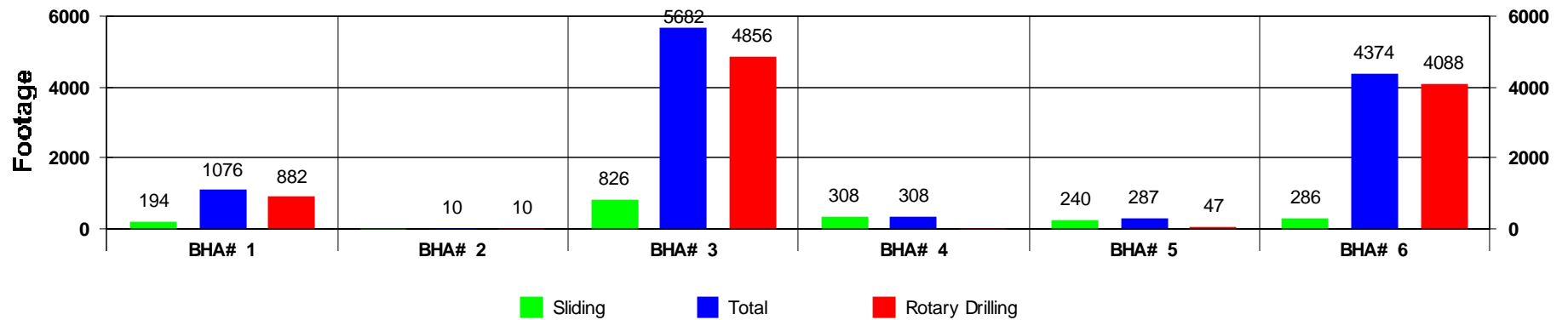
Total Drilled: 4374 **Avg. Total ROP:** 78.57 **DEPTH% - TIME %**

Total Rotary Drilled: 4088 **Avg. Rotary ROP:** 131.87 **Percent Rotary:** 93.46 - 55.69

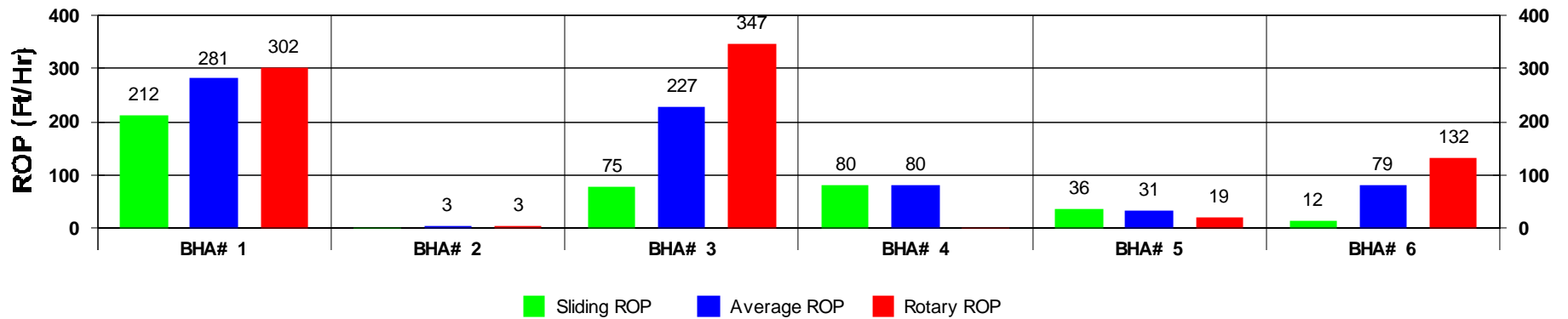
Total Drilled Sliding: 286 **Avg. Slide ROP:** 11.59 **Percent Slide:** 6.54 - 44.31

JOB NO.:	232835	FIELD:	Wattenberg	
Company:	EnCana Oil & Gas (USA) Inc.	Township:	2N	
LOCATION:	Ruhl Pad	SECTORANGE:	32	64W
RIG NAME:	H&P 278	COMMENT		
STATE:	Colorado			
COUNTY:	Weld			
WELL NAME:	Ruhl 1F 32H-B264			

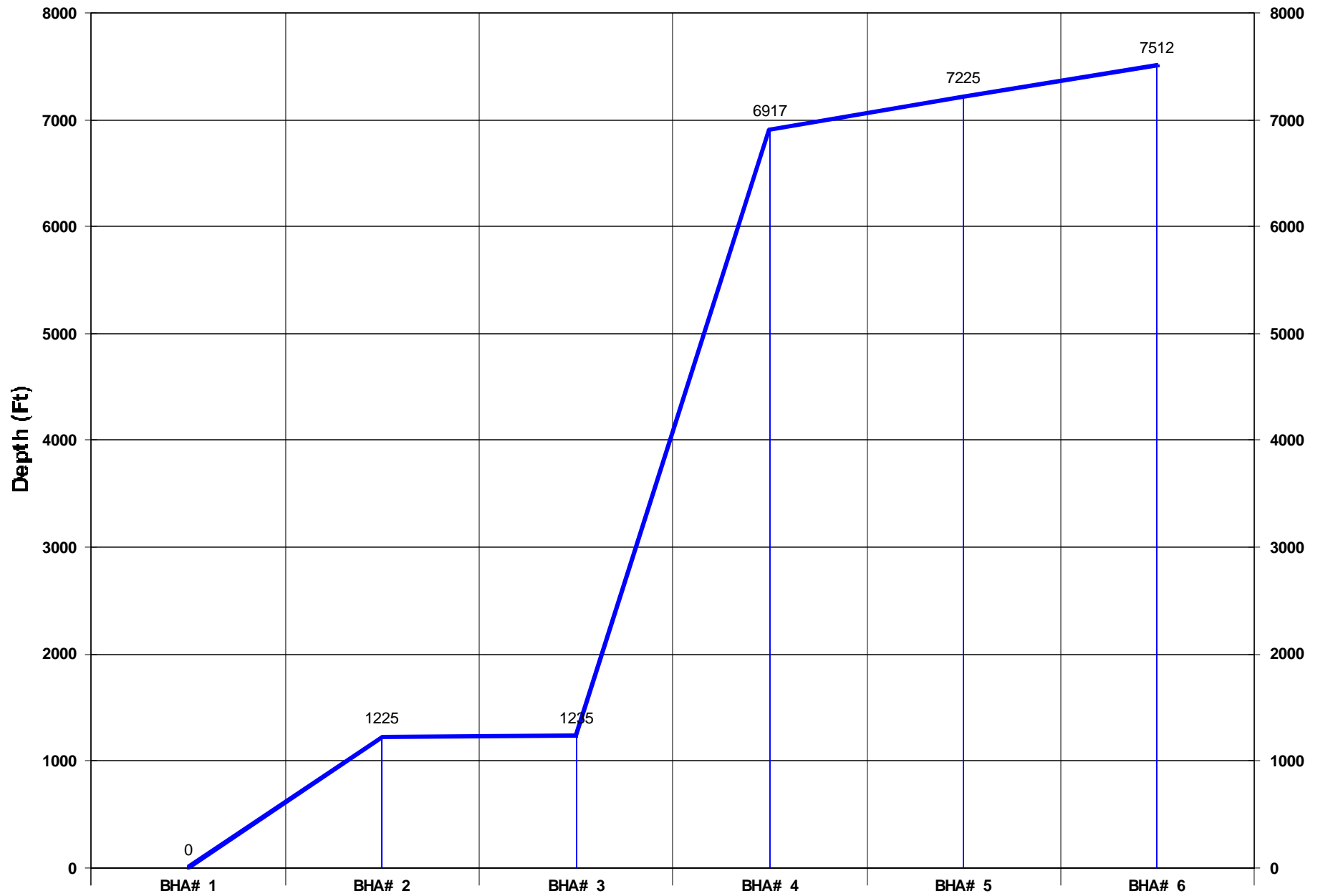
Footage Drilled with BHA



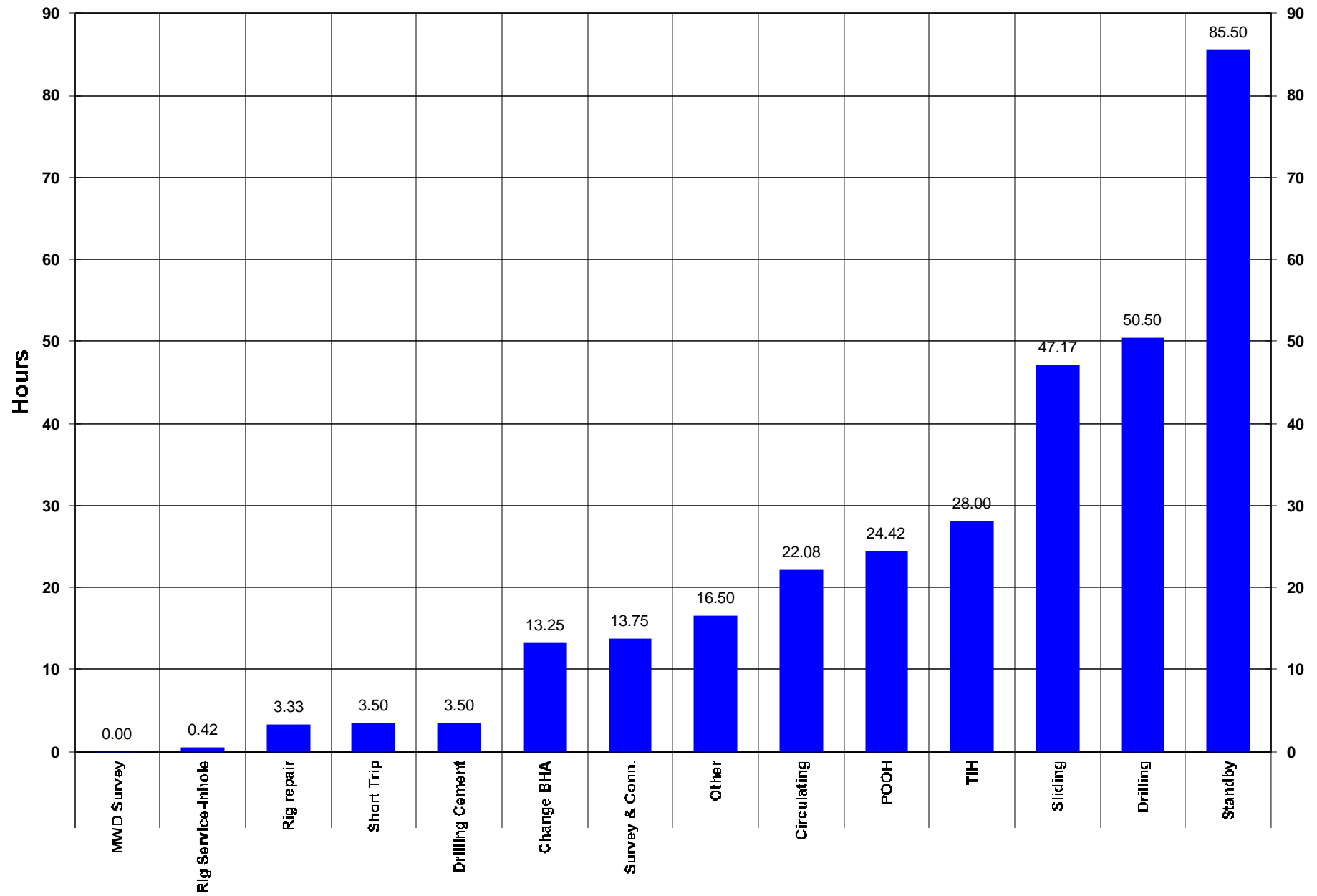
ROP vs BHA



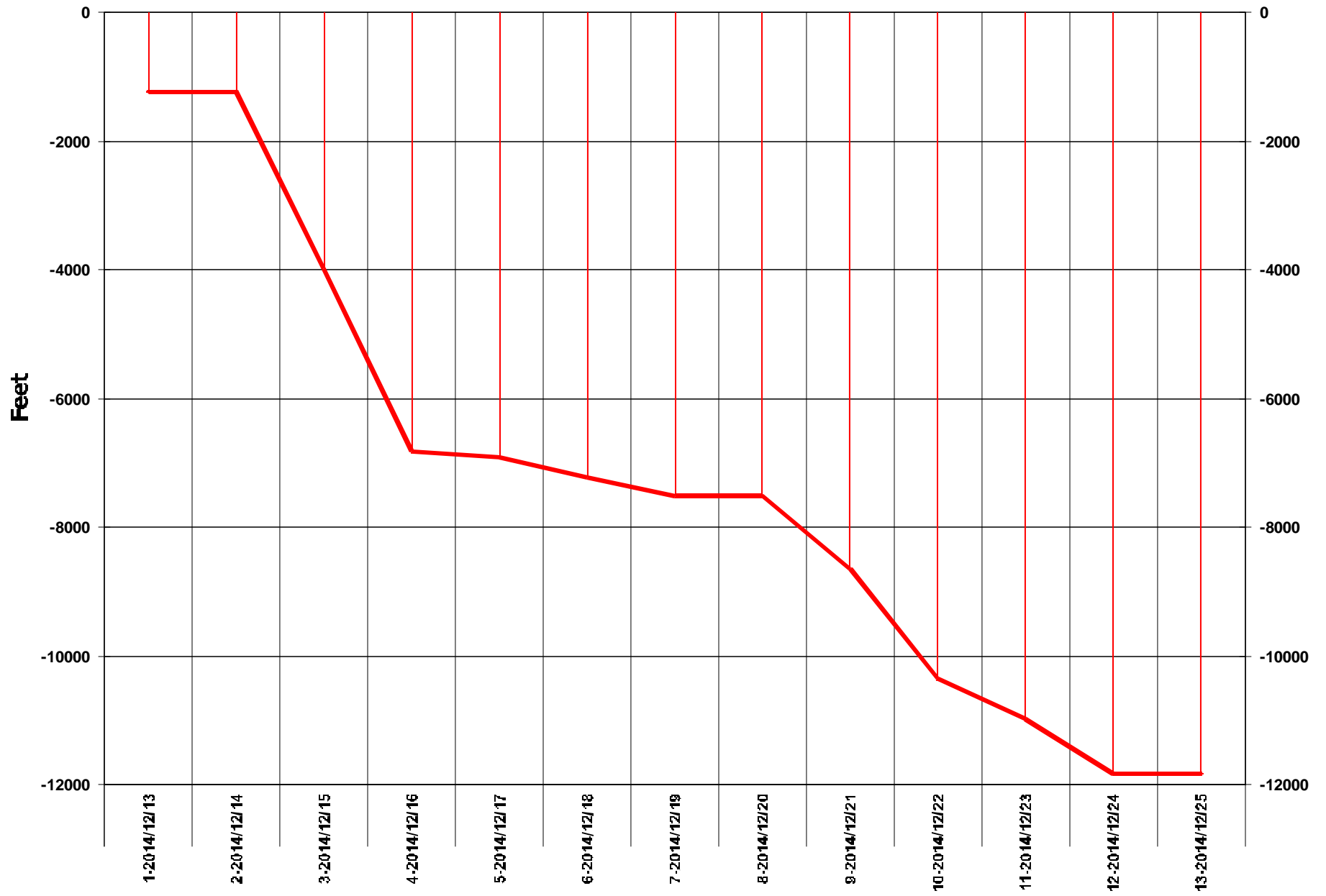
Depth vs BHA



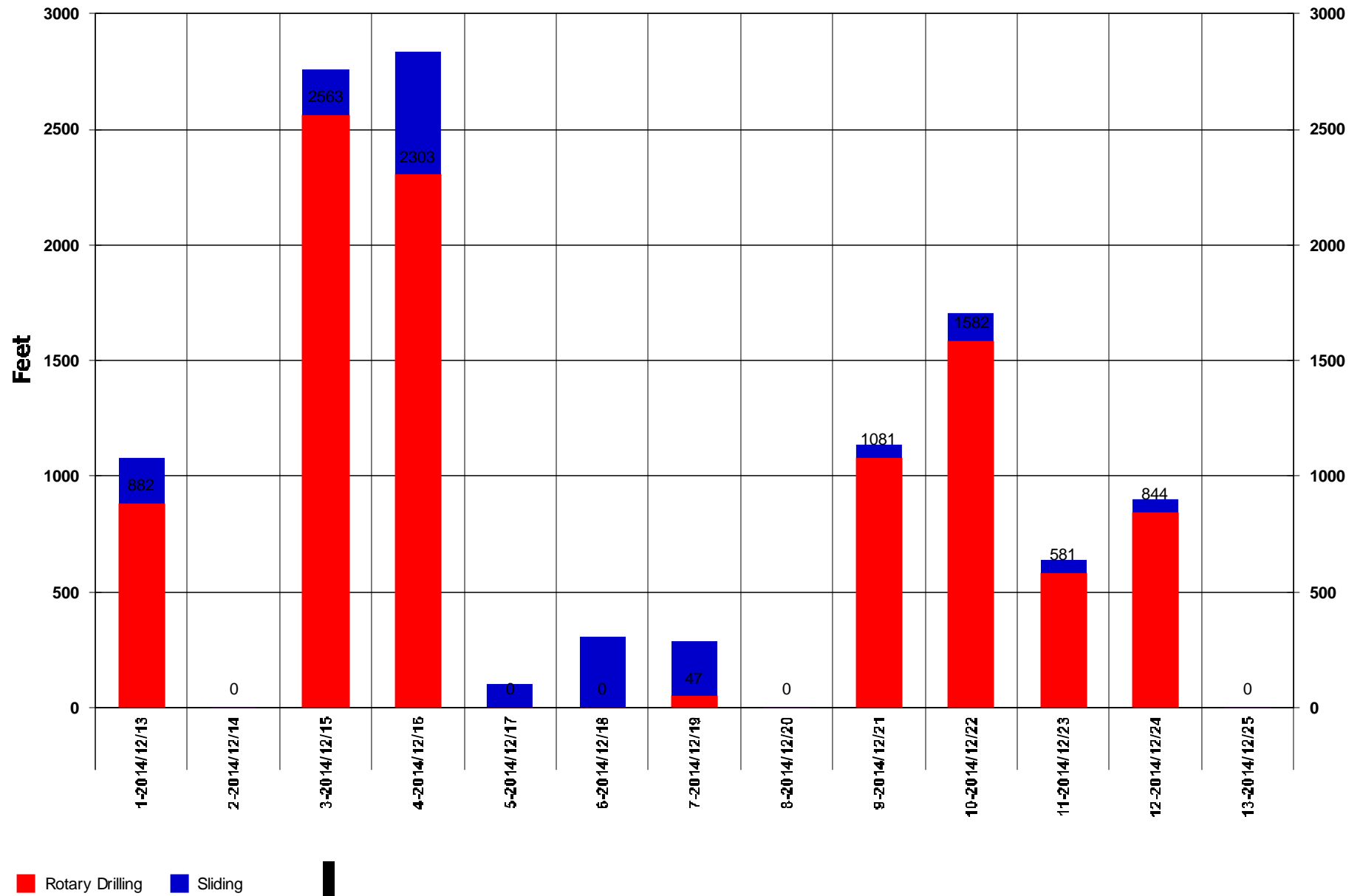
Activity Histogram



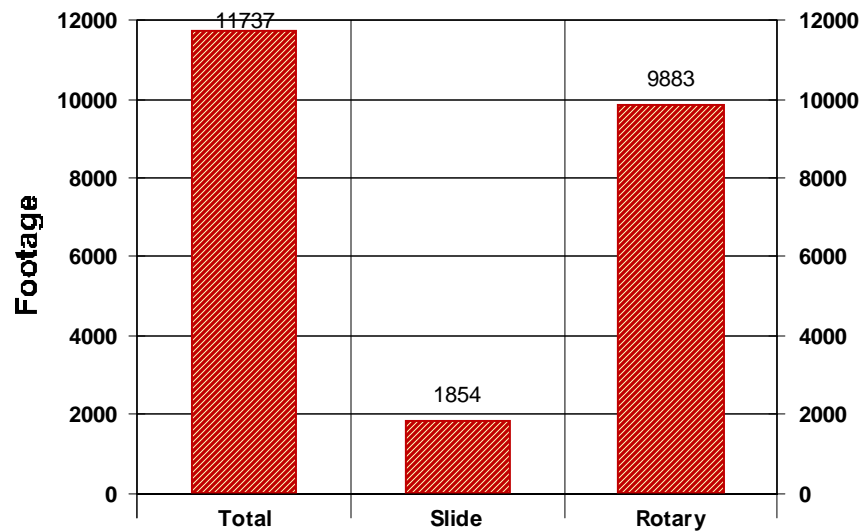
Measured Depth vs Days



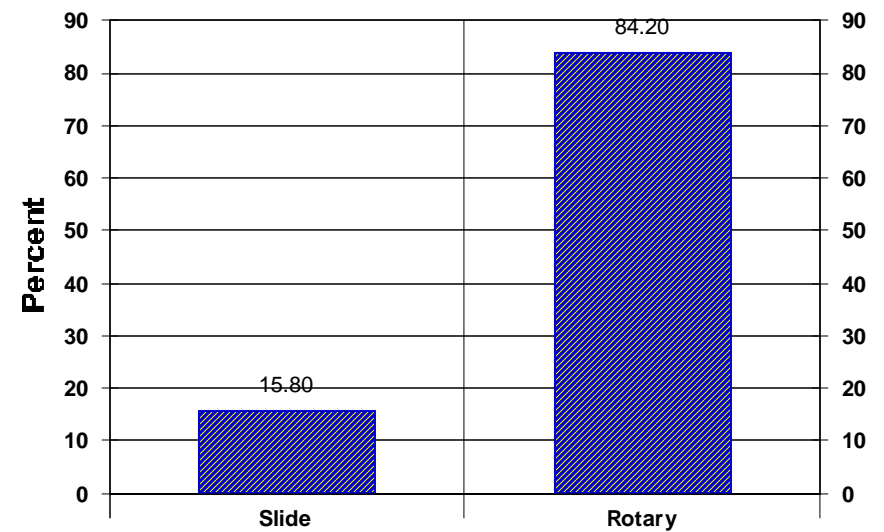
Daily Footage



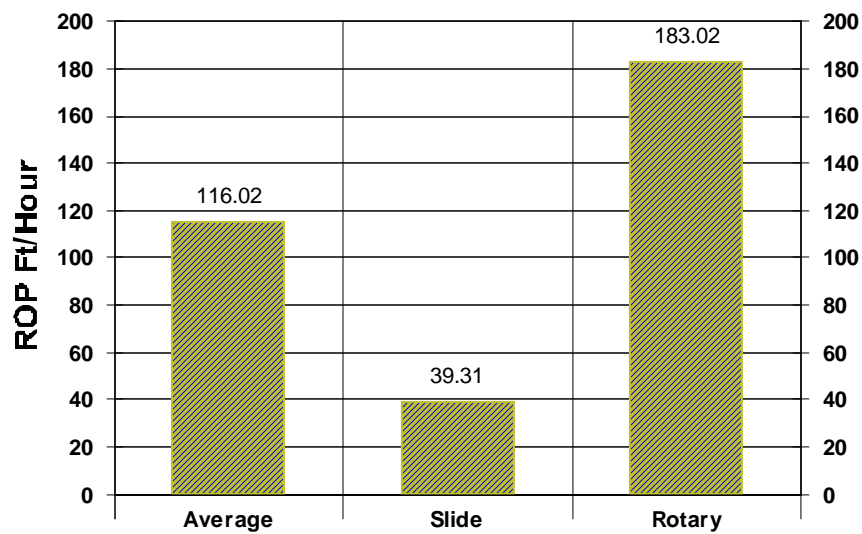
Footage Drilled Totals



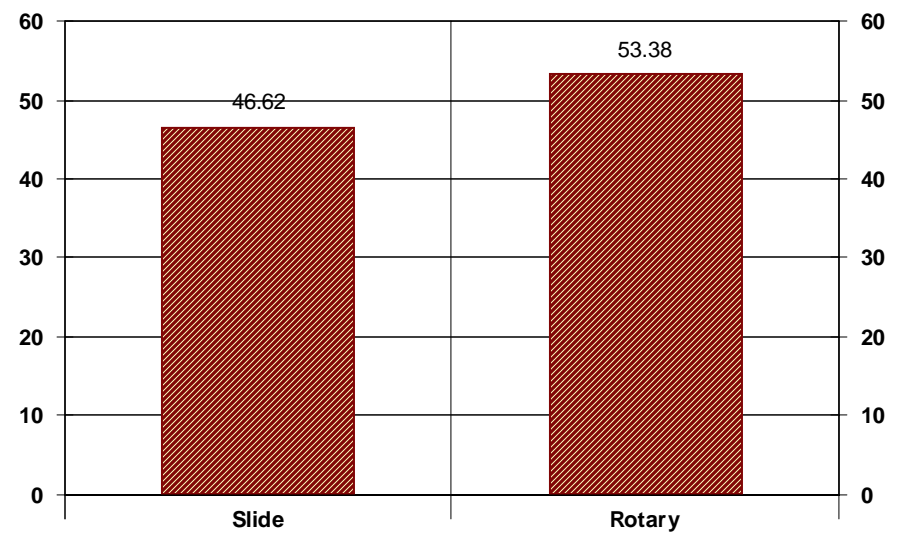
Footage Percent



Rate of Penetration Totals



Time Percent





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