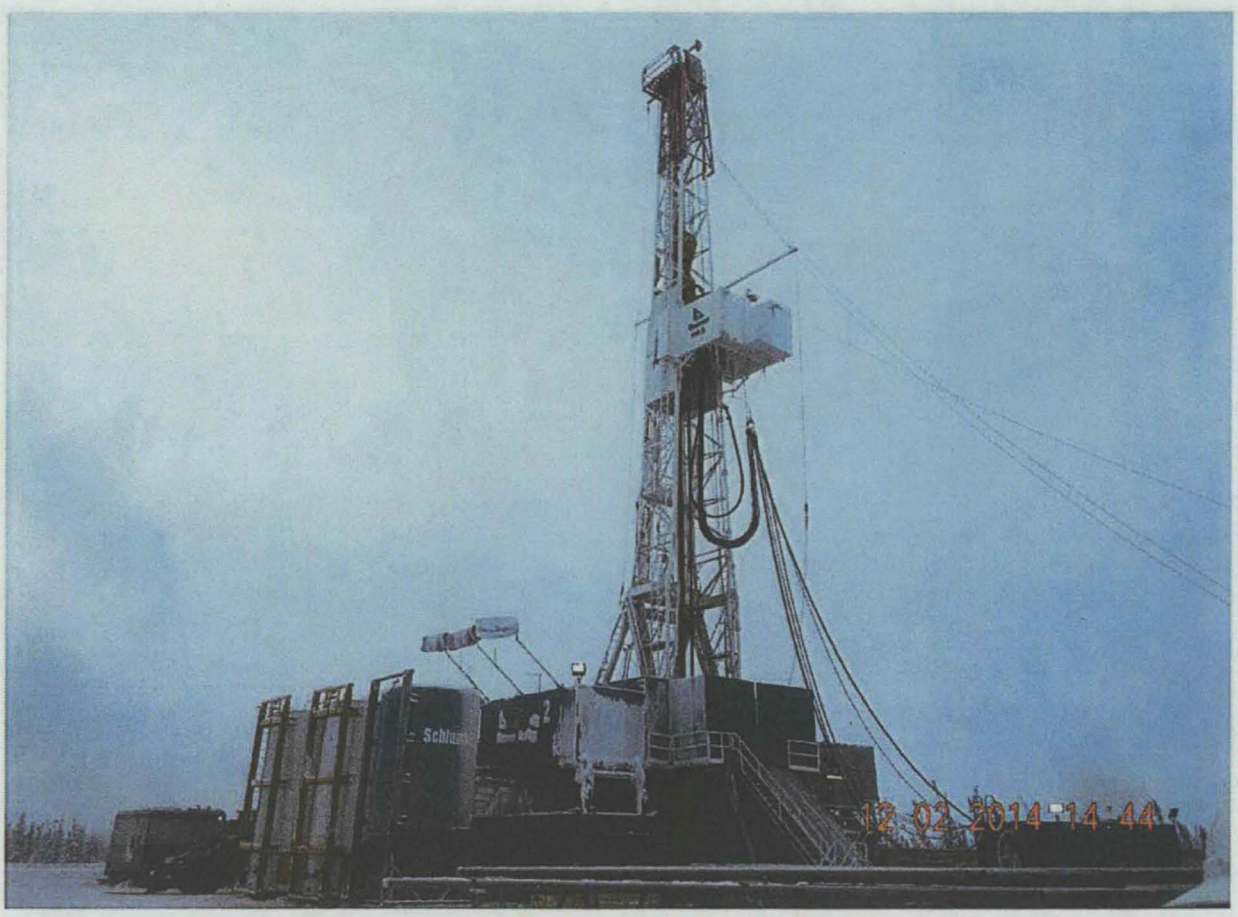
ConocoPhillips Resources Canada CORP.

COPRC Dodo Canyon E-76 Final Well Report

Grid # 65°10′, 126°45′

2014/04/12



ConocoPhillips

ConocoPhillips Canada
401 - 9th Avenue S.W.
P.O. Box 130, Station "M"
Calgary, Alberta T2P 2H7
(403) 233-4000

MAIL ROOM
SALLE DE COURIER
2014 MAY 16 A 11:27
NEB/ONE

May 13, 2014

Chief Conservation Officer
National Energy Board
444 Seventh Avenue SW
Calgary, AB
T2P 0X8
Canada

Attention: Patrick Smyth

SUBJECT: OA-1211-002 - Submission of COPRC Dodo Canyon E-76 Well History Report

Dear Sir:

ConocoPhillips Canada Resources Corp. ("ConocoPhillips") hereby submits the Well History Report for COPRC Dodo Canyon E-76 as per requirement 3 of the Approval to Drill a Well Term and Conditions. This submission contains:

- Two paper copies of the Well History Report
- Two paper copies of all Well Logs
- One electronic copy of the Well History Report
- One LAS copy of final log prints
- Two paper copies of Geological Report (included in End of Well report)
- One electronic copy of Geological Report
- Two paper copies of Mud Gas Log (included in End of Well report)
- One electronic copy of Mud Gas Log

Also enclosed is one copy of the Well Termination record for the above noted well.

Please direct any questions or concerns concerning this submission to my attention at (403) 233-3250 or Cyril Jenkins at (403) 233-3326.

Sincerely,

Eric Hanson, P.Geol (AB)
Supervisor Central Mackenzie Valley
Chinook Appraisal

National Energy Board / Office national de l'énergie

WELL TERMINATION RECORD

Well Name	COPRC Dodo Canyon E-76	Well ID	2082
Operator	ConocoPhillips Canada Resources Corp.	Current Well Status	Suspended
Total Depth	2910m KB	Licence No.	Exploration Licence 470
Location Unit	E	Section 76	Grid 65-10 126-45
Coordinates (NAD27)	*Surface* Lat	65 ° 05 ' 27.0 "	Long 126 ° 59 ' 58.0 "
	Bottom Hole Lat	65 ° 05 ' 46.3 "	Long 127 ° 01 ' 26.2 "
Region	NWT Mainland		
Target Formation	Canol	Field/Pool	/
Elevation KB/RT	273.40 m	Ground Level / Seafloor	268.20 m
Spud/Re-Entry Date	28-Dec-13	Rig Release Date	01/23/14

CASING AND CEMENTING PROGRAM

O.D. (mm)	Weight (kg/m)	Grade	Setting Depth (m KB)	Cementing (m^3)
244.5	53.57	J-55	603.0 √	29.5
177.8	38.69	P-110	1908.0 √	34.6
114.3	17.26	P-110	2909 √	15.6

PLUGGING PROGRAM

Type of Plug	Interval (m KB)	Felt	Depth (m KB)	Cement (m^3)
Other	-	No		
Other	-	No		
Other	-	No		
Other	-	No		
Other	-	No		

PERFORATION

Interval (m KB)	Comments
2789-2858	Stage 1
2685-2763	Stage 2
2590-2667	Stage 3
2494-2572	Stage 4 Details of stages 5 to 10 provided in COPRC Dodo Canyon E-76 end of well Report

Lost Circulation/Overpressure Zones	n/a
Equipment Left on Seafloor (Describe)	n/a
Provision for Re-entry (Describe and attach sketch)	See Current Well Schematic. 60.3 mm tubing set in wellhead w/downhole gauges with surface readout in place
Other Downhole Completion/Suspension	

"I certify that the information provided on this form is true and correct"

Name	*Eric Hanson*	Telephone	(403) 233-3250 Ext
Job Designation	Team Lead, Central Mackenzie Valley	E-Mail	Eric.S.Hanson @cop.com
Operator	ConocoPhillips Canada		
Signature		Date	May 12 2014

Responsible Officer of Company

NATIONAL ENERGY BOARD USE ONLY

The details of this document have been examined and verified by

Job Designation		Well Identifier	Unique Well Identifier
Signature		Date	

NEB Authority

ConocoPhillips Resources Canada CORP.

COPRC Dodo Canyon E-76 Final Well Report

Grid # 65°10′, 126°45′

2014/04/12



COPRC Dodo Canyon E-76

Table of Contents

Table of Contents **2**
1.0 Introduction **4**
1.1 Summary 4
1.2 Locality Map 6
2.0 General Data **7**
2.1 Well Name 7
2.2 Unique Well Identifier 7
2.3 Operator and Drilling Contractor 7
2.4 Difficulties and Delays 7
3.0 Summary of Drilling Operations **8**
3.1 Elevations 8
3.2 Total depth 8
3.3 Spud Date and Time 8
3.4 Date Drilling Completed 8
3.5 Rig Release Date and Time 8
3.6 Well Status 8
3.7 Hole sizes and depths 8
3.8 Casing and Cementing Record 8
3.9 Drilling Fluids 9
3.10 Formation Leak Off Tests 9
3.11 Time Distribution 9
3.12 Deviation Survey 9
3.13 Composite Drilling Record 10
4. Geology **12**
4.1 Drill Cuttings 12
4.2 Cores 12
4.3 Lithology 12
5. Well Evaluation **13**
5.1 Open Hole Logs 13
5.2 Summary of Hydraulic Fracturing Operations 13
5.3 Completion Operations Commence 13
5.4 Fracturing Operations Completed 13
5.5 Perforated Intervals 14
5.6 Multi Stage Fracturing Operations 14
5.7 Well Flowback and Flow testing 15
5.8 Flowback Volumes 15
5.9 Flare Volumes 16
5.10 Current Wellbore Schematic 17
5.11 Suspension Status 18
Appendices to Well History Report **19**
I. Final Survey Plot of COPRC Dodo Canyon E-76 19
II. Casing and Cementing Report 20
III. Drilling Fluid Summary 22
IV. Leak Off Test Charts 23
V. Geological Strip log 24
VI. Mud Gas log 25
VII. Daily Activity and Cost Summary Report 26

VIII.	Daily Drilling Reports	27
IX.	Tour sheets – Drilling Rig	28
X.	Bit record	29
XI.	Directional Summary	30
XII.	Completions Daily Reports	31
XIII.	Completion Daily Activity and Cost Summary	32
XIV	Tour sheets – Service Rig	33
XV	Final Completions Schematic	34
XVI	Completions End of Job QC Summary	35
XVII	Electric Logs	36
XVIII	C RING FRESH WATER LEAKAGE INCIDENT	37

1.0 Introduction

1.1 Summary

The COPRC Loon Creek well was spudded on December 28, 2013 and the rig was released on January 21 2014 after reaching a total depth of 2910 m KB with a total of 27 operating days on the well.

Construction operations to support ConocoPhillips' winter 2013/14 exploration program began on November 22, 2013 with the start of construction of access roads from ConocoPhillips' staging area to the E-76 well site. Initial profiling of the Mackenzie River ice cover was done on November 30 2013 and construction of the ice bridge was undertaken working from both the EL470 and Norman Wells sides of the river. Clearing of the ice bridge route was conducted with flooding and thickening of the 6 km ice bridge beginning in early December. The ice bridge was considered thick enough to support normal loads on December 11 2013 and it was capable of taking full loads by January 30, 2014.

The Dodo Canyon E-76 well pad was completed on December 10 2013 and Beaver Rig 2 was mobilized from the storage site to the E-76 well site beginning on December 11, 2013 and rig up was complete by December 22. Dodo Canyon E-76 was spudded on December 28 2013 and the rig was released on January 21 2014 after reaching a total depth of 2910 metres of which 1002 metres was drilled horizontally in the Canol formation. The well required a total of 27 days for operations from spud to rig release.

Drilling operations were conducted with no major issues and no safety incidents. The top of the Canol target zone was encountered at 1689 meters (TVD). Intermediate hole was drilled to 1908 M MD and logged with Schlumberger open hole tools down to 1814 m. The log run consisted of the AIT-PEX-BHC-TLD2-ERCD logging tools. An intermediate 177.8 mm casing string was run and cemented to surface without any issues. The horizontal hole was logged using logging while drilling (LWD) tools which provides Gamma Ray data. A 114.3 mm liner was run to bottom, set and cemented full length in preparation for completion operations.

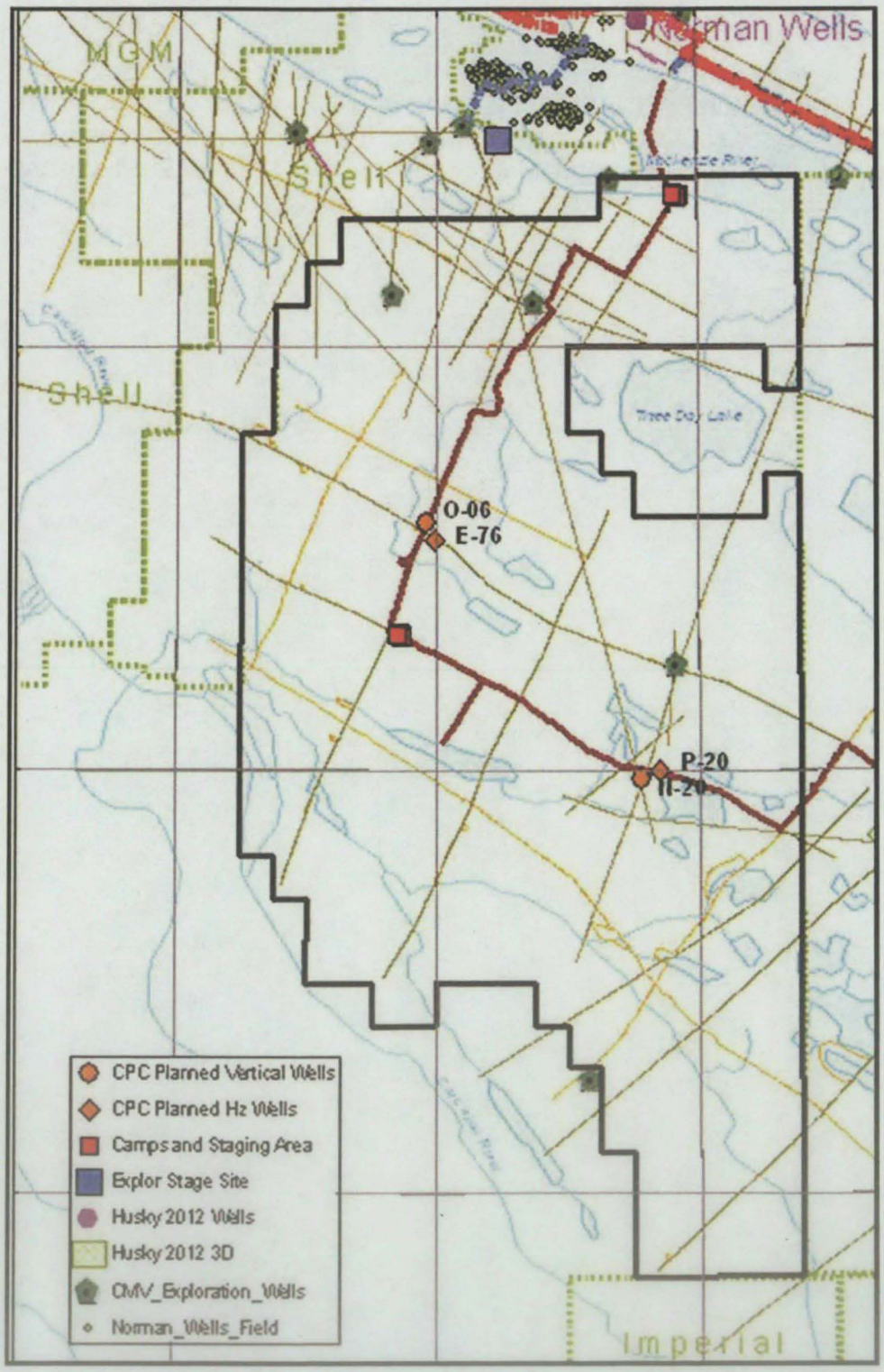
Completion operations began on January 29 2014 with the setup of water tanks, a C-ring frac pond and well site trailers. The GNWT Mackenzie Valley Winter road opened on January 20 2014 and completions equipment began arriving on EL470 on January 27 2014. Rig up was completed by February 2, 2014 and completions operations commenced February 5 2014 when coil tubing was used to clean out the wellbore. Hydraulic fracturing operations began February 9 and were completed by February 17 2014. A total of 10 stages were fracked in the E-76 well, with each frac consisting of about 550 m^3 of water and 100 tonnes of sand proppant.

The well was again cleaned out using a coil tubing rig and then a production packer was set at 1798 m KB on wireline. A tubing head was made up on the wellhead in preparation for Flowback operations. Nabors Service Rig #414 was rigged up on the

well on February 26 and ran a string of 60.3 mm tubing complete with Weatherford surface readout down hole gauges and landed the tubing string in the packer. All wellhead and down hole pressure tests were good. Nabors Service Rig was released on March 3 2014 after the wells was swabbed and had flowed to testers for 42 hours.

Dodo Canyon E-76 began flowing on March 2 and was flowed until March 20. The well was flowed for a total 421 hours. Down hole pressure gauges were left in the well to monitor pressure build up following flowback; these gauges will be recovered next season. All completions equipment was rigged out by March 28 2014 and the well was left with wellhead installed and valves locked.

1.2 Locality Map



2.0 General Data

2.1 Well Name

COPRC Dodo Canyon E-76

2.2 Unique Well Identifier

300E766510126450

2.3 Operator and Drilling Contractor

ConocoPhillips Canada Resources Corporation

Beaver Drilling Ltd. Rig #2

2.4 Difficulties and Delays

There were no significant drilling issues or delays experienced on this well.

3.0 Summary of Drilling Operations

3.1 Elevations

Ground Level: 268.20 m

Kelly Bushing: 273.40 m

KB – Ground Level: 5.20 m

3.2 Total depth

2910 m KB

3.3 Spud Date and Time

December 28 2013 @ 0630 Hours

3.4 Date Drilling Completed

Drilling completed 1/20/2104

3.5 Rig Release Date and Time

Rig Released 01 /23/13 @2400 Hrs.

3.6 Well Status

Suspended

3.7 Hole sizes and depths

Surface Hole: 311 mm to 603 m KB

Intermediate Hole: 222 mm to 1908 m KB

Main Hole: 156 mm to 2910 m KB (TD)

3.8 Casing and Cementing Record

3.8.1 Conductor Hole

508 mm conductor set at 20 m. Cemented to surface with 10 t class 'G' Arctic blend cement.

3.8.2 Surface Hole

244.5 mm, 53.57 kg/m, J-55 LTC set at 603.0 m KB. Cemented to surface with 32 t RFC 1740 cement.

3.8.3 Intermediate Hole

177.8 mm, 38.69 kg/m P-110 LTC set at 1908.0 m KB. Cemented to surface with 20 t HiLITE 1400 lead cement followed by 13 t Class 'G' tail cement.

3.8.4 Production Hole

114.3 mm, 17.26 kg/m P-110 LTC liner set at 2909 m KB(TD). Cemented to liner top with 21 t Class 'G' cement.

3.9 Drilling Fluids

3.9.1 Surface Hole

Gel Chemical (MI Swaco)

3.9.2 Intermediate/Main Hole

Versaclean Mineral Oil (MI Swaco)

3.10 Formation Leak Off Tests

3.10.1 Surface Casing Drill out

A Formation Integrity Test (FIT) was conducted on Dodo Canyon E-76 on January 7, 2014 at a depth of 989 m KB after drilling out the surface casing shoe at 603 m KB and making 386 metres of new hole. The FIT at 989 m KB was conducted with 1008.0 kg/m^3 OBM in the hole and was taken to a pressure of 2500 kPa with no leak off. This equates to an equivalent fracture pressure of 12280 kPa or an equivalent mud weight of 1270 kg/m^3.

3.11 Time Distribution

Casing: 62.0 hrs.

Cementing: 17.75 hrs.

Drilling: 415.50 hrs.

Formation Evaluation: 14.25 hrs.

Rig Move: 433.50 hrs.

Rig Maintenance: 77.0 hrs.

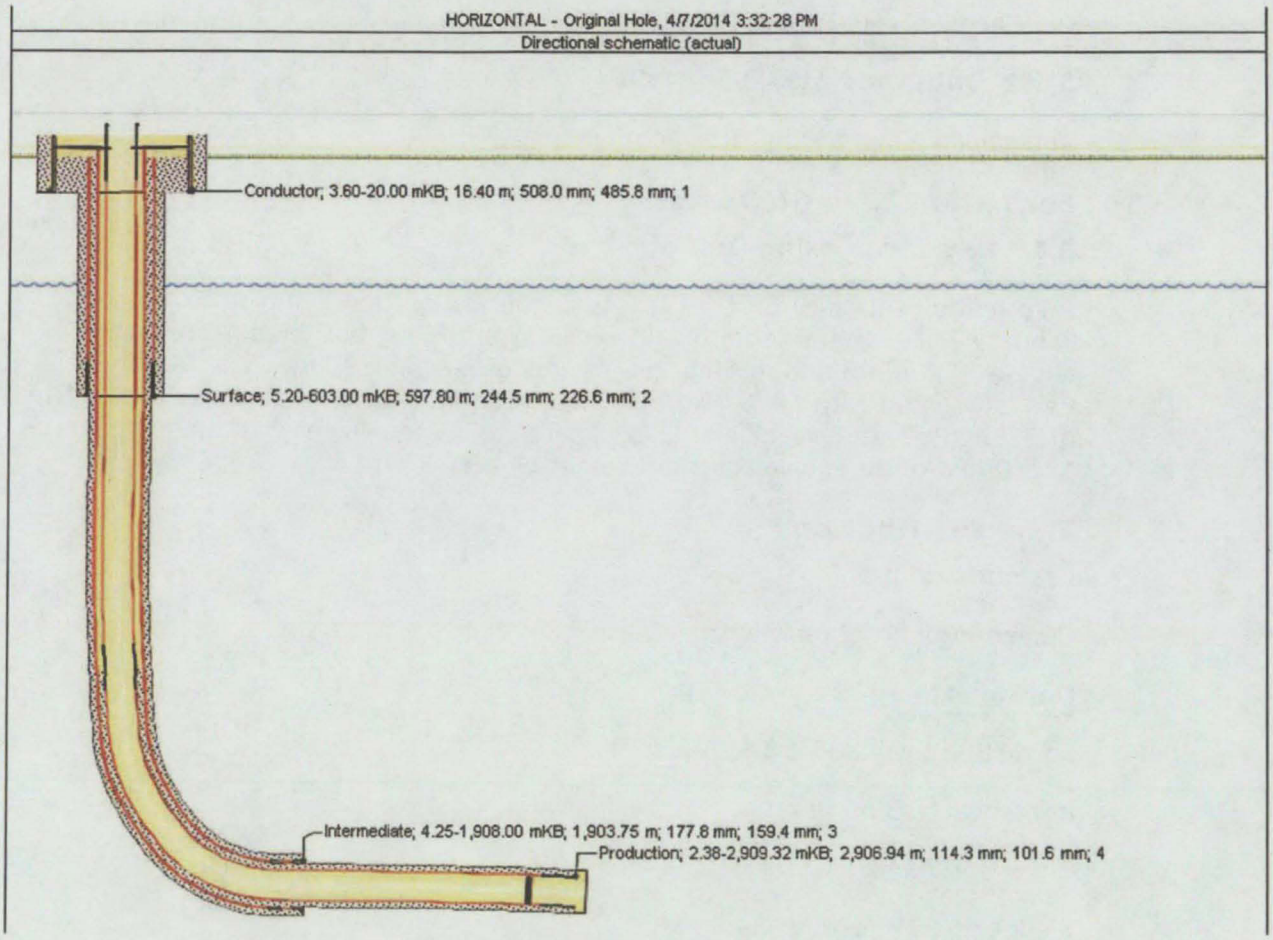
Wellhead/BOP testing: 84.0 hrs.

Trouble Time: 57.5 hrs.

3.12 Deviation Survey

The maximum deviation encountered on surface hole on this well was 1.0^0 at 306.0 m KB. The well kick off point was at approximately 1400 m KB and the well was deviated to horizontal at approximately 1900 m KB at intermediate casing point. The horizontal section of the well comprised some 1002 meters 0f 156 mm hole.

3.13 Composite Drilling Record



ConocoPhillips Canada

Drilling Summary

CANYON E-76 65-10 126-45

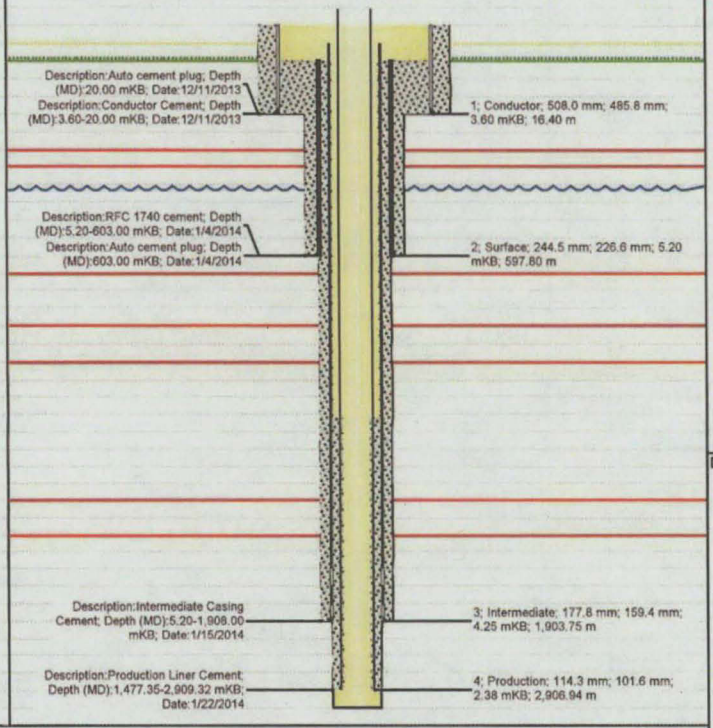
API / UWI	Field Name	Area	Operator	County	State/Province
300E7665-10126-45	Canyon		CONOCOPHILLIPS		N.W.T.

Ground Elevation (m)	Casing Flange Elevation (m)	KB-Ground Distance (m)	KB-Casing Flange Distance (m)	Original Spud Date	Rig Release Date
268.20	268.00	5.20	5.40	12/28/2013 06:30	1/23/2014 23:59

Schematic

HORIZONTAL - Original Hole, 1/23/2014 11:59:00 PM

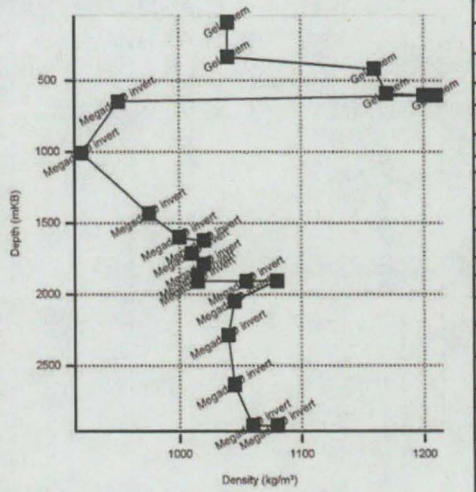
MD (mKB)	Incl (°)	TVD (mKB)
-0.8	0.4	-0.8
2.4	0.4	2.4
4.2	0.4	4.2
16.5	0.4	16.5
20.0	0.4	20.0
31.0	0.4	31.0
76.4	0.3	76.4
589.4	0.4	589.4
603.0	0.4	603.0
827.0	0.9	827.0
938.5	1.1	938.4
975.5	0.9	975.4
1,476.7	4.2	1,476.3
1,477.5	4.2	1,477.1
1,653.4	5.9	1,647.4
1,665.0	27.3	1,658.5
1,700.7	35.6	1,689.0
1,895.1	87.7	1,777.5
1,907.5	90.1	1,777.7
2,893.9	87.8	1,804.9
2,908.6	87.8	1,805.4
2,910.0	87.8	1,805.5



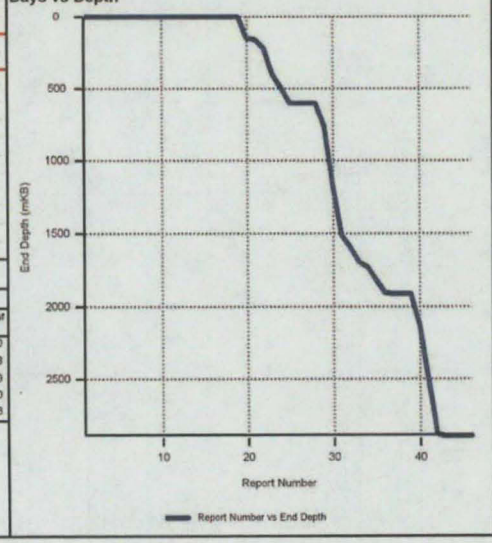
Bit Summary

Bit Run	Drill Bit	Bit Dull	Depth In (mKB)	Depth Out (mKB)	Drilled (m)	Drill Time (hr)	BHA ROP (m/hr)	WOB Max (daN)	WOB Min (daN)	Max RPM (rpm)	Min RPM (rpm)
1A	311.0mm, J&L, B181332	1-2-NO-S-1-0-WT-TD	0.00	603.00	603.00	50.00	12.1	17,000	3	120	100
1	222.0mm, 616, 21191	1-4-CT-G-3-0-WT-BHA	603.00	1,588.00	985.00	57.25	17.2	7,000	5,000	149	118
3	222.0mm, FH18B, RA3594	----	1,588.00	1,691.00	103.00	11.75	8.8	13,000	12,000	149	149
3rr	222.0mm, FH18B, RA3594	1-3-WT-S-1--CT-TD	1,691.00	1,908.00	217.00	50.00	4.3	20,000	13,000	149	120
4	156.0mm, 613, jh8402	----	1,908.00	2,910.00	1,002.00	56.00	17.9	12,000	8,000	228	178

Mud WT vs Depth



Days vs Depth



Job Summary Information

Job Category	Well Config	Actual Start Date	End Date	Drilled Depth (m)
DRILLING	HORIZONTAL	12/9/2013	1/23/2014	2,910.00

AFE / RFE / Maint.#	Total AFE (Cost)	AFE+Supp Amt (Cost)	Total Fld Est (Cost)
10351817	6,820,300.00	6,820,300.00	6,447,888.47

Avg ROP (m/hr)	Spud to TD Duration (hr)	Cost Per Depth Drilled (Cost/m)
12.9	546.25	2,215.77

Objective: Land 1,000 meter horizontal in Lower Cancl formation.

Summary

Beaver Drilling Ltd., 2

Rig Supervisor	Phone Mobile
RICK YAVIS	

Time Log Summarized by Unscheduled Type

Time P-T-X	Dur (hr)	% Total Time (%)
P	1,046.50	94.79
T	57.50	5.21

Interval Lessons

Start Depth (mKB)	End Depth (mKB)	LL ActivityCode	Com	Pot Savings ($) (Cost)

Interval Problems

Start Depth (mKB)	End Depth (mKB)	Trouble Code	Problem Summary	Problem Cost (Cost)
2,115.00	2,115.00	Non-rig Surface Eqp	work on NOV system	6,407.00
1,908.00	1,908.00	Wellhead/Tree	casing bowl needed work to set 7" seals	94,498.00
1,749.00	1,749.00	Rig	change liners	9,610.00
156.00	156.00	Rig	top drive motor failed wait on parts to repair	257,868.00

4. Geology

4.1 Drill Cuttings

Drill cuttings were collected at 5 metre intervals from spud (20 m KB) to TD (2910 m KB). A set of bulk samples as well as a set of washed samples in vials have been delivered to the GNWT (03/12/2014).

4.2 Cores

No Cores were cut on the Dodo Canyon E-76 well.

4.3 Lithology

Formation	Prognosis		Sample		
Marker Tops	**TVD**	**SS**	**MD**	**TVD**	**SS**
Quaternary	5		5.0	5.0	
Little Bear	30	243.4	31.0	31.0	242.4
Slater River	76	197.4	76	76	197.4
Arctic Red	827	-553.6	800.5	800.5	-527.1
Martin House	933	-659.6	938.5	938.5	-655.1
Imperial	968	-694.6	975.5	975.4	-702
Upper Canol	1653.4	-1380	1665	1657.7	-1384.3
Lower Canol	1694.4	-1421	1700.7	1690.7	-1417.3
TD	1800.0	-1526.6	2910	1805.47	-1532.1

5. Well Evaluation

5.1 Open Hole Logs

Hole Section	Run Number	Log description	Depth In	Depth Out
Intermediate	1	AIT/PEX/BHC/TLD2/ERCD	1814	600
Intermediate	2	USIT	1824	600
		USIT run in cased hole to evaluate cement bond of 177.8 mm intermediate casing		

5.2 Summary of Hydraulic Fracturing Operations

Completion operations commenced January 28 when a C Ring was initially set up for water storage for the E-76 fracturing operations. Completions equipment rig up was completed on February 4 and pressure testing of all fracturing equipment began. On February 5, the C Ring began leaking and 2760 m^3 of warm water spilled on to the well pad. The incident report is provided as Appendix XVIII.

Coil tubing operations began on February 6 when coil was run to bottom to ensure that the wellbore was clean and no obstructions existed. The first stage of the hydraulic fracturing program commenced on February 7. A total of 10 stages were fracked over a 10 day period ending on February 17, 2014.

5.3 Completion Operations Commence

Completion operations commenced January 28, 2014

5.4 Fracturing Operations Completed

Hydraulic fracturing operations ended February 17, 2014

5.5 Perforated Intervals

Date	Stage	Perf interval mKB	Perf interval mKB	Perf interval mKB	Perf interval mKB	Perf interval mKB
02/07/14	1	2866 - 2867	2847 - 2848	2827 - 2828	2808 - 2809	2789 - 2790
02/10/14	1A	2857 - 2858	2838 - 2839	2819 - 2820	2800 - 2801	
02/12/14	2	2762 - 2763	2743 - 2744	2723 - 2724	2704 - 2705	2685 - 2686
02/12/14	3	2666 - 2667	2647 - 2648	2628 - 2629	2609 - 2610	2590 - 2591
02/13/14	4	2571 - 2572	2552 - 2553	2533 - 2534	2514 - 2515	2494 - 2495
02/14/14	5	2475 - 2476	2456 - 2457	2437 - 2438		
02/14/14	6	2418 - 2419	2399 - 2400	2380 - 2381		
02/15/14	7	2361 - 2362	2342 - 2343	2323 - 2324	2304 - 2305	2285 - 2286
02/15	8	2265 - 2266	2246 - 2247	2227 - 2228	2208 - 2209	2189 - 2190
02/16/14	9	2170 - 2171	2151 - 2152	2132 - 2133	2113 - 2114	2094 - 2095
02/17/14	10	2075 - 2076	2056 - 2057	2036 - 2037	2017 - 2018	1998 - 1999

5.6 Multi Stage Fracturing Operations

Date	Stage	Interval m KB	Avg. treating Pressure kPa	Total Proppant pumped 't'	Total Water Pumped m^3
02/11/14	1	2789 - 2858	21,800	99.69	579.5
02/12/14	2	2685 - 2763	22,400	116.10	721.7
02/13/14	3	2590 - 2667	25,600	95.86	680.4
02/13/14	4	2494 - 2572	25,500	115.55	524.5
02/14/14	5	2437 - 2476	21,400	100.36	709.4
02/15/14	6	2380 - 2419	20,600	100.00	512.2
02/15/14	7	2285 - 2362	19,900	110.28	550.2
02/16/14	8	2189 - 2266	19,500	112.80	547.3
02/16/14	9	2094 - 2171	19,000	99.66	571.58
02/17/14	10	1998 - 2076	20,600	99.35	515.4

5.7 Well Flowback and Flow testing

Flow testing commenced on COPRC Dodo Canyon E-76 when Nabors Service rig #414 began to rig up on February 26 2014. The service rig was fully inspected the next day and all equipment was pressure tested including Weatherford's test equipment. A string of 60.3 mm tubing was run and landed in a Weatherford WDH production packer set at 1797 m KB, above the perforated intervals.

On March 2, a total of 9 swabs were pulled and the well began to flow unassisted. The well was allowed to flow for 18 hours and was then shut in. Nabors Service rig #414 was rigged out on March 3 and the well was turned over to the testers.

The E-76 well was flowed until 08:00on March 20 for a total of 18 days or a total 0f 421 hours flowed. The total load fluid recovered was 1780 m^3 out of a total load fluid volume of 6586 m^3.

5.8 Flowback Volumes

Date	Load Fluid Recovered (LFR) m^3	Total Load Fluid Recovered (TFLR) m^3	Hydrocarbon Liquids recovered Daily m^3	Total Hydrocarbon Liquids Recovered m^3
03/02/14	134.0	134.0	0	0
03/03/14	182.5	316.51	0	0
03/04/14	196.16	511.67	2.79	2.79
03/05/14	169.03	680.7	5.63	8.42
03/06/14	126.91	807.61	4.32	12.74
03/07/14	114.17	921.78	4.11	16.85
03/08/14	89.38	1011.16	3.53	20.38
03/09/14	92.3	1103.46	3.63	24.01
03/10/14	88.74	1192.20	3.44	27.45
03/11/14	79.53	1271.73	3.68	31.13
03/12/14	72.80	1344.53	3.22	34.35
03/13/14	72.27	1416.80	3.12	37.47
03/14/14	63.43	1480.23	3.27	40.74
03/15/14	63.95	1544.18	3.02	43.76
03/16/14	57.63	1601.81	2.37	46.13

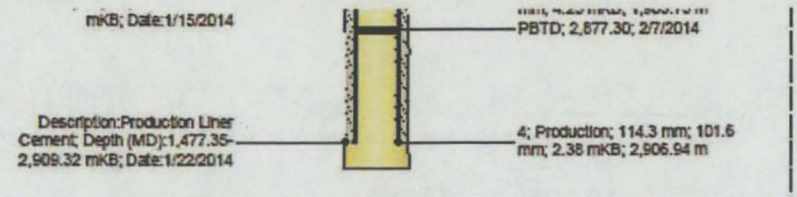
03/17/14	60.3	1662.11	2.21	48.34
03/18/14	58.08	1720.19	2.37	50.71
03/19/14	55.92	1776.11	2.23	52.93
03/20/14	4.50	1780.61	0.15	53.08

5.9 Flare Volumes

Date	Daily volume Flared E^3m^3	Total Volume flared E^3m^3
03/02/14	5.57	5.57
03/03/14	10.53	16.10
03/04/14	46.48	62.58
03/05/14	125.13	187.71
03/06/14	108.38	296.09
03/07/14	104.76	400.85
03/08/14	101.15	502.0
03/09/14	102.66	604.66
03/10/14	101.10	705.76
03/11/14	100.78	806.54
03/12/14	98.11	904.65
03/13/14	96.88	1001.53
03/14/14	96.48	1098.01
03/15/14	98.22	1196.23
03/16/14	99.78	1296.01
03/17/14	98.64	1394.65
03/18/14	97.33	1491.98
03/19/14	95.43	1587.41
03/20/14	7.92	1,595.33

5.1

2,877.3	88.3	1,804.4
2,893.9	87.8	1,804.9
2,894.2	87.8	1,804.9
2,908.6	87.8	1,805.4
2,909.3	87.8	1,805.4
2,910.0	87.8	1,805.5



Template Revised 8/1/2007 Page 1/1 Report Printed: 4/7/2014

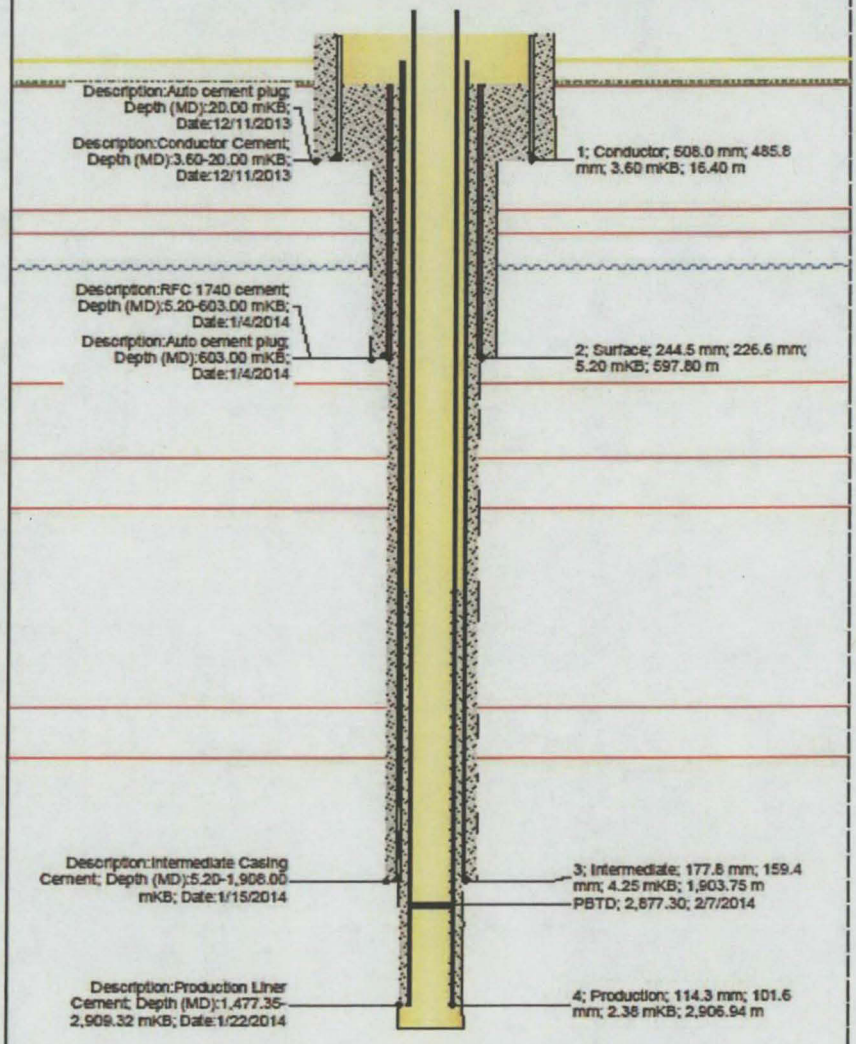
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Current Schematic
CANYON E-76 65-10 126-45

API / UWI	Surface Legal Location	District	Field Name	License No.
300E7665-10126-45	E-76 65-10 126-45	NEW VENTURES	Canyon	EL 470
Program	**Well Type**	**Well Configuration Type**	**Original KB/RT Elevation (m)**	**KB-Ground Distance (m)**
ILX	Appraisal	HORIZONTAL	273.40	5.20

HORIZONTAL - Original Hole, 4/7/2014 3:20:04 PM

MD (mKB)	Incl (°)	TVD (mKB)
-0.8	0.4	-0.8
0.0	0.4	0.0
2.4	0.4	2.4
3.6	0.4	3.6
4.2	0.4	4.2
5.2	0.4	5.2
16.5	0.4	16.5
17.7	0.4	17.7
20.0	0.4	20.0
30.0	0.4	30.0
31.0	0.4	31.0
76.0	0.4	76.0
76.4	0.3	76.4
589.0	0.4	589.0
589.4	0.4	589.4
602.7	0.4	602.7
603.0	0.4	603.0
800.5	0.8	800.5
827.0	0.9	827.0
933.0	1.1	932.9
938.5	1.1	938.4
968.0	0.9	967.9
975.5	0.9	975.4
1,476.4	4.1	1,476.0
1,476.7	4.2	1,476.3
1,477.3	4.2	1,476.9
1,477.5	4.2	1,477.1
1,478.8	4.3	1,478.4
1,653.4	5.9	1,647.4
1,661.0	18.1	1,654.7
1,665.0	27.3	1,658.5
1,694.4	33.8	1,683.9
1,700.7	35.6	1,689.0
1,701.0	35.7	1,689.3
1,895.1	87.7	1,777.5
1,895.5	87.8	1,777.5
1,907.5	90.1	1,777.7
1,908.0	90.2	1,777.7
2,877.3	88.3	1,804.4
2,893.9	87.8	1,804.9
2,894.2	87.8	1,804.9
2,908.6	87.8	1,805.4
2,909.3	87.8	1,805.4
2,910.0	87.8	1,805.5



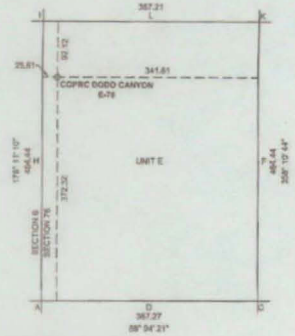
Template Revised 8/1/2007 Page 1/1 Report Printed: 4/7/2014

5.11 Suspension Status

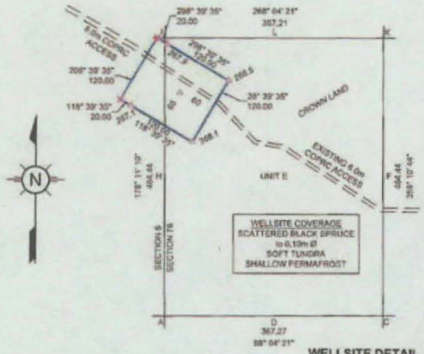
COPRC Dodo Canyon E-76 is suspended. A StreamFlo 34.5 MPa wellhead with two master valves is installed and chained and locked.

Appendices to Well History Report

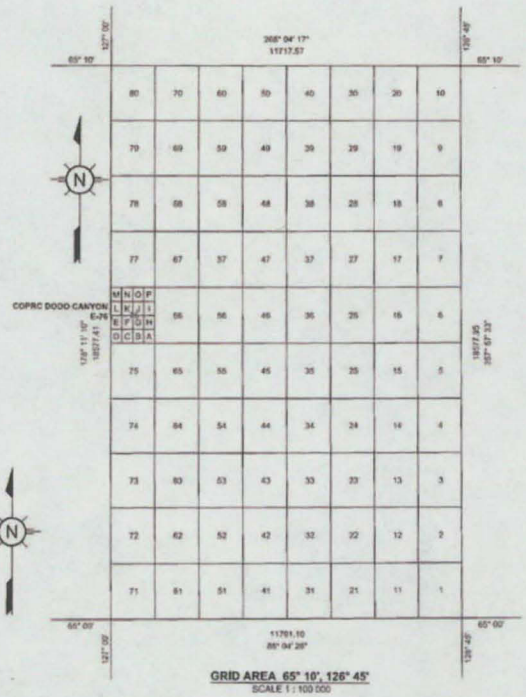
I. Final Survey Plot of COPRC Dodo Canyon E-76



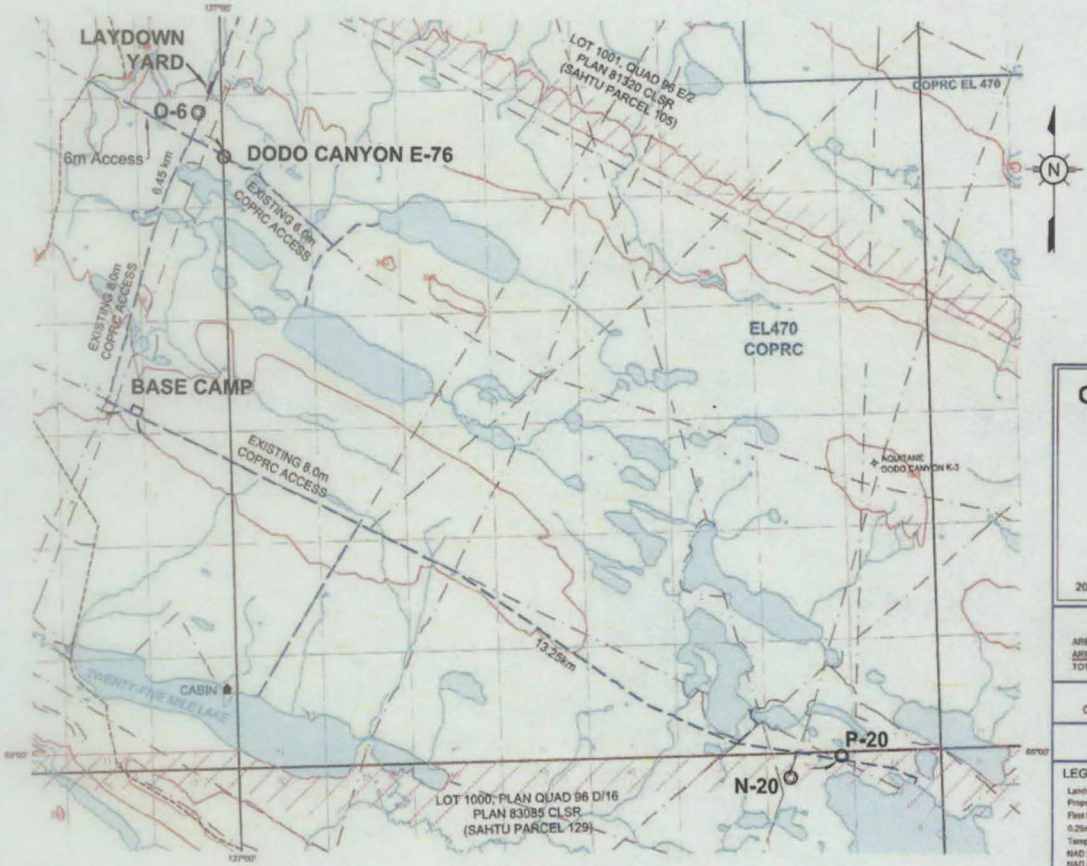
SURFACE UNIT DETAIL
SCALE 1 : 5000



WELLSITE DETAIL
SCALE 1 : 5000



GRID AREA 65° 10', 126° 45'
SCALE 1 : 100 000



ACCESS MAP
SCALE 1 : 50 000

NOTES:	NO	YES
-The proposed well is at least 200m from any privately owned land or structures.	☐	☒
-The proposed well is at least 100m from the ordinary high water mark of a permanent water body.	☐	☒
-The proposed well and related areas are 100m from an archaeological/historical/traditional land use site.	☐	☒

Sahtu GeoMatics Ltd.
300-6040 FISHER ROAD S.E.
CALGARY, ALBERTA T2H 0W3
PH (403) 253-8101
FAX (403) 253-1985
Email calgary@sahtusurv.com

REVISION NOTES:			
No.	DATE	DESCRIPTION	By
2	2013-03-22	UPDATED ACCESS ROAD DIMENSIONS	MB
1	2013-03-21	REVISED WELLSITE DIMENSIONS, MOVED WELLSITE TO 2013-2014 PROJECT	MB
0	2013-02-25	PLAN ISSUED	MB

ConocoPhillips Canada

CONOCOPHILLIPS CANADA RESOURCES CORP.

WELLSITE PLAN
OF
COPRC DODO CANYON E-76
IN UNIT E, SECTION 76
GRID AREA 65°10', 126°45'
EXPLORATION LICENCE 470

SAHTU SETTLEMENT AREA, TULITA DISTRICT
NORTHWEST TERRITORIES

2012 — RON ROBINSON C.L.S.

AREAS

AREA REQUIRED WITHIN 6m ACCESS	0.084 ha.
AREA REQUIRED WITHOUT ABOVE	1.00 ha.
TOTAL AREA REQUIRED	1.08 ha.

UTM CO-ORDINATES
AT WELL CENTRE (UTM - ZONE 9)

NAD 27	NAD 83
N. 7219674.66	N. 7220070.84
E. 594010.01	E. 593919.35

ELEVATIONS
ON GROUND AT WELL LOCATION =268.2m

GEOGRAPHIC CO-ORDINATES
AT WELL CENTRE

NAD 27	NAD 83
LAT. : 65°05'27.0" N.	LAT. : 65°05'27.2" N.
LONG. : 126°59'58.0" W.	LONG. : 127°00'04.7" W.

SURVEY DATES
JULY 17-20, 2012

LEGEND
- Lands to be Dealt with shown thus . . . .
- Proposed COPRC Access shown thus . . . .
- First Nations Surface Rights . . . .
- 0.25m spikes placed are shown thus . . . △
- Temporary traverse points shown thus . . . ×

NAD 27 UTM coordinates are converted from NAD 83 and are derived from NRCAN Precise Point Positioning (PPP) methods.
Elevations are orthometric and were derived using the HTv2.0 geoid model.
Bearings are UTM grid (NAD 27) Zone 9 and are referred through C.M. 129° W.
Distances are in metres and decimals thereof.
Contour Interval is 10m
Position of foreign wells is based on NEB records.

OPERATOR: CONOCOPHILLIPS CANADA RESOURCES CORP.

NOTATION

RON ROBINSON
CANADA LAND SURVEYOR

SCALE:	DRAWN/CHKD'D:	DATE:	FILE NO.:
AS SHOWN	MB/CRR	2013-02-21	36784
			ACAD No.: 36784_E-76

II. Casing and Cementing Report

ConocoPhillips Canada

Casing Summary

CANYON E-76 65-10 126-45

API / UWI	Surface Legal Location	District	Field Name	License No.
)E7665-10126-45	E-76 65-10 126-45	NEW VENTURES	Canyon	EL 470
Program	**Well Type**	**Well Configuration Type**	**Original KB/RT Elevation (m)**	**KB-Ground Distance (m)**
ILX	Appraisal	HORIZONTAL	273.40	[redacted]

Conductor, 20.00mKB

Set Depth (mKB)	Set Tension (daN)	String Nominal OD (mm)	String Min Drift (mm)	Centralizers Count	Scratchers Count
20.00		508.0		none	

Jts	Item Des	OD Nominal (mm)	Nominal ID (mm)	Wt (kg/m)	Grade	Top Thread	Top (mKB)	Btm (mKB)	Section Length (m)	P Burst (kPa)	P Collapse (kPa)
	Casing Joints	508.0	485.7	139.887	H-40	Welded	0.00	20.00	20.00		3,585

Surface, 603.00mKB

Set Depth (mKB)	Set Tension (daN)	String Nominal OD (mm)	String Min Drift (mm)	Centralizers Count	Scratchers Count
603.00		244.5		12 Bow Spring Centralizers	

Jts	Item Des	OD Nominal (mm)	Nominal ID (mm)	Wt (kg/m)	Grade	Top Thread	Top (mKB)	Btm (mKB)	Section Length (m)	P Burst (kPa)	P Collapse (kPa)
46	Casing Joints	244.5	226.6	53.574	K-55	LTC	-0.83	589.01	589.84		13,927
1	Float Collar	244.5	226.6	53.574	K-55	LTC	589.01	589.43	0.42		13,927
1	Casing Joints	244.5	226.6	53.574	K-55	LTC	589.43	602.71	13.28		13,927
1	Float Shoe	244.5	226.6	53.574	K-55	LTC	602.71	603.00	0.29		13,927

Intermediate, 1,908.00mKB

Set Depth (mKB)	Set Tension (daN)	String Nominal OD (mm)	String Min Drift (mm)	Centralizers Count	Scratchers Count
1,908.00		177.8		32 Volants from 1511 to 1908, 10 micro seals from 1415 to 1535, 36 Topco bows from 1511 to 215	

Jts	Item Des	OD Nominal (mm)	Nominal ID (mm)	Wt (kg/m)	Grade	Top Thread	Top (mKB)	Btm (mKB)	Section Length (m)	P Burst (kPa)	P Collapse (kPa)
1	Landing Joint	177.8	159.4	38.692	P-110	LTC	4.25	4.25	0.00		
1	Mandrel	177.8	159.4	38.692	P-110	LTC	4.25	4.25	0.00		
[redacted]	Casing Joints	177.8	159.4	38.692	P-110	LTC	4.25	1,895.07	1,890.82		
1	Float Collar	177.8	159.4	38.692	P-110	LTC	1,895.07	1,895.50	0.43		[redacted]
1	Casing Joints	177.8	159.4	38.692	P-110	LTC	1,895.50	1,907.53	12.03		42,954
1	Float Shoe	177.8	159.4	38.692	P-110	LTC	1,907.53	1,908.00	0.47		42,954

Production, 2,909.32mKB

Set Depth (mKB)	Set Tension (daN)	String Nominal OD (mm)	String Min Drift (mm)	Centralizers Count	Scratchers Count
2,909.32		114.3		109 Volant Hydroforms	

Jts	Item Des	OD Nominal (mm)	Nominal ID (mm)	Wt (kg/m)	Grade	Top Thread	Top (mKB)	Btm (mKB)	Section Length (m)	P Burst (kPa)	P Collapse (kPa)
1	Casing Joints	114.3	101.6	17.263	P-110	LTC	2.38	2.38	0.00		52,262
1	Mandrel Hanger	114.3	101.6	17.263	P-110	LTC	2.38	2.38	0.00		52,262
1	Pup Joint	114.3	101.6	17.263	P-110	LTC	2.38	2.38	0.00		52,262
1	Casing Joints	114.3	101.6	17.263	P-110	LTC	2.38	16.54	14.16		52,262
1	Pup Joint	114.3	101.6	17.263	P-110	LTC	16.54	17.74	1.20		52,262
104	Casing Joints	114.3	101.6	17.263	P-110	LTC	17.74	1,476.36	1,458.62		52,262
1	Latch Assembly	114.3	101.6	17.263	P-110	LTC	1,476.36	1,476.67	0.31		52,262
1	Seal Bore Sub	114.3	101.6	17.263	P-110	LTC	1,476.67	1,477.46	0.79		52,262
1	Liner Top Packer	114.3	101.6	17.263	P-110	LTC	1,477.46	1,478.82	1.36		52,262
102	Casing Joints	114.3	101.6	17.263	P-110	LTC	1,478.82	2,893.87	1,415.05		52,262
1	Float Collar	114.3	101.6	17.263	P-110	LTC	2,893.87	2,894.24	0.37		52,262
1	Casing Joints	114.3	101.6	17.263	P-110	LTC	2,894.24	2,908.64	14.40		52,262
1	Float Shoe	114.3	101.6	17.263	P-110	LTC	2,908.64	2,909.32	0.68		52,262

ConocoPhillips Canada

Cement Summary

CANYON E-76 65-10 126-45

Production

UWI	Surface Legal Location	District	Field Name	License No.
E7665-10126-45	E-76 65-10 126-45	NEW VENTURES	Canyon	EL 470
Spud Date	**Well Type**	**Well Configuration Type**	**Original KB/RT Elevation (m)**	**KB-Ground Distance (m)**
	Appraisal	HORIZONTAL	273.40	5.20

Original Hole

Wellbore Name	Profile Type	Kick Off Depth (mKB)	Vertical Section Direction (°)
Original Hole			

Section Des	Size (mm)	Act Top (mKB)	Act Btm (mKB)
COND1	609.6	3.60	20.00
SURFAC	311.0	20.00	603.00
INTRM1	222.0	603.00	1,908.00
PROD1	156.0	1,908.00	2,910.00

Csg Bowl, Stream Flo Crown on 1/4/2014 14:00

Type	Install Date
Csg Bowl	1/4/2014

Des	Make	Model	WP (kPa)	Service	SN
Casing Bowl	STREAM FLOW Crown	CC-22	34,500	OIL	CC-CH115x958SOWSV-10-2
Upper Spool	STREAM FLOW Crown	FBD100	34,500	OIL	FBD100-TH115x115SV-00-2

Top Section, <make> on 2/28/2014 20:00

Type	Install Date
Top Section	2/28/2014

Des	Make	Model	WP (kPa)	Service	SN
Top Wellhead Cap	Stream Flo	BX152 x 60.3mm EUE	69,000	Sweet	220940-12
Flow Block	Stream Flo	BX152 x 4 sides	69,000	Sweet	220073-9
Wing Valve (Right)	Stream Flo	Gate	69,000	Sweet	217331-35
Wing Valve (Right) Companion Flange	Stream Flo	BX152 x 12.7mm LP	69,000	Sweet	218706-21
Wing Valve (Left)	Stream Flo	Gate	69,000	Sweet	217331-37
g Valve (Left) panion Flange	Stream Flo	BX152 x 12.7mm LP	69,000	Sweet	218706-22
laster Valve	Stream Flo	Gate	69,000	Sweet	217331-30
Bottom Master Valve	Stream Flo	Gate	69,000	Sweet	217331-36
Adapter Spool	Stream Flo	BX156 x BX152	69,000	Sweet	227368-02
Tubing Head Spool	Stream Flo	279mm R-54 x 179mm BX156	69,000	Sweet	228095-02
Casing valve (Right)	Stream Flo	Gate	69,000	Sweet	217331-33
Casing Valve (Right) Companion Flange	Stream Flo	BX152 x 12.7mm LP	69,000	Sweet	218706-18
Casing valve (Left)	Stream Flo	Gate	69,000	Sweet	217331-32
Casing Valve (Left) Companion Flange	Stream Flo	BX152 x 12.7mm LP	69,000	Sweet	218706-19
Intermediate Spool	Stream Flo	279mm R-54 x 279mm R-54	34,500	sweet	221764-1
Intermediate Casing Valve (Right)	Stream Flo	Gate	34,500	Sweet	44648-010-514
Intermediate Casing Valve (Left)	Stream Flo	Gate	34,500	Sweet	44648-010-907

Conductor, 20.00mKB

Casing Description	Wellbore	Run Date	Set Depth (mKB)	Stick Up (mKB)	Set Tension (daN)
Conductor	Original Hole	12/11/2013	20.00	0.00	

Centralizers Count	Scratchers Count
none	

Jts	Item Des	OD Nominal (mm)	Nominal ID (mm)	Wt (kg/m)	Grade	Top Conn Sz (mm)	Top Thread	Section Length (m)	Top (mKB)	Btm (mKB)
	Casing Joints	508.0	485.7	139.887	H-40		Welded	20.00	0.00	20.00

Surface, 603.00mKB

Casing Description	Wellbore	Run Date	Set Depth (mKB)	Stick Up (mKB)	Set Tension (daN)
Surface	Original Hole	1/4/2014	603.00	0.83	

Centralizers Count	Scratchers Count
w Spring Centralizers	

Jts	Item Des	OD Nominal (mm)	Nominal ID (mm)	Wt (kg/m)	Grade	Top Conn Sz (mm)	Top Thread	Section Length (m)	Top (mKB)	Btm (mKB)
46	Casing Joints	244.5	226.6	53.574	K-55		LTC	589.84	-0.83	589.01
1	Float Collar	244.5	226.6	53.574	K-55		LTC	0.42	589.01	589.43
1	Casing Joints	244.5	226.6	53.574	K-55		LTC	13.28	589.43	602.71

ConocoPhillips Canada

Cement Summary

CANYON E-76 65-10 126-45

Production

UWI	Surface Legal Location	District	Field Name	License No.
E7665-10126-45	E-76 65-10 126-45	NEW VENTURES	Canyon	EL 470

Program	Well Type	Well Configuration Type	Original KB/RT Elevation (m)	KB-Ground Distance (m)
ILX	Appraisal	HORIZONTAL	273.40	[redacted]

Jts	Item Des	OD Nominal (mm)	Nominal ID (mm)	Wt (kg/m)	Grade	Top Conn Sz (mm)	Top Thread	Section Length (m)	Top (mKB)	Btm (mKB)
1	Float Shoe	244.5	226.6	53.574	K-55		LTC	0.29	602.71	603.00

Intermediate, 1,908.00mKB

Casing Description	Wellbore	Run Date	Set Depth (mKB)	Stick Up (mKB)	Set Tension (daN)
Intermediate	Original Hole	1/15/2014	1,908.00	-4.25	

Centralizers Count
32 Volants from 1511 to 1908, 10 micro seals from 1415 to 1535, 36 Topco bows from 1511 to 215

Scratchers Count

Jts	Item Des	OD Nominal (mm)	Nominal ID (mm)	Wt (kg/m)	Grade	Top Conn Sz (mm)	Top Thread	Section Length (m)	Top (mKB)	Btm (mKB)
1	Landing Joint	177.8	159.4	38.692	P-110		LTC	0.00	4.25	4.25
1	Mandrel	177.8	159.4	38.692	P-110		LTC	0.00	4.25	4.25
162	Casing Joints	177.8	159.4	38.692	P-110		LTC	1,890.82	4.25	1,895.07
1	Float Collar	177.8	159.4	38.692	P-110		LTC	0.43	1,895.07	1,895.50
1	Casing Joints	177.8	159.4	38.692	P-110		LTC	12.03	1,895.50	1,907.53
1	Float Shoe	177.8	159.4	38.692	P-110		LTC	0.47	1,907.53	1,908.00

Production, 2,909.32mKB

Casing Description	Wellbore	Run Date	Set Depth (mKB)	Stick Up (mKB)	Set Tension (daN)
Production	Original Hole	1/21/2014	2,909.32	-2.38	

Centralizers Count
109 Volant Hydroforms

Scratchers Count

Jts	Item Des	OD Nominal (mm)	Nominal ID (mm)	Wt (kg/m)	Grade	Top Conn Sz (mm)	Top Thread	Section Length (m)	Top (mKB)	Btm (mKB)
1	Casing Joints	114.3	101.6	17.263	P-110		LTC	0.00	2.38	2.38
1	Mandrel Hanger	114.3	101.6	17.263	P-110		LTC	0.00	2.38	2.38
1	Pup Joint	114.3	101.6	17.263	P-110		LTC	0.00	2.38	2.38
1	Casing Joints	114.3	101.6	17.263	P-110		LTC	14.16	2.38	16.54
1	Pup Joint	114.3	101.6	17.263	P-110		LTC	1.20	16.54	[redacted]
104	Casing Joints	114.3	101.6	17.263	P-110		LTC	1,458.62	17.74	1,4[redacted]
1	Latch Assembly	114.3	101.6	17.263	P-110		LTC	0.31	1,476.36	1,476.67
1	Seal Bore Sub	114.3	101.6	17.263	P-110		LTC	0.79	1,476.67	1,477.46
1	Liner Top Packer	114.3	101.6	17.263	P-110		LTC	1.36	1,477.46	1,478.82
102	Casing Joints	114.3	101.6	17.263	P-110		LTC	1,415.05	1,478.82	2,893.87
1	Float Collar	114.3	101.6	17.263	P-110		LTC	0.37	2,893.87	2,894.24
1	Casing Joints	114.3	101.6	17.263	P-110		LTC	14.40	2,894.24	2,908.64
1	Float Shoe	114.3	101.6	17.263	P-110		LTC	0.68	2,908.64	2,909.32

Production, Casing, 1/22/2014 04:00

Cementing Start Date	Cementing End Date	Wellbore
1/22/2014	1/22/2014	Original Hole

Evaluation Method
Returns to Surface

Cement Evaluation Results
Hold safety meeting with Schlumberger cementers prior to cementing 114.3mm production liner, rig up Schlumberger cementers to cement 114.3mm production liner, pump 9m3 of 1000kg/m3 CW8 pre-flush, stop and pressure test line to 35,000kPA (held OK), bleed off pressure, then pump 5m3 of 1200kg/m3 MUDPUSH II pre-flush spacer and then pump 21 tonnes/15.6m3 (20% excess) of 1900kg/m3 Conventional Class G Tail Cement with 0.6% Fluid Loss + 0.5% Dispersant + 0.2% Anti Foam + 0.2% Retarder + 72L/tonne Gas Control Agent from 2909.32m to 1477.35m. Drop dart and displace 18.88m3 of fresh water. Bump plug 3,500kpa over final circulating pressure of 11,200kPA at 7:30hrs on January 22nd 2014, bleed pressure and check floats (holding OK). pressure up to 28,000kPA and set liner with liner top packer, circulate out pre-flush and 2m3 of excess cement out, displace hole with fresh water, rig out cementers, flowcheck, rig up laydown truck, laydown drill pipe and heavy weight drill pipe, run in the rest of the drill pipe in the derrick, laydown drill pipe, rig up power tongs, run 114.3mm tie-back liner, space out, land mandrel seal assembly and tie into top of liner top packer, remove landing joint, pressure test packoff seal assembly, pressure test 114.3mm x 177.8mm annulus to 15,000kPA.

Comment
Hold safety meeting with Schlumberger cementers prior to cementing 114.3mm production liner, rig up Schlumberger cementers to cement 114.3mm production liner, pump 9m3 of 1000kg/m3 CW8 pre-flush, stop and pressure test line to 35,000kPA (held OK), bleed off pressure, then pump 5m3 of 1200kg/m3 MUDPUSH II pre-flush spacer and then pump 21 tonnes/15.6m3 (20% excess) of 1900kg/m3 Conventional Class G Tail Cement with 0.6% Fluid Loss + 0.5% Dispersant + 0.2% Anti Foam + 0.2% Retarder + 72L/tonne Gas Control Agent from 2909.32m to 1477.35m. Drop dart and displace 18.88m3 of fresh water. Bump plug 3,500kpa over final circulating pressure of 11,200kPA at 7:30hrs on January 22nd 2014, bleed pressure and check floats (holding OK). pressure up to 28,000kPA and set liner with [redacted] top packer, circulate out pre-flush and 2m3 of excess cement out, displace hole with fresh water, rig out cementers, flowcheck, rig up laydown truck, laydown [redacted] pipe and heavy weight drill pipe, run in the rest of the drill pipe in the derrick, laydown drill pipe, rig up power tongs, run 114.3mm tie-back liner, space out, land mandrel seal assembly and tie into top of liner top packer, remove landing joint, pressure test packoff seal assembly, pressure test 114.3mm x 177.8mm annulus [redacted] 15,000kPA.

ConocoPhillips Canada

Cement Summary
CANYON E-76 65-10 126-45

Production

UWI	Surface Legal Location	District	Field Name	License No.
E7665-10126-45	E-76 65-10 126-45	NEW VENTURES	Canyon	EL 470
[redacted]	Well Type: Appraisal	Well Configuration Type: HORIZONTAL	Original KB/RT Elevation (m): 273.40	KB-Ground Distance (m): 5.20

1, 1,477.35-2,909.32mKB

Top Depth (mKB)	Bottom Depth (mKB)	Full Return?	Vol Cement Re...	Top Plug?	Bottom Plug?
1,477.35	2,909.32	Yes	2.00	Yes	No

Initial Pump Rate (m³/min)	Final Pump Rate (m³/min)	Avg Pump Rate (m³/min)	Final Pump Pressure (kPa)	Plug Bump Pressure (kPa)
0.500	0.200	0.500	11,200	14,700

Pipe Reciprocated?	Reciprocation Stroke Length (m)	Reciprocation Rate (spm)	Pipe Rotated?	Pipe RPM (rpm)
No			No	

Tagged Depth (mKB)	Tag Method	Depth Plug Drilled Out To (mKB)	Drill Out Diameter (mm)	Drill Out Date

Production Liner Cement

Fluid Type	Fluid Description	Amount (1000kg)	Class	Volume Pumped (m³)
Production Liner Cement	Conventional 1900 Class G Cement	15.6	Class G	15.60

Estimated Top (mKB)	Estimated Bottom Depth (mKB)	Percent Excess Pumped (%)	Yield (m³/tonne)	Mix H20 Ratio (m³/tonne)
1,477.35	2,909.32	20.0	0.760	0.36

Free Water (%)	Density (kg/m³)	Plastic Viscosity (cP)	Thickening Time (hr)	1st Compressive Strength (kPa)
	1,900.0			

Cement Fluid Additives

Add	Type	Conc
Anti Foam		0.2
Dispersant		0.5
Fluid Loss		0.6
Gas Control Agent		
Retarder		0.2

III. Drilling Fluid Summary

VII. Daily Activity and Cost Summary Report

ConocoPhillips Canada

Daily Activity and Cost Summary
CANYON E-76 65-10 126-45

UWI	Surface Legal Location	District	Field Name	License No.
E7665-10126-45	E-76 65-10 126-45	NEW VENTURES	Canyon	EL 470
Program	**Well Type**	**Well Configuration Type**	**Original KB/RT Elevation (m)**	**KB-Ground Distance (m)**
ILX	Appraisal	HORIZONTAL	273.40	

Job Category	Primary Job Type	Secondary Job Type
DRILLING	DRILLING ORIGINAL	

Actual Start Date	End Date	AFE / RFE / Maint.#	Total Job AFE Amount (Cost)
12/9/2013	1/23/2014	10351817	6,820,300.00

Summary

Contractor	Rig Name/No	Rig Type
Beaver Drilling Ltd.	2	DRILLING-DOUBLE

Report No.	Start Date	End Date	Start Depth (mKB)	End Depth (mKB)	Daily Cost Total (Cost)	Cum Cost (Cost)	Last 24hr Sum
1	12/9/2013	12/10/2013	0.00	0.00	61,279.66	61,279.66	No incidents or accidents. Fly Beaver #2 rig personnel, service hands and Conoco reps to Norman Wells from Calgary and Edmonton using Canadian North chartered flight. Set everyone up with accomodations at the construction camp (on the rack site) and the 2 Hodgsons camp in Norman Wells. Round up transportation for all services, rig hands and Conoco reps. Held safety orientation meetings in Conoco's office in Norman Wells with all services prior to them comencing work with ConocoPhillips. Could not cross river until Tuesday morning due to warm weather and construction working on ice bridge. Wait until morning to hold safety meeting prior to crossing river, warming up equipment, remove snow from all trucks and equipment, set up ratholers and drill conductor.
2	12/10/2013	12/11/2013	0.00	0.00	53,459.03	114,738.69	No incidents or accidents. 1 - HID, 0 - OBS and 0 - ASA (all closed out). Wait until morning. Hold safety meeting with OK Drilling, Canol, rig hands, medics and Conoco reps. Cross river, construction working on ice bridge and iceroads to location, warm up equipment, remove snow from all trucks and equipment, set up ratholers and drill 20" x 20m conductor. Shut down, wait until morning to finish drilling and cementing the 20" x 20m conductor, drilling mousehole and rathole and then setting up wellsite shacks with generators on E-76 65-10 126-45 location.
3	12/11/2013	12/12/2013	0.00	0.00	101,530.46	216,269.15	No incidents or accidents. 2 - HID, 0 - OBS and 0 - ASA (all closed out). Wait until morning. Hold safety meeting prior to crossing river, drilling conductor and moving wellsite shacks to location. Construction working on ice bridge and iceroads to location. Finish drilling the 20" x 20m conductor, drill and set 6' x 3' crib, mousehole and rathole and then move and set up wellsite shacks with generator on E-76 65-10 126-45 location. Hold safety meeting with Schlumberger cementers, Ok Rathole, Conoco rep, vac and water truck hands. Pump 10tonne/7.5m3 of Class "G" Arctic blend cement followed by 3.5m3 of fresh water leaving 2m of cement in the conductor to drill out prior to spud. Wait until morning to move Beaver #2 rig.
4	12/12/2013	12/13/2013	0.00	0.00	58,109.03	274,378.18	No incidents or accidents. 3 - HID, 0 - OBS and 0 - ASA (all closed out). Wait until morning. Hold safety meeting with OK Drilling, Beaver hands, Canol Trucking and Conoco reps. Drill mousehole and rathole, lay down environmental liner, move and spot Beaver #2 rig matting and some rental equipment to E-76 65-10 126-45 location. Load substructure to be hauled out and spotted first thing in the morning. Wait until daylight to continue moving rig and rental equipment.
5	12/13/2013	12/14/2013	0.00	0.00	177,910.46	452,288.64	2 - HID, 0 - OBS and 0 - ASA (all closed out). Wait until morning. Hold safety meeting with Beaver hands, Canol Trucking and Conoco reps. Move and attempt to spot Beaver #2 substructure when the cable wedge (pressed on bell) on main winch line on the big Canol bed truck broke dropping the substructure 2 feet from the ground at 11:00am on Friday, December 13th. Shut down rig moving and construction operations until tomorrow morning. Wait until morning to move and spot rig and rental equipment.
6	12/14/2013	12/15/2013	0.00	0.00	58,109.03	510,397.67	No incidents or accidents. 2 - HID, 0 - OBS and 0 - ASA (all closed out). Wait until morning. Hold safety meeting with Beaver hands, Canol Truc and Conoco reps. Move and spot Beaver #2 substructure and drawwo Split and move derrick, move rig buildings and some rental equipment to 76 65-10 126-45 location from rack site. Wait until morning to spot rig and rental equipment.

ConocoPhillips Canada

Daily Activity and Cost Summary
CANYON E-76 65-10 126-45

UWI	Surface Legal Location	District	Field Name	License No.
665-10126-45	E-76 65-10 126-45	NEW VENTURES	Canyon	EL 470
	Well Type	**Well Configuration Type**	**Original KB/RT Elevation (m)**	**KB-Ground Distance (m)**
	Appraisal	HORIZONTAL	273.40	5.20

Report No.	Start Date	End Date	Start Depth (mKB)	End Depth (mKB)	Daily Cost Total (Cost)	Cum Cost (Cost)	Last 24hr Sum
7	12/15/2013	12/16/2013	0.00	0.00	58,109.03	568,506.70	No incidents or accidents. 5 - HID, 0 - OBS and 0 - ASA (all closed out). Wait until morning. Hold safety meeting with Beaver hands, Canol Trucking and Conoco reps. Move and pin derrick together, install monkey board, spot mud tanks, raise a-legs, move miscellaneous rental loads onto E-76 65-10 126-45 location. Wait until morning to finish spotting rig and rental equipment.
8	12/16/2013	12/17/2013	0.00	0.00	343,763.53	912,270.23	No incidents or accidents. 3 - HID, 0 - OBS and 0 - ASA (all closed out). Wait until morning. Hold safety meeting with Beaver hands, Canol Trucking and Conoco reps. Finish spotting rig and rental equipment on E-76 65-10 126-45 location. Wait until morning to warm up rig buildings to hook up power cords, rig up boiler and water lines.
9	12/17/2013	12/18/2013	0.00	0.00	45,806.53	958,076.76	No incidents or accidents. 2 - HID, 0 - OBS and 0 - ASA (all closed out). Wait until morning. Hold safety meeting, warm up rig buildings, plug in power cords, rig up boiler lines and circulate steam around the rig. Wait until morning to rig up derrick to raise, raise derrick and rig up pre-fabs.
10	12/18/2013	12/19/2013	0.00	0.00	40,181.53	998,258.29	No incidents or accidents. 2 - HID, 0 - OBS and 0 - ASA (all closed out). Wait until morning. Hold safety meeting, rig up derrick to raise, raise derrick and rig up pre-fabs. Wait until morning to rig up water lines and rental equipment.
11	12/19/2013	12/20/2013	0.00	0.00	40,181.53	1,038,439.82	No incidents or accidents. 2 - HID, 0 - OBS and 0 - ASA (all closed out). Wait until morning. Hold safety meeting, rig up water lines and rental equipment. Wait until morning to rig up rig floor and fill the mud tanks.
	12/20/2013	12/21/2013	0.00	0.00	40,181.53	1,078,621.35	No incidents or accidents. 2 - HID, 0 - OBS and 0 - ASA (all closed out). Wait until morning. Hold safety meeting, rig up rig floor and work on mud pumps. Wait until morning to fill the mud tanks, set up, load pipe racks with surface BHA and start to rig up diverter lines to flare tank.
13	12/21/2013	12/22/2013	0.00	0.00	40,181.53	1,118,802.88	No incidents or accidents. 2 - HID, 0 - OBS and 0 - ASA (all closed out). Wait until morning. Hold safety meeting, fill the mud tanks, set up, load pipe racks with surface BHA and start to rig up diverter lines to flare tank. Wait until morning to prep cellar for rotating head and rig up diverter lines to flare tank.
14	12/22/2013	12/23/2013	0.00	0.00	40,181.53	1,158,984.41	No incidents or accidents. 2 - HID, 0 - OBS and 0 - ASA (all closed out). Wait until morning. Hold safety meeting, prep cellar for rotating head and rig up diverter lines to flare tank. Wait until morning to install weight indicator, prep cellar for rotating head, weld on 20" adapter flange to the 20" conductor, install and hammer on spool.
15	12/23/2013	12/24/2013	0.00	0.00	83,003.53	1,241,987.94	No incidents or accidents. 3 - HID, 0 - OBS and 0 - ASA (all closed out). Wait until morning. Hold safety meeting, install weight indicator, prep cellar for rotating head, weld on 20" adapter flange to the 20" conductor, install 20" spool.
16	12/24/2013	12/25/2013	0.00	0.00	66,343.53	1,308,331.47	No incidents or accidents. 6 - HID, 0 - OBS and 0 - ASA (all closed out). Weld on 20" adaptor flanges onto 20" conductor. Rig up Schlumberger 8068 Rotating Head and install service loop.
17	12/25/2013	12/26/2013	0.00	0.00	99,893.53	1,408,225.00	No incidents or accidents. 9 - HID, 1 - OBS and 0 - ASA (all closed out) Install service loop, rig up, test and troubleshoot PLC (programmable logic controller) issues with top drive. Rig up BOS III tank and centrifuge combo tank.
18	12/26/2013	12/27/2013	0.00	0.00	86,003.53	1,494,228.53	No incidents or accidents. 7 - HID, 0 - OBS and 0 - ASA (all closed out) Rig up, test and troubleshoot PLC (programmable logic controller) issues with top drive. Rig up BOS III tank and centrifuge combo tank. Re-adjusted service loop. Rig in and weld diverter valves, lines, 10" flowline line and 8" booey line. Held high angle rescue meetings with rig crews.

ConocoPhillips Canada

Daily Activity and Cost Summary
CANYON E-76 65-10 126-45

UWI	Surface Legal Location	District	Field Name	License No.
E7665-10126-45	E-76 65-10 126-45	NEW VENTURES	Canyon	EL 470
Program	**Well Type**	**Well Configuration Type**	**Original KB/RT Elevation (m)**	**KB-Ground Distance (m)**
ILX	Appraisal	HORIZONTAL	273.40	0

Report No.	Start Date	End Date	Start Depth (mKB)	End Depth (mKB)	Daily Cost Total (Cost)	Cum Cost (Cost)	Last 24hr Sum
19	12/27/2013	12/28/2013	0.00	0.00	72,600.18	1,566,828.71	No incidents or accidents. 8 - HID, 0 - OBS and 0 - ASA (all closed out) Troubleshoot PLC (programmable logic controller) issues with top drive, install 10" flowline, install anti-collision program to top drive, complete top drive checks and function, pre-mix mud in mud tanks. Conduct pre-spud inspection, fill out pre-spud and rig inspection checklists. Make up surface BHA. Midnight to 6:30hrs: Make up BHA, circulate and check for leaks. Perform 'Hazard Hunt' with rig crew. Spud and drill 311mm surface hole at 6:30hrs on December 28, 2013. Sent pre-spud Beyond Compliance, pre-spud inspection and rig inspection checklists prior to spudding.
20	12/28/2013	12/29/2013	20.00	146.00	73,141.63	1,639,970.34	No incidents or accidents. 7 - HID, 0 - OBS and 0 - ASA (all closed out) Conduct pre-spud inspection, fill out pre-spud and rig inspection checklists. Make up BHA, circulate and check for leaks, perform 'Hazard Hunt' and pre-spud meetings with rig crews. Spud and drill 311mm surface hole from 0m to 146m with accumulated wireline surveys, rig services, connections and circulation times. Last survey at 146m was 0.1°. Sent pre-spud Beyond Compliance, pre-spud inspection and rig inspection checklists prior to spudding. Spud and drill 311mm surface hole at 6:30hrs on December 28, 2013. From midnight to 6:00am: Drill 311mm surface hole to 155m. Wait on top drive parts to fix PLC issues, pump and work drill string at 155m.
21	12/29/2013	12/30/2013	146.00	156.00	239,229.53	1,879,199.87	No incidents or accidents. 7 - HID, 1 - OBS and 0 - ASA (all closed out) Drill 311mm surface hole to 155m. Wait on top drive parts to fix PLC issues, pump and work drill string at 155m.
22	12/30/2013	12/31/2013	156.00	212.00	84,792.19	1,963,992.06	No incidents or accidents. 5 - HID, 0 - OBS and 0 - ASA (all closed out) Wait on top drive parts to fix HPU issues, pump and work drill string at 155m. Fix HPU issues. Drill 311mm surface hole from 155m to 212m with accumulated wireline surveys, rig services, connections and circulation times. Wiper trip at 212m. Last survey at 211m was 0.3°.
23	12/31/2013	1/1/2014	212.00	396.00	95,875.06	2,059,867.12	No incidents or accidents. 4 - HID, 0 - OBS and 0 - ASA (all closed out) Wiper trip at 212m, wash through tight spots at 183m and 136m. Drill 311mm surface hole from 212m to 396m with accumulated wireline surveys, rig services, connections and circulation times. Wiper trip at 396m. Last survey at 378m was 0.4°.
24	1/1/2014	1/2/2014	396.00	490.00	75,264.33	2,135,131.45	No incidents or accidents. 7 - HID, 0 - OBS and 0 - ASA (all closed out) Wiper trip at 396m, back ream through tight spots. Drill 311mm surface hole from 396m to 490m with accumulated wireline surveys, rig services, connections and circulation times. Last survey at 508m was 0.7°.
25	1/2/2014	1/3/2014	490.00	600.00	98,248.78	2,233,380.23	No incidents or accidents. 10 - HID, 0 - OBS and 0 - ASA (all closed out) Drill 311mm surface hole from 490m to 592m with accumulated wireline surveys, rig services, connections and circulation times. Wiper trip at 592m, back ream through tight spots. Last survey at 571m was 0.5°.
26	1/3/2014	1/4/2014	592.00	603.00	76,202.91	2,309,583.14	No incidents or accidents. 13 - HID, 1 - OBS and 0 - ASA (all closed out) Wiper trip at 592m, ream through tight spots. Drill to 603m (TD), work drill string and circulate hole clean. Pull out of the hole, lay down 6-1/2" and 9" drill collars, rig up power tongs and run 244.5mm surface casing.
27	1/4/2014	1/5/2014	603.00	603.00	329,910.69	2,639,493.83	No incidents or accidents. 12 - HID, 1 - OBS and 0 - ASA (all closed out) Run 244.5mm surface casing, tag bottom at 603m, circulate and clean the hole. Cement 244.5mm surface casing: full returns, 8.0m3 of good cement returns, plug down at 7:45hrs, pressure test surface casing to 11,500kPA, pressure held ok. Rig out cementers, wait on cement and clean substructure, nipple down diverter, weld on casing bowl, nipple up BOP, clean mud tanks, strip surface mud using the BOS III flocking system, transfer surface mud and clean water to 400bbl tanks to later run water through dehydrator.

ConocoPhillips Canada

Daily Activity and Cost Summary
CANYON E-76 65-10 126-45

UWI	Surface Legal Location	District	Field Name	License No.
7665-10126-45	E-76 65-10 126-45	NEW VENTURES	Canyon	EL 470
m	Well Type	Well Configuration Type	Original KB/RT Elevation (m)	KB-Ground Distance (m)
	Appraisal	HORIZONTAL	273.40	5.20

Report No.	Start Date	End Date	Start Depth (mKB)	End Depth (mKB)	Daily Cost Total (Cost)	Cum Cost (Cost)	Last 24hr Sum
28	1/5/2014	1/6/2014	603.00	603.00	152,793.03	2,792,286.86	No incidents or accidents. 8 - HID, 4 - OBS and 0 - ASA (all closed out) Nipple up BOP, clean mud tanks, strip surface mud using the BOS III flocking system, transfer surface mud and clean water to 400bbl tanks to later run water through dehydrator. Pressure test manifold and BOP components to 1400kPA-low and 20,000kPA-high (Annular: 17,500kPA-high), perform an accumulator function test. Complete rig and pre-drill out inspection. Fill mud tanks with invert. Pick and make up directional BHA and run in the hole.
29	1/6/2014	1/7/2014	603.00	761.00	103,134.43	2,895,421.29	No incidents or accidents. 10 - HID, 1 - OBS and 0 - ASA (all closed out) Complete rig and pre-drill out inspection. Fill mud tanks with invert. Pick and make up directional BHA, run in the hole, tag cement, displace to invert mud, conduct BOP drill and high angle rescue safety meetings, drill out cement float and shoe. Drill 222mm intermediate directional hole from 603m to 761m with accumulated MWD surveys, rig services, connections and circulation times.
30	1/7/2014	1/8/2014	761.00	1,179.00	86,623.83	2,982,045.12	No incidents or accidents. 6 - HID, 4 - OBS and 0 - ASA (all closed out) Drill 222mm intermediate directional hole from 761m to 1179m with accumulated MWD surveys, rig services, connections and circulation times. WOB: 6-8,000kDaN, RPM - 35 (Motor RPM - 112), Differential pressure: 3000-3500kPa, Pump rate: 1.6 m3/min. Torque: 1800 - 2400ft/lbs, Rotate: 414.0m - 99.0% / Slide: 4.0m - 1.0%, ROP: 26.5m/hr.
31	1/8/2014	1/9/2014	1,179.00	1,508.00	122,564.36	3,104,609.48	No incidents or accidents. 9 - HID, 1 - OBS and 0 - ASA (all closed out) Drill 222mm intermediate directional hole from 1179m to 1508m with accumulated MWD surveys, rig services, connections and circulation times. WOB: 6-8,000kDaN, RPM - 35 (Motor RPM - 112), Differential pressure: 3000-3500kPa, Pump rate: 1.6 m3/min. Torque: 1800 - 2400ft/lbs, Rotate: 282m - 86% / Slide: 47m - 14%, ROP: 15.7m/hr. Last survey at 1531.5mMD, inclination= 9.81°, azimuth= 264.58°, TVD - 1530.7m. We are 0.3m below and 1.42m left the line - 1.2° behind in angle - 12.2m center to center - BURR: 4.5° to the 7° per 30m mark at 1630mMD, KOP: 1466mMD.
32	1/9/2014	1/10/2014	1,508.00	1,588.00	101,242.18	3,205,851.66	No incidents or accidents. 5 - HID, 0 - OBS and 0 - ASA (all closed out) Drill 222mm intermediate directional hole from 1508m to 1588m with accumulated MWD surveys, rig services, connections and circulation times. WOB: 6-8,000kDaN, RPM - 35 (Motor RPM - 112), Differential pressure: 3000-3500kPa, Pump rate: 1.6 m3/min. Torque: 1800 - 2400ft/lbs, Rotate: 27.5m - 30% / Slide: 63.5m - 70%, ROP: 7.0m/hr. Last survey at 1580mMD, inclination= 15.60°, azimuth= 270.75°, TVD - 1578.02m. We are 3.2m below and 18.63m left the line - 0.7° behind in angle - 30° behind in azimuth - 15.72m center to center - BURR: 5.5° to the 7° per 30m mark at 1630mMD. Pull out of the hole, laydown mud motor, bit and dog sub. Change bit, mud motor and check MWD tool.
33	1/10/2014	1/11/2014	1,588.00	1,691.00	109,595.18	3,315,446.84	No incidents or accidents. 4 - HID, 0 - OBS and 0 - ASA (all closed out) Make up directional BHA, run in the hole and drill 222mm intermediate directional hole from 1588m to 1691m with accumulated MWD surveys, rig services, connections and circulation times. WOB: 6-14,000kDaN, RPM - 35 (Motor RPM - 112), Differential pressure: 3000-3500kPa, Pump rate: 1.6 m3/min. Torque: 1800 - 2400ft/lbs, Rotate: 15m - 15% / Slide: 82.5m - 85%, ROP: 12.3m/hr. Last survey at 1683.5mMD, inclination= 31.2°, azimuth= 312.66°, TVD - 1673.53m. We are 1.11m below and 20.55m left the line - 4.55° behind in angle - 12.50° behind in azimuth - 22.32m center to center - BURR: 8.4°/30m

ConocoPhillips Canada

Daily Activity and Cost Summary
CANYON E-76 65-10 126-45

UWI	Surface Legal Location	District	Field Name	License No.
E7665-10126-45	E-76 65-10 126-45	NEW VENTURES	Canyon	EL 470
Program	**Well Type**	**Well Configuration Type**	**Original KB/RT Elevation (m)**	**KB-Ground Distance (m)**
ILX	Appraisal	HORIZONTAL	273.40	.20

Report No.	Start Date	End Date	Start Depth (mKB)	End Depth (mKB)	Daily Cost Total (Cost)	Cum Cost (Cost)	Last 24hr Sum
34	1/11/2014	1/12/2014	1,691.00	1,726.00	88,691.30	3,404,138.14	No incidents or accidents. 13 - HID, 0 - OBS and 0 - ASA (all closed out) Drill 222mm intermediate directional hole from 1691m to 1702m, circulate bottoms up, pull out of the hole, dial up mud motor from 1.83° to 2.12° due to the inability to attain build rates required, check bit, run in the hole and drill 222mm intermediate directional hole from 1702m to 1726m with accumulated MWD surveys, rig services, connections and circulation times. WOB: 6-14,000kDaN, RPM - 35 (Motor RPM - 112), Differential pressure: 3000-3500kPa, Pump rate: 1.6 m3/min. Torque: 1800 - 2400ft/lbs, Rotate: 0.0m - 0.0% / Slide: 24m - 100%, ROP: 4.7m/hr. Last survey at 1731mMD, inclination= 44.19°, azimuth= 306.67°, TVD - 1711.12m. We are 2.73m below and 16.65m left the line - 2.29° behind in angle - 6.67° behind in azimuth - 20.43m center to center - BURR: 8.0°/30m
35	1/12/2014	1/13/2014	1,726.00	1,816.00	111,405.34	3,515,543.48	No incidents or accidents. 11 - HID, 2 - OBS and 0 - ASA (all closed out) Drill 222mm intermediate directional hole from 1726m to 1816m with accumulated MWD surveys, rig services, connections and circulation times. WOB: 6-18,000kDaN, RPM - 35 (Motor RPM - 112), Differential pressure: 500-1200kPa, Pump rate: 1.6 m3/min. Torque: 0ft/lbs, Rotate: 0.0m - 0% / Slide: 90m - 100%, ROP: 4.6m/hr. Last survey at 1807mMD, inclination= 63.1°, azimuth= 308.96°, TVD - 1756.4m. We are 2.91m below and 1.2m left of the 1777mTVD target line - 1.12° behind in angle - 8.9° behind in azimuth - 16.6m center to center - BURR: 9.0° for 1777mTVD target, BURR: 7.86° for 1780mTVD target.
36	1/13/2014	1/14/2014	1,816.00	1,900.00	102,743.95	3,618,287.43	No incidents or accidents. 5 - HID, 1 - OBS and 0 - ASA (all closed out) Drill 222mm intermediate directional hole from 1816m to 1900m with accumulated MWD surveys, rig services, connections and circulation tir WOB: 14-26,000kDaN, RPM - 25 (Motor RPM - 112), Differential press 500-1200kPa, Pump rate: 1.6 m3/min. Torque: 7500-9000ft/lbs, Rotate: 27m - 32% / Slide: 57m - 68%, ROP: 4.1m/hr. Last survey at 1889.5mMD, inclination: 86.61°, azimuth: 302.26°, TVD: 1776.19mTVD. Projection at bit: Intermediate TD- 1908mMD, inclination: 89.46°, azimuth: 302.0°, TVD: 1776.82mTVD.
37	1/14/2014	1/15/2014	1,900.00	1,908.00	189,894.92	3,808,182.35	No incidents or accidents. 13 - HID, 4 - OBS and 0 - ASA (all closed out) Drill 222mm intermediate directional hole from 1900m to 1908m. Projection at bit: Intermediate TD- 1908mMD, inclination: 89.46°, azimuth: 302.0°, TVD: 1776.82mTVD. Circulate, wiper trip to 1466m (KOP), circulate 2 bottoms up and clean hole, trip out of the hole, lay down directional tools, rig up loggers. Run open hole logs with Schlumberger, log 1 run: AIT-PEX-BHC-TLD2-ECRD to 1814m (65°) at 18:15hrs. Pull wear bushing, slip and cut drill line, change out saver sub on top drive.
38	1/15/2014	1/16/2014	1,908.00	1,908.00	339,249.78	4,147,432.13	No incidents or accidents. 8 - HID, 3 - OBS and 0 - ASA (all closed out) Change out saver sub on top drive, rig up power tongs and laydown truck, run 177.8mm intermediate casing, tag bottom at 1908mMD, circulate bottoms up, lay down tag joint, make up and land mandrel hanger and landing joint, circulate, rig up cementers, cement 177.8mm intermediate casing (plug down at 22:01hrs on January 15/.14 - Full pre-flush returns: 8m3 of CW8 and 8m3 of MudPushII Spacer, cement at surface by calculated volume results), rig out cementers, lay down landing joint.

ConocoPhillips Canada

Daily Activity and Cost Summary
CANYON E-76 65-10 126-45

UWI	Surface Legal Location	District	Field Name	License No.
665-10126-45	E-76 65-10 126-45	NEW VENTURES	Canyon	EL 470
n	Well Type	Well Configuration Type	Original KB/RT Elevation (m)	KB-Ground Distance (m)
	Appraisal	HORIZONTAL	273.40	5.20

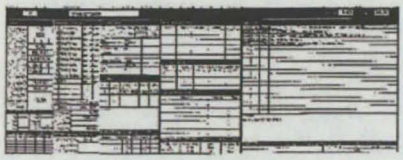
Report No.	Start Date	End Date	Start Depth (mKB)	End Depth (mKB)	Daily Cost Total (Cost)	Cum Cost (Cost)	Last 24hr Sum
39	1/16/2014	1/17/2014	1,908.00	1,908.00	211,773.53	4,359,205.66	No incidents or accidents. 8 - HID, 2 - OBS and 0 - ASA (all closed out) Lay down landing joint, attempt to set Stream-Flo packoff seal assembly above mandrel hanger, contact Calgary to create a 'Management of Change' prior to lifting BOP, flowcheck, lift BOP, fix Strem-Flo mandrel hanger issue, set Stream-Flo packoff seal assembly and pressure test, make up BHA, pressure test spool to 20,000kPA high and 1,400kPA for 10 minutes each (pressure test from upper spool against pipe rams using Schlumberger), run in the hole, tag cement at 1893mMD, drill out cement, tag float at 1895m, drill out float and shoe. From midnight to 6:00am= Drill 156mm hole from 1908m to 1914m, circulate bottoms up, perform FIT to a gradient of 12.5kPA/m (surface applied pressure: 4430kPA for 10 minutes), drill 156mm lateral hole with accumulated MWD surveys, rig services, connections and circulation times.
40	1/17/2014	1/18/2014	1,908.00	2,124.00	192,768.58	4,551,974.24	No incidents or accidents. 7 - HID, 2 - OBS and 0 - ASA (all closed out) Drill 156mm hole from 1908m to 1914m, circulate bottoms up, perform FIT to a gradient of 12.5kPA/m (surface applied pressure: 4430kPA for 10 minutes), drill 156mm lateral hole from 1914m to 2124m with accumulated MWD surveys, rig services, connections and circulation times. WOB: 6-10,000kDaN, RPM - 35-80 (Motor RPM - 152), Differential pressure: 2200-3000kPa, Pump rate: 1.1 m3/min. Torque: 7-10,000ft/lbs, Rotate: 162.75m - 75% / Slide: 53.25m - 25%, ROP: 16m/hr. Last survey at 2171mMD, inclination= 85.99°, azimuth= 297.06°, TVD - 1784.25m. We are 0.41m below and 3.9m right of the line.
41	1/18/2014	1/19/2014	2,124.00	2,495.00	166,517.34	4,718,491.58	No incidents or accidents. 8 - HID, 2 - OBS and 0 - ASA (all closed out) Drill 156mm lateral hole from 2124m to 2495m with accumulated MWD surveys, rig services, connections and circulation times. WOB: 6-10,000kDaN, RPM - 35-80 (Motor RPM - 152), Differential pressure: 2000-3000kPa, Pump rate: 1.1 m3/min. Torque: 7-10,000ft/lbs, Rotate: 341m - 92% / Slide: 29.5m - 8%, ROP: 19.9m/hr. Last survey at 2551mMD, inclination= 87.98°, azimuth= 297.85°, TVD - 1794.22m. We are 0.39m below and 12.12m right of the line.
42	1/19/2014	1/20/2014	2,495.00	2,895.00	122,537.96	4,841,029.54	No incidents or accidents. 9 - HID, 1 - OBS and 0 - ASA (all closed out) Drill 156mm lateral hole from 2495m to 2895m, with accumulated MWD surveys, rig services, connections and circulation times. WOB: 6-14,000kDaN, RPM - 35-80 (Motor RPM - 152), Differential pressure: 2000-3000kPa, Pump rate: 0.9-1.0 m3/min. Torque: 7-10,000ft/lbs, Rotate: 368.0m - 92.0% / Slide: 32.0m - 8.0%, ROP: 20.5m/hr. Last survey at 2890mMD, inclination= 87.8°, azimuth= 301.07°, TVD - 1803.24m. Projected survey at bit: 2910mMD (TD), inclination= 87.8°, azimuth= 301.07°, TVD - 1804.01m. We are 0.78m below and 14.92m left of the line.
43	1/20/2014	1/21/2014	2,895.00	2,910.00	103,189.12	4,944,218.66	No incidents or accidents. 3 - HID, 3 - OBS and 0 - ASA (all closed out) Drill 156mm lateral hole from 2895m to 2910m. Last survey at 2890mMD, inclination= 87.8°, azimuth= 301.07°, TVD - 1803.24m. Projected survey at bit: 2910mMD (TD), inclination= 87.8°, azimuth= 301.07°, TVD - 1804.01m. We are 0.78m below and 14.92m left of the line. Circulate 2 bottoms up, pull out of the hole to 1908mMD (casing shoe), wash in to 2910mMD (TD), circulate 3 bottoms up and clean hole, pull out of the hole, lay down directional tools.
44	1/21/2014	1/22/2014	2,910.00	2,910.00	246,313.25	5,190,531.91	No incidents or accidents. 7 - HID, 3 - OBS and 0 - ASA (all closed out) Pull out of the hole, lay down directional tools, rig up Schlumberger loggers and run USIT log (point of refusal at 1824mMD (67°) at 03:00hrs), rig out loggers, rig up power tongs and laydown truck, run 114.3mm production liner and Volant Hydroforms with liner top packer followed by drill pipe and heavy weight drill pipe, strap in and drift drill pipe and heavy weight drill pipe.

ConocoPhillips Canada

Daily Activity and Cost Summary
CANYON E-76 65-10 126-45

UWI	Surface Legal Location	District	Field Name	License No.
E7665-10126-45	E-76 65-10 126-45	NEW VENTURES	Canyon	EL 470
Program	**Well Type**	**Well Configuration Type**	**Original KB/RT Elevation (m)**	**KB-Ground Distance (m)**
ILX	Appraisal	HORIZONTAL	273.40	0

Report No	Start Date	End Date	Start Depth (mKB)	End Depth (mKB)	Daily Cost Total (Cost)	Cum Cost (Cost)	Last 24hr Sum
45	1/22/2014	1/23/2014	2,910.00	2,910.00	117,964.36	5,308,496.27	No incidents or accidents. 9 - HID, 0 - OBS and 0 - ASA (all closed out) Run 114.3mm production liner with drill pipe and heavy weight drill pipe, strap in and drift drill pipe and heavy weight drill pipe, tag bottom at 2910mMD, circulate bottoms up and clean hole, rig up cementers, cement liner up to liner top, drop dart and displace with fresh water, bump plug 3,500kPA over final circulating pressure, bleed off, check floats, pressure up to 28,000kPA and set liner with liner top packer, circulate out pre-flush and 2m3 of excess cement out, displace hole with fresh water, rig out cementers, flowcheck, rig up laydown truck, laydown drill pipe and heavy weight drill pipe, run in the rest of the drill pipe in the derrick, laydown drill pipe, rig up power tongs, run 114.3mm tie-back liner.
46	1/23/2014	1/24/2014	2,910.00	2,910.00	1,139,392.20	6,447,888.47	No incidents or accidents. 9 - HID, 0 - OBS and 0 - ASA (all closed out) Rig up power tongs, run 114.3mm tie-back liner, space out using 2 small pup joints, land mandrel seal assembly and tie onto top of liner top packer with 18,000dan of compression, remove landing joint, pressure test 114.3mm x 177.8mm annulus to 15,000kPA, rig out top drive, nipple down BOP. Rig release at 23:59hrs on January 23rd, 2014. From midnight to 6:00am: Nipple down BOP, pressure test packoff seal assembly, blow out water and pour 2 pails of diesel, install wellhead, clean mud tanks, tear out rig. No pressure on backside.



X. Bit record

ConocoPhillips Canada

Bit Summary

COPRC DODO CANYON E-76 65-10 126-45

API / UWI	Surface Legal Location	District	Field Name	License No.	Program	Well Type	Well Config	Orig KB/RT (m)	KB-Grd (m)
300E7665-10126-45	E-76 65-10 126-45	NEW VENTURES	Canyon	EL 470	ILX	Appraisal	HORIZONTAL	273.40	5.20

Bits

BHA No.	Bit Run	Size (mm)	Make	Model	SN	IADC Codes	TFA (incl Noz) (mm²)	Nozzles (mm)	Depth In (mKB)	Depth Out (mKB)	Drilled (m)	Drill Time (hr)	BHA ROP (m/hr)	WOB Max (daN)	WOB Min (daN)	Max RPM (rpm)	Min RPM (rpm)	Bit Dull
1	1A	311.0	REED	J&L	B181332	___	722	15.9/15.9/15.9/12.7	0.00	603.00	603.00	50.00	12.1	17,000	3	120	100	1-2-NO-S-1-0-WT-TD
2	1	222.0	Ulterra	616	21191	___	924	14.0/14.0/14.0/14.0/14.0/14.0	603.00	1,588.00	985.00	57.25	17.2	7,000	5,000	149	118	1-4-CT-G-3-0-WT-BHA
3	3	222.0	Smith	FHi18B	RA3594	___	429	13.5/13.5/13.5	1,588.00	1,691.00	103.00	11.75	8.8	13,000	12,000	149	149	-------
4	3rr	222.0	Smith	FHi18B	RA3594	___	429	13.5/13.5/13.5	1,691.00	1,908.00	217.00	50.00	4.3	20,000	13,000	149	120	1-3-WT-S-1--CT-TD
5	4	156.0	smith	613	jh8402	___	760	12.7/12.7/12.7/12.7/12.7/12.7	1,908.00	2,910.00	1,002.00	56.00	17.9	12,000	8,000	228	178	-------

XI. Directional Summary

ConocoPhillips Canada

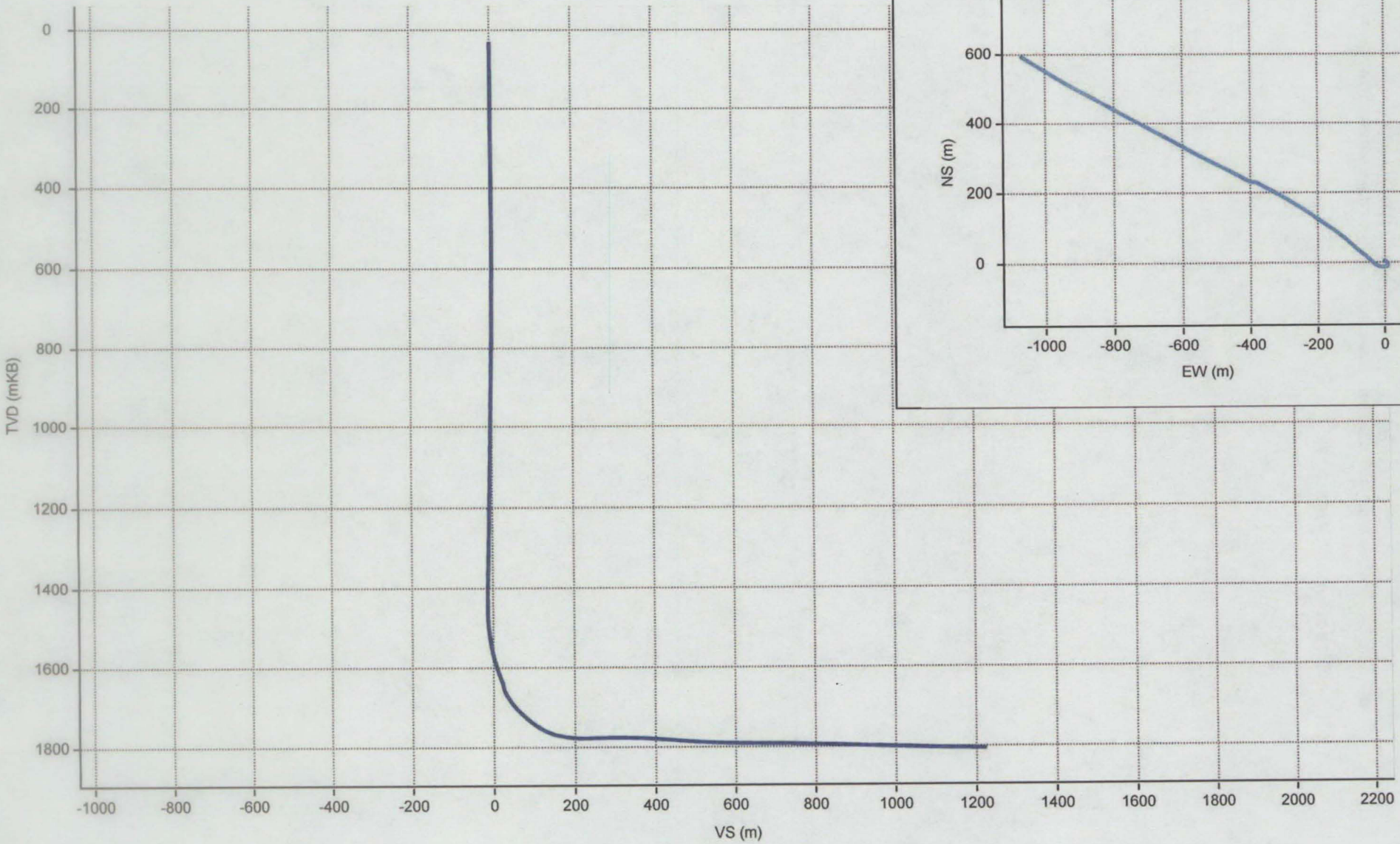
Directional Plot

COPRC DODO CANYON E-76 65-10 126-45

API / UWI	Surface Legal Location	District	Field Name	License No.	Program	Well Type	Well Config	Orig KB/RT (m)	KB-Grd (m)
300E7665-10126-45	E-76 65-10 126-45	NEW VENTURES	Canyon	EL 470	ILX	Appraisal	HORIZONTAL	273.40	5.20

Kick Off Date	Kick Off Method	Kick Off Depth (mKB)	Kick Off Depth (mKB)	MD Tie In (mKB)	TVDTie In (mKB)	Azimuth Tie...	Inclination...	NSTie In (m)	EWTie In (m)	VS Tie In (m)
	Steerable Motor									

Vertical Section



Plan

ConocoPhillips Canada

Directional Survey
CANYON E-76 65-10 126-45

UWI	Surface Legal Location	District	Field Name	License No.
[redacted]7665-10126-45	E-76 65-10 126-45	NEW VENTURES	Canyon	EL 470
Program	**Well Type**	**Well Configuration Type**	**Original KB/RT Elevation (m)**	**KB-Ground Distance (m)**
ILX	Appraisal	HORIZONTAL	273.40	5.20

Wellbore Name	Parent Wellbore	Wellbore API/UWI	Job
Original Hole	Original Hole		DRILLING ORIGINAL, 12/9/2013 00:00
Kick Off Date	**Kick Off Method**	**Kick Off Depth (mKB)**	**Vertical Section Direction (°)**
	Steerable Motor		
Date	**Description**	**As Ran**	**Proposed?**
12/28/2013	Directional Survey from Tour Sheet Import	No	No

MD Tie In (mKB)	TVDTie In (mKB)	Inclination Tie In (°)	Azimuth Tie In (°)	NSTie In (m)	EWTie In (m)

Survey Data

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	Depart (m)	VS (m)	NS (m)	EW (m)	DLS (°/30m)	Method	Survey Company
12/28/2013	29.00	0.40	0.00	29.00	0.10	0.05	0.10	0.00	0.41	WIRELINE	
12/28/2013	62.00	0.50	0.00	62.00	0.36	0.17	0.36	0.00	0.09	WIRELINE	
12/28/2013	90.00	0.20	0.00	90.00	0.53	0.26	0.53	0.00	0.32	WIRELINE	
12/28/2013	118.00	0.20	0.00	118.00	0.63	0.31	0.63	0.00	0.00	WIRELINE	
12/28/2013	147.00	0.10	0.00	147.00	0.71	0.34	0.71	0.00	0.10	WIRELINE	
12/28/2013	157.00	0.10	0.00	157.00	0.72	0.35	0.72	0.00	0.00	WIRELINE	
12/30/2013	183.00	0.20	0.00	183.00	0.79	0.38	0.79	0.00	0.12	WIRELINE	
12/30/2013	211.00	0.30	0.00	211.00	0.91	0.44	0.91	0.00	0.11	WIRELINE	
12/31/2013	240.00	0.50	0.00	240.00	1.12	0.54	1.12	0.00	0.21	WIRELINE	
12/31/2013	269.00	0.80	0.00	268.99	1.44	0.70	1.44	0.00	0.31	WIRELINE	
12/31/2013	306.00	1.00	0.00	305.99	2.03	0.98	2.03	0.00	0.16	WIRELINE	
12/31/2013	348.00	0.90	0.00	347.98	2.72	1.32	2.72	0.00	0.07	WIRELINE	
12/31/2013	378.00	0.40	0.00	377.98	3.06	1.49	3.06	0.00	0.50	WIRELINE	
1/1/2014	396.00	0.60	0.00	395.98	3.22	1.56	3.22	0.00	0.33	WIRELINE	
[redacted]/2014	433.00	0.60	0.00	432.98	3.61	1.75	3.61	0.00	0.00	WIRELINE	
[redacted]014	461.00	0.60	0.00	460.98	3.90	1.89	3.90	0.00	0.00	WIRELINE	
[redacted]014	489.00	0.50	0.00	488.98	4.17	2.02	4.17	0.00	0.11	WIRELINE	
1/2/2014	508.00	0.70	0.00	507.98	4.37	2.12	4.37	0.00	0.32	WIRELINE	
1/2/2014	544.00	0.40	0.00	543.97	4.71	2.29	4.71	0.00	0.25	WIRELINE	
1/2/2014	571.00	0.50	0.00	570.97	4.93	2.39	4.93	0.00	0.11	WIRELINE	
1/6/2014	627.50	0.31	124.14	627.47	5.09	2.36	5.09	0.13	0.38	DIRECTIONA	Pathfinder
1/6/2014	704.46	0.62	137.27	704.43	4.70	1.75	4.66	0.58	0.13	DIRECTIONA	Pathfinder
1/7/2014	781.46	0.71	129.47	781.42	4.24	0.89	4.05	1.23	0.05	DIRECTIONA	Pathfinder
1/7/2014	896.50	1.28	113.56	896.45	4.28	-1.09	3.09	2.96	0.16	DIRECTIONA	Pathfinder
1/7/2014	970.50	0.88	151.56	970.43	4.58	-2.39	2.26	3.99	0.32	DIRECTIONA	Pathfinder
1/7/2014	1,008.50	1.02	147.85	1,008.43	4.64	-2.93	1.71	4.31	0.12	DIRECTIONA	Pathfinder
1/7/2014	1,046.85	1.19	133.05	1,046.77	4.92	-3.62	1.15	4.78	0.26	DIRECTIONA	Pathfinder
1/7/2014	1,084.50	1.50	124.45	1,084.41	5.51	-4.49	0.61	5.47	0.29	DIRECTIONA	Pathfinder
1/7/2014	1,122.50	1.10	145.78	1,122.40	6.09	-5.31	0.02	6.09	0.49	DIRECTIONA	Pathfinder
1/8/2014	1,160.50	1.19	131.15	1,160.40	6.61	-6.02	-0.54	6.59	0.24	DIRECTIONA	Pathfinder
1/8/2014	1,198.50	2.12	145.56	1,198.38	7.41	-7.04	-1.38	7.28	0.80	DIRECTIONA	Pathfinder
1/8/2014	1,236.50	1.81	176.76	1,236.36	8.13	-7.99	-2.55	7.72	0.87	DIRECTIONA	Pathfinder
[redacted]14	1,274.50	1.41	163.67	1,274.34	8.67	-8.64	-3.60	7.88	0.43	DIRECTIONA	Pathfinder
1/8/2014	1,312.50	1.90	156.64	1,312.33	9.47	-9.47	-4.63	8.26	0.42	DIRECTIONA	Pathfinder
1/8/2014	1,351.50	2.12	141.06	1,351.30	10.68	-10.65	-5.78	8.97	0.45	DIRECTIONA	Pathfinder

ConocoPhillips Canada

Directional Survey
CANYON E-76 65-10 126-45

UWI	Surface Legal Location	District	Field Name	License No.
E7665-10126-45	E-76 65-10 126-45	NEW VENTURES	Canyon	EL 470
Program	**Well Type**	**Well Configuration Type**	**Original KB/RT Elevation (m)**	**KB-Ground Distance (m)**
ILX	Appraisal	HORIZONTAL	273.40	5.20

Survey Data

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	Depart (m)	VS (m)	NS (m)	EW (m)	DLS (°/30m)	Method	Survey Company
1/8/2014	1,389.50	2.90	172.66	1,389.27	12.00	-11.87	-7.28	9.54	1.23	DIRECTIONA	Pathfinder
1/8/2014	1,426.50	2.78	175.74	1,426.22	13.32	-12.92	-9.11	9.72	0.16	DIRECTIONA	Pathfinder
1/8/2014	1,446.00	4.20	204.66	1,445.69	13.93	-13.23	-10.23	9.46	3.41	DIRECTIONA	Pathfinder
1/8/2014	1,464.50	2.70	229.77	1,464.15	14.21	-13.13	-11.13	8.84	3.40	DIRECTIONA	Pathfinder
1/8/2014	1,474.50	4.02	247.44	1,474.14	14.14	-12.83	-11.41	8.34	4.99	DIRECTIONA	Pathfinder
1/8/2014	1,483.50	4.60	257.05	1,483.11	13.93	-12.37	-11.61	7.70	3.08	DIRECTIONA	Pathfinder
1/8/2014	1,493.50	6.32	262.42	1,493.07	13.58	-11.63	-11.78	6.76	5.38	DIRECTIONA	Pathfinder
1/9/2014	1,503.00	7.11	268.46	1,502.50	13.14	-10.70	-11.86	5.66	3.34	DIRECTIONA	Pathfinder
1/9/2014	1,512.50	8.09	268.37	1,511.92	12.68	-9.62	-11.90	4.40	3.09	DIRECTIONA	Pathfinder
1/9/2014	1,522.00	8.62	267.36	1,521.32	12.32	-8.44	-11.95	3.02	1.74	DIRECTIONA	Pathfinder
1/9/2014	1,531.50	9.81	264.58	1,530.69	12.15	-7.16	-12.06	1.50	4.01	DIRECTIONA	Pathfinder
1/9/2014	1,541.00	10.78	267.18	1,540.04	12.18	-5.74	-12.18	-0.19	3.40	DIRECTIONA	Pathfinder
2014	1,550.50	11.62	269.47	1,549.36	12.40	-4.16	-12.23	-2.03	3.00	DIRECTIONA	Pathfinder
1/9/2014	1,560.00	12.59	269.78	1,558.65	12.89	-2.42	-12.24	-4.03	3.07	DIRECTIONA	Pathfinder
1/9/2014	1,569.50	14.41	271.28	1,567.89	13.72	-0.47	-12.22	-6.24	5.85	DIRECTIONA	Pathfinder
1/9/2014	1,580.00	15.60	270.75	1,578.03	15.12	1.93	-12.17	-8.96	3.42	DIRECTIONA	Pathfinder
1/10/2014	1,599.00	19.40	278.37	1,596.15	18.73	7.13	-11.68	-14.64	6.99	DIRECTIONA	Pathfinder
1/10/2014	1,608.50	19.31	287.85	1,605.11	20.82	10.15	-10.97	-17.70	9.92	DIRECTIONA	Pathfinder
1/10/2014	1,617.50	19.80	296.44	1,613.60	22.72	13.14	-9.83	-20.48	9.71	DIRECTIONA	Pathfinder
1/10/2014	1,627.00	20.19	300.14	1,622.52	24.77	16.38	-8.29	-23.34	4.18	DIRECTIONA	Pathfinder
1/10/2014	1,636.50	21.21	303.36	1,631.41	26.99	19.74	-6.52	-26.19	4.83	DIRECTIONA	Pathfinder
1/10/2014	1,645.50	22.80	306.18	1,639.75	29.32	23.09	-4.60	-28.96	6.36	DIRECTIONA	Pathfinder
1/10/2014	1,655.00	2.48	309.35	1,648.98	30.81	25.14	-3.37	-30.62	64.18	DIRECTIONA	Pathfinder
1/10/2014	1,664.50	27.22	309.27	1,658.09	32.54	27.52	-1.84	-32.49	78.13	DIRECTIONA	Pathfinder
1/11/2014	1,674.00	29.12	310.94	1,666.46	35.93	31.92	1.05	-35.92	6.50	DIRECTIONA	Pathfinder
1/11/2014	1,683.50	31.20	312.66	1,674.67	39.70	36.57	4.23	-39.48	7.11	DIRECTIONA	Pathfinder
1/11/2014	1,693.00	33.41	312.66	1,682.70	43.88	41.50	7.67	-43.21	6.98	DIRECTIONA	Pathfinder
/2014	1,702.50	36.10	310.68	1,690.51	48.58	46.79	11.27	-47.26	9.21	DIRECTIONA	Pathfinder
1/12/2014	1,712.00	38.62	308.96	1,698.06	53.81	52.45	14.96	-51.68	8.61	DIRECTIONA	Pathfinder
1/12/2014	1,721.50	41.71	305.96	1,705.32	59.55	58.51	18.68	-56.55	11.51	DIRECTIONA	Pathfinder

ConocoPhillips Canada

Directional Survey
CANYON E-76 65-10 126-45

UWI	Surface Legal Location	District	Field Name	License No.
[redacted]7665-10126-45	E-76 65-10 126-45	NEW VENTURES	Canyon	EL 470
[redacted]am	Well Type	Well Configuration Type	Original KB/RT Elevation (m)	KB-Ground Distance (m)
ILX	Appraisal	HORIZONTAL	273.40	5.20

Survey Data

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	Depart (m)	VS (m)	NS (m)	EW (m)	DLS (°/30m)	Method	Survey Company
1/13/2014	1,731.00	44.19	306.67	1,712.27	65.74	64.93	22.51	-61.76	7.98	DIRECTIONAL	Pathfinder
1/12/2014	1,759.50	50.91	309.66	1,731.50	85.95	85.67	35.52	-78.27	7.44	DIRECTIONAL	Pathfinder
1/12/2014	1,769.00	52.32	310.15	1,737.40	93.15	92.98	40.30	-83.98	4.61	DIRECTIONAL	Pathfinder
1/12/2014	1,778.50	55.50	312.17	1,742.99	100.56	100.49	45.35	-89.76	11.29	DIRECTIONAL	Pathfinder
1/12/2014	1,788.00	57.58	311.87	1,748.23	108.23	108.21	50.66	-95.64	6.62	DIRECTIONAL	Pathfinder
1/13/2014	1,797.50	60.41	310.28	1,753.12	116.17	116.17	56.00	-101.78	9.92	DIRECTIONAL	Pathfinder
1/13/2014	1,807.00	63.10	308.96	1,757.62	124.40	124.40	61.34	-108.23	9.25	DIRECTIONAL	Pathfinder
1/13/2014	1,816.50	66.10	308.78	1,761.69	132.88	132.85	66.72	-114.91	9.49	DIRECTIONAL	Pathfinder
1/13/2014	1,825.00	69.51	308.34	1,764.91	140.67	140.61	71.63	-121.06	12.12	DIRECTIONAL	Pathfinder
1/13/2014	1,835.00	73.49	307.55	1,768.08	150.07	149.98	77.46	-128.54	12.15	DIRECTIONAL	Pathfinder
1/13/2014	1,845.00	76.71	307.55	1,770.65	159.68	159.53	83.35	-136.20	9.66	DIRECTIONAL	Pathfinder
1/13/2014	1,854.50	79.10	305.56	1,772.64	168.93	168.74	88.88	-143.66	9.73	DIRECTIONAL	Pathfinder
[redacted]/2014	1,864.00	80.20	304.07	1,774.35	178.26	178.04	94.21	-151.33	5.79	DIRECTIONAL	Pathfinder
[redacted]/2014	1,873.50	82.02	303.67	1,775.81	187.64	187.39	99.44	-159.13	5.88	DIRECTIONAL	Pathfinder
1/14/2014	1,883.00	84.71	302.88	1,776.91	197.08	196.80	104.62	-167.02	8.85	DIRECTIONAL	Pathfinder
1/14/2014	1,889.50	86.61	302.26	1,777.40	203.56	203.27	108.11	-172.48	9.22	DIRECTIONAL	Pathfinder
1/17/2014	1,914.50	91.52	303.85	1,777.81	228.54	228.20	121.74	-193.42	6.19	DIRECTIONAL	Pathfinder
1/17/2014	1,924.00	91.60	302.88	1,777.55	238.04	237.67	126.96	-201.35	3.07	DIRECTIONAL	Pathfinder
1/17/2014	1,933.50	91.70	302.60	1,777.28	247.53	247.14	132.10	-209.34	0.94	DIRECTIONAL	Pathfinder
1/17/2014	1,943.00	91.60	303.40	1,777.01	257.03	256.61	137.27	-217.30	2.54	DIRECTIONAL	Pathfinder
1/17/2014	1,952.50	90.90	301.80	1,776.80	266.53	266.09	142.39	-225.30	5.51	DIRECTIONAL	Pathfinder
1/17/2014	1,962.00	91.00	303.30	1,776.64	276.02	275.57	147.50	-233.31	4.75	DIRECTIONAL	Pathfinder
1/17/2014	1,971.50	90.50	301.40	1,776.52	285.52	285.06	152.58	-241.34	6.20	DIRECTIONAL	Pathfinder
1/17/2014	1,981.00	90.70	300.90	1,776.42	295.02	294.55	157.49	-249.47	1.70	DIRECTIONAL	Pathfinder
1/17/2014	1,990.50	90.50	301.30	1,776.32	304.52	304.04	162.40	-257.60	1.41	DIRECTIONAL	Pathfinder
1/17/2014	2,000.00	89.70	300.30	1,776.30	314.02	313.54	167.27	-265.76	4.04	DIRECTIONAL	Pathfinder
1/17/2014	2,009.50	89.30	299.40	1,776.38	323.51	323.04	171.99	-274.00	3.11	DIRECTIONAL	Pathfinder
[redacted]014	2,019.00	88.30	300.00	1,776.58	333.00	332.53	176.70	-282.25	3.68	DIRECTIONAL	Pathfinder
1/17/2014	2,028.50	88.60	299.40	1,776.84	342.49	342.03	181.40	-290.50	2.12	DIRECTIONAL	Pathfinder
1/17/2014	2,038.00	88.50	298.50	1,777.08	351.97	351.53	186.00	-298.81	2.86	DIRECTIONAL	Pathfinder

ConocoPhillips Canada

Directional Survey
CANYON E-76 65-10 126-45

UWI	Surface Legal Location	District	Field Name	License No.
E7665-10126-45	E-76 65-10 126-45	NEW VENTURES	Canyon	EL 470
Program	**Well Type**	**Well Configuration Type**	**Original KB/RT Elevation (m)**	**KB-Ground Distance (m)**
ILX	Appraisal	HORIZONTAL	273.40	5.20

Survey Data

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	Depart (m)	VS (m)	NS (m)	EW (m)	DLS (°/30m)	Method	Survey Company
1/17/2014	2,048.00	88.30	297.90	1,777.36	361.95	361.52	190.73	-307.62	1.90	DIRECTIONAL	Pathfinder
1/17/2014	2,057.00	88.30	297.90	1,777.63	370.92	370.52	194.93	-315.57	0.00	DIRECTIONAL	Pathfinder
1/17/2014	2,066.50	86.70	297.50	1,778.04	380.39	380.00	199.35	-323.97	5.21	DIRECTIONAL	Pathfinder
1/17/2014	2,076.50	86.50	296.80	1,778.63	390.34	389.98	203.90	-332.85	2.18	DIRECTIONAL	Pathfinder
1/17/2014	2,085.50	86.30	297.37	1,779.20	399.30	398.96	207.99	-340.85	2.01	DIRECTIONAL	Pathfinder
1/17/2014	2,095.00	85.82	296.66	1,779.85	408.75	408.43	212.30	-349.29	2.70	DIRECTIONAL	Pathfinder
1/17/2014	2,104.50	85.68	297.15	1,780.56	418.20	417.90	216.58	-357.74	1.61	DIRECTIONAL	Pathfinder
1/18/2014	2,113.50	85.59	296.97	1,781.24	427.15	426.87	220.67	-365.73	0.67	DIRECTIONAL	Pathfinder
1/18/2014	2,123.00	85.59	296.66	1,781.97	436.59	436.33	224.94	-374.19	0.98	DIRECTIONAL	Pathfinder
1/18/2014	2,132.50	85.68	295.25	1,782.69	446.03	445.79	229.08	-382.70	4.45	DIRECTIONAL	Pathfinder
1/18/2014	2,142.00	85.90	259.20	1,783.42	454.58	454.44	230.26	-391.95	113.53	DIRECTIONAL	Pathfinder
1/18/2014	2,151.00	85.82	295.16	1,784.09	462.70	462.63	231.36	-400.71	119.54	DIRECTIONAL	Pathfinder
/2014	2,171.00	85.90	297.06	1,785.53	482.60	482.55	240.14	-418.62	2.85	DIRECTIONAL	Pathfinder
1/18/2014	2,181.50	85.90	296.57	1,786.28	493.06	493.02	244.86	-427.96	1.40	DIRECTIONAL	Pathfinder
1/18/2014	2,191.00	86.10	297.40	1,786.94	502.53	502.49	249.16	-436.41	2.69	DIRECTIONAL	Pathfinder
1/18/2014	2,199.50	86.40	296.40	1,787.50	511.00	510.97	253.00	-443.97	3.68	DIRECTIONAL	Pathfinder
1/18/2014	2,209.00	86.70	297.40	1,788.07	520.47	520.44	257.29	-452.43	3.29	DIRECTIONAL	Pathfinder
1/18/2014	2,247.00	87.90	295.90	1,789.86	558.38	558.37	274.31	-486.35	1.52	DIRECTIONAL	Pathfinder
1/18/2014	2,266.00	88.20	296.40	1,790.51	577.34	577.33	282.68	-503.40	0.92	DIRECTIONAL	Pathfinder
1/18/2014	2,275.50	88.70	296.60	1,790.77	586.82	586.82	286.92	-511.90	1.70	DIRECTIONAL	Pathfinder
1/18/2014	2,313.50	89.50	297.10	1,791.36	624.79	624.79	304.08	-545.80	0.74	DIRECTIONAL	Pathfinder
1/18/2014	2,342.00	89.40	298.40	1,791.64	653.28	653.28	317.35	-571.02	1.37	DIRECTIONAL	Pathfinder
1/18/2014	2,361.00	89.70	298.40	1,791.79	672.28	672.28	326.39	-587.73	0.47	DIRECTIONAL	Pathfinder
1/18/2014	2,380.00	89.80	298.20	1,791.87	691.27	691.27	335.39	-604.46	0.35	DIRECTIONAL	Pathfinder
1/18/2014	2,399.00	89.40	298.60	1,792.00	710.27	710.27	344.43	-621.17	0.89	DIRECTIONAL	Pathfinder
1/18/2014	2,418.00	89.60	298.80	1,792.17	729.27	729.27	353.55	-637.84	0.45	DIRECTIONAL	Pathfinder
1/18/2014	2,437.00	88.20	297.28	1,792.53	748.26	748.26	362.48	-654.60	3.26	DIRECTIONAL	Pathfinder
/2014	2,455.50	88.60	296.84	1,793.05	766.75	766.75	370.90	-671.07	0.96	DIRECTIONAL	Pathfinder
1/18/2014	2,475.00	88.60	298.95	1,793.52	786.24	786.23	380.02	-688.30	3.25	DIRECTIONAL	Pathfinder
1/19/2014	2,494.00	88.60	297.28	1,793.99	805.23	805.23	388.97	-705.05	2.64	DIRECTIONAL	Pathfinder

ConocoPhillips Canada

Directional Survey
CANYON E-76 65-10 126-45

UWI	Surface Legal Location	District	Field Name	License No.
7665-10126-45	E-76 65-10 126-45	NEW VENTURES	Canyon	EL 470
am	Well Type	Well Configuration Type	Original KB/RT Elevation (m)	KB-Ground Distance (m)
ILX	Appraisal	HORIZONTAL	273.40	5.20

Survey Data

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	Depart (m)	VS (m)	NS (m)	EW (m)	DLS (°/30m)	Method	Survey Company
1/19/2014	2,513.50	88.20	298.56	1,794.53	824.72	824.71	398.09	-722.27	2.06	DIRECTIO NA	Pathfinder
1/19/2014	2,532.00	88.38	298.65	1,795.09	843.21	843.21	406.95	-738.51	0.33	DIRECTIO NA	Pathfinder
1/19/2014	2,551.00	87.98	297.85	1,795.69	862.20	862.19	415.94	-755.24	1.41	DIRECTIO NA	Pathfinder
1/19/2014	2,570.00	88.10	298.80	1,796.34	881.19	881.18	424.95	-771.95	1.51	DIRECTIO NA	Pathfinder
1/19/2014	2,589.00	88.10	299.00	1,796.97	900.18	900.17	434.12	-788.58	0.32	DIRECTIO NA	Pathfinder
1/19/2014	2,608.00	88.30	299.00	1,797.57	919.17	919.16	443.33	-805.19	0.32	DIRECTIO NA	Pathfinder
1/19/2014	2,627.00	88.40	298.60	1,798.11	938.16	938.15	452.48	-821.83	0.65	DIRECTIO NA	Pathfinder
1/19/2014	2,646.00	88.50	297.00	1,798.63	957.15	957.14	461.34	-838.63	2.53	DIRECTIO NA	Pathfinder
1/19/2014	2,665.00	88.80	298.60	1,799.07	976.14	976.13	470.20	-855.43	2.57	DIRECTIO NA	Pathfinder
1/19/2014	2,684.00	87.90	297.30	1,799.62	995.13	995.12	479.10	-872.21	2.50	DIRECTIO NA	Pathfinder
1/19/2014	2,703.00	88.30	297.50	1,800.25	1,014.11	1,014.10	487.84	-889.07	0.71	DIRECTIO NA	Pathfinder
1/19/2014	2,721.00	88.50	298.60	1,800.75	1,032.10	1,032.09	496.30	-904.95	1.86	DIRECTIO NA	Pathfinder
/2014	2,740.00	88.00	298.50	1,801.33	1,051.09	1,051.08	505.37	-921.63	0.81	DIRECTIO NA	Pathfinder
/2014	2,759.00	88.20	299.40	1,801.96	1,070.08	1,070.07	514.57	-938.24	1.45	DIRECTIO NA	Pathfinder
1/19/2014	2,778.50	88.50	301.30	1,802.53	1,089.57	1,089.56	524.41	-955.06	2.96	DIRECTIO NA	Pathfinder
1/19/2014	2,798.50	88.70	300.30	1,803.01	1,109.55	1,109.54	534.65	-972.24	1.53	DIRECTIO NA	Pathfinder
1/19/2014	2,807.50	89.20	301.30	1,803.18	1,118.54	1,118.53	539.26	-979.97	3.73	DIRECTIO NA	Pathfinder
1/19/2014	2,837.00	89.31	302.48	1,803.56	1,148.00	1,147.99	554.84	-1,005.01	1.21	DIRECTIO NA	Pathfinder
1/19/2014	2,855.50	89.20	300.50	1,803.80	1,166.48	1,166.48	564.50	-1,020.79	3.22	DIRECTIO NA	Pathfinder
1/20/2014	2,890.00	87.80	301.07	1,804.71	1,200.95	1,200.95	582.16	-1,050.41	1.31	DIRECTIO NA	Pathfinder
1/20/2014	2,890.00	87.80	301.07	1,804.71	1,200.95	1,200.95	582.16	-1,050.41	1.31	DIRECTIO NA	
1/20/2014	2,910.00	87.80	301.07	1,805.47	1,220.92	1,220.92	592.47	-1,067.53	0.00	DIRECTIO NA	Pathfinder

XIII. Completion Daily Activity and Cost Summary

ConocoPhillips Canada

Daily Activity and Cost Summary
COPRC DODO CANYON E-76 65-10 126-45

Job Category	Primary Job Type	Secondary Job Type	Actual Start Date	End Date
MPLETIONS	INITIAL COMPLETION	RIGLESS	1/25/2014 00:00	3/28/2014 08:00
/ RFE / Maint.#	Total Job AFE Amount (Cost)	AFE+Supp Amt (Cost)	Total Field Estimate (Cost)	AFE-Field Estimate (Cost)
10359413	16,997,500.00	20,641,514.00	21,945,332.75	-1,303,818.75

Objective
Hydrailically fracture and flow test as part of the 2014 Canol Exploration Program

Contractor	Rig Name/No	Rig Type
Weatherford	FS 463	OTHER

DAILY ACTIVITY & COST SUMMARY

Report No.	Start Date	Daily Cost Total (Cost)	Cum Cost (Cost)	Last 24hr Sum
1	1/25/2014 00:00	2,961,069.72	2,961,069.72	
2	1/26/2014 07:30	1,430,026.49	4,391,096.21	Continue staging equipment from Norman Wells / Ice Road to O6 location
3	1/27/2014 07:30	306,629.50	4,697,725.71	Continue staging equipment from Norman Wells / Ice Road to O6 location / Repair and maintenance on equipment
4	1/28/2014 07:30	122,457.00	4,820,182.71	Continue offloading completion equipment / Offload 93 m³ methanol / Prep West side for shacks / Spot Generator and Meeting Shack
5	1/29/2014 07:30	137,279.00	4,957,461.71	Complete C-Ring Pad / Measure and partially spread sawdust / Install 7 1/16" x 10K Gate Valve / Install 4 1/16" Gate Valve / Flow Block / MIRU Office Shacks / Sleepers / Power / Septic / Light Towers.
6	1/30/2014 07:30	158,666.00	5,116,127.71	Spread sawdaust for under C-ring liner. Performed a 10 minute SCVF test as per directive 20. Zero bubbles (no flow) detected in 10 minutes. Good test. Pumped 1/2 stick of arctic pack into wellhead and pressure tested intermediate casing bowl primary seals to 33.5MPa for 15 minutes. Good test. CPC construction worked on several parts of location building up lease and leveling. Spread out Geo mat and liner for C-ring. Stood C-ring.
7	1/31/2014 07:30	672,989.00	5,789,116.71	Construction continued to build and level south side of location. Continued to haul in and spot equipment (HD boiler, RCS pump shack and water managment equipment, frac manifold, 8 x 40 mats, 90 ton crane). Finished rig in of C-ring. Off loaded 75m³ of clean fresh water from Lake into C-ring.
8	2/1/2014 07:30	193,716.00	5,982,832.71	Hauled water from lake (WS-02) and off loaded into C-ring. Filled boilers and fired. Moved on all Weatherford tesing equipment and started to rig in. Spotted mats for flowback tank farm. Started 24 hour operations (fluid hauling).
9	2/2/2014 06:00	184,723.00	6,167,555.71	Continue rigging in test equipment / Continue offloading frac water from WS02 / Erect and secure dirty tank farm containment system / reposition materials on location / Spot single sand chief and offload PCM, Blender, Labs unit / Rig in boiler to wellhead and circulate
10	2/3/2014 06:00	231,023.00	6,398,578.71	Remove frac head and gate valve / Set up flow back tank farm / spot sand cheifs / offload 180 m³ H²O / Offload 50 m³ 28% Acid / Begin offloading sand / Haul water to work tank / Heat frac water / Heat water for CT cleanout.
11	2/4/2014 06:00	596,816.00	6,995,394.71	Spotted SLB CT and frac equipment / Removed tubing spool / Installed and pressure tested new tubing spool / Installed 179mm 10K valve and IES frac wellhead / Rigged in work platform and heated wellhead / Pressure tested CT BOPs and SLB over pressured 69MPa BOP stack / Schlumberger removed BOPs from service / Pressure tested intermediate casing to 30MPa - Good test.
12	2/5/2014 06:00	325,584.00	7,320,978.71	Started to pressure test CT BOPs. C-Ring liner started to leak and became increasingly worse. Personnel were evacuated to muster area. 2760m³ of warm fresh water was drained from C-ring and released from well pad. Stump tested CT BOPs. Pressured intermediate csg up to 10MPa. Installed CT BOPs. Pressure tested test flow line to 60MPa. Pressure tested IES frac wellhead and 114.3mm production casing to 68MPa - Good.
13	2/6/2014 06:00	243,450.00	7,564,428.71	Rig out and move equipment around C-ring,Dismantle C-ring, roll up liner and clean up area. Make up milling BHA and coil tubing lube. Install onto well and pressure test lube. Function test motor. RIH with coil performing pull tests every 500m to heal then every 250m to bottom. Did not see any restrictions or pull overs on way in.
14	2/7/2014 06:00	263,948.00	7,828,376.71	RIH with coil tbg, tag PBTD @ 2877.3mKB, pump 2 x 1m³ gel sweeps @ PBTD, pull up to 1731mKB and pump 2 x 1m³ gel sweeps, circulate gel to surface cleaning well bore. Pull out of the hole with coil, secure well and equipment. Continue building and freezing down pad to set up additional tanks. RIH with coil tubing and 5 - 79mm x 1.0m Owen SDP-3125-411NT4 Perforating guns c/w 21gm HMX (DP) charges,Spiral pattern with 60° phasing, 6 SPM, 6 min time delay between guns. Perforated the following intervals: 2866mkb-2867mkb, 2847mkb-2848mkb, 2827mkb -2828mkb, 2808-2809mkb, 2789-2790mkb. Circulate down and Squeeze 10m³ acid, overflushed with 5.5m³ fresh water. Did not see a definative break while pumping acid. Max rate was 700L/min @ 11,000kpa. Start out of hole with coil.
15	2/8/2014 06:00	1,188,683.00	9,017,059.71	Finish pooh and rig down SOC CT, spot remaining frac equip, and spot and r/u Heat Exchangers and boiler. Spot 12 more 400bbl tanks for frac tank farm. Hauled water from lake (WS-02) and off loaded into frac tank farm. Heated water in 400bbl tanks. Pressure tested wireline lubricator to 60MPa. Approximately 960m³ 35°c water in frac tank farm ready for frac.

ConocoPhillips Canada

Daily Activity and Cost Summary
COPRC DODO CANYON E-76 65-10 126-45

DAILY ACTIVITY & COST SUMMARY

Report No.	Start Date	Daily Cost Total (Cost)	Cum Cost (Cost)	Last 24hr Sum
16	2/9/2014 06:00	671,126.00	9,688,185.71	Finish filling and heating 400bbl tanks of water. Rig in remaining frac iron and fluid manifold. Frac interval #1. Pumped slickwater pad bringing rates up to 7.5MPa at 50MPa. Pumped a total of 716kg of 100 mesh sand at 25kgPA. Treating pressure increased as sand went into formation. Rates were adjusted as per pressure allowed. Shut down with a final pump rate of 0.3m³/min at 54MPa - 240.8m³ water injected. Picked up coil tubing injector and pressure tested to 60MPa. Broke off at quick sub. Made up TCP BHA on CT and started in hole.
17	2/10/2014 06:00	416,565.00	10,104,750.71	RIH TCP BHA and coil. Tag high @ 2787mKB (top perforations @ 2789mKB) Discuss with Derrick Cove and Theron Legarde, decision made to pull out of the hole with coil and perforating gun assembly. RIH with 98mm mill and motor. Clean out wellbore to PBTD 2877.3mKB. POOH coil tubing and milling assembly. Cut coil and install new dimple connector. Pull test to 21dan, pressure test to 35mpa. (tests good). RIH with coil tubing and 5 - 79mm x 1.0m Owen SDP-3125-411NT4 Perforating guns c/w 21gm HMX (DP) charges,Spiral pattern with 60° phasing, 6 SPM, 6 min time delay between guns. Perforate the following intervals: 2857mKB to 2858mKB 2838mKB to 2839mKB 2819mKB to 2820mKB 2800mKB to 2801mKB
18	2/11/2014 06:00	514,696.00	10,619,446.71	Finish POOH coil tubing. Break down BHA. Stab lube back on, purge coil with N2. Rig in frac lines. Pressure test to 69mpa. Perfom stage 1 of frac as follows: - Open wellhead, pumped 10.0m3 15% HCL acid at 0.30m3/min 10.0mpa - Pumped 23.8m3 gelled pad at final rate 0.30m3/min 12.1mpa, shut down 10 min let acid soak. - Pumped 3.50m3 WF130 pad followed by 39.6m3 YF130Flex pad at final rate 2.20m3/min 14.8mpa - Pumped 14.40m3 100 Mesh scour at final rate 5.50m3/min 23.3mpa - Pumped 100 Mesh, 40/70, and 30/50 PR 6000 sand stages at combined rate 7.90m3/min 28.4mpa, started flush. - Pumped 26.50 m3 YF130Flex flush at final rate 7.90m3/min 29.30mpa Shut down pumps ISIP = 11.0mpa, 5 min SICP = 10.0mpa, 20 min SICP = 7.80mpa. Placed 19,350 kg 100 Mesh frac sand, 59,960 kg 40/70 frac sand, and 20,030 kg 30/50 PR 6000 frac sand with total of 579.50m3 f/w. Winterize frac equipment with 60/40 methanol/water mix. Rig coil tubing lubricator and bops off well. Install and pressure test e-line bops. RIH with plug and perforating BHA on e-line Set 101.6mm Halliburton Obsidian 10K flow through plug top@ 2771.63mKB, CE @ 2772mKB. Perforate the following intervals with 1.0m Owen -3125-411NT4, Hollow Steel Carrier, 21gm HMX (DP) charges, Spiral pattern with 60° phasing,6 SPM with spiral pattern perforating guns. 2762mKB-2763mKB, 2743mKB-2744mKB, 2723mKB-2724mKB,2704mKB,2705mKB,2685mKB-2686mKB. Start out of hole with e-line.
19	2/12/2014 06:00	813,142.02	11,432,588.73	Finish POOH with e-line and plug and perf BHA. Perform frac on Interval #2 @ 2685mKB- 2763mKB - Breakdown = 18.8 MPa - Max pressure= 32.8 MPa - Ave pumping pressure = 22.4 MPa -Max rate = 8.93m³/min Average rate = 5.95m³/min - Proppant pumped = 20.9 T of 100 Mesh - 68.5 T of 40/70 - 26.7 T of 30/50 PR6000 - Max concentration = 600 kg/m3 - Total water pumped = 721.7m3 - Total 15% HCL pumped = 10m3 Post frac ISIP = 17.3MPa Rig on e-line, RIH with plug and perforating BHA on e-line. Correlate depth to packer top @ 1477.35mKB. Continue in hole with e-line. Engage pumps @ 1650mKB at 1.1m3/min to assist e-line. Log onto depth set Halliburton plug top @ 2675.64mKB CE @ 2676mKB. perforate interval from 2666mKB to 2667mKB perforate interval from 2647mKB to 2648mKB perforate interval from 2628mKB to 2629mKB perforate interval from 2609mKB to 2610mKB perforate interval from 2590mKB to 2591mKB Rig down e-line. IES greased all valves on frac head.

DAILY ACTIVITY & COST SUMMARY

Report #	Start Date	Daily Cost Total (Cost)	Cum Cost (Cost)	Last 24hr Sum
20	2/13/2014 06:00	1,184,391.74	12,616,980.47	Perform frac on Interval #3 @ 2590mKB- 2667mKB Max pressure= 30.2 MPa Ave pressure = 25.6 MPa Max rate = 8.6m³/min Avg rate = 7.6m³/min Proppant pumped = 20.9T of 100 Mesh, 59.6T of 40/70, 20.0T of 30/50 PR6000 Max concentration = 600 kg/m3 Total water pumped = 649.37m3 Total 15% HCL pumped = 9.0m3 Post frac ISIP = 8.4MPa Rig on e-line, RIH with plug and perforating BHA on e-line. Correlate depth to packer top @ 1477.35mKB. Continue in hole with e-line. Engage pumps @ 1650mKB at 1.1m3/min to assist e-line. Plug top @ 2580.85mKB, CE @ 2581mKB Perforated intervals 2,571.0 - 2,572.0m/ 2,552.0 - 2,553.0m/ 2,533.0 - 2,534.0m/2,514.0 - 2,515.0m/2,494.0 - 2,495.0mKB Perform frac on Interval #4 @ 2495.0mKB- 2,571.0mKB Max pressure= 30.1 MPa Ave pressure = 25.5 MPa Max rate = 8.5m³/min Avg rate = 7.5m³/min Proppant pumped = 20.15T of 100 Mesh, 61.00T of 40/70, 20.10T of 30/50 PR6000 Max concentration = 600 kg/m3 Total water pumped = 515.5m3 Total 15% HCL pumped = 9.0m3 Post frac ISIP = 10.3MPa Rig on e-line, RIH with plug and perforating BHA on e-line. Correlate depth to packer top @ 1477.35mKB. Continue in hole with e-line. Engage pumps @ 1650mKB at 1.1m3/min to assist e-line. Log onto depth set Halliburton plug top @ 2484.85mKB, @ 2485mKB CE. Perforated intervals 2,475.0 - 2,476.0m/ 2,456.0 - 2,457.0m/ 2,437.0 - 2,438.0m. Total 10 shots/m, all fired, well stable. Hauled in 420m³ of water and heat to 33°C, Greased all wellhead Valves and fired up equipment to pre-heat fro frac in AM.
21	2/14/2014 06:00	876,987.34	13,493,967.81	Waited 9 hrs for SOC to r/o broken down blender, move in and r/u replacement blender. Perform frac on Interval #5 @ 2437mKB- 2476 mKB Max pressure= 30.7 MPa Ave pressure = 21.4 MPa Max rate = 8.8m³/min Avg rate = 5.4m³/min Proppant pumped = 20.5T of 100 Mesh, 60.0T of 40/70, 19.8T of 30/50 PR6000 Max concentration = 600 kg/m3 Total water pumped = 700.4m3 Total 15% HCL pumped = 9.0m3 Post frac ISIP = 12.7MPa Rig on e-line, RIH with plug and perforating Interval #6, BHA on e-line. Correlate depth to packer top @ 1477.35mKB. Continue in hole with e-line. Engage pumps @ 1650mKB at 1.1m3/min to assist e-line. Plug top @ 2427.85mKB, CE @ 2428mKB Perforated intervals 2,418.0 - 2,419.0m/ 2,399.0 - 2,400.0m/ 2,380.0 - 2,2381.0m, 10SPM 60° Phase. Hauled in 600m³ of water and heat to 33°C, Greased all wellhead Valves and fired up equipment to pre-heat fro frac in AM.

ConocoPhillips Canada

Daily Activity and Cost Summary
COPRC DODO CANYON E-76 65-10 126-45

DAILY ACTIVITY & COST SUMMARY

Report No.	Start Date	Daily Cost Total (Cost)	Cum Cost (Cost)	Last 24hr Sum
22	2/15/2014 06:00	1,045,914.88	14,539,882.69	Warmed up frac equip 20m3 55°C f/w, pressure tested 69.0mpa. Frac'd Canol, spearhead 9.0m3 15% HCL. Placed 20 tonnes 100 Mesh, 60 tonnes 40/70, and 20 tonnes 30/50 PR 6000 frac sand with 500.7m3 WF 130, and YF130Flex water. Average pressure= 20.6mpa, average rate = 5.20m3/min, sand placed at rates 8.10 to 9.10m3/min, at pressures from 27.8 to 30.6mpa. E-Line set 114.3mm Halliburton 10K Flow Through B.P. at 2,371.0mKB, and perforated intervals 2361.0-62.0, 2342.0-43.0, 2323.0-24.0, 2304.0-05.0, and 2,285.0-86.0mMD. R/o E-Line, r/u to frac. Perform frac on Interval #7 @ 2285mKB- 2362mKB - Breakdown = 19.4 MPa - Max pressure= 30.1 MPa - Ave pumping pressure = 19.9 MPa -Max rate = 9.10m³/min Average rate = 5.5m³/min - Proppant pumped = 20.5 T of 100 Mesh - 66.3 T of 40/70 - 23.4 T of 30/50 PR6000 - Max concentration = 600 kg/m3 - Total water pumped = 541.3m3 - Total 15% HCL pumped = 9m3 Post frac ISIP = 11MPa Rig on e-line, RIH with plug and perforating BHA on e-line. Correlate depth to packer top @ 1477.35mKB. Continue in hole with e-line. Engage pumps @ 1650mKB at 0.3m³/min to assist e-line increasing to 1.1m³/min down to 2280.7mKB Pull up, Log onto depth set Halliburton 10K flow through plug ,top @ 2275.85mKB CE @ 2276mKB. perforate interval from 2265mKB to 2266mKB perforate interval from 2246mKB to 2247mKB perforate interval from 2227mKB to 2228mKB perforate interval from 2208mKB to 2209mKB perforate interval from 2189mKB to 2190mKB Rig down e-line. IES greased all valves on frac head.
23	2/16/2014 06:00	1,061,690.94	15,601,573.63	P-Tested 69.0mpa. Spearheaded frac with 9.0m3 15% HCL acid. Frac'd interval #08 from 2,266.0 2,189.0mKB with 20 tonnes 100 Mesh, 60 tonnes 40/70, 20 tonnes 30/50 PR 6000 frac sand, and 547.30m3 WF130/YF130Flex frac water. Average pressure = 19.50mpa, max pressure = 29.30mpa, average rate = 6.0m3/min, max rate = 9.6m3/min. Flushed frac with 18.60m3 Slick Water. R/u E-Line, rih and pump down perf gun and B.P. assembly. Set Halliburton 114.3mm 10K Composite Flow Through B.P. at 2,180.0mMD C.E. Perforated Canol #09 intervals 2170.0-71.0, 2151.0-52.0, 2132.0-33.0, 2113.0-14.0, and 2094.0-05.0mMD. P-Tested 69.0mpa. Spearheaded frac with 8.0m³ 15% HCL acid. Frac'd interval #09 from 2170.0 to 2094.0mKB with 20.2 tonnes 100 Mesh, 59.1 tonnes 40/70, 20.4 tonnes 30/50 PR 6000 frac sand, and 707.8m³ WF130/YF130Flex frac water. Average pressure = 19.0MPa, Max Pressure = 29.5MPa, Avg Rate = 6.1m³/min, Max Rate = 9.6m³/min. Flushed frac with 19.1m³ Slick Water. R/u E-Line, rih and pump down perf gun and B.P. assembly. Set Halliburton 114.3mm 10K Composite Flow Through B.P.w/ball in place at 2,085mMD C.E. Perform Evaluation test on interval #10 while pumping down guns and shooting interval, evaluate the inter-stage (annular) pressure communication. -Pumped down Plug with 1.4SG composite ball in place. -ISIP = 10.8MPa -3min ISIP = 6.2MPa -ISIP prior to plug set = 4.7MPa Set plug and pressure tested to 35MPa for 5mins, test good. Bleed down CSG to 15MPa, ready to shoot interval -Interval #01: CCL at 2,065.1mMD, perforated interval 2,075.0 to 2,076.0mMD. -Shoot interval ISIP after shooting = 14.8MPa, 1min = 14.8MPa, 2min = 14.8MPa, 3min = 14.9MPa, 4min = 14.9MPa, 5min = 15MPa 21:45hrs pump @ 0.25m³/min for a break down @ 25.7MPa, continued pumping for a total of 1.2m³ , pressure stablized @ 19.1MPa. Shutdown Pumps ISIP = 18.7MPa, 5min ISIP = 11.6MPa Perforated Final Canol #10 intervals 2056.0-2057.0m, 2036.0-2037.0m, 2017.0-2018.0m, and 1998.0-1999.0mKB.

ConocoPhillips Canada

Daily Activity and Cost Summary
COPRC DODO CANYON E-76 65-10 126-45

DAILY ACTIVITY & COST SUMMARY

Rpt	Start Date	Daily Cost Total (Cost)	Cum Cost (Cost)	Last 24hr Sum
24	2/17/2014 06:00	666,941.53	16,268,515.16	Warm up frac motors and frac equip hydraulics, get ready to frac. Pump 20.0m3 of 55°C water to testers, warm up pumpers. Pressure test surface lines to 69.0mpa. Perform frac on Canol Interval #10 @ 1998.0mKB- 2076mKB Max pressure= 28.8 MPa Ave pressure = 20.6 MPa Max rate = 9.5m³/min Avg rate = 5.7m³/min Proppant pumped = 17.5T of 100 Mesh, 66.5T of 40/70, 22.7T of 30/50 PR6000 Max concentration = 600 kg/m3 Total water pumped = 507.4m3 Total 15% HCL pumped = 8m3 Post frac ISIP = 11.1MPa Winterize frac equipment with 60/40 % methanol water, inject 1m³ into wellbore to winterize wellhead and exposed wellbore. Bleed off and drain up all equipment, remove all fluid from surface lines with vac truck, placing collected fluid in flow back tanks. Rig out treatment standing iron and wrap up all frac iron around well center. Held Safety + Operations meeting with coil tbg crew and all associated services. Discussed PJHA for rigging in coil tbg and milling operations, heating and pumping meth/water, cold weather, environmental concerns, and communication. Installed coil connector, pull tested to 21,000LBs, good test. Installed injector and lubicator on wellhead, pressure tested to 1.4MPa and 57MPa for 10mins each, test all good. Installed BHA and start in hole with mud motor to drill out plugs. Equalized and Start in hole with BHA @ 20m/min, function tested Mud Motor at 100m and seems to be working good. Continue in hole at a rate of 20m/min. Pull testing every 500m in hole. Tagged first plug @ 2081.4mMD, 3.45m correction. @ 5:47hrs. Drilled with 1/2 daN weight @ 420 L/min, plug drilled out in 18mins. Pumped 1m³ gel slug, 2m³ fresh water spacer, 1m³ gel slug. Continue RIH to next plug, start drilling when gel plug was around heal.
25	2/18/2014 06:00	980,593.02	17,249,108.18	Drilled out all Bridge Plugs. RIH & Tagged top of BP #1 @ 2084.5mKB (2081.4mKB CT depth) with a pump rate of 0.42m³/min at 23.4MPa with 936 kPa full returns to P-tank. RIH & Tagged top of BP #2 @ 2179.85mKB (2174.9mKB CT depth) with a pump rate of 0.42m³/min at 21.8MPa with 1217 kPa full returns to P-tank. RIH & Tagged top of BP #3 @ 2275.85mKB (2273.2mKB CT depth) with a pump rate of 0.40m³/min at MPa with 20.2 kPa, returns 375 lpm to P-tank. RIH & Tagged top of BP #4 @ 2370.85mKB (2364.4mKB CT depth) with a pump rate of 0.40m³/min at 25MPa with 245 kPa 400 lpm returns to P-tank. RIH & Tagged top of BP #5 @ 2275.85mKB (2421.5mKB CT depth) with a pump rate of 0.42m³/min at MPa with 235 kPa full returns to P-tank. RIH & Tagged top of BP #6 @ 2484.85mKB (2478.0mKB CT depth) with a pump rate of 0.42m³/min at 26.8MPa with 159 kPa 380 lpm returns to P-tank. RIH & Tagged top of BP #7 @ 2580.85.mKB (2573.3mKB CT depth) with a pump rate of 0.42m³/min at 20.8MPa with 102 kPa 350 lpm returns to P-tank. RIH & Tagged top of BP #8 @ 2666.85mKB (2667.2mKB CT depth) with a pump rate of 0.422m³/min at 29.3MPa with 158 kPa 375 lpm returns to P-tank. RIH & Tagged top of BP #9 @ 2771.85 mKB (2762.9mKB CT Depth) with a pump rate of 0.422m³/min at 28.9MPa with 338 kPa 380 lpm returns to P-tank. RIH and tagged PB @ 2877 mKB (2872mKB CT Depth), Pulled back off PB 10meters and launched a 1.0m³ gel slug, 2.0m³ spacer and another 1.0m³ gel slug. Start pulling a sweep back up to 1650mKB (30° dev).

ConocoPhillips Canada

Daily Activity and Cost Summary
COPRC DODO CANYON E-76 65-10 126-45

DAILY ACTIVITY & COST SUMMARY

Report No.	Start Date	Daily Cost Total (Cost)	Cum Cost (Cost)	Last 24hr Sum
26	2/19/2014 06:00	200,972.47	17,450,080.65	Pulled out of hole with Coil tubing. Broke down tools and blew out coil with N2. Removed Coil TBG injector,installed E-Line BOPs, pressure tested BOPs and ring groove to 1.4MPa and 57MPa for 10mins each, all tests good. SICP = 0KPa @2300hrs, well dead. RIH with E-Line junk basket(3.0m) and 96.5mm gauge ring to point of refusal @ 1833mKB @ 73 deg incl. RIH w/ BHA 1-60.3mm x 0.13m PPMP Pump out plug dressed c/w 6 shear pin @ 3613KPa each & 2 shear screws @ 1427KPa each for a total of 24.4MPa differential to shear out. 1-60.3mm x 0.65m J-55 6.99kg/m EUE Pup Joint 1-47.63mm x 0.32m XN No-Go Profile Nipple, 45.49mm No-Go 1-60.3mm x 2.49m J-55 6.99kg/m Pup Joint 1-WDH114 WL x 1.38m Packer 1- 89.0mm x 1.48m 'NFT' On/Off Tool Extended Slick Jt. C/W 47.63mm X profile (SN#733647). Correlated on depth @ liner top @ 1477mKB.Pulled log strip 6 collars above 1798.0mKB and correlated in to position checking against Schlumberger Depth Control Log/CCL dated 12-FEB-2014 @3:00. Short joint 1 casing collar above 1798.0m. SICP = 0KPa, 0400hrs, well still dead. Set packer @ 1798.0m CE @ 60.4° incl. 1797.42mKB to top of packer. 1796.25mKB to top of slick joint. POOH @45m/min. Negative test passed. Rigged out E-line BOPs and equipment. Finished rigging out Coil TBG equipment.
27	2/20/2014 06:00	338,052.87	17,788,133.52	Finished rig out of wireline equipment. Rigged off 69MPa flow line. Rigged out work platform and nippled down IES frac wellhead. Continued to ready Weatherford down hole real time gauges. Hauled all water management equipment off of lake to water well rack site. Rebuilt IES frac wellhead. Heated slop tanks for water to be shipped out, moved around some equipment with crane for easier loading. Note: Performed 10min bubble test on SCV with No Flow detected, test passed.
28	2/21/2014 06:00	160,495.59	17,948,629.11	Continued to haul clean fresh water out of frac tank farm to P-20 location. Used picker to remove 400bbls from tank farm. Laid over and hauled out 400s. Started to remove geo and liner from tar farm. Organized equipment on location and moved off unnecessary equipment. Continued to ready Weatherford down hole real time gauges. Rigged out all test lines to flare stack and laid over flare stacks ready to move in mats tomorrow. Heated Frac tanks and hauled 82.5m^3 to P-20 of fresh water, watched evaporators and moved some equipment with crane on lease for easier loading in AM.
29	2/22/2014 06:00	50,858.58	17,999,487.69	Finished hauling fresh water off location to P-20. Hauled out remaining clean 400bbl tanks. Stacked 25 8 x 40 mats and hauled away 15 to P-20. Set down 35 swamp mats around under flare stacks. Re-spotted flare stacks. Continued to ready Weatherford down hole gauge equipment. Moved and flare stacks back on mats and rigged in to P-Tank. Evaporators going over night. SICP = 0KPa @ 2400hrs & @ 0600hrs
30	2/23/2014 06:00	48,583.58	18,048,071.27	Finished clean up frac tank farm. Spotted Jet pump and NOV 250KW gen set. Hauled matting and mixed loads to P-20 location. Continued to ready Weatherford down hole gauges (installed gauges onto cable and tested). Re-spotted line heater and manifold shack. Installed 5K flow manifold into shack. Heated Gen-Set with dry heater, picked up wellhead parts, planks and any garbage around lease. Heat water for disposal and evaporators running. SICP = 0KPa @ 2400hrs
31	2/24/2014 06:00	134,639.58	18,182,710.85	Filled line heater with water and fired. RCS performed oil changes and serviced their equipment. Fired up NOV gen set and plugged in Weatherford jet pump. Loaded geo and liner into end dumps to be hauled away to disposal.
32	2/25/2014 06:00	190,596.58	18,373,307.43	Hauled off 216m^3 of waste water heading to Tervita Rainbow Lake. Functioned and tested shut downs on jet pump. Continue to heat flowback tanks and wellhead. Testers on location prepping/cleaning equipment.
33	2/26/2014 06:00	160,277.58	18,533,585.01	Rigged out and hauled off shacks (2 x super single, 1 safety shack). Moved on Nabors #414 service rig. Spotted and rigged in all equipment as per regulations. Loaded 200jts of 60.3mm J-55 tubing onto pipe racks. Reviewed Nabors equipment certs, safety valve certs expired Feb.16 2014. Talked with Derrick Cove and Nabors office, annual certification was Nabors former policy but not regulatorty. Nabors is to send documentation stating valve is ok to use prior to running tubing, as per Derrick Cove.
34	2/27/2014 06:00	73,652.58	18,607,237.59	Picked up Weatherford BHA. Installed real time down hole gauges into gauge mandrels. Pressure tested seals on gauges. Confirmed gauges were working correctly after installed. Ran in hole BHA installing Canon clamps across each tubing connection to hold cables tight and straight. Cable wa rubbing/pulling on sheave. Re- positioned spooling trailer and adjusted positioning of pins on sheave so that cable is no longer rubbing. Continue to RIH 60.3mm /6.99kg/m /J-55 tubing and BHA in hole installing Canon clamps across each tubing connection. Weatherford tech checking resistance and gauges on way in hole. All tests were good. 126 joints in hole at shift change.

ConocoPhillips Canada

Daily Activity and Cost Summary
COPRC DODO CANYON E-76 65-10 126-45

DAILY ACTIVITY & COST SUMMARY

Report #	Start Date	Daily Cost Total (Cost)	Cum Cost (Cost)	Last 24hr Sum
35	2/28/2014 06:00	83,853.58	18,691,091.17	Continued to RIH with Weatherford BHA c/w dual real time gauges. Slid over top of slick joint with On-off skirt (no jay slots). Spaced out tubing string and landed the tubing hanger with 7000 daN compression on packer. Pressure tested packer and On-off seals to 30MPa. Good test. Rig out floor and handling equipment, remove bops. Orientate tubing hanger so cables are in proper position. Install BPV in tubing hanger. Install production wellhead (install control lines through wellhead) . Re-pressure test annulus and on/off seals.to 30MPa, test good. Pressure test wellhead assembly to 1.4 low and 34.5MPa high for 15min each, tests good. Pressure test tubing hanger extended neck seals to 1.4 low and 34.5MPa high for 15 min each, test good. Rig in work floor and tarp in wellhead. Rig in testers line to wellhead. Rig crew pour new rope socket, prep swab equipment.
36	3/1/2014 06:00	134,314.62	18,825,405.79	Rigged on Weatherford wellhead outlet assembly for real time down hole gauges. Pressure tested BX156 ring seal and wellhead outlet assembly to 34MPa. Rigged in slickline. Ran 48.3mm GR to top of sliding sleeve at 1773,63mKB. Opened sliding sleeve. Rig on and pressure test service rig pump line to tubing. Pressure up tubing and pump off PPMP plug on bottom of tubing. (22MPa to shear).RIH slickline with 47.63mm X-lock c/w instument hanger, shock absorber and bombwell. Bombwell containing 2- weatherford 10K gauges. Set in 47.63mm X profile nipple below gauge carriers @ 1786.20mKB. Rig out Slickline. Prepare to swab well with service rig. SCADA system is up and running but data not transmitting to welltest system. Weatherford tech to be out in morning to troubleshoot. Not able to begin swabbing until system is operational.
37	3/2/2014 06:00	366,062.61	19,191,468.40	Worked on SCADA and Weatherford real time data acquisition equipment until data communication was confirmed. Swabbed well. IFL was 150m. Pulled 9 swabs total recovering 9.65m³ water and the well started to flow. Choked back flow to keep fluid returns below 10.0m³/d and ensure BHP does not drop more than 15%. Obtained Protechnics samples as per sampling schedule. 06:00 Flow summary (13.5 Hours flowed - 13.5 Hours Flared), FTP: 3170 kPa, SICP: 3018 kPa, Flow Temp: 42°c, Meter Run Temp: 43°c, Choke size: 12.7mm, Gas Rate: 10.52 E³m³/d, Cumulative Gas to Flare: 5.58 E³m³, LFTR: 6586.42m³, LFR last hour: 8.50m³, LFR last 6 hours: 47.27m³, TLFR: 134.00m³, TLFLTR: 6452.42m³, Oil rec. last hour: 0.0m³, Oil rec. last 6 hours: 0.0m³, Cumulative Oil rec: 0.0m³, Salinity: 38000 ppm, PH: 8, Sand: none
38	3/3/2014 06:00	185,243.61	19,376,712.01	Continue to flow and evaluate well to Weatherford testers. AGAT Collected and shipped complete water, additional water and time-lapse water samples. Protechnic samples and rest of water and gas samples collected as per schedule. Shut in well @ 10:30am to remove swab tree, rig out service and move away from wellhead. Re-open well @ 11:45am. Choke size = 12.7mm. 06:00pm Flow summary (Hours flowed - 36 Hours 15min Flared) FTP: 3998 kPa SICP: 6115 kPa Flow Temp: 6°c Meter Run Temp: 47°c Choke size: 12.7mm Gas Rate: 15.23 E³m³/d Cumulative Gas to Flare: 16.10 E³m³ Cumulative Gas to Flare last 24hrs: 10.53 E³m³ LFTR: 6586.42m³ LFR last hour: 7.30m³ LFR last 24 hours: 182.51m³ (hourly average last 24 hours = 7.60m³) TLFR: 316.51m³ TLFLTR: 6269.91m³ Oil rec. last hour: 0.0m³ Oil rec. last 6 hours: 0.0m³ Cumulative Oil rec: 0.0m³ Salinity: 32000 ppm PH: 7 Sand: Trace

ConocoPhillips Canada

Daily Activity and Cost Summary
COPRC DODO CANYON E-76 65-10 126-45

DAILY ACTIVITY & COST SUMMARY

Report No.	Start Date	Daily Cost Total (Cost)	Cum Cost (Cost)	Last 24hr Sum
39	3/4/2014 06:00	93,728.72	19,470,440.73	Continued to flow well to testers on 12.7mm choke. Samples gathered as per schedule. Change choke sizes and Monitor BHP ensure not to draw down more than 40% of original BHP.Started to see traces of condensate @ 16:00pm. AGAT recovered 2- 1L samples of condensate, 2 gas samples taken and to be sent in March 5 for h2s analysis. 17:00pm increase choke size to 13.49mm, BHP prior to choke change to 13.49mm = 14,072 kPa. 18:00pm increase choke size to 14.29mm, BHP prior to choke size change to 14.29mm =13,978kPa. 19:00pm increase choke size to 15.88mm, BHP prior to choke change to 15.88mm = 13870 kPa. 22:00pm increase choke size to 16.67mm, BHP prior to choke size change to 16.67mm =13,447kPa. 04:00am increase choke size to 17.46mm, BHP prior to choke change to 17.46mm = 12,949 kPa. 06:00am increase choke size to 19.05mm, BHP prior to choke change to 19.05mm = 12,827 kPa. 06:00pm Flow summary (Hours flowed - 60 Hours 15min Flared) FTP: 5091 kPa SICP:10776 kPa Intemediate CSG = 1400KPa Flow Temp: 16°c Meter Run Temp: 43°c Choke size: 17.46mm Gas Rate: 110.06 E^3m^3/d Cumulative Gas to Flare: 78.68 E^3m^3 Cumulative Gas to Flare last 24 hrs: 62.58 E^3m^3 LFTR: 6586.42m^3 LFR last hour: 7.29m^3 LFR last 24 hours: 195.16m^3 (hourly average last 24 hours = 8.13 m^3) TLFR: 511.67m^3 TLFLTR: 6074.75m^3 Oil rec. last hour: 0.23m^3 Oil rec. last 24 hours: 2.79m^3 Cumulative Oil rec: 2.79m^3 Oil API =58.68 Salinity: 40000 ppm PH: 8 Sand: Trace Surface Total 282.25m^3
40	3/5/2014 06:00	128,159.21	19,598,599.94	Continue to Flow well to Weatherford testers increasing choke size by 2 increments every 4 hours. Monitor BHP to ensure not to exceed 40% draw down from original BHP or exceed 283e^3m^3/d gas rate (as per NEB). Take water/gas/oil samples as per schedule. First set of 12 ProTechnics samples shipped to Red Deer for analysis. Haul in 70 oak mats and mat around flare stack to avoid melting ice pad. 06:00am Flow summary (Hours flowed - 84 Hours 15min Flared) FTP: 4649 kPa SICP:9975 kPa Intemediate CSG = TSTMKPa Flow Temp: 8°c Meter Run Temp: 43°c Choke size: 19.05mm Gas Rate: 121.05 E^3m^3/d Cumulative Gas to Flare: 187.71 E^3m^3 Cumulative Gas to Flare last 24 hrs: 109.03 E^3m^3 LFTR: 6586.42m^3 LFR last hour: 6.0m^3 LFR last 24 hours: 169.03m^3 (hourly average last 24 hours = 7.04m^3) TLFR: 680.70m^3 TLFLTR: 5905.72m^3 Oil rec. last hour: 0.15m^3 Oil rec. last 24 hours: 5.63m^3 Cumulative Oil rec: 8.42m^3 Oil API =60.56 @ 60°F Salinity: 44000 ppm PH: 8 Sand: Trace Surface Total 377.86m^3 H2S = 0.4PPM

DAILY ACTIVITY & COST SUMMARY

Report #	Start Date	Daily Cost Total (Cost)	Cum Cost (Cost)	Last 24hr Sum
41	3/6/2014 06:00	95,029.61	19,693,629.55	Continue to Flow well to Weatherford testers. Well flowing on a 19.05mm choke. Monitor BHP to ensure not to exceed 40% draw down from original BHP or exceed 283e³m³/d gas rate (as per NEB). Take water/gas/oil samples as per schedule by AGAT. First PVT oil and gas samples taken at 11:00am by Corelab. (2 condensate and 3 gas samples). 06:00am Flow summary (Hours flowed - 108Hours 15min Flared) FTP: 4482 kPa SICP: 9515 kPa DHP: 11036.4 kPa Internediate CSG = TSTMKPa Flow Temp: 27°c Meter Run Temp: 41°c Choke size: 19.05mm Gas Rate: 110.98 E³m³/d Cumulative Gas to Flare: 296.09 E³m³ Cumulative Gas to Flare last 24 hrs: 108.38 E³m³ LFTR: 6586.42m³ LFR last hour: 5.44m³ LFR last 24 hours: 126.91m³ (hourly average last 24 hours = 5.29 m³) TLFR: 807.61m³ TLFLTR: 5778.81m³ Oil rec. last hour: 0.20m³ Oil rec. last 24 hours: 4.32m³ Cumulative Oil rec: 12.74m³ Oil API = 60.87 @ 60°F Salinity: 48000 ppm PH: 8 Sand: Trace Surface Total 494.1m³ H2S = 0.5PPM
42	3/7/2014 06:00	169,200.37	19,862,829.92	Continue to Flow well to Weatherford testers. Well flowing on a 19.05mm choke. Monitor BHP to ensure not to exceed 40% draw down from original BHP or exceed 283e³m³/d gas rate (as per NEB). Take water/gas/oil samples as per schedule by AGAT. Second PVT oil and gas samples taken at 10:00am by Corelab. (2 condensate and 3 gas samples). 06:00am Flow summary (Hours flowed - 132Hours 15min Flared) FTP: 4465 kPa SICP: 9191 kPa DHP=10926.0kPa Internediate CSG = TSTMKPa Flow Temp: 35°c Meter Run Temp: 39°c Choke size: 19.05mm Gas Rate: 101.92 E³m³/d Cumulative Gas to Flare: 400.85 E³m³ Cumulative Gas to Flare last 24 hrs: 104.76 E³m³ LFTR: 6586.42m³ LFR last hour: 4.64m³ LFR last 24 hours: 114.17m³ (hourly average last 24 hours = 4.76m³) TLFR: 921.78m³ TLFLTR: 5664.64m³ Oil rec. last hour: 0.20m³ Oil rec. last 6 hours: 4.11m³ Cumulative Oil rec: 16.85m³ Oil API =61.61 @ 60°F Salinity: 54000 ppm PH: 7 Sand: Trace Surface Total 483.76m³ H2S= 0.5ppm

ConocoPhillips Canada

Daily Activity and Cost Summary
COPRC DODO CANYON E-76 65-10 126-45

DAILY ACTIVITY & COST SUMMARY

Report No	Start Date	Daily Cost Total (Cost)	Cum Cost (Cost)	Last 24hr Sum
43	3/8/2014 06:00	153,744.61	20,016,574.53	Continue to Flow well to Weatherford testers. Well flowing on a 19.05mm choke. Monitor BHP to ensure not to exceed 40% draw down from original BHP or exceed 283e³m³/d gas rate (as per NEB). Take water/gas/oil samples as per schedule by AGAT. 06:00pm Flow summary (Hours flowed - 155 Hours 04min Flared) Daylight savings time change causing readings to be 5hr time frame. FTP: 3951 kPa SICP: 8933 kPa DHP=10608kPa Internediate CSG = TSTMKPa Flow Temp: 35°c Meter Run Temp: 38°c Choke size: 19.05mm Gas Rate: 107.89 E³m³/d Cumulative Gas to Flare: 502.00 E³m³ Cumulative Gas to Flare last 23 hrs: 101.15 E³m³ LFTR: 6586.42m³ LFR last hour: 4.26m³ LFR last 23 hours: 89.38m³ (hourly average last 23 hours = 3.89m³) TLFR: 1011.16m³ TLFLTR: 5575.26m³ Oil rec. last hour: 0.10m³ Oil rec. last 23 hours: 3.53m³ Cumulative Oil rec: 20.38m³ Oil API = 59.95 @ 60°F Salinity: 54000 ppm PH: 7 Sand: Trace Surface Total 432.65m³ H2S= 0.40ppm
44	3/9/2014 06:00	140,439.62	20,157,014.15	Continue to Flow well to Weatherford testers. Well flowing on a 19.05mm choke. Monitor BHP to ensure not to exceed 40% draw down from original BHP or exceed 283e³m³/d gas rate (as per NEB). Take water/gas/oil samples as per schedule by AGAT. NEB and WSCC on location for inspection. Inspection went well, no deficiencies to report. 06:00am Flow summary (Hours flowed - 179 Hours 04min Flared) FTP: 4249 kPa SICP: 8745 kPa DHP=10367kPa Intermediate CSG = TSTMKPa Flow Temp: 33°c Meter Run Temp: 37°c Choke size: 19.05mm Gas Rate: 109.96 E³m³/d Cumulative Gas to Flare: 604.65 E³m³ Cumulative Gas to Flare last 24 hrs: 102.65 E³m³ LFTR: 6586.42m³ LFR last hour: 3.84m³ LFR last 24 hours: 92.3m³ (hourly average last 24 hours = 3.85m³) TLFR: 1103.46m³ TLFLTR: 5482.96m³ Oil rec. last hour: 0.15m³ Oil rec. last 24 hours: 3.63m³ Cumulative Oil rec: 24.01m³ Oil API =61.54 @ 60°F Salinity: 52000 ppm PH: 7 Sand: Trace Surface Total 400.1m³ H2S= 0.40ppm

'LY ACTIVITY & COST SUMMARY

	Start Date	Daily Cost Total (Cost)	Cum Cost (Cost)	Last 24hr Sum
45	3/10/2014 06:00	113,699.61	20,270,713.76	Continue to Flow well to Weatherford testers. Well flowing on a 19.05mm choke. Monitor BHP to ensure not to exceed 40% draw down from original BHP or exceed 283e³m³/d gas rate (as per NEB). Time-Lapse and time sensitive samples taken today as per schedule and shipped to AGAT for analysis. All remaining samples on location being shipped to AGAT as per schedule. 06:00pm Flow summary (Hours flowed - 203 Hours 04min Flared) FTP: 3752 kPa SICP: 8516 kPa DHP=10078kPa Intermediate CSG = TSTMKPa Flow Temp: 32°c Meter Run Temp: 36°c Choke size: 19.05mm Gas Rate: 95.38 E³m³/d Cumulative Gas to Flare: 705.75 E³m³ Cumulative Gas to Flare last 24 hrs: 101.10 E³m³ LFTR: 6586.42m³ LFR last hour: 3.68m³ LFR last 24 hours: 88.74m³ (hourly average last 24 hours = 3.70m³) TLFR: 1192.20m³ TLFLTR: 5394.22m³ Oil rec. last hour: 0.05m³ Oil rec. last 24 hours: 3.44m³ Cumulative Oil rec: 27.45m³ Oil API = 58.3 @ 60°F Salinity: 52000 ppm PH: 7 Sand: Trace Surface Total 422.31m³ H2S= 0.40ppm
46	3/11/2014 06:00	102,049.62	20,372,763.38	Continue to Flow well to Weatherford testers. Well flowing on a 19.05mm choke. Monitor BHP to ensure not to exceed 40% draw down from original BHP or exceed 283e³m³/d gas rate (as per NEB). Took water/gas/oil samples as per schedule by AGAT. 06:00 Flow summary (Hours flowed - 227 Hours, 04min Flared) FTP: 3764 kPa SICP: 8380 kPa DHP= 9904.1 kPa Intermediate CSG = TSTM Flow Temp: 33°c Meter Run Temp: 36°c Choke size: 19.05mm Gas Rate: 103.70 E³m³/d Cumulative Gas to Flare: 806.53 E³m³ Cumulative Gas to Flare last 24 hrs: 100.78 E³m³ LFTR: 6586.42m³ LFR last hour: 3.34 m³ LFR last 24 hours: 79.53 m³ (hourly average last 24 hours = 3.31 m³) TLFR: 1271.73 m³ TLFLTR: 5314.69m³ Oil rec. last hour: 015.m³ Oil rec. last 24 hours: 3.68 m³ Cumulative Oil rec: 3.68m³ Oil API = 59.50 @ 60°F Salinity: 63000 PH: 7 Sand: Trace Surface Total 435.13 m³ H2S= 0.4 ppm

ConocoPhillips Canada

Daily Activity and Cost Summary
COPRC DODO CANYON E-76 65-10 126-45

DAILY ACTIVITY & COST SUMMARY

Report No.	Start Date	Daily Cost Total (Cost)	Cum Cost (Cost)	Last 24hr Sum
47	3/12/2014 06:00	79,979.62	20,452,743.00	Continue to Flow well to Weatherford testers. Well flowing on a 19.05mm choke. Monitor BHP to ensure not to exceed 40% draw down from original BHP or exceed 283e³m³/d gas rate (as per NEB). Took AGAT samples as per schedule. 06:00 Flow summary (Hours flowed - 251 Hours, 04min Flared) FTP: 3708 kPa SICP: 8249 kPa DHP= 9734 kPa Intermediate CSG = TSTM Flow Temp: 34°C Meter Run Temp: 37°C Choke size: 19.05mm Gas Rate: 98.47 E³m³/d Cumulative Gas to Flare: 904.64 E³m³ Cumulative Gas to Flare last 24 hrs: 98.11 E³m³ LFTR: 6586.42m³ LFR last hour: 2.88 m³ LFR last 24 hours: 72.80 m³ (hourly average last 24 hours = 3.03 m³/hr) TLFR: 1344.53 m³ TLFLTR: 5241.89 m³ Oil rec. last hour: 0.20m³ Oil rec. last 24 hours: 3.22m³ Cumulative Oil rec: 34.35m³ Oil API = 59.29 @ 60°F Salinity: 58000 PH: 7 Sand: Trace Surface Total = 457.16 m³ H2S= 0.40ppm (by Gastech tube)
48	3/13/2014 06:00	41,024.61	20,493,767.61	Continue to Flow well to Weatherford testers. Well flowing on a 19.05mm choke. Monitor BHP to ensure not to exceed 40% draw down from original BHP or exceed 283e³m³/d gas rate (as per NEB). Took Protechnics sample as per schedule. 06:00 Flow summary (Hours flowed - 275 Hours, 4 min Flared) FTP: 3562 kPa SICP: 8101 kPa DHP= 9553 kPa Intermediate CSG = TSTM Flow Temp: 32°c Meter Run Temp: 34°c Choke size: 19.05mm Gas Rate: 99.40 E³m³/d Cumulative Gas to Flare: 1001.52 E³m³ Cumulative Gas to Flare last 24 hrs: 96.88 E³m³ LFTR: 6586.42m³ LFR last hour: 3.0m³ LFR last 24 hours: 72.27m³ (hourly average last 24 hours = 3.01 m³/hr) TLFR: 1416.80m³ TLFLTR: 5169.62m³ Oil rec. last hour: 0.10m³ Oil rec. last 24 hours: 3.12m³ Cumulative Oil rec: 37.47m³ Oil API = 59.50 @ 60°F Salinity: 54000ppm PH: 7 Sand: Trace Surface Total = 520.08m³ H2S= 0.3 ppm (by Gastech tube)

DAILY ACTIVITY & COST SUMMARY

Report #	Start Date	Daily Cost Total (Cost)	Cum Cost (Cost)	Last 24hr Sum
49	3/14/2014 06:00	50,006.62	20,543,774.23	Continue to Flow well to Weatherford testers flowing on a 19.05mm choke untill 00:00hrs then changed to 19.84mm, Changed choke to 20.64mm @ 0600hrs. Took Protechnics sample as per schedule. 06:00 Flow summary (Hours flowed - 299 Hours, 4 min Flared) FTP: 3366 kPa SICP: 7937 kPa DHP= 9413 kPa Intermediate CSG = TSTM Flow Temp: 32°c Meter Run Temp: 35°c Choke size: 19.84mm Gas Rate: 89.84 E^3m^3/d Cumulative Gas to Flare: 1098.00 E^3m^3 Cumulative Gas to Flare last 6 hrs: 23.78 E^3m^3 Cumulative Gas to Flare last 24 hrs: 96.48 E^3m^3 LFTR: 6586.42m^3 LFR last hour: 2.50 m^3 LFR last 6 hours: 16.45 m^3 (hourly average last 6 hours = 2.74m^3/hr) LFR last 24 hours: 63.43 m^3 (hourly average last 24 hours = 2.64m^3/hr) TLFR: 1480.23m^3 TLFLTR: 5106.19m^3 Oil rec. last hour: 0.15m^3 Oil rec. last 6 hours: 0.76m^3 Oil rec. last 24 hours: 3.27m^3 Cumulative Oil rec: 40.74m^3 Oil API = 59.09 @ 60°F Salinity: 58000ppm PH: 7 Sand: Trace Surface Total = 556.75m^3 H2S= 0.3ppm (by Gastech tube) Change choke size to a 48/64 and 20/64, equal to a 52/64 choke (20.64mm) @ 0600hrs
50	3/15/2014 06:00	146,030.62	20,689,804.85	Continue to Flow well to Weatherford testers. Adjusted choke size as follows: 06:00 to 20.64mm. 12:00 to 21.30mm. 18:00 to 22.05mm. 00:00 to 22.90 mm. 06:00 to 23.81mm 06:00 Flow summary (Hours flowed - 323 Hours, 4 min Flared) FTP: 3037 kPa SICP: 7814 kPa DHP= 9213 kPa Intermediate CSG = TSTM Flow Temp: 33°c Meter Run Temp: 36°c Choke size: 22.90mm Gas Rate: 109.78 E^3m^3/d Cumulative Gas to Flare: 1196.22 E^3m^3 Cumulative Gas to Flare last 6 hrs: 25.0 E^3m^3 Cumulative Gas to Flare last 24 hrs: 98.22 E^3m^3 LFTR: 6586.42m^3 LFR last hour: 2.70m^3 LFR last 6 hours: 15.95m^3 (hourly average last 6 hours = 2.66m^3/hr) LFR last 24 hours: 63.95m^3 (hourly average last 24 hours = 63.95m^3/hr) TLFR: 1544.18m^3 TLFLTR: 5042.24m^3 Oil rec. last hour: 0.15m^3 Oil rec. last 6 hours: 0.75m^3 Oil rec. last 24 hours: 3.02m^3 Cumulative Oil rec: 43.76m^3 Oil API = 59.09 @ 60°F Salinity: 58000ppm PH: 7 Sand: Trace Surface Total = 497.18m^3 H2S= 0.40ppm (by Gastech tube)

ConocoPhillips Canada

Daily Activity and Cost Summary
COPRC DODO CANYON E-76 65-10 126-45

DAILY ACTIVITY & COST SUMMARY

Report No.	Start Date	Daily Cost Total (Cost)	Cum Cost (Cost)	Last 24hr Sum
51	3/16/2014 06:00	84,975.00	20,774,779.85	Continue to Flow well to Weatherford testers. Time-Lapse and time sensitive samples taken today as per schedule and shipped to AGAT for analysis. Adjusted choke size as follows: 06:00 to 23.81mm. 12:00 to 24.80mm. 18:00 to 25.31mm and stay there for remainder of test 06:00 Flow summary (Hours flowed - 347 Hours, 4 min Flared) FTP: 2439 kPa SICP: 7645 kPa DHP= 9024 kPa Intermediate CSG = TSTM Flow Temp: 32°c Meter Run Temp: 34°c Choke size: 25.4mm Gas Rate: 97.21 E^3m^3/d Cumulative Gas to Flare: 1295.90 E^3m^3 Cumulative Gas to Flare last 6 hrs: 24.70 E^3m^3 Cumulative Gas to Flare last 24 hrs: 99.68 E^3m^3 LFTR: 6586.42m^3 LFR last hour: 2.72m^3 LFR last 6 hours: 15.65 m^3 (hourly average last 6 hours = 2.61 m^3/hr) LFR last 24 hours: 57.63 m TLFR: 1601.81m^3 TLFLTR: 4984.61m^3 Oil rec. last hour: 0.10m^3 Oil rec. last 6 hours: 0.56m^3 Oil rec. last 24 hours: 2.37m^3 Cumulative Oil rec: 46.13m^3 Oil API = 58.11 @ 60°F Salinity: 62000ppm PH: 7 Sand: Trace Surface Total = 496.43m^3 H2S= 0.20 ppm (by Gastech tube)
52	3/17/2014 06:00	137,505.00	20,912,284.85	Continue to Flow well to Weatherford testers. 06:00 Flow summary (Hours flowed - 371 Hours, 4 min Flared) FTP: 2223 kPa SICP: 7504 kPa DHP= 8888 kPa Intermediate CSG = TSTM Flow Temp: 30°c Meter Run Temp: 35°c Choke size: 25.31mm Gas Rate: 103.6 E^3m^3/d Cumulative Gas to Flare: 1394.56 E^3m^3 Cumulative Gas to Flare last 6 hrs: 24.45 E^3m^3 Cumulative Gas to Flare last 24 hrs: 98.64 E^3m^3 LFTR: 6586.42m^3 LFR last hour: 2.25m^3 LFR last 6 hours: 14.75 m^3 (hourly average last 6 hours = 2.46 m^3/hr) LFR last 24 hours: 60.3 m^3 TLFR: 1662.11m^3 TLFLTR: 4924.31m^3 Oil rec. last hour: 0.10m^3 Oil rec. last 6 hours: 0.6m^3 Oil rec. last 24 hours: 2.21m^3 Cumulative Oil rec: 48.34m^3 Oil API = 59.54 @ 60°F Salinity: 58000ppm PH: 7 Sand: Trace Surface Total = 442.46m^3 H2S= 0.50 ppm (by Gastech tube)

LY ACTIVITY & COST SUMMARY

	Start Date	Daily Cost Total (Cost)	Cum Cost (Cost)	Last 24hr Sum
53	3/18/2014 06:00	48,330.00	20,960,614.85	Continue to Flow well to Weatherford testers. Obtained AGAT samples as per schedule. 06:00 Flow summary (Hours flowed - 395 Hours, 4 min Flared) FTP: 2352kPa SICP: 7262 kPa DHP= 8811 kPa Intermediate CSG = TSTM Flow Temp: 30°c Meter Run Temp: 32°c Choke size: 25.31mm Gas Rate: 94.20 E³m³/d Cumulative Gas to Flare: 1491.97 E³m³ Cumulative Gas to Flare last 6 hrs: 24.01 E³m³ Cumulative Gas to Flare last 24 hrs: 97.33 E³m³ LFTR: 6586.42m³ LFR last hour: 2.12m³ LFR last 6 hours: 14.11m³ (hourly average last 6 hours = 2.35m³/hr) LFR last 24 hours: 58.08m³ TLFR: 1720.19m³ TLFLTR: 4866.23m³ Oil rec. last hour: 0.1m³ Oil rec. last 6 hours: 0.60m³ Oil rec. last 24 hours: 2.37m³ Cumulative Oil rec: 50.71m³ Oil API = 59.87 @ 60°F Salinity: 62000ppm PH: 7 Sand: trace Surface Total = 474.62m³ H2S= 0.3ppm (by Raytech tube)
4	3/19/2014 06:00	50,252.00	21,010,866.85	Continue to Flow well to Weatherford testers. 06:00 Flow summary (Hours flowed - 419 Hours, 4 min Flared) FTP: 2335 kPa SICP: 5277 kPa DHP= 8704 kPa Intermediate CSG = TSTM Flow Temp: 30°c Meter Run Temp: 33°c Choke size: 25.31mm Gas Rate: 94.66 E³m³/d Cumulative Gas to Flare: 1587.4 E³m³ Cumulative Gas to Flare last 6 hrs: 23.55 E³m³ Cumulative Gas to Flare last 24 hrs: 95.43 E³m³ LFTR: 6586.42m³ LFR last hour: 2.28m³ LFR last 6 hours: 13.71 m³ (hourly average last 6 hours = 2.29 m³/hr) LFR last 24 hours: 55.92 m³ TLFR: 1776.11m³ TLFLTR: 4810.31m³ Oil rec. last hour: 0.10m³ Oil rec. last 6 hours: 0.6m³ Oil rec. last 24 hours: 2.23m³ Cumulative Oil rec: 52.93m³ Oil API = 59.76 @ 60°F Salinity: 70000ppm PH: 7 Sand: Trace Surface Total = 477.37m³ H2S= 0.30 ppm (by Gastech tube)

ConocoPhillips Canada

Daily Activity and Cost Summary
COPRC DODO CANYON E-76 65-10 126-45

DAILY ACTIVITY & COST SUMMARY

Report No.	Start Date	Daily Cost Total (Cost)	Cum Cost (Cost)	Last 24hr Sum
55	3/20/2014 06:00	51,678.00	21,062,544.85	Continue to Flow well to Weatherford testers. Obtained AGAT time sensitive samples as per sampling schedule. Delivered all samples to MXL for immediate shipping (AGAT, Tetra Tech + Protechnics). 08:00 Shut in the well. 08:00 Flow summary (Total Hours flowed - 421 Hours, 4 min Flared) FTP: 2433 kPa SICP: 5204 kPa DHP= 8711 kPa Intermediate CSG = TSTM Flow Temp: 30°c Meter Run Temp: 32°c Choke size: 25.31mm Gas Rate: 94.24 E^3m^3/d Cumulative Gas to Flare: 1595.32 E^3m^3 Cumulative Gas to Flare last 2 hrs: 7.92 E^3m^3 LFTR: 6586.42m^3 LFR last hour: 2.81m^3 LFR last 2 hours: 4.50m^3 (hourly average last 2 hours = 2.25m^3/hr) TLFR: 1780.61m^3 TLFLTR: 4805.81m^3 Oil rec. last hour: 0.05m^3 Oil rec. last 2 hours: 0.15m^3 Cumulative Oil rec: 53.08m^3 Oil API = 59.95 @ 60°F Salinity: 68000ppm PH: 7 Sand: trace Surface Total = 439.13m^3 H2S= 0.3ppm (by Raytech tube) Sucked out and cleaned high stage and low stage P-tanks. Sucked out all lines and started to rig out all Weatherford test equipment. Cool down and rig out HD boiler. Take pressure build ups for 24 hours. 08:05 Tbg: 7429 kPa, Csg: 5217 kPa, BHP: 9300 kPa 08:10 Tbg: 7596 kPa, Csg: 5229 kPa, BHP: 9468 kPa 08:15 Tbg: 7654 kPa, Csg: 5211 kPa, BHP: 9536 kPa 08:30 Tbg: 7842 kPa, Csg: 5141 kPa, BHP: 9629 kPa 09:00 Tbg: 8137 kPa, Csg: 5279 kPa, BHP: 9780 kPa 12:00 Tbg: 8510 kPa, Csg: 5894 kPa, BHP: 10211 kPa 18:00 Tbg: 8781 kPa, Csg: 8866 kPa, BHP: 10605 kPa 00:00 Tbg: 8939 kPa, Csg: 9032 kPa, BHP: 10872 kPa 06:00 Tbg: 9070 kPa, Csg: 9162 kPa, BHP: 11041 kPa
56	3/21/2014 06:00	42,639.00	21,105,183.85	Finished rig out of all Weatherford testing equipment. Moved all test equipment off location with bed truck to KM 27.5 rack site. Started to remove and stack swamp mats. Cleaned and readied shacks to be rigged out in the AM. Begin cleaning snow and ice from tank farm containment. Well pressures at 06:00am SITP=9332kPa SICP=9394kPa
57	3/22/2014 06:00	41,235.00	21,146,418.85	Rigged out and hauled away 2 50/50 well site shacks, 115KVa generator and sewer system. Hauled all swamp mats off location. Erected chain link fence around wellhead. Continued to dehydrate flow back water. Well Pressures @ 06:00am SITP=9500kPa SICP=9590kPa 35.57m^3 to dehydrator
58	3/23/2014 06:00	125,107.00	21,271,525.85	Continued to Evaporate flowback water. Haul 4 loads of fluid to Tervita disposal.
59	3/24/2014 06:00	372,466.75	21,643,992.60	Shut down dehydrators. Sucked out, cleaned and readied dehydrators for transport. Hauled 3 loads of flow back water off location to disposal (174.8m^3 fluid left on location in tanks). Washed wellhead and cellar ring.
60	3/25/2014 06:00	41,022.00	21,685,014.60	Haul out flowback fluids to disposal. Hauled out 1 load to disposal 27m^3. (3 Formula Powell trucks did not make it up to Norman Wells today) Move 2 light stands off location to P-20 well.

ConocoPhillips Canada

Daily Activity and Cost Summary
COPRC DODO CANYON E-76 65-10 126-45

DAILY ACTIVITY & COST SUMMARY

Report No.	Start Date	Daily Cost Total (Cost)	Cum Cost (Cost)	Last 24hr Sum
61	3/26/2014 06:00	76,592.00	21,761,606.60	Haul out flowback water to disposal. Hauled out 3 loads to Tervita Rainbow Lake (83.6m³). Haul remainder of fluid to storage tank farm in Norman wells. (64.2m³). Tank farm is empty and ready for demob.
62	3/27/2014 06:00	168,448.40	21,930,055.00	Remove 12 x 400 bbl tanks from containment / Send 4 tanks to Norman Wells CPC YVQ Yard / Rack 8 tanks on location.
63	3/28/2014 07:30	15,277.75	21,945,332.75	Load out remaining 400 bbl tanks / Disassemble and load out containment / load out 12 x 8-40 matting

XV Final Completions Schematic

ConocoPhillips Canada

Daily Schematic

COPRC DODO CANYON E-76 65-10 126-45

as of 3/28/2014

Daily Report # 63

Country	State/Province	Region / Division	District	Field Name	Field Code
CANADA	N.W.T.	WCBU	NEW VENTURES	Canyon	

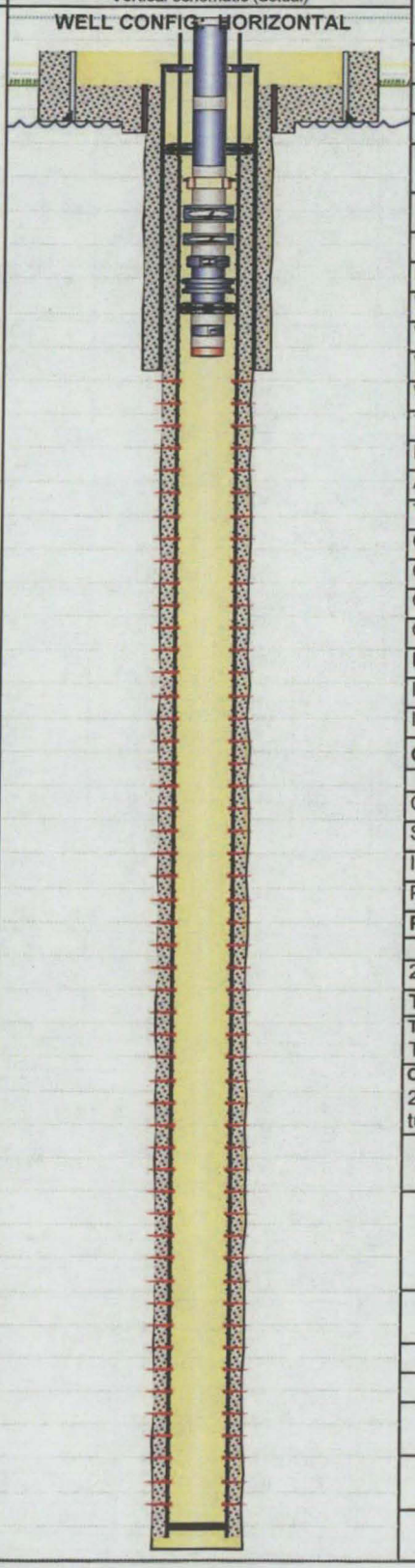
Surface Legal Location	API / UWI	License No.
E-76 65-10 126-45	300E7665-10126-45	EL 470

Orig KB/RT (m)	Ground Elevation (m)	KB-Ground Distance (m)	KB-CF (m)	KB-TF (m)	Total Depth (mKB)
273.40	268.20	5.20	5.40	4.22	2,910.00

HORIZONTAL - Original Hole, 3/28/2014 6:00:00 PM

MD (mKB)	Incl (°)
3.3	0.4
4.4	0.4
15.9	0.4
1,477.3	4.2
1,773.6	53.9
1,777.6	55.2
1,783.7	56.6
1,796.1	60.0
1,798.8	60.8
1,802.3	61.8
1,968.0	89.9
2,018.0	88.4
2,056.0	88.3
2,076.0	86.5
2,113.0	85.6
2,133.0	85.7
[illegible]	85.9
[illegible]	86.1
2,227.0	87.3
2,247.0	87.9
2,285.0	88.9
2,305.0	89.3
2,342.0	89.4
2,362.0	89.7
2,399.0	89.4
2,419.0	89.5
2,456.0	88.6
2,476.0	88.6
2,514.0	88.2
2,534.0	88.3
2,571.0	88.1
2,591.0	88.1
2,628.0	88.4
2,648.0	88.5
2,685.0	87.9
2,705.0	88.3
2,743.0	88.0
2,763.0	88.3
2,789.0	88.6
[illegible]	88.8
[illegible]	89.2
2,838.0	89.3
2,847.0	89.3
2,858.0	89.1
2,877.3	88.3

Vertical schematic (actual)



Report Start Date	Report End Date	Primary Wellbore Affected
3/28/2014 07:30	3/28/2014 18:00	Original Hole

WELLHEADS

Type: Csg Bowl — **Install Date:** 1/4/2014

Des	Make	Model	WP (kPa)	Top Ring Gasket	Bore Min (mm)
Casing Bowl	STREAM FLO...	CC-22	34,500	RX-54	215.0
Upper Spool	STREAM FLO...	FBD100	34,500	RX-54	215.0

Type: Top Section — **Install Date:** 2/28/2014

Des	Make	Model	WP (kPa)	Top Ring Gasket	Bore Min (mm)
Top Wellhead Cap	Stream Flo	BX152 x 60.3...	69,000		52.4
Flow Block	Stream Flo	BX152 x 4 sides	69,000	BX152	52.4
Wing Valve (Right)	Stream Flo	Gate	69,000	BX152	52.4
Wing Valve (Right) Companion Fl...	Stream Flo	BX152 x 12.7...	69,000	BX152	12.7
Wing Valve (Left)	Stream Flo	Gate	69,000	BX152	52.4
Wing Valve (Left) Companion Fla...	Stream Flo	BX152 x 12.7...	69,000	BX152	12.7
Top Master Valve	Stream Flo	Gate	69,000	BX152	52.4
Bottom Master Valve	Stream Flo	Gate	69,000	BX152	52.4
Adapter Spool	Stream Flo	BX156 x BX152	69,000	BX152	52.4
Tubing Head Spool	Stream Flo	279mm R-54 x...	69,000	BX156	104.6
Casing valve (Right)	Stream Flo	Gate	69,000	BX152	52.4
Casing Valve (Right) Companion...	Stream Flo	BX152 x 12.7...	69,000	BX152	12.7
Casing valve (Left)	Stream Flo	Gate	69,000	BX152	52.4
Casing Valve (Left) Companion F...	Stream Flo	BX152 x 12.7...	69,000	BX152	12.7
Intermediate Spool	Stream Flo	279mm R-54 x...	34,500	R-54	274.4
Intermediate Casing Valve (Right)	Stream Flo	Gate	34,500	R-24	52.4
Intermediate Casing Valve (Left)	Stream Flo	Gate	34,500	R-24	52.4

CASING STRINGS

Csg Des	OD (mm)	Wt/Len (kg/m)	Grade	Top Thread	Set Depth (mKB)
Conductor	508.0	139.887	H-40	Welded	20.00
Surface	244.5	53.574	K-55	LTC	603.00
Intermediate	177.8	38.692	P-110	LTC	1,908.00
Production	114.3	17.263	P-110	LTC	2,909.32

PBTDs

Date	Type	Depth (mKB)	KO MD (mKB)	TD (max) (mKB)
2/7/2014		2,877.30		2,910.00

TUBING STRING

Tubing Description	Run Date	Pull Date	String Length (m)	Set Depth (mKB)
Tubing - Production	2/28/2014		1,798.17	1,802.39

Comment

2 control lines w/weatherford real time gauges installed in tubing string. 1 Canon clamp installed on every tubing connection to secure control lines.

Jts	Item Des	OD Nominal (mm)	Nominal ID (mm)	Wt (kg/m)	Grade	Make	Model	Len (m)	Top (mKB)
1	Extended neckTubing Hanger c/w 2-1/2" ports	179.0	50.7		L-80	Stream Flo / Crown	Straight Bore c/w Extended neck	0.16	4.22
	7000 daN compression	60.3	50.7					-0.79	4.38
	Tubing buckle	60.3	50.7					-0.25	3.59
	Tally correction	60.3	50.7					-1.48	3.34
1	Tubing Pup Joint (spacer nipple)	60.3	50.7	6.994	J-55			0.10	1.86
1	Tubing	60.3	50.7	6.994	J-55		T&C Upset	9.63	1.96

Report Printed: 4/10/2014

Daily Schematic

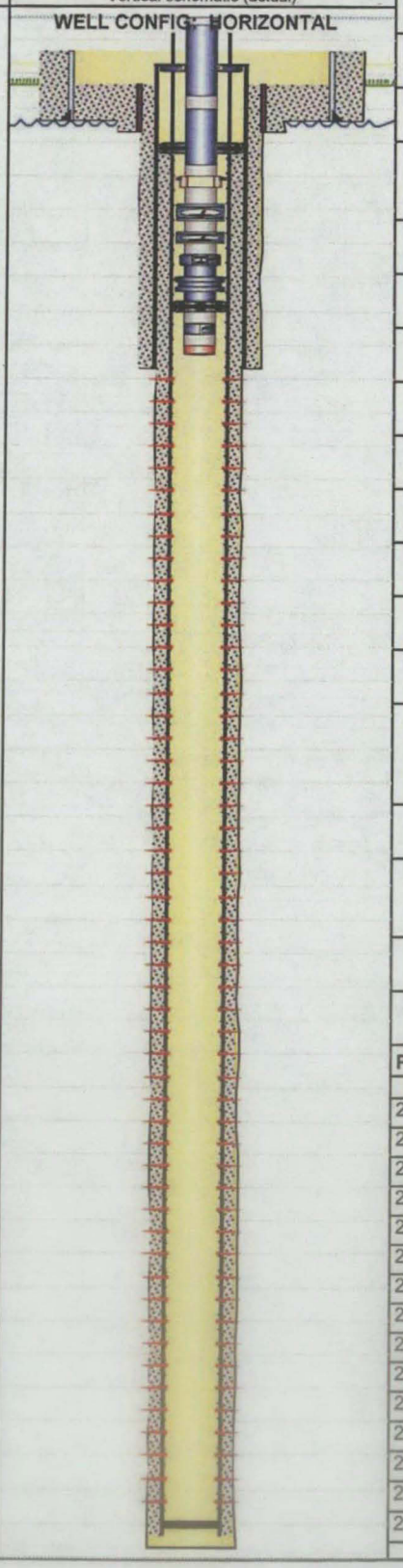
COPRC DODO CANYON E-76 65-10 126-45

as of 3/28/2014

HORIZONTAL - Original Hole, 3/28/2014 6:00:00 PM

MD (mKB)	Incl (°)
33	0.4
44	0.4
159	0.4
1,477.3	4.2
1,773.6	53.9
1,777.6	55.2
1,783.7	56.6
1,796.1	60.0
1,798.8	60.8
1,802.3	61.8
1,998.0	89.9
2,018.0	88.4
2,056.0	88.3
2,076.0	86.5
2,113.0	85.6
2,133.0	85.7
170.0	85.9
2,190.0	86.1
2,227.0	87.3
2,247.0	87.9
2,265.0	88.9
2,305.0	89.3
2,342.0	89.4
2,362.0	89.7
2,399.0	89.4
2,419.0	89.5
2,456.0	88.6
2,476.0	88.6
2,514.0	88.2
2,534.0	88.3
2,571.0	88.1
2,591.0	88.1
2,628.0	88.4
2,648.0	88.5
2,685.0	87.9
2,705.0	88.3
2,743.0	88.0
2,763.0	88.3
2,799.0	88.6
801.0	88.8
2,819.0	89.2
2,839.0	89.3
2,847.0	89.3
2,858.0	89.1
2,877.3	88.3

Vertical schematic (actual)



Jts	Item Des	OD Nominal (mm)	Nominal ID (mm)	Wt (kg/m)	Grade	Make	Model	Len (m)	Top (mKB)
2	Tubing Pup Joint	60.3	50.7	6.994	J-55		T&C Upset	4.32	11.59
183	Tubing	60.3	50.7	6.994	J-55		T&C Upset	1,756.45	15.91
1	Tubing Pup Joint	60.3	50.7	6.994	J-55		T&C Upset	1.24	1,772.36
1	CXU Sliding sleeve c/w 47.63mm X profile, up open	79.2	47.6		L-80		CXU	0.86	1,773.60
1	Tubing Pup Joint	60.3	50.7	6.994	J-55		T&C Upset	3.09	1,774.46
1	Gauge Carrier	90.7	50.7		L-80	Weatherford		1.56	1,777.55
1	Tubing Pup Joint	60.3	50.7	6.994	J-55		T&C Upset	3.06	1,779.11
1	Gauge Carrier	90.7	50.7		L-80	Weatherford		1.56	1,782.17
1	Tubing Pup Joint	60.3	50.7	6.994	J-55		T&C Upset	2.47	1,783.73
1	47.63mm X Profile Nipple	77.7	47.6		L-80	Weatherford		0.29	1,786.20
1	Tubing	60.3	50.7	6.994	J-55		T&C Upset	9.65	1,786.49
1	Extended no-jay NFT on/ off tool	95.3	50.7		L-80	Weatherford		1.11	1,79
1	Slick Joint c/w 47.63mm x profile	60.3	47.6	6.994	J-55	Weatherford	T&C Upset	0.17	1,797.25
1	Weatherford WDH double grip packer (69MPa rated)	101.6	50.7			Weatherford WDH114 WL	T&C Upset	1.38	1,797.42
1	Tubing Pup Joint	60.3	50.7	6.994	J-55		T&C Upset	2.49	1,798.80
1	XN no-go profile nipple 45.49mm no go	60.3	45.5		L-80	Weatherford	T&C Upset	0.32	1,801.29
1	Tubing Pup Joint	60.3	50.7	6.994	J-55		T&C Upset	0.65	1,801.61
1	PPMP Pump out plug	60.3	50.7		L-80		T&C Upset	0.13	1,802.26

PERFORATIONS

Date	Top (mKB)	Btm (mKB)	Type	Zone	Current Status
2/16/2014	1,998.00	1,999.00	Perforated	CANOL, Original Hole	Open - Flowing
2/16/2014	2,017.00	2,018.00	Perforated	CANOL, Original Hole	Open - Flowing
2/16/2014	2,036.00	2,037.00	Perforated	CANOL, Original Hole	Open - Flowing
2/16/2014	2,056.00	2,057.00	Perforated	CANOL, Original Hole	Open - Flowing
2/16/2014	2,075.00	2,076.00	Perforated	CANOL, Original Hole	Open - Flowing
2/16/2014	2,094.00	2,095.00	Perforated	CANOL, Original Hole	Open - Flowing
2/16/2014	2,113.00	2,114.00	Perforated	CANOL, Original Hole	Open - Flowing
2/16/2014	2,132.00	2,133.00	Perforated	CANOL, Original Hole	Open - Flowing
2/16/2014	2,151.00	2,152.00	Perforated	CANOL, Original Hole	Open - Flowing
2/16/2014	2,170.00	2,171.00	Perforated	CANOL, Original Hole	Open - Flowing
2/15/2014	2,189.00	2,190.00	Perforated	CANOL, Original Hole	Open - Flowing
2/15/2014	2,208.00	2,209.00	Perforated	CANOL, Original Hole	Open - Flowing
2/15/2014	2,227.00	2,228.00	Perforated	CANOL, Original Hole	Open - Flowing
2/15/2014	2,246.00	2,247.00	Perforated	CANOL, Original Hole	Open - Flowing
2/15/2014	2,265.00	2,266.00	Perforated	CANOL, Original Hole	Open - Flowing

ConocoPhillips Canada

Daily Schematic

COPRC DODO CANYON E-76 65-10 126-45

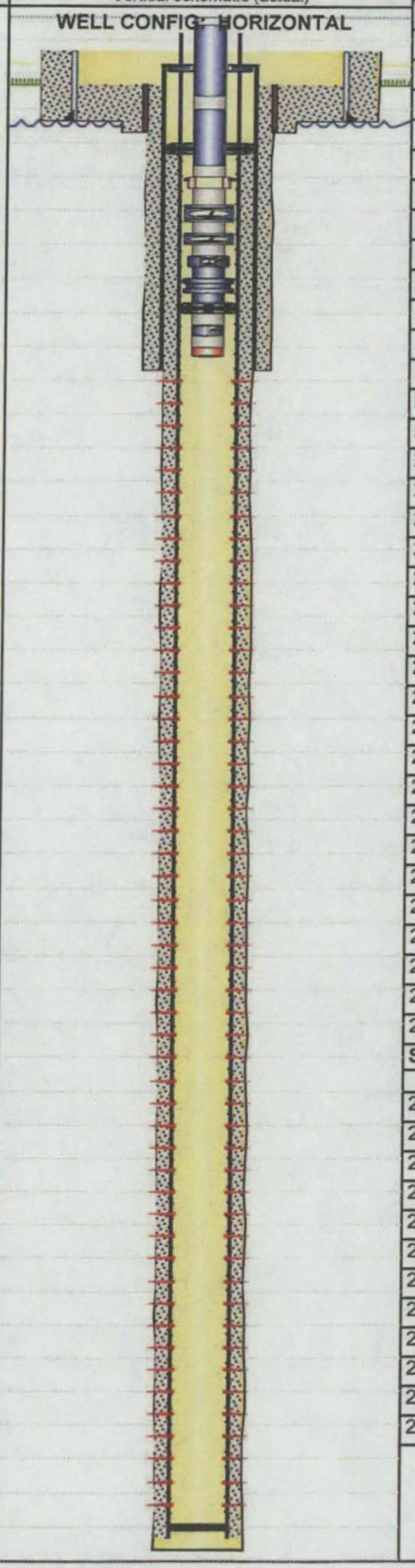
as of 3/28/2014

Daily Report # 63

HORIZONTAL - Original Hole, 3/28/2014 6:00:00 PM

MD (mKB)	Incl (°)
3.3	0.4
4.4	0.4
15.9	0.4
1,477.3	4.2
1,773.6	53.9
1,777.6	55.2
1,783.7	56.6
1,796.1	60.0
1,796.8	60.8
1,802.3	61.8
1,996.0	89.9
2,018.0	88.4
2,056.0	88.3
2,076.0	86.5
2,113.0	85.6
2,133.0	85.7
[illegible]	85.9
[illegible]	86.1
2,227.0	87.3
2,247.0	87.9
2,265.0	88.9
2,305.0	89.3
2,342.0	89.4
2,362.0	89.7
2,399.0	89.4
2,419.0	89.5
2,456.0	88.6
2,476.0	88.6
2,514.0	88.2
2,534.0	88.3
2,571.0	88.1
2,591.0	88.1
2,628.0	88.4
2,648.0	88.5
2,685.0	87.9
2,705.0	88.3
2,743.0	88.0
2,763.0	88.3
2,799.0	88.6
[illegible]	88.8
[illegible]	89.2
2,828.0	89.3
2,847.0	89.3
2,858.0	89.1
2,877.3	88.3

Vertical schematic (actual)



PERFORATIONS

Date	Top (mKB)	Btm (mKB)	Type	Zone	Current Status
2/15/2014	2,285.00	2,286.00	Perforated	CANOL, Original Hole	Open - Flowing
2/15/2014	2,304.00	2,305.00	Perforated	CANOL, Original Hole	Open - Flowing
2/15/2014	2,323.00	2,324.00	Perforated	CANOL, Original Hole	Open - Flowing
2/15/2014	2,342.00	2,343.00	Perforated	CANOL, Original Hole	Open - Flowing
2/15/2014	2,361.00	2,362.00	Perforated	CANOL, Original Hole	Open - Flowing
2/14/2014	2,380.00	2,381.00	Perforated	CANOL, Original Hole	Open - Flowing
2/14/2014	2,399.00	2,400.00	Perforated	CANOL, Original Hole	Open - Flowing
2/14/2014	2,418.00	2,419.00	Perforated	CANOL, Original Hole	Open - Flowing
2/13/2014	2,437.00	2,438.00	Perforated	CANOL, Original Hole	Open - Flowing
2/13/2014	2,456.00	2,457.00	Perforated	CANOL, Original Hole	Open - Flowing
2/13/2014	2,475.00	2,476.00	Perforated	CANOL, Original Hole	Open - Flowing
2/13/2014	2,494.00	2,495.00	Perforated	CANOL, Original Hole	Open - Flowing
2/13/2014	2,514.00	2,515.00	Perforated	CANOL, Original Hole	Open - Flowing
2/13/2014	2,533.00	2,534.00	Perforated	CANOL, Original Hole	Open - Flowing
2/13/2014	2,552.00	2,553.00	Perforated	CANOL, Original Hole	Open - Flowing
2/13/2014	2,571.00	2,572.00	Perforated	CANOL, Original Hole	Open - Flowing
2/12/2014	2,590.00	2,591.00	Perforated	CANOL, Original Hole	Open - Flowing
2/12/2014	2,609.00	2,610.00	Perforated	CANOL, Original Hole	Open - Flowing
2/12/2014	2,628.00	2,629.00	Perforated	CANOL, Original Hole	Open - Flowing
2/12/2014	2,647.00	2,648.00	Perforated	CANOL, Original Hole	Open - Flowing
2/12/2014	2,666.00	2,667.00	Perforated	CANOL, Original Hole	Open - Flowing
2/12/2014	2,685.00	2,686.00	Perforated	CANOL, Original Hole	Open - Flowing
2/12/2014	2,704.00	2,705.00	Perforated	CANOL, Original Hole	Open - Flowing
2/12/2014	2,723.00	2,724.00	Perforated	CANOL, Original Hole	Open - Flowing
2/12/2014	2,743.00	2,744.00	Perforated	CANOL, Original Hole	Open - Flowing
2/12/2014	2,762.00	2,763.00	Perforated	CANOL, Original Hole	Open - Flowing
2/11/2014	2,781.00	2,782.00	Perforated	CANOL, Original Hole	Open - Flowing
2/8/2014	2,789.00	2,790.00	Perforated	CANOL, Original Hole	Open - Flowing
2/11/2014	2,800.00	2,801.00	Perforated	CANOL, Original Hole	Open - Flowing
2/8/2014	2,808.00	2,809.00	Perforated	CANOL, Original Hole	Open - Flowing
2/11/2014	2,819.00	2,820.00	Perforated	CANOL, Original Hole	Open - Flowing
2/8/2014	2,827.00	2,828.00	Perforated	CANOL, Original Hole	Open - Flowing
2/11/2014	2,838.00	2,839.00	Perforated	CANOL, Original Hole	Open - Flowing
2/8/2014	2,847.00	2,848.00	Perforated	CANOL, Original Hole	Open - Flowing
2/11/2014	2,857.00	2,858.00	Perforated	CANOL, Original Hole	Open - Flowing
2/8/2014	2,866.00	2,867.00	Perforated	CANOL, Original Hole	Open - Flowing

STIMULATION & TREATMENTS

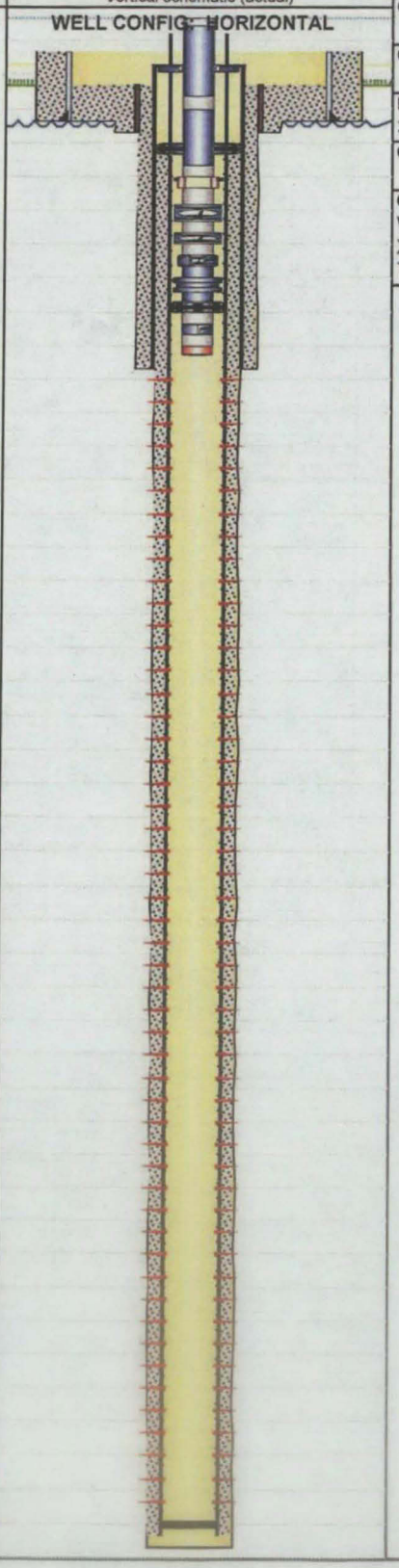
Date	Zone	Type	Proppant Design (kg)	Proppant Frm (kg)
2/17/2014	CANOL, Original Hole	Slickwater	100,000.0	99,350.0
2/16/2014	CANOL, Original Hole	Other	0.0	0.0
2/16/2014	CANOL, Original Hole	Slickwater	100,000.0	99,660.0
2/16/2014	CANOL, Original Hole	Slickwater	100,000.0	112,798.0
2/15/2014	CANOL, Original Hole	Slickwater	100,000.0	110,279.0
2/15/2014	CANOL, Original Hole	Slickwater	100,000.0	100,000.0
2/14/2014	CANOL, Original Hole	Slickwater	100,000.0	100,360.0
2/13/2014	CANOL, Original Hole	Slickwater	100,000.0	115,547.0
2/13/2014	CANOL, Original Hole	Slickwater	100,000.0	95,859.2
2/12/2014	CANOL, Original Hole	Slickwater	100,000.0	116,103.0
2/11/2014	CANOL, Original Hole	Slickwater	100,000.0	99,679.1
2/9/2014	CANOL, Original Hole	Slickwater	100,000.0	716.0

Report Printed: 4/10/2014

HORIZONTAL - Original Hole, 3/28/2014 6:00:00 PM

MD (mKB)	Incl (°)
33	0.4
44	0.4
159	0.4
1,477.3	4.2
1,773.6	53.9
1,777.6	55.2
1,783.7	56.6
1,796.1	60.0
1,798.8	60.8
1,802.3	61.8
1,996.0	89.9
2,018.0	88.4
2,056.0	88.3
2,076.0	86.5
2,113.0	85.6
2,133.0	85.7
2,170.0	85.9
2,190.0	86.1
2,227.0	87.3
2,247.0	87.9
2,285.0	88.9
2,305.0	89.3
2,342.0	89.4
2,362.0	89.7
2,399.0	89.4
2,419.0	89.5
2,456.0	88.6
2,476.0	88.6
2,514.0	88.2
2,534.0	88.3
2,571.0	88.1
2,591.0	88.1
2,628.0	88.4
2,648.0	88.5
2,685.0	87.9
2,705.0	88.3
2,743.0	88.0
2,763.0	88.3
2,799.0	88.6
2,801.0	88.6
2,819.0	89.2
2,839.0	89.3
2,847.0	89.3
2,859.0	89.1
2,877.3	88.3

Vertical schematic (actual)



OTHER IN HOLE

Run Date	Description	Top Depth (mKB)	Bottom Depth (mKB)
1/22/2014	Packer	1,477.35	1,478.90
OD (mm)	**ID (mm)**	**Make**	**Model**
153.7	120.7		
Comment			

Run Date	Description	Top Depth (mKB)	Bottom Depth (mKB)
3/1/2014	Pressure / Temperatur...	1,786.20	1,786.49
OD (mm)	**ID (mm)**	**Make**	**Model**
31.8		Weatherford	SN 8927 (bottom gauge)

Comment

Weatherford tandem 10K BHRs inside bomb wells. Recorders are attached to bottom of a flow through X-lock set in X-profile at 1786.20mKB
Top SN# 8926 / Bottom SN# 8927

XVI Completions End of Job QC Summary

ConocoPhillips Canada

End Of Job QC Summary
COPRC DODO CANYON E-76 65-10 126-45

Region / Division	District	Field Name	API / UWI	License No.
WCBU	NEW VENTURES	Canyon	300E7665-10126-45	EL 470

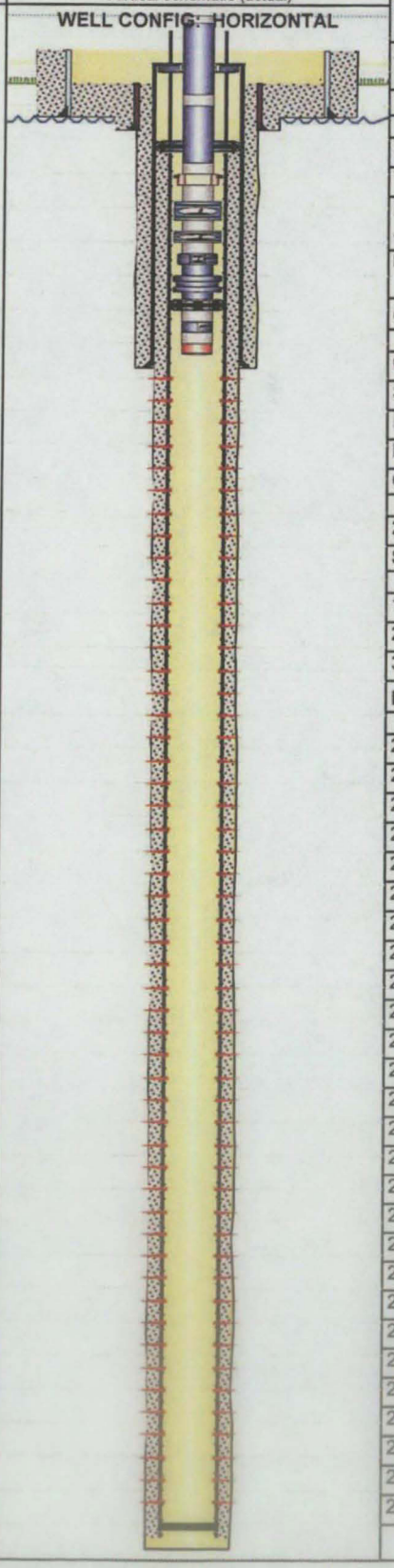
Original KB/RT Elevation (m)	Ground Elevation (m)	KB-Ground Distance (m)	KB-Casing Flange Distance (m)	KB-Tubing Hanger Distance (m)
273.40	268.20	5.20	5.40	4.22

HORIZONTAL - Original Hole, 3/28/2014 6:00:00 PM

MD (mKB)	Incl (°)
3.3	0.4
4.4	0.4
15.9	0.4
1,477.3	4.2
1,773.6	53.9
1,777.6	55.2
1,783.7	56.6
1,796.1	60.0
1,798.8	60.8
1,802.3	61.8
1,998.0	89.9
2,018.0	88.4
2,056.0	88.3
2,076.0	86.5
2,115.0	85.6
2,133.0	85.7
2,170.0	85.9
190.5	86.1
2,227.0	87.3
2,247.0	87.9
2,265.0	88.9
2,305.0	89.3
2,342.0	89.4
2,362.0	89.7
2,399.0	89.4
2,419.0	89.5
2,456.0	88.6
2,476.0	88.6
2,514.0	88.2
2,534.0	88.3
2,571.0	88.1
2,591.0	88.1
2,628.0	88.4
2,648.0	88.5
2,685.0	87.9
2,705.0	88.3
2,743.0	88.0
2,763.0	88.3
2,799.0	88.6
2,801.0	88.8
319.0	89.2
2,839.0	89.3
2,847.0	89.3
2,858.0	89.1
2,877.3	88.3

Vertical schematic (actual)

WELL CONFIG: HORIZONTAL



JOB INFORMATION

Job Category	Primary Job Type	Actual Start Date	End Date
COMPLETIONS	INITIAL COMPLETION	1/25/2014 00:00	3/28/2014 08:00
Final Report?	**Final Job Status**	**Responsible Grp 1**	**Responsible Grp 2**
Yes	GAS	coved	lagartn
AFE / RFE / Maint.#	**AFE+Supp Amt (Cost)**	**Total Field Estimate (Cost)**	**AFE-Field Estimate (Cost)**
10359413	20,641,514.00	21,946,952.75	-1,305,438.75

TIME LOG SUMMARY SUMMARIZED BY P-N-T

Time P-T-X	Dur (hr)	% Total Time (%)
P	1,318.50	98.43
T	21.00	1.57

RIG INFORMATION

<contractor>, <rigno>

Rig Accept Date	Rig Release Date

CASING STRINGS

Csg Des	OD (mm)	Wt/Len (kg/m)	Grade	Top Thread	Set Depth (mKB)
Conductor	508.0	139.887	H-40	Welded	20.00
Surface	244.5	53.574	K-55	LTC	603.00
Intermediate	177.8	38.692	P-110	LTC	1,908.00
Production	114.3	17.263	P-110	LTC	2,909.32

CURRENT PBTD

Date	Type	Depth (mKB)
2/7/2014 07:00		2,877.30

SCVF (SURFACE CASING VENT FLOW)

Date	Typ	Detection
1/30/2014 10:00	SCVF	No
2/22/2014 00:00	SCVF	No
3/23/2014 16:00	SCVF	No

PERFORATIONS

Date	Top (mKB)	Btm (mKB)	Zone	Type	Current Status
2/16/2014	1,998.00	1,999.00	CANOL, Origina...	Perforated	Open - Flowing
2/16/2014	2,017.00	2,018.00	CANOL, Origina...	Perforated	Open - Flowing
2/16/2014	2,036.00	2,037.00	CANOL, Origina...	Perforated	Open - Flowing
2/16/2014	2,056.00	2,057.00	CANOL, Origina...	Perforated	Open - Flowing
2/16/2014	2,075.00	2,076.00	CANOL, Origina...	Perforated	Open - Flowing
2/16/2014	2,094.00	2,095.00	CANOL, Origina...	Perforated	Open - Flowing
2/16/2014	2,113.00	2,114.00	CANOL, Origina...	Perforated	Open - Flowing
2/16/2014	2,132.00	2,133.00	CANOL, Origina...	Perforated	Open - Flowing
2/16/2014	2,151.00	2,152.00	CANOL, Origina...	Perforated	Open - Flowing
2/16/2014	2,170.00	2,171.00	CANOL, Origina...	Perforated	Open - Flowing
2/15/2014	2,189.00	2,190.00	CANOL, Origina...	Perforated	Open - Flowing
2/15/2014	2,208.00	2,209.00	CANOL, Origina...	Perforated	Open - Flowing
2/15/2014	2,227.00	2,228.00	CANOL, Origina...	Perforated	Open - Flowing
2/15/2014	2,246.00	2,247.00	CANOL, Origina...	Perforated	Open - Flowing
2/15/2014	2,265.00	2,266.00	CANOL, Origina...	Perforated	Open - Flowing
2/15/2014	2,285.00	2,286.00	CANOL, Origina...	Perforated	Open - Flowing
2/15/2014	2,304.00	2,305.00	CANOL, Origina...	Perforated	Open - Flowing
2/15/2014	2,323.00	2,324.00	CANOL, Origina...	Perforated	Open - Flowing
2/15/2014	2,342.00	2,343.00	CANOL, Origina...	Perforated	Open - Flowing
2/15/2014	2,361.00	2,362.00	CANOL, Origina...	Perforated	Open - Flowing
2/14/2014	2,380.00	2,381.00	CANOL, Origina...	Perforated	Open - Flowing
2/14/2014	2,399.00	2,400.00	CANOL, Origina...	Perforated	Open - Flowing
2/14/2014	2,418.00	2,419.00	CANOL, Origina...	Perforated	Open - Flowing
2/13/2014	2,437.00	2,438.00	CANOL, Origina...	Perforated	Open - Flowing
2/13/2014	2,456.00	2,457.00	CANOL, Origina...	Perforated	Open - Flowing
2/13/2014	2,475.00	2,476.00	CANOL, Origina...	Perforated	Open - Flowing
2/13/2014	2,494.00	2,495.00	CANOL, Origina...	Perforated	Open - Flowing

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ConocoPhillips Canada

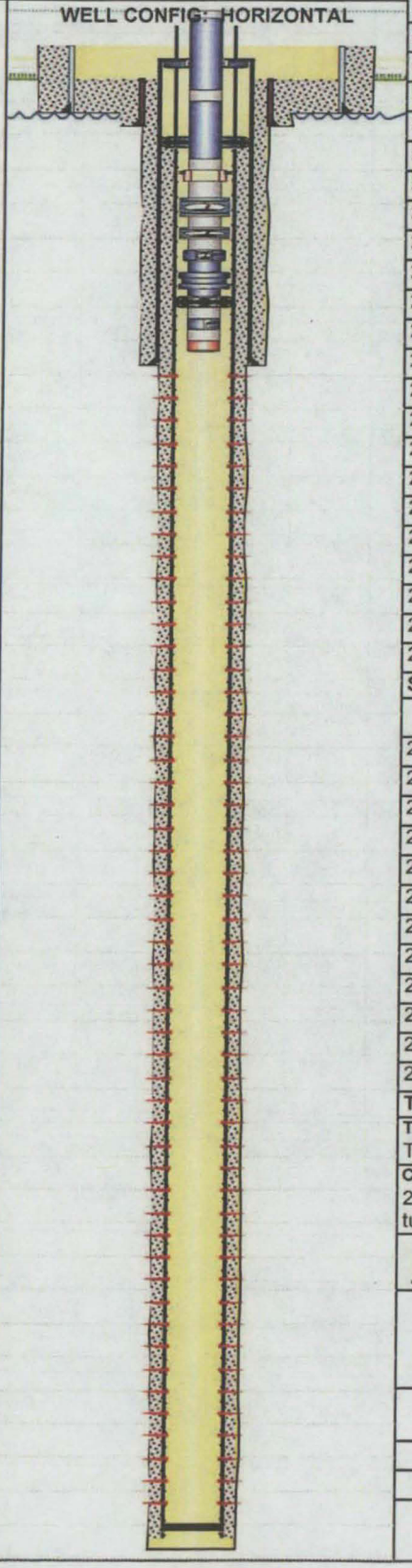
End Of Job QC Summary
COPRC DODO CANYON E-76 65-10 126-45

HORIZONTAL - Original Hole, 3/28/2014 6:00:00 PM

MD (mKB)	Incl (°)
3.3	0.4
4.4	0.4
15.0	0.4
1,477.3	4.2
1,773.6	53.9
1,777.6	55.2
1,783.7	56.6
1,796.1	60.0
1,799.8	60.8
1,802.3	61.8
1,998.0	89.9
2,018.0	88.4
2,056.0	88.3
2,076.0	86.5
2,113.0	85.6
2,133.0	85.7
2,170.0	85.9
[illegible]	86.1
[illegible]	87.3
2,247.0	87.9
2,285.0	88.9
2,305.0	89.3
2,342.0	89.4
2,362.0	89.7
2,399.0	89.4
2,419.0	89.5
2,456.0	88.6
2,476.0	88.6
2,514.0	88.2
2,534.0	88.3
2,571.0	88.1
2,591.0	88.1
2,628.0	88.4
2,648.0	88.5
2,685.0	87.9
2,705.0	88.3
2,743.0	88.0
2,763.0	88.3
2,799.0	88.6
2,801.0	88.8
[illegible]	89.2
[illegible]	89.3
2,847.0	89.3
2,869.0	89.1
2,877.3	88.3

Vertical schematic (actual)

WELL CONFIG: HORIZONTAL



PERFORATIONS

Date	Top (mKB)	Btm (mKB)	Zone	Type	Current Status
2/13/2014	2,514.00	2,515.00	CANOL, Origina...	Perforated	Open - Flowing
2/13/2014	2,533.00	2,534.00	CANOL, Origina...	Perforated	Open - Flowing
2/13/2014	2,552.00	2,553.00	CANOL, Origina...	Perforated	Open - Flowing
2/13/2014	2,571.00	2,572.00	CANOL, Origina...	Perforated	Open - Flowing
2/12/2014	2,590.00	2,591.00	CANOL, Origina...	Perforated	Open - Flowing
2/12/2014	2,609.00	2,610.00	CANOL, Origina...	Perforated	Open - Flowing
2/12/2014	2,628.00	2,629.00	CANOL, Origina...	Perforated	Open - Flowing
2/12/2014	2,647.00	2,648.00	CANOL, Origina...	Perforated	Open - Flowing
2/12/2014	2,666.00	2,667.00	CANOL, Origina...	Perforated	Open - Flowing
2/12/2014	2,685.00	2,686.00	CANOL, Origina...	Perforated	Open - Flowing
2/12/2014	2,704.00	2,705.00	CANOL, Origina...	Perforated	Open - Flowing
2/12/2014	2,723.00	2,724.00	CANOL, Origina...	Perforated	Open - Flowing
2/12/2014	2,743.00	2,744.00	CANOL, Origina...	Perforated	Open - Flowing
2/12/2014	2,762.00	2,763.00	CANOL, Origina...	Perforated	Open - Flowing
2/11/2014	2,781.00	2,782.00	CANOL, Origina...	Perforated	Open - Flowing
2/8/2014	2,789.00	2,790.00	CANOL, Origina...	Perforated	Open - Flowing
2/11/2014	2,800.00	2,801.00	CANOL, Origina...	Perforated	Open - Flowing
2/8/2014	2,808.00	2,809.00	CANOL, Origina...	Perforated	Open - Flowing
2/11/2014	2,819.00	2,820.00	CANOL, Origina...	Perforated	Open - Flowing
2/8/2014	2,827.00	2,828.00	CANOL, Origina...	Perforated	Open - Flowing
2/11/2014	2,838.00	2,839.00	CANOL, Origina...	Perforated	Open - Flowing
2/8/2014	2,847.00	2,848.00	CANOL, Origina...	Perforated	Open - Flowing
2/11/2014	2,857.00	2,858.00	CANOL, Origina...	Perforated	Open - Flowing
2/8/2014	2,866.00	2,867.00	CANOL, Origina...	Perforated	Open - Flowing

STIMULATION AND TREATMENTS

Date	Stim Treat Co	Type	Proppant Design (kg)	Proppant Frm (kg)	Zone
2/17/2014	Schlumberger	Slickwater	100,000.0	99,350.0	CANOL, Original Hole
2/16/2014	Schlumberger	Other	0.0	0.0	CANOL, Original Hole
2/16/2014	Schlumberger	Slickwater	100,000.0	99,660.0	CANOL, Original Hole
2/16/2014	Schlumberger	Slickwater	100,000.0	112,798.0	CANOL, Original Hole
2/15/2014	Schlumberger	Slickwater	100,000.0	110,279.0	CANOL, Original Hole
2/15/2014	Schlumberger	Slickwater	100,000.0	100,000.0	CANOL, Original Hole
2/14/2014	Schlumberger	Slickwater	100,000.0	100,360.0	CANOL, Original Hole
2/13/2014	Schlumberger	Slickwater	100,000.0	115,547.0	CANOL, Original Hole
2/13/2014	Schlumberger	Slickwater	100,000.0	95,859.2	CANOL, Original Hole
2/12/2014	Schlumberger	Slickwater	100,000.0	116,103.0	CANOL, Original Hole
2/11/2014	Schlumberger	Slickwater	100,000.0	99,679.1	CANOL, Original Hole
2/9/2014	Schlumberger	Slickwater	100,000.0	716.0	CANOL, Original Hole

TUBING STRING

Tubing Description	Run Date	Pull Date	String Length (m)	Set Depth (mKB)
Tubing - Production	2/28/2014 15:00		1,798.17	1,802.39

Comment

2 control lines w/weatherford real time gauges installed in tubing string. 1 Canon clamp installed on every tubing connection to secure control lines.

Jts	Item Des	OD Nominal (mm)	Nominal ID (mm)	Wt (kg/m)	Grade	Make	Model	Len (m)	Top (mKB)
1	Extended neckTubing Hanger c/w 2-1/2" ports	179.0	50.7		L-80	Stream Flo / Crown	Straight Bore c/w Extended neck	0.16	4.22
	7000 daN compression	60.3	50.7					-0.79	4.38
	Tubing buckle	60.3	50.7					-0.25	3.59
	Tally correction	60.3	50.7					-1.48	3.34

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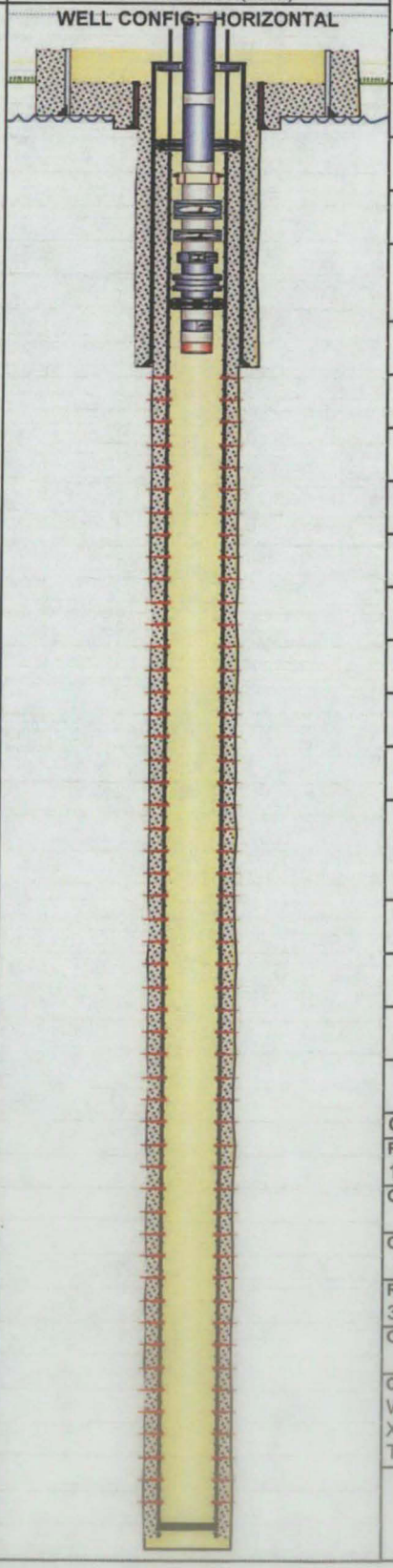
ConocoPhillips Canada

End Of Job QC Summary
COPRC DODO CANYON E-76 65-10 126-45

HORIZONTAL - Original Hole, 3/28/2014 6:00:00 PM

MD (mKB)	Incl (°)
3.3	0.4
4.4	0.4
15.9	0.4
1,477.3	4.2
1,773.6	53.9
1,777.6	55.2
1,783.7	56.6
1,795.1	60.0
1,798.8	60.8
1,802.3	61.8
1,988.0	89.9
2,018.0	88.4
2,056.0	88.3
2,078.0	86.5
2,113.0	85.6
2,133.0	85.7
2,170.0	85.9
190.0	86.1
2,227.0	87.3
2,247.0	87.9
2,283.0	88.9
2,305.0	89.3
2,342.0	89.4
2,362.0	89.7
2,399.0	89.4
2,419.0	89.5
2,455.0	88.6
2,476.0	88.6
2,514.0	88.2
2,534.0	88.3
2,571.0	88.1
2,591.0	88.1
2,628.0	88.4
2,648.0	88.5
2,685.0	87.9
2,705.0	88.3
2,743.0	88.0
2,763.0	88.3
2,799.0	88.6
2,901.0	88.8
919.0	89.2
2,838.0	89.3
2,847.0	89.3
2,858.0	89.1
2,877.3	88.3

Vertical schematic (actual)



Jts	Item Des	OD Nominal (mm)	Nominal ID (mm)	Wt (kg/m)	Grade	Make	Model	Len (m)	Top (mKB)
1	Tubing Pup Joint (spacer nipple)	60.3	50.7	6.994	J-55			0.10	1.86
1	Tubing	60.3	50.7	6.994	J-55		T&C Upset	9.63	1.96
2	Tubing Pup Joint	60.3	50.7	6.994	J-55		T&C Upset	4.32	11.59
183	Tubing	60.3	50.7	6.994	J-55		T&C Upset	1,756.45	15.91
1	Tubing Pup Joint	60.3	50.7	6.994	J-55		T&C Upset	1.24	1,772.36
1	CXU Sliding sleeve c/w 47.63mm X profile, up open	79.2	47.6		L-80		CXU	0.86	1,773.60
1	Tubing Pup Joint	60.3	50.7	6.994	J-55		T&C Upset	3.09	1,774.46
1	Gauge Carrier	90.7	50.7		L-80	Weatherford		1.56	1,777.55
1	Tubing Pup Joint	60.3	50.7	6.994	J-55		T&C Upset	3.06	1,779.11
1	Gauge Carrier	90.7	50.7		L-80	Weatherford		1.56	1,782.17
1	Tubing Pup Joint	60.3	50.7	6.994	J-55		T&C Upset	2.47	1,783.73
1	47.63mm X Profile Nipple	77.7	47.6		L-80	Weatherford		0.29	1,786.20
1	Tubing	60.3	50.7	6.994	J-55		T&C Upset	9.65	1,786.
1	Extended no-jay NFT on/ off tool	95.3	50.7		L-80	Weatherford		1.11	1,796.14
1	Slick Joint c/w 47.63mm x profile	60.3	47.6	6.994	J-55	Weatherford	T&C Upset	0.17	1,797.25
1	Weatherford WDH double grip packer (69MPa rated)	101.6	50.7			Weatherford WDH114 WL	T&C Upset	1.38	1,797.42
1	Tubing Pup Joint	60.3	50.7	6.994	J-55		T&C Upset	2.49	1,798.80
1	XN no-go profile nipple 45.49mm no go	60.3	45.5		L-80	Weatherford	T&C Upset	0.32	1,801.29
1	Tubing Pup Joint	60.3	50.7	6.994	J-55		T&C Upset	0.65	1,801.61
1	PPMP Pump out plug	60.3	50.7		L-80		T&C Upset	0.13	1,802.26

OTHER IN HOLE

Run Date	Description	Top Depth (mKB)	Bottom Depth (mKB)
1/22/2014	Packer	1,477.35	1,478.90
OD (mm)	**ID (mm)**	**Make**	**Model**
153.7	120.7		
Comment			

Run Date	Description	Top Depth (mKB)	Bottom Depth (mKB)
3/1/2014	Pressure / Temperatur...	1,786.20	1,786.49
OD (mm)	**ID (mm)**	**Make**	**Model**
31.8		Weatherford	SN 8927 (bottom gauge)

Comment
Weatherford tandem 10K BHRs inside bomb wells. Recorders are attached to bottom of a flow through X-lock set in X-profile at 1786.20mKB
Top SN# 8926 / Bottom SN# 8927

Report Printed: 4/10/2014

XVII Electric Logs

XVIII C RING FRESH WATER LEAKAGE INCIDENT

ConocoPhillips Canada

Stuart Gardner
Well Engineering Operations
HSE Specialist

ConocoPhillips Canada
2100 Bow Valley Square 4
250 6th Avenue SW
Calgary, AB T2P 3H7
Phone (403) 532-3677

February 11, 2014

National Energy Board
444 Seventh Avenue SW
Calgary, AB, T2P 0X8

Attention: Rick Turner
Operations Technical Specialist

Re: Fresh water release from C-ring liner failure
Location: E-76 65-10 126-45

At approximately 10:45am on February 5th 2014, the ConocoPhillips Canada (ConocoPhillips) site supervisor was alerted to a leak coming from the bottom edge of a containment ring (C-Ring) which was holding warmed fresh water. The site supervisor immediately inspected the leak and observed a hole in the liner.

Within minutes, the warm fresh water released from the hole caused ice under the liner to melt, reducing support provided to the liner by the ice and increasing stress on the liner. The liner subsequently failed at the hole releasing approximately 2,760m^3 of fresh water. The fresh water spread onto the surface of the ice-pad and flowed off-lease, melting snow and ice on a portion of the pad and in the adjacent forested area.

Upon identification of the leak, ConocoPhillips ceased all well site activities and mustered personnel. Actions were taken to move equipment away from the compromised portion of the ice pad and secure the site to prevent subsequent loss.

This event did not result in any injuries, no ancillary damage and no release of hazardous substance to the environment. The NEB was notified of the fresh water release by phone on February 5th, 2014 as soon as the site was safe and secure.

The C-Ring was dismantled and removed from the site, and the ice pad was repaired over the following days. A number of 400 barrel tanks were brought onsite site to replace the C-ring for storage of warmed fresh water.

If you have any questions, please contact the undersigned.

Sincerely,

Stuart Gardner
WEO HSE Specialist

cc: Tomas Romero, ConocoPhillips Canada, Regulatory Affairs Team Lead

Geological Report

on

COPRC Dodo Canyon E-76

Unit E, Section 76, Grid 65-10 126-45

Well Reached Total Depth on
Jan 20, 2014 @ 00:42

for

ConocoPhillips Canada Resources Corp.

Well License # : 470. NEB: 1211

Prepared For: Dave Oakley
ConocoPhillips Canada

Prepared By: Dave Lawrence / Gerry Pasveer
Black Gold Geotechnical Services Ltd.

Dave Lawrence / Gerry Pasveer

Table of Contents

Section	Page
Well Abstract	1-1
Well Summary	2-1
Daily Drilling Summary	3-1
Casing Strings	4-1
Bit Record Summary (IADC)	5-1
Logging Reports	9-1
Directional Surveys	11-1
Mud Data	14-1
Work Schedule	15-1
Formation Tops	16-1
Formation Evaluation	17-1

The horizontal drilling target for this well is the Devonian Canol formation. The Canol is a siliceous organically-rich shale that is probably the source rock for the oil in the Norman Wells field (Kee Scarp Reef). The thickness of the Canol in this area makes it a good candidate to drill horizontally and then fracture hydraulically to obtain the hydrocarbons (hopefully light oil / condensate) which are trapped in the Canol due to the low permeability of the shale. Two vertical strat wells were drilled last winter and thoroughly investigated with cores and extensive logging programs to determine the best location in the Lower Canol to run the horizontal portion of this well.

The well was spudded on Dec 28, 2013. The drilling of surface hole went well except for a top drive breakdown that cost 2 days of rig time waiting on parts. The vertical & build sections also went well operationally with no signifiacnt hole troubles except for a couple of extra bit trips. The first was to change the drill bit which proved difficult to steer, the second trip was to dial up the motor angle from a 1.83 to a 2.12 degree bend. The 1.83 setting did not give us the necessary build rates needed to land the build section at a depth of 1908 meters and the programed angle of 88.5 degrees.

The horizontal portion of the well was trouble free and took only three days to drill to a total depth of 2910 meters measured depth on Jan 20, 2014 @ 00:42 hrs. This section of the well was drilled entirely in the Lower Canol formation. Right after drillout the well drilled out of the top of the target window for the first 200 meters due to too high of an angle caused by our casing which landed at an angle of approximently 90.5 degrees (our formation bed angle was 88.7 degrees). After steering back down into our target zone we then stayed in the window until TD.

Well Summary

Storage Units: Metric

Well Information

Operator:	**ConocoPhillips Canada Resources Corp.**
Well Name:	**COPRC Dodo Canyon E-76**
Location:	**Unit E, Section 76, Grid 65-10 126-45**
UWI:	300E766510126450
Pool:	Undefined
Field:	Dodo Canyon
State / Province:	Northwest Territories
Country:	Canada
License Number:	470, NEB: 1211
Well Status:	**Cased Hztl**

Surface Co-ordinates

Hole Type: Horizontal **Fault Indicator:**
Latitude: 65 05 27 N **Longitude:** 126 59 58 W
UTM Northing: 7219874.66 **UTM Easting:** 594010.01

N / S : Surface Location: c-76-L / 94-P-16
E / W : Surface UWI: 200C076L094P1699

Int. Casing Co-ordinates

Latitude: 7219988.32m N **Longitude:** 593815.38m

N / S : 119.8 m North
E / W : 190.99m West of surface location

Bottom Hole Co-ordinates

Latitude: 7220440.19m N **Longitude:** 592922.75m E

N / S : 599.85m North
E / W : 1069.12m West

Elevations

		Reference:	Grd
Ground Elevation:	268.20	**Kelly Bushing to Ground:**	5.20
Kelly Bushing Elevation:	273.40	**Cut (-):**	
Casing Flange Elevation:	268.20	**Fill (+):**	

Total Depth

	Measured Depth	**True Vertical Depth**
Total Depth Driller (Tally) :	2,910.00	1,803.76
Total Depth Driller (Strap or SLM):		
Total Depth Logger:		

Miscellaneous Depths

Plugback Depth: **Water Depth Reference:**
Sidetrack Depth: **Water Depth:**

Well Summary

Drilling Contractor: Beaver Drilling Ltd. **Spud Date:** Dec 28, 2013 @ 06:30
Rig Release Date: **Total Depth Date:** Jan 20, 2014 @ 00:42

Cores	#	Formation	Interval	Cut	Recovered	%

Well Summary

Storage Units: Metric

Casing Summary

Casing Type	Casing Size	Landed Depth	Hole Size
Surface	244.5	603.00	311.0
Intermediate	177.8	1,907.17	222.0

Logging Summary

Company	Engineer	Total Depth (MD)	Logging tools
Schlumberger	Jeffrey Tatloc	1,908.00	AIT-TLD-HGNS-GR-BHC-TLD2-ECRD
		2,910.00	USIT-CBL-GR

Daily Drilling Summary

Storage Units: Metric

Date	Depth	Progress	Rotating Hours	Avg. P.R.	Daily Costs	Formation	Operational Status @ Report Time
Dec 27, 13	0.00		0.00	0.00		Surface	Rigging up
Dec 28, 13	0.00	0.00	0.00	0.00		Surface	Pre-spud meeting
Dec 29, 13	156.00	156.00	11.00	14.18		Slater River	Wait on top drive parts
Dec 30, 13	156.00	0.00	0.00	0.00		Slater River	Wait on top drive parts
Dec 31, 13	212.00	56.00	3.00	18.67		Slater River	Tripping (RIH)
Jan 01, 14	396.00	184.00	5.50	33.45		Slater River	Wiper trip
Jan 02, 14	543.00	147.00	14.00	10.50		Slater River	Drilling
Jan 03, 14	592.00	49.00	8.00	6.13		Slater River	Ream & wash into hole
Jan 04, 14	603.00	11.00	1.75	6.29		Slater River	Cementing surface casing
Jan 05, 14	603.00	0.00	0.00	0.00		Slater River	Pressure test Manifold
Jan 06, 14	603.00	0.00	0.00	0.00		Slater River	RIH / Dir Tools
Jan 07, 14	808.00	205.00	8.25	24.85		Slater River	Drilling 222mm hole
Jan 08, 14	1,293.00	485.00	18.50	26.22		Imperial	Drilling 222mm hole
Jan 09, 14	1,556.00	263.00	19.25	13.66		Imperial	Drilling 222mm build
Jan 10, 14	1,599.00	43.00	6.50	6.62		Imperial	Tripping RIH (slip & cut)
Jan 11, 14	1,702.00	103.00	14.50	7.10		Upper Canol	Tripping (POOH)
Jan 12, 14	1,751.00	49.00	11.00	4.45		Lower Canol	Drilling 222mm build
Jan 13, 14	1,835.00	84.00	20.50	4.10		Lower Canol	Drilling 222mm build
Jan 14, 14	1,908.00	73.00	17.50	4.17		Lower Canol	Circ after wiper trip
Jan 15, 14	1,908.00	0.00	0.00	0.00		Lower Canol	Run 177.8mm casing
Jan 16, 14	1,908.00	0.00	0.00	0.00		Lower Canol	Attempt to land pack-off assembly
Jan 17, 14	1,945.00	37.00	4.00	9.25		Lower Canol	Drilling 156mm Hztl hole
Jan 18, 14	2,197.00	252.00	18.75	13.44		Lower Canol	Drilling 156mm Hztl hole
Jan 19, 14	2,571.00	374.00	18.75	19.95		Lower Canol	Drilling 156mm Hztl hole
Jan 20, 14	2,910.00	339.00	14.50	23.38		Lower Canol	Wiper Trip
Jan 21, 14	2,910.00	0.00	0.00	0.00		Lower Canol	Rig out loggers

Accumulated Daily Costs:

Casing Data Summary

Storage Units: Metric

Casing Type: Surface

Casing Size:	244.5	**Hole Size:**	311.0
Casing Landed @:	603.00	**Total Joints:**	47
Casing Date:	Jan 4, 2014 @ 02:30	**Plug Down Date:**	Jan 4, 2014 @ 07:45

of Joints / Length / O.D. / Weight:
1 244.5 float.
1 244.5 mm shoe.
47 jts of 244.5mm, 53.6 kg/m, K-55, LT&C surface casing.

Cementing Details:
Pump 5 m3 of 1000 kg/m3 fresh water, Pressure test Line to 21,000 kPa (held ok), bleed off pressure, Pump 5 m3 of 1300 kg/m3 MudPush II pre flush spacer, Pump 32 tonnes / 29.5 m3 (50% excess) of RFC 1740 cement with 0.2% Anti Foam + 1.0% CaCl2 + 1.1% Low Temp Fluid Loss + 0.6% Dispersant from 603m to 5.2m, Drop Plug and Displace with 23.8 m3 of Fresh Water

Remarks:
6 m3 good returns to surface.

Casing Type: Intermediate

Casing Size:	177.8	**Hole Size:**	222.0
Casing Landed @:	1,907.17	**Total Joints:**	150
Casing Date:	Jan 15, 2014 @ 15:30	**Plug Down Date:**	Jan 15, 2014 @ 22:15

of Joints / Length / O.D. / Weight:
1 177.8mm float shoe
1jt of 177.8mm, 38.69kg/m P-110, LT&C csg
1 177.8mm float collar
149 jts 177.8mm, 38.69 kg/m, P-110, LT&C csg.

Cementing Details:
Pump 8m3 of 1000kg/m3 CW8 pre-flush, stop & pressure test lines to 21000kpa (held ok) bled off and pump 8m3 of 1200kg/m3 MUDPUSH II pre-flush spacer.
Pump 20T (24.8m3) (30% excess) of Hilite 1400 lead with 0.2% Antifoam + 0.6% Low temp dispersant + 60L/T Gas control agent + 0.3% Antisettling, from 1369 - 5.2m, pump 13T (9.8m3) (30% excess) of 1900 kg/m3 coventional Class G Tail with 0.6% Fluid loss + 0.5% Dispersant + 0.2% antifoam + 0.2% retarder + 72L/T gas control agent from 1908-1369m. Drop plug and displace 37.8m3 of invert. Bump plug 3500 kpa over final circ pressure of 6500 kpa @ 22:15 hrs. Bleed of pressure and check out floats (holding OK), Pressure test casing to 18500 kpa for 10 min Held OK.

Remarks:

Bit Record Table (IADC Grading System)

Storage Units: Metric

**** For more detailed Bit Information refer to Bit Record ****

Bit #	Make	Type	Size	Depth In	Depth Out	Made	Hours	Avg. P.R.	I.A.D.C. Bit Condition								
									I	O	MDC	Loc	B	G	ODC	RP1	RP2
1A	REED	J&L	311.0	0.0	603.0	603.0	41.00	14.71	1	2	WT	S	1	I	NO	TD	
1	Ulterra	616	222.0	603.0	1,599.0	996.0	50.75	19.63	1	4	CT	G	X	I	NO	BHA	
2	Smith	FH18B	222.0	1,599.0	1,702.0	103.0	14.40	7.15	1	1	WT	G	E	I	NO	BHA	
2RR	Smith	FH18B	222.0	1,702.0	1,908.0	206.0	46.75	4.41	1	3	CT	S	E	I	WT	TD	
3	Smith	613	156.0	1,908.0	2,910.0	1,002.0	43.50	23.03	1	2	WT	S	X	I	NO	TD	

Total Rotating Hours: 196.40

Wireline Logging Summary

Storage Units: Metric

Logging Suite Number: 1
Wireline Logging Company: Schlumberger
District: Grande Prairie
Witness: Dave Lawrence

Engineer: Jeffrey Tatloc
Unit Number: 3139

Was Pressure Control Equipment Utilized: No
Was the Logging Job Mechanically Assisted: No

Maximum Deviation: 89.000 °
Hole Size: 222.0

Total Lost Time:
Loggers' Total Down Time:
Total Job Time (From Rig up to Rig down):

	Measured Depth	True Vertical Depth
Casing Depth Driller	603.00	602.97
Casing Depth Logger	603.00	602.97
Total Depth Driller (Tally)	1,908.00	1,776.68
Total Depth Driller (Strap or SLM)		

General Remarks: Called out for 11:00 hrs. Arrived @ 09:20 hrs.

Logging Run #: 1
Date: Jan 14, 2014

Drilling Fluid Data

Drilling Fluid Type: Invert (versaclean)
Fluid Density: 1025.0 **Viscosity:** 75 **pH:** **Fluid Loss:**

Mud Resistivity (Rm): @ °
Mud Resistivity (Rm) @ BHT: @ °
Mud Filtrate Resistivity (Rmf): @ °
Mud Cake Resistivity (Rmc): @ °

Maximum Temperature: 71.5 °
Source (Rmf):
Source (Rmc):

Logging Run Information

Date on Bottom: Jan 14, 2014
Total Depth Logger: 1,819.10 (MD) 1,761.46 (TVD)

Logging Tools: AIT-TLD-HGNS-GR-BHC-TLD2-ECRD.

Remarks:

Hole Conditions: Good, wiper trip @ TD to 1466m prior to POOH to log.

Wireline Logging Summary

Storage Units: Metric

Logging Suite Number: 2
Wireline Logging Company: Schlumberger
District: Grande Prairie
Witness: Dave Lawrence

Engineer: Jeffrey Tatloc
Unit Number: 3139

Was Pressure Control Equipment Utilized: No
Was the Logging Job Mechanically Assisted: No

Maximum Deviation: 91.000 °
Hole Size: 156.0

Total Lost Time: 0.00
Loggers' Total Down Time: 0.00
Total Job Time (From Rig up to Rig down): 6.00

	Measured Depth	True Vertical Depth
Casing Depth Driller	1,908.00	1,776.68
Casing Depth Logger		
Total Depth Driller (Tally)	2,910.00	1,803.76
Total Depth Driller (Strap or SLM)		

General Remarks:

Logging Run #: 1
Date: Jan 20, 2014

Drilling Fluid Data

Drilling Fluid Type: Invert (versaclean)
Fluid Density: 1040.0 **Viscosity:** 75 **pH:** **Fluid Loss:**

Mud Resistivity (Rm): @ °
Mud Resistivity (Rm) @ BHT: @ °
Mud Filtrate Resistivity (Rmf): @ °
Mud Cake Resistivity (Rmc): @ °

Maximum Temperature: 71.5 °
Source (Rmf):
Source (Rmc):

Logging Run Information

Date on Bottom: Jan 21, 2014
Total Depth Logger: 1,824.10 (MD) 1,763.35 (TVD)

Logging Tools: USIT-CBL-GR

Remarks:

Hole Conditions: Cased

Deviation / Directional Survey Report

Directional Drilling Company: Beaver
Directional Drillers:
Measured While Drilling (MWD) Hands:
Survey Type: drift
Survey Mode: wireline
Survey Date: Dec 28, 2013
Survey Calculation Method: minimum curvature
Target Azimuth: 0.00 °
Dog Leg Severity Characteristic: 30.00

Survey Tie-In Information

Tie-In Co-Ordinates
Latitude:
Longitude:
N / S:
E / W:

Measured Depth	T.V.D.	Drift Angle (°)	Azimuth (°)	+N / -S Distance	+E / -W Distance	Vertical Section	DogLeg Severity

Kick-Off (Whipstock) Information

Kick-Off Co-Ordinates
Latitude:
Longitude:
N / S:
E / W:

Measured Depth	T.V.D.	Drift Angle (°)	Azimuth (°)	+N / -S Distance	+E / -W Distance	Vertical Section	DogLeg Severity

Remarks:

Survey Points

Storage Units: Metric

Measured Depth	T.V.D.	Drift Angle (°)	Azimuth (°)	+N / -S Distance	+E / -W Distance	Vertical Section	DogLeg Severity
29.00		0.400					
62.00		0.500					
90.00		0.200					
118.00		0.200					
146.00		0.100					
183.00		0.200					
211.00		0.300					
240.00		0.500					
269.00		0.800					
306.00		1.000					
348.00		0.900					
378.00		0.400					
396.00		0.600					
433.00		0.600					
461.00		0.600					
489.00		0.500					
508.00		0.700					
544.00		0.400					
571.00		0.500					
603.00		0.500					

Deviation / Directional Survey Report

Directional Drilling Company:	Schlumberger
Directional Drillers:	Chad Chimuk, George Grigore
Measured While Drilling (MWD) Hands:	Dennis Caissie
Survey Type:	magnetic
Survey Mode:	MWD
Survey Date:	Jan 4, 2014
Survey Calculation Method:	minimum curvature
Target Azimuth:	299.99 °
Dog Leg Severity Characteristic:	30.00

Survey Tie-In Information

Tie-In Co-Ordinates

Latitude:

Longitude:

N / S:

E / W:

Measured Depth	T.V.D.	Drift Angle (°)	Azimuth (°)	+N / -S Distance	+E / -W Distance	Vertical Section	DogLeg Severity
0.00	0.00	0.000	0.00	0.00	0.00	0.00	0.00

Kick-Off (Whipstock) Information

Kick-Off Co-Ordinates

Latitude:

Longitude:

N / S:

E / W:

Measured Depth	T.V.D.	Drift Angle (°)	Azimuth (°)	+N / -S Distance	+E / -W Distance	Vertical Section	DogLeg Severity

Remarks: On the bit trip @ 1599m the drill string was strapped and it was discovered that we were missing 1 single, so a 9.36 meter depth correction was made (shallower). It was decided by the drilling departmnet not to change the survey deths, as it would not change the overall survey data that much due to the low angle at that time. All surveys from 600 to 1599 meters are out in depth by 9.36 meters.

Survey Points

Storage Units: Metric

Measured Depth	T.V.D.	Drift Angle (°)	Azimuth (°)	+N / -S Distance	+E / -W Distance	Vertical Section	DogLeg Severity
29.00	29.00	0.400	0.00	0.10	0.00	0.05	0.41
62.00	62.00	0.500	0.00	0.36	0.00	0.18	0.09
90.00	90.00	0.200	0.00	0.53	0.00	0.27	0.32
118.00	118.00	0.200	0.00	0.63	0.00	0.31	0.00
146.00	146.00	0.100	0.00	0.70	0.00	0.35	0.11
183.00	183.00	0.200	0.00	0.80	0.00	0.40	0.08
211.00	211.00	0.300	0.00	0.92	0.00	0.46	0.11
240.00	240.00	0.500	0.00	1.12	0.00	0.56	0.21
269.00	268.99	0.800	0.00	1.45	0.00	0.73	0.31
306.00	305.99	1.000	0.00	2.03	0.00	1.02	0.16
348.00	347.98	0.900	0.00	2.73	0.00	1.36	0.07
378.00	377.98	0.400	0.00	3.07	0.00	1.53	0.50
396.00	395.98	0.600	0.00	3.23	0.00	1.61	0.33
433.00	432.98	0.600	0.00	3.62	0.00	1.81	0.00
461.00	460.98	0.600	0.00	3.91	0.00	1.95	0.00
489.00	488.98	0.500	0.00	4.18	0.00	2.09	0.11
508.00	507.98	0.700	0.00	4.38	0.00	2.19	0.3
544.00	543.97	0.400	0.00	4.72	0.00	2.36	0.25
571.00	570.97	0.500	0.00	4.93	0.00	2.47	0.11
627.50	627.47	0.310	124.14	5.09	0.13	2.44	0.38
704.50	704.47	0.620	137.27	4.67	0.58	1.83	0.13
781.50	781.46	0.710	129.47	4.06	1.23	0.96	0.05
818.50	818.46	0.710	121.14	3.80	1.61	0.51	0.08
856.50	856.46	1.280	112.77	3.51	2.20	-0.15	0.46
896.50	896.45	1.280	113.56	3.16	3.02	-1.04	0.01
932.50	932.44	1.190	113.98	2.85	3.73	-1.81	0.08
970.50	970.43	0.880	151.55	2.43	4.23	-2.45	0.57
1,008.50	1,008.43	1.020	147.85	1.89	4.55	-3.00	0.12
1,046.50	1,046.42	1.190	133.05	1.33	5.02	-3.68	0.26
1,084.50	1,084.41	1.500	124.45	0.78	5.72	-4.56	0.29
1,122.50	1,122.40	1.100	145.78	0.20	6.33	-5.38	0.49
1,160.50	1,160.39	1.190	131.15	-0.36	6.83	-6.10	0.24

1,198.50	1,198.38	2.120	145.56	-1.20	7.53	-7.12	0.80
1,236.50	1,236.35	1.810	176.76	-2.38	7.96	-8.08	0.87
1,274.50	1,274.34	1.410	163.67	-3.43	8.12	-8.75	0.43
1,312.50	1,312.32	1.900	156.64	-4.46	8.51	-9.59	0.42
1,351.50	1,351.30	2.120	141.06	-5.61	9.22	-10.79	0.45
1,389.50	1,389.27	2.900	172.66	-7.11	9.78	-12.02	1.23
1,426.50	1,426.22	2.780	175.74	-8.93	9.97	-13.10	0.16
1,446.00	1,445.68	4.200	204.66	-10.05	9.70	-13.43	3.41
1,464.50	1,464.15	2.700	229.77	-10.95	9.09	-13.35	3.40
1,474.50	1,474.13	4.020	247.44	-11.24	8.58	-13.05	4.99
1,483.50	1,483.11	4.600	257.05	-11.44	7.94	-12.60	3.08
1,493.50	1,493.06	6.320	262.42	-11.60	7.01	-11.87	5.38
1,503.00	1,502.50	7.110	268.46	-11.69	5.90	-10.95	3.34
1,512.50	1,511.91	8.090	268.37	-11.72	4.64	-9.88	3.09
1,522.00	1,521.31	8.620	267.36	-11.77	3.26	-8.71	1.74
1,531.50	1,530.69	9.810	264.58	-11.88	1.75	-7.45	4.01
1,541.00	1,540.04	10.780	267.18	-12.00	0.05	-6.05	3.40
1,550.50	1,549.36	11.620	269.47	-12.06	-1.79	-4.48	3.00
1,560.00	1,558.65	12.590	269.78	-12.07	-3.78	-2.76	3.07
1,569.50	1,567.88	14.410	271.28	-12.05	-6.00	-0.82	5.85
1,580.00	1,578.02	15.600	270.75	-12.00	-8.72	1.55	3.42
1,589.50	1,587.10	18.780	267.97	-12.04	-11.52	3.97	10.37
1,599.00	1,596.08	19.400	278.37	-11.86	-14.61	6.73	10.90
1,608.50	1,605.04	19.310	287.85	-11.15	-17.67	9.73	9.92
1,617.50	1,613.53	19.800	296.44	-10.01	-20.45	12.71	9.71
1,627.00	1,622.45	20.190	300.14	-8.47	-23.31	15.95	4.18
1,636.50	1,631.34	21.210	303.36	-6.71	-26.16	19.31	4.83
1,645.50	1,639.69	22.800	306.18	-4.78	-28.93	22.67	6.36
1,655.00	1,648.39	24.480	309.35	-2.45	-31.94	26.44	6.65
1,664.50	1,656.94	27.220	309.27	0.18	-35.15	30.53	8.65
1,674.00	1,665.31	29.120	310.94	3.07	-38.57	34.94	6.50
1,683.50	1,673.53	31.200	312.66	6.25	-42.13	39.61	7.11
1,693.00	1,681.55	33.410	312.66	9.69	-45.86	44.57	6.98
1,702.50	1,689.36	36.100	310.68	13.29	-49.91	49.87	9.21
1,712.00	1,696.91	38.620	308.96	16.98	-54.34	55.55	8.61

1,721.50	1,704.17	41.710	305.96	20.70	-59.20	61.62	11.51
1,731.00	1,711.12	44.190	306.67	24.53	-64.42	68.06	7.98
1,740.50	1,717.77	47.020	306.67	28.59	-69.86	74.80	8.9
1,750.00	1,724.15	48.610	307.77	32.84	-75.47	81.78	5.64
1,759.50	1,730.28	50.910	309.66	37.38	-81.12	88.95	8.57
1,769.00	1,736.18	52.320	310.15	42.16	-86.84	96.28	4.61
1,778.50	1,741.78	55.500	312.17	47.21	-92.61	103.81	11.29
1,788.00	1,747.02	57.580	311.87	52.52	-98.50	111.56	6.62
1,797.50	1,751.91	60.410	310.28	57.86	-104.64	119.55	9.92
1,807.00	1,756.41	63.100	308.96	63.20	-111.08	127.80	9.25
1,816.50	1,760.48	66.110	308.78	68.58	-117.77	136.28	9.52
1,825.00	1,763.69	69.510	308.34	73.49	-123.92	144.06	12.09
1,835.00	1,766.86	73.490	307.55	79.32	-131.40	153.45	12.15
1,845.00	1,769.43	76.710	307.55	85.21	-139.06	163.03	9.66
1,854.50	1,771.42	79.100	305.56	90.74	-146.52	172.26	9.73
1,864.00	1,773.13	80.200	304.07	96.07	-154.19	181.57	5.79
1,873.50	1,774.60	82.020	303.67	101.30	-161.98	190.93	5.88
1,883.00	1,775.70	84.710	302.88	106.48	-169.87	200.35	8.85
1,889.50	1,776.19	86.610	302.26	109.97	-175.33	206.83	9.22
1,914.50	1,776.60	91.520	303.85	123.60	-196.28	231.78	6.1
1,924.00	1,776.34	91.600	302.88	128.82	-204.21	241.26	3.07
1,933.50	1,776.06	91.700	302.60	133.96	-212.20	250.75	0.94
1,943.00	1,775.79	91.600	303.40	139.13	-220.16	260.23	2.54
1,952.50	1,775.58	90.900	301.80	144.25	-228.16	269.72	5.51
1,962.00	1,775.42	91.000	303.30	149.36	-236.17	279.20	4.75
1,971.50	1,775.30	90.500	301.40	154.44	-244.19	288.70	6.20
1,981.00	1,775.20	90.700	300.90	159.35	-252.32	298.19	1.70
1,990.50	1,775.10	90.500	301.30	164.26	-260.46	307.69	1.41
2,000.00	1,775.08	89.700	300.30	169.13	-268.62	317.19	4.04
2,009.50	1,775.17	89.300	299.40	173.85	-276.86	326.69	3.11
2,019.00	1,775.37	88.300	300.00	178.56	-285.11	336.19	3.68
2,028.50	1,775.62	88.600	299.40	183.26	-293.35	345.68	2.12
2,038.00	1,775.86	88.500	298.50	187.86	-301.66	355.18	2.86
2,048.00	1,776.14	88.300	297.90	192.58	-310.47	365.17	1.90
2,057.00	1,776.41	88.300	297.90	196.79	-318.42	374.16	0.00

2,066.50	1,776.82	86.700	297.50	201.21	-326.83	383.64	5.21
2,076.50	1,777.42	86.500	296.80	205.76	-335.71	393.61	2.18
2,085.50	1,777.98	86.300	297.37	209.85	-343.71	402.58	2.01
2,095.00	1,778.64	85.820	295.65	214.08	-352.19	412.04	5.63
2,104.50	1,779.34	85.680	297.15	218.29	-360.67	421.50	4.74
2,113.50	1,780.02	85.590	296.97	222.38	-368.67	430.46	0.67
2,123.00	1,780.76	85.590	296.66	226.65	-377.12	439.92	0.98
2,132.50	1,781.48	85.680	295.25	230.79	-385.64	449.37	4.45
2,142.00	1,782.18	85.900	295.20	234.83	-394.21	458.81	0.71
2,151.00	1,782.83	85.820	295.16	238.65	-402.33	467.75	0.30
2,171.00	1,784.25	85.990	297.06	247.43	-420.24	487.65	2.85
2,181.50	1,785.00	85.900	296.57	252.16	-429.59	498.11	1.42
2,191.00	1,785.66	86.100	297.40	256.46	-438.03	507.58	2.69
2,199.50	1,786.21	86.400	296.40	260.29	-445.60	516.05	3.68
2,209.00	1,786.79	86.700	297.40	264.58	-454.06	525.51	3.29
2,218.50	1,787.29	87.200	296.40	268.87	-462.51	534.99	3.53
2,228.00	1,787.75	87.300	296.60	273.11	-471.01	544.46	0.71
2,237.50	1,788.15	87.900	297.00	277.39	-479.48	553.94	2.28
2,247.00	1,788.49	87.900	295.90	281.62	-487.98	563.41	3.47
2,266.00	1,789.14	88.200	296.40	289.99	-505.02	582.36	0.92
2,275.50	1,789.40	88.700	296.60	294.22	-513.52	591.84	1.70
2,294.50	1,789.71	89.400	297.10	302.80	-530.47	610.80	1.36
2,313.50	1,789.89	89.500	297.10	311.46	-547.39	629.78	0.16
2,342.00	1,790.17	89.400	298.40	324.73	-572.61	658.26	1.37
2,361.00	1,790.32	89.700	298.40	333.76	-589.32	677.25	0.47
2,380.00	1,790.40	89.800	298.20	342.77	-606.05	696.24	0.35
2,399.00	1,790.53	89.400	298.60	351.81	-622.76	715.23	0.89
2,418.00	1,790.70	89.600	298.80	360.93	-639.43	734.23	0.45
2,437.00	1,791.06	88.200	297.28	369.86	-656.19	753.21	3.26
2,455.50	1,791.58	88.600	296.84	378.27	-672.66	771.68	0.96
2,475.00	1,792.06	88.600	298.95	387.39	-689.89	791.16	3.25
2,494.00	1,792.52	88.600	297.28	396.34	-706.64	810.14	2.64
2,513.50	1,793.07	88.200	298.56	405.47	-723.86	829.62	2.06
2,532.00	1,793.62	88.380	298.65	414.33	-740.10	848.11	0.33
2,551.00	1,794.22	87.980	297.85	423.31	-756.83	867.09	1.41

2,570.00	1,794.87	88.100	298.80	432.32	-773.54	886.07	1.51
2,589.00	1,795.50	88.100	299.00	441.50	-790.17	905.06	0.32
2,608.00	1,796.10	88.300	299.00	450.71	-806.78	924.04	0.3
2,627.00	1,796.64	88.400	298.60	459.86	-823.42	943.03	0.6
2,646.00	1,797.16	88.500	297.00	468.71	-840.22	962.01	2.53
2,665.00	1,797.61	88.800	298.60	477.57	-857.02	980.99	2.57
2,684.00	1,798.15	87.900	297.30	486.47	-873.80	999.97	2.50
2,703.00	1,798.78	88.300	297.50	495.21	-890.66	1,018.94	0.71
2,721.00	1,799.29	88.500	298.60	503.67	-906.54	1,036.92	1.86
2,740.00	1,799.87	88.000	298.50	512.75	-923.22	1,055.91	0.81
2,759.00	1,800.50	88.200	299.40	521.94	-939.83	1,074.89	1.45
2,778.50	1,801.06	88.500	301.30	531.79	-956.65	1,094.38	2.96
2,798.50	1,801.55	88.700	300.30	542.03	-973.83	1,114.38	1.53
2,807.50	1,801.71	89.200	301.30	546.64	-981.56	1,123.37	3.73
2,837.00	1,802.09	89.310	302.48	562.22	-1,006.60	1,152.85	1.21
2,855.50	1,802.34	89.200	300.50	571.88	-1,022.37	1,171.35	3.22
2,890.00	1,803.24	87.800	301.07	589.53	-1,052.00	1,205.83	1.31

Drilling Fluid Summary

Storage Units: Metric

Drilling Fluid Type:	Gel Polymer	**From:**	0	**To:**	603
Drilling Fluid Type:	Invert (Versaclean)	**From:**	603	**To:**	2,910

Work Schedule

Storage Units: Metric

Company:	Black Gold Geotechnical			
Geologist:	**David Lawrence**			
Work Performed	**From:**	Dec 28, 2013	**To:**	Dec 21, 2014
Depths Logged	**From:**	0.0	**To:**	2,910.0

Remarks: Gerald Pasveer (Coromandel Resources Ltd.) logged surface hole and was the 2nd geologist for the main hole.

Formation Top Summary

Storage Units: Metric

Kelly Bushing Elevation: 273.40 **Casing Flange Elevation:** 268.20
Ground Elevation: 268.20

***** All Depths measured from Kelly Bushing Elevation *****

Group *Formation* Member	Prognosis (TVD)	Sample Top (MD)	Sample Top (TVD)	Log Top (MD)	Log Top (TVD)	Subsea	Thickness
Little Bear	31.00	31.00	31.00	24.00	24.00	249.40	
Slater River	51.00	76.00	76.00	65.00	65.00	208.40	
Arctic Red	827.00	791.00	790.96	788.00	787.96	-514.56	
Martin House	933.00	929.00	928.94	927.00	926.94	-653.54	
Imperial	968.00	966.30	966.23	963.30	963.23	-689.83	
Upper Canol	1653.00	1665.00	1657.38	1663.20	1655.77	-1382.37	
Lower Canol	1686.40	1700.50	1687.72	1698.80	1686.32	-1412.92	

Formation Evaluations

Storage Units: Metric

Kelly Bushing Elevation: 273.40 **Casing Flange Elevation:** 268.20
Ground Elevation: 268.20

All Depths Measured from Kelly Bushing Elevation

Group:
Formation: Little Bear
Member:
Boundary Type: conformable
Fault Type:

Era: mesozoic
Series:
Period: Cretaceous
Stage:
Age (Approx): Million years.

	Measured Depth	True Vertical Depth	Subsea	Thickness
Sample Top	31.00	31.00	242.40	
Log Top	24.00	24.00	249.40	

Evaluation:

The Little Bear consisted of interbedded SHALE: light gray, blocky to sub blocky, dull, earthy, soft to very firm, minor very fine carbonaceous grains, trace glauconitic, very silty, trace sandy and SANDSTONE: clear to opaque quartz grains, salt and pepper, lower very fine to lower fine, 20% med brown to black lithic grains, minor carbonaceous grains, trace glauconitic, sub angular to sub rounded, well sorted, clay cement, friable to part well indurated, no shows.

Conclusion:

Due to the lack of hydrocarbon shows, these sands are wet.

Group:
Formation: Slater River
Member:
Boundary Type: conformable
Fault Type:

Era: mesozoic
Series:
Period: Cretaceous
Stage:
Age (Approx): Million years.

	Measured Depth	True Vertical Depth	Subsea	Thickness
Sample Top	76.00	76.00	197.40	
Log Top	65.00	65.00	208.40	

Evaluation:

The Slater River consisted predominately of SHALE: medium gray, darker gray in part, blocky to sub blocky, platy in part, argillaceous, micromicaceous, rarely silty, firm to partly soft, rarely pyritized, trace nodule pyrite, trace acicular crystals (gypsum?), very minor Silty Sandy micro laminations. With interbedded SANDSTONE light to medium gray, salt and pepper, lower very fine to upper fine grained, trace lower med, clear to translucent quartz grains, lithc, rare glauconite, trace carbonaceous grains, trace dark mica, trace nodule pyrite, minor to very argillaceous, trace clay cement, trace calcite, trace sideritic, moderate well indurated, trace friable, poor to fair relief in part, trace siderite fragments, trace 2-4% intergranular porosity, no visible shows.

Conclusion:

Due to the lack of hydrocarbon shows, these sands should prove to be wet.

Kelly Bushing Elevation: 273.40 **Casing Flange Elevation:** 268.20
Ground Elevation: 268.20
All Depths Measured from Kelly Bushing Elevation

Group:
Formation: Arctic Red
Member:
Boundary Type: disconformable
Fault Type:
Era: mesozoic
Series:
Period: Cretaceous
Stage:
Age (Approx): Million years.

	Measured Depth	True Vertical Depth	Subsea	Thickness
Sample Top	791.00	790.96	-517.56	
Log Top	788.00	787.96	-514.56	

Evaluation:

The Artic Red consisted predominately of Shale medium to dark gray, blocky, subfissile in part, trace carbonaceous matter, slightly silty, occasionally micromicaceous, minor brown siderite fragments (nodules?) occasional micro fractures infilled with calcite.

Conclusion:

Zone of little interest.

Group:
Formation: Martin House
Member:
Boundary Type: conformable
Fault Type:
Era: mesozoic
Series:
Period: Cretaceous
Stage:
Age (Approx): Million years.

	Measured Depth	True Vertical Depth	Subsea	Thickness
Sample Top	929.00	928.94	-655.54	
Log Top	927.00	926.94	-653.54	

Evaluation:

The Martin House consisted predominately of SANDSTONE cream to light gray, silt to very fine grain, sub angular, well sorted, quartzose, calcite & clay cement, glauconite, slightly shaly in part, no visible porosity, no show with a basal SANDSTONE cream, quartzose, fine grained, well sorted, sub angular, calcareous & kaolin matrix, trace glauconite, trace pyrite nodules, no visible porosity, no shows. Occasional vugs infilled with frosted calcite. These sands were interbedded with SHALE medium to dark gray, blocky, subfissile in part, slightly micromicaceous, trace silty, sideritic in part, occasional brown siderite fragments, trace very small fractures infilled with calcite.

Conclusion:

Due to the lack of porosity and hydrocarbon shows, these sands appear to be too tite for any hydrocarbon production.

Formation Evaluations

Storage Units: Metric

Kelly Bushing Elevation: 273.40 **Casing Flange Elevation:** 268.20
Ground Elevation: 268.20

All Depths Measured from Kelly Bushing Elevation

Group:
Formation: Imperial
Member:
Boundary Type: disconformable
Fault Type:

Era: paleozoic
Series:
Period: Devonian
Stage:
Age (Approx): Million years.

	Measured Depth	True Vertical Depth	Subsea	Thickness
Sample Top	966.30	966.23	-692.83	
Log Top	963.30	963.23	-689.83	

Evaluation:

The Imperial formation can be separated into three distinct zones. The upper from 966 to 1094 meters was predominately SHALE light to medium gray green, medium gray in part, blocky, slight waxy texture in part, poor trace calcite, slightly micromicaceous, soft to moderately firm, trace silty, trace sandy in part, trace sideritic. With minor Sandstone & Siltstone stringers.

The middle zone from 1094 to 1465 meters consisted of interbedded SILTSTONE light gray, calcareous & clay matrix, sandy, trace glauconite, occasionally grades to very fine grain sandstone in part, occasionally shaly, tight, no shows and SANDSTONE cream to very light gray, very fine grain, sub angular, well sorted, calcite & clay cement, silty, trace dark lithic grains, poor trace glauconite, grades to siltstone in part, trace carbonaceous specks, no visible porosity, no show with interbedded Shale as above.

The lower Imperial consisted predominately of SHALE medium gray, dark gray in part, platy & subfissile, blocky in part, moderately firm, slightly micromicaceous, slightly calcareous, trace silty in part with a trace of minor Marlstone & Limestone stringers.

Conclusion:

Due to the lack of any significant oil & or gas shows this formation should prove to be unproductive.

Group:
Formation: Upper Canol
Member:
Boundary Type: conformable
Fault Type:

Era: paleozoic
Series:
Period: Devonian
Stage:
Age (Approx): Million years.

	Measured Depth	True Vertical Depth	Subsea	Thickness
Sample Top	1665.00	1657.38	-1383.98	
Log Top	1663.20	1655.77	-1382.37	

Evaluation:

The Upper Canol consisted of SHALE dark gray, brown black to black, moderate to very carbonaceous in part, blocky, sub blocky to fissile in part, firm (siliceous) to part soft, trace fractures, local pin point disseminated pyrite, trace nodular pyrite, silty texture in part, no fluorescence, very slow weak pale halo cut.

Conclusion:

The Upper Canol is a siliceous organically rich shale and with horizontal drilling and modern formation fracturing technologies should produce hydrocarbons.

Formation Evaluations

Storage Units: Metric

Kelly Bushing Elevation: 273.40 **Casing Flange Elevation:** 268.20
Ground Elevation: 268.20

All Depths Measured from Kelly Bushing Elevation

Group:
Formation: Lower Canol
Member:
Boundary Type: conformable
Fault Type:

Era: paleozoic
Series:
Period: Devonian
Stage:
Age (Approx): Million years.

	Measured Depth	True Vertical Depth	Subsea	Thickness
Sample Top	1700.50	1687.72	-1414.32	
Log Top	1698.80	1686.32	-1412.92	

Evaluation:

The Lower Canol was the target formation and was drilled horizontally and consisted entirely of SHALE: dark gray to occasionally black, dark gray brown, blocky, commonly fissile to subfissile, occasional carbonaceous matter, firm to occasionally hard, commonly brittle, calcareous in part, siliceous, slightly micromicaceous in part, trace disseminated pyrite, occasional pyrite nodules, occasional thinly laminated pyrite, trace minor siderite fragments (nodules?), trace minor micro fractures usually infilled with calcite, no dry fluorescence with weak slow pale cloudy yellow cut. Some shale was dark gray brown, blocky, soft, bituminous.

Intermediate casing was set @ 1908 meters and was thought to be @ 89 degrees, as it turns out casing was at approximently at 91 degrees, so when drilled out, we initially drilled at too high of an angle to the formation dip of 88.7 degrees. Being immediately to high it took us until 2100 meters to get turned back down into our target window. The Shale though the section from 1908-2100 meters was very calcareous and had generally lower gas shows. But once back in the target window, formation gas shows improved and the shales became basically less calcareous and more siliceous.

Conclusion:

Hopefully once these organically rich siliceous shales are stimulated with hydraulic fracturing, hydrocarbons (hopefully liquid) will be produced.

SAMPLE DESCRIPTIONS

Spud on December 28th, 2013 at 06:30hrs
Samples from 0 to 20m caught previously when conductor hole was drilled.

0-5 SANDSTONE: clear to opaque, part frosted and or quartz grains, salt and pepper, upper fine to lower very coarse, local granular and pebble, 25 to 30% vari color Chert, moderate coal grains, trace glauconitic, sub angular to sub rounded, occasional rounded, poorly sorted, argillaceous, unconsolidated, no shows, minor off white SILTSTONE and minor light grey SHALE.

5-10 SHALE: light grey, fissile, dull, soft, solitary, silty, sandy, washes from samples; inter bed with SANDSTONE: clear to opaque, part frosted and or quartz grains, salt and pepper, upper fine to lower very coarse, common granular and pebble, 25% vari color Chert, trace coal grains, trace glauconitic, sub angular to sub rounded, occasional rounded, poorly sorted, argillaceous, unconsolidated, no shows,

10-15 SHALE: light grey, fissile, dull, soft, trace carbonaceous grains, silty, sandy, common washes from samples; inter bed with SANDSTONE (20%): clear to opaque, part frosted and or quartz grains, very fine to lower very coarse with granular and pebble, 20% vari color Chert, occasional coal grains, sub angular to sub rounded, occasional rounded, poorly sorted, argillaceous, unconsolidated, no shows.

15-20 SHALE: light grey, fissile, trace micro laminations visible, dull, earthy, trace calcareous, soft to trace firm, minor very fine carbonaceous grains, trace glauconitic, silty, trace sandy, common washes from samples;

20-30 CEMENT: off white, firm, hard, brittle, well indurated.

Little Bear 31.00mMD, (31.00mTVD, 242.40mSS.)

30-40 SHALE: light grey, blocky to sub blocky, dull, earthy, soft to very firm, minor very fine carbonaceous grains, trace glauconitic, very silty, trace sandy, common washes from samples; with SANDSTONE: clear to opaque quartz grains, salt and pepper, lower very fine to part lower fine, 20% medium brown to black lithic grains, minor carbs grains, trace glauconitic, sub angular to sub rounded, well sorted, clay cement, friable to part well indurated, no shows.

40-50 SHALE: light grey, blocky to sub blocky, dull, earthy, soft to very firm, minor very fine carbonaceous grains, trace glauconitic, very silty, trace sandy, occasional micro laminations visible, part grading to SILTSTONE, no shows,

50-60 SHALE: light grey, blocky to sub blocky, dull, earthy, part micromicaceous, soft to very firm, trace carbonaceous material, rare glauconitic, moderate to part very silty, minor SILTSTONE stringers.

60-70 SHALE: light grey, trace medium brown, blocky to sub blocky, dull, earthy, part micromicaceous, soft to very firm, trace carbonaceous material, moderate to part very silty, minor SILTSTONE stringers.

Slater River 76.00mMD, (76.00mTVD, 197.40mSS.)

70-80 SHALE: light grey, blocky to sub blocky, earthy, common micromicaceous, soft to very firm, trace carbonaceous material, trace siderite fragments, local disseminated pinpoint pyrite, moderate to part very silty, trace SILTSTONE stringers.

80-90 SHALE: light grey, blocky to sub blocky, earthy, common micromicaceous, soft to very firm, trace carbonaceous material, slightly more common siderite fragments, local disseminated pinpoint pyrite, trace nodules pyrite, moderate to part very silty, very minor local sandy, trace laminations visible, trace SILTSTONE stringers, light medium grey, argillaceous, sideritic, moderate to well indurated, slightly sandy, moderate dark lithic grains, tight, no shows.

90-100 SHALE: light to medium grey, blocky to sub blocky, micromicaceous, soft to very firm, trace siderite fragments, local disseminated pinpoint pyrite, moderate to part very silty, very minor local sandy, trace laminations visible.

100-110 SHALE: light to medium grey, blocky to sub blocky, micromicaceous, soft to very firm, trace siderite fragments, local disseminated pinpoint pyrite, rare glauconitic, trace very silty, rare SILTSTONE, light to medium grey, salt and pepper, argillaceous, trace sideritic, well indurated, minor lithic grains, tight, moderate sawdust in samples, no shows.

110-120 SHALE: light to medium grey, blocky to sub blocky, micromicaceous, soft to very firm, trace siderite fragments, local disseminated pinpoint pyrite, rare glauconitic, trace very silty, grading to trace SILTSTONE, light to medium grey, salt and pepper, argillaceous, trace sideritic, well indurated, common lithic grains, tight, no shows.

120-130 SHALE: light to medium grey, blocky to sub blocky, micromicaceous, soft to very firm, local disseminated pinpoint pyrite, rare glauconitic, trace very silty, rare SILTSTONE, light to medium grey, salt and pepper, argillaceous, trace sideritic, well indurated, common lithic grains, tight, moderate sawdust in samples, no shows.

130-140 SHALE: light to medium grey, blocky to sub blocky, micromicaceous, soft to very firm, local disseminated pinpoint pyrite, rare glauconitic, trace very silty, rare SILTSTONE, light to medium grey, salt and pepper, argillaceous, trace sideritic, well indurated, common lithic and occasional glauconitic grains, tight, no shows.

SAMPLE DESCRIPTIONS

140-150 SHALE: light to medium grey, blocky to sub blocky, micromicaceous, soft to very firm, trace disseminated pinpoint pyrite, trace very silty, occasional MDSTN stringers, dense, hard, rare SILTSTONE, tight, no shows.

150-160 SHALE: light to medium grey, blocky to sub blocky, micromicaceous, soft to very firm, very rare yellow white specks, very fine micro laminations visible, occasional dark mica's, silty in part, trace MDSTN, occasional grading to SILTSTONE, light to medium grey, salt and pepper, very argillaceous, trace sideritic, moderate to well indurated, sandy in part, common lithic and occasional glauconitic grains, trace SIDERITE fragments, tight, no shows.

160-170 SHALE: light to medium grey, blocky to sub blocky, micromicaceous, soft to very firm, very rare yellow white specks, very fine micro laminations visible, occasional dark mica's, silty in part, trace MDSTN, occasional grading to SILTSTONE, light to medium grey, salt and pepper, very argillaceous, trace sideritic, moderate to well indurated, sandy in part, common lithic and occasional glauconitic grains, tight, no shows.

170-180 SHALE: medium grey, blocky to sub blocky, micromicaceous, soft to very firm, trace local yellow white specks, occasional very fine micro laminations visible, trace pyritized, trace dark mica's, silty in part, trace medium grey MDSTN stringers, part grading to SILTSTONE, light to medium grey, salt and pepper, very argillaceous, trace sideritic, moderate to well indurated, sandy in part, common lithic and occasional glauconitic grains, trace SIDERITE fragments, trace nodules Pyrite, tight, no shows.

180-190 SHALE: medium grey, blocky to sub blocky, micromicaceous, firm to part soft, trace local yellow white specks, occasional very fine micro laminations visible, trace pyritized, silty in part, part grading to SILTSTONE, light to medium grey, salt and pepper, very argillaceous, trace sideritic, moderate to well indurated, sandy in part, slightly more common pyritized, common lithic and occasional glauconitic grains, trace SIDERITE, trace pyritized fossil remains, tight, no shows.

190-200 SHALE: medium grey, blocky to sub blocky, micromicaceous, soft to very firm, trace local yellow white specks, occasional very fine micro laminations visible, trace pyritized, silty in part, trace SILTSTONE, trace SIDERITE, trace pyritized fossil remains, tight, no shows.

200-210 SHALE: medium grey, blocky to sub blocky, micromicaceous, soft to very firm, argillaceous, occasional very fine silty micro laminations visible, trace pyritized, silty in part, trace SILTSTONE grading to very fine Sandstone in part, tight, no shows.

SAMPLE DESCRIPTIONS

210-220 SHALE: medium grey, blocky to sub blocky, micromicaceous, soft to very firm, trace pyritized, silty in part, part grading to SILTSTONE, light to medium grey, salt and pepper, very argillaceous, trace sideritic, moderate to well indurated, grading to very fine Sandstone in part, common lithic and trace glauconitic grains, trace siderite fragments, tight, no shows.

220-230 SHALE: light to medium grey, blocky to sub blocky, micromicaceous, argillaceous, firm to part soft, part grading to light grey soft MDSTN, very minor silty laminations.

230-240 SHALE: medium grey, trace darker medium grey, blocky to sub blocky, micromicaceous, firm to part soft, silty in part, trace siderite fragments, tight, no shows, moderate sawdust in samples.

240-250 SHALE: medium grey, trace darker medium grey, blocky to sub blocky, micromicaceous, soft to very firm, trace local disseminated pinpoint pyrite, rare nodules pyrite, part silty, trace siderite, minor silty laminations, moderate sawdust visible.

250-260 SHALE: medium grey, trace darker medium grey, blocky to sub blocky, micromicaceous, firm to part soft, trace local disseminated pinpoint pyrite, very rare SANDSTONE: clear to translucent, salt and pepper, very fine, lithic, sub angular, argillaceous, slightly calcareous, moderate indurated, no shows, moderate sawdust visible.

260-270 SHALE: medium grey, trace darker medium grey, blocky to sub blocky, micromicaceous smooth appearance, firm to part soft, trace local disseminated pinpoint pyrite, SANDSTONE (10%); light grey, salt and pepper, very fine to part lower fine, clear to translucent quartz grains, lithic, trace carbonaceous, rare glauconitic, sub angular to sub rounded, part angular, common argillaceous dirty appearance, slightly calcareous, moderate indurated, friable, no shows, very poor inter grain porosity, moderate sawdust visible.

270-280 SHALE: medium grey, trace darker medium grey, blocky to sub blocky, micromicaceous, soft to very firm, trace local disseminated pinpoint pyrite, trace pyritized, SANDSTONE (15%); light grey, salt and pepper, very fine to lower fine, clear to translucent quartz grains, lithic, rare glauconitic, trace carbonaceous, moderate to very argillaceous, slightly calcareous, moderate to very well indurated, very poor inter grain porosity, no shows.

SAMPLE DESCRIPTIONS

280-290 SHALE: medium grey, blocky to sub blocky, micromicaceous in part, firm to part soft, trace local disseminated pinpoint pyrite, trace locally pyritized, occasional silty light medium brown MDSTN with SANDSTONE (25%); light to medium grey, salt and pepper, lower very fine to upper very fine grading occasional to lower to upper fine, clear to translucent quartz grains, lithic, rare glauconitic, trace carbs grains, moderate to very argillaceous, slightly calcareous in part, trace sideritic, moderate to well indurated, friable in part, trace siderite fragments, very poor inter grain porosity, no shows.

290-300 SHALE: medium grey, blocky to sub blocky, micromicaceous in part, soft to very firm, trace local disseminated pinpoint pyrite, trace locally pyritized, occasional silty light medium brown MDSTN with SANDSTONE (10%); light grey, salt and pepper, very fine to part lower fine, clear to translucent quartz grains, lithic, trace carbonaceous, rare glauconitic, slightly calcareous, moderate indurated, friable, trace siderite fragments, no shows, very poor inter grain porosity, moderate sawdust visible.

300-310 SHALE: medium grey, trace darker medium grey, blocky to sub blocky, micromicaceous, firm to part soft, trace local disseminated pinpoint pyrite, rare nodules pyrite, part silty, trace siderite, minor silty sandy micro laminations, trace pyritized.

310-320 SHALE: medium grey, trace darker medium grey, blocky to sub blocky, micromicaceous, firm to part soft, rare nodules pyrite, part silty, trace siderite, minor silty sandy micro laminations, trace pyritized.

320-330 SHALE: medium grey, blocky to sub blocky, micromicaceous, firm to part soft, silty in part, trace nodules pyrite, trace sideritic, minor siderite fragments, trace pyritized, trace nodules pyrite, very rare Sandstone stringers.

330-340 SHALE: medium grey, blocky to sub blocky, micromicaceous, firm to part soft, silty in part, occasional siderite fragments, minor silty medium brown MDSTN, trace nodules pyrite, very minor Silty micro laminations.

340-350 SHALE: medium grey, blocky to sub blocky, micromicaceous, locally part silty, firm to part soft, trace MDSTN, trace nodules pyrite, very minor Silty laminations.

350-360 SHALE: medium grey, blocky to sub blocky, micromicaceous, locally part silty, firm to part soft, trace sideritic, trace nodules pyrite, very minor Silty laminations.

SAMPLE DESCRIPTIONS

360-370 SHALE: medium grey, blocky to sub blocky, micromicaceous in part, firm to part soft, SANDSTONE (25%); light to medium grey, salt and pepper, lower very fine to upper fine, trace lower medium, clear to translucent quartz grains, lithic, rare glauconitic, trace carbs grains, minor to very argillaceous, trace shaley, trace clay cement, local calcareous reaction, trace sideritic, moderate well indurated, part friable, poor to part fair relief, trace 2 to 4% inter grain porosity, no visible shows.

370-380 SHALE: medium grey, blocky to sub blocky, micromicaceous in part, firm to part soft, SANDSTONE (15%); light to medium grey, salt and pepper, lower very fine to upper fine, trace lower medium, clear to translucent quartz grains, lithic, rare glauconitic, trace carbs grains, minor to very argillaceous, trace clay cement, local calcareous reaction, trace sideritic, moderate well indurated, trace friable, poor to part fair relief, trace 2 to 4% inter grain porosity, no visible shows.

380-390 SHALE: medium grey, trace darker grey, blocky to sub blocky, micromicaceous in part, firm to part soft, silty sandy in part, inter bedded with SANDSTONE (20%); light to medium grey, salt and pepper, lower very fine to upper fine, trace lower medium, clear to translucent quartz grains, lithic, rare glauconitic, trace carbs grains, trace dark mica's, trace nodules pyrite, minor to very argillaceous, trace clay cement, trace calcareous, trace sideritic, moderate well indurated, trace friable, poor to part fair relief, trace siderite fragments, trace 2 to 4% inter grain porosity, no visible shows.

390-400 SHALE: medium grey, trace darker grey, blocky to sub blocky, micromicaceous, locally part silty, trace sideritic, firm to part soft, trace nodules pyrite, very minor Silty Sandy stringers, trace siderite fragments.

400-410 SHALE: medium grey, trace darker grey, blocky to sub blocky, micromicaceous, locally part silty, firm to part soft, trace nodules pyrite, occasional SILTSTONE stringers.

410-420 SHALE: medium grey, blocky to sub blocky, micromicaceous, silty in part, firm to part soft, trace nodules pyrite, trace siderite fragments, part finely laminated with SILTSTONE and occasional SANDSTONE: off white to light grey, salt and pepper, moderately to well consolidated, friable in part, very minor medium grey silty MDSTN preserved, no shows.

420-430 SHALE: medium grey, blocky to sub blocky, micromicaceous, silty in part, firm to part soft, trace sideritic, trace siderite fragments, part finely laminated with SILTSTONE and occasional SANDSTONE: off white to light grey, salt and pepper, moderately to well consolidated, friable in part, very minor medium grey silty MDSTN preserved, no shows.

SAMPLE DESCRIPTIONS

430-440 SHALE: medium grey, trace darker grey, blocky to sub blocky, micromicaceous in part, firm, part grading to silty MDSTN, SANDSTONE (25%); off white to medium grey, salt and pepper, lower very fine to upper fine, clear to translucent quartz grains, lithic, rare glauconitic, trace carbonaceous, shaley in part, clay cement, trace calcareous, moderate indurated, poor to trace fair relief, poor inter grain porosity, no visible shows.

440-450 SHALE: medium grey, trace darker grey, blocky to sub blocky, micromicaceous in part, firm, part grading to silty MDSTN, SANDSTONE (20 to 25%); off white to medium grey, salt and pepper, lower very fine to upper fine, clear to translucent quartz grains, lithic, trace carbonaceous, shaley in part, clay cement, trace calcareous, moderate to well indurated, poor to trace fair relief, poor inter grain porosity, no visible shows.

450-460 SHALE: medium grey, trace darker grey, blocky to sub blocky, trace shards, micromicaceous in part, firm, trace MDSTN, SANDSTONE (15%); off white to medium grey, salt and pepper, lower very fine to upper fine, clear to translucent quartz grains, lithic, trace carbonaceous, shaley in part, clay cement, trace calcareous, fine laminations, trace siderite, trace nodules pyrite, part grading to SILTSTONE, poor inter grain porosity, no visible shows.

460-470 SHALE: medium grey, blocky to sub blocky, micromicaceous, silty in part, firm to part soft, trace sideritic, argillaceous, trace siderite fragments, part finely laminated with SILTSTONE and occasional SANDSTONE: off white to light grey, salt and pepper, moderately to well consolidated, friable in part, very minor medium grey silty MDSTN preserved, no shows.

470-480 SHALE: medium grey, blocky to sub blocky, micromicaceous, silty in part, firm to part soft, trace nodules pyrite, trace siderite fragments, part finely laminated with SILTSTONE and occasional SANDSTONE: off white to light grey, salt and pepper, moderately to well consolidated, friable in part, no shows.

480-490 SHALE: medium grey; minor darker grey, blocky to sub blocky, trace platy, micromicaceous, silty in part, trace sideritic, firm to trace soft, trace nodules pyrite, trace siderite fragments, part finely laminated with SILTSTONE, trace pyritized, and very minor SANDSTONE laminations: off white to light grey, salt and pepper, moderately to well consolidated, tight, no shows.

490-500 SHALE: medium grey, trace darker grey, blocky to sub blocky, micromicaceous, locally part silty, firm to part soft, trace nodules pyrite, occasional SILTSTONE stringers, trace MDSTN, rare siderite fragments. tight, no shows.

500-510 SHALE: medium grey, trace darker grey, blocky to sub blocky, micromicaceous, locally part silty, trace sideritic, firm to part soft, trace nodules pyrite, very minor Silty Sandy stringers, trace siderite fragments.

SAMPLE DESCRIPTIONS

510-520 SHALE: medium grey, blocky to sub blocky, micromicaceous, silty in part, firm to part soft, trace nodules pyrite, trace siderite fragments, part finely laminated with SILTSTONE and occasional SANDSTONE: off white to light grey, salt and pepper, moderately to well consolidated, friable in part, no shows.

520-530 SHALE: medium grey, blocky to sub blocky, micromicaceous, silty in part, firm to part soft, trace nodules pyrite, trace siderite fragments, part finely laminated with SILTSTONE and occasional SANDSTONE: off white to light grey, salt and pepper, moderately to well consolidated, friable in part, very minor medium grey silty MDSTN preserved, no shows.

530-540 SHALE: medium grey, trace darker grey, blocky to sub blocky, micromicaceous, trace sideritic, locally part silty, firm to part soft, trace nodules pyrite, very minor Silty Sandy stringers, trace siderite fragments.

540-550 SHALE: medium grey, part darker grey, blocky to sub blocky, part platy, trace gypsum, micromicaceous, rarely silty, firm to part soft, trace pyritized, trace nodules pyrite, trace Silty Sandy micro laminations, trace siderite fragments.

550-560 SHALE: medium grey, part darker grey, blocky to sub blocky, part platy, trace gypsum, micromicaceous, rarely silty, firm to part soft, trace pyritized, trace nodules pyrite, trace sideritic, no acid response, less than 1% Silty Sandy micro laminations.

560-570 SHALE: medium grey, part darker grey, blocky to sub blocky, part platy, argillaceous, micromicaceous, rarely silty, firm to part soft, rarely pyritized, trace nodules pyrite, trace acicular calcite, very minor Silty Sandy micro laminations.

570-580 SHALE: medium grey, part darker grey, blocky to sub blocky, part platy, argillaceous, trace gypsum, micromicaceous, rarely silty, firm to part soft, rarely pyritized, trace sideritic, trace acicular calcite, less than 1% Silty Sandy micro laminations.

580-603 SHALE: medium grey, part darker grey, blocky to sub blocky, part platy, argillaceous, trace gypsum, micromicaceous, rarely silty, firm to part soft, rarely pyritized, trace sideritic.

Surface TD at 603m Reached on January 3rounded 2014 at 08:06hrs
Drilled out through Surface Casing on January 6th, 2014 at 14:45 hrs.

603-610 SHALE medium to dark grey, blocky, sub fissile in part, occasionally micromicaceous, poor trace silty.

SAMPLE DESCRIPTIONS

610-620 SHALE medium to dark grey, blocky, sub fissile in part, occasionally micromicaceous, poor trace silty / trace Siltstone stringers, light to medium grey, occasionally sandy, clay cement, slightly calcareous, tight, no shows.

620-630 SHALE medium to dark grey, blocky, sub fissile in part, occasionally micromicaceous, poor trace silty.

630-640 SHALE: medium to dark grey, blocky to sub fissile in part, moderately carbs where dark grey, micromicaceous in part, trace locally silty, firm to part soft, trace acicular calcite, very rare calcitic argillaceous Silty micro laminations.

640-650 SHALE: medium to dark grey, blocky to sub fissile in part, moderately carbs where dark grey, micromicaceous in part, trace locally silty, firm to part soft, rarely pyritized, trace acicular calcite, very rare calcitic argillaceous Silty Sandy micro laminations, occasional calcareous partings.

650-660 SHALE: medium to dark grey, blocky to sub fissile in part, moderately carbs where dark grey, micromicaceous in part, trace locally silty, firm to part soft, rarely pyritized, trace acicular calcite, very rare calcitic argillaceous Silty Sandy micro laminations, occasional calcareous partings.

660-670 SHALE: medium to dark grey, blocky to sub fissile trace fissile in part, moderately carbs where dark grey, micromicaceous in part, trace silty grainy appearance, firm to part soft, trace acicular calcite, trace calcitic argillaceous Silty stringers, occasional calcareous partings.

670-680 SHALE: medium to dark grey, blocky to sub fissile trace fissile in part, moderately carbs where dark grey, micromicaceous in part, trace silty grainy appearance, firm to part soft, trace acicular calcite, very rare calcitic argillaceous Silty Sandy micro laminations, occasional calcareous partings.

680-690 SHALE: medium to dark grey, blocky to sub fissile trace fissile in part, moderately carbs where dark grey, micromicaceous in part, satin texture in part, trace silty, firm brittle to part soft, trace acicular calcite, trace calcite healing micro fractures.

690-700 SHALE: medium to dark grey, blocky to sub fissile, trace carbs where dark grey, part micromicaceous, satin texture in part, trace silty, firm brittle, trace hard to part soft, trace calcite healing micro fractures.

700-710 SHALE: medium to dark grey, blocky to platy, fissile in part, trace carbs where dark grey, part micromicaceous, satin texture in part, trace silty, firm brittle, trace hard to part soft, trace calcite healing micro fractures, trace Siltstone stringers, off white to medium grey, sandy in part, clay cement, slightly calcareous, tight, no shows.

710-720 SHALE: medium to dark grey, blocky to platy and fissile in part, trace carbonaceous, micromicaceous in part, satiny texture in part, trace silty, firm, trace hard to part soft, trace local calcite healing micro fractures, very minor Siltstone stringers, tight, no shows.

720-730 SHALE: medium to dark grey, blocky to platy and fissile in part, trace carbonaceous, micromicaceous in part, trace silty, firm, trace hard to part soft, trace local calcite healing micro fractures, very minor Siltstone stringers, tight, no shows.

730-740 SHALE: medium to dark grey, blocky to platy and fissile in part, trace carbonaceous, micromicaceous in part, satiny texture in part, trace silty, firm, trace hard to part soft, trace fractures, trace calcareous partings, very minor Siltstone stringers, tight, no shows.

740-750 SHALE: medium to dark grey, blocky to platy to fissile in part, trace carbonaceous, micromicaceous in part, satiny texture in part, slightly silty in part, firm, trace hard to part soft, very minor fractures visible, very minor Siltstone stringers, local micro laminations visible where silty, tight, no shows.

750-760 SHALE medium to dark grey, blocky, sub fissile in part, trace carbonaceous material, slightly silty, occasionally micromicaceous, occasional micro fractures infilled with calcite.

760-770 SHALE medium to dark grey, blocky, sub fissile in part, trace carbonaceous material, slightly silty, occasionally micromicaceous, occasional micro fractures infilled with calcite.

770-780 SHALE medium to dark grey, blocky, sub fissile in part, trace carbonaceous material, slightly silty, occasionally micromicaceous, occasional micro fractures infilled with calcite with minor Claystone light grey, waxy, trace pyric, mica flakes.

780-790 SHALE medium to dark grey, blocky, sub fissile in part, minor carbonaceous material, slightly silty, occasionally micromicaceous, occasional micro fractures infilled with calcite with minor Claystone as above.

Arctic Red/ Albian unconformity 791.00mMD, (791.00mTVD, -517.60mSS.)

790-800 SHALE medium to dark grey, blocky, sub fissile in part, trace carbonaceous material, slightly silty, occasionally micromicaceous, occasional micro fractures infilled with calcite with minor Claystone light grey, waxy, trace pyric, mica flakes.

800-810 SHALE medium to dark grey, blocky, sub fissile in part, trace carbonaceous material, slightly silty, occasionally micromicaceous, minor brown siderite fragments (nods?) occasional micro fractures infilled with calcite.

SAMPLE DESCRIPTIONS

810-820 SHALE medium to dark grey, blocky, sub fissile in part, trace carbonaceous material, slightly silty, occasionally micromicaceous, minor brown siderite fragments (nods?) occasional micro fractures infilled with calcite.

820-830 SHALE medium to dark grey, blocky, sub fissile in part, trace carbonaceous material, slightly silty, occasionally micromicaceous, minor brown siderite fragments (nods?)

830-840 SHALE medium to dark grey, blocky, sub fissile in part, trace carbonaceous material, slightly silty, occasionally micromicaceous, minor brown siderite fragments (nods?) poor trace plant remains.

840-850 SHALE medium to dark grey, blocky, sub fissile in part, trace carbonaceous material, slightly silty, occasionally micromicaceous, minor brown siderite fragments (nods?)

850-860 SHALE medium to dark grey, blocky, sub fissile in part, trace carbonaceous material, slightly silty, occasionally micromicaceous, slightly sideritic.

860-870 SHALE medium to dark grey, blocky, sub fissile in part, slightly micromicaceous, trace silty, slightly sideritic in part.

870-880 SHALE medium to dark grey, blocky, sub fissile in part, slightly micromicaceous, trace silty, slightly sideritic in part, trace pyrite nods.

880-890 SHALE medium to dark grey, blocky, sub fissile in part, slightly micromicaceous, trace silty, slightly sideritic in part, occasional brown siderite fragments (nods), trace pyrite nods. Trace Sandstone stringers light grey, very fine grained, sub angular, quartzose, well sorted, calcareous, silty, trace dark lithic grains, trace glauconite, tight, no shows.

890-900 Sandstone cream, light grey, very fine grained, sub angular, quartzose, well sorted, calcareous and clay cement, silty, trace dark lithic grains, trace glauconite, tight, no shows / SHALE as above.

900-910 Sandstone cream, light grey, very fine grained, sub angular, quartzose, well sorted, calcareous and clay cement, silty, trace dark lithic grains, trace glauconite, tight, no shows / SHALE as above.

910-920 SHALE medium to dark grey, blocky, sub fissile in part, slightly micromicaceous, trace silty, slightly sideritic in part / 10% Sandstone stringers as above.

SAMPLE DESCRIPTIONS

Martin House 929.00mMD, (928.94mTVD, -655.54mSS.)

920-930 SHALE medium to dark grey, blocky, sub fissile in part, slightly micromicaceous, trace silty, sideritic in part, trace micro fractures infilled with calcite / abundant brown siderite fragments / minor Sandstone stringers as above.

930-940 Sandstone cream to light grey, silt to very fine grained, sub angular, well sorted, quartzose, calcareous and clay cement, glauconite, silty, slightly shaley in part, no visible porosity, no show / SHALE as above.

940-950 SANDSTONE cream to light grey, silt to very fine grained, sub angular, well sorted, quartzose, calcareous and clay cement, glauconite, slightly shaley in part, no visible porosity, no show / interbedded SHALE as above.

950-960 SHALE medium to dark grey, blocky, sub fissile in part, slightly micromicaceous, trace silty, sideritic in part, trace micro fractures infilled with calcite / abundant brown siderite fragments / interbedded SANDSTONE as above.

960-966.3 SANDSTONE predominantly cream, quartzose, fine grained, well sorted, sub angular, calcareous and kaolinitic matrix, trace glauconite, trace pyrite nods, no visible porosity, no shows. Occasional vugs infilled with frosted calcite.

Imperial Fm 966.30mMD, (966.23mTVD, -692.83mSS.)

966.3-980 SHALE predominantly light to medium grey, grey green in part, blocky, slightly calcareous, slightly micromicaceous, trace silty, trace sandy in part / minor SANDSTONE stringers as above.

980-990 SHALE predominantly light to medium grey, grey green in part, blocky, slightly calcareous, slightly micromicaceous, trace silty, trace sandy in part / minor SANDSTONE stringers as above.

990-1000 SHALE light to medium grey green, medium grey in part, blocky, slightly waxy texture in part, poor trace calcareous, slightly micromicaceous, soft to moderately firm, trace silty, trace sandy in part / minor SANDSTONE stringers, light grey, grey green in part, very fine to fine grained, sub angular, moderately well sorted, calcareous and clay cement, slightly silty, shaley in part, trace glauconite, no visible porosity, no shows.

1000-1010 SHALE light to medium grey green, medium grey in part, blocky, slightly waxy texture in part, poor trace calcareous, slightly micromicaceous, soft to moderately firm, trace silty, trace sandy in part / minor SANDSTONE stringers as above.

SAMPLE DESCRIPTIONS

1010-1020 SHALE light to medium grey green, medium grey in part, blocky, slightly waxy texture in part, poor trace calcareous, slightly micromicaceous, soft to moderately firm, trace silty, trace sandy in part / minor SANDSTONE stringers as above, trace sideritic, trace pyric / Siltstone stringers light to medium grey, shaley, slightly calcareous, occasionally grades to very fine grained sandstone in part, tight, no shows.

1020-1030 SHALE: light to medium grey, trace grey green, blocky to platy, trace fissile, satiny texture in part, trace calcareous, slightly micromicaceous, firm to part soft, trace silty, trace grading to minor SANDSTONE stringers as above, trace sideritic, trace pyric / Siltstone stringers light to medium grey, shaley, slightly calcareous, tight, no shows.

1030-1040 SHALE: light to medium grey, trace grey green, blocky to platy, trace fissile, satiny texture in part, trace calcareous, trace locally moderately carbonaceous, part micromicaceous, firm to part soft, trace silty, part grading to SILTSTONE stringers, light grey to off white, slightly salt and pepper, shaley in part, slightly calcareous, clay cement, trace carbs material, part grading sandy, tight, no shows.

1040-1050 SHALE: light to medium grey, trace grey green, blocky to platy, trace fissile, satiny texture in part, trace calcareous, trace locally moderately carbonaceous, part micromicaceous, firm to part soft, trace silty, trace grading to SILTSTONE stringers, light grey to off white, slightly salt and pepper, shaley in part, slightly calcareous, tight, no shows.

1050-1060 SHALE: light to medium grey, trace grey green, blocky to platy, trace fissile, satiny texture in part, trace calcareous, part micromicaceous, firm to part soft, trace silty, trace grading to SILTSTONE stringers, light grey to off white, part grey green, slightly salt and pepper, shaley in part, slightly to moderately calcareous, tight, no shows.

1060-1070 SHALE: light to medium grey, trace grey green, blocky to platy, part micromicaceous, trace locally moderately carbonaceous, firm brittle to part soft, trace silty, minor SILTSTONE stringers, light grey to off white, part grey green, slightly salt and pepper, shaley in part, slightly to moderately calcareous, tight, no shows.

1070-1080 SHALE: light to medium grey, trace grey green, blocky to platy, part micromicaceous, firm brittle to part soft, trace locally moderately carbonaceous, trace silty, minor SILTSTONE stringers, light grey to off white, part grey green, slightly salt and pepper, shaley in part, slightly to moderately calcareous, tight, no shows.

SAMPLE DESCRIPTIONS

1080-1090 SHALE: light to medium grey, blocky to platy, trace fissile, part micromicaceous, firm brittle to trace soft, waxy satiny texture, trace locally moderately carbonaceous, minor SILTSTONE stringers, tight, no shows.

1090-1100 SHALE: light to medium grey, trace grey green, blocky to platy, part micromicaceous, firm brittle to part soft, trace carbs material, inter bedded with SANDSTONE, light grey to off white, part grey green, slightly salt and pepper, very fine to trace lower fine, sub angular to sub rounded, trace carbs material, silty, clay cement, slightly to moderately calcareous, part grading to SILTSTONE, tight, no shows.

1100-1110 SHALE: light to medium grey, trace grey green, blocky to platy, part micromicaceous, firm brittle to part soft, inter bedded with SANDSTONE, light grey to off white, part grey green, silty, clay cement, slightly to moderately calcareous, part grading to SILTSTONE, tight, no shows.

1110-1120 SHALE: light to medium grey, trace grey green, blocky to platy, part micromicaceous, firm brittle to part soft, trace carbs material inter bedded with SANDSTONE, light grey to off white, part grey green, slightly salt and pepper, very fine to trace lower fine, sub angular to sub rounded, trace carbs material, silty, clay cement, slightly to moderately calcareous, tight, part grading to SILTSTONE, no shows.

1120-1130 SHALE: light to medium grey, blocky to platy, part micromicaceous, firm brittle to part soft, inter bedded with SANDSTONE, light grey to off white, slightly salt and pepper, very fine to trace lower fine, sub angular to sub rounded, trace carbs material, silty, clay cement, slightly to moderately calcareous, dense, tight, part grading to SILTSTONE, no shows.

1130-1140 SHALE: light to medium grey, blocky to platy, trace fissile, part micromicaceous, SILTSTONE, light grey to off white, part grey green, slightly salt and pepper, trace glauconitic, trace sideritic, trace carbs material, clay cement, slightly to moderately calcareous, trace sandy, dense, tight,

1140-1150 SHALE: light to medium grey, blocky to platy, trace fissile, part micromicaceous, firm brittle to trace soft, waxy satiny texture, trace locally moderately carbonaceous, minor SILTSTONE stringers, trace marly, tight, no shows.

1150-1160 SHALE: light to medium grey, blocky to platy, trace fissile, part micromicaceous, trace marly, SILTSTONE, light grey to off white, part grey green, slightly salt and pepper, trace glauconitic, trace sideritic, trace lithic, clay cement, slightly to moderately calcareous, trace sandy, dense, tight,

SAMPLE DESCRIPTIONS

1160-1170 SHALE: light to medium grey, blocky to platy, trace fissile, part micromicaceous, trace grading marly, trace red grey ferruginous stringers, SILTSTONE, light grey to off white, slightly salt and pepper, trace sideritic, trace lithic, clay cement, slightly to moderately calcareous, trace sandy, dense, tight,

1170-1180 SHALE: light to medium grey, blocky to platy, trace fissile, part micromicaceous, trace grading marly, trace red grey ferruginous stringers, SILTSTONE laminations.

1180-1190 SHALE: light to medium grey, blocky to platy, trace fissile, part micromicaceous, firm brittle to trace soft, trace grading marly, trace red grey ferruginous stringers, waxy satiny texture, minor SILTSTONE Sandstone stringers.

1190-1200 SHALE: light to medium grey, blocky to platy, trace fissile, part micromicaceous, firm brittle to trace soft, trace grading marly, trace red grey ferruginous stringers, minor SILTSTONE Sandstone stringers.

1200-1210 SHALE: light to medium grey, blocky, sub blocky, platy, part micromicaceous with SILTSTONE, light grey to off white, part grey green, slightly salt and pepper, part glauconitic, clay cement, slightly to moderately calcareous, trace grading sandy, dense, tight,

1210-1220 SHALE: light to medium grey, blocky to platy, part micromicaceous, firm brittle to part soft, inter bedded with SANDSTONE, light grey to off white, slightly salt and pepper, silty, very fine to trace lower fine, predominantly sub angular, trace carbs material, clay cement, slightly to moderately calcareous, dense, tight, part grading to SILTSTONE, no shows.

1220-1230 SHALE: light to medium grey, blocky to platy, part micromicaceous, firm brittle to part soft, inter bedded with SANDSTONE, light grey to off white, slightly salt and pepper, silty, very fine to trace lower fine, predominantly sub angular, clay cement, slightly to moderately calcareous, local Sandstone and Siltstone stringers, tight, no shows.

1230-1240 SHALE: light to medium grey, grey green in part, slightly micromicaceous, occasional minor carbonaceous material, poor trace pyric / interbedded SILTSTONE light grey, clay and calcareous cement, sandy in part, shaley, tight, no shows.

1240-1250 SHALE: light to medium grey, grey green in part, slightly micromicaceous, occasional minor carbonaceous material, poor trace pyric / interbedded SILTSTONE light grey, clay and calcareous cement, sandy in part, shaley, tight, no shows.

SAMPLE DESCRIPTIONS

1250-1260 SILTSTONE light grey, calcareous and clay matrix, sandy, trace glauconite, occasionally grades to very fine grained SANDSTONE in part, tight, no shows / SHALE as above.

1260-1270 SILTSTONE light grey, calcareous and clay matrix, sandy, trace glauconite, occasionally grades to very fine grained SANDSTONE in part, tight, no shows / SHALE as above.

1270-1280 SANDSTONE light grey, very fine to fine grained, sub angular, well sorted, calcareous and clay cement, trace carbonaceous material, silty, no visible porosity, no show / SILTSTONE and SHALE as above.

1280-1290 SILTSTONE light grey, calcareous and clay matrix, sandy, trace glauconite, occasionally grades to very fine grained SANDSTONE in part, tight, no shows / SHALE as above.

1290-1300 SILTSTONE light grey, calcareous and clay matrix, sandy, trace glauconite, occasionally grades to very fine grained SANDSTONE in part, tight, no shows / SHALE as above.

1300-1310 SILTSTONE light grey, calcareous and clay matrix, sandy, trace glauconite, occasionally grades to very fine grained SANDSTONE in part, occasionally shaley, tight, no shows / interbedded SHALE light to medium grey, light grey green in part, blocky, silty, slightly micromicaceous, poor trace carbonaceous material.

1310-1320 SILTSTONE light grey, calcareous and clay matrix, sandy, trace glauconite, occasionally grades to very fine grained SANDSTONE in part, occasionally shaley, tight, no shows / minor interbedded SHALE light to medium grey, light grey green in part, blocky, silty, slightly micromicaceous, poor trace carbonaceous material.

1320-1330 SILTSTONE light grey, calcareous and clay matrix, sandy, trace glauconite, occasionally grades to very fine grained SANDSTONE in part, occasionally shaley, tight, no shows / interbedded minor SHALE light to medium grey, light grey green in part, blocky, silty, slightly micromicaceous, poor trace carbonaceous material.

1330-1340 SILTSTONE light to medium grey, calcareous and clay cement, slightly sandy in part, shaley, trace dark lithic grains, trace glauconite, grades to silty SHALE in part, no visible porosity, no show / interbedded SHALE as above.

1340-1347 SILTSTONE light to medium grey, calcareous and clay cement, slightly sandy in part, shaley, trace dark lithic grains, trace glauconite, grades to silty SHALE in part, no visible porosity, no show / interbedded SHALE as above.

SAMPLE DESCRIPTIONS

1347-1358 SANDSTONE cream to very light grey, very fine grained, sub angular, well sorted, calcareous and clay cement, silty, trace dark lithic grains, poor trace glauconite, grades to siltstone in part, trace carbonaceous specs, no visible porosity, no show / Siltstone and SHALE as above.

1358-1365 SANDSTONE cream to very light grey, very fine grained, sub angular, well sorted, calcareous and clay cement, silty, trace dark lithic grains, poor trace glauconite, grades to siltstone in part, no visible porosity, no show / Siltstone and SHALE as above.

1365-1370 SILTSTONE light to medium grey, slightly calcareous and clay cement, occasionally slightly sandy, trace glauconitic, trace dark lithic grains, occasionally shaley, trace pyric, tight, no shows / interbedded SANDSTONE cream to very light grey, very fine grained, sub angular, well sorted, calcareous and clay cement, no shows.

1370-1380 SILTSTONE light to medium grey, slightly calcareous and clay cement, occasionally slightly sandy, trace glauconitic, trace dark lithic grains, occasionally shaley, trace pyric, tight, no shows / interbedded SHALE as above, trace siderite nods.

1380-1390 SHALE predominantly medium grey, blocky, sub fissile in part, micromicaceous, trace silty, firm, occasionally silty, trace siderite / SILTSTONE stringers as above.

1390-1400 SHALE predominantly medium grey, blocky, sub fissile in part, micromicaceous, trace silty, firm, occasionally silty, trace siderite / increasing SILTSTONE as above.

1400-1410 SHALE predominantly medium grey, blocky, sub fissile in part, micromicaceous, trace silty, firm, sideritic in part, occasionally silty, trace siderite nods / SILTSTONE as above.

1410-1420 SHALE medium grey, blocky, sub fissile in part, micromicaceous, silty, poor trace carbonaceous specs, slightly sideritic / interbedded SILTSTONE light to medium grey, clay and calcareous matrix, occasionally very shaley, minor carbonaceous material, grade to silty SHALE in part, tight, no show.

1420-1430 poor trace carbonaceous specs, slightly sideritic / interbedded SILTSTONE light to medium grey, clay and calcareous matrix, occasionally very shaley, grade to silty SHALE in part, tight, no show.

SAMPLE DESCRIPTIONS

1430-1440 SILTSTONE light to medium grey, clay and calcareous matrix, occasionally very shaley, grade to silty SHALE in part, tight, no show / SHALE medium grey, blocky, sub fissile in part, slightly waxy texture in part, micromicaceous, silty, poor trace carbonaceous specs, slightly sideritic.

1440-1450 SILTSTONE light to medium grey, clay and calcareous matrix, occasionally very shaley, grade to silty SHALE in part, tight, no show / interbedded SHALE medium grey, blocky, sub fissile in part, slightly waxy texture in part, micromicaceous, silty, poor trace carbonaceous specs.

1450-1465 SILTSTONE light to medium grey, clay and calcareous matrix, occasionally very shaley, grade to silty SHALE in part, tight, no show / interbedded SHALE medium grey, blocky, sub fissile in part, micromicaceous, silty, poor trace carbonaceous specs.

1465-1470 SHALE: medium grey, part darker grey, sub blocky to platy and common fissile, part micromicaceous, locally part silty, soft to part firm, waxy satiny texture, very minor Silty laminations.

1470-1480 SHALE: medium grey to part darker grey, platy, sub fissile, sub blocky, part micromicaceous, waxy satiny texture, rare carbs material, trace silty, soft to part firm, very rare grading silty.

1480-1490 SHALE: medium grey to part darker grey, sub fissile to fissile, part platy, sub blocky, part micromicaceous, rare carbs material, trace silty, soft to part firm, very rare grading silty.

1490-1500 SHALE: medium grey to part darker grey, platy, fissile, sub blocky, part micromicaceous, waxy satiny texture, trace silty, soft to part firm.

1500-1510 SHALE: medium grey to part darker grey, sub fissile to fissile, part platy, part micromicaceous, rare carbs material, trace silty, soft to part firm, very rare grading silty.

1510-1520 SHALE: medium grey to part darker grey, sub fissile to fissile, part platy, part micromicaceous, trace silty, soft to part firm, very rare grading silty.

1520-1530 SHALE: predominantly medium grey, sub fissile, firm, slightly micromicaceous, slightly calcareous, trace silty in part / trace minor Limestone stringers tan, mudstone, slightly argillaceous, dense, no show.

1530-1540 SHALE: predominantly medium grey, platy and sub fissile, blocky in part, moderately firm, slightly micromicaceous, slightly calcareous, trace silty in part.

SAMPLE DESCRIPTIONS

1540-1550 SHALE: predominantly medium grey, platy and sub fissile, blocky in part, moderately firm, slightly micromicaceous, slightly calcareous, trace silty in part.

1550-1560 SHALE: predominantly medium grey, platy and sub fissile, blocky in part, moderately firm, slightly micromicaceous, slightly calcareous, trace silty in part. Trace Marlstone stringers, grey brown, calcareous.

1560-1570 SHALE: predominantly medium grey, platy and sub fissile, blocky in part, moderately firm, slightly micromicaceous, slightly calcareous, trace silty in part.

1570-1580 SHALE: predominantly medium grey, platy and sub fissile, blocky in part, moderately firm, slightly micromicaceous, slightly calcareous, trace silty in part.

1580-1590 SHALE: predominantly medium grey, trace minor dark grey, platy and sub fissile, blocky in part, moderately firm, slightly micromicaceous, slightly calcareous, trace silty in part.

1590-1600 SHALE: predominantly medium grey, trace minor dark grey, platy and sub fissile, blocky in part, moderately firm, slightly micromicaceous, slightly calcareous, trace silty in part.

1600-1610 SHALE: predominantly medium grey, dark grey increasing, platy and sub fissile, blocky in part, moderately firm, slightly micromicaceous, slightly calcareous, poor trace silty in part.

1610-1620 SHALE: medium to occasionally dark grey, platy and sub fissile, blocky in part, firm, slightly micromicaceous, poor trace silty in part, trace minor micro fractures, trace pyrite, trace minor light grey Claystone stringers.

1620-1630 SHALE: medium to occasionally dark grey, platy and sub fissile, blocky in part, firm, slightly micromicaceous, poor trace silty in part, trace micro fractures with calcite healing visible, minor Claystone.

1630-1635 SHALE: medium to occasionally dark grey, platy and sub fissile, blocky in part, firm, slightly micromicaceous, poor trace silty in part, trace micro fractures to part very silty.

1635-1640 SHALE: brown black to black, minor medium brown, rare medium grey, predominantly carbonaceous, micromicaceous in part, blocky to sub blocky to fissile in part, firm brittle to part soft, trace calcite filled micro fractures, trace pyritized, silty texture in part, trace silty micro laminations, no fluorescence, very slow weak pale halo cut.

1640-1650 SHALE: brown black to black, minor medium brown, predominantly carbonaceous, blocky to sub blocky to fissile in part, firm brittle to part soft, trace calcite filled micro fractures, trace pyritized, silty texture in part, no fluorescence, very slow weak pale halo cut.

1650-1665 SHALE: brown black to black, minor medium brown, predominantly carbonaceous, blocky to sub blocky to fissile in part, firm brittle to part soft, trace calcite filled micro fractures, trace pyritized, silty texture in part, trace silty micro laminations, no fluorescence, very slow weak pale halo cut.

Upper Canol 1665.00mMD, (1657.38mTVD, -1383.98mSS.)

1665-1670 SHALE: brown black to black, carbonaceous, blocky, sub blocky to fissile in part, firm to part soft, trace micro fractures, local pinpoint disseminated pyrite, trace nodules pyrite, silty texture in part, no fluorescence, very slow weak pale halo cut.

1670-1680 SHALE: dark grey, brown black to black, moderate to very carbs in part, blocky, sub blocky to fissile in part, firm to part soft, trace fractures, local pinpoint disseminated pyrite, trace nodules pyrite, silty texture in part, no fluorescence, very slow weak pale halo cut.

1680-1690 SHALE: dark grey, brown black to black, moderate to very carbs in part, blocky, sub blocky to fissile in part, firm to part soft, trace fractures, rare calcareous partings, local pinpoint disseminated pyrite, trace nodules pyrite, silty texture in part, no fluorescence, very slow weak pale halo cut.

1690-1700 SHALE: dark grey, brown black to black, moderate to very carbs in part, blocky, sub blocky to fissile in part, firm to part soft, trace fractures, rare calcareous partings, local pinpoint disseminated pyrite, trace nodules pyrite, silty in part, no fluorescence, very slow weak pale halo cut.

Trip out of hole at 1702m to Dial upper Motor from 1.83° to 2.12°

** Lower Canol 1700.50mMD, (1687.78mTVD, -1414.38mSS.)

1700-1710 SHALE: dark grey, brown black to black, moderate to very carbs in part, blocky to sub blocky, trace fissile, firm to soft, trace hard, silica in part, rare calcareous partings, local pinpoint disseminated pyrite,more common nodules pyrite, trace pyrite filling fracture, silty in part, no fluorescence, very slow weak pale halo cut.

SAMPLE DESCRIPTIONS

1710-1720 SHALE: dark grey, brown black to black, moderate to very carbs in part, blocky to sub blocky, trace fissile, firm to soft, trace hard, silica in part, rare calcareous partings, more common nodules pyrite, trace pyrite filling fracture, local pinpoint disseminated pyrite, trace micro laminations visible, no fluorescence, very slow weak pale halo cut.

1720-1730 SHALE: very dark grey, brown black to black, moderate to very carbs in part, increase in silica cement, blocky to sub blocky, trace fissile, firm to soft, part hard angular chips, rare calcareous partings, trace dark brown chert fragments, trace nodules pyrite, trace pyritized banding, very rare calcite healing fracture, no fluorescence, very slow weak pale halo cut.

1730-1740 SHALE: very dark grey, brown black to black, moderate to very carbs in part, trace silica cement, blocky to sub blocky, trace fissile, firm to soft, part hard angular chips, trace calcareous partings, trace nodules pyrite, trace pyritized, rare calcite healing fracture, no fluorescence, very slow weak pale halo cut.

1740-1750 SHALE: dark grey, dark grey brown, blocky, sub fissile in part, slightly micromicaceous, carbonaceous material, brittle, firm to hard (siliceous), cherty / dark grey chert fragments occasionally speckled, pyric / pyrite nods / minor grey brown bituminous shale, SHALE cuts / solvent, pale yellow cloudy cut.

1750-1760 SHALE: abundant brown to grey brown, blocky, bituminous / dark grey siliceous SHALE as above / shows as above.

1760-1770 SHALE: dark grey, dark grey brown, blocky, slightly carbonaceous, sub fissile in part, hard, calcareous, occasionally siliceous, slightly micromicaceous, trace pyric / SHALE grey brown, blocky, soft, bituminous, slightly calcareous, pale yellow cloudy cut.

1770-1780 SHALE: dark grey, dark grey brown, blocky, slightly carbonaceous, sub fissile in part, hard, calcareous, occasionally siliceous, slightly micromicaceous, trace pyric / SHALE grey brown, blocky, soft, bituminous, slightly calcareous, pale cloudy yellow cut.

1780-1790 SHALE: dark grey, dark grey brown, blocky, carbonaceous, sub fissile in part, hard, part calcareous, occasionally siliceous, slightly micromicaceous, trace pyric / SHALE grey brown, blocky, soft, bituminous, slightly calcareous, pale cloudy yellow cut.

1790-1800 SHALE: dark grey, dark grey brown, blocky, trace carbonaceous, sub fissile in part, hard, part calcareous, occasionally siliceous, slightly micromicaceous, trace pyric, trace pyrite filling micro fracture, trace nodules pyrite, part SHALE grey brown, blocky, soft, bituminous, pale cloudy yellow cut.

SAMPLE DESCRIPTIONS

1800-1810 SHALE: dark grey, dark grey brown, blocky, trace carbonaceous, sub fissile in part, hard, part calcareous, occasionally siliceous, slightly micromicaceous, trace pyric, trace calcite healing micro fracture, trace nodules pyrite, very rare calcareous partings, inter bedded in part with SHALE grey brown, blocky, soft, bituminous, pale cloudy yellow cut.

1810-1820 SHALE: dark grey, dark grey brown, blocky, trace carbonaceous, sub fissile in part, hard, increase in calcareous reaction, part siliceous, slightly micromicaceous, occasional calcareous partings, trace pyric, trace calcite healing micro fracture, trace nodules pyrite, inter bedded in part with SHALE grey brown, blocky, soft, bituminous, pale cloudy yellow cut.

1820-1830 SHALE: very dark grey, blocky, slightly carbonaceous, firm to hard (siliceous), common calcareous, slightly micromicaceous, trace pyric / pyrite nods, trace micro fractures infilled with calcite, slow pale yellow cloudy cut. With occasional SHALE grey brown, blocky, soft, bituminous, show as above.

1830-1840 SHALE: very dark grey, blocky, slightly carbonaceous, firm to hard (siliceous), common calcareous, slightly micromicaceous, trace laminated pyric / trace pyrite nods, trace micro fractures infilled with calcite, slow pale yellow cloudy cut. With occasional SHALE grey brown, blocky, soft, bituminous, show as above. Trace Limestone laminations mottled light brown, mudstone to wackestone, slightly argillaceous, trace pyric, dense, no shows.

1840-1850 SHALE: dark grey to black, blocky, carbonaceous, firm to hard (siliceous), common calcareous, slightly micromicaceous, trace pyrite nods, trace micro fractures infilled with calcite, slow pale yellow cloudy cut. With occasional SHALE grey brown, blocky, soft, bituminous, show as above.

1850-1860 SHALE: dark grey to black, blocky, carbonaceous, common brittle, firm to hard, siliceous and calcareous, slightly micromicaceous, minor pyrite nods and trace laminated pyrite, slow pale yellow cloudy cut. With occasional SHALE grey brown, blocky, soft, bituminous, show as above.

1860-1870 SHALE: dark grey to black, blocky, carbonaceous, common brittle, firm to hard, calcareous to slightly calcareous, trace non, occasionally part silica, slightly micromicaceous, minor pyrite nods and trace pyric laminations, weak slow pale cloudy yellow cut; with occasional SHALE grey brown, blocky, soft, bituminous, weak slow pale cloudy yellow cut.

1870-1880 SHALE: dark grey to black, blocky, carbonaceous, common brittle, firm to hard, slightly calcareous to part calcareous, part non calcareous, slightly micromicaceous, occasionally part silica, weak slow pale cloudy yellow cut, minor pyrite nods and trace pyric laminations; with occasional SHALE grey brown, blocky, soft, bituminous, weak slow pale cloudy yellow cut.

SAMPLE DESCRIPTIONS

1880-1890 SHALE: dark grey to black, blocky, carbonaceous, common brittle, firm to hard, non calcareous to slightly calcareous, trace calcareous, occasionally part silica, locally micromicaceous, minor pyrite nods and trace pyric laminations with occasional SHALE grey brown, blocky, soft, bituminous, weak slow pale cloudy yellow cut.

1890-1900 SHALE: dark grey to black, blocky, carbonaceous, common brittle, firm to hard, slightly calcareous to trace calcareous, occasionally part silica, locally micromicaceous, minor pyrite nods and trace pyric laminations, with occasional SHALE grey brown, blocky, soft, bituminous, weak slow pale cloudy yellow cut.

1900-1908 SHALE: dark grey to black, blocky, carbonaceous, firm to part hard, brittle, slightly calcareous to trace calcareous, occasionally part silica, locally micromicaceous, minor pyrite nods and trace pyric laminations, with occasional SHALE grey brown, blocky, soft, bituminous, weak slow pale cloudy yellow cut.

ICP Reached on Jan 14th, 2014 02:26hrs
Ext to: 1908mMD (1776.82mTVD, -1503.42mSS, 225.30mVS)
119.80m North 190.99m West of Well Center
Grid N/E Y/X: N 7219988.32 m, E 593815.38 m

SAMPLE DESCRIPTIONS

Lateral Section
Drilled ahead on Lateral Section on January 17th, 2014 at 00:40hrs

1907-1920 SHALE: dark grey to black, blocky, carbonaceous, firm to part hard, brittle, predominantly very slightly calcareous to trace locally calcareous, occasionally part silica, locally micromicaceous, trace pyrite nods, common pinpoint disseminated pyrite with local pyritic micro laminations, interbedded in part with SHALE dark grey brown, blocky, soft, bituminous, trace calcareous, rare calcareous partings, weak slow pale cloudy yellow cut.

1920-1940 SHALE: dark grey to black, blocky, carbonaceous, firm to part hard, brittle in part, slightly calcareous, silica, locally micromicaceous, trace pyrite nods, trace disseminated pyrite with local pyritic micro laminations, interbedded in part with SHALE dark grey brown, blocky, soft, bituminous, calcareous, rare calcareous partings, weak slow pale cloudy yellow cut, bituminous shale increasing with depth.

1940-1960 SHALE: dark grey, blocky, carbonaceous, firm, brittle in part, slightly micromicaceous, trace silty, increasing calcareous and silica, minor disseminated pyrite, trace laminated pyrite, occasional Shale grey brown, blocky, soft, bituminous / minor Limestone laminations mottled light grey brown, mudstone to wackestone, slightly argillaceous, dense, no show.

1960-1980 SHALE dark grey, blocky, slightly micromicaceous, very calcareous, grades to calcareous marlstone, carbonaceous, silica in part, trace pyritic / increasing LIMESTONE stringers mottled light brown, wackestone, micro matrix, slightly argillaceous, dense, no shows.

1980-2000 SHALE dark grey, dark grey brown, blocky, firm, brittle in part, slightly micromicaceous, very calcareous, carbonaceous, slightly bituminous, silica in part, trace pyritic.

2000-2020 SHALE dark grey, dark grey brown, blocky, firm, brittle in part, slightly micromicaceous, very calcareous, grades to calcareous marlstone in part, carbonaceous, slightly bituminous, silica in part, trace pyritic.

2020-2040 SHALE dark grey, dark grey brown, blocky, firm, brittle in part, slightly micromicaceous, very calcareous, grades to calcareous marlstone in part, carbonaceous, slightly bituminous, silica in part, trace pyritic.

2040-2060 SHALE dark grey, dark grey brown, blocky, firm, brittle in part, slightly micromicaceous, very calcareous, grades to calcareous marlstone in part, carbonaceous, occasionally slightly bituminous, silica in part, poor trace pyritic. Trace LIMESTONE stringers, light grey brown, mudstone to wackestone, slightly argillaceous, dense.

SAMPLE DESCRIPTIONS

2060-2080 SHALE dark grey, dark grey brown, blocky, firm, brittle in part, slightly micromicaceous, very calcareous increasing with depth, grades to calcareous marlstone in part, carbonaceous, occasionally slightly bituminous, silica in part, poor trace pyritic. Trace LIMESTONE stringers, light grey brown, mudstone to wackestone, slightly argillaceous, dense.

2080-2100 SHALE: dark grey to black, blocky, occasionally part sub fissile, carbonaceous, locally part bituminous, firm to part hard, brittle in part, very calcareous, trace silica, locally micromicaceous, part Limy, locally common LIMESTONE grains, trace disseminated pinpoint pyrite with local pyritic micro laminations, trace nodules pyrite, trace dirty LIMESTONE stringers, very rare calcite healing micro fracture, weak slow pale cloudy yellow cut.

2100-2120 SHALE: dark grey to black, blocky, occasionally part sub fissile, carbonaceous, locally part bituminous, firm to part hard, brittle in part, moderate with trace very calcareous, trace silica, micromicaceous in part, trace local LIMESTONE grains, trace disseminated pinpoint pyrite with rare pyritic micro laminations, trace nodules pyrite, minor dirty LIMESTONE stringers, weak slow pale cloudy yellow cut.

2120-2140 SHALE: dark grey to black, blocky, occasionally part sub fissile, carbonaceous, locally part bituminous, firm to part hard, brittle in part, slightly to moderately calcareous with trace very calcareous, trace silica, micromicaceous in part, trace local LIMESTONE stringers; pyritic in part, wackestone, trace disseminated pinpoint pyrite, trace nodules pyrite, weak slow pale cloudy yellow cut.

2140-2160 SHALE: dark grey to black, blocky, occasionally part sub fissile, carbonaceous, locally part bituminous, firm to part hard, slightly to moderately calcareous with trace very calcareous, trace silica, micromicaceous in part, minor local LIMESTONE stringers, trace disseminated pinpoint pyrite, trace nodules pyrite, weak slow pale cloudy yellow cut.

2160-2180 SHALE: dark grey to black, blocky, occasionally part sub fissile, carbonaceous, locally part bituminous, firm to part hard, moderate grading to more calcareous, trace silica, micromicaceous in part, occasional calcareous partings, trace limestone stringers, trace disseminated pinpoint pyrite, trace nodules pyrite, weak slow pale cloudy yellow cut.

2180-2200 SHALE: dark grey to black, blocky, occasionally part sub fissile, carbonaceous, locally part bituminous, firm to part hard, decreasing calcareous, silica, micromicaceous in part, trace limestone stringers as before, trace disseminated pinpoint pyrite, trace nodules pyrite, weak slow pale cloudy yellow cut.

SAMPLE DESCRIPTIONS

2200-2220 SHALE: dark grey to black, blocky, occasionally part sub fissile, carbonaceous material, locally part bituminous, firm to part hard, slightly calcareous, silica, slightly micromicaceous in part, trace limestone stringers as before, trace disseminated pinpoint pyrite, trace nodules pyrite, weak slow pale cloudy yellow cut.

2220-2240 SHALE: predominantly dark grey, blocky, slightly micromicaceous, trace silty, firm to hard and siliceous, sub brittle, slightly calcareous, trace pyritic with pyrite nods, carbonaceous material, no dry fluorescence, slow pale yellow cut.

2240-2260 SHALE: predominantly dark grey, blocky, slightly micromicaceous, firm to hard and siliceous, sub brittle, slightly calcareous, trace pyrite nods, trace carbonaceous material, no dry fluorescence, slow pale yellow cut.

2260-2280 SHALE: predominantly dark grey, blocky, slightly micromicaceous, firm to hard and siliceous, sub brittle, slightly calcareous, trace pyrite nods, minor carbonaceous material, no dry fluorescence, slow pale yellow cut.

2280-2300 SHALE: predominantly dark grey, blocky, slightly micromicaceous, firm to hard and siliceous, sub brittle, slightly calcareous, trace pyrite nods, minor carbonaceous material, no dry fluorescence, slow pale yellow cut.

2300-2320 SHALE predominantly very dark grey, occasionally grades to black, blocky, slightly micromicaceous, firm to hard, siliceous, brittle, trace calcareous, trace pyrite nods, minor carbonaceous material, no dry fluorescence, slow pale yellow cut.

2320-2340 SHALE predominantly very dark grey, occasionally grades to black, blocky, slightly micromicaceous, firm to hard, siliceous, brittle, trace calcareous, trace pyrite nods, minor carbonaceous material, trace minor micro fractures infilled with white calcite, no dry fluorescence, slow pale yellow cut.

2340-2360 SHALE predominantly very dark grey, occasionally grades to black, blocky, slightly micromicaceous, firm to hard, siliceous, brittle, trace calcareous, trace pyrite nods, minor carbonaceous material, no dry fluorescence, slow pale yellow cut.

2360-2380 SHALE predominantly very dark grey, occasionally grades to black, blocky, slightly micromicaceous, firm to hard, siliceous, brittle, trace calcareous, increasing pyrite nods, minor carbonaceous material, no dry fluorescence, slow pale yellow cut.

SAMPLE DESCRIPTIONS

2380-2400 SHALE: very dark grey to black, blocky, occasionally part sub fissile, carbonaceous, firm to part hard, part slightly with trace calcareous, trace locally silica, micromicaceous in part, common disseminated pinpoint pyrite visible, trace nodules pyrite, rare limey chips, very weak slow pale cloudy yellow cut.

2400-2420 SHALE: very dark grey to black, blocky, occasionally part sub fissile, carbonaceous, firm to part hard, trace silica, trace very slightly calcareous, micromicaceous in part, common disseminated pinpoint pyrite visible, trace nodules pyrite, very rare very very fine calcite healing fractures, very weak slow pale cloudy yellow cut.

2420-2440 SHALE: very dark grey to black, blocky, occasionally part sub fissile, carbonaceous, firm to part hard, trace silica, trace very slightly calcareous, micromicaceous in part, common disseminated pinpoint pyrite visible, trace nodules pyrite, very rare very very fine calcite healing fractures, very weak slow pale cloudy yellow cut.

2440-2460 SHALE: very dark grey to black, blocky, occasionally part sub fissile, carbonaceous, firm to part hard, trace silica, increase to moderate calcareous, occasionally calcareous, micromicaceous in part, moderate to locally very common disseminated pinpoint pyrite, trace pyritic, trace pyritic laminations, occasional nodules pyrite, very weak slow pale cloudy yellow cut.

2460-2480 SHALE: very dark grey to black, blocky, occasionally part sub fissile, carbonaceous, firm to part hard, trace silica, moderate to slightly calcareous, trace calcareous, micromicaceous in part, occasional nodules pyrite, very weak slow pale cloudy yellow cut.

2480-2500 SHALE: very dark grey to black, blocky, occasionally part sub fissile, carbonaceous, firm to part hard, trace silica, slight and moderately calcareous, micromicaceous in part, disseminated pinpoint pyrite, trace pyritic laminated, occasional nodules pyrite, very weak slow pale cloudy yellow cut.

2500-2520 SHALE: very dark grey to black, blocky, occasionally part sub fissile, carbonaceous, firm to part hard, trace silica, moderately to part slightly calcareous, micromicaceous in part, disseminated pinpoint pyrite, no visible fractures, occasional nodules pyrite, very weak slow pale cloudy yellow cut.

2520-2540 SHALE: very dark grey to black, blocky, occasionally part sub fissile, carbonaceous, firm to part hard, trace silica, moderately to part slightly calcareous, micromicaceous in part, disseminated pinpoint pyrite, occasional nodules pyrite, very weak slow pale cloudy yellow cut.

SAMPLE DESCRIPTIONS

2540-2560 SHALE: very dark grey, dark grey brown in part, blocky, occasionally part sub fissile, carbonaceous, firm to part hard, trace silica, moderately to part slightly calcareous, slightly micromicaceous in part, disseminated pyrite, trace pyrite nods, very weak slow pale cloudy yellow cut.

2560-2580 SHALE: very dark grey, dark grey brown in part, blocky, occasionally part sub fissile, carbonaceous, firm to hard, trace silica, moderately to part slightly calcareous, micromicaceous in part, disseminated pinpoint pyrite, occasional nodules pyrite, very weak slow pale cloudy yellow cut.

2580-2600 SHALE: dark grey, blocky, occasionally part sub fissile, carbonaceous, firm to hard, silica, slightly calcareous, slightly micromicaceous in part, trace disseminated pyrite, trace nodules pyrite, trace fossil casts infilled with pyrite, very weak slow pale cloudy yellow cut. Trace minor Limestone stringers, mottled light grey brown, wackestone, micro matrix, slightly argillaceous, dense.

2600-2620 SHALE: dark grey, blocky, occasionally part sub fissile, carbonaceous, firm to hard, silica, slightly calcareous, slightly micromicaceous in part, trace disseminated pyrite, trace nodules pyrite, trace fossil casts infilled with pyrite, very weak slow pale cloudy yellow cut. Increasing Limestone stringers as before.

2620-2640 SHALE: very dark grey, blocky, occasionally part sub fissile, carbonaceous, firm to hard, silica, slightly calcareous, slightly micromicaceous in part, trace disseminated pyrite, trace nodules pyrite, trace micro fractures infilled with calcite, very weak slow pale cloudy yellow cut. Trace Limestone stringers as before.

2640-2660 SHALE: very dark grey, blocky, occasionally part sub fissile, carbonaceous, firm to hard, silica, slightly calcareous, slightly micromicaceous in part, trace disseminated pyrite, trace nodules pyrite, trace micro fractures infilled with calcite, very weak slow pale cloudy yellow cut. Trace brown sideritic claystone stringers.

2660-2680 SHALE: very dark grey, blocky, occasionally part sub fissile, carbonaceous, firm to hard, silica, slightly calcareous, slightly micromicaceous in part, trace disseminated pyrite, trace nodules pyrite, very weak slow pale cloudy yellow cut. Trace brown siderite fragments.

2680-2700 SHALE: very dark grey, blocky, occasionally part sub fissile, carbonaceous, firm to hard, silica, slightly calcareous, very slightly micromicaceous in part, trace disseminated pyrite, trace nodules pyrite, trace small fractures infilled with white calcite, very weak slow pale cloudy yellow cut. Trace brown siderite fragments, Trace Limestone stringers as before.

SAMPLE DESCRIPTIONS

2700-2720 SHALE: very dark grey, blocky, occasionally part sub fissile, carbonaceous, firm to hard, silica, slightly calcareous, very slightly micromicaceous in part, trace nodules pyrite, very weak slow pale cloudy yellow cut. Trace brown siderite fragments, Trace Limestone stringers as before.

2720-2740 SHALE: very dark grey, blocky, occasionally part sub fissile, carbonaceous, firm to hard, brittle in part, silica, slightly calcareous, very slightly micromicaceous in part, trace nodules pyrite, very weak slow pale cloudy yellow cut.

2740-2760 SHALE: very dark grey, blocky, trace shards, carbonaceous, firm to hard, commonly brittle, local conchoidal fracture, silica, slightly calcareous, very slightly micromicaceous in part, trace nodules pyrite, trace micro fractures infilled with white calcite, very weak slow pale cloudy yellow cut.

2760-2780 SHALE: very dark grey to black, blocky, trace shards, carbonaceous, firm to part hard, commonly brittle, local conchoidal fracture, silica, only trace locally slightly calcareous, micromicaceous in part, disseminated pinpoint pyrite, occasional nodules pyrite, very weak slow pale cloudy yellow cut.

2780-2800 SHALE: very dark grey to black, blocky, trace shards, carbonaceous, firm to part hard, commonly brittle, local conchoidal fracture, silica, part less carbs where silica cement increasing, trace locally very slightly calcareous, micromicaceous in part, disseminated pinpoint pyrite, trace pyritic, occasional nodules pyrite common, very rare calcite healing very very fine mico fracture, very weak slow pale cloudy yellow cut.

2800-2820 SHALE: very dark grey to black, blocky, trace shards, carbonaceous, firm to part hard, commonly brittle, local conchoidal fracture, silica, trace locally very slightly calcareous, micromicaceous in part, trace pyritic, disseminated pinpoint pyrite common, occasional nodules pyrite, very rare calcite healing very very fine micro fracture, very weak slow pale cloudy yellow cut.

2820-2840 SHALE: very dark grey to black, blocky, trace shards, carbonaceous, firm to part hard, silica, trace locally very slightly calcareous, micromicaceous in part, trace pyritic, disseminated pinpoint pyrite common, moderate nodules pyrite, very rare calcite healing very very fine micro fracture, very weak slow pale cloudy yellow cut.

2840-2860 SHALE: very dark grey to black, blocky, carbonaceous, firm to part hard, brittle, silica, trace locally very slightly calcareous, micromicaceous in part, trace pyritic, disseminated pinpoint pyrite, trace nodules pyrite, very weak slow pale cloudy yellow cut.

SAMPLE DESCRIPTIONS

2860-2880 SHALE: very dark grey to black, blocky, trace shards, carbonaceous, firm to part hard, brittle, trace conchoidal fracture, silica, trace very slightly calcareous, micromicaceous in part, trace pyritic, disseminated pinpoint pyrite common, occasional nodules pyrite, very rare calcite healing very very fine micro fracture, very weak slow pale cloudy yellow cut.

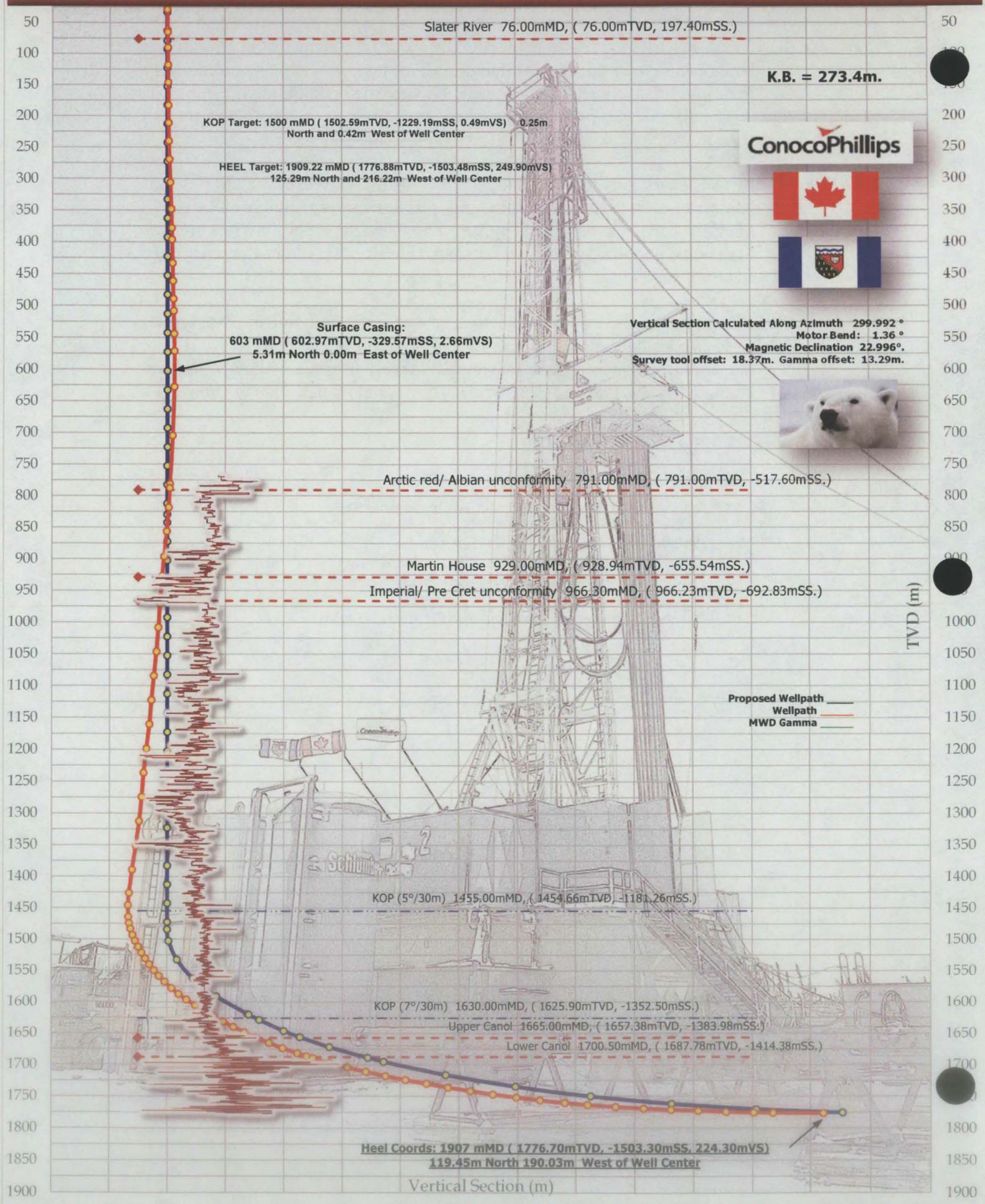
2880-2900 SHALE: very dark grey to black, blocky, trace shards, carbonaceous, firm to part hard, brittle, trace conchoidal fracture, silica, trace very slightly calcareous, micromicaceous in part, trace pyritic, disseminated pinpoint pyrite common, occasional nodules pyrite, very rare calcite healing very very fine micro fracture, very weak slow pale cloudy yellow cut.

2900-2910 SHALE: very dark grey to black, blocky, carbonaceous, firm to part hard, brittle, trace conchoidal fracture, silica, trace very slightly calcareous, very rare moderately calcareous, micromicaceous in part, disseminated pinpoint pyrite common, occasional nodules pyrite, very weak slow pale cloudy yellow cut.

Driller's TD on January 20th, 2014 at 00:42 hrs.
Extrapolated to:
2910 mMD (1804.01mTVD, to 1530.61mSS, 1225.81mVS)
599.85m North 1069.12m West of Well Center
Grid N/E Y/X: N 7220440.19m, E 592922.75

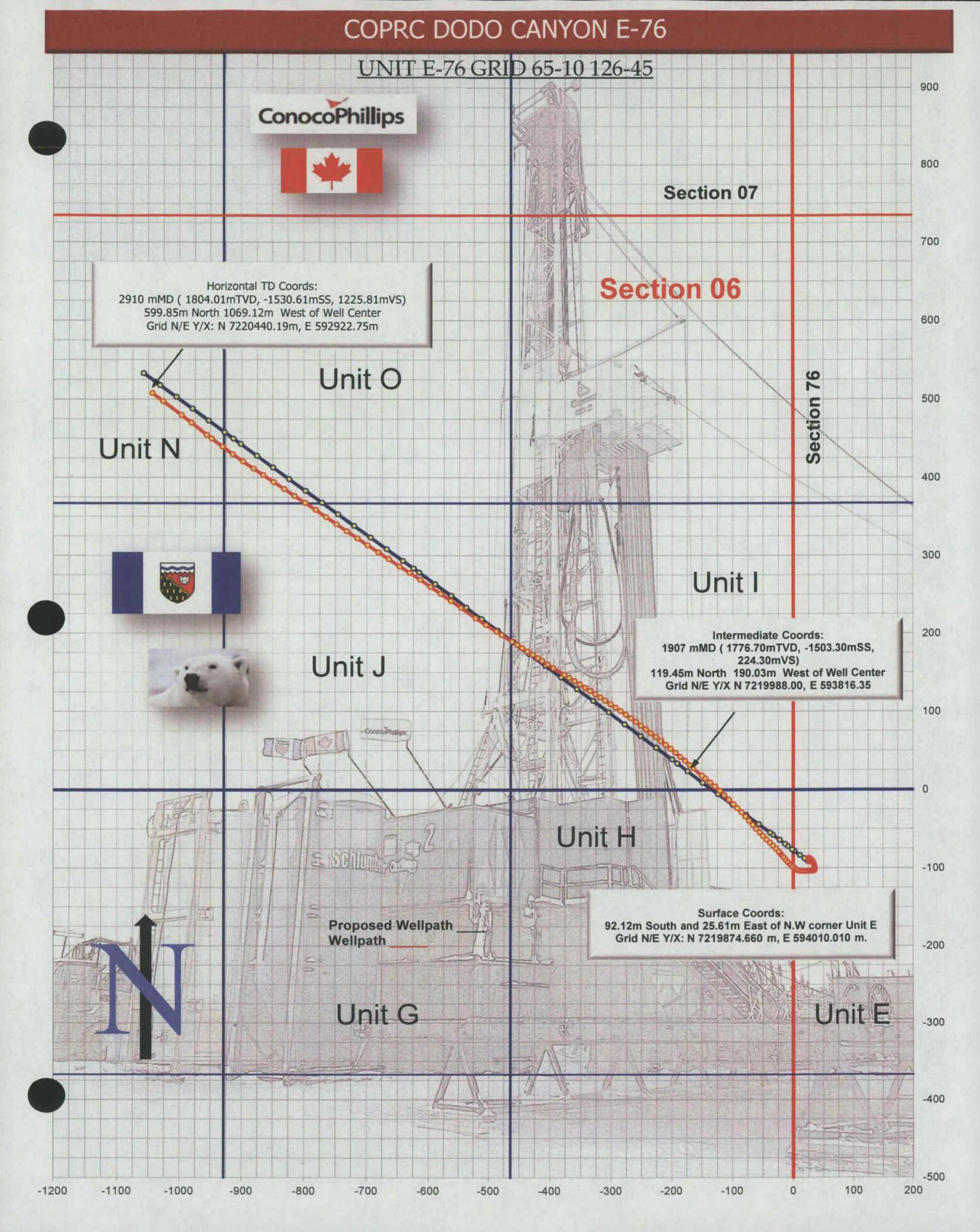
1003.00 meters have been drilled from the ICP at 1907.00mMD to TD.

COPRC DODO CANYON E-76

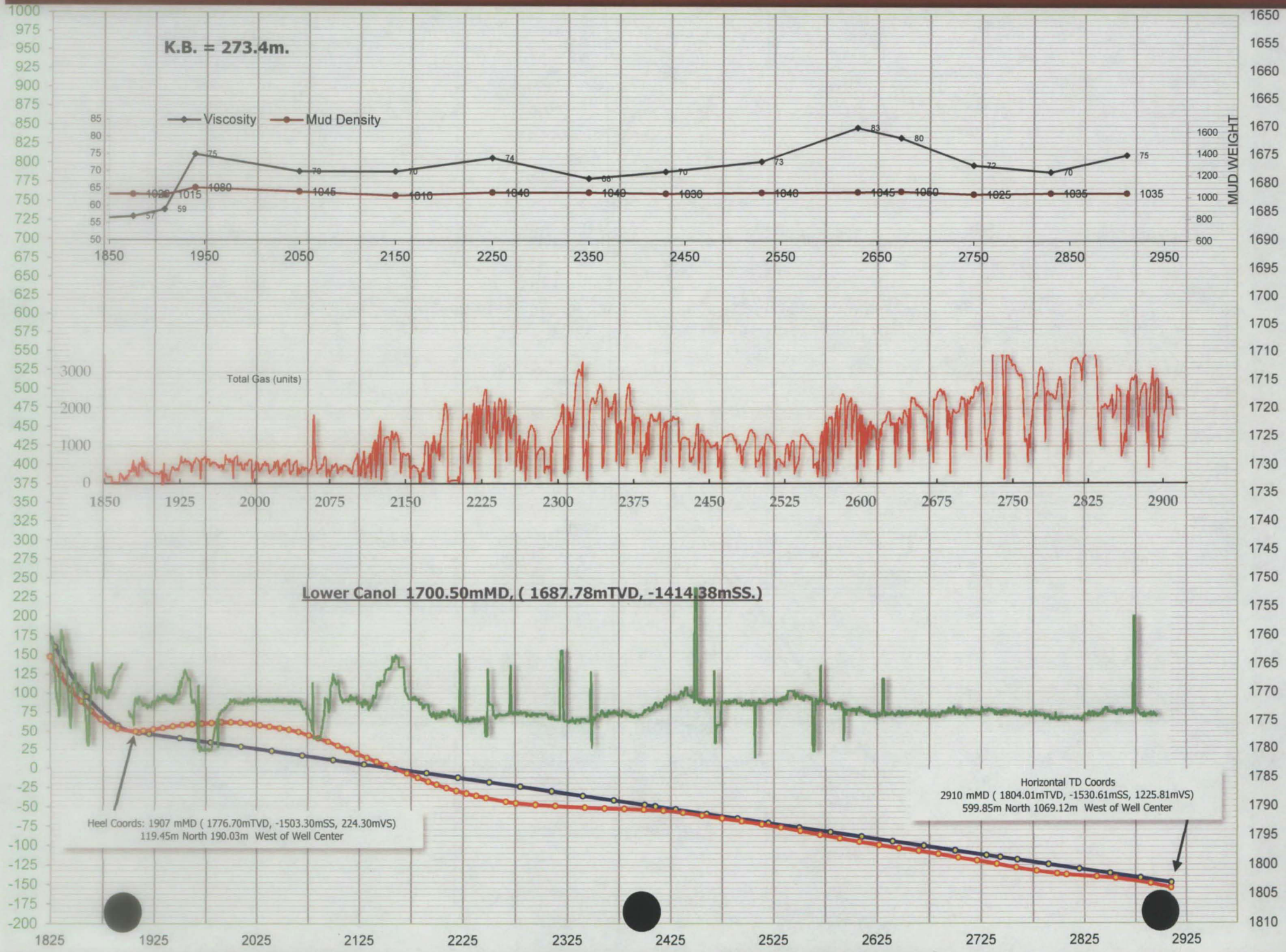


COPRC DODO CANYON E-76

UNIT E-76 GRID 65-10 126-45



COPRC DODO CANYON E-76




ROP min / m
ROP
Total Gas
Total Gas
AAPI
Gamma
VISCOSITY
Viscosity
Mud Density
MUD WEIGHT
SP PRESSURE
Pressure
Torque
TORQUE PSI
Proposal
Wellpath
1800
1950
2100
2250
2400
2550
2700
2850
3000
1800.00
1950.00
2100.00
2250.00
2400.00
2550.00
2700.00
2850.00
3000.00

ConocoPhillips

Scale 1:240 (5"=100') Metric
Measured Depth Log

Well Name:	Dodo Canyon E-76
Location:	UWID: 300E766510126450 ; Surf. Loc: UNIT E-76 GRID 65-10 126-45
License Number:	EL 470 Region: Canol
Spud Date:	Dec 27, 2013 06:30hrs Drilling Completed: Jan 14th, 2014 02:26hrs
Surface Coordinates:	Lat / Long: N 65° 5' 27.02793", W 126° 59' 58.04610"
	Grid N/E Y/X: N 7219874.660 m, E 594010.010 m
Bottom Hole Coordinates:	119.80m North 190.99m West of Well Center
	Grid N/E Y/X: N 7219988.32 m, E 593815.38 m
Ground Elevation (m):	268.2 K.B. Elevation (m): 273.4
Logged Interval (m):	0 To: 1889.5 Total Depth (m): 1908
Formation:	Lower Canol Fm
Type of Drilling Fluid:	Gel Chem (Surface) Invert VersaClean C12 (Build; Lateral)

Printed by STRIP.LOG from WellSight Systems 1-800-447-1534 www.WellSight.com

OPERATOR

Company: ConocoPhillips Canada
Address: 2100, 401- 9 Ave SW
Calgary, Alberta
T2P 2H7

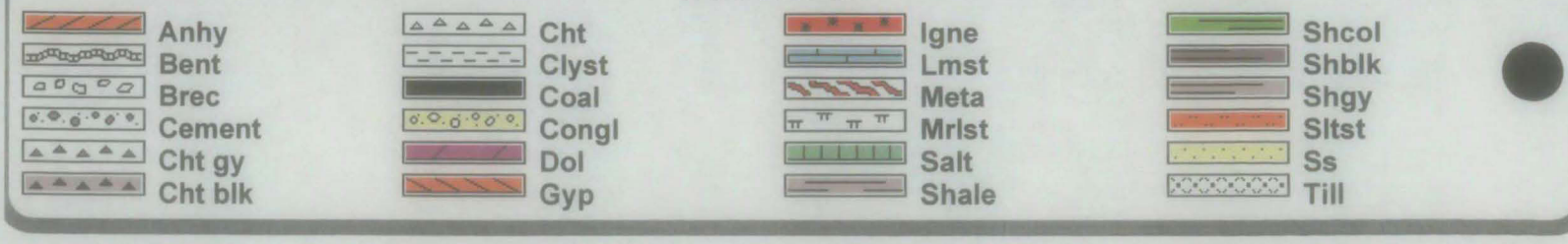
GEOLOGIST

Name: Dave Lawrence; Gerald Pasveer
Company: Black Gold Geotechnical Services LTD.
Address: 2009 Colville Road
Route 9
New Haven PE

Drilling

Samples from: 0m to 2910mMD (Build and Lateral), washed and vialed for Operator and NEB at 5m intervals;
AFE#: 10351817
Drilling Rig: Beaver #2
Drilling Supervisor: Richard Turgeon; Dave Opper
Gas Detection: MD Totco Gas Analyzer
Geological Services: David Lawrence Black Gold Geotechnical Services LTD.
Gerry Pasveer Coromandel Resources LTD.
Directional Services: Sperry Drilling Services
MWD Services: Extreme Engineering
Wireline Logs: Schlumberger (Vertical into Build)

ROCK TYPES



ACCESSORIES

FOSSIL
- Algae
- Amph
- Belm
- Bioclst
- Brach
- Bryozoa
- Cephal
- Coral
- Crin
- Echin
- Fish
- Foram
- Fossil
- Gastro
- Oolite
- Ostra
- Pelec
- Pellet
- Pisolite
- Plant
- Strom

MINERAL
- Anhy
- Arggrn
- Arg
- Bent
- Bit
- Brecfrag
- Calc
- Carb
- Chtdk
- Chtlt
- Dol
- Feldspar
- Ferrpel
- Ferr
- Fracture
- Glau
- Gyp
- Hvymin
- Kaol
- Marl
- Micmica
- Minxl
- Nodule
- Organic
- Phos
- Pyr
- Ls grs
- Sideritic
- Siderite
- Salt
- Sandy
- Silt
- Sil
- Sulphur
- Tuff

STRINGER
- Anhy
- Arg
- Bent
- Coal
- Dol
- Gyp

- pebbles
- Ls
- Mrst
- Shstgr dk
- Sltstrg
- Ssstrg

TEXTURE
- Boundst
- Chalky
- Cryxln
- Earthy
- Finexln
- Grainst
- Lithogr
- Microxln
- Mudst
- Packst
- Wackest
- Sh mudst

OTHER SYMBOLS

POROSITY
- Earthy
- Fenest
- Fracture
- Inter
- Moldic
- Organic
- Pinpoint
- Vuggy

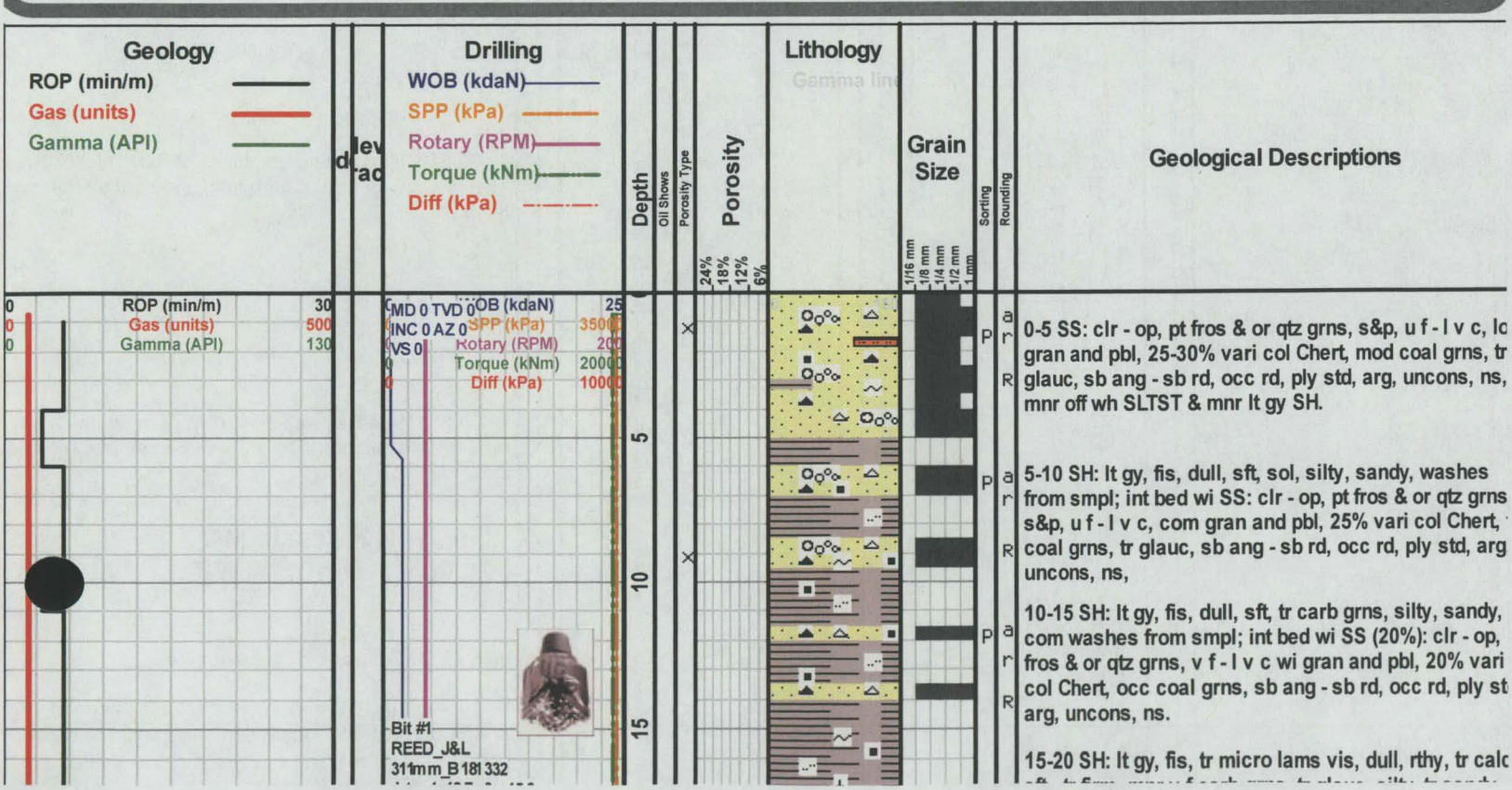
OIL SHOW
- Even
- Spotted
- Ques
- Dead

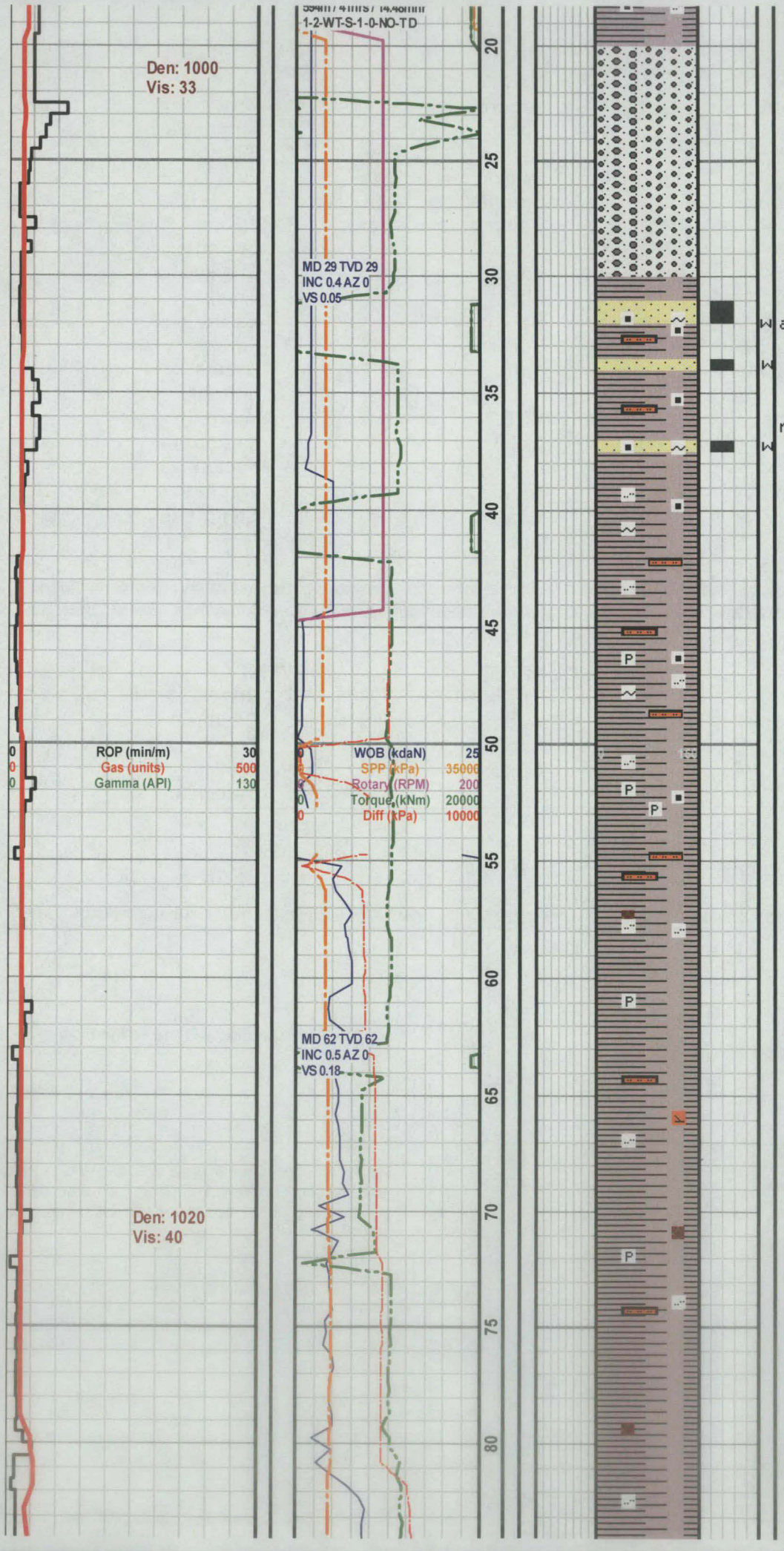
SORTING
- Well
- Moderate
- Poor

ROUNDING
- Rounded
- Subrnd
- Subang
- Angular

INTERVAL
- Core
- Dst

EVENT
- Rft
- Casing
- Top
- Bit trip
- Sidewall





20-30 CEMENT: off wh, firm, hard, brittle, w ind.

ConocoPhillips

COPRC DODO CANYON E-76
UNIT E-76 GRID 65-10 126-45
300E766510126450

Spud on December 28th, 2013 at 06:30hrs
Samples from 0-20m caught previosly when conductor hole was drilled

Little Bear 31.00mMD, (31.00mTVD, 242.40mSS.)

30-40 SH: lt gy, blky - sb blky, dull, rthy, sft - v firm, m v f carb grns, tr glauc, v silty, tr sandy, com washes from smpl; wi SS: clr - op qtz grns, s&p, l v f - pt l f, 20 med brn - blk lithc grns, mnr carbs grns, tr glauc, sb ang - sb rd, w std, cly cmt, fri - pt w ind, ns.

40-50 SH: lt gy, blky - sb blky, dull, rthy, sft - v firm, mnr v f carb grns, tr glauc, v silty, tr sandy, occ micrc lams vis, pt grdg to SLTST, ns,

50-60 SH: lt gy, blky - sb blky, dull, rthy, pt micmica, s - v firm, tr carb mat, rr glauc, mod - pt v silty, m SLTST stgrs.

com sft sol SH washing from samples

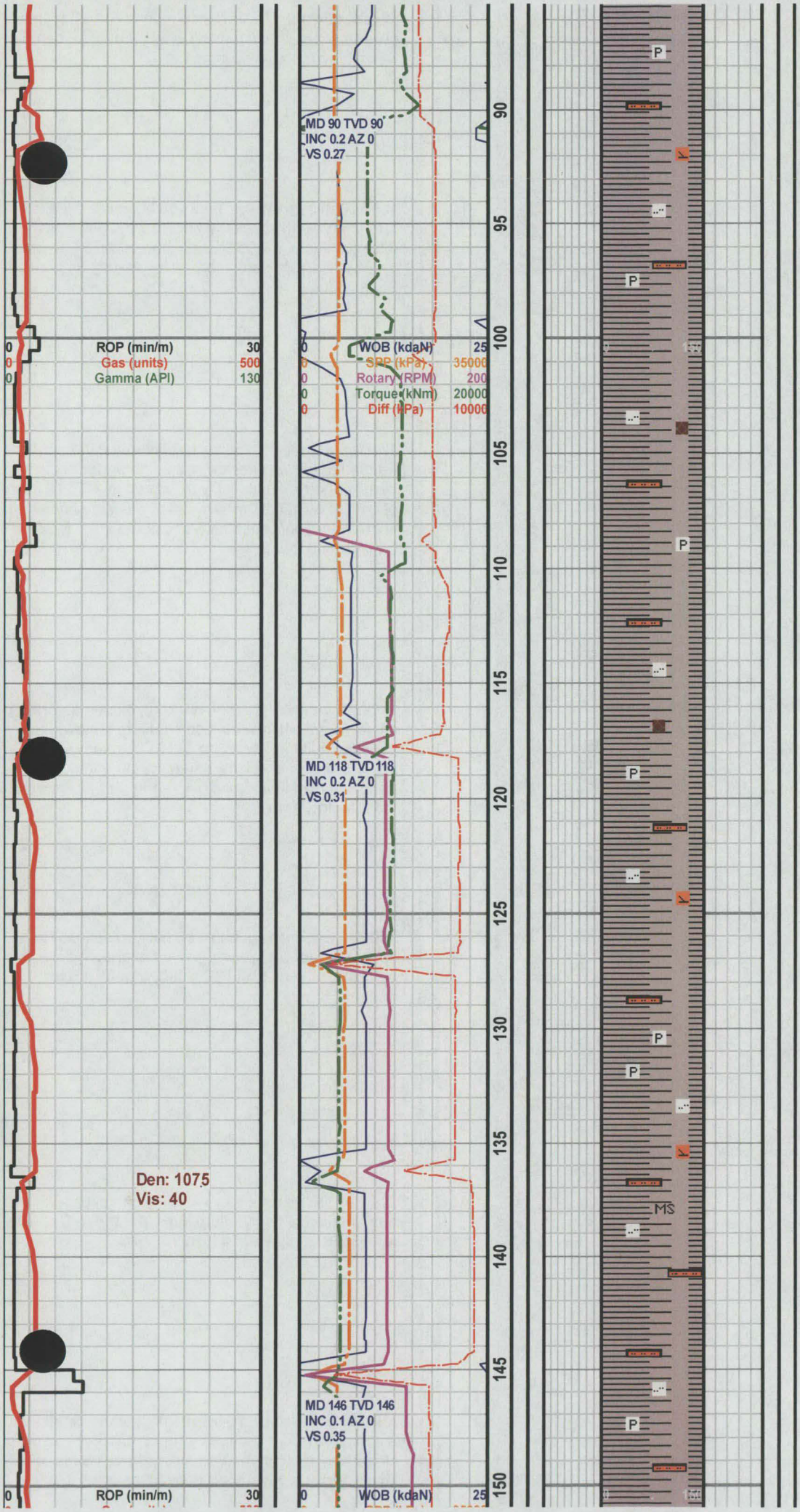
60-70 SH: lt gy, tr med brn, blky - sb blky, dull, rthy, p micmica, sft - v firm, tr carb mat, mod - pt v silty, mnr SLTST stgrs.

70-80 SH: lt gy, blky - sb blky, rthy, com micmica, sft - firm, tr carb mat, tr sid frags, loc dism pp pyr, mod - p silty, tr SLTST stgrs.

Slater River 76.00mMD, (76.00mTVD, 197.40mSS.)

com sft sol SH washing from samples

80-90 SH: lt gy, blky - sb blky, rthy, com micmica, sft - firm, tr carb mat, slly more com sid frags, loc dism pp pyr, tr nod pyr, mod - pt v silty, v mnr loc sandy, tr lam



com sft sol SH washing from samples

90-100 SH: lt - med gy, blky - sb blky, micmica, sft - v firm, tr sid frags, loc dism pp pyr, mod - pt v silty, v m loc sandy, tr lams vis.

100-110 SH: lt - med gy, blky - sb blky, micmica, sft - v firm, tr sid frags, loc dism pp pyr, rr glauc, tr v silty, ri SLTST, lt - med gy, s&p, arg, tr sidic, w ind, mnr lithc grns, tt, mod sawdust in samples, ns.

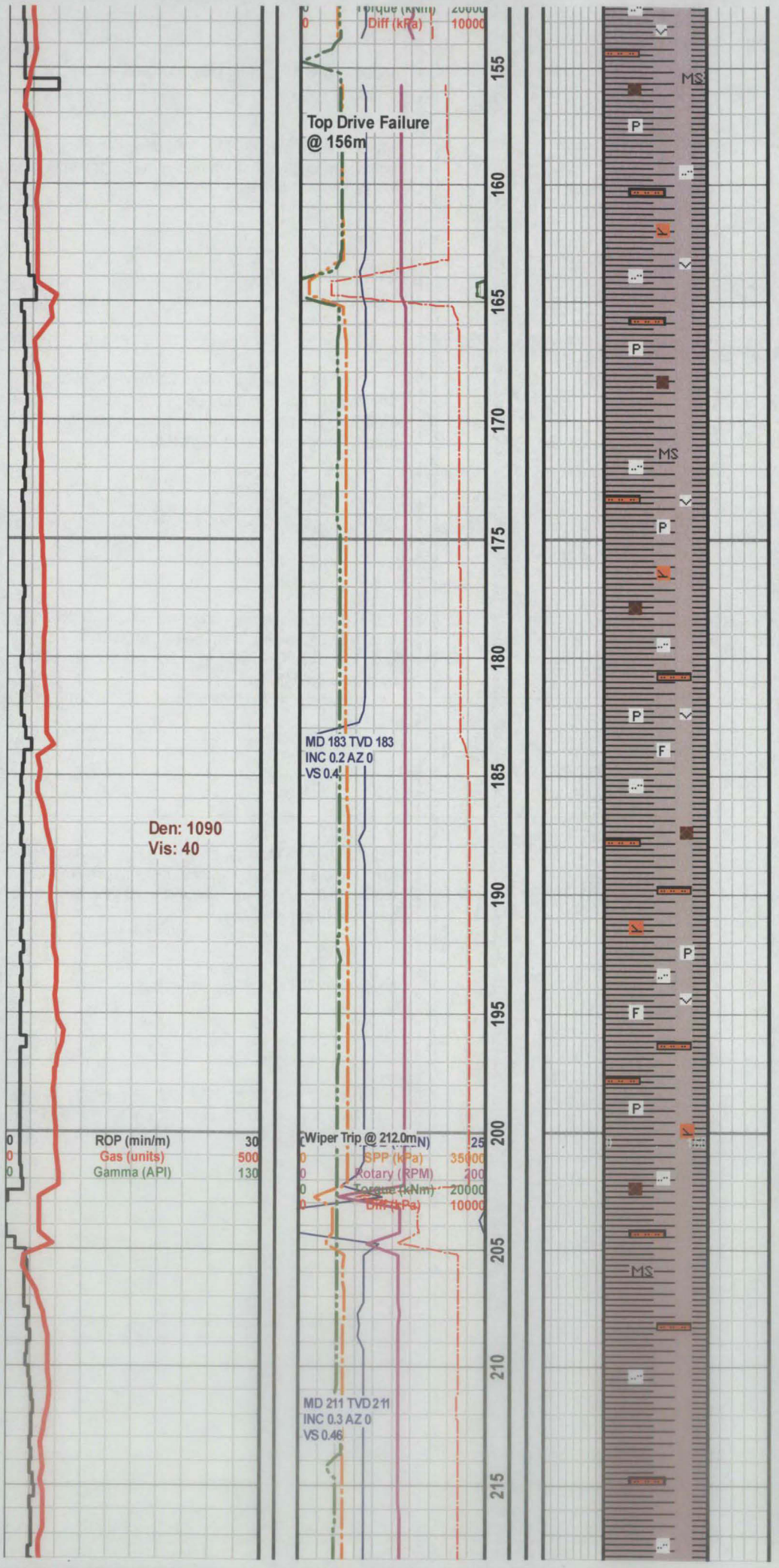
110-120 SH: lt - med gy, blky - sb blky, micmica, sft - v firm, tr sid frags, loc dism pp pyr, rr glauc, tr v silty, grdg to tr SLTST, lt - med gy, s&p, arg, tr sidic, w ind, com lithc grns, tt, ns.

120-130 SH: lt - med gy, blky - sb blky, micmica, sft - v firm, loc dism pp pyr, rr glauc, tr v silty, rr SLTST, lt - med gy, s&p, arg, tr sidic, w ind, com lithc grns, tt, mc sawdust in samples, ns.

com sft sol SH washing from samples

130-140 SH: lt - med gy, blky - sb blky, micmica, sft - v firm, loc dism pp pyr, rr glauc, tr v silty, rr SLTST, lt - med gy, s&p, arg, tr sidic, w ind, com lithc & occ glau grns, tt, ns.

140-150 SH: lt - med gy, blky - sb blky, micmica, sft - v firm, tr dism pp pyr, tr v silty, occ MDSTN stgrs, dense hd, rr SLTST, tt, ns.



mica's, silty ip, tr MDSTN, occ grdg to SLTST, lt - med gy, s&p, v arg, tr sidic, mod - w ind, sandy ip, com lith & occ glauc grns, tr SID frags, tt, ns.

160-170 SH: lt - med gy, blky - sb blky, micmica, sft - v firm, v rr yel wh specks, v f micro lams vis, occ dk mica's, silty ip, tr MDSTN, occ grdg to SLTST, lt - med gy, s&p, v arg, tr sidic, mod - w ind, sandy ip, com lith & occ glauc grns, tt, ns.

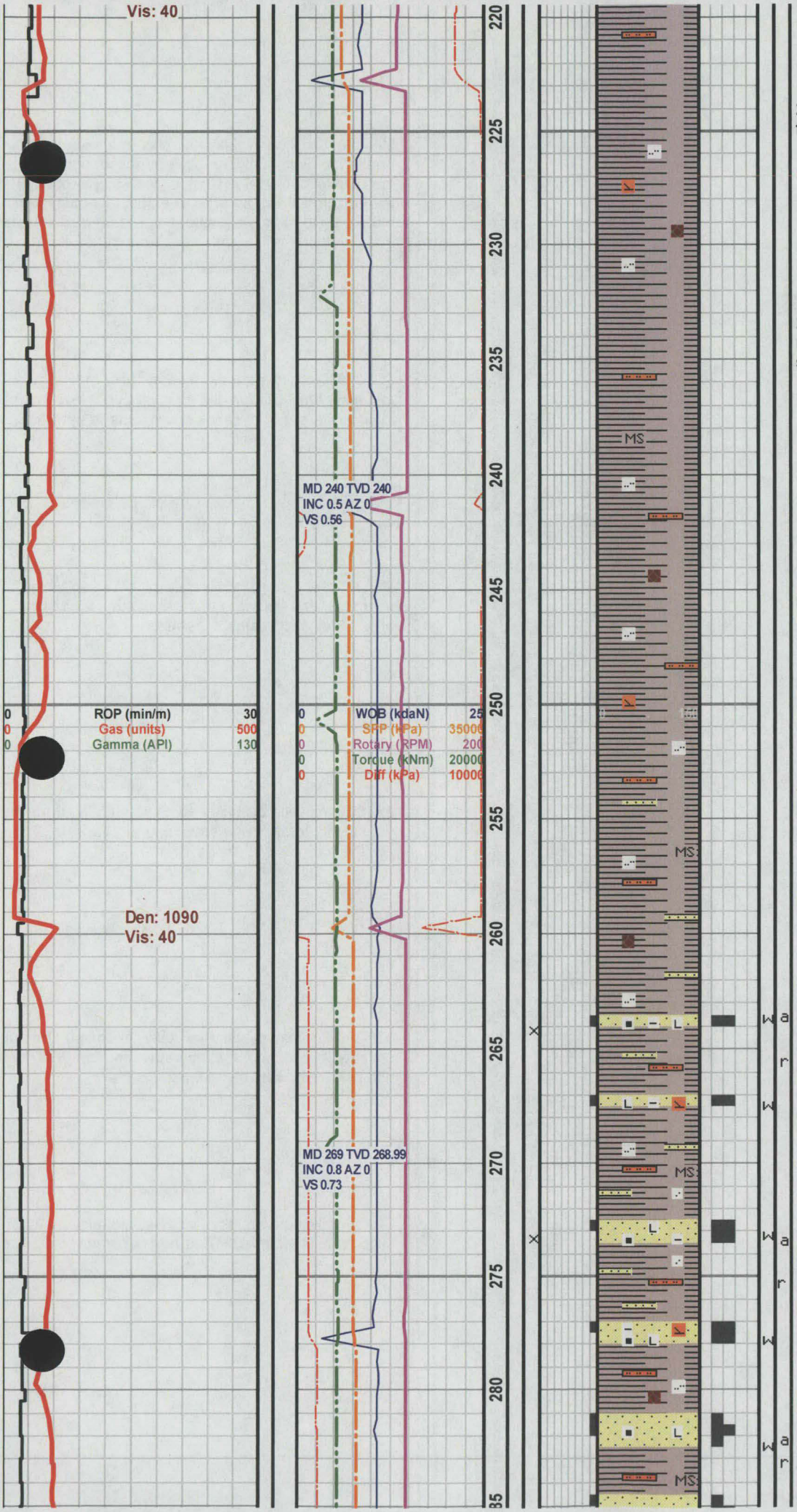
170-180 SH: med gy, blky - sb blky, micmica, sft - v firm, tr loc yel wh specks, occ v f micro lams vis, tr pyritized, tr dk mica's, silty ip, tr med gy MDSTN stgrs pt grdg to SLTST, lt - med gy, s&p, v arg, tr sidic, mod w ind, sandy ip, com lithc & occ glauc grns, tr SID frags, tr nod Pyr, tt, ns.

180-190 SH: med gy, blky - sb blky, micmica, firm - p sft, tr loc yel wh specks, occ v f micro lams vis, tr pyritized, silty ip, pt grdg to SLTST, lt - med gy v arg, tr sidic, mod - w ind, sandy ip, slly more pyritized, com lithc & occ glauc grns, tr SID, tr pyritize fos remains, tt, ns.

190-200 SH: med gy, blky - sb blky, micmica, sft - v firm, tr loc yel wh specks, occ v f micro lams vis, tr pyritized, silty ip, tr SLTST, tr SID, tr pyritized fos remains, tt, ns.

200-210 SH: med gy, blky - sb blky, micmica, sft - v firm, arg, occ v f silty micro lams vis, tr pyritized, silty ip, tr SLTST grdg - v f Ss ip, tt, ns.

210-220 SH: med gy, blky - sb blky, micmica, sft - v firm, tr pyritized, silty ip, pt grdg to SLTST, lt - med gy, s&p, v arg, tr sidic, mod - w ind, grdg - v f Ss ip, com lithc & tr glauc grns, tr sid frags, tt, ns.



220-230 SH: lt - med gy, blky - sb blky, micmica, arg, firm - pt sft,, pt grdg - lt gy sft MDSTN, v mnr silty lams

230-240 SH: med gy, tr dkr med gy, blky - sb blky, micmica, firm - pt sft, silty ip, tr sid frags, tt, ns, mod sawdust in samples.

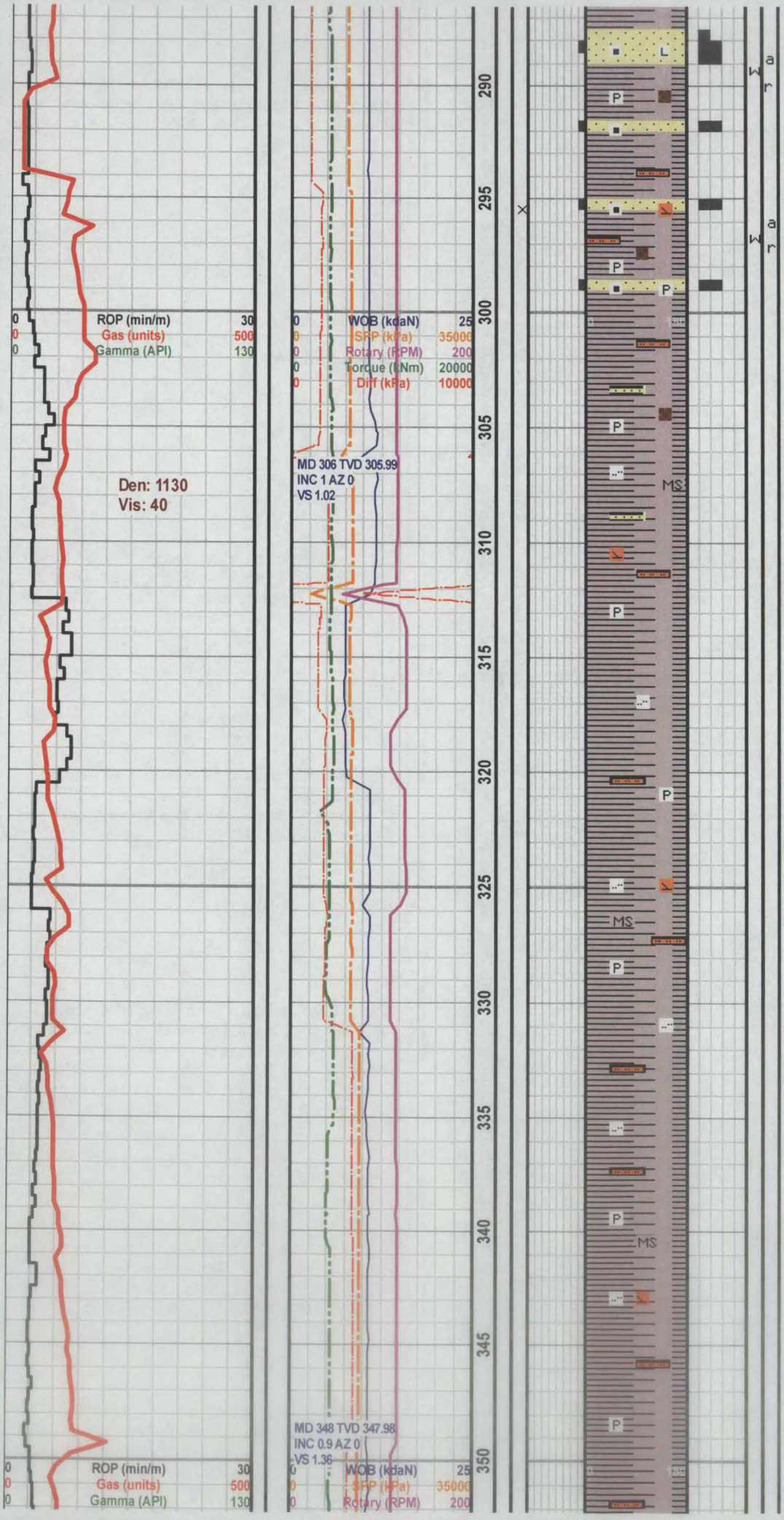
240-250 SH: med gy, tr dkr med gy, blky - sb blky, micmica, sft - v firm, tr loc dism pp pyr, rr nod pyr, pt silty, tr sid, mnr silty lams, mod sawdust vis.

250-260 SH: med gy, tr dkr med gy, blky - sb blky, micmica, firm - pt sft, tr loc dism pp pyr, v rr SS: clr - trnsl, s&p, v f, lithc, sb ang, arg, slly calc, mod ind, ns mod sawdust vis.

260-270 SH: med gy, tr dkr med gy, blky - sb blky, micmica smooth app, firm - pt sft, tr loc dism pp pyr, S (10%); lt gy, s&p, v f - pt l f, clr - trnsl qtz grns, lithc, tr carbs, rr glauc, sb ang - sb rd, pt ang, com arg dirty app, slly calc, mod ind, fri, ns, v poor int grn por, mod sawdust vis.

270-280 SH: med gy, tr dkr med gy, blky - sb blky, micmica, sft - v firm, tr loc dism pp pyr, tr pyritized, S (15%); lt gy, s&p, v f - l f, clr - trnsl qtz grns, lithc, rr glauc, tr carbs, mod - v arg, slly calc, mod - v w ind, v poor int grn por, ns.

280-290 SH: med gy, blky - sb blky, micmica ip, firm pt sft, tr loc dism pp pyr, tr loclly pyritized, occ silty lt med brn MDSTN wi SS (25%); lt - med gy, s&p, l v f - u f grdg occ - l - u f, clr - trnsl qtz grns, lithc, rr glauc, tr carbs grns, mod - v arg, slly calc ip, tr sidic, mod - w



290-300 SH: med gy, blky - sb blky, micmica i[illegible]ft - firm, tr loc dism pp pyr, tr loclly pyritized, occ[illegible]t med brn MDSTN wi SS (10%); lt gy, s&p, v f - pt [illegible], clr trnsl qtz grns, lithc, tr carbs, rr glauc, slly calc, mod ind, fri, tr sid frags, ns, v poor int grn por, mod sawdu vis.

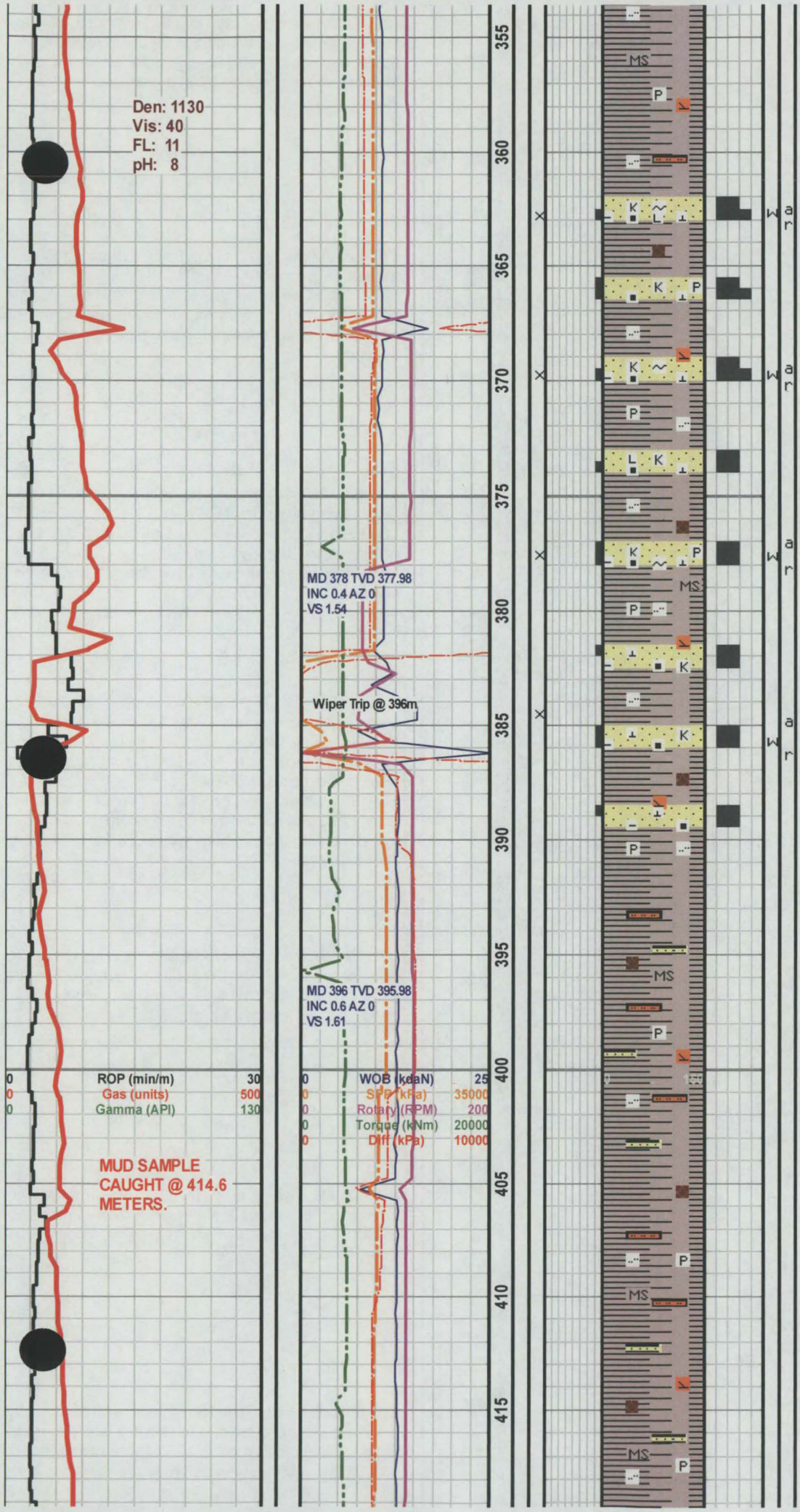
300-310 SH: med gy, tr dkr med gy, blky - sb blky, micmica, firm - pt sft, tr loc dism pp pyr, rr nod pyr, pt silty, tr sid, mnr silty sandy micro lams, tr pyritized.

310-320 SH: med gy, tr dkr med gy, blky - sb blky, micmica, firm - pt sft, rr nod pyr, pt silty, tr sid, mnr silty sandy micro lams, tr pyritized.

320-330 SH: med gy, blky - sb blky, micmica, firm - pt sft, silty ip, tr nod pyr, tr sidic, mnr sid frags, tr pyritized, tr nod pyr, v rr Ss strgs.

330-340 SH: med gy, blky - sb blky, micmica, firm - pt sft, silty ip, occ sid frags, mnr silty med brn MDSTN, t nod pyr, v mnr Silty micro lams.

340-350 SH: med gy, blky - sb blky, micmica, locly pt silty, firm - pt sft, tr MDSTN, tr nod pyr, v mnr Silty lam



360-370 SH: med gy, blky - sb blky, micmica ip, firm - pt sft, SS (25%); lt - med gy, s&p, l v f - u f, tr l med, clr trnsl qtz grns, lithc, rr glauc, tr carbs grns, mnr - v arg tr shaley, tr clay cmt, loc calc reac, tr sidic, mod w in pt fri, p - pt fair relief, tr 2-4% int grn por, no vis shows

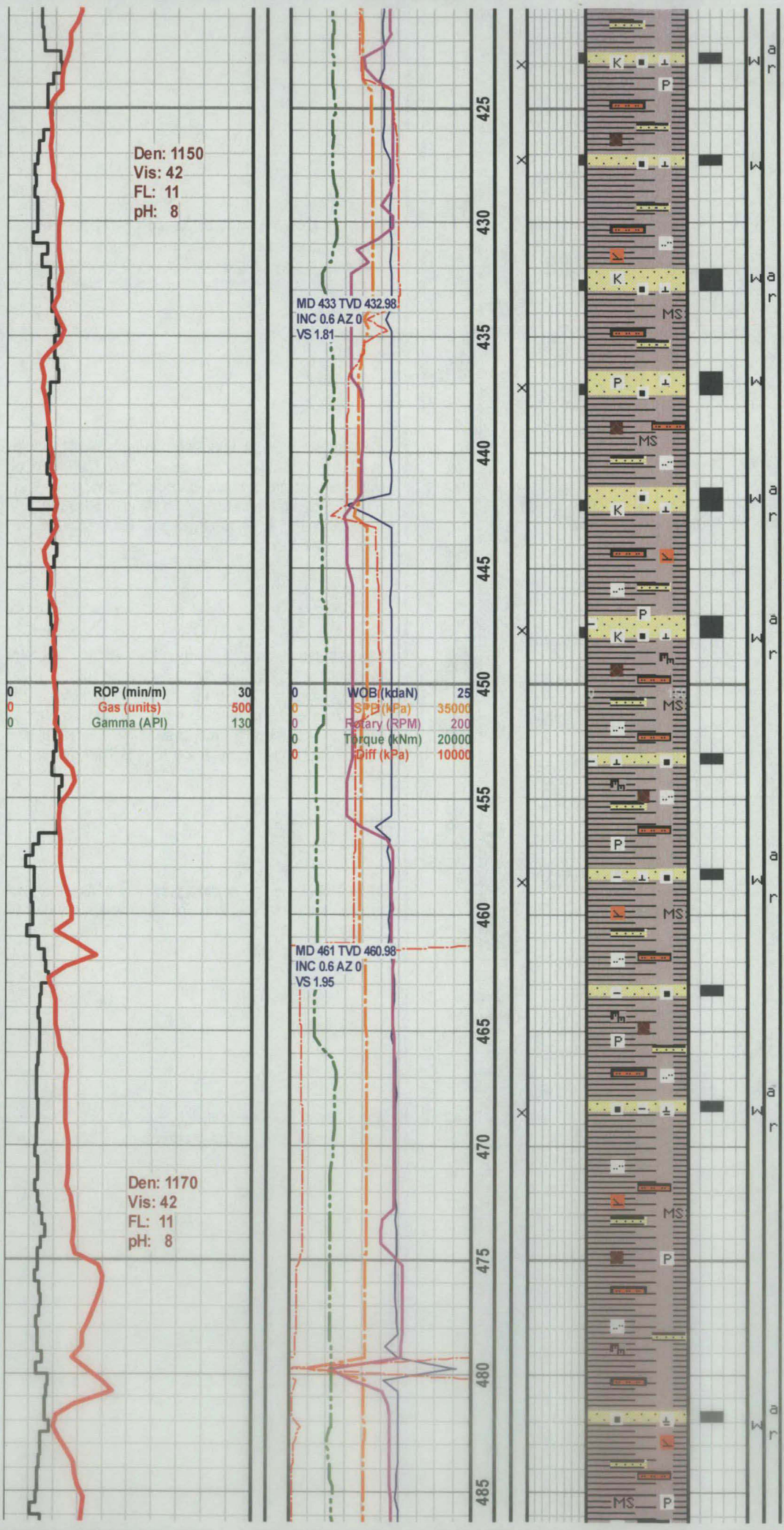
370-380 SH: med gy, blky - sb blky, micmica ip, firm - pt sft, SS (15%); lt - med gy, s&p, l v f - u f, tr l med, clr trnsl qtz grns, lithc, rr glauc, tr carbs grns, mnr - v arg tr clay cement, loc calc reac, tr sidic, mod w ind, tr fri p - pt fair relief, tr 2-4% int grn por, no vis shows.

380-390 SH: med gy, tr dkr gy, blky - sb blky, micmica ip, firm - pt sft, silty sandy ip, int bdd wi SS (20%); lt - med gy, s&p, l v f - u f, tr l med, clr - trnsl qtz grns, lith rr glauc, tr carbs grns, tr dk mica's, tr nod pyr, mnr - v arg, tr clay cement, tr calc, tr sidic, mod w ind, tr fri, p pt fair relief, tr sid frags, tr 2-4% int grn por, no vis shows.

390-400 SH: med gy, tr dkr gy, blky - sb blky, micmica locly pt silty, tr sidic, firm - pt sft, tr nod pyr, v mnr Si Sandy stgrs, tr sid frags.

400-410 SH: med gy, tr dkr gy, blky - sb blky, micmica locly pt silty, firm - pt sft, tr nod pyr, occ SLTST stgrs

410-420 SH: med gy, blky - sb blky, micmica, silty ip, firm - pt sft, tr nod pyr, tr sid frags, pt finely laminated wi SLTST and occ SS: off wh - lt gy, s&p, modly - w cons, fri ip, v mnr med gy silty MDSTN pres, ns.



420-430 SH: med gy, blky - sb blky, micmica, silty ip, firm - pt sft, tr sidic, tr sid frags, pt finely laminated wi SLTST and occ SS: off wh - lt gy, s&p, modly - w cons fri ip, v mnr med gy silty MDSTN pres, ns.

430-440 SH: med gy, tr dkr gy, blky - sb blky, micmica ip, firm, pt grdg to silty MDSTN,
SS (25%); off wh - med gy, s&p, l v f - u f, clr - trnsl qtz grns, lithc, rr glauc, tr carbs, shaley ip, clay cement, calc, mod ind, p - tr fair relief, poor inter grn por, no vi shows.

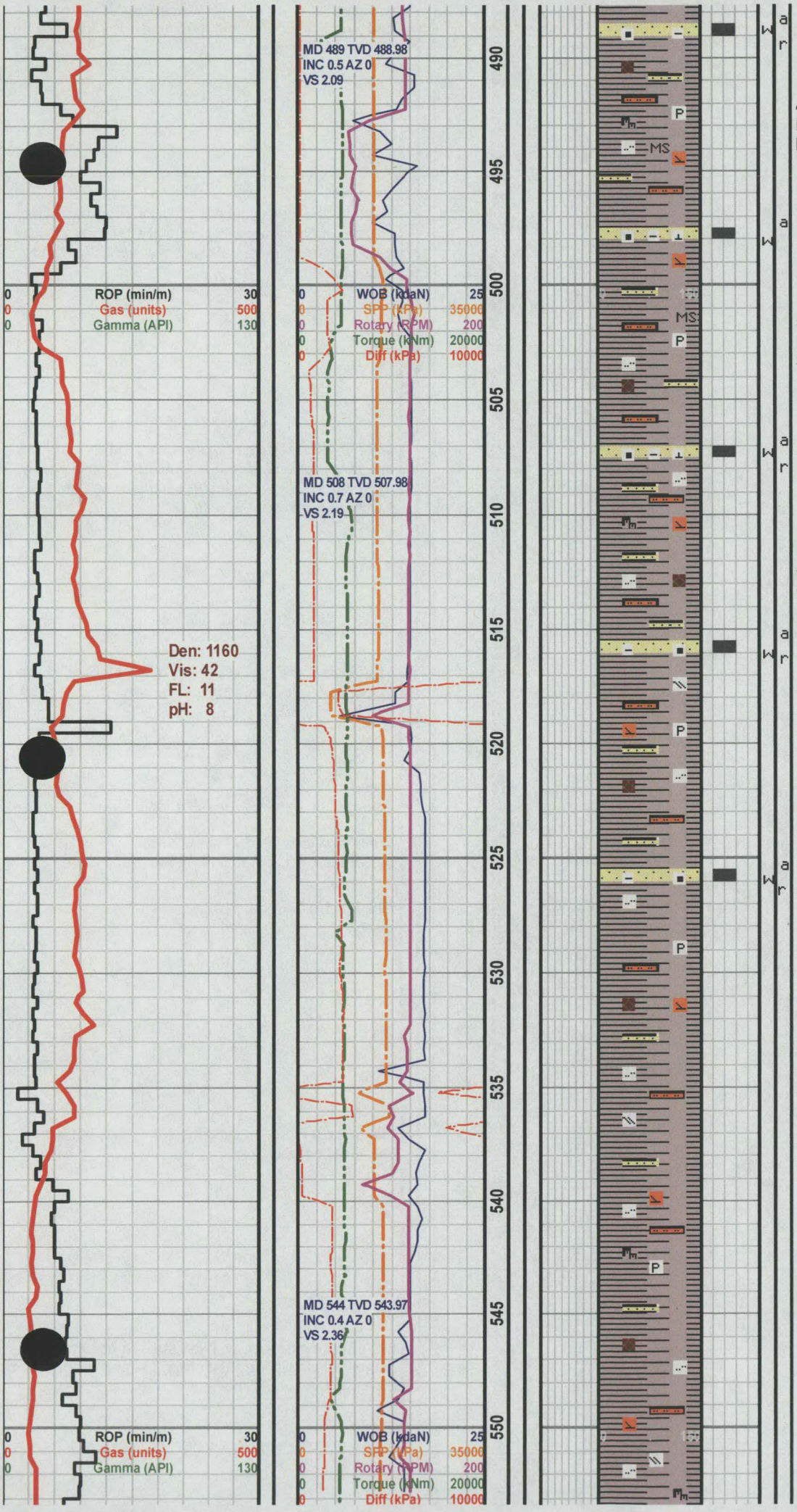
440-450 SH: med gy, tr dkr gy, blky - sb blky, micmica ip, firm, pt grdg to silty MDSTN,
SS (20-25%); off wh - med gy, s&p, l v f - u f, clr - trnsl qtz grns, lithc, tr carbs, shaley ip, clay cement, tr calc mod - w ind, p - tr fair relief, poor inter grn por, no vis shows.

450-460 SH: med gy, tr dkr gy, blky - sb blky, micmica ip, firm, tr MDSTN,
SS (15%); off wh - med gy, s&p, l v f - u f, clr - trnsl qtz grns, lithc, tr carbs, shaley ip, clay cement, tr calc, fi lams, tr sid, tr nod pyr, pt grdg to SLTST, p inter grn p no vis shows.

460-470 SH: med gy, blky - sb blky, micmica, silty ip, firm - pt sft, tr sidic, arg, tr sid frags, pt finely laminat wi SLTST and occ SS: off wh - lt gy, s&p, modly - w cons, fri ip, v mnr med gy silty MDSTN pres, ns.

470-480 SH: med gy, blky - sb blky, micmica, silty ip, firm - pt sft, tr nod pyr, tr sid frags, pt finely laminated wi SLTST and occ SS: off wh - lt gy, s&p, modly - w cons, fri ip, ns.

480-490 SH: med gy, mnr dkr gy, blky - sb blky, tr plty micmica, silty ip, tr sidic, firm - tr sft, tr nod pyr, tr sid frags, pt finely laminated wi SLTST, tr pyritized, and v mnr SS lams: off wh - lt gy, s&p, modly - w cons, tt, ns



490-500 SH: med gy, tr dkr gy, blky - sb blky, micmica locly pt silty, firm - pt sft, tr nod pyr, occ SLTST stgrs, MDSTN, rr sid frags. tt, ns.

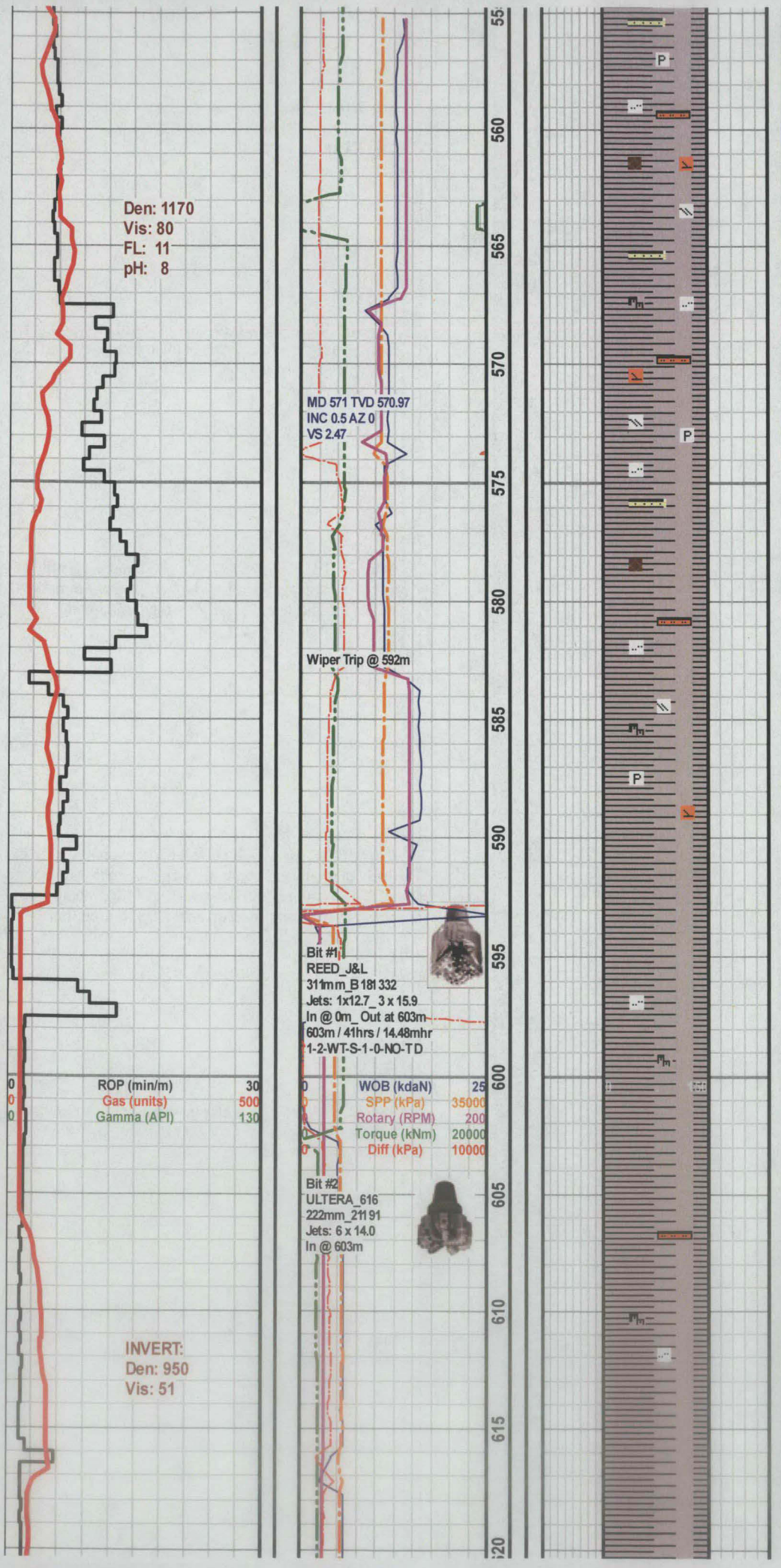
500-510 SH: med gy, tr dkr gy, blky - sb blky, micmica locly pt silty, tr sidic, firm - pt sft, tr nod pyr, v mnr Silt Sandy stgrs, tr sid frags.

510-520 SH: med gy, blky - sb blky, micmica, silty ip, firm - pt sft, tr nod pyr, tr sid frags, pt finely laminated wi SLTST and occ SS: off wh - lt gy, s&p, modly - w cons, fri ip, ns.

520-530 SH: med gy, blky - sb blky, micmica, silty ip, firm - pt sft, tr nod pyr, tr sid frags, pt finely laminated wi SLTST and occ SS: off wh - lt gy, s&p, modly - w cons, fri ip, v mnr med gy silty MDSTN pres, ns.

530-540 SH: med gy, tr dkr gy, blky - sb blky, micmica tr sidic, locly pt silty, firm - pt sft, tr nod pyr, v mnr Silt Sandy stgrs, tr sid frags.

540-550 SH: med gy, pt dkr gy, blky - sb blky, pt plty, t gyp, micmica, rarely silty, firm - pt sft, tr pyritized, tr nod pyr, tr Silty Sandy micro lams, tr sid frags.



gyp, micmica, rarely silty, firm - pt sft, d pyritized, d nod pyr, tr sidic, no acid response, less than 1% Silty Sandy micro lams.

560-570 SH: med gy, pt dkr gy, blky - sb blky, pt plty, arg, micmica, rarely silty, firm - pt sft, rarely pyritized tr nod pyr, tr acicular calcite, very mnr Silty Sandy micro lams.

570-580 SH: med gy, pt dkr gy, blky - sb blky, pt plty, arg, tr gyp, micmica, rarely silty, firm - pt sft, rarely pyritized, tr sidic, tr acicular calcite, less than 1% Silty Sandy micro lams.

580-588 SH: med gy, pt dkr gy, blky - sb blky, pt plty, arg, tr gyp, micmica, rarely silty, firm - pt sft, rarely pyritized, tr sidic.

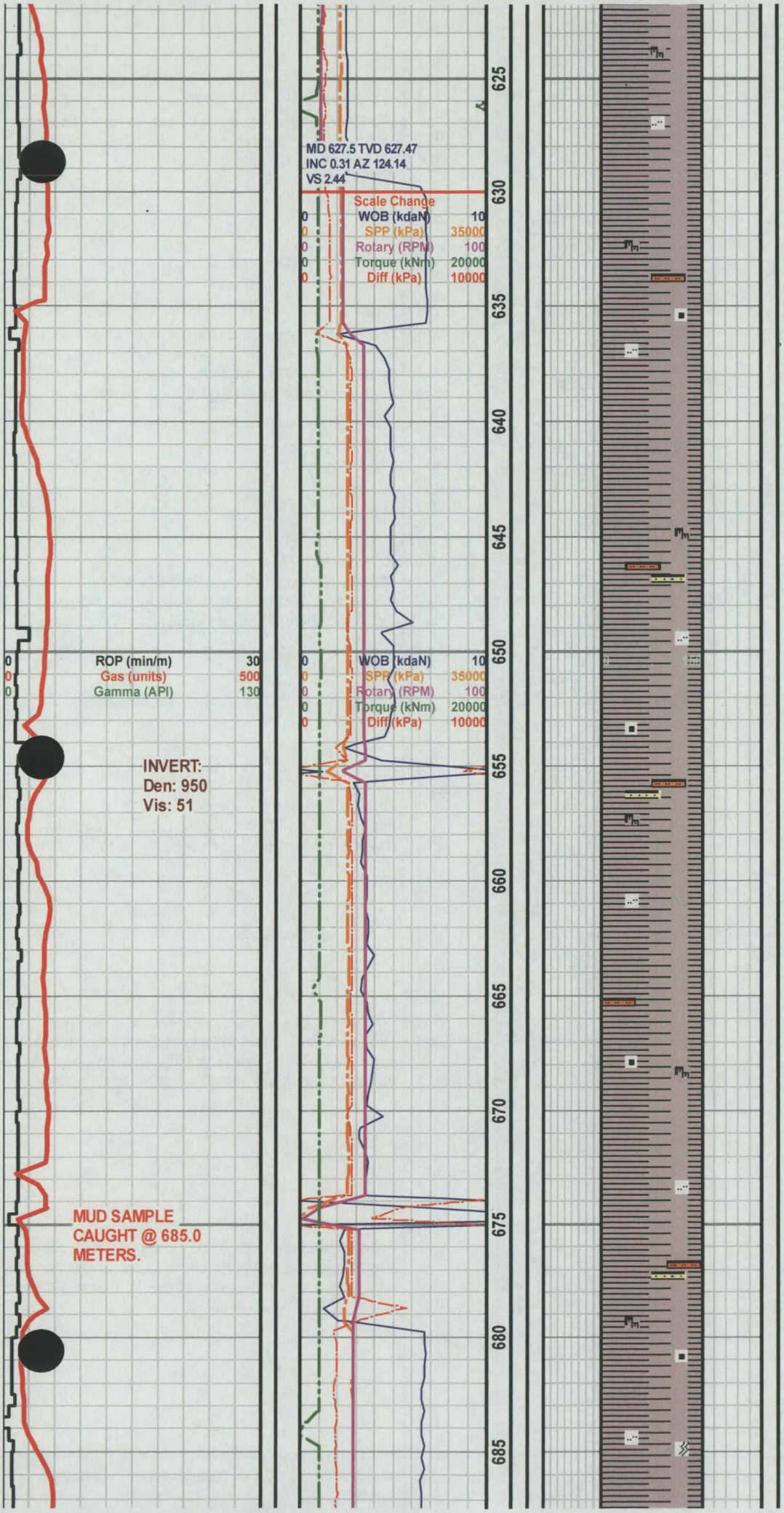
Surface TD at 603m
Reached on January 3rd 2014 at 08:06hrs

Drilled out through Surface Casing
on January 6th, 2014 at 14:45 hrs

588-600 100% Cement

600-610 Sh med - dk gy, blky, sbfis in pt, occly micmica, p tr slty.

610-620 Sh med - dk gy, blky, sbfis in pt, occ micmica, p tr slty / tr Sltst strgs, lt - med gy, occ cly cmt, slly calc, tt, no shows.



620-630 Sh med - dk gy, blky, sbfis in pt, occly micmica, p tr slty.

630-640 SH: med - dk gy, blky - sb fis ip, modly carbs where dk gy, micmica ip, tr locly silty, firm - pt sft, tr acicular calcite, v rr calcitic arg Silty micro lams.

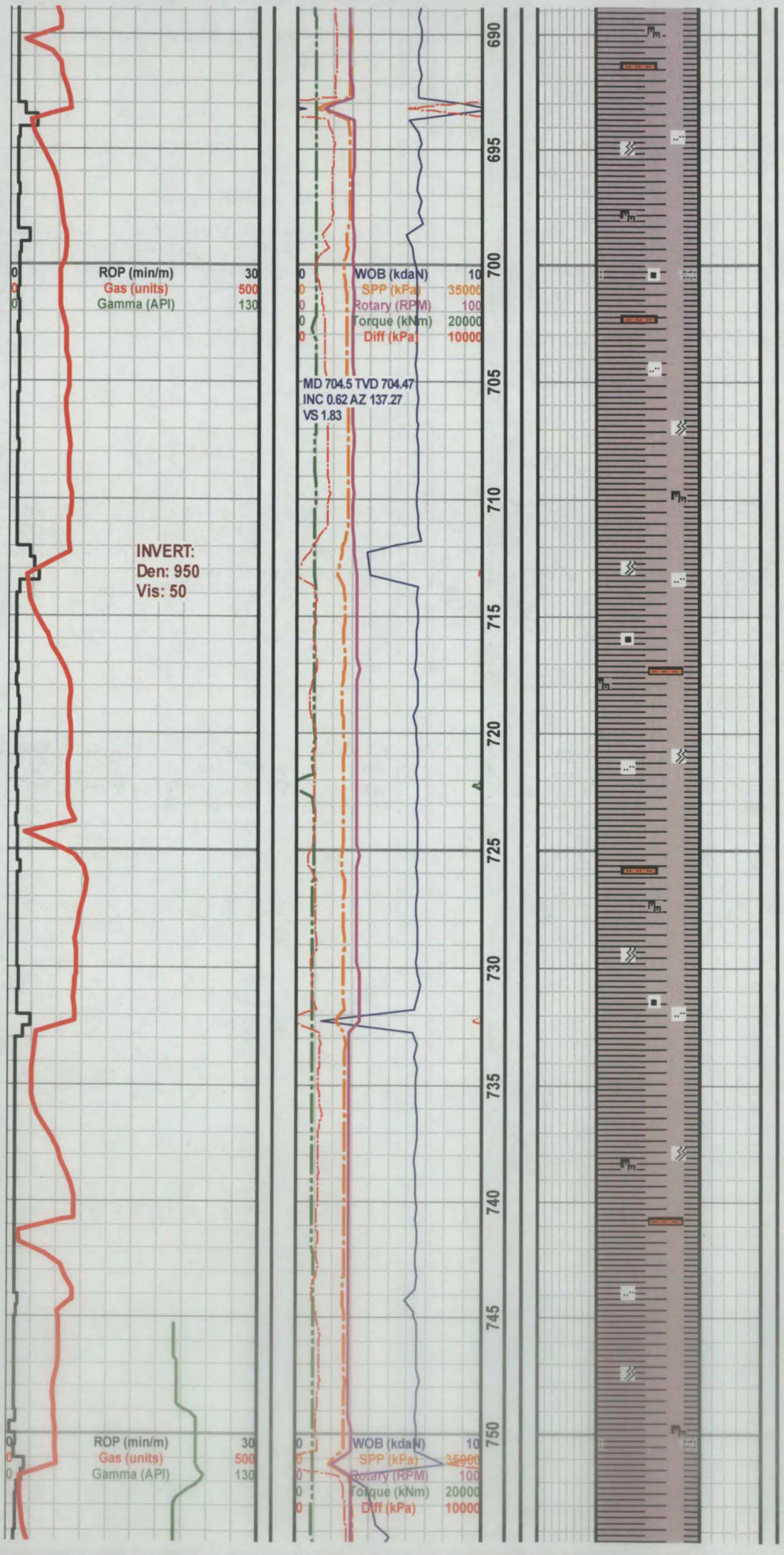
640-650 SH: med - dk gy, blky - sb fis ip, modly carbs where dk gy, micmica ip, tr locly silty, firm - pt sft, rarely pyritized, tr acicular calcite, v rr calcitic arg Si Sandy micro lams, occ calcs prtgs.

650-660 SH: med - dk gy, blky - sb fis ip, modly carbs where dk gy, micmica ip, tr locly silty, firm - pt sft, rarely pyritized, tr acicular calcite, v rr calcitic arg Si Sandy micro lams, occ calcs prtgs.

660-670 SH: med - dk gy, blky - sb fis tr fis ip, modly carbs where dk gy, micmica ip, tr silty grainy app, firı - pt sft, tr acicular calcite, tr calcitic arg Silty stgrs, oc calcs prtgs.

670-680 SH: med - dk gy, blky - sb fis tr fis ip, modly carbs where dk gy, micmica ip, tr silty grainy app, firı - pt sft, tr acicular calcite, v rr calcitic arg Silty Sandy micro lams, occ calcs prtgs.

680-690 SH: med - dk gy, blky - sb fis tr fis ip, modly carbs where dk gy, micmica ip, satin tex ip, tr silty, fi brittle - pt sft, tr acicular calcite, tr calcite healing mic fracs.



690-700 SH: med - dk gy, blky - sb fis, tr carbs where dk gy, pt micmica, satin tex ip, tr silty, firm brittle, tr h - pt sft, tr calcite healing micro fracs.

700-710 SH: med - dk gy, blky - plty, fis ip, tr carbs where dk gy, pt micmica, satin tex ip, tr silty, firm brittle, tr hd - pt sft, tr calcite healing micro fracs, tr Sltst strgs, off wh - med gy, sdy ip, cly cmt, slly calc, no shows.

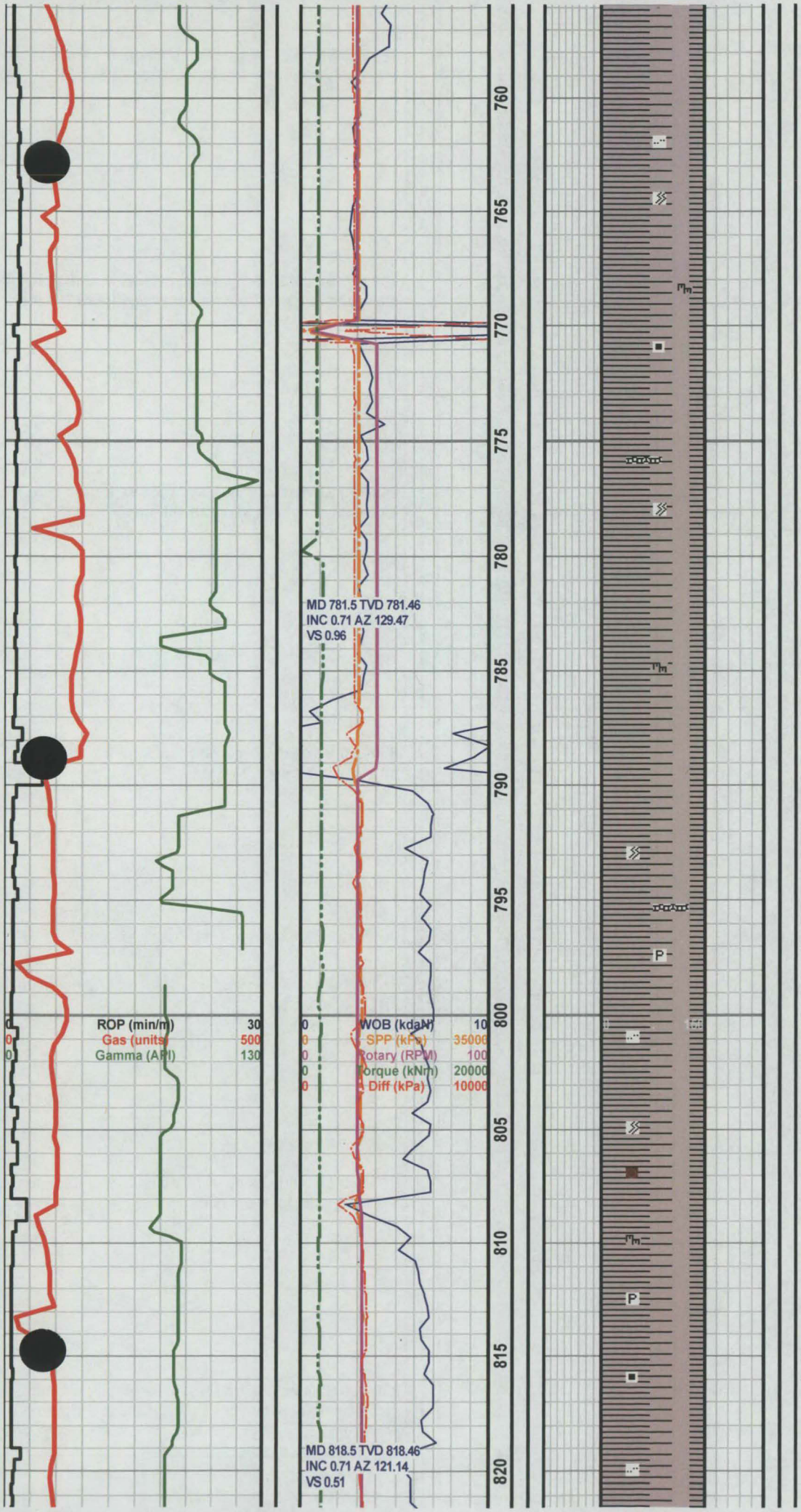
710-720 SH: med - dk gy, blky - plty & fis ip, tr carbs, micmica ip, satiny tex ip, tr silty, firm, tr hd - pt sft, tr loc calcite healing micro fracs, v mnr Sltst strgs, tt, n shows.

720-730 SH: med - dk gy, blky - plty & fis ip, tr carbs, micmica ip, tr silty, firm, tr hd - pt sft, tr loc calcite healing micro fracs, v mnr Sltst strgs, tt, no shows.

730-740 SH: med - dk gy, blky - plty & fis ip, tr carbs, micmica ip, satiny tex ip, tr silty, firm, tr hd - pt sft, tr fracs, tr calc ptgs, v mnr Sltst strgs, tt, no shows.

740-750 SH: med - dk gy, blky - plty - fis ip, tr carbs, micmica ip, satiny tex ip, slly silty ip, firm, tr hd - pt s v mnr fracs vis, v mnr Sltst strgs, loc micro lams vis where silty, tt, no shows.

750-760 Sh med - dk gy, blky, sbfis ip, tr carb mat, sli slty, occly micmica, occ micro fracs infilled with calcite.



760-770 Sh med - dk gy, blky, sbfis ip, tr carb mat, sll slty, occly micmica, occ micro fracs infilled with calcite.

770-780 Sh med - dk gy, blky, sbfis ip, tr carb mat, sll slty, occly micmica, occ micro fracs infilled with calcite with mnr Clyst lt gy, wxy, tr pyric, mica flks.

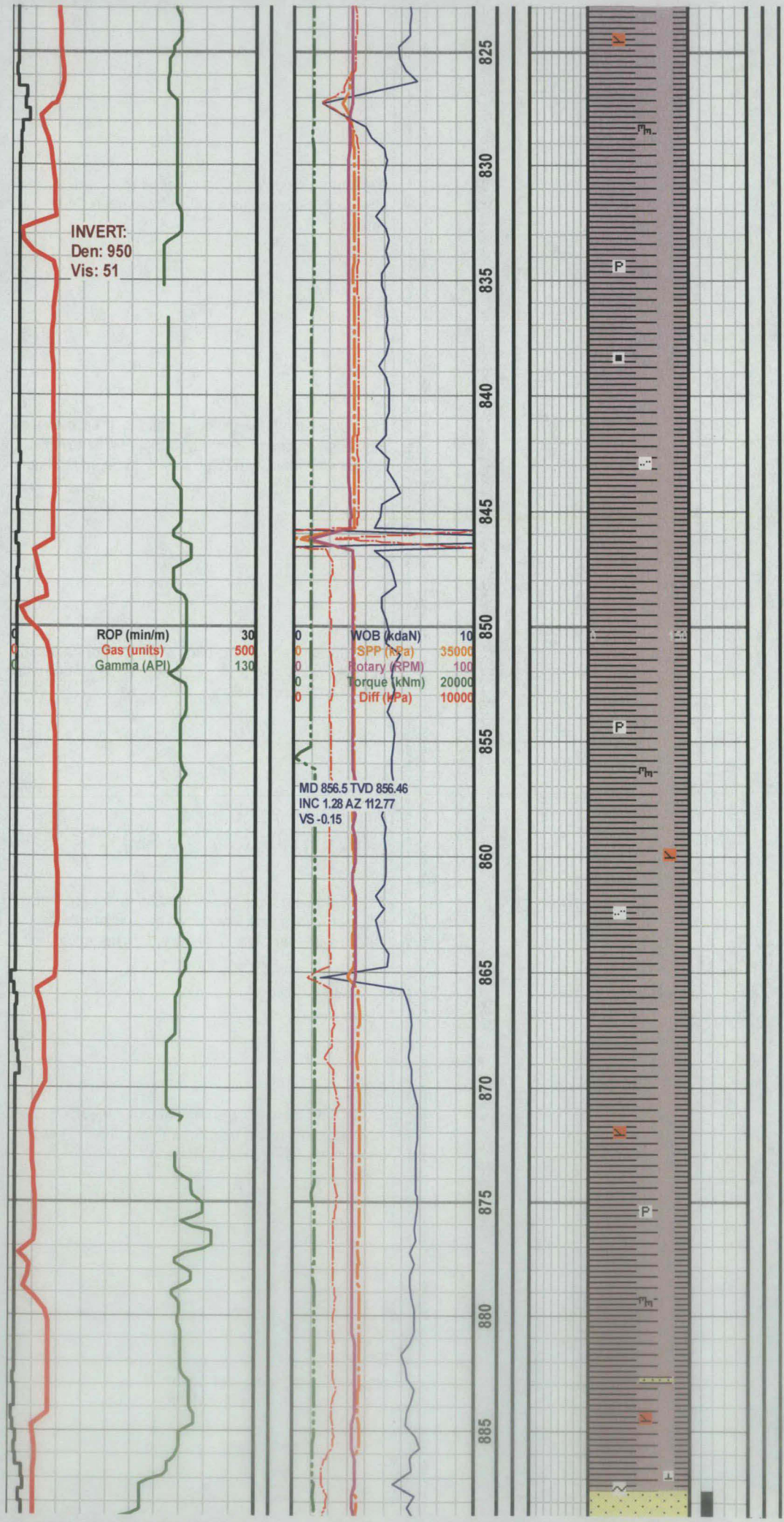
780-790 Sh med - dk gy, blky, sbfis ip, mnr carb mat, slly slty, occly micmica, occ micro fracs infilled with calcite with mnr Clyst aa.

Artic Red 791.00mMD,
(791.0mTVD, -517.60mSS.)

790-800 Sh med - dk gy, blky, sbfis ip, tr carb mat, sll slty, occly micmica, occ micro fracs infilled with calcite with mnr Clyst lt gy, wxy, tr pyric, mica flks.

800-810 Sh med - dk gy, blky, sbfis ip, tr carb mat, sll slty, occly micmica, mnr brn sid frags (nods?) occ micro fracs infilled with calcite.

810-820 Sh med - dk gy, blky, sbfis ip, tr carb mat, sll slty, occly micmica, mnr brn sid frags (nods?) occ micro fracs infilled with calcite.



820-830 Sh med - dk gy, blky, sbfis ip, tr carb mat, sll slty, occly micmica, mnr brn sid frags (nods?)

830-840 Sh med - dk gy, blky, sbfis ip, tr carb mat, sll slty, occly micmica, mnr brn sid frags (nods?) p tr pl rmns.

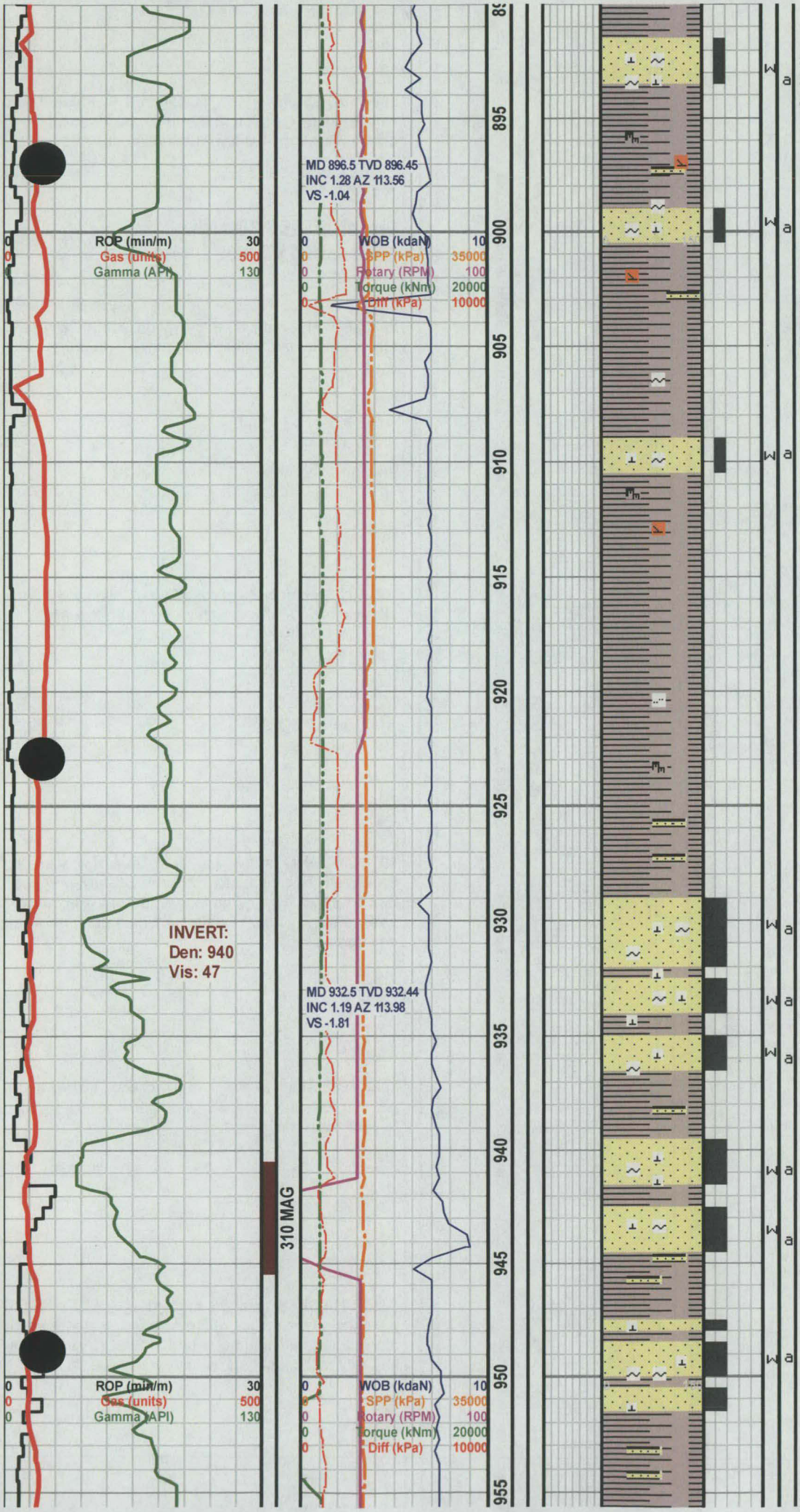
840-850 Sh med - dk gy, blky, sbfis ip, tr carb mat, sll slty, occly micmica, mnr brn sid frags (nods?)

850-860 Sh med - dk gy, blky, sbfis ip, tr carb sll slty, occly micmica, slly sidc.

860-870 Sh med - dk gy, blky, sbfis ip, slly micmica, t slty, slly sidic ip.

870-880 Sh med - dk gy, blky, sbfis ip, slly micmica, t slty, slly sidic ip, tr pyr nods.

880-890 Sh med - dk gy, blky, sbfis ip, slly micmica, t slty, slly sidic ip, occ brn sid frags (nods), tr pyr nods Tr Ss strgs lt gy, vf gr, sub ang, qtzs, w srtd, calc, slty tr dk lithic grs, tr glau, tt, no shows.



890-900 Ss crm, lt gy, vf gr, sub ang, qtzs, w srtd, calc & cly cmt, slty, tr dk lithic grs, tr glau, tt, no shows / S aa.

900-910 Ss crm, lt gy, vf gr, sub ang, qtzs, w srtd, calc & cly cmt, slty, tr dk lithic grs, tr glau, tt, no shows / S aa.

910-920 Sh med - dk gy, blky, sbfis ip, slly micmica, t slty, slly sidic ip / 10% Ss strgs aa.

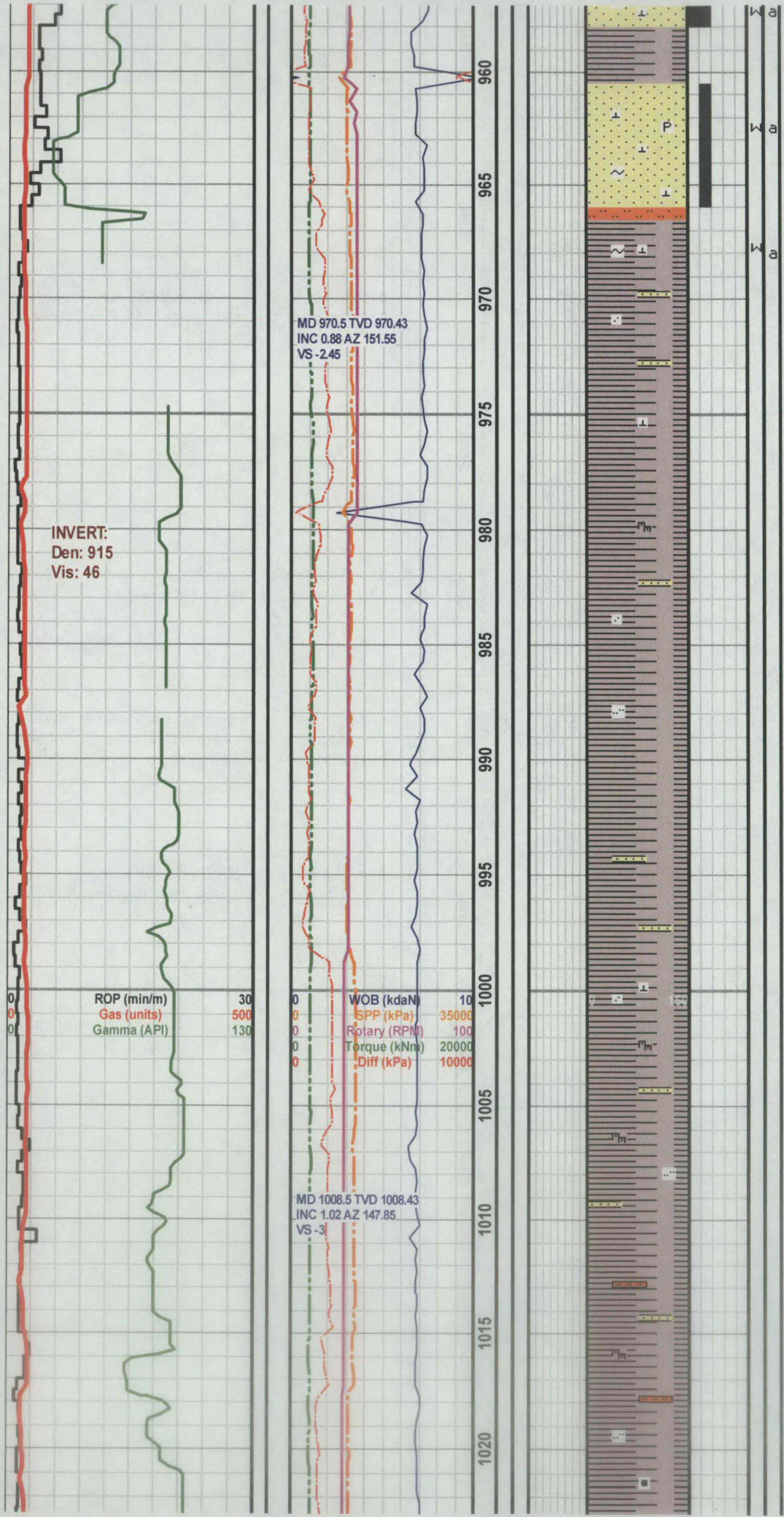
920-930 Sh med - dk gy, blky, sbfis ip, slly micmica, t slty, sidic ip, tr micro fracs infilled with calcite / abnt brn sid frags / mnr Ss strgs aa.

Martin House 929.00mMD, (928.94mTVD, -655.54mSS.)

930-940 Ss crm - lt gy, slt - vf gr, sub ang, w srt, qtzs, calc & cly cmt, glau, slty, slly shy ip, no vis por, no show / Sh aa.

940-950 SS crm - lt gy, slt - vf gr, sub ang, w srt, qtzs, calc & cly cmt, glau, slly shy ip, no vis por, no show / intbd Sh aa.

950-960 Sh med - dk gy, blky, sbfis ip, slly micmica, t



...m sltst trays / mbdd SS aa.

960-966.3 SS predly crm, qtzs, f gred, w srtd, sub ang calc & kao mtx, tr glau, tr pyr nods, no vis por, no shows. Occ vugs infilled with fros calcite.

Imperial 966.30mMD,
(966.23mTVD, -692.83mSS.)

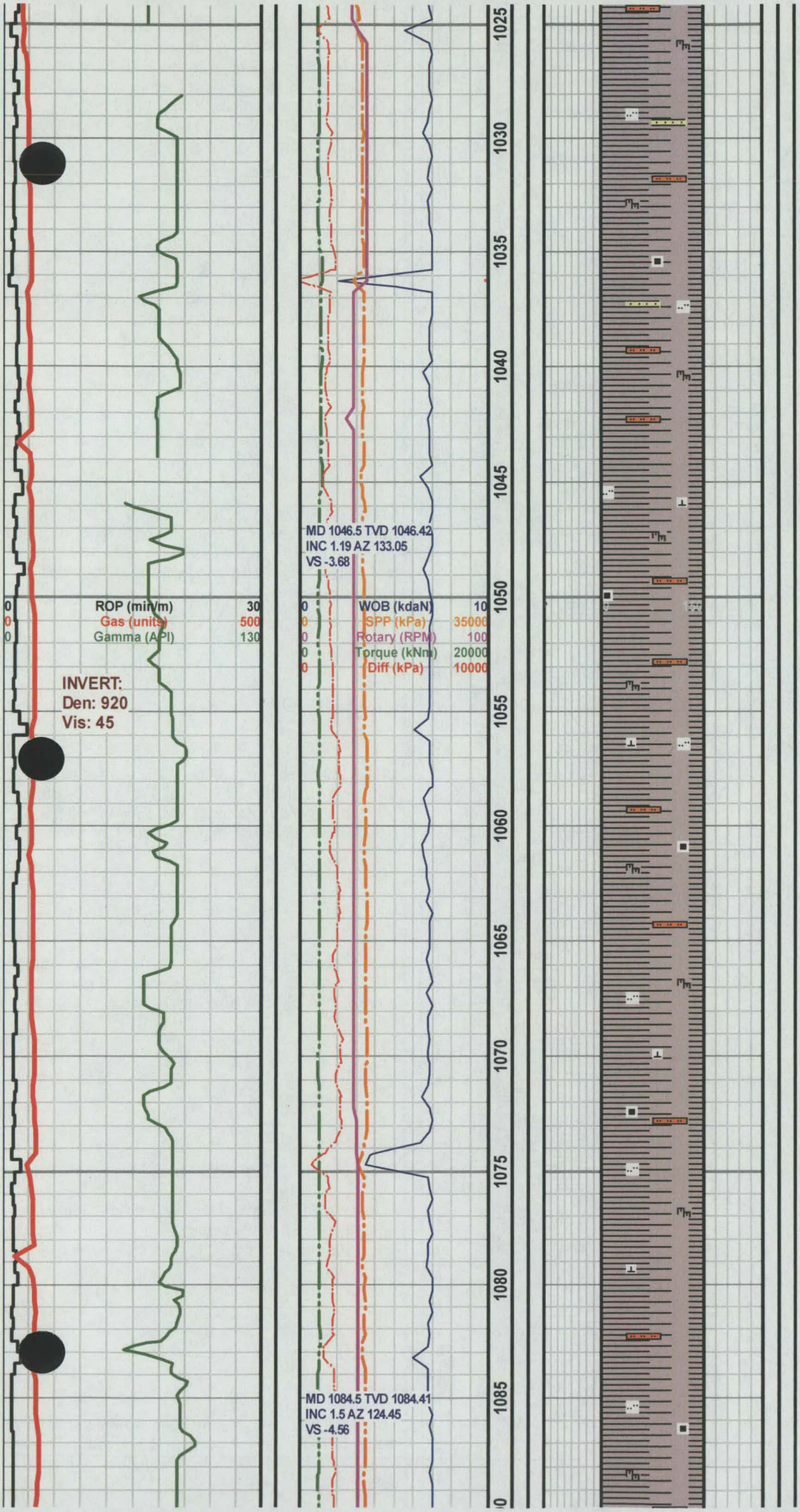
966.3-980 SH predly lt - m gy, gy gn ip, blky, slly calc slly micmica, tr slty, tr sdy ip / mnr SS strgs aa.

980-990 SH predly lt - m gy, gy gn ip, blky, slly calc, slly micmica, tr slty, tr sdy ip / mnr SS strgs aa.

990-1000 SH lt - m gy gn, m gy ip, blky, sl wxy tex ip, tr calc, slly micmica, sft - modly frm, tr slty, tr sdy ip / mnr SS strgs, lt gy, gy gn ip, vf - f gr, sub ang, modly w srtd, calc & cly cmt, slly slty, shy ip, tr glau, no vis po no shows.

1000-1010 SH lt - m gy gn, m gy ip, blky, sl wxy tex ip p tr calc, slly micmica, sft - modly frm, tr slty, tr sdy ip mnr SS strgs aa.

1010-1020 SH lt - m gy gn, m gy ip, blky, sl wxy tex ip p tr calc, slly micmica, sft - modly frm, tr slty, tr sdy ip mnr SS strgs aa, tr sidic, tr pyric / Sltst strgs gy shy, slly calcs, occly grds to vf gred ss ip, tt, shows.



grdg - mnr SS strgs aa, tr sidic, tr pyric / Sltst strgs lt m gy, shy, slly calcs, tt, no shows.

1030-1040 SH: lt - m gy, tr gy gn, blky - plty, tr fiss, satiny tex ip, tr calc, tr locly modly carbs, pt micmica frm - pt sft, tr slty, pt grdg - SLTST strgs, lt gy - off wh, slly s&p, shaley ip, slly calcs, cly cmt, tr carbs mat, grdg sdy, tt, no shows.

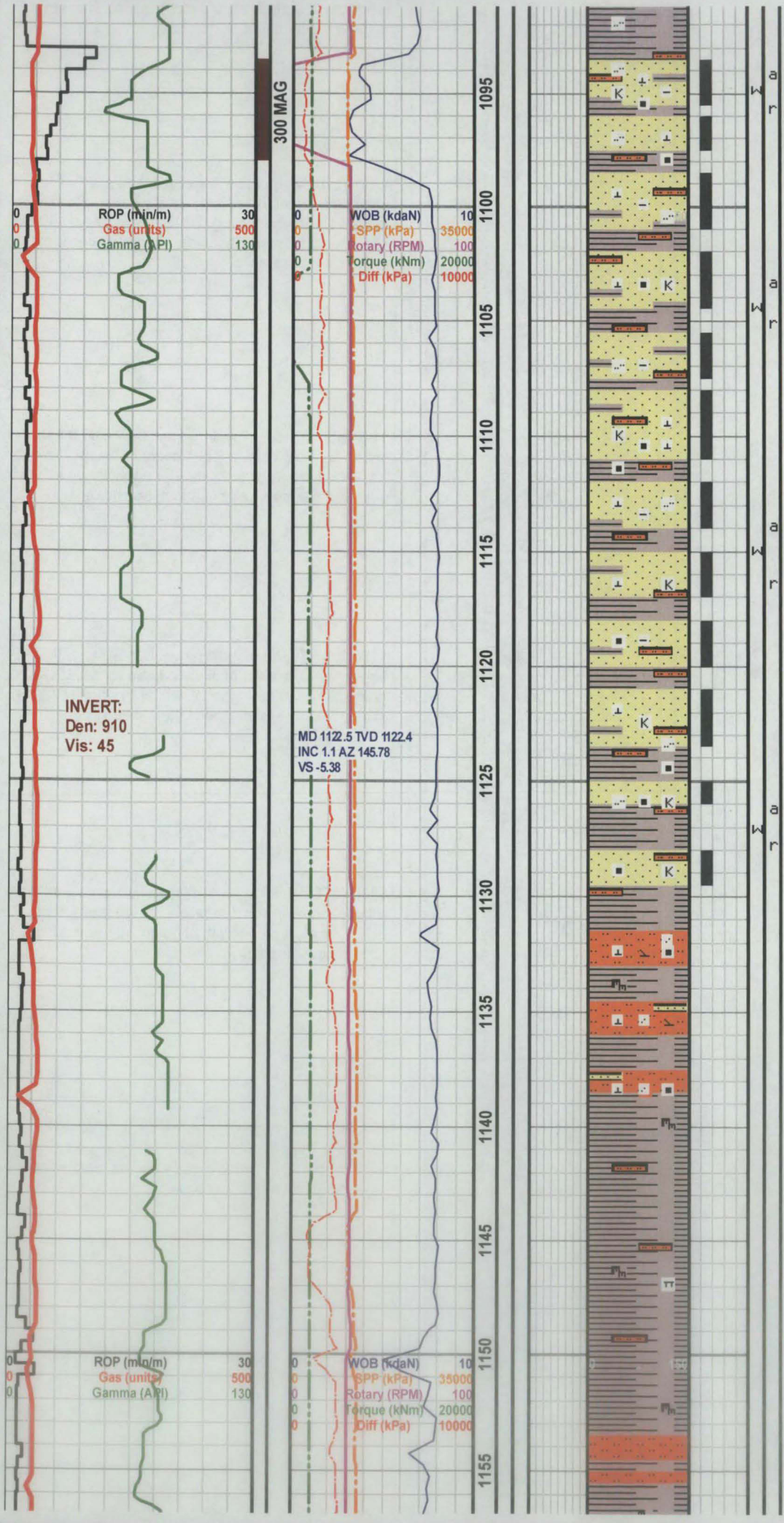
1040-1050 SH: lt - m gy, tr gy gn, blky - plty, tr fiss, satiny tex ip, tr calc, tr locly modly carbs, pt micmica frm - pt sft, tr slty, tr grdg - SLTST strgs, lt gy - off wh, slly s&p, shaley ip, slly calcs, tt, no shows.

1050-1060 SH: lt - m gy, tr gy gn, blky - plty, tr fiss, satiny tex ip, tr calc, pt micmica, frm - pt sft, tr slty, tr grdg - SLTST strgs, lt gy - off wh, pt gy gn, slly s&p, shaley ip, slly - modly calcs, tt, no shows.

1060-1070 SH: lt - m gy, tr gy gn, blky - plty, pt micmic tr locly modly carbs, frm brittle - pt sft, tr slty, mnr SLTST strgs, lt gy - off wh, pt gy gn, slly s&p, shaley i slly - modly calcs, tt, no shows.

1070-1080 SH: lt - m gy, tr gy gn, blky - plty, pt micmic frm brittle - pt sft, tr locly modly carbs, tr slty, mnr SLTST strgs, lt gy - off wh, pt gy gn, slly s&p, shaley i slly - modly calcs, tt, no shows.

1080-1090 SH: lt - m gy, blky - plty, tr fiss, pt micmica frm brittle - tr sft, waxy satiny tex, tr locly modly carb mnr SLTST strgs, tt, no shows.



1090-1100 SH: lt - m gy, tr gy gn, blky - plty, pt micmica, frm brittle - pt sft, tr carbs mat, int bdd wi SS lt gy - off wh, pt gy gn, slly s&p, v f - tr l f, sb ang - sb r tr carbs mat, silty, cly cmt, slly - modly calcs, pt grdg SLTST, tt, no shows.

1100-1110 SH: lt - m gy, tr gy gn, blky - plty, pt micmic frm brittle - pt sft, int bdd wi SS, lt gy - off wh, pt gy gn silty, cly cmt, slly - modly calcs, pt grdg - SLTST, tt, no shows.

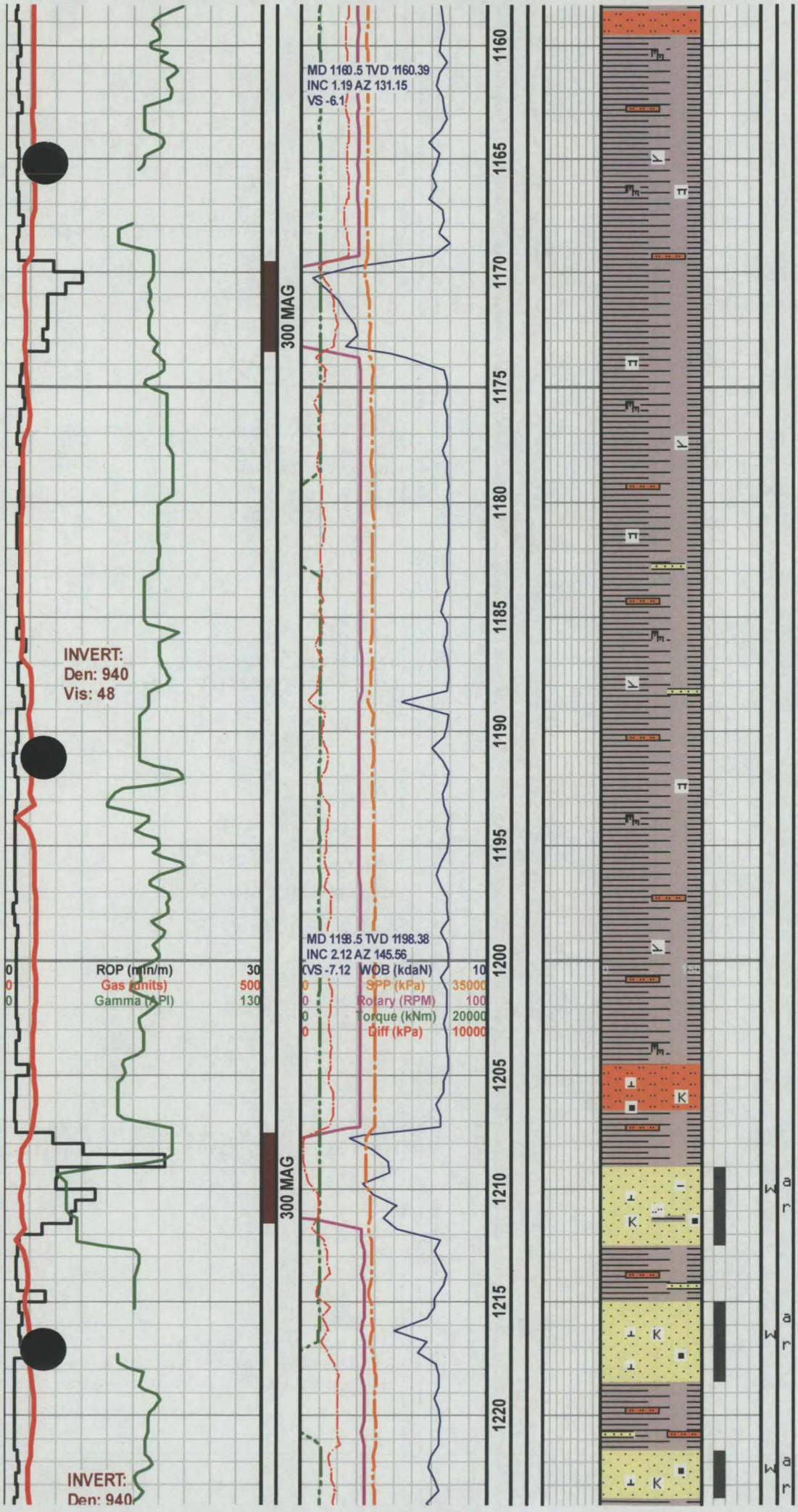
1110-1120 SH: lt - m gy, tr gy gn, blky - plty, pt micmic frm brittle - pt sft, tr carbs mat int bdd wi SS, lt gy - off wh, pt gy gn, slly s&p, v f - tr l f, sb ang - sb rd, tr carb mat, silty, cly cmt, slly - modly calcs, tt, pt grdg - SLTST, no shows.

1120-1130 SH: lt - m gy, blky - plty, pt micmica, brittle - pt sft, int bdd wi SS, lt gy - off wh, slly s&p, v f tr l f, sb ang - sb rd, tr carbs mat, silty, cly cmt, slly - modly calcs, dense, tt, pt grdg - SLTST, no shows.

1130-1140 SH: lt - m gy, blky - plty, tr fiss, pt micmica, SLTST, lt gy - off wh, pt gy gn, slly s&p, tr glauc, tr sid tr carbs mat, cly cmt, slly - modly calcs, tr sdy, dense tt,

1140-1150 SH: lt - m gy, blky - plty, tr fiss, pt micmica, frm brittle - tr sft, waxy satiny tex, tr locly modly carb mnr SLTST strgs, tr marly, tt, no shows.

1150-1160 SH: lt - m gy, blky - plty, tr fiss, pt micmica, marly, SLTST, lt gy - off wh, pt gy gn, slly s&p, tr glauc tr sidic, tr lithic, cly cmt, slly - modly calcs, tr sdy, dense, tt,



1160-1170 SH: lt - m gy, blky - plty, tr fiss, pt micmica, grdg marly, tr red gy fer stgrs, SLTST, lt gy - off wh, sll s&p, tr sidic, tr lithic, cly cmt, slly - modly calcs, tr sd dense, tt,

1170-1180 SH: lt - m gy, blky - plty, tr fiss, pt micmica, grdg marly, tr red gy fer stgrs, SLTST lams.

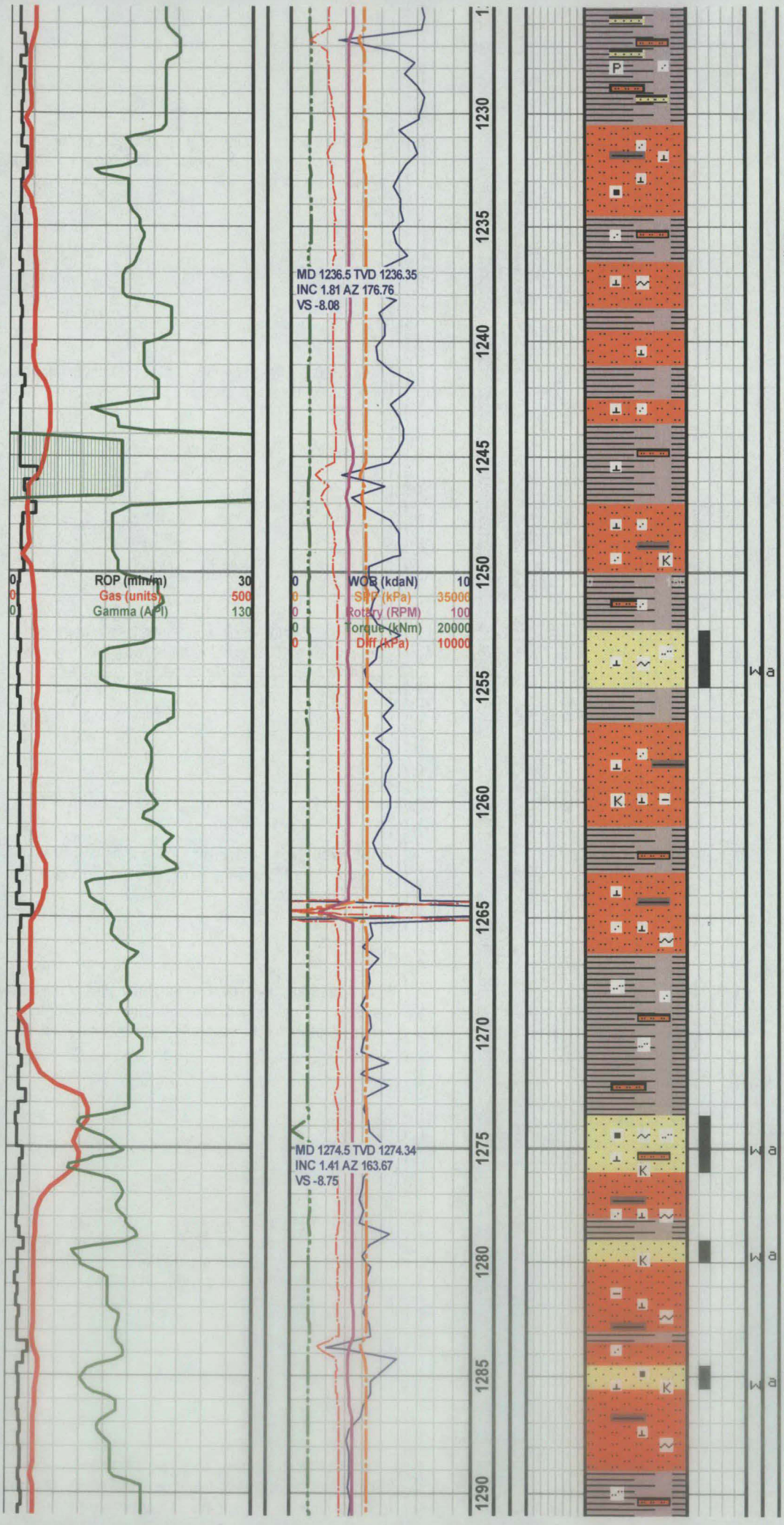
1180-1190 SH: lt - m gy, blky - plty, tr fiss, pt micmica, frm brittle - tr sft, tr grdg marly, tr red gy fer stgrs, wax satiny tex, mnr SLTST Ss strgs.

1190-1200 SH: lt - m gy, blky - plty, tr fiss, pt micmica, frm brittle - tr sft, tr grdg marly, tr red gy fer stgrs, mnr SLTST Ss strgs.

1200-1210 SH: lt - m gy, blky, sb blky, plty, pt micmica wi SLTST, lt gy - off wh, pt gy gn, slly s&p, part glauc, cly cmt, slly - modly calcs, tr grdg sdy, dense, tt,

1210-1220 SH: lt - m gy, blky - plty, pt micmica, frm brittle - pt sft, int bdd wi SS, lt gy - off wh, slly s&p, sil v f - tr l f, predly sb ang, tr carbs mat, cly cmt, slly - modly calcs, dense, tt, pt grdg - SLTST, no shows.

1220-1230 SH: lt - m gy, blky - plty, pt micmica, frm brittle - pt sft, int bdd wi SS, lt gy - off wh, slly s&p, sil v f - tr l f, predly sb ang, cly cmt, slly - modly calcs, lc



1230-1240 SH: lt - m gy, gy gn ip, slly micmica, occ m carb mat, p tr pyric / intbd SLTST lt gy, cly & calc cmt sdy ip, shy, tt, no shows.

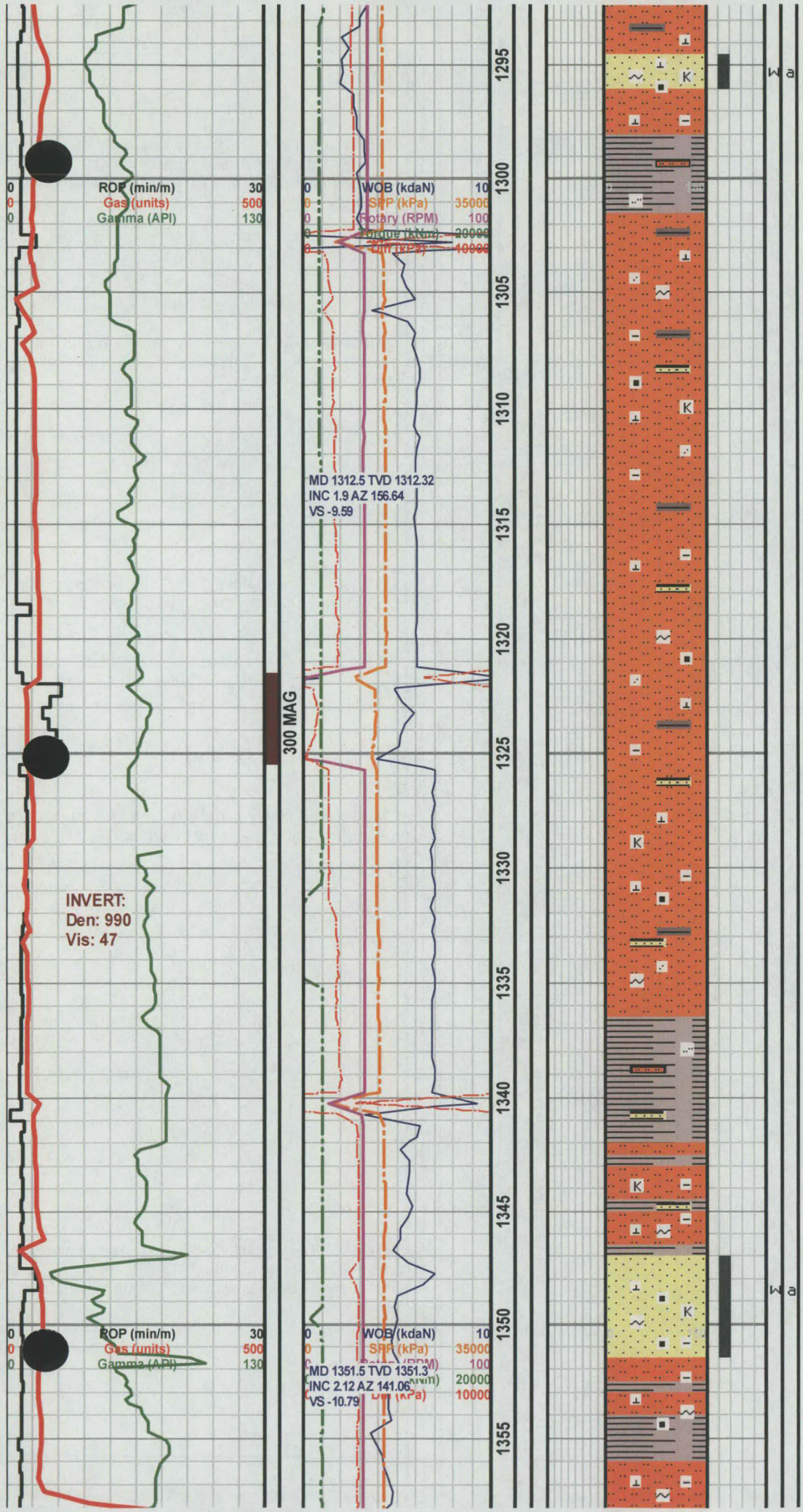
1240-1250 SH: lt - m gy, gy gn ip, slly micmica, occ m carb mat, p tr pyric / intbd SLTST lt gy, cly & calc cmt sdy ip, shy, tt, no shows.

1250-1260 SLTST lt gy, calc & cly mtx, sdy, tr glau, occly grds to vf gr SS in part, tt, no shows / SH aa.

1260-1270 SLTST lt gy, calc & cly mtx, sdy, tr glau, occly grds to vf gr SS in part, tt, no shows / SH aa.

1270-1280 SS lt gy, vf - f gr, sub ang, w srtd, calc & cl cmt, tr carb mat, slty, no vis por, no show / SLTST & S aa.

1280-1290 SLTST lt gy, calc & cly mtx, sdy, tr g occly grds to vf gr SS in part, tt, no shows / SH aa.



1290-1300 SLTST lt gy, calc & cly mtx, sdy, tr glau, occly grds to vf gr SS in part, tt, no shows / SH aa.

1300-1310 SLTST lt gy, calc & cly mtx, sdy, tr glau, occly grds to vf gr SS in part, occly shy, tt, no shows intbd SH lt - med gy, lt gy gn ip, blky, slty, slly micmic p tr carb mat.

1310-1320 SLTST lt gy, calc & cly mtx, sdy, tr glau, occly grds to vf gr SS in part, occly shy, tt, no shows mnr intbd SH lt - med gy, lt gy gn ip, blky, slty, slly micmica, p tr carb mat.

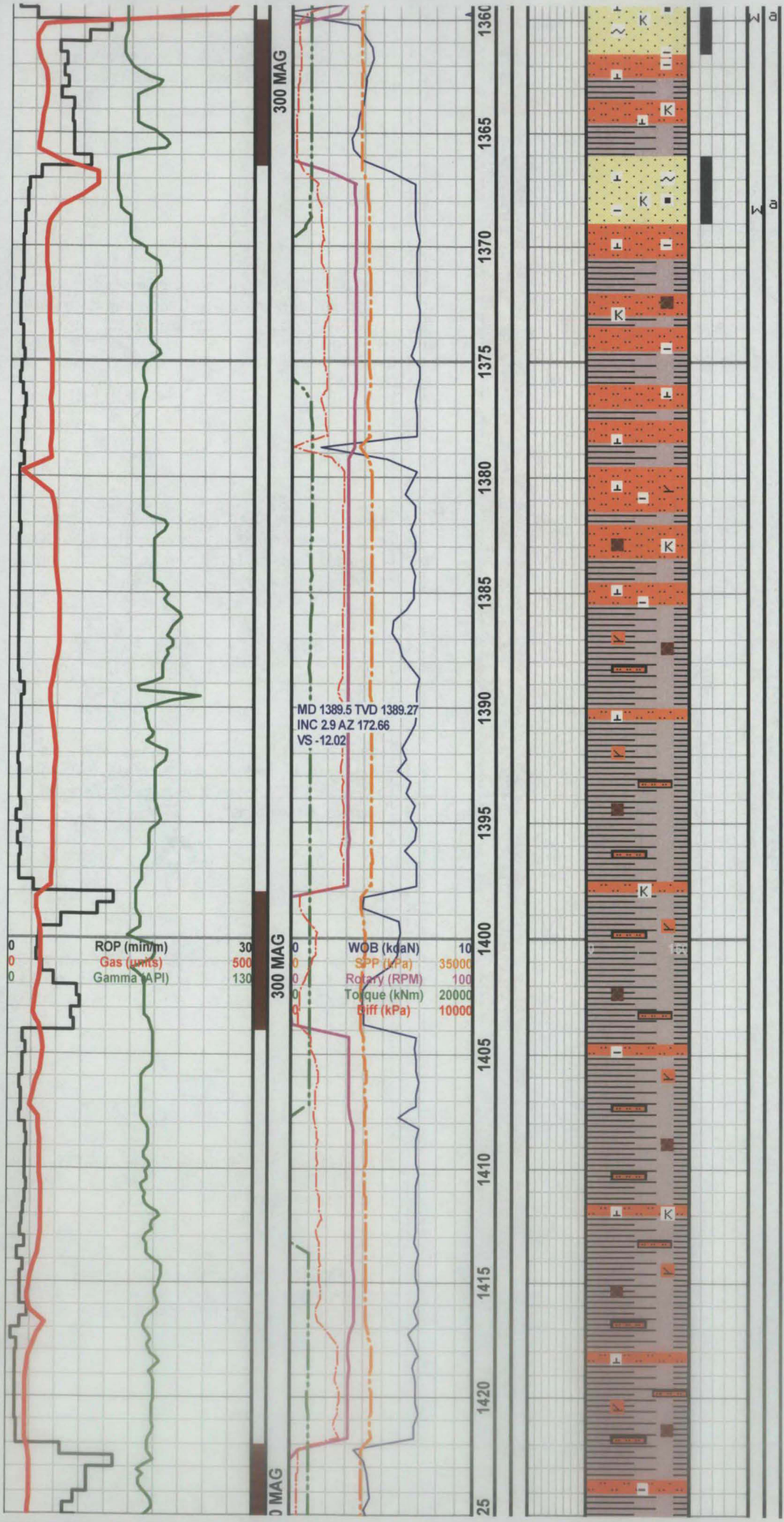
1320-1330 SLTST lt gy, calc & cly mtx, sdy, tr glau, occly grds to vf gr SS in part, occly shy, tt, no shows intbd mnr SH lt - med gy, lt gy gn ip, blky, slty, slly micmica, p tr carb mat.

1330-1340 SLTST lt - m gy, calc & cly cmt, slly sdy ip shy, tr dk lithic grs, tr glau, grds to slty sh ip, no vis por, no show / intbd Sh aa.

1340-1347 SLTST lt - m gy, calc & cly cmt, slly sdy ip shy, tr dk lithic grs, tr glau, grds to slty sh ip, no vis por, no show / intbd Sh aa.

1347-1358 SS crm - v lt gy, vf gr, sub ang, w srt, calc cly cmt, slty, tr dk lithic grs, p tr glau, grds to sltst ip, carb specs, no vis por, no show / Sltst & Sh aa.

1358-1365 SS crm - v lt gy, vf gr, sub ang, w srt, calc



1365-1370 SLTST lt - m gy, slly calc & cly cmt, occly slly sdy, tr glauic, tr dk lithic grs, occly shy, tr pyric, t no shows / intbd SS crm - v lt gy, vf gr, sub ang, w srt calc & cly cmt, ns.

1370-1380 SLTST lt - m gy, slly calc & cly cmt, occly slly sdy, tr glauic, tr dk lithic grs, occly shy, tr pyric, t no shows / intbd SH aa, tr sid nods.

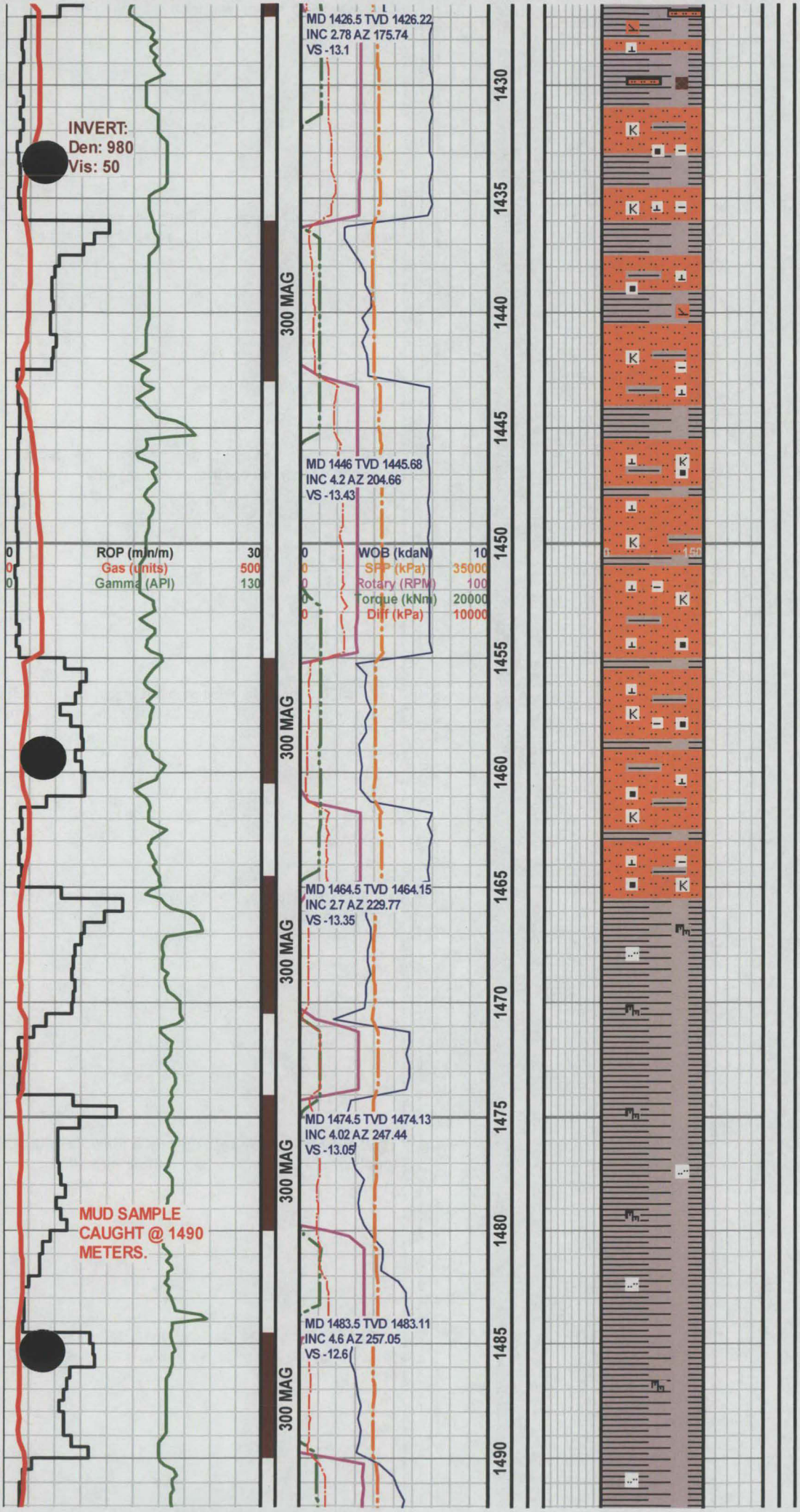
1380-1390 SH predly m gy, blky, sub fis in pt, micmic tr slty, firm, occly slty, tr sid / SLTST strgs aa.

1390-1400 SH predly m gy, blky, sub fis in pt, micmic tr slty, firm, occly slty, tr sid / incrg SLTST aa.

1400-1410 SH predly m gy, blky, sub fis in pt, micmic tr slty, firm, sidic ip, occly slty, tr sid nods / SLTST aa

1410-1420 SH m gy, blky, sbfis in pt, micmica, slty, p carb specs, slly sidic / intbd SLTST lt - m gy, cly & ca mtx, occly v shy, mnr carb mat, grd sto slty sh ip, tt, r show.

1420-1430p tr carb specs, slly sidic / intbd SLTST lt -



1430-1440 SLTST lt - m gy, cly & calc mtx, occly v sh grd sto slty sh ip, tt, no show / SH m gy, blky, sbfis in pt, sl wxy tex ip, micmica, slty, p tr carb specs, slly sidic.

1440-1450 SLTST lt - m gy, cly & calc mtx, occly v sh grd sto slty sh ip, tt, no show / intbd SH m gy, blky, sbfis in pt, sl wxy tex ip, micmica, slty, p tr carb spec

1450-1465 SLTST lt - m gy, cly & calc mtx, occly v sh grd sto slty sh ip, tt, no show / intbdSH m gy, blky, sbf in pt, micmica, slty, p tr carb specs.

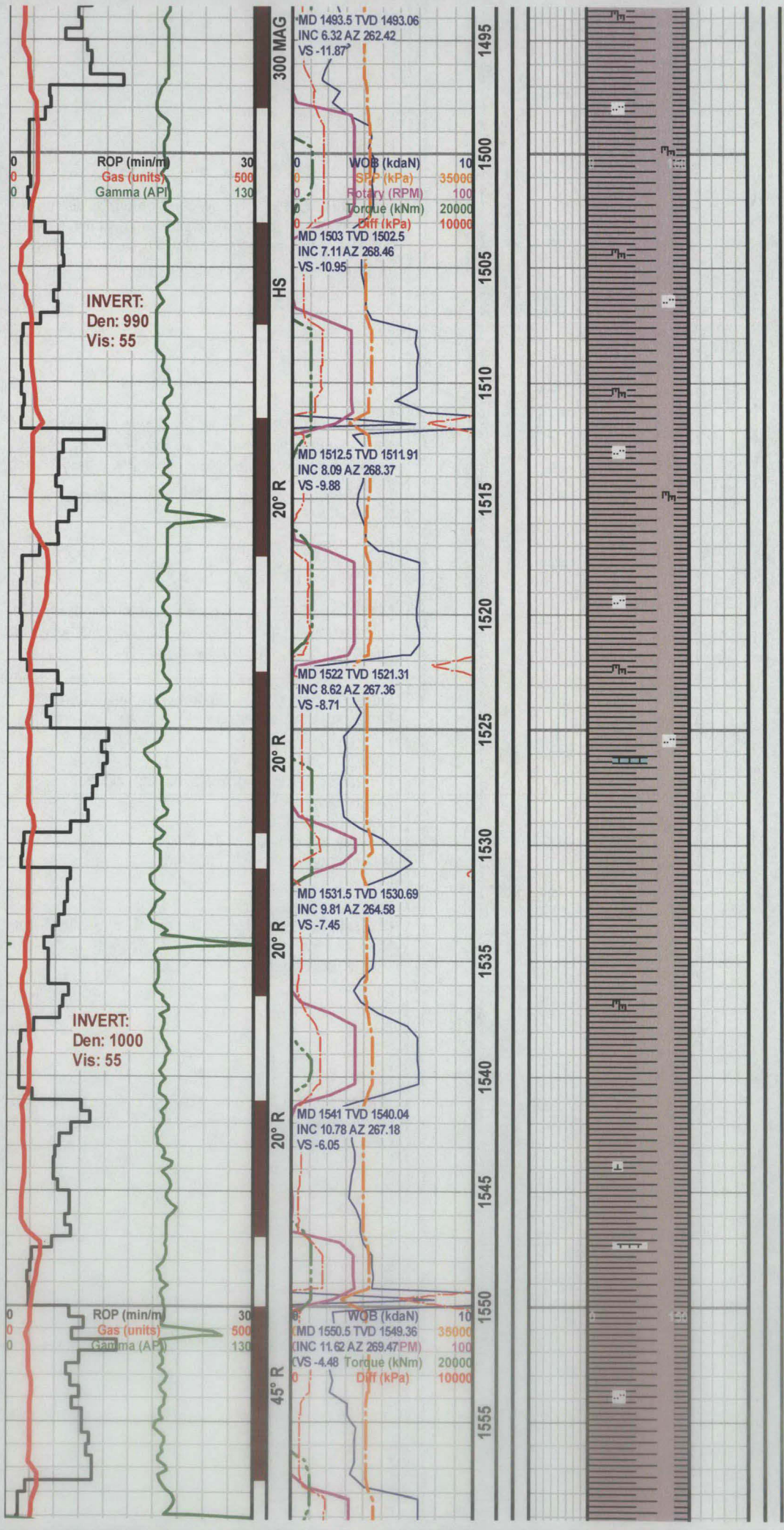
KICK-OFF POINT @ 1455.00mMD, (1454.66mTVD, -1181.26mSS.) (5°/30m)

DIRECTIONAL:
Projected vertical section azimuth: 299.99°
Motor Bend: 1.83°
Magnetic Declination: 22.996°
Survey tool offset: 18.59m
Gamma offset: 13.34m

1465-1470 SH: med gy, pt dkr gy, sb blky - plty & com fiss, pt micmica, locly pt silty, sft - pt firm, waxy satin tex, v mnr Silty lams.

1470-1480 SH: med gy - pt dkr gy, plty, sb fis fiss, sb blky, pt micmica, waxy satiny tex, rr carbs mat, tr silt sft - pt firm, v rr grdg silty.

1480-1490 SH: med gy - pt dkr gy, sb fis - fis, pt plty, s blky, pt micmica, rr carbs mat, tr silty, sft - pt firm, v r grdg silty.



micmica, waxy sdy lex, d silty, slt - pt firm.

1500-1510 SH: med gy - pt dkr gy, sb fis - fis, pt plty, p micmica, rr carbs mat, tr silty, sft - pt firm, v rr grdg silty.

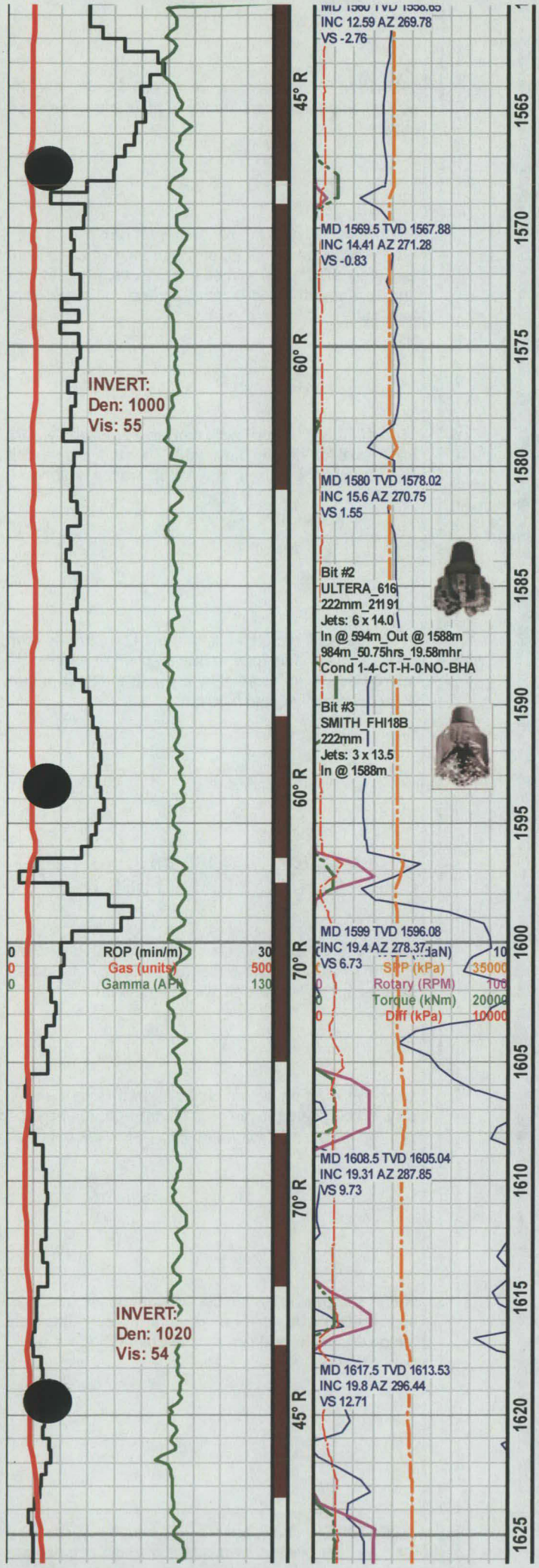
1510-1520 SH: med gy - pt dkr gy, sb fis - fis, pt plty, p micmica, tr silty, sft - pt firm, v rr grdg silty.

1520-1530 SH: predly med gy, sbfis, firm, slly micmic slly calc, tr silty in pt / tr mnr Ls strgs tan, mudst, slly arg, dns, no show.

1530-1540 SH: predly med gy, plty & sbfis, blky in pt, modly firm, slly micmica, slly calc, tr silty in pt.

1540-1550 SH: predly med gy, plty & sbfis, blky in pt, modly firm, slly micmica, slly calc, tr silty in pt.

1550-1560 SH: predly med gy, plty & sbfis, blky in pt, modly firm, slly micmica, slly calc, tr silty in pt. Mr strgs, gy brn, calcs.



1560-1570 SH: predly med gy, plty & sbfis, blky in pt, modly firm, slly micmica, slly calc, tr silty in pt.

1570-1580 SH: predly med gy, plty & sbfis, blky in pt, modly firm, slly micmica, slly calc, tr silty in pt.

1580-1590 SH: predly med gy, tr mnr dk gy, plty & sbf blky in pt, modly firm, slly micmica, slly calc, tr silty pt.

1590-1600 SH: predly med gy, tr mnr dk gy, plty & sbf blky in pt, modly firm, slly micmica, slly calc, tr silty pt.

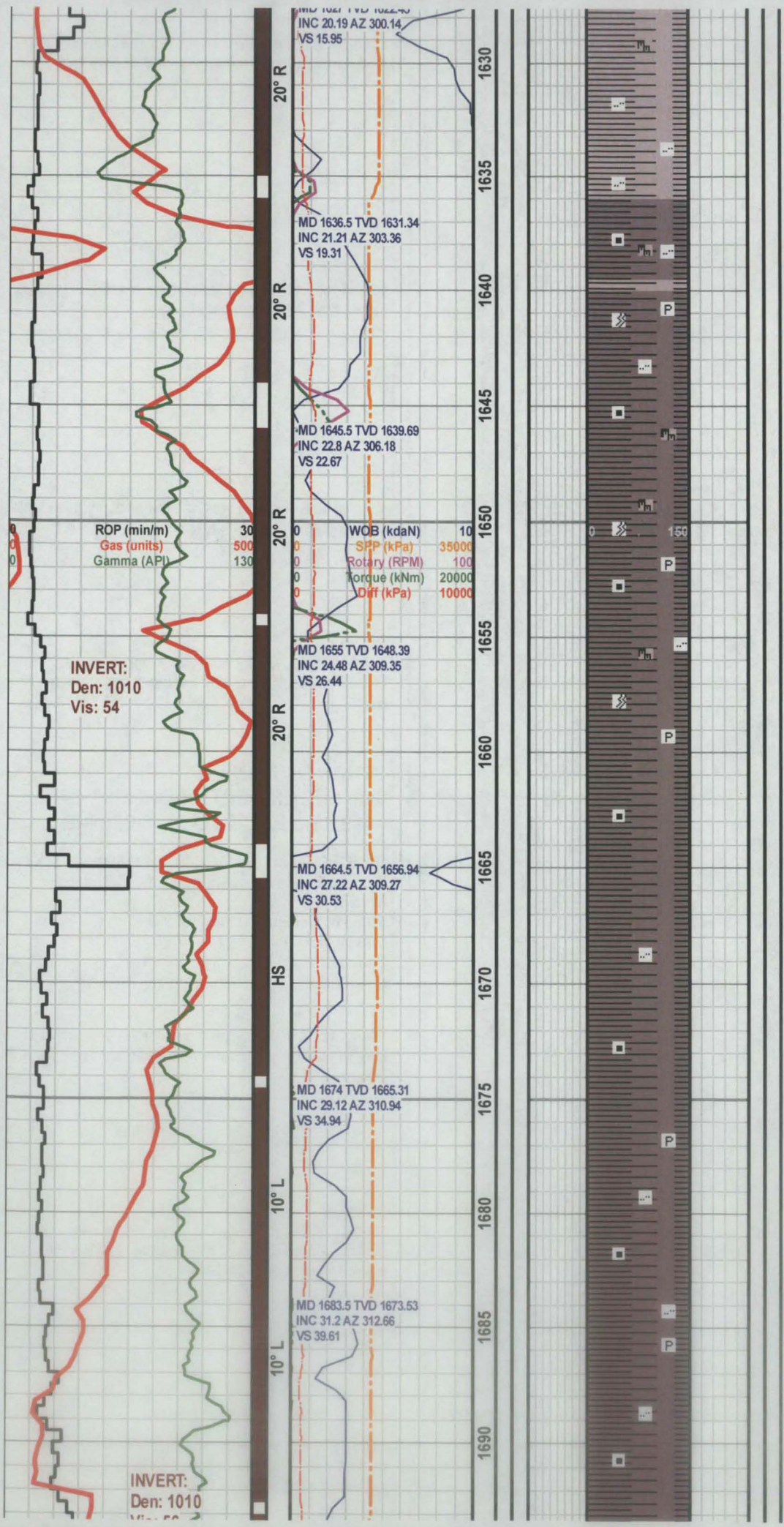
STRAP OUT ON BIT TRIP:
9.36 METER DEPTH CORRECTION
1599.98m BACK TO 1590.62mMD

DIRECTIONAL:	In @ 1588m
Projected vertical section azimuth.	299.99°
Motor Bend:	1.83°
Magnetic Declination	22.996°
Survey tool offset:	18.37m
Gamma offset:	13.29m

1600-1610 SH: predly med gy, dk gy incrg, plty & sbfis blky in pt, modly firm, slly micmica, slly calc, p tr silt in pt.

1610-1620 SH: med - occly dk gy, plty & sbifs, blky in pt, firm, slly micmica, p tr silty in pt, tr mnr micro frac tr pyr, tr mnr lt gy Clyst strgs.

1620-1630 SH: med - occly dk gy, plty & sbifs, blky in pt, firm, slly micmica, p tr silty in pt, tr micro fracs wi calcite healing vis, mnr Clyst.



1630-1635 SH: med - occly dk gy, plty & sbifs, blky in pt, firm, slly micmica, p tr silty in pt, tr micro fracs- pt silty.

1635-1640 SH: brn blk - blk, mnr med brn, rr med gy, predly carbs, micmica ip, blky - sb blky - fiss ip, firm britle - pt sft, tr calcite filled micro fracs, tr pyritized, silty tex ip, tr silty micro lams, no flor, v slow wk pale halo cut.

1640-1650 SH: brn blk - blk, mnr med brn, predly carb blky - sb blky - fiss ip, firm britle - pt sft, tr calcite fille micro fracs, tr pyritized, silty tex ip, no flor, v slow wk pale halo cut.

1650-1665 SH: brn blk - blk, mnr med brn, predly carb blky - sb blky - fiss ip, firm britle - pt sft, tr calcite fille micro fracs, tr pyritized, silty tex ip, tr silty micro lam no flor, v slow wk pale halo cut.

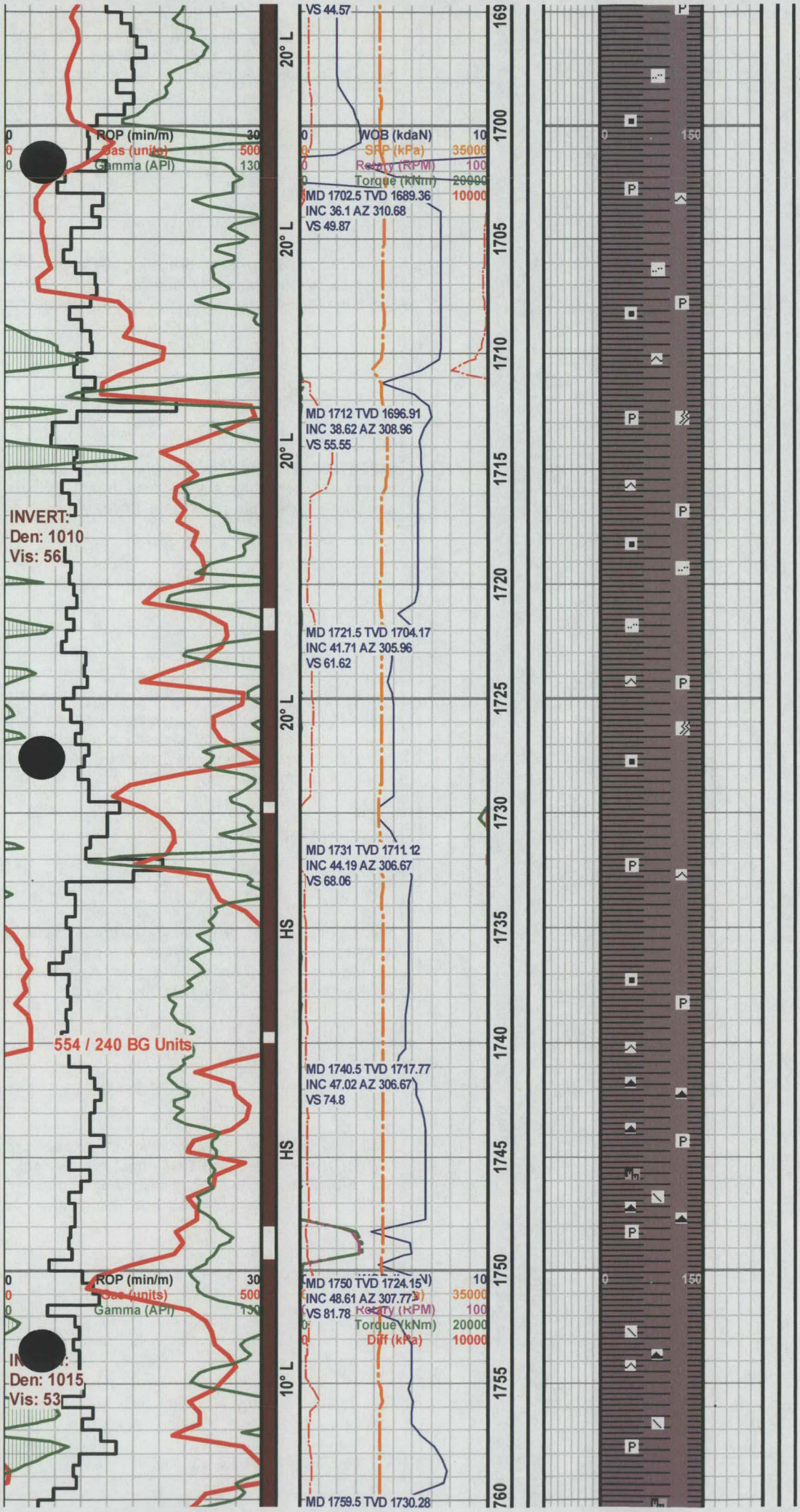
Upper Canol 1665.00mMD, (1657.38mTVD, -1383.98mSS.)

1665-1670 SH: brn blk - blk, carbs, blky, sb blky - fiss ip, firm - pt sft, tr micro fracs, loc pp dis pyr, tr nod py silty tex ip, no flor, v slow wk pale halo cut.

1670-1680 SH: dk gy, brn blk - blk, mod - v carbs ip, blky, sb blky - fiss ip, firm - pt sft, tr fracs, loc pp dis pyr, tr nod pyr, silty tex ip, no flor, v slow wk pale halo cut.

1680-1690 SH: dk gy, brn blk - blk, mod - v carbs ip, blky, sb blky - fiss ip, firm - pt sft, tr fracs, rr calcs ptg loc pp dis pyr, tr nod pyr, silty tex ip, no flor, v slow w pale halo cut.

1690-1700 SH: dk gy, brn blk - blk, mod - v carbs ip, blky, sb blky - fiss ip, firm - pt sft, tr fracs, rr calcs ptg



Trip out of hole @ 1702m
to Dial up Motor from 1.83° to 2.12°

Lower Canol 1700.5mMD, (1687.78mTVD, -1414.38mSS.)

1700-1710 SH: dk gy, brn blk - blk, mod - v carbs ip, blky - sb blky, tr fiss, firm - sft, tr hd, sil ip, rr calcs ptgs, loc pp dis pyr,more com nod pyr, tr pyr filling fra silty ip, no flor, v slow wk pale halo cut.

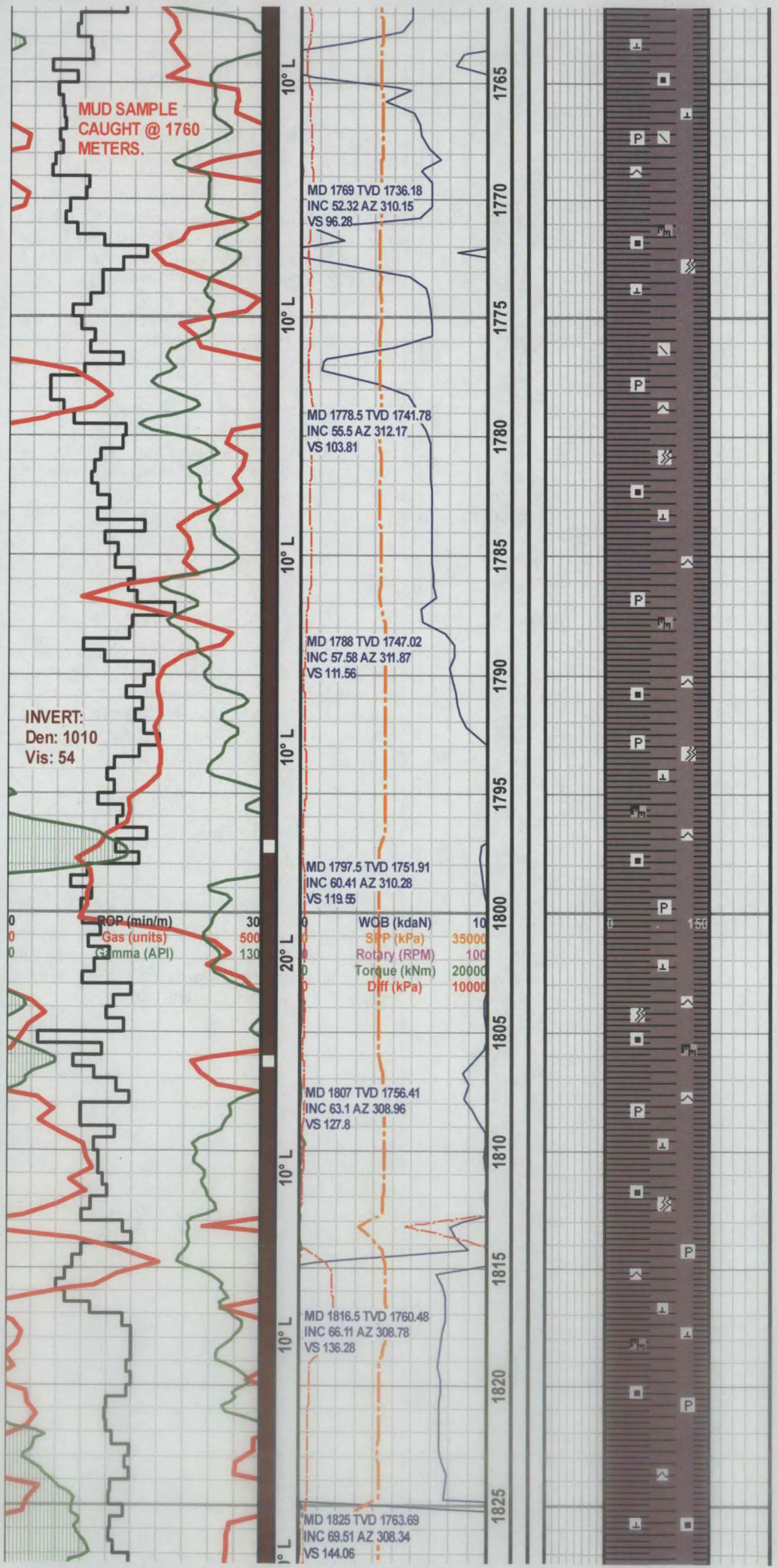
1710-1720 SH: dk gy, brn blk - blk, mod - v carbs ip, blky - sb blky, tr fiss, firm - sft, tr hd, sil ip, rr calcs ptgs, more com nod pyr, tr pyr filling frac, loc pp dis pyr, tr micro lams vis, no flor, v slow wk pale halo cut

1720-1730 SH: v dk gy, brn blk - blk, mod - v carbs ip, incr in sil cmt, blky - sb blky, tr fiss, firm - sft, pt hd ar chips, rr calcs ptgs, tr dk brn cht frags, tr nod pyr, tr pyritized banding, v rr calcite healing frac, no flor, v slow wk pale halo cut.

1730-1740 SH: v dk gy, brn blk - blk, mod - v carbs ip, sil cmt, blky - sb blky, tr fiss, firm - sft, pt hd ang chip tr calcs ptgs, tr nod pyr, tr pyritized, rr calcite healing frac, no flor, v slow wk pale halo cut.

1740-1750 SH: dk gy, dk gy brn, blky, sbfis ip, slly micmica, carb mat, brit, firm - hd (sils), chty / dk gy cl frags occly speckled, pyric / pyr nods / mnr gy brn bi sh, sh cuts / solvent, pale yel cloudy cut.

1750-1760 SH: abnt brn - gy brn, blky, bits / dk gy sils sh aa / shows aa.



1760-1770 SH: dk gy, dk gy brn, blky, slly carb, sbfis ip, hd, calcs, occly sils, slly micmica, tr pyric / Sh gy brn, blky, sft, bits, slly calcs, pale yel cloudy cut.

1770-1780 SH: dk gy, dk gy brn, blky, slly carb, sbfis ip, hd, calcs, occly sils, slly micmica, tr pyric / Sh gy brn, blky, sft, bits, slly calcs, pale cloudy yel cut.

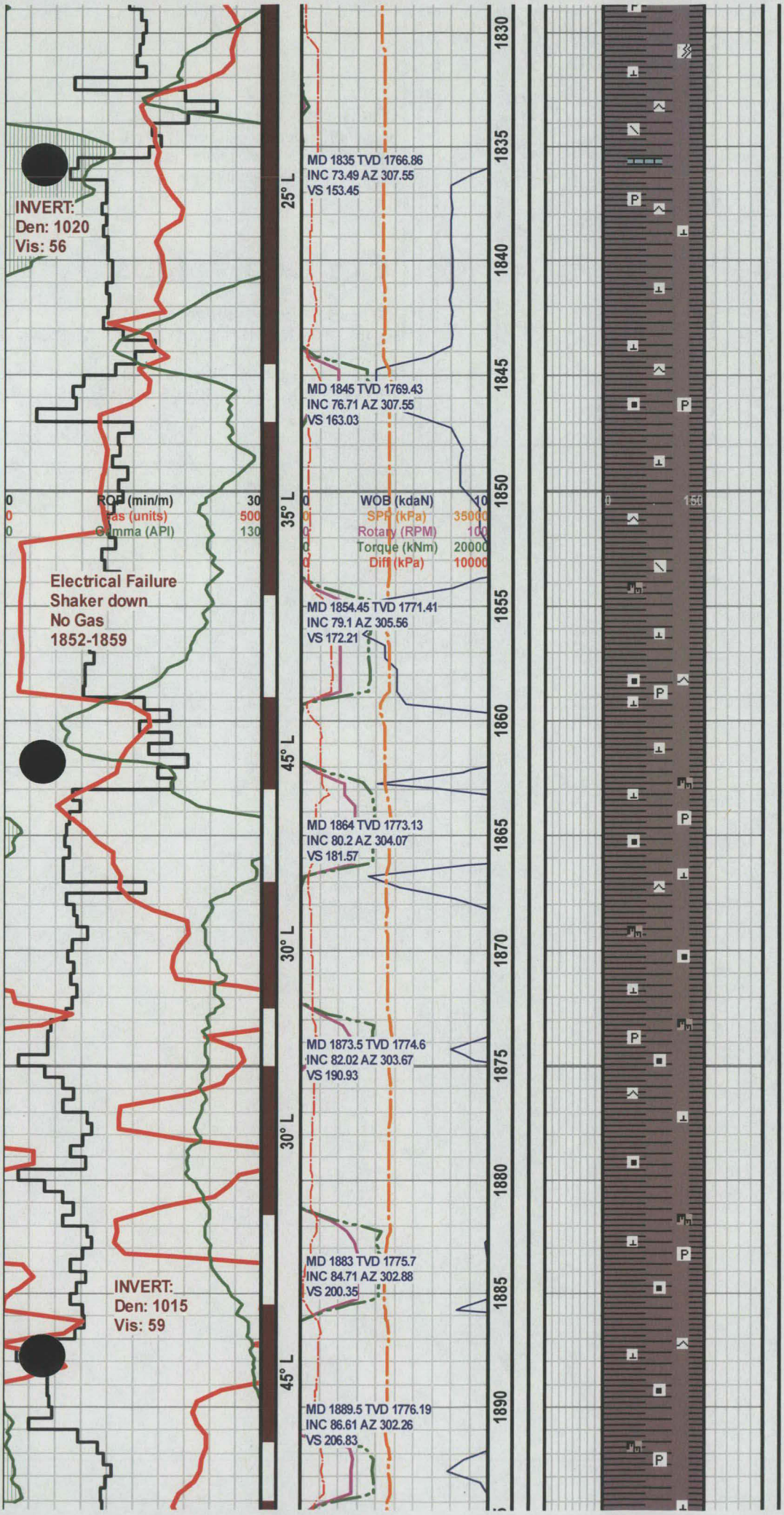
1780-1790 SH: dk gy, dk gy brn, blky, carbs, sbfis ip, hd, pt calcs, occly sils, slly micmica, tr pyric / Sh gy brn, blky, sft, bits, slly calcs, pale cloudy yel cut.

1790-1800 SH: dk gy, dk gy brn, blky, tr carb, sbfis ip, hd, pt calcs, occly sils, slly micmica, tr pyric, [illegible] filling micro frac, tr nod pyr, pt Sh gy brn, blky [illegible] bit pale cldy yel cut.

1800-1810 SH: dk gy, dk gy brn, blky, tr carb, sbfis ip, hd, pt calcs, occly sils, slly micmica, tr pyric, tr calci healing micro frac, tr nod pyr, v rr calc ptgs, int bdd ip wi Sh gy brn, blky, sft, bits, pale cldy yel cut.

1810-1820 SH: dk gy, dk gy brn, blky, tr carb, sbfis ip, hd, incr in calcs reac, pt sils, slly micmica, occ calc ptgs, tr pyric, tr calcite healing micro frac, tr nod pyr, int bdd ip wi Sh gy brn, blky, sft, bits, pale cldy yel cu

1820-1830 SH: v dk gy, blky, slly carb, firm - hd (sils), com calc, slly micmica, tr pyric / pyr nods, tr micro fracs infilled with calcite, slow pale yel cloudy cut. With occ SH gy brn, blky, sft, bits, show aa.



1830-1840 SH: v dk gy, blky, slly carb, firm - hd (sils), com calc, slly micmica, tr lamd pyric / tr pyr nods, tr micro fracs infilled with calcite, slow pale yel cloudy cut. With occ SH gy brn, blky, sft, bits, show aa. Tr Ls lams mot lt brn, mdst - wkest, slly arg, tr pyric, dns, n shows.

1840-1850 SH: dk gy - blk, blky, carb, firm - hd (sils), com calc, slly micmica, tr pyr nods, tr micro fracs infilled with calcite, slow pale yel cloudy cut. With oc SH gy brn, blky, sft, bits, show aa.

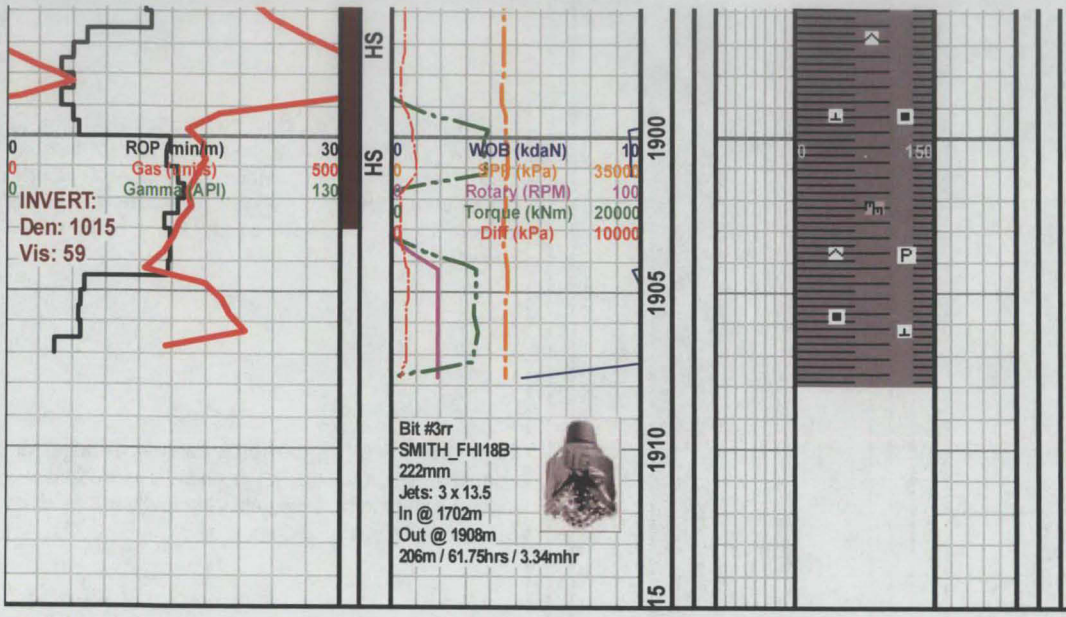
1850-1860 SH: dk gy - blk, blky, carb, com brit, firm - hd, sils & calc, slly micmica, mnr pyr nods & tr lamd pyr, slow pale yel cloudy cut. With occ SH gy brn, blk sft, bits, show aa.

1860-1870 SH: dk gy - blk, blky, carb, com brit, firm - hd, calc - slly calcs, tr non, occly pt sil, slly micmica, mnr pyr nods & tr pyric lams, wk slow pale cldy yel cut; wi occ SH gy brn, blky, sft, bits, wk slow pale clc yel cut.

1870-1880 SH: dk gy - blk, blky, carb, com brit, firm - hd, slly calc - pt calc, pt non calc, slly micmica, occl pt sil, wk slow pale cldy yel cut, mnr pyr nods & tr pyric lams; wi occ SH gy brn, blky, sft, bits, wk slow pale cldy yel cut.

1880-1890 SH: dk gy - blk, blky, carb, com brit, firm - hd, non calc - slly calcs, tr calc, occly pt sil, locly micmica, mnr pyr nods & tr pyric lams wi occ SH gy brn, blky, sft, bits, wk slow pale cldy yel cut.

1890-1900 SH: dk gy - blk, blky, carb, com brit, firm - hd, slly calcs - tr calc, occly pt sil, locly micmica, mn pyr nods & tr pyric lams, wi occ SH gy brn, blky, sft, bits, wk slow pale cldy yel cut.



1900-1908 SH: dk gy - blk, blky, carb, firm - pt hd, brittle, slly calcs - tr calc, occly pt sil, locly micmica, mnr pyr nods & tr pyric lams, wi occ SH gy b[redacted]y, sft, bits, wk slow pale cldy yel cut.

ConocoPhillips

ICP Reached on Jan 14th, 2014 02:26hrs
Ext to: 1908 mMD (1776.82mTVD, -1503.42mSS, 225.30mVS)
119.80m North 190.99m West of Well Center
Grid N/E Y/X: N 7219988.32 m, E 593815.38 m

ConocoPhillips

Scale 1:240 (5"=100') Metric
Measured Depth Log

Well Name:	Dodo Canyon E-76
Location:	UWID: 300E766510126450 ; Surf. Loc: UNIT E-76 GRID 65-10 126-45
License Number:	EL 470
Region:	Canol
Spud Date:	Dec 28, 2013 06:30hrs
Drilling Completed:	Jan 20, 2014 00:42hrs
Surface Coordinates:	Lat / Long: N 65° 5' 27.02793", W 126° 59' 58.04610"
	Grid N/E Y/X: N 7219874.660m, E 594010.010m
Bottom Hole Coordinates:	599.85m North 1069.12m West of Well Center
	Grid N/E Y/X: N 7220440.19m, E 592922.75m
Ground Elevation (m):	268.2
K.B. Elevation (m):	273.4
Logged Interval (m):	1908 To: 2890
Total Depth (m):	1910
Formation:	Lower Canol Fm
Type of Drilling Fluid:	Gel Chem (Surface) Invert VersaClean C12 (Build; Lateral)

Printed by HORIZONTAL.LOG from WellSight Systems 1-800-447-1534 www.WellSight.com

OPERATOR

Company:	ConocoPhillips Canada
Address:	2100, 401- 9 Ave SW
	Calgary, Alberta
	T2P 2H7

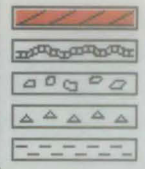
GEOLOGIST

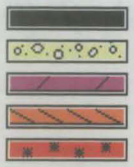
Name:	Dave Lawrence; Gerald Pasveer
Company:	Black Gold Geotechnical Services LTD.
Address:	2009 Colville Road
	Route 9
	New Haven PE

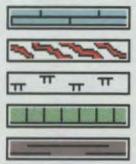
Comments

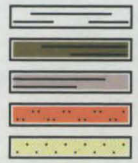
Samples from: 0m to 2910mMD (Build and Lateral), washed and vialed for Operator and NEB at 5m intervals;
AFE#: 10351817
Drilling Rig: Beaver #2
Drilling Supervisor: Richard Turgeon; Dave Opper
Gas Detection: MD Totco Gas Analyzer
Geological Services: David Lawrence Black Gold Geotechnical Services LTD.
Gerry Pasveer Coromandel Resources LTD.
Directional Services: Sperry Drilling Services
MWD Services: Extreme Engineering
Wireline Logs: Schlumberger (Vertical into Build)

ROCK TYPES





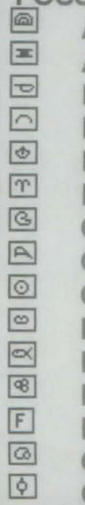


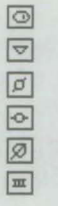




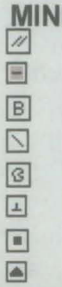
ACCESSORIES

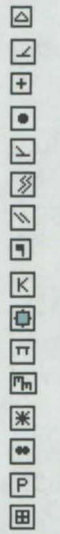
FOSSIL





MINERAL





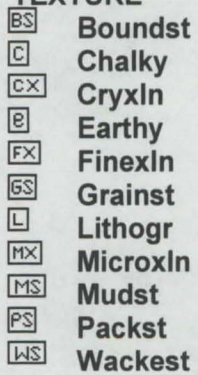


STRINGER





TEXTURE



ROP / Gas / Gam

ROP (min/m)

Gas (units)

Gamma (aapi)

INVERT:
Den: 1020
Vis: 56

Electrical Failure
Shaker down
No Gas
1852-1859

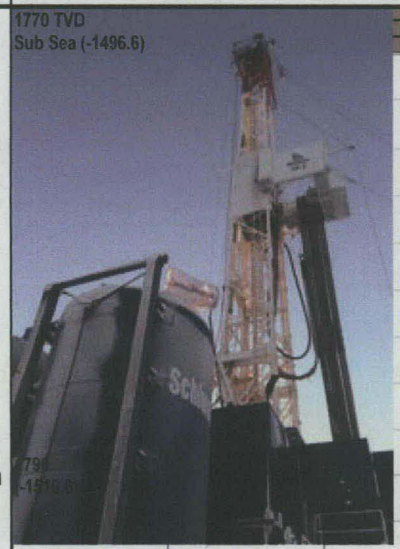
Total Gas Sc

Orientation: 25° L | 35° L | 45° L | 30° L | 30° L | 45° L

Slide / Rotate

Depth: 1835 | 1840 | 1845 | 1850 | 1855 | 1860 | 1865 | 1870 | 1875 | 1880 | 1885 | 1890

Well Bore Cross Section



1770 TVD
Sub Sea (-1496.6)

1790
(-1516.6)

1850-1860 SH: dk gy - blk, blky, carb, com brit, firm - hd, sils & calc, slly micmica, mnr pyr nods & tr lamd pyr, slow pale yel cloudy cut. With occ SH gy brn, blky, sft, bits, show aa.

1860-1870 SH: dk gy - blk, blky, carb, com brit, firm - hd, calc - slly calcs, tr non, occly pt sil, slly micmica, mnr pyr nods & tr pyric lams, wk slow pale cldy yel cut; wi occ SH gy brn, blky, sft, bits, wk slow pale cldy yel cut.

1870-1880 SH: dk gy - blk, blky, carb, com brit, firm - hd, slly calc - pt calc, pt non calc, slly micmica, occly pt sil, wk slow pale cldy yel cut, mnr pyr nods & tr pyric lams; wi occ SH gy brn, blky, sft, bits, wk slow pale cldy yel cut.

1880-1890 SH: dk gy - blk, blky, carb, com brit, firm - hd, non calc - slly calcs, tr calc, occly pt sil, locly micmica, mnr pyr nods & tr pyric lams wi occ SH gy brn, blky, sft, bits, wk slow pale cldy yel cut.

1890-1900 SH: dk gy brit, firm - hd, slly cal locly micmica, mnr p wi occ SH gy brn, blk cldy yel cut.

1900-1908 SH hd, brittle, slly locly micmica wi occ SH gy cldy yel cut.

COPRC DODO CANYON E-76
UNIT E-76 GRID 65-10 126-45
300E766510126450

Projected vertical section azimuth. 299.99°
Motor Bend: 1.36°
Magnetic Dec 22.996°
Survey tool offset: 19.50m
Gamma offset: 13.93m

ConocoPhillips

Spud on December 28th, 2013 at 06:30hrs

Ground Elevation 268.2m
+ Fill / - Cut 0.0m
Adjusted Ground 268.2m
K.B. - Grnd 5.2m
K.B. Elevation 273.40m

MD 1835 TVD 1766.86
INC 73.49 AZ 307.55
VS 153.45
(-1536.6)

MD 1845 TVD 1769.43
INC 76.71 AZ 307.55
VS 163.03

1810
(-1536.6)

MD 1854.5 TVD 1771.42
INC 79.1 AZ 305.56
VS 172.26

MD 1864 TVD 1773.13
INC 80.2 AZ 304.07
VS 181.57

MD 1873.5 TVD 1774.6
INC 82.02 AZ 303.67
VS 190.93

MD 1883 TVD 1775.7
INC 84.71 AZ 302.88
VS 200.35

MD 1889.5
INC 86.61
VS 206.83

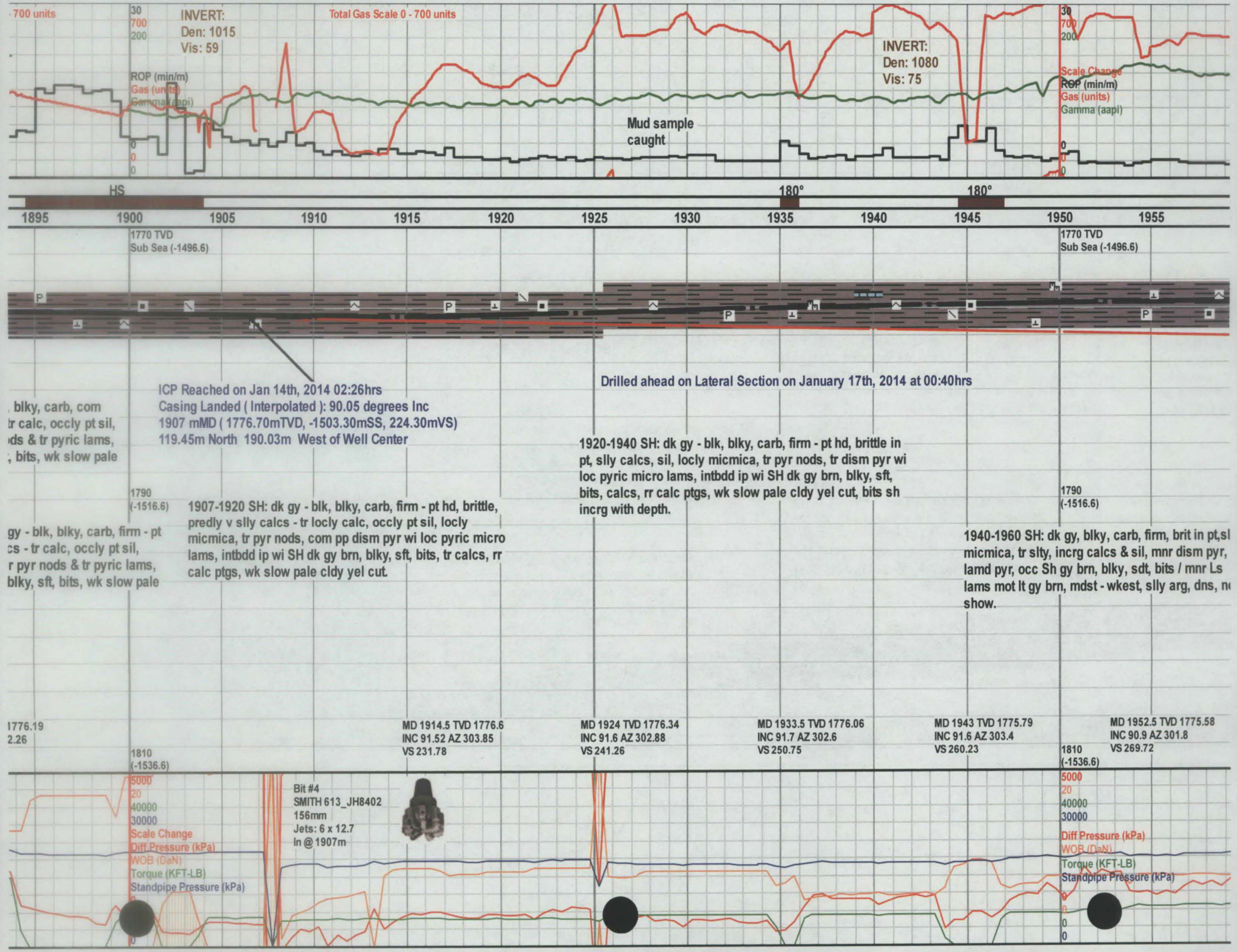
Drilling Parameters

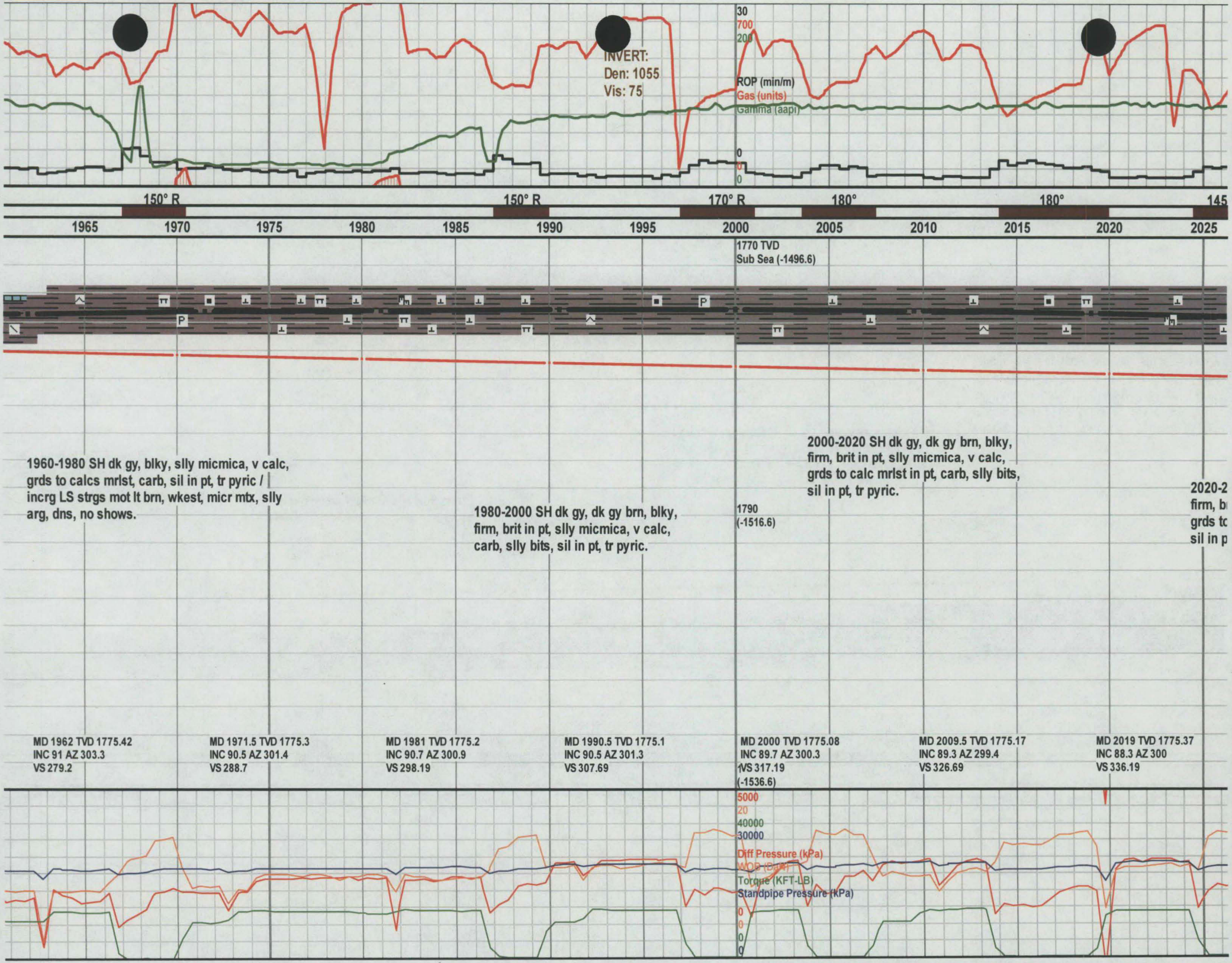
Diff Pressure (kPa)

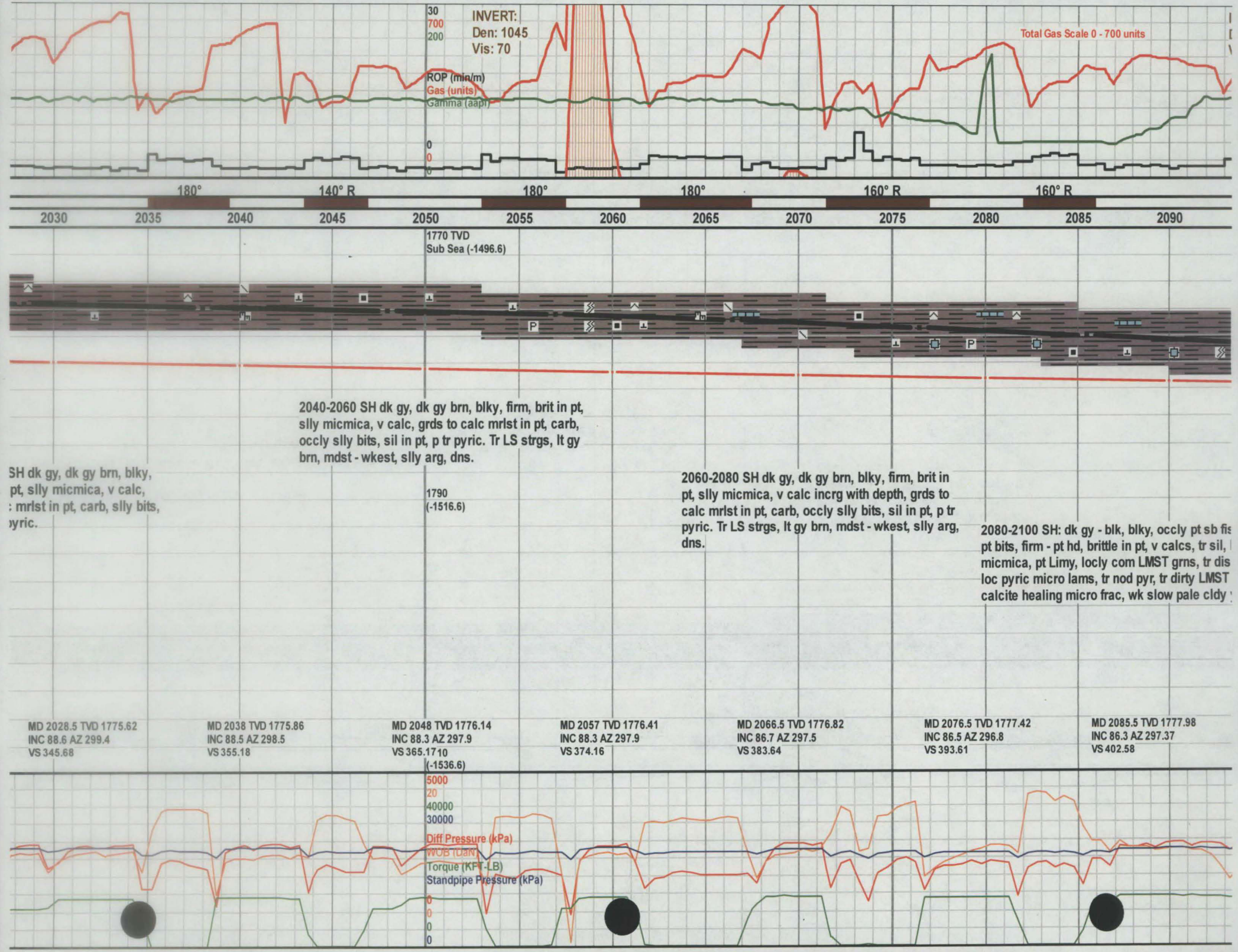
WOB (DaN)

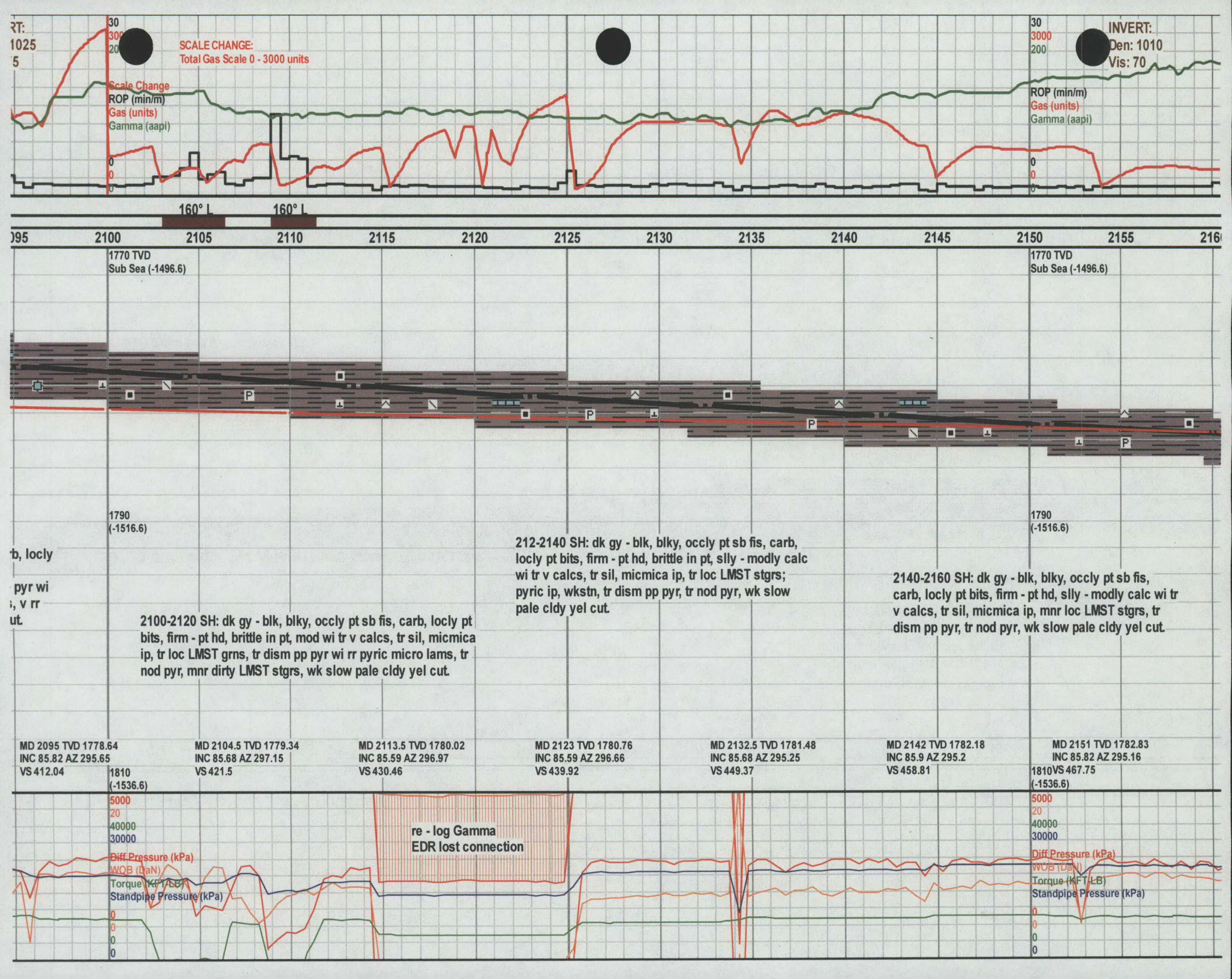
Torque (KFT-LB)

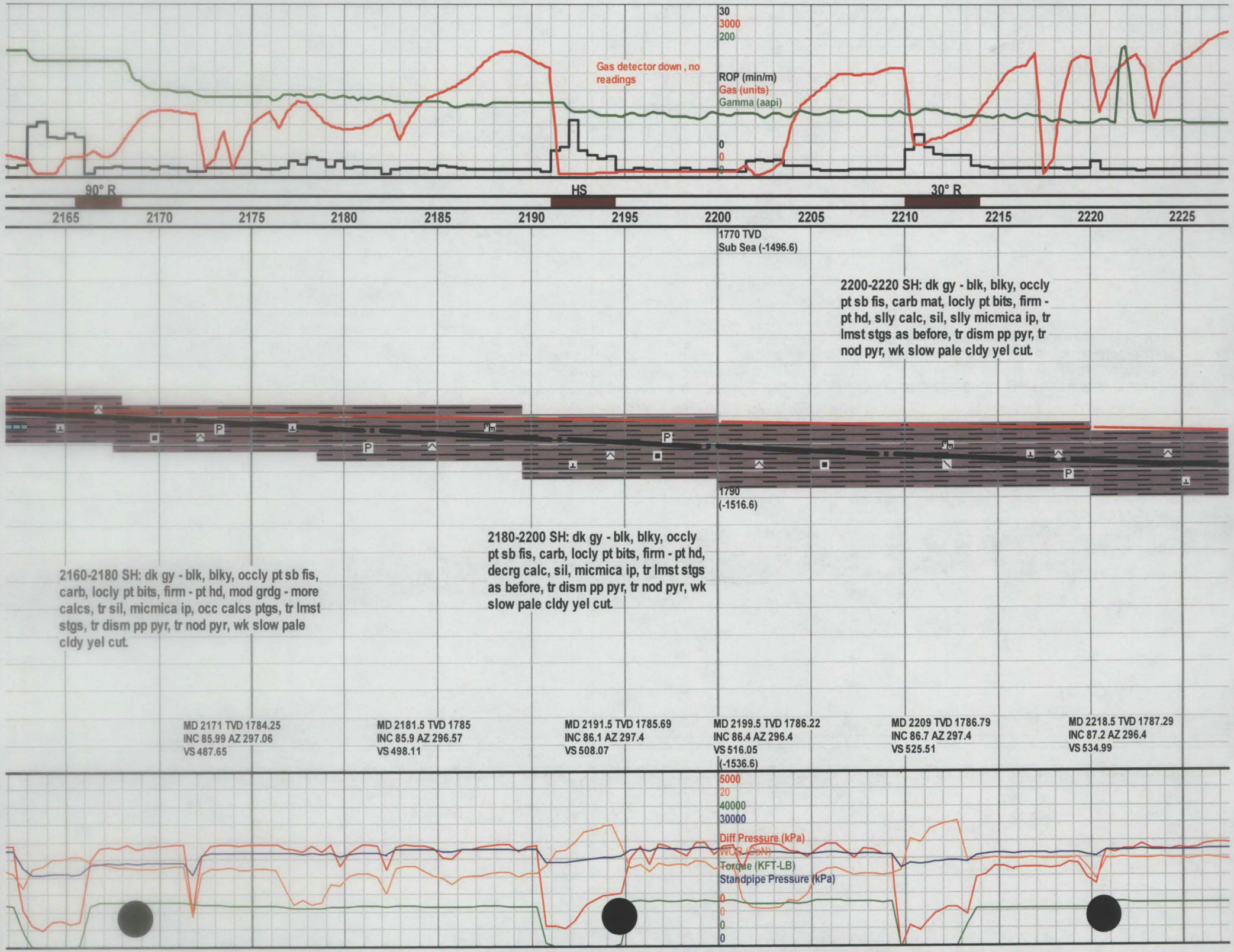
Standpipe Pressure (kPa)

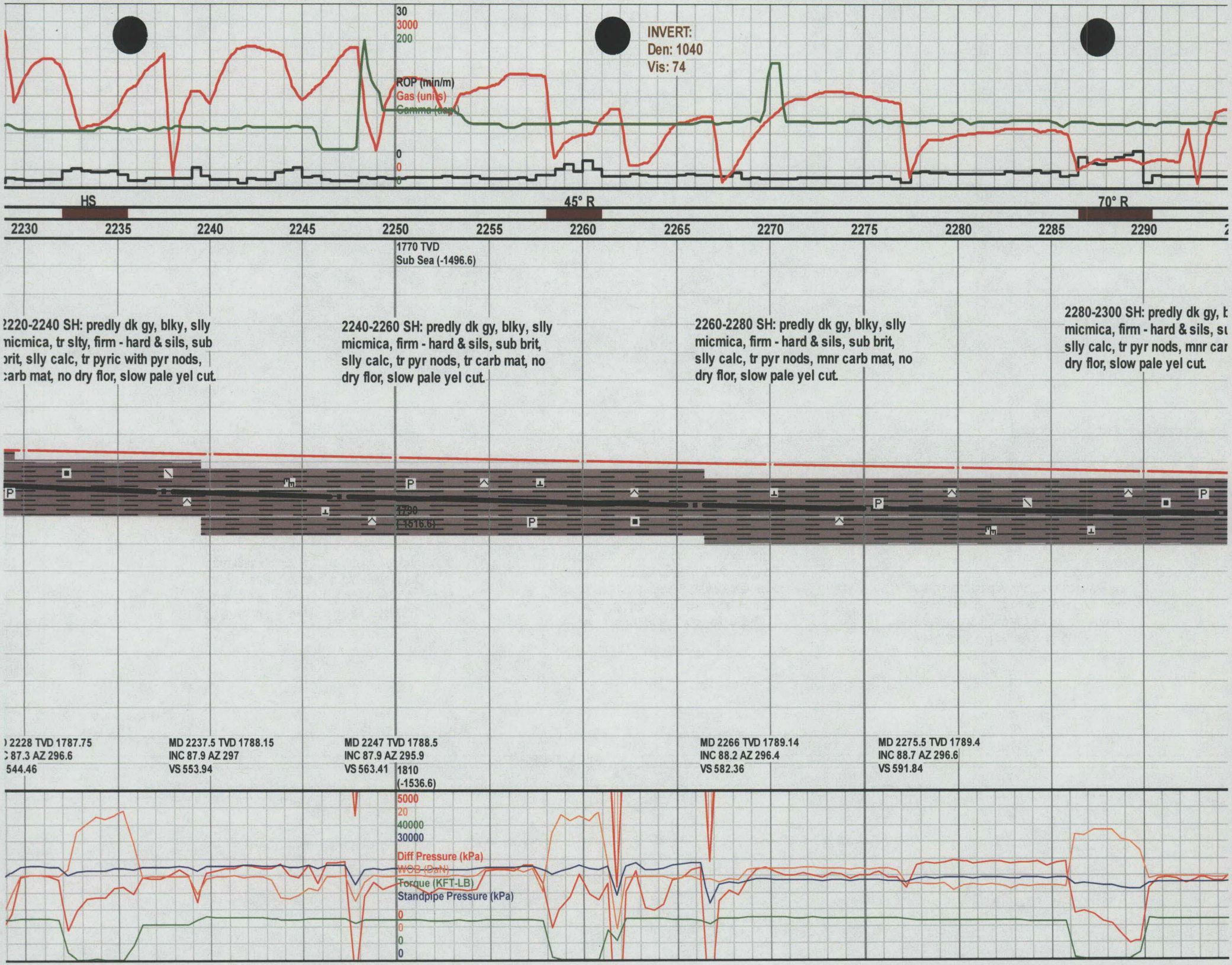

700 units
30
700
200
INVERT:
Den: 1015
Vis: 59
Total Gas Scale 0 - 700 units
ROP (min/m)
Gas (units)
Gamma (aapi)
0
0
0
INVERT:
Den: 1080
Vis: 75
Mud sample
caught
30
700
200
Scale Change
ROP (min/m)
Gas (units)
Gamma (aapi)
0
0
0
HS
180°
180°
1895
1900
1905
1910
1915
1920
1925
1930
1935
1940
1945
1950
1955
1770 TVD
Sub Sea (-1496.6)
1770 TVD
Sub Sea (-1496.6)
ICP Reached on Jan 14th, 2014 02:26hrs
Casing Landed (Interpolated): 90.05 degrees Inc
1907 mMD (1776.70mTVD, -1503.30mSS, 224.30mVS)
119.45m North 190.03m West of Well Center
Drilled ahead on Lateral Section on January 17th, 2014 at 00:40hrs
, blky, carb, com
tr calc, occly pt sil,
ds & tr pyric lams,
, bits, wk slow pale
1790
(-1516.6)
1907-1920 SH: dk gy - blk, blky, carb, firm - pt hd, brittle, predly v slly calcs - tr locly calc, occly pt sil, locly micmica, tr pyr nods, com pp dism pyr wi loc pyric micro lams, intbdd ip wi SH dk gy brn, blky, sft, bits, tr calcs, rr calc ptgs, wk slow pale cldy yel cut.
1920-1940 SH: dk gy - blk, blky, carb, firm - pt hd, brittle in pt, slly calcs, sil, locly micmica, tr pyr nods, tr dism pyr wi loc pyric micro lams, intbdd ip wi SH dk gy brn, blky, sft, bits, calcs, rr calc ptgs, wk slow pale cldy yel cut, bits sh incrg with depth.
1790
(-1516.6)
gy - blk, blky, carb, firm - pt
cs - tr calc, occly pt sil,
r pyr nods & tr pyric lams,
blky, sft, bits, wk slow pale
1940-1960 SH: dk gy, blky, carb, firm, brit in pt,sl micmica, tr slty, incrg calcs & sil, mnr dism pyr, lamd pyr, occ Sh gy brn, blky, sdt, bits / mnr Ls lams mot lt gy brn, mdst - wkest, slly arg, dns, n show.
1776.19
2.26
MD 1914.5 TVD 1776.6
INC 91.52 AZ 303.85
VS 231.78
MD 1924 TVD 1776.34
INC 91.6 AZ 302.88
VS 241.26
MD 1933.5 TVD 1776.06
INC 91.7 AZ 302.6
VS 250.75
MD 1943 TVD 1775.79
INC 91.6 AZ 303.4
VS 260.23
MD 1952.5 TVD 1775.58
INC 90.9 AZ 301.8
VS 269.72
1810
(-1536.6)
1810
(-1536.6)
5000
20
40000
30000
Scale Change
Diff Pressure (kPa)
WOB (DaN)
Torque (KFT-LB)
Standpipe Pressure (kPa)
Bit #4
SMITH 613_JH8402
156mm
Jets: 6 x 12.7
In @ 1907m
5000
20
40000
30000
Diff Pressure (kPa)
WOB (DaN)
Torque (KFT-LB)
Standpipe Pressure (kPa)

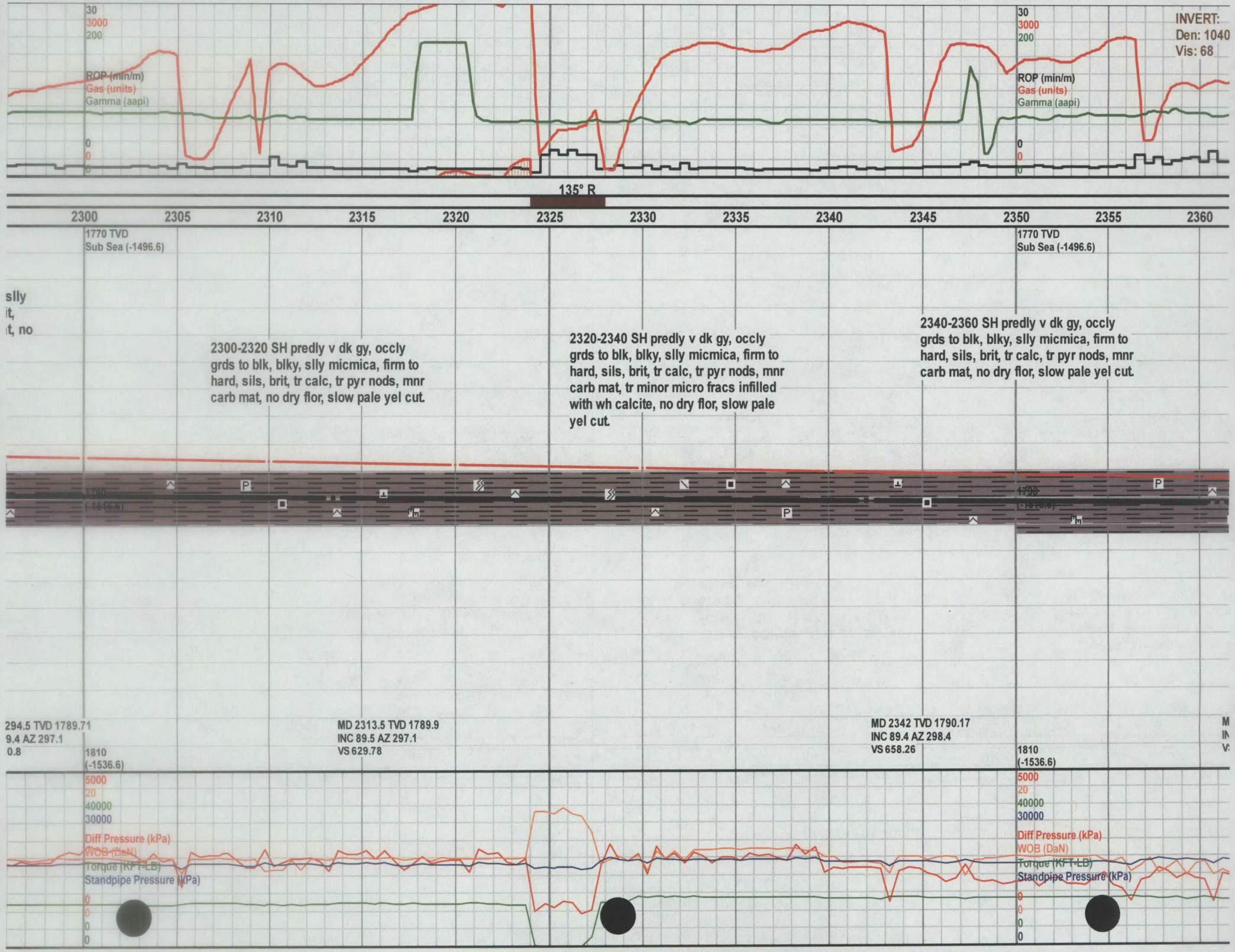

INVERT:
Den: 1055
Vis: 75
30
700
200
ROP (min/m)
Gas (units)
Gamma (aapi)
0
0
0
150° R
150° R
170° R
180°
180°
145
1965
1970
1975
1980
1985
1990
1995
2000
2005
2010
2015
2020
2025
1770 TVD
Sub Sea (-1496.6)
1960-1980 SH dk gy, blky, slly micmica, v calc, grds to calcs mrlst, carb, sil in pt, tr pyric / incrg LS strgs mot lt brn, wkest, micr mtx, slly arg, dns, no shows.
1980-2000 SH dk gy, dk gy brn, blky, firm, brit in pt, slly micmica, v calc, carb, slly bits, sil in pt, tr pyric.
2000-2020 SH dk gy, dk gy brn, blky, firm, brit in pt, slly micmica, v calc, grds to calc mrlst in pt, carb, slly bits, sil in pt, tr pyric.
1790
(-1516.6)
2020-2
firm, b
grds to
sil in p
MD 1962 TVD 1775.42
INC 91 AZ 303.3
VS 279.2
MD 1971.5 TVD 1775.3
INC 90.5 AZ 301.4
VS 288.7
MD 1981 TVD 1775.2
INC 90.7 AZ 300.9
VS 298.19
MD 1990.5 TVD 1775.1
INC 90.5 AZ 301.3
VS 307.69
MD 2000 TVD 1775.08
INC 89.7 AZ 300.3
VS 317.19
(-1536.6)
MD 2009.5 TVD 1775.17
INC 89.3 AZ 299.4
VS 326.69
MD 2019 TVD 1775.37
INC 88.3 AZ 300
VS 336.19
5000
20
40000
30000
Diff Pressure (kPa)
WOB (Klbf)
Torque (KFT-LB)
Standpipe Pressure (kPa)
0
0
0
0

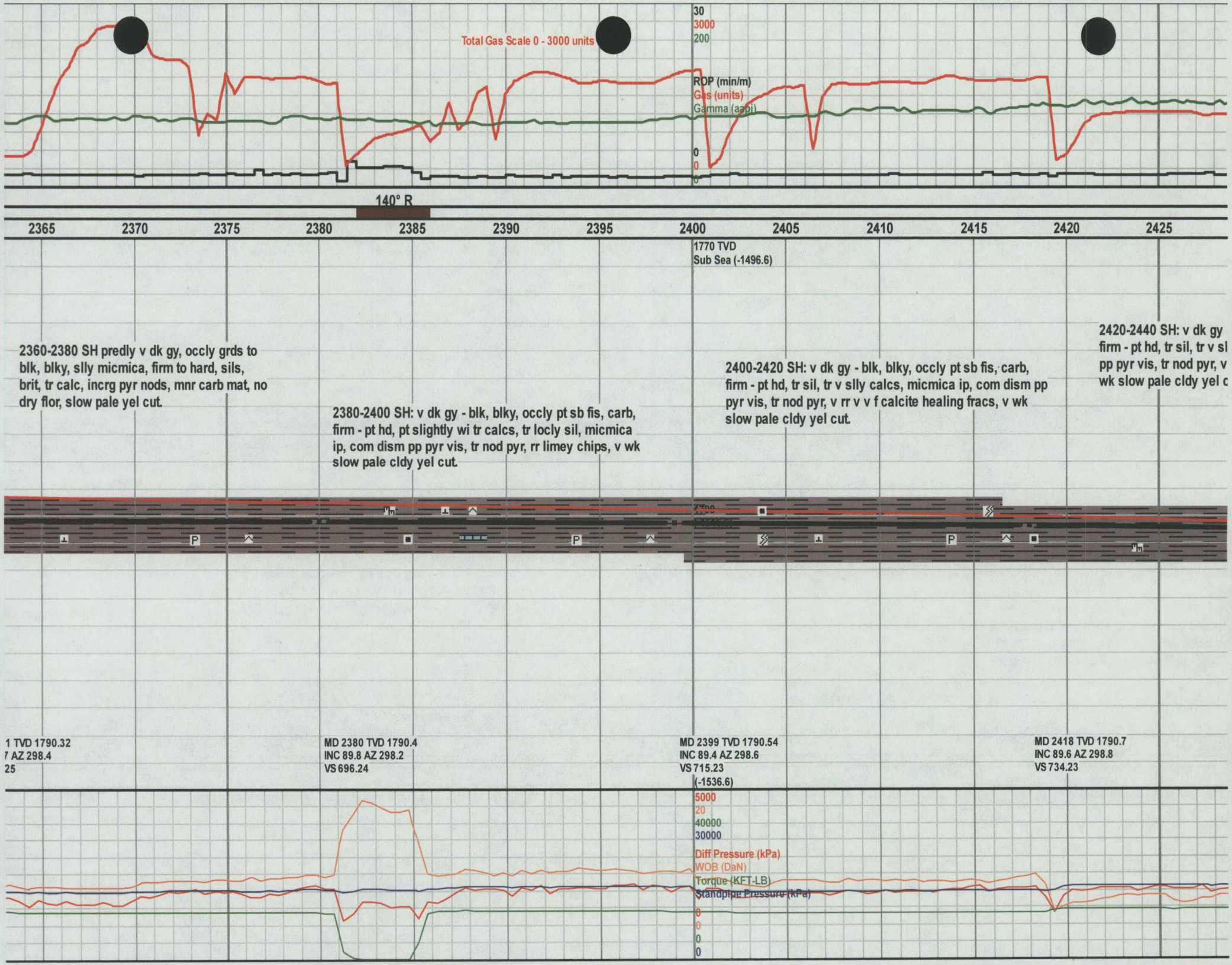

30
700
200
INVERT:
Den: 1045
Vis: 70
ROP (min/m)
Gas (units)
Gamma (aapi)
0
0
0
Total Gas Scale 0 - 700 units
180°
140° R
180°
180°
160° R
160° R
2030
2035
2040
2045
2050
2055
2060
2065
2070
2075
2080
2085
2090
1770 TVD
Sub Sea (-1496.6)
P
P
2040-2060 SH dk gy, dk gy brn, blky, firm, brit in pt, slly micmica, v calc, grds to calc mrlst in pt, carb, occly slly bits, sil in pt, p tr pyric. Tr LS strgs, lt gy brn, mdst - wkest, slly arg, dns.
SH dk gy, dk gy brn, blky,
pt, slly micmica, v calc,
: mrlst in pt, carb, slly bits,
pyric.
1790
(-1516.6)
2060-2080 SH dk gy, dk gy brn, blky, firm, brit in pt, slly micmica, v calc incrg with depth, grds to calc mrlst in pt, carb, occly slly bits, sil in pt, p tr pyric. Tr LS strgs, lt gy brn, mdst - wkest, slly arg, dns.
2080-2100 SH: dk gy - blk, blky, occly pt sb fis
pt bits, firm - pt hd, brittle in pt, v calcs, tr sil,
micmica, pt Limy, locly com LMST grns, tr dis
loc pyric micro lams, tr nod pyr, tr dirty LMST
calcite healing micro frac, wk slow pale cldy
MD 2028.5 TVD 1775.62
INC 88.6 AZ 299.4
VS 345.68
MD 2038 TVD 1775.86
INC 88.5 AZ 298.5
VS 355.18
MD 2048 TVD 1776.14
INC 88.3 AZ 297.9
VS 365.1710
(-1536.6)
MD 2057 TVD 1776.41
INC 88.3 AZ 297.9
VS 374.16
MD 2066.5 TVD 1776.82
INC 86.7 AZ 297.5
VS 383.64
MD 2076.5 TVD 1777.42
INC 86.5 AZ 296.8
VS 393.61
MD 2085.5 TVD 1777.98
INC 86.3 AZ 297.37
VS 402.58
5000
20
40000
30000
Diff Pressure (kPa)
WOB (Dan)
Torque (KFT-LB)
Standpipe Pressure (kPa)
0
0
0
0

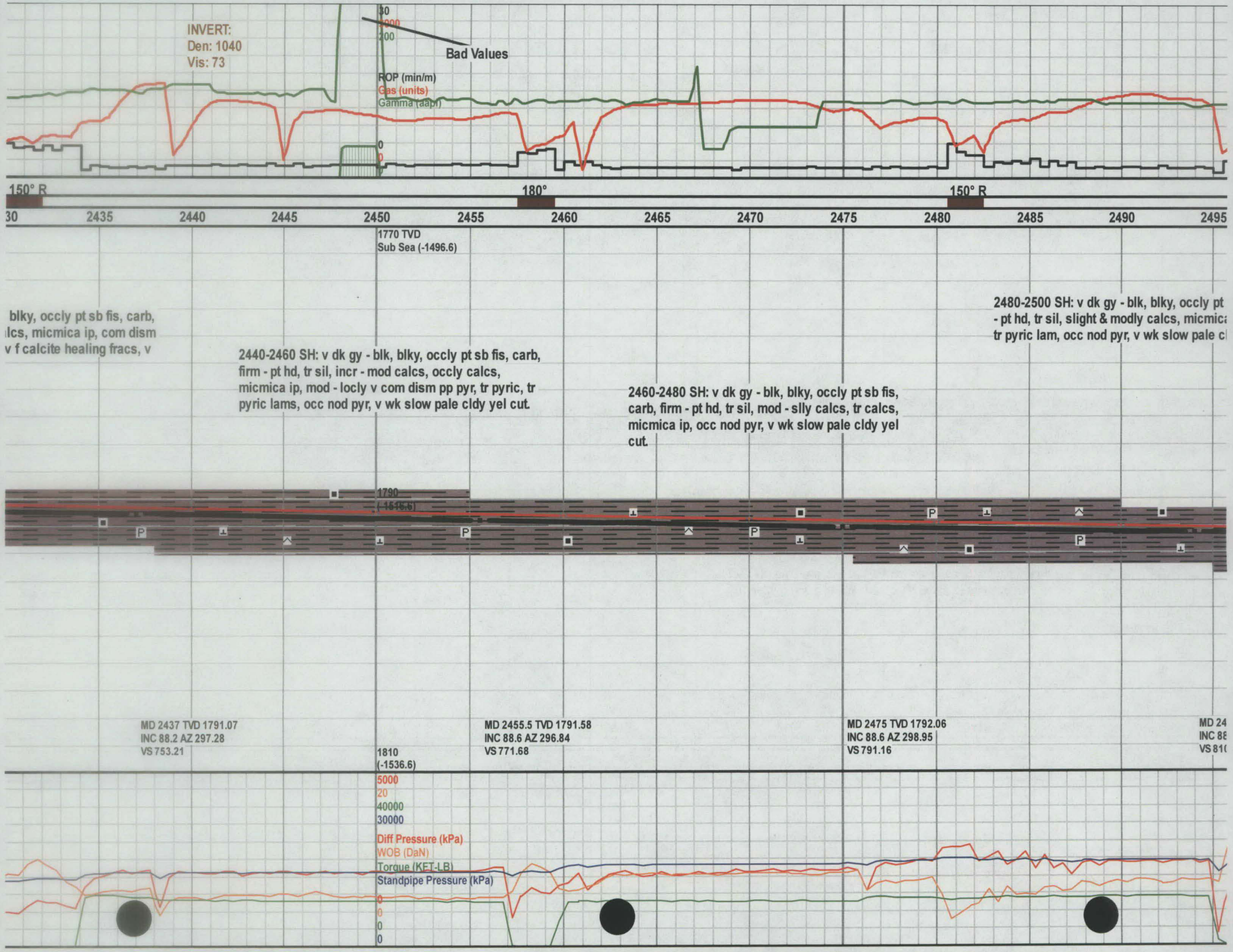

RT:
1025
5
30
300
20
SCALE CHANGE:
Total Gas Scale 0 - 3000 units
Scale Change
ROP (min/m)
Gas (units)
Gamma (aapi)
0
0
0
30
3000
200
INVERT:
Den: 1010
Vis: 70
ROP (min/m)
Gas (units)
Gamma (aapi)
0
0
0
160° L
160° L
095
2100
2105
2110
2115
2120
2125
2130
2135
2140
2145
2150
2155
216
1770 TVD
Sub Sea (-1496.6)
1770 TVD
Sub Sea (-1496.6)
1790
(-1516.6)
1790
(-1516.6)
b, locly
pyr wi
, v rr
ut.
2100-2120 SH: dk gy - blk, blky, occly pt sb fis, carb, locly pt bits, firm - pt hd, brittle in pt, mod wi tr v calcs, tr sil, micmica ip, tr loc LMST grns, tr dism pp pyr wi rr pyric micro lams, tr nod pyr, mnr dirty LMST stgrs, wk slow pale cldy yel cut.
212-2140 SH: dk gy - blk, blky, occly pt sb fis, carb, locly pt bits, firm - pt hd, brittle in pt, slly - modly calc wi tr v calcs, tr sil, micmica ip, tr loc LMST stgrs; pyric ip, wkstn, tr dism pp pyr, tr nod pyr, wk slow pale cldy yel cut.
2140-2160 SH: dk gy - blk, blky, occly pt sb fis, carb, locly pt bits, firm - pt hd, slly - modly calc wi tr v calcs, tr sil, micmica ip, mnr loc LMST stgrs, tr dism pp pyr, tr nod pyr, wk slow pale cldy yel cut.
MD 2095 TVD 1778.64
INC 85.82 AZ 295.65
VS 412.04
MD 2104.5 TVD 1779.34
INC 85.68 AZ 297.15
VS 421.5
MD 2113.5 TVD 1780.02
INC 85.59 AZ 296.97
VS 430.46
MD 2123 TVD 1780.76
INC 85.59 AZ 296.66
VS 439.92
MD 2132.5 TVD 1781.48
INC 85.68 AZ 295.25
VS 449.37
MD 2142 TVD 1782.18
INC 85.9 AZ 295.2
VS 458.81
MD 2151 TVD 1782.83
INC 85.82 AZ 295.16
VS 467.75
1810
(-1536.6)
1810
(-1536.6)
5000
20
40000
30000
Diff Pressure (kPa)
WOB (DaN)
Torque (KFT-LB)
Standpipe Pressure (kPa)
0
0
0
0
re - log Gamma
EDR lost connection
5000
20
40000
30000
Diff Pressure (kPa)
WOB (DaN)
Torque (KFT-LB)
Standpipe Pressure (kPa)
0
0
0
0

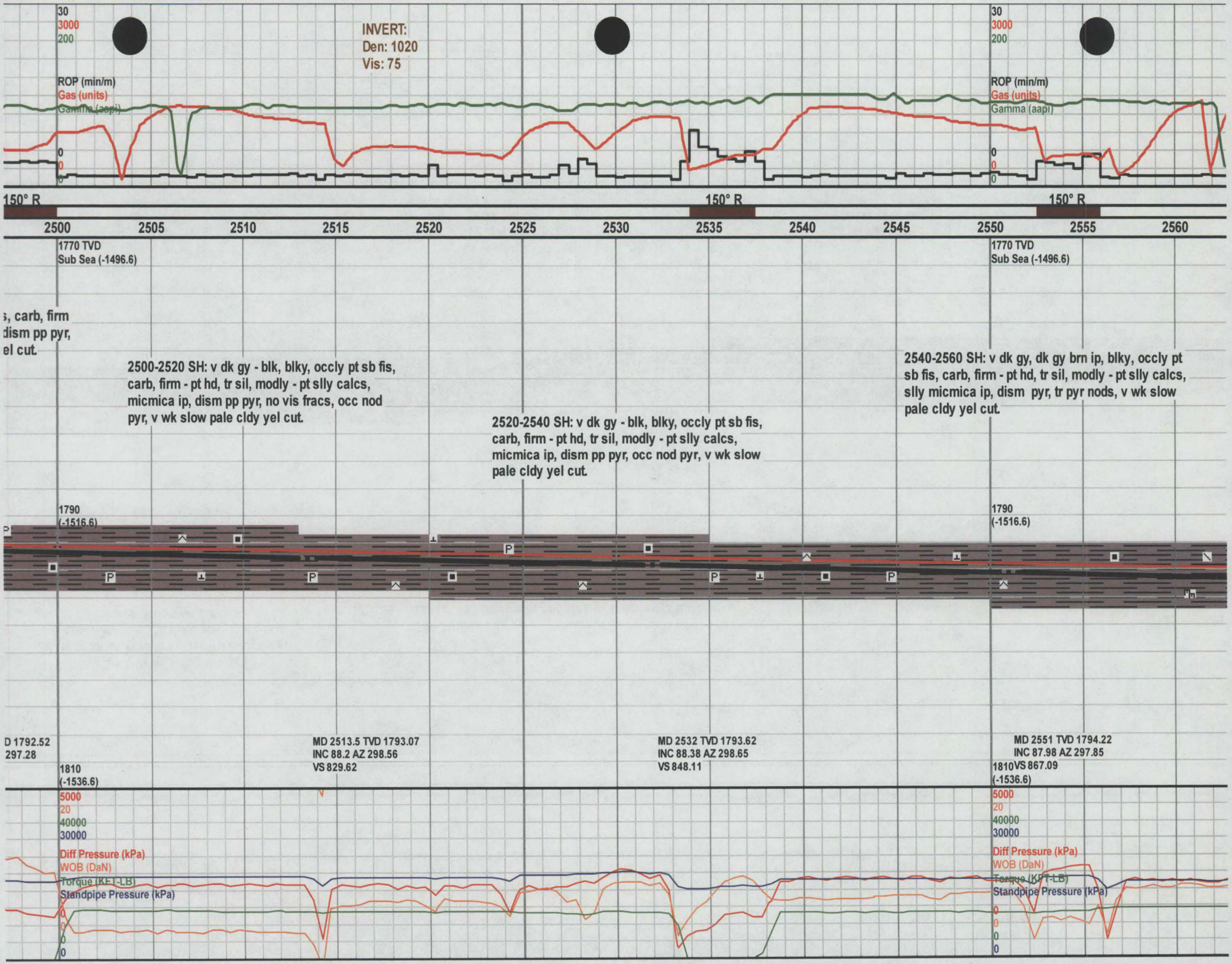

30
3000
200
Gas detector down , no readings
ROP (min/m)
Gas (units)
Gamma (aapi)
0
0
0
90° R
HS
30° R
2165
2170
2175
2180
2185
2190
2195
2200
2205
2210
2215
2220
2225
1770 TVD
Sub Sea (-1496.6)
2200-2220 SH: dk gy - blk, blky, occly pt sb fis, carb mat, locly pt bits, firm - pt hd, slly calc, sil, slly micmica ip, tr lmst stgs as before, tr dism pp pyr, tr nod pyr, wk slow pale cldy yel cut.
1790
(-1516.6)
2180-2200 SH: dk gy - blk, blky, occly pt sb fis, carb, locly pt bits, firm - pt hd, decrg calc, sil, micmica ip, tr lmst stgs as before, tr dism pp pyr, tr nod pyr, wk slow pale cldy yel cut.
2160-2180 SH: dk gy - blk, blky, occly pt sb fis, carb, locly pt bits, firm - pt hd, mod grdg - more calcs, tr sil, micmica ip, occ calcs ptgs, tr lmst stgs, tr dism pp pyr, tr nod pyr, wk slow pale cldy yel cut.
MD 2171 TVD 1784.25
INC 85.99 AZ 297.06
VS 487.65
MD 2181.5 TVD 1785
INC 85.9 AZ 296.57
VS 498.11
MD 2191.5 TVD 1785.69
INC 86.1 AZ 297.4
VS 508.07
MD 2199.5 TVD 1786.22
INC 86.4 AZ 296.4
VS 516.05
(-1536.6)
MD 2209 TVD 1786.79
INC 86.7 AZ 297.4
VS 525.51
MD 2218.5 TVD 1787.29
INC 87.2 AZ 296.4
VS 534.99
5000
20
40000
30000
Diff Pressure (kPa)
WOB (KN)
Torque (KFT-LB)
Standpipe Pressure (kPa)
0
0
0
0

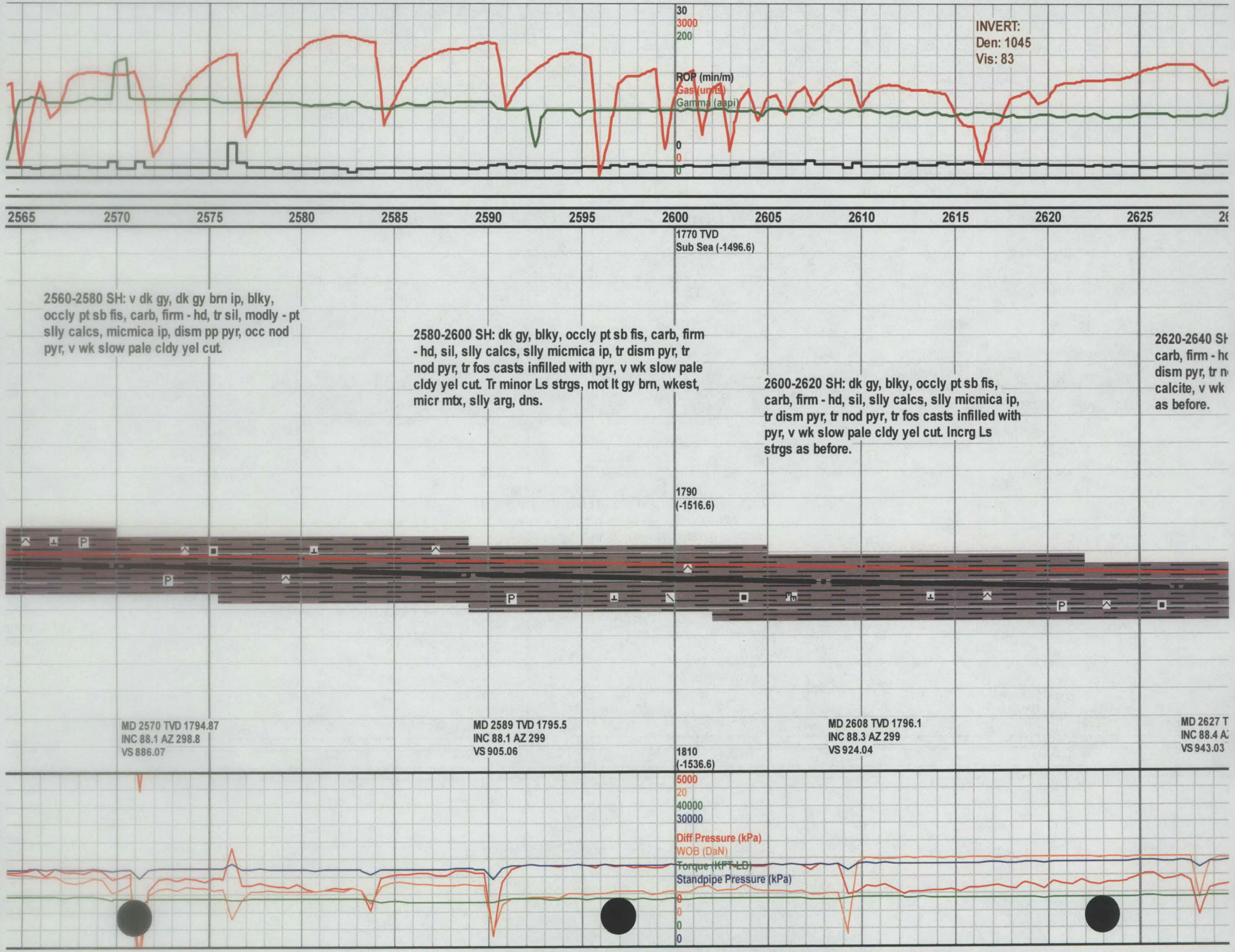

30
3000
200
ROP (min/m)
Gas (units)
Gamma (api)
0
0
0
INVERT:
Den: 1040
Vis: 74
HS
45° R
70° R
2230
2235
2240
2245
2250
2255
2260
2265
2270
2275
2280
2285
2290
1770 TVD
Sub Sea (-1496.6)
2220-2240 SH: predly dk gy, blky, slly micmica, tr slty, firm - hard & sils, sub brit, slly calc, tr pyric with pyr nods, carb mat, no dry flor, slow pale yel cut.
2240-2260 SH: predly dk gy, blky, slly micmica, firm - hard & sils, sub brit, slly calc, tr pyr nods, tr carb mat, no dry flor, slow pale yel cut.
2260-2280 SH: predly dk gy, blky, slly micmica, firm - hard & sils, sub brit, slly calc, tr pyr nods, mnr carb mat, no dry flor, slow pale yel cut.
2280-2300 SH: predly dk gy, b
micmica, firm - hard & sils, su
slly calc, tr pyr nods, mnr car
dry flor, slow pale yel cut.
1790
(-1516.6)
2228 TVD 1787.75
87.3 AZ 296.6
544.46
MD 2237.5 TVD 1788.15
INC 87.9 AZ 297
VS 553.94
MD 2247 TVD 1788.5
INC 87.9 AZ 295.9
VS 563.41
1810
(-1536.6)
MD 2266 TVD 1789.14
INC 88.2 AZ 296.4
VS 582.36
MD 2275.5 TVD 1789.4
INC 88.7 AZ 296.6
VS 591.84
5000
20
40000
30000
Diff Pressure (kPa)
WOB (DaN)
Torque (KFT-LB)
Standpipe Pressure (kPa)
0
0
0
0

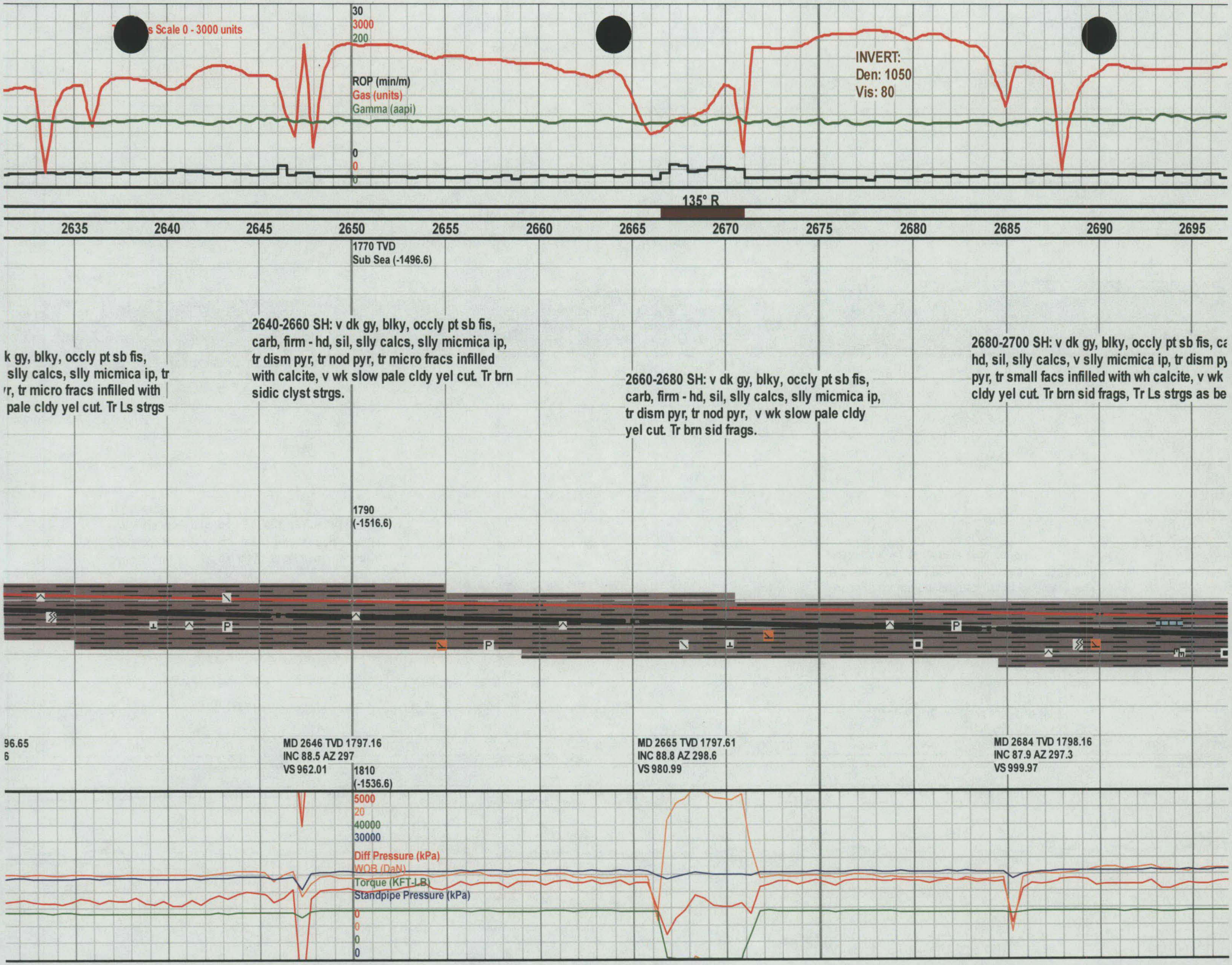

30
3000
200
ROP (min/m)
Gas (units)
Gamma (aapi)
0
0
0
INVERT:
Den: 1040
Vis: 68
135° R
2300
2305
2310
2315
2320
2325
2330
2335
2340
2345
2350
2355
2360
1770 TVD
Sub Sea (-1496.6)
slly
it,
t, no
2300-2320 SH predly v dk gy, occly grds to blk, blky, slly micmica, firm to hard, sils, brit, tr calc, tr pyr nods, mnr carb mat, no dry flor, slow pale yel cut.
2320-2340 SH predly v dk gy, occly grds to blk, blky, slly micmica, firm to hard, sils, brit, tr calc, tr pyr nods, mnr carb mat, tr minor micro fracs infilled with wh calcite, no dry flor, slow pale yel cut.
2340-2360 SH predly v dk gy, occly grds to blk, blky, slly micmica, firm to hard, sils, brit, tr calc, tr pyr nods, mnr carb mat, no dry flor, slow pale yel cut.
294.5 TVD 1789.71
9.4 AZ 297.1
0.8
MD 2313.5 TVD 1789.9
INC 89.5 AZ 297.1
VS 629.78
MD 2342 TVD 1790.17
INC 89.4 AZ 298.4
VS 658.26
1810
(-1536.6)
5000
20
40000
30000
Diff Pressure (kPa)
WOB (DaN)
Torque (KFT-LB)
Standpipe Pressure (kPa)
0
0
0
0

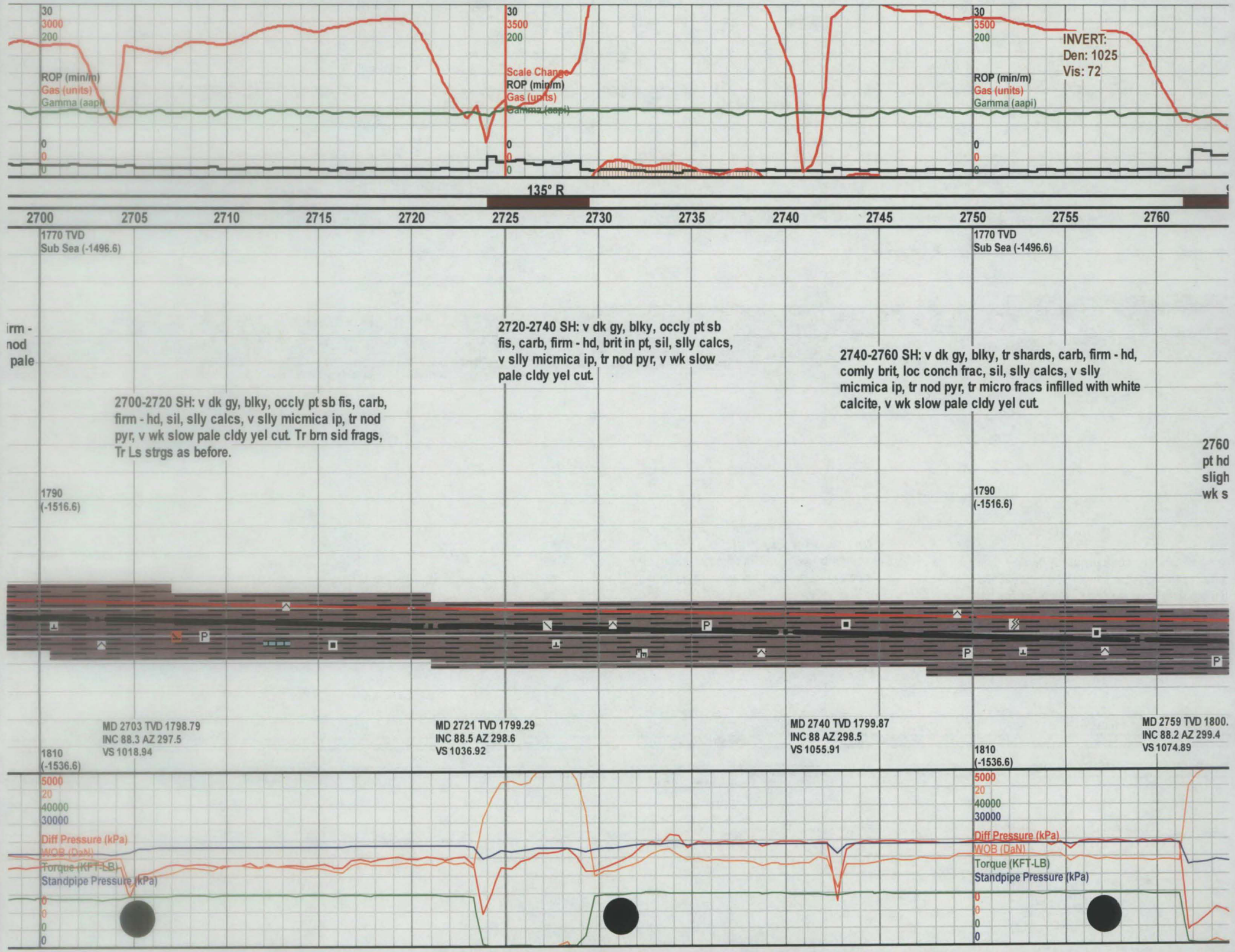

Total Gas Scale 0 - 3000 units
30
3000
200
ROP (min/m)
Gas (units)
Gamma (api)
0
0
0
140° R
2365
2370
2375
2380
2385
2390
2395
2400
2405
2410
2415
2420
2425
1770 TVD
Sub Sea (-1496.6)
2360-2380 SH predly v dk gy, occly grds to blk, blky, slly micmica, firm to hard, sils, brit, tr calc, incrg pyr nods, mnr carb mat, no dry flor, slow pale yel cut.
2380-2400 SH: v dk gy - blk, blky, occly pt sb fis, carb, firm - pt hd, pt slightly wi tr calcs, tr locly sil, micmica ip, com dism pp pyr vis, tr nod pyr, rr limey chips, v wk slow pale cldy yel cut.
2400-2420 SH: v dk gy - blk, blky, occly pt sb fis, carb, firm - pt hd, tr sil, tr v slly calcs, micmica ip, com dism pp pyr vis, tr nod pyr, v rr v v f calcite healing fracs, v wk slow pale cldy yel cut.
2420-2440 SH: v dk gy firm - pt hd, tr sil, tr v sl pp pyr vis, tr nod pyr, v wk slow pale cldy yel c
1 TVD 1790.32
7 AZ 298.4
25
MD 2380 TVD 1790.4
INC 89.8 AZ 298.2
VS 696.24
MD 2399 TVD 1790.54
INC 89.4 AZ 298.6
VS 715.23
(-1536.6)
MD 2418 TVD 1790.7
INC 89.6 AZ 298.8
VS 734.23
5000
20
40000
30000
Diff Pressure (kPa)
WOB (DaN)
Torque (KFT-LB)
Standpipe Pressure (kPa)
0
0
0
0

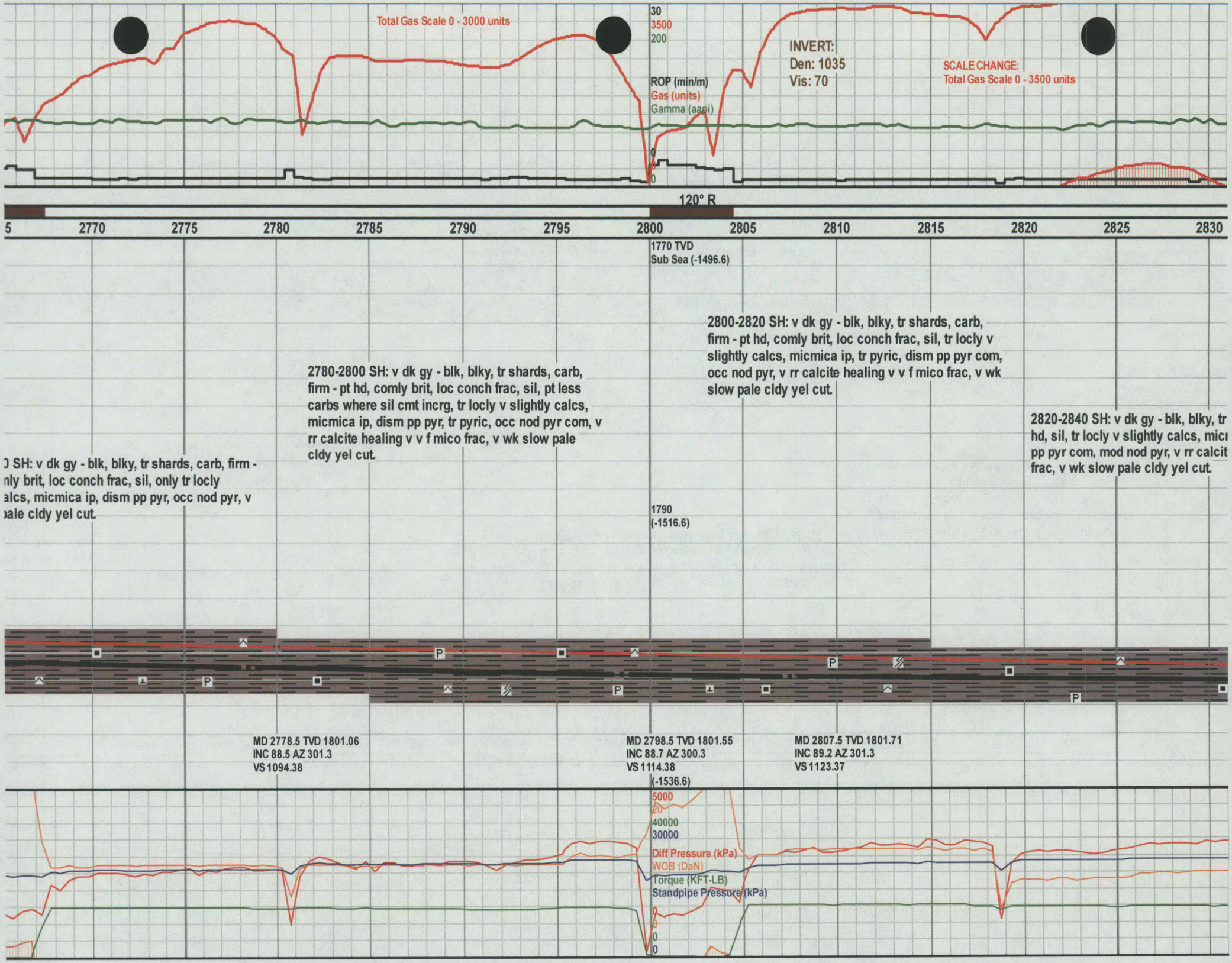

INVERT:
Den: 1040
Vis: 73
Bad Values
ROP (min/m)
Gas (units)
Gamma (api)
150° R
180°
150° R
2435
2440
2445
2450
2455
2460
2465
2470
2475
2480
2485
2490
2495
1770 TVD
Sub Sea (-1496.6)
blky, occly pt sb fis, carb,
lcs, micmica ip, com dism
v f calcite healing fracs, v
2440-2460 SH: v dk gy - blk, blky, occly pt sb fis, carb, firm - pt hd, tr sil, incr - mod calcs, occly calcs, micmica ip, mod - locly v com dism pp pyr, tr pyric, tr pyric lams, occ nod pyr, v wk slow pale cldy yel cut.
2460-2480 SH: v dk gy - blk, blky, occly pt sb fis, carb, firm - pt hd, tr sil, mod - slly calcs, tr calcs, micmica ip, occ nod pyr, v wk slow pale cldy yel cut.
2480-2500 SH: v dk gy - blk, blky, occly pt
- pt hd, tr sil, slight & modly calcs, micmic
tr pyric lam, occ nod pyr, v wk slow pale c
1790
(-1516.6)
MD 2437 TVD 1791.07
INC 88.2 AZ 297.28
VS 753.21
1810
(-1536.6)
MD 2455.5 TVD 1791.58
INC 88.6 AZ 296.84
VS 771.68
MD 2475 TVD 1792.06
INC 88.6 AZ 298.95
VS 791.16
MD 24
INC 88
VS 81
5000
20
40000
30000
Diff Pressure (kPa)
WOB (DaN)
Torque (KFT-LB)
Standpipe Pressure (kPa)
0
0
0
0

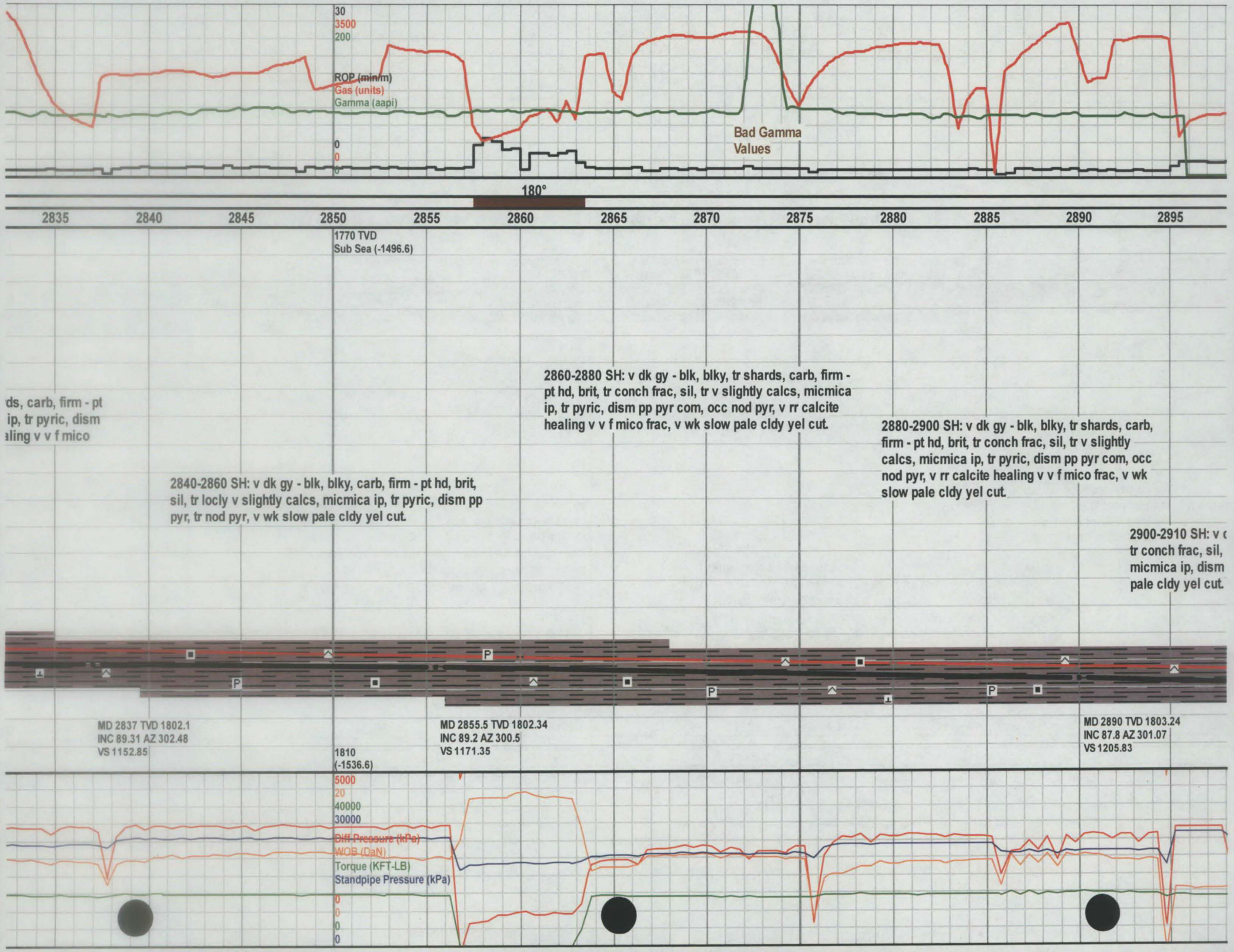

30
3000
200
ROP (min/m)
Gas (units)
Gamma (aapi)
0
0
0
INVERT:
Den: 1020
Vis: 75
30
3000
200
ROP (min/m)
Gas (units)
Gamma (aapi)
0
0
0
150° R
150° R
150° R
2500
2505
2510
2515
2520
2525
2530
2535
2540
2545
2550
2555
2560
1770 TVD
Sub Sea (-1496.6)
1770 TVD
Sub Sea (-1496.6)
s, carb, firm
dism pp pyr,
el cut.
2500-2520 SH: v dk gy - blk, blky, occly pt sb fis, carb, firm - pt hd, tr sil, modly - pt slly calcs, micmica ip, dism pp pyr, no vis fracs, occ nod pyr, v wk slow pale cldy yel cut.
2520-2540 SH: v dk gy - blk, blky, occly pt sb fis, carb, firm - pt hd, tr sil, modly - pt slly calcs, micmica ip, dism pp pyr, occ nod pyr, v wk slow pale cldy yel cut.
2540-2560 SH: v dk gy, dk gy brn ip, blky, occly pt sb fis, carb, firm - pt hd, tr sil, modly - pt slly calcs, slly micmica ip, dism pyr, tr pyr nods, v wk slow pale cldy yel cut.
1790
(-1516.6)
1790
(-1516.6)
D 1792.52
297.28
MD 2513.5 TVD 1793.07
INC 88.2 AZ 298.56
VS 829.62
MD 2532 TVD 1793.62
INC 88.38 AZ 298.65
VS 848.11
MD 2551 TVD 1794.22
INC 87.98 AZ 297.85
VS 867.09
1810
(-1536.6)
1810
(-1536.6)
5000
20
40000
30000
Diff Pressure (kPa)
WOB (DaN)
Torque (KFT-LB)
Standpipe Pressure (kPa)
0
0
0
0
5000
20
40000
30000
Diff Pressure (kPa)
WOB (DaN)
Torque (KFT-LB)
Standpipe Pressure (kPa)
0
0
0
0


30
3000
200
ROP (min/m)
Gas (units)
Gamma (api)
0
0
0
INVERT:
Den: 1045
Vis: 83
2565
2570
2575
2580
2585
2590
2595
2600
2605
2610
2615
2620
2625
1770 TVD
Sub Sea (-1496.6)
2560-2580 SH: v dk gy, dk gy brn ip, blky, occly pt sb fis, carb, firm - hd, tr sil, modly - pt slly calcs, micmica ip, dism pp pyr, occ nod pyr, v wk slow pale cldy yel cut.
2580-2600 SH: dk gy, blky, occly pt sb fis, carb, firm - hd, sil, slly calcs, slly micmica ip, tr dism pyr, tr nod pyr, tr fos casts infilled with pyr, v wk slow pale cldy yel cut. Tr minor Ls strgs, mot lt gy brn, wkest, micr mtx, slly arg, dns.
2600-2620 SH: dk gy, blky, occly pt sb fis, carb, firm - hd, sil, slly calcs, slly micmica ip, tr dism pyr, tr nod pyr, tr fos casts infilled with pyr, v wk slow pale cldy yel cut. Incrg Ls strgs as before.
2620-2640 SH
carb, firm - hd
dism pyr, tr n
calcite, v wk
as before.
1790
(-1516.6)
MD 2570 TVD 1794.87
INC 88.1 AZ 298.8
VS 886.07
MD 2589 TVD 1795.5
INC 88.1 AZ 299
VS 905.06
MD 2608 TVD 1796.1
INC 88.3 AZ 299
VS 924.04
MD 2627 T
INC 88.4 A
VS 943.03
1810
(-1536.6)
5000
20
40000
30000
Diff Pressure (kPa)
WOB (DaN)
Torque (KFT-LB)
Standpipe Pressure (kPa)
0
0
0
0


s Scale 0 - 3000 units
30
3000
200
ROP (min/m)
Gas (units)
Gamma (aapi)
0
0
0
INVERT:
Den: 1050
Vis: 80
135° R
2635
2640
2645
2650
2655
2660
2665
2670
2675
2680
2685
2690
2695
1770 TVD
Sub Sea (-1496.6)
k gy, blky, occly pt sb fis,
slly calcs, slly micmica ip, tr
r, tr micro fracs infilled with
pale cldy yel cut. Tr Ls strgs
2640-2660 SH: v dk gy, blky, occly pt sb fis, carb, firm - hd, sil, slly calcs, slly micmica ip, tr dism pyr, tr nod pyr, tr micro fracs infilled with calcite, v wk slow pale cldy yel cut. Tr brn sidic clyst strgs.
2660-2680 SH: v dk gy, blky, occly pt sb fis, carb, firm - hd, sil, slly calcs, slly micmica ip, tr dism pyr, tr nod pyr, v wk slow pale cldy yel cut. Tr brn sid frags.
2680-2700 SH: v dk gy, blky, occly pt sb fis, ca
hd, sil, slly calcs, v slly micmica ip, tr dism py
pyr, tr small facs infilled with wh calcite, v wk
cldy yel cut. Tr brn sid frags, Tr Ls strgs as be
1790
(-1516.6)
96.65
6
MD 2646 TVD 1797.16
INC 88.5 AZ 297
VS 962.01
1810
(-1536.6)
MD 2665 TVD 1797.61
INC 88.8 AZ 298.6
VS 980.99
MD 2684 TVD 1798.16
INC 87.9 AZ 297.3
VS 999.97
5000
20
40000
30000
Diff Pressure (kPa)
WOB (DaN)
Torque (KFT-LB)
Standpipe Pressure (kPa)
0
0
0
0


30
3000
200
ROP (min/m)
Gas (units)
Gamma (aapi)
0
0
0
30
3500
200
Scale Change
ROP (min/m)
Gas (units)
Gamma (aapi)
0
0
0
30
3500
200
ROP (min/m)
Gas (units)
Gamma (aapi)
INVERT:
Den: 1025
Vis: 72
0
0
0
135° R
2700
2705
2710
2715
2720
2725
2730
2735
2740
2745
2750
2755
2760
1770 TVD
Sub Sea (-1496.6)
1770 TVD
Sub Sea (-1496.6)
irm -
nod
pale
2720-2740 SH: v dk gy, blky, occly pt sb fis, carb, firm - hd, brit in pt, sil, slly calcs, v slly micmica ip, tr nod pyr, v wk slow pale cldy yel cut.
2740-2760 SH: v dk gy, blky, tr shards, carb, firm - hd, comly brit, loc conch frac, sil, slly calcs, v slly micmica ip, tr nod pyr, tr micro fracs infilled with white calcite, v wk slow pale cldy yel cut.
2700-2720 SH: v dk gy, blky, occly pt sb fis, carb, firm - hd, sil, slly calcs, v slly micmica ip, tr nod pyr, v wk slow pale cldy yel cut. Tr brn sid frags, Tr Ls strgs as before.
2760
pt hd
sligh
wk s
1790
(-1516.6)
1790
(-1516.6)
P
P
P
P
MD 2703 TVD 1798.79
INC 88.3 AZ 297.5
VS 1018.94
MD 2721 TVD 1799.29
INC 88.5 AZ 298.6
VS 1036.92
MD 2740 TVD 1799.87
INC 88 AZ 298.5
VS 1055.91
MD 2759 TVD 1800.
INC 88.2 AZ 299.4
VS 1074.89
1810
(-1536.6)
1810
(-1536.6)
5000
20
40000
30000
Diff Pressure (kPa)
WOB (DaN)
Torque (KFT-LB)
Standpipe Pressure (kPa)
0
0
0
0
5000
20
40000
30000
Diff Pressure (kPa)
WOB (DaN)
Torque (KFT-LB)
Standpipe Pressure (kPa)
0
0
0
0


Total Gas Scale 0 - 3000 units
30
3500
200
ROP (min/m)
Gas (units)
Gamma (aapi)
0
0
INVERT:
Den: 1035
Vis: 70
SCALE CHANGE:
Total Gas Scale 0 - 3500 units
120° R
5
2770
2775
2780
2785
2790
2795
2800
2805
2810
2815
2820
2825
2830
1770 TVD
Sub Sea (-1496.6)
2800-2820 SH: v dk gy - blk, blky, tr shards, carb, firm - pt hd, comly brit, loc conch frac, sil, tr locly v slightly calcs, micmica ip, tr pyric, dism pp pyr com, occ nod pyr, v rr calcite healing v v f mico frac, v wk slow pale cldy yel cut.
2780-2800 SH: v dk gy - blk, blky, tr shards, carb, firm - pt hd, comly brit, loc conch frac, sil, pt less carbs where sil cmt incrg, tr locly v slightly calcs, micmica ip, dism pp pyr, tr pyric, occ nod pyr com, v rr calcite healing v v f mico frac, v wk slow pale cldy yel cut.
2820-2840 SH: v dk gy - blk, blky, tr
hd, sil, tr locly v slightly calcs, micı
pp pyr com, mod nod pyr, v rr calcit
frac, v wk slow pale cldy yel cut.
) SH: v dk gy - blk, blky, tr shards, carb, firm -
nly brit, loc conch frac, sil, only tr locly
alcs, micmica ip, dism pp pyr, occ nod pyr, v
ale cldy yel cut.
1790
(-1516.6)
P
MD 2778.5 TVD 1801.06
INC 88.5 AZ 301.3
VS 1094.38
MD 2798.5 TVD 1801.55
INC 88.7 AZ 300.3
VS 1114.38
MD 2807.5 TVD 1801.71
INC 89.2 AZ 301.3
VS 1123.37
(-1536.6)
5000
20
40000
30000
Diff Pressure (kPa)
WOB (DaN)
Torque (KFT-LB)
Standpipe Pressure (kPa)
0
0
0
0


30
3500
200
ROP (min/m)
Gas (units)
Gamma (aapi)
0
0
0
Bad Gamma Values
180°
2835
2840
2845
2850
2855
2860
2865
2870
2875
2880
2885
2890
2895
1770 TVD
Sub Sea (-1496.6)
ds, carb, firm - pt
ip, tr pyric, dism
aling v v f mico
2840-2860 SH: v dk gy - blk, blky, carb, firm - pt hd, brit, sil, tr locly v slightly calcs, micmica ip, tr pyric, dism pp pyr, tr nod pyr, v wk slow pale cldy yel cut.
2860-2880 SH: v dk gy - blk, blky, tr shards, carb, firm - pt hd, brit, tr conch frac, sil, tr v slightly calcs, micmica ip, tr pyric, dism pp pyr com, occ nod pyr, v rr calcite healing v v f mico frac, v wk slow pale cldy yel cut.
2880-2900 SH: v dk gy - blk, blky, tr shards, carb, firm - pt hd, brit, tr conch frac, sil, tr v slightly calcs, micmica ip, tr pyric, dism pp pyr com, occ nod pyr, v rr calcite healing v v f mico frac, v wk slow pale cldy yel cut.
2900-2910 SH: v
tr conch frac, sil,
micmica ip, dism
pale cldy yel cut.
P
P
P
P
MD 2837 TVD 1802.1
INC 89.31 AZ 302.48
VS 1152.85
MD 2855.5 TVD 1802.34
INC 89.2 AZ 300.5
VS 1171.35
MD 2890 TVD 1803.24
INC 87.8 AZ 301.07
VS 1205.83
1810
(-1536.6)
5000
20
40000
30000
Diff Pressure (kPa)
WOB (DaN)
Torque (KFT-LB)
Standpipe Pressure (kPa)
0
0
0
0

30
3500
200

ROP (min/m)
Gas (units)
Gamma (aapi)

INVERT:
Den: 1035
Vis: 75

0
0
0

2900 2905 2910 2915 2920 2925 2930 2935 29

1770 TVD
Sub Sea (-1496.6)

ConocoPhillips

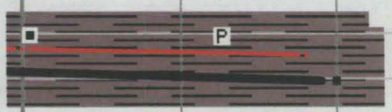
Driller's TD on January 20th, 2014 at 00:42 hrs

Extrapolated to:
2910 mMD (1804.01mTVD, -1530.61mSS, 1225.81mVS)
599.85m North 1069.12m West of Well Center
Grid N/E Y/X: N 7220440.19m, E 592922.75m

1790
(-1516.6)

- blk, blky, carb, firm - pt hd, brit,
lightly calcs, v rr modly calcs,
yr com, occ nod pyr, v wk slow

1003.00 meters have been drilled from the ICP at 1907.00m MD to TD.



Spud on December 28th, 2013 at 06:30hrs

Drilled out through Int Casing on
January 17th, 2014 at 00:40hrs

MD 2910 TVD 1804.01
INC 87.8 AZ 301.07
VS 1225.81

1810
(-1536.6)

5000
20
40000
30000

Diff Pressure (kPa)
WOB (DaN)
Torque (KFT-LB)
Standpipe Pressure (kPa)

0
0
0
0

Bit #4
SMITH 613_JH8402
156mm
Jets: 6 x 12.7
In @ 1907m
Out @ 2910m
1003.0m / 44.25hrs / 22.67 mhr

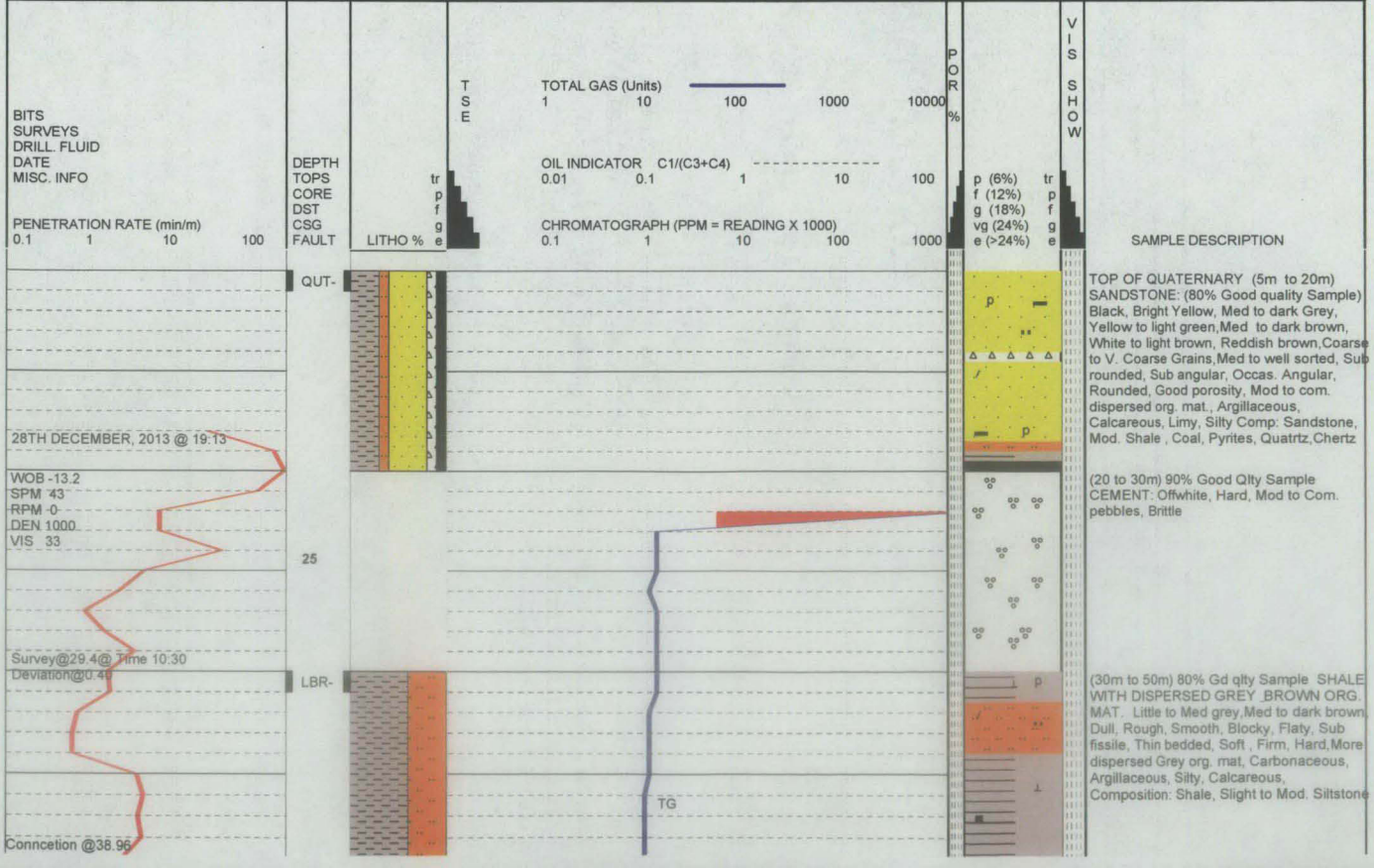


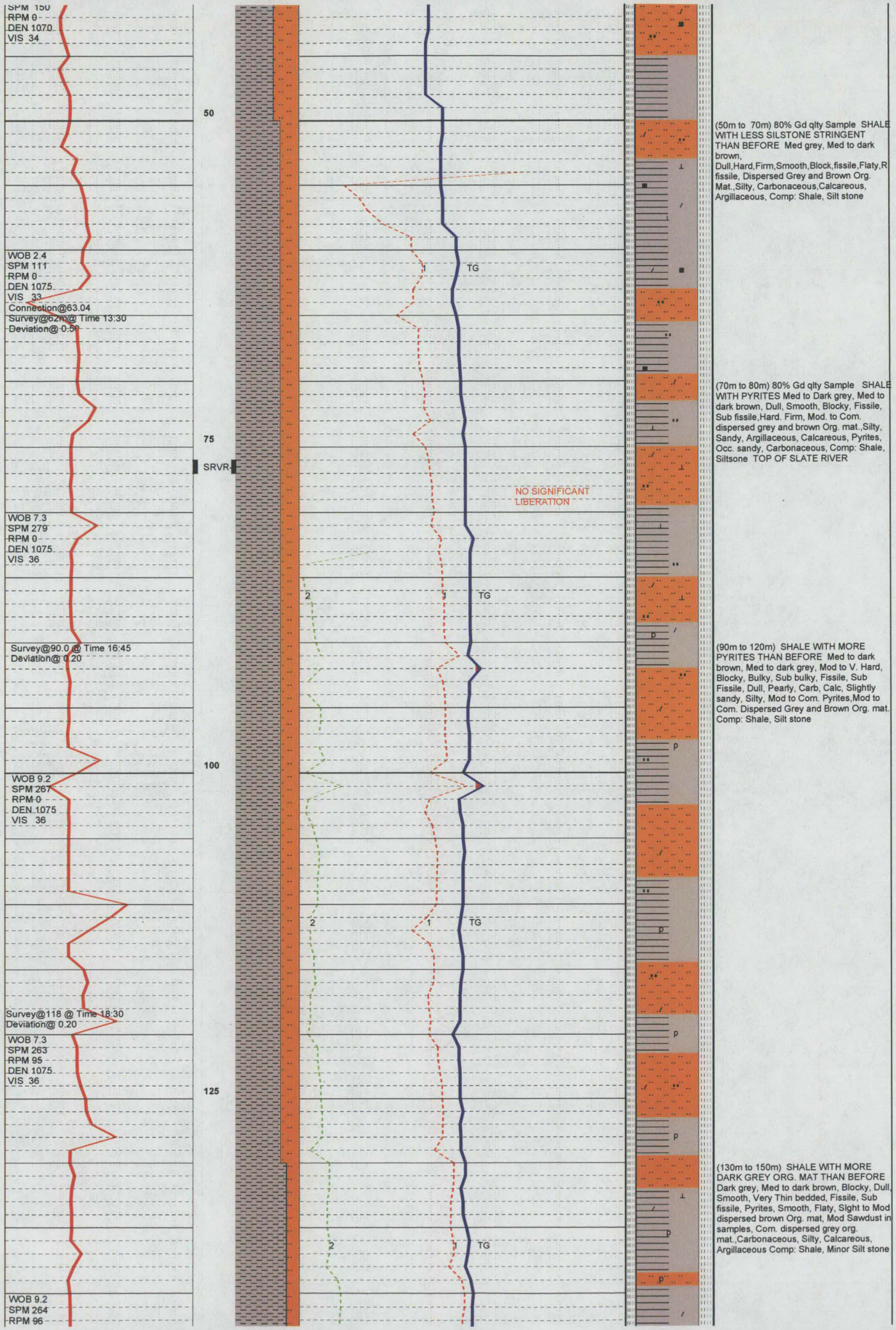
Projected vertical section azimuth. 299.99°
Motor Bend: 1.36°
Magnetic Dec 22.996°
Survey tool offset: 19.50m
Gamma offset: 13.93m

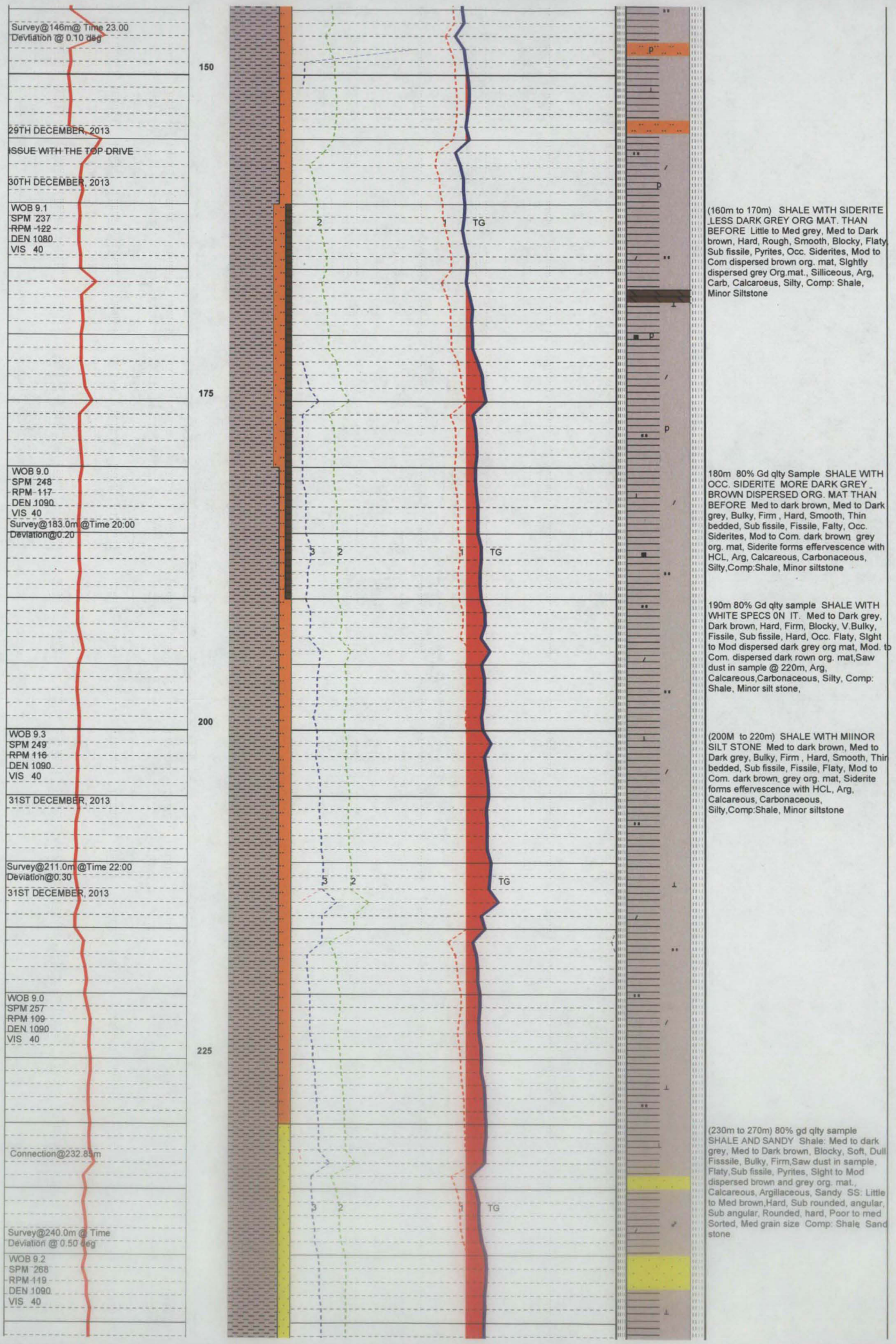
Continental Laboratories Ltd. — Hydrocarbon Well Log

WELL NAME:	COPRC Dodo Canyon E-76 65-10 126-45		
LOCATION:	65° 59' 27.00" N 126° 59' 58.00" W		
UWI:	300E766510126450	LICENSE#:	WID-2082
COMPANY:	CONOCOPHILLIPS CANADA RESOURCES CORP.		
PROVINCE:	NORTH WEST TERRITORIES	FILE:	19746 AN
ELEVATION K.B.:	273.40 m	HOLE SIZE:	311 mm from 18.70 m to 603.0 m
			222 mm from 603.0 m to 1908.0 m
ELEVATION G.L.:	268.20 m		156 mm from 1908.0 m to 2910.0 m
LOGGING INTERVAL:	18.70 m to 2910.0 m		
LOGGING DATES:	28/12/2013 to 20/ 1/2014	MUD SYSTEM:	Water Base from: 18.70 m to: 603.0 m
			Invert from: 603.0 m to: 2910.0 m
PERSONNEL:	UKEME DAN, RAHIL KIANI		

ALL LITHOLOGIC SYMBOLS ARE CANSTRAT COMPATIBLE




SPM 150
RPM 0
DEN 1070
VIS 34
50
WOB 2.4
SPM 111
RPM 0
DEN 1075
VIS 33
Connection@63.04
Survey@62m@ Time 13:30
Deviation@ 0.50
1
TG
75
SRVR
NO SIGNIFICANT
LIBERATION
WOB 7.3
SPM 279
RPM 0
DEN 1075
VIS 36
2
1
TG
Survey@90.0 @ Time 16:45
Deviation@ 0.20
100
WOB 9.2
SPM 267
RPM 0
DEN 1075
VIS 36
2
1
TG
Survey@118 @ Time 18:30
Deviation@ 0.20
WOB 7.3
SPM 263
RPM 95
DEN 1075
VIS 36
125
2
1
TG
WOB 9.2
SPM 264
RPM 96
p
(50m to 70m) 80% Gd qlty Sample SHALE WITH LESS SILSTONE STRINGENT THAN BEFORE Med grey, Med to dark brown, Dull,Hard,Firm,Smooth,Block,fissile,Flaty,R fissile, Dispersed Grey and Brown Org. Mat.,Silty, Carbonaceous,Calcareous, Argillaceous, Comp: Shale, Silt stone
(70m to 80m) 80% Gd qlty Sample SHALE WITH PYRITES Med to Dark grey, Med to dark brown, Dull, Smooth, Blocky, Fissile, Sub fissile,Hard. Firm, Mod. to Com. dispersed grey and brown Org. mat.,Silty, Sandy, Argillaceous, Calcareous, Pyrites, Occ. sandy, Carbonaceous, Comp: Shale, Siltsone TOP OF SLATE RIVER
(90m to 120m) SHALE WITH MORE PYRITES THAN BEFORE Med to dark brown, Med to dark grey, Mod to V. Hard, Blocky, Bulky, Sub bulky, Fissile, Sub Fissile, Dull, Pearly, Carb, Calc, Slightly sandy, Silty, Mod to Com. Pyrites,Mod to Com. Dispersed Grey and Brown Org. mat. Comp: Shale, Silt stone
(130m to 150m) SHALE WITH MORE DARK GREY ORG. MAT THAN BEFORE Dark grey, Med to dark brown, Blocky, Dull, Smooth, Very Thin bedded, Fissile, Sub fissile, Pyrites, Smooth, Flaty, SIght to Mod dispersed brown Org. mat, Mod Sawdust in samples, Com. dispersed grey org. mat.,Carbonaceous, Silty, Calcareous, Argillaceous Comp: Shale, Minor Silt stone



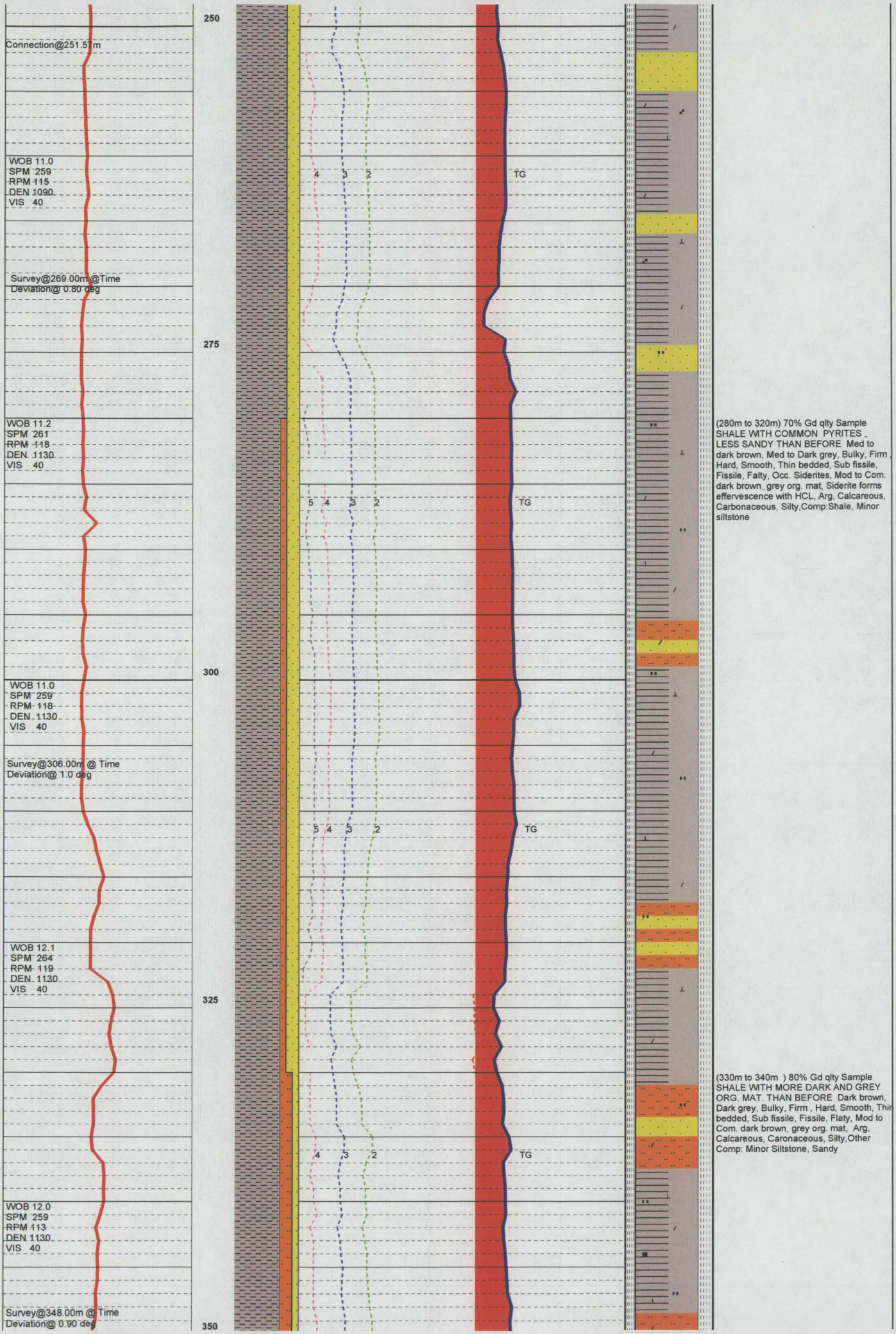
(160m to 170m) SHALE WITH SIDERITE LESS DARK GREY ORG MAT. THAN BEFORE Little to Med grey, Med to Dark brown, Hard, Rough, Smooth, Blocky, Flaty, Sub fissile, Pyrites, Occ. Siderites, Mod to Com dispersed brown org. mat, SIghtly dispersed grey Org.mat., Silliceous, Arg, Carb, Calcaroeus, Silty, Comp: Shale, Minor Siltstone

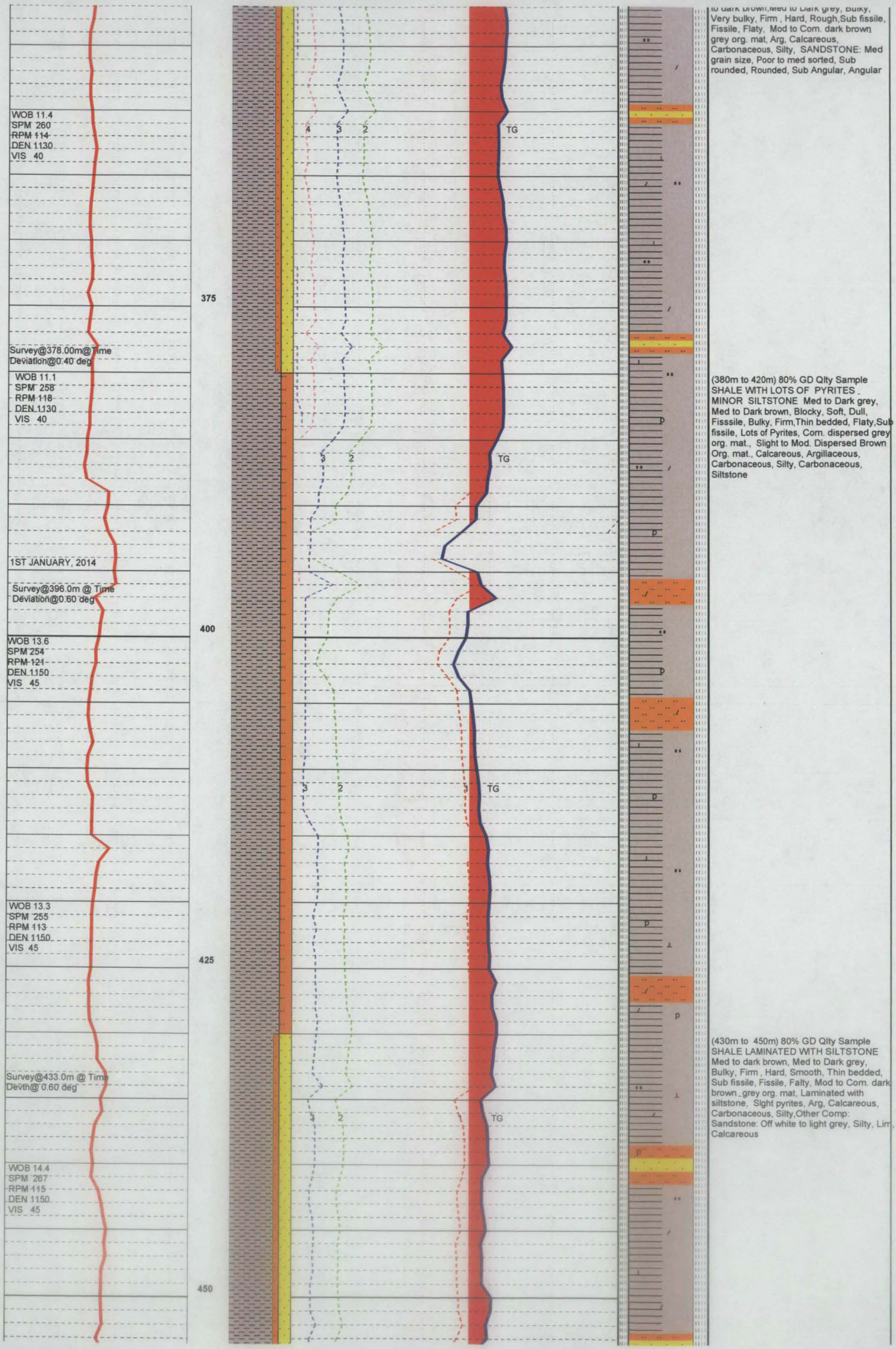
180m 80% Gd qlty Sample SHALE WITH OCC. SIDERITE MORE DARK GREY BROWN DISPERSED ORG. MAT THAN BEFORE Med to dark brown, Med to Dark grey, Bulky, Firm , Hard, Smooth, Thin bedded, Sub fissile, Fissile, Falty, Occ. Siderites, Mod to Com. dark brown grey org. mat, Siderite forms effervescence with HCL, Arg, Calcareous, Carbonaceous, Silty,Comp:Shale, Minor siltstone

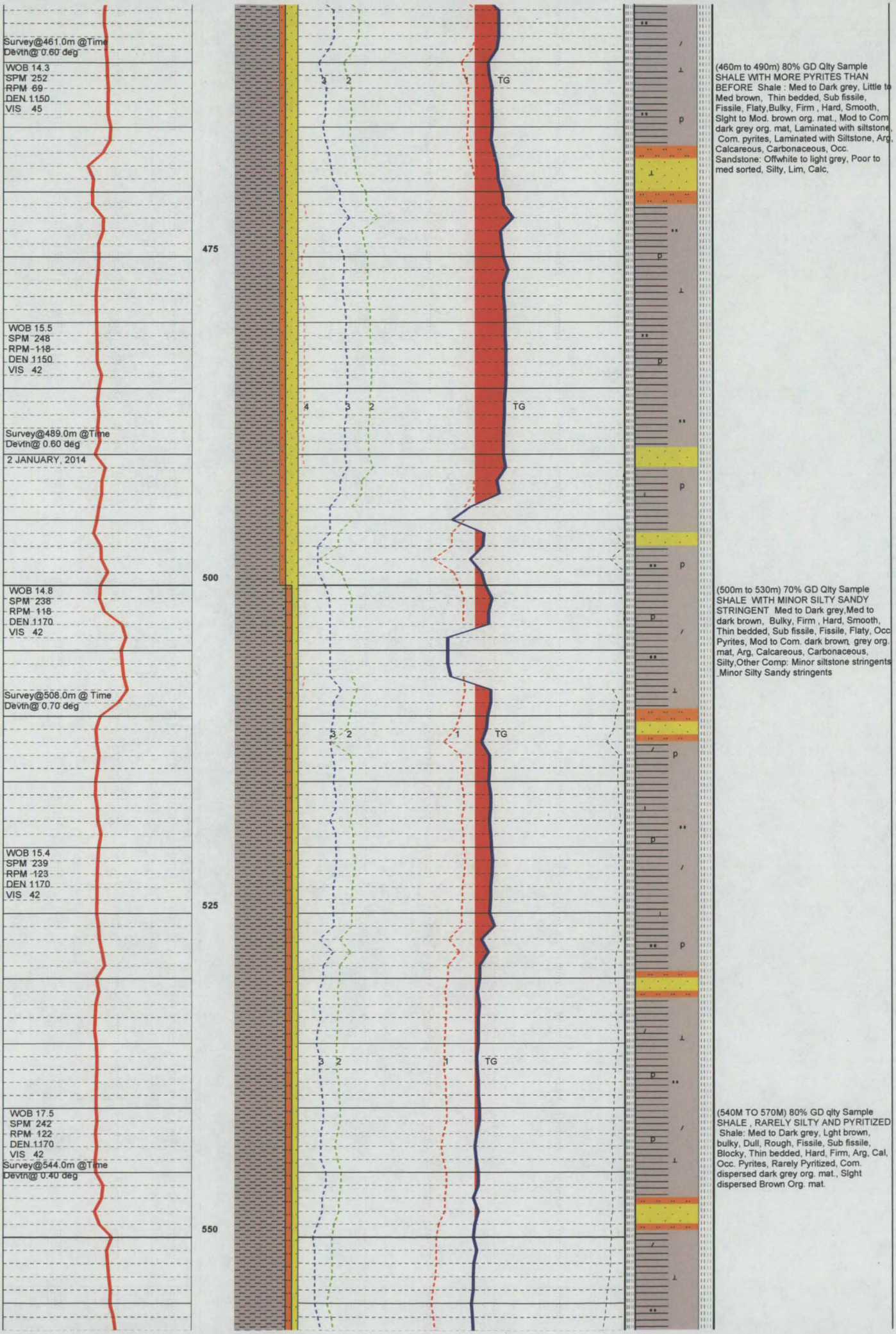
190m 80% Gd qlty sample SHALE WITH WHITE SPECS 0N IT. Med to Dark grey, Dark brown, Hard, Firm, Blocky, V.Bulky, Fissile, Sub fissile, Hard, Occ. Flaty, SIght to Mod dispersed dark grey org mat, Mod. to Com. dispersed dark rown org. mat,Saw dust in sample @ 220m, Arg, Calcareous,Carbonaceous, Silty, Comp: Shale, Minor silt stone,

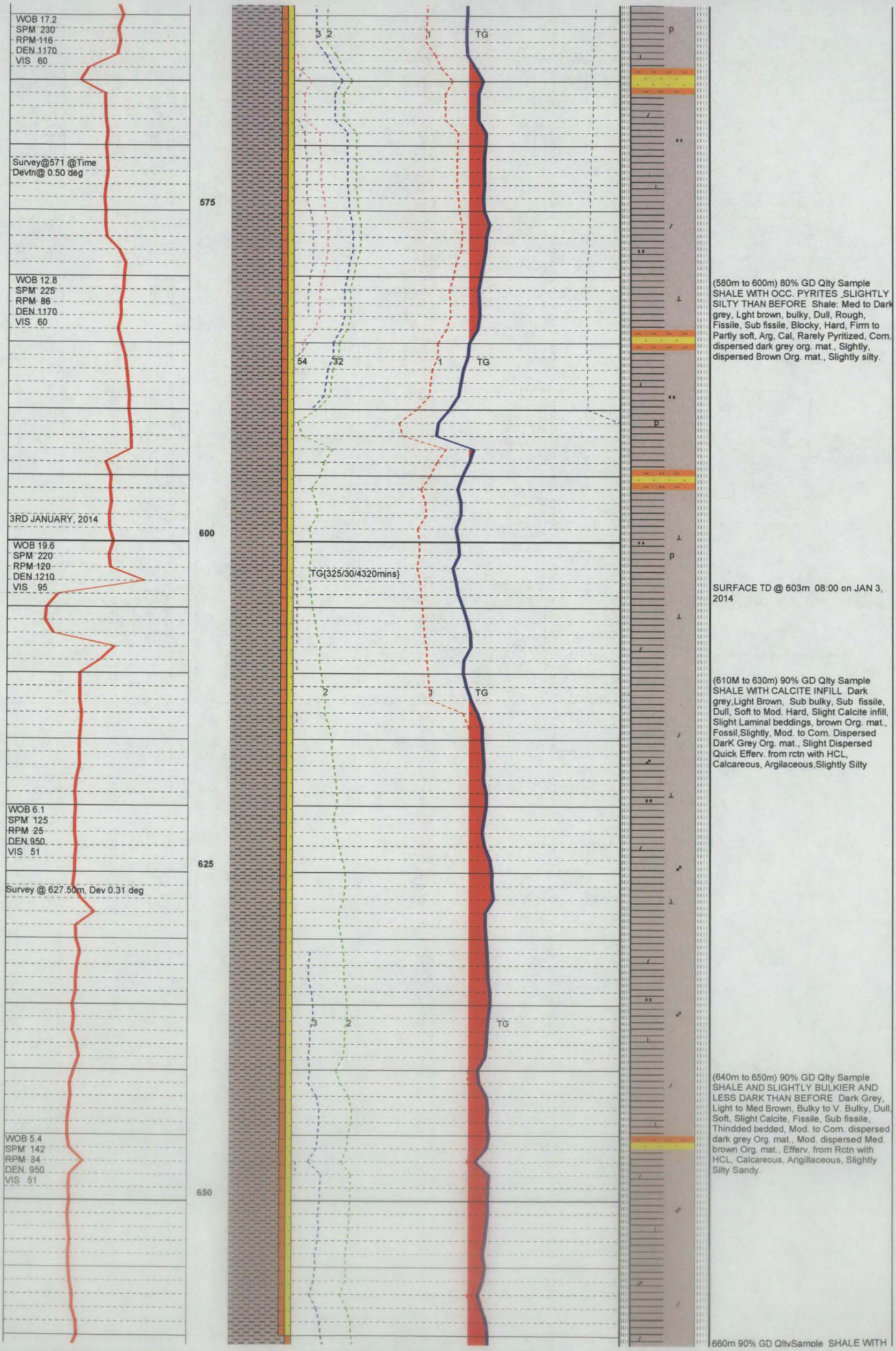
(200M to 220m) SHALE WITH MIINOR SILT STONE Med to dark brown, Med to Dark grey, Bulky, Firm , Hard, Smooth, Thin bedded, Sub fissile, Fissile, Flaty, Mod to Com. dark brown grey org. mat, Siderite forms effervescence with HCL, Arg, Calcareous, Carbonaceous, Silty,Comp:Shale, Minor siltstone

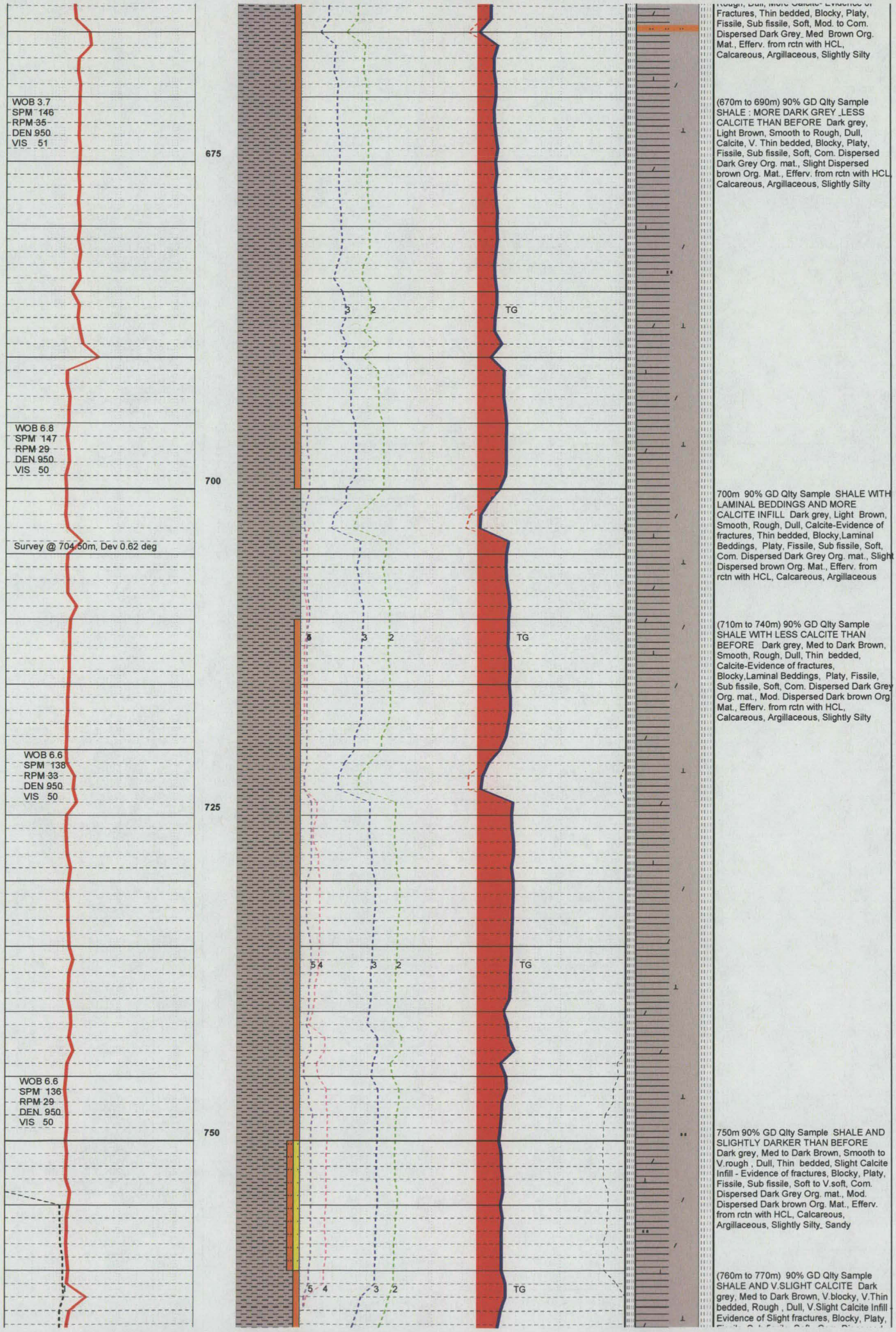
(230m to 270m) 80% gd qlty sample SHALE AND SANDY Shale: Med to dark grey, Med to Dark brown, Blocky, Soft, Dull Fisssile, Bulky, Firm,Saw dust in sample, Flaty,Sub fissile, Pyrites, SIght to Mod dispersed brown and grey org. mat., Calcareous, Argillaceous, Sandy SS: Little to Med brown,Hard, Sub rounded, angular, Sub angular, Rounded, hard, Poor to med Sorted, Med grain size Comp: Shale Sand stone


250
Connection@251.57m
WOB 11.0
SPM 259
RPM 115
DEN 1090
VIS 40
Survey@269.00m @Time
Deviation@ 0.80 deg
4 3 2
TG
275
WOB 11.2
SPM 261
RPM 118
DEN 1130
VIS 40
5 4 3 2
TG
300
WOB 11.0
SPM 259
RPM 118
DEN 1130
VIS 40
Survey@306.00m @ Time
Deviation@ 1.0 deg
5 4 3 2
TG
WOB 12.1
SPM 264
RPM 119
DEN 1130
VIS 40
325
4 3 2
TG
WOB 12.0
SPM 259
RPM 113
DEN 1130
VIS 40
Survey@348.00m @ Time
Deviation@ 0.90 deg
350
(280m to 320m) 70% Gd qlty Sample SHALE WITH COMMON PYRITES _ LESS SANDY THAN BEFORE Med to dark brown, Med to Dark grey, Bulky, Firm , Hard, Smooth, Thin bedded, Sub fissile, Fissile, Falty, Occ. Siderites, Mod to Com. dark brown_grey org. mat, Siderite forms effervescence with HCL, Arg, Calcareous, Carbonaceous, Silty,Comp:Shale, Minor siltstone
(330m to 340m) 80% Gd qlty Sample SHALE WITH MORE DARK AND GREY ORG. MAT. THAN BEFORE Dark brown, Dark grey, Bulky, Firm , Hard, Smooth, Thin bedded, Sub fissile, Fissile, Flaty, Mod to Com. dark brown_grey org. mat, Arg, Calcareous, Caronaceous, Silty,Other Comp: Minor Siltstone, Sandy


WOB 11.4
SPM 260
RPM 114
DEN 1130
VIS 40
375
Survey@378.00m@Time
Deviation@0.40 deg
WOB 11.1
SPM 258
RPM 118
DEN 1130
VIS 40
1ST JANUARY, 2014
Survey@396.0m @ Time
Deviation@0.60 deg
400
WOB 13.6
SPM 254
RPM 121
DEN 1150
VIS 45
WOB 13.3
SPM 255
RPM 113
DEN 1150
VIS 45
425
Survey@433.0m @ Time
Devtn@ 0.60 deg
WOB 14.4
SPM 267
RPM 115
DEN 1150
VIS 45
450
4
3
2
TG
3
2
TG
3
2
1
TG
3
2
TG
to dark brown,Med to Dark grey, Bulky, Very bulky, Firm , Hard, Rough,Sub fissile, Fissile, Flaty, Mod to Com. dark brown grey org. mat, Arg, Calcareous, Carbonaceous, Silty, SANDSTONE: Med grain size, Poor to med sorted, Sub rounded, Rounded, Sub Angular, Angular
(380m to 420m) 80% GD Qlty Sample SHALE WITH LOTS OF PYRITES _ MINOR SILTSTONE Med to Dark grey, Med to Dark brown, Blocky, Soft, Dull, Fisssile, Bulky, Firm,Thin bedded, Flaty,Sub fissile, Lots of Pyrites, Com. dispersed grey org. mat., Slight to Mod. Dispersed Brown Org. mat., Calcareous, Argillaceous, Carbonaceous, Silty, Carbonaceous, Siltstone
(430m to 450m) 80% GD Qlty Sample SHALE LAMINATED WITH SILTSTONE Med to dark brown, Med to Dark grey, Bulky, Firm , Hard, Smooth, Thin bedded, Sub fissile, Fissile, Falty, Mod to Com. dark brown _grey org. mat, Laminated with siltstone, Slght pyrites, Arg, Calcareous, Carbonaceous, Silty,Other Comp: Sandstone: Off white to light grey, Silty, Lim, Calcareous


Survey@461.0m @Time
Devtn@ 0.60 deg
WOB 14.3
SPM 252
RPM 69
DEN 1150
VIS 45
475
WOB 15.5
SPM 248
RPM 118
DEN 1150
VIS 42
Survey@489.0m @Time
Devtn@ 0.60 deg
2 JANUARY, 2014
500
WOB 14.8
SPM 238
RPM 118
DEN 1170
VIS 42
Survey@508.0m @ Time
Devtn@ 0.70 deg
WOB 15.4
SPM 239
RPM 123
DEN 1170
VIS 42
525
WOB 17.5
SPM 242
RPM 122
DEN 1170
VIS 42
Survey@544.0m @Time
Devtn@ 0.40 deg
550
TG
(460m to 490m) 80% GD Qlty Sample SHALE WITH MORE PYRITES THAN BEFORE Shale : Med to Dark grey, Little to Med brown, Thin bedded, Sub fissile, Fissile, Flaty,Bulky, Firm , Hard, Smooth, Sight to Mod. brown org. mat., Mod to Com dark grey org. mat, Laminated with siltstone, Com. pyrites, Laminated with Siltstone, Arg, Calcareous, Carbonaceous, Occ. Sandstone: Offwhite to light grey, Poor to med sorted, Silty, Lim, Calc,
(500m to 530m) 70% GD Qlty Sample SHALE WITH MINOR SILTY SANDY STRINGENT Med to Dark grey,Med to dark brown, Bulky, Firm , Hard, Smooth, Thin bedded, Sub fissile, Fissile, Flaty, Occ Pyrites, Mod to Com. dark brown grey org. mat, Arg, Calcareous, Carbonaceous, Silty,Other Comp: Minor siltstone stringents ,Minor Silty Sandy stringents
(540M TO 570M) 80% GD qlty Sample SHALE , RARELY SILTY AND PYRITIZED Shale: Med to Dark grey, Lght brown, bulky, Dull, Rough, Fissile, Sub fissile, Blocky, Thin bedded, Hard, Firm, Arg, Cal, Occ. Pyrites, Rarely Pyritized, Com. dispersed dark grey org. mat., Sight dispersed Brown Org. mat.


WOB 17.2
SPM 230
RPM 116
DEN 1170
VIS 60
Survey@571 @Time
Devtn@ 0.50 deg
575
WOB 12.8
SPM 225
RPM 86
DEN 1170
VIS 60
3RD JANUARY, 2014
600
WOB 19.6
SPM 220
RPM 120
DEN 1210
VIS 95
WOB 6.1
SPM 125
RPM 25
DEN 950
VIS 51
625
Survey @ 627.50m, Dev 0.31 deg
WOB 5.4
SPM 142
RPM 34
DEN 950
VIS 51
650
3 2 1 TG
54 32 1 TG
TG{325/30/4320mins}
2 1 TG
3 2 TG
p
(580m to 600m) 80% GD Qlty Sample SHALE WITH OCC. PYRITES ,SLIGHTLY SILTY THAN BEFORE Shale: Med to Dark grey, Lght brown, bulky, Dull, Rough, Fissile, Sub fissile, Blocky, Hard, Firm to Partly soft, Arg, Cal, Rarely Pyritized, Com. dispersed dark grey org. mat., Slghtly, dispersed Brown Org. mat., Slightly silty.
SURFACE TD @ 603m 08:00 on JAN 3, 2014
(610M to 630m) 90% GD Qlty Sample SHALE WITH CALCITE INFILL Dark grey,Light Brown, Sub bulky, Sub fissile, Dull, Soft to Mod. Hard, Slight Calcite infill, Slight Laminal beddings, brown Org. mat., Fossil,Slightly, Mod. to Com. Dispersed DarK Grey Org. mat., Slight Dispersed Quick Efferv. from rctn with HCL, Calcareous, Argilaceous,Slightly Silty
(640m to 650m) 90% GD Qlty Sample SHALE AND SLIGHTLY BULKIER AND LESS DARK THAN BEFORE Dark Grey, Light to Med Brown, Bulky to V. Bulky, Dull, Soft, Slight Calcite, Fissile, Sub fissile, Thindded bedded, Mod. to Com. dispersed dark grey Org. mat., Mod. dispersed Med. brown Org. mat., Efferv. from Rctn with HCL, Calcareous, Arigillaceous, Slightly Silty Sandy.
660m 90% GD QltySample SHALE WITH



Fractures, Thin bedded, Blocky, Platy, Fissile, Sub fissile, Soft, Mod. to Com. Dispersed Dark Grey. Med Brown Org. Mat., Efferv. from rctn with HCL, Calcareous, Argillaceous, Slightly Silty

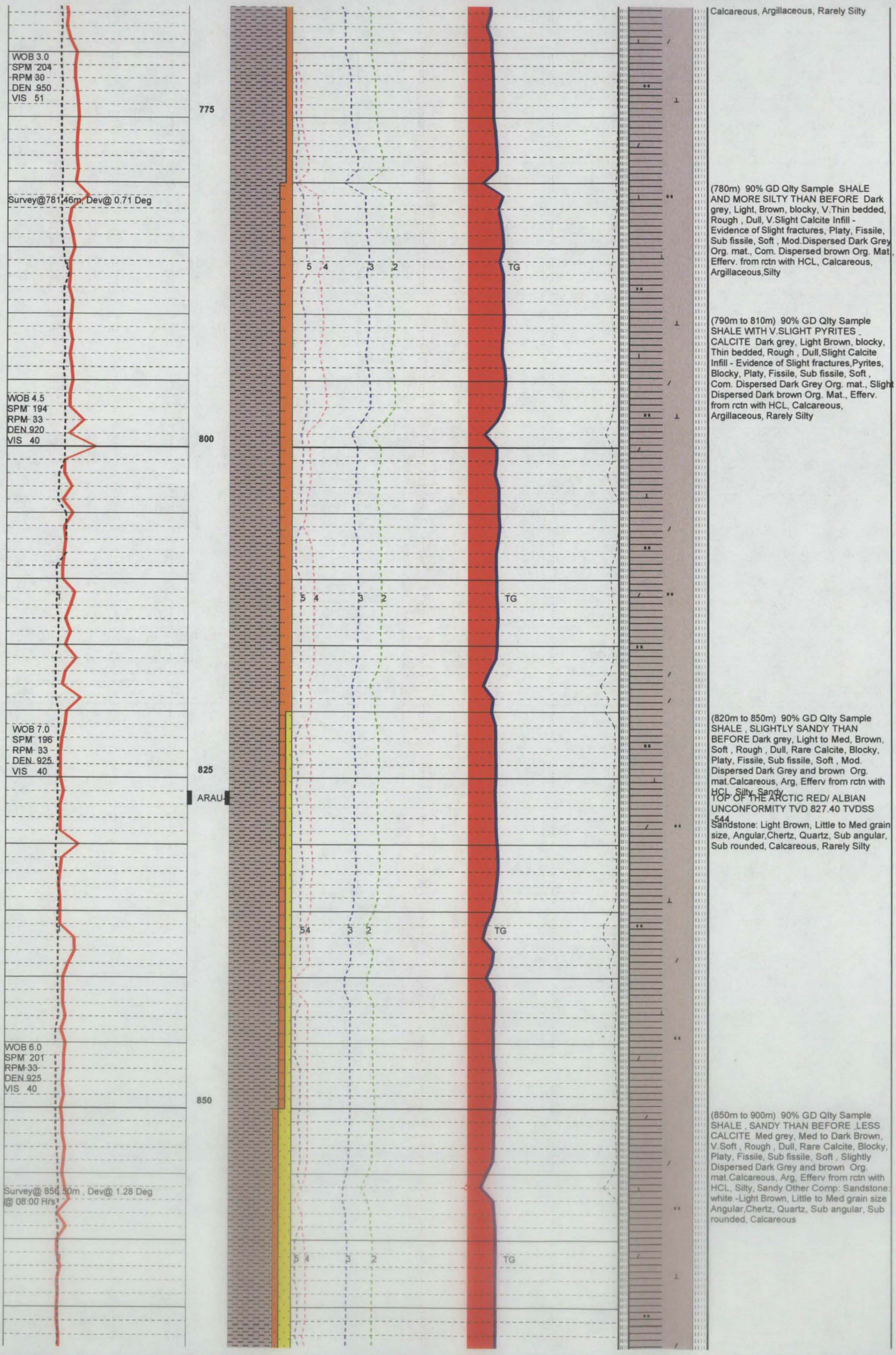
(670m to 690m) 90% GD Qlty Sample SHALE : MORE DARK GREY ,LESS CALCITE THAN BEFORE Dark grey, Light Brown, Smooth to Rough, Dull, Calcite, V. Thin bedded, Blocky, Platy, Fissile, Sub fissile, Soft, Com. Dispersed Dark Grey Org. mat., Slight Dispersed brown Org. Mat., Efferv. from rctn with HCL, Calcareous, Argillaceous, Slightly Silty

700m 90% GD Qlty Sample SHALE WITH LAMINAL BEDDINGS AND MORE CALCITE INFILL Dark grey, Light Brown, Smooth, Rough, Dull, Calcite-Evidence of fractures, Thin bedded, Blocky,Laminal Beddings, Platy, Fissile, Sub fissile, Soft, Com. Dispersed Dark Grey Org. mat., Slight Dispersed brown Org. Mat., Efferv. from rctn with HCL, Calcareous, Argillaceous

(710m to 740m) 90% GD Qlty Sample SHALE WITH LESS CALCITE THAN BEFORE Dark grey, Med to Dark Brown, Smooth, Rough, Dull, Thin bedded, Calcite-Evidence of fractures, Blocky,Laminal Beddings, Platy, Fissile, Sub fissile, Soft, Com. Dispersed Dark Grey Org. mat., Mod. Dispersed Dark brown Org Mat., Efferv. from rctn with HCL, Calcareous, Argillaceous, Slightly Silty

750m 90% GD Qlty Sample SHALE AND SLIGHTLY DARKER THAN BEFORE Dark grey, Med to Dark Brown, Smooth to V.rough , Dull, Thin bedded, Slight Calcite Infill - Evidence of fractures, Blocky, Platy, Fissile, Sub fissile, Soft to V.soft, Com. Dispersed Dark Grey Org. mat., Mod. Dispersed Dark brown Org. Mat., Efferv. from rctn with HCL, Calcareous, Argillaceous, Slightly Silty_ Sandy

(760m to 770m) 90% GD Qlty Sample SHALE AND V.SLIGHT CALCITE Dark grey, Med to Dark Brown, V.blocky, V.Thin bedded, Rough , Dull, V.Slight Calcite Infill - Evidence of Slight fractures, Blocky, Platy,



Calcareous, Argillaceous, Rarely Silty

(780m) 90% GD Qlty Sample SHALE AND MORE SILTY THAN BEFORE Dark grey, Light, Brown, blocky, V.Thin bedded, Rough , Dull, V.Slight Calcite Infill - Evidence of Slight fractures, Platy, Fissile, Sub fissile, Soft , Mod.Dispersed Dark Grey Org. mat., Com. Dispersed brown Org. Mat., Efferv. from rctn with HCL, Calcareous, Argillaceous,Silty

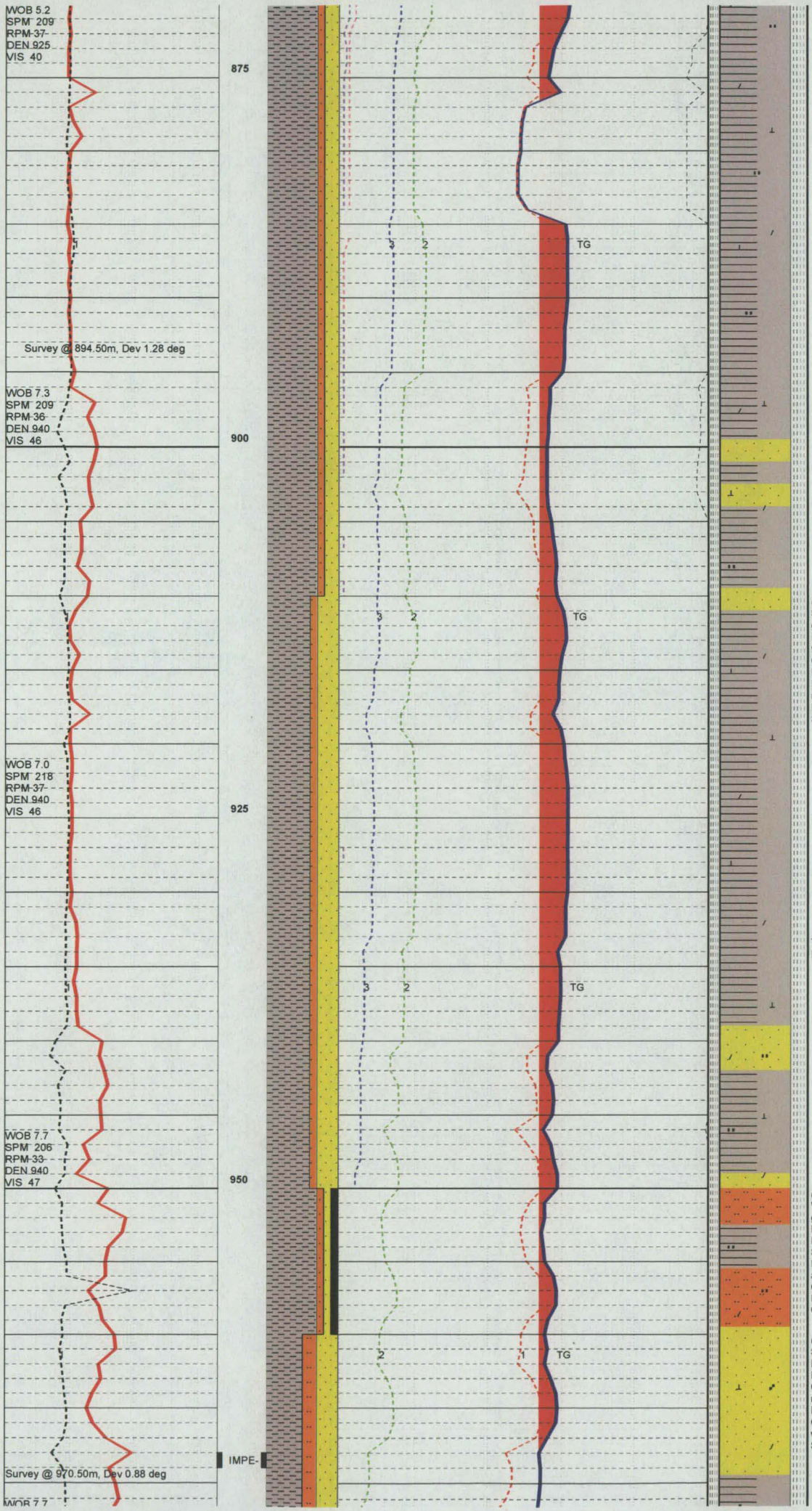
(790m to 810m) 90% GD Qlty Sample SHALE WITH V.SLIGHT PYRITES , CALCITE Dark grey, Light Brown, blocky, Thin bedded, Rough , Dull,Slight Calcite Infill - Evidence of Slight fractures,Pyrites, Blocky, Platy, Fissile, Sub fissile, Soft , Com. Dispersed Dark Grey Org. mat., Slight Dispersed Dark brown Org. Mat., Efferv. from rctn with HCL, Calcareous, Argillaceous, Rarely Silty

(820m to 850m) 90% GD Qlty Sample SHALE , SLIGHTLY SANDY THAN BEFORE Dark grey, Light to Med, Brown, Soft , Rough , Dull, Rare Calcite, Blocky, Platy, Fissile, Sub fissile, Soft , Mod. Dispersed Dark Grey and brown Org. mat.Calcareous, Arg, Efferv from rctn with HCL, Silty, Sandy

TOP OF THE ARCTIC RED/ ALBIAN UNCONFORMITY TVD 827.40 TVDSS 544

Sandstone: Light Brown, Little to Med grain size, Angular,Chertz, Quartz, Sub angular, Sub rounded, Calcareous, Rarely Silty

(850m to 900m) 90% GD Qlty Sample SHALE , SANDY THAN BEFORE LESS CALCITE Med grey, Med to Dark Brown, V.Soft , Rough , Dull, Rare Calcite, Blocky, Platy, Fissile, Sub fissile, Soft , Slightly Dispersed Dark Grey and brown Org. mat.Calcareous, Arg, Efferv from rctn with HCL, Silty, Sandy Other Comp: Sandstone: white -Light Brown, Little to Med grain size Angular,Chertz, Quartz, Sub angular, Sub rounded, Calcareous

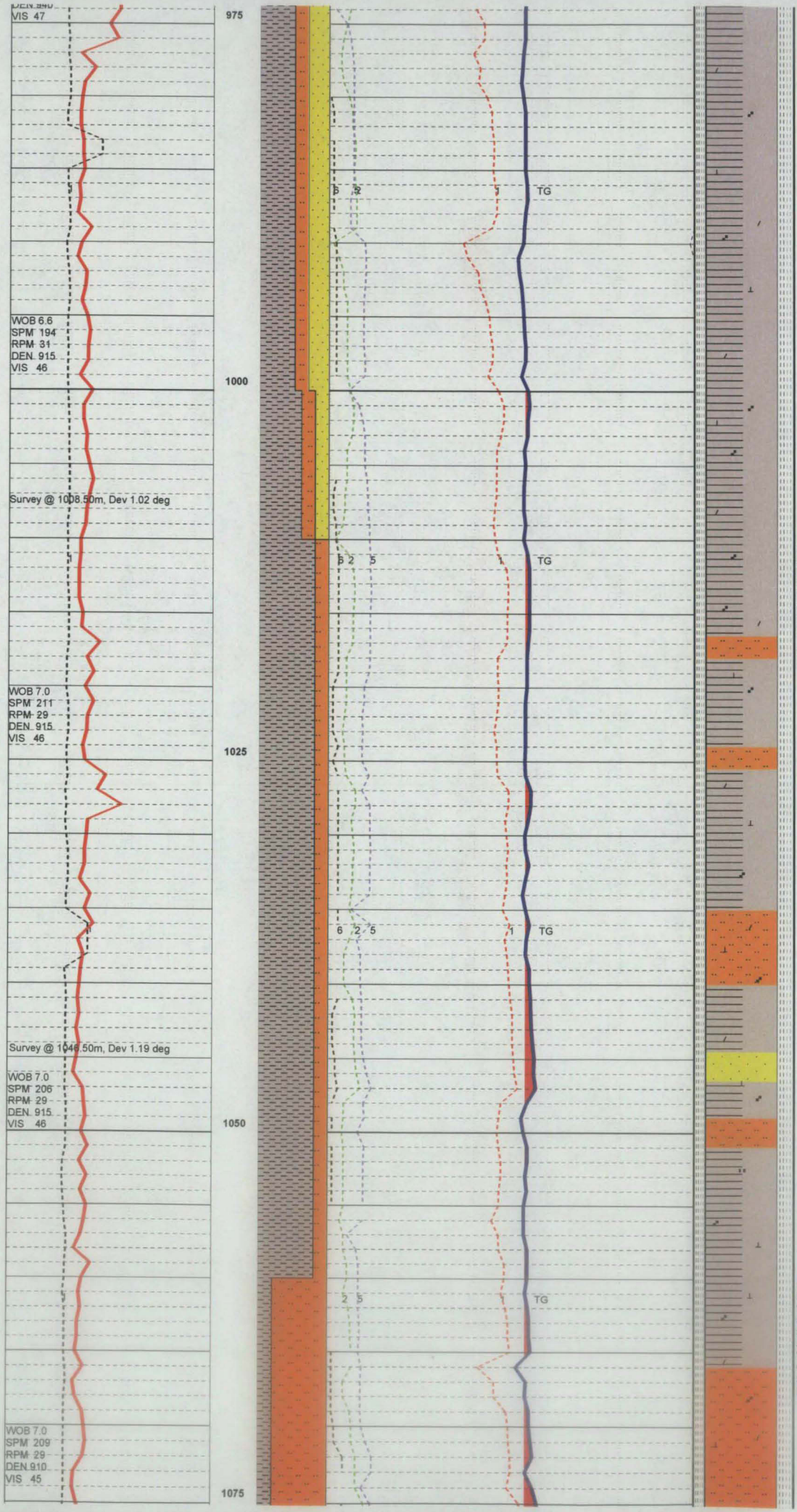


(910m to 940m) 90% GD Qlty Sample SHALE WITH MOD. SANDSTONE Dark grey, Light Brown, White to Light Brown, Rough to Smooth, Dull to Bright, Soft to firm,Hard, Blocky, Fissile, Calcite,,Chertz, Quartz, Sub angular, Sub rounded, Angular, Fine to Med grain size, Calcareous, Mod. Dispersed Dark Grey and Light brown Org. mat.Calcareous, Arg, Efferv from rctn with HCL, Silty, Sandy Other Comp: Sandstone, Silty

TOP OF MARTIN HOUSE TVD 933.40
Prog TVDSS -660

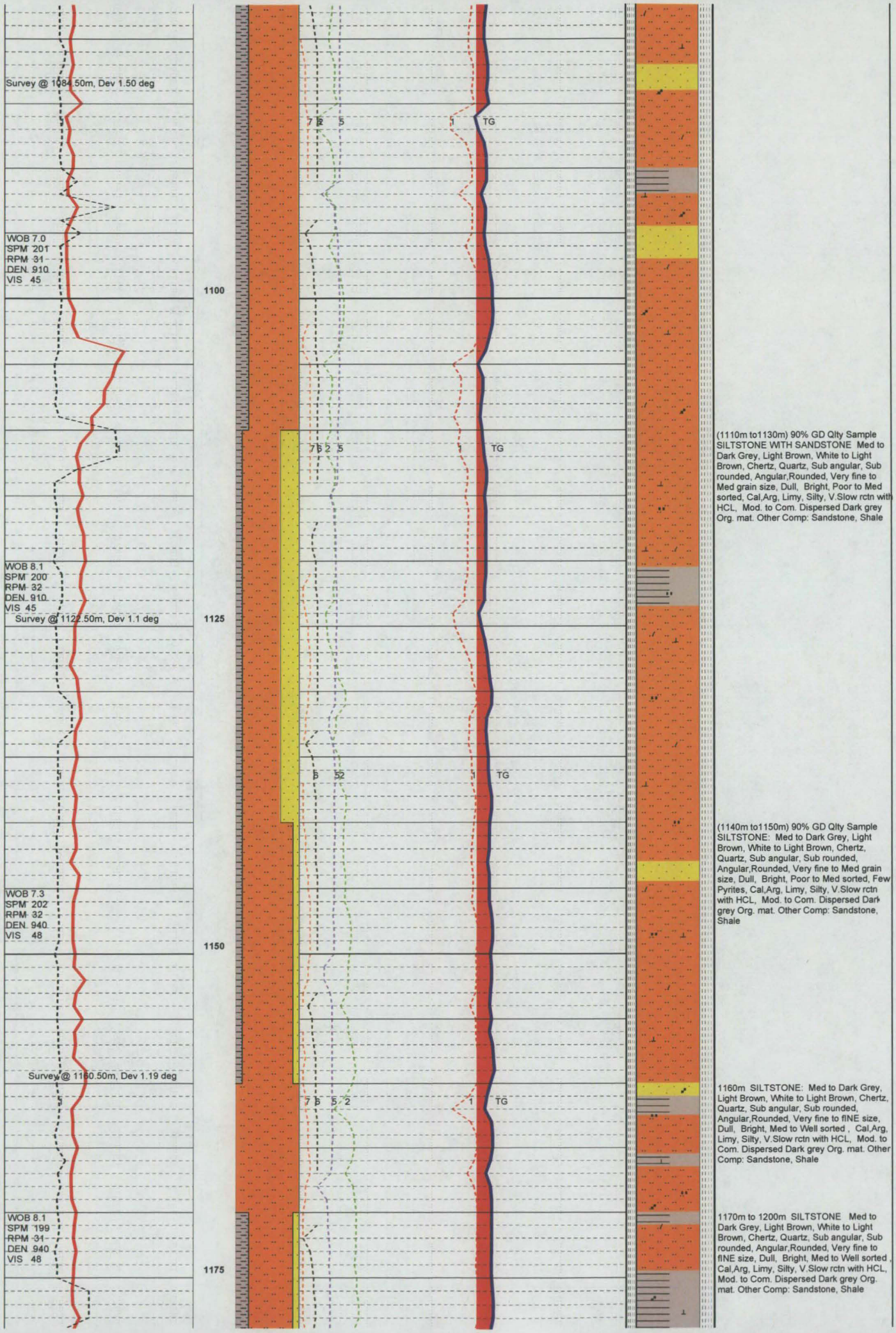
(950m) 90% GD Qlty Sample SHALE WITH TRACES OF COAL Black, Dark grey, Light Brown, White to Light Brown, Rough, Dull to Bright, Soft, firm, Blocky, Fissile, Very Slight Calcite,,Chertz, Quartz, Sub angular, Sub rounded, Angular, Fine to Med grain size, Mod. Dispersed Dark Grey and Light brown Org. mat.Calcareous, Carbonaceous, Arg, Slow rctn, Efferv with HCL, Silty, Sandy Other Comp: Sandstone, Coal

(960m to 1000m) 90% GD Qlty Sample SHALE AND V.SANDY Dark grey, Light Brown, White to Light Brown, Rough, Dull to Bright, Soft, firm, Blocky, Fissile, Very Slight Calcite,,Chertz, Quartz, Sub angular, Sub rounded, Angular, Fine to Med grain size, Mod. Dispersed Dark Grey and Light brown Org. mat.Calcareous,Arg, Slow rctn, Efferv with HCL, Silty, Sandy Other Comp: Sandstone,



(1010m to1050m) 90% GD Qlty Sample SHALE Dark grey, Light Brown, White to Light Brown, Rough, Dull to Bright, Soft, firm, Less Calcite, Blocky, Fissile, Very Slight Calcite,,Chertz, Quartz, Sub angular, Sub rounded, Angular, Fine to Med grain size, Mod. Dispersed Dark Grey and Light brown Org. mat.Calcareous,Arg, Slow rctn Efferv with HCL, Silty, Sandy Other Comp: Sandstone,Siltsone

(1060m to1100m) 90% GD Qlty Sample SILTSTONE Dark grey, Light Brown, White to Light Brown, Rough, Dull to Bright, Soft, firm, Less Calcite, Blocky, Fissile, Very Slight Calcite,, Mod. Dispersed Dark Grey and Light brown Org. mat, Calcareous,Arg, V.Slow rctn, Efferv with HCL, Silty, Sandy Other Comp: Sandstone: Chertz, Quartz, Sub angular, Sub rounded, Angular, Fine to Med grain size,

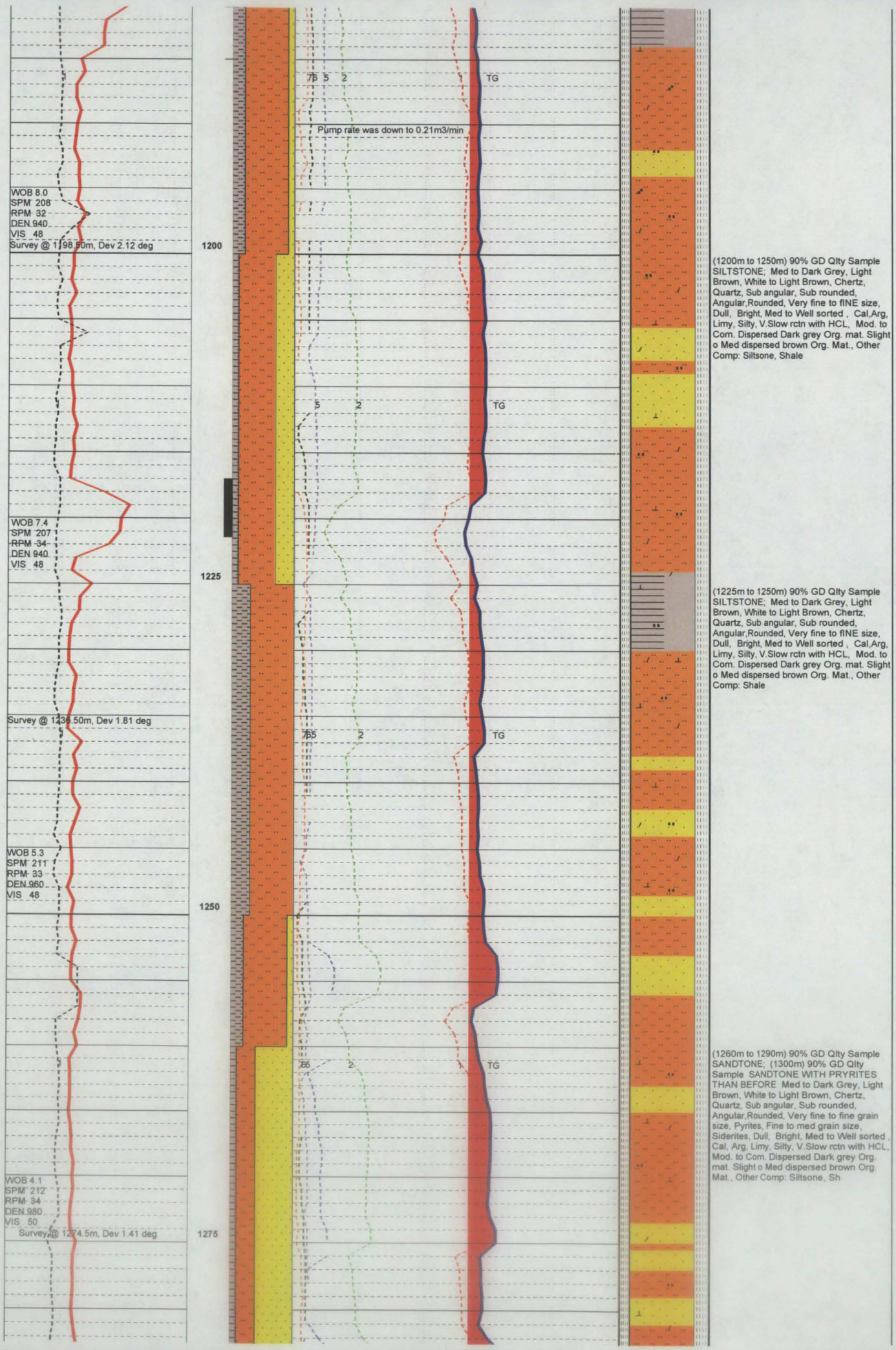


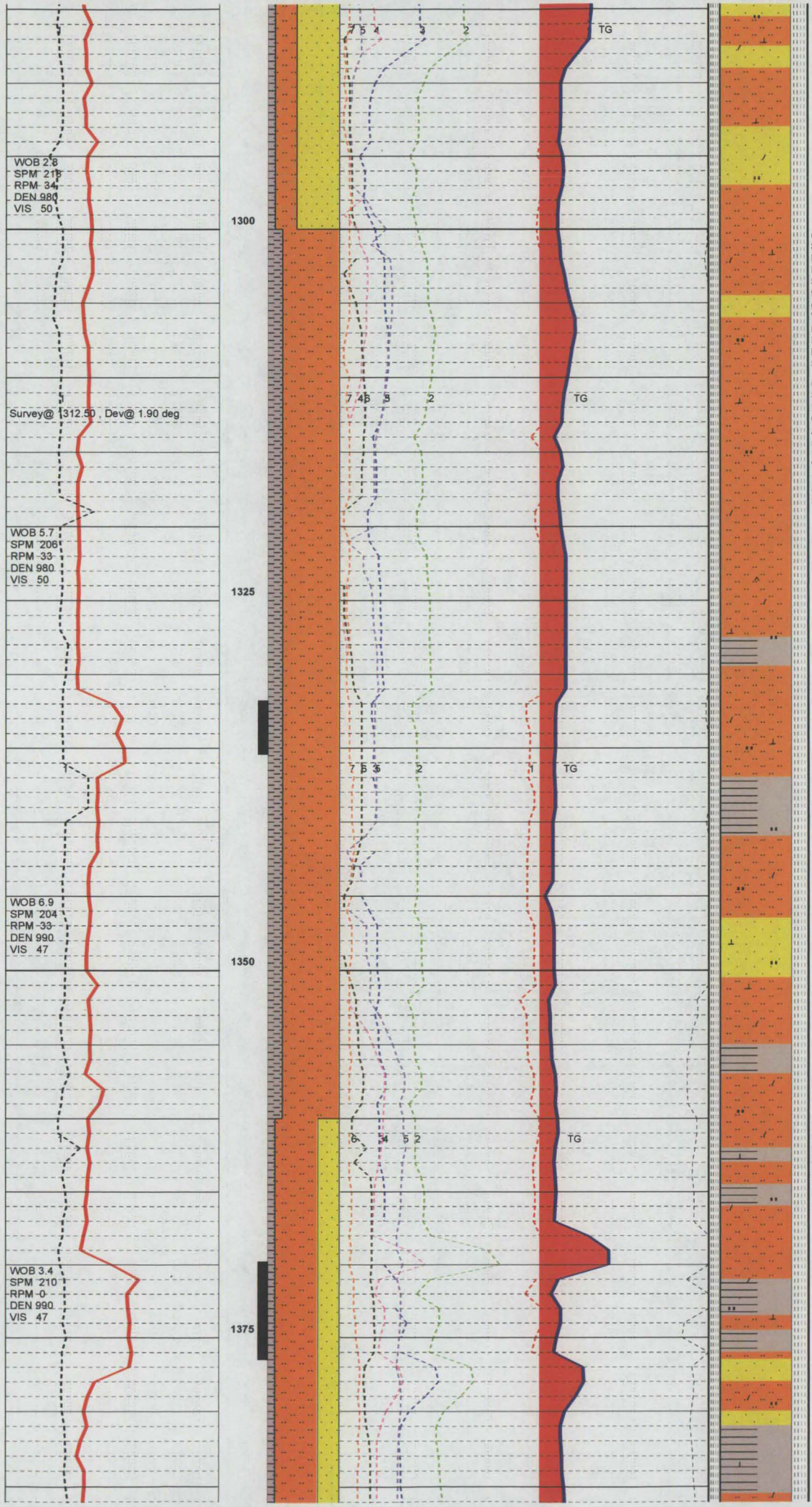
(1110m to1130m) 90% GD Qlty Sample SILTSTONE WITH SANDSTONE Med to Dark Grey, Light Brown, White to Light Brown, Chertz, Quartz, Sub angular, Sub rounded, Angular,Rounded, Very fine to Med grain size, Dull, Bright, Poor to Med sorted, Cal,Arg, Limy, Silty, V.Slow rctn with HCL, Mod. to Com. Dispersed Dark grey Org. mat. Other Comp: Sandstone, Shale

(1140m to1150m) 90% GD Qlty Sample SILTSTONE: Med to Dark Grey, Light Brown, White to Light Brown, Chertz, Quartz, Sub angular, Sub rounded, Angular,Rounded, Very fine to Med grain size, Dull, Bright, Poor to Med sorted, Few Pyrites, Cal,Arg, Limy, Silty, V.Slow rctn with HCL, Mod. to Com. Dispersed Dark grey Org. mat. Other Comp: Sandstone, Shale

1160m SILTSTONE: Med to Dark Grey, Light Brown, White to Light Brown, Chertz, Quartz, Sub angular, Sub rounded, Angular,Rounded, Very fine to fINE size, Dull, Bright, Med to Well sorted , Cal,Arg, Limy, Silty, V.Slow rctn with HCL, Mod. to Com. Dispersed Dark grey Org. mat. Other Comp: Sandstone, Shale

1170m to 1200m SILTSTONE Med to Dark Grey, Light Brown, White to Light Brown, Chertz, Quartz, Sub angular, Sub rounded, Angular,Rounded, Very fine to fINE size, Dull, Bright, Med to Well sorted , Cal,Arg, Limy, Silty, V.Slow rctn with HCL, Mod. to Com. Dispersed Dark grey Org. mat. Other Comp: Sandstone, Shale

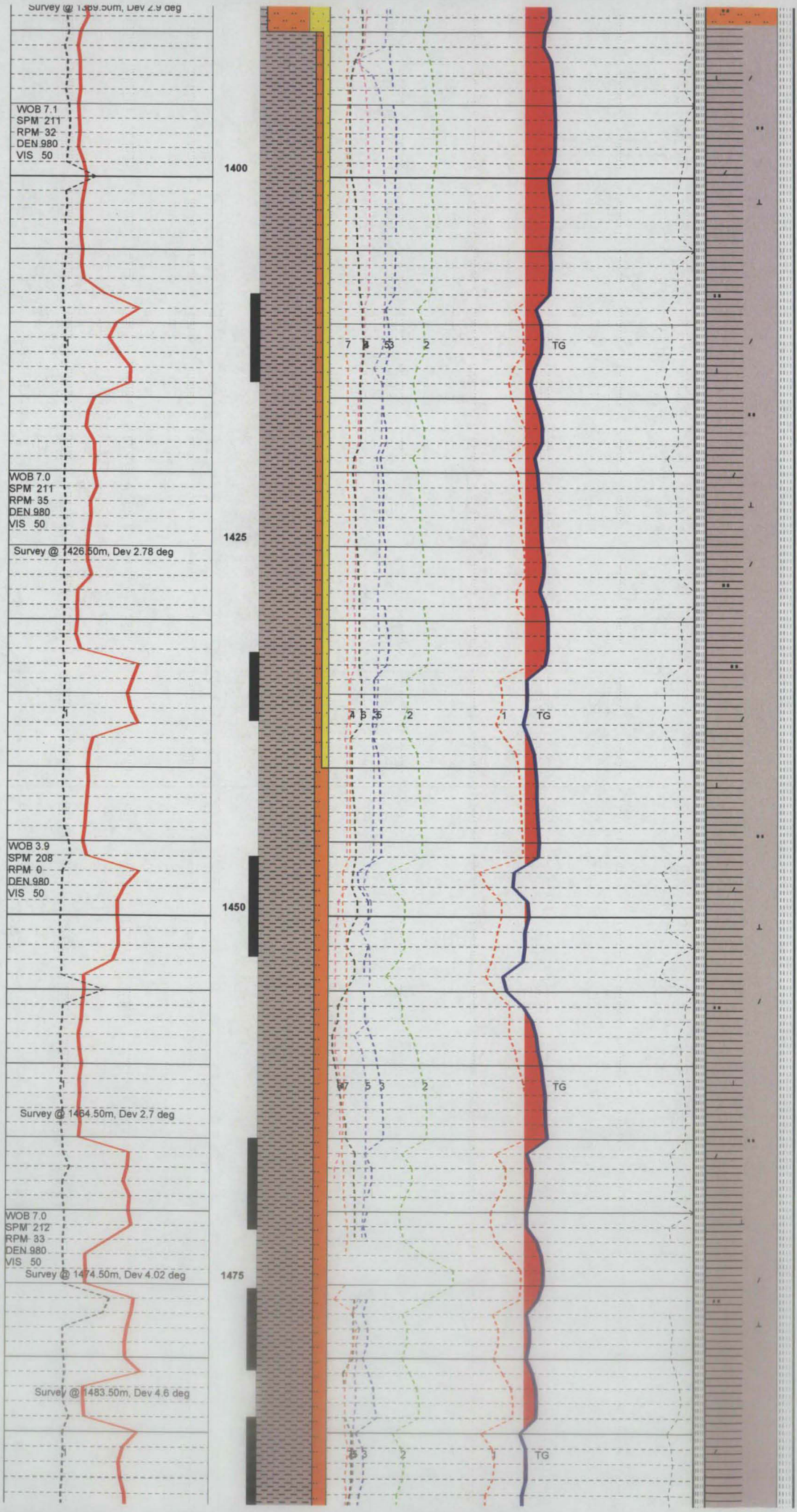

WOB 8.0
SPM 208
RPM 32
DEN 940
VIS 48
Survey @ 1198.50m, Dev 2.12 deg
1200
WOB 7.4
SPM 207
RPM 34
DEN 940
VIS 48
1225
Survey @ 1236.50m, Dev 1.81 deg
WOB 5.3
SPM 211
RPM 33
DEN 960
VIS 48
1250
WOB 4.1
SPM 212
RPM 34
DEN 980
VIS 50
Survey @ 1274.5m, Dev 1.41 deg
1275
Pump rate was down to 0.21m3/min
TG
TG
TG
TG
(1200m to 1250m) 90% GD Qlty Sample SILTSTONE; Med to Dark Grey, Light Brown, White to Light Brown, Chertz, Quartz, Sub angular, Sub rounded, Angular,Rounded, Very fine to flNE size, Dull, Bright, Med to Well sorted , Cal,Arg, Limy, Silty, V.Slow rctn with HCL, Mod. to Com. Dispersed Dark grey Org. mat. Slight o Med dispersed brown Org. Mat., Other Comp: Siltsone, Shale
(1225m to 1250m) 90% GD Qlty Sample SILTSTONE; Med to Dark Grey, Light Brown, White to Light Brown, Chertz, Quartz, Sub angular, Sub rounded, Angular,Rounded, Very fine to flNE size, Dull, Bright, Med to Well sorted , Cal,Arg, Limy, Silty, V.Slow rctn with HCL, Mod. to Com. Dispersed Dark grey Org. mat. Slight o Med dispersed brown Org. Mat., Other Comp: Shale
(1260m to 1290m) 90% GD Qlty Sample SANDTONE; (1300m) 90% GD Qlty Sample SANDTONE WITH PRYRITES THAN BEFORE Med to Dark Grey, Light Brown, White to Light Brown, Chertz, Quartz, Sub angular, Sub rounded, Angular,Rounded, Very fine to fine grain size, Pyrites, Fine to med grain size, Siderites, Dull, Bright, Med to Well sorted , Cal, Arg, Limy, Silty, V.Slow rctn with HCL, Mod. to Com. Dispersed Dark grey Org. mat. Slight o Med dispersed brown Org. Mat., Other Comp: Siltsone, Sh



(1300m) 90% GD Qlty Sample SILTSTONE WITH SLIGHT SIDERITES Med to Dark Grey, Light Brown, White to Light Brown, Chertz, Quartz, Sub angular, Sub rounded, Angular,Rounded, Very fine to fine grain size,Slght Pyrites, Fine to med grain size, Siderites, Dull, Bright, Med to Well sorted , Cal, Arg, Limy, Silty, V.Slow rctn with HCL, Mod. to Com. Dispersed Dark grey Org. mat. Slight o Med dispersed brown Org. Mat., Other Comp: Siltsone, Shale

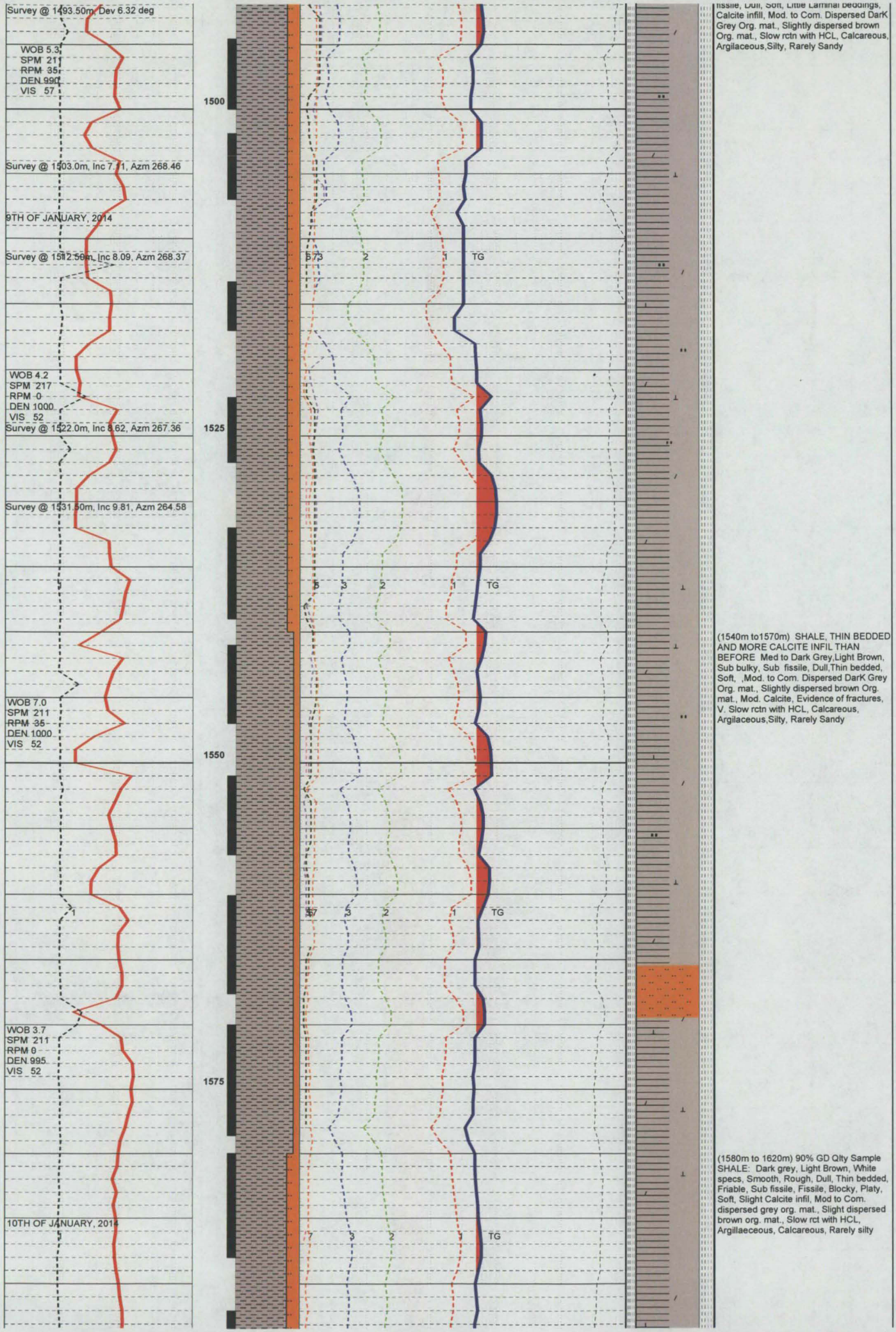
(1310 to 1350m) 90% GD Qlty Sample SILTSTONE: Med to Dark Grey, Light Brown, White to Light Brown, Chertz, Quartz, Sub angular, Sub rounded, Angular,Rounded, Very fine to fine grain size, Fine to med grain size, Dull, Bright, Med to Well sorted , Cal, Arg, Limy, Silty, V.Slow rctn with HCL, Mod. to Com. Dispersed Dark grey Org. mat. Slight o Med dispersed brown Org. Mat., Other Comp: Sandstone, Shale

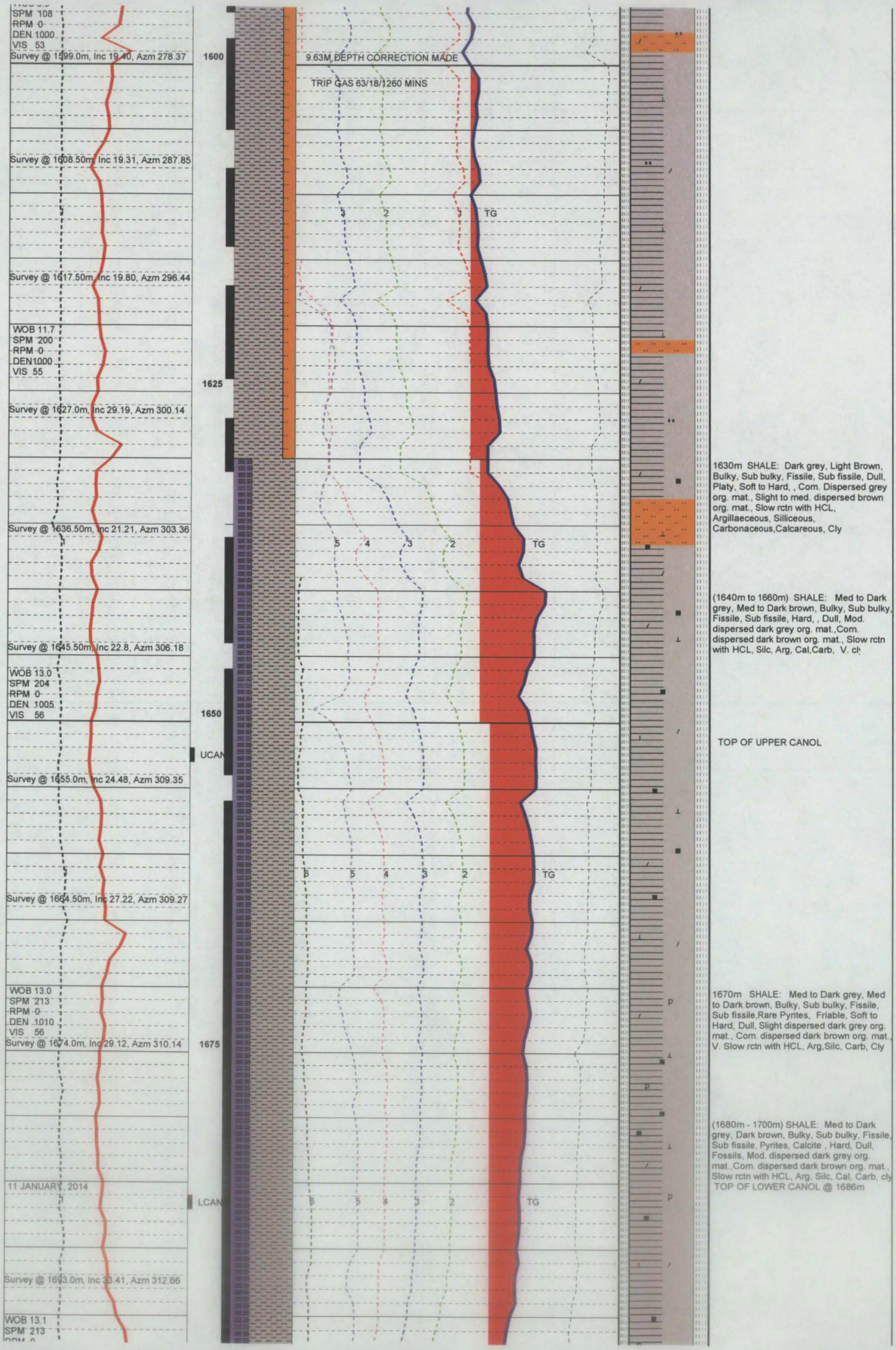
(1360m to 1380m) 90% GD Qlty Sample SILTSTONE: White, Med Grey, Chertz, Quartz, Sub angular, Sub rounded, Angular,Rounded, Very fine to fine grain size,Fine to med grain size, Siderites, Dull, Bright, Med to Well sorted , Cal, Arg, Limy, Silty, V.Slow rctn with HCL Other Comp: Sandstone, Shale



(1390M to 1430m) 90% GD Qlty Sample SHALE: Med to Dark grey,Light Brown, White, Sub bulky, Sub fissile, Dull, Soft, Slight dispersed brown Org. mat.,Mod. to Com. Dispersed DarK Grey Org. mat., Calcite, Slow rctn with HCL, Calcareous, Argilaceous,Silty, Rarely Sandy

(1440m to1480m) SHALE: Med to Dark grey,Light Brown, Sub bulky, Sub fissile, Dull, Soft, ,Mod. to Com. Dispersed DarK Grey Org. mat., Slightly dispersed brown Org. mat., Calcite, Slow rctn with HCL, Calcareous, Argilaceous,Silty, Rarely Sandy


Survey @ 1493.50m, Dev 6.32 deg
WOB 5.3
SPM 211
RPM 35
DEN 990
VIS 57
1500
Survey @ 1503.0m, Inc 7.11, Azm 268.46
9TH OF JANUARY, 2014
Survey @ 1512.50m, Inc 8.09, Azm 268.37
5 4 3 2 1 TG
WOB 4.2
SPM 217
RPM 0
DEN 1000
VIS 52
Survey @ 1522.0m, Inc 8.62, Azm 267.36
1525
Survey @ 1531.50m, Inc 9.81, Azm 264.58
5 4 3 2 1 TG
WOB 7.0
SPM 211
RPM 35
DEN 1000
VIS 52
1550
5 4 3 2 1 TG
WOB 3.7
SPM 211
RPM 0
DEN 995
VIS 52
1575
10TH OF JANUARY, 2014
5 4 3 2 1 TG
fissile, Dull, Soft, Little Laminal beddings, Calcite infill, Mod. to Com. Dispersed DarK Grey Org. mat., Slightly dispersed brown Org. mat., Slow rctn with HCL, Calcareous, Argilaceous,Silty, Rarely Sandy
(1540m to1570m) SHALE, THIN BEDDED AND MORE CALCITE INFIL THAN BEFORE Med to Dark Grey,Light Brown, Sub bulky, Sub fissile, Dull,Thin bedded, Soft, ,Mod. to Com. Dispersed DarK Grey Org. mat., Slightly dispersed brown Org. mat., Mod. Calcite, Evidence of fractures, V. Slow rctn with HCL, Calcareous, Argilaceous,Silty, Rarely Sandy
(1580m to 1620m) 90% GD Qlty Sample SHALE: Dark grey, Light Brown, White specs, Smooth, Rough, Dull, Thin bedded, Friable, Sub fissile, Fissile, Blocky, Platy, Soft, Slight Calcite infil, Mod to Com. dispersed grey org. mat., Slight dispersed brown org. mat., Slow rct with HCL, Argillaeceous, Calcareous, Rarely silty



1630m SHALE: Dark grey, Light Brown, Bulky, Sub bulky, Fissile, Sub fissile, Dull, Platy, Soft to Hard, , Com. Dispersed grey org. mat., Slight to med. dispersed brown org. mat., Slow rctn with HCL, Argillaeceous, Silliceous, Carbonaceous,Calcareous, Cly

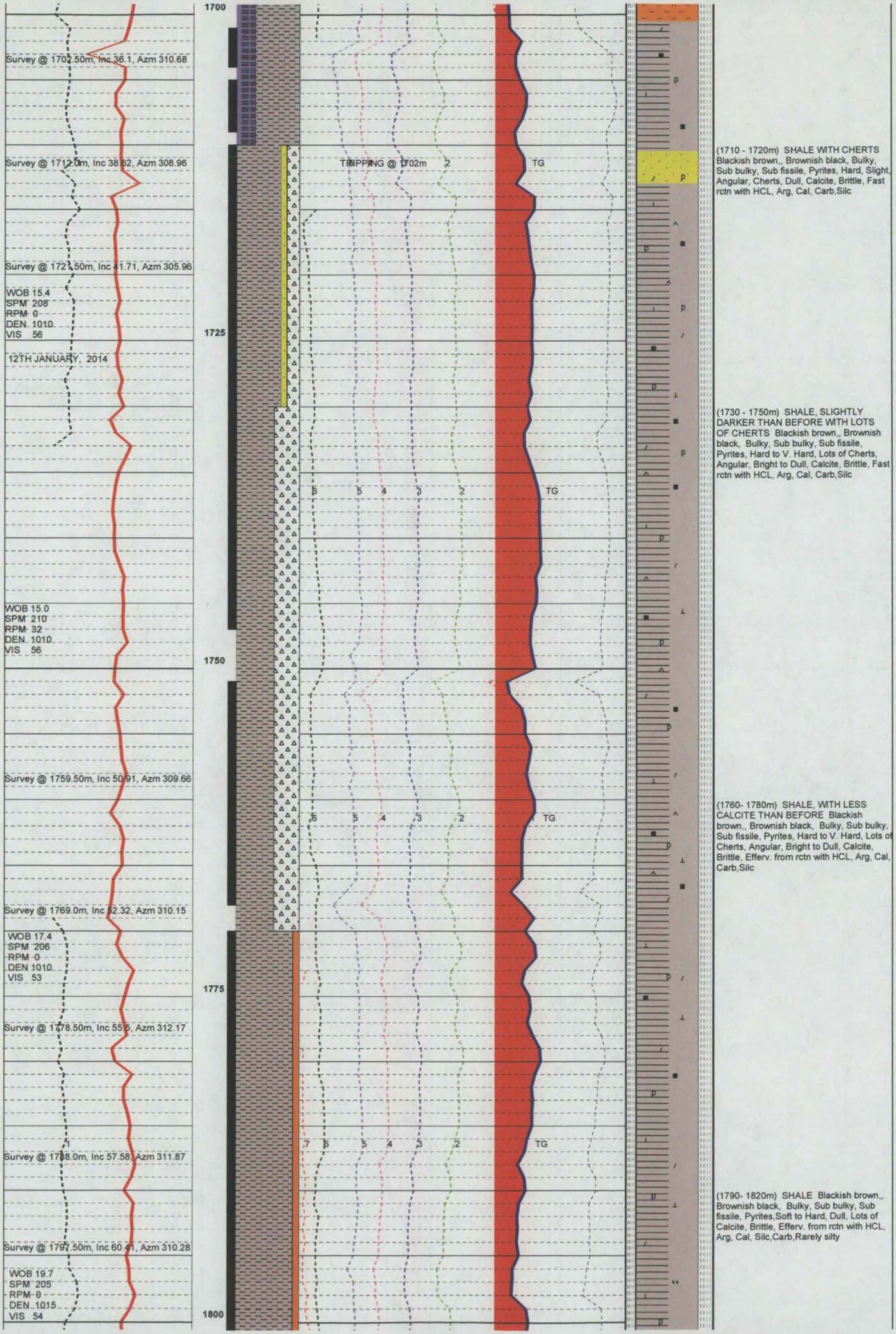
(1640m to 1660m) SHALE: Med to Dark grey, Med to Dark brown, Bulky, Sub bulky, Fissile, Sub fissile, Hard, , Dull, Mod. dispersed dark grey org. mat.,Com. dispersed dark brown org. mat., Slow rctn with HCL, Silc, Arg, Cal,Carb, V. cl

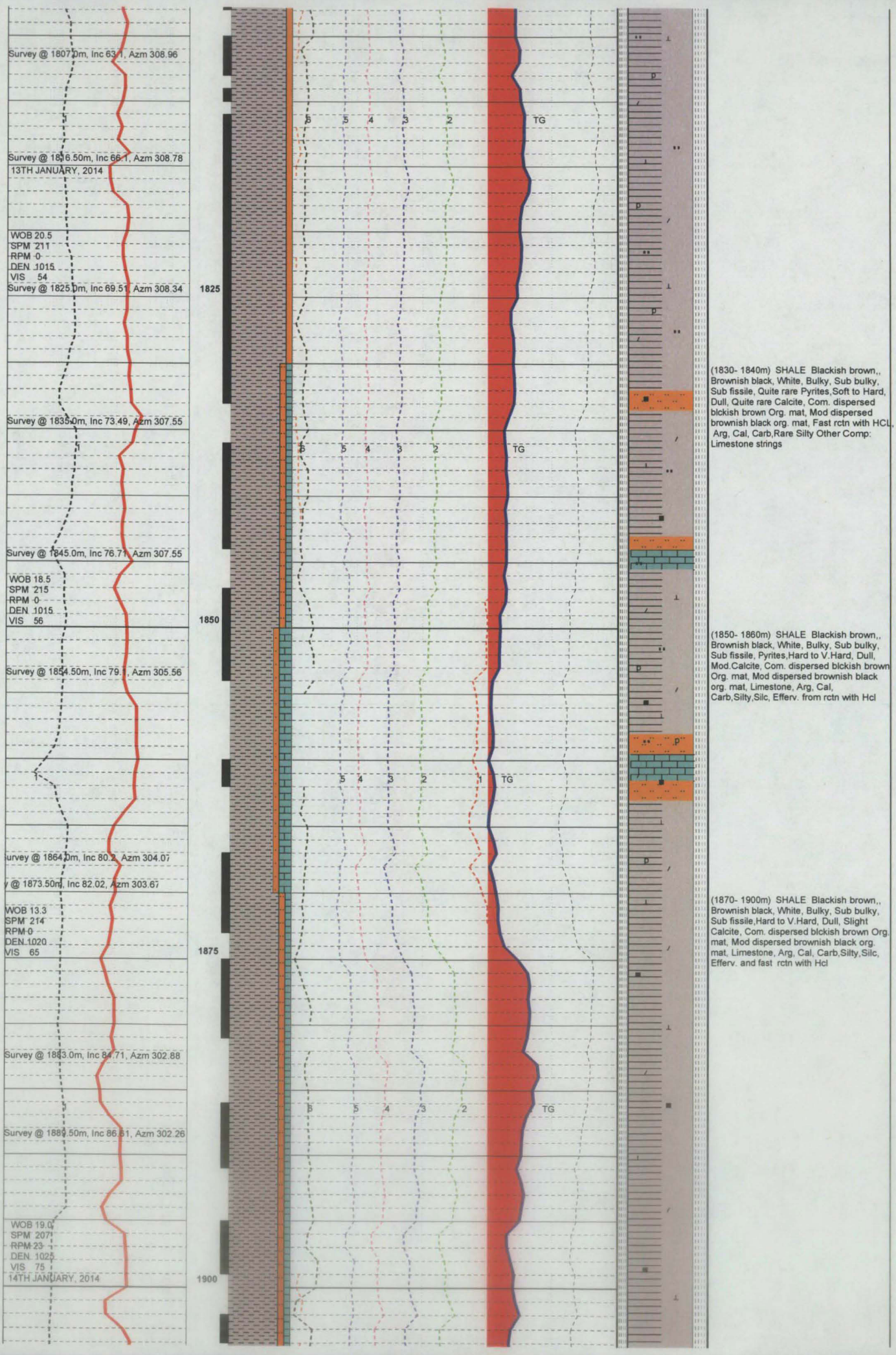
TOP OF UPPER CANOL

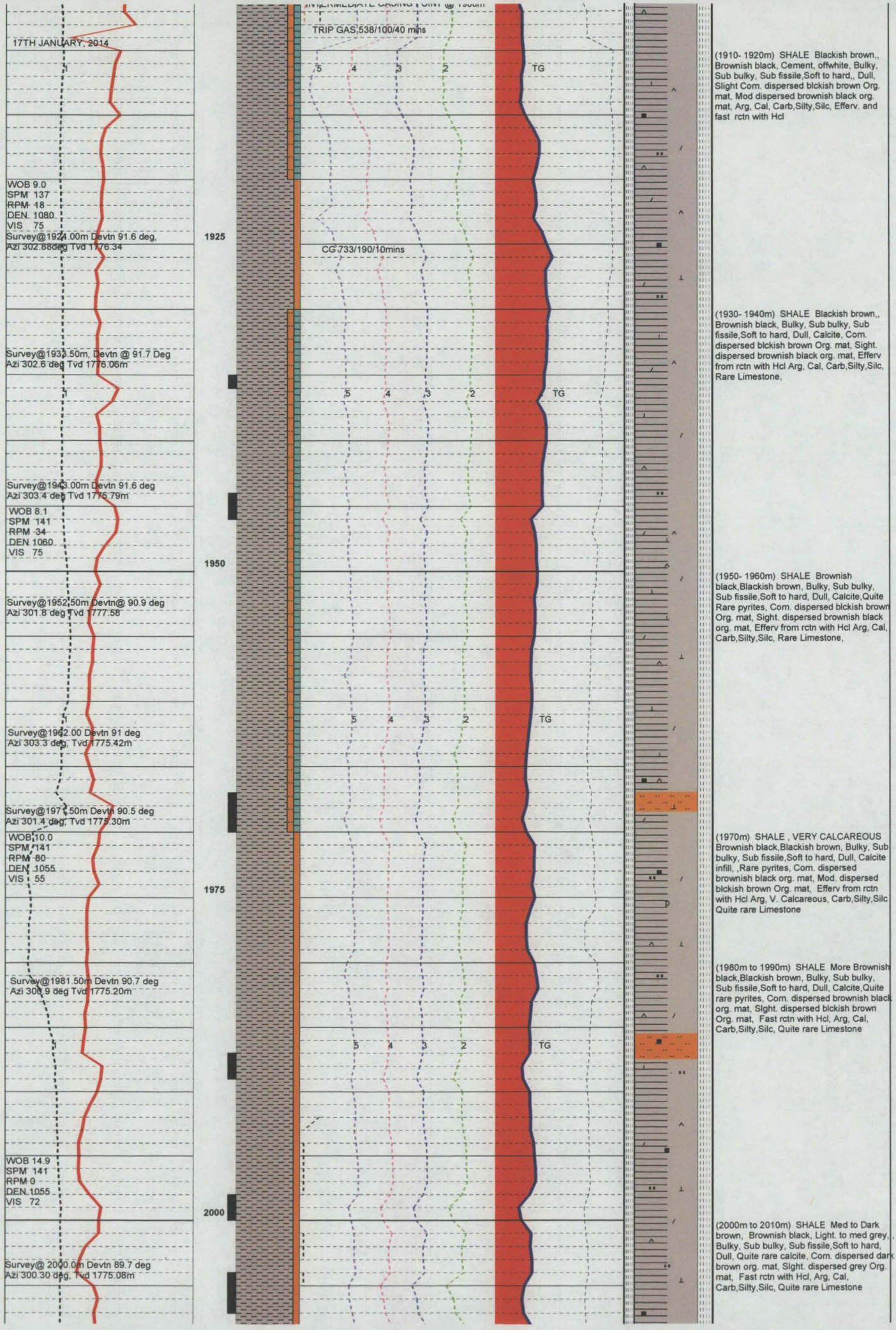
1670m SHALE: Med to Dark grey, Med to Dark brown, Bulky, Sub bulky, Fissile, Sub fissile,Rare Pyrites, Friable, Soft to Hard, Dull, Slight dispersed dark grey org. mat., Com. dispersed dark brown org. mat., V. Slow rctn with HCL, Arg,Silc, Carb, Cly

(1680m - 1700m) SHALE: Med to Dark grey, Dark brown, Bulky, Sub bulky, Fissile, Sub fissile, Pyrites, Calcite , Hard, Dull, Fossils, Mod. dispersed dark grey org. mat.,Com. dispersed dark brown org. mat., Slow rctn with HCL, Arg, Silc, Cal, Carb, cly

TOP OF LOWER CANOL @ 1686m


1700
Survey @ 1702.50m, Inc 36.1, Azm 310.68
Survey @ 1712.0m, Inc 38.62, Azm 308.96
TRIPPING @ 1702m
2
TG
Survey @ 1721.50m, Inc 41.71, Azm 305.96
WOB 15.4
SPM 208
RPM 0
DEN 1010
VIS 56
1725
12TH JANUARY, 2014
6
5
5
4
3
2
TG
WOB 15.0
SPM 210
RPM 32
DEN 1010
VIS 56
1750
Survey @ 1759.50m, Inc 50.91, Azm 309.66
6
5
4
3
2
1
TG
Survey @ 1769.0m, Inc 52.32, Azm 310.15
WOB 17.4
SPM 206
RPM 0
DEN 1010
VIS 53
1775
Survey @ 1778.50m, Inc 55.5, Azm 312.17
7
6
5
4
3
2
TG
Survey @ 1788.0m, Inc 57.58, Azm 311.87
Survey @ 1797.50m, Inc 60.41, Azm 310.28
WOB 19.7
SPM 205
RPM 0
DEN 1015
VIS 54
1800
(1710 - 1720m) SHALE WITH CHERTS Blackish brown,, Brownish black, Bulky, Sub bulky, Sub fissile, Pyrites, Hard, Slight, Angular, Cherts, Dull, Calcite, Brittle, Fast rctn with HCL, Arg, Cal, Carb,Silc
(1730 - 1750m) SHALE, SLIGHTLY DARKER THAN BEFORE WITH LOTS OF CHERTS Blackish brown,, Brownish black, Bulky, Sub bulky, Sub fissile, Pyrites, Hard to V. Hard, Lots of Cherts, Angular, Bright to Dull, Calcite, Brittle, Fast rctn with HCL, Arg, Cal, Carb,Silc
(1760- 1780m) SHALE, WITH LESS CALCITE THAN BEFORE Blackish brown,, Brownish black, Bulky, Sub bulky, Sub fissile, Pyrites, Hard to V. Hard, Lots of Cherts, Angular, Bright to Dull, Calcite, Brittle, Efferv. from rctn with HCL, Arg, Cal, Carb,Silc
(1790- 1820m) SHALE Blackish brown,, Brownish black, Bulky, Sub bulky, Sub fissile, Pyrites,Soft to Hard, Dull, Lots of Calcite, Brittle, Efferv. from rctn with HCL, Arg, Cal, Silc,Carb,Rarely silty


Survey @ 1807.0m, Inc 63.1, Azm 308.96
Survey @ 1816.50m, Inc 66.1, Azm 308.78
13TH JANUARY, 2014
WOB 20.5
SPM 211
RPM 0
DEN 1015
VIS 54
Survey @ 1825.0m, Inc 69.51, Azm 308.34
1825
Survey @ 1835.0m, Inc 73.49, Azm 307.55
Survey @ 1845.0m, Inc 76.71, Azm 307.55
WOB 18.5
SPM 215
RPM 0
DEN 1015
VIS 56
1850
Survey @ 1854.50m, Inc 79.1, Azm 305.56
urvey @ 1864.0m, Inc 80.2, Azm 304.07
@ 1873.50m, Inc 82.02, Azm 303.67
WOB 13.3
SPM 214
RPM 0
DEN 1020
VIS 65
1875
Survey @ 1883.0m, Inc 84.71, Azm 302.88
Survey @ 1889.50m, Inc 86.61, Azm 302.26
WOB 19.0
SPM 207
RPM 23
DEN 1025
VIS 75
14TH JANUARY, 2014
1900
TG
(1830- 1840m) SHALE Blackish brown,, Brownish black, White, Bulky, Sub bulky, Sub fissile, Quite rare Pyrites,Soft to Hard, Dull, Quite rare Calcite, Com. dispersed blckish brown Org. mat, Mod dispersed brownish black org. mat, Fast rctn with HCL, Arg, Cal, Carb,Rare Silty Other Comp: Limestone strings
(1850- 1860m) SHALE Blackish brown,, Brownish black, White, Bulky, Sub bulky, Sub fissile, Pyrites,Hard to V.Hard, Dull, Mod.Calcite, Com. dispersed blckish brown Org. mat, Mod dispersed brownish black org. mat, Limestone, Arg, Cal, Carb,Silty,Silc, Efferv. from rctn with Hcl
(1870- 1900m) SHALE Blackish brown,, Brownish black, White, Bulky, Sub bulky, Sub fissile,Hard to V.Hard, Dull, Slight Calcite, Com. dispersed blckish brown Org. mat, Mod dispersed brownish black org. mat, Limestone, Arg, Cal, Carb,Silty,Silc, Efferv. and fast rctn with Hcl



(1910- 1920m) SHALE Blackish brown,, Brownish black, Cement, offwhite, Bulky, Sub bulky, Sub fissile,Soft to hard,, Dull, Slight Com. dispersed blckish brown Org. mat, Mod dispersed brownish black org. mat, Arg, Cal, Carb,Silty,Silc, Efferv. and fast rctn with Hcl

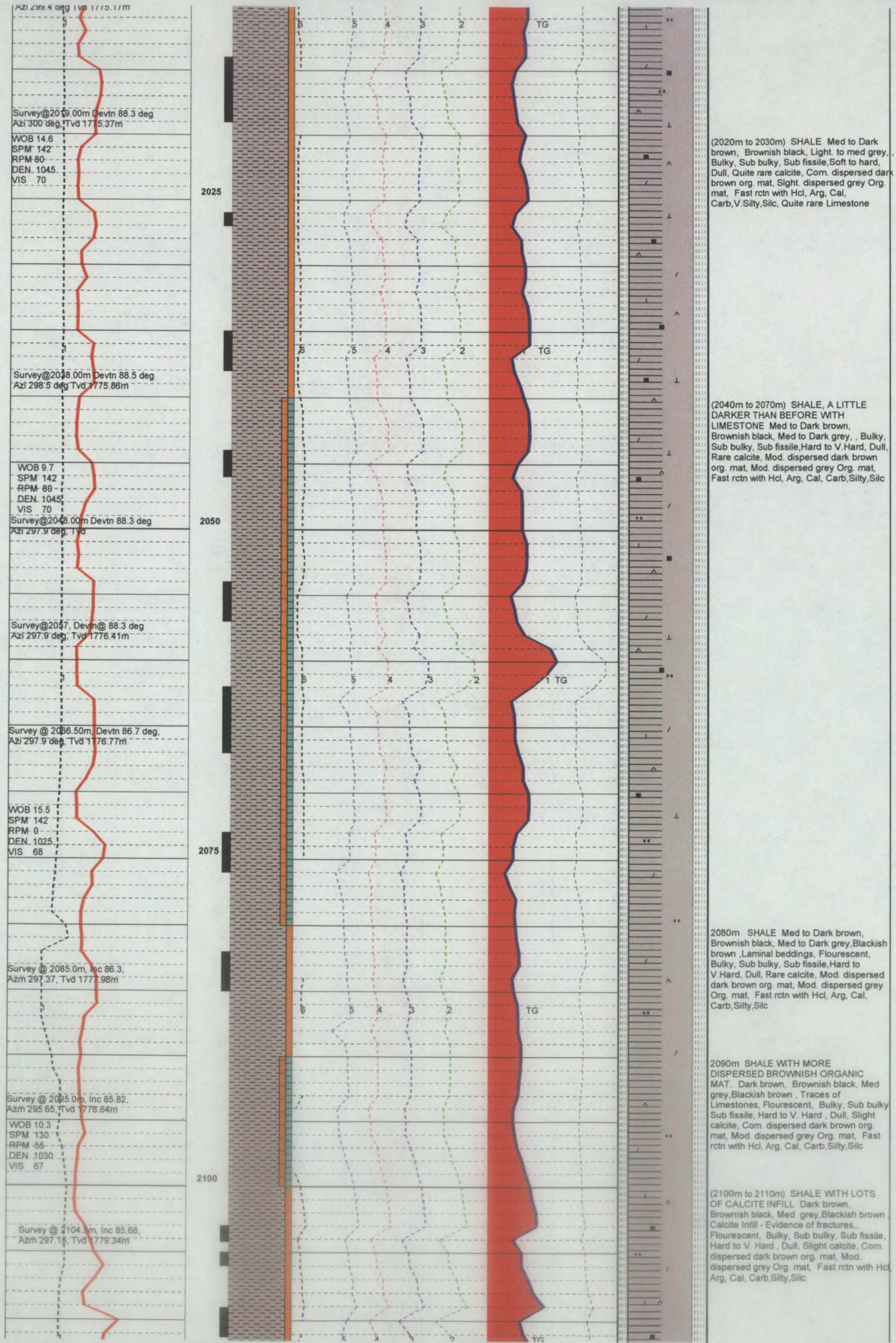
(1930- 1940m) SHALE Blackish brown,, Brownish black, Bulky, Sub bulky, Sub fissile,Soft to hard, Dull, Calcite, Com. dispersed blckish brown Org. mat, Sight. dispersed brownish black org. mat, Efferv from rctn with Hcl Arg, Cal, Carb,Silty,Silc, Rare Limestone,

(1950- 1960m) SHALE Brownish black,Blackish brown, Bulky, Sub bulky, Sub fissile,Soft to hard, Dull, Calcite,Quite Rare pyrites, Com. dispersed blckish brown Org. mat, Sight. dispersed brownish black org. mat, Efferv from rctn with Hcl Arg, Cal, Carb,Silty,Silc, Rare Limestone,

(1970m) SHALE , VERY CALCAREOUS Brownish black,Blackish brown, Bulky, Sub bulky, Sub fissile,Soft to hard, Dull, Calcite infill, ,Rare pyrites, Com. dispersed brownish black org. mat, Mod. dispersed blckish brown Org. mat, Efferv from rctn with Hcl Arg, V. Calcareous, Carb,Silty,Silc Quite rare Limestone

(1980m to 1990m) SHALE More Brownish black,Blackish brown, Bulky, Sub bulky, Sub fissile,Soft to hard, Dull, Calcite,Quite rare pyrites, Com. dispersed brownish black org. mat, SIght. dispersed blckish brown Org. mat, Fast rctn with Hcl, Arg, Cal, Carb,Silty,Silc, Quite rare Limestone

(2000m to 2010m) SHALE Med to Dark brown, Brownish black, Light. to med grey, , Bulky, Sub bulky, Sub fissile,Soft to hard, Dull, Quite rare calcite, Com. dispersed dark brown org. mat, SIght. dispersed grey Org. mat, Fast rctn with Hcl, Arg, Cal, Carb,Silty,Silc, Quite rare Limestone



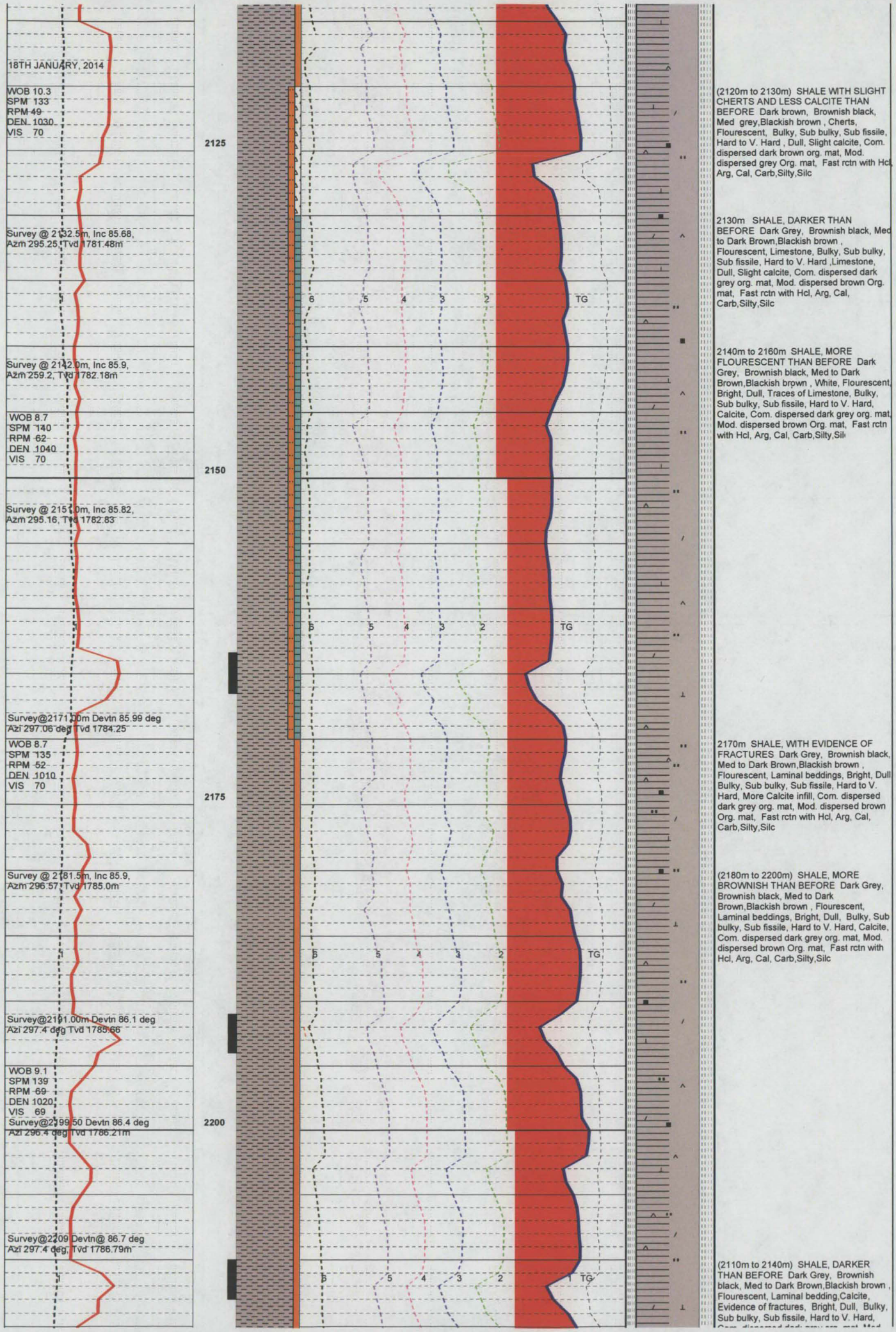
(2020m to 2030m) SHALE Med to Dark brown, Brownish black, Light. to med grey, , Bulky, Sub bulky, Sub fissile,Soft to hard, Dull, Quite rare calcite, Com. dispersed dark brown org. mat, Slght. dispersed grey Org. mat, Fast rctn with Hcl, Arg, Cal, Carb,V.Silty,Silc, Quite rare Limestone

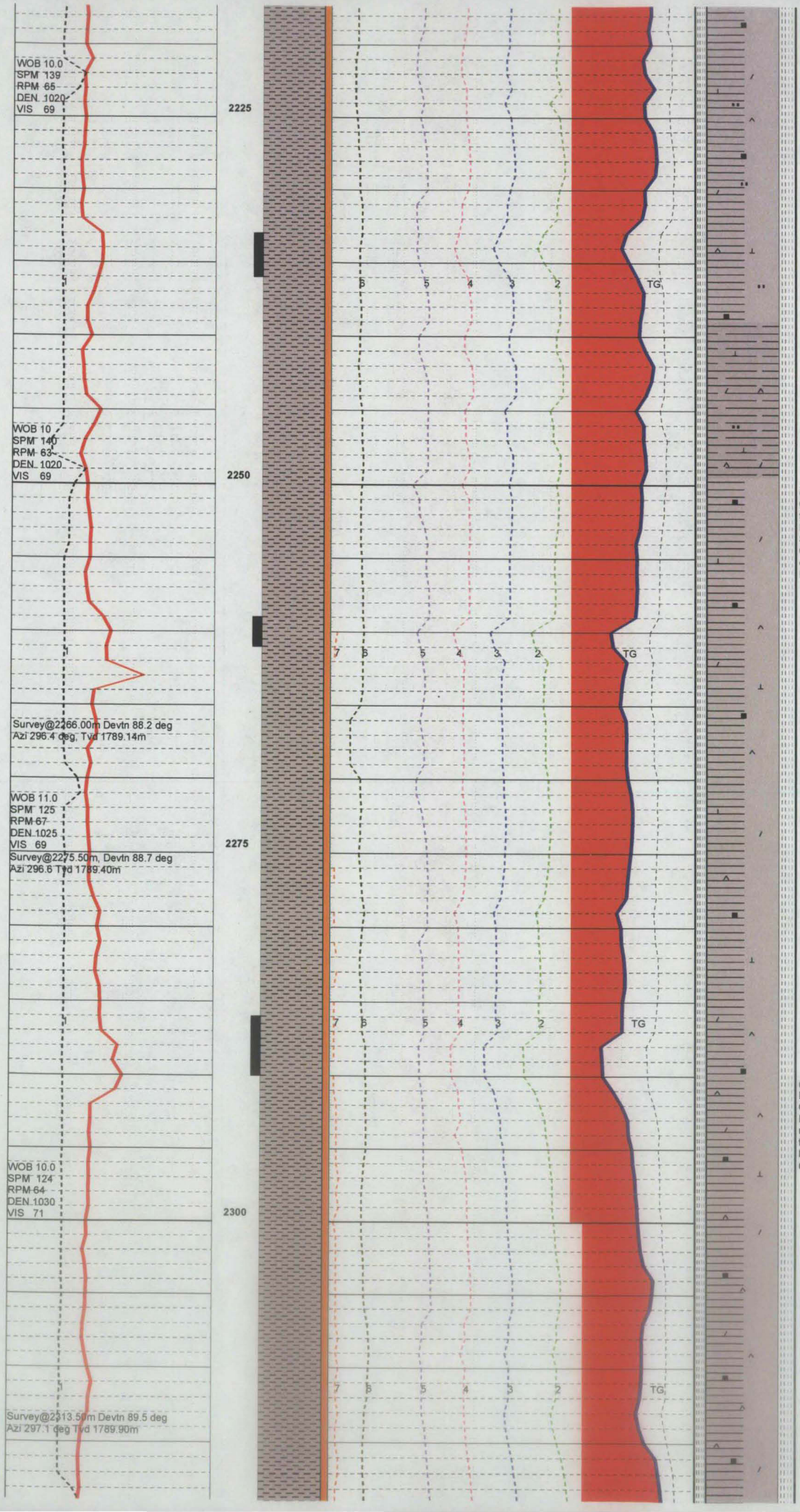
(2040m to 2070m) SHALE, A LITTLE DARKER THAN BEFORE WITH LIMESTONE Med to Dark brown, Brownish black, Med to Dark grey, , Bulky, Sub bulky, Sub fissile,Hard to V.Hard, Dull, Rare calcite, Mod. dispersed dark brown org. mat, Mod. dispersed grey Org. mat, Fast rctn with Hcl, Arg, Cal, Carb,Silty,Silc

2080m SHALE Med to Dark brown, Brownish black, Med to Dark grey,Blackish brown ,Laminal beddings, Flourescent, Bulky, Sub bulky, Sub fissile,Hard to V.Hard, Dull, Rare calcite, Mod. dispersed dark brown org. mat, Mod. dispersed grey Org. mat, Fast rctn with Hcl, Arg, Cal, Carb,Silty,Silc

2090m SHALE WITH MORE DISPERSED BROWNISH ORGANIC MAT. Dark brown, Brownish black, Med grey,Blackish brown , Traces of Limestones, Flourescent, Bulky, Sub bulky Sub fissile, Hard to V. Hard , Dull, Slight calcite, Com. dispersed dark brown org. mat, Mod. dispersed grey Org. mat, Fast rctn with Hcl, Arg, Cal, Carb,Silty,Silc

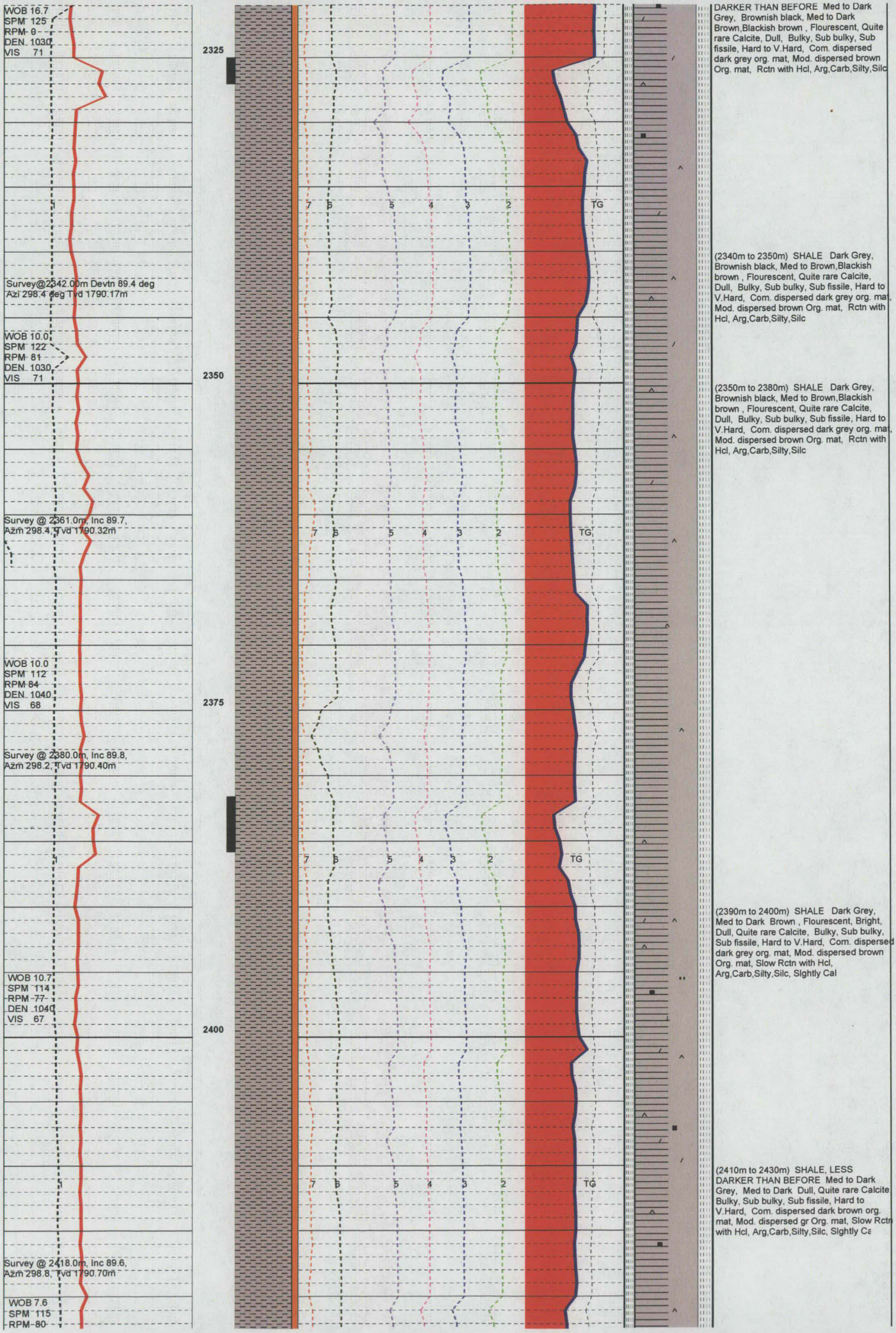
(2100m to 2110m) SHALE WITH LOTS OF CALCITE INFILL Dark brown, Brownish black, Med grey,Blackish brown , Calcite Infill - Evidence of fractures,, Flourescent, Bulky, Sub bulky, Sub fissile, Hard to V. Hard , Dull, Slight calcite, Com. dispersed dark brown org. mat, Mod. dispersed grey Org. mat, Fast rctn with Hcl, Arg, Cal, Carb,Silty,Silc

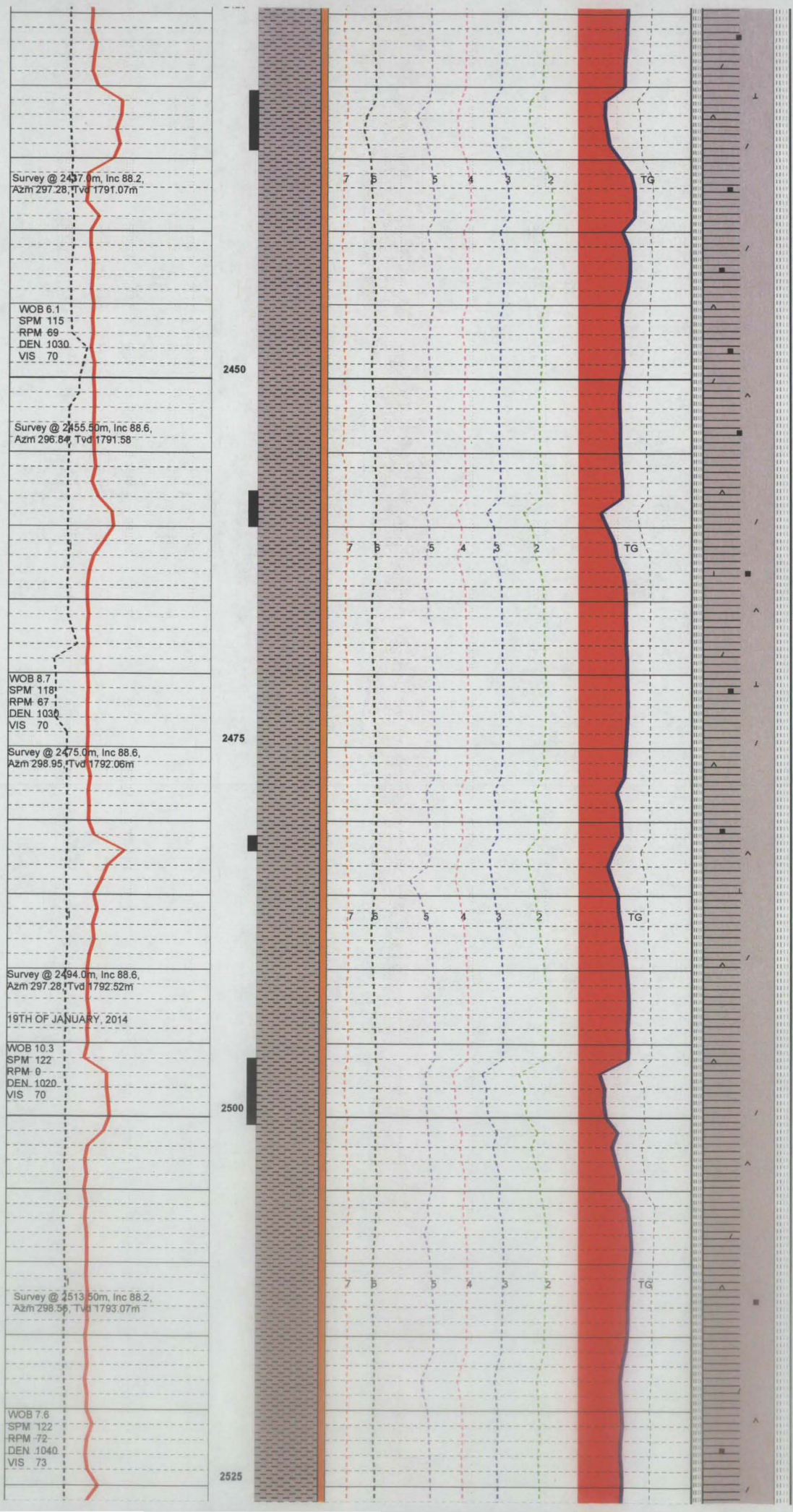

18TH JANUARY, 2014
WOB 10.3
SPM 133
RPM 49
DEN 1030
VIS 70
2125
Survey @ 2132.5m, Inc 85.68,
Azm 295.25, Tvd 1781.48m
6 5 4 3 2 TG
Survey @ 2142.0m, Inc 85.9,
Azm 259.2, Tvd 1782.18m
WOB 8.7
SPM 140
RPM 62
DEN 1040
VIS 70
2150
Survey @ 2151.0m, Inc 85.82,
Azm 295.16, Tvd 1782.83
6 5 4 3 2 TG
Survey@2171.00m Devtn 85.99 deg
Azi 297.06 deg Tvd 1784.25
WOB 8.7
SPM 135
RPM 52
DEN 1010
VIS 70
2175
Survey @ 2181.5m, Inc 85.9,
Azm 296.57, Tvd 1785.0m
6 5 4 3 2 TG
Survey@2191.00m Devtn 86.1 deg
Azi 297.4 deg Tvd 1785.66
WOB 9.1
SPM 139
RPM 69
DEN 1020
VIS 69
Survey@2199.50 Devtn 86.4 deg
Azi 296.4 deg Tvd 1786.21m
2200
Survey@2209 Devtn@ 86.7 deg
Azi 297.4 deg, Tvd 1786.79m
6 5 4 3 2 TG
(2120m to 2130m) SHALE WITH SLIGHT CHERTS AND LESS CALCITE THAN BEFORE Dark brown, Brownish black, Med grey,Blackish brown , Cherts, Flourescent, Bulky, Sub bulky, Sub fissile, Hard to V. Hard , Dull, Slight calcite, Com. dispersed dark brown org. mat, Mod. dispersed grey Org. mat, Fast rctn with Hcl, Arg, Cal, Carb,Silty,Silc
2130m SHALE, DARKER THAN BEFORE Dark Grey, Brownish black, Med to Dark Brown,Blackish brown , Flourescent, Limestone, Bulky, Sub bulky, Sub fissile, Hard to V. Hard ,Limestone, Dull, Slight calcite, Com. dispersed dark grey org. mat, Mod. dispersed brown Org. mat, Fast rctn with Hcl, Arg, Cal, Carb,Silty,Silc
2140m to 2160m SHALE, MORE FLOURESCENT THAN BEFORE Dark Grey, Brownish black, Med to Dark Brown,Blackish brown , White, Flourescent, Bright, Dull, Traces of Limestone, Bulky, Sub bulky, Sub fissile, Hard to V. Hard, Calcite, Com. dispersed dark grey org. mat, Mod. dispersed brown Org. mat, Fast rctn with Hcl, Arg, Cal, Carb,Silty,Sil
2170m SHALE, WITH EVIDENCE OF FRACTURES Dark Grey, Brownish black, Med to Dark Brown,Blackish brown , Flourescent, Laminal beddings, Bright, Dull Bulky, Sub bulky, Sub fissile, Hard to V. Hard, More Calcite infill, Com. dispersed dark grey org. mat, Mod. dispersed brown Org. mat, Fast rctn with Hcl, Arg, Cal, Carb,Silty,Silc
(2180m to 2200m) SHALE, MORE BROWNISH THAN BEFORE Dark Grey, Brownish black, Med to Dark Brown,Blackish brown , Flourescent, Laminal beddings, Bright, Dull, Bulky, Sub bulky, Sub fissile, Hard to V. Hard, Calcite, Com. dispersed dark grey org. mat, Mod. dispersed brown Org. mat, Fast rctn with Hcl, Arg, Cal, Carb,Silty,Silc
(2110m to 2140m) SHALE, DARKER THAN BEFORE Dark Grey, Brownish black, Med to Dark Brown,Blackish brown , Flourescent, Laminal bedding,Calcite, Evidence of fractures, Bright, Dull, Bulky, Sub bulky, Sub fissile, Hard to V. Hard,



(2110m to 2140m) SHALE WITH LESS CALCITE Dark Grey, Brownish black, Med to Dark Brown,Blackish brown , Flourescent, Calcite, Bright, Dull, Bulky, Sub bulky, Sub fissile, Hard to V. Hard, Com. dispersed dark grey org. mat, Mod. dispersed brown Org. mat, Fast rctn with Hcl, Arg, Cal, Carb,Silty,Silc

(2290m to 2310m) SHALE MORE BROWN THAN BEFORE Med to Dark Grey, Brownish black, Med to Dark Brown,Blackish brown , Flourescent, Quite rare Calcite, Dull, Bulky, Sub bulky, Sub fissile, Soft to Hard, Com. dispersed dark brown org. mat, Mod. dispersed grey Org. mat, Rctn with Hcl, Arg,Carb,Silty,Silc

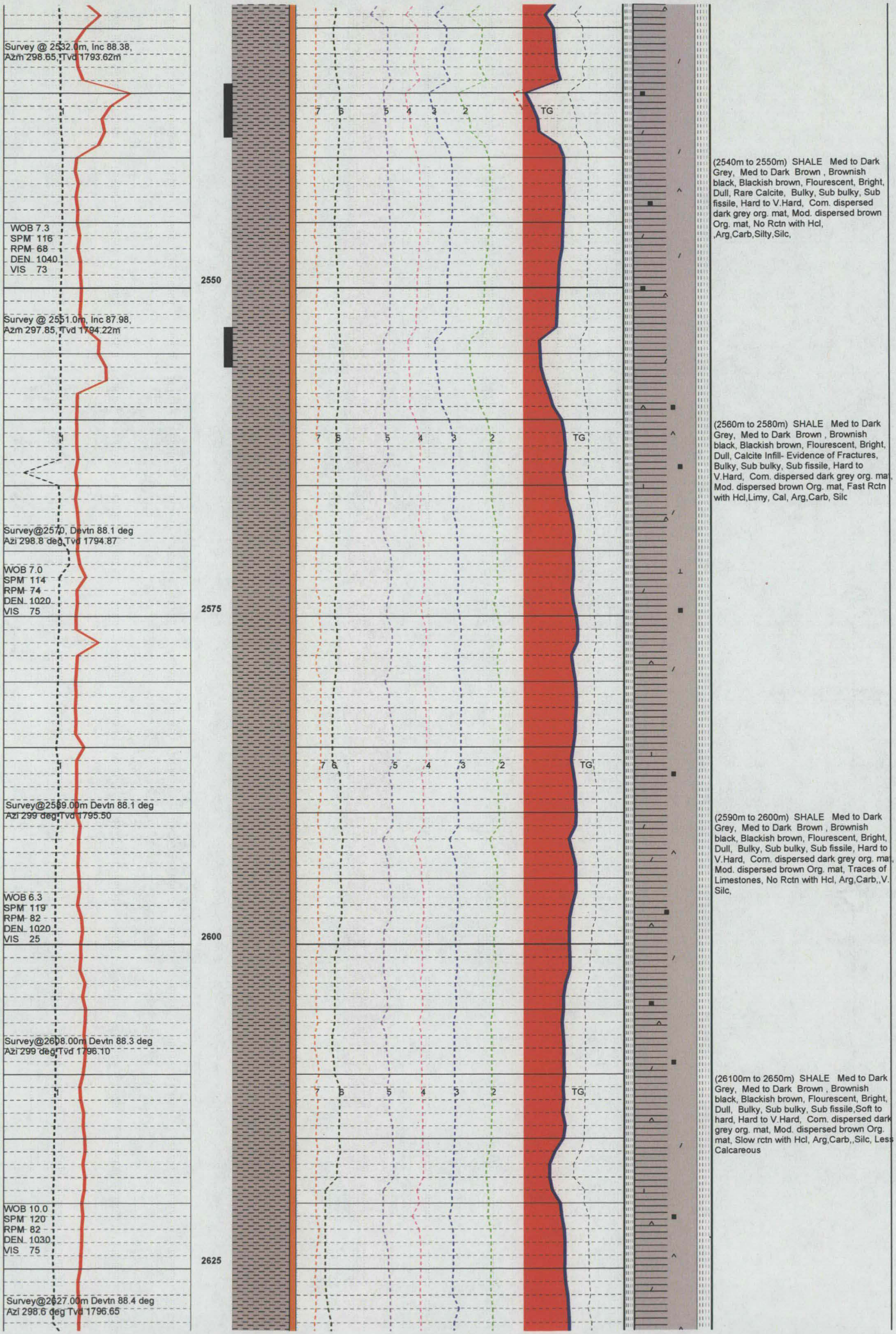

WOB 16.7
SPM 125
RPM 0
DEN 1030
VIS 71
2325
7 6 5 4 3 2 TG
Survey@2342.00m Devtn 89.4 deg
Azi 298.4 deg Tvd 1790.17m
WOB 10.0
SPM 122
RPM 81
DEN 1030
VIS 71
2350
Survey @ 2361.0m, Inc 89.7,
Azm 298.4, Tvd 1790.32m
7 6 5 4 3 2 TG
WOB 10.0
SPM 112
RPM 84
DEN 1040
VIS 68
2375
Survey @ 2380.0m, Inc 89.8,
Azm 298.2, Tvd 1790.40m
7 6 5 4 3 2 TG
WOB 10.7
SPM 114
RPM 77
DEN 1040
VIS 67
2400
7 6 5 4 3 2 TG
Survey @ 2418.0m, Inc 89.6,
Azm 298.8, Tvd 1790.70m
WOB 7.6
SPM 115
RPM 80
DARKER THAN BEFORE Med to Dark Grey, Brownish black, Med to Dark Brown,Blackish brown , Flourescent, Quite rare Calcite, Dull, Bulky, Sub bulky, Sub fissile, Hard to V.Hard, Com. dispersed dark grey org. mat, Mod. dispersed brown Org. mat, Rctn with Hcl, Arg,Carb,Silty,Silc
(2340m to 2350m) SHALE Dark Grey, Brownish black, Med to Brown,Blackish brown , Flourescent, Quite rare Calcite, Dull, Bulky, Sub bulky, Sub fissile, Hard to V.Hard, Com. dispersed dark grey org. mat, Mod. dispersed brown Org. mat, Rctn with Hcl, Arg,Carb,Silty,Silc
(2350m to 2380m) SHALE Dark Grey, Brownish black, Med to Brown,Blackish brown , Flourescent, Quite rare Calcite, Dull, Bulky, Sub bulky, Sub fissile, Hard to V.Hard, Com. dispersed dark grey org. mat, Mod. dispersed brown Org. mat, Rctn with Hcl, Arg,Carb,Silty,Silc
(2390m to 2400m) SHALE Dark Grey, Med to Dark Brown , Flourescent, Bright, Dull, Quite rare Calcite, Bulky, Sub bulky, Sub fissile, Hard to V.Hard, Com. dispersed dark grey org. mat, Mod. dispersed brown Org. mat, Slow Rctn with Hcl, Arg,Carb,Silty,Silc, Slghtly Cal
(2410m to 2430m) SHALE, LESS DARKER THAN BEFORE Med to Dark Grey, Med to Dark Dull, Quite rare Calcite Bulky, Sub bulky, Sub fissile, Hard to V.Hard, Com. dispersed dark brown org. mat, Mod. dispersed gr Org. mat, Slow Rctn with Hcl, Arg,Carb,Silty,Silc, Slghtly Ca

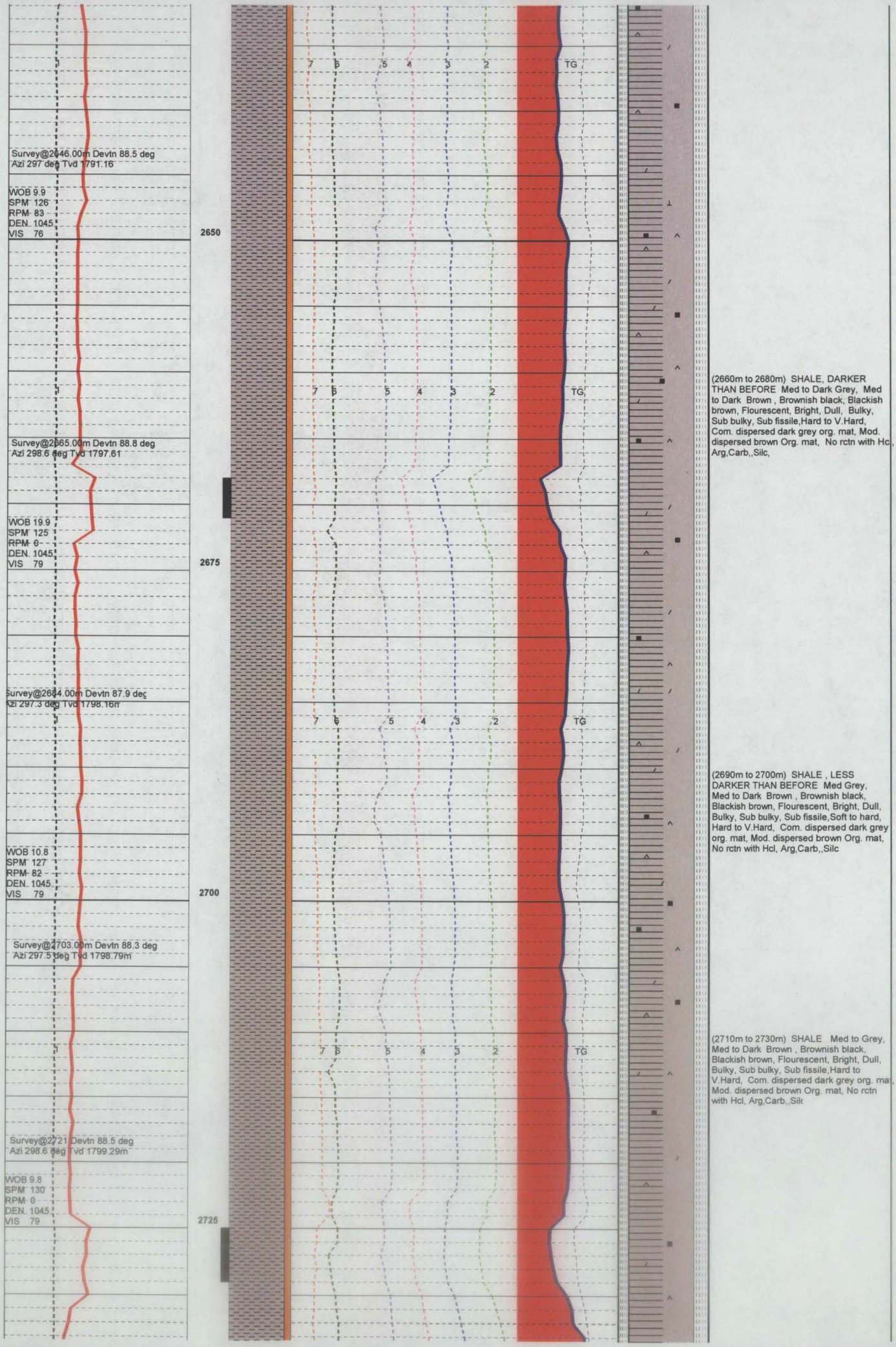


(2440m to 2450m) SHALE Med to Dark Grey, Med to Dark Dull, Calcite, Bulky, Sub bulky, Sub fissile, Soft to Hard , Com. dispersed dark grey org. mat, Mod. dispersed brown Org. mat, No Rctn with Hcl, Arg,Carb,Silty,Silc,

(2460m to 2480m) SHALE Med to Dark Grey, Med to Dark Brown , Brownish black, Blackish brown, Flourescent, Bright, Dull, Rare Calcite, Bulky, Sub bulky, Sub fissile, Hard to V.Hard, Com. dispersed dark grey org. mat, Mod. dispersed brown Org. mat, Fst Rctn with Hcl, Cal, Limy,Arg,Carb,Silty,Silc,

(2490m to 2530m) SHALE Med to Dark Grey, Med to Dark Brown , Brownish black, Blackish brown, Flourescent, Bright, Dull, Rare Calcite, Bulky, Sub bulky, Sub fissile, Hard to V.Hard, Com. dispersed dark grey org. mat, Mod. dispersed brown Org. mat, No Rctn with Hcl, ,Arg,Carb,Silty,Silc,

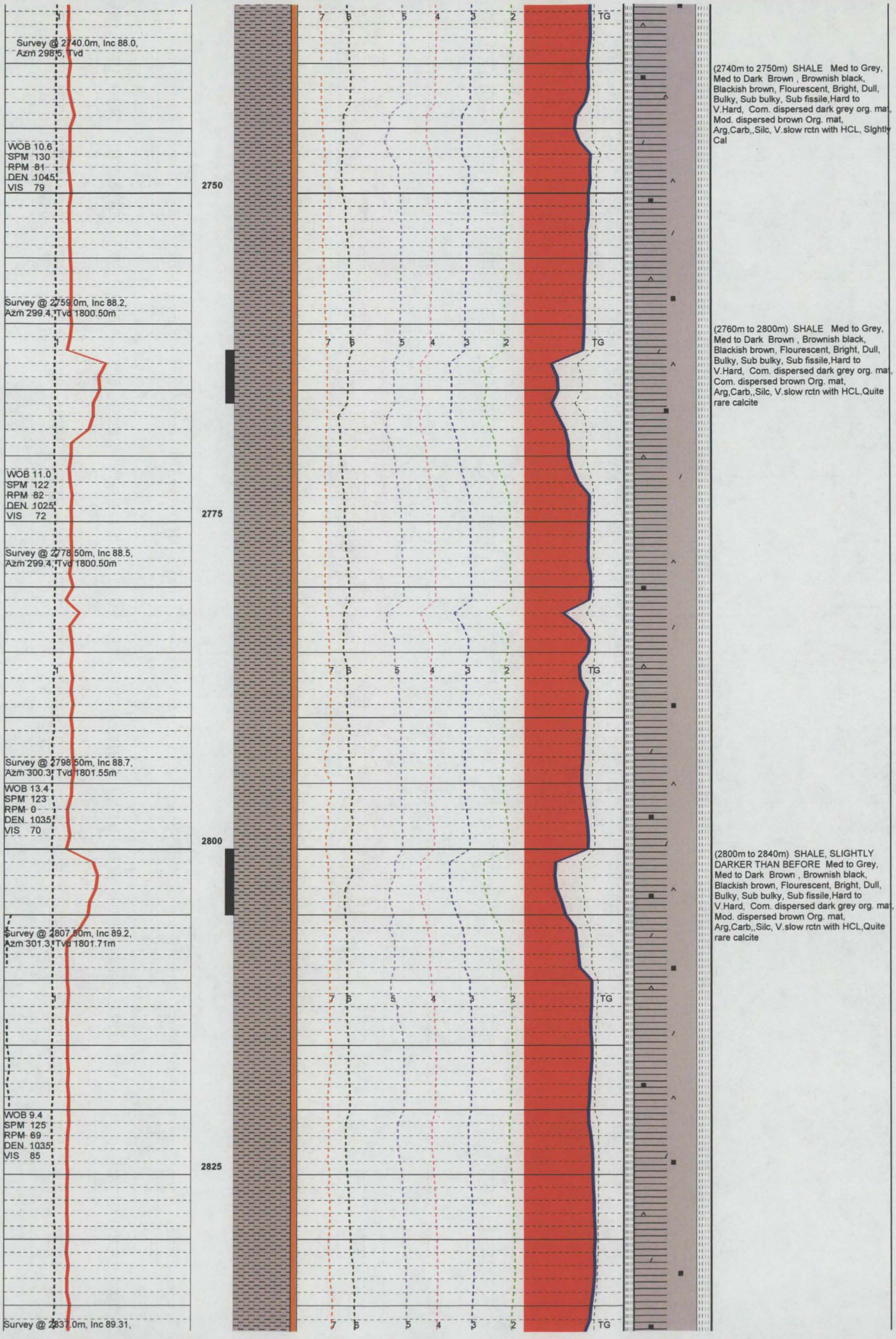

Survey @ 2532.0m, Inc 88.38,
Azm 298.65, Tvd 1793.62m
WOB 7.3
SPM 116
RPM 68
DEN 1040
VIS 73
2550
Survey @ 2551.0m, Inc 87.98,
Azm 297.85, Tvd 1794.22m
Survey@2570, Devtn 88.1 deg
Azi 298.8 deg,Tvd 1794.87
WOB 7.0
SPM 114
RPM 74
DEN 1020
VIS 75
2575
Survey@2589.00m Devtn 88.1 deg
Azi 299 deg,Tvd 1795.50
WOB 6.3
SPM 119
RPM 82
DEN 1020
VIS 25
2600
Survey@2608.00m Devtn 88.3 deg
Azi 299 deg,Tvd 1796.10
WOB 10.0
SPM 120
RPM 82
DEN 1030
VIS 75
2625
Survey@2627.00m Devtn 88.4 deg
Azi 298.6 deg,Tvd 1796.65
7 6 5 4 3 2 TG
(2540m to 2550m) SHALE Med to Dark Grey, Med to Dark Brown , Brownish black, Blackish brown, Flourescent, Bright, Dull, Rare Calcite, Bulky, Sub bulky, Sub fissile, Hard to V.Hard, Com. dispersed dark grey org. mat, Mod. dispersed brown Org. mat, No Rctn with Hcl, ,Arg,Carb,Silty,Silc,
(2560m to 2580m) SHALE Med to Dark Grey, Med to Dark Brown , Brownish black, Blackish brown, Flourescent, Bright, Dull, Calcite Infill- Evidence of Fractures, Bulky, Sub bulky, Sub fissile, Hard to V.Hard, Com. dispersed dark grey org. mat, Mod. dispersed brown Org. mat, Fast Rctn with Hcl,Limy, Cal, Arg,Carb, Silc
(2590m to 2600m) SHALE Med to Dark Grey, Med to Dark Brown , Brownish black, Blackish brown, Flourescent, Bright, Dull, Bulky, Sub bulky, Sub fissile, Hard to V.Hard, Com. dispersed dark grey org. mat, Mod. dispersed brown Org. mat, Traces of Limestones, No Rctn with Hcl, Arg,Carb,,V. Silc,
(26100m to 2650m) SHALE Med to Dark Grey, Med to Dark Brown , Brownish black, Blackish brown, Flourescent, Bright, Dull, Bulky, Sub bulky, Sub fissile,Soft to hard, Hard to V.Hard, Com. dispersed dark grey org. mat, Mod. dispersed brown Org. mat, Slow rctn with Hcl, Arg,Carb,,Silc, Less Calcareous

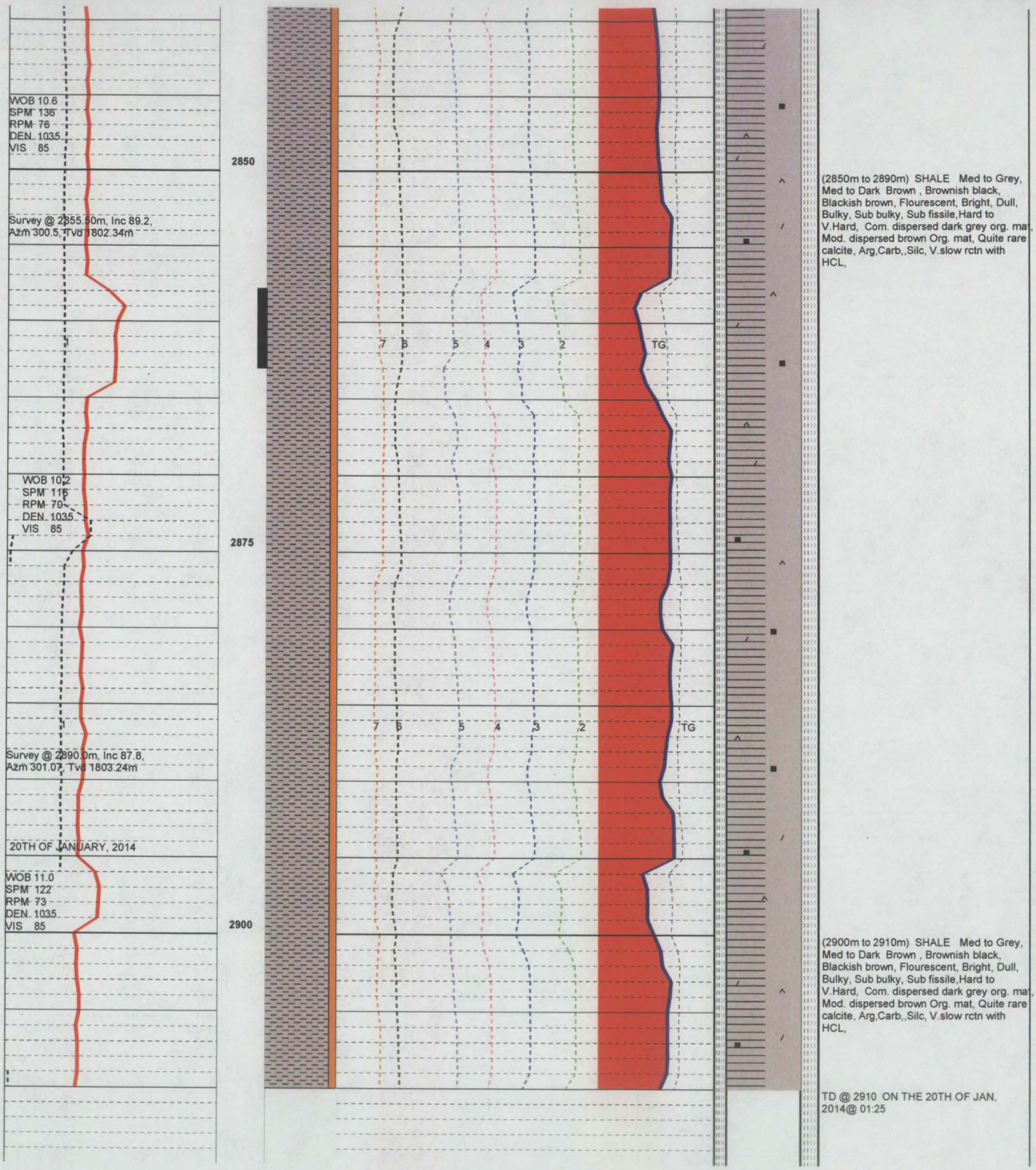


(2660m to 2680m) SHALE, DARKER THAN BEFORE Med to Dark Grey, Med to Dark Brown , Brownish black, Blackish brown, Flourescent, Bright, Dull, Bulky, Sub bulky, Sub fissile,Hard to V.Hard, Com. dispersed dark grey org. mat, Mod. dispersed brown Org. mat, No rctn with Hc, Arg,Carb,,Silc,

(2690m to 2700m) SHALE , LESS DARKER THAN BEFORE Med Grey, Med to Dark Brown , Brownish black, Blackish brown, Flourescent, Bright, Dull, Bulky, Sub bulky, Sub fissile,Soft to hard, Hard to V.Hard, Com. dispersed dark grey org. mat, Mod. dispersed brown Org. mat, No rctn with Hcl, Arg,Carb,,Silc

(2710m to 2730m) SHALE Med to Grey, Med to Dark Brown , Brownish black, Blackish brown, Flourescent, Bright, Dull, Bulky, Sub bulky, Sub fissile,Hard to V.Hard, Com. dispersed dark grey org. mat, Mod. dispersed brown Org. mat, No rctn with Hcl, Arg,Carb,,Silc


Survey @ 2740.0m, Inc 88.0, Azm 298.5, Tvd
WOB 10.6
SPM 130
RPM 81
DEN 1045
VIS 79
2750
Survey @ 2759.0m, Inc 88.2, Azm 299.4, Tvd 1800.50m
WOB 11.0
SPM 122
RPM 82
DEN 1025
VIS 72
2775
Survey @ 2778.50m, Inc 88.5, Azm 299.4, Tvd 1800.50m
Survey @ 2798.50m, Inc 88.7, Azm 300.3, Tvd 1801.55m
WOB 13.4
SPM 123
RPM 0
DEN 1035
VIS 70
2800
Survey @ 2807.50m, Inc 89.2, Azm 301.3, Tvd 1801.71m
WOB 9.4
SPM 125
RPM 69
DEN 1035
VIS 85
2825
Survey @ 2837.0m, Inc 89.31,
7 6 5 4 3 2 TG
(2740m to 2750m) SHALE Med to Grey, Med to Dark Brown , Brownish black, Blackish brown, Flourescent, Bright, Dull, Bulky, Sub bulky, Sub fissile,Hard to V.Hard, Com. dispersed dark grey org. mat, Mod. dispersed brown Org. mat, Arg,Carb,,Silc, V.slow rctn with HCL, SIghtly Cal
(2760m to 2800m) SHALE Med to Grey, Med to Dark Brown , Brownish black, Blackish brown, Flourescent, Bright, Dull, Bulky, Sub bulky, Sub fissile,Hard to V.Hard, Com. dispersed dark grey org. mat, Com. dispersed brown Org. mat, Arg,Carb,,Silc, V.slow rctn with HCL,Quite rare calcite
(2800m to 2840m) SHALE, SLIGHTLY DARKER THAN BEFORE Med to Grey, Med to Dark Brown , Brownish black, Blackish brown, Flourescent, Bright, Dull, Bulky, Sub bulky, Sub fissile,Hard to V.Hard, Com. dispersed dark grey org. mat, Mod. dispersed brown Org. mat, Arg,Carb,,Silc, V.slow rctn with HCL,Quite rare calcite



(2850m to 2890m) SHALE Med to Grey, Med to Dark Brown , Brownish black, Blackish brown, Flourescent, Bright, Dull, Bulky, Sub bulky, Sub fissile,Hard to V.Hard, Com. dispersed dark grey org. mat, Mod. dispersed brown Org. mat, Quite rare calcite, Arg,Carb,,Silc, V.slow rctn with HCL,

(2900m to 2910m) SHALE Med to Grey, Med to Dark Brown , Brownish black, Blackish brown, Flourescent, Bright, Dull, Bulky, Sub bulky, Sub fissile,Hard to V.Hard, Com. dispersed dark grey org. mat, Mod. dispersed brown Org. mat, Quite rare calcite, Arg,Carb,,Silc, V.slow rctn with HCL,

TD @ 2910 ON THE 20TH OF JAN, 2014@ 01:25

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45

Report Date: 1/1/2014
Report #: 24
Depth Progress: 94.00m
Depth End: 490.00mKB
Rig Release Date: 1/23/2014

Rig: Beaver Drilling Ltd. 2

UWI	Surface Legal Location	MaxWell Job Number	License No.
300E7665-10126-45	E-76 65-10 126-45	JOB01@2006	EL 470

Ground Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
268.20	273.40	268.00	12/28/2013	4.73

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	12/9/2013 00:00	1/23/2014 23:59	DRILLED	Yes

Daily Cost Total (Cost)	Cumulative Cost (Cost)	Total AFE (Cost)	AFE+Supp Amt (Cost)	AFE / RFE / Maint.#	Estimated Days
75,264.33	2,135,131.45	6,820,300.00	6,820,300.00	10351817	34.19

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hr)	Cum Personnel Total Hours (hr)
2,881.00		49.0	560.00	21,401.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)

Road Condition	Weather	Temperature (°C)	Wind
Ice/Snow	Windy	-34	NW 20 kms

Ops and Depth @ Morning Report
Drill 311mm surface hole to 542m. Last survey at 508m was 0.7°.

Wellbore
Original Hole

Last 24hr Summary
No incidents or accidents. 7 - HID, 0 - OBS and 0 - ASA (all closed out)

Wiper trip at 396m, back ream through tight spots. Drill 311mm surface hole from 396m to 490m with accumulated wireline surveys, rig services, connections and circulation times. Last survey at 508m was 0.7°.

24hr Forecast
Drill 311mm surface hole with accumulated wireline surveys, rig services, connections and circulation times. Wiper trip at 590m+/- (strap out). Drill to 603m TD.

Daily Contacts
Drilling Superintend, Sheldon Vamplew, 403-999-1302; Drilling Engineer, Mike Greener, 403-771-5039; WS Supervisor, Richard Turgeon, 780-387-1706; WS Supervisor, Dave Opper, 403-863-8205; Rig Manager, Rick Yavis, 780-718-2962; Command Centre, 403-910-0357

Last Casing String
Conductor, 20.00mKB

Time Log

Start Time	End Time	Dur (hr)	Phase	Op Code	Activity Code	Tim e P-T-X	Trbl Code	Start Depth (mKB)	End Depth (mKB)	Operation
00	01:30	1.50	SURFAC	DRILL	WPRT	P		396.00	396.00	Trip out of hole back ream from 359m to 321m & clean up hole
01:30	01:45	0.25	SURFAC	RIGMNT	SVRG	P		396.00	396.00	Rig service function test crown saver
01:45	03:30	1.75	SURFAC	RIGMNT	RGRP	T	Rig	396.00	396.00	Replace broken fan belts in HPU
03:30	06:30	3.00	SURFAC	DRILL	WPRT	P		396.00	396.00	Trip out of hole back ream from 321m to 120m circ hole clean
06:30	07:30	1.00	SURFAC	DRILL	DRLG	P		396.00	396.00	Circulate pull 4" bag out of rotating head
07:30	08:00	0.50	SURFAC	DRILL	SFTY	P		396.00	396.00	Crew hand over meeting with rig crews, rig manager, Conoco reps
08:00	08:15	0.25	SURFAC	RIGMNT	SVRG	P		396.00	396.00	Rig service crown saver operating properly
08:15	10:30	2.25	SURFAC	DRILL	WPRT	P		396.00	396.00	Wiper trip out of hole pump and back ream to 60m
10:30	10:45	0.25	SURFAC	RIGMNT	SVRG	P		396.00	396.00	Check bit,Clean and prepare floor to trip in
10:45	11:00	0.25	SURFAC	DRILL	WPRT	P		396.00	396.00	Trip in the hole to 30m
11:00	11:15	0.25	SURFAC	RIGMNT	SVRG	P		396.00	396.00	Install 4inc bag into rotating head
11:15	13:00	1.75	SURFAC	DRILL	WPRT	P		396.00	396.00	Wiper trip into the hole to 376m
13:00	14:30	1.50	SURFAC	DRILL	CIRC	P		396.00	396.00	Ream tight spot at 377m and reamed to bottom
14:30	16:00	1.50	SURFAC	DRILL	DRLG	P		396.00	415.00	Rotary drill 311mm hole from 396m to 415m
16:00	16:15	0.25	SURFAC	RIGMNT	SVRG	P		415.00	415.00	Rig service crown saver operating properly
16:15	19:00	2.75	SURFAC	DRILL	DRLG	P		415.00	433.00	Rotary drill 311mm hole from 415m to 433m
19:00	19:15	0.25	SURFAC	DRILL	SFTY	P		433.00	433.00	Crew hand over meeting with rig crews, rig manager, Conoco reps
19:15	23:15	4.00	SURFAC	DRILL	DRLG	P		433.00	490.00	Rotary drill 311mm hole from 433m to 490m
23:15	00:00	0.75	SURFAC	DRILL	SRVY	P		490.00	490.00	Acclumlated time for surveys

Fluid/Mud Chks: Mud Engineer: Ed Thompson

Time	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (Pa·s)	YP Override (Pa)
15:30	415.00	1,160.0	42	8.0	8.0	3.0

Low Gravity Solids (%)	MBT (kg/m³)	Oil Water Ratio	Chlorides (mg/L)	Calcium (mg/L)	Lime (kg/m³)	Potassium (mg/L)
9.8			2,100	120		

tric Stab (V)	ECD - Manual Entry (k...	Sand (%)	Solids, Corr. (%)	T Flowline (°C)	HTHP Pressure (kPa)	HTHP Filtrate (mL/30...
	1,176.0	0.0	10.0	31		

API Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Field Est (Cost)
11.0			

Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost (Cost)
		2,485.08

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45
Rig: Beaver Drilling Ltd. 2

Report Date: 1/1/2014
Report #: 24
Depth Progress: 94.00m
Depth End: 490.00mKB
Rig Release Date: 1/23/2014

BOP Drill

	Days Last Chk (...	Last Date	Days Until Next...	Next Check Date
BOP Drill	4	12/28/2013	-1	12/31/2013

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
812.00	812.00

Safety Incidents

Date	Com	Category

Drill String: BHA # 1

Bit Run	Drill Bit	Length (m)	IADC Bit Dull	TFA (incl Noz) (mm²)	BHA ROP (m/hr)
1A	311.0mm, J&L, B181332	0.34	1-2-NO-S-1-0-WT-TD	722	12.1

Nozzles (mm)	String Length (m)	OD (mm)	Max Rotating Hook Load (daN)
15.9/15.9/15.9/12.7	603.00	311.0	55,000

Depth In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hr)	Total Drill Hrs (hr)
0.00	603.00	12.1	603.00	603.00	50.00	50.00

Comment
Rotary drill 311mm slick

Drill String Components

Item Des	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)
4" HW	70.0	132.0	51	464.80	603.00
X/O 4" H-90	62.0	162.0	1	0.80	138.20
6" D.C	60.0	160.0	9	84.00	137.40
Jar	76.0	157.0	1	4.73	53.40
6" D.C	60.0	160.0	3	27.90	48.67
Bell sub	69.0	232.0	1	0.66	20.77
9" D.C	71.0	233.0	2	18.50	20.11
Bit sub	70.0	255.0	1	0.93	1.61
311mm BIT	72.0	311.0	1	0.34	0.68

Drilling Parameter: 415.00 - 490.00 mKB

Depth (m)	Cum Drill...	Int ROP (...	Flow Rate...	WOB (daN)	RPM (r...	SPP (kPa)	Drill Str Wt (d...	SO Str Wt (daN)	PU Str Wt (daN)	Off-Btm Str W...	Drill Tq
490.00	34.25	11.1	2.600	15,000	120	14,500	54,000	53,000	56,000	54,000	6,600.0

Hydraulic Calculations

Bit Hydraulic Powe...	HP/Area (kW/mm²)	% P @ bit (%)	Bit Jet Velocity (m/s)	Bit dP (kPa)	P Drop Annular (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)
101.5	0.00134	16	60.0	2,342.1	27.1	1,160.0	1,165.6

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Vol Shoe to Top (m³)	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m/...
1.77	27.89	3.43	15.1	15.1	41.7	104.4

Error

Mud Pump: 1, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
1	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/20/2014 00:00	2,909.00	0.499	5,150	64
1/20/2014 00:00	2,909.00	1.014	17,500	130

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
1/21/2014	1/21/2014	127.0		
1/22/2014	1/22/2014	127.0		

Mud Pump: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/19/2014 00:00	2,513.00	0.647	6,855	83
1/19/2014 00:00	2,513.00	0.897	15,000	115

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
1/19/2014	1/19/2014	127.0	15,000	
1/21/2014		127.0		

Shaker Screens

Des	Start Date	End Date	Scr Sz X	Scr Sz Y	Note

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
1	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/n
1/19/2014 07:00	2.00	1800	1,000.0	0.400	2,100.0	

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
2	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
1/19/2014 13:00	3.00	2000	990.0	0.400	1,700.0	0.200

Fluid / Mud Additive Amounts

Des	Consumed	Cost	Size	Units
Sawdust	10.0	2.980	7.3	SX

Survey Data

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	Depart (m)	NS (m)	EW (m)	VS (m)	DLS (°/30m)
1/1/2014	396.00	0.60	0.00	395.98	3.22	3.22	0.00	1.56	0.33
1/1/2014	433.00	0.60	0.00	432.98	3.61	3.61	0.00	1.75	0.00
1/1/2014	461.00	0.60	0.00	460.98	3.90	3.90	0.00	1.89	0.00
1/1/2014	489.00	0.50	0.00	488.98	4.17	4.17	0.00	2.02	0.11

Formations

Formation Name	Drill Top MD (mKB)	Drill Top (TVD) (mKB)	Prog Top TVD (mKB)
Little Bear	31.00	31.00	31.00
Slater River	76.00	76.00	76.00
Arctic Red	800.50	800.46	76.40
Martin House	938.50	938.44	76.40
Imperial	975.50	975.43	76.40
Upper Canol	1,665.00	1,658.53	1,653.40
Lower Canol	1,700.72	1,689.07	1,694.40

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45

Report Date: 1/2/2014
Report #: 25
Depth Progress: 110.00m
Depth End: 600.00mKB
Rig Release Date: 1/23/2014

Rig: Beaver Drilling Ltd. 2

VI	Surface Legal Location	MaxWell Job Number	License No.
65-10126-45	E-76 65-10 126-45	JOB01@2006	EL 470

Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
268.20	273.40	268.00	12/28/2013	5.73

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	12/9/2013 00:00	1/23/2014 23:59	DRILLED	Yes

Daily Cost Total (Cost)	Cumulative Cost (Cost)	Total AFE (Cost)	AFE+Supp Amt (Cost)	AFE / RFE / Maint.#	Estimated Days
98,248.78	2,233,380.23	6,820,300.00	6,820,300.00	10351817	34.19

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hr)	Cum Personnel Total Hours (hr)
2,881.00		47.0	536.00	21,937.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)

Road Condition	Weather	Temperature (°C)	Wind
Ice/Snow	Windy	-28	NW 20 kms

Ops and Depth @ Morning Report
Ream/wash to bottom from 569m. Last survey at 571m was 0.5°.

Wellbore
Original Hole

Last 24hr Summary
No incidents or accidents. 10 - HID, 0 - OBS and 0 - ASA (all closed out)

Drill 311mm surface hole from 490m to 592m with accumulated wireline surveys, rig services, connections and circulation times. Wiper trip at 592m, back ream through tight spots. Last survey at 571m was 0.5°.

24hr Forecast
Drill to 603m (TD). Pull out of the hole (Backream through tight spots). Lay down 6" and 9" drill collars, rig up power tongs and run 244.5mm surface casing.

Daily Contacts
Drilling Superintend, Sheldon Vamplew, 403-999-1302; Drilling Engineer, Mike Greener, 403-771-5039; WS Supervisor, Richard Turgeon, 780-387-1706; WS Supervisor, Dave Opper, 403-863-8205; Rig Manager, Rick Yavis, 780-718-2962; Command Centre, 403-910-0357

Last Casing String
Conductor, 20.00mKB

Time Log

Start Time	End Time	Dur (hr)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Start Depth (mKB)	End Depth (mKB)	Operation
00	00:15	0.25	SURFAC	RIGMNT	SVRG	P		490.00	490.00	Rig service function test crown saver
	07:15	7.00	SURFAC	DRILL	DRLG	P		490.00	555.00	Rotary drill 311 mm hole from 490 m to 555m
	07:45	0.50	SURFAC	DRILL	SRVY	P		555.00	555.00	Accumulated time for surveys & connections
07:45	08:00	0.25	SURFAC	DRILL	SFTY	P		555.00	555.00	Crew hand over meeting with rig crews, rig manager, Conoco reps
08:00	09:15	1.25	SURFAC	DRILL	DRLG	P		555.00	564.00	Rotary drill 311mm hole from 555m to 564m
09:15	09:30	0.25	SURFAC	RIGMNT	SVRG	P		564.00	564.00	Rig service crown saver operating properly
09:30	15:15	5.75	SURFAC	DRILL	DRLG	P		564.00	592.00	Rotary drill 311mm hole from 564m to 592m
15:15	16:00	0.75	SURFAC	DRILL	CIRC	P		592.00	592.00	Circulate hole clean to wiper trip
16:00	16:15	0.25	SURFAC	RIGMNT	SVRG	P		592.00	592.00	Rig service function test crown saver and motor kills
16:15	19:00	2.75	SURFAC	DRILL	WPRT	P		592.00	592.00	Wiper trip out and pump and back ream
19:00	19:15	0.25	SURFAC	DRILL	SFTY	P		592.00	592.00	Crew hand over meeting with rig crews, rig manager, Conoco reps
19:15	00:00	4.75	SURFAC	DRILL	WPRT	P		592.00	592.00	Trip out of hole back ream from 462m to 223m. Strap out of hole, Drilling tally = 592.66m. Strap tally = 592.76m. Diff. = 0.10m.

Fluid/Mud Chks: Mud Engineer: Ed Thompson

Time	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (Pa•s)	YP Override (Pa)
14:15	589.00	1,170.0	80	8.0	8.0	3.0

Low Gravity Solids (%)	MBT (kg/m³)	Oil Water Ratio	Chlorides (mg/L)	Calcium (mg/L)	Lime (kg/m³)	Potassium (mg/L)
9.8			2,100	120		

Electric Stab (V)	ECD - Manual Entry (k...	Sand (%)	Solids, Corr. (%)	T Flowline (°C)	HTHP Pressure (kPa)	HTHP Filtrate (mL/30...
	1,176.0	0.0	10.0	31		

API Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Field Est (Cost)
11.0			1,903.75

Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost (Cost)
		4,388.83

Last BOP Drill

Type	Days Last Chk (...	Last Date	Days Until Next...	Next Check Date
BOP Drill	5	12/28/2013	-2	12/31/2013

Since Lost Time Incident (days)	Days Since Recordable Incident (days)
813.00	813.00

Incidents

Date	Com	Category

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45
Rig: Beaver Drilling Ltd. 2

Report Date: 1/2/2014
Report #: 25
Depth Progress: 110.00m
Depth End: 600.00mKB
Rig Release Date: 1/23/2014

String: BHA # 1

Bit Run	Drill Bit	Length (m)	IADC Bit Dull	TFA (incl Noz) (mm²)	BHA ROP (
1A	311.0mm, J&L, B181332	0.34	1-2-NO-S-1-0-WT-TD	722	12.1

Nozzles (mm)	String Length (m)	OD (mm)	Max Rotating Hook Load (daN)
15.9/15.9/15.9/12.7	603.00	311.0	55,000

Depth In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hr)	Total Drill Hrs (hr)
0.00	603.00	12.1	603.00	603.00	50.00	50.00

Comment
Rotary drill 311mm slick

Drill String Components

Item Des	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)
4" HW	70.0	132.0	51	464.80	603.00
X/O 4" H-90	62.0	162.0	1	0.80	138.20
6" D.C	60.0	160.0	9	84.00	137.40
Jar	76.0	157.0	1	4.73	53.40
6" D.C	60.0	160.0	3	27.90	48.67
Bell sub	69.0	232.0	1	0.66	20.77
9" D.C	71.0	233.0	2	18.50	20.11
Bit sub	70.0	255.0	1	0.93	1.61
311mm BIT	72.0	311.0	1	0.34	0.68

Drilling Parameter: 555.00 - 592.00 mKB

Cum Depth (m)	Cum Drill...	Int ROP (...	Flow Rate...	WOB (daN)	RPM (r...	SPP (kPa)	Drill Str Wt (d...	SO Str Wt (daN)	PU Str Wt (daN)	Off-Btm Str W...	Drill Tq
592.00	48.25	5.3	2.300	16,000	110	15,100	52,000	49,000	55,000	52,000	4,820.0

Hydraulic Calculations

Bit Hydraulic Powe...	HP/Area (kW/mm²)	% P @ bit (%)	Bit Jet Velocity (m/s)	Bit dP (kPa)	P Drop Annular (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)
70.9	0.00093	12	53.1	1,848.6	26.1	1,170.0	1,174.5

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Vol Shoe to Top (m³)	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m/...
2.17	34.24	3.43	13.4	13.4	36.9	92.4

Error

Pump: 1, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
1	NATIONAL	8-P-80	140.0	

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/20/2014 00:00	2,909.00	0.499	5,150	64
1/20/2014 00:00	2,909.00	1.014	17,500	130

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
1/21/2014	1/21/2014	127.0		
1/22/2014	1/22/2014	127.0		

Mud Pump: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/19/2014 00:00	2,513.00	0.647	6,855	83
1/19/2014 00:00	2,513.00	0.897	15,000	115

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
1/19/2014	1/19/2014	127.0	15,000	
1/21/2014		127.0		

Shaker Screens

Des	Start Date	End Date	Scr Sz X	Scr Sz Y	Note

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
1	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
/2014 07:00	2.00	1800	1,000.0	0.400	2,100.0	

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm
2	BOS Solutions	5500	

fuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
-014 13:00	3.00	2000	990.0	0.400	1,700.0	0.200

Fluid / Mud Additive Amounts

Des	Consumed	Cost	Size	Units
Gel	58.0	7.200	40.0	SX
Kelzan	4.0	360.450	25.0	SX
Sawdust	10.0	2.980	7.3	SX
Soda Ash	1.0	14.550	22.68	SX

Survey Data

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	Depart (m)	NS (m)	EW (m)	VS (m)	DLS (°/30m)
1/2/2014	508.00	0.70	0.00	507.98	4.37	4.37	0.00	2.12	0.32
1/2/2014	544.00	0.40	0.00	543.97	4.71	4.71	0.00	2.29	0.25
1/2/2014	571.00	0.50	0.00	570.97	4.93	4.93	0.00	2.39	0.11

Formations

Formation Name	Drill Top MD (mKB)	Drill Top (TVD) (mKB)	Prog Top TVD (mKB)
Little Bear	31.00	31.00	31.00
Slater River	76.00	76.00	76.00
Arctic Red	800.50	800.46	76.40
Martin House	938.50	938.44	76.40
Imperial	975.50	975.43	76.40
Upper Canol	1,665.00	1,658.53	1,653.40
Lower Canol	1,700.72	1,689.07	1,694.40

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45

Report Date: 1/3/2014
Report #: 26
Depth Progress: 11.00m
Depth End: 603.00mKB
Rig Release Date: 1/23/2014

Rig: Beaver Drilling Ltd. 2

UWI	Surface Legal Location	MaxWell Job Number	License No.
E7665-10126-45	E-76 65-10 126-45	JOB01@2006	EL 470

Ground Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
268.20	273.40	268.00	12/28/2013	6.73

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	12/9/2013 00:00	1/23/2014 23:59	DRILLED	Yes

Daily Cost Total (Cost)	Cumulative Cost (Cost)	Total AFE (Cost)	AFE+Supp Amt (Cost)	AFE / RFE / Maint.#	Estimated Days
76,202.91	2,309,583.14	6,820,300.00	6,820,300.00	10351817	34.19

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hr)	Cum Personnel Total Hours (hr)
2,881.00		47.0	536.00	22,473.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)

Road Condition	Weather	Temperature (°C)	Wind
Ice/Snow	Clear	-42	NW 10 kms.

Ops and Depth @ Morning Report
Cement 603m (TD) of 244.5mm casing.

Wellbore
Original Hole

Last 24hr Summary
No incidents or accidents. 13 - HID, 1 - OBS and 0 - ASA (all closed out)

Wiper trip at 592m, ream through tight spots. Drill to 603m (TD), work drill string and circulate hole clean. Pull out of the hole, lay down 6-1/2" and 9" drill collars, rig up power tongs and run 244.5mm surface casing.

24hr Forecast
Cement 244.5mm surface casing, nipple down diverter, weld on casing bowl, nipple up BOP and pressure test manifold and BOP components.

Daily Contacts
Drilling Superintend, Sheldon Vamplew, 403-999-1302; Drilling Engineer, Mike Greener, 403-771-5039; WS Supervisor, Richard Turgeon, 780-387-1706; WS Supervisor, Dave Opper, 403-863-8205; Rig Manager, Rick Yavis, 780-718-2962; Command Centre, 403-910-0357

Last Casing String
Conductor, 20.00mKB

Time Log

Start Time	End Time	Dur (hr)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Start Depth (mKB)	End Depth (mKB)	Operation
00:00	01:30	1.50	SURFAC	DRILL	WPRT	P		592.00	592.00	Trip out of hole & strap out
01:30	01:45	0.25	SURFAC	RIGMNT	SVRG	P		592.00	592.00	Rig service function test crown saver
01:45	04:45	3.00	SURFAC	DRILL	WPRT	P		592.00	592.00	Trip in hole, hit bridge at 336 m clean up hole from 336 m 345 m and run in hole
04:45	06:30	1.75	SURFAC	DRILL	REAM	P		592.00	592.00	Ream and clean to bottom from 541 m to 592 m
06:30	07:45	1.25	SURFAC	DRILL	DRLG	P		592.00	600.00	Rotary drill 311mm hole from 592m to 600m
07:45	08:00	0.25	SURFAC	DRILL	SFTY	P		600.00	600.00	Crew hand over meeting with rig crews, rig manager, Conoco reps
08:00	08:30	0.50	SURFAC	DRILL	DRLG	P		600.00	603.00	Rotary drill 311mm hole from 600m to 603m
08:30	08:45	0.25	SURFAC	RIGMNT	SVRG	P		603.00	603.00	Rig service function test rig smart function test crown saver
08:45	09:30	0.75	SURFAC	DRILL	CIRC	P		603.00	603.00	Circ and condition mud and prepair to come out of hole at surface
09:30	11:15	1.75	SURFAC	DRILL	TRIP	P		603.00	603.00	Trip out of hole to 126m, drill collars, to run casing
11:15	11:30	0.25	SURFAC	DRILL	SFTY	P		603.00	603.00	Safety meeting reviewed jsa#161 lay down drill collars
11:30	13:30	2.00	SURFAC	DRILL	PULD	P		603.00	603.00	Lay down BHA, 6" and 9" drill collars
13:30	14:00	0.50	SURFAC	RIGMNT	SVRG	P		603.00	603.00	Clean and prepare floor to run csg
14:00	16:00	2.00	SURFAC	CASING	RNCS	P		603.00	603.00	Rig up power tongs & laydown truck to run 244.5mm surface casing/rig out lay down truck due to broken hyd ram
16:00	16:15	0.25	SURFAC	RIGMNT	SVRG	P		603.00	603.00	Rig service, function, crown saver, operating properly
16:15	16:30	0.25	SURFAC	CASING	SFTY	P		603.00	603.00	Safety meeting with Hallmark power tongs Reviewed jsa#97 Rig up power tongs, jsa#99 install, 244.5mm float and shoe and run casing
16:30	19:00	2.50	SURFAC	CASING	RNCS	P		603.00	603.00	Run surface, 244.5mm, 53.6kg/m,K-55, LT&C casing with hallmark power tongs
19:00	19:15	0.25	SURFAC	CASING	SFTY	P		603.00	603.00	Crew hand over meeting with rig crews, rig manager, Conoco reps
19:15	19:30	0.25	SURFAC	CASING	SFTY	P		603.00	603.00	Safety meeting with night crew, jsa #99, running casing
19:30	00:00	4.50	SURFAC	CASING	RNCS	P		603.00	603.00	Run 244.5mm, 53.6kg/m,K-55, LT@C casing, with Hallmark power tongs

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45

Report Date: 1/3/2014
Report #: 26
Depth Progress: 11.00m
Depth End: 603.00mKB
Rig Release Date: 1/23/2014

Rig: Beaver Drilling Ltd. 2

[redacted]/Mud Chks: Mud Engineer: Ed Thompson

	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (Pa•s)	YP Override (Pa)
08:00	603.00	1,210.0	95	8.5	27.0	11.5

Low Gravity Solids (%)	MBT (kg/m³)	Oil Water Ratio	Chlorides (mg/L)	Calcium (mg/L)	Lime (kg/m³)	Potassium (mg/L)
12.9			2,300	120		

Electric Stab (V)	ECD - Manual Entry (k...	Sand (%)	Solids, Corr. (%)	T Flowline (°C)	HTHP Pressure (kPa)	HTHP Filtrate (mL/30...
	1,240.0	0.0	13.1	37		

API Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Field Est (Cost)
9.0			17.88

Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost (Cost)
		4,406.71

Last BOP Drill

Type	Days Last Chk (...	Last Date	Days Until Next...	Next Check Date
BOP Drill	6	12/28/2013	-3	12/31/2013

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
814.00	814.00

Safety Incidents

Date	Com	Category

Drill String: BHA # 1

Bit Run	Drill Bit	Length (m)	IADC Bit Dull	TFA (incl Noz) (mm²)	BHA ROP (m/hr)
1A	311.0mm, J&L, B181332	0.34	1-2-NO-S-1-0-WT-TD	722	12.1

Nozzles (mm)	String Length (m)	OD (mm)	Max Rotating Hook Load (daN)
15.9/15.9/15.9/12.7	603.00	311.0	55,000

Depth In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hr)	Total Drill Hrs (hr)
0.00	603.00	12.1	603.00	603.00	50.00	50.00

Comment
Rotary drill 311mm slick

Drill String Components

Item Des	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)
4" HW	70.0	132.0	51	464.80	603.00
[redacted] 4" H-90	62.0	162.0	1	0.80	138.20
[redacted]	60.0	160.0	9	84.00	137.40
[redacted]	76.0	157.0	1	4.73	53.40
6" D.C	60.0	160.0	3	27.90	48.67
Bell sub	69.0	232.0	1	0.66	20.77
9" D.C	71.0	233.0	2	18.50	20.11
Bit sub	70.0	255.0	1	0.93	1.61
311mm BIT	72.0	311.0	1	0.34	0.68

Drilling Parameter: 600.00 - 603.00 mKB

Cum Depth (m)	Cum Drill...	Int ROP (...	Flow Rate...	WOB (daN)	RPM (r...	SPP (kPa)	Drill Str Wt (d...	SO Str Wt (daN)	PU Str Wt (daN)	Off-Btm Str W...	Drill Tq
603.00	50.00	6.0	2.200	17,000	110	15,000	55,000	53,000	57,000	55,000	8,800.0

Hydraulic Calculations

Bit Hydraulic Powe...	HP/Area (kW/mm²)	% P @ bit (%)	Bit Jet Velocity (m/s)	Bit dP (kPa)	P Drop Annular (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)
64.1	0.00084	12	50.8	1,749.1	143.0	1,210.0	1,234.2

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Vol Shoe to Top (m³)	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m/...
2.21	34.93	3.43	12.8	12.8	35.3	88.4

Error

Mud Pump: 1, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
1	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/20/2014 00:00	2,909.00	0.499	5,150	64
1/20/2014 00:00	2,909.00	1.014	17,500	130

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
1/21/2014	1/21/2014	127.0		
1/22/2014	1/22/2014	127.0		

Mud Pump: 2, NATIONAL, 8-P-80

[redacted] Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
[redacted]	NATIONAL	8-P-80	140.0	216.0

[redacted]p Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/19/2014 00:00	2,513.00	0.647	6,855	83
1/19/2014 00:00	2,513.00	0.897	15,000	115

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45

Rig: Beaver Drilling Ltd. 2

Report Date: 1/3/2014
Report #: 26
Depth Progress: 11.00m
Depth End: 603.00mKB
Rig Release Date: 1/23/2014

np Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³
1/19/2014	1/19/2014	127.0	15,000	
1/21/2014		127.0		

Shaker Screens

Des	Start Date	End Date	Scr Sz X	Scr Sz Y	Note

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
1	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
1/19/2014 07:00	2.00	1800	1,000.0	0.400	2,100.0	0.200

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
2	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
1/19/2014 13:00	3.00	2000	990.0	0.400	1,700.0	0.200

Fluid / Mud Additive Amounts

Des	Consumed	Cost	Size	Units
Sawdust	6.0	2.980	7.3	SX

Survey Data

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	Depart (m)	NS (m)	EW (m)	VS (m)	DLS (°/30m)

Formations

Formation Name	Drill Top MD (mKB)	Drill Top (TVD) (mKB)	Prog Top TVD (mKB)
Little Bear	31.00	31.00	31.00
Slater River	76.00	76.00	76.00
Arctic Red	800.50	800.46	76.40
tin House	938.50	938.44	
mperial	975.50	975.43	
Upper Canol	1,665.00	1,658.53	
Lower Canol	1,700.72	1,689.07	1,694.40

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45
Rig: Beaver Drilling Ltd. 2

Report Date: 1/4/2014
Report #: 27
Depth Progress: 0.00m
Depth End: 603.00mKB
Rig Release Date: 1/23/2014

UWI	Surface Legal Location	MaxWell Job Number	License No.
65-10126-45	E-76 65-10 126-45	JOB01@2006	EL 470

Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
268.20	273.40	268.00	12/28/2013	7.73

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	12/9/2013 00:00	1/23/2014 23:59	DRILLED	Yes

Daily Cost Total (Cost)	Cumulative Cost (Cost)	Total AFE (Cost)	AFE+Supp Amt (Cost)	AFE / RFE / Maint.#	Estimated Days
329,910.69	2,639,493.83	6,820,300.00	6,820,300.00	10351817	34.19

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hr)	Cum Personnel Total Hours (hr)
2,881.00		47.0	536.00	23,009.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)

Road Condition	Weather	Temperature (°C)	Wind
Ice/Snow	Windy	-34	SW

Ops and Depth @ Morning Report
Pressure test manifold.

Wellbore
Original Hole

Last 24hr Summary
No incidents or accidents. 12 - HID, 1 - OBS and 0 - ASA (all closed out)

Run 244.5mm surface casing, tag bottom at 603m, circulate and clean the hole. Cement 244.5mm surface casing: full returns, 8.0m3 of good cement returns, plug down at 7:45hrs, pressure test surface casing to 11,500kPA, pressure held ok. Rig out cementers, wait on cement and clean substructure, nipple down diverter, weld on casing bowl, nipple up BOP, clean mud tanks, strip surface mud using the BOS III flocking system, transfer surface mud and clean water to 400bbl tanks to later run water through dehydrator.

24hr Forecast
Pressure test manifold and BOP components, conduct an accumulator function test. Pick and make up 222mm directional BHA and run in the hole.

Daily Contacts
Drilling Superintend, Sheldon Vamplew, 403-999-1302; Drilling Engineer, Mike Greener, 403-771-5039; WS Supervisor, Richard Turgeon, 780-387-1706; WS Supervisor, Dave Opper, 403-863-8205; Rig Manager, Rick Yavis, 780-718-2962; Command Centre, 403-910-0357

Last Casing String
Surface, 603.00mKB

Time Log

Start	End Time	Dur (hr)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Start Depth (mKB)	End Depth (mKB)	Operation
	02:30	2.50	SURFAC	CASING	RNCS	P		603.00	603.00	Run 244.5mm, 53.57kg/m, K-55, LTC surface casing from 603m to 5.20m with Hallmark power tongs. Total length of 244.5mm surface casing: 603.83m. Landed at 603m, tagged bottom at 603m, float at 589.01m.
02:30	02:45	0.25	SURFAC	RIGMNT	SVRG	P		603.00	603.00	Rig service function test crown saver
02:45	05:00	2.25	SURFAC	CASING	CIRC	P		603.00	603.00	Circulate & condition mud & hole
05:00	05:15	0.25	SURFAC	CEMENT	SFTY	P		603.00	603.00	Hold safety meeting with cementers and everyone on location prior to cementing 244.5mm surface casing.
05:15	06:30	1.25	SURFAC	CEMENT	CMNT	P		603.00	603.00	Rig up Schlumberger cementers to cement 244.5mm surface casing, pump 5m3 of 1000kg/m3 fresh water, stop and pressure test line to 21,000kPA (held OK), bleed off pressure.
06:30	07:00	0.50	SURFAC	CEMENT	CMNT	P		603.00	603.00	Then pump 5m3 of 1300kg/m3 MudPush II pre-flush spacer and then pump 32 tonnes/29.5m3 (50% excess) of RFC 1740 cement with 0.2% Anti-Foam + 1.0% CaCl2 + 1.1% Low Temp Fluid Loss + 0.6% Dispersant from 603m to 5.20m. Drop plug and displace 23.8m3 of fresh water.
07:00	07:30	0.50	SURFAC	CEMENT	CMNT	P		603.00	603.00	Bump plug 3,500kPA over final circulating pressure of 6,500kPA at 7:45hrs on January 4th 2014, bleed pressure and check floats (holding OK). Pressure test casing to 11,500kPA for 10 minutes (holding OK).
07:30	07:45	0.25	SURFAC	CEMENT	CMNT	P		603.00	603.00	Bleed pressure, flush diverter and rig out cementers. Good cement returns: 8.0m3.
07:45	08:00	0.25	SURFAC	DRILL	SFTY	P		603.00	603.00	Crew hand over meeting with rig crews, rig manager, Conoco reps
08:00	08:30	0.50	SURFAC	CEMENT	CMNT	P		603.00	603.00	flush stack
08:30	12:00	3.50	SURFAC	CEMENT	CMNT	P		603.00	603.00	Wait on cement for 4 hrs
12:00	14:00	2.00	SURFAC	WHDBOP	NUND	P		603.00	603.00	Cut conductor, cut surface casing, tear out diverter and dress casing for casing bowl
00	16:00	2.00	SURFAC	WHDBOP	NUND	P		603.00	603.00	Install and weld on casing bowl
	16:15	0.25	SURFAC	RIGMNT	SVRG	P		603.00	603.00	Rig service function test crown saver & motor kills
	18:30	2.25	SURFAC	WHDBOP	NUND	P		603.00	603.00	Iinstall and weld on casing bowl
18:30	18:45	0.25	SURFAC	WHDBOP	NUND	P		603.00	603.00	Wait on bowl to cool, hook up flair lines and strip back mud
18:45	19:00	0.25	SURFAC	WHDBOP	SFTY	P		603.00	603.00	Crew handover meeting with both crews and conoco reps
19:00	21:45	2.75	SURFAC	WHDBOP	NUND	P		603.00	603.00	Wait on bowl to cool, hook up flair lines and strip back mud

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45
Rig: Beaver Drilling Ltd. 2

Report Date: 1/4/2014
Report #: 27
Depth Progress: 0.00m
Depth End: 603.00mKB
Rig Release Date: 1/23/2014

e Log

Start Time	End Time	Dur (hr)	Phase	Op Code	Activity Code	Tim e P-T-X	Trbl Code	Start Depth (mKB)	End Depth (mKB)	Operation
21:45	00:00	2.25	SURFAC	WHDBOP	NUND	P		603.00	603.00	Pick up and nipple up multi-bowl, install and nipple up BOP

Fluid/Mud Chks: Mud Engineer: <Mud Engineer?>

Time	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (Pa•s)	YP Override (Pa)
05:00	603.00	1,200.0	53			

Low Gravity Solids (%)	MBT (kg/m³)	Oil Water Ratio	Chlorides (mg/L)	Calcium (mg/L)	Lime (kg/m³)	Potassium (mg/L)

Electric Stab (V)	ECD - Manual Entry (k...	Sand (%)	Solids, Corr. (%)	T Flowline (°C)	HTHP Pressure (kPa)	HTHP Filtrate (mL/30...

API Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Field Est (Cost)
			128.10

Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost (Cost)
		4,534.81

Last BOP Drill

Type	Days Last Chk (...	Last Date	Days Until Next...	Next Check Date
BOP Drill	7	12/28/2013	-4	12/31/2013

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
815.00	815.00

Safety Incidents

Date	Com	Category

Drill String: BHA # <BHA No.?>

Bit Run	Drill Bit	Length (m)	IADC Bit Dull	TFA (incl Noz) (mm²)	BHA ROP (m/hr)

Nozzles (mm)	String Length (m)	OD (mm)	Max Rotating Hook Load (daN)

Depth In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hr)	Total Drill Hrs (hr)

Comment

...l String Components

Item Des	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len

Drilling Parameter: <depthstart> - <depthend> mKB

Cum Depth (m)	Cum Drill...	Int ROP (...	Flow Rate...	WOB (daN)	RPM (r...	SPP (kPa)	Drill Str Wt (d...	SO Str Wt (daN)	PU Str Wt (daN)	Off-Btm Str W...	Drill Tq

Hydraulic Calculations

Bit Hydraulic Powe...	HP/Area (kW/mm²)	% P @ bit (%)	Bit Jet Velocity (m/s)	Bit dP (kPa)	P Drop Annular (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Vol Shoe to Top (m³)	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m/...

Error

Mud Pump: 1, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
1	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/20/2014 00:00	2,909.00	0.499	5,150	64
1/20/2014 00:00	2,909.00	1.014	17,500	130

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
1/21/2014	1/21/2014	127.0		
1/22/2014	1/22/2014	127.0		

Mud Pump: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/19/2014 00:00	2,513.00	0.647	6,855	83
/2014 00:00	2,513.00	0.897	15,000	

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/s...
1/19/2014	1/19/2014	127.0	15,000	
1/21/2014		127.0		

ker Screens

Des	Start Date	End Date	Scr Sz X	Scr Sz Y	Note

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
1	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
1/19/2014 07:00	2.00	1800	1,000.0	0.400	2,100.0	0.200

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
2	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
1/19/2014 13:00	3.00	2000	990.0	0.400	1,700.0	0.200

Fluid / Mud Additive Amounts

Des	Consumed	Cost	Size	Units
Desco	2.0	64.050	11.34	SX

Survey Data

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	Depart (m)	NS (m)	EW (m)	VS (m)	DLS (°/30m)

Formations

Formation Name	Drill Top MD (mKB)	Drill Top (TVD) (mKB)	Prog Top TVD (mKB)
Little Bear	31.00	31.00	31.00
Slater River	76.00	76.00	76.00
Arctic Red	800.50	800.46	76.40
Martin House	938.50	938.44	76.40
Imperial	975.50	975.43	76.40
Upper Canol	1,665.00	1,658.53	1,653.40
ver Canol	1,700.72	1,689.07	1,694.40

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45

Report Date: 1/5/2014
Report #: 28
Depth Progress: 0.00m
Depth End: 603.00mKB
Rig Release Date: 1/23/2014

Rig: Beaver Drilling Ltd. 2

UWI	Surface Legal Location	MaxWell Job Number	License No.
00E7665-10126-45	E-76 65-10 126-45	JOB01@2006	EL 470

Ground Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
268.20	273.40	268.00	12/28/2013	8.73

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	12/9/2013 00:00	1/23/2014 23:59	DRILLED	Yes

Daily Cost Total (Cost)	Cumulative Cost (Cost)	Total AFE (Cost)	AFE+Supp Amt (Cost)	AFE / RFE / Maint.#	Estimated Days
152,793.03	2,792,286.86	6,820,300.00	6,820,300.00	10351817	34.19

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hr)	Cum Personnel Total Hours (hr)
2,881.00		47.0	536.00	23,545.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)

Road Condition	Weather	Temperature (°C)	Wind
Ice/Snow	Snowing	-25	NW

Ops and Depth @ Morning Report
Run in hole with 222mm bit and directional tools to drill out.

Wellbore
Original Hole

Last 24hr Summary
No incidents or accidents. 8 - HID, 4 - OBS and 0 - ASA (all closed out)

Nipple up BOP, clean mud tanks, strip surface mud using the BOS III flocking system, transfer surface mud and clean water to 400bbl tanks to later run water through dehydrator. Pressure test manifold and BOP components to 1400kPA-low and 20,000kPA-high (Annular: 17,500kPA-high), perform an accumulator function test. Complete rig and pre-drill out inspection. Fill mud tanks with invert. Pick and make up directional BHA and run in the hole.

24hr Forecast
Run in the hole, tag cement, displace to invert mud, conduct BOP drill and high angle rescue safety meetings, drill out cement float and shoe. Drill 222mm directional hole with accumulated MWD surveys, rig services, connections and circulation times.

Daily Contacts
Drilling Superintend, Sheldon Vamplew, 403-999-1302; Drilling Engineer, Mike Greener, 403-771-5039; WS Supervisor, Richard Turgeon, 780-387-1706; WS Supervisor, Dave Opper, 403-863-8205; Rig Manager, Rick Yavis, 780-718-2962; Command Centre, 403-910-0357

Last Casing String
Surface, 603.00mKB

Time Log

Start Time	End Time	Dur (hr)	Phase	Op Code	Activity Code	Time P-T-X	Trbl.Code	Start Depth (mKB)	End Depth (mKB)	Operation
00:00	00:15	0.25	SURFAC	RIGMNT	SVRG	P		603.00	603.00	Rig service function test, crown saver
00:15	07:45	7.50	SURFAC	WHDBOP	NUND	P		603.00	603.00	Pick up and nipple up multi-bowl, install and nipple up BC and flare lines
07:45	08:00	0.25	SURFAC	WHDBOP	SFTY	P		603.00	603.00	Crew change and safety meeting, with rig crews, rig manager and Conoco reps.
08:00	08:15	0.25	SURFAC	RIGMNT	SVRG	P		603.00	603.00	Rig service function test motor shut off, ok.
08:15	08:30	0.25	SURFAC	WHDBOP	SFTY	P		603.00	603.00	Safety meeting with Schlumbuger pressure testers, rig crew, Conoco rep, prior to rig up
08:30	16:00	7.50	SURFAC	WHDBOP	BOPE	P		603.00	603.00	Pressure test all manifold valves and chocks, low of 1,400kpa, high 21,000kpa with Schlumbuger, all manifold valves, all ok.
16:00	16:15	0.25	SURFAC	RIGMNT	SVRG	P		603.00	603.00	Rig service function test, crown saver & motor kills
16:15	19:30	3.25	SURFAC	WHDBOP	BOPE	P		603.00	603.00	Pressure test with schlumberger, BOP stack, HCR valves, kill line, inside BOP, stabbing valve, pipe rams, blind rams at low 1,400kpa., high 21,000kpa., Annular low 1,400kpa., high 17,500kpa. All ok.
19:30	19:45	0.25	SURFAC	WHDBOP	SFTY	P		603.00	603.00	Crew change and safety meeting, with rig crews, rig manager and Conoco reps.
19:45	23:15	3.50	SURFAC	WHDBOP	BOPE	P		603.00	603.00	Accumulator function test, initial pressure-19,500kpa., function HCR, pipe rams, annular, final pressure-9,000kpa, re-charge pump time 3min. 45sec., prepare floor and directional tools to be picked up, crew hazard hunt and rig inspection, pre-drill out CAODC complete rig inspection, by AD and Conoco rep.
23:15	23:30	0.25	SURFAC	DRILL	SFTY	P		603.00	603.00	Safety meeting with Pathfinder directional hands, rig crew, hoe hand and Conoco rep, on picking up directional tools
23:30	00:00	0.50	SURFAC	DRILL	PULD	P		603.00	603.00	Pick up and make up, 222mm PDC bit, dog sub, directional tools

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45
Rig: Beaver Drilling Ltd. 2

Report Date: 1/5/2014
Report #: 28
Depth Progress: 0.00m
Depth End: 603.00mKB
Rig Release Date: 1/23/2014

Mud Chks: Mud Engineer: <Mud Engineer?>

	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (Pa·s)	YP Override (Pa)
Low Gravity Solids (%)	**MBT (kg/m³)**	**Oil Water Ratio**	**Chlorides (mg/L)**	**Calcium (mg/L)**	**Lime (kg/m³)**	**Potassium (mg/L)**
Electric Stab (V)	**ECD - Manual Entry (k...**	**Sand (%)**	**Solids, Corr. (%)**	**T Flowline (°C)**	**HTHP Pressure (kPa)**	**HTHP Filtrate (mL/30...**

API Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Field Est (Cost)

Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost (Cost)

Last BOP Drill

Type	Days Last Chk (...	Last Date	Days Until Next...	Next Check Date
BOP Drill	8	12/28/2013	-5	12/31/2013

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
816.00	816.00

Safety Incidents

Date	Com	Category

Drill String: BHA # <BHA No.?>

Bit Run	Drill Bit	Length (m)	IADC Bit Dull	TFA (incl Noz) (mm²)	BHA ROP (m/hr)

Nozzles (mm)	String Length (m)	OD (mm)	Max Rotating Hook Load (daN)

Depth In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hr)	Total Drill Hrs (hr)

Comment

Drill String Components

Item Des	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)

g Parameter: <depthstart> - <depthend> mKB

pth (m)	Cum Drill...	Int ROP (...	Flow Rate...	WOB (daN)	RPM (r...	SPP (kPa)	Drill Str Wt (d...	SO Str Wt (daN)	PU Str Wt (daN)	Off-Btm Str W...	Drill Tq

Hydraulic Calculations

Bit Hydraulic Powe...	HP/Area (kW/mm²)	% P @ bit (%)	Bit Jet Velocity (m/s)	Bit dP (kPa)	P Drop Annular (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Vol Shoe to Top (m³)	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m/...

Error

Mud Pump: 1, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
1	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/20/2014 00:00	2,909.00	0.499	5,150	64
1/20/2014 00:00	2,909.00	1.014	17,500	130

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
1/21/2014	1/21/2014	127.0		
1/22/2014	1/22/2014	127.0		

Mud Pump: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/19/2014 00:00	2,513.00	0.647	6,855	83
1/19/2014 00:00	2,513.00	0.897	15,000	115

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
1/19/2014	1/19/2014	127.0	15,000	
014		127.0		

Screens

Des	Start Date	End Date	Scr Sz X	Scr Sz Y	Note

ıtrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mn
1	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
1/19/2014 07:00	2.00	1800	1,000.0	0.400	2,100.0	0.200

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
2	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
1/19/2014 13:00	3.00	2000	990.0	0.400	1,700.0	0.200

Fluid / Mud Additive Amounts

Des	Consumed	Cost	Size	Units

Survey Data

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	Depart (m)	NS (m)	EW (m)	VS (m)	DLS (°/30m)

Formations

Formation Name	Drill Top MD (mKB)	Drill Top (TVD) (mKB)	Prog Top TVD (mKB)
Little Bear	31.00	31.00	31.00
Slater River	76.00	76.00	76.00
Arctic Red	800.50	800.46	76.40
Martin House	938.50	938.44	76.40
Imperial	975.50	975.43	76.40
Upper Canol	1,665.00	1,658.53	1,653.40
Lower Canol	1,700.72	1,689.07	1,694.40

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45

Report Date: 1/6/2014
Report #: 29
Depth Progress: 158.00m
Depth End: 761.00mKB
Rig Release Date: 1/23/2014

Rig: Beaver Drilling Ltd. 2

UWI	Surface Legal Location	MaxWell Job Number	License No.
[redacted]7665-10126-45	E-76 65-10 126-45	JOB01@2006	EL 470

Ground Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
268.20	273.40	268.00	12/28/2013	9.73

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	12/9/2013 00:00	1/23/2014 23:59	DRILLED	Yes

Daily Cost Total (Cost)	Cumulative Cost (Cost)	Total AFE (Cost)	AFE+Supp Amt (Cost)	AFE / RFE / Maint.#	Estimated Days
103,134.43	2,895,421.29	6,820,300.00	6,820,300.00	10351817	34.19

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hr)	Cum Personnel Total Hours (hr)
2,881.00		48.0	540.00	24,085.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)
125	90		0

Road Condition	Weather	Temperature (°C)	Wind
Ice/Snow	Windy	-24	SE

Ops and Depth @ Morning Report
Drill 222mm intermediate hole at 800m. Last survey at 781m, Inc: 0.71°, Azm: 129.47°.

Wellbore
Original Hole

Last 24hr Summary
No incidents or accidents. 10 - HID, 1 - OBS and 0 - ASA (all closed out)

Complete rig and pre-drill out inspection. Fill mud tanks with invert. Pick and make up directional BHA, run in the hole, tag cement, displace to invert mud, conduct BOP drill and high angle rescue safety meetings, drill out cement float and shoe. Drill 222mm intermediate directional hole from 603m to 761m with accumulated MWD surveys, rig services, connections and circulation times.

24hr Forecast
Drill 222mm intermediate directional hole with accumulated MWD surveys, rig services, connections and circulation times.

Daily Contacts
Drilling Superintend, Sheldon Vamplew, 403-999-1302; Drilling Engineer, Mike Greener, 403-771-5039; WS Supervisor, Richard Turgeon, 780-387-1706; WS Supervisor, Dave Opper, 403-863-8205; Rig Manager, Rick Yavis, 780-718-2962; Command Centre, 403-910-0357

Last Casing String
Surface, 603.00mKB

Time Log

Start Time	End Time	Dur (hr)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Start Depth (mKB)	End Depth (mKB)	Operation
[redacted]0	03:45	3.75	SURFAC	DRILL	PULD	P		603.00	603.00	Pick up and make up 222mm Ulterra PDC bit, dog sub, mud motor and Pathfinder directional tools
03:45	04:00	0.25	SURFAC	RIGMNT	SVRG	P		603.00	603.00	Rig service function test hydril 14 sec. function crown saver
04:00	06:45	2.75	SURFAC	DRILL	TRIP	P		603.00	603.00	Run 10 stands of HWDP, in hole, lay down 10 jts of HWDP,& run in 15 stds h.w pick up 8 drill pipe
06:45	07:00	0.25	SURFAC	DRILL	SFTY	P		603.00	603.00	BOP drill with night crew, review warning signs and positions etc.
07:00	07:15	0.25	SURFAC	DRILL	SFTY	P		603.00	603.00	Crew change and safety meeting, with rig crews, rig manager and Conoco reps.
07:15	08:00	0.75	SURFAC	DRILL	SFTY	P		603.00	603.00	Safety meeting and rig inspection, hazard hunt and BOP drill review, with day crew
08:00	09:15	1.25	SURFAC	RIGMNT	SVRG	P		603.00	603.00	Rig service function test rig smart anticollision function test crown saver. Review top drive trouble shooting with top drive hand.
09:15	10:45	1.50	SURFAC	DRILL	PULD	P		603.00	603.00	Pick up drill pipe, run in hole and tag cement
10:45	13:30	2.75	SURFAC	DRILL	CIRC	P		603.00	603.00	Displace 21m3 of water to invert mud system
13:30	14:00	0.50	SURFAC	DRILL	SFTY	P		603.00	603.00	Pre drill out safety meeting held B.O.P drill held well secure in 90 sec crew in positions review stick diagram check manifold allignment Function test motor kills
14:00	15:15	1.25	SURFAC	CEMENT	DRLG	P		603.00	603.00	Drill out cement cement taged at 586mKB float taged at 589mKB shoe taged at 603mKB
15:15	16:00	0.75	INTRM1	DRILL	DRLG	P		603.00	626.00	Drill 222mm intermediate hole with, Ulterra bit and dog sub, Pathfinder mud motor set at 1.83 deg, 7:8 lobe, 5 stage, 70rpm/m3 from 603mKB to 626mKB
16:00	17:15	1.25	INTRM1	DRILL	DRLG	P		626.00	646.00	Drill 222mm intermediate hole, Ulterra bit and dog sub, Pathfinder mud motor set at 1.83 deg, 7:8 lobe, 5 stage, 70rpm/m3 from 626mKB to 646mKB
17:15	17:30	0.25	INTRM1	RIGMNT	SVRG	P		646.00	646.00	Rig service function test rig smart anti collision function test crown saver function test pipe rams 9 sec C/O
[redacted]0	19:00	1.50	INTRM1	DRILL	DRLG	P		646.00	665.00	Drill 222mm intermediate hole, Ulterra bit and dog sub, Pathfinder mud motor set at 1.83 deg, 7:8 lobe, 5 stage, 70rpm/m3 from 646mKB to 665mKB
19:00	19:15	0.25	INTRM1	DRILL	SFTY	P		665.00	665.00	Crew handover meeting conoco reps present

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45

Rig: Beaver Drilling Ltd. 2

Report Date: 1/6/2014
Report #: 29
Depth Progress: 158.00m
Depth End: 761.00mKB
Rig Release Date: 1/23/2014

.ıe Log

Start Time	End Time	Dur (hr)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Start Depth (mKB)	End Depth (mKB)	Operation
19:15	23:15	4.00	INTRM1	DRILL	DRLG	P		665.00	761.00	Drill 222 mm intermedediate hole, Ulterra bit and dog sub, Pathfinder mud motor set at 1.83 deg, 7:8 lobe, 5 stage, 70rpm/m3 from 665 m to 761 m
23:15	23:30	0.25	INTRM1	DRILL	SRVY	P		761.00	761.00	Directional surveys and connection
23:30	00:00	0.50	INTRM1	DRILL	DRLG	P		761.00	761.00	Changed out liners in pump # 1 from 5 1/2 " to 5 " liners

Fluid/Mud Chks: Mud Engineer: Corey Clark

Time	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (Pa•s)	YP Override (Pa)
16:00	646.00	950.0	50		0.0	4.0

Low Gravity Solids (%)	MBT (kg/m³)	Oil Water Ratio	Chlorides (mg/L)	Calcium (mg/L)	Lime (kg/m³)	Potassium (mg/L)
6.9		78/22	114,259	39	20	

Electric Stab (V)	ECD - Manual Entry (k...	Sand (%)	Solids, Corr. (%)	T Flowline (°C)	HTHP Pressure (kPa)	HTHP Filtrate (mL/30...
400.0	993.9	8.0	7.1	13		6.0

API Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Field Est (Cost)
	3.00	0.00	3,809.40

Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost (Cost)
3.00		8,344.21

Last BOP Drill

Type	Days Last Chk (...	Last Date	Days Until Next...	Next Check Date
BOP Drill	0	1/6/2014	5	1/11/2014

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
817.00	817.00

Safety Incidents

Date	Com	Category

Drill String: BHA # 2

Bit Run	Drill Bit	Length (m)	IADC Bit Dull	TFA (incl Noz) (mm²)	BHA ROP (m/hr)
1	222.0mm, 616, 21191	0.25	1-4-CT-G-3-0-WT-BHA	924	17.2

›les (mm)	String Length (m)	OD (mm)	Max Rotating Hook Load (daN)
J/14.0/14.0/14.0/14.0/14.0	1,599.00	222.0	[illegible]

Depth In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hr)	Total Drill Hrs (h...
603.00	1,588.00	17.2	985.00	1,588.00	57.25	57.25

Comment
222mm Ulterra PDC bit, dog sub, Pathfinder mud motor set at 1.83 deg, 7:8 lobe, 5 stage, 70rpm/m3, NM Pony sub monel, MWD flex collar, 2 x NM flex Monels.

Drill String Components

Item Des	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)
Drill pipe - Stands	65.0	101.6	1	9.40	1,599.00
Drill pipe - Stands	65.0	101.6	62	1,172.38	1,589.60
4" HW	70.0	132.0	37	344.73	417.22
Jars	60.0	161.0	1	5.13	72.49
4" HW	70.0	132.0	3	27.54	67.36
6.75" X/O	59.0	168.0	1	0.80	39.82
6.75" NM Flex Mon	70.0	171.0	2	17.48	39.02
6.75" Gap Sub	88.0	162.0	1	0.54	21.54
6.75" Flex Monel	70.0	171.0	1	9.35	21.00
NM Pony Monel	70.0	171.0	1	2.97	11.65
Mud motor	56.0	169.0	1	8.28	8.68
Dog sub	60.0	222.0	1	0.15	0.40

Drilling Parameter: 626.00 - 761.00 mKB

Cum Depth (m)	Cum Drill...	Int ROP (...	Flow Rate...	WOB (daN)	RPM (r...	SPP (kPa)	Drill Str Wt (d...	SO Str Wt (daN)	PU Str Wt (daN)	Off-Btm Str W...	Drill Tq
158.00	7.50	20.0	1.400	7,000	30	9,500	44,000	43,000	45,000	44,000	8,500.0

Hydraulic Calculations

Bit Hydraulic Powe...	HP/Area (kW/mm²)	% P @ bit (%)	Bit Jet Velocity (m/s)	Bit dP (kPa)	P Drop Annular (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)
7.9	0.00021	4	25.3	340.1	187.8	950.0	975.2

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Vol Shoe to Top (m³)	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m/...
2.73	3.55	18.01	43.4	52.5	55.9	88.9

Error

Pump: 1, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
1	NATIONAL	8-P-80	140.0	[illegible]

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/20/2014 00:00	2,909.00	0.499	5,150	64

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45
Rig: Beaver Drilling Ltd. 2

Report Date: 1/6/2014
Report #: 29
Depth Progress: 158.00m
Depth End: 761.00mKB
Rig Release Date: 1/23/2014

Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
..2014 00:00	2,909.00	1.014	17,500	130

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
1/21/2014	1/21/2014	127.0		
1/22/2014	1/22/2014	127.0		

Mud Pump: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/19/2014 00:00	2,513.00	0.647	6,855	83
1/19/2014 00:00	2,513.00	0.897	15,000	115

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
1/19/2014	1/19/2014	127.0	15,000	
1/21/2014		127.0		

Shaker Screens

Des	Start Date	End Date	Scr Sz X	Scr Sz Y	Note

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
1	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
1/19/2014 07:00	2.00	1800	1,000.0	0.400	2,100.0	0.200

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
2	BOS Solutions	5500	

...uge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
..014 13:00	3.00	2000	990.0	0.400	1,700.0	0.200

Fluid / Mud Additive Amounts

Des	Consumed	Cost	Size	Units
Barite	10.0	17.040	40.0	SX
INVERT	3.0	1,063.330	1.0	M3
Truvis	3.0	149.670	25.0	SX

Survey Data

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	Depart (m)	NS (m)	EW (m)	VS (m)	DLS (°/30m)
1/6/2014	627.50	0.31	124.14	627.47	5.09	5.09	0.13	2.36	0.38
1/6/2014	704.46	0.62	137.27	704.43	4.70	4.66	0.58	1.75	0.13

Formations

Formation Name	Drill Top MD (mKB)	Drill Top TVD (mKB)	Prog Top TVD (mKB)
Little Bear	31.00	31.00	31.00
Slater River	76.00	76.00	76.00
Arctic Red	800.50	800.46	76.40
Martin House	938.50	938.44	76.40
Imperial	975.50	975.43	76.40
Upper Canol	1,665.00	1,658.53	1,653.40
Lower Canol	1,700.72	1,689.07	1,694.40

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45

Report Date: 1/7/2014
Report #: 30
Depth Progress: 418.00m
Depth End: 1,179.00mKB
Rig Release Date: 1/23/2014

Rig: Beaver Drilling Ltd. 2

UWI	Surface Legal Location	MaxWell Job Number	License No.
300E7665-10126-45	E-76 65-10 126-45	JOB01@2006	EL 470

Ground Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
268.20	273.40	268.00	12/28/2013	10.73

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	12/9/2013 00:00	1/23/2014 23:59	DRILLED	Yes

Daily Cost Total (Cost)	Cumulative Cost (Cost)	Total AFE (Cost)	AFE+Supp Amt (Cost)	AFE / RFE / Maint.#	Estimated Days
86,623.83	2,982,045.12	6,820,300.00	6,820,300.00	10351817	34.19

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hr)	Cum Personnel Total Hours (hr)
2,881.00		55.0	612.00	24,697.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)
68	46		0

Road Condition	Weather	Temperature (°C)	Wind
Ice/Snow	Snowing	-20	N

Ops and Depth @ Morning Report
Drill 222mm intermediate hole at 1293m. Last survey at 1236.50m, Inc: 1.81°, Azm: 176.76°.

Wellbore
Original Hole

Last 24hr Summary
No incidents or accidents. 6 - HID, 4 - OBS and 0 - ASA (all closed out)

Drill 222mm intermediate directional hole from 761m to 1179m with accumulated MWD surveys, rig services, connections and circulation times. WOB: 6-8,000kDaN, RPM - 35 (Motor RPM - 112), Differential pressure: 3000-3500kPa, Pump rate: 1.6 m3/min. Torque: 1800 - 2400ft/lbs, Rotate: 414.0m - 99.0% / Slide: 4.0m - 1.0%, ROP: 26.5m/hr.

24hr Forecast
Drill 222mm intermediate directional hole with accumulated MWD surveys, rig services, connections and circulation times.

Daily Contacts
Drilling Superintend, Sheldon Vamplew, 403-999-1302; Drilling Engineer, Mike Greener, 403-771-5039; WS Supervisor, Richard Turgeon, 780-387-1706; WS Supervisor, Dave Opper, 403-863-8205; Rig Manager, Rick Yavis, 780-718-2962; Command Centre, 403-910-0357

Last Casing String
Surface, 603.00mKB

Time Log

Start me	End Time	Dur (hr)	Phase	Op Code	Activity Code	Tim e P-T-X	Trbl Code	Start Depth (mKB)	End Depth (mKB)	Operation
0	00:15	0.25	INTRM1	RIGMNT	SVRG	P		761.00	761.00	Rig service function test crown saver, function hydril o/c 1 sec
00:15	04:15	4.00	INTRM1	RIGMNT	RGRP	P		761.00	761.00	Changed out liners in pump # 1 from 5 1/2 " to 5 " liners & moduole seal in pump # 2 middle
04:15	07:30	3.25	INTRM1	DRILL	DRLG	P		761.00	875.00	Drill 222 mm intermedediate hole, Ulterra bit and dog sub, Pathfinder mud motor set at 1.83 deg, 7:8 lobe, 5 stage, 70rpm/m3 from 761 m to 875 m
07:30	07:45	0.25	INTRM1	DRILL	SRVY	P		875.00	875.00	Directional survey and connections
07:45	08:00	0.25	INTRM1	DRILL	SFTY	P		875.00	875.00	Crew change and safety meeting, with rig crews, rig manager and Conoco reps.
08:00	08:30	0.50	INTRM1	DRILL	DRLG	P		875.00	894.00	Drill 222mm intermediate hole, ulterra it and dog sub, pathfinder mud motor set at 1.83deg,7:8 lobe, 5 stage, 70rpm/m3 from 875m to 894m
08:30	08:45	0.25	INTRM1	RIGMNT	SVRG	P		894.00	894.00	Rig service function test rig smart anti collision function test crown saver function test H.C.R 3 sec O/C Grease all moving parts check fluid levels in Floor motor and HPU unit function test flair ignitor
08:45	14:00	5.25	INTRM1	DRILL	DRLG	P		894.00	989.00	Drill 222mm intermediate hole, ulterra it and dog sub, pathfinder mud motor set at 1.83deg,7:8 lobe, 5 stage, 70rpm/m3 from 894mKB to 989mKB
14:00	15:00	1.00	INTRM1	DRILL	CIRC	P		989.00	989.00	Circulate 2 bottoms up and prepair to do a formation test
15:00	15:15	0.25	INTRM1	DRILL	FIT	P		989.00	989.00	Formation integrity test hold pressure @ 2500 kpa for 10 min
15:15	16:00	0.75	INTRM1	DRILL	DRLG	P		989.00	1,016.00	Drill 222mm intermediate hole, ulterra bit and dog sub, pathfinder mud motor set at 1.83deg,7:8 lobe, 5 stage, 70rpm/m3 from 989mKB to 1016mKB
16:00	16:30	0.50	INTRM1	DRILL	DRLG	P		1,016.00	1,027.00	Drill 222mm intermediate hole, ulterra bit and dog sub, pathfinder mud motor set at 1.83deg,7:8 lobe, 5 stage, 70rpm/m3 from 1016mKB to 1027mKB
0	17:15	0.75	INTRM1	RIGMNT	SVRG	P		1,027.00	1,027.00	Rig service function test rig smart anti collision function te crown saver function test pipe rams 9 sec C/O Grease al moving parts Change oil on HPU unit

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45

Report Date: 1/7/2014
Report #: 30
Depth Progress: 418.00m
Depth End: 1,179.00mKB
Rig Release Date: 1/23/2014

Rig: Beaver Drilling Ltd. 2

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...ne	End Time	Dur (hr)	Phase	Op Code	Activity Code	Tim e P T-X	Trbl Code	Start Depth (mKB)	End Depth (mKB)	Operation
17:15	17:30	0.25	INTRM1	DRILL	DRLG	P		1,027.00	1,037.00	Drill 222mm intermediate hole, ulterra bit and dog sub, pathfinder mud motor set at 1.83deg,7:8 lobe, 5 stage, 70rpm/m3 from 1027mKB to 1037mKB
17:30	19:00	1.50	INTRM1	DRILL	DRLG	P		1,037.00	1,064.00	Drill 222mm intermediate hole, ulterra bit and dog sub, pathfinder mud motor set at 1.83deg,7:8 lobe, 5 stage, 70rpm/m3 from 1037mKB to 1064 mKB.
19:00	19:15	0.25	INTRM1	DRILL	SFTY	P		1,064.00	1,064.00	Crew change and safety meeting, with rig crews, rig manager and Conoco reps.
19:15	23:45	4.50	INTRM1	DRILL	DRLG	P		1,064.00	1,179.00	Drill 222mm intermediate hole, ulterra bit and dog sub, pathfinder mud motor set at 1.83deg,7:8 lobe, 5 stage, 70rpm/m3 from 1064mKB to 1179 mKB.
23:45	00:00	0.25	INTRM1	DRILL	SRVY	P		1,179.00	1,179.00	Directional survey and connections

Fluid/Mud Chks: Mud Engineer: Corey Clark

Time	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (Pa•s)	YP Override (Pa)
14:00	1,008.00	920.0	46		8.0	3.5
Low Gravity Solids (%)	**MBT (kg/m³)**	**Oil Water Ratio**	**Chlorides (mg/L)**	**Calcium (mg/L)**	**Lime (kg/m³)**	**Potassium (mg/L)**
4.4		81/19	147,126	44	20	
Electric Stab (V)	**ECD - Manual Entry (k...**	**Sand (%)**	**Solids, Corr. (%)**	**T Flowline (°C)**	**HTHP Pressure (kPa)**	**HTHP Filtrate (mL/30...**
410.0	957.0	4.0	4.5	30		6.0

API Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Field Est (Cost)
	3.00	0.00	8,137.80

Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost (Cost)
6.00		16,482.01

Last BOP Drill

Type	Days Last Chk (...	Last Date	Days Until Next...	Next Check Date
BOP Drill	1	1/6/2014	4	1/11/2014

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
818.00	818.00

Incidents

Date	Com	Category

Drill String: BHA # 2

Bit Run	Drill Bit	Length (m)	IADC Bit Dull	TFA (incl Noz) (mm²)	BHA ROP (m/hr)
1	222.0mm, 616, 21191	0.25	1-4-CT-G-3-0-WT-BHA	924	17.2

Nozzles (mm)	String Length (m)	OD (mm)	Max Rotating Hook Load (daN)
14.0/14.0/14.0/14.0/14.0/14.0	1,599.00	222.0	65,000

Depth In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hr)	Total Drill Hrs (hr)
603.00	1,588.00	17.2	985.00	1,588.00	57.25	57.25

Comment
222mm Ulterra PDC bit, dog sub, Pathfinder mud motor set at 1.83 deg, 7:8 lobe, 5 stage, 70rpm/m3, NM Pony sub monel, MWD flex collar, 2 x NM flex Monels.

Drill String Components

Item Des	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)
Drill pipe - Stands	65.0	101.6	1	9.40	1,599.00
Drill pipe - Stands	65.0	101.6	62	1,172.38	1,589.60
4" HW	70.0	132.0	37	344.73	417.22
Jars	60.0	161.0	1	5.13	72.49
4" HW	70.0	132.0	3	27.54	67.36
6.75" X/O	59.0	168.0	1	0.80	39.82
6.75" NM Flex Mon	70.0	171.0	2	17.48	39.02
6.75" Gap Sub	88.0	162.0	1	0.54	21.54
6.75" Flex Monel	70.0	171.0	1	9.35	21.00
NM Pony Monel	70.0	171.0	1	2.97	11.65
Mud motor	56.0	169.0	1	8.28	8.68
Dog sub	60.0	222.0	1	0.15	0.40

Drilling Parameter: 1,016.00 - 1,179.00 mKB

Cum Depth (m)	Cum Drill...	Int ROP (...	Flow Rate...	WOB (daN)	RPM (r...	SPP (kPa)	Drill Str Wt (d...	SO Str Wt (daN)	PU Str Wt (daN)	Off-Btm Str W...	Drill Tq
576.00	23.25	27.2	1.670	7,000	30	12,500	53,000	51,000	55,000	53,000	8,100.0

Hydraulic Calculations

Bit Hydraulic Powe...	HP/Area (kW/mm²)	% P @ bit (%)	Bit Jet Velocity (m/s)	Bit dP (kPa)	P Drop Annular (kPa)	Mud Density (kg/m³)	ECD End (kg/
13.0	0.00034	4	30.1	468.7	173.8	920.0	J

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Vol Shoe to Top (m³)	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m/...
4.12	14.89	19.46	51.8	51.8	54.6	106.1

Error

Mud Pump: 1, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
1	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/20/2014 00:00	2,909.00	0.499	5,150	64
1/20/2014 00:00	2,909.00	1.014	17,500	130

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
1/21/2014	1/21/2014	127.0		
1/22/2014	1/22/2014	127.0		

Mud Pump: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/19/2014 00:00	2,513.00	0.647	6,855	83
1/19/2014 00:00	2,513.00	0.897	15,000	115

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
1/19/2014	1/19/2014	127.0	15,000	
1/21/2014		127.0		

Shaker Screens

Des	Start Date	End Date	Scr Sz X	Scr Sz Y	Note

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
1	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
1/19/2014 07:00	2.00	1800	1,000.0	0.400	2,100.0	0.200

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
2	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
1/19/2014 13:00	3.00	2000	990.0	0.400	1,700.0	0.200

Fluid / Mud Additive Amounts

Des	Consumed	Cost	Size	Units
Barite	5.0	17.040	40.0	SX
CALCIUM CHLORIDE	36.0	43.920	40.0	SX
INVERT	3.0	1,063.330	1.0	M3
OPTISEAL	5.0	96.200	25.0	SX
Truvis	5.0	149.670	25.0	SX
Versacoat HF	2.0	883.570	55.0	BBL
Versatrol	6.0	47.500	50.0	SX

Survey Data

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	Depart (m)	NS (m)	EW (m)	VS (m)	DLS (°/30m)
1/7/2014	781.46	0.71	129.47	781.42	4.24	4.05	1.23	0.89	0.05
1/7/2014	896.50	1.28	113.56	896.45	4.28	3.09	2.96	-1.09	0.16
1/7/2014	970.50	0.88	151.56	970.43	4.58	2.26	3.99	-2.39	0.32
1/7/2014	1,008.50	1.02	147.85	1,008.43	4.64	1.71	4.31	-2.93	0.12
?014	1,046.85	1.19	133.05	1,046.77	4.92	1.15	4.78	-3.62	
/2014	1,084.50	1.50	124.45	1,084.41	5.51	0.61	5.47	-4.49	
1/7/2014	1,122.50	1.10	145.78	1,122.40	6.09	0.02	6.09	-5.31	

ations

Formation Name	Drill Top MD (mKB)	Drill Top (TVD) (mKB)	Prog Top TVD (mKB)
Little Bear	31.00	31.00	31.00
Slater River	76.00	76.00	76.00
Arctic Red	800.50	800.46	76.40
Martin House	938.50	938.44	76.40
Imperial	975.50	975.43	76.40
Upper Canol	1,665.00	1,658.53	1,653.40
Lower Canol	1,700.72	1,689.07	1,694.40

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45

Report Date: 1/8/2014
Report #: 31
Depth Progress: 329.00m
Depth End: 1,508.00mKB
Rig Release Date: 1/23/2014

Rig: Beaver Drilling Ltd. 2

/ UWI	Surface Legal Location	MaxWell Job Number	License No.
300E7665-10126-45	E-76 65-10 126-45	JOB01@2006	EL 470

Ground Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
268.20	273.40	268.00	12/28/2013	11.73

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	12/9/2013 00:00	1/23/2014 23:59	DRILLED	Yes

Daily Cost Total (Cost)	Cumulative Cost (Cost)	Total AFE (Cost)	AFE+Supp Amt (Cost)	AFE / RFE / Maint.#	Estimated Days
122,564.36	3,104,609.48	6,820,300.00	6,820,300.00	10351817	34.19

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hr)	Cum Personnel Total Hours (hr)
2,881.00		55.0	612.00	25,309.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)
44	30		0

Road Condition	Weather	Temperature (°C)	Wind
Ice/Snow	Cloudy	-24	N.

Ops and Depth @ Morning Report
Drill 222mm intermediate directional hole at 1555m.

Wellbore
Original Hole

Last 24hr Summary
No incidents or accidents. 9 - HID, 1 - OBS and 0 - ASA (all closed out)

Drill 222mm intermediate directional hole from 1179m to 1508m with accumulated MWD surveys, rig services, connections and circulation times. WOB: 6-8,000kDaN, RPM - 35 (Motor RPM - 112), Differential pressure: 3000-3500kPa, Pump rate: 1.6 m3/min. Torque: 1800 - 2400ft/lbs, Rotate: 282m - 86% / Slide: 47m - 14%, ROP: 15.7m/hr. Last survey at 1531.5mMD, inclination= 9.81°, azimuth= 264.58°, TVD - 1530.7m. We are 0.3m below and 1.42m left the line - 1.2° behind in angle - 12.2m center to center - BURR: 4.5° to the 7° per 30m mark at 1630mMD, KOP: 1466mMD.

24hr Forecast
Drill 222mm intermediate directional hole with accumulated MWD surveys, rig services, connections and circulation times.

Daily Contacts
Drilling Superintend, Sheldon Vamplew, 403-999-1302; Drilling Engineer, Mike Greener, 403-771-5039; WS Supervisor, Richard Turgeon, 780-387-1706; WS Supervisor, Dave Opper, 403-863-8205; Rig Manager, Rick Yavis, 780-718-2962; Command Centre, 403-910-0357

Last Casing String
Surface, 603.00mKB

Time Log

Start Time	End Time	Dur (hr)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Start Depth (mKB)	End Depth (mKB)	Operation
00:00	00:15	0.25	INTRM1	RIGMNT	SVRG	P		1,179.00	1,179.00	Rig service function test, crown saver and hydril 14 sec
00:15	07:30	7.25	INTRM1	DRILL	DRLG	P		1,179.00	1,331.00	Drill 222mm intermediate hole, ulterra bit and dog sub, pathfinder mud motor set at 1.83deg,7:8 lobe, 5 stage, 70rpm/m3 from 1179 mKB to1331 mKB.
07:30	07:45	0.25	INTRM1	DRILL	SRVY	P		1,331.00	1,331.00	Directional survey and connections
07:45	08:00	0.25	INTRM1	DRILL	SFTY	P		1,331.00	1,331.00	Crew change and safety meeting, with rig crews, rig manager and Conoco reps.
08:00	08:45	0.75	INTRM1	DRILL	DRLG	P		1,331.00	1,350.00	Drill 222mm intermediate hole, ulterra bit and dog sub, pathfinder mud motor set at 1.83deg,7:8 lobe, 5 stage, 70rpm/m3 from 1331 mKB to 1350mKB.
08:45	09:00	0.25	INTRM1	RIGMNT	SVRG	P		1,350.00	1,350.00	Rig service function test rig smart anti collision system function test crown saver function test pipe rams 8 sec C/O function test flair ignitor grease all moving parts check engine fluid levels in floor motor HPU and pumps
09:00	13:15	4.25	INTRM1	DRILL	DRLG	P		1,350.00	1,417.00	Drill 222mm intermediate hole, ulterra bit and dog sub, pathfinder mud motor set at 1.83deg,7:8 lobe, 5 stage, 70rpm/m3 from 1350 mKB to 1417mKB.
13:15	13:30	0.25	INTRM1	DRILL	SFTY	P		1,417.00	1,417.00	Safety meeting with NEB personal and B.O.P drill well secure in 70 sec crew in positions
13:30	15:30	2.00	INTRM1	DRILL	DRLG	P		1,417.00	1,449.00	Drill 222mm intermediate hole, ulterra bit and dog sub, pathfinder mud motor set at 1.83deg,7:8 lobe, 5 stage, 70rpm/m3 from 1417 mKB to 1449 mKB.
15:30	16:00	0.50	INTRM1	DRILL	SRVY	P		1,449.00	1,449.00	Accumulated directional survey time
16:00	16:45	0.75	INTRM1	DRILL	DRLG	P		1,449.00	1,464.00	Drill 222mm intermediate hole, ulterra bit and dog sub, pathfinder mud motor set at 1.83deg,7:8 lobe, 5 stage, 70rpm/m3 from 1449 mKB to 1464 mKB.
16:45	17:00	0.25	INTRM1	RIGMNT	SVRG	P		1,464.00	1,464.00	Rig service function test rig smart anti collision system function test crown saver function test H.C.R 3sec O/C function test flair ignitor grease all moving parts check engine fluid levels in floor motor HPU and pumps
17:00	19:00	2.00	INTRM1	DRILL	DRLG	P		1,464.00	1,480.00	Drill 222mm intermediate hole, ulterra bit and dog sub, pathfinder mud motor set at 1.83deg,7:8 lobe, 5 stage, 70rpm/m3 from 1464 mKB to 1480mKB.
19:00	19:15	0.25	INTRM1	DRILL	SFTY	P		1,480.00	1,480.00	Crew change and safety meeting, with rig crews, rig manager and Conoco reps.

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45

Rig: Beaver Drilling Ltd. 2

Report Date: 1/8/2014
Report #: 31
Depth Progress: 329.00m
Depth End: 1,508.00mKB
Rig Release Date: 1/23/2014

Log

Start Time	End Time	Dur (hr)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Start Depth (mKB)	End Depth (mKB)	Operation
19:15	23:15	4.00	INTRM1	DRILL	DRLG	P		1,480.00	1,508.00	Drill 222mm intermediate hole, ulterra bit and dog sub, pathfinder mud motor set at 1.83deg,7:8 lobe, 5 stage, 70rpm/m3 from 1480 mKB to 1508 mKB.
23:15	00:00	0.75	INTRM1	DRILL	SRVY	P		1,508.00	1,508.00	Accumulated time for dir surveys

Fluid/Mud Chks: Mud Engineer: Corey Clark

Time	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (Pa•s)	YP Override (Pa)
14:00	1,434.00	975.0	48		11.0	4.0

Low Gravity Solids (%)	MBT (kg/m³)	Oil Water Ratio	Chlorides (mg/L)	Calcium (mg/L)	Lime (kg/m³)	Potassium (mg/L)
4.7		84/16	156,915	39	16	

Electric Stab (V)	ECD - Manual Entry (k...	Sand (%)	Solids, Corr. (%)	T Flowline (°C)	HTHP Pressure (kPa)	HTHP Filtrate (mL/30...
510.0	1,016.0	3.0	6.6	42		6.0

API Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Field Est (Cost)
	13.00	5.00	22,657.33

Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost (Cost)
19.00	5.00	39,139.34

Last BOP Drill

Type	Days Last Chk (...	Last Date	Days Until Next...	Next Check Date
BOP Drill	0	1/8/2014	5	1/13/2014

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
819.00	819.00

Safety Incidents

Date	Com	Category

Drill String: BHA # 2

Bit Run	Drill Bit	Length (m)	IADC Bit Dull	TFA (incl Noz) (mm²)	BHA ROP (m/hr)
1	222.0mm, 616, 21191	0.25	1-4-CT-G-3-0-WT-BHA	924	17.2

Nozzles (mm)	String Length (m)	OD (mm)	Max Rotating Hook Load (daN)
0/14.0/14.0/14.0/14.0	1,599.00	222.0	65,000

...n (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hr)	Total Drill Hrs (hr)
603.00	1,588.00	17.2	985.00	1,588.00	57.25	57.25

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222mm Ulterra PDC bit, dog sub, Pathfinder mud motor set at 1.83 deg, 7:8 lobe, 5 stage, 70rpm/m3, NM Pony sub monel, MWD flex collar, 2 x NM flex Monels.

Drill String Components

Item Des	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)
Drill pipe - Stands	65.0	101.6	1	9.40	1,599.00
Drill pipe - Stands	65.0	101.6	62	1,172.38	1,589.60
4" HW	70.0	132.0	37	344.73	417.22
Jars	60.0	161.0	1	5.13	72.49
4" HW	70.0	132.0	3	27.54	67.36
6.75" X/O	59.0	168.0	1	0.80	39.82
6.75" NM Flex Mon	70.0	171.0	2	17.48	39.02
6.75" Gap Sub	88.0	162.0	1	0.54	21.54
6.75" Flex Monel	70.0	171.0	1	9.35	21.00
NM Pony Monel	70.0	171.0	1	2.97	11.65
Mud motor	56.0	169.0	1	8.28	8.68
Dog sub	60.0	222.0	1	0.15	0.40

Drilling Parameter: 1,449.00 - 1,508.00 mKB

Cum Depth (m)	Cum Drill...	Int ROP (...	Flow Rate...	WOB (daN)	RPM (r...	SPP (kPa)	Drill Str Wt (d...	SO Str Wt (daN)	PU Str Wt (daN)	Off-Btm Str W...	Drill Tq
905.00	44.25	8.7	1.700	6,000	30	14,500	62,000	60,000	64,000	62,000	2,550.0

Hydraulic Calculations

Bit Hydraulic Powe...	HP/Area (kW/mm²)	% P @ bit (%)	Bit Jet Velocity (m/s)	Bit dP (kPa)	P Drop Annular (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)
14.6	0.00038	4	30.7	514.7	274.3	975.0	993.6

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Vol Shoe to Top (m³)	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m/...
5.21	24.96	19.46	52.8	52.8	55.6	108.0

Error

Mud Pump: 1, NATIONAL, 8-P-80

...n Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
	NATIONAL	8-P-80	140.0	216.0

Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/20/2014 00:00	2,909.00	0.499	5,150	64
1/20/2014 00:00	2,909.00	1.014	17,500	130

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45
Rig: Beaver Drilling Ltd. 2

Report Date: 1/8/2014
Report #: 31
Depth Progress: 329.00m
Depth End: 1,508.00mKB
Rig Release Date: 1/23/2014

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m
1/21/2014	1/21/2014	127.0		
1/22/2014	1/22/2014	127.0		

Mud Pump: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/19/2014 00:00	2,513.00	0.647	6,855	83
1/19/2014 00:00	2,513.00	0.897	15,000	115

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
1/19/2014	1/19/2014	127.0	15,000	
1/21/2014		127.0		

Shaker Screens

Des	Start Date	End Date	Scr Sz X	Scr Sz Y	Note

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
1	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
1/19/2014 07:00	2.00	1800	1,000.0	0.400	2,100.0	0.200

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
2	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
1/19/2014 13:00	3.00	2000	990.0	0.400	1,700.0	0.200

Mud / Mud Additive Amounts

Des	Consumed	Cost	Size	Unit
CALCIUM CHLORIDE	15.0	43.920	40.0	SX
INVERT	18.0	1,063.330	1.0	M3
Lime	50.0	7.170	20.0	SX
OPTISEAL	5.0	96.200	25.0	SX
Truvis	6.0	149.670	25.0	SX
Versacoat HF	1.0	883.570	55.0	BBL
Versatrol	5.0	47.500	50.0	SX

Survey Data

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	Depart (m)	NS (m)	EW (m)	VS (m)	DLS (°/30m)
1/8/2014	1,160.50	1.19	131.15	1,160.40	6.61	-0.54	6.59	-6.02	0.24
1/8/2014	1,198.50	2.12	145.56	1,198.38	7.41	-1.38	7.28	-7.04	0.80
1/8/2014	1,236.50	1.81	176.76	1,236.36	8.13	-2.55	7.72	-7.99	0.87
1/8/2014	1,274.50	1.41	163.67	1,274.34	8.67	-3.60	7.88	-8.64	0.43
1/8/2014	1,312.50	1.90	156.64	1,312.33	9.47	-4.63	8.26	-9.47	0.42
1/8/2014	1,351.50	2.12	141.06	1,351.30	10.68	-5.78	8.97	-10.65	0.45
1/8/2014	1,389.50	2.90	172.66	1,389.27	12.00	-7.28	9.54	-11.87	1.23
1/8/2014	1,426.50	2.78	175.74	1,426.22	13.32	-9.11	9.72	-12.92	0.16
1/8/2014	1,446.00	4.20	204.66	1,445.69	13.93	-10.23	9.46	-13.23	3.41
1/8/2014	1,464.50	2.70	229.77	1,464.15	14.21	-11.13	8.84	-13.13	3.40
1/8/2014	1,474.50	4.02	247.44	1,474.14	14.14	-11.41	8.34	-12.83	4.99
1/8/2014	1,483.50	4.60	257.05	1,483.11	13.93	-11.61	7.70	-12.37	3.08
1/8/2014	1,493.50	6.32	262.42	1,493.07	13.58	-11.78	6.76	-11.63	5.38

Formations

Formation Name	Drill Top MD (mKB)	Drill Top (TVD) (mKB)	Prog Top TVD (mKB)
Little Bear	31.00	31.00	31.00
[illegible]er River	76.00	76.00	76.00
[illegible]dic Red	800.50	800.46	
Martin House	938.50	938.44	
Imperial	975.50	975.43	76.40
Upper Canol	1,665.00	1,658.53	1,653.40

tions

Formation Name	Drill Top MD (mKB)	Drill Top (TVD) (mKB)	Prog Top TVD (mKB)
Canol	1,700.72	1,689.07	1,694.40

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45

Report Date: 1/9/2014
Report #: 32
Depth Progress: 80.00m
Depth End: 1,588.00mKB
Rig Release Date: 1/23/2014

Rig: Beaver Drilling Ltd. 2

/ UWI	Surface Legal Location	MaxWell Job Number	License No.
300E7665-10126-45	E-76 65-10 126-45	JOB01@2006	EL 470

Ground Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
268.20	273.40	268.00	12/28/2013	12.73

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	12/9/2013 00:00	1/23/2014 23:59	DRILLED	Yes

Daily Cost Total (Cost)	Cumulative Cost (Cost)	Total AFE (Cost)	AFE+Supp Amt (Cost)	AFE / RFE / Maint.#	Estimated Days
101,242.18	3,205,851.66	6,820,300.00	6,820,300.00	10351817	34.19

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hr)	Cum Personnel Total Hours (hr)
2,881.00		55.0	612.00	25,921.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)
52	45	25	0

Road Condition	Weather	Temperature (°C)	Wind
Ice/Snow	Cloudy	-27	NW

Ops and Depth @ Morning Report
Slip and cut drill line.

Wellbore
Original Hole

Last 24hr Summary
No incidents or accidents. 5 - HID, 0 - OBS and 0 - ASA (all closed out)

Drill 222mm intermediate directional hole from 1508m to 1588m with accumulated MWD surveys, rig services, connections and circulation times. WOB: 6-8,000kDaN, RPM - 35 (Motor RPM - 112), Differential pressure: 3000-3500kPa, Pump rate: 1.6 m3/min. Torque: 1800 - 2400ft/lbs, Rotate: 27.5m - 30% / Slide: 63.5m - 70%, ROP: 7.0m/hr. Last survey at 1580mMD, inclination= 15.60°, azimuth= 270.75°, TVD - 1578.02m. We are 3.2m below and 18.63m left the line - 0.7° behind in angle - 30° behind in azimuth - 15.72m center to center - BURR: 5.5° to the 7° per 30m mark at 1630mMD. Pull out of the hole, laydown mud motor, bit and dog sub. Change bit, mud motor and check MWD tool.

24hr Forecast
Finish slip and cut, run in the hole. Drill 222mm intermediate directional hole with accumulated MWD surveys, rig services, connections and circulation times.

Daily Contacts
Drilling Superintend, Sheldon Vamplew, 403-999-1302; Drilling Engineer, Mike Greener, 403-771-5039; WS Supervisor, Richard Turgeon, 780-387-1706; WS Supervisor, Dave Opper, 403-863-8205; Rig Manager, Rick Yavis, 780-718-2962; Command Centre, 403-910-0357

Last Casing String
Surface, 603.00mKB

Time Log

Start Time	End Time	Dur (hr)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Start Depth (mKB)	End Depth (mKB)	Operation
00:00	00:15	0.25	INTRM1	RIGMNT	SVRG	P		1,508.00	1,508.00	Rig service function test hydril 14 sec and crown saver
00:15	06:45	6.50	INTRM1	DRILL	DRLG	P		1,508.00	1,565.00	Drill 222mm intermediate hole, ulterra bit and dog sub, pathfinder mud motor set at 1.83deg,7:8 lobe, 5 stage, 70rpm/m3 from 1508 mKB to 1565 mKB.
06:45	07:45	1.00	INTRM1	DRILL	SRVY	P		1,565.00	1,565.00	Accumulated time for directional surveys
07:45	08:00	0.25	INTRM1	DRILL	SFTY	P		1,565.00	1,565.00	Crew change and safety meeting, with rig crews, rig manager and Conoco reps.
08:00	11:00	3.00	INTRM1	DRILL	DRLG	P		1,565.00	1,578.00	Drill 222mm intermediate hole, ulterra bit and dog sub, pathfinder mud motor set at 1.83deg,7:8 lobe, 5 stage, 70rpm/m3 from 1565 mKB to 1578 mKB.
11:00	11:30	0.50	INTRM1	RIGMNT	SVRG	P		1,578.00	1,578.00	Rig service function test rig smart system, function test crown saver, function test pipe rams 8sec c/o, grease all moving parts, function test flare stack, check engine fluid levels in the HPU, floor motor and pumps, change oil on pump #1
11:30	15:00	3.50	INTRM1	DRILL	DRLG	P		1,578.00	1,599.00	Drill 222mm intermediate hole, ulterra bit and dog sub, pathfinder mud motor set at 1.83deg,7:8 lobe, 5 stage, 70rpm/m3 from 1578 mKB to 1599 mKB.
15:00	16:00	1.00	INTRM1	DRILL	SRVY	P		1,599.00	1,599.00	Accumulated directional surveys
16:00	17:00	1.00	INTRM1	DRILL	CIRC	P		1,599.00	1,599.00	Circulate bottoms up prior to formation fit test
17:00	17:15	0.25	INTRM1	DRILL	FIT	P		1,599.00	1,599.00	Fit test to 4500 kpa hold for 10 min., held good
17:15	17:30	0.25	INTRM1	RIGMNT	SVRG	P		1,599.00	1,599.00	Rig service function test H.C.R 3sec O/C function test rig smart function test crown saver
17:30	19:00	1.50	INTRM1	DRILL	TRIP	P		1,599.00	1,599.00	Trip out of hole to change bit with flow checks at 1502m,
19:00	19:15	0.25	INTRM1	DRILL	SFTY	P		1,599.00	1,599.00	Crew change and safety meeting, with rig crews, rig manager and Conoco reps.
19:15	00:00	4.75	INTRM1	DRILL	TRIP	P		1,599.00	1,599.00	Trip out of hole with flow checks, to change out PDC bit and mud motor

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45
Rig: Beaver Drilling Ltd. 2

Report Date: 1/9/2014
Report #: 32
Depth Progress: 80.00m
Depth End: 1,588.00mKB
Rig Release Date: 1/23/2014

[redacted]/Mud Chks: Mud Engineer: Corey Clark

	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (Pa•s)	YP Override (Pa)
13:45	1,597.00	1,000.0	53		13.0	3.5

Low Gravity Solids (%)	MBT (kg/m³)	Oil Water Ratio	Chlorides (mg/L)	Calcium (mg/L)	Lime (kg/m³)	Potassium (mg/L)
4.8		85/15	197,729	47	15	

Electric Stab (V)	ECD - Manual Entry (k...	Sand (%)	Solids, Corr. (%)	T Flowline (°C)	HTHP Pressure (kPa)	HTHP Filtrate (mL/30...
570.0	1,049.0	3.1	6.8	49		5.0

API Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Field Est (Cost)
	6.00	1.00	18,745.15

Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost (Cost)
25.00	6.00	57,884.49

Last BOP Drill

Type	Days Last Chk (...	Last Date	Days Until Next...	Next Check Date
BOP Drill	1	1/8/2014	4	1/13/2014

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
820.00	820.00

Safety Incidents

Date	Com	Category

Drill String: BHA # 2

Bit Run	Drill Bit	Length (m)	IADC Bit Dull	TFA (incl Noz) (mm²)	BHA ROP (m/hr)
1	222.0mm, 616, 21191	0.25	1-4-CT-G-3-0-WT-BHA	924	17.2

Nozzles (mm)	String Length (m)	OD (mm)	Max Rotating Hook Load (daN)
14.0/14.0/14.0/14.0/14.0/14.0	1,599.00	222.0	65,000

Depth In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hr)	Total Drill Hrs (hr)
603.00	1,588.00	17.2	985.00	1,588.00	57.25	57.25

Comment
222mm Ulterra PDC bit, dog sub, Pathfinder mud motor set at 1.83 deg, 7:8 lobe, 5 stage, 70rpm/m3, NM Pony sub monel, MWD flex collar, 2 x NM flex Monels.

Drill String Components

Item Des	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)
Drill pipe - Stands	65.0	101.6	1	9.40	1,599.00
[redacted] pipe - Stands	65.0	101.6	62	1,172.38	1,589.60
[redacted]	70.0	132.0	37	344.73	417.22
[redacted]	60.0	161.0	1	5.13	72.49
4" HW	70.0	132.0	3	27.54	67.36
6.75" X/O	59.0	168.0	1	0.80	39.82
6.75" NM Flex Mon	70.0	171.0	2	17.48	39.02
6.75" Gap Sub	88.0	162.0	1	0.54	21.54
6.75" Flex Monel	70.0	171.0	1	9.35	21.00
NM Pony Monel	70.0	171.0	1	2.97	11.65
Mud motor	56.0	169.0	1	8.28	8.68
Dog sub	60.0	222.0	1	0.15	0.40

Drilling Parameter: 1,565.00 - 1,588.00 mKB

Cum Depth (m)	Cum Drill...	Int ROP (...	Flow Rate...	WOB (daN)	RPM (r...	SPP (kPa)	Drill Str Wt (d...	SO Str Wt (daN)	PU Str Wt (daN)	Off-Btm Str W...	Drill Tq
985.00	57.25	3.5	1.700	7,000	30	14,800	65,000	63,000	67,000	65,000	2,800.0

Hydraulic Calculations

Bit Hydraulic Powe...	HP/Area (kW/mm²)	% P @ bit (%)	Bit Jet Velocity (m/s)	Bit dP (kPa)	P Drop Annular (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)
14.6	0.00038	3	30.7	514.7	289.2	975.0	993.6

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Vol Shoe to Top (m³)	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m/...
5.48	27.41	19.46	52.8	52.8	55.6	108.0

Error

Mud Pump: 1, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
1	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/20/2014 00:00	2,909.00	0.499	5,150	64
1/20/2014 00:00	2,909.00	1.014	17,500	130

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
[redacted]/2014	1/21/2014	127.0		
[redacted]/2014	1/22/2014	127.0		

Mud Pump: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80	140.0	216.0

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45

Report Date: 1/9/2014
Report #: 32
Depth Progress: 80.00m
Depth End: 1,588.00mKB
Rig Release Date: 1/23/2014

Rig: Beaver Drilling Ltd. 2

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (...
1/19/2014 00:00	2,513.00	0.647	6,855	...
1/19/2014 00:00	2,513.00	0.897	15,000	115

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
1/19/2014	1/19/2014	127.0	15,000	
1/21/2014		127.0		

Shaker Screens

Des	Start Date	End Date	Scr Sz X	Scr Sz Y	Note

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
1	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
1/19/2014 07:00	2.00	1800	1,000.0	0.400	2,100.0	0.200

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
2	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
1/19/2014 13:00	3.00	2000	990.0	0.400	1,700.0	0.200

Fluid / Mud Additive Amounts

Des	Consumed	Cost	Size	Units
Barite	300.0	17.040	40.0	SX
Barite	30.0	17.040	40.0	SX
CALCIUM CHLORIDE	23.0	43.920	40.0	SX
INVERT	7.0	1,063.330	1.0	M3
e	81.0	7.170	20.0	SX
TISEAL	10.0	96.200	25.0	SX
Versacoat HF	3.0	883.570	55.0	BBL
Versatrol	10.0	47.500	50.0	SX

Survey Data

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	Depart (m)	NS (m)	EW (m)	VS (m)	DLS (°/30m)
1/9/2014	1,503.00	7.11	268.46	1,502.50	13.14	-11.86	5.66	-10.70	3.34
1/9/2014	1,512.50	8.09	268.37	1,511.92	12.68	-11.90	4.40	-9.62	3.09
1/9/2014	1,522.00	8.62	267.36	1,521.32	12.32	-11.95	3.02	-8.44	1.74
1/9/2014	1,531.50	9.81	264.58	1,530.69	12.15	-12.06	1.50	-7.16	4.01
1/9/2014	1,541.00	10.78	267.18	1,540.04	12.18	-12.18	-0.19	-5.74	3.40
1/9/2014	1,550.50	11.62	269.47	1,549.36	12.40	-12.23	-2.03	-4.16	3.00
1/9/2014	1,560.00	12.59	269.78	1,558.65	12.89	-12.24	-4.03	-2.42	3.07
1/9/2014	1,569.50	14.41	271.28	1,567.89	13.72	-12.22	-6.24	-0.47	5.85
1/9/2014	1,580.00	15.60	270.75	1,578.03	15.12	-12.17	-8.96	1.93	3.42

Formations

Formation Name	Drill Top MD (mKB)	Drill Top (TVD) (mKB)	Prog Top TVD (mKB)
Little Bear	31.00	31.00	31.00
Slater River	76.00	76.00	76.00
Arctic Red	800.50	800.46	76.40
Martin House	938.50	938.44	76.40
Imperial	975.50	975.43	76.40
Upper Canol	1,665.00	1,658.53	1,653.40
Lower Canol	1,700.72	1,689.07	1,694.40

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45

Report Date: 1/10/2014
Report #: 33
Depth Progress: 103.00m
Depth End: 1,691.00mKB
Rig Release Date: 1/23/2014

Rig: Beaver Drilling Ltd. 2

UWI	Surface Legal Location	MaxWell Job Number	License No.
7665-10126-45	E-76 65-10 126-45	JOB01@2006	EL 470

Ground Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
268.20	273.40	268.00	12/28/2013	13.73

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	12/9/2013 00:00	1/23/2014 23:59	DRILLED	Yes

Daily Cost Total (Cost)	Cumulative Cost (Cost)	Total AFE (Cost)	AFE+Supp Amt (Cost)	AFE / RFE / Maint.#	Estimated Days
109,595.18	3,315,446.84	6,820,300.00	6,820,300.00	10351817	34.19

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hr)	Cum Personnel Total Hours (hr)
2,881.00		54.0	600.00	26,521.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)
500	205	25	0

Road Condition	Weather	Temperature (°C)	Wind
Ice/Snow	Clear	-40	N 15 kms

Ops and Depth @ Morning Report
Trip out of the hole to dial up mud motor.

Wellbore
Original Hole

Last 24hr Summary
No incidents or accidents. 4 - HID, 0 - OBS and 0 - ASA (all closed out)
Make up directional BHA, run in the hole and drill 222mm intermediate directional hole from 1588m to 1691m with accumulated MWD surveys, rig services, connections and circulation times. WOB: 6-14,000kDaN, RPM - 35 (Motor RPM - 112), Differential pressure: 3000-3500kPa, Pump rate: 1.6 m3/min. Torque: 1800 - 2400ft/lbs, Rotate: 15m - 15% / Slide: 82.5m - 85%, ROP: 12.3m/hr. Last survey at 1683.5mMD, inclination= 31.2°, azimuth= 312.66°, TVD - 1673.53m. We are 1.11m below and 20.55m left the line - 4.55° behind in angle - 12.50° behind in azimuth - 22.32m center to center - BURR: 8.4°/30m

24hr Forecast
Pull out of the hole, dial up mud motor, change bits, run in the hole, drill 222mm intermediate directional hole with accumulated MWD surveys, rig services, connections and circulation times.

Daily Contacts
Drilling Superintend, Sheldon Vamplew, 403-999-1302; Drilling Engineer, Mike Greener, 403-771-5039; WS Supervisor, Richard Turgeon, 780-387-1706; WS Supervisor, Dave Opper, 403-863-8205; Rig Manager, Rick Yavis, 780-718-2962; Command Centre, 403-910-0357

Last Casing String
Surface, 603.00mKB

Time Log

Start	End Time	Dur (hr)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Start Depth (mKB)	End Depth (mKB)	Operation
	00:15	0.25	INTRM1	RIGMNT	SVRG	P		1,599.00	1,599.00	Rig service function test blind rams and crown saver
00:15	00:30	0.25	INTRM1	DRILL	SFTY	P		1,599.00	1,599.00	Safety meeting with Pathfinder, change out mud motor
00:30	03:30	3.00	INTRM1	DRILL	PULD	P		1,599.00	1,599.00	Change out mud motor, check MWD tool and make up bit # 2, Smith FHi18B, insert bit
03:30	05:15	1.75	INTRM1	DRILL	TRIP	P		1,599.00	1,599.00	Run in hole to the top of HWDP
05:15	05:30	0.25	INTRM1	DRILL	SFTY	P		1,599.00	1,599.00	Safety meeting with crew, on slip and cut drilling line
05:30	06:15	0.75	INTRM1	RIGMNT	SLPC	P		1,599.00	1,599.00	Slip and cut 30m drilling line
06:15	07:45	1.50	INTRM1	DRILL	TRIP	P		1,599.00	1,599.00	Run in hole, with Smith FHi18B insert bit and Pathfinder mud motor set at 1.83deg,7:8 lobe, 5 stage, 70rpm/m3
07:45	08:00	0.25	INTRM1	DRILL	SFTY	P		1,599.00	1,599.00	Crew change and safety meeting, with rig crews, rig manager and Conoco reps.
08:00	08:45	0.75	INTRM1	DRILL	TRIP	P		1,599.00	1,599.00	Run in hole from 799mKB to 950mKB
08:45	09:00	0.25	INTRM1	DRILL	SRVY	P		1,599.00	1,599.00	Fill pipe and pulse test MWD tool
09:00	09:15	0.25	INTRM1	RIGMNT	SVRG	P		1,599.00	1,599.00	Rig service function test rig smart function test crown saver function test annular 24 sec C/O grease all moving parts check fluid levels in floor motor and pump engines
09:15	11:00	1.75	INTRM1	DRILL	TRIP	P		1,599.00	1,599.00	Trip in hole, from 956mKB to 1588mKB Change hole depth from 1598mKB To 1588mKB
11:00	15:15	4.25	INTRM1	DRILL	DRLG	P		1,599.00	1,624.00	Drill 222mm intermediate hole, with Smith FHi18B insert bit and, Pathfinder mud motor set at 1.83deg,7:8 lobe, 5 stage, 70rpm/m3 from 1599mKB to 1624mKB.
15:15	16:00	0.75	INTRM1	DRILL	SRVY	P		1,624.00	1,624.00	Accumulated directional surveys
16:00	17:15	1.25	INTRM1	DRILL	DRLG	P		1,624.00	1,636.00	Drill 222mm intermediate hole, with Smith FHi18B insert bit and, pathfinder mud motor set at 1.83deg,7:8 lobe, 5 stage, 70rpm/m3 from 1624 mKB to 1636 mKB.
17:15	17:30	0.25	INTRM1	RIGMNT	SVRG	P		1,636.00	1,636.00	Rig service function test rig smart function test crown saver function test H.C.R 3 sec O/C grease all moving parts check fluid levels in floor motor and pump engines
0	19:00	1.50	INTRM1	DRILL	DRLG	P		1,636.00	1,654.00	Drill 222mm intermediate hole, with Smith FHi18B insert bit and, Pathfinder mud motor set at 1.83deg,7:8 lobe, 5 stage, 70rpm/m3 from 1636 mKB to 1654 mKB.
19:00	19:15	0.25	INTRM1	DRILL	SFTY	P		1,654.00	1,654.00	Crew change and safety meeting, with rig crews, rig manager and Conoco reps.

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45

Report Date: 1/10/2014
Report #: 33
Depth Progress: 103.00m
Depth End: 1,691.00mKB
Rig Release Date: 1/23/2014

Rig: Beaver Drilling Ltd. 2

Time Log

Start Time	End Time	Dur (hr)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Start Depth (mKB)	End Depth (mKB)	Operation
19:15	00:00	4.75	INTRM1	DRILL	DRLG	P		1,654.00	1,691.00	Drill 222mm intermediate hole, with Smith FHi18B insert bit and, Pathfinder mud motor set at 1.83deg,7:8 lobe, 5 stage, 70rpm/m3 from 1654mKB to 1691mKB.

Fluid/Mud Chks: Mud Engineer: Corey Clark

Time	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (Pa•s)	YP Override (Pa)
14:30	1,622.00	1,020.0	54		12.0	5.0

Low Gravity Solids (%)	MBT (kg/m³)	Oil Water Ratio	Chlorides (mg/L)	Calcium (mg/L)	Lime (kg/m³)	Potassium (mg/L)
5.0		85/15	197,729	47	17	

Electric Stab (V)	ECD - Manual Entry (k...	Sand (%)	Solids, Corr. (%)	T Flowline (°C)	HTHP Pressure (kPa)	HTHP Filtrate (mL/30...
580.0	1,064.0	3.1	7.8	40		5.0

API Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Field Est (Cost)
	2.00	0.00	2,781.15

Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost (Cost)
27.00	6.00	60,665.64

Last BOP Drill

Type	Days Last Chk (...	Last Date	Days Until Next...	Next Check Date
BOP Drill	2	1/8/2014	3	1/13/2014

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
821.00	821.00

Safety Incidents

Date	Com	Category

Drill String: BHA # 3

Bit Run	Drill Bit	Length (m)	IADC Bit Dull	TFA (incl Noz) (mm²)	BHA ROP (m/hr)
3	222.0mm, FHi18B, RA3594	0.25	——	429	8.8

Nozzles (mm)	String Length (m)	OD (mm)	Max Rotating Hook Load (daN)
13.5/13.5/13.5	1,712.22	222.0	66,000

Depth In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hr)	Total Drill Hrs (hr)
1,588.00	1,908.00	5.2	320.00	1,908.00	61.75	[illegible]

Comment
222mm Smith FHi18B insert bit, Pathfinder mud motor set at 1.83 deg, 7:8 lobe, 5 stage, 70rpm/m3, NM Pony sub monel, MWD flex collar, 2 x NM flex Monels.

Drill String Components

Item Des	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)
Drill pipe - Stands			68	1,294.72	1,712.22
4" HW	70.0	132.0	37	344.73	417.50
Jars		161.0	1	5.13	72.77
4" HW	70.0	132.0	3	27.54	67.64
6.75" X/O	59.0	168.0	1	0.80	40.10
6.75" NM Flex Mon	70.0	171.0	2	17.48	39.30
6.75" Gap Sub	88.0	162.0	1	0.54	21.82
6.75" Flex Monel	70.0	171.0	1	9.35	21.28
NM Pony Monel	70.0	171.0	1	2.97	11.93
Mud motor		169.0	1	8.46	8.96
222 mm BIT	60.0	222.0	1	0.25	0.50

Drilling Parameter: 1,624.00 - 1,691.00 mKB

Cum Depth (m)	Cum Drill...	Int ROP (...	Flow Rate...	WOB (daN)	RPM (r...	SPP (kPa)	Drill Str Wt (d...	SO Str Wt (daN)	PU Str Wt (daN)	Off-Btm Str W...	Drill Tq
103.00	11.75	8.9	1.700	13,000	30	15,500	66,000	64,000	69,000	66,000	2,480.0

Hydraulic Calculations

Bit Hydraulic Powe...	HP/Area (kW/mm²)	% P @ bit (%)	Bit Jet Velocity (m/s)	Bit dP (kPa)	P Drop Annular (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Vol Shoe to Top (m³)	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m/...

Error
A drill string component contains a null value in OD

Mud Pump: 1, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
1	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spr
1/20/2014 00:00	2,909.00	0.499	5,150	
1/20/2014 00:00	2,909.00	1.014	17,500	

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45
Rig: Beaver Drilling Ltd. 2

Report Date: 1/10/2014
Report #: 33
Depth Progress: 103.00m
Depth End: 1,691.00mKB
Rig Release Date: 1/23/2014

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
1/21/2014	1/21/2014	127.0		
1/22/2014	1/22/2014	127.0		

Mud Pump: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/19/2014 00:00	2,513.00	0.647	6,855	83
1/19/2014 00:00	2,513.00	0.897	15,000	115

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
1/19/2014	1/19/2014	127.0	15,000	
1/21/2014		127.0		

Shaker Screens

Des	Start Date	End Date	Scr Sz X	Scr Sz Y	Note

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
1	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
1/19/2014 07:00	2.00	1800	1,000.0	0.400	2,100.0	0.200

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
2	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
1/19/2014 13:00	3.00	2000	990.0	0.400	1,700.0	0.200

Mud Additive Amounts

Des	Consumed	Cost	Size	Units
CALCIUM CHLORIDE	4.0	43.920	40.0	SX
INVERT	2.0	1,063.330	1.0	M3
Sawdust	10.0	2.980	7.3	SX
Truvis	3.0	149.670	25.0	SX

Survey Data

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	Depart (m)	NS (m)	EW (m)	VS (m)	DLS (°/30m)
1/10/2014	1,599.00	19.40	278.37	1,596.15	18.73	-11.68	-14.64	7.13	6.99
1/10/2014	1,608.50	19.31	287.85	1,605.11	20.82	-10.97	-17.70	10.15	9.92
1/10/2014	1,617.50	19.80	296.44	1,613.60	22.72	-9.83	-20.48	13.14	9.71
1/10/2014	1,627.00	20.19	300.14	1,622.52	24.77	-8.29	-23.34	16.38	4.18
1/10/2014	1,636.50	21.21	303.36	1,631.41	26.99	-6.52	-26.19	19.74	4.83
1/10/2014	1,645.50	22.80	306.18	1,639.75	29.32	-4.60	-28.96	23.09	6.36
1/10/2014	1,655.00	2.48	309.35	1,648.98	30.81	-3.37	-30.62	25.14	64.18
1/10/2014	1,664.50	27.22	309.27	1,658.09	32.54	-1.84	-32.49	27.52	78.13

Formations

Formation Name	Drill Top MD (mKB)	Drill Top (TVD) (mKB)	Prog Top TVD (mKB)
Little Bear	31.00	31.00	31.00
Slater River	76.00	76.00	76.00
Arctic Red	800.50	800.46	76.40
Martin House	938.50	938.44	76.40
Imperial	975.50	975.43	76.40
Upper Canol	1,665.00	1,658.53	1,653.40
Lower Canol	1,700.72	1,689.07	1,694.40

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45

Report Date: 1/11/2014
Report #: 34
Depth Progress: 35.00m
Depth End: 1,726.00mKB
Rig Release Date: 1/23/2014

Rig: Beaver Drilling Ltd. 2

UWI	Surface Legal Location	MaxWell Job Number	License No.
300E7665-10126-45	E-76 65-10 126-45	JOB01@2006	EL 470

Ground Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
268.20	273.40	268.00	12/28/2013	14.73

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	12/9/2013 00:00	1/23/2014 23:59	DRILLED	Yes

Daily Cost Total (Cost)	Cumulative Cost (Cost)	Total AFE (Cost)	AFE+Supp Amt (Cost)	AFE / RFE / Maint.#	Estimated Days
88,691.30	3,404,138.14	6,820,300.00	6,820,300.00	10351817	34.19

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hr)	Cum Personnel Total Hours (hr)
2,881.00		54.0	600.00	27,121.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)
410	180	25	0

Road Condition	Weather	Temperature (°C)	Wind
Ice/Snow	Clear	-47	SW 15 kms

Ops and Depth @ Morning Report
Drill 222mm intermediate directional hole at 1752m.

Wellbore
Original Hole

Last 24hr Summary
No incidents or accidents. 13 - HID, 0 - OBS and 0 - ASA (all closed out)

Drill 222mm intermediate directional hole from 1691m to 1702m, circulate bottoms up, pull out of the hole, dial up mud motor from 1.83° to 2.12° due to the inability to attain build rates required, check bit, run in the hole and drill 222mm intermediate directional hole from 1702m to 1726m with accumulated MWD surveys, rig services, connections and circulation times. WOB: 6-14,000kDaN, RPM - 35 (Motor RPM - 112), Differential pressure: 3000-3500kPa, Pump rate: 1.6 m3/min. Torque: 1800 - 2400ft/lbs, Rotate: 0.0m - 0.0% / Slide: 24m - 100%, ROP: 4.7m/hr. Last survey at 1731mMD, inclination= 44.19°, azimuth= 306.67°, TVD - 1711.12m. We are 2.73m below and 16.65m left the line - 2.29° behind in angle - 6.67° behind in azimuth - 20.43m center to center - BURR: 8.0°/30m

24hr Forecast
Drill 222mm intermediate directional hole with accumulated MWD surveys, rig services, connections and circulation times.

Daily Contacts
Drilling Superintend, Sheldon Vamplew, 403-999-1302; Drilling Engineer, Mike Greener, 403-771-5039; WS Supervisor, Richard Turgeon, 780-387-1706; WS Supervisor, Dave Opper, 403-863-8205; Rig Manager, Rick Yavis, 780-718-2962; Command Centre, 403-910-0357

Last Casing String
Surface, 603.00mKB

Time Log

Start Time	End Time	Dur (hr)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Start Depth (mKB)	End Depth (mKB)	Operation
00:00	00:15	0.25	INTRM1	RIGMNT	SVRG	P		1,691.00	1,691.00	Rig service function test rig smart crown saver, function ram's 4 sec
00:15	03:30	3.25	INTRM1	DRILL	DRLG	P		1,691.00	1,702.00	Drill 222mm intermediate hole, with Smith FHi18B insert bit and, Pathfinder mud motor set at 1.83deg,7:8 lobe, 5 stage, 70rpm/m3 from 1691 mKB to 1702 mKB.
03:30	03:45	0.25	INTRM1	DRILL	SRVY	P		1,702.00	1,702.00	Accumulated time for dir surveys
03:45	04:45	1.00	INTRM1	DRILL	CIRC	P		1,702.00	1,702.00	Circulate & condition hole, mix weighted pill
04:45	07:45	3.00	INTRM1	DRILL	TRIP	P		1,702.00	1,702.00	Trip out of hole to reset mud motor from 1.83 deg. to 2.12 deg. due to the inability to attain proper build rates.
07:45	08:00	0.25	INTRM1	DRILL	SFTY	P		1,702.00	1,702.00	Crew change and safety meeting, with rig crews, rig manager and Conoco reps.
08:00	10:00	2.00	INTRM1	DRILL	TRIP	P		1,702.00	1,702.00	Trip out of hole from 743mKB to 58mKB to reset mud motor from 1.83 deg. to 2.12 deg. due to the inability to attain proper build rates. flow checks @ 852m, 510m 87m OOH
10:00	10:15	0.25	INTRM1	RIGMNT	SVRG	P		1,702.00	1,702.00	Rig service function test rig smart anti-collision system, function test blind rams 8sec close/open, function test crown saver, grease all moving parts and check fluid levels floor motor, HPU, and pumps, monitor well
10:15	10:30	0.25	INTRM1	DRILL	SFTY	P		1,702.00	1,702.00	Safety meeting with Pathfinder directional services, prior to working with directional tools
10:30	11:30	1.00	INTRM1	DRILL	PULD	P		1,702.00	1,702.00	Change bend in the mud motor from 1.83 deg to 2.12deg and inspect bit
11:30	11:45	0.25	INTRM1	DRILL	PULD	P		1,702.00	1,702.00	Clean rig floor to prepare to trip in hole
11:45	14:30	2.75	INTRM1	DRILL	TRIP	P		1,702.00	1,702.00	Trip in hole from 48mKB to 686mKB
14:30	15:00	0.50	INTRM1	DRILL	SRVY	P		1,702.00	1,702.00	Fill pipe and test tool, outside surface casing shoe
15:00	15:30	0.50	INTRM1	RIGMNT	RGRP	T	Rig	1,702.00	1,702.00	Touble shoot mud saver valve on top drive
15:30	16:00	0.50	INTRM1	DRILL	TRIP	P		1,702.00	1,702.00	Trip in hole from 686mKB to 898mKB
16:00	17:00	1.00	INTRM1	DRILL	TRIP	P		1,702.00	1,702.00	Trip in hole from 686mKB to 1223mKB
17:00	17:15	0.25	INTRM1	RIGMNT	SVRG	P		1,702.00	1,702.00	Rig service function test rig smart anti-collision system, function test annular 24sec close/open, function test crown saver, grease all moving parts and check fluid levels floor motor, HPU, and pumps

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45
Rig: Beaver Drilling Ltd. 2

Report Date: 1/11/2014
Report #: 34
Depth Progress: 35.00m
Depth End: 1,726.00mKB
Rig Release Date: 1/23/2014

Log

Start Time	End Time	Dur (hr)	Phase	Op Code	Activity Code	Tim e P-T-X	Trbl Code	Start Depth (mKB)	End Depth (mKB)	Operation
17:15	19:15	2.00	INTRM1	DRILL	TRIP	P		1,702.00	1,702.00	Trip in hole from 1223mKB to 1702m, screw into top drive, strart pumps, fill pipe and break circulation.
19:15	19:30	0.25	INTRM1	DRILL	SFTY	P		1,702.00	1,702.00	Crew change and safety meeting, with rig crews, rig manager and Conoco reps.
19:30	23:45	4.25	INTRM1	DRILL	DRLG	P		1,702.00	1,726.00	Drill 222mm intermediate hole, with Smith FHi18B insert bit and, Pathfinder mud motor set at 2.12deg, 7:8 lobe, 5 stage, 70rpm/m3 from 1702 mKB to 1726 mKB.
23:45	00:00	0.25	INTRM1	DRILL	SRVY	P		1,726.00	1,726.00	Accumulated time for directional surveys

Fluid/Mud Chks: Mud Engineer: Corey Clark

Time	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (Pa•s)	YP Override (Pa)
21:30	1,712.00	1,010.0	55		12.0	5.0

Low Gravity Solids (%)	MBT (kg/m³)	Oil Water Ratio	Chlorides (mg/L)	Calcium (mg/L)	Lime (kg/m³)	Potassium (mg/L)
5.0		85/15	197,729	47	17	

Electric Stab (V)	ECD - Manual Entry (k...	Sand (%)	Solids, Corr. (%)	T Flowline (°C)	HTHP Pressure (kPa)	HTHP Filtrate (mL/30...
580.0	1,053.0	3.1	7.8	36		5.0

API Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Field Est (Cost)
	4.00	0.00	7,120.27

Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost (Cost)
31.00	6.00	67,785.91

Last BOP Drill

Type	Days Last Chk (...	Last Date	Days Until Next...	Next Check Date
BOP Drill	3	1/8/2014	2	1/13/2014

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
822.00	822.00

Safety Incidents

Date	Com	Category

String: BHA # 4

Drill Bit	Length (m)	IADC Bit Dull	TFA (incl Noz) (mm²)	BHA ROP (m/hr)
222.0mm, FHi18B, RA3594	0.25	1-3-WT-S-1--CT-TD	429	4.3

Nozzles (mm)	String Length (m)	OD (mm)	Max Rotating Hook Load (daN)
13.5/13.5/13.5	1,908.00	171.0	69,000

Depth In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hr)	Total Drill Hrs (hr)
1,588.00	1,908.00	5.2	320.00	1,908.00	61.75	61.75

Comment
222mm Smith FHi18B insert bit, Pathfinder mud motor set at 2.12 deg (1.91m bit to bend), 7:8 lobe, 5 stage, 70rpm/m3, NM Pony sub monel, MWD flex collar, 2 x NM flex Monels.

Drill String Components

Item Des	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)
Drill pipe - Singles	70.0	101.6	1	6.01	1,908.00
Drill pipe - Stands	70.0	101.6	78	1,484.74	1,901.99
4" HW	70.0	132.0	37	344.73	417.25
Jars	59.0	161.0	1	5.13	72.52
4" HW	70.0	132.0	3	27.54	67.39
6.75" X/O	59.0	168.0	1	0.80	39.85
6.75" NM Flex Mon	70.0	171.0	2	17.48	39.05
6.75" Gap Sub	88.0	162.0	1	0.54	21.57
6.75" Flex Monel	70.0	171.0	1	9.35	21.03
NM Pony Monel	70.0	171.0	1	2.97	11.68
Mud motor	60.0	169.0	1	8.46	8.71

Drilling Parameter: 1,702.00 - 1,726.00 mKB

Cum Depth (m)	Cum Drill...	Int ROP (...	Flow Rate...	WOB (daN)	RPM (r...	SPP (kPa)	Drill Str Wt (d...	SO Str Wt (daN)	PU Str Wt (daN)	Off-Btm Str W...	Drill Tq
35.00	7.50	5.6	1.600	16,000	30	15,500	67,000	65,000	70,000	67,000	

Hydraulic Calculations

Bit Hydraulic Powe...	HP/Area (kW/mm²)	% P @ bit (%)	Bit Jet Velocity (m/s)	Bit dP (kPa)	P Drop Annular (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)
58.3	0.00151	14	62.1	2,185.2	305.9	1,010.0	1,028.3

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Vol Shoe to Top (m³)	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m/...
6.63	31.64	19.46	49.7	49.7	52.3	101.6

Mud Pump: 1, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
1	NATIONAL	8-P-80	140.0	216.0

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45

Report Date: 1/11/2014
Report #: 34
Depth Progress: 35.00m
Depth End: 1,726.00mKB
Rig Release Date: 1/23/2014

Rig: Beaver Drilling Ltd. 2

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (s
1/20/2014 00:00	2,909.00	0.499	5,150	54
1/20/2014 00:00	2,909.00	1.014	17,500	130

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
1/21/2014	1/21/2014	127.0		
1/22/2014	1/22/2014	127.0		

Mud Pump: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/19/2014 00:00	2,513.00	0.647	6,855	83
1/19/2014 00:00	2,513.00	0.897	15,000	115

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
1/19/2014	1/19/2014	127.0	15,000	
1/21/2014		127.0		

Shaker Screens

Des	Start Date	End Date	Scr Sz X	Scr Sz Y	Note

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
1	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
1/19/2014 07:00	2.00	1800	1,000.0	0.400	2,100.0	0.200

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

ıber	Make	Model	Diameter (mm)
2	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
1/19/2014 13:00	3.00	2000	990.0	0.400	1,700.0	0.200

Fluid / Mud Additive Amounts

Des	Consumed	Cost	Size	Units
Barite	40.0	17.040	40.0	SX
INVERT	4.0	1,063.330	1.0	M3
OPTISEAL	10.0	96.200	25.0	SX
Truvis	5.0	149.670	25.0	SX
Versatrol	10.0	47.500	50.0	SX

Survey Data

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	Depart (m)	NS (m)	EW (m)	VS (m)	DLS (°/30m)
1/11/2014	1,674.00	29.12	310.94	1,666.46	35.93	1.05	-35.92	31.92	6.50
1/11/2014	1,683.50	31.20	312.66	1,674.67	39.70	4.23	-39.48	36.57	7.11
1/11/2014	1,693.00	33.41	312.66	1,682.70	43.88	7.67	-43.21	41.50	6.98
1/11/2014	1,702.50	36.10	310.68	1,690.51	48.58	11.27	-47.26	46.79	9.21

Formations

Formation Name	Drill Top MD (mKB)	Drill Top TVD (mKB)	Prog Top TVD (mKB)
Little Bear	31.00	31.00	31.00
Slater River	76.00	76.00	76.00
Arctic Red	800.50	800.46	76.40
Martin House	938.50	938.44	76.40
Imperial	975.50	975.43	76.40
Upper Canol	1,665.00	1,658.53	1,653.40
Lower Canol	1,700.72	1,689.07	1,694.40

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45

Report Date: 1/12/2014
Report #: 35
Depth Progress: 90.00m
Depth End: 1,816.00mKB
Rig Release Date: 1/23/2014

Rig: Beaver Drilling Ltd. 2

Well	Surface Legal Location	MaxWell Job Number	License No.
65-10126-45	E-76 65-10 126-45	JOB01@2006	EL 470

Ground Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
268.20	273.40	268.00	12/28/2013	15.73

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	12/9/2013 00:00	1/23/2014 23:59	DRILLED	Yes

Daily Cost Total (Cost)	Cumulative Cost (Cost)	Total AFE (Cost)	AFE+Supp Amt (Cost)	AFE / RFE / Maint.#	Estimated Days
111,405.34	3,515,543.48	6,820,300.00	6,820,300.00	10351817	34.19

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hr)	Cum Personnel Total Hours (hr)
2,881.00		54.0	600.00	27,721.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)
640	160		0

Road Condition	Weather	Temperature (°C)	Wind
Ice/Snow	Clear	-45	W. 15 kms

Ops and Depth @ Morning Report
Drill 222mm intermediate directional hole at 1832m.

Wellbore
Original Hole

Last 24hr Summary
No incidents or accidents. 11 - HID, 2 - OBS and 0 - ASA (all closed out)

Drill 222mm intermediate directional hole from 1726m to 1816m with accumulated MWD surveys, rig services, connections and circulation times. WOB: 6-18,000kDaN, RPM - 35 (Motor RPM - 112), Differential pressure: 500-1200kPa, Pump rate: 1.6 m3/min. Torque: 0ft/lbs, Rotate: 0.0m - 0% / Slide: 90m - 100%, ROP: 4.6m/hr. Last survey at 1807mMD, inclination= 63.1°, azimuth= 308.96°, TVD - 1756.4m. We are 2.91m below and 1.2m left of the 1777mTVD target line - 1.12° behind in angle - 8.9° behind in azimuth - 16.6m center to center - BURR: 9.0° for 1777mTVD target, BURR: 7.86° for 1780mTVD target.

24hr Forecast
Drill 222mm intermediate directional hole with accumulated MWD surveys, rig services, connections and circulation times.

Daily Contacts
Drilling Superintend, Sheldon Vamplew, 403-999-1302; Drilling Engineer, Mike Greener, 403-771-5039; WS Supervisor, Richard Turgeon, 780-387-1706; WS Supervisor, Dave Opper, 403-863-8205; Rig Manager, Rick Yavis, 780-718-2962; Command Centre, 403-910-0357

Last Casing String
Surface, 603.00mKB

Time Log

	End Time	Dur (hr)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Start Depth (mKB)	End Depth (mKB)	Operation
	00:45	0.75	INTRM1	DRILL	DRLG	P		1,726.00	1,731.00	Drill 222mm intermediate hole, with Smith FHi18B insert bit and, Pathfinder mud motor set at 2.12deg, 7:8 lobe, 5 stage, 70rpm/m3 from 1726 mKB to 1731 mKB.
00:45	01:00	0.25	INTRM1	RIGMNT	SVRG	P		1,731.00	1,731.00	Rig service function test rig smart anti-collision system, function test pipe ram's 4sec to close function test crown saver, grease all moving parts and check fluid levels floor motor, HPU, and pumps
01:00	06:00	5.00	INTRM1	DRILL	DRLG	P		1,731.00	1,749.00	Drill 222mm intermediate hole, with Smith FHi18B insert bit and, Pathfinder mud motor set at 2.12deg, 7:8 lobe, 5 stage, 70rpm/m3 from 1731 mKB to 1749 mKB.
06:00	07:15	1.25	INTRM1	RIGMNT	RGRP	T	Rig	1,749.00	1,749.00	Change out 5" head & liner in pump # 2 lube side
07:15	07:45	0.50	INTRM1	DRILL	SRVY	P		1,749.00	1,749.00	Accumulated time for directional surveys
07:45	08:00	0.25	INTRM1	DRILL	SFTY	P		1,749.00	1,749.00	Crew change and safety meeting, with rig crews, rig manager and Conoco reps.
08:00	08:15	0.25	INTRM1	RIGMNT	RGRP	T	Rig	1,749.00	1,749.00	Change liner wash basket on pump #2
08:15	11:15	3.00	INTRM1	DRILL	DRLG	P		1,749.00	1,768.00	Drill 222mm intermediate hole, with Smith FHi18B insert bit and, Pathfinder mud motor set at 2.12deg, 7:8 lobe, 5 stage, 70rpm/m3 from 1749 mKB to 1768 mKB.
11:15	11:30	0.25	INTRM1	RIGMNT	SVRG	P		1,768.00	1,768.00	Rig service function test rig smart anti collision system function test crown saver function test, Annular 18 sec close/open, grease all moving and non moving parts, check fluid levels in floor motor, switch over light plants.
11:30	15:30	4.00	INTRM1	DRILL	DRLG	P		1,768.00	1,787.00	Drill 222mm intermediate hole, with Smith FHi18B insert bit and, Pathfinder mud motor set at 2.12deg, 7:8 lobe, 5 stage, 70rpm/m3 from 1768 mKB to 1787 mKB.
15:30	16:00	0.50	INTRM1	DRILL	SRVY	P		1,787.00	1,787.00	Accumulated directional surveys
16:00	16:15	0.25	INTRM1	RIGMNT	SVRG	P		1,787.00	1,787.00	Rig service function test rig smart anti collision system function test crown saver function test, H.C.R 3 open/close, grease all moving and non moving parts, check fluid levels in floor motor, pump engines, HPU
	19:00	2.75	INTRM1	DRILL	DRLG	P		1,787.00	1,796.00	Drill 222mm intermediate hole, with Smith FHi18B insert bit and, Pathfinder mud motor set at 2.12deg,7:8 lobe, 5 stage, 70rpm/m3 from 1787 mKB to 1796 mKB.
19:00	19:15	0.25	INTRM1	DRILL	SFTY	P		1,796.00	1,796.00	Crew change and safety meeting, with rig crews, rig manager and Conoco reps.

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45

Rig: Beaver Drilling Ltd. 2

Report Date: 1/12/2014
Report #: 35
Depth Progress: 90.00m
Depth End: 1,816.00mKB
Rig Release Date: 1/23/2014

.e Log

Start Time	End Time	Dur (hr)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Start Depth (mKB)	End Depth (mKB)	Operation
19:15	23:30	4.25	INTRM1	DRILL	DRLG	P		1,796.00	1,816.00	Drill 222mm intermediate hole, with Smith FHi18B insert bit and, Pathfinder mud motor set at 2.12deg,7:8 lobe, 5 stage, 70rpm/m3 from 1796 mKB to 1816 mKB.
23:30	00:00	0.50	INTRM1	DRILL	SRVY	P		1,816.00	1,816.00	Accumulated time for directional surveys

Fluid/Mud Chks: Mud Engineer: Corey Clark

Time	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (Pa•s)	YP Override (Pa)
16:00	1,788.00	1,020.0	56		14.0	5.0

Low Gravity Solids (%)	MBT (kg/m³)	Oil Water Ratio	Chlorides (mg/L)	Calcium (mg/L)	Lime (kg/m³)	Potassium (mg/L)
5.7		85/15	221,336	53	17	

Electric Stab (V)	ECD - Manual Entry (k...	Sand (%)	Solids, Corr. (%)	T Flowline (°C)	HTHP Pressure (kPa)	HTHP Filtrate (mL/30...
590.0	1,065.0	3.0	8.1	51		5.0

API Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Field Est (Cost)
	4.00	0.00	9,161.31

Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost (Cost)
35.00	6.00	76,947.22

Last BOP Drill

Type	Days Last Chk (...	Last Date	Days Until Next...	Next Check Date
BOP Drill	4	1/8/2014	1	1/13/2014

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
823.00	823.00

Safety Incidents

Date	Com	Category

Drill String: BHA # 4

Bit Run	Drill Bit	Length (m)	IADC Bit Dull	TFA (incl Noz) (mm²)	BHA ROP (m/hr)
3rr	222.0mm, FHi18B, RA3594	0.25	1-3-WT-S-1--CT-TD	429	4.3

Nozzles (mm)	String Length (m)	OD (mm)	Max Rotating Hook Load (daN)
5/13.5/13.5	1,908.00	171.0	60 000

h In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hr)	Total Drill Hrs (
1,588.00	1,908.00	5.2	320.00	1,908.00	61.75	

Comment
222mm Smith FHi18B insert bit, Pathfinder mud motor set at 2.12 deg (1.91m bit to bend), 7:8 lobe, 5 stage, 70rpm/m3, NM Pony sub monel, MWD flex collar, 2 x NM flex Monels.

Drill String Components

Item Des	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)
Drill pipe - Singles	70.0	101.6	1	6.01	1,908.00
Drill pipe - Stands	70.0	101.6	78	1,484.74	1,901.99
4" HW	70.0	132.0	37	344.73	417.25
Jars	59.0	161.0	1	5.13	72.52
4" HW	70.0	132.0	3	27.54	67.39
6.75" X/O	59.0	168.0	1	0.80	39.85
6.75" NM Flex Mon	70.0	171.0	2	17.48	39.05
6.75" Gap Sub	88.0	162.0	1	0.54	21.57
6.75" Flex Monel	70.0	171.0	1	9.35	21.03
NM Pony Monel	70.0	171.0	1	2.97	11.68
Mud motor	60.0	169.0	1	8.46	8.71

Drilling Parameter: 1,787.00 - 1,816.00 mKB

Cum Depth (m)	Cum Drill...	Int ROP (...	Flow Rate...	WOB (daN)	RPM (r...	SPP (kPa)	Drill Str Wt (d...	SO Str Wt (daN)	PU Str Wt (daN)	Off-Btm Str W...	Drill Tq
125.00	27.25	4.1	1.700	17,000	30	16,000	68,000	66,000	70,000	68,000	

Hydraulic Calculations

Bit Hydraulic Powe...	HP/Area (kW/mm²)	% P @ bit (%)	Bit Jet Velocity (m/s)	Bit dP (kPa)	P Drop Annular (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)
70.6	0.00182	16	66.0	2,491.3	453.0	1,020.0	1,046.2

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Vol Shoe to Top (m³)	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m/...
6.98	34.39	19.46	52.8	52.8	55.6	108.0

Error

Mud Pump: 1, NATIONAL, 8-P-80

p Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
	NATIONAL	8-P-80	140.0	

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spn...
1/20/2014 00:00	2,909.00	0.499	5,150	64
1/20/2014 00:00	2,909.00	1.014	17,500	130

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45
Rig: Beaver Drilling Ltd. 2

Report Date: 1/12/2014
Report #: 35
Depth Progress: 90.00m
Depth End: 1,816.00mKB
Rig Release Date: 1/23/2014

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
1/21/2014	1/21/2014	127.0		
1/22/2014	1/22/2014	127.0		

Mud Pump: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/19/2014 00:00	2,513.00	0.647	6,855	83
1/19/2014 00:00	2,513.00	0.897	15,000	115

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
1/19/2014	1/19/2014	127.0	15,000	
1/21/2014		127.0		

Shaker Screens

Des	Start Date	End Date	Scr Sz X	Scr Sz Y	Note

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
1	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
1/19/2014 07:00	2.00	1800	1,000.0	0.400	2,100.0	0.200

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
2	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
9/2014 13:00	3.00	2000	990.0	0.400	1,700.0	0.200

Mud Additive Amounts

Des	Consumed	Cost	Size	Units
CALCIUM CHLORIDE	25.0	43.920	40.0	SX
INVERT	4.0	1,063.330	1.0	M3
OPTISEAL	10.0	96.200	25.0	SX
Truvis	5.0	149.670	25.0	SX
Versacoat HF	2.0	883.570	55.0	BBL
Versatrol	7.0	47.500	50.0	SX

Survey Data

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	Depart (m)	NS (m)	EW (m)	VS (m)	DLS (°/30m)
1/12/2014	1,712.00	38.62	308.96	1,698.06	53.81	14.96	-51.68	52.45	8.61
1/12/2014	1,721.50	41.71	305.96	1,705.32	59.55	18.68	-56.55	58.51	11.51
1/12/2014	1,759.50	50.91	309.66	1,731.50	85.95	35.52	-78.27	85.67	7.44
1/12/2014	1,769.00	52.32	310.15	1,737.40	93.15	40.30	-83.98	92.98	4.61
1/12/2014	1,778.50	55.50	312.17	1,742.99	100.56	45.35	-89.76	100.49	11.29
1/12/2014	1,788.00	57.58	311.87	1,748.23	108.23	50.66	-95.64	108.21	6.62

Formations

Formation Name	Drill Top MD (mKB)	Drill Top (TVD) (mKB)	Prog Top TVD (mKB)
Little Bear	31.00	31.00	31.00
Slater River	76.00	76.00	76.00
Arctic Red	800.50	800.46	76.40
Martin House	938.50	938.44	76.40
Imperial	975.50	975.43	76.40
Upper Canol	1,665.00	1,658.53	1,653.40
Lower Canol	1,700.72	1,689.07	1,694.40

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45

Report Date: 1/13/2014
Report #: 36
Depth Progress: 84.00m
Depth End: 1,900.00mKB
Rig Release Date: 1/23/2014

Rig: Beaver Drilling Ltd. 2

UWI	Surface Legal Location	MaxWell Job Number	License No.
300E7665-10126-45	E-76 65-10 126-45	JOB01@2006	EL 470

Ground Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
268.20	273.40	268.00	12/28/2013	16.73

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	12/9/2013 00:00	1/23/2014 23:59	DRILLED	Yes

Daily Cost Total (Cost)	Cumulative Cost (Cost)	Total AFE (Cost)	AFE+Supp Amt (Cost)	AFE / RFE / Maint.#	Estimated Days
102,743.95	3,618,287.43	6,820,300.00	6,820,300.00	10351817	34.19

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hr)	Cum Personnel Total Hours (hr)
2,881.00		54.0	600.00	28,321.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)
630	220		0

Road Condition	Weather	Temperature (°C)	Wind
Ice/Snow	Cloudy	-28	SE 15kms

Ops and Depth @ Morning Report
Circulate and clean hole prior to tripping out of hole to log open hole.

Wellbore
Original Hole

Last 24hr Summary
No incidents or accidents. 5 - HID, 1 - OBS and 0 - ASA (all closed out)

Drill 222mm intermediate directional hole from 1816m to 1900m with accumulated MWD surveys, rig services, connections and circulation times. WOB: 14-26,000kDaN, RPM - 25 (Motor RPM - 112), Differential pressure: 500-1200kPa, Pump rate: 1.6 m3/min. Torque: 7500-9000ft/lbs, Rotate: 27m - 32% / Slide: 57m - 68%, ROP: 4.1m/hr. Last survey at 1889.5mMD, inclination: 86.61°, azimuth: 302.26°, TVD: 1776.19mTVD. Projection at bit: Intermediate TD- 1908mMD, inclination: 89.46°, azimuth: 302.0°, TVD: 1776.82mTVD.

24hr Forecast
Circulate and clean hole, trip out of the hole, lay down directional tools, rig up loggers, run open hole logs, pull wear bushing, rig up power tongs and laydown truck, run 177.8mm intermediate casing.

Daily Contacts
Drilling Superintend, Sheldon Vamplew, 403-999-1302; Drilling Engineer, Mike Greener, 403-771-5039; WS Supervisor, Richard Turgeon, 780-387-1706; WS Supervisor, Dave Opper, 403-863-8205; Rig Manager, Rick Yavis, 780-718-2962; Command Centre, 403-910-0357

Last Casing String
Surface, 603.00mKB

Time Log

Start Time	End Time	Dur (hr)	Phase	Op Code	Activity Code	Tim e P-T-X	Trbl Code	Start Depth (mKB)	End Depth (mKB)	Operation
00:00	02:45	2.75	INTRM1	DRILL	DRLG	P		1,816.00	1,825.00	Drill 222mm intermediate hole, with Smith FHi18B insert and, Pathfinder mud motor set at 2.12deg, 7:8 lobe, 5 stage, 70rpm/m3 from 1816mKB to 1825mKB.
02:45	03:00	0.25	INTRM1	RIGMNT	SVRG	P		1,825.00	1,825.00	Rig service function test rig smart anti collision system function test crown saver function test, H.C.R 3 open/close, grease all moving and non moving parts, check fluid levels in floor motor, pump engines, HPU
03:00	03:30	0.50	INTRM1	DRILL	ELOG	P		1,825.00	1,825.00	Relog gamma from 1815 m to 1826 m
03:30	07:15	3.75	INTRM1	DRILL	DRLG	P		1,825.00	1,839.00	Drill 222mm intermediate hole, with Smith FHi18B insert bit and, Pathfinder mud motor set at 2.12deg, 7:8 lobe, 5 stage, 70rpm/m3 from 1825mKB to 1839mKB.
07:15	07:45	0.50	INTRM1	DRILL	SRVY	P		1,839.00	1,839.00	Accumulated time for surveys
07:45	08:00	0.25	INTRM1	DRILL	SFTY	P		1,839.00	1,839.00	Crew change and safety meeting, with rig crews, rig manager and Conoco reps.
08:00	09:30	1.50	INTRM1	DRILL	DRLG	P		1,839.00	1,844.00	Drill 222mm intermediate hole, with Smith FHi18B insert bit and, Pathfinder mud motor set at 2.12deg, 7:8 lobe, 5 stage, 70rpm/m3 from 1839mKB to 1844mKB.
09:30	09:45	0.25	INTRM1	RIGMNT	SVRG	P		1,844.00	1,844.00	Rig service function test rig smart anti collision system function test crown saver function test annular 18 sec close/open, Grease all moving and non moving parts, check fluid level in floor motor and pump engines
09:45	10:00	0.25	INTRM1	DRILL	SFTY	P		1,844.00	1,844.00	B.O.P drill well secure in 90 sec crew in positions. Function test flair stack ignitor function test motor kills.
10:00	15:30	5.50	INTRM1	DRILL	DRLG	P		1,844.00	1,863.00	Drill 222mm intermediate hole, with Smith FHi18B insert bit and, Pathfinder mud motor set at 2.12deg, 7:8 lobe, 5 stage, 70rpm/m3 from 1844mKB to 1863mKB.
15:30	16:00	0.50	INTRM1	DRILL	SRVY	P		1,863.00	1,863.00	Accumulated directional surveys
16:00	16:15	0.25	INTRM1	RIGMNT	SVRG	P		1,863.00	1,863.00	Rig service function test rig smart anti collision system function test crown saver function test pipe rams 5 sec close/open Grease all moving and non moving parts,che fluid level in floor motor and pump engines
16:15	20:00	3.75	INTRM1	DRILL	DRLG	P		1,863.00	1,882.00	Drill 222mm intermediate hole, with Smith FHi18B insert bit and, Pathfinder mud motor set at 2.12deg, 7:8 lobe, 5 stage, 70rpm/m3 from 1863mKB to 1882mKB.

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45
Rig: Beaver Drilling Ltd. 2

Report Date: 1/13/2014
Report #: 36
Depth Progress: 84.00m
Depth End: 1,900.00mKB
Rig Release Date: 1/23/2014

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ıme	End Time	Dur (hr)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Start Depth (mKB)	End Depth (mKB)	Operation
20:00	20:15	0.25	INTRM1	DRILL	SFTY	P		1,882.00	1,882.00	B.O.P drill well secure in 90 sec crew in positions. Function test flair stack ignitor function test motor kills.
20:15	23:30	3.25	INTRM1	DRILL	DRLG	P		1,882.00	1,900.00	Drill 222mm intermediate hole, with Smith FHi18B insert bit and, Pathfinder mud motor set at 2.12deg, 7:8 lobe, 5 stage, 70rpm/m3 from 1882mKB to1900 mKB.
23:30	00:00	0.50	INTRM1	DRILL	SRVY	P		1,900.00	1,900.00	Accumulated directional surveys

Fluid/Mud Chks: Mud Engineer: Corey Clark

Time	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (Pa•s)	YP Override (Pa)
15:00	1,864.00	1,015.0	59		14.0	5.0

Low Gravity Solids (%)	MBT (kg/m³)	Oil Water Ratio	Chlorides (mg/L)	Calcium (mg/L)	Lime (kg/m³)	Potassium (mg/L)
4.8		85/15	242,546	55	17	

Electric Stab (V)	ECD - Manual Entry (k...	Sand (%)	Solids, Corr. (%)	T Flowline (°C)	HTHP Pressure (kPa)	HTHP Filtrate (mL/30...
710.0	1,061.0	3.1	7.6	53		4.5

API Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Field Est (Cost)
	4.00	0.00	10,041.92

Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost (Cost)
39.00	6.00	86,989.14

Last BOP Drill

Type	Days Last Chk (...	Last Date	Days Until Next...	Next Check Date
BOP Drill	0	1/13/2014	5	1/18/2014

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
824.00	824.00

Safety Incidents

Date	Com	Category

Drill String: BHA # 4

Bit Run	Drill Bit	Length (m)	IADC Bit Dull	TFA (incl Noz) (mm²)	BHA ROP (m/hr)
	222.0mm, FHi18B, RA3594	0.25	1-3-WT-S-1--CT-TD	429	4.3

(mm)	String Length (m)	OD (mm)	Max Rotating Hook Load (daN)
.5/13.5	1,908.00	171.0	69,000

...n (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hr)	Total Drill Hrs (hr)
1,588.00	1,908.00	5.2	320.00	1,908.00	61.75	61.75

Comment
222mm Smith FHi18B insert bit, Pathfinder mud motor set at 2.12 deg (1.91m bit to bend), 7:8 lobe, 5 stage, 70rpm/m3, NM Pony sub monel, MWD flex collar, 2 x NM flex Monels.

Drill String Components

Item Des	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)
Drill pipe - Singles	70.0	101.6	1	6.01	1,908.00
Drill pipe - Stands	70.0	101.6	78	1,484.74	1,901.99
4" HW	70.0	132.0	37	344.73	417.25
Jars	59.0	161.0	1	5.13	72.52
4" HW	70.0	132.0	3	27.54	67.39
6.75" X/O	59.0	168.0	1	0.80	39.85
6.75" NM Flex Mon	70.0	171.0	2	17.48	39.05
6.75" Gap Sub	88.0	162.0	1	0.54	21.57
6.75" Flex Monel	70.0	171.0	1	9.35	21.03
NM Pony Monel	70.0	171.0	1	2.97	11.68
Mud motor	60.0	169.0	1	8.46	8.71

Drilling Parameter: 1,863.00 - 1,900.00 mKB

Cum Depth (m)	Cum Drill...	Int ROP (...	Flow Rate...	WOB (daN)	RPM (r...	SPP (kPa)	Drill Str Wt (d...	SO Str Wt (daN)	PU Str Wt (daN)	Off-Btm Str W...	Drill Tq
209.00	47.75	5.3	1.700	20,000	20	16,000	69,000	66,000	72,000	69,000	8,900.0

Hydraulic Calculations

Bit Hydraulic Powe...	HP/Area (kW/mm²)	% P @ bit (%)	Bit Jet Velocity (m/s)	Bit dP (kPa)	P Drop Annular (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)
70.2	0.00181	15	66.0	2,479.1	375.6	1,015.0	1,036.5

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Vol Shoe to Top (m³)	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m/...
7.30	36.96	19.46	52.8	52.8	55.6	108.0

Error

ımp: 1, NATIONAL, 8-P-80

umber	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/20/2014 00:00	2,909.00	0.499	5,150	64

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45
Rig: Beaver Drilling Ltd. 2

Report Date: 1/13/2014
Report #: 36
Depth Progress: 84.00m
Depth End: 1,900.00mKB
Rig Release Date: 1/23/2014

ıp Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (s
1/20/2014 00:00	2,909.00	1.014	17,500	

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
1/21/2014	1/21/2014	127.0		
1/22/2014	1/22/2014	127.0		

Mud Pump: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/19/2014 00:00	2,513.00	0.647	6,855	83
1/19/2014 00:00	2,513.00	0.897	15,000	115

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
1/19/2014	1/19/2014	127.0	15,000	
1/21/2014		127.0		

Shaker Screens

Des	Start Date	End Date	Scr Sz X	Scr Sz Y	Note

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
1	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
1/19/2014 07:00	2.00	1800	1,000.0	0.400	2,100.0	0.200

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
2	BOS Solutions	5500	

ıtrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/mi
1/19/2014 13:00	3.00	2000	990.0	0.400	1,700.0	

Fluid / Mud Additive Amounts

Des	Consumed	Cost	Size	Units
CALCIUM CHLORIDE	18.0	43.920	40.0	SX
INVERT	4.0	1,063.330	1.0	M3
Truvis	20.0	149.670	25.0	SX
Versacoat HF	2.0	883.570	55.0	BBL
Versatrol	5.0	47.500	50.0	SX

Survey Data

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	Depart (m)	NS (m)	EW (m)	VS (m)	DLS (°/30m)
1/13/2014	1,731.00	44.19	306.67	1,712.27	65.74	22.51	-61.76	64.93	7.98
1/13/2014	1,797.50	60.41	310.28	1,753.12	116.17	56.00	-101.78	116.17	9.92
1/13/2014	1,807.00	63.10	308.96	1,757.62	124.40	61.34	-108.23	124.40	9.25
1/13/2014	1,816.50	66.10	308.78	1,761.69	132.88	66.72	-114.91	132.85	9.49
1/13/2014	1,825.00	69.51	308.34	1,764.91	140.67	71.63	-121.06	140.61	12.12
1/13/2014	1,835.00	73.49	307.55	1,768.08	150.07	77.46	-128.54	149.98	12.15
1/13/2014	1,845.00	76.71	307.55	1,770.65	159.68	83.35	-136.20	159.53	9.66
1/13/2014	1,854.50	79.10	305.56	1,772.64	168.93	88.88	-143.66	168.74	9.73
1/13/2014	1,864.00	80.20	304.07	1,774.35	178.26	94.21	-151.33	178.04	5.79
1/13/2014	1,873.50	82.02	303.67	1,775.81	187.64	99.44	-159.13	187.39	5.88

Formations

Formation Name	Drill Top MD (mKB)	Drill Top (TVD) (mKB)	Prog Top TVD (mKB)
Little Bear	31.00	31.00	31.00
Slater River	76.00	76.00	76.00
Arctic Red	800.50	800.46	76.40
Martin House	938.50	938.44	76.40
ɛrial	975.50	975.43	
Upper Canol	1,665.00	1,658.53	1
Lower Canol	1,700.72	1,689.07	1,(

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45

Report Date: 1/14/2014
Report #: 37
Depth Progress: 8.00m
Depth End: 1,908.00mKB
Rig Release Date: 1/23/2014

Rig: Beaver Drilling Ltd. 2

UWI	Surface Legal Location	MaxWell Job Number	License No.
[redacted]665-10126-45	E-76 65-10 126-45	JOB01@2006	EL 470

Ground Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
268.20	273.40	268.00	12/28/2013	17.73

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	12/9/2013 00:00	1/23/2014 23:59	DRILLED	Yes

Daily Cost Total (Cost)	Cumulative Cost (Cost)	Total AFE (Cost)	AFE+Supp Amt (Cost)	AFE / RFE / Maint.#	Estimated Days
189,894.92	3,808,182.35	6,820,300.00	6,820,300.00	10351817	34.19

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hr)	Cum Personnel Total Hours (hr)
2,881.00		54.0	600.00	28,921.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)
365	170	28	0

Road Condition	Weather	Temperature (°C)	Wind
Ice/Snow	Snowing	-26	NW 15kms

Ops and Depth @ Morning Report
Run 177.8mm intermediate casing at 590m. Fill every 20 joints and break circulation every 600m+/-.

Wellbore
Original Hole

Last 24hr Summary
No incidents or accidents. 13 - HID, 4 - OBS and 0 - ASA (all closed out)

Drill 222mm intermediate directional hole from 1900m to 1908m. Projection at bit: Intermediate TD- 1908mMD, inclination: 89.46°, azimuth: 302.0°, TVD: 1776.82mTVD. Circulate, wiper trip to 1466m (KOP), circulate 2 bottoms up and clean hole, trip out of the hole, lay down directional tools, rig up loggers. Run open hole logs with Schlumberger, log 1 run: AIT-PEX-BHC-TLD2-ECRD to 1814m (65°) at 18:15hrs. Pull wear bushing, slip and cut drill line, change out saver sub on top drive.

24hr Forecast
Run 177.8mm intermediate casing, tag bottom, circulate bottoms up, lay down tag joint, make up and land mandrel hanger and landing joint, circulate, rig up cementers, cement 177.8mm intermediate casing, rig out cementers, pick and make up lateral BHA.

Daily Contacts
Drilling Superintend, Sheldon Vamplew, 403-999-1302; Drilling Engineer, Mike Greener, 403-771-5039; WS Supervisor, Richard Turgeon, 780-387-1706; WS Supervisor, Dave Opper, 403-863-8205; Rig Manager, Rick Yavis, 780-718-2962; Command Centre, 403-910-0357

Last Casing String
Surface, 603.00mKB

Time Log

[redacted]	End Time	Dur (hr)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Start Depth (mKB)	End Depth (mKB)	Operation
[redacted]	00:30	0.50	INTRM1	DRILL	DRLG	P		1,900.00	1,901.00	Drill 222mm intermediate hole, with Smith FHi18B insert bit and, Pathfinder mud motor set at 2.12deg, 7:8 lobe, 5 stage, 70rpm/m3 from 1900mKB to1901 mKB.
00:30	00:45	0.25	INTRM1	RIGMNT	SVRG	P		1,901.00	1,901.00	Rig service function test rig smart anti collision system function test crown saver function test H.C.R 3sec open/close Grease all moving and non moving parts,check fluid level in floor motor and pump engines
00:45	02:30	1.75	INTRM1	DRILL	DRLG	P		1,901.00	1,908.00	Drill 222mm intermediate hole, with Smith FHi18B insert bit and, Pathfinder mud motor set at 2.12deg, 7:8 lobe, 5 stage, 70rpm/m3 from 1901mKB to1908mKB.
02:30	03:15	0.75	INTRM1	DRILL	CIRC	P		1,908.00	1,908.00	Circulate bottoms up, prepair to do a wiper trip to 1466mKB
03:15	03:30	0.25	INTRM1	DRILL	SFTY	P		1,908.00	1,908.00	Held safety meeting with crew on tripping out of hole
03:30	05:00	1.50	INTRM1	DRILL	TRIP	P		1,908.00	1,908.00	Trip out of hole from 1908mKB to 1466mKB flow checks @1816m,1466m
05:00	05:45	0.75	INTRM1	DRILL	TRIP	P		1,908.00	1,908.00	Run back in hole
05:45	07:00	1.25	INTRM1	DRILL	CIRC	P		1,908.00	1,908.00	Circulate and prepare to trip out of the hole to lay down directional tools
07:00	07:15	0.25	INTRM1	DRILL	SFTY	P		1,908.00	1,908.00	Crew change and safety meeting, with rig crews, rig manager and Conoco reps.
07:15	08:00	0.75	INTRM1	DRILL	CIRC	P		1,908.00	1,908.00	Circulate and prepair to trip out of the hole to lay down directional tools
08:00	08:15	0.25	INTRM1	RIGMNT	SVRG	P		1,908.00	1,908.00	Rig service function test rig smart anti collision system function test crown saver function test pipe rams 5 sec open/close Grease all moving and non moving parts,check fluid level in floor motor and pump engines
08:15	13:15	5.00	INTRM1	DRILL	TRIP	P		1,908.00	1,908.00	Trip out of hole to lay down directional tools and open hole log Flow check at 1815m/958m/419m/74m
13:15	13:30	0.25	INTRM1	DRILL	SFTY	P		1,908.00	1,908.00	Safety meeting Schlumberger directional Reviewed jsa#161 lay down DC
[redacted]	14:30	1.00	INTRM1	DRILL	PULD	P		1,908.00	1,908.00	Lay down directional tools F/C OOH close/open blind rams 5 sec
14:30	15:15	0.75	INTRM1	DRILL	PULD	P		1,908.00	1,908.00	Pull wear bushing
15:15	15:30	0.25	INTRM1	EVALFM	SFTY	P		1,908.00	1,908.00	Safety meeting w/Schlumberger loggers reviewed jsa#153 Rig to and log well

ConocoPhillips Canada

Daily Drilling

COPRC DODO CANYON E-76 65-10 126-45

Rig: Beaver Drilling Ltd. 2

Report Date: 1/14/2014
Report #: 37
Depth Progress: 8.00m
Depth End: 1,908.00mKB
Rig Release Date: 1/23/2014

e Log

Start Time	End Time	Dur (hr)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Start Depth (mKB)	End Depth (mKB)	Operation
15:30	16:00	0.50	INTRM1	EVALFM	ELOG	P		1,908.00	1,908.00	Wire line open hole log with Schlumberger. Run logs: AIT-PEX-BHC-TLD2-ECRD to 1814m (65°) at 18:15hrs.
16:00	16:15	0.25	INTRM1	RIGMNT	SVRG	P		1,908.00	1,908.00	Rig service, function test crown saver, brake linkage
16:15	21:00	4.75	INTRM1	EVALFM	ELOG	P		1,908.00	1,908.00	Open hole wire line logs with Schlumberger
21:00	22:30	1.50	INTRM1	EVALFM	ELOG	P		1,908.00	1,908.00	Rig out wire line equitment, clean and tidy floor
22:30	23:15	0.75	INTRM1	DRILL	PULD	P		1,908.00	1,908.00	Pick up stand of drill pipe and run in and pull wear bushing
23:15	23:45	0.50	INTRM1	RIGMNT	SLPC	P		1,908.00	1,908.00	Slip and cut 25m off drilling line, reset crown saver
23:45	00:00	0.25	INTRM1	RIGMNT	RGRP	T	Rig	1,908.00	1,908.00	Change out mud saver valve on top drive

Fluid/Mud Chks: Mud Engineer: Corey Clark

Time	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (Pa·s)	YP Override (Pa)
15:00	1,908.00	1,015.0	59		14.0	5.0

Low Gravity Solids (%)	MBT (kg/m³)	Oil Water Ratio	Chlorides (mg/L)	Calcium (mg/L)	Lime (kg/m³)	Potassium (mg/L)
5.5		86/14	263,512	58	16	

Electric Stab (V)	ECD - Manual Entry (k...	Sand (%)	Solids, Corr. (%)	T Flowline (°C)	HTHP Pressure (kPa)	HTHP Filtrate (mL/30...
720.0	1,061.0	3.2	9.0	26		4.5

API Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Field Est (Cost)
	3.00	0.00	4,212.39

Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost (Cost)
42.00	6.00	91,201.53

Last BOP Drill

Type	Days Last Chk (...	Last Date	Days Until Next...	Next Check Date
BOP Drill	1	1/13/2014	4	1/18/2014

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
825.00	825.00

Safety Incidents

Date	Com	Category

l String: BHA # 4

Bit Run	Drill Bit	Length (m)	IADC Bit Dull	TFA (incl Noz) (mm²)	BHA ROP (l
3rr	222.0mm, FHi18B, RA3594	0.25	1-3-WT-S-1--CT-TD	429	4.3

Nozzles (mm)	String Length (m)	OD (mm)	Max Rotating Hook Load (daN)
13.5/13.5/13.5	1,908.00	171.0	69,000

Depth In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hr)	Total Drill Hrs (hr)
1,588.00	1,908.00	5.2	320.00	1,908.00	61.75	61.75

Comment
222mm Smith FHi18B insert bit, Pathfinder mud motor set at 2.12 deg (1.91m bit to bend), 7:8 lobe, 5 stage, 70rpm/m3, NM Pony sub monel, MWD flex collar, 2 x NM flex Monels.

Drill String Components

Item Des	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)
Drill pipe - Singles	70.0	101.6	1	6.01	1,908.00
Drill pipe - Stands	70.0	101.6	78	1,484.74	1,901.99
4" HW	70.0	132.0	37	344.73	417.25
Jars	59.0	161.0	1	5.13	72.52
4" HW	70.0	132.0	3	27.54	67.39
6.75" X/O	59.0	168.0	1	0.80	39.85
6.75" NM Flex Mon	70.0	171.0	2	17.48	39.05
6.75" Gap Sub	88.0	162.0	1	0.54	21.57
6.75" Flex Monel	70.0	171.0	1	9.35	21.03
NM Pony Monel	70.0	171.0	1	2.97	11.68
Mud motor	60.0	169.0	1	8.46	8.71

Drilling Parameter: 1,900.00 - 1,908.00 mKB

Cum Depth (m)	Cum Drill...	Int ROP (...	Flow Rate...	WOB (daN)	RPM (r...	SPP (kPa)	Drill Str Wt (d...	SO Str Wt (daN)	PU Str Wt (daN)	Off-Btm Str W...	Drill Tq
217.00	50.00	3.6	1.700	20,000	20	16,700	69,000	65,000	72,000	69,000	7,200.0

Hydraulic Calculations

Bit Hydraulic Powe...	HP/Area (kW/mm²)	% P @ bit (%)	Bit Jet Velocity (m/s)	Bit dP (kPa)	P Drop Annular (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)
70.2	0.00181	15	66.0	2,479.1	377.2	1,015.0	1,036.6

...l String Volume (m³)	Bit to Shoe Volume (m³)	Vol Shoe to Top (m³)	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m/...
7.33	37.20	19.46	52.8	52.8	55.6	

Error

Mud Pump: 1, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
1	NATIONAL	8-P-80	140.0	216.0

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45
Rig: Beaver Drilling Ltd. 2

Report Date: 1/14/2014
Report #: 37
Depth Progress: 8.00m
Depth End: 1,908.00mKB
Rig Release Date: 1/23/2014

Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
2014 00:00	2,909.00	0.499	5,150	64
1/20/2014 00:00	2,909.00	1.014	17,500	130

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
1/21/2014	1/21/2014	127.0		
1/22/2014	1/22/2014	127.0		

Mud Pump: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/19/2014 00:00	2,513.00	0.647	6,855	83
1/19/2014 00:00	2,513.00	0.897	15,000	115

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
1/19/2014	1/19/2014	127.0	15,000	
1/21/2014		127.0		

Shaker Screens

Des	Start Date	End Date	Scr Sz X	Scr Sz Y	Note

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
1	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
1/19/2014 07:00	2.00	1800	1,000.0	0.400	2,100.0	0.200

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

ber	Make	Model	Diameter (mm)
2	BOS Solutions	5500	

uge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
1/19/2014 13:00	3.00	2000	990.0	0.400	1,700.0	0.200

Fluid / Mud Additive Amounts

Des	Consumed	Cost	Size	Units
Barite	60.0	17.040	40.0	SX
INVERT	3.0	1,063.330	1.0	M3

Survey Data

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	Depart (m)	NS (m)	EW (m)	VS (m)	DLS (°/30m)
1/14/2014	1,883.00	84.71	302.88	1,776.91	197.08	104.62	-167.02	196.80	8.85
1/14/2014	1,889.50	86.61	302.26	1,777.40	203.56	108.11	-172.48	203.27	9.22

Formations

Formation Name	Drill Top MD (mKB)	Drill Top (TVD) (mKB)	Prog Top TVD (mKB)
Little Bear	31.00	31.00	31.00
Slater River	76.00	76.00	76.00
Arctic Red	800.50	800.46	76.40
Martin House	938.50	938.44	76.40
Imperial	975.50	975.43	76.40
Upper Canol	1,665.00	1,658.53	1,653.40
Lower Canol	1,700.72	1,689.07	1,694.40

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45

Report Date: 1/15/2014
Report #: 38
Depth Progress: 0.00m
Depth End: 1,908.00mKB
Rig Release Date: 1/23/2014

Rig: Beaver Drilling Ltd. 2

UWI	Surface Legal Location	MaxWell Job Number	License No.
300E7665-10126-45	E-76 65-10 126-45	JOB01@2006	EL 470

Ground Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
268.20	273.40	268.00	12/28/2013	18.73

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	12/9/2013 00:00	1/23/2014 23:59	DRILLED	Yes

Daily Cost Total (Cost)	Cumulative Cost (Cost)	Total AFE (Cost)	AFE+Supp Amt (Cost)	AFE / RFE / Maint.#	Estimated Days
339,249.78	4,147,432.13	6,820,300.00	6,820,300.00	10351817	34.19

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hr)	Cum Personnel Total Hours (hr)
2,881.00		54.0	600.00	29,521.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)
	170	27	0

Road Condition	Weather	Temperature (°C)	Wind
Ice/Snow	Cloudy	-20	W 10 kms

Ops and Depth @ Morning Report
Attempt to set Stream-Flo packoff seal assembly above mandrel hanger.

Wellbore
Original Hole

Last 24hr Summary
No incidents or accidents. 8 - HID, 3 - OBS and 0 - ASA (all closed out)

Change out saver sub on top drive, rig up power tongs and laydown truck, run 177.8mm intermediate casing, tag bottom at 1908mMD, circulate bottoms up, lay down tag joint, make up and land mandrel hanger and landing joint, circulate, rig up cementers, cement 177.8mm intermediate casing (plug down at 22:01hrs on January 15/.14 - Full pre-flush returns: 8m3 of CW8 and 8m3 of MudPushII Spacer, cement at surface by calculated volume results), rig out cementers, lay down landing joint.

24hr Forecast
Lift BOP, fix Strem-Flo mandrel hanger issue, set Stream-Flo packoff seal assembly and pressure test, make up BHA, run in the hole, drill out cement, float and shoe, drill 156mm lateral hole with accumulated MWD surveys, rig services, connections and circulation times.

Daily Contacts
Drilling Superintend, Sheldon Vamplew, 403-999-1302; Drilling Engineer, Mike Greener, 403-771-5039; WS Supervisor, Richard Turgeon, 780-387-1706; WS Supervisor, Dave Opper, 403-863-8205; Rig Manager, Rick Yavis, 780-718-2962; Command Centre, 403-910-0357

Last Casing String
Intermediate, 1,908.00mKB

Time Log

Start Time	End Time	Dur (hr)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Start Depth (mKB)	End Depth (mKB)	Operation
00:00	01:15	1.25	INTRM1	RIGMNT	RGRP	T	Rig	1,908.00	1,908.00	Change out mud saver valve
01:15	02:30	1.25	INTRM1	CASING	RNCS	P		1,908.00	1,908.00	Rig up Hallmark power tongs and Trottier laydown truck
02:30	02:45	0.25	INTRM1	CASING	SFTY	P		1,908.00	1,908.00	Safety meeting on running tong with Hallmark tong service and lay down truck hands
02:45	07:45	5.00	INTRM1	CASING	RNCS	P		1,908.00	1,908.00	Make up 1-177.8mm float shoe, 1-joint of 177.8mm, 38.69kg/m, P-110, LTC intermediate casing and 1-177.8mm float collar.
07:45	08:00	0.25	INTRM1	CASING	SFTY	P		1,908.00	1,908.00	Crew change and safety meeting, Rig manager and Conoco Reps where present
08:00	08:15	0.25	INTRM1	RIGMNT	SVRG	P		1,908.00	1,908.00	Rig service, check brake linkage
08:15	17:00	8.75	INTRM1	CASING	RNCS	P		1,908.00	1,908.00	Run 149-joints of 177.8mm, 38.69kg/m, P-110, LTC intermediate casing from 1908m to 5.20m. Run 32 x Volant Hydroform centralizers from 1511m to 1908m, run 10 Weatherford Micro Seal Packers from 1415m to 1535m then run 36 Topco bow spring centralizers, fill every 20 joints and break circulation every 700m, tag bottom at 1908mMD. Total length of 177.8mm intermediate casing: 1907.17m. Landed at 1907m, tagged bottom at 1908m, float at 1895.07m.
17:00	18:45	1.75	INTRM1	CASING	CIRC	P		1,908.00	1,908.00	Circulate bottoms up, laydown tag joint, make up mandrel hanger and landing joint. Land mandrel hanger and circulate.
18:45	19:00	0.25	INTRM1	CEMENT	SFTY	P		1,908.00	1,908.00	Hold safety meeting with Schlumberger cementers prior to cementing 177.8mm intermediate casing.

og

Start Time	End Time	Dur (hr)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Start Depth (mKB)	End Depth (mKB)	Operation
19:00	23:00	4.00	INTRM1	CEMENT	CMNT	P		1,908.00	1,908.00	Rig up Schlumberger cementers to cement 177.8mm intermediate casing, pump 8m3 of 1000kg/m3 CW8 pre-flush, stop and pressure test line to 21,000kPA (held OK), bleed off pressure, then pump 8m3 of 1200kg/m3 MUDPUSH II pre-flush spacer and then pump 20 tonnes/24.8m3 (30% excess) of HiLITE 1400 Lead cement with 0.2% Anti Foam + 0.6% Fluid Loss + 0.6% Low Temp Dispersant + 60L/tonne Gas Control Agent + 0.3% Antisettling from 1369m to 5.20m then pump 13 tonnes/9.8m3 (30% excess) of 1900kg/m3 Conventional Class G Tail Cement with 0.6% Fluid Loss + 0.5% Dispersant + 0.2% Anti Foam + 0.2% Retarder + 72L/tonne Gas Control Agent from 1908m to 1369m. Drop plug and displace 37.8m3 of invert. Bump plug 3,500kpa over final circulating pressure of 6,500kpa at 22:01hrs on January 15th 2014, bleed pressure and check floats (holding OK). Pressure test casing to 18,500kpa for 10 minutes (holding OK). Bleed pressure and rig out cementers. Full pre-flush returns: 8m3 of CW8 and 8m3 of MudPushII Spacer, cement at surface by calculated volume results.
23:00	23:45	0.75	INTRM1	DRILL	RURD	P		1,908.00	1,908.00	Lay down landing joint.
23:45	00:00	0.25	INTRM1	DRILL	RURD	T	Non-rig Surface Eqp	1,908.00	1,908.00	Attempt to set Stream-Flo packoff seal assembly above mandrel hanger.

Fluid/Mud Chks: Mud Engineer: Corey Clark

Time	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (Pa•s)	YP Override (Pa)
15:20	1,908.00	1,055.0	68		14.0	5.0

Low Gravity Solids (%)	MBT (kg/m³)	Oil Water Ratio	Chlorides (mg/L)	Calcium (mg/L)	Lime (kg/m³)	Potassium (mg/L)
		86/14	263,512	58	16	

Stab (V)	ECD - Manual Entry (k...	Sand (%)	Solids, Corr. (%)	T Flowline (°C)	HTHP Pressure (kPa)	HTHP Filtrate (mL/30...
700.0	1,061.0	3.2	9.0	32		4.5

...rate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Field Est (Cost)
	2.00	0.00	2,126.66

Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost (Cost)
44.00	6.00	93,328.19

Last BOP Drill

Type	Days Last Chk (...	Last Date	Days Until Next...	Next Check Date
BOP Drill	2	1/13/2014	3	1/18/2014

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
826.00	826.00

Safety Incidents

Date	Com	Category

Drill String: BHA # <BHA No.?>

Bit Run	Drill Bit	Length (m)	IADC Bit Dull	TFA (incl Noz) (mm²)	BHA ROP (m/hr)

Nozzles (mm)	String Length (m)	OD (mm)	Max Rotating Hook Load (daN)

Depth In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hr)	Total Drill Hrs (hr)

Comment

Drill String Components

Item Des	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)

Drilling Parameter: <depthstart> - <depthend> mKB

Cum Depth (m)	Cum Drill...	Int ROP (...	Flow Rate...	WOB (daN)	RPM (r...	SPP (kPa)	Drill Str Wt (d...	SO Str Wt (daN)	PU Str Wt (daN)	Off-Btm Str W...	Drill Tq

Hydraulic Calculations

Bit Hydraulic Powe...	HP/Area (kW/mm²)	% P @ bit (%)	Bit Jet Velocity (m/s)	Bit dP (kPa)	P Drop Annular (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)

...ng Volume (m³)	Bit to Shoe Volume (m³)	Vol Shoe to Top (m³)	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m/...

XII. Completions Daily Reports

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 1
Report Date: 1/25/2014
Final Job Status: GAS
Final Report? Yes

WELL HEADER INFORMATION

Country	State/Province	Region / Division	District	Field Name	Field Code
CANADA	N.W.T.	WCBU	NEW VENTURES	Canyon	

Surface Legal Location	API / UWI	License No.
E-76 65-10 126-45	300E7665-10126-45	EL 470

Orig KB/RT (m)	Ground Elevation (m)	KB-Grd (m)	KB-CF (m)	KB-TF (m)	Total Depth (mKB)	PBTD (All) (mKB)
273.40	268.20	5.20	5.40	4.22	2,910.00	Original Hole - 2,877.30

JOB INFORMATION

Job Category	Primary Job Type	Secondary Job Type	Total Field Estimate (Cost)
COMPLETIONS	INITIAL COMPLETION	RIGLESS	21,945,332.75

Objective
Hydrailically fracture and flow test as part of the 2014 Canol Exploration Program

Actual Start Date	End Date	Abandon Date	Responsible Grp 1	Responsible Grp 2	Responsible Grp 3
1/25/2014 00:00	3/28/2014 08:00		coved	lagartn	Chris Kendall

AFE COST SUMMARY

AFE / RFE / Maint.#	Total AFE Amount (Cost)	Total AFE + Supp Amount (Cost)	Total Field Estimate (Cost)	AFE-Field Estimate (Cost)
10351695	2,111,000.00	2,111,000.00	2,318,381.14	-207,381.14
AFE / RFE / Maint.#	Total AFE Amount (Cost)	Total AFE + Supp Amount (Cost)	Total Field Estimate (Cost)	AFE-Field Estimate (Cost)
10359413	16,997,500.00	20,641,514.00	19,626,951.61	1,014,562.39

DAILY INFORMATION

Report Start Date	Report End Date	Daily Cost Total (Cost)	Cumulative Cost (Cost)	Personnel Regular Hours (hr)
1/25/2014 00:00	1/25/2014 00:00	2,961,069.72	2,961,069.72	

Daily Contacts	Rig
	Weatherford, FS 463

Tubing Pressure (kPa)	Casing Pressure (kPa)	Weather	Temperature (°C)	Lease Condition

Last 24hr Summary

24hr Forecast

DAILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
00:00	00:00		P	Jan 6/2014 - WSS and RCS crew travel to Norman Wells via CPC Charter. RCS Crew orientated via HSE - Derek Tate Jan 7 - 12/2014 - WSS / RCS crew members in CPC Town rack site clearing work areas of snow. Prepare and execute plan to repair 400 bbl tanks / light towers / generators (10 men per day) Jan 13/2014 - Safety and procedural meeting with all on location regarding daily activities. Conduct CPC PJHA regarding loading out equipment, rental repair Spot and rig in Canol Trucking / RCS and begin loading out 8 x 40 matting to staging area at km 27 on CPC road. Continue repairing RCS rental 400 BBL tanks. (15 men) Jan 14/2014 - Safety and procedural meeting with all on location regarding daily activites. Conduct CPC PJHA regarding loading out equipment, rental repair Spot and rig in Canol Trucking / RCS and continue loading out 8 x 40 matting to staging area at km 27 on CPC road. Repairs complete on 400 bbl tanks. Load out 1 - Large Fuel light tower to staging area @ km 27 / Load out 2 x 400 bbl tanks and haul to staging area at km 27 / Pre arrange tanks for hauling to staging area / Utilize front end loader to clean areas of accumulated snow fall between equipment after removal. (13 men) Jan 15/2014 - Safety and procedural meeting with all on location regarding daily activites. Conduct CPC PJHA regarding loading out equipment, rental repair. Spot and rig in Canol Trucking / RCS and continue loading out (pre loading) remaining clean frac tanks and haul to staging area @ km 27 on CPC road. Send RCS crew across river to locate and determine available liners and berming system. Travel in field with Monty Hackett (SLB FRac Crew Co-Ordinator) to perform lease and pre trip road inspection (14 men). Meet with Mac Watson (construction) and discuss dates needed for construction to be ready to spot tank farm.
00:00	00:00		P	Jan 16/2014 - Safety and procedural meeting with all on location regarding daily activites. Conduct CPC PJHA regarding loading out equipment / repair and maintenance. Spot and in rig in Canol Transport (2 trucks short) continue loading out dirty 400 bbl tanks. (9 men)
00	00:00		P	Jan 17/2014 - Safety and procedural meeting with all on location regarding daily activites. Conduct CPC PJHA regarding loading out equipment / repair and maintenance. Travel over to Project area meet with Dave McCormick(Waste cornat),Norm Garberg (const),DuaneEvans (Sim ops), Mac Watson,discussed requirements & marked area for Medic/Boiler ws , Safety meeting trailer, clean tank farm & 3000 m3 C ring for E76 location .Met Drl consultant Richard Turgeon& to base in Norman Wells. (6 men)

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 1
Report Date: 1/25/2014
Final Job Status: GAS
Final Report? Yes

ILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
00:00	00:00		P	Jan 18/2014 - Safety and procedural meeting with all on location regarding daily activites. Conduct CPC PJHA regarding loading out equipment / repair and maintenance. Spot and in rig in Canol Transport (2 trucks short) continue loading out dirty 400 bbl tanks. (9 men)
00:00	00:00		P	Jan 19/2014 - Safety and procedural meeting with all on location regarding daily activites. Conduct CPC PJHA regarding loading out equipment / repair and maintenance. Spot and in rig in Canol Transport (2 trucks short) continue loading out dirty 400 bbl tanks.Traveled to Conoco camp @ km 33 met with George Allerston (camp manager) made arrangements for 16 rooms ,RCS 10 rooms, Weatherford 2 , Conoco 3 ws Lyle ,Trevor & Chris + a spare room.Stopped @ Drl rig location @ km 28 checked with Norm with construction about the clean tank farm pad development,which is to be ready to start placing matting tomorrow.
00:00	00:00		P	Jan 20/2014 - Safety and procedural meeting with all on location regarding daily activites. Conduct CPC PJHA regarding loading out equipment / repair and maintenance. Spot and in rig in Canol Transport (2 trucks short) continue loading out dirty 400 bbl tanks. (9 men)(-33 w/c) no incidents
00:00	00:00		P	Jan 21/2014 - Safety and procedural meeting with all on location regarding daily activites. Conduct CPC PJHA regarding loading out equipment & installing a berm system (12 People) .Measured out placed Clean tank farm matting (8x40), 6m off long side of lease & 35 m from north side running south for 60 m X 10 m wide to the west .Waited on flameless heater to return from repairs in Norman wells.Temp (- 32 c w/c) no incidents.
00:00	00:00		P	Jan 22/2014 - Safety and procedural meeting with all on location regarding daily activites. Conduct CPC PJHA regarding loading out equipment & installing a berm system (12 People) .Heated geo tek & 10m x 55 m liner with 700k air heater , laided out geo tek, assembled berm system panel while liner was warming up.Rolled out liner & built 2 ends 10 m each & back system 55 m installed liner to berm walls.(-25 w/c) no incidents.
00:00	00:00		P	Jan 23/2014 - Safety and procedural meeting with all on location regarding daily activites. Conduct CPC PJHA regarding loading out equipment & installing a berm system (12 People) .Continue to build Clean tank farm berm system&install tanks, walk way plank system & stairs.Made arrangements for 3 gen sets & 2 50/50 ws ,2 super singles,1 safety ws to be truck over km 28.5 water well for staging til Drl moves off equipment.(-21 w/c)
00:00	00:00		P	Jan 24/2014 - Safety and procedural meeting with all on location regarding daily activites. Conduct CPC PJHA regarding loading out equipment & installing a berm system (12 People) .Continue to build Clean tank farm berm system&install tanks, walk way plank system & stairs.Made arrangements for 3 gen sets & 2 50/50 ws ,2 super singles,1 safety ws to be truck over km 28.5 water well for staging til Drl moves off equipment.(-21 w/c)
.00	00:00		P	Jan 24/2014 - Safety and procedural meeting with all on location regarding daily activites. Conduct CPC PJHA regarding loading out equipment (12 People) spot 3 gen sets & 2 50/50 ws ,2 super singles,1 safety ws at km 28.5 til Drl moves off equipment.(-21 w/c)
00:00	00:00		P	Jan 25/2014 - Safety and procedural meeting with all on location regarding daily activites. Conduct CPC PJHA regarding loading out equipment (12 People) spot 1 gen set / WFT Test equipment & light tower at km 28.5 til Drl moves off equipment.(-21 w/c)

FLUID SUMMARY

Fluid	To lease (m³)	From lease (m³)	To well (m³)	From well (m³)	Left to recover (m³)

DAILY COST

BU Desc	Vendor	Activity Code	Amount (Cost)
Surface Completion Equipment Rental	***VENDOR NOT LISTED***	Q300	1,117.07
Trucking/Hauling/ Hot Shot Services	CANOL OILFIELD SERVICES INC	P100	9,320.00
Trucking/Hauling/ Hot Shot Services	CANOL OILFIELD SERVICES INC	P100	7,950.00
Trucking/Hauling/ Hot Shot Services	CANOL OILFIELD SERVICES INC	P100	24,110.00
Trucking/Hauling/ Hot Shot Services	CANOL OILFIELD SERVICES INC	P100	20,270.00
Trucking/Hauling/ Hot Shot Services	CANOL OILFIELD SERVICES INC	P100	17,720.00
Trucking/Hauling/ Hot Shot Services	CANOL OILFIELD SERVICES INC	P100	29,650.00
Trucking/Hauling/ Hot Shot Services	CANOL OILFIELD SERVICES INC	P100	9,545.00
Trucking/Hauling/ Hot Shot Services	CANOL OILFIELD SERVICES INC	P100	10,010.00
Trucking/Hauling/ Hot Shot Services	CANOL OILFIELD SERVICES INC	P100	11,530.00
Trucking/Hauling/ Hot Shot Services	CANOL OILFIELD SERVICES INC	P100	8,250.00
Trucking/Hauling/ Hot Shot Services	CANOL OILFIELD SERVICES INC	P100	6,742.00
Trucking/Hauling/ Hot Shot Services	CANOL OILFIELD SERVICES INC	P100	800.00
Trucking/Hauling/ Hot Shot Services	CANOL OILFIELD SERVICES INC	P100	17,385.00
Trucking/Hauling/ Hot Shot Services	CANOL OILFIELD SERVICES INC	P100	20,470.00
Trucking/Hauling/ Hot Shot Services	CANOL OILFIELD SERVICES INC	P100	17,140.00
Trucking/Hauling/ Hot Shot Services	CANOL OILFIELD SERVICES INC	P100	16,180.00
ety Equipment & Services	CONOCO	T430	3,500.00
Safety Equipment & Services	CONOCO	T430	9,350.00
Surface Completion Equipment Rental	CORNERSTONE OILFIELD SERVICES LTD	Q300	5,000.00
Surface Completion Equipment Rental	CORNERSTONE OILFIELD SERVICES LTD	Q300	5,00
Surface Completion Equipment Rental	CORNERSTONE OILFIELD SERVICES LTD	Q300	5,0
Service Rig	CORNERSTONE OILFIELD SERVICES LTD	E120	105,00

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 2
Report Date: 1/26/2014
Final Job Status: GAS
Final Report? Yes

LL HEADER INFORMATION

Country	State/Province	Region / Division	District	Field Name	Field Code
CANADA	N.W.T.	WCBU	NEW VENTURES	Canyon	

Surface Legal Location	API / UWI	License No.
E-76 65-10 126-45	300E7665-10126-45	EL 470

Orig KB/RT (m)	Ground Elevation (m)	KB-Grd (m)	KB-CF (m)	KB-TF (m)	Total Depth (mKB)	PBTD (All) (mKB)
273.40	268.20	5.20	5.40	4.22	2,910.00	Original Hole - 2,877.30

JOB INFORMATION

Job Category	Primary Job Type	Secondary Job Type	Total Field Estimate (Cost)
COMPLETIONS	INITIAL COMPLETION	RIGLESS	21,945,332.75

Objective
Hydrailically fracture and flow test as part of the 2014 Canol Exploration Program

Actual Start Date	End Date	Abandon Date	Responsible Grp 1	Responsible Grp 2	Responsible Grp 3
1/25/2014 00:00	3/28/2014 08:00		coved	lagartn	Chris Kendall

AFE COST SUMMARY

AFE / RFE / Maint.#	Total AFE Amount (Cost)	Total AFE + Supp Amount (Cost)	Total Field Estimate (Cost)	AFE-Field Estimate (Cost)
10351695	2,111,000.00	2,111,000.00	2,318,381.14	-207,381.14
AFE / RFE / Maint.#	**Total AFE Amount (Cost)**	**Total AFE + Supp Amount (Cost)**	**Total Field Estimate (Cost)**	**AFE-Field Estimate (Cost)**
10359413	16,997,500.00	20,641,514.00	19,626,951.61	1,014,562.39

DAILY INFORMATION

Report Start Date	Report End Date	Daily Cost Total (Cost)	Cumulative Cost (Cost)	Personnel Regular Hours (hr)
1/26/2014 07:30	1/26/2014 17:30	1,430,026.49	4,391,096.21	184.00

Daily Contacts
Completion Engineer, Theorn LaGarde, 403-710-9753; WS Superintendent, Derrick Cove, 780-831-1314; WS Supervisor, Chris Kendall, 780-518-3284; WS Supervisor, Lyle McGratton, 403 968-3505; WS Supervisor, Trevor Oleskiw, 403 581-5126

Rig
Weatherford, FS 463

Tubing Pressure (kPa)	Casing Pressure (kPa)	Weather	Temperature (°C)	Lease Condition
		Clear	-20	Rough

Last 24hr Summary
Continue staging equipment from Norman Wells / Ice Road to O6 location

24hr Forecast
Continue staging equipment from Norman Wells / Ice Road to O6 location / Repair and maintenance on equipment

ILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
07:30	08:00	0.50	P	Safety and procedural meeting with all on location regarding daily activites. Conduct CPC PJHA regarding equipment maintenance / spotting and offloading equipment
08:00	17:30	9.50	P	Lyle McGratton / Trevor Oleskiw / RCS crew travel to P20 rig site to install berming system for dehydrator unit / tank farm. Job cancelled. Crew sourced out liner / berming system for tank farm Chris Kendall / WFT Test crew inspect test equipment and noted deficiencies / damages. Pics captured and sent to G.P. operations. Offloaded 2 x Aerial Work Platforms from Ron's Auto in Yellowknife. Spot and rig in heat to I.E.S. work trailer Spot and rig in HD Rentals recycle trailer

FLUID SUMMARY

Fluid	To lease (m³)	From lease (m³)	To well (m³)	From well (m³)	Left to recover (m³)
FRESH WATER	27.00	0.00	27.00	0.00	27.00

DAILY COST

BU Desc	Vendor	Activity Code	Amount (Cost)
In-House Engineering & Design	CONOCO	V100	34,500.00
In-House Engineering & Design	CONOCO	V100	386,700.00
Service Rig	CORNERSTONE OILFIELD SERVICES LTD	E120	91,800.00
Service Rig	CORNERSTONE OILFIELD SERVICES LTD	E120	18,900.00
Surface Completion Equipment Rental	CORNERSTONE OILFIELD SERVICES LTD	Q300	5,062.50
Maintain Road & Location	GP MASONRY	D230	1,890.00
Safety Equipment & Services	HODGSON'S CONTRACTING (2005) LTD	T430	6,345.00
Fracture Stimulation Services	ISOLATION EQUIPMENT SERVICES INC	N110	2,000.00
Fracture Stimulation Services	ISOLATION EQUIPMENT SERVICES INC	N110	2,000.00
Fracture Stimulation Services	ISOLATION EQUIPMENT SERVICES INC	N110	2,000.00
Fracture Stimulation Services	ISOLATION EQUIPMENT SERVICES INC	N110	2,000.00
Surface Completion Equipment Rental	MYB CONSTRUCTION LTD	Q300	10,800.00
mpletion Fluids & Other Chem	NORTHERN TRUCK SERVICES (1994) LTD	G300	10,440.00
Completion Fluids & Other Chem	NORTHERN TRUCK SERVICES (1994) LTD	G300	3,000.00
Completion Fluids & Other Chem	NORTHERN TRUCK SERVICES (1994) LTD	G300	6,860.00
Completion Fluids & Other Chem	NORTHERN TRUCK SERVICES (1994) LTD	G300	80,880.00
Surface Completion Equipment Rental	RIGSAT COMMUNICATIONS INC	Q300	405.00
Surface Completion Equipment Rental	RIGSAT COMMUNICATIONS INC	Q300	100.00

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 3
Report Date: 1/27/2014
Final Job Status: GAS
Final Report? Yes

LL HEADER INFORMATION

Country	State/Province	Region / Division	District	Field Name	Field Code
CANADA	N.W.T.	WCBU	NEW VENTURES	Canyon	

Surface Legal Location	API / UWI	License No.
E-76 65-10 126-45	300E7665-10126-45	EL 470

Orig KB/RT (m)	Ground Elevation (m)	KB-Grd (m)	KB-CF (m)	KB-TF (m)	Total Depth (mKB)	PBTD (All) (mKB)
273.40	268.20	5.20	5.40	4.22	2,910.00	Original Hole - 2,877.30

JOB INFORMATION

Job Category	Primary Job Type	Secondary Job Type	Total Field Estimate (Cost)
COMPLETIONS	INITIAL COMPLETION	RIGLESS	21,945,332.75

Objective
Hydrailically fracture and flow test as part of the 2014 Canol Exploration Program

Actual Start Date	End Date	Abandon Date	Responsible Grp 1	Responsible Grp 2	Responsible Grp 3
1/25/2014 00:00	3/28/2014 08:00		coved	lagartn	Chris Kendall

AFE COST SUMMARY

AFE / RFE / Maint.#	Total AFE Amount (Cost)	Total AFE + Supp Amount (Cost)	Total Field Estimate (Cost)	AFE-Field Estimate (Cost)
10351695	2,111,000.00	2,111,000.00	2,318,381.14	-207,381.14
AFE / RFE / Maint.#	**Total AFE Amount (Cost)**	**Total AFE + Supp Amount (Cost)**	**Total Field Estimate (Cost)**	**AFE-Field Estimate (Cost)**
10359413	16,997,500.00	20,641,514.00	19,626,951.61	1,014,562.39

DAILY INFORMATION

Report Start Date	Report End Date	Daily Cost Total (Cost)	Cumulative Cost (Cost)	Personnel Regular Hours (hr)
1/27/2014 07:30	1/27/2014 17:30	306,629.50	4,697,725.71	280.00

Daily Contacts
Completion Engineer, Theorn LaGarde, 403-710-9753; WS Superintendent, Derrick Cove, 780-831-1314; WS Supervisor, Chris Kendall, 780-518-3284; WS Supervisor, Lyle McGratton, 403 968-3505; WS Supervisor, Trevor Oleskiw, 403 581-5126

Rig
Weatherford, FS 463

Tubing Pressure (kPa)	Casing Pressure (kPa)	Weather	Temperature (°C)	Lease Condition
		Clear	-20	Rough

Last 24hr Summary
Continue staging equipment from Norman Wells / Ice Road to O6 location / Repair and maintenance on equipment

24hr Forecast
Regin moving equipment on location from staging areas

ILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
07:30	08:00	0.50	P	Safety and procedural meeting with all on location regarding daily activities. Conduct CPC PJHA regarding moving equipment / equipment maintenance
08:00	17:30	9.50	P	Continue inspecting test equipment / transporting light towers / light stands / washrooms onto storage site at km 27.5 and O6 location. WSS Crew Change Lyle McGratton - Days off Trevor Oleskiw - On shift Myles Hahn - On shift Mike Short - On shift Chris Kendall - On shift

FLUID SUMMARY

Fluid	To lease (m³)	From lease (m³)	To well (m³)	From well (m³)	Left to recover (m³)
FRESH WATER	0.00	0.00	0.00	0.00	27.00

DAILY COST

BU Desc	Vendor	Activity Code	Amount (Cost)
Wellsite Supervision & Engineering	***VENDOR NOT LISTED***	T130	30,000.00
Service Rig	CANOL OILFIELD SERVICES INC	E120	1,650.00
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	650.00
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	650.00
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	650.00
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	650.00
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	650.00
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	650.00
Service Rig	CORNERSTONE OILFIELD SERVICES LTD	E120	91,800.00
Service Rig	CORNERSTONE OILFIELD SERVICES LTD	E120	18,900.00
Surface Completion Equipment Rental	CORNERSTONE OILFIELD SERVICES LTD	Q300	5,062.50
fety Equipment & Services	HODGSON'S CONTRACTING (2005) LTD	T430	6,345.00
Wellsite Supervision & Engineering	M HAHN CONSULTING INC	T130	2,080.00
Surface Completion Equipment Rental	MACKAY RANGE DEVELOPMENT CORP	Q300	25,000.00
Surface Completion Equipment Rental	MYB CONSTRUCTION LTD	Q300	7,500.00
Surface Completion Equipment Rental	MYB CONSTRUCTION LTD	Q300	10,8
Completion Fluids & Other Chem	NORTHERN TRUCK SERVICES (1994) LTD	G300	10,4

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 4
Report Date: 1/28/2014
Final Job Status: GAS
Final Report? Yes

WELL HEADER INFORMATION

Country	State/Province	Region / Division	District	Field Name	Field Code
CANADA	N.W.T.	WCBU	NEW VENTURES	Canyon	

Surface Legal Location	API / UWI	License No.
E-76 65-10 126-45	300E7665-10126-45	EL 470

Orig KB/RT (m)	Ground Elevation (m)	KB-Grd (m)	KB-CF (m)	KB-TF (m)	Total Depth (mKB)	PBTD (All) (mKB)
273.40	268.20	5.20	5.40	4.22	2,910.00	Original Hole - 2,877.30

JOB INFORMATION

Job Category	Primary Job Type	Secondary Job Type	Total Field Estimate (Cost)
COMPLETIONS	INITIAL COMPLETION	RIGLESS	21,945,332.75

Objective
Hydrailically fracture and flow test as part of the 2014 Canol Exploration Program

Actual Start Date	End Date	Abandon Date	Responsible Grp 1	Responsible Grp 2	Responsible Grp 3
1/25/2014 00:00	3/28/2014 08:00		coved	lagartn	Chris Kendall

AFE COST SUMMARY

AFE / RFE / Maint.#	Total AFE Amount (Cost)	Total AFE + Supp Amount (Cost)	Total Field Estimate (Cost)	AFE-Field Estimate (Cost)
10351695	2,111,000.00	2,111,000.00	2,318,381.14	-207,381.14
AFE / RFE / Maint.#	**Total AFE Amount (Cost)**	**Total AFE + Supp Amount (Cost)**	**Total Field Estimate (Cost)**	**AFE-Field Estimate (Cost)**
10359413	16,997,500.00	20,641,514.00	19,626,951.61	1,014,562.39

DAILY INFORMATION

Report Start Date	Report End Date	Daily Cost Total (Cost)	Cumulative Cost (Cost)	Personnel Regular Hours (hr)
1/28/2014 07:30	1/28/2014 17:30	122,457.00	4,820,182.71	394.00

Daily Contacts
Completion Engineer, Theorn LaGarde, 403-710-9753; WS Superintendent, Derrick Cove, 780-831-1314; WS Supervisor, Chris Kendall, 780-518-3284; WS Supervisor, Myles Hahn, 780-402-0500; WS Supervisor, Michael Short, 403 348-7127

Rig
Weatherford, FS 463

Tubing Pressure (kPa)	Casing Pressure (kPa)	Weather	Temperature (°C)	Lease Condition
	0	Overcast	-21	Rough

Last 24hr Summary
Continue offloading completion equipment / Offload 93 m³ methanol / Prep West side for shacks / Spot Generator and Meeting Shack

24hr Forecast
Begin spotting C-Ring base and liner / Haul in office shack and sleepers / Install Gate Valve / Nipple up frac head / prep location with construction for flow back
n

DAILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
07:30	08:00	0.50	P	Safety and procedural meeting with all on location regarding daily activites. Conduct CPC PJHA regaring multiple operations.
08:00	17:30	9.50	P	Continue offloading equipment from Ice Road C-Ring and related equipment Generator and transfer pump 93 m³ Methanol 157 m³ sawdust for C-Ring Base 5 - Loads staged in Norman Wells for Jan 29/14 delivery Spotted and rigged in115 kVW Generator and Safety Meeting Shack Prep side of location via construction for C-Ring base and Office shacks. NOTE: During discussion with Stream Flo industries representative on Jan 26/2014 it was revealed that primary seal on Intermediate head was leaking and would not hold pressure. Contacted Stream Flo industries in Edmonton and arranged for Arctic Pac to be delivered on Chartered Flight Jan 27/14. Received arctic pac on Jan 27/14 and waited until liner was removed and construction complete around wellhead to continue pressure testing operations. MIRU Enerbuilt Technologies Flamess heater and heated wellhead for 4 hours prior to beginning pressure test operations. Zero Well Pressure. Stream Flo rep contacted main office for advice regarding amount of Arctic Pac grease to inject to effect seal. SFI Rep injected 12 sticks of Arctic Pac grease into primary seal of 11" x 5 K intermediate flange followed by 2L envio-oil. Slight evidence of enviro-oil spilling out of intermediate casing valve. SFI Rep attempted to pressure test seals inside Intermediate Bowl on landing mandrel and was able to bypass. WSS utilized flash light to peer through 2" casing valve and tell if oil was coming up or down and noticed that Pack-off was not correctly aligned with intermediate spool (appears to be misaligned by +/- 40%). Pic captured and sent to G.P. operations, Derrick Cove and discussed findings. Pressure tested primary seal on 4 1/2" production casing to 6000 psi = Good 15 minute test. Pressure tested secondary seal on 11" x 5K intermediate spool to 5000 psi = Good 15 minute test. Repositioned flameless heater to 7 1/16" gate valve for morning install

FLUID SUMMARY

Fluid	To lease (m³)	From lease (m³)	To well (m³)	From well (m³)	Left to recover (m³)
FRESH WATER	93.00	0.00			27.00

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 5
Report Date: 1/29/2014
Final Job Status: GAS
Final Report? Yes

WELL HEADER INFORMATION

Country	State/Province	Region / Division	District	Field Name	Field Code
CANADA	N.W.T.	WCBU	NEW VENTURES	Canyon	

Surface Legal Location	API / UWI	License No.
E-76 65-10 126-45	300E7665-10126-45	EL 470

Orig KB/RT (m)	Ground Elevation (m)	KB-Grd (m)	KB-CF (m)	KB-TF (m)	Total Depth (mKB)	PBTD (All) (mKB)
273.40	268.20	5.20	5.40	4.22	2,910.00	Original Hole - 2,877.30

JOB INFORMATION

Job Category	Primary Job Type	Secondary Job Type	Total Field Estimate (Cost)
COMPLETIONS	INITIAL COMPLETION	RIGLESS	21,945,332.75

Objective
Hydrailically fracture and flow test as part of the 2014 Canol Exploration Program

Actual Start Date	End Date	Abandon Date	Responsible Grp 1	Responsible Grp 2	Responsible Grp 3
1/25/2014 00:00	3/28/2014 08:00		coved	lagartn	Chris Kendall

AFE COST SUMMARY

AFE / RFE / Maint.#	Total AFE Amount (Cost)	Total AFE + Supp Amount (Cost)	Total Field Estimate (Cost)	AFE-Field Estimate (Cost)
10351695	2,111,000.00	2,111,000.00	2,318,381.14	-207,381.14
10359413	16,997,500.00	20,641,514.00	19,626,951.61	1,014,562.39

DAILY INFORMATION

Report Start Date	Report End Date	Daily Cost Total (Cost)	Cumulative Cost (Cost)	Personnel Regular Hours (hr)
1/29/2014 07:30	1/29/2014 17:30	137,279.00	4,957,461.71	382.00

Daily Contacts
Completion Engineer, Theorn LaGarde, 403-710-9753; WS Superintendent, Derrick Cove, 780-831-1314; WS Supervisor, Chris Kendall, 780-518-3284; WS Supervisor, Myles Hahn, 780-402-0500; WS Supervisor, Michael Short, 403 348-7127

Rig
Weatherford, FS 463

Tubing Pressure (kPa)	Casing Pressure (kPa)	Weather	Temperature (°C)	Lease Condition
		Clear	-22	Rough

Last 24hr Summary
Complete C-Ring Pad / Measure and partially spread sawdust / Install 7 1/16" x 10K Gate Valve / Install 4 1/16" Gate Valve / Flow Block / MIRU Office Shacks / Sleepers / Power / Septic / Light Towers.

24hr Forecast
t up 3000 m³ C-Ring / MIRU Temporary work platform / Install buffalo head / Offload water to C-Ring / Spot boiler / Generator / Begin spotting test equipment

DAILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
07:30	08:00	0.50	P	Safety and procedural meeting with all on location regarding daily activites. Conduct CPC PJHA regarding multiple operations / hauling equipment / installing frac head
08:00	17:30	9.50	P	RCS Crew continue offloading and tallying equipment being delivered and noting deficiencies. CPC Construction still on location preparing pad for C-Ring / East / South sides of location for equipment positioning. CPC Environmental on location looking after loading out cuttings waste and loading out materials Remove 7 1/16" top cap from THF and visually inspect inside and notice 1/4" sqaured shoulder that may create hang up area during coil ops. Pic captured and sent to G.P. operations, Derrick Cove for intrepretation and discussion. Installed and torqued to spec via I.E.S. hydraulic torque wrench the 7 1/16" Gate Valve. Installed and torqued to spec via I.E.S. hydraulic torqure wrench the lower half of the frac head (flow block with 4 1/16" manual valve) Spotted and rigged in Medical / Boilerman 50/50 Shack, Wellsite Supervisor / Weatherford Testing 50/50 Shack, 2 x Completion Superintendent and Engineering sleepers / Power / Garbage / Septic / light Towers. Pace off and mark out base for C-Ring install. Partially spread sawdust for base. Intall personal fall restraint systems on 400 bbl tanks Removed 2 1/16" x 34.5 mPa surface casing valves / installed blanking flanges / installed 2" vent piping system Continue filling intermediate seal void with Arctic Pac grease and enviro-oil and establish 3800 psi test. Lost 100 psi over 15 min. Bleed back to zero and retest seals in morning to confirm integrity

FLUID SUMMARY

Fluid	To lease (m³)	From lease (m³)	To well (m³)	From well (m³)	Left to recover (m³)
FRESH WATER	0.00	0.00	0.00	0.00	27.00

DAILY COST

BU Desc	Vendor	Activity Code	Amount (Cost)
Service Rig	CANOL OILFIELD SERVICES INC	E120	5,800.00
Trucking/Hauling/ Hot Shot Services	CANOL OILFIELD SERVICES INC	P100	19,235.00
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	3,760.00
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	3,920.00
mpletion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	3,920.00
Wellsite Supervision & Engineering	DEN JAR CONSULTING LTD	T130	1,670.00
Safety Equipment & Services	FRONTIERMEDEX CANADA LTD/ EXLOGS SAHTU LTD	T430	2,000.00
Safety Equipment & Services	HODGSON'S CONTRACTING (2005) LTD	T430	6,34[illegible]
Wellsite Supervision & Engineering	M HAHN CONSULTING INC	T130	1,[illegible]
Surface Completion Equipment Rental	MACKAY RANGE DEVELOPMENT CORP	Q300	9[illegible]

Report Printed: 4/14/201

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 6
Report Date: 1/30/2014
Final Job Status: GAS
Final Report? Yes

WELL HEADER INFORMATION

Country	State/Province	Region / Division	District	Field Name	Field Code
CANADA	N.W.T.	WCBU	NEW VENTURES	Canyon	

Surface Legal Location	API / UWI	License No.
E-76 65-10 126-45	300E7665-10126-45	EL 470

Orig KB/RT (m)	Ground Elevation (m)	KB-Grd (m)	KB-CF (m)	KB-TF (m)	Total Depth (mKB)	PBTD (All) (mKB)
273.40	268.20	5.20	5.40	4.22	2,910.00	Original Hole - 2,877.30

JOB INFORMATION

Job Category	Primary Job Type	Secondary Job Type	Total Field Estimate (Cost)
COMPLETIONS	INITIAL COMPLETION	RIGLESS	21,945,332.75

Objective
Hydrailically fracture and flow test as part of the 2014 Canol Exploration Program

Actual Start Date	End Date	Abandon Date	Responsible Grp 1	Responsible Grp 2	Responsible Grp 3
1/25/2014 00:00	3/28/2014 08:00		coved	lagartn	Chris Kendall

AFE COST SUMMARY

AFE / RFE / Maint.#	Total AFE Amount (Cost)	Total AFE + Supp Amount (Cost)	Total Field Estimate (Cost)	AFE-Field Estimate (Cost)
10351695	2,111,000.00	2,111,000.00	2,318,381.14	-207,381.14
AFE / RFE / Maint.#	Total AFE Amount (Cost)	Total AFE + Supp Amount (Cost)	Total Field Estimate (Cost)	AFE-Field Estimate (Cost)
10359413	16,997,500.00	20,641,514.00	19,626,951.61	1,014,562.39

DAILY INFORMATION

Report Start Date	Report End Date	Daily Cost Total (Cost)	Cumulative Cost (Cost)	Personnel Regular Hours (hr)
1/30/2014 07:30	1/30/2014 18:30	158,666.00	5,116,127.71	372.00

Daily Contacts
Completion Engineer, Theorn LaGarde, 403-710-9753; WS Superintendent, Derrick Cove, 780-831-1314; WS Supervisor, Chris Kendall, 780-518-3284; WS Supervisor, Myles Hahn, 780-402-0500; WS Supervisor, Michael Short, 403 348-7127

Rig
Weatherford, FS 463

Tubing Pressure (kPa)	Casing Pressure (kPa)	Weather	Temperature (°C)	Lease Condition
		Clear	-18	Rough

Last 24hr Summary
Spread sawdaust for under C-ring liner. Performed a 10 minute SCVF test as per directive 20. Zero bubbles (no flow) detected in 10 minutes. Good test. Pumped 1/2 stick of arctic pack into wellhead and pressure tested intermediate casing bowl primary seals to 33.5MPa for 15 minutes. Good test. CPC construction worked on several parts of location building up lease and leveling. Spread out Geo mat and liner for C-ring. Stood C-ring.

r Forecast
.nish rig in of C-ring and start to fill. Spot boilers and frac manifold. Pump and ready water transfer station at lake.

DAILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
07:30	08:00	0.50	P	Held a daily safety and operations meeting with all personnel. Reviewed and discussed CPC PJHA #30012014 regarding daily activities and all associated hazards. Reviewed and discussed ERP plan and emergency procedures.
08:00	11:45	3.75	P	Performed a walk around inspection. Utilized track hoe to finish dumping sawdust into C-ring area (loader was supposed to do it but was broken down this morning). Attempted to use the grader to level out sawdust but were unsuccessful as the sawdust just slid on the ice and bunched up. Spread and leveled out all sawdust by hand with shovels (108' diameter). Performed a ten minute SCVF test as per directive 20. Zero bubbles (no flow) in ten minutes. Good test. Stream flo pumped 1/2 a stick of arctic pack into wellhead and pressure tested the primary seals on the intermediate casing bowl. Pressured up to 33500kPa. Pressure held solid for 15 minutes with no leak off. Good test. Filled 1.0m deep cellar up with sawdust. Construction leveled area around wellhead and froze in.
11:45	13:30	1.75	P	Moved Geo textile fiber cloth over to C-ring area and spread out over the sawdust. Spead out liner over top of Geo mat. Spotted HD work platform at wellhead. Moved on and spotted Weatherford tool shead and NOV gen set. Heated gen set with dry heat machine.
13:30	18:30	5.00	P	Started to rig in Sewer system on shacks. Rigged in full satellite communications package (see phone numbers below). Spotted C-ring panels with track hoe. Stood all 16 panels one by one securing each one as we went (40km wind gust slowed rigging in panels considerably). Construction was continuing to build up and level side of location where flow back tank farm is to be spotted. All drilling's mix off bins and contaminated snow have now been hauled off location. Secured equipment for the night. We will continue with Rig in of C-ring liner in the AM. On site communications satellite phone numbers: Well Site Supervisors Shack: 403-538-6877 Test Shack: 403-538-6861 Superintendents Shack: 403-444-1305 Engineers shack: 403-648-9061

FLUID SUMMARY

Fluid	To lease (m³)	From lease (m³)	To well (m³)	From well (m³)	Left to recover (m³)
FRESH WATER	0.00	0.00	0.00	0.00	27.00

DAILY COST

BU Desc	Vendor	Activity Code	Amount (Cost)
Rig Camp	***VENDOR NOT LISTED***	E500	5,000.00

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 7
Report Date: 1/31/2014
Final Job Status: GAS
Final Report? Yes

WELL HEADER INFORMATION

Country	State/Province	Region / Division	District	Field Name	Field Code
CANADA	N.W.T.	WCBU	NEW VENTURES	Canyon	

Surface Legal Location	API / UWI	License No.
E-76 65-10 126-45	300E7665-10126-45	EL 470

Orig KB/RT (m)	Ground Elevation (m)	KB-Grd (m)	KB-CF (m)	KB-TF (m)	Total Depth (mKB)	PBTD (All) (mKB)
273.40	268.20	5.20	5.40	4.22	2,910.00	Original Hole - 2,877.30

JOB INFORMATION

Job Category	Primary Job Type	Secondary Job Type	Total Field Estimate (Cost)
COMPLETIONS	INITIAL COMPLETION	RIGLESS	21,945,332.75

Objective
Hydrailically fracture and flow test as part of the 2014 Canol Exploration Program

Actual Start Date	End Date	Abandon Date	Responsible Grp 1	Responsible Grp 2	Responsible Grp 3
1/25/2014 00:00	3/28/2014 08:00		coved	lagartn	Chris Kendall

AFE COST SUMMARY

AFE / RFE / Maint.#	Total AFE Amount (Cost)	Total AFE + Supp Amount (Cost)	Total Field Estimate (Cost)	AFE-Field Estimate (Cost)
10351695	2,111,000.00	2,111,000.00	2,318,381.14	-207,381.14
10359413	16,997,500.00	20,641,514.00	19,626,951.61	1,014,562.39

DAILY INFORMATION

Report Start Date	Report End Date	Daily Cost Total (Cost)	Cumulative Cost (Cost)	Personnel Regular Hours (hr)
1/31/2014 07:30	1/31/2014 18:30	672,989.00	5,789,116.71	498.00

Daily Contacts
Completion Engineer, Theorn LaGarde, 403-710-9753; WS Superintendent, Derrick Cove, 780-831-1314; WS Supervisor, Chris Kendall, 780-518-3284; WS Supervisor, Myles Hahn, 780-402-0500; WS Supervisor, Michael Short, 403 348-7127

Rig
Weatherford, FS 463

Tubing Pressure (kPa)	Casing Pressure (kPa)	Weather	Temperature (°C)	Lease Condition
		Overcast	-8	Ice Pad

Last 24hr Summary
Construction continued to build and level south side of location. Continued to haul in and spot equipment (HD boiler, RCS pump shack and water managment equipment, frac manifold, 8 x 40 mats, 90 ton crane). Finished rig in of C-ring. Off loaded 75m³ of clean fresh water from Lake into C-ring.

24hr Forecast
ul in all Weatherford test equipment and spot. Rig in flow back tank farm.

DAILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
07:30	08:00	0.50	P	Held a daily safety and operations meeting with all personnel. Reviewed and discussed CPC PJHA #31012014 regarding daily activities and all associated hazards. Reviewed and discussed ERP plan and emergency procedures.
08:00	16:15	8.25	P	Performed a walk around inspection. 08:00 - 16:15 Continued with rig in of C-ring. Pulled liner up walls of C-ring and clamped. 08:00 - 17:30 Construction continued to build up and level south side of location (all testing equipment and flow back tank farm will be on the south side of location). Spotted HD boiler. Heated boiler with dry heat fired up built in generator. Spotted RCS pump shack by C-ring. Moved RCS submersible pump and 8" aluminum pump lines down to the Lake. CPC construction augured 2 holes in lake (ice was profiled at 130cm and is good for 67000kgs). Mobile boiler was used to widen auger holes in ice (monitored by CPC environmental hand Gord Saurer). Moved in 90 ton crane and spotted frac manifold in tank farm. Hauled in 11 8 x 40 mats.
16:15	18:00	1.75	P	Black Opal continued to rig in septic system for shacks (not finished yet). Off loaded 75m³ of fresh water into the C-ring from the Lake (WS-02). Finished trimming liner around outside of C-ring. Secured equipment for the night.

FLUID SUMMARY

Fluid	To lease (m³)	From lease (m³)	To well (m³)	From well (m³)	Left to recover (m³)
FRESH WATER	75.00	0.00			27.00

DAILY COST

BU Desc	Vendor	Activity Code	Amount (Cost)
Rig Camp	***VENDOR NOT LISTED***	E500	5,000.00
Surface Completion Equipment Rental	BOREALIS COMMUNICATIONS INC	Q300	2,835.00
Surface Completion Equipment Rental	BOREALIS COMMUNICATIONS INC	Q300	5,947.00
Service Rig	CANOL OILFIELD SERVICES INC	E120	5,952.00
Fracture Stimulation Services	CANOL OILFIELD SERVICES INC	N110	50,800.00
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	1,985.00
mpletion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	1,985.00
ompletion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	1,985.00
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	1,985.00
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	1,985.00
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	2,05
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	2,05

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 8
Report Date: 2/1/2014
Final Job Status: GAS
Final Report? Yes

HEADER INFORMATION

y	State/Province	Region / Division	District	Field Name	Field Code
ADA	N.W.T.	WCBU	NEW VENTURES	Canyon	

Surface Legal Location	API / UWI	License No.
E-76 65-10 126-45	300E7665-10126-45	EL 470

Orig KB/RT (m)	Ground Elevation (m)	KB-Grd (m)	KB-CF (m)	KB-TF (m)	Total Depth (mKB)	PBTD (All) (mKB)
273.40	268.20	5.20	5.40	4.22	2,910.00	Original Hole - 2,877.30

JOB INFORMATION

Job Category	Primary Job Type	Secondary Job Type	Total Field Estimate (Cost)
COMPLETIONS	INITIAL COMPLETION	RIGLESS	21,945,332.75

Objective
Hydrailically fracture and flow test as part of the 2014 Canol Exploration Program

Actual Start Date	End Date	Abandon Date	Responsible Grp 1	Responsible Grp 2	Responsible Grp 3
1/25/2014 00:00	3/28/2014 08:00		coved	lagartn	Chris Kendall

AFE COST SUMMARY

AFE / RFE / Maint.#	Total AFE Amount (Cost)	Total AFE + Supp Amount (Cost)	Total Field Estimate (Cost)	AFE-Field Estimate (Cost)
10351695	2,111,000.00	2,111,000.00	2,318,381.14	-207,381.14
10359413	16,997,500.00	20,641,514.00	19,626,951.61	1,014,562.39

DAILY INFORMATION

Report Start Date	Report End Date	Daily Cost Total (Cost)	Cumulative Cost (Cost)	Personnel Regular Hours (hr)
2/1/2014 07:30	2/2/2014 06:00	193,716.00	5,982,832.71	618.00

Daily Contacts
Completion Engineer, Theorn LaGarde, 403-710-9753; WS Superintendent, Derrick Cove, 780-831-1314; WS Supervisor, Chris Kendall, 780-518-3284; WS Supervisor, Myles Hahn, 780-402-0500; WS Supervisor, Michael Short, 403 348-7127

Rig
Weatherford, FS 463

Tubing Pressure (kPa)	Casing Pressure (kPa)	Weather	Temperature (°C)	Lease Condition
		Light Snow	-8	Ice Pad

Last 24hr Summary
Hauled water from lake (WS-02) and off loaded into C-ring. Filled boilers and fired. Moved on all Weatherford tesing equipment and started to rig in. Spotted mats for flowback tank farm. Started 24 hour operations (fluid hauling).

24hr Forecast
in test equipment. Move in frac equipment and spot. Build berm system for flowback tank farm.

TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
07:30	08:00	0.50	P	Held a daily safety and operations meeting with all personnel. Reviewed and discussed CPC PJHA #01022014 regarding daily activities and all associated hazards. Reviewed and discussed ERP plan and emergency procedures.
08:00	18:30	10.50	P	Performed a walk around inspection. Started to haul water from lake (WS-02) filling C-ring and 400bbl frac tanks. Filled #1 HD boiler with water and fired. Spotted rigless anchors around wellhead for coil tubing. Spotted HD heat exchanger and #2 HD boiler. Filled boiler with diesel and water. Fired #2 boiler and created head of steam. Continued to haul RCS water management equipment to WS-02. Cut hole in ice. Spotted pump station and sunk submersible pump. Fired generator, plugged in pump and rigged in lights. Laid 8" water transfer/load line to edge of lake. Tied in 8" suction from C-ring into the transfer pump. Installed victolic flanges onto the frac manifold. Rigged 8" line from transfer pump into frac manifold. Hauled in and spotted mats needed for Weatherford test equipment. Spotted flare stacks. Hauled in and spotted all remaining test equipment and started to rig in. Spotted 12 mats on south side of location for flowback tank farm. Tarped in and heated liner and Geo mat for tank farm.
18:30	19:30	1.00	P	Night shift crews arrived on location. Held pre-job safety and operations meeting with night shift personnel. Review PJHA # 01022014C on hauling and heating water hazards. Discuss ERP plan and procedures. Ensure workers have all required training certificates. New workers fill out medical forms for medic.Perform lease walk around.
19:30	06:00	10.50	P	Continue to haul water from lake (WS-02) to fill C-ring and 400bbl frac tanks. 02:30am was able to catch prime with heat exchange unit and begin heating C-ring. Estimated volume to tank - 840 m³

FLUID SUMMARY

Fluid	To lease (m³)	From lease (m³)	To well (m³)	From well (m³)	Left to recover (m³)
FRESH WATER	1,520.00	0.00			27.00

DAILY COST

BU Desc	Vendor	Activity Code	Amount (Cost)
mp	***VENDOR NOT LISTED***	E500	500.00
ce Completion Equipment Rental	BOREALIS COMMUNICATIONS INC	Q300	554.00
Service Rig	CANOL OILFIELD SERVICES INC	E120	5,952.00
Fracture Stimulation Services	CANOL OILFIELD SERVICES INC	N110	14,712.00
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	3,430.00

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 9
Report Date: 2/2/2014
Final Job Status: GAS
Final Report? Yes

WELL HEADER INFORMATION

Country	State/Province	Region / Division	District	Field Name	Field Code
CANADA	N.W.T.	WCBU	NEW VENTURES	Canyon	

Surface Legal Location	API / UWI	License No.
E-76 65-10 126-45	300E7665-10126-45	EL 470

Orig KB/RT (m)	Ground Elevation (m)	KB-Grd (m)	KB-CF (m)	KB-TF (m)	Total Depth (mKB)	PBTD (All) (mKB)
273.40	268.20	5.20	5.40	4.22	2,910.00	Original Hole - 2,877.30

JOB INFORMATION

Job Category	Primary Job Type	Secondary Job Type	Total Field Estimate (Cost)
COMPLETIONS	INITIAL COMPLETION	RIGLESS	21,945,332.75

Objective
Hydraulically fracture and flow test as part of the 2014 Canol Exploration Program

Actual Start Date	End Date	Abandon Date	Responsible Grp 1	Responsible Grp 2	Responsible Grp 3
1/25/2014 00:00	3/28/2014 08:00		coved	lagartn	Chris Kendall

AFE COST SUMMARY

AFE / RFE / Maint.#	Total AFE Amount (Cost)	Total AFE + Supp Amount (Cost)	Total Field Estimate (Cost)	AFE-Field Estimate (Cost)
10351695	2,111,000.00	2,111,000.00	2,318,381.14	-207,381.14
10359413	16,997,500.00	20,641,514.00	19,626,951.61	1,014,562.39

DAILY INFORMATION

Report Start Date	Report End Date	Daily Cost Total (Cost)	Cumulative Cost (Cost)	Personnel Regular Hours (hr)
2/2/2014 06:00	2/3/2014 06:00	184,723.00	6,167,555.71	648.00

Daily Contacts	Rig
Completion Engineer, Theorn LaGarde, 403-710-9753; WS Superintendent, Derrick Cove, 780-831-1314; WS Supervisor, Chris Kendall, 780-518-3284; WS Supervisor, Myles Hahn, 780-402-0500; WS Supervisor, Michael Short, 403 348-7127	Weatherford, FS 463

Tubing Pressure (kPa)	Casing Pressure (kPa)	Weather	Temperature (°C)	Lease Condition
		Overcast	-11	Ice Pad

Last 24hr Summary
Continue rigging in test equipment / Continue offloading frac water from WS02 / Erect and secure dirty tank farm containment system / reposition materials on location / Spot single sand chief and offload PCM, Blender, Labs unit / Rig in boiler to wellhead and circulate

24hr Forecast
ot dirty tank farm / continue rigging in test equipment / disassemble lower frac head and gate valve and install top cap on tubing head / Continue hauling water m WS02

DAILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
06:00	06:30	0.50	P	Continue water haul from WS02 water source to C-Ring / Tank Farm
06:30	07:00	0.50	P	Safety and procedural meeting with all on location regarding daily activities. Conduct CPC PJHA regarding spotting equipment / handling equipment / handling steam and boiler operations / rigging in test equipment / hauling water
07:00	07:15	0.25	P	Crew Change
07:15	18:00	10.75	P	Continue hauling in 900 m³ water from WS 02 via JB water hauling / Cascade Partnership Begin rigging in test equipment from line heater to high stage / Hot Head / Flare / Pop lines Erect and secure 8.5m x 35m Containment system for flowback tank farm. Spot and rig in Clean Harbors trailered twin heating unit. NOTE: Boke fuel sensing switch. No parts available to replace. Rig in second Clean Harbors trailered twin heating unit with Clean Harbors portable boiler providing steam and preheating tank valves. Reposition crates of material located in various parts of location with loader Spot and rig in Rig and Well trucking and offload 25 m³ Methanol
18:00	18:30	0.50	P	WSS Shift Change
18:30	19:00	0.50	P	Safety and operational meeting with night shift conducting CPC PJHA #02022014. Crew Change
19:00	06:00	11.00	P	Haul water from WS02 water source via 4 Cascade trucks, 1-Rig and well truck and 1-NTS truck to C-ring. Clean Harbours heat 400bbl frac tanks to 40°C. Heat water in C-ring with HD heat exchanger. Haul in 960m³ water to C-ring in last 12 hours (6 trucks - 30m³ loads).

FLUID SUMMARY

Fluid	To lease (m³)	From lease (m³)	To well (m³)	From well (m³)	Left to recover (m³)
FRESH WATER	1,885.00	0.00			27.00

DAILY COST

BU Desc	Vendor	Activity Code	Amount (Cost)
Rig Camp	***VENDOR NOT LISTED***	E500	500.00
Surface Completion Equipment Rental	BOREALIS COMMUNICATIONS INC	Q300	554.00
rvice Rig	CANOL OILFIELD SERVICES INC	E120	6,104.00
acture Stimulation Services	CANOL OILFIELD SERVICES INC	N110	19,12
Service Rig	CANOL OILFIELD SERVICES INC	E120	4,67
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	3,430.00
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	3,430.00
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	3,430.00

Report Printed: 4/14/2014

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 10
Report Date: 2/3/2014
Final Job Status: GAS
Final Report? Yes

WELL HEADER INFORMATION

Country	State/Province	Region / Division	District	Field Name	Field Code
CANADA	N.W.T.	WCBU	NEW VENTURES	Canyon	

Surface Legal Location	API / UWI	License No.
E-76 65-10 126-45	300E7665-10126-45	EL 470

Orig KB/RT (m)	Ground Elevation (m)	KB-Grd (m)	KB-CF (m)	KB-TF (m)	Total Depth (mKB)	PBTD (All) (mKB)
273.40	268.20	5.20	5.40	4.22	2,910.00	Original Hole - 2,877.30

JOB INFORMATION

Job Category	Primary Job Type	Secondary Job Type	Total Field Estimate (Cost)
COMPLETIONS	INITIAL COMPLETION	RIGLESS	21,945,332.75

Objective
Hydrailically fracture and flow test as part of the 2014 Canol Exploration Program

Actual Start Date	End Date	Abandon Date	Responsible Grp 1	Responsible Grp 2	Responsible Grp 3
1/25/2014 00:00	3/28/2014 08:00		coved	lagartn	Chris Kendall

AFE COST SUMMARY

AFE / RFE / Maint.#	Total AFE Amount (Cost)	Total AFE + Supp Amount (Cost)	Total Field Estimate (Cost)	AFE-Field Estimate (Cost)
10351695	2,111,000.00	2,111,000.00	2,318,381.14	-207,381.14
10359413	16,997,500.00	20,641,514.00	19,626,951.61	1,014,562.39

DAILY INFORMATION

Report Start Date	Report End Date	Daily Cost Total (Cost)	Cumulative Cost (Cost)	Personnel Regular Hours (hr)
2/3/2014 06:00	2/4/2014 06:00	231,023.00	6,398,578.71	764.00

Daily Contacts
Completion Engineer, Theorn LaGarde, 403-710-9753; WS Superintendent, Derrick Cove, 780-831-1314; WS Supervisor, Chris Kendall, 780-518-3284; WS Supervisor, Myles Hahn, 780-402-0500; WS Supervisor, Michael Short, 403 348-7127

Rig
Weatherford, FS 463

Tubing Pressure (kPa)	Casing Pressure (kPa)	Weather	Temperature (°C)	Lease Condition
		Overcast	-12	Ice Pad

Last 24hr Summary
Remove frac head and gate valve / Set up flow back tank farm / spot sand cheifs / offload 180 m³ H²O / Offload 50 m³ 28% Acid / Begin offloading sand / Haul water to work tank / Heat frac water / Heat water for CT cleanout.

24hr Forecast
ntinue to heat Frac water / Install new tubing spool + test / Install frac head / Spot SLB Frac and CT equipment.

DAILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
06:00	06:30	0.50	P	Continue hauling in frac water to C-Ring / Continue heating tanks with Twin Heater / Continue heating C-Ring with Boiler Wellsite Supervisor Shift change
06:30	07:00	0.50	P	Safety and procedural meeting with all on location regarding daily activites. Conduct CPC PJHA regarding MIRU Frac / Tank Farms / Haul Fluids
07:00	18:00	11.00	P	Crew Change Spot and rig in Schlumberger sand chiefs / Hurricane dustless sand system / Bexson Transport and offload sand Spot and rig in Canol Trucking and offload 16 x 400 bbl tanks and set up in 9m x 35m containment. Continue rigging in test equipment to stacks / shipping lines Spot and rig in Cascade trucking and offload 180 m³ H²O from WS-02 Spot and rig in Scott Safety Shower Trailer / Air Trailer Spot and rig in Trophy Buck Tank Truck and offload 50 m³ 28% HcL NOTE: Lost 4 hr heating time due to no fuel truck arriving at site.
18:00	18:30	0.50	P	WSS Shift Change
18:30	19:00	0.50	P	Held a daily safety and operations meeting with all night shift personnel. Reviewed and discussed CPC PJHA #02032014 regarding night time activities, job procedures and all associated hazards. Crews performed cross shift.
19:00	23:00	4.00	P	Continued to heat frac 400bbl tanks with Canol (Clean Harbors) twin hot oiler. Hauled 80m³ fresh water from WS-02 and off loaded into 400bbls in flowback tank farm. 60.0m³ into one 400bbl and 20m³ into second 400bbl tank. Transferred 30m³ methanol across location and offloaded into 400bbl tank with 20m³ water for a 60/40 blend. Rigged steam to flowback tank farm and heated both tanks.
23:00	06:00	7.00	T	Hot Oiler repositioned and started to heat C-ring. After 10 minutes of heating C-ring hydraulic oil started to come out of vent cap on the passenger side hydraulic tank. Unit was shut down immediately and a drip tray was placed under the tank. No oil was spilled on the ground and the oil coming down the side of the tank was cleaned up immediately with absorbent pads. Clean Harbors hands trouble shot including calling their mechanic for advice but could not fix the problem. Every time clutch was engaged to the hydraulic pumps the oil level in hydraulic tank would rise and have to be shut down before overflowing. Called local mechanic through Hodgsons and he was not available to come out till 06:30 in the morning. Removed filters and tried again with the same results. Drained hot oiler unit and hoses. Note: The second Canol (Clean Harbors) twin hot oiler unit (contingency plan if first one breaks down) is parked at the 27.5KM rack site broken down and waiting for parts to arrive before it would be operational. Continued to heat C-ring with heat exchanger. Average water temperature at 06:00 in C-ring is 11°c.

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 11
Report Date: 2/4/2014
Final Job Status: GAS
Final Report? Yes

WELL HEADER INFORMATION

Country	State/Province	Region / Division	District	Field Name	Field Code
CANADA	N.W.T.	WCBU	NEW VENTURES	Canyon	

Surface Legal Location	API / UWI	License No.
E-76 65-10 126-45	300E7665-10126-45	EL 470

Orig KB/RT (m)	Ground Elevation (m)	KB-Grd (m)	KB-CF (m)	KB-TF (m)	Total Depth (mKB)	PBTD (All) (mKB)
273.40	268.20	5.20	5.40	4.22	2,910.00	Original Hole - 2,877.30

JOB INFORMATION

Job Category	Primary Job Type	Secondary Job Type	Total Field Estimate (Cost)
COMPLETIONS	INITIAL COMPLETION	RIGLESS	21,945,332.75

Objective
Hydrailically fracture and flow test as part of the 2014 Canol Exploration Program

Actual Start Date	End Date	Abandon Date	Responsible Grp 1	Responsible Grp 2	Responsible Grp 3
1/25/2014 00:00	3/28/2014 08:00		coved	lagartn	Chris Kendall

AFE COST SUMMARY

AFE / RFE / Maint.#	Total AFE Amount (Cost)	Total AFE + Supp Amount (Cost)	Total Field Estimate (Cost)	AFE-Field Estimate (Cost)
10351695	2,111,000.00	2,111,000.00	2,318,381.14	-207,381.14
AFE / RFE / Maint.#	**Total AFE Amount (Cost)**	**Total AFE + Supp Amount (Cost)**	**Total Field Estimate (Cost)**	**AFE-Field Estimate (Cost)**
10359413	16,997,500.00	20,641,514.00	19,626,951.61	1,014,562.39

DAILY INFORMATION

Report Start Date	Report End Date	Daily Cost Total (Cost)	Cumulative Cost (Cost)	Personnel Regular Hours (hr)
2/4/2014 06:00	2/5/2014 06:00	596,816.00	6,995,394.71	732.00

Daily Contacts
Completion Engineer, Theorn LaGarde, 403-710-9753; WS Superintendent, Derrick Cove, 780-831-1314; WS Supervisor, Chris Kendall, 780-518-3284; WS Supervisor, Myles Hahn, 780-402-0500; WS Supervisor, Michael Short, 403 348-7127

Rig
Weatherford, FS 463

Tubing Pressure (kPa)	Casing Pressure (kPa)	Weather	Temperature (°C)	Lease Condition
	0	Overcast	-12	Ice Pad

Last 24hr Summary
Spotted SLB CT and frac equipment / Removed tubing spool / Installed and pressure tested new tubing spool / Installed 179mm 10K valve and IES frac wellhead / Rigged in work platform and heated wellhead / Pressure tested CT BOPs and SLB over pressured 69MPa BOP stack / Schlumberger removed BOPs from service / Pressure tested intermediate casing to 30MPa - Good test.

r Forecast
essure test CT BOPs / Pressure test wellhead and Weatherford flow line / RIH CT with mill and motor assembly

DAILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
06:00	06:30	0.50	P	WSS Shift Change
06:30	07:00	0.50	P	Held Safety + Operations meeting with all crews on location. Discuss Conoco PJHA for multiple operations; spot CTU and equip, frac equip, finsih r/u test equip, heating fluids, and r/u frac wellhead assembly. All tickets checked and valid.
07:00	12:30	5.50	P	Repaired hydraulic system, thawed out manifold on Hot oiler, started heating "C" Ring frac water ("C" Ring vol est @2,786.0m³ f/w). Continued to r/u frac manifold and frac 400's, and Weatherford test equip. Moved in and spotted Coiled Tbg equip, tarped in and heated Buffalo Head and Coiled Tbg BOP stack. R/u SOC 10 K pumping unit, built spill containment area for blender, started to spot frac equip. Finished r/u steam heat system for flow back tank farm, fueled up all equip.
12:30	16:00	3.50	P	Pick up Coil injector, slip and cut 5m of coil tbg off of coil string, Install Slip Dimple connector and plate for pull testing. Pull test coil connector to 21,000 lbs. Good test. Rig in 4" trash pump to circulate C-ring. Spot Chemical van and frac pumpers.
16:00	18:00	2.00	P	Remove existing 11" 5K x 7 1/16" 10K Tubing Head. I.D of Landing Nipple - 116.04mm Install new 11" 5K x 7 1/16" 10K Tubing Head, Bit Guide I.D 104.39mm. Nipple up and energize PI Internal seals to 44,815 KPa, pressure test to 41,368KPa for 10min. Good test. Pressure test Primary Seals to 34,000KPa for 10min, good test. Install and nipple up: - 7 1/16" 10K Gate Valve (Function 17 1/4 turns) - 7 1/16" 10K x 4 1/16" 10K Adapter - 4 1/16" 10K Gate Valve Pick up and install Frac Stack as follows: - 101.6mm (4 1/16") 69MPa hydraulic master valve - 0.3m x 101.6mm (4 1/16") 69MPa spacer spool. - 101.6mm (4 1/16") 69.0MPa two port flow block - c/w one (1) 50.8mm (2 1/16") 69MPa gate valve on one side. - c/w two (2) 76.2MM (3 1/16") 69MPa gate valves on the other side - 0.3m x 101.6mm (4 1/16") 69MPa spacer spool - 101.6mm (4 1/16") 69MPa hydraulic swab valve - c/w removable 69MPa test flange on top.
18:00	18:30	0.50	P	WSS Shift Change

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 11
Report Date: 2/4/2014
Final Job Status: GAS
Final Report? Yes

Y TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
18:30	19:00	0.50	P	Held safety and operations meeting with all crews on location. Discuss Conoco PJHA on coil rig up and operations, heating fluids. All tickets checked and valid. Perform daily walk around inspections and checks.
19:00	02:00	7.00	P	Rig in work floor, install tarps and apply heat to wellhead. Slumberger coil tubing continued to rig in their equipment. Installed R-24 x 602 Weco flange onto the intermediate casing for pressure testing. Off loaded BOPs. Rigged BOP hoses onto combo stack. Function tested stack. Good. Rigged on Weatherford 10K ESD to frac head.
02:00	04:15	2.25	T	Primed pump with 15°c 60/40 Methanol water. Filled BOP stack and installed 50.8mm test bar. Attempted to pressure test Pipe/slip rams to a low of 1500 kPa. Pressure dropped steadily. Hand noticed that BOP heat blanket was not on and BOPs were cold. Heated BOPs with steam. Pressure tested Pipe/slip rams to a low of 1500 kPa for 15 minutes. Good test. Started to bump up pressure attempting achieve a high pressure test of 60000 kPa. Pump kicked out at 71050 kPa (electronic trip was set for 61000 kPa) and over pressured 69000 kPa BOPs (pump and lines rated for 103MPa). Bled pressure down to 65000 kPa and achieved a high pressure test on Pipe slip rams. Schlumberger coil tubing supervisor called his office and spoke with Don Loader (780-518-1350) regarding over pressuring BOPs. Don Loader said that it was OK to continue using BOPs as they were not over pressured by more than 5% of their max pressure limit. Bled off and removed test bar. Pressure tested blind/shear rams to a low of 1500 kPa / high 60000 kPa. Both tests held solid for 15 minutes each. 03:45 Don Loader with Schlumberger called and now said that the max pressure of BOPs was over pressured by more than 2.5% and that the BOPs would have to be pulled from service.
04:15	06:00	1.75	P	Sucked out BOP stack. Rigged pump line onto intermediate casing. Schlumberger changed out their combo BOPs with a new set (pipe/slip top bottom - blind/shear top). New set was installed onto test stump. Torqued ring seal connection, Pressure tested intermediate casing to 30000 kPa for 15 minutes. Good test. Installed POP valve onto the intermediate casing and set it for 20MPa.

UID SUMMARY

Fluid	To lease (m³)	From lease (m³)	To well (m³)	From well (m³)	Left to recover (m³)
SH WATER	0.00	0.00	0.00	0.00	27.00

DAILY COST

BU Desc	Vendor	Activity Code	Amount (Cost)
Rig Camp	***VENDOR NOT LISTED***	E500	500.00
Trucking/Hauling/ Hot Shot Services	***VENDOR NOT LISTED***	P100	1,000.00
Surface Completion Equipment Rental	BOREALIS COMMUNICATIONS INC	Q300	554.00
Service Rig	CANOL OILFIELD SERVICES INC	E120	6,104.00
Fracture Stimulation Services	CANOL OILFIELD SERVICES INC	N110	19,260.00
Service Rig	CANOL OILFIELD SERVICES INC	E120	4,490.00
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	1,985.00
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	1,985.00
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	1,985.00
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	1,985.00
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	2,050.00
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	2,050.00
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	1,985.00
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	2,050.00
Trucking/Hauling/ Hot Shot Services	CANOL OILFIELD SERVICES INC	P100	2,275.00
Service Rig	CORNERSTONE OILFIELD SERVICES LTD	E120	1,400.00
Surface Completion Equipment Rental	CORNERSTONE OILFIELD SERVICES LTD	Q300	195.00
Service Rig	CORNERSTONE OILFIELD SERVICES LTD	E120	3,400.00
Service Rig	CORNERSTONE OILFIELD SERVICES LTD	E120	4,400.00
Service Rig	CORNERSTONE OILFIELD SERVICES LTD	E120	280.00
Wellsite Supervision & Engineering	DEN JAR CONSULTING LTD	T130	1,670.00
Safety Equipment & Services	FRONTIERMEDEX CANADA LTD/ EXLOGS SAHTU LTD	T430	2,000.00
afety Equipment & Services	HODGSON'S CONTRACTING (2005) LTD	T430	6,345.00
ty Equipment & Services	HODGSON'S CONTRACTING (2005) LTD	T430	1,600.00
ure Stimulation Services	ISOLATION EQUIPMENT SERVICES INC	N110	5,295.00
Wellsite Supervision & Engineering	M HAHN CONSULTING INC	T130	1,670.00
Surface Completion Equipment Rental	MACKAY RANGE DEVELOPMENT CORP	Q300	374.00
Wellsite Supervision & Engineering	MINAULT ENERGY SERVICES LTD	T130	1,545.00
Surface Completion Equipment Rental	MYB CONSTRUCTION LTD	Q300	1,380.00

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 12
Report Date: 2/5/2014
Final Job Status: GAS
Final Report? Yes

WELL HEADER INFORMATION

Country	State/Province	Region / Division	District	Field Name	Field Code
CANADA	N.W.T.	WCBU	NEW VENTURES	Canyon	

Surface Legal Location	API / UWI	License No.
E-76 65-10 126-45	300E7665-10126-45	EL 470

Orig KB/RT (m)	Ground Elevation (m)	KB-Grd (m)	KB-CF (m)	KB-TF (m)	Total Depth (mKB)	PBTD (All) (mKB)
273.40	268.20	5.20	5.40	4.22	2,910.00	Original Hole - 2,877.30

JOB INFORMATION

Job Category	Primary Job Type	Secondary Job Type	Total Field Estimate (Cost)
COMPLETIONS	INITIAL COMPLETION	RIGLESS	21,945,332.75

Objective
Hydrailically fracture and flow test as part of the 2014 Canol Exploration Program

Actual Start Date	End Date	Abandon Date	Responsible Grp 1	Responsible Grp 2	Responsible Grp 3
1/25/2014 00:00	3/28/2014 08:00		coved	lagartn	Chris Kendall

AFE COST SUMMARY

AFE / RFE / Maint.#	Total AFE Amount (Cost)	Total AFE + Supp Amount (Cost)	Total Field Estimate (Cost)	AFE-Field Estimate (Cost)
10351695	2,111,000.00	2,111,000.00	2,318,381.14	-207,381.14
AFE / RFE / Maint.#	**Total AFE Amount (Cost)**	**Total AFE + Supp Amount (Cost)**	**Total Field Estimate (Cost)**	**AFE-Field Estimate (Cost)**
10359413	16,997,500.00	20,641,514.00	19,626,951.61	1,014,562.39

DAILY INFORMATION

Report Start Date	Report End Date	Daily Cost Total (Cost)	Cumulative Cost (Cost)	Personnel Regular Hours (hr)
2/5/2014 06:00	2/6/2014 06:00	325,584.00	7,320,978.71	756.00

Daily Contacts
Completion Engineer, Theorn LaGarde, 403-710-9753; WS Superintendent, Derrick Cove, 780-831-1314; WS Supervisor, Chris Kendall, 780-518-3284; WS Supervisor, Myles Hahn, 780-402-0500; WS Supervisor, Richard Young, 780-831-9153

Rig
Weatherford, FS 463

Tubing Pressure (kPa)	Casing Pressure (kPa)	Weather	Temperature (°C)	Lease Condition
	0	Overcast	-21	Ice Pad

Last 24hr Summary
Started to pressure test CT BOPs. C-Ring liner started to leak and became increasingly worse. Personnel were evacuated to muster area. 2760m³ of warm fresh water was drained from C-ring and released from well pad. Stump tested CT BOPs. Pressured intermediate csg up to 10MPa. Installed CT BOPs. Pressure tested test flow line to 60MPa. Pressure tested IES frac wellhead and 114.3mm production casing to 68MPa - Good.

24hr Forecast
Rig down C-ring and investigate cause of leak.

DAILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
06:00	06:30	0.50	P	WSS Shift Change
06:30	07:00	0.50	P	Held Safety + Operations meeting with all crews on location. Discussed Conoco PJHA and SOC JSA for multiple operations, Coiled tbg operations, finish spotting and start r/u frac equip, heating "C" Ring, and pressure testing requirements. All tickets checked and valid.
07:00	10:45	3.75	P	Unloaded SOC back up CT BOP stack, and installed heating blanket. Tarped in BOP's with steam heater, waited 2 hrs for BOP stack to be heated to operational temperature. Moved wellhead equip back from wellhead area with crane, Weatherford testers completed wellhead tie in. Stump test CT Blind Rams 1.5mpa, started to increase pressure, line pipe union leaking. Sucked out line vacuum truck, replaced jt line pipe. Start pressure up again, chicksan leaking, replaced chicksan. SOC CT wanted to circ there line to warm methanol water, then try pressure test again. made up CT pump line to Weatherford test line. The "C" Ring started leaking out bottom and under center of Clean Harbors Hot Oiler trailor. Shut down all location operations, evacuated all crews to Muster point #01 at lease entrance.
10:45	12:00	1.25	T	WSS received notification that c-ring had encountered slight leak. WSS inspected c-ring and found a hole approximately 1.5" in diameter. WSS attempted to cut a piece of liner to place in hole in an attempt to slow tank leakage. Leak in the tank liner quickly became increasingly worse resulting in 2760 m³ fresh water released from well pad. WSS evacuated all personnel to muster area / head count completed / isolated workers in safety shack until tank was completely drained. 10:45 WSS Contacted D. Cove concerning leak 10:50 Complete rupture of liner 10:52 Call made to CMV Lead - Bill Pepper - Initiating calls 10:55 D. Cove on location 11:10 Tank completely drained 11:12 Call made to CMV Lead - Bill Pepper - Contact NEB? Environmental - Gord Sarauer Construction Lead - Joe Booth Construction Supervisor - Mac Watson HSE - Derek Tate Simops - Duane Evans All above on location performing walk around inspection. Several pictures captured from each CPC division. 11:40 WSS conducted tailgate safety meeting with crew members on location regarding status of ice pad and c-ring. NOTE: Reiterated to crew not to be talking about incident off location. Avoid spreading rumors / factual information only

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 12
Report Date: 2/5/2014
Final Job Status: GAS
Final Report? Yes

LY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
12:00	13:00	1.00	T	Safety meeting prior to continue operations including: Derrick Cove Chris Kendall Richard Young Duane Evans Derek Tate Joe Booth Gord Sarauer Point form e-mail distributed to Frank Barlow / Frank Roberts.
13:00	18:00	5.00	T	Joe Booth / Gord Saraeur profile ice pad around frac equipment and tank farm with portable steamer to prove integrity. Removed ground disturbance anchors from point of travel. Loaded out 2 x chemical vans / 1 x Labs unit. Rig out suction line from C-Ring to pump station and to 12" manifold Arrange services for morning clean up / equipment move. Coil equipment on location performing maintenance
18:00	18:30	0.50	P	WSS Shift change.
18:30	19:00	0.50	P	Held a daily safety and operations meeting with all night shift personnel. Reviewed and discussed CPC PJHA regarding night time operations, job procedures and all associated hazards. Informed all personnel to stay well clear of washed out area at the back of C-ring. All tickets checked and valid.
19:00	22:00	3.00	P	Performed a walk around inspection and cross shifted day crews. Flagged off washed out area at the back of C-ring. Schlumberger could not find their BOP cap needed to pressure test when test bar was installed. BOPs cap was found at KM 27.5 rack site on BOPs that were changed out (60 minutes down time). Stump tested Schlumberger coil tubing combo BOPs. Installed 50.8mm test bar and capped BOPs (needle valve open) Pipe/slip rams: low 1500 kPa / high 60000 kPa. Both tests held solid for 15 minutes - Good tests. Removed test bar. Blind/shear rams: low 1500 kPa / high 60000 kPa. Both tests held solid for 15 minutes - Good tests.
0	01:00	3.00	P	Rigged pump line onto the intermediate casing. Pressured intermediate casing up to 10MPa with 60/40 Methanol water. Unbolted and removed top flange on IES frac wellhead. Attempted to set SLB combo BOPs onto the top of frac head but the locking wheels on rams hit the work floor before the BX155 flange connection came together. Landed BOPs back down onto the test stump. Installed spacer spool onto top of frac head and then landed BOPs onto the top of spacer spool. Torqued BX155 flange connections. Rigged pump line onto BOPs.
01:00	04:00	3.00	P	Checked all valves on IES frac head and readied to pressure test. Closed bottom 179mm master valve and CT Blind/shear rams. Pressure tested Weatherford flow line to flow manifold: low 1500 kPa / high 60000 kPa. Good tests. Bled off pressure. Shut in IES wing valve. SIICP: 10018 kPa Pressure tested 114.3mm production casing and IES frac wellhead: low 1500 kPa / high 68000 kPa. Good tests. Intermediate casing pressure built slowly as production casing pressure came up. Intermediate casing reached a max pressure of 19500 kPa and remained constant for 15 minute test with 68MPa on production casing. When production casing was bled off to 0 kPa the intermediate casing bled down 12100 kPa where it remained constant.
04:00	06:00	2.00	P	Sucked water out of boiler by C-ring. Tarped in CT BOPs and secured wellhead.

FLUID SUMMARY

Fluid	To lease (m³)	From lease (m³)	To well (m³)	From well (m³)	Left to recover (m³)
FRESH WATER	0.00	2,760.00			27.00

DAILY COST

BU Desc	Vendor	Activity Code	Amount (Cost)
Rig Camp	***VENDOR NOT LISTED***	E500	500.00
Trucking/Hauling/ Hot Shot Services	***VENDOR NOT LISTED***	P100	1,000.00
Surface Completion Equipment Rental	BOREALIS COMMUNICATIONS INC	Q300	554.00
Service Rig	CANOL OILFIELD SERVICES INC	E120	6,104.00
Fracture Stimulation Services	CANOL OILFIELD SERVICES INC	N110	19,260.00
Trucking/Hauling/ Hot Shot Services	CANOL OILFIELD SERVICES INC	P100	9,340.00
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	1,985.00
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	1,985.00
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	1,985.00
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	1,985.00
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	2,050.00
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	2,050.00
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	2,050.00

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 13
Report Date: 2/6/2014
Final Job Status: GAS
Final Report? Yes

WELL HEADER INFORMATION

Country	State/Province	Region / Division	District	Field Name	Field Code
CANADA	N.W.T.	WCBU	NEW VENTURES	Canyon	

Surface Legal Location	API / UWI	License No.
E-76 65-10 126-45	300E7665-10126-45	EL 470

Orig KB/RT (m)	Ground Elevation (m)	KB-Grd (m)	KB-CF (m)	KB-TF (m)	Total Depth (mKB)	PBTD (All) (mKB)
273.40	268.20	5.20	5.40	4.22	2,910.00	Original Hole - 2,877.30

JOB INFORMATION

Job Category	Primary Job Type	Secondary Job Type	Total Field Estimate (Cost)
COMPLETIONS	INITIAL COMPLETION	RIGLESS	21,945,332.75

Objective
Hydrailically fracture and flow test as part of the 2014 Canol Exploration Program

Actual Start Date	End Date	Abandon Date	Responsible Grp 1	Responsible Grp 2	Responsible Grp 3
1/25/2014 00:00	3/28/2014 08:00		coved	lagartn	Chris Kendall

AFE COST SUMMARY

AFE / RFE / Maint.#	Total AFE Amount (Cost)	Total AFE + Supp Amount (Cost)	Total Field Estimate (Cost)	AFE-Field Estimate (Cost)
10351695	2,111,000.00	2,111,000.00	2,318,381.14	-207,381.14
10359413	16,997,500.00	20,641,514.00	19,626,951.61	1,014,562.39

DAILY INFORMATION

Report Start Date	Report End Date	Daily Cost Total (Cost)	Cumulative Cost (Cost)	Personnel Regular Hours (hr)
2/6/2014 06:00	2/7/2014 06:00	243,450.00	7,564,428.71	876.00

Daily Contacts	Rig
Completion Engineer, Theorn LaGarde, 403-710-9753; WS Superintendent, Derrick Cove, 780-831-1314; WS Supervisor, Chris Kendall, 780-518-3284; WS Supervisor, Myles Hahn, 780-402-0500; WS Supervisor, Richard Young, 780-831-9153	Weatherford, FS 463

Tubing Pressure (kPa)	Casing Pressure (kPa)	Weather	Temperature (°C)	Lease Condition
		Overcast	-10	Ice Pad

Last 24hr Summary
Rig out and move equipment around C-ring,Dismantle C-ring, roll up liner and clean up area. Make up milling BHA and coil tubing lube. Install onto well and pressure test lube. Function test motor. RIH with coil performing pull tests every 500m to heal then every 250m to bottom. Did not see any restrictions or pull overs on way in.

24hr Forecast
Continue in hole with coil. Clean out on bottom. POOH coil. Prep pad for tanks. Move 400bbl frac tanks into field.

DAILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
06:00	06:30	0.50	P	WSS Shift Change
06:30	07:00	0.50	P	Held Safety + Operations meeting with all crews on location. Discussed Conoco PJHA and SOC JSA for multiple operations, Move equipment surrounding c-ring, dismantle c-ring, wrap up liner and clean up area. All tickets checked and valid.
07:00	09:00	2.00	P	Move in bed truck and haul out boiler, heat exchanger and pump shack to make room for removal of c-ring.
09:00	12:00	3.00	P	Remove 2 panels from c-ring allowing access to inside c-ring, cut and roll up liner, dismantle and remove 10" suction riser and candy cane suction inlets. Represents from following branch's on location for a site visit: NEB (Rick Turner + Saadat Javeed), W.S.C.C (Judy Kainz) and Aboriginal affairs (Joseph)
12:00	18:00	6.00	P	Continue dismantling the remaining 14 panels of the c-ring, cut and roll up the geo-foam. Stack up and load all panels, transport and store at water well site. Start cleaning and hauling out sawdust from c-ring pad.
18:00	18:30	0.50	P	WSS handover and shift change
18:30	19:00	0.50	P	Held a daily safety and operations meeting with all night shift personnel. Reviewed and discussed CPC PJHA #020514 regarding night time coil tubing operations and all associated hazards. All tickets checked and valid.
19:00	00:30	5.50	P	Performed a walk around inspection and cross shifted day shift crews. Spotted zero ground disturbance anchors for coil tubing. Rigged crane onto injector. Hoisted injector and installed four 8' pieces of lubricator. Threading bowen connections together on lubricator was very time consuming. They were trucked up with no protectors on them and they banged into each other on the stand causing the threads to be galled. Several threads had to be filed in order to thread connections together. Filled coil tubing with 60/40 methanol water (6.25m³ to fill). Shut in 1/4 turn valve at the end of CT and pressure tested 50.8mm coil and dimple connector to 35MPa. Good test.

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 13
Report Date: 2/6/2014
Final Job Status: GAS
Final Report? Yes

Y TIME LOG

Time	End Time	Dur (hr)	Time P-T-X	Operation
00:30	02:00	1.50	P	Installed BHA onto coil connector as follows: 1 - 50.8mm dimple connector 1 - 73mm MHA c/w - dual flapper check valves - Hydraulic disconnect (35MPa 28.575mm / 1 1/8" ball activated) - Circulation sub (21MPa 25.4mm / 1" ball activated - 42MPa activated without ball) 1 - 73mm Bi-directional Ultra Jar (317.5mm / 12.5" stroke) 1 - 73mm Hydraulic disconnect (33MPa 22.2mm / 7/8" ball activated) 1 - 73mm Power Plus mud Motor 1 - 95mm 5 blade concave mill c/w 5 10mm circulation ports Attempted to torque connections with Schlumberger tongs. Tongs would not function correctly. All connections were torqued to spec with pipe wrenches and pull gauge (2100 ft/lbs - lock tight used) Pulled BHA into lubricator and stabbed onto the well. Cross chained and secured injector.
02:00	03:00	1.00	P	Fill and circulate lube with 60/40 methanol water back to testers via CT string. Perform quick function test of motor @ 200L/min (good). Shut in to testers, pressure test lube to 1.5mpa low for 5min and 60mpa high for 15min, both tests good.
03:00	06:00	3.00	P	Check 114.3mm pressure =0, check intermediate csg pressure=11,700kpa. Open well and start in hole with Coil and milling assembly. Function test motor, rates and pressures with fresh water as follows: 250L/min @ 11750kpa 350L/min @ 22,000kpa 400L/min @ 26,500kpa Continue to run in hole coil @ 15-20m/min circulating fresh water @ 120L/min @ 3200kpa. Perform pull tests on way in hole as follows: 500m- down weight, 1200dan up weight 4000dan full returns to testers 1000m- down weight 3100dan, up weight 5800dan full returns to testers Increase pump rate to 400L/m at 1300m. pressure @ 24000kpa 1500m- down weight 4300dan up weight 8000dan full returns to testers, did not see any restrictions 1750m- down weight 5300dan up weight 8500dan, full returns to testers, did not see any restrictions 2000m- down weight 5000dan up weight 9200dan, full returns to testers, did not see any restrictions 2250m- down weight 4600dan up weight 9400dan, full returns to testers, did not see any restrictions

FLUID SUMMARY

Fluid	To lease (m³)	From lease (m³)	To well (m³)	From well (m³)	Left to recover (m³)
FRESH WATER	26.00	0.00			27.00

DAILY COST

BU Desc	Vendor	Activity Code	Amount (Cost)
Rig Camp	***VENDOR NOT LISTED***	E500	500.00
Trucking/Hauling/ Hot Shot Services	***VENDOR NOT LISTED***	P100	1,000.00
Surface Completion Equipment Rental	BOREALIS COMMUNICATIONS INC	Q300	554.00
Service Rig	CANOL OILFIELD SERVICES INC	E120	6,104.00
Fracture Stimulation Services	CANOL OILFIELD SERVICES INC	N110	19,260.00
Trucking/Hauling/ Hot Shot Services	CANOL OILFIELD SERVICES INC	P100	5,920.00
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	2,050.00
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	2,050.00
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	1,985.00
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	1,985.00
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	1,985.00
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	1,985.00
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	2,050.00
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	1,985.00
Trucking/Hauling/ Hot Shot Services	CANOL OILFIELD SERVICES INC	P100	2,275.00
Service Rig	CANOL OILFIELD SERVICES INC	E120	4,490.00
Service Rig	CORNERSTONE OILFIELD SERVICES LTD	E120	1,400.00
Surface Completion Equipment Rental	CORNERSTONE OILFIELD SERVICES LTD	Q300	195.00
·rice Rig	CORNERSTONE OILFIELD SERVICES LTD	E120	3,400.00
e Rig	CORNERSTONE OILFIELD SERVICES LTD	E120	4,400.00
e Rig	CORNERSTONE OILFIELD SERVICES LTD	E120	280.00
Wellsite Supervision & Engineering	DEN JAR CONSULTING LTD	T130	1,670.00
Safety Equipment & Services	FRONTIERMEDEX CANADA LTD/ EXLOGS SAHTU LTD	T430	2,000.00
Safety Equipment & Services	HODGSON'S CONTRACTING (2005) LTD	T430	6,345.00

Report Printed: 4/14/2014

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 14
Report Date: 2/7/2014
Final Job Status: GAS
Final Report? Yes

WELL HEADER INFORMATION

Country	State/Province	Region / Division	District	Field Name	Field Code
CANADA	N.W.T.	WCBU	NEW VENTURES	Canyon	

Surface Legal Location	API / UWI	License No.
E-76 65-10 126-45	300E7665-10126-45	EL 470

Orig KB/RT (m)	Ground Elevation (m)	KB-Grd (m)	KB-CF (m)	KB-TF (m)	Total Depth (mKB)	PBTD (All) (mKB)
273.40	268.20	5.20	5.40	4.22	2,910.00	Original Hole - 2,877.30

JOB INFORMATION

Job Category	Primary Job Type	Secondary Job Type	Total Field Estimate (Cost)
COMPLETIONS	INITIAL COMPLETION	RIGLESS	21,945,332.75

Objective
Hydrailically fracture and flow test as part of the 2014 Canol Exploration Program

Actual Start Date	End Date	Abandon Date	Responsible Grp 1	Responsible Grp 2	Responsible Grp 3
1/25/2014 00:00	3/28/2014 08:00		coved	lagartn	Chris Kendall

AFE COST SUMMARY

AFE / RFE / Maint.#	Total AFE Amount (Cost)	Total AFE + Supp Amount (Cost)	Total Field Estimate (Cost)	AFE-Field Estimate (Cost)
10351695	2,111,000.00	2,111,000.00	2,318,381.14	-207,381.14
10359413	16,997,500.00	20,641,514.00	19,626,951.61	1,014,562.39

DAILY INFORMATION

Report Start Date	Report End Date	Daily Cost Total (Cost)	Cumulative Cost (Cost)	Personnel Regular Hours (hr)
2/7/2014 06:00	2/8/2014 06:00	263,948.00	7,828,376.71	912.00

Daily Contacts	Rig
Completion Engineer, Theorn LaGarde, 403-710-9753; WS Superintendent, Derrick Cove, 780-831-1314; WS Supervisor, Chris Kendall, 780-518-3284; WS Supervisor, Myles Hahn, 780-402-0500; WS Supervisor, Richard Young, 780-831-9153	Weatherford, FS 463

Tubing Pressure (kPa)	Casing Pressure (kPa)	Weather	Temperature (°C)	Lease Condition
		overcast	-20	Ice Pad

Last 24hr Summary
RIH with coil tbg, tag PBTD @ 2877.3mKB, pump 2 x 1m³ gel sweeps @ PBTD, pull up to 1731mKB and pump 2 x 1m³ gel sweeps, circulate gel to surface cleaning well bore. Pull out of the hole with coil, secure well and equipment. Continue building and freezing down pad to set up additional tanks. RIH with coil tubing and 5 - 79mm x 1.0m Owen SDP-3125-411NT4 Perforating guns c/w 21gm HMX (DP) charges,Spiral pattern with 60° phasing, 6 SPM, 6 min time delay between guns. Perforated the following intervals: 2866mkb-2867mkb, 2847mkb-2848mkb, 2827mkb-2828mkb, 2808-2809mkb, 2789-2790mkb. Circulate down and Squeeze 10m³ acid, overflushed with 5.5m³ fresh water. Did not see a definative break while pumping acid. Max rate was 700L/min @ 11,000kpa. Start out of hole with coil.

24hr Forecast
Continue out of hole with coil. Set up frac tanks for water. Spot and rig in frac equipment. Start hauling in and heating water.

DAILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
06:00	06:30	0.50	P	WSS shift change.
06:30	07:00	0.50	P	Held pre-job safety and operations meeting.

LY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
07:00	10:30	3.50	P	Conduct cross shift with night shift WSS. Coil tbg running in the hole, tag @ 2876.5 mKB, pick up and re tag @ 2877.4 mKB. Mark coil tbg @ PBTD (2877.3mKB + 2867.3mKB). 7:03 - Pump 1m³ E-221W Gel Sweep followed with 1m³ fresh water spacer and 1m³ E-221W Gel Sweep. 7:20 - Gel @ nozzle 7:24 - 2nd gel sweep @ nozzle 7:30 - Start out of hole with coil from 2867.3mKB 7:52 - Trace of mud in returns. (360 lpm return rate) 8:07 - 1st gel sweep @ surface 8:15 - 2nd gel sweep @ surface 8:27 - with coil @ 1899.5mKB pump 1m³ E221W gel sweep followed by 1m³ fresh water spacer + 1m³ E221W gel sweep. 8:40 - stop with coil @ 1731.6mKB to allow gel to reach nozzle. 8:45 - 3rd Gel sweep @ nozzle 8:50 - 4th Gel sweep @ nozzle 8:55 - continue out of hole with coil 8:52 - Returns look clean, no debris (350 lpm return rate) 9:14 - Gel sweeps @ surface 10:15 - with coil @ 125.3m pump 1m³ 60% methanol / water to winterize fluid pump. 10:17 - Function test mud motor as follows: 250 lpm @ 6753KPa 350 lpm @ 11997 KPa 400 lpm @ 15064 KPa Shut down pump and shut in tester's, continue to surface with coil. Tag stripper (-7.8m on counter), close master valve. Total fluid pumped for job - 150.8m³
10:30	12:30	2.00	P	Rig in vac truck and drain treatment line, break coil lubricator at Bop's, lower Bha and break down bit, mud motor, and jars. Re-stab lubricator and displace water in coil and surface lines with nitrogen. Secure well and equipment.
12:30	14:30	2.00	P	Conduct toolbox meeting with all associated personnel regarding removing Hot Oiler from washed out section of ice pad. Remove all diesel from Hot oiler fuel supply tank with Vac truck, Position and rig in crane, secure Hot oiler by basket slinging between axles and taking weight with crane. Back in and dolly on tractor to hot oiler king pin, raise trailer legs and secure loose equipment on trailer, Hoist rear end of hot oiler and position on rebuilt frozen pad. Pull trailer away from washed area with tractor, conduct pre-trip inspection on Hot oiler, transport off of location to water well.
14:30	18:00	3.50	P	Continue flooding and shaping ice pad for rig mats and additional frac tanks. Spot rig matting off to side of location in preperation for morning, re position light towers and flameless heaters.
18:00	18:30	0.50	P	WSS Shift Change.
18:30	19:00	0.50	P	Held a daily safety and operations meeting with all night shift personnel. Reviewed and discussed CPC PJHA #020714 regarding coil tubing operations and all associated hazards. All tickets checked and valid. Performed a walk around inspection and cross shifted with day shift.

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 15
Report Date: 2/8/2014
Final Job Status: GAS
Final Report? Yes

ELL HEADER INFORMATION

Country	State/Province	Region / Division	District	Field Name	Field Code
CANADA	N.W.T.	WCBU	NEW VENTURES	Canyon	

Surface Legal Location	API / UWI	License No.
E-76 65-10 126-45	300E7665-10126-45	EL 470

Orig KB/RT (m)	Ground Elevation (m)	KB-Grd (m)	KB-CF (m)	KB-TF (m)	Total Depth (mKB)	PBTD (All) (mKB)
273.40	268.20	5.20	5.40	4.22	2,910.00	Original Hole - 2,877.30

JOB INFORMATION

Job Category	Primary Job Type	Secondary Job Type	Total Field Estimate (Cost)
COMPLETIONS	INITIAL COMPLETION	RIGLESS	21,945,332.75

Objective
Hydrailically fracture and flow test as part of the 2014 Canol Exploration Program

Actual Start Date	End Date	Abandon Date	Responsible Grp 1	Responsible Grp 2	Responsible Grp 3
1/25/2014 00:00	3/28/2014 08:00		coved	lagartn	Chris Kendall

AFE COST SUMMARY

AFE / RFE / Maint.#	Total AFE Amount (Cost)	Total AFE + Supp Amount (Cost)	Total Field Estimate (Cost)	AFE-Field Estimate (Cost)
10351695	2,111,000.00	2,111,000.00	2,318,381.14	-207,381.14
10359413	16,997,500.00	20,641,514.00	19,626,951.61	1,014,562.39

DAILY INFORMATION

Report Start Date	Report End Date	Daily Cost Total (Cost)	Cumulative Cost (Cost)	Personnel Regular Hours (hr)
2/8/2014 06:00	2/9/2014 06:00	1,188,683.00	9,017,059.71	912.00

Daily Contacts
Completion Engineer, Theorn LaGarde, 403-710-9753; WS Superintendent, Derrick Cove, 780-831-1314; WS Supervisor, Chris Kendall, 780-518-3284; WS Supervisor, Myles Hahn, 780-402-0500; WS Supervisor, Richard Young, 780-831-9153

Rig
Weatherford, FS 463

Tubing Pressure (kPa)	Casing Pressure (kPa)	Weather	Temperature (°C)	Lease Condition
	3,150	Overcast	-28	Ice Pad

Last 24hr Summary
Finish pooh and rig down SOC CT, spot remaining frac equip, and spot and r/u Heat Exchangers and boiler. Spot 12 more 400bbl tanks for frac tank farm. Hauled water from lake (WS-02) and off loaded into frac tank farm. Heated water in 400bbl tanks. Pressure tested wireline lubricator to 60MPa. Approximately 960m³ 35°c water in frac tank farm ready for frac.

hr Forecast
inish rig in of frac equipment. Frac 5 x 1.0m perforations at toe.

DAILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
06:00	06:30	0.50	P	WSS Shift Change
06:30	07:00	0.50	P	Held Safety + Operations meeting with all crews on location. Discuss Conoco PJHA and SOC JSA for multiple operations; spot and r/u frac tank farm, finish pooh and rig down SOC CT, spot remaining frac equip, and spot and r/u Heat Exchangers and boiler. All tickets checked and valid.
07:00	08:00	1.00	P	Continued to pooh with CT (maintaining 5,000Kpa wellhead pressure). Pull Bha up to stripper (-4.0m), shut down pump and close in master valve.
08:00	09:30	1.50	P	Pump 1m³ 60% methanol/water through surface lines to winterize pump and surface lines, Spot vac truck and rig in vent hose, drain up all surface lines. Break off lubricator at quick disconnect, lower toolstring and break down Bha inspecting guns to ensure they all were all fired. Re-stab lubricator, (having issues with n2 pumper, trickle 60% methanol/water @ 20 lpm through coil and surface lines to testers to prevent freezing.
09:30	14:00	4.50	P	Spot 11 sheets of 8' x 40' rig matting, place 2 x heat exchangers and 175HP boiler, rig in frac tank farm consisting of 12 additional frac tanks. Spot remaining frac pumpers, data van and chemical trailers. Install wireline Bop's and apply heat in preperation for pressure test. Read and record shut in pressures on casing and intermediate casing as follows: Time — Production Csg — Intermediate Csg 8:15 — 5671 KPa — 11267 KPa 8:30 — 5566 KPa — 11248 KPa 8:45 — 5500 KPa — 11292 KPa 9:00 — 5400 KPa — 11350 KPa 9:30 — 5236 KPa — 11439 KPa 10:00 — 5087 KPa — 11543 KPa 11:00 — 4813 KPa — 11614 KPa 12:00 — 4612 KPa — 11678 KPa 13:00 — 4419 KPa — 11734 KPa 14:00 — 4255 KPa — 11769 KPa
14:00	18:00	4.00	P	Spot Clean Harbours hot oiler, fill and fire H D Rentals boiler. R/u fall arrest system on all 12 & 63.5m3 tanks, ground tanks. R/u Clean Harbors Hot Oiler, ran steam lines through tank farm. R/u equalizing lines on frac tanks. SOC spotted remainder of frac equip, started rigging in.
18:00	18:30	0.50	P	WSS shift change.

Report Printed: 4/14/2014

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 15
Report Date: 2/8/2014
Final Job Status: GAS
Final Report? Yes

DAILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
18:30	19:00	0.50	P	Held a daily safety and operations meeting with all night shift personnel. Reviewed and discussed CPC PJHA #02082014 regarding night shift operations and all associated hazards. All tickets checked and valid. Performed a walk around inspection and cross shifted with day shift crews.
19:00	06:00	11.00	P	Lifted the last 400bbl tank (#12) in place in frac tank farm "B". Re-spotted twin hot oiler and started to boost temperatures in Frac tank farm "A". Rigged in 2 HD heat exchange units and started to heat tanks in frac tank farm "A". Lifted wireline lubricator and stabbed onto the well. Pressure tested lubricator and BOPs (shell test) to 1.5MPa and high 60MPa. Good test. Hauled water from Lake (WS-02) for frac tank farms. Approximately 960m³ hot water in tank farms A + B ready for frac. 05:30 SICP: 3150 kPa / SIICP: 11800 kPa

FLUID SUMMARY

Fluid	To lease (m³)	From lease (m³)	To well (m³)	From well (m³)	Left to recover (m³)
FRESH WATER	762.00	0.00			42.50

DAILY COST

BU Desc	Vendor	Activity Code	Amount (Cost)
Rig Camp	***VENDOR NOT LISTED***	E500	500.00
Trucking/Hauling/ Hot Shot Services	***VENDOR NOT LISTED***	P100	1,000.00
Surface Completion Equipment Rental	BOREALIS COMMUNICATIONS INC	Q300	554.00
Service Rig	CANOL OILFIELD SERVICES INC	E120	6,104.00
Fracture Stimulation Services	CANOL OILFIELD SERVICES INC	N110	19,260.00
Trucking/Hauling/ Hot Shot Services	CANOL OILFIELD SERVICES INC	P100	15,480.00
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	3,430.00
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	3,430.00
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	3,430.00
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	3,430.00
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	3,430.00
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	3,430.00
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	3,430.00
Trucking/Hauling/ Hot Shot Services	CANOL OILFIELD SERVICES INC	P100	2,275.00
Service Rig	CANOL OILFIELD SERVICES INC	E120	4,490.00
Service Rig	CORNERSTONE OILFIELD SERVICES LTD	E120	1,400.00
Surface Completion Equipment Rental	CORNERSTONE OILFIELD SERVICES LTD	Q300	195.00
Service Rig	CORNERSTONE OILFIELD SERVICES LTD	E120	3,400.00
Service Rig	CORNERSTONE OILFIELD SERVICES LTD	E120	4,400.00
Service Rig	CORNERSTONE OILFIELD SERVICES LTD	E120	280.00
Wellsite Supervision & Engineering	DEN JAR CONSULTING LTD	T130	1,670.00
Safety Equipment & Services	FRONTIERMEDEX CANADA LTD/ EXLOGS SAHTU LTD	T430	2,000.00
Safety Equipment & Services	HODGSON'S CONTRACTING (2005) LTD	T430	6,345.00
Safety Equipment & Services	HODGSON'S CONTRACTING (2005) LTD	T430	1,600.00
Fracture Stimulation Services	ISOLATION EQUIPMENT SERVICES INC	N110	4,190.00
Wellsite Supervision & Engineering	M HAHN CONSULTING INC	T130	1,670.00
Surface Completion Equipment Rental	MACKAY RANGE DEVELOPMENT CORP	Q300	374.00
Wellsite Supervision & Engineering	MINAULT ENERGY SERVICES LTD	T130	1,545.00
Surface Completion Equipment Rental	MYB CONSTRUCTION LTD	Q300	1,380.00
Surface Completion Equipment Rental	MYB CONSTRUCTION LTD	Q300	500.00
Trucking/Hauling/ Hot Shot Services	NCSG CRANE & HEAVY HAUL SERVICES LTD	P100	10,820.00
Completion Fluids & Other Chem	NORTHERN TRUCK SERVICES (1994) LTD	G300	3,570.00
Completion Fluids & Other Chem	NORTHERN TRUCK SERVICES (1994) LTD	G300	10,710.00
Completion Fluids & Other Chem	NORTHERN TRUCK SERVICES (1994) LTD	G300	10,440.00
Completion Fluids & Other Chem	PBN ENERGY SERVICES LTD	G300	3,745.00
Fracture Stimulation Services	PROTECHNICS - CORE LABS	N110	24,500.00
Surface Completion Equipment Rental	RIGSAT COMMUNICATIONS INC	Q300	15.00
Surface Completion Equipment Rental	RIGSAT COMMUNICATIONS INC	Q300	15.00
Surface Completion Equipment Rental	RIGSAT COMMUNICATIONS INC	Q300	15.00
Surface Completion Equipment Rental	SAHTU RCS ENERGY SERVICES LTD	Q300	600.00
Surface Completion Equipment Rental	SAHTU RCS ENERGY SERVICES LTD	Q300	600.00
Surface Completion Equipment Rental	SAHTU RCS ENERGY SERVICES LTD	Q300	600.00

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 16
Report Date: 2/9/2014
Final Job Status: GAS
Final Report? Yes

WELL HEADER INFORMATION

Country	State/Province	Region / Division	District	Field Name	Field Code
CANADA	N.W.T.	WCBU	NEW VENTURES	Canyon	

Surface Legal Location	API / UWI	License No.
E-76 65-10 126-45	300E7665-10126-45	EL 470

Orig KB/RT (m)	Ground Elevation (m)	KB-Grd (m)	KB-CF (m)	KB-TF (m)	Total Depth (mKB)	PBTD (All) (mKB)
273.40	268.20	5.20	5.40	4.22	2,910.00	Original Hole - 2,877.30

JOB INFORMATION

Job Category	Primary Job Type	Secondary Job Type	Total Field Estimate (Cost)
COMPLETIONS	INITIAL COMPLETION	RIGLESS	21,945,332.75

Objective
Hydrailically fracture and flow test as part of the 2014 Canol Exploration Program

Actual Start Date	End Date	Abandon Date	Responsible Grp 1	Responsible Grp 2	Responsible Grp 3
1/25/2014 00:00	3/28/2014 08:00		coved	lagartn	Chris Kendall

AFE COST SUMMARY

AFE / RFE / Maint.#	Total AFE Amount (Cost)	Total AFE + Supp Amount (Cost)	Total Field Estimate (Cost)	AFE-Field Estimate (Cost)
10351695	2,111,000.00	2,111,000.00	2,318,381.14	-207,381.14
AFE / RFE / Maint.#	Total AFE Amount (Cost)	Total AFE + Supp Amount (Cost)	Total Field Estimate (Cost)	AFE-Field Estimate (Cost)
10359413	16,997,500.00	20,641,514.00	19,626,951.61	1,014,562.39

DAILY INFORMATION

Report Start Date	Report End Date	Daily Cost Total (Cost)	Cumulative Cost (Cost)	Personnel Regular Hours (hr)
2/9/2014 06:00	2/10/2014 06:00	671,126.00	9,688,185.71	1,092.00

Daily Contacts
Completion Engineer, Theorn LaGarde, 403-710-9753; WS Superintendent, Derrick Cove, 780-831-1314; WS Supervisor, Chris Kendall, 780-518-3284; WS Supervisor, Myles Hahn, 780-402-0500; WS Supervisor, Richard Young, 780-831-9153

Rig
Weatherford, FS 463

Tubing Pressure (kPa)	Casing Pressure (kPa)	Weather	Temperature (°C)	Lease Condition
	5,500	Overcast	-29	Ice Pad

Last 24hr Summary
Finish filling and heating 400bbl tanks of water. Rig in remaining frac iron and fluid manifold. Frac interval #1. Pumped slickwater pad bringing rates up to 7.5MPa at 50MPa. Pumped a total of 716kg of 100 mesh sand at 25kgPA. Treating pressure increased as sand went into formation. Rates were adjusted as per pressure allowed. Shut down with a final pump rate of 0.3m³/min at 54MPa - 240.8m³ water injected. Picked up coil tubing injector and pressure tested to 50MPa. Broke off at quick sub. Made up TCP BHA on CT and started in hole.

24hr Forecast
Continue to RIH with coil tubing and 5 - 79mm x 1.0m Owen SDP-3125-411NT4 Perforating guns c/w 21gm HMX (DP) charges,Spiral pattern with 60° phasing 6 SPM, 6 min time delay between guns.

DAILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
06:00	06:30	0.50	P	WSS Shift Change
06:30	07:00	0.50	P	Held Safety + Operations meeting with all crews on location. Discuss Conoco PJHA and SOC JSA for multiple operations; r/u remaining frac iron, hauling and unloading frac water, tie in tank farm, heating fluid with heat exchangers and hot oiler. All tickets checked and valid.
07:00	11:00	4.00	P	Rig in remaining frac iron, haul in 90m³ to fill remaining frac tanks, continue heating 400bbl tanks with heat exchangers and hot oiler. Hooked up all hoses to frac manifold and 63.5m3 tanks.
11:00	13:30	2.50	P	Continue to heat frac tanks, wait for SOC to complete there rig in.
13:30	14:00	0.50	P	Held Safety + Operations meeting with all crews on location. Discussed PJHA and SOC JSA for fracing, heating and pumping frac water, and cold weather working conditions.
14:00	15:30	1.50	P	Waited 30 min for SOC to complete some final rig in adjustments. Opened valves to frac manifold, 1 valve on manifold leaking. Shut down and drained hose, repaired leaking valve. Opened tanks to frac manifold. SOC started pumping 60°C f/w at 0.25m3/min, pumped 1.30m3 with each of 10 pumpers to warm up iron, returned f/w to test equip. Shut in testers, pressured surface lines to 53.1mpa, flange on 1 pumper started leaking. Shut down, bleed off pressure to testers, suck out pumper with vacuum truck. Replaced damaged gasket on pumper flange. Pressure tested surface lines 69.0mpa.
15:30	17:30	2.00	T	Opened well started pumping, pressure biult 35.2mpa at 5.47m3/min, pumpers started cutting out and shutting down. Restarted pumpers 3 times, pumped total 95.0m3 f/w, pumpers still cutting out and shutting down. Shut down wait for SOC to repair computer system.

Y TIME LOG

Time	End Time	Dur (hr)	Time P-T-X	Operation
17:30	18:30	1.00	P	17:21 Casing at 8MPa. Engaged pumps. Slowly brought rates up to 7.5m³/min. 17:30 Pump rate: 7.5m³/min at a steady 50MPa. 17:35 Started 100 mesh sand stage at 25kgPA. Pumped a total of 716kgs 100mesh sand. Pressure started to climb as sand went into formation. Dropped and adjusted rates according to pressure. 18:08 Pump rate: 0.70m³/min at a steady 50MPa. 18:17 Upped pump rate to 1.10m³/min and pressure quickly built to 55.5MPa. Dropped pump rate. 18:21 Pump rate: 0.56m³/min at 57MPa. Shut down pumps. Total of 235m³ pumped. 18:23 Casing down to 28MPa. Engaged pumps at 0.56m³/min. Pressure climbed to 50MPa and steadied out for a short period before starting to climb again. Dropped pump rate to minimum of 0.3m³/min. 18:33 Shut down pumps. Final pump rate was 0.3m³/min at 57MPa. Total sand into formation: 716 kg of 100 mesh Total water injected: 240.8m³ 18:00 WSS shift change. 18:30 Crew shift change. Held a daily safety and operations meeting with all night shift personnel. Reviewed and discussed CPC PJHA #020914 regarding night time operations and all associated hazards. All tickets checked and valid. Average Pressure = 42.69mpa, Average rate = 2.27m3/min.
18:30	22:30	4.00	P	Winterized frac equipment. Pumped 10.3m³ of 60/40 methanol water through frac equipment into the wellbore (0.3m³/min at 54MPa). Transferred 35°c fresh water from frac tank farm "B" to frac tank farm "A" (840m³ in frac tank farm "A"). Drained suction lines on frac manifold. Started to haul water from lake (WS-02) and off load into frac tank farm "B". Rigged off wireline BOPs. Pull tested CT dimple connector to 21000daN. Good. Installed coil tubing combo BOPs (blind/shear, pipe/slips) onto well. Function tested BOPs. Good. Moved rigless anchor blocks into position with crane. -30°c weather with a slight wind slowed operations as hands needed regular warm up breaks.
[illegible]0	01:15	2.75	P	Hoisted injector and installed 4 joints of 8" lube onto the bottom. Filled coil tubing with 60/40 methanol water (6.4m³ to fill) and pressure tested connector to 35MPa. Good test.
[illegible]	04:45	3.50	P	Stabbed onto the well. Put a low pressure test on injector, lubricator, BOP (shell test) and ring seal connection of 1500 kPa. Bumped pressure up to 60MPa and coil tubing stripper was leaking. Bled off pressure. Worked stripped and moved CT up and down through stripper. Pressure tested again and stripper continued to leak (-30°c outside with wind). Hoisted lubricator off of well and lowered to ground level. Used genie boom to change out stripper (60 min). Hoisted lubricator and stabbed back on to the well. Pressure tested lubricator again and at 28000 kPa the bottom Bowen connection started to leak. Bled off pressure. Heated bowen connection and attempted to test again. Connection still leaked. Drained out lubricator and hoisted off well. Changed out O-ring on bowen connection and landed back on well. Pressure tested lubricator again and the second bowen connection 8' above work floor started to leak. Bled off pressure. Sent man up in genie and steamed bottom 3 bowen connections on lubricator. Pressure tested injector, lubricator, BOPs (shell test) and ring seal connection to 60 MPa. Good test. Broke lubricator connection at quick sub and hoisted off of well.
04:45	06:00	1.25	P	Installed TCP perforating BHA as follows: 1 - 50.8mm Dimple connector 1 - 73mm MHA c/w - dual flapper check valves - Hydraulic disconnect (35MPa 28.575mm / 1 1/8" ball activated) - Circulation sub (21MPa 25.4mm / 1" ball activated - 42MPa activated without ball) 1 - Crossover (60.3mm PAC x 60.3mm EUE c/w swivel) 1 - Open Flow sub 1 - Pressure activated firing head 5 - 79mm x 1.0m Owen SDP-3125-411NT4 Perforating gun - Hollow Steel Carrier - 21gm HMX (DP) charges - Spiral pattern with 60° phasing - 6 SPM with spiral pattern - 6 MINUTE TIME DELAY BETWEEN GUNS 1 - Tapered bull nose Pulled BHA up into lubricator and stabbed onto the well. Chained and secured injector. Pressure tested quick test sub to 60MPa. Good test. SICP= 5500 kpa, SIICP = 11500 kpa

SUMMARY

Fluid	To lease (m³)	From lease (m³)	To well (m³)	From well (m³)	Left to recover (m³)
FRESH WATER	308.00	0.00	251.10	0.00	293.60

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 17
Report Date: 2/10/2014
Final Job Status: GAS
Final Report? Yes

WELL HEADER INFORMATION

Country	State/Province	Region / Division	District	Field Name	Field Code
CANADA	N.W.T.	WCBU	NEW VENTURES	Canyon	

Surface Legal Location	API / UWI	License No.
E-76 65-10 126-45	300E7665-10126-45	EL 470

Orig KB/RT (m)	Ground Elevation (m)	KB-Grd (m)	KB-CF (m)	KB-TF (m)	Total Depth (mKB)	PBTD (All) (mKB)
273.40	268.20	5.20	5.40	4.22	2,910.00	Original Hole - 2,877.30

JOB INFORMATION

Job Category	Primary Job Type	Secondary Job Type	Total Field Estimate (Cost)
COMPLETIONS	INITIAL COMPLETION	RIGLESS	21,945,332.75

Objective
Hydrailically fracture and flow test as part of the 2014 Canol Exploration Program

Actual Start Date	End Date	Abandon Date	Responsible Grp 1	Responsible Grp 2	Responsible Grp 3
1/25/2014 00:00	3/28/2014 08:00		coved	lagartn	Chris Kendall

AFE COST SUMMARY

AFE / RFE / Maint.#	Total AFE Amount (Cost)	Total AFE + Supp Amount (Cost)	Total Field Estimate (Cost)	AFE-Field Estimate (Cost)
10351695	2,111,000.00	2,111,000.00	2,318,381.14	-207,381.14
AFE / RFE / Maint.#	**Total AFE Amount (Cost)**	**Total AFE + Supp Amount (Cost)**	**Total Field Estimate (Cost)**	**AFE-Field Estimate (Cost)**
10359413	16,997,500.00	20,641,514.00	19,626,951.61	1,014,562.39

DAILY INFORMATION

Report Start Date	Report End Date	Daily Cost Total (Cost)	Cumulative Cost (Cost)	Personnel Regular Hours (hr)
2/10/2014 06:00	2/11/2014 06:00	416,565.00	10,104,750.71	1,104.00

Daily Contacts
Completion Engineer, Theorn LaGarde, 403-710-9753; WS Superintendent, Derrick Cove, 780-831-1314; WS Supervisor, Chris Kendall, 780-518-3284; WS Supervisor, Myles Hahn, 780-402-0500; WS Supervisor, Richard Young, 780-831-9153; WS Supervisor, Michael Short

Rig
Weatherford, FS 463

Tubing Pressure (kPa)	Casing Pressure (kPa)	Weather	Temperature (°C)	Lease Condition
		Overcast	-24	Ice Pad

Last 24hr Summary
RIH TCP BHA and coil. Tag high @ 2787mKB (top perforations @ 2789mKB) Discuss with Derrick Cove and Theron Legarde, decision made to pull out of the hole with coil and perforating gun assembly. RIH with 98mm mill and motor. Clean out wellbore to PBTD 2877.3mKB.
POOH coil tubing and milling assembly.
Cut coil and install new dimple connector. Pull test to 21dan, pressure test to 35mpa. (tests good). RIH with coil tubing and 5 - 79mm x 1.0m Owen SDP-3125-411NT4 Perforating guns c/w 21gm HMX (DP) charges,Spiral pattern with 60° phasing, 6 SPM, 6 min time delay between guns. Perforate the following intervals:
2857mKB to 2858mKB
2838mKB to 2839mKB
2819mKB to 2820mKB
2800mKB to 2801mKB

24hr Forecast
POOH coil, rig down coil tubing. Rig in frac equipment. Perform re-frac on stage 1.

DAILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
06:00	06:30	0.50	P	WSS Shift Change
06:30	07:00	0.50	P	Held Safety + Operations meeting with all crews on location. Discussed Conoco PJHA and SOC JSA for multiple operations: Coiled tbg perforating, frac crews mr/o required equip to move PCM out for repairs, and filling and heating frac tanks.
07:00	09:30	2.50	P	Rih and 20m/min with perforating gun assembly on 50.8mm CT. circulating fresh water @ 100L/min. Perform pull tests on way in hole as follows: 1000m- down weight 2100dan, up weight 4400dan full returns to testers 1200m- down weight 2700dan up weight 4400dan full returns to testers, did not see any restrictions 1700m- down weight 4400dan up weight 6000dan, full returns to testers, did not see any restrictions 2300m- down weight 4000dan up weight 7200dan, full returns to testers, did not see any restrictions 2250m- down weight 3500dan up weight 8100dan, full returns to testers, did not see any restrictions
09:30	10:00	0.50	P	Run in and tag @ 2787.0 mKB, pick off and re-confirm tag point with setting down 1.5 Dan string weight @ 2787.3 mKB Note: perforation top @ 2789 mKB. Notify Derrick Cove and Theron Legarde of tag point, decision is made to pull out of the hole with coil and perforating gun assembly.
10:00	12:30	2.50	P	Pull out of the hole with coil tbg and perforating gun assembly, circulating fresh water @ 100 lpm to tester's, with coil 100m from surface displace coil tbg and surface lines over to 60% methanol / water. Kick out pump and shut in tester's. SICP when shut in 5800KPa.
12:30	13:00	0.50	P	Hold pre-job safety meeting with all personnel regarding pulling live perforating guns to surface.

ILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
13:00	14:30	1.50	P	Pull remaining 100m of coil tbg, Bha to surface, tag out @ -5.5. Close 4 1/2" master valve, bleed off pressure and drain up surface lines. Break off lubricator, lay down live perforating gun assembly and make up Bha as follows: Installed BHA onto coil connector as follows: 1 - 50.8mm dimple connector 1 - 73mm MHA c/w - dual flapper check valves - Hydraulic disconnect (35MPa 28.575mm / 1 1/8" ball activated) - Circulation sub (21MPa 25.4mm / 1" ball activated - 42MPa activated without ball) 1 - 73mm Bi-directional Ultra Jar (317.5mm / 12.5" stroke) 1 - 73mm Hydraulic disconnect (33MPa 22.2mm / 7/8" ball activated) 1 - 73mm Power Plus mud Motor 1 - 98.0mm 5 blade concave mill c/w 5 10mm circulation ports All connections were torqued to spec with pipe wrenches and pull gauge (2100 ft/lbs - lock tight used) Pulled BHA into lubricator and stabbed onto the well. Cross chained and secured injector.
14:30	17:30	3.00	P	Stab on coil lubricator, pressure test quick test sub to 60.0MPa. Surface test mud motor, zeroed depth -5.4, run in and zero mechanical depth counter @ 0. Run in 50m and perform motor tests at following pressures and rates: 250 lpm @ 16258 KPa 350 lpm @ 26270 KPa 450 lpm @ 28086 KPa RIH with coil and drilling assembly circulating @ 400 lpm.
0	18:00	0.50	P	Pass point of refusal (2788 mKB) without seeing any restriction, tag with coil @ 2878mKB. Pump 1m³ gel sweep followed by 2m³ fresh water and 1m³ gel sweep, chase sweep up hole to 2770 mKB, run back down to 2875 mKB and pump 1m³ gel sweep followed by 2m³ fresh water spacer and 1m³ gel sweep. Pull out of the hole @ 10 m/min up to 2770 mKB, pick up to 20 m/min.
18:00	18:30	0.50	P	WSS Shift Change
18:30	19:00	0.50	P	Held pre-job safety and operations meeting with all services. Discussed coil tubing and perforating operations. Review Conoco PJHA #10022014C/D. All tickets were checked and valid. Perform daily walk around inspections and checks.
19:00	00:00	5.00	P	Continue to pull out coil. Pump 1m³ Gel sweep followed by 1m3 spacer, followed by 1m3 Gel @ 1660mKB (30 deg). Monitor returns to testers. Testers seen sand in returns with gel sweep to surface. At 50mKB perform post motor check 450L/min @ 39mpa 350L/min @ 28mpa 250L/min @ 19.5mpa, wellhead pressure @ 8.5mpa Circulate Coil tubing string over to 60/40 methanol/fresh water mix. Pull coil and milling BHA into lube, shut in well (8000kpa), bleed off and drain lube to vac truck. Break off lube at quick test sub. Had issues comming out of lube. Heat up connection with steam to pull off lube. Coil cut off 11.1m tubing, Install new dimple connector. Had wear on old dimple connector and above on tubing.
00:00	02:00	2.00	P	Pull test dimple connector to 21000dan. Pressure test to 35mpa. All tests good. IES greased all valves on frac head. Held tailgate meeting prior to installing perforating guns on coil tubing. Discussed and confirmed all perforating depths and pressures.

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 17
Report Date: 2/10/2014
Final Job Status: GAS
Final Report? Yes

DAILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
02:00	03:00	1.00	P	Make up TCP BHA as follows (top down) 1 - 50.8mm Dimple connector 1 - 73mm MHA c/w - dual flapper check valves - Hydraulic disconnect (35MPa 28.575mm / 1 1/8" ball activated) - Circulation sub (21MPa 25.4mm / 1" ball activated - 42MPa activated without ball) 1 - Crossover (60.3mm PAC x 60.3mm EUE c/w swivel) 1 - Equalize sub 1 - Pressure activated firing head.(autovent) firing head is a CLOSED SYSTEM 5 - 79mm x 1.0m Owen SDP-3125-411NT4 Perforating gun - Hollow Steel Carrier - 21gm HMX (DP) charges - Spiral pattern with 60° phasing - 6 SPM with spiral pattern - 6 MINUTE TIME DELAY BETWEEN GUNS 1 - Tapered bull nose All connections torqued to spec with mechanical pull gauges. Pulled BHA up into lubricator and stab onto the well. Chain and secured injector. Pressure test quick test sub to 60MPa. Good test. SICP=4760kpa, SIICP = 13600kpa
03:00	06:00	3.00	P	Equalize and Open well, RIH coil tubing and BHA. Mechanical counter zeroed at zero to digital. Perform pull tests @ 1000mKB, 1500mKB, 2000mKB and 2500mKB. No over pull or restrictions seen. SIICP=13,600kpa 05:45am-Pull guns into position, shut in annulus to testers. Pressure up to 33mpa to activate guns. 05:46am perforate interval from 2857mkb to 2858mkb, csg pressure=7500 kpa, pull up into position for next perforation 05:52am perforate interval from 2838mkb to 2839mkb, csg pressure=11,100 kpa, pull up into position for next perforation 05:58am perforate interval from 2819mkb to 2820mkb, csg pressure=6700 kpa, pull up into position for next perforation Engage pump @ 100L/min to increase annulus pressure 06:04am perforate interval from 2800mkb to 2801mkb, csg pressure=10,000 kpa, pull up into position for next perforation Engage pump @ 100L/min to increase annulus pressure 06:10am perforate interval from 2781mkb to 2782mkb, csg pressure =10,000 kpa

FLUID SUMMARY

Fluid	To lease (m³)	From lease (m³)	To well (m³)	From well (m³)	Left to recover (m³)
FRESH WATER	0.00	0.00	0.00	0.00	293.60

DAILY COST

BU Desc	Vendor	Activity Code	Amount (Cost)
Rig Camp	***VENDOR NOT LISTED***	E500	500.00
Trucking/Hauling/ Hot Shot Services	***VENDOR NOT LISTED***	P100	1,000.00
Surface Completion Equipment Rental	BOREALIS COMMUNICATIONS INC	Q300	554.00
Service Rig	CANOL OILFIELD SERVICES INC	E120	6,104.00
Fracture Stimulation Services	CANOL OILFIELD SERVICES INC	N110	14,260.00
Trucking/Hauling/ Hot Shot Services	CANOL OILFIELD SERVICES INC	P100	8,762.00
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	3,430.00
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	3,430.00
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	3,430.00
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	3,430.00
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	3,430.00
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	3,430.00
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	3,430.00
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	3,430.00
Trucking/Hauling/ Hot Shot Services	CANOL OILFIELD SERVICES INC	P100	2,275.00
Fracture Stimulation Services	CANOL OILFIELD SERVICES INC	N110	29,900.00
Service Rig	CANOL OILFIELD SERVICES INC	E120	4,490.00
Service Rig	CONOCO	E120	37,000.00
Service Rig	CORNERSTONE OILFIELD SERVICES LTD	E120	1,400.00
face Completion Equipment Rental	CORNERSTONE OILFIELD SERVICES LTD	Q300	195.00
Service Rig	CORNERSTONE OILFIELD SERVICES LTD	E120	3,40
Service Rig	CORNERSTONE OILFIELD SERVICES LTD	E120	4,40
Service Rig	CORNERSTONE OILFIELD SERVICES LTD	E120	280.00
Wellsite Supervision & Engineering	DEN JAR CONSULTING LTD	T130	1,670.00
Safety Equipment & Services	FRONTIERMEDEX CANADA LTD/ EXLOGS SAHTU LTD	T430	2,000.00

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 18
Report Date: 2/11/2014
Final Job Status: GAS
Final Report? Yes

WELL HEADER INFORMATION

Country	State/Province	Region / Division	District	Field Name	Field Code
CANADA	N.W.T.	WCBU	NEW VENTURES	Canyon	

Surface Legal Location	API / UWI	License No.
E-76 65-10 126-45	300E7665-10126-45	EL 470

Orig KB/RT (m)	Ground Elevation (m)	KB-Grd (m)	KB-CF (m)	KB-TF (m)	Total Depth (mKB)	PBTD (All) (mKB)
273.40	268.20	5.20	5.40	4.22	2,910.00	Original Hole - 2,877.30

JOB INFORMATION

Job Category	Primary Job Type	Secondary Job Type	Total Field Estimate (Cost)
COMPLETIONS	INITIAL COMPLETION	RIGLESS	21,945,332.75

Objective
Hydrailically fracture and flow test as part of the 2014 Canol Exploration Program

Actual Start Date	End Date	Abandon Date	Responsible Grp 1	Responsible Grp 2	Responsible Grp 3
1/25/2014 00:00	3/28/2014 08:00		coved	lagartn	Chris Kendall

AFE COST SUMMARY

AFE / RFE / Maint.#	Total AFE Amount (Cost)	Total AFE + Supp Amount (Cost)	Total Field Estimate (Cost)	AFE-Field Estimate (Cost)
10351695	2,111,000.00	2,111,000.00	2,318,381.14	-207,381.14
10359413	16,997,500.00	20,641,514.00	19,626,951.61	1,014,562.39

DAILY INFORMATION

Report Start Date	Report End Date	Daily Cost Total (Cost)	Cumulative Cost (Cost)	Personnel Regular Hours (hr)
2/11/2014 06:00	2/12/2014 06:00	514,696.00	10,619,446.71	1,104.00

Daily Contacts
Completion Engineer, Theorn LaGarde, 403-710-9753; WS Superintendent, Derrick Cove, 780-831-1314; WS Supervisor, Chris Kendall, 780-518-3284; WS Supervisor, Myles Hahn, 780-402-0500; WS Supervisor, Richard Young, 780-831-9153; WS Supervisor, Michael Short

Rig
Weatherford, FS 463

Tubing Pressure (kPa)	Casing Pressure (kPa)	Weather	Temperature (°C)	Lease Condition
	10,000	Overcast	-28	Ice Pad

Last 24hr Summary
Finish POOH coil tubing. Break down BHA. Stab lube back on, purge coil with N2. Rig in frac lines. Pressure test to 69mpa.
Perfom stage 1 of frac as follows: - Open wellhead, pumped 10.0m3 15% HCL acid at 0.30m3/min 10.0mpa
- Pumped 23.8m3 gelled pad at final rate 0.30m3/min 12.1mpa, shut down 10 min let acid soak.
- Pumped 3.50m3 WF130 pad followed by 39.6m3 YF130Flex pad at final rate 2.20m3/min 14.8mpa
- Pumped 14.40m3 100 Mesh scour at final rate 5.50m3/min 23.3mpa
- Pumped 100 Mesh, 40/70, and 30/50 PR 6000 sand stages at combined rate 7.90m3/min 28.4mpa, started flush.
- Pumped 26.50 m3 YF130Flex flush at final rate 7.90m3/min 29.30mpa
Shut down pumps ISIP = 11.0mpa, 5 min SICP = 10.0mpa, 20 min SICP = 7.80mpa. Placed 19,350 kg 100 Mesh frac sand, 59,960 kg 40/70 frac sand, and 20,030 kg 30/50 PR 6000 frac sand with total of 579.50m3 f/w. Winterize frac equipment with 60/40 methanol/water mix.

Rig coil tubing lubricator and bops off well. Install and pressure test e-line bops. RIH with plug and perforating BHA on e-line
Set 101.6mm Halliburton Obsidian 10K flow through plug top@ 2771.63mKB, CE @ 2772mKB. Perforate the following intervals with 1.0m Owen -3125-411NT4, Hollow Steel Carrier, 21gm HMX (DP) charges, Spiral pattern with 60° phasing,6 SPM with spiral pattern perforating guns.
2762mKB-2763mKB, 2743mKB-2744mKB, 2723mKB-2724mKB,2704mKB,2705mKB,2685mKB-2686mKB. Start out of hole with e-line.

24hr Forecast
Perform stage 2 of frac.

DAILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
06:00	06:30	0.50	P	WSS Shift Change
06:30	07:00	0.50	P	Held Safety + Operations meeting with all crews on location. Discussed Conoco PJHA and SOC JSA for CT pulling to surface, r/o CT, water transfer operations, and heating frac water.
07:00	10:00	3.00	P	Pooh with CT at 20m/min circ f/w at 0.10m3/min to Waetherford testers, held 10.8mpa back pressure on csg. Started pumping methanol water at 185m, pulled to surface at 5.0m/min, shut in well. Broke off lubricator, laid down fired perf guns. Made up lubricator, pumped 1,000 scm N2 through 50.8mm CT, blew CT dry, rec 6.30m3 f/w to testers. Shut in and secured well.
10:00	11:30	1.50	P	Heat and transfer water from frac tank farm #02 to frac tank farm #01. Hook up hoses from frac tanks to frac manifold, wait for SOC to get ready to frac.
11:30	12:00	0.50	P	Held Safety + Operations meeting with all crews on location. Discuss Conoco PJHA and SOC JSA for fracing operations, pressure and rate limitations, handling 15% HCL acid, and pumping and heating frac water.
12:00	13:00	1.00	P	SOC hooked up to frac manifold, waited for SOC to get ready to frac.

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 18
Report Date: 2/11/2014
Final Job Status: GAS
Final Report? Yes

DAILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
13:00	17:00	4.00	P	Pumped 5.0m3 of 50°C frac water through frac head to testers, warm up frac lines and equip. Pressure tested surface lines 69.0mpa. - Open wellhead, pumped 10.0m3 15% HCL acid at 0.30m3/min 10.0mpa - Pumped 23.8m3 gelled pad at final rate 0.30m3/min 12.1mpa, shut down 10 min let acid soak. - Pumped 3.50m3 WF130 pad followed by 39.6m3 YF130Flex pad at final rate 2.20m3/min 14.8mpa - Pumped 14.40m3 100 Mesh scour at final rate 5.50m3/min 23.3mpa - Pumped 100 Mesh, 40/70, and 30/50 PR 6000 sand stages at combined rate 7.90m3/min 28.4mpa, started flush. - Pumped 26.50 m3 YF130Flex flush at final rate 7.90m3/min 29.30mpa Shut down pumps ISIP = 11.0mpa, 5 min SICP = 10.0mpa, 20 min SICP = 7.80mpa. Placed 19,350 kg 100 Mesh frac sand, 59,960 kg 40/70 frac sand, and 20,030 kg 30/50 PR 6000 frac sand with total of 579.50m3 f/w. Shut in well. Pumped 15.0m3 50% methanol water through frac equip, frac head, and back to testers, winterized frac equip.
17:00	18:00	1.00	P	Lay down lubricator and CT injector.
18:00	18:30	0.50	P	WSS shift change and cross over meeting.
18:30	19:00	0.50	P	Held pre-job safety and operations meeting with all services. Review Conoco Phillips PJHA on rigging out coil tubing, pump down operations and hauling/heating water. All tickets checked and valid. Perform daily walk around inspections and checks.
19:00	20:30	1.50	P	Continue to rig down coil tubing lubricator and bops. Transfer fluid into frac tank farm. Haul in and heat water to 35deg. Drain and winterize frac manifold and associated hoses.
20:30	03:30	7.00	P	Install e-line bops. Pressure test bops to 60mpa with 60/40 methanol/water mix. Had some leaks on pumping iron due to cold fluid. Tighten unions and re-test, test good. Make up plug and perforating BHA -Casing collar locator -Firing head 6 - 79mm x 1.0m Owen -3125-411NT4 Perforating guns (have 1 extra gun in the case one does not fire) - Hollow Steel Carrier - 21gm HMX (DP) charges - Spiral pattern with 60° phasing - 6 SPM with spiral pattern -Plug shoot extender - Baker #10 setting tool -setting sleeve -Halliburton "Obsidian" flow through plug - 10K -92.96mm x 0.73m -1.4 SG ball Pack off head and accumulator cold so not functioning properly. Heat equipment to operating temperature. Pick up e-line lube and install on well. Presure test quick test sub to 60mpa. Fill lube with 60/40 methanol/water mix to avoid freeze up. Steam hose froze off, try to thaw on well with no success. Drain lube and lay down. Thaw out steam hose. re-configure so that hoses do not need to be disconnected when hoisting. Pick up lube and stab onto well. Pressure test Qick test sub connection to 60mpa. Fill lube with 60/40methanol mix, equalize lube.
03:30	06:00	2.50	P	Well pressure = 2000kpa RIH with plug and perforating BHA on e-line. Correlate depth to packer top @ 1477.35mKB. Continue in hole with e-line. Engage pumps @ 1650mKB at 1.1m3/min to assist e-line. Log onto depth set Halliburton plug top @ 2771.63mKB CE @ 2772mKB. Pull guns into position, perforate interval from 2762mKB to 2763mKB Pull guns into position, perforate interval from 2743mKB to 2744mKB Pull guns into position, perforate interval from 2723mKB to 2724mKB Pull guns into position, perforate interval from 2704mKB to 2705mKB Pull guns into position, perforate interval from 2785mKB to 2786mKB Well pressure=4600kpa Start out of hole with e-line (1 extra live gun) Hauled in and heated 510m³ of fresh water.

FLUID SUMMARY

Fluid	To lease (m³)	From lease (m³)	To well (m³)	From well (m³)	Left to recover (m³)
FRESH WATER	570.00	0.00	622.90	0.00	916.50

DAILY COST

BU Desc	Vendor	Activity Code	Amount (Cost)
Camp	***VENDOR NOT LISTED***	E500	500.00
Trucking/Hauling/ Hot Shot Services	***VENDOR NOT LISTED***	P100	1,00
Surface Completion Equipment Rental	BOREALIS COMMUNICATIONS INC	Q300	55
Service Rig	CANOL OILFIELD SERVICES INC	E120	6,104.00
Fracture Stimulation Services	CANOL OILFIELD SERVICES INC	N110	14,260.00
Trucking/Hauling/ Hot Shot Services	CANOL OILFIELD SERVICES INC	P100	8,000.00

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 19
Report Date: 2/12/2014
Final Job Status: GAS
Final Report? Yes

L HEADER INFORMATION

ry	State/Province	Region / Division	District	Field Name	Field Code
ADA	N.W.T.	WCBU	NEW VENTURES	Canyon	

Surface Legal Location	API / UWI	License No.
E-76 65-10 126-45	300E7665-10126-45	EL 470

Orig KB/RT (m)	Ground Elevation (m)	KB-Grd (m)	KB-CF (m)	KB-TF (m)	Total Depth (mKB)	PBTD (All) (mKB)
273.40	268.20	5.20	5.40	4.22	2,910.00	Original Hole - 2,877.30

JOB INFORMATION

Job Category	Primary Job Type	Secondary Job Type	Total Field Estimate (Cost)
COMPLETIONS	INITIAL COMPLETION	RIGLESS	21,945,332.75

Objective
Hydraillically fracture and flow test as part of the 2014 Canol Exploration Program

Actual Start Date	End Date	Abandon Date	Responsible Grp 1	Responsible Grp 2	Responsible Grp 3
1/25/2014 00:00	3/28/2014 08:00		coved	lagartn	Chris Kendall

AFE COST SUMMARY

AFE / RFE / Maint.#	Total AFE Amount (Cost)	Total AFE + Supp Amount (Cost)	Total Field Estimate (Cost)	AFE-Field Estimate (Cost)
10351695	2,111,000.00	2,111,000.00	2,318,381.14	-207,381.14
AFE / RFE / Maint.#	Total AFE Amount (Cost)	Total AFE + Supp Amount (Cost)	Total Field Estimate (Cost)	AFE-Field Estimate (Cost)
10359413	16,997,500.00	20,641,514.00	19,626,951.61	1,014,562.39

DAILY INFORMATION

Report Start Date	Report End Date	Daily Cost Total (Cost)	Cumulative Cost (Cost)	Personnel Regular Hours (hr)
2/12/2014 06:00	2/13/2014 06:00	813,142.02	11,432,588.73	1,104.00

Daily Contacts
Completion Engineer, Theorn LaGarde, 403-710-9753; WS Superintendent, Derrick Cove, 780-831-1314; WS Supervisor, Chris Kendall, 780-518-3284; WS Supervisor, Myles Hahn, 780-402-0500; WS Supervisor, Richard Young, 780-831-9153; WS Supervisor, Michael Short

Rig
Weatherford, FS 463

Tubing Pressure (kPa)	Casing Pressure (kPa)	Weather	Temperature (°C)	Lease Condition
	2,700	Overcast	-35	Ice Pad

Last 24hr Summary
Finish POOH with e-line and plug and perf BHA.

erform frac on Interval #2 @ 2685mKB- 2763mKB
akdown = 18.8 MPa
pressure= 32.8 MPa
pumping pressure = 22.4 MPa
-Max rate = 8.93m³/min
Average rate = 5.95m³/min
- Proppant pumped = 20.9 T of 100 Mesh
- 68.5 T of 40/70
- 26.7 T of 30/50 PR6000
- Max concentration = 600 kg/m3
- Total water pumped = 721.7m3
- Total 15% HCL pumped = 10m3
Post frac ISIP = 17.3MPa

Rig on e-line, RIH with plug and perforating BHA on e-line. Correlate depth to packer top @ 1477.35mKB. Continue in hole with e-line. Engage pumps @ 1650mKB at 1.1m3/min to assist e-line.
Log onto depth set Halliburton plug top @ 2675.64mKB CE @ 2676mKB.
perforate interval from 2666mKB to 2667mKB
perforate interval from 2647mKB to 2648mKB
perforate interval from 2628mKB to 2629mKB
perforate interval from 2609mKB to 2610mKB
perforate interval from 2590mKB to 2591mKB
Rig down e-line. IES greased all valves on frac head.

24hr Forecast
Perform stage 3 of frac

DAILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
06:00	06:30	0.50	P	WSS Shift Change
06:30	07:00	0.50	P	Held Safety + Operations meeting with all crews on location. Discuss Conoco PJHA and SOC JSA for rig down E-Line, r/u frac equip, pump frac, heat and pump f/w.
07:00	09:00	2.00	P	SOC E-Line pulled to surface with perf gun assembly. Shut in well, bleed off lubricator to testers. Broke off and laid down lubricator, broke apart perf gun assembly. Installed cap on top of W/L BOP's, I.E.S. serviceman functioned and greased all valves - 179.4mm & 10 K valve left in open position.
	12:30	3.50	P	Rigged tank hoses into frac manifold, wait on SOC to get ready to frac.

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 19
Report Date: 2/12/2014
Final Job Status: GAS
Final Report? Yes

AILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
12:30	16:00	3.50	P	SOC warned up frac pumpers, transfer chemicals between chem vans. Pumped 16.0m3 60°C f/w at 0.25m3/min, picked up prime and warmed up all pumpers, blender, and PCM, circ water back to testers. Placed ball on top of hydraulic frac head valve, made up wellhead cap, pressure tested surface lines 69.0mpa. - Open frac valve, dropped Halliburton 60.3mm Composite 1.4 specific gravity B.P. ball. Pumped 10.0m3 15% HCL acid down csg, final rate 0.60m3/min 7.70mpa - Pumped 101.20m3 Slick Water pad #01, increased rate from 0.60 to 7.90m3/min at 28.40mpa. - Pumped 41.6m3 WF130 pad #02 at final rate 8.0m3/min 26.0mpa. - Pumped 25.6m3 YF130Flex pad #03 at final rate 8.0m3/min 28.1mpa, started scour. - Pumped 19.1m3 YF130Flex Scour with 100 Mesh frac sand at 25kg/m3 at final rate 8.0m3/min 28.1mpa, started spacer. - Pumped 29.1m3 YF130Flex spacer at final rate 8.0m3/min 29.2mpa, started 100 Mesh frac sand. - Pumped 50, 75, 100, 150, and 200kg/m3 YF130Flex 100 Mesh frac sand stages increased rate 8.0 to 8.40m3/min, with pressures of 28.3, 27.0, 27.7, 27.7, and 28.7mpa respectively, started 40/70 frac sand. - Pumped 100, 200, 300, 400, and 500kg/m3 YF130Flex 40/70 frac sand stages at rates 8.4, 8.4, 8.7, 8.9, and 8.9m3/min at pressures of 29.3, 29.2, 29.7, 30.0, and 29.5mpa respectively, started 30/50 PR 6000 sand. - Pumped 300, 400, 500, and 600kg/m3 PR 6000 frac sand stages at rate 8.90m3/min at pressures of 29.6, 30.8, 28.8, and 28.9mpa respectively, started WF130 spacer. - Pumped 1.50m3 WF130 spacer at rate of 8.90m3/min 30.9mpa, started flush. - Pumped 25.7m3 Slick Water Flush at final rate 8.90m3/min 31.2mpa. Shut down pumps, ISIP = 17.3mpa, 10 min SICP = 10.8mpa. Placed 20.9 tonnes 100 Mesh, 68.5 tonnes 40/70, and 26.7 tonnes PR 6000 frac sand with 721.70m3 frac f/w. Pump out PCM, pumped 13.0m3 50% methanol water through frac equip to testers, pumped 2.0m3 50% methanol water down well. Shut in well.
16:00	17:00	1.00	P	SOC crew change day, wait for 2 E-Line workers to recieve Artic Orientation at Conoco base camp and then travel to location.
17:00	18:00	1.00	P	Make up and tally plug and perforating BHA -Casing collar locator -Firing head 6 - 79mm x 1.0m Owen -3125-411NT4 Perforating guns (have 1 extra gun in the case one does not fire) - Hollow Steel Carrier - 21gm HMX (DP) charges - Spiral pattern with 60° phasing - 6 SPM with spiral pattern -Plug shoot extender - Baker #10 setting tool -setting sleeve -Halliburton "Obsidian" flow through plug - 10K -92.96mm x 0.73m -1.3 SG ball Pick up e-line lube and install on well. Presure test quick test sub to 60mpa. Fill lube with 60/40 methanol/water mix to avoid freeze up.
18:00	18:30	0.50	P	WSS Shift Change.
18:30	19:00	0.50	P	Held pre-job safety and operations meeting with all services. Review Conoco PJHA on e-line plug and perf operations, hauling and heating water. Perform daily walk around inspections and checks.
19:00	21:00	2.00	P	Well pressure = 4000kpa SIICP=11959KPa RIH with plug and perforating BHA on e-line. Correlate depth to packer top @ 1477.35mKB. Continue in hole with e-line. Engage pumps @ 1650mKB at 1.1m3/min to assist e-line. Log onto depth set Halliburton plug top @ 2675.64mKB CE @ 2676mKB. Pull guns into position, perforate interval from 2666mKB to 2667mKB Pull guns into position, perforate interval from 2647mKB to 2648mKB Pull guns into position, perforate interval from 2628mKB to 2629mKB Pull guns into position, perforate interval from 2609mKB to 2610mKB Pull guns into position, perforate interval from 2590mKB to 2591mKB Well pressure=7200kpa Start out of hole with e-line (1 extra live gun) 13.4MPa Max pump down pressure, 20.4m³ fresh water pumped. Pumped 2.6m³ 60/40 methanol/water mix to winterize frac equipment. Hauled in and heated 750m³ of fresh water.
21:00	22:30	1.50	P	Held PJHA meeting with all personal on procedures of laying down a live gun. Layed down E-Line lubicator and tool, dis-armed gun and capped wellhead,
22:30	05:30	7.00	P	Winterized all frac equipment for night. IES greased all valves on wellhead, continued to haul in water and heat for next Frac in AM. Moved flameless heat for frac crew to heat needed equipment. Start up and warm frac equipment at 03:30 to prep for pressure test.
05:30	06:00	0.50	P	Placed Halliburton 60.3mm Composite 1.4 specific gravity B.P. ball on top of 4 1/16 valve. pressure test frac lines to 69MPa. Had multiple leaks on lines. Wait for day shift to circulate hot fresh water to heat lines prior to testing.

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 20
Report Date: 2/13/2014
Final Job Status: GAS
Final Report? Yes

WELL HEADER INFORMATION

Country	State/Province	Region / Division	District	Field Name	Field Code
CANADA	N.W.T.	WCBU	NEW VENTURES	Canyon	

Surface Legal Location	API / UWI	License No.
E-76 65-10 126-45	300E7665-10126-45	EL 470

Orig KB/RT (m)	Ground Elevation (m)	KB-Grd (m)	KB-CF (m)	KB-TF (m)	Total Depth (mKB)	PBTD (All) (mKB)
273.40	268.20	5.20	5.40	4.22	2,910.00	Original Hole - 2,877.30

JOB INFORMATION

Job Category	Primary Job Type	Secondary Job Type	Total Field Estimate (Cost)
COMPLETIONS	INITIAL COMPLETION	RIGLESS	21,945,332.75

Objective
Hydrailically fracture and flow test as part of the 2014 Canol Exploration Program

Actual Start Date	End Date	Abandon Date	Responsible Grp 1	Responsible Grp 2	Responsible Grp 3
1/25/2014 00:00	3/28/2014 08:00		coved	lagartn	Chris Kendall

AFE COST SUMMARY

AFE / RFE / Maint.#	Total AFE Amount (Cost)	Total AFE + Supp Amount (Cost)	Total Field Estimate (Cost)	AFE-Field Estimate (Cost)
10351695	2,111,000.00	2,111,000.00	2,318,381.14	-207,381.14
AFE / RFE / Maint.#	Total AFE Amount (Cost)	Total AFE + Supp Amount (Cost)	Total Field Estimate (Cost)	AFE-Field Estimate (Cost)
10359413	16,997,500.00	20,641,514.00	19,626,951.61	1,014,562.39

DAILY INFORMATION

Report Start Date	Report End Date	Daily Cost Total (Cost)	Cumulative Cost (Cost)	Personnel Regular Hours (hr)
2/13/2014 06:00	2/14/2014 06:00	1,184,391.74	12,616,980.47	1,104.00

Daily Contacts
Completion Engineer, Theorn LaGarde, 403-710-9753; WS Superintendent, Derrick Cove, 780-831-1314; WS Supervisor, Chris Kendall, 780-518-3284; WS Supervisor, Myles Hahn, 780-402-0500; WS Supervisor, Richard Young, 780-831-9153; WS Supervisor, Michael Short

Rig
Weatherford, FS 463

Tubing Pressure (kPa)	Casing Pressure (kPa)	Weather	Temperature (°C)	Lease Condition
		Overcast	-33	Ice Pad

Last 24hr Summary
Perform frac on Interval #3 @ 2590mKB- 2667mKB
Max pressure= 30.2 MPa
Ave pressure = 25.6 MPa
Max rate = 8.6m³/min
Avg rate = 7.6m³/min
Proppant pumped = 20.9T of 100 Mesh, 59.6T of 40/70, 20.0T of 30/50 PR6000
Max concentration = 600 kg/m3
Total water pumped = 649.37m3
Total 15% HCL pumped = 9.0m3
Post frac ISIP = 8.4MPa

Rig on e-line, RIH with plug and perforating BHA on e-line. Correlate depth to packer top @ 1477.35mKB. Continue in hole with e-line. Engage pumps @ 1650mKB at 1.1m3/min to assist e-line. Plug top @ 2580.85mKB, CE @ 2581mKB
Perforated intervals 2,571.0 - 2,572.0m/ 2,552.0 - 2,553.0m/ 2,533.0 - 2,534.0m/2,514.0 - 2,515.0m/2,494.0 - 2,495.0mKB

Perform frac on Interval #4 @ 2495.0mKB- 2,571.0mKB
Max pressure= 30.1 MPa
Ave pressure = 25.5 MPa
Max rate = 8.5m³/min
Avg rate = 7.5m³/min
Proppant pumped = 20.15T of 100 Mesh, 61.00T of 40/70, 20.10T of 30/50 PR6000
Max concentration = 600 kg/m3
Total water pumped = 515.5m3
Total 15% HCL pumped = 9.0m3
Post frac ISIP = 10.3MPa

Rig on e-line, RIH with plug and perforating BHA on e-line. Correlate depth to packer top @ 1477.35mKB. Continue in hole with e-line. Engage pumps @ 1650mKB at 1.1m3/min to assist e-line.
Log onto depth set Halliburton plug top @ 2484.85mKB, @ 2485mKB CE.
Perforated intervals 2,475.0 - 2,476.0m/ 2,456.0 - 2,457.0m/ 2,437.0 - 2,438.0m. Total 10 shots/m, all fired, well stable.
Hauled in 420m³ of water and heat to 33°C, Greased all wellhead Valves and fired up equipment to pre-heat fro frac in AM.

24hr Forecast
Perform stage 5 and 6 of frac.

DAILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
[redacted]	06:30	0.50	P	WSS Shift Change
[redacted]	07:00	0.50	P	Held Safety + Operations meeting with all crews on location. Discuss Conoco PJHA and SOC JSA for fracing operations, hot fueling, heating and pumping water, plug and perf operations, communication, and driving.
07:00	08:30	1.50	P	Hook up hoses to frac manifold in frac tank farm, wait for SOC to warm up equip and get ready to frac.

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 20
Report Date: 2/13/2014
Final Job Status: GAS
Final Report? Yes

DAILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
08:30	11:30	3.00	P	Pumped 10.0m3 of 60°C f/w, pressure tested surface lines 69.0mpa. Openned I.E.S. 103.2mm gate valve, dropped Halliburton 60.3mm Composite B.P. ball, started pumping 15% HCL acid. - Pumped 9.0m3 15% HCL acid at openning rate 0.20m3/min3.7mpa, final rate 0.70m3/min 9.40mpa - Stop pump, ISIP = 9.1mpa, 5 min SICP = 7.1mpa. - Squeeze 9.0m3 acid followed by 10.7m3 Slick water into perfs at 0.20m3/min 9.70mpa, shut down pump ISIP = 9.50mpa - Pumped 174.60m3 Slick Water pad #01 at rate 7.80m3/min 24.4mpa, 35.80 m3 WF130 pad #02 at final rate 8.0m3/min 24.40mpa. - Pumped 29.6m3 YF130Flex pad #03 at final rate 8.0m3/min 25.4mpa, started 100 Mesh frac sand. - Pumped 50, 75, 100, 150, and 200kg/m3 sand stages at rate of 8.0m3/min, pressures 29.2, 29.3, 29.3, 29.0, and 28.6mpa respectively, started 40/70 frac sand. - Pumped 200, 300, 400, and 500kg/m3 sand stages at rate 8.1 to 8.5m3/min with final pressures of 28.1, 26.5, 27.3, and 27.4mpa respectively, started 30/50 PR 6000 frac sand. - Pumped 3.0m3 YF130 spacer, then 23.3m3 Slick Water flush at final rate 8.60m3/min 28.90mpa. Shut down pumps, ISIP = 11.30mpa, 5 min SICP = 8.40mpa. Placed 20,940 kg 100 Mesh, 59,620 kg 40/70, and 20,000 kg 30/50 PR 6000 frac sand with 649.37m3 frac fresh water. Shut in well.
11:30	15:00	3.50	P	Made up and tallied perf gun B.P. assembly. Picked up lubricator, pressure tested wellhead connection 60.0mpa. Rih to 1,500m at 50m/min, correlated on depth to 114.3mm Liner Top at 1,477.0mKB. Started pumping f/w down csg 0.30m3/min at 1,650mKB. Continued to rih, increased pump rate to 0.60m3/min @1700m, 0.90m3/min @1750m, and 1.10m3/min from 1800m down to 2,571.0mKB CCL depth. Shut down pumps, pulled up to 2,566.7m. Set 114.3mm Halliburton Flow Through 10K Composite BP at 2,581.0m, top at 2,580.85m, bottom at 2,581.25m. Picked up and positioned CCL to perforate the Canol formation with 79mm HSC csg gun L/w Owen SDP-3125-411NT4 charges at 6 SPM and 60° phasing. Interval #01: CCL depth = 2,561.10m, perforated interval 2,571.0 to 2,572.0m. Total 6 shots, all fired, well stable. Interval #02: CCL depth = 2,543.80m, perforated interval 2,552.0 to 2,553.0m. Total 6 shots, all fired, well stable. Interval #03: CCL depth = 2,526.60m, perforated interval 2,533.0 to 2,534.0m. Total 6 shots, all fired, well stable. Interval #04: CCL depth = 2,509.40m, perforated interval 2,514.0 to 2,515.0m. Total 6 shots, all fired, well stable. Interval #05: CCL depth = 2,491.20m, perforated interval 2,494.0 to 2,495.0m. Total 6 shots, all fired, well stable. Pooh, slowed to 2.50m/min coming to surface. Shut in well, bleed off lubricator to testers. Laid down lubricator, borke out perf gun assembly. Note: SOC had problems with gun shooting screen on computer, had to shut down computer 6 times to get gun shooting screen to come up for perforating the last 3 intervals.
15:00	17:30	2.50	P	Halliburton sat 60.3mm Composite 1.4 specfic gravity B.P. Ball on top of hydraulic frac valve, installed and made up frac head cap. SOC pumped 15.0m3 33°C fresh water through wellhead to testers, alternated pumpers to heat up all pumps and lines. Pumped #03 had frozen line, thawed line with portable steamer.
17:30	19:00	1.50	P	Pumped 10.0m3 of 60°C f/w, pressure tested surface lines 69.0mpa. Openned I.E.S. 103.2mm gate valve, dropped Halliburton 60.3mm Composite B.P. ball, started pumping 15% HCL acid. - Pumped 9.0m3 15% HCL acid at openning rate 0.20m3/min3.7mpa, final rate 0.70m3/min 9.30mpa - Stop pump, ISIP = 9.5mpa, 5 min SICP = 6.2mpa. - Squeeze 9.0m3 acid followed by 10.7m3 Slick water into perfs at 0.30m3/min 11.0mpa, shut down pump ISIP = 9.50mpa - Pumped 17.30m3 WF130 pad #01 at rate 0.2m3/min 9.5mpa, 33.9m³ YF130Flex pad #02 at final rate 5.3m3/min 20.1mpa. - Pumped 50, 75, 100, 150, and 200kg/m3 sand stages at rate of 8.5m3/min, pressures 27.5, 30.2, 29.5, 28.8, and 28.2mpa respectively, started 40/70 frac sand. - Pumped 200, 300, 400, and 500kg/m3 sand stages at rate 7.9 to 8.5m3/min with final pressures of 27.8, 26.3, 25.6, and 25.8mpa respectively, started 30/50 PR 6000 frac sand. - Pumped 500, 600kg/m3 sand stages at rate 8.5m³/min with final pressures of 26.6 and 26mpa respectively, - Pumped 3.0m3 WF130 spacer, then 21.8m3 Slick Water flush at final rate 8.2m³/min 26.7MPa. Shut down pumps, ISIP = 10.3mpa, 5 min SICP = 11.0mpa. Placed 20,150 kg 100 Mesh, 61000 kg 40/70, and 20,100 kg 30/50 PR 6000 frac sand with 515.5m3 frac fresh water. Shut in well. Winterized Frac Equipment for night.
19:00	00:00	5.00	P	Made up and tallied perf gun B.P. assembly. Picked up lubricator, pressure tested wellhead connection 60.0mpa. Rih to 1,500m at 45m/min, correlated on depth to 114.3mm Liner Top at 1,477.0mKB. Started pumping f/w down csg 0.30m3/min at 1,650mKB. Continued to rih, increased pump rate to 0.60m3/min @1700m, 0.90m3/min @1750m, and 1.10m3/min from 1800m down to 2,482.9.0mKB CCL depth. Shut down pumps, pulled up to 2,474.3m CCL Depth. Set 114.3mm Halliburton Flow Through 10K Composite BP at 2,485.0m CE, top at 2,484.85m, bottom at 2,485.25m. Picked up and positioned CCL to perforate the Canol formation with 79mm HSC csg gun L/w Owen SDP-3125-411NT4 charges at 10 SPM and 60° phasing. Interval #01: CCL depth = 2,468.60m, perforated interval 2,475.0 to 2,476.0m. Total 10 shots, all fired, well stable. Interval #02: CCL depth = 2,451.40m, perforated interval 2,456.0 to 2,457.0m. Total 10 shots, all fired, well stable. Interval #03: CCL depth = 2,434.20m, perforated interval 2,437.0 to 2,438.0m. Total 10 shots, all fired, well stable. Pooh, Stopped at 100m and held safety meeting with all personal POOH with live gun. Slowed to 2.50m/min coming to surface. Shut in well, bleed off lubricator, Laid down lubricator, borke out perf gun assembly. 12.7MPa Max pump down pressure, 18.3m³ fresh water pumped. Pumped 2.7m³ 60/40 methanol/water mix to winterize frac equipment. Hauled in and heated 1280m³ of fresh water.

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 21
Report Date: 2/14/2014
Final Job Status: GAS
Final Report? Yes

WELL HEADER INFORMATION

Country	State/Province	Region / Division	District	Field Name	Field Code
CANADA	N.W.T.	WCBU	NEW VENTURES	Canyon	

Surface Legal Location	API / UWI	License No.
E-76 65-10 126-45	300E7665-10126-45	EL 470

Orig KB/RT (m)	Ground Elevation (m)	KB-Grd (m)	KB-CF (m)	KB-TF (m)	Total Depth (mKB)	PBTD (All) (mKB)
273.40	268.20	5.20	5.40	4.22	2,910.00	Original Hole - 2,877.30

JOB INFORMATION

Job Category	Primary Job Type	Secondary Job Type	Total Field Estimate (Cost)
COMPLETIONS	INITIAL COMPLETION	RIGLESS	21,945,332.75

Objective
Hydrailically fracture and flow test as part of the 2014 Canol Exploration Program

Actual Start Date	End Date	Abandon Date	Responsible Grp 1	Responsible Grp 2	Responsible Grp 3
1/25/2014 00:00	3/28/2014 08:00		coved	lagartn	Chris Kendall

AFE COST SUMMARY

AFE / RFE / Maint.#	Total AFE Amount (Cost)	Total AFE + Supp Amount (Cost)	Total Field Estimate (Cost)	AFE-Field Estimate (Cost)
10351695	2,111,000.00	2,111,000.00	2,318,381.14	-207,381.14
10359413	16,997,500.00	20,641,514.00	19,626,951.61	1,014,562.39

DAILY INFORMATION

Report Start Date	Report End Date	Daily Cost Total (Cost)	Cumulative Cost (Cost)	Personnel Regular Hours (hr)
2/14/2014 06:00	2/15/2014 06:00	876,987.34	13,493,967.81	1,104.00

Daily Contacts
Completion Engineer, Theorn LaGarde, 403-710-9753; WS Superintendent, Derrick Cove, 780-831-1314; WS Supervisor, Chris Kendall, 780-518-3284; WS Supervisor, Myles Hahn, 780-402-0500; WS Supervisor, Richard Young, 780-831-9153; WS Supervisor, Michael Short

Rig
Weatherford, FS 463

Tubing Pressure (kPa)	Casing Pressure (kPa)	Weather	Temperature (°C)	Lease Condition
	3,200	Overcast	-33	Ice Pad

Last 24hr Summary
Waited 9 hrs for SOC to r/o broken down blender, move in and r/u replacement blender.

Perform frac on Interval #5 @ 2437mKB- 2476 mKB
[redacted]pressure= 30.7 MPa
[redacted]pressure = 21.4 MPa
[redacted]rate = 8.8m³/min
Avg rate = 5.4m³/min
Proppant pumped = 20.5T of 100 Mesh, 60.0T of 40/70, 19.8T of 30/50 PR6000
Max concentration = 600 kg/m3
Total water pumped = 700.4m3
Total 15% HCL pumped = 9.0m3
Post frac ISIP = 12.7MPa

Rig on e-line, RIH with plug and perforating Interval #6, BHA on e-line. Correlate depth to packer top @ 1477.35mKB. Continue in hole with e-line. Engage pumps @ 1650mKB at 1.1m3/min to assist e-line. Plug top @ 2427.85mKB, CE @ 2428mKB
Perforated intervals 2,418.0 - 2,419.0m/ 2,399.0 - 2,400.0m/ 2,380.0 - 2,2381.0m, 10SPM 60° Phase.

Hauled in 600m³ of water and heat to 33°C, Greased all wellhead Valves and fired up equipment to pre-heat fro frac in AM.

24hr Forecast
Perform stage 6 and 7 of frac

DAILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
06:00	06:30	0.50	P	WSS Shift Change
06:30	07:00	0.50	P	Held Safety + Operations meeting with all crews on location. Discussed PJHA for fracing operations, perf and plug operations, heating and pumping frac water, cold weather, communication, and driving.
07:00	16:00	9.00	P	Continue to heat frac water, wait for SOC to move out broken down Blender, move in and r/u replacement Blender. Heated up blender hydraulics with flameless heater, pumped 15.5m3 of 60°C fresh water to testers, warmed up frac equip. Dropped 60.3mm Composite B.P. ball on top of 103.2mm hydraulic frac valve, installed wellhead cap. Pressure tested surface lines 69.0mpa.

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 21
Report Date: 2/14/2014
Final Job Status: GAS
Final Report? Yes

DAILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
16:00	20:00	4.00	P	Pumped 10.0m3 of 60°C f/w, pressure tested surface lines 69.0mpa. Openned I.E.S. 103.2mm gate valve, dropped Halliburton 60.3mm 1.4SG Composite B.P. ball, started pumping 15% HCL acid. - Pumped 9.0m3 15% HCL acid at openning rate 0.20m3/min, 0.4mpa, final rate 0.60m3/min 9.0mpa - Stop pump, ISIP = 12.7mpa, 5 min SICP = 11.0mpa. - Squeeze 9.0m3 acid followed by 9.0m3 Slick water into perfs at 0.60m3/min 9.0mpa, shut down pump ISIP = 8.9mpa - Pumped 170.3m3 Slick Water pad #01 at rate 8.10m3/min 8.7mpa, - Pumped 30.9 m3 WF130 pad #02 at final rate 8.1m3/min 25.2mpa. - Pumped 30.8m3 YF130Flex pad #03 at final rate 8.1m3/min 26.5mpa, started 100 Mesh frac sand. - Pumped 50, 75, 100, 150, and 200kg/m3 sand stages at rate of 8.2m3/min, pressures 29.9, 28.9, 29.0, 29.3, and 28.2mpa respectively, started 40/70 frac sand. - Pumped 200, 300, 400, and 500kg/m3 sand stages at rate 8.2 to 8.5m3/min with final pressures of 28.4, 28.2, 28.4, and 27.8mpa respectively, started 30/50 PR 6000 frac sand. - Pumped 3.0m3 WF130 spacer, then 21.4m3 Slick Water flush at final rate 8.10m3/min 25.4mpa. Shut down pumps, ISIP = 12.7mpa, 5 min SICP = 11.0mpa. Placed 20,500 kg 100 Mesh, 60,080 kg 40/70, and 19,780 kg 30/50 PR 6000 frac sand with 700.4m3 frac fresh water. Shut in well.
20:00	23:00	3.00	P	Held PJHA meeting with all personal on location. Made up and tallied perf gun B.P. assembly. Picked up lubricator, pressure tested wellhead connection 60.0mpa. Rih to 1,500m at 45m/min, correlated on depth to 114.3mm Liner Top at 1,477.0mKB. Started pumping f/w down csg 0.30m3/min at 1,650mKB. Continued to rih, increased pump rate to 0.60m3/min @1700m, 0.90m3/min @1750m, and 1.10m3/min from 1800m down to 2,422mKB CCL depth. Shut down pumps, pulled up to 2,417.3m CCL Depth. Set 114.3mm Halliburton Flow Through 10K Composite BP at 2,428m CE, top at 2,427.85m, bottom at 2,428.25m. Picked up and positioned CCL to perforate the Canol formation with 79mm HSC csg gun L/w Owen SDP-3125-411NT4 charges at 10 SPM and 60° phasing. Interval #01: CCL depth = 2,411.60m, perforated interval 2,418.0 to 2,419.0m. Total 10 shots, all fired, well stable. Interval #02: CCL depth = 2,394.40m, perforated interval 2,399.0 to 2,400.0m. Total 10 shots, all fired, well stable. Interval #03: CCL depth = 2,377.20m, perforated interval 2,380.0 to 2,381.0m. Total 10 shots, all fired, well stable. Pooh, Stopped at 100m and held safety meeting with all personal POOH with live gun. Slowed to 2.50m/min coming to surface. Shut in well, bleed off lubricator, Laid down lubricator, borke out perf gun assembly. 10.7MPa Max pump down pressure, 20.1m³ fresh water pumped. Pumped 4.5m³ 60/40 methanol/water mix to winterize frac equipment. Hauled in and heated 600m³ of fresh water.
23:00	06:00	7.00	P	Winterized all frac equipment for night. Thawed frac riser line that was frozen. IES greased all valves on wellhead, continued to haul in water and heat for next Frac in AM. Start up and warm frac equipment at 03:30 to prep for pressure test. Note: Hauled out 54m³ to disposal at Tervita in Rainbow lake

FLUID SUMMARY

Fluid	To lease (m³)	From lease (m³)	To well (m³)	From well (m³)	Left to recover (m³)
FRESH WATER	845.00	54.00	734.00	0.00	3,625.27

DAILY COST

BU Desc	Vendor	Activity Code	Amount (Cost)
Rig Camp	***VENDOR NOT LISTED***	E500	500.00
Trucking/Hauling/ Hot Shot Services	***VENDOR NOT LISTED***	P100	1,000.00
Surface Completion Equipment Rental	BOREALIS COMMUNICATIONS INC	Q300	554.00
Service Rig	CANOL OILFIELD SERVICES INC	E120	6,104.00
Fracture Stimulation Services	CANOL OILFIELD SERVICES INC	N110	14,260.00
Service Rig	CANOL OILFIELD SERVICES INC	E120	4,490.00
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	13,720.00
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	13,720.00
Trucking/Hauling/ Hot Shot Services	CANOL OILFIELD SERVICES INC	P100	3,355.00
Fracture Stimulation Services	CANOL OILFIELD SERVICES INC	N110	29,900.00
Service Rig	CONOCO	E120	37,000.00
Service Rig	CORNERSTONE OILFIELD SERVICES LTD	E120	1,400.00
Surface Completion Equipment Rental	CORNERSTONE OILFIELD SERVICES LTD	Q300	195.00
Service Rig	CORNERSTONE OILFIELD SERVICES LTD	E120	3,400.00
Service Rig	CORNERSTONE OILFIELD SERVICES LTD	E120	4,400.00
Service Rig	CORNERSTONE OILFIELD SERVICES LTD	E120	280.00
Safety Equipment & Services	FRONTIERMEDEX CANADA LTD/ EXLOGS SAHTU LTD	T430	2,000
Safety Equipment & Services	HODGSON'S CONTRACTING (2005) LTD	T430	6,914.00
Safety Equipment & Services	HODGSON'S CONTRACTING (2005) LTD	T430	2,084.00
Fracture Stimulation Services	ISOLATION EQUIPMENT SERVICES INC	N110	6,630.00
Surface Completion Equipment Rental	MACKAY RANGE DEVELOPMENT CORP	Q300	374.00

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 22
Report Date: 2/15/2014
Final Job Status: GAS
Final Report? Yes

WELL HEADER INFORMATION

Country	State/Province	Region / Division	District	Field Name	Field Code
CANADA	N.W.T.	WCBU	NEW VENTURES	Canyon	

Surface Legal Location	API / UWI	License No.
E-76 65-10 126-45	300E7665-10126-45	EL 470

Orig KB/RT (m)	Ground Elevation (m)	KB-Grd (m)	KB-CF (m)	KB-TF (m)	Total Depth (mKB)	PBTD (All) (mKB)
273.40	268.20	5.20	5.40	4.22	2,910.00	Original Hole - 2,877.30

JOB INFORMATION

Job Category	Primary Job Type	Secondary Job Type	Total Field Estimate (Cost)
COMPLETIONS	INITIAL COMPLETION	RIGLESS	21,945,332.75

Objective
Hydrailically fracture and flow test as part of the 2014 Canol Exploration Program

Actual Start Date	End Date	Abandon Date	Responsible Grp 1	Responsible Grp 2	Responsible Grp 3
1/25/2014 00:00	3/28/2014 08:00		coved	lagartn	Chris Kendall

AFE COST SUMMARY

AFE / RFE / Maint.#	Total AFE Amount (Cost)	Total AFE + Supp Amount (Cost)	Total Field Estimate (Cost)	AFE-Field Estimate (Cost)
10351695	2,111,000.00	2,111,000.00	2,318,381.14	-207,381.14
AFE / RFE / Maint.#	**Total AFE Amount (Cost)**	**Total AFE + Supp Amount (Cost)**	**Total Field Estimate (Cost)**	**AFE-Field Estimate (Cost)**
10359413	16,997,500.00	20,641,514.00	19,626,951.61	1,014,562.39

DAILY INFORMATION

Report Start Date	Report End Date	Daily Cost Total (Cost)	Cumulative Cost (Cost)	Personnel Regular Hours (hr)
2/15/2014 06:00	2/16/2014 06:00	1,045,914.88	14,539,882.69	1,092.00

Daily Contacts
Completion Engineer, Theorn LaGarde, 403-710-9753; WS Superintendent, Derrick Cove, 780-831-1314; WS Supervisor, Chris Kendall, 780-518-3284; WS Supervisor, Myles Hahn, 780-402-0500; WS Supervisor, Richard Young, 780-831-9153; WS Supervisor, Michael Short

Rig
Weatherford, FS 463

Tubing Pressure (kPa)	Casing Pressure (kPa)	Weather	Temperature (°C)	Lease Condition
		Clear	-34	Ice Pad

Last 24hr Summary
Warmed up frac equip 20m3 55°C f/w, pressure tested 69.0mpa. Frac'd Canol, spearhead 9.0m3 15% HCL. Placed 20 tonnes 100 Mesh, 60 tonnes 40/70, and 20 tonnes 30/50 PR 6000 frac sand with 500.7m3 WF 130, and YF130Flex water. Average pressure= 20.6mpa, average rate = 5.20m3/min, sand placed at rates 8.10 to 9.10m3/min, at pressures from 27.8 to 30.6mpa. E-Line set 114.3mm Halliburton 10K Flow Through B.P. at 2,371.0mKB, and perforated intervals [illegible].0-62.0, 2342.0-43.0, 2323.0-24.0, 2304.0-05.0, and 2,285.0-86.0mMD. R/o E-Line, r/u to frac.
[illegible]rm frac on Interval #7 @ 2285mKB- 2362mKB
- Breakdown = 19.4 MPa
- Max pressure= 30.1 MPa
- Ave pumping pressure = 19.9 MPa
-Max rate = 9.10m³/min
Average rate = 5.5m³/min
- Proppant pumped = 20.5 T of 100 Mesh
- 66.3 T of 40/70
- 23.4 T of 30/50 PR6000
- Max concentration = 600 kg/m3
- Total water pumped = 541.3m3
- Total 15% HCL pumped = 9m3
Post frac ISIP = 11MPa

Rig on e-line, RIH with plug and perforating BHA on e-line. Correlate depth to packer top @ 1477.35mKB. Continue in hole with e-line. Engage pumps @ 1650mKB at 0.3m³/min to assist e-line increasing to 1.1m³/min down to 2280.7mKB
Pull up, Log onto depth set Halliburton 10K flow through plug ,top @ 2275.85mKB CE @ 2276mKB.
perforate interval from 2265mKB to 2266mKB
perforate interval from 2246mKB to 2247mKB
perforate interval from 2227mKB to 2228mKB
perforate interval from 2208mKB to 2209mKB
perforate interval from 2189mKB to 2190mKB
Rig down e-line. IES greased all valves on frac head.

24hr Forecast
Perform stage 7 and 8 of frac

DAILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
06:00	06:30	0.50	P	WSS Shift Change
06:30	07:00	0.50	P	Held Safety + Operations meeting with all crews on location. Discuss PJHA and SOC JSA for multiple operations, Fracing operations, Plug and perf operations, pumping acid, heating and transfer water, communication, and driving.
07:00	08:15	1.25	P	Pumped 20.0m3 45°C f/w through test equip to testers, warmed up frac equip. Remove wellhead cap and dropped Halliburton 60.3mm Composite Ball on top of 103.2mm hydraulic frac valve. Installed wellhead cap, pressure tested surface lines 69.0mpa.

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 22
Report Date: 2/15/2014
Final Job Status: GAS
Final Report? Yes

DAILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
08:15	10:45	2.50	P	Openned 103.2mm hydraulic frac valve, dropped Halliburton 60.3mm 1.4 specific gravity Composite B.P. Ball. - Pumped 9.0m3 15% HCL acid followed by 8.60m3 WF130 pad at 0.80m3/min 11.6mpa, shut down pumps, ISIP = 11.2mpa - Continued pumping WF 130 pad #01, squeeze acid. Pumped 8.60m3, final rate 0.20m3/min 8.80mpa. shut down pumps, ISIP = 8.20mpa. - Pumped final 30.0m3 of WF 130 pad #01, final rate 0.10m3/min 10.0mpa, started pad #02. - Pumped 56.10m3 YF130Flex pad #02 at final rate 1.60m3/min 12.5mpa, started 100 Mesh frac sand - Pumped 50, 75, 100, 150, and 200kg/m3 sand stages at rate 8.10, 8.20, 8.40, 8.70, and 8.90m3/min, with final stage pressures of 27.8, 28.2, 28.9, 28.7, and 28.2mpa respectively, started 40/70 frac sand. - Pumped 200, 300, 400, and 500kg/m3 40/70 sand stages at rate 9.10m3/min with pressures of 28.3, 28.4, 27.8, and 28.1mpa respectively, started 30/50 PR 6000 frac sand. - pumped 500, and 600kg/m3 30/50 aPR 6000 sand stages at rate 9.10m3/min, with final pressures 27.7 and 27.8mpa respectively, start WF 130 Spacer. - pumped 3.60m3 WF 130 Spacer at final rate of 9.10m3/min 28.90mpa, started flush. - Pumped 20.40m3 Slick Water flush at final rate 9.10m3/min 30.60mpa. Shut down pumps, ISIP = 12.3mpa, 5 min SICP = 10.3mpa, and 10 min SICP = 8.60mpa. Placed 20 tonnes 100 Mesh, 60 tonnes 40/70, and 20 tonnes 30/50 PR 6000 frac sand with 500.7m3 frac water.
10:45	13:45	3.00	P	Made up and tallied perf gun B.P. assembly, picked up lubricator. Rih to 1,500m at 50m/min, correlated on depth to 114.3mm liner top at 1,477.0mKB. Rih to 1,650mKB, started pumping f/w at 0.30m3/min. Continued to rih, increased pump rate to 0.60m3/min @1,700, 0.90 @1,750, and 1.10m3/min from 1,800 to 2,365.0mMD, shut down pumps. Picked up 8.30m and positioned CCL at 2,356.70mMD, set 114.3mm Halliburton Flow Through 10 K Composite B.P. at 2,371.0mMD C.E., top at 2,370.85mMD. Picked up and positioned CCL to perforate the Canol formation with 79,, HSC Csg Guns L/w Owen SDP-3125-411NT4 charges at 6 SPM and 60° phasing. - Interval #01: CCL depth 2,351.10mMD, perforated interval 2,361.0 to 2,362.0mMD. Total 6 shots, all fired, well stable - Interval #02: CCL depth 2,333.80mMD, perforated interval 2,342.0 to 2,343.0mMD. Total 6 shots, all fired, well stable. - Interval #03: CCL depth 2,316.60mMD, perforated interval 2,323.0 to 2,324.0mMD. Total 6 shots, all fired, well stable. - Interval #04: CCL depth 2,299.40mMD, perforated interval 2,304.0 to 2,305.0mMD. Total 6 shots, all fired, well stable. - Interval #05: CCL depth 2,282.20mMD, perforated interval 2,285.0 to 2,286.0mMD. Total 6 shots, all fired, well stable. Pooh 50m/min, slowed to 2.50m/min at 100m. Shut in well, bleed off lubricator to vacuum truck. Lay down lubricator, disarm 1 live gun.
13:45	16:15	2.50	P	Frac Interval # 7 as follows: Openned 103.2mm hydraulic frac valve, dropped Halliburton 60.3mm 1.4 specific gravity Composite B.P. Ball. - Pumped 9.0m3 15% HCL acid followed by 8.0m3 WF130 pad at 0.60m3/min 9.6MPa, shut down pumps, ISIP = 9.4MPa - Continued pumping WF 130 pad #01, squeeze acid. Pumped 8.10m3, final rate 0.20m³/min 8.40MPa. shut down pumps, ISIP = 10.3MPa. - Pumped final 31.3m³ of WF 130 pad #01, final rate 0.30m³/min 10.0MPa. - started pad #02. - Pumped 56.10m3 YF130Flex pad #02 at final rate 1.60m3/min 12.5mpa, started 100 Mesh frac sand - Pumped 50, 75, 100, 150, and 200kg/m3 sand stages at rate 8.10, 8.20, 8.50, 8.30, and 8.50m3/min, with final stage pressures of 27.4, 28.1, 28.6, 27.3, and 25.0mpa respectively. - started 40/70 frac sand. - Pumped 200, 300, 400, and 500kg/m³ 40/70 sand stages at rate 8.2, 8.6, 8.5, and 9.0m3/min with pressures of 27.6, 26.9, 25.1, and 26.6MPa respectively. started 30/50 PR 6000 frac sand. - pumped 500, and 600kg/m3 30/50 aPR 6000 sand stages at rate 9.0 and 9.10m3/min, with final pressures 25.7 and 25.5MPa respectively, - start WF 130 Spacer. - pumped 3.60m3 WF 130 Spacer at final rate of 9.10m3/min 24.80 MPa, started flush. - Pumped 19.80m³ Slick Water flush at final rate 9.10m3/min 26.30MPa. Shut down pumps, ISIP = 11.0MPa, 5 min SICP = 10.5MPa, and 15 min SICP = 9.0MPa. Placed 20 tonnes 100 Mesh, 60 tonnes 40/70, and 20 tonnes 30/50 PR 6000 frac sand with 541.30m3 frac water.
16:15	18:00	1.75	P	Winterize frac equipment, prep for pump down operations.
18:00	18:30	0.50	P	Wellsite supervisor shift change.
18:30	19:00	0.50	P	Held pre-job safety and operations meeting with all services. Review Conoco PJHA on plug and perf pumpdown operations. Perform daily walk around inspections and checks.

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 22
Report Date: 2/15/2014
Final Job Status: GAS
Final Report? Yes

ILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
19:00	22:30	3.50	P	Made up and tallied perf gun B.P. assembly, picked up lubricator. Rih to 1,500m at 50m/min, correlated on depth to 114.3mm liner top at 1,477.0mKB. Rih to 1,650mKB, started pumping f/w at 0.30m3/min. Continued to rih, increased pump rate to 0.60m3/min @1,700, 0.90 @1,750, and 1.10m3/min from 1,800 to 2,280.70mMD, shut down pumps. Picked up and positioned CCL at 2261.70mMD, set 114.3mm Halliburton Flow Through 10 K Composite B.P. at 2276.0mMD C.E., top at 2,275.85mMD. Picked up and positioned CCL to perforate the Canol formation with 79mm, HSC Csg Guns c/w Owen SDP-3125-411NT4 charges at 6 SPM and 60° phasing. - Interval #01: CCL depth 2255.10mMD, perforated interval 2,265.0 to 2,266.0mMD. Total 6 shots, all fired, well stable - Interval #02: CCL depth 2237.80mMD, perforated interval 2,246.0 to 2,247.0mMD. Total 6 shots, all fired, well stable. - Interval #03: CCL depth 2,220.60mMD, perforated interval 2,227.0 to 2,228.0mMD. Total 6 shots, all fired, well stable. - Interval #04: CCL depth 2,203.40mMD, perforated interval 2,208.0 to 2,209.0mMD. Total 6 shots, all fired, well stable. - Interval #05: CCL depth 2,186.20mMD, perforated interval 2,189.0 to 2,190.0mMD. Total 6 shots, all fired, well stable. Pooh 50m/min, slowed to 2.50m/min at 100m. Stop 100m from surface. Held safety meeting with all services involved in laying down live gun. Pump 2.4m³ of 60/40 methanol/water mix through pumps and down well to winterize. Drain and suck out lube and lines with vac truck. Lay down lube, disarm and break down plug and perf BHA. Pumped 10.4m³ of fresh water for pump down. Max pressure was 10.9MPa
22:30	06:00	7.50	P	IES tech greased all valves on frac head. Secure well. Continue to haul in and heat fresh water to ± 32° C for frac.

FLUID SUMMARY

Fluid	To lease (m³)	From lease (m³)	To well (m³)	From well (m³)	Left to recover (m³)
FRESH WATER	980.00	0.00	1,084.30	0.00	4,709.57

DAILY COST

BU Desc	Vendor	Activity Code	Amount (Cost)
Rig Camp	***VENDOR NOT LISTED***	E500	500.00
Trucking/Hauling/ Hot Shot Services	***VENDOR NOT LISTED***	P100	1,000.00
rface Completion Equipment Rental	BOREALIS COMMUNICATIONS INC	Q300	554.00
cking/Hauling/ Hot Shot Services	CANOL OILFIELD SERVICES INC	P100	4,344.00
pletion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	13,720.00
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	13,720.00
Trucking/Hauling/ Hot Shot Services	CANOL OILFIELD SERVICES INC	P100	2,275.00
Fracture Stimulation Services	CANOL OILFIELD SERVICES INC	N110	29,900.00
Service Rig	CANOL OILFIELD SERVICES INC	E120	4,490.00
Service Rig	CONOCO	E120	37,000.00
Service Rig	CORNERSTONE OILFIELD SERVICES LTD	E120	1,400.00
Surface Completion Equipment Rental	CORNERSTONE OILFIELD SERVICES LTD	Q300	195.00
Service Rig	CORNERSTONE OILFIELD SERVICES LTD	E120	3,400.00
Service Rig	CORNERSTONE OILFIELD SERVICES LTD	E120	4,400.00
Service Rig	CORNERSTONE OILFIELD SERVICES LTD	E120	4,410.00
Service Rig	CORNERSTONE OILFIELD SERVICES LTD	E120	280.00
Safety Equipment & Services	FRONTIERMEDEX CANADA LTD/ EXLOGS SAHTU LTD	T430	2,000.00
Safety Equipment & Services	HODGSON'S CONTRACTING (2005) LTD	T430	6,914.00
Safety Equipment & Services	HODGSON'S CONTRACTING (2005) LTD	T430	2,084.00
Fracture Stimulation Services	ISOLATION EQUIPMENT SERVICES INC	N110	6,630.00
Surface Completion Equipment Rental	MACKAY RANGE DEVELOPMENT CORP	Q300	374.00
Wellsite Supervision & Engineering	MINAULT ENERGY SERVICES LTD	T130	1,545.00
Surface Completion Equipment Rental	MYB CONSTRUCTION LTD	Q300	1,380.00
Surface Completion Equipment Rental	MYB CONSTRUCTION LTD	Q300	2,000.00
Trucking/Hauling/ Hot Shot Services	NCSG CRANE & HEAVY HAUL SERVICES LTD	P100	7,230.00
Completion Fluids & Other Chem	NORTHERN TRUCK SERVICES (1994) LTD	G300	3,570.00
Completion Fluids & Other Chem	NORTHERN TRUCK SERVICES (1994) LTD	G300	10,977.00
Completion Fluids & Other Chem	NORTHERN TRUCK SERVICES (1994) LTD	G300	12,630.00
Completion Fluids & Other Chem	NORTHERN TRUCK SERVICES (1994) LTD	G300	3,570.00
mpletion Fluids & Other Chem	NORTHERN TRUCK SERVICES (1994) LTD	G300	3,430.00
pletion Fluids & Other Chem	PBN ENERGY SERVICES LTD	G300	5,575.00
esting (Eqpmt,Srvcs,PTA,Gov't Subs)	PROTECHNICS - CORE LABS	M220	10,024.00
Surface Completion Equipment Rental	RIGSAT COMMUNICATIONS INC	Q300	15.00
Surface Completion Equipment Rental	RIGSAT COMMUNICATIONS INC	Q300	15.00
Surface Completion Equipment Rental	RIGSAT COMMUNICATIONS INC	Q300	15.00

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 23
Report Date: 2/16/2014
Final Job Status: GAS
Final Report? Yes

WELL HEADER INFORMATION

Country	State/Province	Region / Division	District	Field Name	Field Code
CANADA	N.W.T.	WCBU	NEW VENTURES	Canyon	

Surface Legal Location	API / UWI	License No.
E-76 65-10 126-45	300E7665-10126-45	EL 470

Orig KB/RT (m)	Ground Elevation (m)	KB-Grd (m)	KB-CF (m)	KB-TF (m)	Total Depth (mKB)	PBTD (All) (mKB)
273.40	268.20	5.20	5.40	4.22	2,910.00	Original Hole - 2,877.30

JOB INFORMATION

Job Category	Primary Job Type	Secondary Job Type	Total Field Estimate (Cost)
COMPLETIONS	INITIAL COMPLETION	RIGLESS	21,945,332.75

Objective
Hydraulically fracture and flow test as part of the 2014 Canol Exploration Program

Actual Start Date	End Date	Abandon Date	Responsible Grp 1	Responsible Grp 2	Responsible Grp 3
1/25/2014 00:00	3/28/2014 08:00		coved	lagartn	Chris Kendall

AFE COST SUMMARY

AFE / RFE / Maint.#	Total AFE Amount (Cost)	Total AFE + Supp Amount (Cost)	Total Field Estimate (Cost)	AFE-Field Estimate (Cost)
10351695	2,111,000.00	2,111,000.00	2,318,381.14	-207,381.14
AFE / RFE / Maint.#	**Total AFE Amount (Cost)**	**Total AFE + Supp Amount (Cost)**	**Total Field Estimate (Cost)**	**AFE-Field Estimate (Cost)**
10359413	16,997,500.00	20,641,514.00	19,626,951.61	1,014,562.39

DAILY INFORMATION

Report Start Date	Report End Date	Daily Cost Total (Cost)	Cumulative Cost (Cost)	Personnel Regular Hours (hr)
2/16/2014 06:00	2/17/2014 06:00	1,061,690.94	15,601,573.63	1,092.00

Daily Contacts
Completion Engineer, Theorn LaGarde, 403-710-9753; WS Superintendent, Derrick Cove, 780-831-1314; WS Supervisor, Chris Kendall, 780-518-3284; WS Supervisor, Myles Hahn, 780-402-0500; WS Supervisor, Richard Young, 780-831-9153; WS Supervisor, Michael Short

Rig
Weatherford, FS 463

Tubing Pressure (kPa)	Casing Pressure (kPa)	Weather	Temperature (°C)	Lease Condition
	3,800	Clear	-30	Ice Pad

Last 24hr Summary
P-Tested 69.0mpa. Spearheaded frac with 9.0m3 15% HCL acid. Frac'd interval #08 from 2,266.0 to 2,189.0mKB with 20 tonnes 100 Mesh, 60 tonnes 40/70, 20 tonnes 30/50 PR 6000 frac sand, and 547.30m3 WF130/YF130Flex frac water. Average pressure = 19.50mpa, max pressure = 29.30mpa, average rate = 6.0m3/min, max rate = 9.6m3/min. Flushed frac with 18.60m3 Slick Water. R/u E-Line, rih and pump down perf gun and B.P. assembly. Set Halliburton 114.3mm 10K Composite Flow Through B.P. at 2,180.0mMD C.E. Perforated Canol #09 intervals 2170.0-71.0, 2151.0-52.0, 2132.0-33.0, 2113.0-14.0, and 2094.0-05.0mMD.

P-Tested 69.0mpa. Spearheaded frac with 8.0m³ 15% HCL acid. Frac'd interval #09 from 2170.0 to 2094.0mKB with 20.2 tonnes 100 Mesh, 59.1 tonnes 40/70, 20.4 tonnes 30/50 PR 6000 frac sand, and 707.8m³ WF130/YF130Flex frac water. Average pressure = 19.0MPa, Max Pressure = 29.5MPa, Avg Rate = 6.1m³/min, Max Rate = 9.6m³/min. Flushed frac with 19.1m³ Slick Water. R/u E-Line, rih and pump down perf gun and B.P. assembly. Set Halliburton 114.3mm 10K Composite Flow Through B.P.w/ball in place at 2,085mMD C.E.

Perform Evaluation test on interval #10 while pumping down guns and shooting interval, evaluate the inter-stage (annular) pressure communication.
-Pumped down Plug with 1.4SG composite ball in place.
-ISIP = 10.8MPa
-3min ISIP = 6.2MPa
-ISIP prior to plug set = 4.7MPa
Set plug and pressure tested to 35MPa for 5mins, test good. Bleed down CSG to 15MPa, ready to shoot interval
-Interval #01: CCL at 2,065.1mMD, perforated interval 2,075.0 to 2,076.0mMD.
-Shoot interval ISIP after shooting = 14.8MPa, 1min = 14.8MPa, 2min = 14.8MPa, 3min = 14.9MPa, 4min = 14.9MPa, 5min = 15MPa
21:45hrs pump @ 0.25m³/min for a break down @ 25.7MPa, continued pumping for a total of 1.2m³ , pressure stablized @ 19.1MPa.
Shutdown Pumps ISIP = 18.7MPa, 5min ISIP = 11.6MPa
Perforated Final Canol #10 intervals 2056.0-2057.0m, 2036.0-2037.0m, 2017.0-2018.0m, and 1998.0-1999.0mKB.

24hr Forecast
Perform stage 10 frac, rig out Frac equipment and rig in Coil Tubing.

DAILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
06:00	06:30	0.50	P	WSS Shift Change
06:30	07:00	0.50	P	Held Safety + Operations meeting with all crews on location. Discuss Conoco PJHA and SOC JSA for multiple operations, fracing operations, pumping acid, plug and perf, winterizing equip, heat and pump fresh water, communications, enviromental concerns, and driving.
07:00	09:30	2.50	P	Warm up frac motors and frac equip hydraulics, get ready to frac. Pump 20.0m3 of 55°C water to testers, warm up pumpers. Remove wellhead cap, set ball on top of 103.2mm hydraulic frac valve. Pressure test surface lines to 69.0mpa.

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 23
Report Date: 2/16/2014
Final Job Status: GAS
Final Report? Yes

ILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
09:30	11:30	2.00	P	Openned hydraulic frac valve, dropped 60.3mm Composite 1.4 specific gravity Halliburton B.P. Ball, wait 10 min for ball to fall. - Pumped 9.0m3 15% HCL acid followed by 7.0m3 WF130 pad #01 frac waterdown csg 0.70m3/min 9.90mpa. - Shut down pumps, ISIP = 8.20mpa, 5 min SICP = 6.6mpa. - Continue pumping pad #01, pumped 23.0m3 WF130 frac water at 0.20m3/min 12.8mpa, squeeze acid into perfs. - Shut down pumps, ISIP = 10.50mpa, 5 min SICP = 9.80mpa. - Pumped final 34.2m3 of WF130 pad at final rate 0.30m3/min 9.50mpa, started YF130Flex pad #02. - Pumped 36.90m3 YF130Flex frac water pad #02 at final rate 7.20m3/min 21.40mpa, started 100 Mesh frac sand. - Pumped 50, 75, 100, 150, and 200kg/m3 100 Mesh sand stages at rates of 8.60, 8.80, 9.0, 9.30, and 9.30 with final stage pressures of 25.70, 27.20, 27.40, 27.40, and 27.40mpa respectively, started 40/70 Mesh frac sand. - Pumped 200, 300, 400, and 500kg/m3 40/70 sand stages at final rates of 9.40, 9.40, 9.60, and 9.60mpa with final stage pressures of 24.90, 25.30, 26.60, and 23.90mpa respectively, started 30/50 PR 6000 frac sand. - Pumped 500, and 600kg/m3 30/50 PR 6000 sand stages at final rate of 9.60m3/min with final stage pressures of 26.5, and 26,8mpa, started WF130 frac water spacer. - Pumped 3.80m3 WF130 spacer at final rate 9.60m3/min, 26.50mpa, started flush. - Pumped 18.60m3 Slick Water flush at final rate 9.70m3/min 26.80mpa. Shut down pumps, ISIP = 9.20mpa, 5 min SICP = 10.4mpa, and 10 min SICP = 5.50mpa. Placed 20 tonnes 100 Mesh, 60 Tonnes 40/70, and 20 tonnes 30/50 PR 6000 frac sand with 547.30m3 frac water.
11:30	14:30	3.00	P	Tallied and made up perf gun B.P. assembly, picked up lubricator. Rih with E-line, pulled CCL strip from 1,500mMD up to 1,410mKB, and correlated to 114.3mm liner top at 1,477.35mKB. Continued to rih to 2,175.0mMD, started pumping at 0.30m3/min at 1650m, 0.60m3/min at 1700m, 0.90m3/min at 1750m, and 1.10m3/min from 1800 to 2,175.0mMD. Picked up and position B.P. - CCL at 2,165.70mMD set 114.3mm Halliburton Composite Flow Through B.P. at 2,180.0mMD C.E., top at 2,179.85mMD. - Interval #01: CCL at 2,160.10mMD, perforated interval 2,170.0 to 2,171.0mMD. Total 6 shots, all fired, well stable. - Interval #02: CCL at 2,142.80mMD, perforated interval 2,151.0 to 2,152.0mMD. Total 6 shots, all fired, well stable. - Interval #03: CCL at 2,125.60mMD, perforated interval 2,132.0 to 2,133.0mMD. Total 6 shots, all fired, well stable. - Interval #04: CCL at 2,108.40mMD, perforated interval 2,113.0 to 2,114.0mMD. Total 6 shots, all fired, well stable. - Interval #05: CCL at 2,091.20mMD, perforated interval 2,094.0 to 2,095.0mMD. Total 6 shots, all fired, well stable. Pooh, lay down lubricator and perf gun assembly, disarmed 1.0m perf gun.
0	18:30	4.00	P	Openned hydraulic frac valve, dropped 60.3mm Composite 1.4 specific gravity Halliburton B.P. Ball, wait 10 min for ball to fall. - Pumped 8.0m³ 15% HCL acid followed by 7.0m³ slickwater pad #01 frac water down csg 0.70m³/min 6.20MPa. - Shut down pumps, ISIP = 12.4MPa, 5 min SICP = 8.1.MPa. - Continue pumping pad #01, pumped 30.1m³ slickwater frac water at 0.2m³/min 11.3MPa, squeeze acid into perfs. - Shut down pumps, ISIP = 11.3MPa, 5 min SICP = 9.1MPa. - Pumped final 174.9m³ of slickwater pad at final rate 0.70m³/min 9.1MPa, started YF130Flex pad #02. - Pumped 53.6m³ YF130Flex frac water pad #02 at final rate 9.5m³/min @ 24.8MPa, - Pumped 34.7m³ YF130Flex frac water pad #03 at final rate 9.1m³ @ 24MPa, started 100 Mesh frac sand. - Pumped 50, 75, 100, 150, and 200kg/m³ 100 Mesh sand stages at rates of 8.9, 9,1, 9.1, 9.1, and 9.4 with final stage pressures of 24.9, 27.4, 27.1, 26.4, and 27.2MPa respectively, started 40/70 Mesh frac sand. - Pumped 200, 300, 400, and 500kg/m3 40/70 sand stages at final rates of 9.1, 9.4, 9.5, and 9.5MPa with final stage pressures of 27.2, 25.3, 24.3, and 23.6MPa respectively, started 30/50 PR 6000 frac sand. - Pumped 500, and 600kg/m³ 30/50 PR 6000 sand stages at final rate of 9.5m³/min with final stage pressures of 23.3, and 23.7MPa, started WF130 frac water spacer. - Pumped 2.8m³ WF130 spacer at final rate 9.5m³/min, 24.3MPa, started flush. - Pumped 19.1m³ Slick Water flush at final rate 9.5m³/min 24.8MPa. Shut down pumps, ISIP = 11.7MPa, 5 min SICP = 10.9MPa, and 10 min SICP = 9.2MPa. Placed 20 tonnes 100 Mesh, 59 Tonnes 40/70, and 20 tonnes 30/50 PR 6000 frac sand with 707.8m³ frac water.

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 23
Report Date: 2/16/2014
Final Job Status: GAS
Final Report? Yes

DAILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
18:30	00:30	6.00	P	Tallied and made up perf gun B.P. assembly with ball Composite Frac ball in place in plug, picked up lubricator. Rih with E-line, pulled CCL strip from 1,500mMD up to 1,410mKB, and correlated to 114.3mm liner top at 1,477.35mKB. Continued to rih to 2,175.0mMD, started pumping at 0.30m³/min at 1650m, 0.60m³/min at 1700m, 0.90m³/min at 1750m, and 1.10m3/min from 1800 to 2,175.0mMD. Picked up and position B.P. - CCL at 2,070.70mMD set 114.3mm Halliburton Composite Flow Through B.P. at 2,085mMD C.E., top at 2,084.85mMD. Perform Evaluation test while pumping down guns and shooting interval, evaluate the inter-stage (annular) pressure communication. -Pumped down Plug with 1.4SG composite ball in place. -ISIP = 10.8MPa -3min ISIP = 6.2MPa -ISIP prior to plug set = 4.7MPa Set plug and pressure tested to 35MPa for 5mins, test good. Bleed down CSG to 15MPa and ready to shoot interval -Interval #01: CCL at 2,065.1mMD, perforated interval 2,075.0 to 2,076.0mMD. -Shoot interval ISIP after shooting = 14.8MPa, 1min = 14.8MPa, 2min = 14.8MPa, 3min = 14.9MPa, 4min = 14.9MPa, 5min = 15MPa 21:45hrs pump @ 0.25m³/min for a break down @ 25.7MPa, continued pumping for a total of 1.2m³ , pressure stablized @ 19.1MPa. Shutdown Pumps ISIP = 18.7MPa, 5min ISIP = 11.6MPa. Continue to perforate the rest of the intervals as normal. - Interval #02: CCL at 2,047.8mMD, perforated interval 2,056.0 to 2,057.0mMD. - Interval #03: CCL at 2,029.6mMD, perforated interval 2,036.0 to 2,037.0mMD. - Interval #04: CCL at 2,012.4mMD, perforated interval 2,017.0 to 2,018.0mMD. - Interval #05: CCL at 1,995.2mMD, perforated interval 1,998.0 to 1,999.0mMD. Pooh, lay down lubricator and perf gun assembly, disarmed 1.0m perf gun, check all shots fired on guns and in good condition. Rigged E-Line BOP's off wellhead and ready to install CT BOPs.
00:30	06:00	5.50	P	Greased all valves on wellhead Stump test all CT BOP rams to 1.4MPa and 58.5MPa for 10mins, tests good, had several small leaks that had to be fixed. Installed CT BOP's on wellhead and pressure test rig groove to1.4MPa and 57.5MPa, for 10mins each. Test also good. All pressure tests charted, Ready to frac Interval #10

FLUID SUMMARY

Fluid	To lease (m³)	From lease (m³)	To well (m³)	From well (m³)	Left to recover (m³)
FRESH WATER	983.00	0.00	1,292.10	0.00	6,001.67

DAILY COST

BU Desc	Vendor	Activity Code	Amount (Cost)
Rig Camp	***VENDOR NOT LISTED***	E500	500.00
Trucking/Hauling/ Hot Shot Services	***VENDOR NOT LISTED***	P100	1,000.00
Surface Completion Equipment Rental	BOREALIS COMMUNICATIONS INC	Q300	532.44
Trucking/Hauling/ Hot Shot Services	CANOL OILFIELD SERVICES INC	P100	15,000.00
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	13,720.00
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	13,720.00
Maintain Road & Location	CANOL OILFIELD SERVICES INC	D230	2,050.00
Service Rig	CONOCO	E120	37,000.00
Service Rig	CORNERSTONE OILFIELD SERVICES LTD	E120	1,400.00
Surface Completion Equipment Rental	CORNERSTONE OILFIELD SERVICES LTD	Q300	195.00
Service Rig	CORNERSTONE OILFIELD SERVICES LTD	E120	3,400.00
Service Rig	CORNERSTONE OILFIELD SERVICES LTD	E120	4,400.00
Service Rig	CORNERSTONE OILFIELD SERVICES LTD	E120	280.00
Safety Equipment & Services	FRONTIERMEDEX CANADA LTD/ EXLOGS SAHTU LTD	T430	2,000.00
Safety Equipment & Services	HODGSON'S CONTRACTING (2005) LTD	T430	6,914.00
Safety Equipment & Services	HODGSON'S CONTRACTING (2005) LTD	T430	2,084.00
Surface Completion Equipment Rental	HORIZON OILFILED SOLUTIONS INC	Q300	3,446.15
Fracture Stimulation Services	ISOLATION EQUIPMENT SERVICES INC	N110	6,630.00
Surface Completion Equipment Rental	MACKAY RANGE DEVELOPMENT CORP	Q300	374.00
Wellsite Supervision & Engineering	MINAULT ENERGY SERVICES LTD	T130	1,545.00
rface Completion Equipment Rental	MYB CONSTRUCTION LTD	Q300	1,150.00
urface Completion Equipment Rental	MYB CONSTRUCTION LTD	Q300	2,000.00
Completion Fluids & Other Chem	NORTHERN TRUCK SERVICES (1994) LTD	G300	3,570.00
Completion Fluids & Other Chem	NORTHERN TRUCK SERVICES (1994) LTD	G300	10,710.00
Completion Fluids & Other Chem	NORTHERN TRUCK SERVICES (1994) LTD	G300	10,440.00
Completion Fluids & Other Chem	NORTHERN TRUCK SERVICES (1994) LTD	G300	4,300.00
Completion Fluids & Other Chem	NORTHERN TRUCK SERVICES (1994) LTD	G300	3,971.00

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 24
Report Date: 2/17/2014
Final Job Status: GAS
Final Report? Yes

WELL HEADER INFORMATION

Country	State/Province	Region / Division	District	Field Name	Field Code
CANADA	N.W.T.	WCBU	NEW VENTURES	Canyon	

Surface Legal Location	API / UWI	License No.
E-76 65-10 126-45	300E7665-10126-45	EL 470

Orig KB/RT (m)	Ground Elevation (m)	KB-Grd (m)	KB-CF (m)	KB-TF (m)	Total Depth (mKB)	PBTD (All) (mKB)
273.40	268.20	5.20	5.40	4.22	2,910.00	Original Hole - 2,877.30

JOB INFORMATION

Job Category	Primary Job Type	Secondary Job Type	Total Field Estimate (Cost)
COMPLETIONS	INITIAL COMPLETION	RIGLESS	21,945,332.75

Objective
Hydrailically fracture and flow test as part of the 2014 Canol Exploration Program

Actual Start Date	End Date	Abandon Date	Responsible Grp 1	Responsible Grp 2	Responsible Grp 3
1/25/2014 00:00	3/28/2014 08:00		coved	lagartn	Chris Kendall

AFE COST SUMMARY

AFE / RFE / Maint.#	Total AFE Amount (Cost)	Total AFE + Supp Amount (Cost)	Total Field Estimate (Cost)	AFE-Field Estimate (Cost)
10351695	2,111,000.00	2,111,000.00	2,318,381.14	-207,381.14
AFE / RFE / Maint.#	Total AFE Amount (Cost)	Total AFE + Supp Amount (Cost)	Total Field Estimate (Cost)	AFE-Field Estimate (Cost)
10359413	16,997,500.00	20,641,514.00	19,626,951.61	1,014,562.39

DAILY INFORMATION

Report Start Date	Report End Date	Daily Cost Total (Cost)	Cumulative Cost (Cost)	Personnel Regular Hours (hr)
2/17/2014 06:00	2/18/2014 06:00	666,941.53	16,268,515.16	1,092.00

Daily Contacts
Completion Engineer, Theorn LaGarde, 403-710-9753; WS Superintendent, Derrick Cove, 780-831-1314; WS Supervisor, Chris Kendall, 780-518-3284; WS Supervisor, Myles Hahn, 780-402-0500; WS Supervisor, Richard Young, 780-831-9153; WS Supervisor, Michael Short

Rig
Weatherford, FS 463

Tubing Pressure (kPa)	Casing Pressure (kPa)	Weather	Temperature (°C)	Lease Condition
	7,700	Clear	-28	Ice Pad

Last 24hr Summary
Warm up frac motors and frac equip hydraulics, get ready to frac. Pump 20.0m3 of 55°C water to testers, warm up pumpers. Pressure test surface lines to 69.0mpa.

Perform frac on Canol Interval #10 @ 1998.0mKB- 2076mKB
Max pressure= 28.8 MPa
Ave pressure = 20.6 MPa
Max rate = 9.5m³/min
Avg rate = 5.7m³/min
Proppant pumped = 17.5T of 100 Mesh, 66.5T of 40/70, 22.7T of 30/50 PR6000
Max concentration = 600 kg/m3
Total water pumped = 507.4m3
Total 15% HCL pumped = 8m3
Post frac ISIP = 11.1MPa

Winterize frac equipment with 60/40 % methanol water, inject 1m³ into wellbore to winterize wellhead and exposed wellbore. Bleed off and drain up all equipment, remove all fluid from surface lines with vac truck, placing collected fluid in flow back tanks. Rig out treatment standing iron and wrap up all frac iron around well center.

Held Safety + Operations meeting with coil tbg crew and all associated services. Discussed PJHA for rigging in coil tbg and milling operations, heating and pumping meth/water, cold weather, environmental concerns, and communication.
Installed coil connector, pull tested to 21,000LBs, good test. Installed injector and lubicator on wellhead, pressure tested to 1.4MPa and 57MPa for 10mins each, test all good. Installed BHA and start in hole with mud motor to drill out plugs.
Equalized and Start in hole with BHA @ 20m/min, function tested Mud Motor at 100m and seems to be working good. Continue in hole at a rate of 20m/min. Pull testing every 500m in hole.
Tagged first plug @ 2081.4mMD, 3.45m correction. @ 5:47hrs.
Drilled with 1/2 daN weight @ 420 L/min, plug drilled out in 18mins.
Pumped 1m³ gel slug, 2m³ fresh water spacer, 1m³ gel slug.
Continue RIH to next plug, start drilling when gel plug was around heal.

24hr Forecast
Drill out Halliburton Obsidian 10K flow through plugs following drill out plan with coil TBG.

DAILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
06:00	06:30	0.50	P	WSS Shift Change
06:30	07:00	0.50	P	Held Safety + Operations meeting with all crews on location. Discussed PJHA for fracing operations, heating and pumping frac water, rigging out demobilizing Frac equipment, cold weather, environmental concerns, communication, and driving.
	09:00	2.00	P	Warm up frac motors and frac equip hydraulics, get ready to frac. Pump 20.0m3 of 55°C water to testers, warm up pumpers. Pressure test surface lines to 69.0mpa.

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 24
Report Date: 2/17/2014
Final Job Status: GAS
Final Report? Yes

AILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
09:00	11:00	2.00	P	Openned hydraulic frac valve. - Pumped 8.0m3 15% HCL acid followed by 4.2m3 WF130 pad #01 frac water down csg 0.70m3/min 16.4MPa. - Shut down pumps, ISIP = 9.60MPa, 5 min SICP = 6.6MPa. - Continue pumping pad #01, pumped 25.8m³ WF130 frac water at 0.20m3/min 6.6MPa, squeeze acid into perfs. - Shut down pumps, ISIP = 10.20MPa, 5 min SICP = 8.40MPa. - Pumped final 31.5m³ of WF130 pad at final rate 0.30m3/min 8.40MPa, - started YF130Flex pad #02. - Pumped 33.30m³ YF130Flex frac water pad #02 at final rate 8.20m³/min 24.20MPa, - started 100 Mesh frac sand. - Pumped 50, 75, 100, 150, and 200kg/m3 100 Mesh sand stages at rates of 8.80, 9.0, 9.2, 9.50, and 9.50 with final stage pressures of 26.70, 26.80, 27.0, 27.60, and 26.0MPa respectively, - started 40/70 Mesh frac sand. - Pumped 200, 300, 400, and 500kg/m³ 40/70 sand stages at final rates of 9.40, 9.50, 9.50, and 9.50mpa with final stage pressures of 25.50, 25.0, 24.30, and 23.50mpa respectively, started 30/50 PR 6000 frac sand. - Pumped 500, and 600kg/m3 30/50 PR 6000 sand stages at final rate of 9.50m³/min with final stage pressures of 23.8, and 23,7MPa, started WF130 frac water spacer. - Pumped 3.0m³ WF130 spacer at final rate 9.50m³/min, 26.0MPa, started flush. - Pumped 13.30m³ Slick Water flush at final rate 9.50m³/min 26.60MPa. Shut down pumps, ISIP = 11.1MPa, 5 min SICP = 11.0MPa. Placed 20 tonnes 100 Mesh, 60 Tonnes 40/70, and 20 tonnes 30/50 PR 6000 frac sand with 507.40m³ frac water.
11:00	17:30	6.50	P	Winterize frac equipment with 60/40 % methanol water, inject 1m³ into wellbore to winterize wellhead and exposed wellbore. Bleed off and drain up all equipment, remove all fluid from surface lines with vac truck, placing collected fluid in flow back tanks. Rig out treatment standing iron and wrap up all frac iron around well center.
17:30	18:30	1.00	P	Held Safety + Operations meeting with coil tbg crew and all associated services. Discussed PJHA for rigging in coil tbg and milling operations, heating and pumping meth/water, cold weather, environmental concerns, and communication.
18:30	22:30	4.00	P	Mix 4m³ fresh water with 60% meth/water mix to heat mix to 25°C. Methonal water mix now @ 50% meth/water. 24m³ total on location. Fuel equipment and wait on Crane Operator shift change.
22:30	03:30	5.00	P	Installed CT connector and pull tested to 21,000daN. Test good. Installed injector and lubicator on wellhead. Filled Coil with 6.4m³ of 25°C 50/50 Meth/water, pressure tested lubicator, BOPs and connections to 1.4MPa for 10mins, test good. Pressured up to 20MPa and started to leak on all connections, pump another 1.5m³ of warm Meth/Water mix and re-tested. Tested lubicator/BOPs and connections to 57MPa for 10mins, test good. Broke off lubicator and installed BHA as follows using hyd. tongs: 95mm x 0.3m 5 blade concave mill w/5-10mm water ports 73mm x 3.90m PowerPlus Motor, 188-470 rpm, Max Diff Pressure 7033KPa, Torque @ Max pressure = 646ft-lbs. 73mm x 0.35m, 22.2mm ID Disconnect, 7/8" ball, 4 pin 4800psi. 73mm x 1.72m, 25.4mm Bi-Directional Ultra Jar, Max over pull 32,000 lbf, Max overpush 32,000lbf, 304.8mm stroke 73mm x 0.90m, 35.05mm Motorhead Assy, Double Flapper, Hyd Disconnect, 1 1/8" ball seat, 6 pin 35MPa, circ sub, 1" ball seat/ 4 shear 73mm x 0.17m, connector assyembly, dimple F/2 CT pull tested to 21000daN. Total lenght = 7.34m, Min ID = 22.21mm, Max OD = 95mm Re-installed Lubicator and injector on wellhead, Tested quick connector on lub to 60MPa, test good.
03:30	06:00	2.50	P	SICP = 50KPa Equalized and Start in hole with BHA @ 20m/min, function tested Mud Motor at 100m and seems to be working good. Continue in hole at a rate of 20m/min. Pull testing every 500m in hole. Tagged first plug @ 2081.4mMD, 3.45m correction. @ 5:47hrs. Drilled with 1/2 daN weight @ 420 L/min, plug drilled out in 18mins. Pumped 1m³ gel slug, 2m³ fresh water spacer, 1m³ gel slug. Continue RIH to next plug, start drilling when gel plug was around heal.

FLUID SUMMARY

Fluid	To lease (m³)	From lease (m³)	To well (m³)	From well (m³)	Left to recover (m³)
FRESH WATER	0.00	81.00	523.30	0.00	6,524.97

DAILY COST

BU Desc	Vendor	Activity Code	Amount (Cost)
g Camp	***VENDOR NOT LISTED***	E500	50
Trucking/Hauling/ Hot Shot Services	***VENDOR NOT LISTED***	P100	1,0
Surface Completion Equipment Rental	BOREALIS COMMUNICATIONS INC	Q300	53
Trucking/Hauling/ Hot Shot Services	CANOL OILFIELD SERVICES INC	P100	15,000.00
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	12,740.00
Maintain Road & Location	CANOL OILFIELD SERVICES INC	D230	2,050.00

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 25
Report Date: 2/18/2014
Final Job Status: GAS
Final Report? Yes

WELL HEADER INFORMATION

Country	State/Province	Region / Division	District	Field Name	Field Code
CANADA	N.W.T.	WCBU	NEW VENTURES	Canyon	

Surface Legal Location	API / UWI	License No.
E-76 65-10 126-45	300E7665-10126-45	EL 470

Orig KB/RT (m)	Ground Elevation (m)	KB-Grd (m)	KB-CF (m)	KB-TF (m)	Total Depth (mKB)	PBTD (All) (mKB)
273.40	268.20	5.20	5.40	4.22	2,910.00	Original Hole - 2,877.30

JOB INFORMATION

Job Category	Primary Job Type	Secondary Job Type	Total Field Estimate (Cost)
COMPLETIONS	INITIAL COMPLETION	RIGLESS	21,945,332.75

Objective
Hydrailically fracture and flow test as part of the 2014 Canol Exploration Program

Actual Start Date	End Date	Abandon Date	Responsible Grp 1	Responsible Grp 2	Responsible Grp 3
1/25/2014 00:00	3/28/2014 08:00		coved	lagartn	Chris Kendall

AFE COST SUMMARY

AFE / RFE / Maint.#	Total AFE Amount (Cost)	Total AFE + Supp Amount (Cost)	Total Field Estimate (Cost)	AFE-Field Estimate (Cost)
10351695	2,111,000.00	2,111,000.00	2,318,381.14	-207,381.14
AFE / RFE / Maint.#	**Total AFE Amount (Cost)**	**Total AFE + Supp Amount (Cost)**	**Total Field Estimate (Cost)**	**AFE-Field Estimate (Cost)**
10359413	16,997,500.00	20,641,514.00	19,626,951.61	1,014,562.39

DAILY INFORMATION

Report Start Date	Report End Date	Daily Cost Total (Cost)	Cumulative Cost (Cost)	Personnel Regular Hours (hr)
2/18/2014 06:00	2/19/2014 06:00	980,593.02	17,249,108.18	1,092.00

Daily Contacts
Completion Engineer, Theorn LaGarde, 403-710-9753; WS Superintendent, Derrick Cove, 780-831-1314; WS Supervisor, Chris Kendall, 780-518-3284; WS Supervisor, Myles Hahn, 780-402-0500; WS Supervisor, Richard Young, 780-831-9153; WS Supervisor, Michael Short

Rig
Weatherford, FS 463

Tubing Pressure (kPa)	Casing Pressure (kPa)	Weather	Temperature (°C)	Lease Condition
	782	Overcast	-32	Ice Pad

Last 24hr Summary
Drilled out all Bridge Plugs.
RIH & Tagged top of BP #1 @ 2084.5mKB (2081.4mKB CT depth) with a pump rate of 0.42m³/min at 23.4MPa with 936 kPa full returns to P-tank.
RIH & Tagged top of BP #2 @ 2179.85mKB (2174.9mKB CT depth) with a pump rate of 0.42m³/min at 21.8MPa with 1217 kPa full returns to P-tank.
RIH & Tagged top of BP #3 @ 2275.85mKB (2273.2mKB CT depth) with a pump rate of 0.40m³/min at MPa with 20.2 kPa, returns 375 lpm to P-tank.
RIH & Tagged top of BP #4 @ 2370.85mKB (2364.4mKB CT depth) with a pump rate of 0.40m³/min at 25MPa with 245 kPa 400 lpm returns to P-tank.
RIH & Tagged top of BP #5 @ 2275.85mKB (2421.5mKB CT depth) with a pump rate of 0.42m³/min at MPa with 235 kPa full returns to P-tank.
RIH & Tagged top of BP #6 @ 2484.85mKB (2478.0mKB CT depth) with a pump rate of 0.42m³/min at 26.8MPa with 159 kPa 380 lpm returns to P-tank.
RIH & Tagged top of BP #7 @ 2580.85.mKB (2573.3mKB CT depth) with a pump rate of 0.42m³/min at 20.8MPa with 102 kPa 350 lpm returns to P-tank.
RIH & Tagged top of BP #8 @ 2666.85mKB (2667.2mKB CT depth) with a pump rate of 0.422m³/min at 29.3MPa with 158 kPa 375 lpm returns to P-tank.
RIH & Tagged top of BP #9 @ 2771.85 mKB (2762.9mKB CT Depth) with a pump rate of 0.422m³/min at 28.9MPa with 338 kPa 380 lpm returns to P-tank.
RIH and tagged PB @ 2877 mKB (2872mKB CT Depth), Pulled back off PB 10meters and launched a 1.0m³ gel slug, 2.0m³ spacer and another 1.0m³ gel slug. Start pulling a sweep back up to 1650mKB (30° dev).

24hr Forecast
Finsihing with Coil Tubing, RIH with 98mm gauge ring and junk basket, RIH and set packer.

DAILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
06:00	06:30	0.50	P	Continued to run in hole coil tubing with mud motor milling BHA on bottom. WSS Shift change
06:30	07:00	0.50	P	Held a daily safety and operations meeting with all day shift services. Reviewed and discussed CPC PJHA #021814 regarding CT operations and all associated hazards. Discussed ERP plan and emergency procedures. Performed cross shift with night crews.

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 25
Report Date: 2/18/2014
Final Job Status: GAS
Final Report? Yes

DAILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
07:00	11:00	4.00	P	Tagged top of bridge plug #1 at 2084.5mKB (2081.4mKB CT depth) with a pump rate of 0.42m³/min at 23.4MPa with 936 kPa full returns to P-tank. Set down 1,858daN and drilled though bridge plug in 19 minutes. Launched a 1.0m³ gel slug, 2.0m³ spacer and another 1.0m³ gel slug once through plug. Continued in hole to Plug #2. Tagged top of bridge plug #2 at 2179.85mKB (2174.9mKB CT depth) with a pump rate of 0.42m³/min at 21.8MPa with 1217 kPa full returns to P-tank. Set down 1,240daN and drilled though bridge plug in 45 minutes. Launched a 1.0m³ gel slug, 2.0m³ spacer and another 1.0m³ gel slug once through plug. Waited for gel to come out the end of the tubing and pulled a sweep back up to 1650mKB (30° dev). Tagged top of bridge plug #3 at 2275.85mKB (2273.2mKB CT depth) with a pump rate of 0.40m³/min at MPa with 20.2 kPa, returns 375 lpm to P-tank. Set down 1,325daN and drilled though bridge plug in 38 minutes. Launched a 1.0m³ gel slug, 2.0m³ spacer and another 1.0m³ gel slug once through plug. Continued in hole to Plug #4. Tagged top of bridge plug #4 at 2370.85mKB (2364.4mKB CT depth) with a pump rate of 0.40m³/min at 25MPa with 245 kPa 400 lpm returns to P-tank. Set down 542daN and drilled though bridge plug in 57 minutes. Launched a 1.0m³ gel slug, 2.0m³ spacer and another 1.0m³ gel slug once through plug. Waited for gel to come out the end of the tubing and pulled a sweep back up to 1650mKB (30° dev). Continued to rig out all suction hoses and fluid managment equipment in clean tank farms. Laid over and hauled out 12 400bbl tanks and 11 mats to rack site by P-20 location. Rigged out remaining frac equipment and continued to clean up sand and frac area
11:00	18:30	7.50	P	Tagged top of bridge plug #5 at 2275.85mKB (2421.5mKB CT depth) with a pump rate of 0.42m³/min at MPa with 235 kPa full returns to P-tank. Set down 703daN and drilled though bridge plug in 38 minutes. Launched a 1.0m³ gel slug, 2.0m³ spacer and another 1.0m³ gel slug once through plug Tagged top of bridge plug #6 at 2484.85mKB (2478.0mKB CT depth) with a pump rate of 0.42m³/min at 26.8MPa with 159 kPa 380 lpm returns to P-tank. Set down 203daN and drilled though bridge plug in 57 minutes. Launched a 1.0m³ gel slug, 2.0m³ spacer and another 1.0m³ gel slug once through plug. Waited for gel to come out the end of the tubing and pulled a sweep back up to 1650mKB (30° dev).
18:30	22:30	4.00	P	Tagged top of bridge plug #7 at 2580.85.mKB (2573.3mKB CT depth) with a pump rate of 0.42m³/min at 20.8MPa with 102 kPa 350 lpm returns to P-tank. Set down 241daN, drilled for 120 mins working CT several times, Re-Tagged @ 7m/min, drilled though bridge plug in 126 minutes. Launched a 1.0m³ gel slug, 2.0m³ spacer and another 1.0m³ gel slug once through plug. RIH and tagged next plug @ 2666.85mKB (2667.2mKB CT Depth), waited for gel to come out the end of the tubing and started drilling plug. Tagged top of bridge plug #8 at 2666.85mKB (2667.2mKB CT depth) with a pump rate of 0.422m³/min at 29.3MPa with 158 kPa 375 lpm returns to P-tank. Set down 285daN, drilled plug out in 112 mins working CT several times, Re-Tagging each time @ 7m/min. Launched a 1.0m³ gel slug, 2.0m³ spacer and another 1.0m³ gel slug once through plug. RIH and tagged next plug @ 2771.85 mKB (2762.9mKB CT Depth), Waited for gel to come out the end of the tubing and pulled a sweep back up to 1650mKB (30° dev).
22:30	03:30	5.00	P	RIH and Tagged plug #9 @ 2771.85 mKB (2762.9mKB CT Depth) with a pump rate of 0.422m³/min at 28.9MPa with 338 kPa 380 lpm returns to P-tank. Set down 482daN, drilled plug out in mins working CT several times, Re-Tagging each time @ 7m/min. Launched a 1.0m³ gel slug, 2.0m³ spacer and another 1.0m³ gel slug once through plug. RIH and tagged PB @ 2877 mKB (2872mKB CT Depth), Pulled back off PB 10meters and launched a 1.0m³ gel slug, 2.0m³ spacer and another 1.0m³ gel slug. Start pulling a sweep back up to 1650mKB (30° dev). Note: Trace of sand in samples Switched over to fresh clean water for final circulations, and gel sweeps.

FLUID SUMMARY

Fluid	To lease (m³)	From lease (m³)	To well (m³)	From well (m³)	Left to recover (m³)
FRESH WATER	0.00	0.00	0.00	0.00	6,524.97

DAILY COST

BU Desc	Vendor	Activity Code	Amount (Cost)
Rig Camp	***VENDOR NOT LISTED***	E500	500.00
Surface Completion Equipment Rental	BOREALIS COMMUNICATIONS INC	Q300	532.44
Trucking/Hauling/ Hot Shot Services	CANOL OILFIELD SERVICES INC	P100	15,000.00
Service Rig	CONOCO	E120	37,000.00
Service Rig	CORNERSTONE OILFIELD SERVICES LTD	E120	1,700.00
Service Rig	CORNERSTONE OILFIELD SERVICES LTD	E120	2,200.00
Service Rig	CORNERSTONE OILFIELD SERVICES LTD	E120	1,400.00
Surface Completion Equipment Rental	CORNERSTONE OILFIELD SERVICES LTD	Q300	19
Slickline Services	CORNERSTONE OILFIELD SERVICES LTD	U200	3,270.
Safety Equipment & Services	FRONTIERMEDEX CANADA LTD/ EXLOGS SAHTU LTD	T430	2,000.00
Surface Completion Equipment Rental	HORIZON OILFILED SOLUTIONS INC	Q300	3,446.15
Fracture Stimulation Services	ISOLATION EQUIPMENT SERVICES INC	N110	5,190.00

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 26
Report Date: 2/19/2014
Final Job Status: GAS
Final Report? Yes

WELL HEADER INFORMATION

Country	State/Province	Region / Division	District	Field Name	Field Code
CANADA	N.W.T.	WCBU	NEW VENTURES	Canyon	

Surface Legal Location	API / UWI	License No.
E-76 65-10 126-45	300E7665-10126-45	EL 470

Orig KB/RT (m)	Ground Elevation (m)	KB-Grd (m)	KB-CF (m)	KB-TF (m)	Total Depth (mKB)	PBTD (All) (mKB)
273.40	268.20	5.20	5.40	4.22	2,910.00	Original Hole - 2,877.30

JOB INFORMATION

Job Category	Primary Job Type	Secondary Job Type	Total Field Estimate (Cost)
COMPLETIONS	INITIAL COMPLETION	RIGLESS	21,945,332.75

Objective
Hydrailically fracture and flow test as part of the 2014 Canol Exploration Program

Actual Start Date	End Date	Abandon Date	Responsible Grp 1	Responsible Grp 2	Responsible Grp 3
1/25/2014 00:00	3/28/2014 08:00		coved	lagartn	Chris Kendall

AFE COST SUMMARY

AFE / RFE / Maint.#	Total AFE Amount (Cost)	Total AFE + Supp Amount (Cost)	Total Field Estimate (Cost)	AFE-Field Estimate (Cost)
10351695	2,111,000.00	2,111,000.00	2,318,381.14	-207,381.14
10359413	16,997,500.00	20,641,514.00	19,626,951.61	1,014,562.39

DAILY INFORMATION

Report Start Date	Report End Date	Daily Cost Total (Cost)	Cumulative Cost (Cost)	Personnel Regular Hours (hr)
2/19/2014 06:00	2/20/2014 06:00	200,972.47	17,450,080.65	1,092.00

Daily Contacts
Completion Engineer, Theorn LaGarde, 403-710-9753; WS Superintendent, Derrick Cove, 780-831-1314; WS Supervisor, Chris Kendall, 780-518-3284; WS Supervisor, Myles Hahn, 780-402-0500; WS Supervisor, Richard Young, 780-831-9153; WS Supervisor, Michael Short

Rig
Weatherford, FS 463

Tubing Pressure (kPa)	Casing Pressure (kPa)	Weather	Temperature (°C)	Lease Condition
	0	Overcast	-30	Ice Pad

Last 24hr Summary
Pulled out of hole with Coil tubing. Broke down tools and blew out coil with N2.
Removed Coil TBG injector,installed E-Line BOPs, pressure tested BOPs and ring groove to 1.4MPa and 57MPa for 10mins each, all tests good.
SICP = 0KPa @2300hrs, well dead.
RIH with E-Line junk basket(3.0m) and 96.5mm gauge ring to point of refusal @ 1833mKB @ 73 deg incl.
POOH w/ BHA
1-60.3mm x 0.13m PPMP Pump out plug dressed c/w 6 shear pin @ 3613KPa each & 2 shear screws @ 1427KPa each for a total of 24.4MPa differential to shear out.
1-60.3mm x 0.65m J-55 6.99kg/m EUE Pup Joint
1-47.63mm x 0.32m XN No-Go Profile Nipple, 45.49mm No-Go
1-60.3mm x 2.49m J-55 6.99kg/m Pup Joint
1-WDH114 WL x 1.38m Packer
1- 89.0mm x 1.48m 'NFT' On/Off Tool Extended Slick Jt. C/W 47.63mm X profile (SN#733647).

Correlated on depth @ liner top @ 1477mKB.Pulled log strip 6 collars above 1798.0mKB and correlated in to position checking against Schlumberger Depth Control Log/CCL dated 12-FEB-2014 @3:00. Short joint 1 casing collar above 1798.0m.
SICP = 0KPa, 0400hrs, well still dead.
Set packer @ 1798.0m CE @ 60.4° incl. 1797.42mKB to top of packer. 1796.25mKB to top of slick joint. POOH @45m/min.
Negative test passed.
Rigged out E-line BOPs and equipment. Finished rigging out Coil TBG equipment.

24hr Forecast
Nipple down wellhead conections and install TBG head.

DAILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
06:00	06:30	0.50	P	WSS Shift change Start to pull out of the hole with coil tubing.
06:30	07:00	0.50	P	Held a daily safety and operations meeting with all day shift services. Reviewed and discussed CPC PJHA #021914 regarding CT operations and all associated hazards. Discussed ERP plan and emergency procedures. Performed cross shift with night crews.
07:00	11:00	4.00	P	Continued to pull out of the hole with coil tubing while circulating at 0.4m³/min to P-tank (aprx 0.35m³/min return rate). Launch 1m³ Gel sweep followed with 2m³ fresh water spacer and 1m³ Gel sweep @ 1700m (40 degrees), Wait for Gel to turn corner and circulate out of hole to surface @ 15m/min.

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 26
Report Date: 2/19/2014
Final Job Status: GAS
Final Report? Yes

DAILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
11:00	14:30	3.50	P	When coil was getting close to surface they switched from fresh water to 60/40 methanol water. Pumped 7.0m³ of 60/40 through coil and back to P-tank. At this time coil was at 50m and pump was shut down. Coil continued out of the hole and at 25mKB pulled over 6000 daN. Ran in hole and pulled back up to continually tagging at 25mKB with and continued to pull over. Ran in hole to 80mKB. Engaged pump at 0.42m³/min pumping fresh water down CT returning to P-tank. Pulled out of the hole slowly until connector tagged out on stripper. Shut in the 114.3mm master valve and shut down the pump. Pumped 6.5m³ of 60/40 methanol water through CT at 0.12m³/min (motor inside of lubricator) returning to testers. Sucked out lubricator and broke off the well. Broke apart milling BHA and laid down. Mill showed good signs of wear (bottom outside corners of all 5 blades were rounded). Looked down inside of wellhead and there were no visible signs of debris inside stack/wellhead. Note: Lost 18.5m³ water to well today (06:00-14:30) during CT cleanout. Lost a total of 45.29m³ for entire CT cleanout run milling out bridge plugs, flushed CSG with 18m³, total lost to zone 62.8m³
14:30	16:00	1.50	P	Stabbed lubricator back onto the well. Pressure tested N2 line to 35MPa. Purged all fluid out of coil with N2 back to P-tank (total of 2100scm N2 used). Bled down pressure to 0 kPa and broke off lubricator.
16:00	17:00	1.00	P	Rigged down lubricator and landed injector into cradle.
17:00	18:30	1.50	P	Closed Blind Shear rams. SICP: 200 kPa. Opened master valve and engaged pump pumping fresh water. Brought rate up to 1.2m³/min. and flushed wellbore with 18m³ clean water. Final pump rate pressure 5,248KPa. Shut in well, bleed off lines, methanol pump and drain up lines. WSS Shife Change. Held PJHA with all night shift personal on tonights operations and procedures to be followed.
18:30	00:00	5.50	P	Removed Coil TBG injector from well, and racked back. Removed CT BOPs and racked back on stump. Picked up and installed E-Line BOPs, pressure tested BOPs and ring groove to 1.4MPa and 57MPa for 10mins each, all tests good. SICP = 0KPa, @2400hrs, well dead. RIH with E-Line junk basket(3.0m) and 96.61mm gauge ring to point of refusal @ 1833mKB @ 73 deg incl. POOH Checked junk basket is clean, installed BHA tool string as follows: 1-60.3mm x 0.13m PPMP Pump out plug dressed c/w 6 shear pin @ 3613KPa each & 2 shear screws @ 1427KPa each for a total of 24.5MPa differential to shear out. 1-60.3mm x 0.65m J-55 6.99kg/m EUE Pup Joint 1-47.63mm x 0.32m XN No-Go Profile Nipple, 45.49mm No-Go 1-60.3mm x 2.49m J-55 6.99kg/m Pup Joint 1-WDH114 WL x 1.38m Wireline set Retriveable Double Grip Packer, 69MPa rated, 80-70-80 Durometer Nitrile Elastomers 1- 89.0mm x 1.17m Slick Jt. C/W 47.63mm X profile (SN#733647).
00:00	06:00	6.00	P	RIH with BHA, correlated on depth to liner top @ 1477mKB. Continue RIH. Pulled log strip 6 collars above 1798.0mKB and correlated in to position checking against Schlumberger Depth Control Log/CCL dated 12-FEB-2014 @3:00. Short joint 1 casing collar above 1798.0m. SICP = 0KPa, 0400hrs, well still dead. Set packer @ 1798.0m CE @ 60.4° incl. 1797.42mKB to top of packer. 1796.25mKB to top of " NFT" ON/OFF tool extended slick joint. POOH @45m/min. Negative test passed. Rigged out E-line BOPs and equipment. Finished rigging out Coil TBG equipment. When E-Line was out of hole, wellhead and lubicator was dry, no fluid.

FLUID SUMMARY

Fluid	To lease (m³)	From lease (m³)	To well (m³)	From well (m³)	Left to recover (m³)
FRESH WATER			63.29	0.00	6,588.26

DAILY COST

BU Desc	Vendor	Activity Code	Amount (Cost)
Rig Camp	***VENDOR NOT LISTED***	E500	500.00
Surface Completion Equipment Rental	BOREALIS COMMUNICATIONS INC	Q300	532.44
Maintain Road & Location	CANOL OILFIELD SERVICES INC	D230	2,050.00
Service Rig	CONOCO	E120	15,000.00
Service Rig	CORNERSTONE OILFIELD SERVICES LTD	E120	1,700.00
Service Rig	CORNERSTONE OILFIELD SERVICES LTD	E120	2,200.00
Service Rig	CORNERSTONE OILFIELD SERVICES LTD	E120	1,400.00
Surface Completion Equipment Rental	CORNERSTONE OILFIELD SERVICES LTD	Q300	195.00
ckline Services	CORNERSTONE OILFIELD SERVICES LTD	U200	3,270.00
afety Equipment & Services	FRONTIERMEDEX CANADA LTD/ EXLOGS SAHTU LTD	T430	2,00
Surface Completion Equipment Rental	HORIZON OILFILED SOLUTIONS INC	Q300	3,44
Service Rig	HRN CONTRACTING LTD	E120	3,350.00
Fracture Stimulation Services	ISOLATION EQUIPMENT SERVICES INC	N110	5,190.00
Wellsite Supervision & Engineering	M HAHN CONSULTING INC	T130	1,670.00
Surface Completion Equipment Rental	MACKAY RANGE DEVELOPMENT CORP	Q300	374.00

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 27
Report Date: 2/20/2014
Final Job Status: GAS
Final Report? Yes

HEADER INFORMATION

ry	State/Province	Region / Division	District	Field Name	Field Code
ADA	N.W.T.	WCBU	NEW VENTURES	Canyon	

Surface Legal Location	API / UWI	License No.
E-76 65-10 126-45	300E7665-10126-45	EL 470

Orig KB/RT (m)	Ground Elevation (m)	KB-Grd (m)	KB-CF (m)	KB-TF (m)	Total Depth (mKB)	PBTD (All) (mKB)
273.40	268.20	5.20	5.40	4.22	2,910.00	Original Hole - 2,877.30

JOB INFORMATION

Job Category	Primary Job Type	Secondary Job Type	Total Field Estimate (Cost)
COMPLETIONS	INITIAL COMPLETION	RIGLESS	21,945,332.75

Objective
Hydraillically fracture and flow test as part of the 2014 Canol Exploration Program

Actual Start Date	End Date	Abandon Date	Responsible Grp 1	Responsible Grp 2	Responsible Grp 3
1/25/2014 00:00	3/28/2014 08:00		coved	lagartn	Chris Kendall

AFE COST SUMMARY

AFE / RFE / Maint.#	Total AFE Amount (Cost)	Total AFE + Supp Amount (Cost)	Total Field Estimate (Cost)	AFE-Field Estimate (Cost)
10351695	2,111,000.00	2,111,000.00	2,318,381.14	-207,381.14
AFE / RFE / Maint.#	**Total AFE Amount (Cost)**	**Total AFE + Supp Amount (Cost)**	**Total Field Estimate (Cost)**	**AFE-Field Estimate (Cost)**
10359413	16,997,500.00	20,641,514.00	19,626,951.61	1,014,562.39

DAILY INFORMATION

Report Start Date	Report End Date	Daily Cost Total (Cost)	Cumulative Cost (Cost)	Personnel Regular Hours (hr)
2/20/2014 06:00	2/21/2014 06:00	338,052.87	17,788,133.52	1,092.00

Daily Contacts
Completion Engineer, Theorn LaGarde, 403-710-9753; WS Superintendent, Derrick Cove, 780-831-1314; WS Supervisor, Chris Kendall, 780-518-3284; WS Supervisor, Myles Hahn, 780-402-0500; WS Supervisor, Richard Young, 780-831-9153; WS Supervisor, Michael Short

Rig
Weatherford, FS 463

Tubing Pressure (kPa)	Casing Pressure (kPa)	Weather	Temperature (°C)	Lease Condition
	0	Slight Overcast	-35	Ice Pad

Last 24hr Summary
Finished rig out of wireline equipment. Rigged off 69MPa flow line. Rigged out work platform and nippled down IES frac wellhead. Continued to ready Weatherford down hole real time gauges. Hauled all water management equipment off of lake to water well rack site. Rebuilt IES frac wellhead. Heated slop tanks for water to be shipped out, moved around some equipment with crane for easier loading.

Performed 10min bubble test on SCV with No Flow detected, test passed.

Forecast
Haul 400bbl tanks off location to P-20. Haul fluid to P-20.

DAILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
06:00	06:30	0.50	P	WSS shift change.
06:30	07:00	0.50	P	Held a daily safety and operations meeting with all day shift personnel. Reviewed and discussed PJHA #0219214 regarding job scope and all associated hazards. Reviewed ERP plan and emergency procedures. Performed cross shift with night crews.
07:00	10:30	3.50	P	Unbolted and removed wire line BOPs. Sucked out Weatherford 69MPa flow line + manifold. Picker was utilized to rack all remaining CT equipment and wireline equipment on the ground. Removed tarp from around work platform. Removed flow line and 69MPa ESD.
10:30	13:30	3.00	P	Rigged out HD work platform. Nippled down IES frac wellhead. Hauled all Water managment equipment from lake (WS-02) to water well. Continued to ready Weatherford real time downhole gauges and equipment.
13:30	16:30	3.00	P	Installed 2 way BPV valve into the tubing hanger c/w 60.3mm pup joint. Checked pressure: SICP: 0 kPa. Opened 179mm master valve. Landed the tubing hanger and did in 4 lag screws. Unbolted and removed 179mm full bore master valve. Installed BX156 69MPa x BX152 69MPa tubing head adapter. Installed dual master 69MPa wellhead top section. Torqued connections.
16:30	18:30	2.00	P	Picker was utilized to start changing valves on IES frac wellhead. Tarped in wellhead c/w steam heater. Rigged out containment walls on clean tank farm. Hauled clean water from frac tank farm to P-20 tank farm. Used vac truck to suck out tank bottoms on dirty tank farm.
18:30	19:00	0.50	P	WSS shift change.
19:00	06:00	11.00	P	Continued breaking apart frac head and replacing used valves with new valves. Hauled 110m³ of fresh water to lease P-20 for re-use, evaporators running all night. Heated Slop tanks to 50°C for transport to disposal in AM. Performed a 10min bubble test on SCV with NO FLOW detected, test passed. Continued to move equipment around lease with Crane to be loaded in the AM easier. Heated wellhead with steam heater and general house keeping and clean up on lease with testers.

SUMMARY

Fluid	To lease (m³)	From lease (m³)	To well (m³)	From well (m³)	Left to recover (m³)
FRESH WATER	0.00	165.00			6,588.26

Report Printed: 4/14/2014

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 28
Report Date: 2/21/2014
Final Job Status: GAS
Final Report? Yes

WELL HEADER INFORMATION

Country	State/Province	Region / Division	District	Field Name	Field Code
CANADA	N.W.T.	WCBU	NEW VENTURES	Canyon	

Surface Legal Location	API / UWI	License No.
E-76 65-10 126-45	300E7665-10126-45	EL 470

Orig KB/RT (m)	Ground Elevation (m)	KB-Grd (m)	KB-CF (m)	KB-TF (m)	Total Depth (mKB)	PBTD (All) (mKB)
273.40	268.20	5.20	5.40	4.22	2,910.00	Original Hole - 2,877.30

JOB INFORMATION

Job Category	Primary Job Type	Secondary Job Type	Total Field Estimate (Cost)
COMPLETIONS	INITIAL COMPLETION	RIGLESS	21,945,332.75

Objective
Hydrailically fracture and flow test as part of the 2014 Canol Exploration Program

Actual Start Date	End Date	Abandon Date	Responsible Grp 1	Responsible Grp 2	Responsible Grp 3
1/25/2014 00:00	3/28/2014 08:00		coved	lagartn	Chris Kendall

AFE COST SUMMARY

AFE / RFE / Maint.#	Total AFE Amount (Cost)	Total AFE + Supp Amount (Cost)	Total Field Estimate (Cost)	AFE-Field Estimate (Cost)
10351695	2,111,000.00	2,111,000.00	2,318,381.14	-207,381.14
10359413	16,997,500.00	20,641,514.00	19,626,951.61	1,014,562.39

DAILY INFORMATION

Report Start Date	Report End Date	Daily Cost Total (Cost)	Cumulative Cost (Cost)	Personnel Regular Hours (hr)
2/21/2014 06:00	2/22/2014 06:00	160,495.59	17,948,629.11	572.00

Daily Contacts
Completion Engineer, Theorn LaGarde, 403-710-9753; WS Superintendent, Derrick Cove, 780-831-1314; WS Supervisor, Chris Kendall, 780-518-3284; WS Supervisor, Myles Hahn, 780-402-0500; WS Supervisor, Richard Young, 780-831-9153; WS Supervisor, Michael Short

Rig
Weatherford, FS 463

Tubing Pressure (kPa)	Casing Pressure (kPa)	Weather	Temperature (°C)	Lease Condition
	0	Clear	-38	Ice Pad

Last 24hr Summary
Continued to haul clean fresh water out of frac tank farm to P-20 location. Used picker to remove 400bbls from tank farm. Laid over and hauled out 400s. Started to remove geo and liner from tank farm. Organized equipment on location and moved off unnecessary equipment. Continued to ready Weatherford down hole real time gauges. Rigged out all test lines to flare stack and laid over flare stacks ready to move in mats tomorrow. Heated Frac tanks and hauled 82.5m³ to P-20 of fresh water, watched evaporators and moved some equipment with crane on lease for easier loading in AM.

24hr Forecast
Heat tanks, haul out equipment and water to P-20.

DAILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
06:00	06:30	0.50	P	WSS shift change.
06:30	07:00	0.50	P	Held a daily safety and operations meeting with all day shift personnel. Reviewed and discussed CPC PJHA regarding job scope and all associated hazards. All tickets were checked and valid. Performed cross shift with night crews.
07:00	18:00	11.00	P	Continued to haul clean fresh water from frac tank farm to P-20 location. Hoisted 400bbl tanks out of tank farm with crane. Moved evaporators and filled with water. Continued to evaporate water. Hauled IES equipment to KM 28 water well rack site. RCS started to pull up Geo and liner in frac tank farm (very time consuming as all geo and liner was frozen with 1" thick ice - geo was frozen down to matting from C-ring release). Continued with general clean up around location. Met with Opsco slickline hands and discussed future operations. Loader hauled wellhead parts to P-20 location (2 trips - tubing head / tubing head adapter / Tubing hanger / 179mm master valve) Weatherford tech hands continued to ready down hole gauge equipment. Connected one cable head stainless steel line. Pressure tested head and pressure test failed. Rebuilt head and re-pressure tested: low 3500 kPa / high 10000 kPa. Good tests. Rigged out all test lines to flare stacks. Laid over stacks and moved out of the way ready for moving in mats in the AM.
18:00	18:30	0.50	P	WSS shift change.
18:30	06:00	11.50	P	SIPC = 0KPa Moved around equipment with Crane for easier loading tomorrow. Heated tanks for fluid to be shipped out and watched evaporators. Hauled out 82.5m³ to P-20 location.

FLUID SUMMARY

Fluid	To lease (m³)	From lease (m³)	To well (m³)	From well (m³)	Left to recover (m³)
FRESH WATER	0.00	274.95			6,588.26

DAILY COST

BU Desc	Vendor	Activity Code	Amount (Cost)
Surface Completion Equipment Rental	***VENDOR NOT LISTED***	Q300	7,510.
Rig Camp	***VENDOR NOT LISTED***	E500	500.00
Surface Completion Equipment Rental	BOREALIS COMMUNICATIONS INC	Q300	532.44
Trucking/Hauling/ Hot Shot Services	CANOL OILFIELD SERVICES INC	P100	15,000.00

Report Printed: 4/14/2014

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 29
Report Date: 2/22/2014
Final Job Status: GAS
Final Report? Yes

L HEADER INFORMATION

ry	State/Province	Region / Division	District	Field Name	Field Code
ADA	N.W.T.	WCBU	NEW VENTURES	Canyon	

Surface Legal Location	API / UWI	License No.
E-76 65-10 126-45	300E7665-10126-45	EL 470

Orig KB/RT (m)	Ground Elevation (m)	KB-Grd (m)	KB-CF (m)	KB-TF (m)	Total Depth (mKB)	PBTD (All) (mKB)
273.40	268.20	5.20	5.40	4.22	2,910.00	Original Hole - 2,877.30

JOB INFORMATION

Job Category	Primary Job Type	Secondary Job Type	Total Field Estimate (Cost)
COMPLETIONS	INITIAL COMPLETION	RIGLESS	21,945,332.75

Objective
Hydrailically fracture and flow test as part of the 2014 Canol Exploration Program

Actual Start Date	End Date	Abandon Date	Responsible Grp 1	Responsible Grp 2	Responsible Grp 3
1/25/2014 00:00	3/28/2014 08:00		coved	lagartn	Chris Kendall

AFE COST SUMMARY

AFE / RFE / Maint.#	Total AFE Amount (Cost)	Total AFE + Supp Amount (Cost)	Total Field Estimate (Cost)	AFE-Field Estimate (Cost)
10351695	2,111,000.00	2,111,000.00	2,318,381.14	-207,381.14
AFE / RFE / Maint.#	Total AFE Amount (Cost)	Total AFE + Supp Amount (Cost)	Total Field Estimate (Cost)	AFE-Field Estimate (Cost)
10359413	16,997,500.00	20,641,514.00	19,626,951.61	1,014,562.39

DAILY INFORMATION

Report Start Date	Report End Date	Daily Cost Total (Cost)	Cumulative Cost (Cost)	Personnel Regular Hours (hr)
2/22/2014 06:00	2/23/2014 06:00	50,858.58	17,999,487.69	548.00

Daily Contacts
Completion Engineer, Theorn LaGarde, 403-710-9753; WS Superintendent, Derrick Cove, 780-831-1314; WS Supervisor, Chris Kendall, 780-518-3284; WS Supervisor, Myles Hahn, 780-402-0500; WS Supervisor, Michael Short, 403 348-7127; WS Supervisor, Chris Tucker,

Rig
Weatherford, FS 463

Tubing Pressure (kPa)	Casing Pressure (kPa)	Weather	Temperature (°C)	Lease Condition
	0	Clear	-38	Ice Pad

Last 24hr Summary
Finished hauling fresh water off location to P-20. Hauled out remaining clean 400bbl tanks. Stacked 25 8 x 40 mats and hauled away 15 to P-20. Set down 35 swamp mats around under flare stacks. Re-spotted flare stacks. Continued to ready Weatherford down hole gauge equipment. Moved and flare stacks back on mats and rigged in to P-Tank. Evaporators going over night.
SICP = 0KPa @ 2400hrs & @ 0600hrs

Forecast
Run evaporators full, move equipment around and off lease.

DAILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
06:00	06:30	0.50	P	WWS shift change.
06:30	07:00	0.50	P	Held a daily safety and operations meeting with all day shift personnel. Reviewed and discussed CPC PJHA regarding daily job scope and all associated hazards. All tickets checked and valid. Performed cross shift with night crews.
07:00	18:30	11.50	P	Hauled out 15 8 x 40 mats to P-20 Hauled out all remaining fresh water from frac tank farm to P-20. Laid over and hauled out 6 remaining clean 400bbl tanks to P-20. Removed remaining geo and liner from on top of matting. Geo had 1" thick ice on it and was very difficult to remove. Scraped up all ice and put it in the incinerator. Cut up all geo and liner into 1m². Went to install Weatherford 3/16" gauge cable reel onto spooling trailer and the spool was too large to fit onto trailer. Dispatched a welder and modified spool trailer to fit the cable spool. Lifted and stacked remaining 10 8 x 40 mats ready to be hauled out in AM. Hauled in swamp mats from water well rack site. Spotted 35 swamp mats around for under flare stacks. Spotted flare stacks and stood them.
18:30	19:00	0.50	P	WWS shift change.
19:00	06:00	11.00	P	SICP = 0KPa @ 2400hrs & 0600hrs Spotted and rigged in testers flare satcks on swamp mats. Watched evaporators overnight and general house keeping.

FLUID SUMMARY

Fluid	To lease (m³)	From lease (m³)	To well (m³)	From well (m³)	Left to recover (m³)
FRESH WATER	0.00	113.00			6,588.26

DAILY COST

BU Desc	Vendor	Activity Code	Amount (Cost)
Rig Camp	***VENDOR NOT LISTED***	E500	500.00
Surface Completion Equipment Rental	BOREALIS COMMUNICATIONS INC	Q300	532.43
Service Rig	CONOCO	E120	2,500.00
Service Rig	CORNERSTONE OILFIELD SERVICES LTD	E120	1,700.00
Service Rig	CORNERSTONE OILFIELD SERVICES LTD	E120	2,200.00
Service Rig	CORNERSTONE OILFIELD SERVICES LTD	E120	1,400.00
Surface Completion Equipment Rental	CORNERSTONE OILFIELD SERVICES LTD	Q300	195.00
Slickline Services	CORNERSTONE OILFIELD SERVICES LTD	U200	2,200.00

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 30
Report Date: 2/23/2014
Final Job Status: GAS
Final Report? Yes

WELL HEADER INFORMATION

Country	State/Province	Region / Division	District	Field Name	Field Code
CANADA	N.W.T.	WCBU	NEW VENTURES	Canyon	

Surface Legal Location	API / UWI	License No.
E-76 65-10 126-45	300E7665-10126-45	EL 470

Orig KB/RT (m)	Ground Elevation (m)	KB-Grd (m)	KB-CF (m)	KB-TF (m)	Total Depth (mKB)	PBTD (All) (mKB)
273.40	268.20	5.20	5.40	4.22	2,910.00	Original Hole - 2,877.30

JOB INFORMATION

Job Category	Primary Job Type	Secondary Job Type	Total Field Estimate (Cost)
COMPLETIONS	INITIAL COMPLETION	RIGLESS	21,945,332.75

Objective
Hydrailically fracture and flow test as part of the 2014 Canol Exploration Program

Actual Start Date	End Date	Abandon Date	Responsible Grp 1	Responsible Grp 2	Responsible Grp 3
1/25/2014 00:00	3/28/2014 08:00		coved	lagartn	Chris Kendall

AFE COST SUMMARY

AFE / RFE / Maint.#	Total AFE Amount (Cost)	Total AFE + Supp Amount (Cost)	Total Field Estimate (Cost)	AFE-Field Estimate (Cost)
10351695	2,111,000.00	2,111,000.00	2,318,381.14	-207,381.14
AFE / RFE / Maint.#	Total AFE Amount (Cost)	Total AFE + Supp Amount (Cost)	Total Field Estimate (Cost)	AFE-Field Estimate (Cost)
10359413	16,997,500.00	20,641,514.00	19,626,951.61	1,014,562.39

DAILY INFORMATION

Report Start Date	Report End Date	Daily Cost Total (Cost)	Cumulative Cost (Cost)	Personnel Regular Hours (hr)
2/23/2014 06:00	2/24/2014 06:00	48,583.58	18,048,071.27	548.00

Daily Contacts
Completion Engineer, Theorn LaGarde, 403-710-9753; WS Superintendent, Derrick Cove, 780-831-1314; WS Supervisor, Chris Kendall, 780-518-3284; WS Supervisor, Myles Hahn, 780-402-0500; WS Supervisor, Michael Short, 403 348-7127; WS Supervisor, Chris Tucker,

Rig
Weatherford, FS 463

Tubing Pressure (kPa)	Casing Pressure (kPa)	Weather	Temperature (°C)	Lease Condition
	0	Clear	-32	Ice Pad

Last 24hr Summary
Finished clean up frac tank farm. Spotted Jet pump and NOV 250KW gen set. Hauled matting and mixed loads to P-20 location. Continued to ready Weatherford down hole gauges (installed gauges onto cable and tested). Re-spotted line heater and manifold shack. Installed 5K flow manifold into shack. Hauled Gen-Set with dry heater, picked up wellhead parts, planks and any garbage around lease. Heat water for disposal and evaporators running.
SICP = 0KPa @ 2400hrs

24hr Forecast
Run evaporators, heat fluid for disposal, continue with real time down hole gauge assembly and pressure tests, wait on Service rig.

DAILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
06:00	06:30	0.50	P	WSS shift change
06:30	07:00	0.50	P	Held a daily safety and operations meeting with all day shift personnel. Reviewed and discussed CPC PJHA regarding job scope and all associated hazards. All tickets checked and valid. Performed cross shift with night crews.
07:00	18:30	11.50	P	Hauled out 10 remaining mats from frac tank farm to P-20 location. Cleaned up remaining geo that was frozen into the ground from frac tank farm. Removed all geo and liner from garbage bin that was not cut up into 1m squares (from under C-ring). Cut up into 1m squares and stacked in corner of location ready to haul away. Winterized Super single well site shacks. Off loaded and spotted Weatherford jet pump. Hauled in and spotted NOV 250 KW generator beside the jet pump (jet pump only came with 25' power cord - field hand has extensions coming up on the chartered flight tomorrow) Set up tarps and dry heat machine for Weatherford gauge techs so that the have a warm place to work. Hands installed gauges onto cable ends and pressure tested connections. Hauled out a mixed load of tank farm containment equipment (walls, stairs, drip trays etc.) to P-20. Hauled out rigless anchors to P-20. Rigged lines into line heater and manifold shack. Built 35MPa test manifold.
18:30	19:00	0.50	P	WSS shift change, held safety meeting with all personal on location about tonights operations and procedures to be followed.
19:00	06:00	11.00	P	SICP = 0KPa @ 2400 hrs Rigged out super single for transport. Moved dry heating machine to heat up inside of NOV Gen-Set for easy start-up in AM. Stacked up all planks on far side of lease, moved sawdust bags, Cleaned out wooden bin and loaded wellhead parts that arent needed anymore to be sent back. General house keeping on lease and picking up ant garbage thats lying around. Kept evaporators running overnight and heated tank farm fluids to 50°C to be shipped out.

FLUID SUMMARY

Fluid	To lease (m³)	From lease (m³)	To well (m³)	From well (m³)	Left to recover (m³)
FRESH WATER	0.00	0.00	0.00	0.00	6,588

DAILY COST

BU Desc	Vendor	Activity Code	Amount (Cost)
Rig Camp	***VENDOR NOT LISTED***	E500	500.00
Surface Completion Equipment Rental	BOREALIS COMMUNICATIONS INC	Q300	532.43

Report Printed: 4/14/2014

VIII. Daily Drilling Reports

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45

Report Date: 12/9/2013
Report #: 1
Depth Progress: m
Depth End: 0.00mKB
Rig Release Date: 1/23/2014

Rig:

/ UWI	Surface Legal Location	MaxWell Job Number	License No.
300E7665-10126-45	E-76 65-10 126-45	JOB01@2006	EL 470

Ground Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
268.20	273.40	268.00	12/28/2013	-18.27

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	12/9/2013 00:00	1/23/2014 23:59	DRILLED	Yes

Daily Cost Total (Cost)	Cumulative Cost (Cost)	Total AFE (Cost)	AFE+Supp Amt (Cost)	AFE / RFE / Maint.#	Estimated Days
61,279.66	61,279.66	6,820,300.00	6,820,300.00	10351817	34.19

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hr)	Cum Personnel Total Hours (hr)
2,881.00		105.0	1,080.00	1,080.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)

Road Condition	Weather	Temperature (°C)	Wind
Ice/Snow	Windy	-36	NW

Ops and Depth @ Morning Report
Hold safety meeting with OK Drilling, Canol, rig hands, medics and Conoco reps.

Wellbore
Original Hole

Last 24hr Summary
No incidents or accidents.

Fly Beaver #2 rig personnel, service hands and Conoco reps to Norman Wells from Calgary and Edmonton using Canadian North chartered flight. Set everyone up with accomodations at the construction camp (on the rack site) and the 2 Hodgsons camp in Norman Wells. Round up transportation for all services, rig hands and Conoco reps. Held safety orientation meetings in Conoco's office in Norman Wells with all services prior to them comencing work with ConocoPhillips. Could not cross river until Tuesday morning due to warm weather and construction working on ice bridge. Wait until morning to hold safety meeting prior to crossing river, warming up equipment, remove snow from all trucks and equipment, set up ratholers and drill conductor.

24hr Forecast
Hold safety meeting with OK Drilling, Canol, rig hands, medics and Conoco reps, cross river, warm up equipment, remove snow from all trucks and equipment, set up ratholers and drill conductor.

Daily Contacts
Drilling Superintend, Sheldon Vamplew, 403-999-1302; Drilling Engineer, Mike Greener, 403-771-5039; WS Supervisor, Richard Turgeon, 780-387-1706; WS Supervisor, Dave Opper, 403-863-8205; Rig Manager, Rick Yavis, 780-718-2962

Last Casing String

e Log

Start Time	End Time	Dur (hr)	Phase	Op Code	Activity Code	Tim e P-T-X	Trbl Code	Start Depth (mKB)	End Depth (mKB)	Operation
00:00	13:00	13.00	MIRU	MOVE	MOB	P		0.00	0.00	Fly Beaver #2 rig personnel, service hands and Conoco reps to Norman Wells from Calgary and Edmonton using Canadian North chartered flight. Set everyone up with accomodations at the construction camp (on the rack site) and the 2 Hodgsons camp in Norman Wells. Round up transportation for all services, rig hands and Conoco reps. Held safety orientation meetings in Conoco's office in Norman Wells with all services prior to them comencing work with ConocoPhillips. Could not cross river until Tuesday morning due to warm weather and construction working on ice bridge.
13:00	00:00	11.00	MIRU	MOVE	WODL	P		0.00	0.00	Wait until morning to hold safety meeting prior to crossing river, warming up equipment, remove snow from all trucks and equipment, set up ratholers and drill conductor.

Fluid/Mud Chks: Mud Engineer: <Mud Engineer?>

Time	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (Pa•s)	YP Override (Pa)

Low Gravity Solids (%)	MBT (kg/m³)	Oil Water Ratio	Chlorides (mg/L)	Calcium (mg/L)	Lime (kg/m³)	Potassium (mg/L)

Electric Stab (V)	ECD - Manual Entry (k...	Sand (%)	Solids, Corr. (%)	T Flowline (°C)	HTHP Pressure (kPa)	HTHP Filtrate (mL/30...

API Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Field Est (Cost)

Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost (Cost)

Last BOP Drill

Type	Days Last Chk (...	Last Date	Days Until Next...	Next Check Date
BOP Drill				

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
789.00	

Safety Incidents

Date	Com	Categ

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45

Report Date: 12/9/2013
Report #: 1
Depth Progress: m
Depth End: 0.00mKB
Rig Release Date: 1/23/2014

Rig:

String: BHA # <BHA No.?>

Drill Bit	Length (m)	IADC Bit Dull	TFA (incl Noz) (mm²)	BHA ROP (m/hr)

Nozzles (mm)	String Length (m)	OD (mm)	Max Rotating Hook Load (daN)

Depth In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hr)	Total Drill Hrs (hr)

Comment

Drill String Components

Item Des	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)

Drilling Parameter: <depthstart> - <depthend> mKB

Cum Depth (m)	Cum Drill...	Int ROP (...	Flow Rate...	WOB (daN)	RPM (r...	SPP (kPa)	Drill Str Wt (d...	SO Str Wt (daN)	PU Str Wt (daN)	Off-Btm Str W...	Drill Tq

Hydraulic Calculations

Bit Hydraulic Powe...	HP/Area (kW/mm²)	% P @ bit (%)	Bit Jet Velocity (m/s)	Bit dP (kPa)	P Drop Annular (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Vol Shoe to Top (m³)	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m/...

Error

Mud Pump: 1, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
1	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/20/2014 00:00	2,909.00	0.499	5,150	64
1/20/2014 00:00	2,909.00	1.014	17,500	130

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
014	1/21/2014	127.0		
14	1/22/2014	127.0		

Mud Pump: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/19/2014 00:00	2,513.00	0.647	6,855	83
1/19/2014 00:00	2,513.00	0.897	15,000	115

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
1/19/2014	1/19/2014	127.0	15,000	
1/21/2014		127.0		

Shaker Screens

Des	Start Date	End Date	Scr Sz X	Scr Sz Y	Note

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
1	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
1/19/2014 07:00	2.00	1800	1,000.0	0.400	2,100.0	0.200

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
2	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
1/19/2014 13:00	3.00	2000	990.0	0.400	1,700.0	0.200

Fluid / Mud Additive Amounts

Des	Consumed	Cost	Size	Units

Data

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	Depart (m)	NS (m)	EW (m)	VS (m)	DLS (°/30m)

.mations

Formation Name	Drill Top MD (mKB)	Drill Top (TVD) (mKB)	Prog Top TVD (mK
Little Bear	31.00	31.00	31.00
Slater River	76.00	76.00	76.00
Arctic Red	800.50	800.46	76.40
Martin House	938.50	938.44	76.40
Imperial	975.50	975.43	76.40
Upper Canol	1,665.00	1,658.53	1,653.40
Lower Canol	1,700.72	1,689.07	1,694.40

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45

Report Date: 12/10/2013
Report #: 2
Depth Progress: m
Depth End: 0.00mKB
Rig Release Date: 1/23/2014

Rig:

UWI	Surface Legal Location	MaxWell Job Number	License No.
365-10126-45	E-76 65-10 126-45	JOB01@2006	EL 470

Ground Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
268.20	273.40	268.00	12/28/2013	-17.27

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	12/9/2013 00:00	1/23/2014 23:59	DRILLED	Yes

Daily Cost Total (Cost)	Cumulative Cost (Cost)	Total AFE (Cost)	AFE+Supp Amt (Cost)	AFE / RFE / Maint.#	Estimated Days
53,459.03	114,738.69	6,820,300.00	6,820,300.00	10351817	34.19

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hr)	Cum Personnel Total Hours (hr)
2,881.00		105.0	1,080.00	2,160.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)

Road Condition	Weather	Temperature (°C)	Wind
Ice/Snow	Windy	-32	NW

Ops and Depth @ Morning Report
Hold safety meeting prior to crossing river, warming up equipment and drilling conductor.

Wellbore
Original Hole

Last 24hr Summary
No incidents or accidents. 1 - HID, 0 - OBS and 0 - ASA (all closed out).

Wait until morning. Hold safety meeting with OK Drilling, Canol, rig hands, medics and Conoco reps. Cross river, construction working on ice bridge and iceroads to location, warm up equipment, remove snow from all trucks and equipment, set up ratholers and drill 20" x 20m conductor. Shut down, wait until morning to finish drilling and cementing the 20" x 20m conductor, drilling mousehole and rathole and then setting up wellsite shacks with generators on E-76 65-10 126-45 location.

24hr Forecast
Finish drilling and cementing the 20" x 20m conductor, drill and set 6 x 3 crib, mousehole and rathole and then move and set up wellsite shacks with generators and miscellaneous loads on E-76 65-10 126-45 location. Wait until morning to move Beaver #2 rig.

Daily Contacts
Drilling Superintend, Sheldon Vamplew, 403-999-1302; Drilling Engineer, Mike Greener, 403-771-5039; WS Supervisor, Richard Turgeon, 780-387-1706; WS Supervisor, Dave Opper, 403-863-8205; Rig Manager, Rick Yavis, 780-718-2962

Last Casing String

Time Log

Start	End Time	Dur (hr)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Start Depth (mKB)	End Depth (mKB)	Operation
	07:00	7.00	MIRU	MOVE	WODL	P		0.00	0.00	Wait until morning.
	07:15	0.25	MIRU	MOVE	SFTY	P		0.00	0.00	Hold safety meeting with OK Drilling, Canol, rig hands, medics and Conoco reps.
07:15	21:00	13.75	MIRU	MOVE	MOB	P		0.00	0.00	Cross river, construction working on ice bridge and iceroads to location, warm up equipment, remove snow from all trucks and equipment, set up ratholers and drill 20" x 20m conductor.
21:00	00:00	3.00	MIRU	MOVE	WODL	P		0.00	0.00	Shut down, wait until morning to finish drilling and cementing the 20" x 20m conductor, drilling mousehole and rathole and then setting up wellsite shacks with generators on E-76 65-10 126-45 location.

Fluid/Mud Chks: Mud Engineer: <Mud Engineer?>

Time	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (Pa•s)	YP Override (Pa)
Low Gravity Solids (%)	**MBT (kg/m³)**	**Oil Water Ratio**	**Chlorides (mg/L)**	**Calcium (mg/L)**	**Lime (kg/m³)**	**Potassium (mg/L)**
Electric Stab (V)	**ECD - Manual Entry (k...**	**Sand (%)**	**Solids, Corr. (%)**	**T Flowline (°C)**	**HTHP Pressure (kPa)**	**HTHP Filtrate (mL/30...**

API Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Field Est (Cost)

Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost (Cost)

Last BOP Drill

Type	Days Last Chk (...	Last Date	Days Until Next...	Next Check Date
BOP Drill				

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
790.00	790.00

Safety Incidents

Date	Com	Category

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45

Report Date: 12/10/2013
Report #: 2
Depth Progress: m
Depth End: 0.00mKB
Rig Release Date: 1/23/2014

Rig:

Drill String: BHA # <BHA No.?>

Bit Run	Drill Bit	Length (m)	IADC Bit Dull	TFA (Incl Noz) (mm²)	BHA ROP (.

Nozzles (mm)	String Length (m)	OD (mm)	Max Rotating Hook Load (daN)

Depth In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hr)	Total Drill Hrs (hr)

Comment

Drill String Components

Item Des	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)

Drilling Parameter: <depthstart> - <depthend> mKB

Cum Depth (m)	Cum Drill...	Int ROP (...	Flow Rate...	WOB (daN)	RPM (r...	SPP (kPa)	Drill Str Wt (d...	SO Str Wt (daN)	PU Str Wt (daN)	Off-Btm Str W...	Drill Tq

Hydraulic Calculations

Bit Hydraulic Powe...	HP/Area (kW/mm²)	% P @ bit (%)	Bit Jet Velocity (m/s)	Bit dP (kPa)	P Drop Annular (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Vol Shoe to Top (m³)	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m/...

Error

Mud Pump: 1, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
1	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/20/2014 00:00	2,909.00	0.499	5,150	64
1/20/2014 00:00	2,909.00	1.014	17,500	130

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
/2014	1/21/2014	127.0		
1/22/2014	1/22/2014	127.0		

Mud Pump: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/19/2014 00:00	2,513.00	0.647	6,855	83
1/19/2014 00:00	2,513.00	0.897	15,000	115

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
1/19/2014	1/19/2014	127.0	15,000	
1/21/2014		127.0		

Shaker Screens

Des	Start Date	End Date	Scr Sz X	Scr Sz Y	Note

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
1	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
1/19/2014 07:00	2.00	1800	1,000.0	0.400	2,100.0	0.200

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
2	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
1/19/2014 13:00	3.00	2000	990.0	0.400	1,700.0	0.200

Fluid / Mud Additive Amounts

Des	Consumed	Cost	Size	Units

Survey Data

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	Depart (m)	NS (m)	EW (m)	VS (m)	DLS (°

Formations

Formation Name	Drill Top MD (mKB)	Drill Top (TVD) (mKB)	Prog Top TVD (mKB)
Little Bear	31.00	31.00	31.00
Slater River	76.00	76.00	76.00
Arctic Red	800.50	800.46	76.40
Martin House	938.50	938.44	76.40
Imperial	975.50	975.43	76.40
Upper Canol	1,665.00	1,658.53	1,653.40
Lower Canol	1,700.72	1,689.07	1,694.40

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45

Report Date: 12/11/2013
Report #: 3
Depth Progress: m
Depth End: 0.00mKB
Rig Release Date: 1/23/2014

Rig:

UWI	Surface Legal Location	MaxWell Job Number	License No.
300E7665-10126-45	E-76 65-10 126-45	JOB01@2006	EL 470

Ground Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
268.20	273.40	268.00	12/28/2013	-16.27

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	12/9/2013 00:00	1/23/2014 23:59	DRILLED	Yes

Daily Cost Total (Cost)	Cumulative Cost (Cost)	Total AFE (Cost)	AFE+Supp Amt (Cost)	AFE / RFE / Maint.#	Estimated Days
101,530.46	216,269.15	6,820,300.00	6,820,300.00	10351817	34.19

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hr)	Cum Personnel Total Hours (hr)
2,881.00		128.0	1,146.00	3,306.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)

Road Condition	Weather	Temperature (°C)	Wind
Ice/Snow	Windy	-35	NW

Ops and Depth @ Morning Report
Hold safety meeting prior to moving Beaver #2 rig and drilling mousehole and rathole.

Wellbore
Original Hole

Last 24hr Summary
No incidents or accidents. 2 - HID, 0 - OBS and 0 - ASA (all closed out).

Wait until morning. Hold safety meeting prior to crossing river, drilling conductor and moving wellsite shacks to location. Construction working on ice bridge and iceroads to location. Finish drilling the 20" x 20m conductor, drill and set 6' x 3' crib, mousehole and rathole and then move and set up wellsite shacks with generator on E-76 65-10 126-45 location. Hold safety meeting with Schlumberger cementers, Ok Rathole, Conoco rep, vac and water truck hands. Pump 10tonne/7.5m3 of Class "G" Arctic blend cement followed by 3.5m3 of fresh water leaving 2m of cement in the conductor to drill out prior to spud. Wait until morning to move Beaver #2 rig.

24hr Forecast
Hold safety meeting, drill mousehole and rathole, move Beaver #2 rig, rental equipment and miscellaneous loads to E-76 65-10 126-45 location.Wait until daylight to continue moving rig and rental equipment.

Daily Contacts
Drilling Superintend, Sheldon Vamplew, 403-999-1302; Drilling Engineer, Mike Greener, 403-771-5039; WS Supervisor, Richard Turgeon, 780-387-1706; WS Supervisor, Dave Opper, 403-863-8205; Rig Manager, Rick Yavis, 780-718-2962

Last Casing String
Conductor, 20.00mKB

e Log

Start Time	End Time	Dur (hr)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Start Depth (mKB)	End Depth (mKB)	Operation
00:00	07:00	7.00	MIRU	MOVE	WODL	P		0.00	0.00	Wait until morning.
07:00	07:15	0.25	MIRU	MOVE	SFTY	P		0.00	0.00	Hold safety meeting prior to crossing river, drilling conductor and moving wellsite shacks to location.
07:15	17:45	10.50	MIRU	MOVE	MOB	P		0.00	0.00	Construction working on ice bridge and iceroads to location. Finish drilling the 20" x 20m conductor, drill and set 6' x 3' crib, mousehole and rathole and then move and set up wellsite shacks with generators on E-76 65-10 126-45 location.
17:45	18:00	0.25	MIRU	MOVE	SFTY	P		0.00	0.00	Hold safety meeting with Schlumberger cementers, Ok Rathole, Conoco rep, vac and water truck hands.
18:00	21:00	3.00	MIRU	MOVE	CMNT	P		0.00	0.00	Pump 10tonne/7.5m3 of Class "G" Arctic blend cement followed by 3.2m3 of fresh water leaving 3m of cement in the conductor to drill out prior to spud.
21:00	00:00	3.00	MIRU	MOVE	WODL	P		0.00	0.00	Wait until morning to move Beaver #2 rig.

Fluid/Mud Chks: Mud Engineer: <Mud Engineer?>

Time	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (Pa•s)	YP Override (Pa)

Low Gravity Solids (%)	MBT (kg/m³)	Oil Water Ratio	Chlorides (mg/L)	Calcium (mg/L)	Lime (kg/m³)	Potassium (mg/L)

Electric Stab (V)	ECD - Manual Entry (k...	Sand (%)	Solids, Corr. (%)	T Flowline (°C)	HTHP Pressure (kPa)	HTHP Filtrate (mL/30...

API Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Field Est (Cost)

Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost (Cost)

Last BOP Drill

Type	Days Last Chk (...	Last Date	Days Until Next...	Next Check Date
BOP Drill				

Since Lost Time Incident (days)	Days Since Recordable Incident (days)
791.00	

Safety Incidents

Date	Com	Category

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45

Report Date: 12/11/2013
Report #: 3
Depth Progress: m
Depth End: 0.00mKB
Rig Release Date: 1/23/2014

Rig:

tring: BHA # <BHA No.?>

Drill Bit	Length (m)	IADC Bit Dull	TFA (incl Noz) (mm²)	BHA ROP (m/hr)

Nozzles (mm)	String Length (m)	OD (mm)	Max Rotating Hook Load (daN)

Depth In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hr)	Total Drill Hrs (hr)

Comment

Drill String Components

Item Des	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)

Drilling Parameter: <depthstart> - <depthend> mKB

Cum Depth (m)	Cum Drill...	Int ROP (...	Flow Rate...	WOB (daN)	RPM (r...	SPP (kPa)	Drill Str Wt (d...	SO Str Wt (daN)	PU Str Wt (daN)	Off-Btm Str W...	Drill Tq

Hydraulic Calculations

Bit Hydraulic Powe...	HP/Area (kW/mm²)	% P @ bit (%)	Bit Jet Velocity (m/s)	Bit dP (kPa)	P Drop Annular (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Vol Shoe to Top (m³)	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m/...

Error

Mud Pump: 1, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
1	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/20/2014 00:00	2,909.00	0.499	5,150	64
1/20/2014 00:00	2,909.00	1.014	17,500	130

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
014	1/21/2014	127.0		
14	1/22/2014	127.0		

Pump: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/19/2014 00:00	2,513.00	0.647	6,855	83
1/19/2014 00:00	2,513.00	0.897	15,000	115

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
1/19/2014	1/19/2014	127.0	15,000	
1/21/2014		127.0		

Shaker Screens

Des	Start Date	End Date	Scr Sz X	Scr Sz Y	Note

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
1	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
1/19/2014 07:00	2.00	1800	1,000.0	0.400	2,100.0	0.200

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
2	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
1/19/2014 13:00	3.00	2000	990.0	0.400	1,700.0	0.200

Fluid / Mud Additive Amounts

Des	Consumed	Cost	Size	Units

Data

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	Depart (m)	NS (m)	EW (m)	VS (m)	DLS (°/30m)

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45

Report Date: 12/11/2013
Report #: 3
Depth Progress: m
Depth End: 0.00mKB
Rig Release Date: 1/23/2014

Rig:

..mations

Formation Name	Drill Top MD (mKB)	Drill Top (TVD) (mKB)	Prog Top TVD (mK
Little Bear	31.00	31.00	31.00
Slater River	76.00	76.00	76.00
Arctic Red	800.50	800.46	76.40
Martin House	938.50	938.44	76.40
Imperial	975.50	975.43	76.40
Upper Canol	1,665.00	1,658.53	1,653.40
Lower Canol	1,700.72	1,689.07	1,694.40

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45

Report Date: 12/12/2013
Report #: 4
Depth Progress: m
Depth End: 0.00mKB
Rig Release Date: 1/23/2014

Rig:

UWI	Surface Legal Location	MaxWell Job Number	License No.
365-10126-45	E-76 65-10 126-45	JOB01@2006	EL 470

Grnd Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
268.20	273.40	268.00	12/28/2013	-15.27

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	12/9/2013 00:00	1/23/2014 23:59	DRILLED	Yes

Daily Cost Total (Cost)	Cumulative Cost (Cost)	Total AFE (Cost)	AFE+Supp Amt (Cost)	AFE / RFE / Maint.#	Estimated Days
58,109.03	274,378.18	6,820,300.00	6,820,300.00	10351817	34.19

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hr)	Cum Personnel Total Hours (hr)
2,881.00		113.0	1,155.00	4,461.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)

Road Condition	Weather	Temperature (°C)	Wind
Ice/Snow	Windy	-39	NW

Ops and Depth @ Morning Report
Hold safety meeting prior to moving Beaver #2 rig.

Wellbore
Original Hole

Last 24hr Summary
No incidents or accidents. 3 - HID, 0 - OBS and 0 - ASA (all closed out).

Wait until morning. Hold safety meeting with OK Drilling, Beaver hands, Canol Trucking and Conoco reps. Drill mousehole and rathole, lay down environmental liner, move and spot Beaver #2 rig matting and some rental equipment to E-76 65-10 126-45 location. Load substructure to be hauled out and spotted first thing in the morning. Wait until daylight to continue moving rig and rental equipment.

24hr Forecast
Hold safety meeting, move and spot Beaver #2 substructure, buildings, rental equipment and miscellaneous loads to E-76 65-10 126-45 location.Wait until daylight to continue moving and spotting rig and rental equipment.

Daily Contacts
Drilling Superintend, Sheldon Vamplew, 403-999-1302; Drilling Engineer, Mike Greener, 403-771-5039; WS Supervisor, Richard Turgeon, 780-387-1706; WS Supervisor, Dave Opper, 403-863-8205; Rig Manager, Rick Yavis, 780-718-2962

Last Casing String
Conductor, 20.00mKB

Time Log

Start Time	End Time	Dur (hr)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Start Depth (mKB)	End Depth (mKB)	Operation
	07:00	7.00	MIRU	MOVE	WODL	P		0.00	0.00	Wait until morning.
	07:15	0.25	MIRU	MOVE	SFTY	P		0.00	0.00	Hold safety meeting with OK Drilling, Beaver hands, Canol Trucking and Conoco reps.
07:15	20:00	12.75	MIRU	MOVE	MOB	P		0.00	0.00	Drill mousehole and rathole, lay down environmental liner, move and spot Beaver #2 rig matting and some rental equipment to E-76 65-10 126-45 location. Load substructure to be hauled out and spotted first thing in the morning.
20:00	00:00	4.00	MIRU	MOVE	WODL	P		0.00	0.00	Wait until daylight to continue moving rig and rental equipment.

Fluid/Mud Chks: Mud Engineer: <Mud Engineer?>

Time	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (Pa•s)	YP Override (Pa)

Low Gravity Solids (%)	MBT (kg/m³)	Oil Water Ratio	Chlorides (mg/L)	Calcium (mg/L)	Lime (kg/m³)	Potassium (mg/L)

Electric Stab (V)	ECD - Manual Entry (k...	Sand (%)	Solids, Corr. (%)	T Flowline (°C)	HTHP Pressure (kPa)	HTHP Filtrate (mL/30...

API Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Field Est (Cost)

Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost (Cost)

Last BOP Drill

Type	Days Last Chk (...	Last Date	Days Until Next...	Next Check Date
BOP Drill				

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
792.00	792.00

Safety Incidents

Date	Com	Category

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45

Report Date: 12/12/2013
Report #: 4
Depth Progress: m
Depth End: 0.00mKB
Rig Release Date: 1/23/2014

Rig:

...l String: BHA # <BHA No.?>

Bit Run	Drill Bit	Length (m)	IADC Bit Dull	TFA (incl Noz) (mm²)	BHA ROP

Nozzles (mm)	String Length (m)	OD (mm)	Max Rotating Hook Load (daN)

Depth In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hr)	Total Drill Hrs (hr)

Comment

Drill String Components

Item Des	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)

Drilling Parameter: <depthstart> - <depthend> mKB

Cum Depth (m)	Cum Drill...	Int ROP (...	Flow Rate...	WOB (daN)	RPM (r...	SPP (kPa)	Drill Str Wt (d...	SO Str Wt (daN)	PU Str Wt (daN)	Off-Btm Str W...	Drill Tq

Hydraulic Calculations

Bit Hydraulic Powe...	HP/Area (kW/mm²)	% P @ bit (%)	Bit Jet Velocity (m/s)	Bit dP (kPa)	P Drop Annular (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Vol Shoe to Top (m³)	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m/...

Error

Mud Pump: 1, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
1	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/20/2014 00:00	2,909.00	0.499	5,150	64
1/20/2014 00:00	2,909.00	1.014	17,500	130

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
.../2014	1/21/2014	127.0		
1/22/2014	1/22/2014	127.0		

Mud Pump: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/19/2014 00:00	2,513.00	0.647	6,855	83
1/19/2014 00:00	2,513.00	0.897	15,000	115

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
1/19/2014	1/19/2014	127.0	15,000	
1/21/2014		127.0		

Shaker Screens

Des	Start Date	End Date	Scr Sz X	Scr Sz Y	Note

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
1	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
1/19/2014 07:00	2.00	1800	1,000.0	0.400	2,100.0	0.200

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
2	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
1/19/2014 13:00	3.00	2000	990.0	0.400	1,700.0	0.200

Fluid / Mud Additive Amounts

Des	Consumed	Cost	Size	Units

Survey Data

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	Depart (m)	NS (m)	EW (m)	VS (m)	DLS (°...

tions

Formation Name	Drill Top MD (mKB)	Drill Top (TVD) (mKB)	Prog Top TVD (mKB)
Bear	31.00	31.00	31.00
Slater River	76.00	76.00	76.00
Arctic Red	800.50	800.46	76.40
Martin House	938.50	938.44	76.40
Imperial	975.50	975.43	76.40
Upper Canol	1,665.00	1,658.53	1,653.40
Lower Canol	1,700.72	1,689.07	1,694.40

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45

Report Date: 12/13/2013
Report #: 5
Depth Progress: m
Depth End: 0.00mKB
Rig Release Date: 1/23/2014

Rig:

UWI	Surface Legal Location	MaxWell Job Number	License No.
300E7665-10126-45	E-76 65-10 126-45	JOB01@2006	EL 470

Ground Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
268.20	273.40	268.00	12/28/2013	-14.27

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	12/9/2013 00:00	1/23/2014 23:59	DRILLED	Yes

Daily Cost Total (Cost)	Cumulative Cost (Cost)	Total AFE (Cost)	AFE+Supp Amt (Cost)	AFE / RFE / Maint.#	Estimated Days
177,910.46	452,288.64	6,820,300.00	6,820,300.00	10351817	34.19

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hr)	Cum Personnel Total Hours (hr)
2,881.00		113.0	1,155.00	5,616.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)

Road Condition	Weather	Temperature (°C)	Wind
Ice/Snow	Windy	-29	NW

Ops and Depth @ Morning Report	Wellbore
Hold safety meeting prior to moving Beaver #2 rig.	Original Hole

Last 24hr Summary

2 - HID, 0 - OBS and 0 - ASA (all closed out).

Wait until morning. Hold safety meeting with Beaver hands, Canol Trucking and Conoco reps. Move and attempt to spot Beaver #2 substructure when the cable wedge (pressed on bell) on main winch line on the big Canol bed truck broke dropping the substructure 2 feet from the ground at 11:00am on Friday, December 13th. Shut down rig moving and construction operations until tomorrow morning. Wait until morning to move and spot rig and rental equipment.

24hr Forecast

Hold safety meeting, spot Beaver #2 substructure, buildings, rental equipment and miscellaneous loads to E-76 65-10 126-45 location.Wait until daylight to continue moving and spotting rig and rental equipment.

Daily Contacts

Drilling Superintend, Sheldon Vamplew, 403-999-1302; Drilling Engineer, Mike Greener, 403-771-5039; WS Supervisor, Richard Turgeon, 780-387-1706; WS Supervisor, Dave Opper, 403-863-8205; Rig Manager, Rick Yavis, 780-718-2962

Last Casing String

Conductor, 20.00mKB

Time Log

Start Time	End Time	Dur (hr)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Start Depth (mKB)	End Depth (mKB)	Operation
00:00	07:00	7.00	MIRU	MOVE	WODL	P		0.00	0.00	Wait until morning.
07:00	07:15	0.25	MIRU	MOVE	SFTY	P		0.00	0.00	Hold safety meeting with Beaver hands, Canol Trucking & Conoco reps.
07:15	10:45	3.50	MIRU	MOVE	MOB	P		0.00	0.00	Move and attempt to spot Beaver #2 substructure when the cable wedge (pressed on bell) on main winch line on the big Canol bed truck broke dropping the substructure 2 feet from the ground at 11:00am on Friday, December 13th.
10:45	00:00	13.25	MIRU	MOVE	WODL	P		0.00	0.00	Shut down rig moving and construction operations until tomorrow morning. Wait until morning to move and spot rig and rental equipment.

Fluid/Mud Chks: Mud Engineer: <Mud Engineer?>

Time	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (Pa•s)	YP Override (Pa)

Low Gravity Solids (%)	MBT (kg/m³)	Oil Water Ratio	Chlorides (mg/L)	Calcium (mg/L)	Lime (kg/m³)	Potassium (mg/L)

Electric Stab (V)	ECD - Manual Entry (k...	Sand (%)	Solids, Corr. (%)	T Flowline (°C)	HTHP Pressure (kPa)	HTHP Filtrate (mL/30...

API Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Field Est (Cost)

Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost (Cost)

Last BOP Drill

Type	Days Last Chk (...	Last Date	Days Until Next...	Next Check Date
BOP Drill				

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
793.00	793.00

Safety Incidents

Date	Com	Category

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45

Report Date: 12/13/2013
Report #: 5
Depth Progress: m
Depth End: 0.00mKB
Rig Release Date: 1/23/2014

Rig:

tring: BHA # <BHA No.?>

Drill Bit	Length (m)	IADC Bit Dull	TFA (incl Noz) (mm²)	BHA ROP (m/hr)

Nozzles (mm)	String Length (m)	OD (mm)	Max Rotating Hook Load (daN)

Depth In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hr)	Total Drill Hrs (hr)

Comment

Drill String Components

Item Des	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)

Drilling Parameter: <depthstart> - <depthend> mKB

Cum Depth (m)	Cum Drill...	Int ROP (...	Flow Rate...	WOB (daN)	RPM (r...	SPP (kPa)	Drill Str Wt (d...	SO Str Wt (daN)	PU Str Wt (daN)	Off-Btm Str W...	Drill Tq

Hydraulic Calculations

Bit Hydraulic Powe...	HP/Area (kW/mm²)	% P @ bit (%)	Bit Jet Velocity (m/s)	Bit dP (kPa)	P Drop Annular (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Vol Shoe to Top (m³)	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m/...

Error

Mud Pump: 1, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
1	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/20/2014 00:00	2,909.00	0.499	5,150	64
1/20/2014 00:00	2,909.00	1.014	17,500	130

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
014	1/21/2014	127.0		
14	1/22/2014	127.0		

ump: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/19/2014 00:00	2,513.00	0.647	6,855	83
1/19/2014 00:00	2,513.00	0.897	15,000	115

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
1/19/2014	1/19/2014	127.0	15,000	
1/21/2014		127.0		

Shaker Screens

Des	Start Date	End Date	Scr Sz X	Scr Sz Y	Note

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
1	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
1/19/2014 07:00	2.00	1800	1,000.0	0.400	2,100.0	0.200

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
2	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
1/19/2014 13:00	3.00	2000	990.0	0.400	1,700.0	0.200

Fluid / Mud Additive Amounts

Des	Consumed	Cost	Size	Units

Data

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	Depart (m)	NS (m)	EW (m)	VS (m)	DLS (°/30m)

mations

Formation Name	Drill Top MD (mKB)	Drill Top (TVD) (mKB)	Prog Top TVD (mK
Little Bear	31.00	31.00	[illegible]
Slater River	76.00	76.00	76.00
Arctic Red	800.50	800.46	76.40
Martin House	938.50	938.44	76.40
Imperial	975.50	975.43	76.40
Upper Canol	1,665.00	1,658.53	1,653.40
Lower Canol	1,700.72	1,689.07	1,694.40

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45

Report Date: 12/14/2013
Report #: 6
Depth Progress: m
Depth End: 0.00mKB
Rig Release Date: 1/23/2014

Rig:

VI	Surface Legal Location	MaxWell Job Number	License No.
65-10126-45	E-76 65-10 126-45	JOB01@2006	EL 470

d Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
268.20	273.40	268.00	12/28/2013	-13.27

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	12/9/2013 00:00	1/23/2014 23:59	DRILLED	Yes

Daily Cost Total (Cost)	Cumulative Cost (Cost)	Total AFE (Cost)	AFE+Supp Amt (Cost)	AFE / RFE / Maint.#	Estimated Days
58,109.03	510,397.67	6,820,300.00	6,820,300.00	10351817	34.19

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hr)	Cum Personnel Total Hours (hr)
2,881.00		113.0	1,155.00	6,771.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)

Road Condition	Weather	Temperature (°C)	Wind
Ice/Snow	Windy	-31	NW

Ops and Depth @ Morning Report
Hold safety meeting prior to setting up Beaver #2 rig.

Wellbore
Original Hole

Last 24hr Summary
No incidents or accidents. 2 - HID, 0 - OBS and 0 - ASA (all closed out).

Wait until morning. Hold safety meeting with Beaver hands, Canol Trucking and Conoco reps. Move and spot Beaver #2 substructure and drawworks. Split and move derrick, move rig buildings and some rental equipment to E-76 65-10 126-45 location from rack site. Wait until morning to spot rig and rental equipment.

24hr Forecast
Hold safety meeting, spot Beaver #2 buildings, rental equipment and miscellaneous loads on E-76 65-10 126-45 location. Wait until daylight to finish spotting rig and rental equipment.

Daily Contacts
Drilling Superintend, Sheldon Vamplew, 403-999-1302; Drilling Engineer, Mike Greener, 403-771-5039; WS Supervisor, Richard Turgeon, 780-387-1706; WS Supervisor, Dave Opper, 403-863-8205; Rig Manager, Rick Yavis, 780-718-2962

Last Casing String
Conductor, 20.00mKB

Time Log

Start Time	End Time	Dur (hr)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Start Depth (mKB)	End Depth (mKB)	Operation
	07:00	7.00	MIRU	MOVE	WODL	P		0.00	0.00	Wait until morning.
	07:15	0.25	MIRU	MOVE	SFTY	P		0.00	0.00	Hold safety meeting with OK Drilling, Beaver hands, Canol Trucking and Conoco reps.
07:15	19:00	11.75	MIRU	MOVE	MOB	P		0.00	0.00	Move and spot Beaver #2 substructure and drawworks. Split and move derrick, move rig buildings and some rental equipment to E-76 65-10 126-45 location from rack site.
19:00	00:00	5.00	MIRU	MOVE	WODL	P		0.00	0.00	Wait until morning to spot rig and rental equipment.

Fluid/Mud Chks: Mud Engineer: <Mud Engineer?>

Time	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (Pa·s)	YP Override (Pa)

Low Gravity Solids (%)	MBT (kg/m³)	Oil Water Ratio	Chlorides (mg/L)	Calcium (mg/L)	Lime (kg/m³)	Potassium (mg/L)

Electric Stab (V)	ECD - Manual Entry (k...	Sand (%)	Solids, Corr. (%)	T Flowline (°C)	HTHP Pressure (kPa)	HTHP Filtrate (mL/30...

API Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Field Est (Cost)

Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost (Cost)

Last BOP Drill

Type	Days Last Chk (...	Last Date	Days Until Next...	Next Check Date
BOP Drill				

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
794.00	794.00

Safety Incidents

Date	Com	Category

Drill String: BHA # <BHA No.?>

Bit Run	Drill Bit	Length (m)	IADC Bit Dull	TFA (incl Noz) (mm²)	BHA ROP (m/hr)

Nozzles (mm)	String Length (m)	OD (mm)	Max Rotating Hook Load (daN)

In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hr)	Total Drill Hrs (hr)

nt

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45

Report Date: 12/14/2013
Report #: 6
Depth Progress: m
Depth End: 0.00mKB
Rig Release Date: 1/23/2014

Rig:

...l String Components

Item Des	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len

Drilling Parameter: <depthstart> - <depthend> mKB

Cum Depth (m)	Cum Drill...	Int ROP (...	Flow Rate...	WOB (daN)	RPM (r...	SPP (kPa)	Drill Str Wt (d...	SO Str Wt (daN)	PU Str Wt (daN)	Off-Btm Str W...	Drill Tq

Hydraulic Calculations

Bit Hydraulic Powe...	HP/Area (kW/mm²)	% P @ bit (%)	Bit Jet Velocity (m/s)	Bit dP (kPa)	P Drop Annular (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Vol Shoe to Top (m³)	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m/...

Error

Mud Pump: 1, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
1	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/20/2014 00:00	2,909.00	0.499	5,150	64
1/20/2014 00:00	2,909.00	1.014	17,500	130

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
1/21/2014	1/21/2014	127.0		
1/22/2014	1/22/2014	127.0		

Mud Pump: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/19/2014 00:00	2,513.00	0.647	6,855	83
...)/2014 00:00	2,513.00	0.897	15,000	...5

...mp Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/...
1/19/2014	1/19/2014	127.0	15,000	
1/21/2014		127.0		

Shaker Screens

Des	Start Date	End Date	Scr Sz X	Scr Sz Y	Note

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
1	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
1/19/2014 07:00	2.00	1800	1,000.0	0.400	2,100.0	0.200

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
2	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
1/19/2014 13:00	3.00	2000	990.0	0.400	1,700.0	0.200

Fluid / Mud Additive Amounts

Des	Consumed	Cost	Size	Units

Survey Data

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	Depart (m)	NS (m)	EW (m)	VS (m)	DLS (°/30m)

Formations

Formation Name	Drill Top MD (mKB)	Drill Top (TVD) (mKB)	Prog Top TVD (mKB)
Little Bear	31.00	31.00	31.00
Slater River	76.00	76.00	76.00
...c Red	800.50	800.46	7...
...in House	938.50	938.44	
Imperial	975.50	975.43	
Upper Canol	1,665.00	1,658.53	1,65...40
Lower Canol	1,700.72	1,689.07	1,694.40

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45

Report Date: 12/15/2013
Report #: 7
Depth Progress: m
Depth End: 0.00mKB
Rig Release Date: 1/23/2014

Rig:

VI	Surface Legal Location	MaxWell Job Number	License No.
65-10126-45	E-76 65-10 126-45	JOB01@2006	EL 470

d Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
268.20	273.40	268.00	12/28/2013	-12.27

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	12/9/2013 00:00	1/23/2014 23:59	DRILLED	Yes

Daily Cost Total (Cost)	Cumulative Cost (Cost)	Total AFE (Cost)	AFE+Supp Amt (Cost)	AFE / RFE / Maint.#	Estimated Days
58,109.03	568,506.70	6,820,300.00	6,820,300.00	10351817	34.19

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hr)	Cum Personnel Total Hours (hr)
2,881.00		113.0	1,155.00	7,926.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)

Road Condition	Weather	Temperature (°C)	Wind
Ice/Snow	High Wind	-32	NW

Ops and Depth @ Morning Report
Hold safety meeting prior to spotting rig and rental equipment.

Wellbore
Original Hole

Last 24hr Summary
No incidents or accidents. 5 - HID, 0 - OBS and 0 - ASA (all closed out).

Wait until morning. Hold safety meeting with Beaver hands, Canol Trucking and Conoco reps. Move and pin derrick together, install monkey board, spot mud tanks, raise a-legs, move miscellaneous rental loads onto E-76 65-10 126-45 location. Wait until morning to finish spotting rig and rental equipment.

24hr Forecast
Hold safety meeting, finish spotting rig and rental equipment on E-76 65-10 126-45 location. Wait until morning to hook up sewer lines to sleeper shack, rigging up boiler and water lines to finish spotting rig and rental equipment.

Daily Contacts
Drilling Superintend, Sheldon Vamplew, 403-999-1302; Drilling Engineer, Mike Greener, 403-771-5039; WS Supervisor, Richard Turgeon, 780-387-1706; WS Supervisor, Dave Opper, 403-863-8205; Rig Manager, Rick Yavis, 780-718-2962

Last Casing String
Conductor, 20.00mKB

Time Log

Start Time	End Time	Dur (hr)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Start Depth (mKB)	End Depth (mKB)	Operation
	07:00	7.00	MIRU	MOVE	WODL	P		0.00	0.00	Wait until morning.
	07:15	0.25	MIRU	MOVE	SFTY	P		0.00	0.00	Hold safety meeting with Beaver hands, Canol Trucking and Conoco reps.
07:15	19:00	11.75	MIRU	MOVE	MOB	P		0.00	0.00	Move and pin derrick together, install monkey board, spot mud tanks, raise a-legs, move miscellaneous rental loads onto E-76 65-10 126-45 location.
19:00	00:00	5.00	MIRU	MOVE	WODL	P		0.00	0.00	Wait until morning to finish spotting rig and rental equipment.

Fluid/Mud Chks: Mud Engineer: <Mud Engineer?>

Time	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (Pa·s)	YP Override (Pa)
Low Gravity Solids (%)	**MBT (kg/m³)**	**Oil Water Ratio**	**Chlorides (mg/L)**	**Calcium (mg/L)**	**Lime (kg/m³)**	**Potassium (mg/L)**
Electric Stab (V)	**ECD - Manual Entry (k...**	**Sand (%)**	**Solids, Corr. (%)**	**T Flowline (°C)**	**HTHP Pressure (kPa)**	**HTHP Filtrate (mL/30...**

API Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Field Est (Cost)

Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost (Cost)

Last BOP Drill

Type	Days Last Chk (...	Last Date	Days Until Next...	Next Check Date
BOP Drill				

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
795.00	795.00

Safety Incidents

Date	Com	Category

Drill String: BHA # <BHA No.?>

Bit Run	Drill Bit	Length (m)	IADC Bit Dull	TFA (incl Noz) (mm²)	BHA ROP (m/hr)

Nozzles (mm)	String Length (m)	OD (mm)	Max Rotating Hook Load (daN)

(mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hr)	Total Drill Hrs (hr)

Comment

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45

Report Date: 12/15/2013
Report #: 7
Depth Progress: m
Depth End: 0.00mKB
Rig Release Date: 1/23/2014

Rig:

String Components

Item Des	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len

Drilling Parameter: <depthstart> - <depthend> mKB

Cum Depth (m)	Cum Drill...	Int ROP (...	Flow Rate...	WOB (daN)	RPM (r...	SPP (kPa)	Drill Str Wt (d...	SO Str Wt (daN)	PU Str Wt (daN)	Off-Btm Str W...	Drill Tq

Hydraulic Calculations

Bit Hydraulic Powe...	HP/Area (kW/mm²)	% P @ bit (%)	Bit Jet Velocity (m/s)	Bit dP (kPa)	P Drop Annular (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Vol Shoe to Top (m³)	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m/...

Error

Mud Pump: 1, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
1	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/20/2014 00:00	2,909.00	0.499	5,150	64
1/20/2014 00:00	2,909.00	1.014	17,500	130

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
1/21/2014	1/21/2014	127.0		
1/22/2014	1/22/2014	127.0		

Mud Pump: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/19/2014 00:00	2,513.00	0.647	6,855	83
/2014 00:00	2,513.00	0.897	15,000	

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
1/19/2014	1/19/2014	127.0	15,000	
1/21/2014		127.0		

Shaker Screens

Des	Start Date	End Date	Scr Sz X	Scr Sz Y	Note

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
1	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
1/19/2014 07:00	2.00	1800	1,000.0	0.400	2,100.0	0.200

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
2	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
1/19/2014 13:00	3.00	2000	990.0	0.400	1,700.0	0.200

Fluid / Mud Additive Amounts

Des	Consumed	Cost	Size	Units

Survey Data

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	Depart (m)	NS (m)	EW (m)	VS (m)	DLS (°/30m)

Formations

Formation Name	Drill Top MD (mKB)	Drill Top (TVD) (mKB)	Prog Top TVD (mKB)
Little Bear	31.00	31.00	31.00
Slater River	76.00	76.00	76.00
c Red	800.50	800.46	76.40
tin House	938.50	938.44	
Imperial	975.50	975.43	
Upper Canol	1,665.00	1,658.53	1,653.40
Lower Canol	1,700.72	1,689.07	1,694.40

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45

Report Date: 12/16/2013
Report #: 8
Depth Progress: m
Depth End: 0.00mKB
Rig Release Date: 1/23/2014

Rig:

VI	Surface Legal Location	MaxWell Job Number	License No.
365-10126-45	E-76 65-10 126-45	JOB01@2006	EL 470

d Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
268.20	273.40	268.00	12/28/2013	-11.27

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	12/9/2013 00:00	1/23/2014 23:59	DRILLED	Yes

Daily Cost Total (Cost)	Cumulative Cost (Cost)	Total AFE (Cost)	AFE+Supp Amt (Cost)	AFE / RFE / Maint.#	Estimated Days
343,763.53	912,270.23	6,820,300.00	6,820,300.00	10351817	34.19

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hr)	Cum Personnel Total Hours (hr)
2,881.00		113.0	1,155.00	9,081.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)

Road Condition	Weather	Temperature (°C)	Wind
Ice/Snow	Windy	-39	NW

Ops and Depth @ Morning Report
Hold safety meeting prior to rigging up rig.

Wellbore
Original Hole

Last 24hr Summary
No incidents or accidents. 3 - HID, 0 - OBS and 0 - ASA (all closed out).

Wait until morning. Hold safety meeting with Beaver hands, Canol Trucking and Conoco reps. Finish spotting rig and rental equipment on E-76 65-10 126-45 location. Wait until morning to warm up rig buildings to hook up power cords, rig up boiler and water lines.

24hr Forecast
Hold safety meeting, warm up rig buildings to hook up power cords, rig up boiler and water lines. Wait until morning to rig to raise derrick.

Daily Contacts
Drilling Superintend, Sheldon Vamplew, 403-999-1302; Drilling Engineer, Mike Greener, 403-771-5039; WS Supervisor, Richard Turgeon, 780-387-1706; WS Supervisor, Dave Opper, 403-863-8205; Rig Manager, Rick Yavis, 780-718-2962

Last Casing String
Conductor, 20.00mKB

Time Log

Start Time	End Time	Dur (hr)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Start Depth (mKB)	End Depth (mKB)	Operation
00	07:00	7.00	MIRU	MOVE	WODL	P		0.00	0.00	Wait until morning.
	07:15	0.25	MIRU	MOVE	SFTY	P		0.00	0.00	Hold safety meeting with Beaver hands, Canol Trucking and Conoco reps.
0...0	19:00	11.75	MIRU	MOVE	MOB	P		0.00	0.00	Finish spotting rig and rental equipment on E-76 65-10 126-45 location.
19:00	00:00	5.00	MIRU	MOVE	WODL	P		0.00	0.00	Wait until morning to warm up rig buildings to hook up power cords, rig up boiler and water lines.

Fluid/Mud Chks: Mud Engineer: <Mud Engineer?>

Time	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (Pa•s)	YP Override (Pa)
Low Gravity Solids (%)	**MBT (kg/m³)**	**Oil Water Ratio**	**Chlorides (mg/L)**	**Calcium (mg/L)**	**Lime (kg/m³)**	**Potassium (mg/L)**
Electric Stab (V)	**ECD - Manual Entry (k...**	**Sand (%)**	**Solids, Corr. (%)**	**T Flowline (°C)**	**HTHP Pressure (kPa)**	**HTHP Filtrate (mL/30...**

API Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Field Est (Cost)

Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost (Cost)

Last BOP Drill

Type	Days Last Chk (...	Last Date	Days Until Next...	Next Check Date
BOP Drill				

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
796.00	796.00

Safety Incidents

Date	Com	Category

Drill String: BHA # <BHA No.?>

Bit Run	Drill Bit	Length (m)	IADC Bit Dull	TFA (incl Noz) (mm²)	BHA ROP (m/hr)

Nozzles (mm)	String Length (m)	OD (mm)	Max Rotating Hook Load (daN)

Depth In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hr)	Total Drill Hrs (hr)

nt

Drill String Components

Item Des	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45

Report Date: 12/16/2013
Report #: 8
Depth Progress: m
Depth End: 0.00mKB
Rig Release Date: 1/23/2014

Rig:

...ling Parameter: <depthstart> - <depthend> mKB

Cum Depth (m)	Cum Drill...	Int ROP (...	Flow Rate...	WOB (daN)	RPM (r...	SPP (kPa)	Drill Str Wt (d...	SO Str Wt (daN)	PU Str Wt (daN)	Off-Btm Str W...	Drill

Hydraulic Calculations

Bit Hydraulic Powe...	HP/Area (kW/mm²)	% P @ bit (%)	Bit Jet Velocity (m/s)	Bit dP (kPa)	P Drop Annular (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Vol Shoe to Top (m³)	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m/...

Error

Mud Pump: 1, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
1	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/20/2014 00:00	2,909.00	0.499	5,150	64
1/20/2014 00:00	2,909.00	1.014	17,500	130

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
1/21/2014	1/21/2014	127.0		
1/22/2014	1/22/2014	127.0		

Mud Pump: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/19/2014 00:00	2,513.00	0.647	6,855	83
1/19/2014 00:00	2,513.00	0.897	15,000	115

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
...9/2014	1/19/2014	127.0	15,000	
...21/2014		127.0		

Shaker Screens

Des	Start Date	End Date	Scr Sz X	Scr Sz Y	Note

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
1	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
1/19/2014 07:00	2.00	1800	1,000.0	0.400	2,100.0	0.200

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
2	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
1/19/2014 13:00	3.00	2000	990.0	0.400	1,700.0	0.200

Fluid / Mud Additive Amounts

Des	Consumed	Cost	Size	Units

Survey Data

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	Depart (m)	NS (m)	EW (m)	VS (m)	DLS (°/30m)

Formations

Formation Name	Drill Top MD (mKB)	Drill Top (TVD) (mKB)	Prog Top TVD (mKB)
Little Bear	31.00	31.00	31.00
Slater River	76.00	76.00	76.00
Arctic Red	800.50	800.46	76.40
Martin House	938.50	938.44	76.40
Imperial	975.50	975.43	76.40
...er Canol	1,665.00	1,658.53	1,...
Lower Canol	1,700.72	1,689.07	1

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45

Report Date: 12/17/2013
Report #: 9
Depth Progress; m
Depth End: 0.00mKB
Rig Release Date: 1/23/2014

Rig:

VI	Surface Legal Location	MaxWell Job Number	License No.
65-10126-45	E-76 65-10 126-45	JOB01@2006	EL 470

d Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
268.20	273.40	268.00	12/28/2013	-10.27

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	12/9/2013 00:00	1/23/2014 23:59	DRILLED	Yes

Daily Cost Total (Cost)	Cumulative Cost (Cost)	Total AFE (Cost)	AFE+Supp Amt (Cost)	AFE / RFE / Maint.#	Estimated Days
45,806.53	958,076.76	6,820,300.00	6,820,300.00	10351817	34.19

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hr)	Cum Personnel Total Hours (hr)
2,881.00		75.0	711.00	9,792.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)

Road Condition	Weather	Temperature (°C)	Wind
Ice/Snow	Windy	-36	NW

Ops and Depth @ Morning Report
Hold safety meeting prior to rigging up to raise derrick..

Wellbore
Original Hole

Last 24hr Summary
No incidents or accidents. 2 - HID, 0 - OBS and 0 - ASA (all closed out).

Wait until morning. Hold safety meeting, warm up rig buildings, plug in power cords, rig up boiler lines and circulate steam around the rig. Wait until morning to rig up derrick to raise, raise derrick and rig up pre-fabs.

24hr Forecast
Hold safety meeting, rig up derrick to raise, raise derrick and rig up pre-fabs. Wait until morning to rig up water lines and rental equipment.

Daily Contacts
Drilling Superintend, Sheldon Vamplew, 403-999-1302; Drilling Engineer, Mike Greener, 403-771-5039; WS Supervisor, Richard Turgeon, 780-387-1706; WS Supervisor, Dave Opper, 403-863-8205; Rig Manager, Rick Yavis, 780-718-2962

Last Casing String
Conductor, 20.00mKB

Time Log

Start Time	End Time	Dur (hr)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Start Depth (mKB)	End Depth (mKB)	Operation
00	07:00	7.00	MIRU	MOVE	WODL	P		0.00	0.00	Wait until morning.
	07:15	0.25	MIRU	MOVE	SFTY	P		0.00	0.00	Hold safety meeting with Beaver hands and Conoco reps.
	19:00	11.75	MIRU	MOVE	MOB	P		0.00	0.00	Warm up rig buildings, plug in power cords, rig up boiler lines and circulate steam around the rig.
19:00	00:00	5.00	MIRU	MOVE	WODL	P		0.00	0.00	Wait until morning to rig up derrick to raise, raise derrick and rig up pre-fabs.

Fluid/Mud Chks: Mud Engineer: <Mud Engineer?>

Time	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (Pa·s)	YP Override (Pa)

Low Gravity Solids (%)	MBT (kg/m³)	Oil Water Ratio	Chlorides (mg/L)	Calcium (mg/L)	Lime (kg/m³)	Potassium (mg/L)

Electric Stab (V)	ECD - Manual Entry (k...	Sand (%)	Solids, Corr. (%)	T Flowline (°C)	HTHP Pressure (kPa)	HTHP Filtrate (mL/30...

API Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Field Est (Cost)

Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost (Cost)

Last BOP Drill

Type	Days Last Chk (...	Last Date	Days Until Next...	Next Check Date
BOP Drill				

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
797.00	797.00

Safety Incidents

Date	Com	Category

Drill String: BHA # <BHA No.?>

Bit Run	Drill Bit	Length (m)	IADC Bit Dull	TFA (incl Noz) (mm²)	BHA ROP (m/hr)

Nozzles (mm)	String Length (m)	OD (mm)	Max Rotating Hook Load (daN)

Depth In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hr)	Total Drill Hrs (hr)

ment

ring Components

Item Des	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45

Report Date: 12/17/2013
Report #: 9
Depth Progress: m
Depth End: 0.00mKB
Rig Release Date: 1/23/2014

Rig:

ing Parameter: <depthstart> - <depthend> mKB

Cum Depth (m)	Cum Drill...	Int ROP (...	Flow Rate...	WOB (daN)	RPM (r...	SPP (kPa)	Drill Str Wt (d...	SO Str Wt (daN)	PU Str Wt (daN)	Off-Btm Str W...	Drill

Hydraulic Calculations

Bit Hydraulic Powe...	HP/Area (kW/mm²)	% P @ bit (%)	Bit Jet Velocity (m/s)	Bit dP (kPa)	P Drop Annular (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Vol Shoe to Top (m³)	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m/...

Error

Mud Pump: 1, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
1	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/20/2014 00:00	2,909.00	0.499	5,150	64
1/20/2014 00:00	2,909.00	1.014	17,500	130

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
1/21/2014	1/21/2014	127.0		
1/22/2014	1/22/2014	127.0		

Mud Pump: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/19/2014 00:00	2,513.00	0.647	6,855	83
1/19/2014 00:00	2,513.00	0.897	15,000	115

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
/2014	1/19/2014	127.0	15,000	
1/21/2014		127.0		

Shaker Screens

Des	Start Date	End Date	Scr Sz X	Scr Sz Y	Note

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
1	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
1/19/2014 07:00	2.00	1800	1,000.0	0.400	2,100.0	0.200

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
2	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
1/19/2014 13:00	3.00	2000	990.0	0.400	1,700.0	0.200

Fluid / Mud Additive Amounts

Des	Consumed	Cost	Size	Units

Survey Data

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	Depart (m)	NS (m)	EW (m)	VS (m)	DLS (°/30m)

Formations

Formation Name	Drill Top MD (mKB)	Drill Top (TVD) (mKB)	Prog Top TVD (mKB)
Little Bear	31.00	31.00	31.00
Slater River	76.00	76.00	76.00
Arctic Red	800.50	800.46	76.40
Martin House	938.50	938.44	76.40
Imperial	975.50	975.43	76.40
er Canol	1,665.00	1,658.53	1,6
Lower Canol	1,700.72	1,689.07	1

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45

Report Date: 12/18/2013
Report #: 10
Depth Progress: m
Depth End: 0.00mKB
Rig Release Date: 1/23/2014

Rig:

UWI	Surface Legal Location	MaxWell Job Number	License No.
7665-10126-45	E-76 65-10 126-45	JOB01@2006	EL 470

Ground Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
268.20	273.40	268.00	12/28/2013	-9.27

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	12/9/2013 00:00	1/23/2014 23:59	DRILLED	Yes

Daily Cost Total (Cost)	Cumulative Cost (Cost)	Total AFE (Cost)	AFE+Supp Amt (Cost)	AFE / RFE / Maint.#	Estimated Days
40,181.53	998,258.29	6,820,300.00	6,820,300.00	10351817	34.19

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hr)	Cum Personnel Total Hours (hr)
2,881.00		113.0	1,155.00	10,947.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)

Road Condition	Weather	Temperature (°C)	Wind
Ice/Snow	Windy	-31	NW

Ops and Depth @ Morning Report
Hold safety meeting prior to rigging up to circulate water around rig.

Wellbore
Original Hole

Last 24hr Summary
No incidents or accidents. 2 - HID, 0 - OBS and 0 - ASA (all closed out).

Wait until morning. Hold safety meeting, rig up derrick to raise, raise derrick and rig up pre-fabs. Wait until morning to rig up water lines and rental equipment.

24hr Forecast
Hold safety meeting, rig up rig up water lines and rental equipment. Wait until morning to rig up rig floor and fill the mud tanks.

Daily Contacts
Drilling Superintend, Sheldon Vamplew, 403-999-1302; Drilling Engineer, Mike Greener, 403-771-5039; WS Supervisor, Richard Turgeon, 780-387-1706; WS Supervisor, Dave Opper, 403-863-8205; Rig Manager, Rick Yavis, 780-718-2962

Last Casing String
Conductor, 20.00mKB

Time Log

Start Time	End Time	Dur (hr)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Start Depth (mKB)	End Depth (mKB)	Operation
00:00	07:00	7.00	MIRU	MOVE	WODL	P		0.00	0.00	Wait until morning.
07:00	07:15	0.25	MIRU	MOVE	SFTY	P		0.00	0.00	Hold safety meeting with Beaver hands and Conoco reps.
07:15	19:00	11.75	MIRU	MOVE	MOB	P		0.00	0.00	Rig up derrick to raise, raise derrick and rig up pre-fabs.
19:00	00:00	5.00	MIRU	MOVE	WODL	P		0.00	0.00	Wait until morning to rig up water lines and rental equipment.

Fluid/Mud Chks: Mud Engineer: <Mud Engineer?>

Time	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (Pa•s)	YP Override (Pa)

Low Gravity Solids (%)	MBT (kg/m³)	Oil Water Ratio	Chlorides (mg/L)	Calcium (mg/L)	Lime (kg/m³)	Potassium (mg/L)

Electric Stab (V)	ECD - Manual Entry (k...	Sand (%)	Solids, Corr. (%)	T Flowline (°C)	HTHP Pressure (kPa)	HTHP Filtrate (mL/30...

API Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Field Est (Cost)

Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost (Cost)

Last BOP Drill

Type	Days Last Chk (...	Last Date	Days Until Next...	Next Check Date
BOP Drill				

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
798.00	798.00

Safety Incidents

Date	Com	Category

Drill String: BHA # <BHA No.?>

Bit Run	Drill Bit	Length (m)	IADC Bit Dull	TFA (incl Noz) (mm²)	BHA ROP (m/hr)

Nozzles (mm)	String Length (m)	OD (mm)	Max Rotating Hook Load (daN)

Depth In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hr)	Total Drill Hrs (hr)

Comment

String Components

Item Des	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)

Drilling Parameter: <depthstart> - <depthend> mKB

Cum Depth (m)	Cum Drill...	Int ROP (...	Flow Rate...	WOB (daN)	RPM (r...	SPP (kPa)	Drill Str Wt (d...	SO Str Wt (daN)	PU Str Wt (daN)	Off-Btm Str W...	Drill Tq

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45

Report Date: 12/18/2013
Report #: 10
Depth Progress: m
Depth End: 0.00mKB
Rig Release Date: 1/23/2014

Rig:

Hydraulic Calculations

Bit Hydraulic Powe...	HP/Area (kW/mm²)	% P @ bit (%)	Bit Jet Velocity (m/s)	Bit dP (kPa)	P Drop Annular (kPa)	Mud Density (kg/m³)	ECD End (kg/

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Vol Shoe to Top (m³)	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m/...

Error

Mud Pump: 1, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
1	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/20/2014 00:00	2,909.00	0.499	5,150	64
1/20/2014 00:00	2,909.00	1.014	17,500	130

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
1/21/2014	1/21/2014	127.0		
1/22/2014	1/22/2014	127.0		

Mud Pump: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/19/2014 00:00	2,513.00	0.647	6,855	83
1/19/2014 00:00	2,513.00	0.897	15,000	115

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
1/19/2014	1/19/2014	127.0	15,000	
1/21/2014		127.0		

Shaker Screens

Des	Start Date	End Date	Scr Sz X	Scr Sz Y	Note

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
1	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
1/19/2014 07:00	2.00	1800	1,000.0	0.400	2,100.0	0.200

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
2	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
1/19/2014 13:00	3.00	2000	990.0	0.400	1,700.0	0.200

Fluid / Mud Additive Amounts

Des	Consumed	Cost	Size	Units

Survey Data

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	Depart (m)	NS (m)	EW (m)	VS (m)	DLS (°/30m)

Formations

Formation Name	Drill Top MD (mKB)	Drill Top (TVD) (mKB)	Prog Top TVD (mKB)
Little Bear	31.00	31.00	31.00
Slater River	76.00	76.00	76.00
Arctic Red	800.50	800.46	76.40
Martin House	938.50	938.44	76.40
Imperial	975.50	975.43	76.40
Upper Canol	1,665.00	1,658.53	1,653.40
Lower Canol	1,700.72	1,689.07	1,694.40

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45

Report Date: 12/19/2013
Report #: 11
Depth Progress: m
Depth End: 0.00mKB
Rig Release Date: 1/23/2014

Rig:

UWI	Surface Legal Location	MaxWell Job Number	License No.
[redacted]7665-10126-45	E-76 65-10 126-45	JOB01@2006	EL 470

Ground Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
268.20	273.40	268.00	12/28/2013	-8.27

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	12/9/2013 00:00	1/23/2014 23:59	DRILLED	Yes

Daily Cost Total (Cost)	Cumulative Cost (Cost)	Total AFE (Cost)	AFE+Supp Amt (Cost)	AFE / RFE / Maint.#	Estimated Days
40,181.53	1,038,439.82	6,820,300.00	6,820,300.00	10351817	34.19

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hr)	Cum Personnel Total Hours (hr)
2,881.00		113.0	1,155.00	12,102.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)

Road Condition	Weather	Temperature (°C)	Wind
Ice/Snow	Windy	-33	NW

Ops and Depth @ Morning Report
Hold safety meeting prior to rigging up to fill mud tanks.

Wellbore
Original Hole

Last 24hr Summary
No incidents or accidents. 2 - HID, 0 - OBS and 0 - ASA (all closed out).

Wait until morning. Hold safety meeting, rig up water lines and rental equipment. Wait until morning to rig up rig floor and fill the mud tanks.

24hr Forecast
Hold safety meeting, rig up rig floor and fill the mud tanks. Wait until morning to set up and load pipe racks with surface BHA.

Daily Contacts
Drilling Superintend, Sheldon Vamplew, 403-999-1302; Drilling Engineer, Mike Greener, 403-771-5039; WS Supervisor, Richard Turgeon, 780-387-1706; WS Supervisor, Dave Opper, 403-863-8205; Rig Manager, Rick Yavis, 780-718-2962

Last Casing String
Conductor, 20.00mKB

Time Log

Start Time	End Time	Dur (hr)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Start Depth (mKB)	End Depth (mKB)	Operation
00:00	07:00	7.00	MIRU	MOVE	WODL	P		0.00	0.00	Wait until morning.
[redacted]00	07:15	0.25	MIRU	MOVE	SFTY	P		0.00	0.00	Hold safety meeting with Beaver hands.
[redacted]	19:00	11.75	MIRU	MOVE	MOB	P		0.00	0.00	Rig up water lines and rental equipment.
[redacted]	00:00	5.00	MIRU	MOVE	WODL	P		0.00	0.00	Wait until morning to rig up rig floor and fill the mud tanks.

Fluid/Mud Chks: Mud Engineer: <Mud Engineer?>

Time	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (Pa•s)	YP Override (Pa)

Low Gravity Solids (%)	MBT (kg/m³)	Oil Water Ratio	Chlorides (mg/L)	Calcium (mg/L)	Lime (kg/m³)	Potassium (mg/L)

Electric Stab (V)	ECD - Manual Entry (k...	Sand (%)	Solids, Corr. (%)	T Flowline (°C)	HTHP Pressure (kPa)	HTHP Filtrate (mL/30...

API Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Field Est (Cost)

Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost (Cost)

Last BOP Drill

Type	Days Last Chk (...	Last Date	Days Until Next...	Next Check Date
BOP Drill				

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
799.00	799.00

Safety Incidents

Date	Com	Category

Drill String: BHA # <BHA No.?>

Bit Run	Drill Bit	Length (m)	IADC Bit Dull	TFA (incl Noz) (mm²)	BHA ROP (m/hr)

Nozzles (mm)	String Length (m)	OD (mm)	Max Rotating Hook Load (daN)

Depth In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hr)	Total Drill Hrs (hr)

Comment

Drill String Components

Item Des	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)

Drilling Parameter: <depthstart> - <depthend> mKB

Cum Depth (m)	Cum Drill...	Int ROP (...	Flow Rate...	WOB (daN)	RPM (r...	SPP (kPa)	Drill Str Wt (d...	SO Str Wt (daN)	PU Str Wt (daN)	Off-Btm Str W...	Drill Tq

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45

Report Date: 12/19/2013
Report #: 11
Depth Progress: m
Depth End: 0.00mKB
Rig Release Date: 1/23/2014

Rig:

Hydraulic Calculations

Bit Hydraulic Powe...	HP/Area (kW/mm²)	% P @ bit (%)	Bit Jet Velocity (m/s)	Bit dP (kPa)	P Drop Annular (kPa)	Mud Density (kg/m³)	ECD End (kg/

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Vol Shoe to Top (m³)	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m/..

Error

Mud Pump: 1, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
1	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/20/2014 00:00	2,909.00	0.499	5,150	64
1/20/2014 00:00	2,909.00	1.014	17,500	130

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
1/21/2014	1/21/2014	127.0		
1/22/2014	1/22/2014	127.0		

Mud Pump: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/19/2014 00:00	2,513.00	0.647	6,855	83
1/19/2014 00:00	2,513.00	0.897	15,000	115

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
1/19/2014	1/19/2014	127.0	15,000	
1/21/2014		127.0		

Shaker Screens

Des	Start Date	End Date	Scr Sz X	Scr Sz Y	Note

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
1	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
1/19/2014 07:00	2.00	1800	1,000.0	0.400	2,100.0	0.200

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
2	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
1/19/2014 13:00	3.00	2000	990.0	0.400	1,700.0	0.200

Fluid / Mud Additive Amounts

Des	Consumed	Cost	Size	Units

Survey Data

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	Depart (m)	NS (m)	EW (m)	VS (m)	DLS (°/30m)

Formations

Formation Name	Drill Top MD (mKB)	Drill Top (TVD) (mKB)	Prog Top TVD (mKB)
Little Bear	31.00	31.00	31.00
Slater River	76.00	76.00	76.00
Arctic Red	800.50	800.46	76.40
Martin House	938.50	938.44	76.40
Imperial	975.50	975.43	76.40
Upper Canol	1,665.00	1,658.53	1,653.40
Lower Canol	1,700.72	1,689.07	1,694.40

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45

Report Date: 12/21/2013
Report #: 13
Depth Progress: m
Depth End: 0.00mKB
Rig Release Date: 1/23/2014

Rig:

UWI	Surface Legal Location	MaxWell Job Number	License No.
65-10126-45	E-76 65-10 126-45	JOB01@2006	EL 470

Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
268.20	273.40	268.00	12/28/2013	-6.27

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	12/9/2013 00:00	1/23/2014 23:59	DRILLED	Yes

Daily Cost Total (Cost)	Cumulative Cost (Cost)	Total AFE (Cost)	AFE+Supp Amt (Cost)	AFE / RFE / Maint.#	Estimated Days
40,181.53	1,118,802.88	6,820,300.00	6,820,300.00	10351817	34.19

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hr)	Cum Personnel Total Hours (hr)
2,881.00		113.0	1,155.00	14,412.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)

Road Condition	Weather	Temperature (°C)	Wind
Ice/Snow	Windy	-30	NW

Ops and Depth @ Morning Report
Hold safety meeting prior to laying diverter lines.

Wellbore
Original Hole

Last 24hr Summary
No incidents or accidents. 2 - HID, 0 - OBS and 0 - ASA (all closed out).

Wait until morning. Hold safety meeting, fill the mud tanks, set up, load pipe racks with surface BHA and start to rig up diverter lines to flare tank. Wait until morning to prep cellar for rotating head and rig up diverter lines to flare tank.

24hr Forecast
Hold safety meeting, prep cellar for rotating head and rig up diverter lines to flare tank. Wait until morning to finish rigging up diverter lines and weld on RCD Head.

Daily Contacts
Drilling Superintend, Sheldon Vamplew, 403-999-1302; Drilling Engineer, Mike Greener, 403-771-5039; WS Supervisor, Richard Turgeon, 780-387-1706; WS Supervisor, Dave Opper, 403-863-8205; Rig Manager, Rick Yavis, 780-718-2962

Last Casing String
Conductor, 20.00mKB

Time Log

Start Time	End Time	Dur (hr)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Start Depth (mKB)	End Depth (mKB)	Operation
00:00	07:00	7.00	MIRU	MOVE	WODL	P		0.00	0.00	Wait until morning.
	07:15	0.25	MIRU	MOVE	SFTY	P		0.00	0.00	Hold safety meeting with Beaver hands.
	19:00	11.75	MIRU	MOVE	MOB	P		0.00	0.00	Fill the mud tanks, set up, load pipe racks with surface BHA and start to rig up diverter lines to flare tank.
19:00	00:00	5.00	MIRU	MOVE	WODL	P		0.00	0.00	Wait until morning to prep cellar for rotating head and rig up diverter lines to flare tank.

Fluid/Mud Chks: Mud Engineer: <Mud Engineer?>

Time	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (Pa•s)	YP Override (Pa)

Low Gravity Solids (%)	MBT (kg/m³)	Oil Water Ratio	Chlorides (mg/L)	Calcium (mg/L)	Lime (kg/m³)	Potassium (mg/L)

Electric Stab (V)	ECD - Manual Entry (k...	Sand (%)	Solids, Corr. (%)	T Flowline (°C)	HTHP Pressure (kPa)	HTHP Filtrate (mL/30...

API Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Field Est (Cost)

Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost (Cost)

Last BOP Drill

Type	Days Last Chk (...	Last Date	Days Until Next...	Next Check Date
BOP Drill				

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
801.00	801.00

Safety Incidents

Date	Com	Category

Drill String: BHA # <BHA No.?>

Bit Run	Drill Bit	Length (m)	IADC Bit Dull	TFA (incl Noz) (mm²)	BHA ROP (m/hr)

Nozzles (mm)	String Length (m)	OD (mm)	Max Rotating Hook Load (daN)

Depth In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hr)	Total Drill Hrs (hr)

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Item Des	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45

Report Date: 12/21/2013
Report #: 13
Depth Progress: m
Depth End: 0.00mKB
Rig Release Date: 1/23/2014

Rig:

...ling Parameter: <depthstart> - <depthend> mKB

Cum Depth (m)	Cum Drill...	Int ROP (...	Flow Rate...	WOB (daN)	RPM (r...	SPP (kPa)	Drill Str Wt (d...	SO Str Wt (daN)	PU Str Wt (daN)	Off-Btm Str W...	Drill

Hydraulic Calculations

Bit Hydraulic Powe...	HP/Area (kW/mm²)	% P @ bit (%)	Bit Jet Velocity (m/s)	Bit dP (kPa)	P Drop Annular (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Vol Shoe to Top (m³)	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m/...

Error

Mud Pump: 1, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
1	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/20/2014 00:00	2,909.00	0.499	5,150	64
1/20/2014 00:00	2,909.00	1.014	17,500	130

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
1/21/2014	1/21/2014	127.0		
1/22/2014	1/22/2014	127.0		

Mud Pump: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/19/2014 00:00	2,513.00	0.647	6,855	83
1/19/2014 00:00	2,513.00	0.897	15,000	115

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
...1/2014	1/19/2014	127.0	15,000	
1/21/2014		127.0		

Shaker Screens

Des	Start Date	End Date	Scr Sz X	Scr Sz Y	Note

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
1	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
1/19/2014 07:00	2.00	1800	1,000.0	0.400	2,100.0	0.200

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
2	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
1/19/2014 13:00	3.00	2000	990.0	0.400	1,700.0	0.200

Fluid / Mud Additive Amounts

Des	Consumed	Cost	Size	Units

Survey Data

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	Depart (m)	NS (m)	EW (m)	VS (m)	DLS (°/30m)

Formations

Formation Name	Drill Top MD (mKB)	Drill Top (TVD) (mKB)	Prog Top TVD (mKB)
Little Bear	31.00	31.00	31.00
Slater River	76.00	76.00	76.00
Arctic Red	800.50	800.46	76.40
Martin House	938.50	938.44	76.40
Imperial	975.50	975.43	76.40
...er Canol	1,665.00	1,658.53	1...
Lower Canol	1,700.72	1,689.07	1...

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45

Report Date: 12/22/2013
Report #: 14
Depth Progress: m
Depth End: 0.00mKB
Rig Release Date: 1/23/2014

Rig:

VI	Surface Legal Location	MaxWell Job Number	License No.
65-10126-45	E-76 65-10 126-45	JOB01@2006	EL 470

Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
268.20	273.40	268.00	12/28/2013	-5.27

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	12/9/2013 00:00	1/23/2014 23:59	DRILLED	Yes

Daily Cost Total (Cost)	Cumulative Cost (Cost)	Total AFE (Cost)	AFE+Supp Amt (Cost)	AFE / RFE / Maint.#	Estimated Days
40,181.53	1,158,984.41	6,820,300.00	6,820,300.00	10351817	34.19

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hr)	Cum Personnel Total Hours (hr)
2,881.00		113.0	1,155.00	15,567.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)

Road Condition	Weather	Temperature (°C)	Wind
Ice/Snow	Windy	-31	NW

Ops and Depth @ Morning Report
Hold safety meeting prior to prepping cellar to weld on RCD Head.

Wellbore
Original Hole

Last 24hr Summary
No incidents or accidents. 2 - HID, 0 - OBS and 0 - ASA (all closed out).

Wait until morning. Hold safety meeting, prep cellar for rotating head and rig up diverter lines to flare tank. Wait until morning to install weight indicator, prep cellar for rotating head, weld on 20" adapter flange to the 20" conductor, install and hammer on spool.

24hr Forecast
Install weight indicator, prep cellar for rotating head, weld on 20" adapter flange to the 20" conductor, install 20" spool.

Daily Contacts
Drilling Superintend, Sheldon Vamplew, 403-999-1302; Drilling Engineer, Mike Greener, 403-771-5039; WS Supervisor, Richard Turgeon, 780-387-1706; WS Supervisor, Dave Opper, 403-863-8205; Rig Manager, Rick Yavis, 780-718-2962

Last Casing String
Conductor, 20.00mKB

Time Log

Start Time	End Time	Dur (hr)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Start Depth (mKB)	End Depth (mKB)	Operation
00	07:00	7.00	MIRU	MOVE	WODL	P		0.00	0.00	Wait until morning.
	07:15	0.25	MIRU	MOVE	SFTY	P		0.00	0.00	Hold safety meeting with Beaver hands.
	19:00	11.75	MIRU	MOVE	MOB	P		0.00	0.00	Prep cellar for rotating head and rig up diverter lines to flare tank.
19:00	00:00	5.00	MIRU	MOVE	WODL	P		0.00	0.00	Wait until morning to prep cellar for rotating head, weld on RCD Head and begin rigging up torque tube.

Fluid/Mud Chks: Mud Engineer: <Mud Engineer?>

Time	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (Pa•s)	YP Override (Pa)

Low Gravity Solids (%)	MBT (kg/m³)	Oil Water Ratio	Chlorides (mg/L)	Calcium (mg/L)	Lime (kg/m³)	Potassium (mg/L)

Electric Stab (V)	ECD - Manual Entry (k...	Sand (%)	Solids, Corr. (%)	T Flowline (°C)	HTHP Pressure (kPa)	HTHP Filtrate (mL/30...

API Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Field Est (Cost)

Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost (Cost)

Last BOP Drill

Type	Days Last Chk (...	Last Date	Days Until Next...	Next Check Date
BOP Drill				

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
802.00	802.00

Safety Incidents

Date	Com	Category

Drill String: BHA # <BHA No.?>

Bit Run	Drill Bit	Length (m)	IADC Bit Dull	TFA (incl Noz) (mm²)	BHA ROP (m/hr)

Nozzles (mm)	String Length (m)	OD (mm)	Max Rotating Hook Load (daN)

Depth In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hr)	Total Drill Hrs (hr)

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Item Des	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45

Report Date: 12/22/2013
Report #: 14
Depth Progress: m
Depth End: 0.00mKB
Rig Release Date: 1/23/2014

Rig:

...illing Parameter: <depthstart> - <depthend> mKB

Cum Depth (m)	Cum Drill...	Int ROP (...	Flow Rate...	WOB (daN)	RPM (r...	SPP (kPa)	Drill Str Wt (d...	SO Str Wt (daN)	PU Str Wt (daN)	Off-Btm Str W...	Drill

Hydraulic Calculations

Bit Hydraulic Powe...	HP/Area (kW/mm²)	% P @ bit (%)	Bit Jet Velocity (m/s)	Bit dP (kPa)	P Drop Annular (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Vol Shoe to Top (m³)	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m/...

Error

Mud Pump: 1, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
1	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/20/2014 00:00	2,909.00	0.499	5,150	64
1/20/2014 00:00	2,909.00	1.014	17,500	130

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
1/21/2014	1/21/2014	127.0		
1/22/2014	1/22/2014	127.0		

Mud Pump: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/19/2014 00:00	2,513.00	0.647	6,855	83
1/19/2014 00:00	2,513.00	0.897	15,000	115

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
9/2014	1/19/2014	127.0	15,000	
1/21/2014		127.0		

Shaker Screens

Des	Start Date	End Date	Scr Sz X	Scr Sz Y	Note

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
1	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
1/19/2014 07:00	2.00	1800	1,000.0	0.400	2,100.0	0.200

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
2	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
1/19/2014 13:00	3.00	2000	990.0	0.400	1,700.0	0.200

Fluid / Mud Additive Amounts

Des	Consumed	Cost	Size	Units

Survey Data

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	Depart (m)	NS (m)	EW (m)	VS (m)	DLS (°/30m)

Formations

Formation Name	Drill Top MD (mKB)	Drill Top (TVD) (mKB)	Prog Top TVD (mKB)
Little Bear	31.00	31.00	31.00
Slater River	76.00	76.00	76.00
Arctic Red	800.50	800.46	76.40
Martin House	938.50	938.44	76.40
Imperial	975.50	975.43	76.40
...per Canol	1,665.00	1,658.53	1,6...
Lower Canol	1,700.72	1,689.07	1

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45

Report Date: 12/23/2013
Report #: 15
Depth Progress: m
Depth End: 0.00mKB
Rig Release Date: 1/23/2014

Rig: Beaver Drilling Ltd. 2

UWI	Surface Legal Location	MaxWell Job Number	License No.
[redacted]7665-10126-45	E-76 65-10 126-45	JOB01@2006	EL 470

Ground Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
268.20	273.40	268.00	12/28/2013	-4.27

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	12/9/2013 00:00	1/23/2014 23:59	DRILLED	Yes

Daily Cost Total (Cost)	Cumulative Cost (Cost)	Total AFE (Cost)	AFE+Supp Amt (Cost)	AFE / RFE / Maint.#	Estimated Days
83,003.53	1,241,987.94	6,820,300.00	6,820,300.00	10351817	34.19

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hr)	Cum Personnel Total Hours (hr)
2,881.00		113.0	1,155.00	16,722.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)

Road Condition	Weather	Temperature (°C)	Wind
Ice/Snow	Windy	-32	NW

Ops and Depth @ Morning Report
Rig up torque tube.

Wellbore
Original Hole

Last 24hr Summary
No incidents or accidents. 3 - HID, 0 - OBS and 0 - ASA (all closed out).

Wait until morning. Hold safety meeting, install weight indicator, prep cellar for rotating head, weld on 20" adapter flange to the 20" conductor, install 20" spool.

24hr Forecast
Weld on 20" adaptor flanges onto 20" conductor. Rig up Schlumberger 8068 Rotating Head, 2 x hydraulic valves, 10" flow line and 8" flare tank. Rig up torque tube and pick up top drive.

Daily Contacts
Drilling Superintend, Sheldon Vamplew, 403-999-1302; Drilling Engineer, Mike Greener, 403-771-5039; WS Supervisor, Richard Turgeon, 780-387-1706; WS Supervisor, Dave Opper, 403-863-8205; Rig Manager, Rick Yavis, 780-718-2962

Last Casing String
Conductor, 20.00mKB

Time Log

Start Time	End Time	Dur (hr)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Start Depth (mKB)	End Depth (mKB)	Operation
[redacted]:00	07:00	7.00	MIRU	MOVE	WODL	P		0.00	0.00	Wait until morning.
[redacted]	07:15	0.25	MIRU	MOVE	SFTY	P		0.00	0.00	Hold safety meeting with Beaver hands.
[redacted]	00:00	16.75	MIRU	MOVE	RURD	P		0.00	0.00	Install weight indicator, prep cellar for rotating head, weld on 20" adapter flange to the 20" conductor, install 20" spool.

Fluid/Mud Chks: Mud Engineer: <Mud Engineer?>

Time	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (Pa•s)	YP Override (Pa)

Low Gravity Solids (%)	MBT (kg/m³)	Oil Water Ratio	Chlorides (mg/L)	Calcium (mg/L)	Lime (kg/m³)	Potassium (mg/L)

Electric Stab (V)	ECD - Manual Entry (k...	Sand (%)	Solids, Corr. (%)	T Flowline (°C)	HTHP Pressure (kPa)	HTHP Filtrate (mL/30...

API Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Field Est (Cost)

Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost (Cost)

Last BOP Drill

Type	Days Last Chk (...	Last Date	Days Until Next...	Next Check Date
BOP Drill				

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
803.00	803.00

Safety Incidents

Date	Com	Category

Drill String: BHA # <BHA No.?>

Bit Run	Drill Bit	Length (m)	IADC Bit Dull	TFA (incl Noz) (mm²)	BHA ROP (m/hr)

Nozzles (mm)	String Length (m)	OD (mm)	Max Rotating Hook Load (daN)

Depth In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hr)	Total Drill Hrs (hr)

Comment

[redacted]tring Components

Item Des	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45

Report Date: 12/23/2013
Report #: 15
Depth Progress: m
Depth End: 0.00mKB
Rig Release Date: 1/23/2014

Rig: Beaver Drilling Ltd. 2

Drilling Parameter: <depthstart> - <depthend> mKB

Cum Depth (m)	Cum Drill...	Int ROP (...	Flow Rate...	WOB (daN)	RPM (r...	SPP (kPa)	Drill Str Wt (d...	SO Str Wt (daN)	PU Str Wt (daN)	Off-Btm Str W...	Drill

Hydraulic Calculations

Bit Hydraulic Powe...	HP/Area (kW/mm²)	% P @ bit (%)	Bit Jet Velocity (m/s)	Bit dP (kPa)	P Drop Annular (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Vol Shoe to Top (m³)	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m/...

Error

Mud Pump: 1, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
1	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/20/2014 00:00	2,909.00	0.499	5,150	64
1/20/2014 00:00	2,909.00	1.014	17,500	130

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
1/21/2014	1/21/2014	127.0		
1/22/2014	1/22/2014	127.0		

Mud Pump: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/19/2014 00:00	2,513.00	0.647	6,855	83
1/19/2014 00:00	2,513.00	0.897	15,000	115

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
/2014	1/19/2014	127.0	15,000	
1/21/2014		127.0		

Shaker Screens

Des	Start Date	End Date	Scr Sz X	Scr Sz Y	Note

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
1	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
1/19/2014 07:00	2.00	1800	1,000.0	0.400	2,100.0	0.200

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
2	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
1/19/2014 13:00	3.00	2000	990.0	0.400	1,700.0	0.200

Fluid / Mud Additive Amounts

Des	Consumed	Cost	Size	Units

Survey Data

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	Depart (m)	NS (m)	EW (m)	VS (m)	DLS (°/30m)

Formations

Formation Name	Drill Top MD (mKB)	Drill Top (TVD) (mKB)	Prog Top TVD (mKB)
Little Bear	31.00	31.00	31.00
Slater River	76.00	76.00	76.00
Arctic Red	800.50	800.46	76.40
Martin House	938.50	938.44	76.40
Imperial	975.50	975.43	76.40
er Canol	1,665.00	1,658.53	1,6
Lower Canol	1,700.72	1,689.07	1,

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45

Report Date: 12/24/2013
Report #: 16
Depth Progress: m
Depth End: 0.00mKB
Rig Release Date: 1/23/2014

Rig: Beaver Drilling Ltd. 2

UWI	Surface Legal Location	MaxWell Job Number	License No.
665-10126-45	E-76 65-10 126-45	JOB01@2006	EL 470

Ground Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
268.20	273.40	268.00	12/28/2013	-3.27

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	12/9/2013 00:00	1/23/2014 23:59	DRILLED	Yes

Daily Cost Total (Cost)	Cumulative Cost (Cost)	Total AFE (Cost)	AFE+Supp Amt (Cost)	AFE / RFE / Maint.#	Estimated Days
66,343.53	1,308,331.47	6,820,300.00	6,820,300.00	10351817	34.19

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hr)	Cum Personnel Total Hours (hr)
2,881.00		44.0	516.00	17,238.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)

Road Condition	Weather	Temperature (°C)	Wind
Ice/Snow	Clear	-38	Calm

Ops and Depth @ Morning Report
Rig up top drive.

Wellbore
Original Hole

Last 24hr Summary
No incidents or accidents. 6 - HID, 0 - OBS and 0 - ASA (all closed out).

Weld on 20" adaptor flanges onto 20" conductor. Rig up Schlumberger 8068 Rotating Head and install service loop.

24hr Forecast
Install 2 hydraulic valves, rig up 10" flow line and 8" flare tank. Rig up top drive. Pre-mix mud in mud tanks.

Daily Contacts
Drilling Superintend, Sheldon Vamplew, 403-999-1302; Drilling Engineer, Mike Greener, 403-771-5039; WS Supervisor, Richard Turgeon, 780-387-1706; WS Supervisor, Dave Opper, 403-863-8205; Rig Manager, Rick Yavis, 780-718-2962; Command Centre, 403-910-0357

Last Casing String
Conductor, 20.00mKB

Time Log

Start Time	End Time	Dur (hr)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Start Depth (mKB)	End Depth (mKB)	Operation
00:00	00:15	0.25	MIRU	RIGMNT	SVRG	P		0.00	0.00	Rig service
:15	00:30	0.25	MIRU	MOVE	SFTY	P		0.00	0.00	Pre job safety meeting -Nipple up
	05:00	4.50	MIRU	WHDBOP	NUND	P		0.00	0.00	Nipple up bottom section of rotating equiptment, rig up flare lines
05:00	07:45	2.75	MIRU	MOVE	RURD	P		0.00	0.00	De-ice torque tube and prepare to install torque tube
07:45	08:00	0.25	MIRU	MOVE	SFTY	P		0.00	0.00	Crew hand over meeting with rig crews, rig manager and Conoco reps.
08:00	08:15	0.25	MIRU	MOVE	SFTY	P		0.00	0.00	Safety meeting with day crew prior to picking up torque tube
08:15	08:30	0.25	MIRU	RIGMNT	SVRG	P		0.00	0.00	Rig service, function test crown saver
08:30	12:00	3.50	MIRU	MOVE	RURD	P		0.00	0.00	Pick up and install torque tube
12:00	16:00	4.00	MIRU	WHDBOP	NUND	P		0.00	0.00	Cut conductor, weld on flange and install diverter spool
16:00	16:15	0.25	MIRU	RIGMNT	SVRG	P		0.00	0.00	Rig service
16:15	19:45	3.50	MIRU	WHDBOP	NUND	P		0.00	0.00	Continue to weld flanges to install rotating head
19:45	20:00	0.25	MIRU	MOVE	SFTY	P		0.00	0.00	Crew hand over meeting with rig crews, rig manager and Conoco reps.
20:00	00:00	4.00	MIRU	WHDBOP	NUND	P		0.00	0.00	Continue to weld and install rotating equipment

Fluid/Mud Chks: Mud Engineer: <Mud Engineer?>

Time	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (Pa•s)	YP Override (Pa)

Low Gravity Solids (%)	MBT (kg/m³)	Oil Water Ratio	Chlorides (mg/L)	Calcium (mg/L)	Lime (kg/m³)	Potassium (mg/L)

Electric Stab (V)	ECD - Manual Entry (k...	Sand (%)	Solids, Corr. (%)	T Flowline (°C)	HTHP Pressure (kPa)	HTHP Filtrate (mL/30...

API Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Field Est (Cost)

Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost (Cost)

Last BOP Drill

Type	Days Last Chk (...	Last Date	Days Until Next...	Next Check Date
BOP Drill				

s Since Lost Time Incident (days)	Days Since Recordable Incident (days)
804.00	804.00

y Incidents

Date	Com	Category

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45

Report Date: 12/24/2013
Report #: 16
Depth Progress: m
Depth End: 0.00mKB
Rig Release Date: 1/23/2014

Rig: Beaver Drilling Ltd. 2

...l String: BHA # <BHA No.?>

Bit Run	Drill Bit	Length (m)	IADC Bit Dull	TFA (incl Noz) (mm²)	BHA ROP

Nozzles (mm)	String Length (m)	OD (mm)	Max Rotating Hook Load (daN)

Depth In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hr)	Total Drill Hrs (hr)

Comment

Drill String Components

Item Des	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)

Drilling Parameter: <depthstart> - <depthend> mKB

Cum Depth (m)	Cum Drill...	Int ROP (...	Flow Rate...	WOB (daN)	RPM (r...	SPP (kPa)	Drill Str Wt (d...	SO Str Wt (daN)	PU Str Wt (daN)	Off-Btm Str W...	Drill Tq

Hydraulic Calculations

Bit Hydraulic Powe...	HP/Area (kW/mm²)	% P @ bit (%)	Bit Jet Velocity (m/s)	Bit dP (kPa)	P Drop Annular (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Vol Shoe to Top (m³)	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m/...

Error

Mud Pump: 1, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
1	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/20/2014 00:00	2,909.00	0.499	5,150	64
1/20/2014 00:00	2,909.00	1.014	17,500	130

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
/2014	1/21/2014	127.0		
1/22/2014	1/22/2014	127.0		

Mud Pump: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/19/2014 00:00	2,513.00	0.647	6,855	83
1/19/2014 00:00	2,513.00	0.897	15,000	115

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
1/19/2014	1/19/2014	127.0	15,000	
1/21/2014		127.0		

Shaker Screens

Des	Start Date	End Date	Scr Sz X	Scr Sz Y	Note

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
1	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
1/19/2014 07:00	2.00	1800	1,000.0	0.400	2,100.0	0.200

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
2	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
1/19/2014 13:00	3.00	2000	990.0	0.400	1,700.0	0.200

Fluid / Mud Additive Amounts

Des	Consumed	Cost	Size	Units

Survey Data

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	Depart (m)	NS (m)	EW (m)	VS (m)	DLS (°/...

ations

Formation Name	Drill Top MD (mKB)	Drill Top (TVD) (mKB)	Prog Top TVD (mKB)
Little Bear	31.00	31.00	31.00
Slater River	76.00	76.00	76.00
Arctic Red	800.50	800.46	76.40
Martin House	938.50	938.44	76.40
Imperial	975.50	975.43	76.40
Upper Canol	1,665.00	1,658.53	1,653.40
Lower Canol	1,700.72	1,689.07	1,694.40

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45

Report Date: 12/25/2013
Report #: 17
Depth Progress: m
Depth End: 0.00mKB
Rig Release Date: 1/23/2014

Rig: Beaver Drilling Ltd. 2

/ UWI	Surface Legal Location	MaxWell Job Number	License No.
300E7665-10126-45	E-76 65-10 126-45	JOB01@2006	EL 470

Ground Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
268.20	273.40	268.00	12/28/2013	-2.27

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	12/9/2013 00:00	1/23/2014 23:59	DRILLED	Yes

Daily Cost Total (Cost)	Cumulative Cost (Cost)	Total AFE (Cost)	AFE+Supp Amt (Cost)	AFE / RFE / Maint.#	Estimated Days
99,893.53	1,408,225.00	6,820,300.00	6,820,300.00	10351817	34.19

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hr)	Cum Personnel Total Hours (hr)
2,881.00		41.0	483.00	17,721.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)

Road Condition	Weather	Temperature (°C)	Wind
Ice/Snow	Clear	-42	Calm

Ops and Depth @ Morning Report
Rig up and test top drive. Work on mud pumps.

Wellbore
Original Hole

Last 24hr Summary
No incidents or accidents. 9 - HID, 1 - OBS and 0 - ASA (all closed out)

Install service loop, rig up, test and troubleshoot PLC (programmable logic controller) issues with top drive. Rig up BOS III tank and centrifuge combo tank.

24hr Forecast
Install 2 hydraulic valves, rig up 10" flow line and 8" flare tank. Rig up top drive. Pre-mix mud in mud tanks.

Daily Contacts
Drilling Superintend, Sheldon Vamplew, 403-999-1302; Drilling Engineer, Mike Greener, 403-771-5039; WS Supervisor, Richard Turgeon, 780-387-1706; WS Supervisor, Dave Opper, 403-863-8205; Rig Manager, Rick Yavis, 780-718-2962; Command Centre, 403-910-0357

Last Casing String
Conductor, 20.00mKB

Time Log

Start Time	End Time	Dur (hr)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Start Depth (mKB)	End Depth (mKB)	Operation
00:00	00:15	0.25	MIRU	RIGMNT	SVRG	P		0.00	0.00	Rig service
15	02:45	2.50	MIRU	MOVE	RURD	P		0.00	0.00	Prepare service loop to hang from monkey board
02:45	03:00	0.25	MIRU	MOVE	SFTY	P		0.00	0.00	Pre job safety meeting on hanging service loop
03:00	07:45	4.75	MIRU	MOVE	RURD	P		0.00	0.00	Hang service loop
07:45	08:00	0.25	MIRU	MOVE	SFTY	P		0.00	0.00	Crew hand over meeting with rig crews, rig manager and Conoco reps.
08:00	08:15	0.25	MIRU	MOVE	SFTY	P		0.00	0.00	Safety meeting prior to picking up top drive
08:15	08:30	0.25	MIRU	RIGMNT	SVRG	P		0.00	0.00	Rig service, function test crown saver
08:30	16:00	7.50	MIRU	MOVE	RURD	P		0.00	0.00	Rig in top drive to service loop and test censors
16:00	16:15	0.25	MIRU	RIGMNT	SVRG	P		0.00	0.00	Rig service
16:15	19:00	2.75	MIRU	MOVE	RURD	P		0.00	0.00	Continue to rig up top drive to service loop and function censors.
19:00	19:15	0.25	MIRU	MOVE	SFTY	P		0.00	0.00	Crew hand over meeting with rig crews, rig manager and Conoco reps.
19:15	19:30	0.25	MIRU	MOVE	SFTY	P		0.00	0.00	Safety meeting on camp rules and etiquette
19:30	00:00	4.50	MIRU	MOVE	RURD	P		0.00	0.00	Rig up, de-ice and warm equipment prior to installing

Fluid/Mud Chks: Mud Engineer: <Mud Engineer?>

Time	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (Pa·s)	YP Override (Pa)

Low Gravity Solids (%)	MBT (kg/m³)	Oil Water Ratio	Chlorides (mg/L)	Calcium (mg/L)	Lime (kg/m³)	Potassium (mg/L)

Electric Stab (V)	ECD - Manual Entry (k...	Sand (%)	Solids, Corr. (%)	T Flowline (°C)	HTHP Pressure (kPa)	HTHP Filtrate (mL/30...

API Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Field Est (Cost)

Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost (Cost)

Last BOP Drill

Type	Days Last Chk (...	Last Date	Days Until Next...	Next Check Date
BOP Drill				

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
805.00	

Safety Incidents

Date	Com	Categ

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45

Rig: Beaver Drilling Ltd. 2

Report Date: 12/25/2013
Report #: 17
Depth Progress: m
Depth End: 0.00mKB
Rig Release Date: 1/23/2014

String: BHA # <BHA No.?>

Bit Run	Drill Bit	Length (m)	IADC Bit Dull	TFA (incl Noz) (mm²)	BHA ROP (m/hr)

Nozzles (mm)	String Length (m)	OD (mm)	Max Rotating Hook Load (daN)

Depth In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hr)	Total Drill Hrs (hr)

Comment

Drill String Components

Item Des	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)

Drilling Parameter: <depthstart> - <depthend> mKB

Cum Depth (m)	Cum Drill...	Int ROP (...	Flow Rate...	WOB (daN)	RPM (r...	SPP (kPa)	Drill Str Wt (d...	SO Str Wt (daN)	PU Str Wt (daN)	Off-Btm Str W...	Drill Tq

Hydraulic Calculations

Bit Hydraulic Powe...	HP/Area (kW/mm²)	% P @ bit (%)	Bit Jet Velocity (m/s)	Bit dP (kPa)	P Drop Annular (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Vol Shoe to Top (m³)	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m/...

Error

Mud Pump: 1, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
1	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/20/2014 00:00	2,909.00	0.499	5,150	64
1/20/2014 00:00	2,909.00	1.014	17,500	130

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
[redacted]2014	1/21/2014	127.0		
[redacted]2014	1/22/2014	127.0		

Mud Pump: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/19/2014 00:00	2,513.00	0.647	6,855	83
1/19/2014 00:00	2,513.00	0.897	15,000	115

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
1/19/2014	1/19/2014	127.0	15,000	
1/21/2014		127.0		

Shaker Screens

Des	Start Date	End Date	Scr Sz X	Scr Sz Y	Note

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
1	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
1/19/2014 07:00	2.00	1800	1,000.0	0.400	2,100.0	0.200

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
2	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
1/19/2014 13:00	3.00	2000	990.0	0.400	1,700.0	0.200

Fluid / Mud Additive Amounts

Des	Consumed	Cost	Size	Units

[redacted]y Data

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	Depart (m)	NS (m)	EW (m)	VS (m)	DLS (°/30m)

mations

Formation Name	Drill Top MD (mKB)	Drill Top (TVD) (mKB)	Prog Top TVD (mK
Little Bear	31.00	31.00	31.00
Slater River	76.00	76.00	76.00
Arctic Red	800.50	800.46	76.40
Martin House	938.50	938.44	76.40
Imperial	975.50	975.43	76.40
Upper Canol	1,665.00	1,658.53	1,653.40
Lower Canol	1,700.72	1,689.07	1,694.40

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45

Report Date: 12/26/2013
Report #: 18
Depth Progress: m
Depth End: 0.00mKB
Rig Release Date: 1/23/2014

Rig: Beaver Drilling Ltd. 2

UWI	Surface Legal Location	MaxWell Job Number	License No.
[redacted]7665-10126-45	E-76 65-10 126-45	JOB01@2006	EL 470

Ground Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
268.20	273.40	268.00	12/28/2013	-1.27

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	12/9/2013 00:00	1/23/2014 23:59	DRILLED	Yes

Daily Cost Total (Cost)	Cumulative Cost (Cost)	Total AFE (Cost)	AFE+Supp Amt (Cost)	AFE / RFE / Maint.#	Estimated Days
86,003.53	1,494,228.53	6,820,300.00	6,820,300.00	10351817	34.19

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hr)	Cum Personnel Total Hours (hr)
2,881.00		44.0	519.00	18,240.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)

Road Condition	Weather	Temperature (°C)	Wind
Ice/Snow	Clear	-44	NW

Ops and Depth @ Morning Report
Prep, strap BHA and troubleshoot PLC.

Wellbore
Original Hole

Last 24hr Summary
No incidents or accidents. 7 - HID, 0 - OBS and 0 - ASA (all closed out)

Rig up, test and troubleshoot PLC (programmable logic controller) issues with top drive. Rig up BOS III tank and centrifuge combo tank. Re-adjusted service loop. Rig in and weld diverter valves, lines, 10" flowline line and 8" booey line. Held high angle rescue meetings with rig crews.

24hr Forecast
Troubleshoot PLC (programmable logic controller) issues with top drive, install anti-collision program to top drive, complete top drive checks and function, conduct pre-spud checklist, pre-mix mud in mud tanks, pick up and make up BHA, spud and drill 311mm surface hole.

Daily Contacts
Drilling Superintend, Sheldon Vamplew, 403-999-1302; Drilling Engineer, Mike Greener, 403-771-5039; WS Supervisor, Richard Turgeon, 780-387-1706; WS Supervisor, Dave Opper, 403-863-8205; Rig Manager, Rick Yavis, 780-718-2962; Command Centre, 403-910-0357

Last Casing String
Conductor, 20.00mKB

Time Log

Start me	End Time	Dur (hr)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Start Depth (mKB)	End Depth (mKB)	Operation
[redacted]00	00:15	0.25	MIRU	RIGMNT	SVRG	P		0.00	0.00	Rig service
[redacted]	01:15	1.00	MIRU	MOVE	SFTY	P		0.00	0.00	High angle rescue drill, confined space lift drill with tri-pod
01:15	01:30	0.25	MIRU	MOVE	SFTY	P		0.00	0.00	BOP drill / diverter procedure, review for tripping and drilling
01:30	07:45	6.25	MIRU	MOVE	RURD	P		0.00	0.00	Inspect pump fluid ends, seats and valves, de-ice and warm up diverter valves
07:45	08:00	0.25	MIRU	MOVE	SFTY	P		0.00	0.00	Crew hand over meeting with rig crews, rig manager and Conoco reps.
08:00	08:15	0.25	MIRU	RIGMNT	SVRG	P		0.00	0.00	Rig service
08:15	10:00	1.75	MIRU	MOVE	SFTY	P		0.00	0.00	Safety meeting, review Beaver drilling J S.A's notification and high angel rescue drill
10:00	12:30	2.50	MIRU	MOVE	RURD	P		0.00	0.00	Work on top drive functions and calibrate censors
12:30	16:00	3.50	MIRU	WHDBOP	NUND	P		0.00	0.00	Rig up R.C.D head, diverter system and prepare to weld on flanges for flow and flare lines
16:00	16:15	0.25	MIRU	RIGMNT	SVRG	P		0.00	0.00	Rig service
16:15	16:30	0.25	MIRU	MOVE	SFTY	P		0.00	0.00	Safety meeting prior to welding valve flanges
16:30	19:00	2.50	MIRU	WHDBOP	NUND	P		0.00	0.00	Nipple up / rotating equipment and weld flanges, 10" and 8 " lines, for flow and flare lines
19:00	19:30	0.50	MIRU	MOVE	SFTY	P		0.00	0.00	Crew hand over meeting with rig crews, rig manager and Conoco reps. Safety meeting prior to installing diverter valves
19:30	00:00	4.50	MIRU	WHDBOP	NUND	P		0.00	0.00	Nipple up flow and flare line, diverter valves

Fluid/Mud Chks: Mud Engineer: <Mud Engineer?>

Time	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (Pa•s)	YP Override (Pa)
Low Gravity Solids (%)	**MBT (kg/m³)**	**Oil Water Ratio**	**Chlorides (mg/L)**	**Calcium (mg/L)**	**Lime (kg/m³)**	**Potassium (mg/L)**
Electric Stab (V)	**ECD - Manual Entry (k...**	**Sand (%)**	**Solids, Corr. (%)**	**T Flowline (°C)**	**HTHP Pressure (kPa)**	**HTHP Filtrate (mL/30...**

Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Field Est (Cost)

[redacted]ud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost (Cost)

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45
Rig: Beaver Drilling Ltd. 2

Report Date: 12/26/2013
Report #: 18
Depth Progress: m
Depth End: 0.00mKB
Rig Release Date: 1/23/2014

Last BOP Drill

Type	Days Last Chk (...	Last Date	Days Until Next...	Next Check Date
BOP Drill				

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
806.00	806.00

Safety Incidents

Date	Com	Category

Drill String: BHA # <BHA No.?>

Bit Run	Drill Bit	Length (m)	IADC Bit Dull	TFA (incl Noz) (mm²)	BHA ROP (m/hr)

Nozzles (mm)	String Length (m)	OD (mm)	Max Rotating Hook Load (daN)

Depth In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hr)	Total Drill Hrs (hr)

Comment

Drill String Components

Item Des	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)

Drilling Parameter: <depthstart> - <depthend> mKB

Cum Depth (m)	Cum Drill...	Int ROP (...	Flow Rate...	WOB (daN)	RPM (r...	SPP (kPa)	Drill Str Wt (d...	SO Str Wt (daN)	PU Str Wt (daN)	Off-Btm Str W...	Drill Tq

Hydraulic Calculations

Bit Hydraulic Powe...	HP/Area (kW/mm²)	% P @ bit (%)	Bit Jet Velocity (m/s)	Bit dP (kPa)	P Drop Annular (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Vol Shoe to Top (m³)	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m/...

Error

Mud Pump: 1, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
1	NATIONAL	8-P-80	140.0	

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/20/2014 00:00	2,909.00	0.499	5,150	64
1/20/2014 00:00	2,909.00	1.014	17,500	130

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
1/21/2014	1/21/2014	127.0		
1/22/2014	1/22/2014	127.0		

Mud Pump: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/19/2014 00:00	2,513.00	0.647	6,855	83
1/19/2014 00:00	2,513.00	0.897	15,000	115

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
1/19/2014	1/19/2014	127.0	15,000	
1/21/2014		127.0		

Shaker Screens

Des	Start Date	End Date	Scr Sz X	Scr Sz Y	Note

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
1	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
1/19/2014 07:00	2.00	1800	1,000.0	0.400	2,100.0	0.200

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm
2	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
1/19/2014 13:00	3.00	2000	990.0	0.400	1,700.0	0.200

Mud Additive Amounts

Des	Consumed	Cost	Size	Units

Survey Data

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	Depart (m)	NS (m)	EW (m)	VS (m)	DLS (°/30m)

Formations

Formation Name	Drill Top MD (mKB)	Drill Top (TVD) (mKB)	Prog Top TVD (mKB)
Little Bear	31.00	31.00	31.00
Slater River	76.00	76.00	76.00
Arctic Red	800.50	800.46	76.40
Martin House	938.50	938.44	76.40
Imperial	975.50	975.43	76.40
Upper Canol	1,665.00	1,658.53	1,653.40
Lower Canol	1,700.72	1,689.07	1,694.40

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45

Report Date: 12/27/2013
Report #: 19
Depth Progress: m
Depth End: 0.00mKB
Rig Release Date: 1/23/2014

Rig: Beaver Drilling Ltd. 2

UWI	Surface Legal Location	MaxWell Job Number	License No.
300E7665-10126-45	E-76 65-10 126-45	JOB01@2006	EL 470

Ground Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
268.20	273.40	268.00	12/28/2013	-0.27

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	12/9/2013 00:00	1/23/2014 23:59	DRILLED	Yes

Daily Cost Total (Cost)	Cumulative Cost (Cost)	Total AFE (Cost)	AFE+Supp Amt (Cost)	AFE / RFE / Maint.#	Estimated Days
72,600.18	1,566,828.71	6,820,300.00	6,820,300.00	10351817	34.19

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hr)	Cum Personnel Total Hours (hr)
2,881.00		44.0	519.00	18,759.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)

Road Condition	Weather	Temperature (°C)	Wind
Ice/Snow	Clear	-45	NW

Ops and Depth @ Morning Report
Spud and drill 311mm surface hole at 6:30hrs on December 28, 2013.

Wellbore
Original Hole

Last 24hr Summary
No incidents or accidents. 8 - HID, 0 - OBS and 0 - ASA (all closed out)

Troubleshoot PLC (programmable logic controller) issues with top drive, install 10" flowline, install anti-collision program to top drive, complete top drive checks and function, pre-mix mud in mud tanks. Conduct pre-spud inspection, fill out pre-spud and rig inspection checklists. Make up surface BHA.
Midnight to 6:30hrs: Make up BHA, circulate and check for leaks. Perform 'Hazard Hunt' with rig crew. Spud and drill 311mm surface hole at 6:30hrs on December 28, 2013. Sent pre-spud Beyond Compliance, pre-spud inspection and rig inspection checklists prior to spudding.

24hr Forecast
Drill 311mm surface hole with accumulated wireline surveys, rig services, connections and circulation times. Wiper trip at 200m+/-.

Daily Contacts
Drilling Superintend, Sheldon Vamplew, 403-999-1302; Drilling Engineer, Mike Greener, 403-771-5039; WS Supervisor, Richard Turgeon, 780-387-1706; WS Supervisor, Dave Opper, 403-863-8205; Rig Manager, Rick Yavis, 780-718-2962; Command Centre, 403-910-0357

Last Casing String
Conductor, 20.00mKB

Time Log

Start Time	End Time	Dur (hr)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Start Depth (mKB)	End Depth (mKB)	Operation
00:00	00:15	0.25	MIRU	RIGMNT	SVRG	P		0.00	0.00	Rig Service, function motor shut off's, work ok.
00:15	07:00	6.75	MIRU	MOVE	RURD	P		0.00	0.00	Rig in pipe rack and load with BHA, HWDP, finish tie in fla... line to flare tanck and check all connections on lis and diverter
07:00	07:15	0.25	MIRU	MOVE	SFTY	P		0.00	0.00	Crew hand over meeting with rig crews, rig manager and Conoco reps.
07:15	08:00	0.75	MIRU	MOVE	SFTY	P		0.00	0.00	Rig inspection walk around with driller and Conoco rep.
08:00	08:15	0.25	MIRU	RIGMNT	SVRG	P		0.00	0.00	Rig service.
08:15	08:30	0.25	MIRU	MOVE	SFTY	P		0.00	0.00	Safety meeting prior to setting up rig smart anti collision system.
08:30	16:00	7.50	MIRU	MOVE	RURD	P		0.00	0.00	Rig in rig smart anti collision system with system hand.
16:00	16:15	0.25	MIRU	RIGMNT	SVRG	P		0.00	0.00	Rig service, function horn.
16:15	19:00	2.75	MIRU	MOVE	RURD	P		0.00	0.00	Finish rigging up top drive, recalibrate all functions
19:00	19:30	0.50	MIRU	MOVE	SFTY	P		0.00	0.00	Crew hand over meeting with rig crews, rig manager and Conoco reps.
19:30	23:30	4.00	MIRU	MOVE	RURD	P		0.00	0.00	Continue to rig up top drive, mud saver valve and saver sub, recalibrate rig smart.
23:30	23:45	0.25	MIRU	MOVE	SFTY	P		0.00	0.00	Safety meeting prior to picking up 9" drill collars and installing 311mm tooth bit.
23:45	00:00	0.25	MIRU	MOVE	PULD	P		0.00	0.00	Pick up and steam heat 9" drill collar, bit sub and 311mm bit

Fluid/Mud Chks: Mud Engineer: <Mud Engineer?>

Time	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (Pa•s)	YP Override (Pa)
Low Gravity Solids (%)	**MBT (kg/m³)**	**Oil Water Ratio**	**Chlorides (mg/L)**	**Calcium (mg/L)**	**Lime (kg/m³)**	**Potassium (mg/L)**
Electric Stab (V)	**ECD - Manual Entry (k...**	**Sand (%)**	**Solids, Corr. (%)**	**T Flowline (°C)**	**HTHP Pressure (kPa)**	**HTHP Filtrate (mL/30...**

Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Field Est (Cost)

Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost (Cost)

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45
Rig: Beaver Drilling Ltd. 2

Report Date: 12/27/2013
Report #: 19
Depth Progress: m
Depth End: 0.00mKB
Rig Release Date: 1/23/2014

BOP Drill

BOP Drill	Days Last Chk (...	Last Date	Days Until Next...	Next Check Date

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
807.00	807.00

Safety Incidents

Date	Com	Category

Drill String: BHA # <BHA No.?>

Bit Run	Drill Bit	Length (m)	IADC Bit Dull	TFA (incl Noz) (mm²)	BHA ROP (m/hr)

Nozzles (mm)	String Length (m)	OD (mm)	Max Rotating Hook Load (daN)

Depth In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hr)	Total Drill Hrs (hr)

Comment

Drill String Components

Item Des	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)

Drilling Parameter: <depthstart> - <depthend> mKB

Cum Depth (m)	Cum Drill...	Int ROP (...	Flow Rate...	WOB (daN)	RPM (r...	SPP (kPa)	Drill Str Wt (d...	SO Str Wt (daN)	PU Str Wt (daN)	Off-Btm Str W...	Drill Tq

Hydraulic Calculations

Bit Hydraulic Powe...	HP/Area (kW/mm²)	% P @ bit (%)	Bit Jet Velocity (m/s)	Bit dP (kPa)	P Drop Annular (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Vol Shoe to Top (m³)	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m/...

Error

Mud Pump: 1, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/20/2014 00:00	2,909.00	0.499	5,150	64
1/20/2014 00:00	2,909.00	1.014	17,500	130

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
1/21/2014	1/21/2014	127.0		
1/22/2014	1/22/2014	127.0		

Mud Pump: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/19/2014 00:00	2,513.00	0.647	6,855	83
1/19/2014 00:00	2,513.00	0.897	15,000	115

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
1/19/2014	1/19/2014	127.0	15,000	
1/21/2014		127.0		

Shaker Screens

Des	Start Date	End Date	Scr Sz X	Scr Sz Y	Note

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
1	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
1/19/2014 07:00	2.00	1800	1,000.0	0.400	2,100.0	0.200

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
2	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
1/19/2014 13:00	3.00	2000	990.0	0.400	1,700.0	0.200

...id / Mud Additive Amounts

Des	Consumed	Cost	Size	Un
Gel	41.0	7.200	40.0	SX
Kelzan	2.0	360.450	25.0	SX
Soda Ash	1.0	14.550	22.68	SX

Survey Data

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	Depart (m)	NS (m)	EW (m)	VS (m)	DLS (°/30m)

Formations

Formation Name	Drill Top MD (mKB)	Drill Top (TVD) (mKB)	Prog Top TVD (mKB)
Little Bear	31.00	31.00	31.00
Slater River	76.00	76.00	76.00
Arctic Red	800.50	800.46	76.40
Martin House	938.50	938.44	76.40
Imperial	975.50	975.43	76.40
Upper Canol	1,665.00	1,658.53	1,653.40
Lower Canol	1,700.72	1,689.07	1,694.40

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45

Report Date: 12/28/2013
Report #: 20
Depth Progress: 146.00m
Depth End: 146.00mKB
Rig Release Date: 1/23/2014

Rig: Beaver Drilling Ltd. 2

UWI	Surface Legal Location	MaxWell Job Number	License No.
365-10126-45	E-76 65-10 126-45	JOB01@2006	EL 470

Ground Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
268.20	273.40	268.00	12/28/2013	0.73

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	12/9/2013 00:00	1/23/2014 23:59	DRILLED	Yes

Daily Cost Total (Cost)	Cumulative Cost (Cost)	Total AFE (Cost)	AFE+Supp Amt (Cost)	AFE / RFE / Maint.#	Estimated Days
73,141.63	1,639,970.34	6,820,300.00	6,820,300.00	10351817	34.19

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hr)	Cum Personnel Total Hours (hr)
2,881.00		40.0	470.00	19,229.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)

Road Condition	Weather	Temperature (°C)	Wind
Ice/Snow	Clear	-47	NW

Ops and Depth @ Morning Report
Wait on top drive parts to fix PLC issues, pump and work drill string at 155m.

Wellbore
Original Hole

Last 24hr Summary
No incidents or accidents. 7 - HID, 0 - OBS and 0 - ASA (all closed out)

Conduct pre-spud inspection, fill out pre-spud and rig inspection checklists. Make up BHA, circulate and check for leaks, perform 'Hazard Hunt' and pre-spud meetings with rig crews. Spud and drill 311mm surface hole from 0m to 146m with accumulated wireline surveys, rig services, connections and circulation times. Last survey at 146m was 0.1°. Sent pre-spud Beyond Compliance, pre-spud inspection and rig inspection checklists prior to spudding. Spud and drill 311mm surface hole at 6:30hrs on December 28, 2013.
From midnight to 6:00am: Drill 311mm surface hole to 155m. Wait on top drive parts to fix PLC issues, pump and work drill string at 155m.

24hr Forecast
Wait on top drive parts to fix PLC issues, pump and work drill string at 155m. Drill 311mm surface hole with accumulated wireline surveys, rig services, connections and circulation times. Wiper trip at 200m+/-.

Daily Contacts
Drilling Superintend, Sheldon Vamplew, 403-999-1302; Drilling Engineer, Mike Greener, 403-771-5039; WS Supervisor, Richard Turgeon, 780-387-1706; WS Supervisor, Dave Opper, 403-863-8205; Rig Manager, Rick Yavis, 780-718-2962; Command Centre, 403-910-0357

Last Casing String
Conductor, 20.00mKB

Log

	End Time	Dur (hr)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Start Depth (mKB)	End Depth (mKB)	Operation
00:00	00:15	0.25	SURFAC	RIGMNT	SVRG	P		0.00	0.00	Rig service, funtion test crown saver
00:15	03:45	3.50	SURFAC	DRILL	PULD	P		0.00	0.00	Pick up and warm up BHA, circulate check for leaks, extend hydrualic hose for top drive
03:45	06:30	2.75	SURFAC	DRILL	SFTY	P		0.00	0.00	Pre spud safety meeting and hazard hunt
06:30	07:00	0.50	SURFAC	DRILL	DRLG	P		0.00	20.00	Spud well & drill 311 mm hole 0m to 20m
07:00	08:00	1.00	SURFAC	DRILL	SFTY	P		20.00	20.00	Crew change safety meeting & prespud meeting with second crew
08:00	08:15	0.25	SURFAC	DRILL	SFTY	P		20.00	20.00	Crew hand over meeting with rig crews, rig manager and Conoco reps.
08:15	08:30	0.25	SURFAC	RIGMNT	SVRG	P		20.00	20.00	Rig service, funcction test lower crown saver
08:30	10:30	2.00	SURFAC	WHDBOP	NUND	P		20.00	20.00	Install rubber seal in rotating head on diverter
10:30	15:30	5.00	SURFAC	DRILL	DRLG	P		20.00	80.00	Rotary drill 311mm hole from 0m to 80 m
15:30	16:00	0.50	SURFAC	DRILL	SRVY	P		80.00	80.00	acclumlated time for surveys
16:00	16:15	0.25	SURFAC	RIGMNT	SVRG	P		80.00	80.00	Rig service, function test crown saver and air horn
16:15	18:00	1.75	SURFAC	DRILL	DRLG	P		80.00	100.00	Rotary drill 311mm hole from 80m to 100m
18:00	19:30	1.50	SURFAC	DRILL	CIRC	P		100.00	100.00	Hole tight, circulate and condition hole at 100 m
19:30	20:00	0.50	SURFAC	DRILL	SFTY	P		100.00	100.00	Crew hand over meeting with rig crews, rig manager and Conoco reps.
20:00	23:45	3.75	SURFAC	DRILL	DRLG	P		100.00	146.00	Drill 311mm hole from 100m to 146m
23:45	00:00	0.25	SURFAC	DRILL	SRVY	P		146.00	146.00	Accumulatedtime for surveys

Fluid/Mud Chks: Mud Engineer: Ed Thompson

Time	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (Pa·s)	YP Override (Pa)
16:00	95.00	1,040.0	33	9.5	4.0	3.0

Low Gravity Solids (%)	MBT (kg/m³)	Oil Water Ratio	Chlorides (mg/L)	Calcium (mg/L)	Lime (kg/m³)	Potassium (mg/L)
2.4			100	80		

Electric Stab (V)	ECD - Manual Entry (k...	Sand (%)	Solids, Corr. (%)	T Flowline (°C)	HTHP Pressure (kPa)	HTHP Filtrate (mL/30...
	1,060.0	0.0	2.5	25		

rate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Field Est (Cost)
25.0			872.10

Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost (Cost)
		1,902.75

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45
Rig: Beaver Drilling Ltd. 2

Report Date: 12/28/2013
Report #: 20
Depth Progress: 146.00m
Depth End: 146.00mKB
Rig Release Date: 1/23/2014

BOP Drill

Type	Days Last Chk (...	Last Date	Days Until Next...	Next Check Date
BOP Drill	0	12/28/2013	3	12/31/2013

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
808.00	808.00

Safety Incidents

Date	Com	Category

Drill String: BHA # 1

Bit Run	Drill Bit	Length (m)	IADC Bit Dull	TFA (incl Noz) (mm²)	BHA ROP (m/hr)
1A	311.0mm, J&L, B181332	0.34	1-2-NO-S-1-0-WT-TD	722	12.1

Nozzles (mm)	String Length (m)	OD (mm)	Max Rotating Hook Load (daN)
15.9/15.9/15.9/12.7	603.00	311.0	55,000

Depth In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hr)	Total Drill Hrs (hr)
0.00	603.00	12.1	603.00	603.00	50.00	50.00

Comment
Rotary drill 311mm slick

Drill String Components

Item Des	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)
4" HW	70.0	132.0	51	464.80	603.00
X/O 4" H-90	62.0	162.0	1	0.80	138.20
6" D.C	60.0	160.0	9	84.00	137.40
Jar	76.0	157.0	1	4.73	53.40
6" D.C	60.0	160.0	3	27.90	48.67
Bell sub	69.0	232.0	1	0.66	20.77
9" D.C	71.0	233.0	2	18.50	20.11
Bit sub	70.0	255.0	1	0.93	1.61
311mm BIT	72.0	311.0	1	0.34	0.68

Drilling Parameter: 80.00 - 146.00 mKB

ı Depth (m)	Cum Drill...	Int ROP (...	Flow Rate...	WOB (daN)	RPM (r...	SPP (kPa)	Drill Str Wt (d...	SO Str Wt (daN)	PU Str Wt (daN)	Off-Btm Str W...	Drill To
146.00	11.00	12.0	2.600	10	101	9,200	33,000	33,000	33,000	33,000	

Hydraulic Calculations

Bit Hydraulic Powe...	HP/Area (kW/mm²)	% P @ bit (%)	Bit Jet Velocity (m/s)	Bit dP (kPa)	P Drop Annular (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)
91.0	0.00120	23	60.0	2,099.8	18.1	1,040.0	1,052.7

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Vol Shoe to Top (m³)	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m/...
0.45	6.54	3.35	15.1	15.8	45.9	104.4

Error

Mud Pump: 1, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
1	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/20/2014 00:00	2,909.00	0.499	5,150	64
1/20/2014 00:00	2,909.00	1.014	17,500	130

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
1/21/2014	1/21/2014	127.0		
1/22/2014	1/22/2014	127.0		

Mud Pump: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/19/2014 00:00	2,513.00	0.647	6,855	83
1/19/2014 00:00	2,513.00	0.897	15,000	115

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
1/19/2014	1/19/2014	127.0	15,000	
1/21/2014		127.0		

ker Screens

Des	Start Date	End Date	Scr Sz X	Scr Sz Y	Note

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
1	BOS Solutions	5500	

ifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
1/19/2014 07:00	2.00	1800	1,000.0	0.400	2,100.0	0.200

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
2	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
1/19/2014 13:00	3.00	2000	990.0	0.400	1,700.0	0.200

Fluid / Mud Additive Amounts

Des	Consumed	Cost	Size	Units
Gel	21.0	7.200	40.0	SX
Kelzan	2.0	360.450	25.0	SX

Survey Data

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	Depart (m)	NS (m)	EW (m)	VS (m)	DLS (°/30m)
12/28/2013	29.00	0.40	0.00	29.00	0.10	0.10	0.00	0.05	0.41
12/28/2013	62.00	0.50	0.00	62.00	0.36	0.36	0.00	0.17	0.09
12/28/2013	90.00	0.20	0.00	90.00	0.53	0.53	0.00	0.26	0.32
12/28/2013	118.00	0.20	0.00	118.00	0.63	0.63	0.00	0.31	0.00
12/28/2013	147.00	0.10	0.00	147.00	0.71	0.71	0.00	0.34	0.10
12/28/2013	157.00	0.10	0.00	157.00	0.72	0.72	0.00	0.35	0.00

Formations

Formation Name	Drill Top MD (mKB)	Drill Top (TVD) (mKB)	Prog Top TVD (mKB)
Little Bear	31.00	31.00	31.00
Slater River	76.00	76.00	76.00
Arctic Red	800.50	800.46	76.40
Martin House	938.50	938.44	76.40
Imperial	975.50	975.43	76.40
per Canol	1,665.00	1,658.53	1,653.40
Canol	1,700.72	1,689.07	1,694.40

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45

Report Date: 12/29/2013
Report #: 21
Depth Progress: 10.00m
Depth End: 156.00mKB
Rig Release Date: 1/23/2014

Rig: Beaver Drilling Ltd. 2

... / UWI	Surface Legal Location	MaxWell Job Number	License No.
300E7665-10126-45	E-76 65-10 126-45	JOB01@2006	EL 470

Ground Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
268.20	273.40	268.00	12/28/2013	1.73

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	12/9/2013 00:00	1/23/2014 23:59	DRILLED	Yes

Daily Cost Total (Cost)	Cumulative Cost (Cost)	Total AFE (Cost)	AFE+Supp Amt (Cost)	AFE / RFE / Maint.#	Estimated Days
239,229.53	1,879,199.87	6,820,300.00	6,820,300.00	10351817	34.19

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hr)	Cum Personnel Total Hours (hr)
2,881.00		43.0	506.00	19,735.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)

Road Condition	Weather	Temperature (°C)	Wind
Ice/Snow	Clear	-43	NW

Ops and Depth @ Morning Report
Wait on top drive parts to fix PLC issues, pump and work drill string at 155m.

Wellbore
Original Hole

Last 24hr Summary
No incidents or accidents. 7 - HID, 1 - OBS and 0 - ASA (all closed out)

Drill 311mm surface hole to 155m. Wait on top drive parts to fix PLC issues, pump and work drill string at 155m.

24hr Forecast
Wait on top drive parts to fix PLC issues, pump and work drill string at 155m. Fix PLC issues, drill 311mm surface hole with accumulated wireline surveys, rig services, connections and circulation times. Wiper trip at 200m+/-.

Daily Contacts
Drilling Superintend, Sheldon Vamplew, 403-999-1302; Drilling Engineer, Mike Greener, 403-771-5039; WS Supervisor, Richard Turgeon, 780-387-1706; WS Supervisor, Dave Opper, 403-863-8205; Rig Manager, Rick Yavis, 780-718-2962; Command Centre, 403-910-0357

Last Casing String
Conductor, 20.00mKB

Time Log

Start Time	End Time	Dur (hr)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Start Depth (mKB)	End Depth (mKB)	Operation
00	00:15	0.25	SURFAC	RIGMNT	SVRG	P		146.00	146.00	Rig service function test crown saver
:15	00:30	0.25	SURFAC	DRILL	DRLG	P		146.00	156.00	Drill 311mm hole from 146m to 156m
00:30	02:00	1.50	SURFAC	DRILL	SFTY	P		156.00	156.00	Diverter drill, review crew positions and procedures
02:00	07:45	5.75	SURFAC	RIGMNT	RGRP	T	Rig	156.00	156.00	Circulate and move pipe, wait on top drive parts
07:45	08:00	0.25	SURFAC	DRILL	SFTY	P		156.00	156.00	Crew hand over meeting with rig crews, rig manager, Conoco reps
08:00	08:15	0.25	SURFAC	RIGMNT	SVRG	P		156.00	156.00	Rig Service Function Test Crown Saver
08:15	08:30	0.25	SURFAC	DRILL	SFTY	P		156.00	156.00	Diverter drill, review crew positions and procedures
08:30	16:00	7.50	SURFAC	RIGMNT	RGRP	T	Rig	156.00	156.00	Circulate, work pipe and wait on top drive parts
16:00	16:15	0.25	SURFAC	RIGMNT	SVRG	P		156.00	156.00	Rig service function test crown saver
16:15	19:00	2.75	SURFAC	RIGMNT	RGRP	T	Rig	156.00	156.00	Circulate, work pipe and wait on top drive parts
19:00	19:15	0.25	SURFAC	DRILL	SFTY	P		156.00	156.00	Crew hand over meeting with rig crews ,rig manager,conoco reps
19:15	00:00	4.75	SURFAC	RIGMNT	RGRP	T	Rig	156.00	156.00	Circulate, work pipe and wait on top drive parts

Fluid/Mud Chks: Mud Engineer: Ed Thompson

Time	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (Pa·s)	YP Override (Pa)
16:00	95.00	1,040.0	33	9.5	4.0	3.0

Low Gravity Solids (%)	MBT (kg/m³)	Oil Water Ratio	Chlorides (mg/L)	Calcium (mg/L)	Lime (kg/m³)	Potassium (mg/L)
2.4			100	80		

Electric Stab (V)	ECD - Manual Entry (k...	Sand (%)	Solids, Corr. (%)	T Flowline (°C)	HTHP Pressure (kPa)	HTHP Filtrate (mL/30...
	1,060.0	0.0	2.5	25		

API Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Field Est (Cost)
25.0			

Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost (Cost)
		1,902.75

Last BOP Drill

Type	Days Last Chk (...	Last Date	Days Until Next...	Next Check Date
BOP Drill	1	12/28/2013	2	12/31/2013

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
809.00	809.00

fety Incidents

Date	Com	Cater

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45
Rig: Beaver Drilling Ltd. 2

Report Date: 12/29/2013
Report #: 21
Depth Progress: 10.00m
Depth End: 156.00mKB
Rig Release Date: 1/23/2014

String: BHA # 1

Run	Drill Bit	Length (m)	IADC Bit Dull	TFA (incl Noz) (mm²)	BHA ROP (m/hr)
1A	311.0mm, J&L, B181332	0.34	1-2-NO-S-1-0-WT-TD	722	12.1

Nozzles (mm)	String Length (m)	OD (mm)	Max Rotating Hook Load (daN)
15.9/15.9/15.9/12.7	603.00	311.0	55,000

Depth In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hr)	Total Drill Hrs (hr)
0.00	603.00	12.1	603.00	603.00	50.00	50.00

Comment
Rotary drill 311mm slick

Drill String Components

Item Des	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)
4" HW	70.0	132.0	51	464.80	603.00
X/O 4" H-90	62.0	162.0	1	0.80	138.20
6" D.C	60.0	160.0	9	84.00	137.40
Jar	76.0	157.0	1	4.73	53.40
6" D.C	60.0	160.0	3	27.90	48.67
Bell sub	69.0	232.0	1	0.66	20.77
9" D.C	71.0	233.0	2	18.50	20.11
Bit sub	70.0	255.0	1	0.93	1.61
311mm BIT	72.0	311.0	1	0.34	0.68

Drilling Parameter: 146.00 - 156.00 mKB

Cum Depth (m)	Cum Drill...	Int ROP (...	Flow Rate...	WOB (daN)	RPM (r...	SPP (kPa)	Drill Str Wt (d...	SO Str Wt (daN)	PU Str Wt (daN)	Off-Btm Str W...	Drill Tq
156.00	11.25	40.0	2.600	10	101	9,200	33,000	33,000	33,000	33,000	

Hydraulic Calculations

Bit Hydraulic Powe...	HP/Area (kW/mm²)	% P @ bit (%)	Bit Jet Velocity (m/s)	Bit dP (kPa)	P Drop Annular (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)
91.0	0.00120	23	60.0	2,099.8	19.4	1,040.0	1,052.7

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Vol Shoe to Top (m³)	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m/...
0.49	7.10	3.42	15.1	15.8	45.9	104.4

Error

Pump: 1, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
1	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/20/2014 00:00	2,909.00	0.499	5,150	64
1/20/2014 00:00	2,909.00	1.014	17,500	130

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
1/21/2014	1/21/2014	127.0		
1/22/2014	1/22/2014	127.0		

Mud Pump: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/19/2014 00:00	2,513.00	0.647	6,855	83
1/19/2014 00:00	2,513.00	0.897	15,000	115

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
1/19/2014	1/19/2014	127.0	15,000	
1/21/2014		127.0		

Shaker Screens

Des	Start Date	End Date	Scr Sz X	Scr Sz Y	Note

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
1	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
9/2014 07:00	2.00	1800	1,000.0	0.400	2,100.0	0.200

...fuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
2	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
1/19/2014 13:00	3.00	2000	990.0	0.400	1,700.0	0.200

Fluid / Mud Additive Amounts

Des	Consumed	Cost	Size	Units

Survey Data

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	Depart (m)	NS (m)	EW (m)	VS (m)	DLS (°/30m)

Formations

Formation Name	Drill Top MD (mKB)	Drill Top (TVD) (mKB)	Prog Top TVD (mKB)
Little Bear	31.00	31.00	31.00
Slater River	76.00	76.00	76.00
Arctic Red	800.50	800.46	76.40
Martin House	938.50	938.44	76.40
Imperial	975.50	975.43	76.40
Upper Canol	1,665.00	1,658.53	1,653.40
Lower Canol	1,700.72	1,689.07	1,694.40

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45

Report Date: 12/30/2013
Report #: 22
Depth Progress: 56.00m
Depth End: 212.00mKB
Rig Release Date: 1/23/2014

Rig: Beaver Drilling Ltd. 2

UWI	Surface Legal Location	MaxWell Job Number	License No.
[redacted]7665-10126-45	E-76 65-10 126-45	JOB01@2006	EL 470

Ground Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
268.20	273.40	268.00	12/28/2013	2.73

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	12/9/2013 00:00	1/23/2014 23:59	DRILLED	Yes

Daily Cost Total (Cost)	Cumulative Cost (Cost)	Total AFE (Cost)	AFE+Supp Amt (Cost)	AFE / RFE / Maint.#	Estimated Days
84,792.19	1,963,992.06	6,820,300.00	6,820,300.00	10351817	34.19

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hr)	Cum Personnel Total Hours (hr)
2,881.00		46.0	552.00	20,287.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)

Road Condition	Weather	Temperature (°C)	Wind
Ice/Snow	Clear	-47	NE 10 kms

Ops and Depth @ Morning Report
Wiper trip at 212m. Last survey at 211m was 0.3°.

Wellbore
Original Hole

Last 24hr Summary
No incidents or accidents. 5 - HID, 0 - OBS and 0 - ASA (all closed out)

Wait on top drive parts to fix HPU issues, pump and work drill string at 155m. Fix HPU issues. Drill 311mm surface hole from 155m to 212m with accumulated wireline surveys, rig services, connections and circulation times. Wiper trip at 212m. Last survey at 211m was 0.3°.

24hr Forecast
Drill 311mm surface hole with accumulated wireline surveys, rig services, connections and circulation times. Wiper trip at 400m+/-.

Daily Contacts
Drilling Superintend, Sheldon Vamplew, 403-999-1302; Drilling Engineer, Mike Greener, 403-771-5039; WS Supervisor, Richard Turgeon, 780-387-1706; WS Supervisor, Dave Opper, 403-863-8205; Rig Manager, Rick Yavis, 780-718-2962; Command Centre, 403-910-0357

Last Casing String
Conductor, 20.00mKB

Time Log

Start Time	End Time	Dur (hr)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Start Depth (mKB)	End Depth (mKB)	Operation
[redacted]00	00:15	0.25	SURFAC	RIGMNT	SVRG	P		156.00	156.00	Rig Service function test crown saver
[redacted]E	07:45	7.50	SURFAC	RIGMNT	RGRP	T	Rig	156.00	156.00	Circulate and work pipe wait on Top Drive parts
[redacted]	08:00	0.25	SURFAC	DRILL	SFTY	P		156.00	156.00	Crew hand over meeting with rig crews, rig manager, Conoco reps
08:00	08:15	0.25	SURFAC	RIGMNT	SVRG	P		156.00	156.00	Rig service function test crown saver
08:15	14:15	6.00	SURFAC	RIGMNT	RGRP	T	Rig	156.00	156.00	Circulate and work pipe wait on top drive mechanic
14:15	15:45	1.50	SURFAC	RIGMNT	RGRP	T	Rig	156.00	156.00	Down time - top drive repair HPU with wajax mechanical.
15:45	16:00	0.25	SURFAC	DRILL	SFTY	P		156.00	156.00	Crew hand over meeting with rig crews, rig manager, Conoco reps
16:00	16:15	0.25	SURFAC	RIGMNT	SVRG	P		156.00	156.00	Rig service function test crown saver operating properly
16:15	17:00	0.75	SURFAC	RIGMNT	RGRP	T	Rig	156.00	156.00	Down time - top drive repair HPU with wajax mechanical.
17:00	18:15	1.25	SURFAC	DRILL	CIRC	P		156.00	156.00	Circulate top drive to warm up system
18:15	21:15	3.00	SURFAC	DRILL	DRLG	P		156.00	212.00	Rotary drill 311mm surface hole from 156mKB to 212m
21:15	21:30	0.25	SURFAC	DRILL	CIRC	P		212.00	212.00	Circulate hole clean to wiper trip
21:30	21:45	0.25	SURFAC	DRILL	SRVY	P		212.00	212.00	Wire line survey at 211m, 0.3 deg.
21:45	22:15	0.50	SURFAC	DRILL	WPRT	P		212.00	212.00	Wiper trip out of hole to 194m
22:15	23:00	0.75	SURFAC	DRILL	TRIP	P		212.00	212.00	work tight hole @193m circ and work string
23:00	23:15	0.25	SURFAC	DRILL	SFTY	P		212.00	212.00	Crew hand over safety meeting
23:15	00:00	0.75	SURFAC	DRILL	WPRT	P		212.00	212.00	Wiper trip out of hole

Fluid/Mud Chks: Mud Engineer: Ed Thompson

Time	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (Pa•s)	YP Override (Pa)
16:00	95.00	1,040.0	33	9.5	4.0	3.0

Low Gravity Solids (%)	MBT (kg/m³)	Oil Water Ratio	Chlorides (mg/L)	Calcium (mg/L)	Lime (kg/m³)	Potassium (mg/L)
2.4			100	80		

Electric Stab (V)	ECD - Manual Entry (k...	Sand (%)	Solids, Corr. (%)	T Flowline (°C)	HTHP Pressure (kPa)	HTHP Filtrate (mL/30...
	1,060.0	0.0	2.5	25		

API Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Field Est (Cost)
25.0			72.00

Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost (Cost)
		1,974.75

[redacted]BOP Drill

	Days Last Chk (...	Last Date	Days Until Next...	Next Check Date
BOP Drill	2	12/28/2013	1	12/31/2013

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
810.00	810.00

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45

Report Date: 12/30/2013
Report #: 22
Depth Progress: 56.00m
Depth End: 212.00mKB
Rig Release Date: 1/23/2014

Rig: Beaver Drilling Ltd. 2

..ety Incidents

Date	Com	Cate

Drill String: BHA # 1

Bit Run	Drill Bit	Length (m)	IADC Bit Dull	TFA (incl Noz) (mm²)	BHA ROP (m/hr)
1A	311.0mm, J&L, B181332	0.34	1-2-NO-S-1-0-WT-TD	722	12.1

Nozzles (mm)	String Length (m)	OD (mm)	Max Rotating Hook Load (daN)
15.9/15.9/15.9/12.7	603.00	311.0	55,000

Depth In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hr)	Total Drill Hrs (hr)
0.00	603.00	12.1	603.00	603.00	50.00	50.00

Comment
Rotary drill 311mm slick

Drill String Components

Item Des	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)
4" HW	70.0	132.0	51	464.80	603.00
X/O 4" H-90	62.0	162.0	1	0.80	138.20
6" D.C	60.0	160.0	9	84.00	137.40
Jar	76.0	157.0	1	4.73	53.40
6" D.C	60.0	160.0	3	27.90	48.67
Bell sub	69.0	232.0	1	0.66	20.77
9" D.C	71.0	233.0	2	18.50	20.11
Bit sub	70.0	255.0	1	0.93	1.61
311mm BIT	72.0	311.0	1	0.34	0.68

Drilling Parameter: 156.00 - 212.00 mKB

Cum Depth (m)	Cum Drill...	Int ROP (...	Flow Rate...	WOB (daN)	RPM (r...	SPP (kPa)	Drill Str Wt (d...	SO Str Wt (daN)	PU Str Wt (daN)	Off-Btm Str W...	Drill Tq
212.00	14.25	18.7	2.600	9,000	120	9,000	39,000	38,000	40,000	39,000	4,420.0

Hydraulic Calculations

Bit Hydraulic Powe...	HP/Area (kW/mm²)	% P @ bit (%)	Bit Jet Velocity (m/s)	Bit dP (kPa)	P Drop Annular (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)
91.0	0.00120	23	60.0	2,099.8	25.3	1,040.0	1,052.2

String Volume (m³)	Bit to Shoe Volume (m³)	Vol Shoe to Top (m³)	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m/..
0.70	10.58	3.43	15.1	15.1	41.7	

Error

Mud Pump: 1, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
1	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/20/2014 00:00	2,909.00	0.499	5,150	64
1/20/2014 00:00	2,909.00	1.014	17,500	130

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
1/21/2014	1/21/2014	127.0		
1/22/2014	1/22/2014	127.0		

Mud Pump: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/19/2014 00:00	2,513.00	0.647	6,855	83
1/19/2014 00:00	2,513.00	0.897	15,000	115

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
1/19/2014	1/19/2014	127.0	15,000	
1/21/2014		127.0		

Shaker Screens

Des	Start Date	End Date	Scr Sz X	Scr Sz Y	Note

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

...ber	Make	Model	Diameter (mm)
1	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/mi...
1/19/2014 07:00	2.00	1800	1,000.0	0.400	2,100.0	0.200

ifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

er	Make	Model	Diameter (mm)
2	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
1/19/2014 13:00	3.00	2000	990.0	0.400	1,700.0	0.200

Fluid / Mud Additive Amounts

Des	Consumed	Cost	Size	Units
Gel	10.0	7.200	40.0	SX

Survey Data

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	Depart (m)	NS (m)	EW (m)	VS (m)	DLS (°/30m)
12/30/2013	183.00	0.20	0.00	183.00	0.79	0.79	0.00	0.38	0.12
12/30/2013	211.00	0.30	0.00	211.00	0.91	0.91	0.00	0.44	0.11

Formations

Formation Name	Drill Top MD (mKB)	Drill Top (TVD) (mKB)	Prog Top TVD (mKB)
Little Bear	31.00	31.00	31.00
Slater River	76.00	76.00	76.00
Arctic Red	800.50	800.46	76.40
Martin House	938.50	938.44	76.40
Imperial	975.50	975.43	76.40
Upper Canol	1,665.00	1,658.53	1,653.40
Lower Canol	1,700.72	1,689.07	1,694.40

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45

Report Date: 12/31/2013
Report #: 23
Depth Progress: 184.00m
Depth End: 396.00mKB
Rig Release Date: 1/23/2014

Rig: Beaver Drilling Ltd. 2

/ UWI	Surface Legal Location	MaxWell Job Number	License No.
300E7665-10126-45	E-76 65-10 126-45	JOB01@2006	EL 470

Ground Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
268.20	273.40	268.00	12/28/2013	3.73

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	12/9/2013 00:00	1/23/2014 23:59	DRILLED	Yes

Daily Cost Total (Cost)	Cumulative Cost (Cost)	Total AFE (Cost)	AFE+Supp Amt (Cost)	AFE / RFE / Maint.#	Estimated Days
95,875.06	2,059,867.12	6,820,300.00	6,820,300.00	10351817	34.19

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hr)	Cum Personnel Total Hours (hr)
2,881.00		47.0	554.00	20,841.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)

Road Condition	Weather	Temperature (°C)	Wind
Ice/Snow	Clear	-43	SW

Ops and Depth @ Morning Report
Wiper trip from 396m at 173m. Last survey at 378m was 0.4°.

Wellbore
Original Hole

Last 24hr Summary
No incidents or accidents. 4 - HID, 0 - OBS and 0 - ASA (all closed out)
Wiper trip at 212m, wash through tight spots at 183m and 136m. Drill 311mm surface hole from 212m to 396m with accumulated wireline surveys, rig services, connections and circulation times. Wiper trip at 396m. Last survey at 378m was 0.4°.

24hr Forecast
Drill 311mm surface hole with accumulated wireline surveys, rig services, connections and circulation times. Wiper trip at 590 m+/- (strap out).

Daily Contacts
Drilling Superintend, Sheldon Vamplew, 403-999-1302; Drilling Engineer, Mike Greener, 403-771-5039; WS Supervisor, Richard Turgeon, 780-387-1706; WS Supervisor, Dave Opper, 403-863-8205; Rig Manager, Rick Yavis, 780-718-2962; Command Centre, 403-910-0357

Last Casing String
Conductor, 20.00mKB

Time Log

Start Time	End Time	Dur (hr)	Phase	Op Code	Activity Code	Tim e.P.-T-X	Trbl Code	Start Depth (mKB)	End Depth (mKB)	Operation
00:00	03:30	3.50	SURFAC	DRILL	WPRT	P		212.00	212.00	Wiper trip into conductor, back ream from 196m to 58m
03:30	03:45	0.25	SURFAC	RIGMNT	SVRG	P		212.00	212.00	Rig service, function test crown saver
03:45	04:30	0.75	SURFAC	DRILL	WPRT	P		212.00	212.00	Pull out to 9" collars, remove 6 " rotating head rubber
04:30	06:00	1.50	SURFAC	DRILL	WPRT	P		212.00	212.00	Trip in hole to 4" HWDP
06:00	06:45	0.75	SURFAC	DRILL	WPRT	P		212.00	212.00	Install 4" rubber in rotating head
06:45	07:45	1.00	SURFAC	DRILL	WASH	P		212.00	212.00	Wash to bottom from 88m
07:45	08:00	0.25	SURFAC	DRILL	SFTY	P		212.00	212.00	Crew hand over meeting with rig crews, rig manager, Conoco reps
08:00	08:30	0.50	SURFAC	DRILL	DRLG	P		212.00	230.00	Rotary drill 311mm hole from 212m to 230m
08:30	08:45	0.25	SURFAC	RIGMNT	SVRG	P		230.00	230.00	Rig service function test rig smart function test crown saver grease all moving parts check engine fluid levels
08:45	14:30	5.75	SURFAC	DRILL	DRLG	P		230.00	330.00	Rotary drill 311 hole from 230m to 330m
14:30	16:00	1.50	SURFAC	DRILL	SRVY	P		330.00	330.00	Conections and surveys
16:00	17:00	1.00	SURFAC	DRILL	DRLG	P		330.00	340.00	Rotary drill 311mm hole from 330m to 340m
17:00	17:15	0.25	SURFAC	RIGMNT	SVRG	P		340.00	340.00	Rig service crown saver operating properly
17:15	19:00	1.75	SURFAC	DRILL	DRLG	P		340.00	368.00	Rotary drill 311mm hole from 340m to 368 m
19:00	19:15	0.25	SURFAC	DRILL	SFTY	P		368.00	368.00	Crew hand over meeting with rig crews, rig manager, Conoco reps
19:15	22:00	2.75	SURFAC	DRILL	DRLG	P		368.00	396.00	Rotary drill 311 mm hole from 368 m to 396m
22:00	22:30	0.50	SURFAC	DRILL	SRVY	P		396.00	396.00	Acclumlated time for surveys
22:30	23:00	0.50	SURFAC	DRILL	CIRC	P		396.00	396.00	Circ & condition hole
23:00	00:00	1.00	SURFAC	DRILL	WPRT	P		396.00	396.00	Trip out of hole, back ream from 396 m to 359 m

Fluid/Mud Chks: Mud Engineer: Ed Thompson

Time	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (Pa·s)	YP Override (Pa)
14:30	331.00	1,040.0	40	8.0	11.0	3.5

Low Gravity Solids (%)	MBT (kg/m³)	Oil Water Ratio	Chlorides (mg/L)	Calcium (mg/L)	Lime (kg/m³)	Potassium (mg/L)
8.7			2,000	160		

Electric Stab (V)	ECD - Manual Entry (k...	Sand (%)	Solids, Corr. (%)	T Flowline (°C)	HTHP Pressure (kPa)	HTHP Filtrate (mL/30...
	1,164.0	0.0	8.8	35		

Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Field Est (Cost)
13.0			

Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost (Cost)
		2,

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45
Rig: Beaver Drilling Ltd. 2

Report Date: 12/31/2013
Report #: 23
Depth Progress: 184.00m
Depth End: 396.00mKB
Rig Release Date: 1/23/2014

OP Drill

	Days Last Chk (...	Last Date	Days Until Next...	Next Check Date
Drill	3	12/28/2013	0	12/31/2013

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
811.00	811.00

Safety Incidents

Date	Com	Category

Drill String: BHA # 1

Bit Run	Drill Bit	Length (m)	IADC Bit Dull	TFA (incl Noz) (mm²)	BHA ROP (m/hr)
1A	311.0mm, J&L, B181332	0.34	1-2-NO-S-1-0-WT-TD	722	12.1

Nozzles (mm)	String Length (m)	OD (mm)	Max Rotating Hook Load (daN)
15.9/15.9/15.9/12.7	603.00	311.0	55,000

Depth In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hr)	Total Drill Hrs (hr)
0.00	603.00	12.1	603.00	603.00	50.00	50.00

Comment: Rotary drill 311mm slick

Drill String Components

Item Des	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)
4" HW	70.0	132.0	51	464.80	603.00
X/O 4" H-90	62.0	162.0	1	0.80	138.20
6" D.C	60.0	160.0	9	84.00	137.40
Jar	76.0	157.0	1	4.73	53.40
6" D.C	60.0	160.0	3	27.90	48.67
Bell sub	69.0	232.0	1	0.66	20.77
9" D.C	71.0	233.0	2	18.50	20.11
Bit sub	70.0	255.0	1	0.93	1.61
311mm BIT	72.0	311.0	1	0.34	0.68

Drilling Parameter: 330.00 - 396.00 mKB

Depth (m)	Cum Drill...	Int ROP (...	Flow Rate...	WOB (daN)	RPM (r...	SPP (kPa)	Drill Str Wt (d...	SO Str Wt (daN)	PU Str Wt (daN)	Off-Btm Str W...	Drill Tq
396.00	26.00	12.0	2.600	12,000	120	13,000	49,000	47,000	51,000	49,000	8,000.0

Hydraulic Calculations

Hydraulic Powe...	HP/Area (kW/mm²)	% P @ bit (%)	Bit Jet Velocity (m/s)	Bit dP (kPa)	P Drop Annular (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)
91.0	0.00120	16	60.0	2,099.8	36.8	1,040.0	1,049.5

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Vol Shoe to Top (m³)	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m/...
1.41	22.03	3.43	15.1	15.1	41.7	104.4

Error

Mud Pump: 1, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
1	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/20/2014 00:00	2,909.00	0.499	5,150	64
1/20/2014 00:00	2,909.00	1.014	17,500	130

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
1/21/2014	1/21/2014	127.0		
1/22/2014	1/22/2014	127.0		

Mud Pump: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/19/2014 00:00	2,513.00	0.647	6,855	83
1/19/2014 00:00	2,513.00	0.897	15,000	115

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
1/19/2014	1/19/2014	127.0	15,000	
1/21/2014		127.0		

Shaker Screens

Des	Start Date	End Date	Scr Sz X	Scr Sz Y	Note

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
1	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/m
1/19/2014 07:00	2.00	1800	1,000.0	0.400	2,100.0	

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
2	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
1/19/2014 13:00	3.00	2000	990.0	0.400	1,700.0	0.200

Fluid / Mud Additive Amounts

Des	Consumed	Cost	Size	Units
Caustic	1.0	24.650	50.0	SX
FED PAC R	1.0	190.000	22.68	SX
Gel	3.0	7.200	40.0	SX
Sawdust	20.0	2.980	7.3	SX
SOAP STICKS	12.0	15.390	0.5	STICK

Survey Data

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	Depart (m)	NS (m)	EW (m)	VS (m)	DLS (°/30m)
12/31/2013	240.00	0.50	0.00	240.00	1.12	1.12	0.00	0.54	0.21
12/31/2013	269.00	0.80	0.00	268.99	1.44	1.44	0.00	0.70	0.31
12/31/2013	306.00	1.00	0.00	305.99	2.03	2.03	0.00	0.98	0.16
12/31/2013	348.00	0.90	0.00	347.98	2.72	2.72	0.00	1.32	0.07
12/31/2013	378.00	0.40	0.00	377.98	3.06	3.06	0.00	1.49	0.50

Formations

Formation Name	Drill Top MD (mKB)	Drill Top (TVD) (mKB)	Prog Top TVD (mKB)
Little Bear	31.00	31.00	31.00
Slater River	76.00	76.00	76.00
Arctic Red	800.50	800.46	76.40
tin House	938.50	938.44	76.40
perial	975.50	975.43	
Upper Canol	1,665.00	1,658.53	
Lower Canol	1,700.72	1,689.07	1,694.40

ump: 1, NATIONAL, 8-P-80

umber	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/20/2014 00:00	2,909.00	0.499	5,150	64
1/20/2014 00:00	2,909.00	1.014	17,500	130

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
1/21/2014	1/21/2014	127.0		
1/22/2014	1/22/2014	127.0		

Mud Pump: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/19/2014 00:00	2,513.00	0.647	6,855	83
1/19/2014 00:00	2,513.00	0.897	15,000	115

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
1/19/2014	1/19/2014	127.0	15,000	
1/21/2014		127.0		

Shaker Screens

Des	Start Date	End Date	Scr Sz X	Scr Sz Y	Note

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
1	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
014 07:00	2.00	1800	1,000.0	0.400	2,100.0	0.200

ge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

	Make	Model	Diameter (mm)
2	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
1/19/2014 13:00	3.00	2000	990.0	0.400	1,700.0	0.200

Fluid / Mud Additive Amounts

Des	Consumed	Cost	Size	Units
INVERT	2.0	1,063.330	1.0	M3

Survey Data

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	Depart (m)	NS (m)	EW (m)	VS (m)	DLS (°/30m)

Formations

Formation Name	Drill Top MD (mKB)	Drill Top (TVD) (mKB)	Prog Top TVD (mKB)
Little Bear	31.00	31.00	31.00
Slater River	76.00	76.00	76.00
Arctic Red	800.50	800.46	76.40
Martin House	938.50	938.44	76.40
Imperial	975.50	975.43	76.40
Upper Canol	1,665.00	1,658.53	1,653.40
Lower Canol	1,700.72	1,689.07	1,694.40

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45

Report Date: 1/16/2014
Report #: 39
Depth Progress: 0.00m
Depth End: 1,908.00mKB
Rig Release Date: 1/23/2014

Rig: Beaver Drilling Ltd. 2

UWI	Surface Legal Location	MaxWell Job Number	License No.
300E7665-10126-45	E-76 65-10 126-45	JOB01@2006	EL 470

Ground Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
268.20	273.40	268.00	12/28/2013	19.73

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	12/9/2013 00:00	1/23/2014 23:59	DRILLED	Yes

Daily Cost Total (Cost)	Cumulative Cost (Cost)	Total AFE (Cost)	AFE+Supp Amt (Cost)	AFE / RFE / Maint.#	Estimated Days
211,773.53	4,359,205.66	6,820,300.00	6,820,300.00	10351817	34.19

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hr)	Cum Personnel Total Hours (hr)
2,881.00		54.0	600.00	30,121.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)
990	150	28	0

Road Condition	Weather	Temperature (°C)	Wind
Ice/Snow	Cloudy	-23	NE

Ops and Depth @ Morning Report
Drill 156mm lateral directional hole at 1947m.

Wellbore
Original Hole

Last 24hr Summary
No incidents or accidents. 8 - HID, 2 - OBS and 0 - ASA (all closed out)

Lay down landing joint, attempt to set Stream-Flo packoff seal assembly above mandrel hanger, contact Calgary to create a 'Management of Change' prior to lifting BOP, flowcheck, lift BOP, fix Strem-Flo mandrel hanger issue, set Stream-Flo packoff seal assembly and pressure test, make up BHA, pressure test spool to 20,000kPA high and 1,400kPA for 10 minutes each (pressure test from upper spool against pipe rams using Schlumberger), run in the hole, tag cement at 1893mMD, drill out cement, tag float at 1895m, drill out float and shoe.
From midnight to 6:00am= Drill 156mm hole from 1908m to 1914m, circulate bottoms up, perform FIT to a gradient of 12.5kPA/m (surface applied pressure: 4430kPA for 10 minutes), drill 156mm lateral hole with accumulated MWD surveys, rig services, connections and circulation times.

24hr Forecast
Drill 156mm lateral directional hole with accumulated MWD surveys, rig services, connections and circulation times.

Daily Contacts
Drilling Superintend, Sheldon Vamplew, 403-999-1302; Drilling Engineer, Mike Greener, 403-771-5039; WS Supervisor, Richard Turgeon, 780-387-1706; WS Supervisor, Dave Opper, 403-863-8205; Rig Manager, Rick Yavis, 780-718-2962; Command Centre, 403-910-0357

Last Casing String
Intermediate, 1,908.00mKB

e Log

Start Time	End Time	Dur (hr)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Start Depth (mKB)	End Depth (mKB)	Operation
00:00	01:45	1.75	INTRM1	WHDBOP	WWSP	T	Wellhead/Tree	1,908.00	1,908.00	Attempt to land pack off seal assembly
01:45	02:00	0.25	INTRM1	RIGMNT	SVRG	P		1,908.00	1,908.00	Rig service function test rig smart anti collision function test crown saver
02:00	05:00	3.00	INTRM1	WHDBOP	WWSP	T	Wellhead/Tree	1,908.00	1,908.00	Attempt to land pack off seal assembly
05:00	08:00	3.00	INTRM1	WHDBOP	WWSP	T	Wellhead/Tree	1,908.00	1,908.00	Attempt to land pack off seal assembly, talked to Conoco office (Calgary) about lifting BOP stack, recieved waiver to lift BOP stack ConocoPhillips Prepared a MOC # 37877
08:00	08:15	0.25	INTRM1	RIGMNT	SVRG	P		1,908.00	1,908.00	Rig service, checked brake linkage and BOP sling
08:15	08:30	0.25	INTRM1	WHDBOP	SFTY	T	Wellhead/Tree	1,908.00	1,908.00	Safety meeting on nipple down bop reviewed jsa#115 nipple down bop
08:30	09:15	0.75	INTRM1	WHDBOP	NUND	T	Wellhead/Tree	1,908.00	1,908.00	Take catch can off split stack at flange, between upper and lower casing bowl
09:15	13:00	3.75	INTRM1	WHDBOP	WWSP	T	Wellhead/Tree	1,908.00	1,908.00	Cleaned prepared top of mandral hanger, until able to get a seal, with the pack off seal assembly
13:00	15:15	2.25	INTRM1	WHDBOP	NUND	T	Wellhead/Tree	1,908.00	1,908.00	Set BOP stack back down and nippled up
15:15	15:30	0.25	INTRM1	RIGMNT	SVRG	P		1,908.00	1,908.00	Clean and prepare floor to pick up and make up BHA
15:30	16:00	0.50	INTRM1	DRILL	PULD	P		1,908.00	1,908.00	Make up BHA with a Smith 156mm MSi613 PDC bit, Pathfinder 7/8 lobe, 3.8 stage, set at 1.36 deg. (RPM of 0.135/L), 1.66m from bit to bend, mud motor
16:00	21:00	5.00	INTRM1	DRILL	TRIP	P		1,908.00	1,908.00	Make up BHA run in hole, with a Smith 156mm MSi613 PDC bit, Pathfinder 7/8 lobe, 3.8 stage, set at 1.36 deg. rotate at 0.135/L, 1.66m from bit to bend, mud motor, MWD and LWD tools 2 joints HWDP, Jars, 1 joint of HWDP, to 1285mKB
0	22:30	1.50	INTRM1	WHDBOP	BOPE	P		1,908.00	1,908.00	Pressure test, with Sclumberger, flange between upper and lower casing bowl, close pipe rams on B.O.P stack, low c 1,400kpa, for 10 minutes and a high of 20,000kpa, for 1C minutes. Held good.

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45

Rig: Beaver Drilling Ltd. 2

Report Date: 1/16/2014
Report #: 39
Depth Progress: 0.00m
Depth End: 1,908.00mKB
Rig Release Date: 1/23/2014

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Start	End Time	Dur (hr)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Start Depth (mKB)	End Depth (mKB)	Operation
22:30	23:30	1.00	INTRM1	DRILL	TRIP	P		1,908.00	1,908.00	Trip in the hole with a Smith 156mm MSi613 PDC bit, Pathfinder 7/8 lobe, 3.8 stage, set at 1.36 deg. rotate at 0.135/L, 1.66m from bit to bend, mud motor, MWD and LWD tools 2 joints HWDP, Jars, 1 joint of HWDP, 126 joints of 4" drill pipe, 37 joints of HWDP, from 1285m to 1893m
23:30	00:00	0.50	INTRM1	CEMENT	DRLG	P		1,908.00	1,908.00	Tag cement @ 1893mKB drill out Tag float collar @ 1895mKB drill out

Fluid/Mud Chks: Mud Engineer: <Mud Engineer?>

Time	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (Pa•s)	YP Override (Pa)
23:15	1,906.00	1,080.0	75			

Low Gravity Solids (%)	MBT (kg/m³)	Oil Water Ratio	Chlorides (mg/L)	Calcium (mg/L)	Lime (kg/m³)	Potassium (mg/L)

Electric Stab (V)	ECD - Manual Entry (k...	Sand (%)	Solids, Corr. (%)	T Flowline (°C)	HTHP Pressure (kPa)	HTHP Filtrate (mL/30...

API Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Field Est (Cost)

Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost (Cost)
44.00	6.00	93,328.19

Last BOP Drill

Type	Days Last Chk (...	Last Date	Days Until Next...	Next Check Date
BOP Drill	3	1/13/2014	2	1/18/2014

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
827.00	827.00

Safety Incidents

Date	Com	Category

Drill String: BHA # <BHA No.?>

...n	Drill Bit	Length (m)	IADC Bit Dull	TFA (incl Noz) (mm²)	BHA ROP (m/hr)

... (mm)	String Length (m)	OD (mm)	Max Rotating Hook Load (daN)

Depth In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hr)	Total Drill Hrs (hr)

Comment

Drill String Components

Item Des	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)

Drilling Parameter: <depthstart> - <depthend> mKB

Cum Depth (m)	Cum Drill...	Int ROP (...	Flow Rate...	WOB (daN)	RPM (r...	SPP (kPa)	Drill Str Wt (d...	SO Str Wt (daN)	PU Str Wt (daN)	Off-Btm Str W...	Drill Tq

Hydraulic Calculations

Bit Hydraulic Powe...	HP/Area (kW/mm²)	% P @ bit (%)	Bit Jet Velocity (m/s)	Bit dP (kPa)	P Drop Annular (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Vol Shoe to Top (m³)	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m/...

Error

Mud Pump: 1, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
1	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/20/2014 00:00	2,909.00	0.499	5,150	64
1/20/2014 00:00	2,909.00	1.014	17,500	130

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
1/21/2014	1/21/2014	127.0		
...2014	1/22/2014	127.0		

...mp: 2, NATIONAL, 8-P-80

...mber	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (s
1/19/2014 00:00	2,513.00	0.647	6,855	
1/19/2014 00:00	2,513.00	0.897	15,000	115

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
1/19/2014	1/19/2014	127.0	15,000	
1/21/2014		127.0		

Shaker Screens

Des	Start Date	End Date	Scr Sz X	Scr Sz Y	Note

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
1	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
1/19/2014 07:00	2.00	1800	1,000.0	0.400	2,100.0	0.200

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
2	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
1/19/2014 13:00	3.00	2000	990.0	0.400	1,700.0	0.200

Fluid / Mud Additive Amounts

Des	Consumed	Cost	Size	Units

Survey Data

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	Depart (m)	NS (m)	EW (m)	VS (m)	DLS (°/30m)

Formations

Formation Name	Drill Top MD (mKB)	Drill Top (TVD) (mKB)	Prog Top TVD (mKB
Little Bear	31.00	31.00	
Slater River	76.00	76.00	
Arctic Red	800.50	800.46	76.40
Martin House	938.50	938.44	76.40
Imperial	975.50	975.43	76.40
Upper Canol	1,665.00	1,658.53	1,653.40
Lower Canol	1,700.72	1,689.07	1,694.40

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45

Report Date: 1/17/2014
Report #: 40
Depth Progress: 216.00m
Depth End: 2,124.00mKB
Rig Release Date: 1/23/2014

Rig: Beaver Drilling Ltd. 2

UWI	Surface Legal Location	MaxWell Job Number	License No.
7665-10126-45	E-76 65-10 126-45	JOB01@2006	EL 470

Ground Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
268.20	273.40	268.00	12/28/2013	20.73

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	12/9/2013 00:00	1/23/2014 23:59	DRILLED	Yes

Daily Cost Total (Cost)	Cumulative Cost (Cost)	Total AFE (Cost)	AFE+Supp Amt (Cost)	AFE / RFE / Maint.#	Estimated Days
192,768.58	4,551,974.24	6,820,300.00	6,820,300.00	10351817	34.19

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hr)	Cum Personnel Total Hours (hr)
2,881.00		54.0	600.00	30,721.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)
890	135		0

Road Condition	Weather	Temperature (°C)	Wind
Ice/Snow	Cloudy	-22	SW

Ops and Depth @ Morning Report
Drill 156mm lateral directional hole at 2200m.

Wellbore
Original Hole

Last 24hr Summary
No incidents or accidents. 7 - HID, 2 - OBS and 0 - ASA (all closed out)

Drill 156mm hole from 1908m to 1914m, circulate bottoms up, perform FIT to a gradient of 12.5kPA/m (surface applied pressure: 4430kPA for 10 minutes), drill 156mm lateral hole from 1914m to 2124m with accumulated MWD surveys, rig services, connections and circulation times. WOB: 6-10,000kDaN, RPM - 35-80 (Motor RPM - 152), Differential pressure: 2200-3000kPa, Pump rate: 1.1 m3/min. Torque: 7-10,000ft/lbs, Rotate: 162.75m - 75% / Slide: 53.25m - 25%, ROP: 16m/hr. Last survey at 2171mMD, inclination= 85.99°, azimuth= 297.06°, TVD - 1784.25m. We are 0.41m below and 3.9m right of the line.

24hr Forecast
Drill 156mm lateral hole with accumulated MWD surveys, rig services, connections and circulation times.

Daily Contacts
Drilling Superintend, Sheldon Vamplew, 403-999-1302; Drilling Engineer, Mike Greener, 403-771-5039; WS Supervisor, Richard Turgeon, 780-387-1706; WS Supervisor, Dave Opper, 403-863-8205; Rig Manager, Rick Yavis, 780-718-2962; Command Centre, 403-910-0357

Last Casing String
Intermediate, 1,908.00mKB

Time Log

Start	End Time	Dur (hr)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Start Depth (mKB)	End Depth (mKB)	Operation
[redacted]	00:30	0.50	INTRM1	CEMENT	DRLG	P		1,908.00	1,908.00	Drill out float collar Tagged @ 1895mKB Drill out shoe @ 1907mKB
00:30	00:45	0.25	PROD1	RIGMNT	SVRG	P		1,908.00	1,908.00	Rig service function test rig smart anti collision system function test crown saver function test pipe rams 8 sec C/O grease all moving parts check fluid levels in floor motor.
00:45	01:00	0.25	PROD1	DRILL	SFTY	P		1,908.00	1,908.00	B.O.P drill well secure in 80 sec crew in position check manifold
01:00	01:30	0.50	PROD1	DRILL	DRLG	P		1,908.00	1,914.00	Drill 156mm hole with Smith 156mm MSi613 PDC bit, Weatherford 7/8 lobe, 3.8 stage (rpm at 0.135/L) 1.66m from bit to bend, mud motor, from 1907mKB to 1914mKB
01:30	02:15	0.75	PROD1	DRILL	CIRC	P		1,914.00	1,914.00	Circulate bottoms up prepair to do a fit test
02:15	02:30	0.25	PROD1	DRILL	FIT	P		1,914.00	1,914.00	formation integrity test 4400kpa for 10 min
02:30	07:15	4.75	PROD1	DRILL	DRLG	P		1,914.00	1,972.00	Drill 156mm hole, with Smith 156mm MSi613 PDC bit, Weatherford 7/8 lobe, 3.8 stage (rpm at 0.135/L) 1.66m from bit to bend, mud motor, from 1914mKB to 1972mKB
07:15	07:45	0.50	PROD1	DRILL	SRVY	P		1,972.00	1,972.00	Accumulated directional surveys
07:45	08:00	0.25	PROD1	DRILL	SFTY	P		1,972.00	1,972.00	Safety meeting with both rig crews,tool push and conoco reps. present
08:00	09:00	1.00	PROD1	DRILL	DRLG	P		1,972.00	1,982.00	Drill 156mm hole, with Smith 156mm MSi613 PDC bit, Weatherford 7/8 lobe, 3.8 stage (rpm at 0.135/L) 1.66m from bit to bend, mud motor, from 1972m to 1982m
09:00	09:15	0.25	PROD1	RIGMNT	SVRG	P		1,982.00	1,982.00	Rig service function test rig smart anti collision system function test crown saver function test hydrill 13 sec C/O grease all moving parts check fluid levels in floor motor,change oil in HPU
09:15	14:15	5.00	PROD1	DRILL	DRLG	P		1,982.00	2,067.00	Drill 156m hole, with Smith 156mm MSi613 PDC bit, Weatherford 7/8 lobe, 3.8 stage (rpm at 0.135/L) 1.66m from bit to bend, mud motor, from 1982m to 2067m
[redacted]:15	16:00	1.75	PROD1	DRILL	SRVY	P		2,067.00	2,067.00	Accumulated directional surveys
[redacted]	17:00	1.00	PROD1	DRILL	DRLG	P		2,067.00	2,077.00	Drill 156mm hole, with Smith 156mm MSi613 PDC bit, Weatherford 7/8 lobe, 3.8 stage (rpm at 0.135/L) 1.66m from bit to bend, mud motor, from 2067m to 2077m

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45
Rig: Beaver Drilling Ltd. 2

Report Date: 1/17/2014
Report #: 40
Depth Progress: 216.00m
Depth End: 2,124.00mKB
Rig Release Date: 1/23/2014

.e Log

Start Time	End Time	Dur (hr)	Phase	Op Code	Activity Code	Tim e P-T-X	Trbl Code	Start Depth (mKB)	End Depth (mKB)	Operation
17:00	17:15	0.25	PROD1	RIGMNT	SVRG	P		2,077.00	2,077.00	Rig service function test rig smart anti collision system function test crown saver function test pipe rams 6 sec C/O grease all moving parts check fluid levels in floor motor,change oil in floor motor
17:15	21:45	4.50	PROD1	DRILL	DRLG	P		2,077.00	2,115.00	Drill 156mm hole, with Smith 156mm MSi613 PDC bit, Weatherford 7/8 lobe, 3.8 stage (rpm at 0.135/L) 1.66m from bit to bend, mud motor, from 2077m to2115m
21:45	22:30	0.75	PROD1	RIGMNT	RGRP	T	Non-rig Surface Eqp	2,115.00	2,115.00	Work on NOV reprogram system
22:30	23:15	0.75	PROD1	DRILL	DRLG	P		2,115.00	2,124.00	Drill 156 mm hole, with Smith 156mm MSi613 PDC bit, Weatherford 7/8 lobe, 3.8 stage (rpm at 0.135/L) 1.66m from bit to bend, mud motor, from 2115m to 2124m
23:15	23:30	0.25	PROD1	DRILL	OTHR	P		2,124.00	2,124.00	Re log gamma from 2115m to 2124
23:30	00:00	0.50	PROD1	DRILL	SRVY	P		2,124.00	2,124.00	Accumulated directional surveys

Fluid/Mud Chks: Mud Engineer: Corey Clark

Time	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (Pa•s)	YP Override (Pa)
13:30	2,045.00	1,045.0	67		18.0	5.0
Low Gravity Solids (%)	**MBT (kg/m³)**	**Oil Water Ratio**	**Chlorides (mg/L)**	**Calcium (mg/L)**	**Lime (kg/m³)**	**Potassium (mg/L)**
5.5		82/18	211,825	38	17	
Electric Stab (V)	**ECD - Manual Entry (k...**	**Sand (%)**	**Solids, Corr. (%)**	**T Flowline (°C)**	**HTHP Pressure (kPa)**	**HTHP Filtrate (mL/30...**
680.0	1,227.0	8.5	8.5	43		4.0

API Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Field Est (Cost)
	4.00	1.00	5,316.65

Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost (Cost)
48.00	7.00	98,644.84

Last BOP Drill

	Days Last Chk (...	Last Date	Days Until Next...	Next Check Date
›P Drill	0	1/17/2014	5	1/22/2014

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
828.00	828.00

Safety Incidents

Date	Com	Category

Drill String: BHA # 5

Bit Run	Drill Bit	Length (m)	IADC Bit Dull	TFA (incl Noz) (mm²)	BHA ROP (m/hr)
4	156.0mm, 613, jh8402	0.19	-------	760	17.9

Nozzles (mm)	String Length (m)	OD (mm)	Max Rotating Hook Load (daN)
12.7/12.7/12.7/12.7/12.7/12.7	2,910.00	132.0	69,000

Depth In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hr)	Total Drill Hrs (hr)
1,908.00	2,910.00	17.9	1,002.00	2,910.00	56.00	56.00

Comment
Smith 156mm MSi613 PDC bit, Pathfinder 7/8 lobe, 3.8 stage, set at 1.36 deg. rotate at 0.135/L, (1.66m from bit to bend), mud motor, MWD and LWD tools 2 JOINTS HWDP, Jars, 1 joint of HWDP.

Drill String Components

Item Des	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)
Drill pipe - Stands	70.0	101.6	68	1,283.77	2,910.00
4 " D.P	70.0	101.0	1	5.15	1,626.23
4" HW	70.0	132.0	36	335.20	1,621.08
4 " D.P	70.0	101.0	126	1,199.76	1,285.88
4" H.W	65.0	101.0	1	9.53	86.12
Jars	59.0	131.0	1	5.07	76.59
4" HW	70.0	132.0	3	27.54	71.52
X/O SUB	58.0	128.0	1	0.82	43.98
Slick monel	67.0	119.0	1	9.50	43.16
x/o	56.0	120.0	1	0.45	33.66
4.75 LWD ABS	70.0	129.0	1	4.79	33.21
LWD SAWR	70.0	128.0	1	6.15	28.42
4.75 gap sub	63.0	119.0	1	0.58	[illegible]
Slick monel	67.0	119.0	1	9.47	[illegible]
NM Pony Monel	57.0	119.0	1	3.10	12.22
MUD MOTOR	34.0	123.0	1	8.93	9.12

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45
Rig: Beaver Drilling Ltd. 2

Report Date: 1/17/2014
Report #: 40
Depth Progress: 216.00m
Depth End: 2,124.00mKB
Rig Release Date: 1/23/2014

Parameter: 2,067.00 - 2,124.00 mKB

pth (m)	Cum Drill...	Int ROP (...	Flow Rate...	WOB (daN)	RPM (r...	SPP (kPa)	Drill Str Wt (d...	SO Str Wt (daN)	PU Str Wt (daN)	Off-Btm Str W...	Drill Tq
216.00	17.50	9.1	1.100	12,000	80	17,000	59,000	55,000	62,000	59,000	9,800.0

Hydraulic Calculations

Bit Hydraulic Powe...	HP/Area (kW/mm²)	% P @ bit (%)	Bit Jet Velocity (m/s)	Bit dP (kPa)	P Drop Annular (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)
6.3	0.00033	2	24.1	341.1	1,620.1	1,045.0	1,137.7

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Vol Shoe to Top (m³)	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m/...
8.13	2.05	20.95	34.1	175.4	99.1	202.6

Error

Mud Pump: 1, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
1	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/20/2014 00:00	2,909.00	0.499	5,150	64
1/20/2014 00:00	2,909.00	1.014	17,500	130

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
1/21/2014	1/21/2014	127.0		
1/22/2014	1/22/2014	127.0		

Mud Pump: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/19/2014 00:00	2,513.00	0.647	6,855	83
1/19/2014 00:00	2,513.00	0.897	15,000	115

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
/2014	1/19/2014	127.0	15,000	
)14		127.0		

r Screens

Des	Start Date	End Date	Scr Sz X	Scr Sz Y	Note

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
1	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
1/19/2014 07:00	2.00	1800	1,000.0	0.400	2,100.0	0.200

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
2	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
1/19/2014 13:00	3.00	2000	990.0	0.400	1,700.0	0.200

Fluid / Mud Additive Amounts

Des	Consumed	Cost	Size	Units
INVERT	5.0	1,063.330	1.0	M3

Survey Data

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	Depart (m)	NS (m)	EW (m)	VS (m)	DLS (°/30m)
1/17/2014	1,914.50	91.52	303.85	1,777.81	228.54	121.74	-193.42	228.20	6.19
1/17/2014	1,924.00	91.60	302.88	1,777.55	238.04	126.96	-201.35	237.67	3.07
1/17/2014	1,933.50	91.70	302.60	1,777.28	247.53	132.10	-209.34	247.14	0.94
1/17/2014	1,943.00	91.60	303.40	1,777.01	257.03	137.27	-217.30	256.61	2.54
1/17/2014	1,952.50	90.90	301.80	1,776.80	266.53	142.39	-225.30	266.09	5.51
1/17/2014	1,962.00	91.00	303.30	1,776.64	276.02	147.50	-233.31	275.57	4.75
1/17/2014	1,971.50	90.50	301.40	1,776.52	285.52	152.58	-241.34	285.06	6.20
'7/2014	1,981.00	90.70	300.90	1,776.42	295.02	157.49	-249.47	294.55	1.70
)14	1,990.50	90.50	301.30	1,776.32	304.52	162.40	-257.60	304.04	1.41
)14	2,000.00	89.70	300.30	1,776.30	314.02	167.27	-265.76	313.54	4.04
1/1 //2014	2,009.50	89.30	299.40	1,776.38	323.51	171.99	-274.00	323.04	3.11
1/17/2014	2,019.00	88.30	300.00	1,776.58	333.00	176.70	-282.25	332.53	3.68
1/17/2014	2,028.50	88.60	299.40	1,776.84	342.49	181.40	-290.50	342.03	2.12

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45
Rig: Beaver Drilling Ltd. 2

Report Date: 1/17/2014
Report #: 40
Depth Progress: 216.00m
Depth End: 2,124.00mKB
Rig Release Date: 1/23/2014

vey Data

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	Depart (m)	NS (m)	EW (m)	VS (m)	DLS (°
1/17/2014	2,038.00	88.50	298.50	1,777.08	351.97	186.00	-298.81	351.53	
1/17/2014	2,048.00	88.30	297.90	1,777.36	361.95	190.73	-307.62	361.52	1.90
1/17/2014	2,057.00	88.30	297.90	1,777.63	370.92	194.93	-315.57	370.52	0.00
1/17/2014	2,066.50	86.70	297.50	1,778.04	380.39	199.35	-323.97	380.00	5.21
1/17/2014	2,076.50	86.50	296.80	1,778.63	390.34	203.90	-332.85	389.98	2.18
1/17/2014	2,085.50	86.30	297.37	1,779.20	399.30	207.99	-340.85	398.96	2.01
1/17/2014	2,095.00	85.82	296.66	1,779.85	408.75	212.30	-349.29	408.43	2.70
1/17/2014	2,104.50	85.68	297.15	1,780.56	418.20	216.58	-357.74	417.90	1.61

Formations

Formation Name	Drill Top MD (mKB)	Drill Top (TVD) (mKB)	Prog Top TVD (mKB)
Little Bear	31.00	31.00	31.00
Slater River	76.00	76.00	76.00
Arctic Red	800.50	800.46	76.40
Martin House	938.50	938.44	76.40
Imperial	975.50	975.43	76.40
Upper Canol	1,665.00	1,658.53	1,653.40
Lower Canol	1,700.72	1,689.07	1,694.40

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45

Report Date: 1/18/2014
Report #: 41
Depth Progress: 371.00m
Depth End: 2,495.00mKB
Rig Release Date: 1/23/2014

Rig: Beaver Drilling Ltd. 2

UWI	Surface Legal Location	MaxWell Job Number	License No.
[redacted]665-10126-45	E-76 65-10 126-45	JOB01@2006	EL 470

Ground Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
268.20	273.40	268.00	12/28/2013	21.73

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	12/9/2013 00:00	1/23/2014 23:59	DRILLED	Yes

Daily Cost Total (Cost)	Cumulative Cost (Cost)	Total AFE (Cost)	AFE+Supp Amt (Cost)	AFE / RFE / Maint.#	Estimated Days
166,517.34	4,718,491.58	6,820,300.00	6,820,300.00	10351817	34.19

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hr)	Cum Personnel Total Hours (hr)
2,881.00		54.0	600.00	31,321.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)
2,700	1,200		0

Road Condition	Weather	Temperature (°C)	Wind
Ice/Snow	Cloudy	-21	S 15 kms

Ops and Depth @ Morning Report
Drill 156mm lateral directional hole at 2572m.

Wellbore
Original Hole

Last 24hr Summary
No incidents or accidents. 8 - HID, 2 - OBS and 0 - ASA (all closed out)

Drill 156mm lateral hole from 2124m to 2495m with accumulated MWD surveys, rig services, connections and circulation times. WOB: 6-10,000kDaN, RPM - 35-80 (Motor RPM - 152), Differential pressure: 2000-3000kPa, Pump rate: 1.1 m3/min. Torque: 7-10,000ft/lbs, Rotate: 341m - 92% / Slide: 29.5m - 8%, ROP: 19.9m/hr. Last survey at 2551mMD, inclination= 87.98°, azimuth= 297.85°, TVD - 1794.22m. We are 0.39m below and 12.12m right of the line.

24hr Forecast
Drill 156mm lateral hole with accumulated MWD surveys, rig services, connections and circulation times.

Daily Contacts
Drilling Superintend, Sheldon Vamplew, 403-999-1302; Drilling Engineer, Mike Greener, 403-771-5039; WS Supervisor, Richard Turgeon, 780-387-1706; WS Supervisor, Dave Opper, 403-863-8205; Rig Manager, Rick Yavis, 780-718-2962; Command Centre, 403-910-0357

Last Casing String
Intermediate, 1,908.00mKB

Time Log

Start Time	End Time	Dur (hr)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Start Depth (mKB)	End Depth (mKB)	Operation
[redacted]00	00:15	0.25	PROD1	DRILL	OTHR	P		2,124.00	2,124.00	Re log gamma from 2119m to 2124m
[redacted]	01:00	0.75	PROD1	DRILL	DRLG	P		2,124.00	2,134.00	Drill 156mm hole,with Smith 156mm MSi613 PDC bit, Weatherford 7/8 lobe, 3.8 stage (rpm at 0.135/L) 1.66m from bit to bend, mud motor, from 2124m to 2134
01:00	01:30	0.50	PROD1	RIGMNT	SVRG	P		2,134.00	2,134.00	Rig service function test rig smart anti collision system function test crown saver function test H.C.R 3 seconds O/C grease all moving parts check fluid levels in floor motor, Function test flair stack ignitor set up breaks on draw works
01:30	06:15	4.75	PROD1	DRILL	DRLG	P		2,134.00	2,229.00	Drill 156mm hole, with Smith 156mm MSi613 PDC bit, Weatherford 7/8 lobe, 3.8 stage (rpm at 0.135/L) 1.66m from bit to bend, mud motor, from 2134m to 2229m
06:15	07:45	1.50	PROD1	DRILL	SRVY	P		2,229.00	2,229.00	Accumulated directional survey time
07:45	08:00	0.25	PROD1	DRILL	SFTY	P		2,229.00	2,229.00	Crew hand over meeting Rig manager and Conoco reps. present
08:00	10:30	2.50	PROD1	DRILL	DRLG	P		2,229.00	2,267.00	Drill 156m hole, with Smith 156mm MSi613 PDC bit, Weatherford 7/8 lobe, 3.8 stage (rpm at 0.135/L) 1.66m from bit to bend, mud motor, from 2229m to 2267m
10:30	10:45	0.25	PROD1	RIGMNT	SVRG	P		2,267.00	2,267.00	Rig service function test rig smart anti collision system function test crown saver function test pipe rams 6 seconds O/C grease all moving parts check fluid levels in floor motor, Function test flair stack ignitor
10:45	14:15	3.50	PROD1	DRILL	DRLG	P		2,267.00	2,362.00	Drill 156mm hole, with Smith 156mm MSi613 PDC bit, Weatherford 7/8 lobe, 3.8 stage (rpm at 0.135/L) 1.66m from bit to bend, mud motor, from 2267m to 2362m
14:15	16:00	1.75	PROD1	DRILL	SRVY	P		2,362.00	2,362.00	Accumilated directional surveys
16:00	17:00	1.00	PROD1	DRILL	DRLG	P		2,362.00	2,381.00	Drill 156mm hole, with Smith 156mm MSi613 PDC bit, Weatherford 7/8 lobe, 3.8 stage (rpm at 0.135/L) 1.66m from bit to bend, mud motor, from 2362m to 2381m
17:00	17:15	0.25	PROD1	RIGMNT	SVRG	P		2,381.00	2,381.00	Rig service function test rig smart anti collision system function test crown saver function test hydrill 13 seconds O/C grease all moving parts check fluid levels in floor motor, Function test flair stack ignitor
17:15	23:00	5.75	PROD1	DRILL	DRLG	P		2,381.00	2,495.00	Drill 156mm hole, with Smith 156mm MSi613 PDC bit, Weatherford 7/8 lobe, 3.8 stage (rpm at 0.135/L) 1.66m from bit to bend, mud motor, from 2381m to 2495m

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45

Report Date: 1/18/2014
Report #: 41
Depth Progress: 371.00m
Depth End: 2,495.00mKB
Rig Release Date: 1/23/2014

Rig: Beaver Drilling Ltd. 2

.e Log

Start Time	End Time	Dur (hr)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Start Depth (mKB)	End Depth (mKB)	Operation
23:00	00:00	1.00	PROD1	DRILL	SRVY	P		2,495.00	2,495.00	Accumulated directional surveys

Fluid/Mud Chks: Mud Engineer: Corey Clark

Time	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (Pa•s)	YP Override (Pa)
11:00	2,285.00	1,040.0	74		18.0	4.5

Low Gravity Solids (%)	MBT (kg/m³)	Oil Water Ratio	Chlorides (mg/L)	Calcium (mg/L)	Lime (kg/m³)	Potassium (mg/L)
6.9		83/17	254,082	38	17	

Electric Stab (V)	ECD - Manual Entry (k...	Sand (%)	Solids, Corr. (%)	T Flowline (°C)	HTHP Pressure (kPa)	HTHP Filtrate (mL/30...
640.0	1,206.0	3.0	9.2	43		4.0

API Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Field Est (Cost)
	6.00	1.00	10,871.31

Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost (Cost)
54.00	8.00	109,516.15

Last BOP Drill

Type	Days Last Chk (...	Last Date	Days Until Next...	Next Check Date
BOP Drill	1	1/17/2014	4	1/22/2014

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
829.00	829.00

Safety Incidents

Date	Com	Category

Drill String: BHA # 5

Bit Run	Drill Bit	Length (m)	IADC Bit Dull	TFA (incl Noz) (mm²)	BHA ROP (m/hr)
4	156.0mm, 613, jh8402	0.19	------	760	17.9

Nozzles (mm)	String Length (m)	OD (mm)	Max Rotating Hook Load (daN)
12.7/12.7/12.7/12.7/12.7/12.7	2,910.00	132.0	69,000

Depth In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hr)	Total Drill Hrs (hr)
1,908.00	2,910.00	17.9	1,002.00	2,910.00	56.00	56.00

Comment

th 156mm MSi613 PDC bit, Pathfinder 7/8 lobe, 3.8 stage, set at 1.36 deg. rotate at 0.135/L, (1.66m from bit to bend), mud motor, MWD and LWD tools 2 JOINTS HWDP, Jars, 1 joint of HWDP.

Drill String Components

Item Des	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)
Drill pipe - Stands	70.0	101.6	68	1,283.77	2,910.00
4" D.P	70.0	101.0	1	5.15	1,626.23
4" HW	70.0	132.0	36	335.20	1,621.08
4" D.P	70.0	101.0	126	1,199.76	1,285.88
4" H.W	65.0	101.0	1	9.53	86.12
Jars	59.0	131.0	1	5.07	76.59
4" HW	70.0	132.0	3	27.54	71.52
X/O SUB	58.0	128.0	1	0.82	43.98
Slick monel	67.0	119.0	1	9.50	43.16
X/o	56.0	120.0	1	0.45	33.66
4.75 LWD ABS	70.0	129.0	1	4.79	33.21
4.75 LWD SAWR	70.0	128.0	1	6.15	28.42
4.75 gap sub	63.0	119.0	1	0.58	22.27
Slick monel	67.0	119.0	1	9.47	21.69
NM Pony Monel	57.0	119.0	1	3.10	12.22
MUD MOTOR	34.0	123.0	1	8.93	9.12

Drilling Parameter: 2,362.00 - 2,495.00 mKB

Cum Depth (m)	Cum Drill...	Int ROP (...	Flow Rate...	WOB (daN)	RPM (r...	SPP (kPa)	Drill Str Wt (d...	SO Str Wt (daN)	PU Str Wt (daN)	Off-Btm Str W...	Drill Tq
587.00	35.75	19.7	0.900	10,000	80	14,800	69,000	64,000	73,000	69,000	10,900.0

Hydraulic Calculations

Bit Hydraulic Powe...	HP/Area (kW/mm²)	% P @ bit (%)	Bit Jet Velocity (m/s)	Bit dP (kPa)	P Drop Annular (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)
3.4	0.00018	2	19.7	227.3	1,572.2	1,040.0	1,129.4

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Vol Shoe to Top (m³)	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m/...
9.56	6.17	20.92	27.9	143.5	81.1	165.8

Mud Pump: 1, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
1	NATIONAL	8-P-80	140.0	216.0

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45
Rig: Beaver Drilling Ltd. 2

Report Date: 1/18/2014
Report #: 41
Depth Progress: 371.00m
Depth End: 2,495.00mKB
Rig Release Date: 1/23/2014

Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
./2014 00:00	2,909.00	0.499	5,150	64
1/20/2014 00:00	2,909.00	1.014	17,500	130

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
1/21/2014	1/21/2014	127.0		
1/22/2014	1/22/2014	127.0		

Mud Pump: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/19/2014 00:00	2,513.00	0.647	6,855	83
1/19/2014 00:00	2,513.00	0.897	15,000	115

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
1/19/2014	1/19/2014	127.0	15,000	
1/21/2014		127.0		

Shaker Screens

Des	Start Date	End Date	Scr Sz X	Scr Sz Y	Note

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
1	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
1/19/2014 07:00	2.00	1800	1,000.0	0.400	2,100.0	0.200

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

ber	Make	Model	Diameter (mm)
2	BOS Solutions	5500	

fuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
1/19/2014 13:00	3.00	2000	990.0	0.400	1,700.0	0.200

Fluid / Mud Additive Amounts

Des	Consumed	Cost	Size	Units
CALCIUM CHLORIDE	31.0	43.920	40.0	SX
INVERT	7.0	1,063.330	1.0	M3
Truvis	2.0	149.670	25.0	SX
Versacoat HF	2.0	883.570	55.0	BBL

Survey Data

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	Depart (m)	NS (m)	EW (m)	VS (m)	DLS (°/30m)
1/18/2014	2,113.50	85.59	296.97	1,781.24	427.15	220.67	-365.73	426.87	0.67
1/18/2014	2,123.00	85.59	296.66	1,781.97	436.59	224.94	-374.19	436.33	0.98
1/18/2014	2,132.50	85.68	295.25	1,782.69	446.03	229.08	-382.70	445.79	4.45
1/18/2014	2,142.00	85.90	259.20	1,783.42	454.58	230.26	-391.95	454.44	113.53
1/18/2014	2,151.00	85.82	295.16	1,784.09	462.70	231.36	-400.71	462.63	119.54
1/18/2014	2,171.00	85.90	297.06	1,785.53	482.60	240.14	-418.62	482.55	2.85
1/18/2014	2,181.50	85.90	296.57	1,786.28	493.06	244.86	-427.96	493.02	1.40
1/18/2014	2,191.00	86.10	297.40	1,786.94	502.53	249.16	-436.41	502.49	2.69
1/18/2014	2,199.50	86.40	296.40	1,787.50	511.00	253.00	-443.97	510.97	3.68
1/18/2014	2,209.00	86.70	297.40	1,788.07	520.47	257.29	-452.43	520.44	3.29
1/18/2014	2,247.00	87.90	295.90	1,789.86	558.38	274.31	-486.35	558.37	1.52
1/18/2014	2,266.00	88.20	296.40	1,790.51	577.34	282.68	-503.40	577.33	0.92
1/18/2014	2,275.50	88.70	296.60	1,790.77	586.82	286.92	-511.90	586.82	1.70
1/18/2014	2,313.50	89.50	297.10	1,791.36	624.79	304.08	-545.80	624.79	0.74
1/18/2014	2,342.00	89.40	298.40	1,791.64	653.28	317.35	-571.02	653.28	1.37
9/2014	2,361.00	89.70	298.40	1,791.79	672.28	326.39	-587.73	672.28	0.47
014	2,380.00	89.80	298.20	1,791.87	691.27	335.39	-604.46	691.27	0.35
014	2,399.00	89.40	298.60	1,792.00	710.27	344.43	-621.17	710.27	0.89
1/18/2014	2,418.00	89.60	298.80	1,792.17	729.27	353.55	-637.84	729.27	0.45
1/18/2014	2,437.00	88.20	297.28	1,792.53	748.26	362.48	-654.60	748.26	3.26

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45

Rig: Beaver Drilling Ltd. 2

Report Date: 1/18/2014
Report #: 41
Depth Progress: 371.00m
Depth End: 2,495.00mKB
Rig Release Date: 1/23/2014

Survey Data

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	Depart (m)	NS (m)	EW (m)	VS (m)	DLS (°
1/18/2014	2,455.50	88.60	296.84	1,793.05	766.75	370.90	-671.07	766.75	[illegible]
1/18/2014	2,475.00	88.60	298.95	1,793.52	786.24	380.02	-688.30	786.23	3.25

Formations

Formation Name	Drill Top MD (mKB)	Drill Top (TVD) (mKB)	Prog Top TVD (mKB)
Little Bear	31.00	31.00	31.00
Slater River	76.00	76.00	76.00
Arctic Red	800.50	800.46	76.40
Martin House	938.50	938.44	76.40
Imperial	975.50	975.43	76.40
Upper Canol	1,665.00	1,658.53	1,653.40
Lower Canol	1,700.72	1,689.07	1,694.40

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45

Report Date: 1/19/2014
Report #: 42
Depth Progress: 400.00m
Depth End: 2,895.00mKB
Rig Release Date: 1/23/2014

Rig: Beaver Drilling Ltd. 2

UWI	Surface Legal Location	MaxWell Job Number	License No.
[redacted]7665-10126-45	E-76 65-10 126-45	JOB01@2006	EL 470

Ground Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
268.20	273.40	268.00	12/28/2013	22.73

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	12/9/2013 00:00	1/23/2014 23:59	DRILLED	Yes

Daily Cost Total (Cost)	Cumulative Cost (Cost)	Total AFE (Cost)	AFE+Supp Amt (Cost)	AFE / RFE / Maint.#	Estimated Days
122,537.96	4,841,029.54	6,820,300.00	6,820,300.00	10351817	34.19

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hr)	Cum Personnel Total Hours (hr)
2,881.00		54.0	600.00	31,921.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)
3,300	780		0

Road Condition	Weather	Temperature (°C)	Wind
Ice/Snow	Snowing	-24	S 15 kms

Ops and Depth @ Morning Report
Wash back to bottom from 1908m (wiper trip).

Wellbore
Original Hole

Last 24hr Summary
No incidents or accidents. 9 - HID, 1 - OBS and 0 - ASA (all closed out)

Drill 156mm lateral hole from 2495m to 2895m, with accumulated MWD surveys, rig services, connections and circulation times. WOB: 6-14,000kDaN, RPM - 35-80 (Motor RPM - 152), Differential pressure: 2000-3000kPa, Pump rate: 0.9-1.0 m3/min. Torque: 7-10,000ft/lbs, Rotate: 368.0m - 92.0% / Slide: 32.0m - 8.0%, ROP: 20.5m/hr. Last survey at 2890mMD, inclination= 87.8°, azimuth= 301.07°, TVD - 1803.24m. Projected survey at bit: 2910mMD (TD), inclination= 87.8°, azimuth= 301.07°, TVD - 1804.01m. We are 0.78m below and 14.92m left of the line.

24hr Forecast
Wash back to bottom at 2910mMD (TD), Circulate 3+ bottoms up and clean hole, pull out of the hole, laydown directional tools, rig up Schlumberger loggers, run USIT log, rig out loggers, rig up power tongs and laydown truck, run 114.3mm production liner.

Daily Contacts
Drilling Superintend, Sheldon Vamplew, 403-999-1302; Drilling Engineer, Mike Greener, 403-771-5039; WS Supervisor, Richard Turgeon, 780-387-1706; WS Supervisor, Dave Opper, 403-863-8205; Rig Manager, Rick Yavis, 780-718-2962; Command Centre, 403-910-0357

Last Casing String
Intermediate, 1,908.00mKB

Time Log

[redacted]rt	End Time	Dur (hr)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Start Depth (mKB)	End Depth (mKB)	Operation
[redacted]	01:00	1.00	PROD1	DRILL	DRLG	P		2,495.00	2,514.00	Drill 156mm hole, with Smith 156mm MSi613 PDC bit, Weatherford 7/8 lobe, 3.8 stage (rpm at 0.135/L) 1.66m from bit to bend, mud motor, from 2495m to 2514m
01:00	01:15	0.25	PROD1	RIGMNT	SVRG	P		2,514.00	2,514.00	Rig service function test rig smart anti collision system function test crown saver function test H.C.R 3sec open/close, grease all moving parts check fluid levels in floor motor
01:15	06:45	5.50	PROD1	DRILL	DRLG	P		2,514.00	2,600.00	Drill 156mm hole, with Smith 156mm MSi613 PDC bit, Weatherford 7/8 lobe, 3.8 stage (rpm at 0.135/L) 1.66m from bit to bend, mud motor, from 2514m to2600 m
06:45	07:45	1.00	PROD1	DRILL	SRVY	P		2,600.00	2,600.00	Accumulated directional surveys
07:45	08:00	0.25	PROD1	DRILL	SFTY	P		2,600.00	2,600.00	Crew handover meeting with both crews, tool push, conoco reps present.
08:00	09:30	1.50	PROD1	DRILL	DRLG	P		2,600.00	2,628.00	Drill 156mm hole, with Smith 156mm MSi613 PDC bit, Weatherford 7/8 lobe, 3.8 stage (rpm at 0.135/L) 1.66m from bit to bend, mud motor, from 2600m to 2628m
09:30	09:45	0.25	PROD1	RIGMNT	SVRG	P		2,628.00	2,628.00	Rig service function test rig smart anti collision system function test crown saver function test pipe rams 6sec O/C grease all moving parts check fluid levels in floor motor
09:45	14:30	4.75	PROD1	DRILL	DRLG	P		2,628.00	2,752.00	Drill 156mm hole, with Smith 156mm MSi613 PDC bit, Weatherford 7/8 lobe, 3.8 stage (rpm at 0.135/L) 1.66m from bit to bend, mud motor, from 2628m to 2752m
14:30	16:00	1.50	PROD1	DRILL	SRVY	P		2,752.00	2,752.00	Accumilated directional surveys
16:00	17:15	1.25	PROD1	DRILL	DRLG	P		2,752.00	2,780.00	Drill 156mm hole, with Smith 156mm MSi613 PDC bit, Weatherford 7/8 lobe, 3.8 stage (rpm at 0.135/L) 1.66m from bit to bend, mud motor, from 2752m to 2780m
17:15	17:30	0.25	PROD1	RIGMNT	SVRG	P		2,780.00	2,780.00	Rig service function test rig smart anti collision system function test crown saver function test hydrill 13sec open/close, grease all moving parts check fluid levels in floor motor
[redacted]	23:00	5.50	PROD1	DRILL	DRLG	P		2,780.00	2,895.00	Drill 156mm hole, with Smith 156mm MSi613 PDC bit, Weatherford 7/8 lobe, 3.8 stage (rpm at 0.135/L) 1.66m from bit to bend, mud motor, from 2780m to 2895m
23:00	00:00	1.00	PROD1	DRILL	SRVY	P		2,895.00	2,895.00	Accumulated directional survey time

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45

Report Date: 1/19/2014
Report #: 42
Depth Progress: 400.00m
Depth End: 2,895.00mKB
Rig Release Date: 1/23/2014

Rig: Beaver Drilling Ltd. 2

d/Mud Chks: Mud Engineer: Corey Clark

Time	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (Pa•s)	YP Override (Pa)
09:30	2,630.00	1,045.0	83		23.0	J

Low Gravity Solids (%)	MBT (kg/m³)	Oil Water Ratio	Chlorides (mg/L)	Calcium (mg/L)	Lime (kg/m³)	Potassium (mg/L)
8.2		84/16	284,951	47	17	

Electric Stab (V)	ECD - Manual Entry (k...	Sand (%)	Solids, Corr. (%)	T Flowline (°C)	HTHP Pressure (kPa)	HTHP Filtrate (mL/30...
700.0	1,206.0	2.8	9.5	45		4.0

API Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Field Est (Cost)
	7.00	1.00	10,515.93

Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost (Cost)
61.00	9.00	120,032.08

Last BOP Drill

Type	Days Last Chk (...	Last Date	Days Until Next...	Next Check Date
BOP Drill	2	1/17/2014	3	1/22/2014

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
830.00	830.00

Safety Incidents

Date	Com	Category

Drill String: BHA # 5

Bit Run	Drill Bit	Length (m)	IADC Bit Dull	TFA (incl Noz) (mm²)	BHA ROP (m/hr)
4	156.0mm, 613, jh8402	0.19	------	760	17.9

Nozzles (mm)	String Length (m)	OD (mm)	Max Rotating Hook Load (daN)
12.7/12.7/12.7/12.7/12.7/12.7	2,910.00	132.0	69,000

Depth In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hr)	Total Drill Hrs (hr)
1,908.00	2,910.00	17.9	1,002.00	2,910.00	56.00	56.00

Comment
Smith 156mm MSi613 PDC bit, Pathfinder 7/8 lobe, 3.8 stage, set at 1.36 deg. rotate at 0.135/L, (1.66m from bit to bend), mud motor, MWD and LWD tools 2 JOINTS HWDP, Jars, 1 joint of HWDP.

Drill String Components

Item Des	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)
' pipe - Stands	70.0	101.6	68	1,283.77	2,910.00
D.P	70.0	101.0	1	5.15	1
4" HW	70.0	132.0	36	335.20	1
4 " D.P	70.0	101.0	126	1,199.76	1,2
4" H.W	65.0	101.0	1	9.53	86.12
Jars	59.0	131.0	1	5.07	76.59
4" HW	70.0	132.0	3	27.54	71.52
X/O SUB	58.0	128.0	1	0.82	43.98
Slick monel	67.0	119.0	1	9.50	43.16
x/o	56.0	120.0	1	0.45	33.66
4.75 LWD ABS	70.0	129.0	1	4.79	33.21
4.75 LWD SAWR	70.0	128.0	1	6.15	28.42
4.75 gap sub	63.0	119.0	1	0.58	22.27
Slick monel	67.0	119.0	1	9.47	21.69
NM Pony Monel	57.0	119.0	1	3.10	12.22
MUD MOTOR	34.0	123.0	1	8.93	9.12

Drilling Parameter: 2,752.00 - 2,895.00 mKB

Cum Depth (m)	Cum Drill...	Int ROP (...	Flow Rate...	WOB (daN)	RPM (r...	SPP (kPa)	Drill Str Wt (d...	SO Str Wt (daN)	PU Str Wt (daN)	Off-Btm Str W...	Drill Tq
987.00	55.25	21.2	0.900	11,000	80	17,300	69,000	61,000	75,000	69,000	12,260.0

Hydraulic Calculations

Bit Hydraulic Powe...	HP/Area (kW/mm²)	% P @ bit (%)	Bit Jet Velocity (m/s)	Bit dP (kPa)	P Drop Annular (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)
3.4	0.00018	1	19.7	228.3	1,742.1	1,045.0	1,143.4

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Vol Shoe to Top (m³)	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m/...
11.09	10.61	20.88	27.9	143.5	81.1	165.8

Error

Mud Pump: 1, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
1	NATIONAL	8-P-80	140.0	216.0

mp Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (sp
1/20/2014 00:00	2,909.00	0.499	5,150	
1/20/2014 00:00	2,909.00	1.014	17,500	

Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
2014	1/21/2014	127.0		
1/22/2014	1/22/2014	127.0		

Mud Pump: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/19/2014 00:00	2,513.00	0.647	6,855	83
1/19/2014 00:00	2,513.00	0.897	15,000	115

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
1/19/2014	1/19/2014	127.0	15,000	
1/21/2014		127.0		

Shaker Screens

Des	Start Date	End Date	Scr Sz X	Scr Sz Y	Note

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
1	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
1/19/2014 07:00	2.00	1800	1,000.0	0.400	2,100.0	0.200

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
2	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
19/2014 13:00	3.00	2000	990.0	0.400	1,700.0	0.200

Mud Additive Amounts

Des	Consumed	Cost	Size	Units
UM CHLORIDE	12.0	43.920	40.0	SX
INVERT	8.0	1,063.330	1.0	M3
Truvis	4.0	149.670	25.0	SX
Versacoat HF	1.0	883.570	55.0	BBL

Survey Data

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	Depart (m)	NS (m)	EW (m)	VS (m)	DLS (°/30m)
1/19/2014	2,494.00	88.60	297.28	1,793.99	805.23	388.97	-705.05	805.23	2.64
1/19/2014	2,513.50	88.20	298.56	1,794.53	824.72	398.09	-722.27	824.71	2.06
1/19/2014	2,532.00	88.38	298.65	1,795.09	843.21	406.95	-738.51	843.21	0.33
1/19/2014	2,551.00	87.98	297.85	1,795.69	862.20	415.94	-755.24	862.19	1.41
1/19/2014	2,570.00	88.10	298.80	1,796.34	881.19	424.95	-771.95	881.18	1.51
1/19/2014	2,589.00	88.10	299.00	1,796.97	900.18	434.12	-788.58	900.17	0.32
1/19/2014	2,608.00	88.30	299.00	1,797.57	919.17	443.33	-805.19	919.16	0.32
1/19/2014	2,627.00	88.40	298.60	1,798.11	938.16	452.48	-821.83	938.15	0.65
1/19/2014	2,646.00	88.50	297.00	1,798.63	957.15	461.34	-838.63	957.14	2.53
1/19/2014	2,665.00	88.80	298.60	1,799.07	976.14	470.20	-855.43	976.13	2.57
1/19/2014	2,684.00	87.90	297.30	1,799.62	995.13	479.10	-872.21	995.12	2.50
1/19/2014	2,703.00	88.30	297.50	1,800.25	1,014.11	487.84	-889.07	1,014.10	0.71
1/19/2014	2,721.00	88.50	298.60	1,800.75	1,032.10	496.30	-904.95	1,032.09	1.86
1/19/2014	2,740.00	88.00	298.50	1,801.33	1,051.09	505.37	-921.63	1,051.08	0.81
1/19/2014	2,759.00	88.20	299.40	1,801.96	1,070.08	514.57	-938.24	1,070.07	1.45
1/19/2014	2,778.50	88.50	301.30	1,802.53	1,089.57	524.41	-955.06	1,089.56	2.96
1/19/2014	2,798.50	88.70	300.30	1,803.01	1,109.55	534.65	-972.24	1,109.54	1.53
1/19/2014	2,807.50	89.20	301.30	1,803.18	1,118.54	539.26	-979.97	1,118.53	3.73
1/19/2014	2,837.00	89.31	302.48	1,803.56	1,148.00	554.84	-1,005.01	1,147.99	1.21
2014	2,855.50	89.20	300.50	1,803.80	1,166.48	564.50	-1,020.79	1,166.48	3.22

ions

Formation Name	Drill Top MD (mKB)	Drill Top (TVD) (mKB)	Prog Top TVD (mKB)
Bear	31.00	31.00	31.00
Slater River	76.00	76.00	76.00

..nations

Formation Name	Drill Top MD (mKB)	Drill Top (TVD) (mKB)	Prog Top TVD (mK
Arctic Red	800.50	800.46	
Martin House	938.50	938.44	76.40
Imperial	975.50	975.43	76.40
Upper Canol	1,665.00	1,658.53	1,653.40
Lower Canol	1,700.72	1,689.07	1,694.40

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45

Report Date: 1/20/2014
Report #: 43
Depth Progress: 15.00m
Depth End: 2,910.00mKB
Rig Release Date: 1/23/2014

Rig: Beaver Drilling Ltd. 2

WI	Surface Legal Location	MaxWell Job Number	License No.
65-10126-45	E-76 65-10 126-45	JOB01@2006	EL 470

Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
268.20	273.40	268.00	12/28/2013	23.73

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	12/9/2013 00:00	1/23/2014 23:59	DRILLED	Yes

Daily Cost Total (Cost)	Cumulative Cost (Cost)	Total AFE (Cost)	AFE+Supp Amt (Cost)	AFE / RFE / Maint.#	Estimated Days
103,189.12	4,944,218.66	6,820,300.00	6,820,300.00	10351817	34.19

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hr)	Cum Personnel Total Hours (hr)
2,881.00		54.0	600.00	32,521.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)
3,100	740	29	0

Road Condition	Weather	Temperature (°C)	Wind
Ice/Snow	Cloudy	-24	SE 10 kms

Ops and Depth @ Morning Report
Rig out Schlumberger loggers.

Wellbore
Original Hole

Last 24hr Summary
No incidents or accidents. 3 - HID, 3 - OBS and 0 - ASA (all closed out)

Drill 156mm lateral hole from 2895m to 2910m. Last survey at 2890mMD, inclination= 87.8°, azimuth= 301.07°, TVD - 1803.24m. Projected survey at bit: 2910mMD (TD), inclination= 87.8°, azimuth= 301.07°, TVD - 1804.01m. We are 0.78m below and 14.92m left of the line. Circulate 2 bottoms up, pull out of the hole to 1908mMD (casing shoe), wash in to 2910mMD (TD), circulate 3 bottoms up and clean hole, pull out of the hole, lay down directional tools.

24hr Forecast
Rig up power tongs and laydown truck, run 114.3mm production liner and Volant Hydroforms with liner top packer followed by drill pipe and heavy weight drill pipe, strap in and drift drill pipe and heavy weight drill pipe, tag bottom, circulate bottoms up and clean hole, rig up cementers, cement liner to liner top, displace with fresh water, set liner with liner top packer, circulate excess cement out and displace hole with fresh water, laydown drill pipe.

Daily Contacts
Drilling Superintend, Sheldon Vamplew, 403-999-1302; Drilling Engineer, Mike Greener, 403-771-5039; WS Supervisor, Richard Turgeon, 780-387-1706; WS Supervisor, Dave Opper, 403-863-8205; Rig Manager, Rick Yavis, 780-718-2962; Command Centre, 403-910-0357

Last Casing String
Intermediate, 1,908.00mKB

Time Log

	End Time	Dur (hr)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Start Depth (mKB)	End Depth (mKB)	Operation
	00:45	0.75	PROD1	DRILL	DRLG	P		2,895.00	2,910.00	Drill 156mm hole, with Smith 156mm MSi613 PDC bit, Weatherford 7/8 lobe, 3.8 stage (rpm at 0.135/L) 1.66m from bit to bend, mud motor, from 2895m to 2910m. TD well at 00:42 hrs. Jan. 20 2014
00:45	01:00	0.25	PROD1	RIGMNT	SVRG	P		2,910.00	2,910.00	Rig service function test rig smart anti collision system function test crown saver, function test H.C.R 3 sec open/close grease all moving parts check fluid level in floor motor
01:00	01:30	0.50	PROD1	DRILL	SFTY	P		2,910.00	2,910.00	Weekly safety meeting, with rig crew and Conoco rep present
01:30	01:45	0.25	PROD1	DRILL	SFTY	P		2,910.00	2,910.00	B.O.P drill on tripping stabbing valve discused and everyones job while tripping
01:45	02:15	0.50	PROD1	DRILL	CIRC	P		2,910.00	2,910.00	Circulate 2 bottoms up prepair to trip
02:15	04:45	2.50	PROD1	DRILL	TRIP	P		2,910.00	2,910.00	Trip out of hole from 2910mKB to 1988mKB flow checks at 2904m,2818m,1885m
04:45	05:30	0.75	PROD1	RIGMNT	SLPC	P		2,910.00	2,910.00	Slip and cut 45m of drilling line, grease crown and blocks
05:30	08:00	2.50	PROD1	DRILL	TRIP	P		2,910.00	2,910.00	Wash to bottom from 1909m to 2324m, Rotary at 35rpm pump rate of 1.0m3
08:00	08:15	0.25	PROD1	RIGMNT	SVRG	P		2,910.00	2,910.00	Rig service function test rig smart anti collision system function test crown saver, function test pipe rams 6sec open/close grease all moving parts check fluid level in floor motor
08:15	11:30	3.25	PROD1	DRILL	TRIP	P		2,910.00	2,910.00	Wash to bottom from 2324m, Rotary at 35rpm pump rate of 1.0m3
11:30	13:30	2.00	PROD1	DRILL	CIRC	P		2,910.00	2,910.00	Circulate hole clean, 3 bottoms up
13:30	15:15	1.75	PROD1	DRILL	TRIP	P		2,910.00	2,910.00	Trip out of hole to 2435m, with flow check at 2758m
15:15	15:30	0.25	PROD1	DRILL	SFTY	P		2,910.00	2,910.00	Crew change over and safety meeting with crews and Conoco rep.
	16:00	0.50	PROD1	DRILL	TRIP	P		2,910.00	2,910.00	Continue to trip out of the hole, with flow checks
	17:30	1.50	PROD1	DRILL	TRIP	P		2,910.00	2,910.00	Continue to trip out of hole, with flow check at 1668m
	18:15	0.75	PROD1	DRILL	SFTY	P		2,910.00	2,910.00	Safety stand down safety meeting with, rig crew, rig manager, Conoco well site supervisors and Conoco Calgary Staff

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45
Rig: Beaver Drilling Ltd. 2

Report Date: 1/20/2014
Report #: 43
Depth Progress: 15.00m
Depth End: 2,910.00mKB
Rig Release Date: 1/23/2014

e Log

Start Time	End Time	Dur (hr)	Phase	Op Code	Activity Code	Tim e P-T-X	Trbl Code	Start Depth (mKB)	End Depth (mKB)	Operation
18:15	18:30	0.25	PROD1	DRILL	SFTY	P		2,910.00	2,910.00	BOP drill crew in position well secure in 90 sec function test motor kills operating properly
18:30	18:45	0.25	PROD1	RIGMNT	SVRG	P		2,910.00	2,910.00	Rig service, check brake linkage and crown saver
18:45	23:00	4.25	PROD1	DRILL	TRIP	P		2,910.00	2,910.00	Continue to trip out of hole, with flow check at 86m
23:00	00:00	1.00	PROD1	DRILL	PULD	P		2,910.00	2,910.00	Lay down directional tools, flow check OOH, close/open blind rams, 6 sec., monitor well

Fluid/Mud Chks: Mud Engineer: Corey Clark

Time	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (Pa•s)	YP Override (Pa)
00:00	2,910.00	1,060.0	83		23.0	5.0

Low Gravity Solids (%)	MBT (kg/m³)	Oil Water Ratio	Chlorides (mg/L)	Calcium (mg/L)	Lime (kg/m³)	Potassium (mg/L)
8.2		84/16	284,951	47	17	

Electric Stab (V)	ECD - Manual Entry (k...	Sand (%)	Solids, Corr. (%)	T Flowline (°C)	HTHP Pressure (kPa)	HTHP Filtrate (mL/30...
700.0	1,206.0	2.8	9.5	45		4.0

API Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Field Est (Cost)
	1.00	0.00	1,744.93

Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost (Cost)
62.00	9.00	121,777.01

Last BOP Drill

Type	Days Last Chk (...	Last Date	Days Until Next...	Next Check Date
BOP Drill	3	1/17/2014	2	1/22/2014

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
831.00	831.00

Safety Incidents

Date	Com	Category

Drill String: BHA # 5

Bit Run	Drill Bit	Length (m)	IADC Bit Dull	TFA (incl Noz) (mm²)	BHA ROP (m/hr)
	156.0mm, 613, jh8402	0.19	----	760	17.9

...zzles (mm)	String Length (m)	OD (mm)	Max Rotating Hook Load (daN)
12.7/12.7/12.7/12.7/12.7/12.7	2,910.00	132.0	

Depth In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hr)	Total Drill Hrs (h...
1,908.00	2,910.00	17.9	1,002.00	2,910.00	56.00	56.00

Comment
Smith 156mm MSi613 PDC bit, Pathfinder 7/8 lobe, 3.8 stage, set at 1.36 deg. rotate at 0.135/L, (1.66m from bit to bend), mud motor, MWD and LWD tools 2 JOINTS HWDP, Jars, 1 joint of HWDP.

Drill String Components

Item Des	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)
Drill pipe - Stands	70.0	101.6	68	1,283.77	2,910.00
4 " D.P	70.0	101.0	1	5.15	1,626.23
4" HW	70.0	132.0	36	335.20	1,621.08
4 " D.P	70.0	101.0	126	1,199.76	1,285.88
4" H.W	65.0	101.0	1	9.53	86.12
Jars	59.0	131.0	1	5.07	76.59
4" HW	70.0	132.0	3	27.54	71.52
X/O SUB	58.0	128.0	1	0.82	43.98
Slick monel	67.0	119.0	1	9.50	43.16
x/o	56.0	120.0	1	0.45	33.66
4.75 LWD ABS	70.0	129.0	1	4.79	33.21
4.75 LWD SAWR	70.0	128.0	1	6.15	28.42
4.75 gap sub	63.0	119.0	1	0.58	22.27
Slick monel	67.0	119.0	1	9.47	21.69
NM Pony Monel	57.0	119.0	1	3.10	12.22
MUD MOTOR	34.0	123.0	1	8.93	9.12

Drilling Parameter: 2,895.00 - 2,910.00 mKB

Cum Depth (m)	Cum Drill...	Int ROP (...	Flow Rate...	WOB (daN)	RPM (r...	SPP (kPa)	Drill Str Wt (d...	SO Str Wt (daN)	PU Str Wt (daN)	Off-Btm Str W...	Drill Tq
1,002.00	56.00	20.0	0.900	11,000	80	17,500	69,000	60,000	75,000	69,000	12,400.0

...aulic Calculations

...ydraulic Powe...	HP/Area (kW/mm²)	% P @ bit (%)	Bit Jet Velocity (m/s)	Bit dP (kPa)	P Drop Annular (kPa)	Mud Density (kg/m³)	ECD End (kg/m
3.5	0.00018	1	19.7	231.6	1,765.3	1,060.0	

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Vol Shoe to Top (m³)	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole A
11.15	10.77	20.88	27.9	143.5	81.1	165.8

Error

ump: 1, NATIONAL, 8-P-80

umber	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/20/2014 00:00	2,909.00	0.499	5,150	64
1/20/2014 00:00	2,909.00	1.014	17,500	130

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
1/21/2014	1/21/2014	127.0		
1/22/2014	1/22/2014	127.0		

Mud Pump: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/19/2014 00:00	2,513.00	0.647	6,855	83
1/19/2014 00:00	2,513.00	0.897	15,000	115

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
1/19/2014	1/19/2014	127.0	15,000	
1/21/2014		127.0		

Shaker Screens

Des	Start Date	End Date	Scr Sz X	Scr Sz Y	Note

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
1	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
014 07:00	2.00	1800	1,000.0	0.400	2,100.0	0.200

uge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

r	Make	Model	Diameter (mm)
2	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
1/19/2014 13:00	3.00	2000	990.0	0.400	1,700.0	0.200

Fluid / Mud Additive Amounts

Des	Consumed	Cost	Size	Units
Barite	40.0	17.040	40.0	SX
INVERT	1.0	1,063.330	1.0	M3

Survey Data

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	Depart (m)	NS (m)	EW (m)	VS (m)	DLS (°/30m)
1/20/2014	2,890.00	87.80	301.07	1,804.71	1,200.95	582.16	-1,050.41	1,200.95	1.31
1/20/2014	2,890.00	87.80	301.07	1,804.71	1,200.95	582.16	-1,050.41	1,200.95	1.31
1/20/2014	2,910.00	87.80	301.07	1,805.47	1,220.92	592.47	-1,067.53	1,220.92	0.00

Formations

Formation Name	Drill Top MD (mKB)	Drill Top (TVD) (mKB)	Prog Top TVD (mKB)
Little Bear	31.00	31.00	31.00
Slater River	76.00	76.00	76.00
Arctic Red	800.50	800.46	76.40
Martin House	938.50	938.44	76.40
Imperial	975.50	975.43	76.40
Upper Canol	1,665.00	1,658.53	1,653.40
Lower Canol	1,700.72	1,689.07	1,694.40

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45

Report Date: 1/21/2014
Report #: 44
Depth Progress: 0.00m
Depth End: 2,910.00mKB
Rig Release Date: 1/23/2014

Rig: Beaver Drilling Ltd. 2

UWI	Surface Legal Location	MaxWell Job Number	License No.
300E7665-10126-45	E-76 65-10 126-45	JOB01@2006	EL 470

Ground Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
268.20	273.40	268.00	12/28/2013	24.73

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	12/9/2013 00:00	1/23/2014 23:59	DRILLED	Yes

Daily Cost Total (Cost)	Cumulative Cost (Cost)	Total AFE (Cost)	AFE+Supp Amt (Cost)	AFE / RFE / Maint.#	Estimated Days
246,313.25	5,190,531.91	6,820,300.00	6,820,300.00	10351817	34.19

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hr)	Cum Personnel Total Hours (hr)
2,881.00		54.0	600.00	33,121.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)
		28	0

Road Condition	Weather	Temperature (°C)	Wind
Ice/Snow	Cloudy	-20	SW 10 kms

Ops and Depth @ Morning Report
Displace invert from well with fresh water from top of liner top packer.

Wellbore
Original Hole

Last 24hr Summary
No incidents or accidents. 7 - HID, 3 - OBS and 0 - ASA (all closed out)

Pull out of the hole, lay down directional tools, rig up Schlumberger loggers and run USIT log (point of refusal at 1824mMD (67°) at 03:00hrs), rig out loggers, rig up power tongs and laydown truck, run 114.3mm production liner and Volant Hydroforms with liner top packer followed by drill pipe and heavy weight drill pipe, strap in and drift drill pipe and heavy weight drill pipe.

24hr Forecast
Tag bottom, circulate bottoms up and clean hole, rig up cementers, cement liner to liner top, displace with fresh water, bump plug, set liner with liner top packer, circulate excess cement out and displace hole with fresh water, rig up laydown truck, laydown drill pipe and heavy weight drill pipe, run in the rest of the drill pipe in the derrick, laydown drill pipe, rig up power tongs, run 114.3mm tie-back liner.

Daily Contacts
Drilling Superintend, Sheldon Vamplew, 403-999-1302; Drilling Engineer, Mike Greener, 403-771-5039; WS Supervisor, Richard Turgeon, 780-387-1706; WS Supervisor, Dave Opper, 403-863-8205; Rig Manager, Rick Yavis, 780-718-2962; Command Centre, 403-910-0357

Last Casing String
Production, 2,909.32mKB

Time Log

art Time	End Time	Dur (hr)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Start Depth (mKB)	End Depth (mKB)	Operation
00:00	00:15	0.25	PROD1	RIGMNT	SVRG	P		2,910.00	2,910.00	Rig service function test blind ram's 3 sec to close & mo kills & crown saver
00:15	00:30	0.25	PROD1	DRILL	SFTY	P		2,910.00	2,910.00	Held BOP drill, while out of the hole, 45 sec.
00:30	00:45	0.25	PROD1	EVALWB	SFTY	P		2,910.00	2,910.00	Safety meeting with Schlumberger, on logging
00:45	07:45	7.00	PROD1	EVALWB	ELOG	P		2,910.00	2,910.00	Usit log with schlumberger, to point of refusal, 1824mMD (approx. 67 deg) at 03:00 Hrs. January 21 2014.
07:45	08:00	0.25	PROD1	DRILL	SFTY	P		2,910.00	2,910.00	Crew change hand over meeting safety meeting with crews and Conoco rep.
08:00	08:15	0.25	PROD1	RIGMNT	SVRG	P		2,910.00	2,910.00	Rig service close/open blind rams 6 sec crown saver operating properly
08:15	09:15	1.00	PROD1	CASING	RNCS	P		2,910.00	2,910.00	Rig up to run 114.3mm, 17.26kg/m, P-110, LTC casing liner
09:15	09:30	0.25	PROD1	CASING	SFTY	P		2,910.00	2,910.00	Safety meeting with Hallmark tong hand and Trottier pipe handlers reviewed jsa # 97 rig up power tongs and # 99 Install shoe/float
09:30	16:00	6.50	PROD1	CASING	RNCS	P		2,910.00	2,910.00	Run 114.3mm, 17.26kg/m, P-110, LTC casing liner to 1430.50m Break circulation at 590m 1229m
16:00	16:15	0.25	PROD1	RIGMNT	SVRG	P		2,910.00	2,910.00	Rig service, check pipe spinner, slip and tong dies
16:15	16:30	0.25	PROD1	CASING	RNCS	P		2,910.00	2,910.00	Make up liner top packer with Weatherford hand
16:30	17:30	1.00	PROD1	CASING	RNCS	P		2,910.00	2,910.00	Rig out lay down truck and power tongs, rig up floor to trip in the hole
17:30	17:45	0.25	PROD1	CASING	SFTY	P		2,910.00	2,910.00	Safety meeting on tripping in the hole/Strap and drift pipe from monkey board
17:45	20:30	2.75	PROD1	CASING	RNCS	P		2,910.00	2,910.00	Trip in the hole from 1436m to 1889m with drill pipe to hang Weaterford liner packer and 114.3mm, 17.26kg/m, P-110, LTC casing liner
20:30	20:45	0.25	PROD1	CASING	CIRC	P		2,910.00	2,910.00	Break circulation at 1889 m circulate for 10 min.
5	00:00	3.25	PROD1	CASING	RNCS	P		2,910.00	2,910.00	Trip in hole from 1889m to 2860m with drill pipe to hang Weaterford liner packer and 114.3mm, 17.26kg/m, P-11 LTC casing liner

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45

Report Date: 1/21/2014
Report #: 44
Depth Progress: 0.00m
Depth End: 2,910.00mKB
Rig Release Date: 1/23/2014

Rig: Beaver Drilling Ltd. 2

Mud Chks: Mud Engineer: <Mud Engineer?>

	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (Pa•s)	YP Override (Pa)
Low Gravity Solids (%)	MBT (kg/m³)	Oil Water Ratio	Chlorides (mg/L)	Calcium (mg/L)	Lime (kg/m³)	Potassium (mg/L)
Electric Stab (V)	ECD - Manual Entry (k...	Sand (%)	Solids, Corr. (%)	T Flowline (°C)	HTHP Pressure (kPa)	HTHP Filtrate (mL/30...

API Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Field Est (Cost)

Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost (Cost)

Last BOP Drill

Type	Days Last Chk (...	Last Date	Days Until Next...	Next Check Date
BOP Drill	4	1/17/2014	1	1/22/2014

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
832.00	832.00

Safety Incidents

Date	Com	Category

Drill String: BHA # <BHA No.?>

Bit Run	Drill Bit	Length (m)	IADC Bit Dull	TFA (incl Noz) (mm²)	BHA ROP (m/hr)

Nozzles (mm)	String Length (m)	OD (mm)	Max Rotating Hook Load (daN)

Depth In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hr)	Total Drill Hrs (hr)

Comment

Drill String Components

Item Des	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)

ling Parameter: <depthstart> - <depthend> mKB

pth (m)	Cum Drill...	Int ROP (...	Flow Rate...	WOB (daN)	RPM (r...	SPP (kPa)	Drill Str Wt (d...	SO Str Wt (daN)	PU Str Wt (daN)	Off-Btm Str W...	Drill Tq

ulic Calculations

Bit Hydraulic Powe...	HP/Area (kW/mm²)	% P @ bit (%)	Bit Jet Velocity (m/s)	Bit dP (kPa)	P Drop Annular (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Vol Shoe to Top (m³)	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m/...

Error

Mud Pump: 1, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
1	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/20/2014 00:00	2,909.00	0.499	5,150	64
1/20/2014 00:00	2,909.00	1.014	17,500	130

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
1/21/2014	1/21/2014	127.0		
1/22/2014	1/22/2014	127.0		

Mud Pump: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/19/2014 00:00	2,513.00	0.647	6,855	83
1/19/2014 00:00	2,513.00	0.897	15,000	115

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
1/19/2014	1/19/2014	127.0	15,000	
/2014		127.0		

Screens

Des	Start Date	End Date	Scr Sz X	Scr Sz Y	Note

...trifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm
1	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
1/19/2014 07:00	2.00	1800	1,000.0	0.400	2,100.0	0.200

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
2	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
1/19/2014 13:00	3.00	2000	990.0	0.400	1,700.0	0.200

Fluid / Mud Additive Amounts

Des	Consumed	Cost	Size	Units

Survey Data

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	Depart (m)	NS (m)	EW (m)	VS (m)	DLS (°/30m)

Formations

Formation Name	Drill Top MD (mKB)	Drill Top (TVD) (mKB)	Prog Top TVD (mKB)
Little Bear	31.00	31.00	31.00
Slater River	76.00	76.00	76.00
Arctic Red	800.50	800.46	76.40
Martin House	938.50	938.44	76.40
Imperial	975.50	975.43	76.40
Upper Canol	1,665.00	1,658.53	1,653.40
Lower Canol	1,700.72	1,689.07	1,694.40

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45

Report Date: 1/22/2014
Report #: 45
Depth Progress: 0.00m
Depth End: 2,910.00mKB
Rig Release Date: 1/23/2014

Rig: Beaver Drilling Ltd. 2

UWI	Surface Legal Location	MaxWell Job Number	License No.
[redacted]7665-10126-45	E-76 65-10 126-45	JOB01@2006	EL 470

Ground Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
268.20	273.40	268.00	12/28/2013	25.73

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	12/9/2013 00:00	1/23/2014 23:59	DRILLED	Yes

Daily Cost Total (Cost)	Cumulative Cost (Cost)	Total AFE (Cost)	AFE+Supp Amt (Cost)	AFE / RFE / Maint.#	Estimated Days
117,964.36	5,308,496.27	6,820,300.00	6,820,300.00	10351817	34.19

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hr)	Cum Personnel Total Hours (hr)
2,881.00		54.0	600.00	33,721.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)

Road Condition	Weather	Temperature (°C)	Wind
Ice/Snow	Cloudy	-14	Calm

Ops and Depth @ Morning Report
Tie onto liner top.

Wellbore
Original Hole

Last 24hr Summary
No incidents or accidents. 9 - HID, 0 - OBS and 0 - ASA (all closed out)

Run 114.3mm production liner with drill pipe and heavy weight drill pipe, strap in and drift drill pipe and heavy weight drill pipe, tag bottom at 2910mMD, circulate bottoms up and clean hole, rig up cementers, cement liner up to liner top, drop dart and displace with fresh water, bump plug 3,500kPA over final circulating pressure, bleed off, check floats, pressure up to 28,000kPA and set liner with liner top packer, circulate out pre-flush and 2m3 of excess cement out, displace hole with fresh water, rig out cementers, flowcheck, rig up laydown truck, laydown drill pipe and heavy weight drill pipe, run in the rest of the drill pipe in the derrick, laydown drill pipe, rig up power tongs, run 114.3mm tie-back liner.

24hr Forecast
Land mandrel seal assembly and tie onto top of liner top packer, remove landing joint, pressure test packoff seal assembly, pressure test 114.3mm x 177.8mm annulus to 15,000kPA, nipple down BOP, blow out water and pour 2 pails of diesel, install wellhead, clean mud tanks.

Daily Contacts
Drilling Superintend, Sheldon Vamplew, 403-999-1302; Drilling Engineer, Mike Greener, 403-771-5039; WS Supervisor, Richard Turgeon, 780-387-1706; WS Supervisor, Dave Opper, 403-863-8205; Rig Manager, Rick Yavis, 780-718-2962; Command Centre, 403-910-0357

Last Casing String
Production, 2,909.32mKB

e Log

[redacted]	End Time	Dur (hr)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Start Depth (mKB)	End Depth (mKB)	Operation
00:00	00:30	0.50	PROD1	CASING	TRIP	P		2,910.00	2,910.00	Run 102-joints of 114.3mm, 17.26kg/m, P-110, LTC production liner from 2909.32m to 1477.35m. Run 109 x Volant Hydroform centralizers from 1511m to 1908m. Fill pipe every 20 joints and break circulation every 600m.
00:30	00:45	0.25	PROD1	RIGMNT	SVRG	P		2,910.00	2,910.00	Rig Service function test hydril 14 sec & crown saver
00:45	03:45	3.00	PROD1	CASING	CIRC	P		2,910.00	2,910.00	Tag bottom at 2910mMD, circulate bottoms up and clean hole.
03:45	04:00	0.25	PROD1	CASING	SFTY	P		2,910.00	2,910.00	Hold safety meeting with Schlumberger cementers prior to cementing 114.3mm production liner
04:00	06:30	2.50	PROD1	CEMENT	CMNT	P		2,910.00	2,910.00	Rig up Schlumberger cementers to cement 114.3mm production liner, pump 9m3 of 1000kg/m3 CW8 pre-flush, stop and pressure test line to 35,000kPA (held OK), bleed off pressure, then pump 5m3 of 1200kg/m3 MUDPUSH II pre-flush spacer and then pump 21 tonnes/15.6m3 (20% excess) of 1900kg/m3 Conventional Class G Tail Cement with 0.6% Fluid Loss + 0.5% Dispersant + 0.2% Anti Foam + 0.2% Retarder + 72L/tonne Gas Control Agent from 2909.32m to 1477.35m. Drop dart and displace 18.88m3 of fresh water. Bump plug 3,500kpa over final circulating pressure of 11,200kPA at 7:30hrs on January 22nd 2014, bleed pressure and check floats (holding OK). pressure up to 28,000kPA and set liner with liner top packer, circulate out pre-flush and 2m3 of excess cement out, displace hole with fresh water.
06:30	07:45	1.25	PROD1	CEMENT	CMNT	P		2,910.00	2,910.00	Displace hole with fresh water
07:45	08:00	0.25	PROD1	CEMENT	SFTY	P		2,910.00	2,910.00	Crew change hand over meeting safety meeting with crews and Conoco rep.
08:00	08:15	0.25	PROD1	RIGMNT	SVRG	P		2,910.00	2,910.00	Rig service
[redacted]5	08:45	0.50	PROD1	CEMENT	RURD	P		2,910.00	2,910.00	Rig out cementers, flow check
[redacted]	09:15	0.50	PROD1	RIGMNT	SVRG	P		2,910.00	2,910.00	Clean and prepare floor to lay down drill pipe, rig up laydown truck
09:15	09:30	0.25	PROD1	DRILL	SFTY	P		2,910.00	2,910.00	Safety meeting with Trottier lay down truckers
09:30	11:45	2.25	PROD1	DRILL	PULD	P		2,910.00	2,910.00	Lay down 86 drill pipe used to hang liner
11:45	13:45	2.00	PROD1	DRILL	TRIP	P		2,910.00	2,910.00	Run in the hole 36 stands of drill pipe out of derrick

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45
Rig: Beaver Drilling Ltd. 2

Report Date: 1/22/2014
Report #: 45
Depth Progress: 0.00m
Depth End: 2,910.00mKB
Rig Release Date: 1/23/2014

Time Log

Start Time	End Time	Dur (hr)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Start Depth (mKB)	End Depth (mKB)	Operation
13:45	15:30	1.75	PROD1	DRILL	PULD	P		2,910.00	2,910.00	Lay down 72 drill pipe with Trottier lay down trucker
15:30	16:45	1.25	PROD1	DRILL	TRIP	P		2,910.00	2,910.00	Run in the hole the 37 stands of drill pipe in derrick
16:45	17:00	0.25	PROD1	RIGMNT	SVRG	P		2,910.00	2,910.00	Rig service
17:00	21:45	4.75	PROD1	DRILL	PULD	P		2,910.00	2,910.00	Lay down drill pipe and HWDP with Trottier lay down truck
21:45	22:45	1.00	PROD1	CASING	RNCS	P		2,910.00	2,910.00	Rig up Hallmark power tongs and Trottier lay down truck to run 114.3mm tie back casing
22:45	23:00	0.25	PROD1	CASING	SFTY	P		2,910.00	2,910.00	Held safety meeting with Hallmark power tongs and Trottier lay down truck prior to handle 114.3mm casing
23:00	00:00	1.00	PROD1	CASING	RNCS	P		2,910.00	2,910.00	Rig up Stream-Flo Pack off seal to landing joint, run in to upper casing bowl and measure out

Fluid/Mud Chks: Mud Engineer: Corey Clark

Time	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (Pa•s)	YP Override (Pa)
07:00	2,910.00	1,080.0	88		24.0	5.0

Low Gravity Solids (%)	MBT (kg/m³)	Oil Water Ratio	Chlorides (mg/L)	Calcium (mg/L)	Lime (kg/m³)	Potassium (mg/L)
9.8		84/16	285,598	45,500	17	

Electric Stab (V)	ECD - Manual Entry (k...	Sand (%)	Solids, Corr. (%)	T Flowline (°C)	HTHP Pressure (kPa)	HTHP Filtrate (mL/30...
640.0	1,266.9	2.8	11.1	39		4.0

API Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Field Est (Cost)
	1.00	0.00	1,063.33

Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost (Cost)
63.00	9.00	122,840.34

Last BOP Drill

Type	Days Last Chk (...	Last Date	Days Until Next...	Next Check Date
BOP Drill	5	1/17/2014	0	1/22/2014

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
833.00	833.00

Safety Incidents

Date	Com	Categor

Drill String: BHA # <BHA No.?>

Bit Run	Drill Bit	Length (m)	IADC Bit Dull	TFA (incl Noz) (mm²)	BHA ROP (m/hr)

Nozzles (mm)	String Length (m)	OD (mm)	Max Rotating Hook Load (daN)

Depth In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hr)	Total Drill Hrs (hr)

Comment

Drill String Components

Item Des	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)

Drilling Parameter: <depthstart> - <depthend> mKB

Cum Depth (m)	Cum Drill...	Int ROP (...	Flow Rate...	WOB (daN)	RPM (r...	SPP (kPa)	Drill Str Wt (d...	SO Str Wt (daN)	PU Str Wt (daN)	Off-Btm Str W...	Drill Tq

Hydraulic Calculations

Bit Hydraulic Powe...	HP/Area (kW/mm²)	% P @ bit (%)	Bit Jet Velocity (m/s)	Bit dP (kPa)	P Drop Annular (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Vol Shoe to Top (m³)	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m/...

Error

Mud Pump: 1, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
1	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/20/2014 00:00	2,909.00	0.499	5,150	64
1/20/2014 00:00	2,909.00	1.014	17,500	130

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/
1/21/2014	1/21/2014	127.0		
1/22/2014	1/22/2014	127.0		

ump: 2, NATIONAL, 8-P-80

umber	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/19/2014 00:00	2,513.00	0.647	6,855	83
1/19/2014 00:00	2,513.00	0.897	15,000	115

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
1/19/2014	1/19/2014	127.0	15,000	
1/21/2014		127.0		

Shaker Screens

Des	Start Date	End Date	Scr Sz X	Scr Sz Y	Note
1	1/22/2014		80		3
1	1/22/2014		100		2
1	1/22/2014		80		1

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
1	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
1/19/2014 07:00	2.00	1800	1,000.0	0.400	2,100.0	0.200

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
2	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
1/19/2014 13:00	3.00	2000	990.0	0.400	1,700.0	0.200

Fluid / Mud Additive Amounts

Des	Consumed	Cost	Size	Units
RT	1.0	1,063.330	1.0	M3

Data

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	Depart (m)	NS (m)	EW (m)	VS (m)	DLS (°/30m)

Formations

Formation Name	Drill Top MD (mKB)	Drill Top (TVD) (mKB)	Prog Top TVD (mKB)
Little Bear	31.00	31.00	31.00
Slater River	76.00	76.00	76.00
Arctic Red	800.50	800.46	76.40
Martin House	938.50	938.44	76.40
Imperial	975.50	975.43	76.40
Upper Canol	1,665.00	1,658.53	1,653.40
Lower Canol	1,700.72	1,689.07	1,694.40

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45

Report Date: 1/23/2014
Report #: 46
Depth Progress: 0.00m
Depth End: 2,910.00mKB
Rig Release Date: 1/23/2014

Rig: Beaver Drilling Ltd. 2

UWI	Surface Legal Location	MaxWell Job Number	License No.
300E7665-10126-45	E-76 65-10 126-45	JOB01@2006	EL 470

Ground Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
268.20	273.40	268.00	12/28/2013	26.73

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	12/9/2013 00:00	1/23/2014 23:59	DRILLED	Yes

Daily Cost Total (Cost)	Cumulative Cost (Cost)	Total AFE (Cost)	AFE+Supp Amt (Cost)	AFE / RFE / Maint.#	Estimated Days
1,139,392.20	6,447,888.47	6,820,300.00	6,820,300.00	10351817	34.19

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hr)	Cum Personnel Total Hours (hr)
2,881.00		54.0	600.00	34,321.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)

Road Condition	Weather	Temperature (°C)	Wind
Ice/Snow	Cloudy	-14	NE 15 kms

Ops and Depth @ Morning Report
Tear out rig.

Wellbore
Original Hole

Last 24hr Summary
No incidents or accidents. 9 - HID, 0 - OBS and 0 - ASA (all closed out)

Rig up power tongs, run 114.3mm tie-back liner, space out using 2 small pup joints, land mandrel seal assembly and tie onto top of liner top packer with 18,000dan of compression, remove landing joint, pressure test 114.3mm x 177.8mm annulus to 15,000kPA, rig out top drive, nipple down BOP. Rig release at 23:59hrs on January 23rd, 2014.
From midnight to 6:00am: Nipple down BOP, pressure test packoff seal assembly, blow out water and pour 2 pails of diesel, install wellhead, clean mud tanks, tear out rig. No pressure on backside.

24hr Forecast
Rig out rig to move to P-20 location.

Daily Contacts
Drilling Superintend, Sheldon Vamplew, 403-999-1302; Drilling Engineer, Mike Greener, 403-771-5039; WS Supervisor, Richard Turgeon, 780-387-1706; WS Supervisor, Dave Opper, 403-863-8205; Rig Manager, Rick Yavis, 780-718-2962; Command Centre, 403-910-0357

Last Casing String
Production, 2,909.32mKB

Time Log

Start Time	End Time	Dur (hr)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Start Depth (mKB)	End Depth (mKB)	Operation
00:00	00:15	0.25	PROD1	RIGMNT	SVRG	P		2,910.00	2,910.00	Rig service function test crown saver
00:15	05:00	4.75	PROD1	CASING	RNCS	P		2,910.00	2,910.00	Run 1- 114.3mm latch assembly, 104 joints of 114.3mm, 17.26kg/m, P-110 LTC casing, 1-114.3mm, 17.26kg/m, P-110,LTC pup joint, 1-114.3mm joint of casing, 1-114.3mm pup joint, sealed Mandrel Hanger and 1-114.3mm landing joint, with Hallmark power tongs and
05:00	06:00	1.00	PROD1	CASING	RNCS	P		2,910.00	2,910.00	Pick up and run sealed Mandrel Hanger
06:00	07:45	1.75	PROD1	CASING	RNCS	P		2,910.00	2,910.00	Set sealed Mandrel Hanger at 18,000, compression, tighten seal assembly bolts
07:45	08:00	0.25	PROD1	CASING	SFTY	P		2,910.00	2,910.00	Crew change safety meeting with rig manager and Conoco reps
08:00	08:15	0.25	PROD1	RIGMNT	SVRG	P		2,910.00	2,910.00	Rig service
08:15	08:30	0.25	PROD1	WHDBOP	PRTS	P		2,910.00	2,910.00	Pressure test casing bowl with Schlumberger to 15,000kpa, held good
08:30	09:30	1.00	DEMOB	CASING	RNCS	P		2,910.00	2,910.00	Rig out Hallmark power tongs and Trottier lay down truck
09:30	12:00	2.50	DEMOB	RIGMNT	SVRG	P		2,910.00	2,910.00	Clean floor pick top off of rotery table and clean
12:00	16:00	4.00	DEMOB	MOVE	DMOB	P		2,910.00	2,910.00	Rig out top drive and lay down
16:00	16:15	0.25	DEMOB	RIGMNT	SVRG	P		2,910.00	2,910.00	Rig service
16:15	19:00	2.75	DEMOB	MOVE	DMOB	P		2,910.00	2,910.00	Rig out service loop and hydraulic power unit, for top drive
19:00	19:15	0.25	DEMOB	MOVE	SFTY	P		2,910.00	2,910.00	Crew change safety meeting with rig manager and Conoco reps
19:15	00:00	4.75	DEMOB	WHDBOP	NUND	P		2,910.00	2,910.00	Nipple down BOP stack, HCR line, flare line, degasser line, kill line, lift off BOP stack and rack in sub, clean and prepare casing bowl to install well head, Rig Released Jan 23/2014 @ 23:59 Hrs

ConocoPhillips Canada

Daily Drilling
COPRC DODO CANYON E-76 65-10 126-45

Rig: Beaver Drilling Ltd. 2

Report Date: 1/23/2014
Report #: 46
Depth Progress: 0.00m
Depth End: 2,910.00mKB
Rig Release Date: 1/23/2014

Mud Chks: Mud Engineer: <Mud Engineer?>

	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (Pa·s)	YP Override (Pa)
Low Gravity Solids (%)	MBT (kg/m³)	Oil Water Ratio	Chlorides (mg/L)	Calcium (mg/L)	Lime (kg/m³)	Potassium (mg/L)
Electric Stab (V)	ECD - Manual Entry (k...	Sand (%)	Solids, Corr. (%)	T Flowline (°C)	HTHP Pressure (kPa)	HTHP Filtrate (mL/30...

API Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Field Est (Cost)

Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost (Cost)

Last BOP Drill

Type	Days Last Chk (...	Last Date	Days Until Next...	Next Check Date
BOP Drill	6	1/17/2014	-1	1/22/2014

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
834.00	834.00

Safety Incidents

Date	Com	Category

Drill String: BHA # <BHA No.?>

Bit Run	Drill Bit	Length (m)	IADC Bit Dull	TFA (incl Noz) (mm²)	BHA ROP (m/hr)

Nozzles (mm)	String Length (m)	OD (mm)	Max Rotating Hook Load (daN)

Depth In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hr)	Total Drill Hrs (hr)

Comment

Drill String Components

Item Des	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)

ling Parameter: <depthstart> - <depthend> mKB

pth (m)	Cum Drill...	Int ROP (...	Flow Rate...	WOB (daN)	RPM (r...	SPP (kPa)	Drill Str Wt (d...	SO Str Wt (daN)	PU Str Wt (daN)	Off-Btm Str W...	Drill Tq

ulic Calculations

Bit Hydraulic Powe...	HP/Area (kW/mm²)	% P @ bit (%)	Bit Jet Velocity (m/s)	Bit dP (kPa)	P Drop Annular (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Vol Shoe to Top (m³)	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m/...

Error

Mud Pump: 1, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
1	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/20/2014 00:00	2,909.00	0.499	5,150	64
1/20/2014 00:00	2,909.00	1.014	17,500	130

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
1/21/2014	1/21/2014	127.0		
1/22/2014	1/22/2014	127.0		

Mud Pump: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80	140.0	216.0

Pump Checks

Date	Depth (mKB)	Q Flow (m³/min)	P (kPa)	Strokes (spm)
1/19/2014 00:00	2,513.00	0.647	6,855	83
1/19/2014 00:00	2,513.00	0.897	15,000	115

Pump Operations

Start Date	End Date	Liner Size (mm)	P Max (kPa)	Vol/Stk OR (m³/stk)
1/19/2014	1/19/2014	127.0	15,000	
'2014		127.0		

Screens

Des	Start Date	End Date	Scr Sz X	Scr Sz Y	Note
	1/23/2014				4
	1/23/2014				3

aker Screens

Des	Start Date	End Date	Scr Sz X	Scr Sz Y	Note
	1/23/2014				2
	1/23/2014				1
	1/23/2014				4
	1/23/2014				3
	1/23/2014				2
	1/23/2014				1
1	1/23/2014				4
1	1/23/2014		80		3
1	1/23/2014		100		2
1	1/23/2014		80		1
1	1/22/2014		80		3
1	1/22/2014		100		2
1	1/22/2014		80		1

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
1	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
1/19/2014 07:00	2.00	1800	1,000.0	0.400	2,100.0	0.200

Centrifuge/Cyclone: HGS Centrifuge, BOS Solutions, 5500

Number	Make	Model	Diameter (mm)
2	BOS Solutions	5500	

Centrifuge/Cyclone Checks

Date	Hrs (hr)	RPM (rpm)	Dens OF (kg/m³)	Q OF (L/min)	Dens UF (kg/m³)	Q UF (L/min)
1/19/2014 13:00	3.00	2000	990.0	0.400	1,700.0	0.200

Fluid / Mud Additive Amounts

Des	Consumed	Cost	Size	Units

Survey Data

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	Depart (m)	NS (m)	EW (m)	VS (m)	DLS (°/

Formations

Formation Name	Drill Top MD (mKB)	Drill Top (TVD) (mKB)	Prog Top TVD (mKB)
Little Bear	31.00	31.00	31.00
Slater River	76.00	76.00	76.00
Arctic Red	800.50	800.46	76.40
Martin House	938.50	938.44	76.40
Imperial	975.50	975.43	76.40
Upper Canol	1,665.00	1,658.53	1,653.40
Lower Canol	1,700.72	1,689.07	1,694.40

IX. Tour sheets – Drilling Rig

FRONT PAGE SUMMARY

Tour Sheet Serial Number: BEAV2_20131226_1A	Version Software Version: RMS 2013.8.14.27104	Year: 2013	Month: 12	Day: 26
Licensee No: WID-2082	Well Name: COPRC Dado Canyon E-76 65-10 126-45	Surface Location: E-76-65-10-126-45	Area: NT	Lic Type: CLSS	Unique Well Id:
Operator: Conoco Canada	Contractor: Beaver Drilling Ltd.	Rig No: 2	Well Type: HORIZ	Run Query:
Operator's AFE: 10351817	Contractor's Job No: 151	Equal Date Time:
Signature Of Operator's Representative: RICHARD TURGEON	Signature Of Contractor's Rig Manager: RICK YAVIS	Rig Release Date Time:

DAILY CHECKS — OP REP / RV

(1) Daily Walk Around Inspection
(2) Detailed Inspection - Weekly (Daily Check List)
(3) H2S Sphn Product If Required
(4) Well License & Blow Diagram Posted
(5) Flare Lines Staked
(6) BOP Drills Performed
(7) Visibility Inspected BOP's Flare Lines & Diagram Lines
(1) Rig Site Health & Safety Meeting (every morning)
(2) CADDC Rig Safety Inspection Checklist (weekly/monthly)
(3) Meet Inspection before Raising or Lowering
(4) Chain Saver Checked
(5) Motor Kills Checked

Daily Summary — Off Hole

Hours	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	TOTAL
	Rig Up	Drill Actual	Reaming	Casing	Cond Mud & Circ	Trips	Rig Service	Repair Rig	Cut Off Drlg Line	Run Survey	Wireline Logs	Run Csg & Cement	Wait On Cement	Nipple BOP	Test BOP	Drill Cmnt Test	Plug Back	Squeeze Cement	Fishing	Directional Work	Safety Meeting	Tear Down	Waiting On	Rig Watch	Other	TOTAL
Tour 1	6.25						0.25														1.50					8.00
Tour 2	2.50						0.25							3.50							1.75					8.00
Tour 3							0.25							7.00							0.75					8.00
TOTAL	8.75						0.75							10.50							4.00					24.00

FUEL: 09:00 HRS

Depth	205
Gain	190
Chg	09:00
Temp	-40
Current Conditions	OVERCAST
Wind Direction	N
Wind Velocity	UP TO 19 KM/H
Road Conditions	GOOD

WEATHER INFO

TOUR 1 — CURTIS DAY

START TOUR: 0:00 END TOUR: 8:00

BHA

Bit Number	
Size	
IADC Code	
Manufacturer	
Type	
Serial No	
Jets	
Depth Out (m)	
Depth In (m)	
Total Drilled (m)	
Hrs Run Today	
Cumulative Hrs Run	
Entry Date	

CURTIS STRUCTURE

TD		Stage	
BDC		Nozzles	
LDC		Total Nozzle Area	
LSC			
SHM			

Kelly Down: Total: Weight of DC: Weight of String:

DRILLING ASSEMBLY

No	Component	OD	ID	Length

Drill Pipe: Blends
Drill Pipe: Weight

MUD RECORD

Mud Type: Water ☑ Oil ☐ Other:

Time	
Density	
Funnel Viscosity	
Fluid Loss	
pH	
Location Of Sample	
Depth	
PVT	

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run

Remarks

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density

MUD MATERIALS ADDED

Product	Amount	Type

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequence & Remarks
0:00	0:15	0.25	7	Rig service
0:15	1:15	1.00	21	High angle rescue drill, confined space lift drill with tri-pod
1:15	1:30	0.25	21A	BOP drill / diverter procedure, review for tripping and drilling
1:30	7:45	6.25	1	Inspect pump fluid ends, seats and valves, de-ice and warm up diverter valves
7:45	8:00	0.25	21	Crew hand over meeting with rig crews, rig manager and Conoco reps.

Remarks
boiler #2 170cm fuel, blow down boiler # 1,2 every 4 hours 100l

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	450

BOP TEST

Safety Topic	MEHL	MAOP
High Angle Rescue		

BOP TEST

From	To	D-R-C	RPM	WOB

HOLE CONDITION

Hole Drag: Up / Down
Torque At Bottom:
Fill On Bottom:

REDUCED PUMP SPEED

Pump #	Pressure	Strokes/min	Depth
	@	@	
	@	@	
	@	@	

TOUR 2 — BRIAN BERGSETH

START TOUR: 8:00 END TOUR: 16:00

BHA

Bit Number	
Size	
IADC Code	
Manufacturer	
Type	
Serial No	
Jets	
Depth Out (m)	
Depth In (m)	
Total Drilled (m)	
Hrs Run Today	
Cumulative Hrs Run	
Entry Date	

CURTIS STRUCTURE

TD		Stage	
BDC		Nozzles	
LDC		Total Nozzle Area	
LSC			
SHM			

Kelly Down: Total: Weight of DC: Weight of String:

DRILLING ASSEMBLY

No	Component	OD	ID	Length

Drill Pipe: Blends
Drill Pipe: Weight

MUD RECORD

Mud Type: Water ☑ Oil ☐ Other:

Time	
Density	
Funnel Viscosity	
Fluid Loss	
pH	
Location Of Sample	
Depth	
PVT	

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run

Remarks

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density

MUD MATERIALS ADDED

Product	Amount	Type

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequence & Remarks
8:00	8:15	0.25	7	Rig service
8:15	10:00	1.75	21	Safety meeting, review Beaver drilling J.S.A's notification and high angel rescue drill
10:00	12:30	2.50	1B	Work on top drive functions and calibrate sensors
12:30	16:00	3.50	14C	Rig up R.C.D head, diverter system and prepare to weld on flanges for flow and flare lines

Remarks
BLOW DOWN BOILERS 100 L

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	450

BOP TEST

Safety Topic	MEHL	MAOP
HIGH ANGEL DRILL		

BOP TEST

From	To	D-R-C	RPM	WOB

HOLE CONDITION

Hole Drag: Up / Down
Torque At Bottom:
Fill On Bottom:

REDUCED PUMP SPEED

Pump #	Pressure	Strokes/min	Depth
	@	@	
	@	@	
	@	@	

TOUR 3 — CURTIS DAY

START TOUR: 16:00 END TOUR: 24:00

BHA

Bit Number	
Size	
IADC Code	
Manufacturer	
Type	
Serial No	
Jets	
Depth Out (m)	
Depth In (m)	
Total Drilled (m)	
Hrs Run Today	
Cumulative Hrs Run	
Entry Date	

CURTIS STRUCTURE

TD		Stage	
BDC		Nozzles	
LDC		Total Nozzle Area	
LSC			
SHM			

Kelly Down: Total: Weight of DC: Weight of String:

DRILLING ASSEMBLY

No	Component	OD	ID	Length

Drill Pipe: Blends
Drill Pipe: Weight

MUD RECORD

Mud Type: Water ☑ Oil ☐ Other:

Time	
Density	
Funnel Viscosity	
Fluid Loss	
pH	
Location Of Sample	
Depth	
PVT	

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run

Remarks

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density

MUD MATERIALS ADDED

Product	Amount	Type

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequence & Remarks
16:00	16:15	0.25	7	Rig service
16:15	16:30	0.25	21	Safety meeting prior to welding valve flanges
16:30	19:00	2.50	14C	Nipple up / rotating equipment and weld flanges, 10" and 8 " lines, for flow and flare lines
19:00	19:30	0.50	21D	Crew hand over meeting with rig crews, rig manager and Conoco reps. Safety meeting prior to installing diverter valves
19:30	24:00	4.50	14C	Nipple up flow and flare line, diverter valves

Remarks

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	450

BOP TEST

Safety Topic	MEHL	MAOP

BOP TEST

From	To	D-R-C	RPM	WOB

HOLE CONDITION

Hole Drag: Up / Down
Torque At Bottom:
Fill On Bottom:

REDUCED PUMP SPEED

Pump #	Pressure	Strokes/min	Depth
	@	@	
	@	@	
	@	@	

FRONT PAGE SUMMARY

Tour Sheet Serial Number: BEAV2_20131227_1A | Vendor Software Version: RMS 2013.8.14.27104 | Year: 2013 | Month: 12 | Day: 27

License No: WID-2082	Well Name: COPRC Dodo Canyon E-76 65-10 126-45	Surface Location: E-76-65-10-126-45	Prov: NT	Lic Type: CLSS	Unique Well Id
Operator: Conoco Canada	Contractor: Beaver Drilling Ltd.	Rig No: 2	Well Type: HORIZ	No Entry: ☐	
Operator's AFE: 10351817	Contractor's Job No: 151	Spud Date Time			
Signature Of Operator's Representative: RICHARD TURGEON	Signature Of Contractor's Rig Manager: RICK YAVIS	Rig Release Date Time			

DAILY CHECKS — OP / RM

	OP	RM
(1a) Daily Walk Around Inspection	RT	RY
(2a) Detailed Inspection - Weekly (Using Check List)	RT	RY
(2c) H2S Signs Posted If Required	RT	RY
(4a) Hoist Upgrade & Sub Diagram Posted	RT	RY
(5a) Flare Lines Staked	RT	RY
(6a) BOP Drills Performed		
(7a) Monthly Inspection BOP/Flare Lines & Diverter Lines		
(1) Rig Site Health & Safety Meeting (each tour/shift)		RY
(2) CAODC Rig Safety Inspection Checklist (weekly/month)		
(3) Hoist Inspection before Raising or Lowering		
(4) Crown Saver Checked		
(5) Motor Kills Checked		

CAODC / NOV

Safety Meeting: | Drill Time:

HOURS

Tour	1 Rig Up/Tear Down	2 Drill Actual	3 Reaming	4 Coring	5 Circ Cond & Circ	6 Trips	7 Rig Service	8 Repair Rig	9 Cut Off Drlg Line	10 Slip Elevators	11 Wireline Logs	12 Run Csg & Cement	13 Wait On Cement	14 Nipple BOP	15 Test BOP	16 Drillstem Test	17 Plug Back	18 Directional Control	19 Fishing	20 Other	21 Safety Meeting	22 Lost Circ	23 Waiting On	24 Rig Watch	25 Other	TOTAL
Tour 1		6.75					0.25														1.00					8.00
Tour 2		7.50					0.25														0.25					8.00
Tour 3		6.75				0.25	0.25														0.75					8.00
TOTAL		21.00				0.25	0.75														2.00					24.00

FUEL @ 09:00 HRS

No	180
Used	130
Add	08:00
Take	-40

WEATHER

General Conditions	CLEAR
Wind Direction	N
Wind Strength	UP TO 19 KM/H
Road Conditions	GOOD

Tour No: 1 | Tour Pusher / Foreman: CURTIS DAY | Start Time: 0:00 | End Time: 8:00

BITS

Bit Number	1
Size	311
IADC Code	
Manufacturer	REED
Type	J&L
Serial No	B181332
Jets	15.9 15.9 15.9 12.7
Depth Out (m)	
Depth In (m)	
Total Drilled (m)	
Hrs Run Today	
Cumulative Hrs Run	0.00
Entry Date	

CURTIS STRUCTURE: TO | BC | MDC | LOC | BRG

WEAR CODES: From | To | D-B-C | RPM | WOB

DRILLING ASSEMBLY: No | Component | OD | ID | Length

Drill Pipe: Stands | Drill Pipe: Singles

HOLE CONDITION: Hole Drag: Up / Down | Torque At Bottom | Fill On Bottom

MUD RECORD: Mud Type: Water ☑ Oil ☐ Other | Time | Density | Funnel Viscosity | Fluid Loss | pH | Location Of Sample | Depth | PVT

Circulation: Pump # | Type | Liner Size | SPM | Pressure | Hrs Run

Remarks

REDUCED PUMP SPEED: Pump # | Pressure | Strokes/min | Depth

DEVIATION SURVEYS: Time | Depth | Deviation | Direction | Type

SOLIDS CONTROL: Equipment Name | Hours Run | Intake Density | Over Flow Density | Under Flow Density

MUD MATERIALS ADDED: Product | Amount | Type

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	450

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
0:00	0:15	0.25	7	Rig Service, function motor shut off's, work ok.
0:15	7:00	6.75	1	Rig in pipe rack and load with BHA, HWDP, finish lie in flare line to flare tanck and check all connections on fis and diverter
7:00	7:15	0.25	21D	Crew hand over meeting with rig crews, rig manager and Conoco reps.
7:15	8:00	0.75	21F	Rig inspection walk around with driller and Conoco rep.

Remarks: BOILER # 2 160CM FUEL BLOW BOILERS DOWN 100L

SAFETY: Safety Topic | MEHL | MACP

Tour No: 2 | Tour Pusher / Foreman: BRIAN BERGSETH | Start Time: 8:00 | End Time: 16:00

BITS

Bit Number	1
Size	311
IADC Code	
Manufacturer	REED
Type	J&L
Serial No	B181332
Jets	15.9 15.9 15.9 12.7
Depth Out (m)	
Depth In (m)	
Total Drilled (m)	
Hrs Run Today	
Cumulative Hrs Run	0.00
Entry Date	

CURTIS STRUCTURE: TO | BC | MDC | LOC | BRG

WEAR CODES: From | To | D-B-C | RPM | WOB

DRILLING ASSEMBLY: No | Component | OD | ID | Length

Drill Pipe: Stands | Drill Pipe: Singles

HOLE CONDITION: Hole Drag: Up / Down | Torque At Bottom | Fill On Bottom

MUD RECORD: Mud Type: Water ☑ Oil ☐ Other | Time | Density | Funnel Viscosity | Fluid Loss | pH | Location Of Sample | Depth | PVT

Circulation: Pump # | Type | Liner Size | SPM | Pressure | Hrs Run

Remarks

REDUCED PUMP SPEED: Pump # | Pressure | Strokes/min | Depth

DEVIATION SURVEYS: Time | Depth | Deviation | Direction | Type

SOLIDS CONTROL: Equipment Name | Hours Run | Intake Density | Over Flow Density | Under Flow Density

MUD MATERIALS ADDED: Product | Amount | Type

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	450

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
8:00	8:15	0.25	7	Rig service.
8:15	8:30	0.25	21D	Safety meeting prior to setting up rig smart anti collision system.
8:30	16:00	7.50	1B	Rig in rig smart anti collision system with system hand.

Remarks: BLOW DOWN BOILERS 100 L

SAFETY: Safety Topic | MEHL | MACP

Tour No: 3 | Tour Pusher / Foreman: CURTIS DAY | Start Time: 16:00 | End Time: 24:00

BITS

Bit Number	1
Size	311
IADC Code	
Manufacturer	REED
Type	J&L
Serial No	B181332
Jets	15.9 15.9 15.9 12.7
Depth Out (m)	
Depth In (m)	
Total Drilled (m)	
Hrs Run Today	
Cumulative Hrs Run	0.00
Entry Date	

CURTIS STRUCTURE: TO | BC | MDC | LOC | BRG

WEAR CODES: From | To | D-B-C | RPM | WOB

DRILLING ASSEMBLY: No | Component | OD | ID | Length

Drill Pipe: Stands | Drill Pipe: Singles

HOLE CONDITION: Hole Drag: Up / Down | Torque At Bottom | Fill On Bottom

MUD RECORD: Mud Type: Water ☑ Oil ☐ Other | Time | Density | Funnel Viscosity | Fluid Loss | pH | Location Of Sample | Depth | PVT

Circulation: Pump # | Type | Liner Size | SPM | Pressure | Hrs Run

Remarks

REDUCED PUMP SPEED: Pump # | Pressure | Strokes/min | Depth

DEVIATION SURVEYS: Time | Depth | Deviation | Direction | Type

SOLIDS CONTROL: Equipment Name | Hours Run | Intake Density | Over Flow Density | Under Flow Density

MUD MATERIALS ADDED: Product | Amount | Type

Product	Amount	Type
Bentonite	41	SX
Fedzan	2	SX
Soda Ash	1	SX

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	450

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
16:00	16:15	0.25	7	Rig service, function horn.
16:15	19:00	2.75	1B	Finish rigging up top drive, recalibrate all functions
19:00	19:30	0.50	21	Crew hand over meeting with rig crews, rig manager and Conoco reps.
19:30	23:30	4.00	1B	Continue to rig up top drive, mud saver valve and saver sub, recalibrate rig smart.
23:30	23:45	0.25	21D	Safety meeting prior to picking up 9" drill collars and installing 311mm tooth bit.
23:45	24:00	0.25	6C	Pick up and steam heat 9" drill collar, bit sub and 311mm bit

Remarks

SAFETY: Safety Topic | MEHL | MACP

PICK UP DRILL COLLARS

FRONT PAGE SUMMARY

| | | |

FRONT PAGE SUMMARY

Tour Sheet Serial Number: BEAV2_20131229_1A	Vendor Software Version: RMS 2013.8.14.27104	Year: 2013	Month: 12	Day: 29
License No: WID-2082	Well Name: COPRC Dodo Canyon E-75 65-10 126-45	Surface Location: E-76-65-10-126-45	Prov: NT	Lic Type: CLSS	Unique Well Id:
Operator: Conoco Canada	Contractor: Beaver Drilling Ltd.	Rig No: 2	Well Type: HORIZ	Re-Entry: ☐
Operator's AFE: 10351817	Contractor's Job No: 151	Spud Date Time: 28-Dec-2013 06:30		
Signature Of Operator's Representative: RICHARD TURGEON	Signature Of Contractor's Rig Manager: RICK VAVIS	Rig Release Date Time:		

DAILY CHECKS — OP. RT. / RY.

(1.) Daily Walk Around Inspection
(2.) Detailed Inspection - Weekly (Safety Check List)
(3.) H2S Signs Posted if Required
(4.) Well Licence & Stab Diagram Posted
(5.) Flare Lines Rated
(6.) BOP Drills Performed
(7.) Visually Inspected BOPs, Flare Lines & Diverter Lines
(1.) Rig Site Hazard & Safety Meeting (every rotation/tour)
(2.) CAODC Rig Safety Inspection Checklist (once/fortnight)
(3.) Meet Inspector before Rigging or Lowering
(4.) Crown Saver Checked
(5.) Motor Kills Checked

Code	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	TOTAL
	Rig Up	Drill Actual	Reaming	Coring	Cond Mud & Circ	Trips	Rig Service	Repair Rig	Cut Off Drlg Line	Dev Survey	Wireline Logs	Run Csg & Cement	Wait On Cement	Nipple BOP	Test BOP	Drillstem Test	Plug Back	Squeeze Cement	Fishing	Dir Work	Safety Meeting	Tour Down	Waiting On	Rig Watch	Other	
Tour 1		0.25					0.25	5.75													1.75					8.00
Tour 2							0.25	7.50													0.25					8.00
Tour 3							0.25	7.50													0.25					8.00
TOTAL		0.25					0.75	20.75													2.25					24.00

FUEL @ 06:00 HRS: Rig 170 | Camp 185 | Total 06:30 | Diff -42

WEATHER: Conditions PARTLY CLOUDY | Wind Direction N | Wind Strength CALM | Road Condition GOOD

Tour 1

Driller: CURTIS DAY | Start Time: 0:00 | End Time: 8:00

BITS

Bit Number	1
Size	311
IADC Code	
Manufacturer	REED
Type	J&L
Serial No	B181332
Jets	15.9 15.9 / 15.9 12.7
Depth Out (m)	
Depth In (m)	
Total Drilled (m)	156.00
Hrs Run Today	0.00
Cumulative Hrs Run	11.00
Entry Date	

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	311mm BIT	311	72	0.34
1	Bit sub	255	70	0.93
2	9" D.C	233	71	18.50
1	Bell sub	232	69	0.66
3	6" D.C	160	60	27.80
1	Jar	157	76	4.73
9	6" D.C	160	60	84.00
1	X/O 4" H-90	162	62	0.80
2	4" HW	132	70	18.18
0	Drill Pipe	Stands		0.00
0	Drill Pipe	Singles		0.00
	Kelly Down			0.00
	Total			0.00
	Weight of DC			
	Weight of String			40.00

MUD RECORD

Mud Type: Water ☑ Oil ☐ Other

Time	00:30
Density	1075
Funnel Viscosity	40
Fluid Loss	
pH	
Location Of Sample	shaker
Depth	155.00
PVT	40

Circulation

Pump #	Type	Liner Size	RPM	Pressure	Hrs Run
1	PARALLEL	140	95	4300	8.00
2	PARALLEL	140	95	4300	8.00

Remarks:

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density

MUD MATERIALS ADDED

Product	Amount	Type

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	450

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequence & Remarks
0:00	0:15	0.25	7	Rig service function test crown saver
0:15	0:30	0.25	2	Drill 311mm hole from 145m to 156m
0:30	2:00	1.50	21A	Diverter drill, review crew positions and procedures
2:00	7:45	5.75	8B	Circulate and move pipe, wait on top drive parts
7:45	8:00	0.25	21	Crew hand over meeting with rig crews, rig manager, Conoco reps

Remarks: Boiler # 2 195 cm fuel , blow boilers down 100l

SAFETY

Safety Topic	MEHL	MACP
Diverter Procedures		

WEIGHT & SPEED

From	To	D-R-C	RPM	WOB

HOLE CONDITION

Hole Drag: Up 0 Down 0
Torque At Bottom:
Fill On Bottom:

CUTTING STRUCTURE

I	Chars		
TO		ODC	
MDC		Pressure Loss	
LOC		Bit Hrs Run	14.18
BRG			

REDUCED PUMP SPEED

Pump #	Pressure	Strokes/min	Depth
	@	@	
	@	@	
	@	@	

Tour 2

Driller: BRIAN BERGSETH | Start Time: 8:00 | End Time: 16:00

BITS

Bit Number	1
Size	311
IADC Code	
Manufacturer	REED
Type	J&L
Serial No	B181332
Jets	15.9 15.9 / 15.9 12.7
Depth Out (m)	
Depth In (m)	0.00
Total Drilled (m)	
Hrs Run Today	
Cumulative Hrs Run	11.00
Entry Date	

DRILLING ASSEMBLY

No	Component	OD	ID	Length
	Drill Pipe	Stands		
	Drill Pipe	Singles		
	Kelly Down			
	Total			
	Weight of DC			
	Weight of String			

MUD RECORD

Mud Type: Water ☑ Oil ☐ Other

Time	09:00	13.45
Density	1080	1080
Funnel Viscosity	40	40
Fluid Loss		
pH		9
Location Of Sample		
Depth	155.00	155.00
PVT	41.7	41.7

Circulation

Pump #	Type	Liner Size	RPM	Pressure	Hrs Run
1	SINGLE	140	95	1300	8.00

Remarks:

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density

MUD MATERIALS ADDED

Product	Amount	Type

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	450

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequence & Remarks
8:00	8:15	0.25	7	Rig Service Function Test Crown Saver
8:15	8:30	0.25	21	diverter drill, review crew positions and procedures
8:30	16:00	7.50	8B	Circulate, work pipe and wait on top drive parts

Remarks: blow down boilers # 1 & 2 100 l each

SAFETY

Safety Topic	MEHL	MACP
diverter drill		

WEIGHT & SPEED

From	To	D-R-C	RPM	WOB

HOLE CONDITION

Hole Drag: Up Down
Torque At Bottom:
Fill On Bottom:

CUTTING STRUCTURE

I	Chars		
TO		ODC	
MDC		Pressure Loss	
LOC		Bit Hrs Run	
BRG			

REDUCED PUMP SPEED

Pump #	Pressure	Strokes/min	Depth
	@	@	
	@	@	
	@	@	

Tour 3

Driller: CURTIS DAY | Start Time: 16:00 | End Time: 24:00

BITS

Bit Number	1
Size	311
IADC Code	
Manufacturer	REED
Type	J&L
Serial No	B181332
Jets	15.9 15.9 / 15.9 12.7
Depth Out (m)	
Depth In (m)	0.00
Total Drilled (m)	
Hrs Run Today	
Cumulative Hrs Run	11.00
Entry Date	

DRILLING ASSEMBLY

No	Component	OD	ID	Length
	Drill Pipe	Stands		
	Drill Pipe	Singles		
	Kelly Down			
	Total			
	Weight of DC			
	Weight of String			

MUD RECORD

Mud Type: Water ☑ Oil ☐ Other

Time	20:00	22:00
Density	1080	1080
Funnel Viscosity	36	40
Fluid Loss		
pH		
Location Of Sample	shaker	shaker
Depth	156.00	156.00
PVT	45	45

Circulation

Pump #	Type	Liner Size	RPM	Pressure	Hrs Run
1	SINGLE	140	95	1300	8.00

Remarks:

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density

MUD MATERIALS ADDED

Product	Amount	Type

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	450

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequence & Remarks
16:00	16:15	0.25	7	Rig service function test crown saver
16:15	19:00	2.75	8B	Circulate, work pipe and wait on top drive parts
19:00	19:15	0.25	21	Crew hand over meeting with rig crews, rig manager, conoco reps
19:15	24:00	4.75	8B	Circulate, work pipe and wait on top drive parts

Remarks:

SAFETY

Safety Topic	MEHL	MACP
Clean and Prepare Casing		

WEIGHT & SPEED

From	To	D-R-C	RPM	WOB

HOLE CONDITION

Hole Drag: Up Down
Torque At Bottom:
Fill On Bottom:

CUTTING STRUCTURE

I	Chars		
TO		ODC	
MDC		Pressure Loss	
LOC		Bit Hrs Run	
BRG			

REDUCED PUMP SPEED

Pump #	Pressure	Strokes/min	Depth
	@	@	
	@	@	
	@	@	

FRONT PAGE SUMMARY

Tour Sheet Serial Number: BEAV2_20131230_1A | Vendor Software Version: RMS 2013.8.14.27104 | Year: 2013 | Month: 12 | Day: 30

Licence No: WID-2082	Well Name: COPRC Dodo Canyon E-76 65-10 126-45	Surface Location: E-76-65-10-126-45	Prov: NT	Lic Type: CLSS	Unique Well Id:
Operator: Conoco Canada	Contractor: Beaver Drilling Ltd.	Rig No: 2	Well Type: HORIZ	Re-Entry: ☐	
Operator's AFE: 10351817	Contractor's Job No: 151	Spud Date Time: 28-Dec-2013 06:30			
Signature Of Operator's Representative: RICHARD TURGEON	Signature Of Contractor's Rig Manager: RICK YAVIS	Rig Release Date Time:			

DAILY CHECKS — OP / RY

(1.) Daily Well Control Inspection — RT / RY
(2.) Detailed Inspection - Visually (Using Check List) — RT / RY
(3.) H2S Signs Posted If Required — RT / RY
(4.) Well Licence & Block Diagram Posted — RT / RY
(5.) Term Limits Posted — RT / RY
(6.) BOP Drills Performed
(7.) Visually Inspected BOPs Pre-Flare Lines & Degasser Lines
(1.) Rig Site Health & Safety Meeting (once/week/month) — RY
(2.) CAODC Rig Safety Inspection Checklist (once/equipment) — RY
(3.) Mast Inspection before Raising or Lowering — RY
(4.) Crown Saver Checked — RY
(5.) Motor Kills Checked — RY

CAODC NOV

HOURS

Code	1 Rig Up	2 Drill Actual	3 Reaming	4 Coring	5 Cond Mud & Circ	6 Trips	7 Rig Service	8 Repair Rig	9 Cut Off Drlg Line	10 Dev Survey	11 Wireline Logs	12 Run Csg & Cement	13 Wait On Cement	14 Nipple BOP	15 Test BOP	16 Drillstem Test	17 Plug Back	18 Squeeze Cement	19 Fishing	20 Dir Work	21 Safety Meeting	22 Tear Down	23 Waiting On	24 Rig Maint	Other	TOTAL
Tour 1							0.25	7.50													0.25					8.00
Tour 2							0.25	7.50													0.25					8.00
Tour 3		3.00			1.50	2.00	0.25	0.75		0.25											0.25					8.00
TOTAL		3.00			1.50	2.00	0.75	15.75		0.25											0.75					24.00

DAYS SINCE: Last Lost Time | Last Inspection

FUEL @ 08:00 HRS: Air 202 | Used 185 | Temp 05.00 | Used -50 | Survey Conditions: CLEAR | Wind Direction: N | Wind Strength: UP TO 15 KM/H | Road Condition: GOOD

TOUR 1

Tour: 1 | Driller: CURTIS DAY | Start Time: 0:00 | End Time: 8:00

BITS

Bit Number	1
Size	311
IADC Code	
Manufacturer	REED
Type	J&L
Serial No	B181332
Jets	15.9 15.9 / 15.9 12.7
Depth Out (m)	
Depth In (m)	156.00
Total Drilled (m)	
Hrs Run Today	
Cumulative Hrs Run	11.00
Entry Date	

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	311mm BIT	311	72	0.34
1	Bit sub	255	70	0.93
2	9" D.C	233	71	18.50
1	Bell sub	232	69	0.66
3	6" D.C	160	60	27.80
1	Jar	157	76	4.73
9	6" D.C	160	60	84.00
1	X/O 4" H-90	162	62	0.80
2	4" HW	132	70	18.18
0	Drill Pipe Stands			0.00
0	Drill Pipe Singles			0.00

MUD RECORD

Mud Type	Water	Oil ☑
Other		
Time	00:15	02:15
Density	1080	1080
Funnel Viscosity	40	40
Fluid Loss		
pH		
Location Of Sample	shaker	SHAKER
Depth	156.00	156.00
PVT	45	46

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	SINGLE	140	95	1120	8.00

Remarks

REDUCED PUMP SPEED

Pump #	Pressure	Strokes/min	Depth
	@	@	
	@	@	
	@	@	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density
Centrifuge #1	8.00	1060	1050	1710

MUD MATERIALS ADDED

Product	Amount	Type
Bentonite	10	sx

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	450

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequence & Remarks
0:00	0:15	0.25	7	Rig Service function test crown saver
0:15	7:45	7.50	8B	Circulate and work pipe wait on Top Drive parts
7:45	8:00	0.25	21	Crew hand over meeting with rig crews, rig manager, Conoco reps

Remarks: boiler # 2 200 fuel cm blow both boilers 100l

CUTTINGS STRUCTURE

TI		IBC	
TO		Ream Gage	
MDC		Hrs Run Bit	
LDC		Bit Hrs Left	
BRG			

CORE / TESTS

From	To	D-R-C	RPM	WOB

HOLE CONDITION

Kelly Down			0.00
Total			0.00
Weight of DC			
Weight of String			40.00

Hole Drag: Up / Down
Torque At Bottom
Fill On Bottom

SAFETY

Safety Topic	MEHL	MACP

TOUR 2

Tour: 2 | Driller: BRIAN BERGSETH | Start Time: 8:00 | End Time: 16:00

BITS

Bit Number	1
Size	311
IADC Code	
Manufacturer	REED
Type	J&L
Serial No	B181332
Jets	15.9 15.9 / 15.9 12.7
Depth Out (m)	
Depth In (m)	0.00
Total Drilled (m)	
Hrs Run Today	
Cumulative Hrs Run	11.00
Entry Date	

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	311mm BIT	311	72	0.34
1	Bit sub	255	70	0.93
2	9" D.C	233	71	18.50
1	Bell sub	232	69	0.66
3	6" D.C	160	60	27.80
1	Jar	157	76	4.73
9	6" D.C	160	60	84.00
1	X/O 4" H-90	162	62	0.80
2	4" HW	132	70	18.18
0	Drill Pipe Stands			0.00
0	Drill Pipe Singles			0.00

MUD RECORD

Mud Type	Water	Oil ☑
Other		
Time	09:30	14:15
Density	1070	1070
Funnel Viscosity	40	40
Fluid Loss		
pH		
Location Of Sample	shaker	shaker
Depth	156.00	156.00
PVT	47.2	48

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	SINGLE	140	115	1200	8.00

Remarks

REDUCED PUMP SPEED

Pump #	Pressure	Strokes/min	Depth
	@	@	
	@	@	
	@	@	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density

MUD MATERIALS ADDED

Product	Amount	Type

BOILER

BoilerNo	HoursRun	pH	StackTemp

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequence & Remarks
8:00	8:15	0.25	7	Rig service function test crown saver
8:15	14:15	6.00	8B	Circulate and work pipe wait on top drive mechanic
14:15	15:45	1.50	8B	Down time - top drive repair HPU with wajax mechanical
15:45	16:00	0.25	21	Crew hand over meeting with rig crews, rig manager, Conoco reps

Remarks: blow down boilers 200 l

CUTTINGS STRUCTURE

TI		IBC	
TO		Ream Gage	
MDC		Hrs Run Bit	3.00
LDC		Bit Hrs Left	
BRG			

CORE / TESTS

From	To	D-R-C	RPM	WOB

HOLE CONDITION

Kelly Down			0.00
Total			156.04
Weight of DC			
Weight of String			39.00

Hole Drag: Up / Down
Torque At Bottom
Fill On Bottom

SAFETY

Safety Topic	MEHL	MACP
rig service j.s.a # 67		

TOUR 3

Tour: 3 | Driller: DEVAN SCHLITTER | Start Time: 16:00 | End Time: 24:00

BITS

Bit Number	1
Size	311
IADC Code	
Manufacturer	REED
Type	J&L
Serial No	B181332
Jets	15.9 15.9 / 15.9 12.7
Depth Out (m)	
Depth In (m)	0.00
Total Drilled (m)	212.00
Hrs Run Today	3.00
Cumulative Hrs Run	14.00
Entry Date	

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	311mm BIT	311	72	0.34
1	Bit sub	255	70	0.93
2	9" D.C	233	71	18.50
1	Bell sub	232	69	0.66
3	6" D.C	160	60	27.80
1	Jar	157	76	4.73
9	6" D.C	160	60	84.00
1	X/O 4" H-90	162	62	0.80
8	4" HW	132	70	74.57
0	Drill Pipe Stands			0.00
0	Drill Pipe Singles			0.00

MUD RECORD

Mud Type	Water	Oil ☑
Other		
Time	16:00	20:00
Density	1080	1090
Funnel Viscosity	40	40
Fluid Loss		
pH		
Location Of Sample	shaker	shaker
Depth	155.00	186.00
PVT	48	48

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	PARALLEL	140	120	9000	5.50
2	PARALLEL	140	120	9000	3.50

Remarks

REDUCED PUMP SPEED

Pump #	Pressure	Strokes/min	Depth
	@	@	
	@	@	
	@	@	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type
20:00	183.00	0.20	0	WIRELINE
22:00	211.00	0.30	0	WIRELINE

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density
Centrifuge #1	8.00	1090	1080	1710

MUD MATERIALS ADDED

Product	Amount	Type

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequence & Remarks
16:00	16:15	0.25	7	Rig service function test crown saver operating properly
16:15	17:00	0.75	8B	Down time - top drive repair HPU with wajax mechanical
17:00	18:15	1.25	5	Circulate top drive to warm up system
18:15	21:15	3.00	2	Rotary drill 311mm surface hole from 156mKB to 212m
21:15	21:30	0.25	5	Circulate hole clean to wiper trip
21:30	21:45	0.25	10	Wire line survey at 211m, 0.3 deg.
21:45	22:15	0.50	6M	Wiper trip out of hole to 194m
22:15	23:00	0.75	6	work tight hole @193m circ and work string
23:00	23:15	0.25	21	Crew hand over safety meeting
23:15	24:00	0.75	6M	Wiper trip out of hole

Remarks: level 1 inspection on tongs and overhead equipment d.s
blew down boiler 2 times 50 litres

CUTTINGS STRUCTURE

TI		IBC	
TO		Ream Gage	
MDC		Hrs Run Bit	15.14
LDC		Bit Hrs Left	
BRG			

CORE / TESTS

From	To	D-R-C	RPM	WOB
156.00	212.00	DRILL	120	9

HOLE CONDITION

Kelly Down			0.00
Total			212.43
Weight of DC			
Weight of String			40.00

Hole Drag: Up / Down
Torque At Bottom
Fill On Bottom

SAFETY

Safety Topic	MEHL	MACP

FRONT PAGE SUMMARY

Your Site or Serial Number: BEAV2_20131230_1A	Vendor Software Version: RMS 2013.8.14.27104	Year: 2013	Month: 12	Day: 30	DAILY CHECKS	SP	RV
License No.: WID-2082	Well Name: COPRC Dodo Canyon E-76 65-10 126-45	Surface Location: E-76-65-10-126-45	Prov: NT	Loc Type: CLSS	Unique Well ID:		
Operator: Conoco Canada	Contractor: Beaver Drilling Ltd.	Rig No: 2	Well Type: HORIZ	Re-Entry: ☐			
Operator's AFE: 10351817	Contractor's Job No: 151	Spud Date Time: 28-Dec-2013 06:30					
Signature Of Operator's Representative: RICHARD TURGEON	Signature Of Contractor's Rig Manager: RICK YAVIS	Rig Release Date Time:					

(1.) Daily Walk Around Inspection — RT ☐ RV ☐
(2.) Derailed Inspection - Weekly (Using Check List) — RT ☐ RV ☐
(3.) H2S Signs Posted if Required — RT ☐ RV ☐
(4.) Well Licences & Well Program Posted — RT ☐ RV ☐
(5.) Flare Lines Staked — RT ☐ RV ☐
(6.) BOP Drills Performed — ☐
(7.) Visually Inspected BOPs, Flare Lines & Diverter Lines — ☐
(1.) Rig Site Health & Safety Meeting (minute taken/log) — BY ☐
(2.) CAODC Rig Safety Inspection Checklist (once/month) — BY ☐
(3.) Hard Inspection before Raising or Lowering — BY ☐
(4.) Crown Saver Checked — BY ☐
(5.) Motor Mills Checked — BY ☐

CAODC

NOV

HOURS

	Rig Up	Drill Ahead	Reaming	Coring	Cond Mud & Circ	Trips	Rig Service	Repair Rig	Cut Off Drlg Line	Dev Survey	Wireline Logs	Run Csg & Cement	Wait On Cement	Nipple BOP	Test BOP	Drillstem Test	Plug Back	Squeeze Cement	Fishing	Dir Work	Safety Meeting	Tear Down	Waiting On	Rig Maint	Other	TOTAL
Tour 1							0.25	7.50													0.25					8.00
Tour 2							0.25	7.50													0.25					8.00
Tour 3		3.00			1.50	2.00	0.25	0.75		0.25											0.25					8.00
TOTAL		3.00			1.50	2.00	0.75	15.75		0.25											0.75					24.00

FUEL @ 08:00 HRS: 202 / 185

WEATHER: Time 05:00 — Temp -50 — Conditions CLEAR — Wind Direction N — Wind Strength UP TO 15 KM/H — Road Conditions GOOD

TOUR 1

Driller: 1 — Name of Driller: CURTIS DAY — Start Time: 0:00 — End Time: 8:00

BITS

Bit Number	1
Size	311
IADC Code	
Manufacturer	REED
Type	J&L
Serial No	B181332
Jets	15.9 15.9 / 15.9 12.7
Depth Out (m)	
Depth In (m)	156.00
Total Drilled (m)	
Hrs Run Today	
Cumulative Hrs Run	11.00
Entry Date	

CUTTING STRUCTURE: TI / TO / MDC / LOC / BRG / Gauge / ODC / Reason Pulled / Inner Row / Outer Row

METRES DRILLED

From	To	D-R-C	RPM	WOB

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	311mm BIT	311	72	0.34
1	Bit sub	256	70	0.93
2	9" D.C	233	71	18.50
1	Bell sub	232	69	0.66
3	6" D.C	160	60	27.80
1	Jar	157	76	4.73
9	6" D.C	160	60	84.00
1	X/O 4" H-90	162	62	0.80
2	4" HW	132	70	18.18
0	Drill Pipe — Stands			0.00
0	Drill Pipe — Singles			0.00

Kelly Down: 0.00 — Total: 0.00 — Weight of DC: — Weight of String: 40.00

HOLE CONDITION: Hole Drag: Up / Down — Torque At Bottom — Fill On Bottom

MUD RECORD

Mud Type: Water ☑ Oil ☐ Other

Time	04:15	06:15
Density	1080	1080
Funnel Viscosity	40	40
Fluid Loss		
pH		
Location Of Sample	SHAKER	SHAKER
Depth	156.00	156.00
PVT	46	47

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	SINGLE	140	95	1120	8.00

Remarks:

REDUCED PUMP SPEED

Pump #	Pressure	Strokes/min	Depth
	@	@	
	@	@	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density
Centrifuge #1	8.00	1060	1050	1710

MUD MATERIALS ADDED

Product	Amount	Type

BOILER

BoilerNo	HoursRun	pH	StackTemp

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequence & Remarks

Remarks: boiler # 2 200 fuel cm blow both boilers 100l

SAFETY

Safety Topic	MEHL	MACP

TOUR 2

Driller: 2 — Name of Driller: BRIAN BERGSETH — Start Time: 8:00 — End Time: 16:00

BITS

Bit Number	1
Size	311
IADC Code	
Manufacturer	REED
Type	J&L
Serial No	B181332
Jets	15.9 15.9 / 15.9 12.7
Depth Out (m)	
Depth In (m)	0.00
Total Drilled (m)	
Hrs Run Today	
Cumulative Hrs Run	11.00
Entry Date	

CUTTING STRUCTURE: TI / TO / MDC / LOC / BRG / Gauge / ODC / Reason Pulled / Inner Row / Outer Row: 3.00

METRES DRILLED

From	To	D-R-C	RPM	WOB

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	311mm BIT	311	72	0.34
1	Bit sub	255	70	0.93
2	9" D.C	233	71	18.50
1	Bell sub	232	69	0.66
3	6" D.C	160	60	27.80
1	Jar	157	76	4.73
9	6" D.C	160	60	84.00
1	X/O 4" H-90	162	62	0.80
2	4" HW	132	70	18.18
0	Drill Pipe — Stands			0.00
0	Drill Pipe — Singles			0.00

Kelly Down: 0.00 — Total: 156.04 — Weight of DC: — Weight of String: 39.00

HOLE CONDITION: Hole Drag: Up / Down — Torque At Bottom — Fill On Bottom

MUD RECORD

Mud Type: Water ☑ Oil ☐ Other

Time			
Density			
Funnel Viscosity			
Fluid Loss			
pH			
Location Of Sample			
Depth			
PVT			

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	SINGLE	140	115	1200	8.00

Remarks:

REDUCED PUMP SPEED

Pump #	Pressure	Strokes/min	Depth
	@	@	
	@	@	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density

MUD MATERIALS ADDED

Product	Amount	Type

BOILER

BoilerNo	HoursRun	pH	StackTemp

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequence & Remarks

Remarks: blow down boilers 200 l

SAFETY

Safety Topic	MEHL	MACP

TOUR 3

Driller: 3 — Name of Driller: DEVAN SCHLITTER — Start Time: 16:00 — End Time: 24:00

BITS

Bit Number	1
Size	311
IADC Code	
Manufacturer	REED
Type	J&L
Serial No	B181332
Jets	15.9 15.9 / 15.9 12.7
Depth Out (m)	
Depth In (m)	0.00
Total Drilled (m)	212.00
Hrs Run Today	3.00
Cumulative Hrs Run	14.00
Entry Date	

CUTTING STRUCTURE: TI / TO / MDC / LOC / BRG / Gauge / ODC / Reason Pulled / Inner Row / Outer Row: 15.14

METRES DRILLED

From	To	D-R-C	RPM	WOB

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	311mm BIT	311	72	0.34
1	Bit sub	255	70	0.93
2	9" D.C	233	71	18.50
1	Bell sub	232	69	0.66
3	6" D.C	160	60	27.80
1	Jar	157	76	4.73
9	6" D.C	160	60	84.00
1	X/O 4" H-90	162	62	0.80
8	4" HW	132	70	74.87
0	Drill Pipe — Stands			0.00
0	Drill Pipe — Singles			0.00

Kelly Down: 0.00 — Total: 212.43 — Weight of DC: — Weight of String: 40.00

HOLE CONDITION: Hole Drag: Up / Down — Torque At Bottom — Fill On Bottom

MUD RECORD

Mud Type: Water ☑ Oil ☐ Other

Time			
Density			
Funnel Viscosity			
Fluid Loss			
pH			
Location Of Sample			
Depth			
PVT			

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	PARALLEL	140	120	9000	5.50
2	PARALLEL	140	120	9000	3.50

Remarks:

REDUCED PUMP SPEED

Pump #	Pressure	Strokes/min	Depth
	@	@	
	@	@	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density
Centrifuge #1	8.00	1090	1080	1710

MUD MATERIALS ADDED

Product	Amount	Type

BOILER

BoilerNo	HoursRun	pH	StackTemp

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequence & Remarks

Remarks: level 1 inspection on tongs and overhead equipment d.s
blew down boiler 2 times 50 litres

SAFETY

Safety Topic	MEHL	MACP

FRONT PAGE SUMMARY

Timer Sheet Serial Number: BEAV2_20131231_1A | Vendor Software Version: RNS 2013.8.14.27104 | Year: 2013 | Month: 12 | Day: 31

License No: WID-2082	Well Name: COPRC Dodo Canyon E-76 65-10 126-45	Surface Location: E-76-65-10-126-45	Prov: NT	Last Type: CLSS	Unique Well Id		
Operator: Conoco Canada	Contractor: Beaver Drilling Ltd.	Rig No: 2	Well Type: HORIZ	Re-Entry: ☐			
Operator's AFE: 10351817	Contractor's Job No: 151	Spud Date Time: 25-Dec-2013	06:30				
Signature Of Operator's Representative: RICHARD TURGEON	Signature Of Contractor's Rig Manager: RICK YAVIS	Rig Release Date Time					

SHIFT CHECKS — OP | RP

(1.) Daily Walk Around Inspection — RT | RV
(2.) Detailed Inspection - Visually (Using Check List) — RT | RV
(3.) H2S Signs Posted If Required — RT | RV
(4.) Well Licence & Well Diagram Posted — RT | RV
(5.) Flare Lines Rated — RT | RV
(6.) BOP Drills Performed — RT | RV
(7.) Visually Inspected BOPs Flare Lines & Diagonal Lines — RT | RV
(1.) Rig Site Health & Safety Meeting (crew participation) — RV
(2.) CAODC Rig Safety Inspection Checklist (one Highpoint) — RV
(3.) Hoist Inspection before Raising or Lowering — RV
(4.) Crown Saver Checked — RV
(5.) Hoist Rite Checked — RV

Daily Meeting | Rig Time

HOURS

Code	1 Rig Up	2 Drill Actual	3 Reaming	4 Coring	5 Cond Mud & Circ	6 Trips	7 Rig Service	9 Repair Rig	10 Cut Off Drlg Line	11 Dev Survey	12 Wireline Logs	13 Run Csg & Cement	14 Wait On Cement	15 Nipple BOP	16 Test BOP	17 Drill/Ream Test	18 Plug Back	19 Squeeze Cement	20 Plugging	21 Other	22 Safety Meeting	23 Tear Down	24 Waiting On	25 Rig Repair	Other	TOTAL
Tour 1			1.00			5.00	0.25														0.25				1.50	8.00
Tour 2		6.25					0.25			1.50																8.00
Tour 3		5.50			0.50	1.00	0.25			0.50											0.25					8.00
TOTAL		11.75	1.00		0.50	6.00	0.75			2.00											0.50				1.50	24.00

FUEL & CASING — Rig: 200 | Ramp: 200 | Time: 06:15 | Temp: -45 | Weather Conditions: OVERCAST | Wind Direction: N | Wind Strength: UP TO 19 KM/H | Road Conditions: GOOD

TOUR: 1 | DRILLER: BRIAN BERGSETH | START TIME: 0:00 | END TIME: 8:00

BITS

Bit Number	1
Size	311
IADC Code	
Manufacturer	REED
Type	J&L
Serial No	B181332
Jets	15.9, 15.9, 15.9, 12.7
Depth Out (m)	
Depth In (m)	0.00
Total Drilled (m)	212.00
Hrs Ran Today	
Cumulative Hrs Run	14.00
Entry Date	

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	311mm BIT	311	72	0.34
1	Bit sub	255	70	0.93
2	9" D.C	233	71	18.59
1	Bell sub	232	69	0.66
3	6" D.C	160	60	27.80
1	Jar	157	76	4.73
9	6" D.C	160	60	84.60
1	X/O 4" H-90	162	62	0.80
8	4" HW	132	70	74.67
0	Drill Pipe — Stands			0.00
0	Drill Pipe — Singles			0.00

MUD RECORD

Mud Type: Water ☑ Oil ☐ Other

Time	
Density	
Funnel Viscosity	
Fluid Loss	
pH	
Location Of Sample	
Depth	
PVT	

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	PARALLEL	140	125	12000	8.00
2	PARALLEL	140	125	12000	8.00

Remarks

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Inside Density	Over Flow Density	Under Flow Density
Centrifuge #1	8.00	0.6	1090	1500
Centrifuge #2	8.00	0.6	1090	1500

MUD MATERIALS ADDED

Product	Amount	Type

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	450

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
0:00	3:30	3.50	6M	Wiper trip into conductor, back ream from 195m to 58m
3:30	3:45	0.25	7	Rig service, function test crown saver
3:45	4:30	0.75	25	Pull out to 9" collers, remove 6 " rotating head rubber
4:30	6:00	1.50	6A	Trip in hole to 4" HWDP
6:00	6:45	0.75	25	Install 4" rubber in rotating head
6:45	7:45	1.00	3A	Wash to bottom from 88m
7:45	8:00	0.25	21D	Crew hand over meeting with rig crews, rig manager, Conoco reps

Remarks: BLOW DOWN BOILERS # 1 & 200 L

SAFETY

Safety Topic	MEHL	MACP
TRIPPING		

CUTTINGS STRUCTURE

In	
TD	
MDC	
LDC	
BHA	
Gauge	
ODC	
Reason Pulled	
Tool Pushed	15.14

DRILL OFF TEST

From	To	D-R-C	RPM	WOB

HOLE CONDITION

Hole Drag	Up		Down	
Torque At Bottom				
Fill On Bottom				

Kelly Down: 0.00 | Total: 212.43 | Weight of DC | Weight of String

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
		@		@	
		@		@	
		@		@	

TOUR: 2 | DRILLER: MARCUS HALLOWES | START TIME: 8:00 | END TIME: 16:00

BITS

Bit Number	1
Size	311
IADC Code	
Manufacturer	REED
Type	J&L
Serial No	B181332
Jets	15.9, 15.9, 15.9, 12.7
Depth Out (m)	
Depth In (m)	0.00
Total Drilled (m)	330.00
Hrs Ran Today	6.25
Cumulative Hrs Run	20.25
Entry Date	

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	311mm BIT	311	72	0.34
1	Bit sub	255	70	0.93
2	9" D.C	233	71	18.59
1	Bell sub	232	69	0.66
3	6" D.C	160	60	27.80
1	Jar	157	76	4.73
9	6" D.C	160	60	84.60
1	X/O 4" H-90	162	62	0.80
21	4" HW	132	70	195.91
0	Drill Pipe — Stands			0.00
0	Drill Pipe — Singles			0.00

MUD RECORD

Mud Type: Water ☑ Oil ☐ Other

Time	08:00	11:00
Density	1090	1090
Funnel Viscosity	40	40
Fluid Loss		
pH		
Location Of Sample	shaker	shaker
Depth	230.00	267.00
PVT	48	48

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	PARALLEL	140	130	8500	8.00
2	PARALLEL	140	130	8500	8.00

Remarks

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type
	240.00	0.50	0	WIRELINE
	269.00	0.80	0	WIRELINE
	306.00	1.00	0	WIRELINE

SOLIDS CONTROL

Equipment Name	Hours Run	Inside Density	Over Flow Density	Under Flow Density
Centrifuge #1	8.00	0.6	1090	1500
Centrifuge #2	8.00	0.6	1090	1500

MUD MATERIALS ADDED

Product	Amount	Type

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	455
2	8.00	11	455

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
8:00	8:30	0.50	2	Rotary drill 311mm hole from 212m to 230m
8:30	8:45	0.25	7	Rig service function test rig smart function test crown saver grease all moving parts check engine fluid levels
8:45	14:30	5.75	2	Rotary drill 311 hole from 230m to 330m
14:30	16:00	1.50	10A	Conections and surveys

Remarks:
level 1 overhead inspection mh
blowdown boilers 100l x2
reviwed IRS sheet

SAFETY

Safety Topic	MEHL	MACP
IRS		

CUTTINGS STRUCTURE

In	
TD	
MDC	
LDC	
BHA	
Gauge	
ODC	
Reason Pulled	
Tool Pushed	16.30

DRILL OFF TEST

From	To	D-R-C	RPM	WOB
212.00	330.00	DRILL	120	10

HOLE CONDITION

Hole Drag	Up 2000		Down 2000	
Torque At Bottom			8000	
Fill On Bottom				

Kelly Down: 0.00 | Total: 330.79 | Weight of DC | Weight of String: 46000.00

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
		@		@	
		@		@	
		@		@	

TOUR: 3 | DRILLER: BRIAN BERGSETH | START TIME: 16:00 | END TIME: 24:00

BITS

Bit Number	1
Size	311
IADC Code	
Manufacturer	REED
Type	J&L
Serial No	B181332
Jets	15.9, 15.9, 15.9, 12.7
Depth Out (m)	
Depth In (m)	0.00
Total Drilled (m)	212.00
Hrs Ran Today	5.50
Cumulative Hrs Run	25.75
Entry Date	

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	311mm BIT	311	72	0.34
1	Bit sub	255	70	0.93
2	9" D.C	233	71	18.59
1	Bell sub	232	69	0.66
3	6" D.C	160	60	27.80
1	Jar	157	76	4.73
9	6" D.C	160	60	84.60
1	X/O 4" H-90	162	62	0.80
28	4" HW	132	70	184.21
0	Drill Pipe — Stands			0.00
0	Drill Pipe — Singles			0.00

MUD RECORD

Mud Type: Water ☑ Oil ☐ Other

Time	20:30	21:30
Density	1140	1140
Funnel Viscosity	43	42
Fluid Loss		
pH	8	
Location Of Sample		
Depth	388.00	395.00
PVT		

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	PARALLEL	140	130	13000	
2	PARALLEL	140	130	13000	

Remarks

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type
	348.00	0.90	0	WIRELINE
	378.00	0.40	0	WIRELINE

SOLIDS CONTROL

Equipment Name	Hours Run	Inside Density	Over Flow Density	Under Flow Density
Centrifuge #1	8.00	0.6	1090	1500
Centrifuge #2	8.00	0.6	1090	1500

MUD MATERIALS ADDED

Product	Amount	Type
Fedzan	1	SX
Sawdust	20	SX
Bentonite	3	SX
Caustic Soda	1	SX
Soap Sticks	12	sticks

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	450

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
16:00	17:00	1.00	2	Rotary drill 311mm hole from 330m to 340m
17:00	17:15	0.25	7	Rig service crown saver operating properly
17:15	19:00	1.75	2	Rotary drill 311mm hole from 340m to 368 m
19:00	19:15	0.25	21	Crew hand over meeting with rig crews, rig manager, Conoco reps
19:15	22:00	2.75	2	Rotary drill 311 mm hole from 368 m to 396m
22:00	22:30	0.50	10	Accumulated time for surveys
22:30	23:00	0.50	5	Circ & condition hole
23:00	24:00	1.00	6B	Trip out of hole, back ream from 396 m to 359 m

Remarks:
blow down boilers 200 l

SAFETY

Safety Topic	MEHL	MACP
connections with top drive J.S.A # 257		

CUTTINGS STRUCTURE

In	
TD	
MDC	
LDC	
BHA	
Gauge	
ODC	
Reason Pulled	
Tool Pushed	8.23

DRILL OFF TEST

From	To	D-R-C	RPM	WOB
330.00	396.00	DRILL	120	12

HOLE CONDITION

Hole Drag	Up 2000		Down 2000	
Torque At Bottom			8000	
Fill On Bottom				

Kelly Down: 0.45 | Total: 396.56 | Weight of DC | Weight of String: 49000.00

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
		@		@	
		@		@	
		@		@	

FRONT PAGE SUMMARY

Tour Sheet Serial Number: BEAV2_20140101_1A | Vendor Software Version: RMS 2013.6.14.27104 | Year: 2014 | Month: 01 | Day: 01

Licence No: WID-2082	Well Name: COPRC Dodo Canyon E-76 65-10 126-45	Surface Location: E-76-65-10-126-45	Prov: NT	Lic Type: CLSS	Unique Well Id	
Operator: Conoco Canada	Contractor: Beaver Drilling Ltd.	Rig No: 2	Well Type: HORIZ	Re-Entry: ☐		
Operator's AFE: 10351817	Contractor's Job No: 151	Spud Date Time: 28-Dec-2013 | 06:30				
Signature Of Operator's Representative: RICHARD TURGEON	Signature Of Contractor's Rig Manager: RICK YAVIS	Rig Release Date Time:				

DAILY CHECKS — OP / RM

	OP	RM
(1.) Daily Walk Around Inspection	RT	RY
(2.) Detailed Inspection - Weekly (Using Check List)	RT	RY
(3.) H2S Signs Posted if Required	RT	RY
(4.) Well Licence & Well Diagram Posted	RT	RY
(5.) Flare Lines Baled		
(6.) BOP Drills Performed		
(7.) Visually Inspected BOPs-Flare Lines & Degasser Lines		
(1.) Rig Site Health & Safety Meeting (crew/contractor)		RY
(2.) CAODC Rig Safety Inspection Checklist (one/Hightour)		
(3.) Steel Inspection before Raising or Lowering		
(4.) Crown Saver Checked		RY
(5.) Motor Kills Checked		

CAODC / NOV

Code: 1 Rig Up | 2 Drill Actual | 3 Reaming | 4 Coring | 5 Cond Mud & Circ | 6 Trips | 7 Rig Service | 8 Repair Rig | 9 Cut Off Drlg Line | 10 Dev Survey | 11 Wireline Logs | 12 Run Csg & Cement | 13 Wait On Cement | 14 Nipple BOP | 15 Test BOP | 16 Drillstem Test | 17 Plug Back | 18 Squeeze Cement | 19 Fishing | 20 Dir Work | 21 Safety Meeting | 22 Tear Down | 23 Waiting On | 24 Rig Watch | 25 Other | TOTAL

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	TOTAL
Tour 1						4.50	0.25	1.75													0.50				1.00	8.00
Tour 2		1.50			1.50	4.25	0.50																		0.25	8.00
Tour 3		6.75					0.25			0.75											0.25					8.00
TOTAL		8.25			1.50	8.75	1.00	1.75		0.75											0.75				1.25	24.00

FWP: @ 08:00 HRS

Rig	180
Rig	175
Time	06:00
Temp	-43
Current Conditions	PARTLY CLOUDY
Wind Direction	S
Wind Strength	UP TO 19 KM/H
Road Conditions	GOOD

WEATHER

TOUR: 1 | TOUR SUPERVISOR / DRILLER: BRIAN BERGSETH | START TIME: 0:00 | END TIME: 8:00

BITS

Bit Number	1
Size	311
IADC Code	
Manufacturer	REED
Type	J&L
Serial No	B181332
Jets	15.9 15.9 / 15.9 12.7
Depth Out (m)	
Depth In (m)	0.00
Total Drilled (m)	212.00
Hrs Run Today	
Cumulative Hrs Run	25.75
Entry Data	

CUTTING STRUCTURE: T0 | TD | ADC | LOC | BRG | Gauge | ODC | Reason Pulled | Total Rot Hours | 8.23

METRES DRILLED

From	To	D-R-C	RPM	WOB

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	311mm BIT	311	72	0.34
1	Bit sub	255	70	0.93
2	9" D.C	233	71	18.59
1	Bell sub	232	69	0.66
3	6" D.C	160	60	27.80
1	Jar	157	76	4.73
9	6" D.C	160	60	84.00
1	X/O 4" H-90	162	62	0.80
28	4" HW	132	70	235.29
0	Drill Pipe	Stands		0.00
0	Drill Pipe	Singles		0.00
	Kelly Down			0.00
	Total			396.11
	Weight of DC			
	Weight of String			

HOLE CONDITION: Hole Drag Up | Down | Torque At Bottom | Fill On Bottom

MUD RECORD

Mud Type: Water ☑ Oil ☐ Other

Time	01:15	04:15
Density	1140	1140
Funnel Viscosity	42	412
Fluid Loss		
pH		
Location Of Sample	suction tank	suction tank
Depth	396.00	396.00
PVT		

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	PARALLEL	140	125	1400	5.00
2	PARALLEL	140	125	1400	5.00

Remarks

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min	Depth
		@		@
		@		@

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density
Centrifuge #1	8.00	1180	1170	1720
Centrifuge #2	8.00	1160	1150	1740

MUD MATERIALS ADDED

Product	Amount	Type
Sawdust	2	sx

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	450

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequence & Remarks
0:00	1:30	1.50	6M	Trip out of hole back ream from 359m to 321m & clean up hole
1:30	1:45	0.25	7	Rig service function test crown saver
1:45	3:30	1.75	8D	Replace broken fan belts in HPU
3:30	6:30	3.00	6M	Trip out of hole back ream from 321m to 120m circ hole clean
6:30	7:30	1.00	25	Circulate pull 4" bag out of rotating head
7:30	8:00	0.50	21	Crew hand over meeting with rig crews, rig manager, Conoco reps

Remarks
blow down boilers 200l

SAFETY

Safety Topic	MEHL	MACP

TOUR: 2 | TOUR SUPERVISOR / DRILLER: MARCUS HALLOWES | START TIME: 8:00 | END TIME: 16:00

BITS

Bit Number	1
Size	311
IADC Code	
Manufacturer	REED
Type	J&L
Serial No	B181332
Jets	15.9 15.9 / 15.9 12.7
Depth Out (m)	
Depth In (m)	0.00
Total Drilled (m)	415.00
Hrs Run Today	1.50
Cumulative Hrs Run	27.25
Entry Data	

CUTTING STRUCTURE: T0 | TD | ADC | LOC | BRG | Gauge | ODC | Reason Pulled | Total Rot Hours | 15.23

METRES DRILLED

From	To	D-R-C	RPM	WOB
396.00	415.00	DRILL	120	15

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	311mm BIT	311	72	0.34
1	Bit sub	255	70	0.93
2	9" D.C	233	71	18.59
1	Bell sub	232	69	0.66
3	6" D.C	160	60	27.80
1	Jar	157	76	4.73
9	6" D.C	160	60	84.00
1	X/O 4" H-90	162	62	0.80
30	4" HW	132	70	277.27
0	Drill Pipe	Stands		0.00
0	Drill Pipe	Singles		0.00
	Kelly Down			0.00
	Total			415.23
	Weight of DC			
	Weight of String			53000.00

HOLE CONDITION: Hole Drag Up 1500 | Down 1500 | Torque At Bottom 6400 | Fill On Bottom

MUD RECORD

Mud Type: Water ☑ Oil ☐ Other

Time	15:00	
Density	1150	
Funnel Viscosity	45	
Fluid Loss		
pH		
Location Of Sample		
Depth	400.00	
PVT	46	

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	PARALLEL	140	130	14600	3.00
2	PARALLEL	140	130	14600	3.00

Remarks

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min	Depth
		@		@
		@		@

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type
	396.00	0.60	0	WIRELINE

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density
Centrifuge #1	8.00	1160	1140	1760
Centrifuge #2	8.00	1160	1140	1770

MUD MATERIALS ADDED

Product	Amount	Type
Sawdust	10	sx

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	450

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequence & Remarks
8:00	8:15	0.25	7	Rig service crown saver operating properly
8:15	10:30	2.25	6M	Wiper trip out of hole pump and back ream to 60m
10:30	10:45	0.25	7A	Check brk,Clean and prepare floor to trip in
10:45	11:00	0.25	6M	Trip in the hole to 30m
11:00	11:15	0.25	25	Install 4inc bag into rotating head
11:15	13:00	1.75	6M	Wiper trip into the hole to 376m
13:00	14:30	1.50	5	Ream tight spot at 377m and reamed to bottom
14:30	16:00	1.50	2	Rotary drill 311mm hole from 396m to 415m

Remarks
level one inspection of tongs and overhead equipment DS
blow down boilers 100lts x 2

SAFETY

Safety Topic	MEHL	MACP
trip with a top drive		

TOUR: 3 | TOUR SUPERVISOR / DRILLER: BRIAN BERGSETH | START TIME: 16:00 | END TIME: 24:00

BITS

Bit Number	1
Size	311
IADC Code	
Manufacturer	REED
Type	J&L
Serial No	B181332
Jets	15.9 15.9 / 15.9 12.7
Depth Out (m)	
Depth In (m)	0.00
Total Drilled (m)	490.00
Hrs Run Today	6.75
Cumulative Hrs Run	34.00
Entry Data	

CUTTING STRUCTURE: T0 | TD | ADC | LOC | BRG | Gauge | ODC | Reason Pulled | Total Rot Hours | 14.41

METRES DRILLED

From	To	D-R-C	RPM	WOB
415.00	490.00	DRILL	120	15

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	311mm BIT	311	72	0.34
1	Bit sub	255	70	0.93
2	9" D.C	233	71	18.59
1	Bell sub	232	69	0.66
3	6" D.C	160	60	27.80
1	Jar	157	76	4.73
9	6" D.C	160	60	84.00
1	X/O 4" H-90	162	62	0.80
38	4" HW	132	70	351.28
0	Drill Pipe	Stands		0.00
0	Drill Pipe	Singles		0.00
	Kelly Down			0.00
	Total			490.11
	Weight of DC			
	Weight of String			54000.00

HOLE CONDITION: Hole Drag Up 2000 | Down 2000 | Torque At Bottom 6600 | Fill On Bottom

MUD RECORD

Mud Type: Water ☑ Oil ☐ Other

Time		19:30
Density		1150
Funnel Viscosity		42
Fluid Loss		
pH		
Location Of Sample		shaker
Depth		452.00
PVT		46

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	PARALLEL	140	125	14500	7.00
2	PARALLEL	140	125	14500	7.00

Remarks

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min	Depth
		@		@
		@		@

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type
	433.00	0.60	0	WIRELINE
	461.00	0.60	0	WIRELINE
	489.00	0.50	0	WIRELINE

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density
Centrifuge #1	8.00	1140	1150	1760
Centrifuge #2	8.00	1140	1140	1790

MUD MATERIALS ADDED

Product	Amount	Type

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	450

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequence & Remarks
16:00	16:15	0.25	7	Rig service crown saver operating properly
16:15	19:00	2.75	2	Rotary drill 311mm hole from 415m to 433m
19:00	19:15	0.25	21	Crew hand over meeting with rig crews, rig manager, Conoco reps
19:15	23:15	4.00	2	Rotary drill 311mm hole from 433m to 490m
23:15	24:00	0.75	10	Acclumlated time for surveys

Remarks
blow down boilers 200 l

SAFETY

Safety Topic	MEHL	MACP
generator service		

FRONT PAGE SUMMARY

Tour Sheet Serial Number: BEAV2_20140102_1A	Vendor Software Version: RNS 2013.8.14.27104	Year: 2014	Month: 01	Day: 02	DAILY CHECKS: (A) Daily Walk Around Inspection (B) Detailed Inspection - Weekly (Using Check List) (B) K23 Signs Posted If Required (F) Well License & Blow Diagram Posted (G) Flare Lines Staked (H) BOP Drills Performed (I) Weekly Inspected BOPs+Flare Lines & Degasser Lines (1) Rig Site Health & Safety Meeting (once a week) (2) CAODC Rig Safety Inspection Checklist (once/fortnight) (3) Mast Inspection before Raising or Lowering (4) Crown Saver Checked (5) Motor Kills Checked	DP: RT / AV

Licensee No: WID-2082	Well Name: COPRC Dodo Canyon E-76 65-10 126-45	Surface Location: E-76-65-10-126-45	Prov: NT	Lic Type: CLSS	Unique Well Id				
Operator: Conoco Canada	Contractor: Beaver Drilling Ltd.	Rig No: 2	Well Type: HORIZ	Run Duty: ☐					
Operator's AFE: 10351617	Contractor's Job No: 151	Spud Date Time: 28-Dec-2013 06:30							
Signature Of Operator's Representative: RICHARD TURGEON	Signature Of Contractor's Rig Manager: RICK YAVIS	Rig Released Date Time							

Code	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	TOTAL
	Rig Up	Drill Actual	Reaming	Coring	Cond Mud & Circ	Trips	Rig Service	Repair Rig	Cut Off Drlg Line	Dev Survey	Wireline Logs	Run Csg & Cement	Wait On Cement	Nipple BOP	Test BOP	Drl Stem Test	Plug Back	Squeeze Cement	Fishing	Dir Work	Safety Meeting	Tour Down	Waiting On	Rig Watch	Other	
Tour 1		7.00					0.25			0.50											0.25					8.00
Tour 2		7.00			0.75		0.25																			8.00
Tour 3						7.50	0.25														0.25					8.00
TOTAL		14.00			0.75	7.50	0.75			0.50											0.50					24.00

FULL @ 06:00 HRS

Rig	102
Number	98
Time	06:00
Trend	-35
General Conditions	BLOWING SNOW
Road Conditions	N
Wind Direction and Strength	UP TO 19 KM/H
Road Conditions	GOOD

WEATHER

Tour: 1 — Driller: BRIAN BERGSETH — Starting: 0:00 — Ending: 8:00

BITS

Bit Number	1
Size	311
IADC Code	
Manufacturer	REED
Type	J&L
Serial No	B181332
Jets	15.9 15.9 / 15.9 12.7
Depth Out (m)	
Depth In (m)	0.00
Total Drilled (m)	555.00
Hrs Run Today	7.00
Cumulative Hrs Run	41.00
Entry Date	

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	311mm BIT	311	72	0.34
1	Bit sub	255	70	0.93
2	9" D.C	233	71	18.59
1	Bell sub	232	69	0.66
3	6" D.C	160	60	27.80
1	Jar	157	76	4.73
9	6" D.C	160	60	84.00
1	X/O 4" H-90	162	62	0.80
45	4" HW	132	70	411.00
0	Drill Pipe — Stands			0.00
0	Drill Pipe — Singles			0.00

MUD RECORD

Mud Type: Water ☑ Oil ☐ Other

Time	00:30	04:00
Density	1160	1165
Funnel Viscosity	42	53
Fluid Loss		
pH		
Location Of Sample	Shaker	Suction Tank
Depth	492.00	527.00
PVT	43	43

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	PARALLEL	140	120	16200	7.00
2	PARALLEL	140	120	16200	7.00

Remarks

REDUCED PUMP SPEED

Pump #	Pressure	Strokes/min	Depth
	@	@	
	@	@	
	@	@	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type
	508.00	0.70	0	WIRELINE
	544.00	0.40	0	WIRELINE

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density
Centrifuge #2	8.00	1160	1150	1900
Centrifuge #1	8.00	1160	1150	1920

MUD MATERIALS ADDED

Product	Amount	Type
Bentonite	38	SX
Fedzan	2	SX
Sawdust	6	SX

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	450

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequence & Remarks
0:00	0:15	0.25	7	Rig service function test crown saver
0:15	7:15	7.00	2	Rotary drill 311 mm hole from 490 m to 555m
7:15	7:45	0.50	10	Accumulated time for surveys & connections
7:45	8:00	0.25	21	Crew hand over meeting with rig crews, rig manager, Conoco reps

Remarks: boiler #2 170cm blow down boilers 200 l

SAFETY

Safety Topic	MEHL	MACP

DRILL OFF TEST

From	To	D-R-C	RPM	WOB
490.00	555.00	DRILL	120	16

HOLE CONDITION

	Up	Down
Hole Drag	3000	3000
Tongue At Bottom		4780
Fill On Bottom		

CUTTINGS DISPOSAL

Kelly Down	0.00
Total	555.38
Weight of BC	
Weight of String	52000.00

Tour: 2 — Driller: MARCUS HALLOWES — Starting: 8:00 — Ending: 16:00

BITS

Bit Number	1
Size	311
IADC Code	
Manufacturer	REED
Type	J&L
Serial No	B181332
Jets	15.9 15.9 / 15.9 12.7
Depth Out (m)	
Depth In (m)	0.00
Total Drilled (m)	594.00
Hrs Run Today	7.00
Cumulative Hrs Run	48.00
Entry Date	

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	311mm BIT	311	72	0.34
1	Bit sub	255	70	0.93
2	9" D.C	233	71	18.59
1	Bell sub	232	69	0.66
3	6" D.C	160	60	27.80
1	Jar	157	76	4.73
9	6" D.C	160	60	84.00
1	X/O 4" H-90	162	62	0.80
49	4" HW	132	70	451.00
0	Drill Pipe — Stands			0.00
0	Drill Pipe — Singles			0.00

MUD RECORD

Mud Type: Water ☑ Oil ☐ Other

Time	08:15	10:15
Density	1170	1170
Funnel Viscosity	60	60
Fluid Loss		
pH		
Location Of Sample	shaker	shaker
Depth	564.00	570.00
PVT	41	44

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	PARALLEL	140	115	15100	5.50
2	PARALLEL	140	115	15100	5.50

Remarks

REDUCED PUMP SPEED

Pump #	Pressure	Strokes/min	Depth
	@	@	
	@	@	
	@	@	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type
	571.00	0.50	0	WIRELINE

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density
Centrifuge #1	8.00	1160	1150	1900
Centrifuge #2	8.00	1160	1150	1900

MUD MATERIALS ADDED

Product	Amount	Type
Bentonite	20	SXS
Fedzan	2	SXS
Soda Ash	1	SXS

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	460
2	8.00	11	450

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequence & Remarks
8:00	9:15	1.25	2	Rotary drill 311mm hole from 555m to 564m
9:15	9:30	0.25	7	Rig service crown saver operating properly
9:30	15:15	5.75	2	Rotary drill 311mm hole from 564m to 592m
15:15	16:00	0.75	5	Circulate hole clean to wiper trip

Remarks:
Level 1 inspection on tongs and overhead equipment D.S
Blew down boilers 2 times each .50 litres

SAFETY

Safety Topic	MEHL	MACP
Mouse Hole Connections with Top Drive		

DRILL OFF TEST

From	To	D-R-C	RPM	WOB
555.00	592.00	DRILL	120	16

HOLE CONDITION

	Up	Down
Hole Drag	3000	3000
Tongue At Bottom		4820
Fill On Bottom		

CUTTINGS DISPOSAL

Kelly Down	0.00
Total	592.76
Weight of BC	
Weight of String	52000.00

Tour: 3 — Driller: BRIAN BERGSETH — Starting: 16:00 — Ending: 24:00

BITS

Bit Number	1
Size	311
IADC Code	
Manufacturer	REED
Type	J&L
Serial No	B181332
Jets	15.9 15.9 / 15.9 12.7
Depth Out (m)	
Depth In (m)	0.00
Total Drilled (m)	594.00
Hrs Run Today	
Cumulative Hrs Run	48.00
Entry Date	

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	311mm BIT	311	72	0.34
1	Bit sub	255	70	0.93
2	9" D.C	233	71	18.59
1	Bell sub	232	69	0.66
3	6" D.C	160	60	27.80
1	Jar	157	76	4.73
9	6" D.C	160	60	84.00
1	X/O 4" H-90	162	62	0.80
49	4" HW	132	70	451.00
0	Drill Pipe — Stands			0.00
0	Drill Pipe — Singles			0.00

MUD RECORD

Mud Type: Water ☑ Oil ☐ Other

Time	20:00	22:00
Density	1180	1190
Funnel Viscosity	90	95
Fluid Loss		
pH		
Location Of Sample	shaker	shaker
Depth	432.00	360.00
PVT	45	46

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	PARALLEL	140	110	12500	7.00
2	PARALLEL	140	110	12500	7.00

Remarks

REDUCED PUMP SPEED

Pump #	Pressure	Strokes/min	Depth
	@	@	
	@	@	
	@	@	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density
Centrifuge #1	8.00	1170	1160	1910
Centrifuge #2	8.00	1180	1170	1900

MUD MATERIALS ADDED

Product	Amount	Type

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	450

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequence & Remarks
16:00	16:15	0.25	7	Rig service function test crown saver and motor kills
16:15	19:00	2.75	6M	Wiper trip out and pump and back ream
19:00	19:15	0.25	21	Crew hand over meeting with rig crews, rig manager, Conoco reps
19:15	24:00	4.75	6M	Trip out of hole back ream from 462m to 223m. Strap out, Drilling tally = 592.66m, Strap tally = 592.76m, Diff = 0.10m.

Remarks: blow down boilers 200 l strap 592.76 tally 592.66 diff _ .10

SAFETY

Safety Topic	MEHL	MACP

DRILL OFF TEST

From	To	D-R-C	RPM	WOB

HOLE CONDITION

	Up	Down
Hole Drag		
Tongue At Bottom		
Fill On Bottom		

CUTTINGS DISPOSAL

Kelly Down	0.00
Total	0.00
Weight of BC	
Weight of String	

FRONT PAGE SUMMARY

Tour Sheet Serial Number: BEAV2_20140103_18 | Vendor Software Version: RMS 2013.8.14.27104 | Year: 2014 | Month: 01 | Day: 03

License No: WID-2082 | Well Name: COPRC Dodo Canyon E-76 65-10 126-45 | Surface Location: E-76-65-10-126-45 | Prov: NT | Lic Type: CLSS | Unique Well Id:

Operator: Conoco Canada | Contractor: Beaver Drilling Ltd. | Rig No: 2 | Well Type: HORIZ | Re-Entry: ☐

Operator's AFE: 10351817 | Contractor's Job No: 151 | Spud Date Time: 28-Dec-2013 06:30

Signature Of Operator's Representative: RICHARD TURGEON | Signature Of Contractor's Rig Manager: RICK YAVIS | Rig Release Date Time:

DAILY CHECKS — OP / RM

(1.) Daily Well Ground Inspection — RY
(2.) Detailed Inspection - Monthly (Using Check List) — RY
(3.) H2S Signs Posted If Required — RY
(4.) Well Licence & Stick Diagram Posted — RY
(5.) Flare Lines Staked — RY
(6.) BOP Drills Performed — RY
(7.) Visually Inspected BOPs-Flare Lines & Degasser Lines — RY
(1.) Rig Site Health & Safety Meeting (weekly/monthly) — RY
(2.) CAODC Rig Safety Inspection Checklist (weekly/monthly) — RY
(3.) Hoist Inspection before Raising or Lowering — RY
(4.) Crown Saver Checked — RY
(5.) Motor Kills Checked — RY

HOURS

	Rig Up	Drill Actual	Reaming	Coring	Cond Mud & Circ	Trips	Rig Service	Repair Rig	Cut Off Drlg Line	Dev Survey	Wireline Logs	Run Csg & Cement	Wait On Cement	Nipple BOP	Test BOP	Drillstem Test	Plug Back	Squeeze Cement	Fishing	Dir Work	Safety Meeting	Tear Down	Rig On	Rig Watch	Other	TOTAL
Tour 1		1.25	1.75			4.50	0.25														0.25					8.00
Tour 2		0.50			0.75	3.75	0.75					2.00									0.25					8.00
Tour 3							0.25					7.00									0.75					8.00
TOTAL		1.75	1.75		0.75	8.25	1.25					9.00									1.25					24.00

CAODC STARS: FULL (5.0) 00:00 HRS

Rig	200
Time	06:15
Weather Conditions	OVERCAST
Wind Direction	N
Wind Strength	UP TO 19 KM/H
Road Condition	GOOD
Kelly Bushing	
Rig Float	
Ambient	190
Temp	-32

TOUR 1

Driller: BRIAN BERGSETH | Start Time: 0:00 | End Time: 8:00

BITS

Bit Number	1
Size	311
IADC Code	
Manufacturer	REED
Type	J&L
Serial No	B181332
Jets	15.9 15.9 / 15.9 12.7
Depth Out (m)	
Depth In (m)	0.00
Total Drilled (m)	594.00
Hrs Run Today	
Cumulative Hrs Run	41.00
Entry Date	

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	311mm BIT	311	72	0.34
1	Bit sub	255	70	0.93
2	9" D.C	233	71	18.50
1	Bell sub	232	69	0.66
3	6" D.C	160	60	27.80
1	Jar	157	76	4.73
9	6" D.C	160	60	84.00
1	X/O 4" H-90	162	62	0.80
51	4" HW	132	70	468.14

0	Drill Pipe	Stands	0.00
0	Drill Pipe	Singles	0.00
	Kelly Down		0.00
	Total		603.00
	Weight of DC		
	Weight of String		55000.00

CUTTINGS STRUCTURE

In		Gauge	
To		ODC	
MDC		Reason Pulled	
LOC		Total Rev (k#)	14.49
BRG			

MUD RECORD

Mud Type: Water ☑ Oil ☐ Other

Time	06:00	
Density	1210	
Funnel Viscosity	95	
Fluid Loss		
pH		
Location Of Sample	shaker	
Depth	572.00	
PVT	44	

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	PARALLEL	140	110	15000	3.00
2	PARALLEL	140	110	15000	3.00

Remarks

REDUCED PUMP SPEED

Pump #	Pressure	Strokes/min	Depth
	@	@	
	@	@	
	@	@	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density
Centrifuge #1	8.00	1200	1190	1730
Centrifuge #2	8.00	1200	1190	1740

MUD MATERIALS ADDED

Product	Amount	Type

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequence & Remarks
0:00	1.30	1.50	6M	Trip out of hole & strap out
1:30	1:45	0.25	7	Rig service function test crown saver
1:45	4:45	3.00	6M	Trip in hole, hit bridge at 336 m clean up hole from 336 m to 345 m and run in hole
4:45	6:30	1.75	3A	Ream and clean to bottom from 541 m to 592 m
6:30	7:45	1.25	2	Rotary drill 311mm hole from 592m to 600m
7:45	8:00	0.25	21	Crew hand over meeting with rig crews, rig manager, Conoco reps

Remarks
blow down boilers 200 l

TIME DRILLED

From	To	D-R-C	RPM	WOB
592.00	600.00	DRILL	120	17

HOLE CONDITION

Hole Drag	Up	2000	Down	2000
Torque At Bottom				6600
Fill On Bottom				

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	450

SAFETY

Safety Topic	MEHL	MACP
tripping		

TOUR 2

Driller: MARCUS HALLOWES | Start Time: 8:00 | End Time: 16:00

BITS

Bit Number	1
Size	311
IADC Code	
Manufacturer	REED
Type	J&L
Serial No	B181332
Jets	15.9 15.9 / 15.9 12.7
Depth Out (m)	603.00
Depth In (m)	0.00
Total Drilled (m)	603.00
Hrs Run Today	
Cumulative Hrs Run	41.00
Entry Date	28-Dec-2013

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	311mm BIT	311	72	0.34
1	Bit sub	255	70	0.93
2	9" D.C	233	71	18.50
1	Bell sub	232	69	0.66
3	6" D.C	160	60	27.80
1	Jar	157	76	4.73
9	6" D.C	160	60	84.00
1	X/O 4" H-90	162	62	0.80
51	4" HW	132	70	468.14

0	Drill Pipe	Stands	0.00
0	Drill Pipe	Singles	0.00
	Kelly Down		0.00
	Total		603.00
	Weight of DC		
	Weight of String		55000.00

CUTTINGS STRUCTURE

In	1	Gauge	0
To	2	ODC	NO
MDC	WT	Reason Pulled	TD
LOC	6	Total Rev (k#)	14.71
BRG	1		

MUD RECORD

Mud Type: Water ☑ Oil ☐ Other

Time	08:00	12:15
Density	1210	1190
Funnel Viscosity	95	70
Fluid Loss		
pH		
Location Of Sample	shaker	suction tank
Depth	602.00	603.00
PVT	44.35	41.62

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	PARALLEL	140	110	15000	1.00
2	PARALLEL	140	110	15000	1.00

Remarks

REDUCED PUMP SPEED

Pump #	Pressure	Strokes/min	Depth
	@	@	
	@	@	
	@	@	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density
Centrifuge #1	8.00	1200	1180	1700
Centrifuge #2	8.00	1200	1180	1710

MUD MATERIALS ADDED

Product	Amount	Type

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequence & Remarks
8:00	8:30	0.50	2	Rotary drill 311mm hole from 600m to 603m
8:30	8:45	0.25	7	Rig service function test rig smart function test crown saver
8:45	9:30	0.75	5	Circ and condition mud and prepair to come out of hole at surface
9:30	11:15	1.75	6B	Trip out of hole to 126m, drill collars, lo run casing
11:15	11:30	0.25	21	Safety meeting reviewed jsa#161 lay down drill collars
11:30	13:30	2.00	6D	Lay down BHA, 6" and 9" drill collars
13:30	14:00	0.50	7A	Clean and prepare floor to run csg
14:00	16:00	2.00	12A	Rig up power tongs & laydown truck to run 244.5mm surface casing/rig out lay down truck due to broken hyd ram

Remarks
Level 1 inspection on tongs and overhead equipment D.S
Blew down boilers 2 times each .50 litres

TIME DRILLED

From	To	D-R-C	RPM	WOB
600.00	603.00	DRILL	110	17

HOLE CONDITION

Hole Drag	Up	2000	Down	2000
Torque At Bottom				6600
Fill On Bottom				

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	450

SAFETY

Safety Topic	MEHL	MACP
working with steam		

TOUR 3

Driller: BRIAN BERGSETH | Start Time: 16:00 | End Time: 24:00

BITS

Bit Number	
Size	
IADC Code	
Manufacturer	
Type	
Serial No	
Jets	
Depth Out (m)	
Depth In (m)	
Total Drilled (m)	
Hrs Run Today	
Cumulative Hrs Run	
Entry Date	

DRILLING ASSEMBLY

No	Component	OD	ID	Length

	Drill Pipe	Stands	
	Drill Pipe	Singles	
	Kelly Down		
	Total		
	Weight of DC		
	Weight of String		

CUTTINGS STRUCTURE

In		Gauge	
To		ODC	
MDC		Reason Pulled	
LOC		Total Rev (k#)	
BRG			

MUD RECORD

Mud Type: Water ☑ Oil ☐ Other

Time	22:00	
Density	1200	
Funnel Viscosity	95	
Fluid Loss		
pH		
Location Of Sample	shaker	
Depth	603.00	
PVT	48	

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	SINGLE	140	75	300	8.00

Remarks

REDUCED PUMP SPEED

Pump #	Pressure	Strokes/min	Depth
	@	@	
	@	@	
	@	@	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density
Centrifuge #1	8.00	1200	1190	1780

MUD MATERIALS ADDED

Product	Amount	Type

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequence & Remarks
16.00	16:15	0.25	7	Rig service, function, crown saver, operating properly
16:15	16:30	0.25	21	Safety meeting with Hallmark power tongs Reviewed jsa#97 Rig up power tongs, jsa#99 install, 244.5mm float and shoe and run casing
16:30	19:00	2.50	12B	Run surface, 244.5mm, 53.6kg/m,K-55, LT@C casing with hallmark power tongs
19:00	19.15	0.25	21	Crew hand over meeting with rig crews, rig manager, Conoco reps
19:15	19:30	0.25	21	Safety meeting with night crew, jsa #99, running casing
19.30	24:00	4.50	12B	Run 244.5mm, 53.6kg/m,K-55, LT@C casing, with Hallmark power tongs

Remarks
blow down boilers 200 l

TIME DRILLED

From	To	D-R-C	RPM	WOB

HOLE CONDITION

Hole Drag	Up		Down	
Torque At Bottom				
Fill On Bottom				

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	450

SAFETY

Safety Topic	MEHL	MACP
run casing j.s.a # 99		

FRONT PAGE SUMMARY

Tour Sheet Serial Number: BEAV2_20140104_1A | Vendor Software Version: RMS 2013.8.14.27104 | Year: 2014 | Month: 01 | Day: 04

Licence No: WID-2082	Well Name: COPRC Dodo Canyon E-76 65-10 126-45	Battery Location: E-76-65-10-126-45	Type: INT	Lic Type: CLSS	Unique Well ID:		
Operator: Conoco Canada		Contractor: Beaver Drilling Ltd.	Rig No: 2	Well Type: HORIZ		Re-Entry: ☐	
Operator's AFE: 10351617		Contractor's Job No: 151	Spud Date Time: 28-Dec-2013	06:30			
Signature Of Operator's Representative: RICHARD TURGEON		Signature Of Contractor's Rig Manager: RICK YAVIS	Rig Release Date Time:				

DAILY CHECKS — OP / PS

(1.) Daily Work Around Inspection — AT / AV
(1a.) Detailed Inspection - Weekly (Using Check List) — AT / AV
(2a.) H2S Signs Posted If Required — AT / AV
(4.) Well Licence & Sign Diagram Posted — AT / AV
(5.) Flare Lines Staked — AT / AV
(6.) BOP Drills Performed — AT / AV
(7.) Visually Inspected BOPs/Flare Lines & Degasser Line — AT / AV
(1.) Rig Site Health & Safety Meeting (crew/contractor) — RV
(2.) CAODC Rig Safety Inspection Checklist (any Highlevels) — RV
(3.) Visit Inspection before Rehang or Lowering — RV
(4.) Crown Saver Checked — RV
(5.) Motor Man Checked — RV

CAODC / NOV

Code: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25

HOURS

	Rig Up	Drill Actual	Reaming	Coring	Cond Mud & Circ	Trips	Rig Service	Repair Rig	Cut Off Drlg Line	Dev Surveys	Welding Legs	Run Csg & Cement	Wait On Cement	Nipple BOP	Test BOP	Drill Stm Test	Plug Back	Squeeze Cement	Fishing	Other Work	Safety Meeting	Tour Down	Waiting On	Rig Watch	Other	TOTAL
Tour 1					2.25		0.25					5.00									0.50					8.00
Tour 2												4.00		4.00												8.00
Tour 3							0.25							4.75							0.25				2.75	8.00
TOTAL					2.25		0.50					9.00		8.75							0.75				2.75	24.00

WEATHER: Kelly Bushing — Up Hole: 05:00 PM
Rig: 160 | Bore: 120
Time: 08:15 | Temp: -42
General Conditions: PARTLY CLOUDY
Wind Direction: W | Wind Strength: CALM
Road Condition: GOOD

Tour 1

Tour: 1 | Driller: BRIAN BERGSETH | Start Time: 0:00 | End Time: 8:00

BITS

Bit Number	Size	IADC Code	Manufacturer	Type	Serial No	Jets	Depth Out (m)	Depth In (m)	Total Drilled (m)	Hrs Run Today	Cumulative Hrs Run	Entry Date
											0	

Drill Pipe: Rounds 0.00 | Singles 0.00

CUTTINGS STRUCTURE

TR	CON	BDC	LOC	BRG

DRILLING ASSEMBLY

No	Component	OD	ID	Length

Kelly Down 0.00
Total 48.00
Weight of DC
Weight of String

MUD RECORD

Mud Type: Water ☑ Oil ☐ Other

Time	05:00
Density	1200
Funnel Viscosity	53
Fluid Loss	
pH	
Location Of Sample	shaker
Depth	603.00
PVT	46

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	SR/DLE	140	110	500	3.00

Remarks

REDUCED PUMP SPEED

Pump #	Pressure	@ Strokes/min	@ Strokes/min	Depth
		@	@	
		@	@	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density

MUD MATERIALS ADDED

Product	Amount	Type
Desco	2	bags

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	450

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequence & Remarks
0:00	2:30	2.50	12B	Run 244.5mm, 53.57kg/m, K-55, LTC surface casing from 603m to 5.20m with Hallmark power tongs. Total length of 244.5mm surface casing. 603.83m. Landed at 603m, tagged bottom at 603m, float at 589.01m.
2:30	2:45	0.25	7	Rig service f.t crown saver
2:45	5:00	2.25	5	Circulate & condition mud & hole
5:00	5:15	0.25	21	Hold safety meeting with cementers and everyone on location prior to cementing 244.5mm surface casing.
5:15	6:30	1.25	12	Rig up Schlumberger cementers to cement 244.5mm surface casing, pump 5m3 of 1000kg/m3 fresh water, stop and pressure test line to 21,000kPA (held OK), bleed off pressure.
6:30	7:00	0.50	12	Then pump 5m3 of 1300kg/m3 MudPush II pre-flush spacer and then pump 32 tonnes/29.5m3 (50% excess) of RFC 1740 cement with 0.2% Anti-Foam + 1.0% CaCl2 + 1.1% Low Temp Fluid Loss + 0.6% Dispersant from 603m to 5.20m. Drop plug and displace 23.8m3 of fresh water.
7:00	7:30	0.50	12	Bump plug 3,500kPA over final circulating pressure of 6,500kPA at 7:45hrs on January 4th 2014, bleed pressure and check floats (holding OK). Pressure test casing to 11,500kPA for 10 minutes (holding OK).
7:30	7:45	0.25	12	Bleed pressure, flush diverter and rig out cementers, Good cement returns: 8.0m3.
7:45	8:00	0.25	21	Crew hand over meeting with rig crews, rig manager, Conoco reps

Remarks
blow down boilers 200 l

SAFETY

Safety Topic	MEHL	MACP
cementing	s.s #	

Tour 2

Tour: 2 | Driller: MARCUS HALLOWES | Start Time: 8:00 | End Time: 16:00

BITS

Bit Number	Size	IADC Code	Manufacturer	Type	Serial No	Jets	Depth Out (m)	Depth In (m)	Total Drilled (m)	Hrs Run Today	Cumulative Hrs Run	Entry Date

Drill Pipe: Rounds | Singles

CUTTINGS STRUCTURE

TR	CON	BDC	LOC	BRG

DRILLING ASSEMBLY

No	Component	OD	ID	Length

Kelly Down
Total
Weight of DC
Weight of String

MUD RECORD

Mud Type: Water ☑ Oil ☐ Other

Time	
Density	
Funnel Viscosity	
Fluid Loss	
pH	
Location Of Sample	
Depth	
PVT	

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run

Remarks

REDUCED PUMP SPEED

Pump #	Pressure	@ Strokes/min	@ Strokes/min	Depth
		@	@	
		@	@	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density

MUD MATERIALS ADDED

Product	Amount	Type

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	450

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequence & Remarks
8:00	8:30	0.50	12	Flush stack
8:30	12:00	3.50	12	Wait on cement for 4 hrs
12:00	14:00	2.00	14C	Cut conductor, cut surface casing, tear out diverter and dress casing for casing bowl,
14:00	16:00	2.00	14A	Install and weld on casing bowl

Remarks
Level one overhead inspection mh
Blew down boiler 2 times @ 100L

SAFETY

Safety Topic	MEHL	MACP

Tour 3

Tour: 3 | Driller: BRIAN BERGSETH | Start Time: 16:00 | End Time: 24:00

BITS

Bit Number	Size	IADC Code	Manufacturer	Type	Serial No	Jets	Depth Out (m)	Depth In (m)	Total Drilled (m)	Hrs Run Today	Cumulative Hrs Run	Entry Date

Drill Pipe: Rounds | Singles

CUTTINGS STRUCTURE

TR	CON	BDC	LOC	BRG

DRILLING ASSEMBLY

No	Component	OD	ID	Length

Kelly Down
Total
Weight of DC
Weight of String

MUD RECORD

Mud Type: Water ☑ Oil ☐ Other

Time	
Density	
Funnel Viscosity	
Fluid Loss	
pH	
Location Of Sample	
Depth	
PVT	

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run

Remarks

REDUCED PUMP SPEED

Pump #	Pressure	@ Strokes/min	@ Strokes/min	Depth
		@	@	
		@	@	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density

MUD MATERIALS ADDED

Product	Amount	Type

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	10.5	450

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequence & Remarks
16:00	16:15	0.25	7	Rig service function test crown saver & motor kills
16:15	18:30	2.25	14A	Install and weld on casing bowl
18:30	18:45	0.25	14A	Wait on bowl to cool, hook up flair lines and strip back mud
18:45	19:00	0.25	21	Crew handover meeting with both crews and conoco reps
19:00	21:45	2.75	25	Wait on bowl to cool, hook up flair lines and strip back mud
21:45	24:00	2.25	14A	Pick up and nipple up multi-bowl, install and nipple up BOP

Remarks
blow down boilers 200 l

SAFETY

Safety Topic	MEHL	MACP
nipple up b.o.ps	s.s # 111	

FRONT PAGE SUMMARY

Tour Sheet Serial Number: BEAV2_20140105_1A | Vendor Software Version: RMS 2013.6.14.27104 | Year: 2014 | Month: 01 | Day: 05

License No: WID-2082 | Well Name: COPRC Dodo Canyon E-76 65-10 126-45 | Surface Location: E-76-65-10-126-45 | Prov: NT | Lic Type: CLSS | Unique Well Id:

Operator: Conoco Canada | Contractor: Beaver Drilling Ltd. | Rig No: 2 | Well Type: HORIZ | Re-Entry: ☐

Operator's AFE: 10351817 | Contractor's Job No: 151 | Spud Date Time: 28-Dec-2013 06:30

Signature Of Operator's Representative: RICHARD TURGEON | Signature Of Contractor's Rig Manager: RICK YAVIS | Rig Release Date Time:

DAILY CHECKS — OP PM

(1.) Daily Walk Around Inspection — RT RY
(2.) Detailed Inspection - Weekly (Using Check List) — RT RY
(3.) H2S Signs Posted If Required — RT RY
(4.) BHP (Licence & Stab Diagram Posted) — RT RY
(5.) Flare Lines Staked — RT RY
(6.) BOP Drills Performed — RT RY
(7.) Visually Inspected BOPs Flare Lines & Degasser Lines — RT RY
(1.) Rig Site Health & Safety Meeting (crew/contractor) — RY
(2.) CAODC Rig Safety Inspection Checked (crew/lghtcrew) — RY
(3.) Hazard Inspection before Raising or Lowering — RY
(4.) Crown Saver Checked — RY
(5.) Kelly Hose Checked — RY

CAODC NOV

Code	1 Rig Up	2 Drill Actual	3 Reaming	4 Coring	5 Cond Mud & Circ	6 Trips	7 Rig Service	8 Repair Rig	9 Cut Off Drlg Line	10 Dev Survey	11 Wireline Logs	12 Run Csg & Cement	13 Wait On Cement	14 Nipple BOP	15 Test BOP	16 Drillstem Test	17 Plug Back	18 Squeeze Cement	19 Fishing	20 Dir Work	21 Safety Meeting	22 Tear Down	23 Welding On	24 Rig Watch	25 Other	TOTAL
Tour 1							0.25							7.50							0.25					8.00
Tour 2							0.25								7.50						0.25					8.00
Tour 3							0.25								6.75					0.50	0.50					8.00
TOTAL							0.75							7.50	14.25					0.50	1.00					24.00

HOURS

DAILY HELP — FUEL @ 08:00 HRS: Prev 205 | Used 180 | Mtrs 05:00 | Temp -39 | Current Conditions: OVERCAST | Wind Direction: N | Wind Strength: UP TO 19 KM/H | Road Condition: GOOD

TOUR 1

Tour Supervisor / Driller: BRIAN BERGSETH

Start Time: 0:00 | End Time: 8:00

BITS

Bit Number	1
Size	222
IADC Code	
Manufacturer	Ulterra
Type	616
Serial No	21191
Jets	14 14 14 14 / 14 14
Depth Out (m)	
Depth In (m)	603.00
Total Drilled (m)	
Hrs Run Today	
Cumulative Hrs Run	0.00
Entry Date	

CUTTING STRUCTURE: TD | WEAR | TOC | DOC | MDC | Pump Pressure | LOC | Total Rev String | BRK

DRILL STRING RECORD

From	To	D-R-C	RPM	WOB

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	222 mm BIT	222	60	0.25
1	Dog sub	222	60	0.15
1	Mud motor	168	70	8.28
1	NM Pony Monel	171	70	2.97
1	6.75" Flex Monel	171	70	9.35
1	6.75" Gap Sub	162	88	0.54
2	6.75" NM Flex Monel	171	70	17.48
1	6.75" X/O	168	59	0.80
3	4" HW	132	70	27.94
1	Jars	161	70	5.13
37	4" HW	132	70	140.81
0	Drill Pipe		Stands	0.00
0	Drill Pipe		Singles	0.00

Kelly Down: 0.00 | Total: 416.04 | Weight of DC | Weight of String

HOLE CONDITION: Hole Drag Up / Down | Torque At Bottom | Fill On Bottom

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other

Time	
Density	
Funnel Viscosity	
Fluid Loss	
pH	
Location Of Sample	
Depth	
PVT	

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run

Remarks

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
		@		@	
		@		@	
		@		@	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density

MUD MATERIALS ADDED

Product	Amount	Type

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	450

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequence & Remarks
0:00	0:15	0.25	7	Rig service function test, crown saver
0:15	7:45	7.50	14A	Pick up and nipple up multi-bowl, install and nipple up BOP and flare lines
7:45	8:00	0.25	21D	Crew change and safety meeting, with rig crews, rig manager and Conoco reps.

Remarks: blow down boiler 200 l

SAFETY

Safety Topic	MEHL	MACP

TOUR 2

Tour Supervisor / Driller: MARCUS HALLOWES

Start Time: 8:00 | End Time: 16:00

BITS

Bit Number	
Size	
IADC Code	
Manufacturer	
Type	
Serial No	
Jets	
Depth Out (m)	
Depth In (m)	
Total Drilled (m)	
Hrs Run Today	
Cumulative Hrs Run	
Entry Date	

CUTTING STRUCTURE: TD | WEAR | TOC | DOC | MDC | Pump Pressure | LOC | Total Rev String | BRK

DRILL STRING RECORD

From	To	D-R-C	RPM	WOB

DRILLING ASSEMBLY

No	Component	OD	ID	Length
	Drill Pipe		Stands	
	Drill Pipe		Singles	

Kelly Down | Total | Weight of DC | Weight of String

HOLE CONDITION: Hole Drag Up / Down | Torque At Bottom | Fill On Bottom

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other

Time	
Density	
Funnel Viscosity	
Fluid Loss	
pH	
Location Of Sample	
Depth	
PVT	

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run

Remarks

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
		@		@	
		@		@	
		@		@	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density

MUD MATERIALS ADDED

Product	Amount	Type

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	460
2	8.00	11	450

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequence & Remarks
8:00	8:15	0.25	7	Rig service function test motor shut off, ok.
8:15	8:30	0.25	21	Safety meeting with Schlumbuger pressure testers, rig crew, Conoco rep, prior to rig up
8:30	16:00	7.50	15A	Pressure test all manifold valves and chocks, low of 1,400kpa, high 21,000kpa with Schlumbuger, all manifold valves, all ok.

Remarks: Level 1 inspection on tongs and overhead equipment M.H
Blew down boilers 2 times .50 litres each

SAFETY

Safety Topic	MEHL	MACP

TOUR 3

Tour Supervisor / Driller: BRIAN BERGSETH

Start Time: 16:00 | End Time: 24:00

BITS

Bit Number	1
Size	222
IADC Code	
Manufacturer	Ulterra
Type	616
Serial No	21191
Jets	14 14 14 14 / 14 14
Depth Out (m)	
Depth In (m)	603.00
Total Drilled (m)	
Hrs Run Today	
Cumulative Hrs Run	0.00
Entry Date	

CUTTING STRUCTURE: TD | WEAR | TOC | DOC | MDC | Pump Pressure | LOC | Total Rev String | BRK

DRILL STRING RECORD

From	To	D-R-C	RPM	WOB

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	222 mm BIT	222	60	0.25
1	Dog sub	222	60	0.15
1	Mud motor	168	70	8.28
1	NM Pony Monel	171	70	2.97
1	6.75" Flex Monel	171	70	9.35
1	6.75" Gap Sub	162	88	0.54
2	6.75" NM Flex Monel	171	70	17.48
1	6.75" X/O	168	59	0.80
3	4" HW	132	70	27.94
1	Jars	161	70	5.13
37	4" HW	132	70	140.81
0	Drill Pipe		Stands	0.00
0	Drill Pipe		Singles	0.00

Kelly Down: 0.00 | Total: 416.04 | Weight of DC | Weight of String

HOLE CONDITION: Hole Drag Up / Down | Torque At Bottom | Fill On Bottom

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other

Time	
Density	
Funnel Viscosity	
Fluid Loss	
pH	
Location Of Sample	
Depth	
PVT	

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run

Remarks

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
		@		@	
		@		@	
		@		@	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density

MUD MATERIALS ADDED

Product	Amount	Type

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	450

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequence & Remarks
16:00	16:15	0.25	7	Rig service function test, crown saver & motor kills
16:15	19:30	3.25	15A	Pressure test with schlumberger, BOP stack, HCR valves, kill line, inside BOP, stabbing valve, pipe rams, blind rams at low 1,400kpa., high 21,000kpa., Annular low 1,400kpa., high 17,500kpa. All ok.
19:30	19:45	0.25	21	Crew change and safety meeting, with rig crews, rig manager and Conoco reps.
19:45	23:15	3.50	15A	Accumulator function test, initial pressure-18,500kpa., function HCR, pipe rams, annular, final pressure-9,000kpa, re-charge pump time 3min. 45sec., prepare floor and directional tools to be picked up, crew hazard hunt and rig inspection, pre-drill out CAODC complete rig inspection, by AD and Conoco rep.
23:15	23:30	0.25	21	Safety meeting with Pathfinder directional hands, rig crew, hoe hand and Conoco rep, on picking up directional tools
23:30	24:00	0.50	20D	Pick up and make up, 222mm PDC bit, dog sub, directional tools

Remarks: blow down boiler 200 l

SAFETY

Safety Topic	MEHL	MACP
pick up dir tools		

FRONT PAGE SUMMARY

Your Wired Serial Number: BEAV2_20140106_1A	Version: RMS 2013.8.14.27104	Year: 2014	Month: 01	Day: 06	DAILY CHECKS	OP	RP
Licence No: WID-2082	Well Name: COPRC Dodo Canyon E-76 65-10 126-45	Surface Location: E-76-65-10-126-45	Rig: NT	Lic Type: CLSS	Unique Well Id		
Operator: Conoco Canada	Contractor: Beaver Drilling Ltd.	Rig No: 2	Well Type: HORIZ	Rig Activity: ☐			
Operator's AFE: 10351817	Contractor's Job No: 151	Spud Date Time: 28-Dec-2013 06:30					
Signature Of Operator's Representative: RICHARD TURGEON	Signature Of Contractor's Rig Manager: RICK YAVIS	Rig Release Date Time					

Code	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	TOTAL
	Rig Up	Drill Actual	Reaming	Coring	Circ Mud & Cire	Trips	Rig Service	Repair Rig	Cut Of Drlg Line	Dev Survey	Wireline Logs	Run Csg & Cement	Wait On Cement	Nipple BOP	Test BOP	D/Stem Test	Plug Back	Squeeze Cement	Fishing	Dir Work	Safety Meeting	Tear Down	Waiting On	Rig Wash	Other	
Tour 1						2.75	0.25													3.75	1.25					8.00
Tour 2		2.00			2.75	1.50	1.25														0.50					8.00
Tour 3		6.75					0.25			0.25											0.25				0.50	8.00
TOTAL		8.75			2.75	4.25	1.75			0.25										3.75	2.00				0.50	24.00

HOURS

RIG: CAODC 99 FPS

WEATHER: Temp 175 | Scale 120 | Time 06:00 | Temp -28 | Weather Conditions OVERCAST | Wind Direction W | Wind Strength UP TO 19 KM/H | Road Condition GOOD

TOUR 1

DRILLER: BRIAN BERGSETH

TOUR TIME: 0:00 | END TIME: 8:00

BITS

Bit Number	
Size	
IADC Code	
Manufacturer	
Type	
Serial No	
Jets	
Depth Out (m)	
Depth In (m)	
Total Drilled (m)	
Hrs Run Today	
Cumulative Hrs Run	
Entry Date	

DRILLING ASSEMBLY

No	Component	OD	ID	Length

Drill Pipe: Stands | Drill Pipe: Singles

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other:

Time	
Density	
Funnel Viscosity	
Fluid Loss	
pH	
Location Of Sample	
Depth	
PVT	

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run

Remarks

REDUCED PUMP SPEED

Pump #	Pressure	Strokes/min	Depth
	@	@	
	@	@	
	@	@	

CUTTINGS PICTURE

TD | BOC | MDC | LSC | BHA

DRILLING DATA

From	To	D-R-C	RPM	WOB

HOLE CONDITION

Hole Drag: Up | Down

Tongue At Bottom

Fill On Bottom

Kelly Down | Total | Weight at DC | Weight at String

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density

MUD MATERIALS ADDED

Product	Amount	Type
Truvis	3	bags
Barite	10	bags

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	450

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequence & Remarks
0:00	3:45	3.75	20D	Pick up and make up 222mm Ulterra PDC bit, dog sub, mud motor and Pathfinder directional tools
3:45	4:00	0.25	7	Rig service function test hydril 14 sec. function crown saver
4:00	6:45	2.75	6A	Run 10 stands of HWDP, in hole, lay down 10 jts of HWDP,& run in 15 stds h.w pick up 8 drill pipe
6:45	7:00	0.25	21A	BOP drill with night crew, review warning signs and positions etc.
7:00	7:15	0.25	21D	Crew change and safety meeting, with rig crews, rig manager and Conoco reps.
7:15	8:00	0.75	21F	Safety meeting and rig inspection, hazard hunt and BOP drill review, with day crew

Remarks
blow down boilers 200 l mud motor set @ 1.83 deg.

SAFETY

Safety Topic	MEHL	MACP
b.o.p drill		

TOUR 2

DRILLER: MARCUS HALLOWES

TOUR TIME: 8:00 | END TIME: 16:00

BITS

Bit Number	1
Size	222
IADC Code	
Manufacturer	Ulterra
Type	616
Serial No	21191
Jets	14 14 14 14 14 14
Depth Out (m)	
Depth In (m)	603.00
Total Drilled (m)	23.90
Hrs Run Today	0.75
Cumulative Hrs Run	0.75
Entry Date	

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	222 mm BIT	222	60	0.25
1	Dog sub	222	60	0.15
1	Mud motor	169	70	8.26
1	NM Pony Monel	171	70	2.97
1	6.75" Flex Monel	171	70	8.35
1	6.75" Gap Sub	162	88	0.54
2	6.75" NM Flex Monel	171	70	17.46
1	6.75" X/O	168	59	0.80
3	4" HW	132	70	27.54
1	Jars	161	62	5.13
37	4" HW	132	70	344.72
11	Drill Pipe: Stands			209.68
0	Drill Pipe: Singles			0.00

Kelly Down 0.00 | Total 626.90 | Weight at DC | Weight at String 41.00

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other:

Time	10:00	14:45
Density	950	950
Funnel Viscosity	60	51
Fluid Loss		
pH		
Location Of Sample	suction tank	shaker
Depth	603.00	607.00
PVT	36	35

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	SINGLE	140	120	6500	5.00

Remarks

REDUCED PUMP SPEED

Pump #	Pressure	Strokes/min	Depth
	@	@	
	@	@	
	@	@	

CUTTINGS PICTURE

TD | BOC 31.87 | MDC | LSC | BHA

DRILLING DATA

From	To	D-R-C	RPM	WOB
603.00	626.00	DRILL	20	6

HOLE CONDITION

Hole Drag: Up 0 | Down 0

Tongue At Bottom 8500

Fill On Bottom

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density
Centrifuge #1	8.00	950	940	1680

MUD MATERIALS ADDED

Product	Amount	Type

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	450

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequence & Remarks
8:00	9:15	1.25	7	Rig service function test rig smart anticollision function test crown saver. Review top drive trouble shooting with top drive hand.
9:15	10:45	1.50	6E	Pick up drill pipe, run in hole and tag cement
10:45	13:30	2.75	5B	Displace 21m3 of water to invert mud system
13:30	14:00	0.50	21A	Pre drill out safety meeting held B.O.P drill held well secure in 90 sec crew in positions review stick diagram check manifold alignment Funcbon test motor kills
14:00	15:15	1.25	2C	Drill out cement cement tagged at 586mKB float tagad at 589mKB shoe tagad at 603mKB
15:15	16:00	0.75	2	Drill 222mm intermediate hole with, Ulterra bit and dog sub, Pathfinder mud motor set at 1.83 deg, 7:8 lobe, 5 stage, 70rpm/m3 from 603mKB to 626mKB

Remarks
Level 1 inspection on tongs and overhead equipment M.H
Blew down boilers 2 times each .50 litres

SAFETY

Safety Topic	MEHL	MACP
B.O.P drill	43	5119

TOUR 3

DRILLER: BRIAN BERGSETH

TOUR TIME: 16:00 | END TIME: 24:00

BITS

Bit Number	1
Size	222
IADC Code	
Manufacturer	Ulterra
Type	616
Serial No	21191
Jets	14 14 14 14 14 14
Depth Out (m)	
Depth In (m)	603.00
Total Drilled (m)	158.00
Hrs Run Today	6.75
Cumulative Hrs Run	7.50
Entry Date	

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	222 mm BIT	222	60	0.25
1	Dog sub	222	60	0.15
1	Mud motor	169	70	8.26
1	NM Pony Monel	171	70	2.97
1	6.75" Flex Monel	171	70	8.35
1	6.75" Gap Sub	162	88	0.54
2	6.75" NM Flex Monel	171	70	17.46
1	6.75" X/O	168	59	0.80
3	4" HW	132	70	27.54
1	Jars	161	70	5.13
37	4" HW	132	70	344.72
18	Drill Pipe: Stands			343.83
0	Drill Pipe: Singles			0.00

Kelly Down 0.00 | Total 761.05 | Weight at DC | Weight at String 44.00

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other:

Time	
Density	
Funnel Viscosity	
Fluid Loss	
pH	
Location Of Sample	
Depth	
PVT	

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	SINGLE	140	140	9500	8.00

Remarks

REDUCED PUMP SPEED

Pump #	Pressure	Strokes/min	Depth
1	2976 @	80 @	645.00
	@	@	
	@	@	

CUTTINGS PICTURE

TD | BOC 21.47 | MDC | LSC | BHA

DRILLING DATA

From	To	D-R-C	RPM	WOB
626.00	761.00	DRILL	30	7

HOLE CONDITION

Hole Drag: Up 0 | Down 0

Tongue At Bottom 8500

Fill On Bottom

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type
	627.50	0.31	124.14	DIRECTIONAL
	704.46	0.62	137.27	DIRECTIONAL

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density
Centrifuge #1	8.00	950	945	1720

MUD MATERIALS ADDED

Product	Amount	Type

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	10.5	450

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequence & Remarks
16:00	17:15	1.25	2	Drill 222mm intermediate hole, Ulterra bit and dog sub, Pathfinder mud motor set at 1.83 deg, 7:8 lobe, 5 stage, 70rpm/m3 from 626mKB to 646mKB
17:15	17:30	0.25	7	Rig service function test rig smart anti collision funcbon test crown saver function test pipe rams 8 sec C/O
17:30	19:00	1.50	2	Drill 222mm intermediate hole, Ulterra bit and dog sub, Pathfinder mud motor set at 1.83 deg, 7:8 lobe, 5 stage, 70rpm/m3 from 646mKB to 665mKB
19:00	19:15	0.25	21	Crew handover meeting conoco reps present
19:15	23:15	4.00	2	Drill 222 mm intermediate hole, Ulterra bit and dog sub, Pathfinder mud motor set at 1.83 deg, 7:8 lobe, 5 stage, 70rpm/m3 from 665 m to 761 m
23:15	23:30	0.25	10	Directional surveys and connection
23:30	24:00	0.50	25	Changed out liners in pump # 1 from 5 1/2 " to 5 " liners

Remarks
blow down boiler 200 l

SAFETY

Safety Topic	MEHL	MACP
		5119

FRONT PAGE SUMMARY

Tour Sheet Serial Number: BEAV2_20140107_1A	Vendor Software Version: RMS 2013.8.14.27104	Year: 2014	Month: 01	Day: 07
License No: WID-2082	Well Name: COPRC Dodo Canyon E-76 65-10 126-45	Surface Location: E-76-65-10-126-45	Fmn: NT	Lse Type: CLSS	Unique Well Id:
Operator: Conoco Canada	Contractor: Beaver Drilling Ltd.	Rig No: 2	Well Type: HORIZ	Re-Entry: ☐
Operator's AFE: 10351817	Contractor's Job No: 151	Spud Date Time: 28-Dec-2013 06:30		
Signature Of Operator's Representative: RICHARD TURGEON	Signature Of Contractor's Rig Manager: RICK YAVIS	Rig Release Date Time:		

DAILY CHECKS — DP RM

	RT	AV
(1.) Daily Walk Around Inspection		
(2.) Derkhot Inspection - Weekly (Using Check List)		
(3.) H2S Signs Posted If Required	RT	AV
(4.) Well License & Well Diagram Posted	RT	AV
(5.) Flare Lines Bolted	RT	AV
(6.) BOP Drills Performed	RT	AV
(7.) Visually Inspected BOPs-Flare Lines & Diagnostic Lines		
(1.) Rig Site Health & Safety Meeting (crew assessments)		AV
(2.) CAODC Big Safety Inspection Checklist (crew/Supervisor)		
(3.) Mast Inspection before Raising or Lowering		
(4.) Crown Saver Checked		AV
(5.) Motor Kills Checked		

CAODC NOV

24 HOURS

	Rig Up	Drill Actual	Reaming	Coring	Cond Mud & Circ	Trips	Rig Service	Repair Rig	Cut Off Drlg Line	Dev Survey	Wireline Logs	Run Csg & Cement	Wait On Cement	Nipple BOP	Test BOP	Drill Stem Test	Plug Back	Squeeze Cement	Fishing	Dir Work	Safety Meeting	Tour Down	Waiting On	Rig Watch	Other	TOTAL
Tour 1		3.25					0.25			0.25											0.25				4.00	8.00
Tour 2		6.50			1.00		0.25																		0.25	8.00
Tour 3		6.00					0.75	0.75		0.25											0.25					8.00
TOTAL		15.75			1.00		1.25	0.75		0.50											0.50				4.25	24.00

WEATHER — FULL @ 08.00 HRS

Rig	198
Water	197
Time	04:45
Amb	-29
Current Conditions	OVERCAST
Wind Direction	S
Wind Speed	UP TO 19 KM/H
Road Conditions	GOOD

TOUR: 1 — TOURPUSHER / DRILLER: BRIAN BERGSETH — START TIME: 0:00 — END TIME: 8:00

BITS

Bit Number	1
Size	222
IADC Code	
Manufacturer	Ulterra
Type	616
Serial No	21191
Jets	14 14 14 14 / 14 14
Depth Out (m)	
Depth In (m)	603.00
Total Drilled (m)	267.00
Hrs Run Today	3.25
Cumulative Hrs Run	10.75
Entry Date	

CUTTING STRUCTURE

ID		Gage	
TD		ODC	
MDC		Pressure Loss	
Loc		Total Nozzle Area	24.84
Brng			

DRILLED

From	To	D-R-C	RPM	WOB
761.00	875.00	DRILL	30	5

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	222 mm BIT	222	60	0.25
1	Dog sub	222	70	0.15
1	Mud motor	169	70	8.28
1	NM Pony Monel	171	70	2.97
1	6.75" Flex Monel	171	70	8.35
1	6.75" Gap Sub	162	88	0.54
2	6.75" NM Flex Monel	171	70	17.48
1	6.75" X/O	168	59	0.80
3	4" HW	132	70	27.64
1	Jars	161	70	5.13
37	4" HW	132	70	344.73
24	Drill Pipe - Stands			458.01
0	Drill Pipe - Singles			0.00

Kelly Down	0.00
Total	875.23
Weight of BHA	
Weight of String	46.00

HOLE CONDITION

Hole Drag	Up 2000	Down	2000
Torque At Bottom			7800
Fill On Bottom			0.00

MUD RECORD

Mud Type	Water ☐	Oil ☑	Other ☐
Time	01:00	04:15	
Density	930	920	
Funnel Viscosity	40	40	
Fluid Loss			
pH			
Location Of Sample	shaker	shaker	
Depth	761.00	775.00	
PVT			

CIRCULATION

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	PARALLEL	127	100	11600	3.00
2	PARALLEL	127	100	11600	3.00

Remarks

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
2	1612	@	79	@	760.00
		@		@	
		@		@	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type
05:45	781.46	0.71	129.47	DIRECTIONAL

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density

MUD MATERIALS ADDED

Product	Amount	Type
Calcium Chloride	6	sks
Versatrol	1	sks

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	450

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequence & Remarks
0:00	0:15	0.25	7	Rig service function test crown saver, function hydril o/c 14 sec
0:15	4:15	4.00	25	Changed out liners in pump # 1 from 5 1/2 " to 5 " liners & moduole seal in pump # 2 middle
4:15	7:30	3.25	2	Drill 222 mm intermedediate hole, Ulterra bit and dog sub, Pathfinder mud motor set at 1.83 deg, 7:8 lobe, 5 stage, 70rpm/m3 from 761 m to 875 m
7:30	7:45	0.25	10	Directional survey and connections
7:45	8:00	0.25	21	Crew change and safety meeting, with rig crews, rig manager and Conoco reps.

Remarks
blow down boilers 200 l

SAFETY

Safety Topic	MEHL	MACP
working on mud pumps		5119

TOUR: 2 — TOURPUSHER / DRILLER: MARCUS HALLOWES — START TIME: 8:00 — END TIME: 16:00

BITS

Bit Number	1
Size	222
IADC Code	
Manufacturer	Ulterra
Type	616
Serial No	21191
Jets	14 14 14 14 / 14 14
Depth Out (m)	
Depth In (m)	603.00
Total Drilled (m)	413.00
Hrs Run Today	6.50
Cumulative Hrs Run	17.25
Entry Date	

CUTTING STRUCTURE

ID		Gage	
TD		ODC	
MDC		Pressure Loss	
Loc		Total Nozzle Area	23.84
Brng			

DRILLED

From	To	D-R-C	RPM	WOB
875.00	1016.00	DRILL	30	7

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	222 mm BIT	222	60	0.25
1	Dog sub	222	60	0.15
1	Mud motor	169	60	8.28
1	NM Pony Monel	171	70	2.97
1	6.75" Flex Monel	171	70	9.35
1	6.75" Gap Sub	162	88	0.54
2	6.75" NM Flex Monel	171	70	17.48
1	6.75" X/O	168	59	0.80
3	4" HW	132	70	27.64
1	Jars	161	63	5.13
37	4" HW	132	70	344.73
31	Drill Pipe - Stands			581.05
1	Drill Pipe - Singles			9.52

Kelly Down	-1.79
Total	1016.00
Weight of BHA	
Weight of String	49.00

HOLE CONDITION

Hole Drag	Up 2000	Down	2000
Torque At Bottom			8200
Fill On Bottom			0.00

MUD RECORD

Mud Type	Water ☐	Oil ☑	Other ☐
Time	08:00	10:45	
Density	940	940	
Funnel Viscosity	46	47	
Fluid Loss			
pH			
Location Of Sample	shaker	shaker	
Depth	894.00	951.00	
PVT	38.26	33.91	

CIRCULATION

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	PARALLEL	127	100	13100	8.00
2	PARALLEL	127	100	13100	8.00

Remarks

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
1	2215	@	81	@	883.00
		@		@	
		@		@	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type
09:30	894.50	1.28	113.56	DIRECTIONAL
14:30	970.50	0.88	151.55	DIRECTIONAL

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density
Centrifuge #1	8.00	940	930	1680
Centrifuge #2	8.00	940	930	1680

MUD MATERIALS ADDED

Product	Amount	Type
OptiSeal III	5	SX
Versacoat HF	1	BBL
Calcium Chloride	30	SX
Versatrol	5	SX
Versamul	1	BBL
Truvis	5	SX
Barite	5	SX

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	450

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequence & Remarks
8:00	8:30	0.50	2	Drill 222mm intermediate hole, ulterra it and dog sub, pathfinder mud motor set at 1.83deg,7:8 lobe, 5 stage, 70rpm/m3 from 875m to 894m
8:30	8:45	0.25	7	Rig service function test rig smart anti collision function test crown saver function test H.C.R 3 sec O/C Grease all moving parts check fluid levels in Floor motor and HPU unit function test flair ignitor
8:45	14:00	5.25	2	Drill 222mm intermediate hole, ulterra it and dog sub, pathfinder mud motor set at 1.83deg,7:8 lobe, 5 stage, 70rpm/m3 from 894mKB to 989mKB
14:00	15:00	1.00	5	Circulate 2 bottoms up and prepair to do a formation test
15:00	15:15	0.25	25	Formation integrity test hold pressure @ 2500 kpa for 10 min
15:15	18:00	0.75	2	Drill 222mm intermediate hole, ulterra bit and dog sub, pathfinder mud motor set at 1.83deg,7:8 lobe, 5 stage, 70rpm/m3 from 989mKB to 1016mKB

Remarks
level one overhead inspection MH
blow down boilers 100L x2

SAFETY

Safety Topic	MEHL	MACP
Rig service	151	5119

TOUR: 3 — TOURPUSHER / DRILLER: BRIAN BERGSETH — START TIME: 16:00 — END TIME: 24:00

BITS

Bit Number	1
Size	222
IADC Code	
Manufacturer	Ulterra
Type	616
Serial No	21191
Jets	14 14 14 14 / 14 14
Depth Out (m)	
Depth In (m)	603.00
Total Drilled (m)	576.00
Hrs Run Today	6.00
Cumulative Hrs Run	23.25
Entry Date	

CUTTING STRUCTURE

ID		Gage	
TD		ODC	
MDC		Pressure Loss	
Loc		Total Nozzle Area	24.77
Brng			

DRILLED

From	To	D-R-C	RPM	WOB
1016.00	1179.00	DRILL	30	7

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	222 mm BIT	222	60	0.25
1	Dog sub	222	60	0.15
1	Mud motor	169	60	8.28
1	NM Pony Monel	171	70	2.97
1	6.75" Flex Monel	171	70	9.35
1	6.75" Gap Sub	162	88	0.54
2	6.75" NM Flex Monel	171	70	17.48
1	6.75" X/O	168	59	0.80
3	4" HW	132	70	27.64
1	Jars	161	63	5.13
37	4" HW	132	70	344.73
40	Drill Pipe - Stands			762.13
0	Drill Pipe - Singles			0.00

Kelly Down	0.00
Total	1179.35
Weight of BHA	
Weight of String	53.00

HOLE CONDITION

Hole Drag	Up 2000	Down	2000
Torque At Bottom			8100
Fill On Bottom			0.00

MUD RECORD

Mud Type	Water ☐	Oil ☑	Other ☐
Time	21:00	23:45	
Density	910	940	
Funnel Viscosity	45	48	
Fluid Loss			
pH			
Location Of Sample	shaker	shaker	
Depth	1122.00	1196.00	
PVT			

CIRCULATION

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	PARALLEL	127	100	12500	7.00
2	PARALLEL	127	100	12500	7.00

Remarks

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
2	2172	@	85	@	1026.00
		@		@	
		@		@	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type
17:15	1008.50	1.02	147.85	DIRECTIONAL
19:15	1046.85	1.19	133.05	DIRECTIONAL
20:45	1084.50	1.50	124.45	DIRECTIONAL
22:45	1122.50	1.10	145.78	DIRECTIONAL

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density
Centrifuge #1	8.00	940	930	1680
Centrifuge #2	8.00	940	930	1680

MUD MATERIALS ADDED

Product	Amount	Type

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	450

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequence & Remarks
16:00	16:30	0.50	2	Drill 222mm intermediate hole, ulterra bit and dog sub, pathfinder mud motor set at 1.83deg,7:8 lobe, 5 stage, 70rpm/m3 from 1016mKB to 1027mKB
16:30	17:15	0.75	7	Rig service function test rig smart anti collision function test crown saver function test pipe rams 9 sec C/O Grease all moving parts Change oil on HPU unit
17:15	17:30	0.25	2	Drill 222mm intermediate hole, ulterra bit and dog sub, pathfinder mud motor set at 1.83deg,7:8 lobe, 5 stage, 70rpm/m3 from 1027mKB to 1037mKB
17:30	18:15	0.75	8C	Cange seat and valve on pump #1 lube side
18:15	19:00	0.75	2	Drill 222mm intermediate hole, ulterra bit and dog sub, pathfinder mud motor set at 1.83deg,7:8 lobe, 5 stage, 70rpm/m3 from 1037mKB to 1064 mKB,
19:00	19:15	0.25	21	Crew change and safety meeting, with rig crews, rig manager and Conoco reps.
19:15	23:45	4.50	2	Drill 222mm intermediate hole, ulterra bit and dog sub, pathfinder mud motor set at 1.83deg,7:8 lobe, 5 stage, 70rpm/m3 from 1064mKB to 1179 mKB, Slide = 4m
23:45	24:00	0.25	10	Directional survey and connections

Remarks
blow down boilers 200 l

SAFETY

Safety Topic	MEHL	MACP
		5119

FRONT PAGE SUMMARY

This Ellen Serial Number		Vendor Software Version		Year	Month	Day	DAILY CHECKS
BEAV2_20140108_1A		RMS 2013.8.14.27104		2014	01	08	

License No	Well Name	Surface Location	Prov	Lic Type	Unique Well Id
WID-2082	COPRC Dodo Canyon E-76 65-10 126-45	E-76-65-10-126-45	NT	CLSS	

Operator	Contractor	Rig No	Well Type	Re-Entry
Conoco Canada	Beaver Drilling Ltd.	2	HORIZ	☐

Operator's AFE	Contractor's Job No	Spud Date Time	
10351817	151	29-Dec-2013	06.30

Signature Of Operator's Rep/s Location	Signature Of Contractor's Rig Manager	Rig Release Date Time	
RICHARD TURGEON	RICK YAVIS		

DAILY CHECKS — OP RIG

	OP	RIG
(1.) Daily Walk Around Inspection	RT	RV
(2.) Detailed Inspection - Weekly (Using Check List)	RT	RV
(3.) H2S Signs Posted/If Required	RT	RV
(4.) Well License & Stick Diagram Posted	RT	RV
(5.) Flare Lines Staked	RT	RV
(6.) BOP Drills Performed	RT	RV
(7.) Visually Inspected BO Pre-Flare Lines & Diagonal Lines	RT	RV
(1.) Rig Site Health & Safety Meeting (conference) monthly		RV
(2.) CAODC Rig Safety Inspection Checklist (recent/current)		RV
(3.) Mast Inspection before Raising or Lowering		RV
(4.) Crown Saver Checked		RV
(5.) Motor Kills Checked		RV

HOURS

Code	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	TOTAL
	Rig Up	Drill Ahead	Reaming	Coring	Cond Mud & Circ	Trips	Rig Service	Repair Rig	Cut Off Drlg Line	Dev Survey	Wireline Logs	Run Csg & Cement	Wait On Cement	Nipple BOP	Test BOP	Drillstem Test	Plug Back	Squeeze Cement	Fishing	Dir Work	Safety Meeting	Tear Down	Waiting On	Rig Watch	Other	
Tour 1		7.25					0.25			0.25											0.25					8.00
Tour 2		7.00					0.25			0.50											0.25					8.00
Tour 3		6.75					0.25			0.75											0.25					8.00
TOTAL		21.00					0.75			1.50											0.75					24.00

FUEL @ 08.00 HRS: No 137, Litres 125; Used 05.00, Litres -25

WEATHER: Derrick Conditions OVERCAST; Wind Direction N; Wind Strength UP TO 19 KM/H; Road Conditions GOOD

TOUR 1 — Driller BRIAN BERGSETH — Start Time 0:00 — End Time 8:00

BITS

Bit Number	1
Size	222
IADC Code	
Manufacturer	Ulterra
Type	616
Serial No	21191
Jets	14 14 14 14 / 14 14
Depth Out (m)	
Depth In (m)	603.00
Total Drilled (m)	728.00
Hrs Run Today	7.25
Cumulative Hrs Run	30.50
Entry Date	

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	222 mm BIT	222	60	0.25
1	Dog sub	222	60	0.15
1	Mud motor	169	60	8.26
1	NM Pony Monel	171	70	2.97
1	6.76" Flex Monel	171	70	8.35
1	6.75" Gap Sub	162	88	0.54
2	6.75" NM Flex Monel	171	70	17.48
1	6.75" X/O	168	59	0.80
3	4" HW	132	70	37.84
1	Jars	161	63	5.13
37	4" HW	132	70	344.72
48	Drill Pipe — Stands			914.42
0	Drill Pipe — Singles			0.00
	Kelly Down			0.00
	Total			1331.64
	Weight of BHA			
	Weight of String			56.00

MUD RECORD

Mud Type — Water ☐ Oil ☑ Other

Time	01:15	04:00
Density	940	960
Funnel Viscosity	48	48
Fluid Loss		
pH		
Location Of Sample	shaker	shaker
Depth	1190.00	1250.00
PVT		

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	PARALLEL	127	105	14300	7.00
2	PARALLEL	127	105	14300	7.00

Remarks

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
1	2340	@	79	@	1178.00
		@		@	
		@		@	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type
00:15	1160.50	1.19	131.15	DIRECTIONAL
02:30	1198.50	2.12	145.56	DIRECTIONAL
04:45	1236.50	1.81	176.76	DIRECTIONAL
06:15	1274.50	1.41	163.67	DIRECTIONAL
07:30	1312.50	1.90	156.64	DIRECTIONAL

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density
Centrifuge #1	1.00	1200	1040	1780
Centrifuge #2	1.00	1200	1040	1780

MUD MATERIALS ADDED

Product	Amount	Type
Barite	300	sx

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	450

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
0:00	0:15	0.25	7	Rig service function test, crown saver and hydril 14 sec
0:15	7:30	7.25	2	Drill 222mm intermediate hole, ulterra bit and dog sub, pathfinder mud motor set at 1.83deg,7:8 lobe, 5 stage, 70rpm/m3 from 1179 mKB to1331 mKB.
7:30	7:45	0.25	10	Directional survey and connections
7:45	8:00	0.25	21	Crew change and safety meeting, with rig crews, rig manager and Conoco reps.

Remarks
blow down boilers 200 l

SAFETY

Safety Topic	MEHL	MACP
mbing mud products		5119

TOUR 2 — Driller MARCUS HALLOWES — Start Time 8:00 — End Time 16:00

BITS

Bit Number	1
Size	222
IADC Code	
Manufacturer	Ulterra
Type	616
Serial No	21191
Jets	14 14 14 14 / 14 14
Depth Out (m)	
Depth In (m)	603.00
Total Drilled (m)	728.00
Hrs Run Today	7.00
Cumulative Hrs Run	37.50
Entry Date	

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	222 mm BIT	222	60	0.25
1	Dog sub	222	60	0.13
1	Mud motor	168	60	8.26
1	NM Pony Monel	171	70	2.97
1	6.76" Flex Monel	171	70	9.35
1	6.75" Gap Sub	162	88	0.54
2	6.75" NM Flex Monel	171	70	17.48
1	6.75" X/O	168	59	0.80
3	4" HW	132	70	37.84
1	Jars	161	63	5.13
37	4" HW	132	70	344.72
54	Drill Pipe — Stands			1026.00
1	Drill Pipe — Singles			9.50
	Kelly Down			-5.72
	Total			1449.00
	Weight of BHA			
	Weight of String			60.00

MUD RECORD

Mud Type — Water ☐ Oil ☑ Other

Time	08:45	11:45
Density	960	960
Funnel Viscosity	47	50
Fluid Loss		
pH		
Location Of Sample	shaker	shaker
Depth	1349.00	1407.00
PVT	38	48.8

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	PARALLEL	127	105	13800	8.00
2	PARALLEL	127	105	13800	8.00

Remarks

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
2	2897	@	89	@	1348.00
		@		@	
		@		@	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type
10:00	1351.50	2.12	141.06	DIRECTIONAL
12:00	1389.50	2.90	172.66	DIRECTIONAL
15:30	1426.50	2.78	175.74	DIRECTIONAL

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density
Centrifuge #1	8.00	1200	1040	1780
Centrifuge #2	8.00	1200	1040	1780

MUD MATERIALS ADDED

Product	Amount	Type
OptiSeal III	5	SX
Versatrol	5	SX
Calcium Chloride Beads	15	SX
Versamod	1	BBL
Truvis	6	SX
Lime	50	SX

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	445
2	8.00	10.5	450

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
8:00	8:45	0.75	2	Drill 222mm intermediate hole, ulterra bit and dog sub, pathfinder mud motor set at 1.83deg,7:8 lobe, 5 stage, 70rpm/m3 from 1331 mKB to 1350mKB.
8:45	9:00	0.25	7	Rig service function test rig smart anti collision system function test crown saver function test pipe rams 8 sec C/O function test flair ignitor grease all moving parts check engine fluid levels in floor motor HPU and pumps
9:00	13:15	4.25	2	Drill 222mm intermediate hole, ulterra bit and dog sub, pathfinder mud motor set at 1.83deg,7:8 lobe, 5 stage, 70rpm/m3 from 1350 mKB to 1417mKB.
13:15	13:30	0.25	21	Safety meeting with NEB personal and B.O.P drill wall secure in 70 sec crew in positions
13:30	15:30	2.00	2	Drill 222mm intermediate hole, ulterra bit and dog sub, pathfinder mud motor set at 1.83deg,7:8 lobe, 5 stage, 70rpm/m3 from 1417 mKB to 1449 mKB.
15:30	16:00	0.50	10	Accumulated directional survey time

Remarks
Level one overhead inspection MH
Blew down boilers 2 times @ 100L

SAFETY

Safety Topic	MEHL	MACP
Working drill string with top drive	61	2550

TOUR 3 — Driller BRIAN BERGSETH — Start Time 16:00 — End Time 24:00

BITS

Bit Number	1
Size	222
IADC Code	
Manufacturer	Ulterra
Type	616
Serial No	21191
Jets	14 14 14 14 / 14 14
Depth Out (m)	
Depth In (m)	603.00
Total Drilled (m)	905.00
Hrs Run Today	6.75
Cumulative Hrs Run	44.25
Entry Date	

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	222 mm BIT	222	60	0.25
1	Dog sub	222	60	0.13
1	Mud motor	169	60	8.26
1	NM Pony Monel	171	70	2.97
1	6.75" Flex Monel	171	70	9.35
1	6.75" Gap Sub	162	88	0.54
2	6.75" NM Flex Monel	171	70	17.48
1	6.75" X/O	168	59	0.80
3	4" HW	132	70	37.84
1	Jars	161	63	5.13
37	4" HW	132	70	344.72
58	Drill Pipe — Stands			1104.73
0	Drill Pipe — Singles			0.00
	Kelly Down			-13.95
	Total			1508.00
	Weight of BHA			
	Weight of String			62.00

MUD RECORD

Mud Type — Water ☐ Oil ☑ Other

Time	20:00	22:45
Density	960	960
Funnel Viscosity	57	54
Fluid Loss		
pH		
Location Of Sample	shaker	shaker
Depth	1438.00	1502.00
PVT	40	38.3

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	PARALLEL	127	105	14500	8.00
2	PARALLEL	127	105	14500	8.00

Remarks

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
1	2559	@	80	@	1464.00
		@		@	
		@		@	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type
21:30	1446.00	4.20	204.66	DIRECTIONAL
20:00	1464.50	2.70	229.77	DIRECTIONAL
21:30	1474.50	4.02	247.44	DIRECTIONAL
22:45	1483.50	4.60	257.05	DIRECTIONAL

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density
Centrifuge #1	8.00	1200	1010	1810
Centrifuge #2	8.00	1200	1010	1810

MUD MATERIALS ADDED

Product	Amount	Type

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	450

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
16:00	18:45	0.75	2	Drill 222mm intermediate hole, ulterra bit and dog sub, pathfinder mud motor set at 1.83deg,7:8 lobe, 5 stage, 70rpm/m3 from 1449 mKB to 1464 mKB.
18:45	17:00	0.25	7	Rig service function test rig smart anti collision system function test crown saver function test H.C.R 3sec O/C function test flair ignitor grease all moving parts check engine fluid levels in floor motor HPU and pumps
17:00	19:00	2.00	2	Drill 222mm intermediate hole, ulterra bit and dog sub, pathfinder mud motor set at 1.83deg,7:8 lobe, 5 stage, 70rpm/m3 from 1464 mKB to 1480mKB.
19:00	19:15	0.25	21	Crew change and safety meeting, with rig crews, rig manager and Conoco reps.
19:15	23:15	4.00	2	Drill 222mm intermediate hole, ulterra bit and dog sub, pathfinder mud motor set at 1.83deg,7:8 lobe, 5 stage, 70rpm/m3 from 1480 mKB to 1508 mKB.
23:15	24:00	0.75	10	Accumulated time for dir surveys

Remarks
blow down boilers 200 l

SAFETY

Safety Topic	MEHL	MACP
		2810

FRONT PAGE SUMMARY

Tour Sheet Serial Number: BEAV2_20140109_1A | Vendor Software Version: RMS 2013.8.14.27104 | Year: 2014 | Month: 01 | Day: 09

Licence No: WID-2082 | Well Name: COPRC Dodo Canyon E-76 65-10 126-45 | Surface Location: E-76-65-10-126-45 | Prov: NT | Lic Type: CLSS | Unique Well ID:

Operator: Conoco Canada | Contractor: Beaver Drilling Ltd. | Rig No: 2 | Well Type: HORIZ | Rig Entry:

Operator's AFE: 10351817 | Contractor's Job No: 151 | Spud Date Time: 28-Dec-2013 06:30

Signature Of Operator's Representative: RICHARD TURGEON | Signature Of Contractor's Rig Manager: RICK YAVIS | Rig Release Date Time:

DAILY CHECKS — OP RT KY

(1) Daily Walk Around Inspection
(2) Datafloat Inspection - Weekly (Chilling Chain Link)
(3) H2S Signs Present? Required
(4) Well Licence & Shift Diagram Posted
(5) Pipe Lines Bolted
(6) BOP Drills Performed
(7) Visually Inspected BO Pre-Flare Lines & Degasser Lines
(1) Rig Site Health & Safety Meeting (environmental)
(2) CAODC Rig Safety Inspection Checklist (new/agreement)
(3) Mast Inspection before Raising or Lowering
(4) Crown Saver Checked
(5) Motor Kills Checked

HOURS

	Rig Up	Drill Actual	Reaming	Coring	Cond Mud & Circ	Trips	Rig Service	Repair Rig	Cut Off Drlg Line	Dev Survey	Wireline Logs	Run Csg & Cementing	Wait On Cement	Nipple BOP	Test BOP	Diverter Test	Rig Back	Squeeze Cement	Fishing	Dir Work	Safety Meeting	Lost Circ	Waiting On	Rig Repair	Other	TOTAL
Tour 1		6.50					0.25			1.00											0.25					8.00
Tour 2		6.50					0.50			1.00																8.00
Tour 3					1.00	6.25	0.25					0.25									0.25					8.00
TOTAL		13.00			1.00	6.25	1.00			2.00		0.25									0.50					24.00

Daily Booking: | Daily Total:

WEATHER

Rig	Radar
182	186
Time	Hour
04:00	-27
Current Conditions	
PARTLY CLOUDY	
Wind Direction	Wind Strength
N	CALM
Road Condition	
GOOD	

RIG UP @ 08:00 HRS

TOUR 1

DRILLER: BRIAN BERGSETH | START TIME: 0:00 | END TIME: 8:00

BITS

Bit Number	1
Size	222
IADC Code	
Manufacturer	Ulterra
Type	616
Serial No	21191
Jets	14 14 14 14 / 14 14
Depth Out (m)	
Depth In (m)	603.00
Total Drilled (m)	975.00
Hrs Run Today	6.50
Cumulative Hrs Run	50.75
Entry Date	

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	222 mm BIT	222	60	0.25
1	Dog sub	222	60	0.15
1	Mud motor	169	70	8.28
1	NM Pony Monel	171	70	2.97
1	6.75" Flex Monel	171	70	9.35
1	6.75" Gap Sub	162	88	0.54
2	6.75" NM Flex Monel	171	70	17.48
1	6.75" X/O	168	59	0.80
3	4" HW	132	70	27.64
1	Jars	161	70	5.13
37	4" HW	132	70	344.73
60	Drill Pipe		Stands	1142.74
1	Drill Pipe		Singles	9.49

Kelly Drive: -4.00 | Total: 1565.45 | Weight of BHA: | Weight of String: 65.00

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other:

Time	01:45	03:45
Density	1000	1000
Funnel Viscosity	52	52
Fluid Loss		
pH		
Location Of Sample	shaker	shaker
Depth	1510.00	1540.00
PVT	42	41

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	PARALLEL	127	105	14800	7.00
2	PARALLEL	127	105	14800	7.00

Remarks:

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
1	2618	@	80	@	1506.00
		@		@	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type
00:00	1493.50	6.32	262.42	DIRECTIONAL
01:30	1503.00	7.11	268.46	DIRECTIONAL
02:30	1512.50	8.09	268.37	DIRECTIONAL
04:00	1522.00	8.62	267.36	DIRECTIONAL
05:15	1531.50	9.81	264.58	DIRECTIONAL

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density
Centrifuge #1	7.00	1200	1010	1790
Centrifuge #2	7.00	1200	1010	1790

MUD MATERIALS ADDED

Product	Amount	Type
OptiSeal III	5	sxs
Lime	31	sxs
Versatrol	5	sxs
Versacoat HF	1	drum
Versamul	1	drum
Calcium Chloride	17	sxs

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	450

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
0:00	0:15	0.25	7	Rig service function test hydril 14 sec and crown saver
0:15	6:45	6.50	2	Drill 222mm intermediate hole, ulterra bit and dog sub, pathfinder mud motor set at 1.83deg,7:8 lobe, 5 stage, 70rpm/m3 from 1508 mKB to 1565 mKB.
6:45	7:45	1.00	10	Accumulated time for directional surveys
7:45	8:00	0.25	21	Crew change and safety meeting, with rig crews, rig manager and Conoco reps.

Remarks: blow down boilers 200 l

SAFETY

Safety Topic	MEHL	MACP
IRS		2550

HOLE CONDITION

Hole Drag: Up 2000 Down 2000 | Torque At Bottom: 2650 | Fill On Bottom:

METRE DRILLED

From	To	D-R-C	RPM	WOB
1508.00	1565.00	DRILL	30	6

TOUR 2

DRILLER: MARCUS HALLOWES | START TIME: 8:00 | END TIME: 16:00

BITS

Bit Number	1
Size	222
IADC Code	
Manufacturer	Ulterra
Type	616
Serial No	21191
Jets	14 14 14 14 / 14 14
Depth Out (m)	
Depth In (m)	603.00
Total Drilled (m)	975.00
Hrs Run Today	
Cumulative Hrs Run	50.75
Entry Date	

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	222 mm BIT	222	60	0.25
1	Dog sub	222	60	0.15
1	Mud motor	169	70	8.28
1	NM Pony Monel	171	70	2.97
1	6.75" Flex Monel	171	70	9.35
1	6.75" Gap Sub	162	88	0.54
2	6.75" NM Flex Monel	171	70	17.48
1	6.75" X/O	168	59	0.80
3	4" HW	132	70	27.64
1	Jars	161	70	5.13
37	4" HW	132	70	344.73
62	Drill Pipe		Stands	1180.75
1	Drill Pipe		Singles	9.49

Kelly Drive: -8.00 | Total: 1599.46 | Weight of BHA: | Weight of String: 65.00

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other:

Time	08:45	13:30
Density	995	1000
Funnel Viscosity	52	53
Fluid Loss		
pH		
Location Of Sample	shaker	shaker
Depth	1578.00	1596.00
PVT	39.86	39.12

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	PARALLEL	127	105	14100	8.00
2	PARALLEL	127	105	14100	8.00

Remarks:

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
2	3558	@	87	@	1578.00
		@		@	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density
Centrifuge #1	8.00	1200	1010	1800
Centrifuge #2	8.00	1200	1010	1790

MUD MATERIALS ADDED

Product	Amount	Type
OptiSeal III	5	SX
Versatrol	5	SX
Lime	50	SX
Calcium Chloride	6	SX
Barite	30	SX
Versacoat HF	1	BBL

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	10.5	450

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
8:00	11:00	3.00	2	Drill 222mm intermediate hole, ulterra bit and dog sub, pathfinder mud motor set at 1.83deg,7:8 lobe, 5 stage, 70rpm/m3 from 1565 mKB to 1578 mKB.
11:00	11:30	0.50	7	Rig service function test rig smart system, function test crown saver, function test pipe rams 8sec c/o, grease all moving parts, function test flare stack, check engine fluid levels in the HPU, floor motor and pumps, change oil on pump #1
11:30	15:00	3.50	2	Drill 222mm intermediate hole, ulterra bit and dog sub, pathfinder mud motor set at 1.83deg,7:8 lobe, 5 stage, 70rpm/m3 from 1578 mKB to 1596 mKB.
15:00	16:00	1.00	10	Accumulated directional surveys

Remarks: Level one overhead inspection MH
Blew down boilers 2 times @ 100L

SAFETY

Safety Topic	MEHL	MACP
Change grabber box dies	68	2550

HOLE CONDITION

Hole Drag: Up 2 Down 2 | Torque At Bottom: 2800 | Fill On Bottom:

METRE DRILLED

From	To	D-R-C	RPM	WOB
1565.00	1596.00	DRILL	30	7

TOUR 3

DRILLER: BRIAN BERGSETH | START TIME: 16:00 | END TIME: 24:00

BITS

Bit Number	1
Size	222
IADC Code	
Manufacturer	Ulterra
Type	616
Serial No	21191
Jets	14 14 14 14 / 14 14
Depth Out (m)	1599.00
Depth In (m)	603.00
Total Drilled (m)	996.00
Hrs Run Today	
Cumulative Hrs Run	50.75
Entry Date	

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	222 mm BIT	222	60	0.25
1	Dog sub	222	60	0.15
1	Mud motor	169	70	8.28
1	NM Pony Monel	171	70	2.97
1	6.75" Flex Monel	171	70	9.35
1	6.75" Gap Sub	162	88	0.54
2	6.75" NM Flex Monel	171	70	17.48
1	6.75" X/O	168	59	0.80
3	4" HW	132	70	27.64
1	Jars	161	70	5.13
37	4" HW	132	70	344.73
63	Drill Pipe		Stands	1199.74
0	Drill Pipe		Singles	0.00

Kelly Drive: 0.00 | Total: 1616.96 | Weight of BHA: | Weight of String:

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other:

Time	22:00
Density	1000
Funnel Viscosity	55
Fluid Loss	
pH	
Location Of Sample	Tanks
Depth	1590.00
PVT	42

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run

Remarks:

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
		@		@	
		@		@	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density
Centrifuge #1	8.00	1200	1010	1800
Centrifuge #2	8.00	1200	1010	1800

MUD MATERIALS ADDED

Product	Amount	Type

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	450

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
16:00	17:00	1.00	S	Circulate bottoms up prior to formation fit test
17:00	17:15	0.25	12E	Fit test to 4500 kpa held for 10 min., held good
17:15	17:30	0.25	7	Rig service function test H.C.R 3sec O/C function test rig smart function test crown saver
17:30	19:00	1.50	6B	Trip out of hole to change bit with flow checks at 1502m,
19:00	19:15	0.25	21	Crew change and safety meeting, with rig crews, rig manager and Conoco reps.
19:15	24:00	4.75	6B	Trip out of hole with flow checks, to change out PDC bit and mud motor

Remarks: blow down boilers 200 l mud on trip calc 5.69 m3 meas 5.97 diff + .35 m3

SAFETY

Safety Topic	MEHL	MACP
Pull Out of Hole with Top Drive jas #259		2550

METRE DRILLED

From	To	D-R-C	RPM	WOB

FRONT PAGE SUMMARY

Tour Sheet Serial Number: BEAV2_20140110_1A | Vendor Software Version: RMS 2013.8.14.27104 | Year: 2014 | Month: 01 | Day: 10

License No: WID-2082 | Well Name: COPRC Dodo Canyon E-76 65-10 126-45 | Uniform Location: E-76-65-10-126-45 | Prov: NT | Lic Type: CLSS | Nearest Well Id:

Operator: Conoco Canada | Contractor: Beaver Drilling Ltd. | Rig No: 2 | Well Type: HORIZ | Re-Entry: ☐

Operator's AFE: 10351817 | Contractor's Job No: 151 | Spud Date/Time: 28-Dec-2013 06:30

Signature Of Operator's Representative: RICHARD TURGEON | Signature Of Contractor's Rig Manager: RICK YAVIS | Rig Release Date/Time:

DAILY CHECKS — OP RIG

	OP	RIG
(1.) Daily Walk Around Inspection		RY
(1.) Detailed Inspection - Weekly Lifting Check List		
(2.) H2S Signs Posted If Required		RY
(*.) Well Licence & Sign Diagram Posted	RY	RY
(5.) Flare Lines Staked	RY	RY
(6.) BOP Drills Performed		RY
(7.) Visually Inspected BOPs-Flare Lines & Degasser Lines	RY	RY
(*.) Rig Site Health & Safety Meeting (once/week/crew)		RY
(3.) CAODC Rig Safety Inspection Checklist (once/tour/crew)		
(3.) Load Inspection before Raising or Lowering		
(4.) Crown Saver Checked		RY
(5.) Motor Mtr Checked		

CAODC / NOV

TIME BREAKDOWN

Code	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	TOTAL
	Rig Up	Drill Actual	Reaming	Coring	Cond Mud & Circ	Trips	Rig Service	Repair Rig	Cut Off Drlg Line	Dev Survey	Wireline Logs	Run Csg & Cement	Wait On Cement	Nipple BOP	Test BOP	Drill Stem Test	Plug Back	Squeeze Cement	Fishing	Dir Work	Safety Meeting	Tour Comb	Waiting On ...	Rig Watch	Other	
Tour 1						3.25	0.25		0.75											3.00	0.75					8.00
Tour 2		4.25				2.50	0.25			1.00																8.00
Tour 3		7.50					0.25														0.25					8.00
TOTAL		11.75				5.75	0.75		0.75	1.00										3.00	1.00					24.00

RIG TIME

FULL @ 06:00 HRS

Rig	132
Rotary	125
Tubing	-32
Time	06:00
Overall Conditions	OVERCAST
Wind Direction	N
Wind Velocity	UP TO 19 KM/H
Road Conditions	GOOD

TOUR 1

TOUR HAND REPORTED BY: BRIAN BERGSETH | TOUR TIME: 0:00 | END TIME: 8:00

BITS

Bit Number	3
Size	222
IADC Code	
Manufacturer	Smith
Type	FHI18B
Serial No	RA3594
Jets	13.5 13.5 13.5
Depth Out (m)	
Depth In (m)	1588.00
Total Drilled (m)	
Hrs Run Today	
Cumulative Hrs Run	0.00
Entry Date	

DRILLING ASSEMBLY

No	Component	OD	ID	Length

Drill Pipe: Stands | Drill Pipe: Singles

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other:

Time	
Density	
Funnel Viscosity	
Fluid Loss	
pH	
Location Of Sample	
Depth	
PVT	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequence & Remarks
0:00	0:15	0.25	7	Rig service function test blind rams and crown saver
0:15	0:30	0.25	21D	Safety meeting with Pathfinder, change out mud motor
0:30	3:30	3.00	20D	Change out mud motor, check MWD tool and make up bit # 2, Smith FHI18B, insert bit
3:30	5:15	1.75	6A	Run in hole to the top of HWDP
5:15	5:30	0.25	21	Safety meeting with crew, on slip and cut drilling line
5:30	6:15	0.75	9	Slip and cut 30m drilling line
6:15	7:45	1.50	6A	Run in hole, with Smith FHI18B insert bit and Pathfinder mud motor set at 1.83deg,7:8 lobe, 5 stage, 70rpm/m3
7:45	8:00	0.25	21	Crew change and safety meeting, with rig crews, rig manager and Conoco reps.

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density
Centrifuge #1	6.00	1180	1010	1780
Centrifuge #2	6.00	1180	1010	1780

MUD MATERIALS ADDED

Product	Amount	Type

CIRCULATION

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run

Remarks

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
		@		@	
		@		@	
		@		@	

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	450

SAFETY

Safety Topic	MEHL	MACP
lay down mud motor & pick up mud motor # 2		2560

Remarks
blow down boilers 200 l mud motor set @ 1.83 deg.

TOUR 2

TOUR HAND REPORTED BY: MARCUS HALLOWES | TOUR TIME: 8:00 | END TIME: 16:00

BITS

Bit Number	3
Size	222
IADC Code	
Manufacturer	Smith
Type	
Serial No	FHI18B0BVPS
Jets	13.5 13.5 13.5
Depth Out (m)	
Depth In (m)	1588.00
Total Drilled (m)	36.00
Hrs Run Today	4.25
Cumulative Hrs Run	4.25
Entry Date	

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	222 mm BIT	222	60	0.25
1	Mud motor	168	60	8.46
1	NM Pony Monel	171	70	2.97
1	6.75" Flex Monel	171	70	9.35
1	6.75" Gap Sub	162	88	0.54
2	6.75" NM Flex Monel	171	70	17.48
1	6.75" X/O	168	59	0.90
3	4" HW	132	70	27.54
1	Jars	161	65	5.13
37	4" HW	132	70	114.73
63	Drill Pipe: Stands			1199.74
1	Drill Pipe: Singles			9.50

Kelly Down: -2.49 | Total: 1624.00 | Weight of DC: | Weight of String: 64.00

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other:

Time	08:15	12:15
Density	1020	1020
Funnel Viscosity	56	56
Fluid Loss		
pH		
Location Of Sample	suction tank	shaker
Depth	1588.00	1598.00
PVT	37	37

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type
15:15	1599.00	19.40	278.37	DIRECTIONAL
	1608.50	19.31	287.85	DIRECTIONAL

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequence & Remarks
8:00	8:45	0.75	6A	Run in hole from 799mKB to 950mKB
8:45	9:00	0.25	10	Fill pipe and pulse test MWD tool
9:00	9:15	0.25	7	Rig service function test rig smart function test crown saver function test annular 24 sec C/O grease all moving parts check fluid levels in floor motor and pump engines
9:15	11:00	1.75	6A	Trip in hole, from 956mKB to 1588mKB Change hole depth from 1598mKB To 1588mKB
11:00	15:15	4.25	2	Drill 222mm Intermediate hole, with Smith FHI18B insert bit and, Pathfinder mud motor set at 1.83deg,7:8 lobe, 5 stage, 70rpm/m3 from 1588mKB to 1624mKB.
15:15	16:00	0.75	10	Accumulated directional surveys

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density
Centrifuge #1	8.00	1200	1010	1780
Centrifuge #2	8.00	1200	1010	1780

MUD MATERIALS ADDED

Product	Amount	Type
Truvis	3	SX
Calcium Chloride	4	SX

CIRCULATION

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	PARALLEL	127	105	15500	5.00
2	PARALLEL	127	105	15500	5.00

Remarks

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
1	3215	@	83	@	1588.00
		@		@	
		@		@	

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	450

SAFETY

Safety Topic	MEHL	MACP
RH with top drive	70	2432

Remarks
Level one inspection on overhead equitment mh
Blew down boilers 2 times @ 100L

DRILL STRING COMPONENTS

From	To	D-R-C	RPM	WOB
1588.00	1624.00	DRILL	30	12

HOLE CONDITION

Hole Drag: Up 2 Down 2 | Torque At Bottom: 2350 | Fill On Bottom:

TOUR 3

TOUR HAND REPORTED BY: BRIAN BERGSETH | TOUR TIME: 16:00 | END TIME: 24:00

BITS

Bit Number	3
Size	222
IADC Code	
Manufacturer	Smith
Type	
Serial No	FHI18B0BVPS
Jets	13.5 13.5 13.5
Depth Out (m)	
Depth In (m)	1588.00
Total Drilled (m)	103.00
Hrs Run Today	7.50
Cumulative Hrs Run	11.75
Entry Date	

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	222 mm BIT	222	60	0.25
1	Mud motor	168	60	8.46
1	NM Pony Monel	171	70	2.97
1	6.76" Flex Monel	171	70	9.35
1	6.75" Gap Sub	162	88	0.54
2	6.75" NM Flex Monel	171	70	17.48
1	6.75" X/O	168	59	0.90
3	4" HW	132	70	27.54
1	Jars	161	70	5.13
37	4" HW	132	70	114.73
67	Drill Pipe: Stands			1275.72
0	Drill Pipe: Singles			0.00

Kelly Down: 0.00 | Total: 1692.97 | Weight of DC: | Weight of String: 66.00

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other:

Time	19:30	22:00
Density	1005	1010
Funnel Viscosity	56	56
Fluid Loss		
pH		
Location Of Sample	shaker	shaker
Depth	1655.00	1692.00
PVT	45.3	42.2

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type
	1617.50	19.80	296.44	DIRECTIONAL
	1627.00	20.19	300.14	DIRECTIONAL
	1636.50	21.21	303.36	DIRECTIONAL
	1645.50	22.80	306.18	DIRECTIONAL
	1655.00	2.48	309.35	DIRECTIONAL
	1664.50	27.22	309.27	DIRECTIONAL

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequence & Remarks
16:00	17:15	1.25	2	Drill 222mm Intermediate hole, with Smith FHI18B insert bit and, pathfinder mud motor set at 1.83deg,7:8 lobe, 5 stage, 70rpm/m3 from 1624 mKB to 1636 mKB,
17:15	17:30	0.25	7	Rig service function test rig smart function test crown saver function test H.C.R 3 sec O/C grease all moving parts check fluid levels in floor motor and pump engines
17:30	19:00	1.50	2	Drill 222mm Intermediate hole, with Smith FHI18B insert bit and, Pathfinder mud motor set at 1.83deg,7:8 lobe, 5 stage, 70rpm/m3 from 1636 mKB to 1654mKB.
19:00	19:15	0.25	21	Crew change and safety meeting, with rig crews, rig manager and Conoco reps.
19:15	24:00	4.75	2	Drill 222mm Intermediate hole, with Smith FHI18B insert bit and, Pathfinder mud motor set at 1.83deg,7:8 lobe, 5 stage, 70rpm/m3 from 1654mKB to 1691mKB.

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density
Centrifuge #1	2.00	1200	1010	1780
Centrifuge #2	2.00	1200	1010	1780

MUD MATERIALS ADDED

Product	Amount	Type

CIRCULATION

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	PARALLEL	127	104	15500	7.00
2	PARALLEL	127	104	15500	7.00

Remarks

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
2	3315	@	84	@	1635.00
		@		@	
		@		@	

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	450

SAFETY

Safety Topic	MEHL	MACP
		2432

Remarks
blow down boilers 200 l

DRILL STRING COMPONENTS

From	To	D-R-C	RPM	WOB
1624.00	1691.00	DRILL	30	13

HOLE CONDITION

Hole Drag: Up 3 Down 2 | Torque At Bottom: 2480 | Fill On Bottom:

FRONT PAGE SUMMARY

Tour Sheet Serial Number: BEAV2_20140111_1A | Vendor Software Version: RMS 2013.8.14.27104 | Year: 2014 | Month: 01 | Day: 11

License No: WID-2052 | Well Name: COPRC Dodo Canyon E-76 65-10 126-45 | Surface Location: E-76-65-10-126-45 | Prov: NT | Lic Type: CLSS | Unique Well Id:

Operator: Conoco Canada | Contractor: Beaver Drilling Ltd. | Rig No: 2 | Well Type: HORIZ | Ry-Eddy: ☐

Operator's AFE: 10351817 | Contractor's Job No: 151 | Spud Date Time: 28-Dec-2013 06:30

Signature Of Operator's Representative: RICHARD TURGEON | Signature Of Contractor's Rig Manager: RICK YAVIS | Rig Release Date Time:

DAILY CHECKS — OP RM

	RT	RY
(1.) Daily Walk Around Inspection		
(2.) Detailed Inspection - Weekly (Using Check List)		
(3.) H2S Signs Posted If Required	RT	RY
(4.) Well Licence & Sign Diagram Posted	RT	RY
(5.) Flare Lines Staked	RT	RY
(6.) BOP Drills Performed	RT	RY
(7.) Visually Inspected BOPs Flare Lines & Degasser Lines	RT	RY
(1.) Rig Site Health & Safety Meeting (environment)		RY
(2.) CAODC Rig Safety Inspection Checklist (once/fortnight)		
(3.) Mast Inspection before Raising or Lowering		RY
(4.) Crown Saver Checked		
(5.) Motor Hits Checked		

Kelly Bushing: | Up Foot:

Code	1 Rig Up	2 Drill Actual	3 Reaming	4 Coring	5 Cond Mud & Circ	6 Trips	7 Rig Service	8 Repair Rig	9 Cut Off Drlg Line	10 Dev Survey	11 Wireline Logs	12 Run Csg & Cement	13 Wait On Cement	14 Nipple BOP	15 Test BOP	16 Drillstem Test	17 Plug Back	18 Squeeze Cement	19 Fishing	20 Dir Work	21 Safety Meeting	22 Tear Down	23 Weld On	24 Rig Watch	25 Other	TOTAL
HOURS Tour 1		3.25			1.00	3.00	0.25			0.25											0.25					8.00
Tour 2						5.25	0.25	0.50												1.50	0.25				0.25	8.00
Tour 3		4.25				3.00	0.25			0.25											0.25					8.00
TOTAL		7.50			1.00	11.25	0.75	0.50		0.50										1.50	0.75				0.25	24.00

FUEL @ 6a 00 HRS: Rig 184 | Meter 190 | Time 04:00 | Temp -37

WEATHER: General Conditions OVERCAST | Wind Direction N | Wind Strength UP TO 19 KM/H | Road Conditions GOOD

TOUR 1

TOUR 1 | SIGNATURE OF DRILLER: BRIAN BERGSETH | START TOUR: 0:00 | END TOUR: 8:00

BITS

Bit Number	3
Size	222
IADC Code	
Manufacturer	Smith
Type	fhi18b
Serial No	FHI18B0BVPS
Jets	13.5 13.5 13.5
Depth Out (m)	1702.00
Depth In (m)	1588.00
Total Drilled (m)	114.00
Hrs Run Today	3.25
Cumulative Hrs Run	15.00
Entry Date	

CUTTING STRUCTURE: TR | MDC | LOC | BRG | GDC | Pressure Hole | Total Rev in Hrs 7.60

BITS DRILLED

From	To	D-R-C	RPM	WOB
1691.00	1702.00	DRILL	30	13

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	222 mm BIT	222	60	0.25
1	Mud motor	169	60	8.46
1	NM Pony Monel	171	70	2.97
1	6.75" Flex Monel	171	70	9.35
1	6.75" Gap Sub	162	88	0.54
2	6.75" NM Flex Monel	171	70	17.48
1	6.75" X/O	168	59	0.80
3	4" HW	132	70	27.94
1	Jars	161	70	5.13
37	4" HW	132	70	244.73
68	Drill Pipe	Stands		1294.72
0	Drill Pipe	Singles		0.00

Kelly Down: -9.97 | Total: 1702.00 | Weight of DC: | Weight of String: 67.00

HOLE CONDITION

Hole Drag: Up 2 Down 2 | Torque At Bottom: 2450 | Fill On Bottom:

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other:

Time	01:30	
Density	1010	
Funnel Viscosity	56	
Fluid Loss		
pH		
Location Of Sample	shaker	
Depth	1711.00	
PVT	40	

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	PARALLEL	127	105	15500	4.00
2	PARALLEL	127	105	15500	4.00

Remarks:

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
1	2600	@	81	@	1691.00
		@		@	
		@		@	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type
	1674.00	29.12	310.94	DIRECTIONAL
	1683.50	31.20	312.66	DIRECTIONAL

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density

MUD MATERIALS ADDED

Product	Amount	Type
OptiSeal III	5	SXS
Versatrol	5	SXS
Truvis	5	SXS
Barite	40	SXS

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	450

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
0:00	0:15	0.25	7	Rig service function test rig smart crown saver, function pipe ram's 4 sec
0:15	3:30	3.25	2	Drill 222mm intermediate hole, with Smith FHi18B insert bit and, Pathfinder mud motor set at 1.83deg.7-8 lobe, 5 stage, 70rpm/m3 from 1691 mKB to 1702 mKB.
3:30	3:45	0.25	10	Accumulated time for dir surveys
3:45	4:45	1.00	5D	Circulate & condition hole, mix weighted pill
4:45	7:45	3.00	6B	Trip out of hole to reset mud motor from 1.83 deg. to 2.12 deg. due to the inability to attain proper build rates.
7:45	8:00	0.25	21	Crew change and safety meeting, with rig crews, rig manager and Conoco reps.

Remarks: blow down boilers 200 l flow checks @ 1692 m & 1653 m

SAFETY

Safety Topic	MEHL	MACP
top drive connections i.s.o # 127		2490

TOUR 2

TOUR 2 | SIGNATURE OF DRILLER: MARCUS HALLOWES | START TOUR: 8:00 | END TOUR: 16:00

BITS

Bit Number	3rr
Size	222
IADC Code	
Manufacturer	Smith
Type	fhi18b
Serial No	FHI18B0BVPS
Jets	13.5 13.5 13.5
Depth Out (m)	1702.00
Depth In (m)	1702.00
Total Drilled (m)	0.00
Hrs Run Today	
Cumulative Hrs Run	15.00
Entry Date	

CUTTING STRUCTURE: TR | MDC | LOC | BRG | GDC | Pressure Hole | Total Rev in Hrs 0.00

BITS DRILLED

From	To	D-R-C	RPM	WOB

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	222 mm BIT	222	60	0.25
1	Mud motor	169	60	8.46
1	NM Pony Monel	171	70	2.97
1	6.75" Flex Monel	171	70	9.35
1	6.75" Gap Sub	162	88	0.54
2	6.75" NM Flex Monel	171	70	17.48
1	6.75" X/O	168	59	0.80
3	4" HW	132	70	27.94
1	Jars	161	70	5.13
37	4" HW	132	70	244.73
68	Drill Pipe	Stands		1294.72
0	Drill Pipe	Singles		0.00

Kelly Down: -9.97 | Total: 1702.00 | Weight of DC: | Weight of String: 67.00

HOLE CONDITION

Hole Drag: Up | Down | Torque At Bottom: | Fill On Bottom:

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other:

Time	08:00	12:00
Density	1010	1010
Funnel Viscosity	56	56
Fluid Loss		
pH		
Location Of Sample	suction tank	suction tank
Depth	1702.00	1702.00
PVT	40	40

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	PARALLEL	127	104	12500	1.00
2	PARALLEL	127	104	12500	1.00

Remarks:

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
		@		@	
		@		@	
		@		@	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density

MUD MATERIALS ADDED

Product	Amount	Type

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	450

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
8:00	10:00	2.00	6B	Trip out of hole from 743mKB to 58mKB to reset mud motor from 1.83 deg. to 2.12 deg. due to the inability to attain proper build rates. flow checks @ 852m, 510m 87m OOH
10:00	10:15	0.25	7	Rig service function test rig smart anti-collision system, function test blind rams 8sec close/open, function test crown saver, grease all moving parts and check fluid levels floor motor, HPU, and pumps, monitor well
10:15	10:30	0.25	21	Safety meeting with Pathfinder directional services, prior to working with directional tools
10:30	11:30	1.00	20D	Change bend in the mud motor from 1.83 deg to 2.12deg and inspect bit
11:30	11:45	0.25	25	Clean rig floor to prepare to trip in hole
11:45	14:30	2.75	6A	Trip in hole from 48mKB to 686mKB
14:30	15:00	0.50	20A	Fill pipe and test tool, outside surface casing shoe
15:00	15:30	0.50	8B	Touble shoot mud saver valve on top drive
15:30	16:00	0.50	6A	Trip in hole from 686mKB to 898mKB

Remarks:
Level 1 overhead inspection MH
blew down boilers 2 times @ 100L
Trip sheet record Calc 6.99m3 meas 8.09m3 Diff +1.1m3

SAFETY

Safety Topic	MEHL	MACP
Tripping with top drive		2432

TOUR 3

TOUR 3 | SIGNATURE OF DRILLER: BRIAN BERGSETH | START TOUR: 16:00 | END TOUR: 24:00

BITS

Bit Number	3rr
Size	222
IADC Code	
Manufacturer	Smith
Type	fhi18b
Serial No	FHI18B0BVPS
Jets	13.5 13.5 13.5
Depth Out (m)	
Depth In (m)	1702.00
Total Drilled (m)	24.00
Hrs Run Today	4.25
Cumulative Hrs Run	19.25
Entry Date	

CUTTING STRUCTURE: TR | MDC | LOC | BRG | GDC | Pressure Hole | Total Rev in Hrs 1.25

BITS DRILLED

From	To	D-R-C	RPM	WOB
1702.00	1726.00	DRILL	30	16

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	222 mm BIT	222	60	0.25
1	Mud motor	169	60	8.46
1	NM Pony Monel	171	70	2.97
1	6.75" Flex Monel	171	70	9.35
1	6.75" Gap Sub	162	88	0.54
2	6.75" NM Flex Monel	171	70	17.48
1	6.75" X/O	168	59	0.80
3	4" HW	132	70	27.94
1	Jars	161	70	5.13
37	4" HW	132	70	244.73
69	Drill Pipe	Stands		1313.72
0	Drill Pipe	Singles		0.00

Kelly Down: -4.97 | Total: 1726.00 | Weight of DC: | Weight of String: 67.00

HOLE CONDITION

Hole Drag: Up 3000 Down 2000 | Torque At Bottom: | Fill On Bottom:

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other:

Time	19:00	21.45
Density	1010	1010
Funnel Viscosity	55	55
Fluid Loss		
pH		
Location Of Sample	shaker	shaker
Depth	1711.00	1730.00
PVT	42.1	49.5

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	PARALLEL	127	104	15400	5.00
2	PARALLEL	127	104	15400	5.00

Remarks:

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
		@		@	
		@		@	
		@		@	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type
21:30	1693.00	33.41	312.66	DIRECTIONAL
23:15	1702.50	36.10	310.68	DIRECTIONAL

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density

MUD MATERIALS ADDED

Product	Amount	Type
OptiSeal III	5	SXS
Versatrol	5	SXS

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	450

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
16:00	17:00	1.00	6A	Trip in hole from 686mKB to 1223mKB
17:00	17:15	0.25	7	Rig service function test rig smart anti-collision system, function test annular 24sec close/open, function test crown saver, grease all moving parts and check fluid levels floor motor, HPU, and pumps
17:15	19:15	2.00	6A	Trip in hole from 1223mKB to 1702m, screw into top drive, strart pumps, fill pipe and break circulation.
19:15	19:30	0.25	21	Crew change and safety meeting, with rig crews, rig manager and Conoco reps.
19:30	23:45	4.25	2	Drill 222mm intermediate hole, with Smith FHi18B insert bit and, Pathfinder mud motor set at 2.12deg, 7.8 lobe, 5 stage, 70rpm/m3 from 1702 mKB to 1726 mKB.
23:45	24:00	0.25	10	Accumulated time for directional surveys

Remarks: blow down boilers 200 l

SAFETY

Safety Topic	MEHL	MACP
		2432

FRONT PAGE SUMMARY

Tour Sheet Data Number: BEAV2_20140112_1A | Vendor Software Version: RMS 2013.8.14.27104 | Year: 2014 | Month: 01 | Day: 12

Licensee No: WID-2082 | Well Name: COPRC Dodo Canyon E-76 65-10 126-45 | Surface Location: E-76-65-10-126-45 | Prov: NT | Lic Type: CLSS | Unique Well Id:

Operator: Conoco Canada | Contractor: Beaver Drilling Ltd. | Rig No: 2 | Well Type: HORIZ | Re-Entry: ☐

Operator's AFE: 10351817 | Contractor's Job No: 151 | Spud Date Time: 28-Dec-2013 06:30

Signature Of Operator's Representative: RICHARD TURGEON | Signature Of Contractor's Rig Manager: RICK YAVIS | Rig Release Date Time:

DAILY CHECKS — DP PM

(1.) Daily Walk Around Inspection — RT RV
(2.) Detailed Inspection - Weekly (Derrick Unit) — RT RV
(3.) H2S Signs Posted If Required — RT RV
(4.) Well Diagram & Stab Diagram Posted — RT RV
(5.) Fibre Lines Marked — RT RV
(6.) BOP Drills Performed — RT RV
(7.) Visually Inspected BOPs, Fibre Lines & Diagrams Lines — RT RV
(1.) Rig Site Health & Safety Meeting (onsite meetings) — RV
(2.) CAODC Rig Safety Inspection Checklist (once Lightweight) — RV
(3.) Crew Inspection before Raising or Lowering — RV
(4.) Crown Saver Checked — RV
(5.) Motor Rpm Checked — RV

CAODC NOV

Daily Meeting | Drill Crew

FUEL @ 08:00 HRS: Fuel 139 | Used 132 | Hours 04:45 | Hours 44 | Current Conditions: OVERCAST | Wind Direction: N | Wind Strength: CALM | Road Conditions: GOOD

HOURS

	Rig Up	Drill Actual	Reaming	Coring	Cond Mud & Circ	Trips	Rig Service	Repair Rig	Cut Off Drlg Line	Dev Survey	Wireline Logs	Run Csg & Cement	Wait On Cement	Nipple BOP	Test BOP	Drillstem Test	Plug Back	Ream Loss Cement	Fishing	Dir Work	Safety Meeting	Tear Down	Waiting On	Rig Water	Other	TOTAL
Tour 1		5.75					0.25	1.25		0.50											0.25					8.00
Tour 2		7.00					0.25	0.25												0.50						8.00
Tour 3		7.00					0.25			0.50											0.25					8.00
TOTAL		19.75					0.75	1.50		1.00										0.50	0.50					24.00

TOUR 1

DRILLER: BRIAN BERGSETH | START TIME: 0:00 | END TIME: 8:00

BITS

Bit Number	3rr
Size	222
IADC Code	
Manufacturer	Smith
Type	fhi18b
Serial No	FHI18B0BVPS
Jets	13.5 13.5 13.5
Depth Out (m)	
Depth In (m)	1702.00
Total Drilled (m)	50.00
Hrs Run Today	5.75
Cumulative Hrs Run	25.00
Entry Date	

CUTTING STRUCTURE: TD | Grade | BDC | Reason Pulled | Inner | Outer | Dull Char | Loc | Brg | Gage | 2.00

DRILLED: From 1726.00 | To 1749.98 | D-R-C DRILL | RPM 30 | WOB 16

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	222 mm BIT	222	60	0.25
1	Mud motor	169	70	8.46
1	NM Pony Monel	171	70	2.97
1	6.75" Flex Monel	171	70	9.35
1	6.75" Gap Sub	162	88	0.54
2	6.75" NM Flex Monel	171	70	17.48
1	6.75" X/O	168	59	0.80
3	4" HW	132	70	27.64
1	Jars	161	70	5.13
37	4" HW	132	70	114.72
70	Drill Pipe — Stands			1332.73
0	Drill Pipe — Singles			0.00
	Kelly Down			0.00
	Total			1749.98
	Weight of DC			
	Weight of String			68.00

HOLE CONDITION: Hole Drag Up 2 Down 2 | Tongue At Bottom | Fill On Bottom

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other

Time	01:30	04:15
Density	1010	1010
Funnel Viscosity	55	54
Fluid Loss		
pH		
Location Of Sample	shaker	shaker
Depth	1749.00	1751.00
PVT		47.5

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	PARALLEL	127	104	15400	7.00
2	PARALLEL	127	104	15400	7.00

Remarks

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
1	2555	@	78	@	1726.00
		@		@	
		@		@	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type
01:00	1712.00	38.62	308.96	DIRECTIONAL
03:30	1721.50	41.71	305.96	DIRECTIONAL

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density

MUD MATERIALS ADDED

Product	Amount	Type
Calcium Chloride	10	sx
Versamul	1	bbl

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	450

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
0:00	0:45	0.75	2	Drill 222mm Intermediate hole, with Smith FHi18B insert bit and, Pathfinder mud motor set at 2.12deg, 7:8 lobe, 5 stage, 70rpm/m3 from 1726 mKB to 1731 mKB.
0:45	1:00	0.25	7	Rig service function test rig smart anti-collision system, function test pipe ram's 4sec to close function test crown saver, grease all moving parts and check fluid levels floor motor, HPU, and pumps
1:00	6:00	5.00	2	Drill 222mm intermediate hole, with Smith FHi18B insert bit and, Pathfinder mud motor set at 2.12deg, 7:8 lobe, 5 stage, 70rpm/m3 from 1731 mKB to 1749 mKB.
6:00	7:15	1.25	8C	Change out 5" head & liner in pump # 2 lube side
7:15	7:45	0.50	10	Accumulated time for directional surveys
7:45	8:00	0.25	21	Crew change and safety meeting, with rig crews, rig manager and Conoco reps.

Remarks: blow down boilers 200l

SAFETY

Safety Topic	MEHL	MACP
working in cold conditions		4440

TOUR 2

DRILLER: MARCUS HALLOWES | START TIME: 8:00 | END TIME: 16:00

BITS

Bit Number	3rr
Size	222
IADC Code	
Manufacturer	Smith
Type	fhi18b
Serial No	FHI18B0BVPS
Jets	13.5 13.5 13.5
Depth Out (m)	
Depth In (m)	1702.00
Total Drilled (m)	85.00
Hrs Run Today	7.00
Cumulative Hrs Run	32.00
Entry Date	

CUTTING STRUCTURE: TD | Grade | BDC | Reason Pulled | Inner | Outer | Dull Char | Loc | Brg | Gage | 2.66

DRILLED: From 1749.00 | To 1787.08 | D-R-C DRILL | RPM 20 | WOB 16

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	222 mm BIT	222	60	0.25
1	Mud motor	169	70	8.46
1	NM Pony Monel	171	70	2.97
1	6.75" Flex Monel	171	70	9.35
1	6.75" Gap Sub	162	88	0.54
2	6.75" NM Flex Monel	171	70	17.48
1	6.75" X/O	168	59	0.80
3	4" HW	132	70	27.64
1	Jars	161	59	5.13
37	4" HW	132	70	114.72
72	Drill Pipe — Stands			1370.72
0	Drill Pipe — Singles			0.00
	Kelly Down			0.00
	Total			1787.97
	Weight of DC			
	Weight of String			68.00

HOLE CONDITION: Hole Drag Up 2 Down 2 | Tongue At Bottom | Fill On Bottom

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other

Time	08:15	13:15
Density	1010	1015
Funnel Viscosity	53	53
Fluid Loss		
pH		
Location Of Sample	Shaker	Shaker
Depth	1766.00	1775.00
PVT	46.05	44.87

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	PARALLEL	127	104	15000	8.00
2	PARALLEL	127	104	15000	8.00

Remarks

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
2	3099	@	88	@	1766.00
		@		@	
		@		@	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type
12:30	1759.50	50.91	309.66	DIRECTIONAL

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density
Centrifuge #1	0.00	0	0	0
Centrifuge #2	0.00	0	0	0

MUD MATERIALS ADDED

Product	Amount	Type
OptiSeal III	5	sx
Trums	5	SX
Calcium Chloride	15	sx
Versatrol	2	sx
Versamul	1	BBL

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	445

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
8:00	8:15	0.25	8C	Change liner wash basket on pump #2
8:15	11:15	3.00	2	Drill 222mm Intermediate hole, with Smith FHi18B insert bit and, Pathfinder mud motor set at 2.12deg, 7:8 lobe, 5 stage, 70rpm/m3 from 1749 mKB to 1768 mKB.
11:15	11:30	0.25	7	Rig service function test rig smart anti collision system function test crown saver function test, Annular 18 sec close/open, grease all moving and non moving parts, check fluid levels in floor motor, switch over light plants,
11:30	15:30	4.00	2	Drill 222mm intermediate hole, with Smith FHi18B insert bit and, Pathfinder mud motor set at 2.12deg, 7:8 lobe, 5 stage, 70rpm/m3 from 1768 mKB to 1787 mKB.
15:30	16:00	0.50	20A	Accumulated directional surveys

Remarks: Level one overhead inspection mh
Blew down boilers 2 times @ 100L

SAFETY

Safety Topic	MEHL	MACP
Repair mud pumps	71	4440

TOUR 3

DRILLER: BRIAN BERGSETH | START TIME: 16:00 | END TIME: 24:00

BITS

Bit Number	3rr
Size	222
IADC Code	
Manufacturer	Smith
Type	fhi18b
Serial No	FHI18B0BVPS
Jets	13.5 13.5 13.5
Depth Out (m)	
Depth In (m)	1702.00
Total Drilled (m)	114.00
Hrs Run Today	7.00
Cumulative Hrs Run	39.00
Entry Date	

CUTTING STRUCTURE: TD | Grade | BDC | Reason Pulled | Inner | Outer | Dull Char | Loc | Brg | Gage | 2.92

DRILLED: From 1787.00 | To 1816.00 | D-R-C DRILL | RPM 30 | WOB 17

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	222 mm BIT	222	60	0.25
1	Mud motor	169	70	8.46
1	NM Pony Monel	171	70	2.97
1	6.75" Flex Monel	171	70	9.35
1	6.75" Gap Sub	162	88	0.54
2	6.75" NM Flex Monel	171	70	17.48
1	6.75" X/O	168	59	0.80
3	4" HW	132	70	27.64
1	Jars	161	70	5.13
37	4" HW	132	70	114.72
74	Drill Pipe — Stands			1408.68
0	Drill Pipe — Singles			0.00
	Kelly Down			0.00
	Total			1825.93
	Weight of DC			
	Weight of String			68.00

HOLE CONDITION: Hole Drag Up 2 Down 2 | Tongue At Bottom | Fill On Bottom

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other

Time	19:30	21:45
Density	1010	1015
Funnel Viscosity	54	54
Fluid Loss		
pH		
Location Of Sample	shaker	shaker
Depth	1806.00	1806.00
PVT	42.8	41.9

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	PARALLEL	127	104	15000	8.00
2	PARALLEL	127	104	16000	8.00

Remarks

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
1	3554	@	87	@	1787.00
		@		@	
		@		@	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type
16:30	1769.00	52.32	10.15	DIRECTIONAL
19:45	1778.50	55.50	312.17	DIRECTIONAL
23:30	1788.00	57.58	311.87	DIRECTIONAL

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density
Centrifuge #2	1.25	1020	940	2230

MUD MATERIALS ADDED

Product	Amount	Type
OptiSeal III	5	sx
Versatrol	5	sx

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	450

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
16:00	16:15	0.25	7	Rig service function test rig smart anti collision system function test crown saver function test, H.C.R 3 open/close, grease all moving and non moving parts, check fluid levels in floor motor, pump engines, HPU
16:15	19:00	2.75	2	Drill 222mm intermediate hole, with Smith FHi18B insert bit and, Pathfinder mud motor set at 2.12deg, 7:8 lobe, 5 stage, 70rpm/m3 from 1787 mKB to 1796 mKB.
19:00	19:15	0.25	21	Crew change and safety meeting, with rig crews, rig manager and Conoco reps.
19:15	23:30	4.25	2	Drill 222mm intermediate hole, with Smith FHi18B insert bit and, Pathfinder mud motor set at 2.12deg, 7:8 lobe, 5 stage, 70rpm/m3 from 1796 mKB to 1816 mKB.
23:30	24:00	0.50	10	Accumulated time for directional surveys

Remarks: blow down boilers 200 l

SAFETY

Safety Topic	MEHL	MACP
		4440

FRONT PAGE SUMMARY

Tour Sheet Serial Number: BEAV2_20140113_18	Vendor Software Version: RMS 2013.8.14.27104	Year: 2014	Month: 01	Day: 13	DAILY CHECKS	OP RIH			
Licence No: WID-2082	Well Name: COPRC Dodo Canyon E-76 65-10 126-45	Surface Location: E-76-65-10-126-45	Prov: NT	Lic Type: CLSS	Unique Well Id:	(1.) Daily Walk Around Inspection	AT	SV	
Operator: Conoco Canada	Contractor: Beaver Drilling Ltd.	Rig No: 2	Well Type: HORIZ	Fly-Safety: ☐		(2.) Detailed Inspection - Weekly (Daily Check List)			
Operator's AFE: 10351817	Contractor's Job No: 151	Spud Date Time: 28-Dec-2013	06:30			(3.) H2S Signs Posted/ Required			
Signature Of Operator's Representative: RICHARD TURGEON	Signature Of Contractor's Rig Manager: RICK YAVIS	Rig Release Date Time				(4.) Well Licence & BOP Diagram Posted	RT	RV	
						(5.) Flare Lines Bolted			
						(6.) BOP Drills Performed	RT	RV	
						(7.) Visually Inspected BOPs+Flare Lines & Diverter Lines	RT	RV	
						(1.) Rig Site Health & Safety Meeting (crew/contractor)		BV	
						(2.) CAODC Rig Safety Inspection Checklist (once/quarter)			
						(3.) Hard Inspection before Raising or Lowering		RV	
						(4.) Crown Saver Checked			
						(5.) Motor Kills Checked			

Code	1 Rig Up	2 Drill Actual	3 Reaming	4 Coring	5 Cond Mud & Circ	6 Trips	7 Rig Service	8 Repair Rig	9 Cut Off Drlg Line	10 Drlg Survey	11 Wireline Logs	12 Run Csg & Cement	13 Wait On Cement	14 Nipple BOP	15 Test BOP	16 Drill Stem Test	17 Plug Back	18 Squeeze Cement	19 Fishing	20 Dir Work	21 Safety Meeting	22 Tear Down	23 Waiting On	24 Rig Watch	25 Other	TOTAL
HOURS Tour 1		6.50					0.25			0.50	0.50										0.25					8.00
Tour 2		7.00					0.25			0.50											0.25					8.00
Tour 3		7.00					0.25			0.50											0.25					8.00
TOTAL		20.50					0.75			1.50	0.50										0.75					24.00

F.U.T. @ 03.00 HRS: Pit 250 | Mud Wt 225 | Time 04:00 | Temp -39

WEATHER: Road Conditions CLEAR | Wind Direction N | Wind Strength UP TO 19 KMH | Temperature GOOD

TOUR 1

Tour Supervisor: BRIAN BERGSETH | Start Time: 0:00 | End Time: 8:00

BITS

Bit Number	3rr
Size	222
IADC Code	
Manufacturer	Smith
Type	fhi18b
Serial No	FHI18B0BVPS
Jets	13.5 13.5 13.5
Depth Out (m)	
Depth In (m)	1702.00
Total Drilled (m)	
Hrs Run Today	6.50
Cumulative Hrs Run	45.50
Entry Date	

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	222 mm BIT	222	60	0.25
1	Mud motor	169	60	8.46
1	NM Pony Monel	171	70	2.67
1	6.75" Flex Monel	171	70	9.35
1	6.75" Gap Sub	162	88	0.54
2	6.75" NM Flex Monel	171	70	17.48
1	6.75" X/O	168	59	0.80
3	4" HW	132	70	27.54
1	Jars	161	70	5.13
37	4" HW	132	70	344.73
75	Drill Pipe	Pseudo		1427.68
0	Drill Pipe	Weighted		0.00
	Kelly Down			-5.00
	Total			1839.93
	Weight of BHA			
	Weight of String			68.00

MUD RECORD

Mud Type: | Water: ☐ | Oil: ☑ | Other:

Time	01:15	03:15
Density	1010	1010
Funnel Viscosity	54	56
Fluid Loss		
pH		
Location Of Sample	shaker	shaker
Depth	1825.00	1825.00
PVT	40.9	40.3

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	PARALLEL	127	104	15400	7.00
2	PARALLEL	127	104	15400	7.00

Remarks:

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type
00:30	1797.50	60.41	310.28	DIRECTIONAL
03:00	1807.00	63.10	308.96	DIRECTIONAL
07:30	1816.50	66.10	308.78	DIRECTIONAL

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density

MUD MATERIALS ADDED

Product	Amount	Type
Versamul	1	bbl
Truvis	5	sx
Calcium Chloride	8	sx

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	450

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequence & Remarks
0.00	2:45	2.75	2	Drill 222mm intermediate hole, with Smith FHi18B insert bit and, Pathfinder mud motor set at 2.12deg, 7:8 lobe, 5 stage, 70rpm/m3 from 1816mKB to 1825mKB.
2:45	3:00	0.25	7	Rig service function test rig smart anti collision system function test crown saver function test, H.C.R 3 open/close, grease all moving and non moving parts, check fluid levels in floor motor, pump engines, HPU
3:00	3:30	0.50	11	Relog gamma from 1815 m to 1826 m
3:30	7:15	3.75	2	Drill 222mm intermediate hole, with Smith FHi18B insert bit and, Pathfinder mud motor set at 2.12deg, 7:8 lobe, 5 stage, 70rpm/m3 from 1825mKB to 1839mKB.
7:15	7:45	0.50	10	Accumulated time for surveys
7:45	8:00	0.25	21	Crew change and safety meeting, with rig crews, rig manager and Conoco reps.

Remarks: blow down boilers 200 l

OUTER STRUCTURE

Dogs	
TG	ODC
MDC	Pump Liners
LOC	Rod Pumping
BRG	

DRILLED INTERVAL

From	To	D-R-C	RPM	WOB
1816.00	1839.00	DRILL	1	14

HOLE CONDITION

Hole Drag	Up	3	Down 3
Torque At Bottom			
Fill On Bottom			

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
2	2850	@	81	@	1825.00
		@		@	
		@		@	

SAFETY

Safety Topic	MEHL	MACP
steam use		4440

TOUR 2

Tour Supervisor: MARCUS HALLOWES | Start Time: 8:00 | End Time: 16:00

BITS

Bit Number	3rr
Size	222
IADC Code	
Manufacturer	Smith
Type	fhi18b
Serial No	FHI18B0BVPS
Jets	13.5 13.5 13.5
Depth Out (m)	
Depth In (m)	1702.00
Total Drilled (m)	161.00
Hrs Run Today	7.00
Cumulative Hrs Run	52.50
Entry Date	

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	222 mm BIT	222	60	0.25
1	Mud motor	169	60	8.46
1	NM Pony Monel	171	70	2.67
1	6.75" Flex Monel	171	70	9.35
1	6.75" Gap Sub	162	88	0.54
2	6.75" NM Flex Monel	171	70	17.48
1	6.75" X/O	168	59	0.80
3	4" HW	132	70	27.54
1	Jars	161	70	5.13
37	4" HW	132	70	344.73
76	Drill Pipe	Pseudo		1446.71
0	Drill Pipe	Weighted		0.00
	Kelly Down			0.00
	Total			1863.96
	Weight of BHA			
	Weight of String			69.00

MUD RECORD

Mud Type: | Water: | Oil: ☑ | Other:

Time	08:00	10:45
Density	1020	1015
Funnel Viscosity	53	56
Fluid Loss		
pH		
Location Of Sample	shaker	shaker
Depth	1839.00	1845.00
PVT	39	48

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	PARALLEL	127	104	16000	8.00
2	PARALLEL	127	104	16000	8.00

Remarks:

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type
10:15	1825.00	69.51	308.34	DIRECTIONAL
13:15	1835.00	73.49	307.55	DIRECTIONAL

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density

MUD MATERIALS ADDED

Product	Amount	Type
Truvis	5	sks
Versatrol	5	sks

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	450

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequence & Remarks
8:00	9:30	1.50	2	Drill 222mm intermediate hole, with Smith FHi18B insert bit and, Pathfinder mud motor set at 2.12deg, 7:8 lobe, 5 stage, 70rpm/m3 from 1839mKB to 1844mKB.
9:30	9:45	0.25	7	Rig service function test rig smart anti collision system function test crown saver function test annular 18 sec close/open, Grease all moving and non moving parts, check fluid level in floor motor and pump engines
9:45	10:00	0.25	21A	B.O.P drill well secure in 90 sec crew in positions. Function test flair stack ignitor function test motor kills.
10:00	15:30	5.50	2	Drill 222mm intermediate hole, with Smith FHi18B insert bit and, Pathfinder mud motor set at 2.12deg, 7:8 lobe, 5 stage, 70rpm/m3 from 1844mKB to 1863mKB.
15:30	16:00	0.50	10	Accumulated directional surveys

Remarks:
Level one overhead inspection MH
Blew down boilers 2 times @ 100L

OUTER STRUCTURE

Dogs	
TG	ODC
MDC	Pump Liners
LOC	Rod Pumping 3.07
BRG	

DRILLED INTERVAL

From	To	D-R-C	RPM	WOB
1839.00	1863.00	DRILL	20	14

HOLE CONDITION

Hole Drag	Up	3	Down 3
Torque At Bottom		7700	
Fill On Bottom			

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
1	3227	@	84	@	1843.00
		@		@	
		@		@	

SAFETY

Safety Topic	MEHL	MACP
BOP Drill	73	4440

TOUR 3

Tour Supervisor: DEVAN SCHLITTER | Start Time: 16:00 | End Time: 24:00

BITS

Bit Number	3rr
Size	222
IADC Code	
Manufacturer	Smith
Type	fhi18b
Serial No	FHI18B0BVPS
Jets	13.5 13.5 13.5
Depth Out (m)	
Depth In (m)	1702.00
Total Drilled (m)	161.00
Hrs Run Today	7.00
Cumulative Hrs Run	59.50
Entry Date	

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	222 mm BIT	222	60	0.25
1	Mud motor	169	60	8.46
1	NM Pony Monel	171	70	2.67
1	6.75" Flex Monel	171	70	9.35
1	6.75" Gap Sub	162	88	0.54
2	6.75" NM Flex Monel	171	70	17.48
1	6.75" X/O	168	59	0.80
3	4" HW	132	70	27.54
1	Jars	161	59	5.13
37	4" HW	132	70	344.73
78	Drill Pipe	Pseudo		1484.74
0	Drill Pipe	Weighted		0.00
	Kelly Down			-1.99
	Total			1900.00
	Weight of BHA			
	Weight of String			69.00

MUD RECORD

Mud Type: | Water: ☐ | Oil: ☑ | Other:

Time	16:00	18:00
Density	1015	1020
Funnel Viscosity	59	65
Fluid Loss		
pH		
Location Of Sample	shaker	shaker
Depth	1862.00	1870.00
PVT	48	47

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	PARALLEL	127	104	16000	
2	PARALLEL	127	104	16000	

Remarks:

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type
16:45	1845.00	76.71	307.55	DIRECTIONAL
18:30	1854.50	79.10	305.56	DIRECTIONAL
20:15	1864.00	80.20	304.07	DIRECTIONAL
22:15	1873.50	82.02	303.67	DIRECTIONAL

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density

MUD MATERIALS ADDED

Product	Amount	Type
Calcium Chloride	10	bags
Truvis	10	bags
Versamul	1	bbl

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	450

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequence & Remarks
16:00	16:15	0.25	7	Rig service function test rig smart anti collision system function test crown saver function test pipe rams 5 sec close/open Grease all moving and non moving parts,check fluid level in floor motor and pump engines
16:15	20:00	3.75	2	Drill 222mm intermediate hole, with Smith FHi18B insert bit and, Pathfinder mud motor set at 2.12deg, 7:8 lobe, 5 stage, 70rpm/m3 from 1863mKB to 1882mKB.
20:00	20:15	0.25	21A	B.O.P drill well secure in 90 sec crew in positions. Function test flair stack ignitor function test motor kills.
20:15	23:30	3.25	2	Drill 222mm intermediate hole, with Smith FHi18B insert bit and, Pathfinder mud motor set at 2.12deg, 7:8 lobe, 5 stage, 70rpm/m3 from 1882mKB to1900 mKB.
23:30	24:00	0.50	10	Accumulated directional surveys

Remarks:
Level 1 inspection on tongs and overhead equipment D.S
Blew down boilers 2 times each 0.50 litres

OUTER STRUCTURE

Dogs	
TG	ODC
MDC	Pump Liners
LOC	Rod Pumping 2.71
BRG	

DRILLED INTERVAL

From	To	D-R-C	RPM	WOB
1883.00	1900.00	DRILL	20	20

HOLE CONDITION

Hole Drag	Up 3000		Down 3000
Torque At Bottom		8900	
Fill On Bottom			

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
1	4900	@	104	@	1883.00
		@		@	
		@		@	

SAFETY

Safety Topic	MEHL	MACP
		4440

FRONT PAGE SUMMARY

Tour Sheet Serial Number: BEAV2_20140113_18 | Vendor Software Version: RMS 2013.6.14.27104 | Year: 2014 | Month: 01 | Day: 13

Licence No: WID-2082	Well Name: COPRC Dodo Canyon E-76 65-10 126-45	Surface Location: E-76-65-10-126-45	Prov: NT	Lic Type: CLSS	Licensee Well Id
Operator: Conoco Canada	Contractor: Beaver Drilling Ltd.	Rig No: 2	Well Type: HORIZ	Re-Entry: ☐	
Operator's AFE: 10351817	Contractor's Job No: 151	Spud Date Time: 28-Dec-2013	06:30		
Signature Of Operator's Representative: RICHARD TURGEON	Signature Of Contractor's Rig Manager: RICK YAVIS	Rig Release Date Time			

DAILY CHECKS — OP / RV

(1) Daily Visit Around Inspection — RT / RV
(2) Detailed Inspection - Weekly (Safety Check List) — RT / RV
(3) H2S Signs Posted If Required — RT / RV
(4) Well License & Well Diagram Posted — RT / RV
(5) Flare Lines Staked — RT / RV
(6) BOP Drills Performed — RT / RV
(7) Visually Inspected BO Pre-Flare Lines & Diagonal Lines — RT / RV
(1) Rig Site Health & Safety Meeting (once per week) — RV
(2) CAODC Rig Safety Inspection Checklist (once/month) — RV
(3) Most Inspection before Raising or Lowering — RV
(4) Crown & Ivor Checked — RV
(5) Motor Was Checked — RV

CAODC NOV

HOURS

Code	1 Rig Up	2 Drill Ahead	3 Reaming	4 Coring	5 Cond Mud & Circ	6 Trips	7 Rig Service	8 Repair Rig	9 Cut Off Drlg Line	10 Dev Survey	11 Wireline Logs	12 Run Csg & Cement	13 Wait On Cement	14 Nipple BOP	15 Test BOP	16 Drillstem Test	17 Plug Back	18 Squeeze Cement	19 Fishing	20 Dir Work	21 Safety Meeting	22 Tear Down	23 Waiting On	24 Rig Maint	25 Other	TOTAL
Tour 1		6.50					0.25			0.50	0.50										0.25					8.00
Tour 2		7.00					0.25			0.50											0.25					8.00
Tour 3		7.00					0.25			0.50											0.25					8.00
TOTAL		20.50					0.75			1.50	0.50										0.75					24.00

FUEL @ 08:00 HRS: Rig 250 | Boiler 225 | Time 04:00 | Temp -39 | Humidity | Visibility CLEAR | Wind Direction N | Wind Strength UP TO 15 KM/H | Road Condition GOOD

WEATHER

Kelly Bushing | Dp Flot

TOUR 1

Tour No: 1 | Driller: BRIAN BERGSETH | Start Time: 0:00 | End Time: 8:00

BITS

Bit Number	3rr
Size	222
IADC Code	
Manufacturer	Smith
Type	fhi18b
Serial No	FHI18B0BVPS
Jets	13.5 13.5 19.5
Depth Out (m)	
Depth In (m)	1702.00
Total Drilled (m)	
Hrs Run Today	6.50
Cumulative Hrs Run	45.50
Entry Date	

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	222 mm BIT	222	60	0.25
1	Mud motor	169	70	8.46
1	NM Pony Monel	171	70	2.97
1	6.75" Flex Monel	171	70	9.35
1	6.75" Gap Sub	162	88	0.54
2	6.75" NM Flex Monel	171	70	17.46
1	6.75" X/O	168	59	0.80
3	4" HW	132	70	27.94
1	Jars	161	70	5.13
37	4" HW	132	70	344.73

75 Drill Pipe Length 1427.68
0 Drill Pipe Length 0.00

Kelly Down -5.00
Total 1839.93
Weight of BHA
Weight at Bottom 68.00

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other

Time	04:45
Density	1010
Funnel Viscosity	55
Fluid Loss	
pH	
Location Of Sample	shaker
Depth	1844.00
PVT	40

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	PARALLEL	127	104	15400	7.00
2	PARALLEL	127	104	15400	7.00

Remarks

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
2	2850	@	81	@	1835.00
		@		@	
		@		@	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density

MUD WATER ADDED

Product	Amount	Type

BOILER

BoilerNo	HoursRun	pH	StackTemp

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequence & Remarks

Remarks
blow down boilers 2001

SAFETY

Safety Topic	MEHL	MACP
steam use		4440

CUTTING STRUCTURE

TO	IADC
Inner Rows	
Outer Rows	
Dull Char	
Bearing / Seals	
Gauge	
Other Char	
Bit Run Jets	

WEAR / BIT NOTES

From	To	D-R-C	RPM	WOB

HOLE CONDITION

Hole Drag	Up	3	Down 3
Tongue At Bottom			
Fill On Bottom			

TOUR 2

Tour No: 2 | Driller: MARCUS HALLOWES | Start Time: 8:00 | End Time: 16:00

BITS

Bit Number	3rr
Size	222
IADC Code	
Manufacturer	Smith
Type	fhi18b
Serial No	FHI18B0BVPS
Jets	13.5 13.5 19.5
Depth Out (m)	
Depth In (m)	1702.00
Total Drilled (m)	161.00
Hrs Run Today	7.00
Cumulative Hrs Run	52.50
Entry Date	

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	222 mm BIT	222	60	0.25
1	Mud motor	169	60	8.46
1	NM Pony Monel	171	70	2.97
1	6.75" Flex Monel	171	70	9.35
1	6.75" Gap Sub	162	88	0.54
2	6.75" NM Flex Monel	171	70	17.46
1	6.75" X/O	168	59	0.80
3	4" HW	132	70	27.94
1	Jars	161	70	5.13
37	4" HW	132	70	344.73

76 Drill Pipe Length 1446.71
0 Drill Pipe Length 0.00

Kelly Down 0.00
Total 1863.96
Weight at BHA
Weight at Bottom 69.00

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other

Time	14:15
Density	1020
Funnel Viscosity	53
Fluid Loss	
pH	
Location Of Sample	shaker
Depth	1856.00
PVT	48

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	PARALLEL	127	104	16000	8.00
2	PARALLEL	127	104	16000	8.00

Remarks

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
1	3227	@	84	@	1843.00
		@		@	
		@		@	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density

MUD WATER ADDED

Product	Amount	Type

BOILER

BoilerNo	HoursRun	pH	StackTemp

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequence & Remarks

Remarks
Level one overhead inspection MH
Blew down boilers 2 times @ 100L

SAFETY

Safety Topic	MEHL	MACP
BOP Drill	73	4440

CUTTING STRUCTURE

TO	3.07
Inner Rows	
Outer Rows	
Dull Char	
Bearing / Seals	
Gauge	
Other Char	
Bit Run Jets	

WEAR / BIT NOTES

From	To	D-R-C	RPM	WOB

HOLE CONDITION

Hole Drag	Up	3	Down 3
Tongue At Bottom		7700	
Fill On Bottom			

TOUR 3

Tour No: 3 | Driller: DEVAN SCHLITTER | Start Time: 16:00 | End Time: 24:00

BITS

Bit Number	3rr
Size	222
IADC Code	
Manufacturer	Smith
Type	fhi18b
Serial No	FHI18B0BVPS
Jets	13.5 13.5 13.5
Depth Out (m)	
Depth In (m)	1702.00
Total Drilled (m)	161.00
Hrs Run Today	7.00
Cumulative Hrs Run	59.50
Entry Date	

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	222 mm BIT	222	60	0.25
1	Mud motor	169	60	8.46
1	NM Pony Monel	171	70	2.97
1	6.75" Flex Monel	171	70	9.35
1	6.75" Gap Sub	162	88	0.54
2	6.75" NM Flex Monel	171	70	17.46
1	6.75" X/O	168	59	0.80
3	4" HW	132	70	27.94
1	Jars	161	59	5.13
37	4" HW	132	70	344.73

78 Drill Pipe Length 1484.74
0 Drill Pipe Length 0.00

Kelly Down -1.99
Total 1900.00
Weight at BHA
Weight at Bottom 69.00

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other

Time	20:00	22:00
Density	1020	1025
Funnel Viscosity	70	71
Fluid Loss		
pH		
Location Of Sample	shaker	shaker
Depth	1880.00	1895.00
PVT	47	48

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	PARALLEL	127	104	16000	
2	PARALLEL	127	104	16000	

Remarks

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
1	4900	@	104	@	1883.00
		@		@	
		@		@	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density

MUD WATER ADDED

Product	Amount	Type

BOILER

BoilerNo	HoursRun	pH	StackTemp

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequence & Remarks

Remarks
Level 1 inspection on tongs and overhead equipment D.S
Blew down boilers 2 times each 0.50 litres

SAFETY

Safety Topic	MEHL	MACP
		4440

CUTTING STRUCTURE

TO	2.71
Inner Rows	
Outer Rows	
Dull Char	
Bearing / Seals	
Gauge	
Other Char	
Bit Run Jets	

WEAR / BIT NOTES

From	To	D-R-C	RPM	WOB

HOLE CONDITION

Hole Drag	Up 3000	Down 3000	
Tongue At Bottom		8900	
Fill On Bottom			

FRONT PAGE SUMMARY

Tour Sheet Serial Number: BEAV2_20140114_1C | Vendor Software Version: RMS 2013.6.14.27104 | Year: 2014 | Month: 01 | Day: 14

Licence No: WID-2082	Well Name: COPRC Dodo Canyon E-76 65-10 126-45	Surface Location: E-76-65-10-126-45	Prov: NT	Lic Type: CLSS	Unique Well Id:	
Operator: Conoco Canada		Contractor: Beaver Drilling Ltd.	Rig No: 2	Well Type: HORIZ	Re-Entry: ☐	
Operator's AFE: 10351817		Contractor's Job No: 151	Spud Date Time: 28-Dec-2013	06:30		
Signature Of Operator's Representative: RICHARD TURGEON		Signature Of Contractor's Rig Manager: RICK YAVIS	Rig Release Date Time:			

DAILY CHECKS — OP RM

	RT	TH
(1.) Daily Visual Assure Inspection		
(B.) Detailed Inspection - Weekly (Daily Check Ust)		
(3.) H2S Signs Posted If Required	RT	TH
(4.) Well License & Stick Diagram Posted	RT	TH
(5.) Flare Lines Staked		TH
(6.) BOP Drills Performed	RT	TH
(7.) Visually Inspected BOPs Flare Lines & Degasser Lines	RT	TH
(1.) Rig Site Health & Safety Meeting (once/week)		
(2.) CADDC Rig Safety Inspection Checklist (once/month)		
(3.) Mast Inspection before Raising or Lowering		
(4.) Crown Saver Checked		TH
(5.) Motor Bits Checked		

Kelly Bushing: | Up Feet:

FUEL @ 08:00 HRS

	Rig	Other
	185	190

	Time	Temp
	06:45	-24

Current Conditions: PARTLY CLOUDY

Wind Direction	Wind Strength
NW	UP TO 18 KMH

Road Condition: FAIR

HOURS

Code	1 Rig Up	2 Drill Actual	3 Reaming	4 Coring	5 Cond Mud & Circ	6 Trips	7 Rig Service	8 Repair Rig	9 Cut Off Drlg Line	10 Dev Survey	11 Wireline Logs	12 Run Csg & Cement	13 Wait On Cement	14 Nipple BOP	15 Test BOP	16 Drillstem Test	17 Plug Back	18 Squeeze Cement	19 Fishing	20 Dir Work	21 Safety Meeting	22 Tear Down	23 Waiting On	24 Rig Watch	25 Other	TOTAL
Tour 1		2.25			2.75	2.25	0.25														0.50					8.00
Tour 2						6.00	0.25				0.50										0.50				0.75	8.00
Tour 3							0.25	0.25	0.50		6.25														0.75	8.00
TOTAL		2.25			2.75	8.25	0.75	0.25	0.50		6.75										1.00				1.50	24.00

TOUR 1

DRILLER: MARCUS HALLOWES | START TIME: 0:00 | END TIME: 8:00

BITS

Bit Number	3rr
Size	222
IADC Code	
Manufacturer	Smith
Type	fhi18b
Serial No	FHI18B0BVPS
Jets	13.5 13.5 13.5
Depth Out (m)	1908.00
Depth In (m)	1702.00
Total Drilled (m)	206.00
Hrs Run Today	2.25
Cumulative Hrs Run	61.75
Entry Date	

CUTTING STRUCTURE

TO	1	Grade	0
BDC	3	ODC	WT
MDC	CT	Reason Pulled	TD
LOC	8	Trip Run Jetted	3.34
BRG	I		

DRILLED OFF

From	To	D-R-C	RPM	WOB
1000.00	1908.00	DRILL	20	20

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	222 mm BIT	222	60	0.25
1	Mud motor	169	60	8.46
1	NM Pony Monel	171	70	2.97
1	6.75" Flex Monel	171	70	9.35
1	6.75" Gap Sub	162	88	0.54
2	6.75" NM Flex Monel	171	70	17.48
1	6.75" X/O	168	59	0.80
3	4" HW	132	70	27.84
1	Jars	161	59	5.13
37	4" HW	132	70	344.23

Drill Pipe: Stands 78 — 1484.74 | Drill Pipe: Singles 1 — 9.50

Kelly Down: -3.49 | Total: 1908.00 | Weight of DC | Weight of String

HOLE CONDITION

Hole Drag: Up 3 | Down 4

Torque At Bottom: 7200 | Fill On Bottom

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other

Time	00:00
Density	1025
Funnel Viscosity	75
Fluid Loss	
pH	
Location Of Sample	shaker
Depth	1900.00
PVT	46

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	PARALLEL	127	104	16700	4.00
2	PARALLEL	127	104	16700	4.00

Remarks

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
2	3669	@	88	@	1901.00
		@		@	
		@		@	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type
00:15	1883.00	84.71	302.68	DIRECTIONAL
02:45	1889.50	86.61	302.26	DIRECTIONAL

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density

MUD MATERIALS ADDED

Product	Amount	Type
Barite	60	sks

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	10	445

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
0:00	0:30	0.50	2	Drill 222mm intermediate hole, with Smith FHi18B insert bit and, Pathfinder mud motor set at 2.12deg, 7:8 lobe, 5 stage, 70rpm/m3 from 1900mKB to1901 mKB.
0:30	0:45	0.25	7	Rig service function test rig smart anti collision system function test crown saver function test H.C.R 3sec open/close Grease all moving and non moving parts,check fluid level in floor motor and pump engines
0:45	2:30	1.75	2	Drill 222mm intermediate hole, with Smith FHi18B insert bit and, Pathfinder mud motor set at 2.12deg, 7:8 lobe, 5 stage, 70rpm/m3 from 1901mKB to1908mKB.
2:30	3:15	0.75	5	Circulate bottoms up, prepair to do a wiper trip to 1466mKB
3:15	3:30	0.25	21B	Held safety meeting with crew on tripping out of hole
3:30	5:00	1.50	6B	Trip out of hole from 1908mKB to 1466mKB flow checks @1816m,1466m
5:00	5:45	0.75	6A	Run back in hole
5:45	7:00	1.25	5	Circulate and prepair to trip out of the hole to lay down directional tools
7:00	7:15	0.25	21	Crew change and safety meeting, with rig crews, rig manager and Conoco reps.
7:15	8:00	0.75	5D	Circulate and prepair to trip out of the hole to lay down directional tools

Remarks
Level one overhead inspection mh
Blew down boilers 2 times @ 100L
Trip sheet calc 1.36m3 meas1.6m3 diff+.24
boiler #2 fuel 200cm

SAFETY

Safety Topic	MEHL	MACP
Tripping out of hole	73	4382

TOUR 2

DRILLER: DEVAN SCHLITTER | START TIME: 8:00 | END TIME: 16:00

BITS

Bit Number	
Size	
IADC Code	
Manufacturer	
Type	
Serial No	
Jets	
Depth Out (m)	
Depth In (m)	
Total Drilled (m)	
Hrs Run Today	
Cumulative Hrs Run	
Entry Date	

CUTTING STRUCTURE

TO		Grade	
BDC		ODC	
MDC		Reason Pulled	
LOC		Trip Run Jetted	
BRG			

DRILLED OFF

From	To	D-R-C	RPM	WOB

DRILLING ASSEMBLY

No	Component	OD	ID	Length

Drill Pipe: Stands | Drill Pipe: Singles

Kelly Down | Total | Weight of DC | Weight of String

HOLE CONDITION

Hole Drag: Up | Down

Torque At Bottom | Fill On Bottom

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other

Time	11:00
Density	1050
Funnel Viscosity	75
Fluid Loss	
pH	
Location Of Sample	tanks
Depth	1909.00
PVT	36

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run

Remarks

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
		@		@	
		@		@	
		@		@	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density

MUD MATERIALS ADDED

Product	Amount	Type

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	450

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
8:00	8:15	0.25	7	Rig service function test rig smart anti collision system function test crown saver function test pipe rams 5 sec open/close Grease all moving and non moving parts,check fluid level in floor motor and pump engines
8:15	13:15	5.00	6B	Trip out of hole to lay down directional tools and open hole log Flow check at 1815m/958m/419m/74m
13:15	13:30	0.25	21	Safety meeting Schlumberger directional Reviewed jsa#161 lay down DC
13:30	14:30	1.00	6D	Lay down directional tools F/C OOH close/open blind rams 5 sec
14:30	15:15	0.75	25	Pull wear bushing
15:15	15:30	0.25	21	Safety meeting w/Schlumberger loggers reviewed jsa#153 Rig to and log well
15:30	16:00	0.50	11	Wire line open hole log with Schlumberger

Remarks
Level 1 inspection on tongs and overhead equipment D.S
Blew down boilers 2 times .50 litres each
Trip calc 7.59m3 meas 8.84m3 diff +1.25m3

SAFETY

Safety Topic	MEHL	MACP
		4382

TOUR 3

DRILLER: MARCUS HALLOWES | START TIME: 16:00 | END TIME: 24:00

BITS

Bit Number	
Size	
IADC Code	
Manufacturer	
Type	
Serial No	
Jets	
Depth Out (m)	
Depth In (m)	
Total Drilled (m)	
Hrs Run Today	
Cumulative Hrs Run	
Entry Date	

CUTTING STRUCTURE

TO		Grade	
BDC		ODC	
MDC		Reason Pulled	
LOC		Trip Run Jetted	
BRG			

DRILLED OFF

From	To	D-R-C	RPM	WOB

DRILLING ASSEMBLY

No	Component	OD	ID	Length

Drill Pipe: Stands | Drill Pipe: Singles

Kelly Down | Total | Weight of DC | Weight of String

HOLE CONDITION

Hole Drag: Up | Down

Torque At Bottom | Fill On Bottom

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other

Time	
Density	
Funnel Viscosity	
Fluid Loss	
pH	
Location Of Sample	
Depth	
PVT	

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run

Remarks

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
		@		@	
		@		@	
		@		@	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density

MUD MATERIALS ADDED

Product	Amount	Type

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	445

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
16:00	16:15	0.25	7	Rig service, function test crown saver, brake linkage
16:15	21:00	4.75	11	Open hole wire line logs with Schlumberger
21:00	22:30	1.50	11	Rig out wire line equitment, clean and tidy floor
22:30	23:15	0.75	25	Pick up stand of drill pipe and run in and pull wear bushing
23:15	23:45	0.50	9A	Slip and cut 25m off drilling line, reset crown saver
23:45	24:00	0.25	8B	Change out mud saver valve on top drive

Remarks
Level one overhead inspection mh
Blew down boilers 2 times @ 100L

SAFETY

Safety Topic	MEHL	MACP
		4382

FRONT PAGE SUMMARY

Well No	Well Name	Your Report Serial Number	Vendor Software Version	Year	Month	Day	DAILY CHECKS
WID-2082	COPRC Dado Canyon E-76 65-10 126-45	BEAV2_20140115_1D	RMS 2013.8.14.27104	2014	01	15	

Surface Location		From	Lsd Type	Unique Well Id	
E-76-65-10-126-45		NT	CLSS		
Operator	Contractor	Rig No	Well Type		Re-Entry
Conoco Canada	Beaver Drilling Ltd.	2	HOR82		☐
Operator's AFE	Contractor's Job No	Spud Date Time			
10351817	151	28-Dec-2013	06:30		
Signature Of Operator's Representative	Signature Of Contractor's Rig Manager	Rig Release Date Time			
RICHARD TURGEON	TONY HEIMSTRA				

DAILY CHECKS

	RT	TH
(1.) Daily Walk Around Inspection		
(2.) Derrick Inspection - Weekly (Daily Check List)		
(3.) H2S Signs Posted If Required		
(4.) Well Licences & Block Diagram Posted	RT	TH
(5.) Flare Lines Staked	RT	TH
(6.) BOP Tests Performed		
(7.) Visually Inspected BOPs Flare Lines & Degasser Lines	RT	TH
(1.) Rig Site Health & Safety Meeting (whole community)		TH
(2.) CAODC Rig Safety Inspection Checklist (once/fortnight)		
(3.) Meet Inspection before Raising or Lowering		
(4.) Crown Saver Checked		TH
(5.) Motor Kills Checked		

HOURS

Code	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	TOTAL
	Rig Up	Drill Actual	Reaming	Casing	Cond Mud & Circ	Trips	Rig Service	Repair Rig	Cut Off Drlg Line	Dev Survey	Wireline Logs	Run Csg & Cement	Wait On Cement	Nipple BOP	Test BOP	Diverter Test	Plug Back	Squeeze Cement	Fishing	Dir Work	Safety Meeting	Tour Down	Waiting On	Rig Watch	Other	
Tour 1								1.25				6.25									0.50					8.00
Tour 2					0.75		0.25					7.00														8.00
Tour 3					1.75		0.25					5.00									0.25				0.75	8.00
TOTAL					2.50		0.50	1.25				18.25									0.75				0.75	24.00

FUEL @ 05:00 HRS

Diesel	205
Gasoline	190
Date	06:45
Time	-20
Current Conditions	LIGHT SNOW
Wind Direction	NW
Wind Strength	UP TO 19 KM/H
Road Conditions	GOOD

WEATHER

TOUR 1

TOUR # 1 | TOUR PUSHER: MARCUS HALLOWES | STARTING: 0:00 | ENDING: 8:00

BITS

Bit Number	
Size	
IADC Code	
Manufacturer	
Type	
Serial No	
Jets	
Depth Out (m)	
Depth In (m)	
Total Drilled (m)	
Hrs Run Today	
Cumulative Hrs Run	
Entry Date	

CUTTING STRUCTURE: TR | BDC | MDC | LOC | SHA | GAUGE | Reason Pulled | Last Run Grade

BIT #1 DRILLED

From	To	D-R-C	RPM	WOB

DRILLING ASSEMBLY

No	Component	OD	ID	Length

Drill Pipe: Stands | Drill Pipe: Singles

Kelly Down | Total | Weight of BHA | Weight of String

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other

Time	04:00
Density	1040
Funnel Viscosity	75
Fluid Loss	
pH	
Location Of Sample	tank
Depth	600.00
PVT	97

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run

Remarks

MUD CONDITION

Hole Drag: Up | Down | Torque At Bottom | Fill On Bottom

REDUCED PUMP SPEED

Pump #	Pressure	Strokes/min	Depth
	@	@	
	@	@	
	@	@	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density

MUD MATERIALS ADDED

Product	Amount	Type

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	450

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequence & Remarks
0.00	1:15	1.25	8B	Change out mud saver valve
1:15	2:30	1.25	12A	Rig up Hallmark long hand and laydown truck
2:30	2:45	0.25	21	Safety meeting on running tong with Hallmark tong service and lay down truck hands
2:45	7:45	5.00	12	Run 177.8mm intermediate casing, fill every 20 joints and break circulation at 700m
7:45	8:00	0.25	21	Crew change and safety meeting, Rig manager and Conoco Reps where present

Remarks
Level one overhead inspection mh
Blow down boilers 2 times @ 100L

SAFETY

Safety Topic	MEHL	MACP
Install shoe/float and run casing		4382

TOUR 2

TOUR # 2 | TOUR PUSHER: DEVAN SCHLITTER | STARTING: 8:00 | ENDING: 16:00

BITS

Bit Number	
Size	
IADC Code	
Manufacturer	
Type	
Serial No	
Jets	
Depth Out (m)	
Depth In (m)	
Total Drilled (m)	
Hrs Run Today	
Cumulative Hrs Run	
Entry Date	

CUTTING STRUCTURE: TR | BDC | MDC | LOC | SHA | GAUGE | Reason Pulled | Last Run Grade

BIT #1 DRILLED

From	To	D-R-C	RPM	WOB

DRILLING ASSEMBLY

No	Component	OD	ID	Length

Drill Pipe: Stands | Drill Pipe: Singles

Kelly Down | Total | Weight of BHA | Weight of String

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other

Time	
Density	
Funnel Viscosity	
Fluid Loss	
pH	
Location Of Sample	
Depth	
PVT	

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	SWOL	127	135	2000	1.00

Remarks

MUD CONDITION

Hole Drag: Up | Down | Torque At Bottom | Fill On Bottom

REDUCED PUMP SPEED

Pump #	Pressure	Strokes/min	Depth
	@	@	
	@	@	
	@	@	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density

MUD MATERIALS ADDED

Product	Amount	Type

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	450

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequence & Remarks
8:00	8:15	0.25	7	Rig service, check brake linkage
8:15	14:45	6.50	12B	Run intermediate cassing, make up 1-177.8mm float shoe, 1-joint of 177.8mm, 38.69kg/m, P-110, LTC intermediate casing, 1-177.8mm float collar then 149 joints of 177.8mm, 38.69kg/m, P-110, LTC intermediate casing from 1908m to 5.20m. Run 32xVolantHydroform centralizers from 1511m to 1908m, run Weatherford Micro Seal Packers from 1415m to 1535m, run 36 Topco bow spring centralizers to surface, fill every 20 joints and break circulation every 700m, tag bottom at 1908mMD.
14:45	15:30	0.75	5	Run 36 Topco bow spring centralizers to surface, fill every 20 joints and break circulation every 700m, tag bottom at 1908mMD. circulate bottoms up, lay down tag joint
15:30	16:00	0.50	12B	Make up mandrel hanger and landing joint and land hanger, land mandel hanger and circulate. Total length of 177.8mm intermediate casing: 1907.17m. Landed at 1907m, tagged bottom at 1908m, float collar at 1895.07m.

Remarks
Level 1 inspection on overhead equipment D.S
Blew down boilers 2 times .50 litres each

SAFETY

Safety Topic	MEHL	MACP
run casing		4382

TOUR 3

TOUR # 3 | TOUR PUSHER: MARCUS HALLOWES | STARTING: 16:00 | ENDING: 24:00

BITS

Bit Number	
Size	
IADC Code	
Manufacturer	
Type	
Serial No	
Jets	
Depth Out (m)	
Depth In (m)	
Total Drilled (m)	
Hrs Run Today	
Cumulative Hrs Run	
Entry Date	

CUTTING STRUCTURE: TR | BDC | MDC | LOC | SHA | GAUGE | Reason Pulled | Last Run Grade

BIT #1 DRILLED

From	To	D-R-C	RPM	WOB

DRILLING ASSEMBLY

No	Component	OD	ID	Length

Drill Pipe: Stands | Drill Pipe: Singles

Kelly Down | Total | Weight of BHA | Weight of String

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other

Time	
Density	
Funnel Viscosity	
Fluid Loss	
pH	
Location Of Sample	
Depth	
PVT	

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run

Remarks

MUD CONDITION

Hole Drag: Up | Down | Torque At Bottom | Fill On Bottom

REDUCED PUMP SPEED

Pump #	Pressure	Strokes/min	Depth
	@	@	
	@	@	
	@	@	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density

MUD MATERIALS ADDED

Product	Amount	Type

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	450

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequence & Remarks
16:00	16:15	0.25	7	Rig service
16:15	17:00	0.75	12B	Make up mandrel hanger and landing joint and land hanger
17:00	18:45	1.75	5	Circulate casing on bottom
18:45	19:00	0.25	21	Hold safety meeting with Schlumberger cementers prior to cementing 177.8mm intermediate casing, rig up Schlumberger cementers
19:00	22:15	3.25	12	Pump 8m3 of 1000kg/m3 CW8 pre-flush, stop pressure test lines to 21,000kpa (held ok), bled off and pumped 8m3 of 1200kg/m3 MUDPUSH II pre-flush spacer.
22:15	22:30	0.25	12C	Pump 20 tonne/24.8m3 (30% excess) of HiLite 1400 lead cement with 0.2% Anti foam + 0.6% Low Temp Dispersant + 60L/tonne Gas Control Agent + 0.3% Antisettling, from 1369m to 5.20m, pump 13 tonne/9.8m3 (30% excess) of 1900kg/m3 Conventional Class G Tail Cement with 0.6% Fluid Loss + 0.5% Dispersant + 0.2% Anti foam
22:30	23:15	0.75	12	+ 0.2% Retarder + 72L/tonne Gas Control Agent, from 1908m to 1369m. Drop plug and displace 37.8m3 of Invert. Bump plug 3,500kpa over final circulating pressure of 6,500kpa at 22:15hrs on January 15 2014. Bleed off pressure and check out floats (holding ok). Pressure test casing to 18,500kpa for 10 minutes (hold ok).Pressure test casing to 18,500kpa for 10 minutes (hold ok).
23:15	24:00	0.75	25	Bleed off pressureand ng out cementers. Full pre-flush: 8m3 of CW8 and 6m3 of MudPush Spacer, cement at surface by calculated volume results.

Remarks
Level one overhead inspection mh
Blew down boilers 2 times @ 100L

SAFETY

Safety Topic	MEHL	MACP
Cementing casing		

FRONT PAGE SUMMARY

Tour Sheet Serial Number: BEAV2_20140116_1A | Vendor Software Version: RMS 2013.8.14.27104 | Year: 2014 | Month: 01 | Day: 16

Licence No: WID-2082 | Well Name: COPRC Dodo Canyon E-76 65-10 126-45 | Surface Location: E-76-65-10-126-45 | Prov: NT | Unique Well Id: CLSS

Operator: Conoco Canada | Contractor: Beaver Drilling Ltd. | Rig No: 2 | Well Type: HORIZ | Re-Entry: ☐

Operator's AFE: 10351617 | Contractor's Job No: 151 | Spud Date Time: 28-Dec-2013 05:30

Signature Of Operator's Representative: RICHARD TURGEON | Signature Of Contractor's Rig Manager: TONY HIEMSTRA | Rig Released Date Time:

DAILY CHECKS — CP RPM

	RT	TH
(1.) Daily Visual Area and Inspection		
(2.) Detailed Inspection - Weekly (Using Check List)		
(3.) H2S Signs Posted/If Required	RT	TH
(4.) Well Licence & Site Diagram Posted	RT	TH
(5.) Flow Lines Staked	RT	TH
(6.) BOP Drills Performed	RT	TH
(7.) Visually Inspected BOPs Flow Lines & Degasser Lines	RT	TH
(1.) Rig Site Health & Safety Meeting (once weekly)		TH
(2.) CAODC Rig Safety Inspection Checklist (once fortnightly)		TH
(3.) Meet Inspector before Raising or Lowering		TH
(4.) Crown Saver Checked		TH
(5.) Motor Kills Checked		TH

CAODC NOV

Code	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	TOTAL
	Rig Up	Drill Actual	Reaming	Coring	Cond Mud & Circ	Trips	Rig Service	Repair Rig	Cut/Off Drlg Line	Dev Survey	Wireline Logs	Run Csg & Cement	Wait On Cement	Hydr BOP	Test BOP	Deflation Test	Plug Back	Squeeze Cement	Fishing	Dir Work	Safety Meeting	Tour Down	Meeting On	Rig Maint	Other	
Tour 1							0.25																		7.75	8.00
Tour 2						0.50	0.50							3.00							0.25				3.75	8.00
Tour 3		0.50				6.00									1.50											8.00
TOTAL		0.50				6.50	0.75							3.00	1.50						0.25				11.50	24.00

FUEL @ 08:00 HRS: Rig 200 | Camp 190 | Date 06.15 | Temp -20 | Current Conditions: LIGHT SNOW | Wind Direction: NW | Wind Strength: UP TO 19 KM/H | Road Condition: GOOD

TOUR 1

TOUR 1 SIGNATURE / DRILLER: MARCUS HALLOWES | START TIME: 0:00 | END TIME: 8:00

BITS

Bit Number	4
Size	156
IADC Code	
Manufacturer	smith
Type	613
Serial No	jh8402
Jets	12.7 12.7 12.7 12.7 / 12.7 12.7
Depth Out (m)	
Depth In (m)	1909.00
Total Drilled (m)	
Hrs Run Today	0.00
Cumulative Hrs Run	0.00
Entry Date	

CUTTING STRUCTURE: In | Out | BHA | To | Dull | Loc | Bearings | Gauge | ODC | Reason Pulled | Tool Pressure | Bits

BITS DRILLED

From	To	D-R-C	RPM	WOB

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	156MM BIT	156	0	0.19
1	MUD MOTOR	123	34	8.93
1	NM Pony Monel	119	57	3.10
1	Slick monel	119	67	8.47
1	4.75 gap sub	119	63	0.58
1	4.75 LWD SAWR	128	70	6.15
1	4.75 LWD ABS	129	70	4.79
1	x/o	120	56	0.45
1	Slick monel	119	67	9.50
1	X/O SUB	128	58	0.82
3	4" HW	132	70	27.94
1	Jars	131	59	5.07
126	4 " D.P	101	70	3832.70
15	Drill Pipe - Stands			284.98
0	Drill Pipe - Singles			0.00
	Kelly Down			0.00
	Total			1906.06
	Weight of DC			
	Weight of String			

HOLE CONDITION: Hole Drag: Up / Down | Torque At Bottom | Fill On Bottom

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other:

Time	
Density	
Funnel Viscosity	
Fluid Loss	
pH	
Location Of Sample	
Depth	
PVT	

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run

Remarks

REDUCED PUMP SPEED

Pump #	Pressure	@	Strokes/min	@	Depth
		@		@	
		@		@	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density

MUD MATERIALS ADDED

Product	Amount	Type

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	450

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
0:00	1:45	1.75	25	Attempt to land pack off seal assembly
1:45	2:00	0.25	7	Rig service function test rig smart anti collision function test crown saver
2:00	5:00	3.00	25	Attempt to land pack off seal assembly
5:00	8:00	3.00	25	Attempt to land pack off seal assembly, talked to Conoco office (Calgary) about lifting BOP stack, recieved waiver to lift BOP stack

Remarks
Level one overhead inspection mh
Blew down boilers 2 times @ 100L

SAFETY

Safety Topic	MEHL	MACP

TOUR 2

TOUR 2 SIGNATURE / DRILLER: DEVAN SCHLITTER | START TIME: 8:00 | END TIME: 16:00

BITS

Bit Number	4
Size	156
IADC Code	
Manufacturer	smith
Type	613
Serial No	jh8402
Jets	12.7 12.7 12.7 12.7 / 12.7 12.7
Depth Out (m)	
Depth In (m)	1909.00
Total Drilled (m)	
Hrs Run Today	0.00
Cumulative Hrs Run	0.00
Entry Date	

CUTTING STRUCTURE: In | Out | BHA | To | Dull | Loc | Bearings | Gauge | ODC | Reason Pulled | Tool Pressure | Bits

BITS DRILLED

From	To	D-R-C	RPM	WOB

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	156MM BIT	156	0	0.19
1	MUD MOTOR	123	34	8.93
1	NM Pony Monel	119	57	3.10
1	Slick monel	119	67	8.47
1	4.75 gap sub	119	63	0.58
1	4.75 LWD SAWR	128	70	6.15
1	4.75 LWD ABS	129	70	4.79
1	x/o	120	56	0.45
1	Slick monel	119	67	9.50
1	X/O SUB	128	58	0.82
3	4" HW	132	70	27.94
1	Jars	131	59	5.07
1	4" H.W	101	65	9.53
15	Drill Pipe - Stands			284.98
0	Drill Pipe - Singles			0.00
	Kelly Down			0.00
	Total			1906.06
	Weight of DC			
	Weight of String			

HOLE CONDITION: Hole Drag: Up / Down | Torque At Bottom | Fill On Bottom

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other:

Time	
Density	
Funnel Viscosity	
Fluid Loss	
pH	
Location Of Sample	
Depth	
PVT	

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run

Remarks

REDUCED PUMP SPEED

Pump #	Pressure	@	Strokes/min	@	Depth
		@		@	
		@		@	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density

MUD MATERIALS ADDED

Product	Amount	Type

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	450

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
8:00	8:15	0.25	7	Rig service, checked brake linkage and BOP sling
8:15	8:30	0.25	21	Safety meeting on nipple down bop reviewed jsa#115 nipple down bop
8:30	9:15	0.75	14B	Take catch can off split stack at flange, between upper and lower casing bowl
9:15	13:00	3.75	25	Cleaned prepared top of mandral hanger, unbl able to get a seal, with the pack off seal assembly
13:00	15:15	2.25	14A	Set BOP stack back down and nippled up
15:15	15:30	0.25	7A	Clean and prepare floor to pick up and make up BHA
15:30	16:00	0.50	6C	Make up BHA with a Smith 156mm MSi613 PDC bit, Pathfinder 7/8 lobe, 3.8 stage, set at 1.36 deg. (RPM of 0.135/L), 1.66m from bit to bend, mud motor

Remarks
Level 1 inspection on overhead equipment D.S
Blew down boilers 2 times .50 litres each

SAFETY

Safety Topic	MEHL	MACP

TOUR 3

TOUR 3 SIGNATURE / DRILLER: MARCUS HALLOWES | START TIME: 16:00 | END TIME: 24:00

BITS

Bit Number	4
Size	156
IADC Code	
Manufacturer	smith
Type	613
Serial No	jh8402
Jets	12.7 12.7 12.7 12.7 / 12.7 12.7
Depth Out (m)	
Depth In (m)	1909.00
Total Drilled (m)	
Hrs Run Today	0.00
Cumulative Hrs Run	0.00
Entry Date	

CUTTING STRUCTURE: In | Out | BHA | To | Dull | Loc | Bearings | Gauge | ODC | Reason Pulled | Tool Pressure | Bits

BITS DRILLED

From	To	D-R-C	RPM	WOB

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	156MM BIT	156	0	0.19
1	MUD MOTOR	123	34	8.93
1	NM Pony Monel	119	57	3.10
1	Slick monel	119	67	8.47
1	4.75 gap sub	119	63	0.58
1	4.75 LWD SAWR	128	70	6.15
1	4.75 LWD ABS	129	70	4.79
1	x/o	120	56	0.45
1	Slick monel	119	67	9.50
1	X/O SUB	128	58	0.82
3	4" HW	132	70	27.94
1	Jars	131	59	5.07
1	4" H.W	101	65	9.53
15	Drill Pipe - Stands			284.98
0	Drill Pipe - Singles			0.00
	Kelly Down			0.00
	Total			1906.06
	Weight of DC			
	Weight of String			

HOLE CONDITION: Hole Drag: Up / Down | Torque At Bottom | Fill On Bottom

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other:

Time	23:15
Density	1080
Funnel Viscosity	75
Fluid Loss	
pH	
Location Of Sample	shacker
Depth	1906.00
PVT	57

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run

Remarks

REDUCED PUMP SPEED

Pump #	Pressure	@	Strokes/min	@	Depth
		@		@	
		@		@	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density

MUD MATERIALS ADDED

Product	Amount	Type

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	450

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
16.00	21:00	5.00	6A	Make up BHA run in hole, with a Smith 156mm MSi613 PDC bit, Pathfinder 7/8 lobe, 3.8 stage, set at 1.36 deg. rotate at 0.135/L, 1.66m from bit to bend, mud motor, MWD and LWD tools 2 JOINTS HWDP, Jars, 1 joint of HWDP, to 1285mKB
21:00	22:30	1.50	15A	Pressur test, with Schlumberger, flange between upper and lower casing bowl, close pipe rams on B.O.P stack, low of 1,400kpa, for 10 minutes and a high of 20,000kpa, for 10 minutes. Held good.
22.30	23.30	1.00	6A	Trip in the hole with a Smith 156mm MSi613 PDC bit, Pathfinder 7/8 lobe, 3.8 stage, set at 1.36 deg. rotate at 0.135/L, 1.66m from bit to bend, mud motor, MWD and LWD tools 2 joints HWDP, Jars, 1 joint of HWDP, 125 joints of 4" drill pipe, 37 joints of HWDP, from 1285mKB to 1893m
23.30	24:00	0.50	2C	Tag cement @ 1893mKB drill out Tag float collar @ 1895mKB drill out

Remarks
Level one overhead inspection mh
Blew down boilers 2 times @ 100L

SAFETY

Safety Topic	MEHL	MACP
Running in the hole with top drive		

FRONT PAGE SUMMARY

Your Sheet Serial Number: BEAV2_20140117_1A | Vendor Software Version: RMS 2013.6.14.27104 | Year: 2014 | Month: 01 | Day: 17

Licensee No: WID-2082	Well Name: CO:PRC Dodo Canyon E-76 65-10 126-45	Surface Location: E-76-65-10-126-45	Prov: NT	Loc Type: CLSS	Unique Well Id:		
Operator: Conoco Canada	Contractor: Beaver Drilling Ltd.		Rig No: 2	Well Type: HORIZ	Redrill: ☐		
Operator's AFE: 10351817	Contractor's Job No: 151		Spud Date Time: 28-Dec-2013	06:30			
Operator's Representative: RICHARD TURGEON	Signature Of Contractor's Rig Manager: TONY HIEMSTRA		Rig Release Date Time:				

DAILY CHECKS — OP'N

	RT	TR
(1) Daily Well Around Inspection		
(2) Derrick Inspection - Monthly (Daily Check List)		
(3) H2S Signs Posted if Required		
(4) Well Licence & Spill Diagram Posted	RT	TR
(5) Flare Lines Staked	RT	TR
(6) BOP Daily Performed	RT	TR
(7) Visually Inspected BOP's Flare Lines & Degasser Lines	RT	TR
(1) Rig Site Health & Safety Meeting (once monthly)		TR
(2) CAODC Rig Safety Inspection Checklist (once/quarter)		TR
(3) Well Inspection Notice Posting or Lowering		TR
(4) Crown Saver Checked		TR
(5) Motor Kills Checked		TR

HOURS

	Rig Up	D-S Actvt	Reaming	Coring	Circ/ Mud & Cnd	Trips	Rig Service	Repair Rig	Cut Off Drlg Line	Dev Survey	Wireline Logs	Run Csg & Cement	Wait On Cement	Nipple BOP	Test BOP	Differen Test	Rig Back	Squeeze Cement	Plugging	Off Work	Safety Meeting	Tour Down	Weather Wait	Rig Wash	Other	TOTAL
Tour 1		5.75			0.75		0.25			0.50											0.50				0.25	8.00
Tour 2		6.00					0.25													1.75						8.00
Tour 3		6.25					0.25	0.75												0.75						8.00
TOTAL		18.00			0.75		0.75	0.75		0.50										2.50	0.50				0.25	24.00

FULL 24 HR OPS HRS: 24.00

WELL FILE

Rig	190
Elevation	180
Rig Time	05:45
Datum	-20
Current Conditions	BLOWING SNOW
Last 24 hr wind	NM
Wind Strength	UP TO 19 KM/H
Road Conditions	GOOD

TOUR 1 — DRILLER(S) ON TOUR: MARCUS HALLOWES — START TIME: 0:00 — END TIME: 8:00

BITS

Bit Number	4
Size	156
IADC Code	
Manufacturer	smith
Type	613
Serial No	jh8402
Jets	12.7 12.7 12.7 12.7 12.7 12.7
Depth Out (m)	
Depth In (m)	1909.00
Total Drilled (m)	54.00
Hrs Run Today	5.25
Cumulative Hrs Run	5.25
Entry Date	

CUTTING STRUCTURE: TI 10.29

DRILLING SUMMARY

From	To	D-R-C	RPM	WOB
1909.00	1972.00	DRILL	30	8

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	156MM BIT	156	0	0.19
1	MUD MOTOR	123	34	8.93
1	NM Pony Monel	119	57	3.10
1	Slick monel	119	67	9.47
1	4.75 gap sub	119	63	0.58
1	4.75 LWD SAWR	128	70	6.15
1	4.75 LWD ABS	129	70	4.79
1	X/O	120	56	0.45
1	Slick monel	119	67	9.50
1	X/O SUB	128	58	0.82
3	4" HW	132	70	27.94
1	Jars	131	59	9.07
1	4" H.W	101	65	9.53
18	Drill Pipe	Grade		341.99
0	Drill Pipe	Grade		9.51
	Kelly Down			0.00
	Total			1972.58
	Weight of BC			
	Weight of String			58.00

HOLE CONDITION: Hole Orng Up 3 Down 3 | Torque At Bottom 8600 | Fill On Bottom

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other

Time	02:00	05:30
Density	1080	1060
Funnel Viscosity	75	75
Fluid Loss		
pH		
Location Of Sample	shaker	shaker
Depth	1925.00	1944.00
PVT	57	57

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
2	SINGLE	127	135	15000	6.00

Remarks

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
2	6154	@	84	@	1934.00
		@		@	
		@		@	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type
04:30	1914.50	91.52	303.85	DIRECTIONAL
05:45	1924.00	91.60	302.88	DIRECTIONAL
06:45	1933.50	91.70	302.6	DIRECTIONAL
07:30	1943.00	91.60	303.4	DIRECTIONAL

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density

MUD MATERIALS ADDED

Product	Amount	Type

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	450

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
0:00	0:30	0.50	2C	Drill out float collar Tagged @ 1895mKB Drill out shoe @ 1907mKB
0:30	0:45	0.25	7	Rig service function test rig smart anti collision system function test crown saver function test pipe rams 8 sec C/O grease all moving parts check fluid levels in floor motor
0:45	1:00	0.25	21A	B.O.P drill well secure in 80 sec crew in position check manifold
1:00	1:30	0.50	2	Drill 156mm hole with Smith 156mm MSi613 PDC bit, Weatherford 7/8 lobe, 3.8 stage (rpm at 0.135/L) 1.66m from bit to bend, mud motor, from 1907mKB to 1914mKB
1:30	2:15	0.75	5	Circulate bottoms up prepair to do a fit test
2:15	2:30	0.25	25	formation integrity test 4400kpa for 10 min
2:30	7:15	4.75	2	Drill 156mm hole, with Smith 156mm MSi613 PDC bit, Weatherford 7/8 lobe, 3.8 stage (rpm at 0.135/L) 1.66m from bit to bend, mud motor, from 1914mKB to 1972mKB
7:15	7:45	0.50	10	Accumulated directional surveys
7:45	8:00	0.25	21	Safety meeting with boih rig crews,tool push and conoco reps. present

Remarks
Level one overhead inspection mh
Blew down boilers 2 times @ 100L

SAFETY

Safety Topic	MEHL	MACP
B.O.P drill	71	3384

TOUR 2 — DRILLER(S) ON TOUR: DEVAN SCHLITTER — START TIME: 8:00 — END TIME: 16:00

BITS

Bit Number	4
Size	156
IADC Code	
Manufacturer	smith
Type	613
Serial No	jh8402
Jets	12.7 12.7 12.7 12.7 12.7 12.7
Depth Out (m)	
Depth In (m)	1909.00
Total Drilled (m)	58.00
Hrs Run Today	6.00
Cumulative Hrs Run	11.25
Entry Date	

CUTTING STRUCTURE: TI 5.16

DRILLING SUMMARY

From	To	D-R-C	RPM	WOB
1972.00	2067.00	DRILL	80	12

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	156MM BIT	156	0	0.19
1	MUD MOTOR	123	34	8.93
1	NM Pony Monel	119	57	3.10
1	Slick monel	119	67	9.47
1	4.75 gap sub	119	63	0.58
1	4.75 LWD SAWR	128	70	6.15
1	4.75 LWD ABS	129	70	4.79
1	X/O	120	56	0.45
1	Slick monel	119	67	9.50
1	X/O SUB	128	58	0.82
3	4" HW	132	70	27.94
1	Jars	131	59	9.07
1	4" H.W	101	65	9.53
23	Drill Pipe	Grade		437.05
1	Drill Pipe	Grade		9.47
	Kelly Down			0.00
	Total			2067.60
	Weight of BC			
	Weight of String			58.00

HOLE CONDITION: Hole Orng Up 3000 Down 4000 | Torque At Bottom 11400 | Fill On Bottom

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other

Time	08:00	10:00
Density	1055	1055
Funnel Viscosity	75	72
Fluid Loss		
pH		
Location Of Sample	shaker	shaker
Depth	1968.00	1988.00
PVT	55	54

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
2	SINGLE	127	138	16100	7.00

Remarks

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
2	4600	@	74	@	1991.00
		@		@	
		@		@	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type
08:45	1952.50	90.90	301.8	DIRECTIONAL
09:15	1962.00	91.00	303.3	DIRECTIONAL
10:30	1971.50	90.50	301.4	DIRECTIONAL
11:15	1981.50	90.70	300.9	DIRECTIONAL
13:00	2000.00	89.70	300.3	DIRECTIONAL
13:30	2009.50	89.30	299.4	DIRECTIONAL

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density
Centrifuge #1	3.00	1055	990	1710

MUD MATERIALS ADDED

Product	Amount	Type

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	450

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
8:00	9:00	1.00	2	Drill 156mm hole, with Smith 156mm MSi613 PDC bit, Weatherford 7/8 lobe, 3.8 stage (rpm at 0.135/L) 1.66m from bit to bend, mud motor, from 1972m to 1982m
9:00	9:15	0.25	7	Rig service function test rig smart anti collision system function test crown saver function test hydrill 13 sec C/O grease all moving parts check fluid levels in floor motor,change oil in HPU
9:15	14:15	5.00	2	Drill 156m hole, with Smith 156mm MSi613 PDC bit, Weatherford 7/8 lobe, 3.8 stage (rpm at 0.135/L) 1.66m from bit to bend, mud motor, from 1982m to 2067m
14:15	16:00	1.75	20A	Accumulated directional surveys

Remarks
Level 1 inspection on tongs and overhead equipment D.S
Blew down boilers 2 times 100 L

SAFETY

Safety Topic	MEHL	MACP
Oil changes	71	3384

TOUR 3 — DRILLER(S) ON TOUR: MARCUS HALLOWES — START TIME: 16:00 — END TIME: 24:00

BITS

Bit Number	4
Size	156
IADC Code	
Manufacturer	smith
Type	613
Serial No	jh8402
Jets	12.7 12.7 12.7 12.7 12.7 12.7
Depth Out (m)	
Depth In (m)	1909.00
Total Drilled (m)	215.00
Hrs Run Today	6.25
Cumulative Hrs Run	17.50
Entry Date	

CUTTING STRUCTURE: TI 12.29

DRILLING SUMMARY

From	To	D-R-C	RPM	WOB
2067.00	2124.68	DRILL	80	12

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	156MM BIT	156	0	0.19
1	MUD MOTOR	123	34	8.93
1	NM Pony Monel	119	57	3.10
1	Slick monel	119	67	9.47
1	4.75 gap sub	119	63	0.58
1	4.75 LWD SAWR	128	70	6.15
1	4.75 LWD ABS	129	70	4.79
1	X/O	120	56	0.45
1	Slick monel	119	67	9.50
1	X/O SUB	128	58	0.82
3	4" HW	132	70	27.94
1	Jars	131	59	9.07
1	4" H.W	101	65	9.53
26	Drill Pipe	Grade		494.08
1	Drill Pipe	Grade		9.52
	Kelly Down			0.00
	Total			2124.68
	Weight of BC			
	Weight of String			59.00

HOLE CONDITION: Hole Orng Up 3 Down 4 | Torque At Bottom 9800 | Fill On Bottom

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other

Time	16:00	18:00
Density	1025	1030
Funnel Viscosity	68	67
Fluid Loss		
pH		
Location Of Sample	shaker	shaker
Depth	2059.00	2086.00
PVT	49	48

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
2	SINGLE	127	137	17000	8.00

Remarks

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
2	3700	@	66	@	2076.00
		@		@	
		@		@	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type
16:00	2048.00	88.30	297.9	DIRECTIONAL
17:15	2057.00	88.30	297.9	DIRECTIONAL
17:15	2068.50	86.70	297.5	DIRECTIONAL
19:15	2085.50	86.30	297.37	DIRECTIONAL
21:30	2095.00	85.82	295.65	DIRECTIONAL
23:45	2104.50	85.68	297.15	DIRECTIONAL

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density

MUD MATERIALS ADDED

Product	Amount	Type

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	450

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
16:00	17:00	1.00	2	Drill 156mm hole, with Smith 156mm MSi613 PDC bit, Weatherford 7/8 lobe, 3.8 stage (rpm at 0.135/L) 1.66m from bit to bend, mud motor, from 2067m to 2077m
17:00	17:15	0.25	7	Rig service function test rig smart anti collision system function test crown saver function test pipe rams 6 sec C/O grease all moving parts check fluid levels in floor motor,change oil in floor motor
17:15	21:45	4.50	2	Drill 156mm hole, with Smith 156mm MSi613 PDC bit, Weatherford 7/8 lobe, 3.8 stage (rpm at 0.135/L) 1.66m from bit to bend, mud motor, from 2077m to2115m
21:45	22:30	0.75	8A	Work on NOV reprogram system
22:30	23:15	0.75	2	Drill 156 mm hole, with Smith 156mm MSi613 PDC bit, Weatherford 7/8 lobe, 3.8 stage (rpm at 0.135/L) 1.66m from bit to bend, mud motor, from 2115m to 2124m
23:15	23:30	0.25	20B	Re log gamma from 2115m to 2124
23:30	24:00	0.50	20A	Accumulated directional surveys

Remarks
Level one overhead inspection mh
Blew down boilers 2 times @ 100L

SAFETY

Safety Topic	MEHL	MACP
IRS	71	4081

FRONT PAGE SUMMARY

Tour Sheet Edited Number: BEAV2_20140117_1A	Version: RMS 2013.8.14.27104	Year: 2014	Month: 01	Day: 17					
Licence No: WID-2082	Well Name: COPRC Dodo Canyon E-76 65-10 126-45	Surface Location: E-76-65-10-126-45	Prov: NT	Lic Type: CLSS	Unique Well Id:				
Operator: Conoco Canada	Contractor: Beaver Drilling Ltd.	Rig No: 2	Well Type: HORIZ	Sub-Surface: ☐					
Operator's AFE: 10351817	Contractor's Job No: 151	Spud Date Time: 28-Dec-2013 06:30							
Signature Of Operator's Representative: RICHARD TURGEON	Signature Of Contractor's Rig Manager: TONY HIEMSTRA	Rig Release Date Time:							

DAILY CHECKS — OP RIG

	RT	TH
(1) Daily Visit Around Inspection		
(2) Detailed Inspection - Weekly (Derby Chase Use)		
(3) ICS Signs Posted If Required		
(4) Well Licence & Site Diagram Posted	RT	TH
(5) Flare Lines Staked	RT	TH
(6) BOP Drills Performed	RT	TH
(7) Visually Inspected BOP-to-Flare Lines & Diverter Lines		
(1) Rig Site Health & Safety Meeting (environmental)		TH
(2) CAODC Rig Safety Inspection Checklist (complete/current)		
(3) Hoist Inspection Indoor Sheave or Lowering		
(4) Crown Saver Checked		
(5) Upper Kelly Checked		

CAODC NOV

Code	1 Rig Up	2 Drill Actual	3 Reaming	4 Coring	5 Cond Mud & Circ	6 Trips	7 Rig Service	8 Repair Rig	9 Cut Off Drlg Line	10 Dev Survey	11 Wireline Logs	12 Run Csg & Cement	13 Wait On Cement	14 Nipple BOP	15 Test BOP	16 Drill Stem Test	17 Plug Back	18 Squeeze Cement	19 Fishing	20 Other Work	21 Safety Meeting	22 Tear Down	23 Waiting On	24 Rig Watch	25 Other	TOTAL
Tour 1		5.75			0.75		0.25			0.50											0.50				0.25	8.00
Tour 2		6.00					0.25													1.75						8.00
Tour 3		6.25					0.25	0.75												0.75						8.00
TOTAL		18.00			0.75		0.75	0.75		0.50										2.50	0.50				0.25	24.00

FULL @ 08:00 HRS

Rig	190
Rig Time	05:45
Formation Condition	BLOWING SNOW
Wind Direction	NW
Wind Velocity	UP TO 19 KM/H
Road Condition	GOOD

Tour: 1 — Driller: MARCUS HALLOWES — Start: 0:00 — End: 8:00

BITS

Bit Number	4
Size	156
IADC Code	
Manufacturer	smith
Type	613
Serial No	jh8402
Jets	12.7 12.7 12.7 12.7 12.7 12.7
Depth Out (m)	
Depth In (m)	1909.00
Total Drilled (m)	54.00
Hrs Run Today	5.25
Cumulative Hrs Run	5.25
Entry Date	

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	156MM BIT	156	0	0.18
1	MUD MOTOR	123	34	8.93
1	NM Pony Monel	119	57	3.10
1	Slick monel	119	67	8.47
1	4.75 gap sub	119	63	0.58
1	4.75 LWD SAWR	128	70	6.15
1	4.75 LWD ABS	129	70	4.79
1	x/o	120	56	0.45
1	Slick monel	119	67	8.50
1	X/O SUB	128	58	0.82
3	4" HW	132	70	27.54
1	Jars	131	59	5.07
1	4" H.W	101	65	8.53
18	Drill Pipe	Grade		341.99
0	Drill Pipe	Weight		9.51
	Kelly Down			0.00
	Total			1972.58
	Weight of DC			
	Weight of String			58.00

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other:

Time		
Density		
Funnel Viscosity		
Fluid Loss		
pH		
Location Of Sample		
Depth		
PVT		

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
2	SINGLE	127	135	15000	6.00

Remarks

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density

MUD MATERIALS ADDED

Product	Amount	Type

BOILER

BoilerNo	HoursRun	pH	StackTemp

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks

Remarks
Level one overhead inspection mh
Blew down boilers 2 times @ 100L

SAFETY

Safety Topic	MEHL	MACP
B.O.P drill	71	3384

METRES DRILLED

From	To	D-R-C	RPM	WOB

HOLE CONDITION

Hole Drag	Up	3	Down 3
Torque At Bottom		8600	
Fill On Bottom			

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
2	6154	@	84	@	1924.00
		@		@	
		@		@	

Tour: 2 — Driller: DEVAN SCHLITTER — Start: 8:00 — End: 16:00

BITS

Bit Number	4
Size	156
IADC Code	
Manufacturer	smith
Type	613
Serial No	jh8402
Jets	12.7 12.7 12.7 12.7 12.7 12.7
Depth Out (m)	
Depth In (m)	1909.00
Total Drilled (m)	58.00
Hrs Run Today	6.00
Cumulative Hrs Run	11.25
Entry Date	

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	156MM BIT	156	0	0.18
1	MUD MOTOR	123	34	8.93
1	NM Pony Monel	119	57	3.10
1	Slick monel	119	67	8.47
1	4.75 gap sub	119	63	0.58
1	4.75 LWD SAWR	128	70	6.15
1	4.75 LWD ABS	129	70	4.79
1	x/o	120	56	0.45
1	Slick monel	119	67	8.50
1	X/O SUB	128	58	0.82
3	4" HW	132	70	27.54
1	Jars	131	59	5.07
1	4" H.W	101	65	8.53
23	Drill Pipe	Grade		437.05
1	Drill Pipe	Weight		9.47
	Kelly Down			0.00
	Total			2067.60
	Weight of DC			
	Weight of String			58.00

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other:

Time	12:00	14:00
Density	1045	1025
Funnel Viscosity	70	69
Fluid Loss		
pH		
Location Of Sample	shaker	shaker
Depth	2014.00	2040.00
PVT	52	51

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
2	SINGLE	127	138	16100	7.00

Remarks

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type
14:00	2019.00	88.30	300	DIRECTIONAL
14:45	2020.50	88.60	299.4	DIRECTIONAL
15:30	2038.00	88.50	298.5	DIRECTIONAL

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density
Centrifuge #1	3.00	1055	990	1710

MUD MATERIALS ADDED

Product	Amount	Type

BOILER

BoilerNo	HoursRun	pH	StackTemp

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks

Remarks
Level 1 inspection on tongs and overhead equipment D.S
Blew down boilers 2 times 100 L

SAFETY

Safety Topic	MEHL	MACP
Oil changes	71	3384

METRES DRILLED

From	To	D-R-C	RPM	WOB

HOLE CONDITION

Hole Drag	Up 3000		Down 4000
Torque At Bottom		11400	
Fill On Bottom			

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
2	4600	@	74	@	1991.00
		@		@	
		@		@	

Tour: 3 — Driller: MARCUS HALLOWES — Start: 16:00 — End: 24:00

BITS

Bit Number	4
Size	156
IADC Code	
Manufacturer	smith
Type	613
Serial No	jh8402
Jets	12.7 12.7 12.7 12.7 12.7 12.7
Depth Out (m)	
Depth In (m)	1909.00
Total Drilled (m)	215.00
Hrs Run Today	6.25
Cumulative Hrs Run	17.50
Entry Date	

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	156MM BIT	156	0	0.19
1	MUD MOTOR	123	34	8.93
1	NM Pony Monel	119	57	3.10
1	Slick monel	119	67	8.47
1	4.75 gap sub	119	63	0.58
1	4.75 LWD SAWR	128	70	6.15
1	4.75 LWD ABS	129	70	4.79
1	x/o	120	56	0.45
1	Slick monel	119	67	8.50
1	X/O SUB	128	58	0.82
3	4" HW	132	70	27.54
1	Jars	131	59	5.07
1	4" H.W	101	65	8.53
26	Drill Pipe	Grade		494.08
1	Drill Pipe	Weight		9.52
	Kelly Down			0.00
	Total			2124.68
	Weight of DC			
	Weight of String			59.00

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other:

Time	20:00
Density	1030
Funnel Viscosity	70
Fluid Loss	
pH	
Location Of Sample	shaker
Depth	2115.00
PVT	48

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
2	SINGLE	127	137	17000	8.00

Remarks

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density

MUD MATERIALS ADDED

Product	Amount	Type

BOILER

BoilerNo	HoursRun	pH	StackTemp

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks

Remarks
Level one overhead inspection mh
Blew down boilers 2 times @ 100L

SAFETY

Safety Topic	MEHL	MACP
IRS	71	4081

METRES DRILLED

From	To	D-R-C	RPM	WOB

HOLE CONDITION

Hole Drag	Up 3		Down 4
Torque At Bottom		9800	
Fill On Bottom			

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
2	3700	@	66	@	2074.00
		@		@	
		@		@	

FRONT PAGE SUMMARY

Tour Sheet Serial Number: BEAV2_20140118_1B	Vendor Software Version: RMS 2013.8.14.27104	Year: 2014	Month: 01	Day: 18	DAILY CHECKS	OP	RIG
Licence No: WID-2082	Well Name: COPRC Dodo Canyon E-76 65-10 126-45	Surface Location: E-76-65-10-126-45	Prov: NT	Lic Type: CLSS	Unique Well Id		
Operator: Conoco Canada	Contractor: Beaver Drilling Ltd.	Rig No: 2	Well Type: HORIZ	Re-Entry: ☐	(1.) Daily Mdtr Annual Inspection	RT	TP
Operator's AFE: 10351817	Contractor's Job No: 151	Tour Start Time: 28-Dec-2013 06:30			(2.) Detailed Inspection - Weekly (Drilling Check List)	RT	TP
Signature Of Operator's Representative: RICHARD TURGEON	Signature Of Contractor's Rig Manager: TONY HIEMSTRA	Rig Release Date Time			(3.) ICS Signs Posted if Required	RT	TP
					(4.) Well Licence & Blow Diagram Posted	RT	TP
					(5.) Flare Lines (Tested /)	RT	TP
					(6.) BOP Drills Performed		TP
					(7.) Visually Inspected BOP + Flare Lines & Degasser Lines	RT	TP
					(1.) Rig Site Health & Safety Meeting (Each Occupancy)		TP
					(2.) CAODC Rig Safety Inspection Checklist (Length/Frequency)		
					(3.) Hoist Inspection (Before Raising or Lowering)		TP
					(4.) Crown Saver Checked		TP
					(5.) Motor Idle Checked		TP

Crews	Rig Up	Drill Ahead	Reaming	Coring	Cond Mud & Circ	Trips	Rig Service	Repair Rig	Cut Off Drlg Line	Dev Survey	Wireline Logs	Run Csg & Cement	Wait On Cement	Nipple BOP	Test BOP	Drl Stem Test	Plug Back	Squeeze Cement	Fishing	Dir Work	Safety Meeting	Tour Down	Waiting On	Rig Watch	Other	TOTAL
Tour 1		5.50					0.50													1.75	0.25					8.00
Tour 2		6.00					0.25													1.75						8.00
Tour 3		6.75					0.25													1.00						8.00
TOTAL		18.25					1.00													4.50	0.25					24.00

FUEL @ 09:59 HRS: Rig 180, Camp 180, Time 05:45, Camp -20

WEATHER: Current Conditions: BLOWING SNOW; Wind Direction: NW; Wind Strength: UP TO 29 KM/H; Road Conditions: FAIR

Tour 1

Driller: MARCUS HALLOWES — Start Time: 0:00 — End Time: 8:00

BITS

Bit Number	4
Size	156
IADC Code	
Manufacturer	smith
Type	613
Serial No	jh8402
Jets	12.7 12.7 12.7 0.0 / 12.7 12.7
Depth Out (m)	
Depth In (m)	1909.00
Total Drilled (m)	58.00
Hrs Run Today	5.50
Cumulative Hrs Run	23.00
Entry Date	

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	156MM BIT	156	32	0.18
1	MUD MOTOR	123	34	8.83
1	NM Pony Monel	119	57	3.10
1	Slick monel	119	67	8.47
1	4.75 gap sub	119	63	0.56
1	4.75 LWD SAWR	128	70	6.15
1	4.75 LWD ABS	128	70	4.79
1	x/o	120	56	0.45
1	Slick monel	119	67	8.50
1	X/O SUB	128	58	0.82
3	4" HW	132	70	27.34
1	Jars	131	59	9.07
1	4" H.W	101	65	8.53
32	Drill Pipe	Stands		608.15
0	Drill Pipe	Singles		0.00

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other: ☐

Time	00:00	02:30
Density	1040	1010
Funnel Viscosity	70	70
Fluid Loss		
pH		
Location Of Sample	shaker	shaker
Depth	2120.00	2153.00
PVT	45	45

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
2	SINGLE	127	135	16900	8.00

Remarks:

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type
01:30	2113.50	85.59	296.97	DIRECTIONAL
01:45	2123.00	85.59	296.66	DIRECTIONAL
02:15	2132.50	85.68	295.25	DIRECTIONAL
03:30	2142.00	85.90	259.2	DIRECTIONAL
04:15	2151.00	85.82	295.16	DIRECTIONAL
05:00	2171.00	85.99	297.06	DIRECTIONAL

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density
Centrifuge #1	1.50	1030	1010	2120

MUD MATERIALS ADDED

Product	Amount	Type
Versamul	1	drum
Versacoat HF	1	drum
Calcium Chloride	18	sx

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequence & Remarks
0:00	0:15	0.25	20B	Re log gamma from 2119m to 2124m
0:15	1:00	0.75	2	Drill 156mm hole,with Smith 156mm MSi613 PDC bit, Weatherford 7/8 lobe, 3.8 stage (rpm at 0.135/L) 1.66m from bit to bend, mud motor, from 2124m to 2134
1:00	1:30	0.50	7	Rig service function test rig smart anti collision system function test crown saver function test H.C.R 3 seconds O/C grease all moving parts check fluid levels in floor motor, Function test flair stack ignitor set up breaks on draw works
1:30	6:15	4.75	2	Drill 156mm hole, with Smith 156mm MSi613 PDC bit, Weatherford 7/8 lobe, 3.8 stage (rpm at 0.135/L) 1.66m from bit to bend, mud motor, from 2134m to 2229m
6:15	7:45	1.50	20A	Accumulated directional survey bme
7:45	8:00	0.25	21	Crew hand over meeting Rig manager and Conoco reps. present

Remarks:
Level one overhead inspection mh
Blew down boilers 2 times @ 100L

CUTTING STRUCTURE

TR	
TD	GDC
MSC	Bearing Seals
LOC	Gauge
BRG	Total Rev/Hr 2.52

DRILLING PARAMETERS

From	To	D-R-C	RPM	WOB
2124.00	2229.00	DRILL	50	10

HOLE CONDITION

Hole Drag: Up 3 Down 4

Torque At Bottom: 10600

Fill On Bottom:

Kelly Down	0.00
Total	2229.23
Weight of BHA	
Weight of String	59.00

REQUIRED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
2	6157	@	83	@	2153.00
		@		@	
		@		@	

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	450

SAFETY

Safety Topic	MEHL	MACP
LRS	68	4430

Tour 2

Driller: DEVAN SCHLITTER — Start Time: 8:00 — End Time: 16:00

BITS

Bit Number	4
Size	156
IADC Code	
Manufacturer	smith
Type	613
Serial No	jh8402
Jets	12.7 12.7 12.7 0.0 / 12.7 12.7
Depth Out (m)	
Depth In (m)	1909.00
Total Drilled (m)	453.00
Hrs Run Today	6.00
Cumulative Hrs Run	29.00
Entry Date	

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	156MM BIT	156	32	0.18
1	MUD MOTOR	123	34	8.83
1	NM Pony Monel	119	57	3.10
1	Slick monel	119	67	8.47
1	4.75 gap sub	119	63	0.56
1	4.75 LWD SAWR	128	70	6.15
1	4.75 LWD ABS	128	70	4.79
1	x/o	120	56	0.45
1	Slick monel	119	67	8.50
1	X/O SUB	128	58	0.82
3	4" HW	132	70	27.34
1	Jars	131	59	9.07
1	4" H.W	101	65	9.53
39	Drill Pipe	Stands		741.28
0	Drill Pipe	Singles		0.00

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other: ☐

Time	08:00	10:00
Density	1020	1025
Funnel Viscosity	69	70
Fluid Loss		
pH		
Location Of Sample	shaker	shaker
Depth	2232.00	2262.00
PVT	41.5	40

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
2	SINGLE	127	125	14500	7.00

Remarks:

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type
08:30	2209.00	86.70	297.4	DIRECTIONAL
10:15	2247.00	87.90	295.9	DIRECTIONAL
12:00	2266.00	88.20	296.4	DIRECTIONAL
13:15	2275.50	88.70	296.6	DIRECTIONAL
14:30	2313.50	89.50	297.1	DIRECTIONAL

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density

MUD MATERIALS ADDED

Product	Amount	Type
Calcium Chloride	13	bags
Truvis	2	bags

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequence & Remarks
8:00	10:30	2.50	2	Drill 156m hole, with Smith 155mm MSi613 PDC bit, Weatherford 7/8 lobe, 3.8 stage (rpm at 0.135/L) 1.66m from bit to bend, mud motor, from 2229m to 2267m
10:30	10:45	0.25	7	Rig service function test rig smart anti collision system function test crown saver function test pipe rams 6 seconds O/C grease all moving parts check fluid levels in floor motor, Function test flair stack ignitor
10:45	14:15	3.50	2	Drill 156mm hole, with Smith 156mm MSi613 PDC bit, Weatherford 7/8 lobe, 3.8 stage (rpm at 0.135/L) 1.66m from bit to bend, mud motor, from 2267m to 2362m
14:15	16:00	1.75	20A	Accumulated directional surveys

Remarks:
Level 1 inspection on tongs and overhead equipment D.S
Blew down boilers 2 times 100L

CUTTING STRUCTURE

TR	
TD	GDC
MSC	Bearing Seals
LOC	Gauge
BRG	Total Rev/Hr 15.62

DRILLING PARAMETERS

From	To	D-R-C	RPM	WOB
2225.00	2362.00	DRILL	60	10

HOLE CONDITION

Hole Drag: Up 4 Down 5

Torque At Bottom: 11400

Fill On Bottom:

Kelly Down	0.00
Total	2362.36
Weight of BHA	
Weight of String	64.00

REQUIRED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
2	4521	@	70	@	2362.00
		@		@	
		@		@	

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	450

SAFETY

Safety Topic	MEHL	MACP
	65	4430

Tour 3

Driller: MARCUS HALLOWES — Start Time: 16:00 — End Time: 24:00

BITS

Bit Number	4
Size	156
IADC Code	
Manufacturer	smith
Type	613
Serial No	jh8402
Jets	12.7 12.7 12.7 0.0 / 12.7 12.7
Depth Out (m)	
Depth In (m)	1909.00
Total Drilled (m)	586.00
Hrs Run Today	6.75
Cumulative Hrs Run	35.75
Entry Date	

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	156MM BIT	156	32	0.18
1	MUD MOTOR	123	34	8.83
1	NM Pony Monel	119	57	3.10
1	Slick monel	119	67	8.47
1	4.75 gap sub	119	63	0.56
1	4.75 LWD SAWR	128	70	6.15
1	4.75 LWD ABS	128	70	4.79
1	x/o	120	56	0.45
1	Slick monel	119	67	8.50
1	X/O SUB	128	58	0.82
3	4" HW	132	70	27.34
1	Jars	131	59	9.07
1	4" H.W	101	65	8.53
46	Drill Pipe	Stands		874.31
0	Drill Pipe	Singles		0.00

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other: ☐

Time	16:00	18:00
Density	1040	1030
Funnel Viscosity	68	67
Fluid Loss		
pH		
Location Of Sample		
Depth	2364.00	2398.00
PVT	45	44

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
2	SINGLE	127	115	14600	8.00

Remarks:

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type
16:00	2342.00	89.40	298.4	DIRECTIONAL
17:15	2361.00	89.70	298.4	DIRECTIONAL
18:30	2380.00	89.80	298.2	DIRECTIONAL
21:00	2418.00	89.60	298.8	DIRECTIONAL
22:00	2437.00	88.20	297.28	DIRECTIONAL
23:00	2455.50	88.60	296.84	DIRECTIONAL

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density
Centrifuge #1	2.50	1040	990	1710

MUD MATERIALS ADDED

Product	Amount	Type

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequence & Remarks
16:00	17:00	1.00	2	Drill 156mm hole, with Smith 156mm MSi613 PDC bit, Weatherford 7/8 lobe, 3.8 stage (rpm at 0.135/L) 1.66m from bit to bend, mud motor, from 2362m to 2381m
17:00	17:15	0.25	7	Rig service function test rig smart anti collision system function test crown saver function test hydrill 13 seconds O/C grease all moving parts check fluid levels in floor motor, Function test flair stack ignitor
17:15	23:00	5.75	2	Drill 156mm hole, with Smith 156mm MSi613 PDC bit, Weatherford 7/8 lobe, 3.8 stage (rpm at 0.135/L) 1.66m from bit to bend, mud motor, from 2381m to 2495m
23:00	24:00	1.00	20A	Accumulated directional surveys

Remarks:
Level one overhead inspection mh
Blew down boilers 2 times @ 100L

CUTTING STRUCTURE

TR	
TD	GDC
MSC	Bearing Seals
LOC	Gauge
BRG	Total Rev/Hr 16.39

DRILLING PARAMETERS

From	To	D-R-C	RPM	WOB
2352.00	2495.00	DRILL	60	10

HOLE CONDITION

Hole Drag: Up 4 Down 5

Torque At Bottom: 10900

Fill On Bottom:

Kelly Down	0.00
Total	2495.39
Weight of BHA	
Weight of String	69.00

REQUIRED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
2	3945	@	63	@	2381.00
		@		@	
		@		@	

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	450

SAFETY

Safety Topic	MEHL	MACP
Weekly top drive service	72	4256

FRONT PAGE SUMMARY

Tour Sheet Scaled Number: BEAV2_20140118_1B | Vendor Software Version: RMS 2013.8.14.27104 | Year: 2014 | Month: 01 | Day: 18

Licence No: WID-2082	Well Name: COPRC Dodo Canyon E-76 65-10 126-45	Surface Location: E-76-65-10-126-45	Fmn: NT	Lic Type: CLSS	Unique Well Id:	
Operator: Conoco Canada	Contractor: Beaver Drilling Ltd.	Rig No: 2	Well Type: HORIZ	Re-Entry: ☐		
Operator's AFE: 10351817	Contractor's Job No: 151	Spud Date Time: 28-Dec-2013	06:30			
Signature Of Operator's Representative: RICHARD TURGEON	Signature Of Contractor's Rig Manager: TONY HIEMSTRA	Rig Released Date Time:				

DAILY CHECKS — CP RM

(1) Daily Walk Around Inspection — RT TM
(2) Detailed Inspection - Weekly (Safety Check List) — RT TM
(3) H2S Signs Posted If Required — RT TM
(4) Well License & Well Diagram Posted — RT TM
(5) Pipe Lines Tested — RT TM
(6) BOP Drills Performed — RT TM
(7) Visually Inspected BOP - Pipe Lines & Diagram Lines — RT TM
(1) Rig and Health & Safety Meeting (or tailgate mtg) — TM
(2) CAODC Rig Safety Inspection Checklist (once/fortnight) — TM
(3) Mud Inspection before Retiring or Lowering — TM
(4) Crown Saver Checked — TM
(5) Lower Kelly Checked — TM

CAODC NOV

HOURS

Crew	1 Rig Up	2 Drill Actual	3 Reaming	4 Coring	5 Cond Mud & Circ	6 Trips	7 Rig Service	8 Repair Rig	9 Cut Off Drlg Line	10 Deviation Survey	11 Wireline Logs	12 Run Csg & Cement	13 Wait On Cement	14 Nipple BOP	15 Test BOP	16 Drillstem Test	17 Plug Back	18 Squeeze Cement	19 Fishing	20 Dir Work	21 Safety Meeting	22 Tear Down	23 Waiting On	24 Rig Watch	25 Other	TOTAL
Tour 1		5.50					0.50													1.75	0.25					8.00
Tour 2		6.00					0.25													1.75						8.00
Tour 3		6.75					0.25													1.00						8.00
TOTAL		18.25					1.00													4.50	0.25					24.00

FUEL @ CK CC HRS: Rig 180 | Trailer 180 | Time 06:45 | Temp -20 | Common Comments: BLOWING SNOW | Wind Direction NW | Wind Strength UP TO 29 KMH | Road Conditions FAIR

TOUR 1

Tour 1 | Driller: MARCUS HALLOWES | Start Time 0:00 | End Time 8:00

BITS

Bit Number	4
Size	156
IADC Code	
Manufacturer	smith
Type	613
Serial No	jh8402
Jets	12.7 12.7 12.7 12.7 12.7 12.7
Depth Out (m)	
Depth In (m)	1909.00
Total Drilled (m)	58.00
Hrs Run Today	5.50
Cumulative Hrs Run	23.00
Entry Data	

CUTTING STRUCTURE: TR | Gauge | TD | IDC | BDC | LOC | Bond | Seal Bearing 2.52 | Nose

DULL CONDITION: From | To | D-R-C | RPM | WOB

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	156MM BIT	156	32	0.19
1	MUD MOTOR	123	34	8.93
1	NM Pony Monel	119	57	3.10
1	Slick monel	119	67	8.47
1	4.75 gap sub	119	63	0.58
1	4.75 LWD SAWR	128	70	6.15
1	4.75 LWD ABS	129	70	4.78
1	x/o	120	56	0.45
1	Slick monel	119	67	9.50
1	X/O SUB	128	58	0.82
3	4" HW	132	70	27.84
1	Jars	131	59	5.07
1	4" H.W	101	65	9.53
32	Drill Pipe	Grade		608.15
0	Drill Pipe	Weight		0.00

Kelly Down: 0.00 | Total: 2229.23 | Weight of BHA | Weight of String: 59.00

HOLE CONDITION: Hole Drag Up 3 Down 4 | Torque At Bottom 10600 | Fill On Bottom

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other

Time	04:45
Density	1010
Funnel Viscosity	67
Fluid Loss	
pH	
Location Of Sample	shaker
Depth	2191.00
PVT	44

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
2	SINGLE	127	135	16900	8.00

Remarks

REDUCED PUMP SPEED

Pump #	Pressure	Strokes/min	Depth
2	6157 @	83 @	2133.00
	@	@	
	@	@	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type
06:00	2181.50	85.90	296.57	DIRECTIONAL
06:30	2191.00	86.10	297.4	DIRECTIONAL
07:15	2199.50	86.40	296.4	DIRECTIONAL

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density
Centrifuge #1	1.50	1030	1010	2120

MUD MATERIALS ADDED

Product	Amount	Type

BOILER

BoilerNo	HoursRun	pH	StackTemp

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequence & Remarks

Remarks
Level one overhead inspection mh
Blew down boilers 2 times @ 100L

SAFETY

Safety Topic	MEHL	MACP
I.R.S	68	4430

TOUR 2

Tour 2 | Driller: DEVAN SCHLITTER | Start Time 8:00 | End Time 16:00

BITS

Bit Number	4
Size	156
IADC Code	
Manufacturer	smith
Type	613
Serial No	jh8402
Jets	12.7 12.7 12.7 12.7 12.7 12.7
Depth Out (m)	
Depth In (m)	1909.00
Total Drilled (m)	453.00
Hrs Run Today	6.00
Cumulative Hrs Run	29.00
Entry Data	

CUTTING STRUCTURE: TR | Gauge | TD | IDC | BDC | LOC | Bond | Seal Bearing 16.62 | Nose

DULL CONDITION: From | To | D-R-C | RPM | WOB

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	156MM BIT	156	32	0.19
1	MUD MOTOR	123	34	8.93
1	NM Pony Monel	119	57	3.10
1	Slick monel	119	67	8.47
1	4.75 gap sub	119	63	0.58
1	4.75 LWD SAWR	128	70	6.15
1	4.75 LWD ABS	129	70	4.78
1	x/o	120	56	0.45
1	Slick monel	119	67	9.50
1	X/O SUB	128	58	0.82
3	4" HW	132	70	27.84
1	Jars	131	59	5.07
1	4" H.W	101	65	9.53
39	Drill Pipe	Grade		741.28
0	Drill Pipe	Weight		0.00

Kelly Down: 0.00 | Total: 2362.36 | Weight of BHA | Weight of String: 64.00

HOLE CONDITION: Hole Drag Up 4 Down 5 | Torque At Bottom 11400 | Fill On Bottom

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other

Time	12:00	14:00
Density	1030	1040
Funnel Viscosity	71	73
Fluid Loss		
pH		
Location Of Sample	shaker	shaker
Depth	2286.00	2325.00
PVT	39	38

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
2	SINGLE	127	125	14500	7.00

Remarks

REDUCED PUMP SPEED

Pump #	Pressure	Strokes/min	Depth
2	4521 @	70 @	2286.00
	@	@	
	@	@	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density

MUD MATERIALS ADDED

Product	Amount	Type

BOILER

BoilerNo	HoursRun	pH	StackTemp

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequence & Remarks

Remarks
Level 1 inspection on tongs and overhead equipment D.S
Blew down boilers 2 times 100L

SAFETY

Safety Topic	MEHL	MACP
	68	4430

TOUR 3

Tour 3 | Driller: MARCUS HALLOWES | Start Time 16:00 | End Time 24:00

BITS

Bit Number	4
Size	156
IADC Code	
Manufacturer	smith
Type	613
Serial No	jh8402
Jets	12.7 12.7 12.7 12.7 12.7 12.7
Depth Out (m)	
Depth In (m)	1909.00
Total Drilled (m)	586.00
Hrs Run Today	6.75
Cumulative Hrs Run	35.75
Entry Data	

CUTTING STRUCTURE: TR | Gauge | TD | IDC | BDC | LOC | Bond | Seal Bearing 16.39 | Nose

DULL CONDITION: From | To | D-R-C | RPM | WOB

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	156MM BIT	156	32	0.19
1	MUD MOTOR	123	34	8.93
1	NM Pony Monel	119	57	3.10
1	Slick monel	119	67	8.47
1	4.75 gap sub	119	63	0.58
1	4.75 LWD SAWR	128	70	6.15
1	4.75 LWD ABS	129	70	4.78
1	x/o	120	56	0.45
1	Slick monel	119	67	9.50
1	X/O SUB	128	58	0.82
3	4" HW	132	70	27.84
1	Jars	131	59	5.07
1	4" H.W	101	65	9.53
46	Drill Pipe	Grade		874.31
0	Drill Pipe	Weight		0.00

Kelly Down: 0.00 | Total: 2495.39 | Weight of BHA | Weight of String: 69.00

HOLE CONDITION: Hole Drag Up 4 Down 5 | Torque At Bottom 10900 | Fill On Bottom

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other

Time	19:00	
Density	1030	
Funnel Viscosity	70	
Fluid Loss		
pH		
Location Of Sample	shaker	
Depth	2438.00	
PVT	42	

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
2	SINGLE	127	115	14800	8.00

Remarks

REDUCED PUMP SPEED

Pump #	Pressure	Strokes/min	Depth
2	3945 @	63 @	2341.00
	@	@	
	@	@	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type
00:00	2475.00	88.60	298.95	DIRECTIONAL

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density
Centrifuge #1	2.50	1040	990	1710

MUD MATERIALS ADDED

Product	Amount	Type

BOILER

BoilerNo	HoursRun	pH	StackTemp

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequence & Remarks

Remarks
Level one overhead inspection mh
Blew down boilers 2 times @ 100L

SAFETY

Safety Topic	MEHL	MACP
Weekly top drive service	72	4256

FRONT PAGE SUMMARY

Licence No: WID-2082	Well Name: COPRC Dodo Canyon E-78 65-10 126-45		Surface Location: E-78-65-10-126-45	Prov: NT	Lic Type: CLSS	Unique Well ID:	
Operator: Conoco Canada		Contractor: Beaver Drilling Ltd.		Rig No: 2	Well Type: HORIZ	Re-Entry: ☐	
Operator's AFE: 10351817		Contractor's Job No: 151		Spud Date: 28-Dec-2013	Time: 05:30		
Supervisor: RICHARD TURGEON		Supervisor: TONY HIEMSTRA		Rig Release Date:	Time:		

DRILL CHECKS

	RT	TH
(1.) Daily Visit/ Around Inspection		
(2.) Derrick Inspection - Monthly (Derrick Check List)		
(3.) H2S Signs Posted/If Required		
(4.) Shell Diagram & Stick Diagram Posted		
(5.) Plans Given Ahead		
(6.) BOP Drills Performed		
(7.) Visually Inspected BOP's+Flare Lines & Degasser Lines		
(1.) Rig Site (Health & Safety Meeting (crew/subcontract))		TH
(2.) CADDC Rig Safety Inspection Checklist (once/fortnight)		TH
(3.) Hand Inspection before Raising or Lowering		TH
(4.) Crown Saver Checked		TH
(5.) Motor Kills Checked		TH

HOURS

	Rig Up	Drill Actual	Reaming	Circing	Cond Mud & Circ	Trips	Rig Service	Repair Rig	Cut Off Drlg Line	Surv Survey	Wireline Logs	Run Csg & Cement	Wait On Cement	Nipple BOP	Test BOP	Drillstem Test	Plug Back	Separate Cement	Fishing	Dir Work	Safety Meeting	Tear Down	Waiting On	Rig Watch	Other	TOTAL
Tour 1		6.50					0.25													1.00	0.25					8.00
Tour 2		6.25					0.25													1.50						8.00
Tour 3		6.75					0.25													1.00						8.00
TOTAL		19.50					0.75													3.50	0.25					24.00

FUEL @ 08:00 HRS: Start 175 | Rec 180 | Used -20

WEATHER: Time 06:15 | Temp -20 | General Conditions OVERCAST | Wind Direction NW | Wind Strength UP TO 19 KM/H | Road Conditions GOOD

TOUR 1

Tour 1 | Driller: MARCUS HALLOWES | Start Time: 0:00 | End Time: 8:00

BITS

Bit Number	4
Size	156
IADC Code	
Manufacturer	smith
Type	613
Serial No	jh8402
Jets	12.7 12.7 12.7 11.1 / 12.7 12.7
Depth Out (m)	
Depth In (m)	1909.00
Total Drilled (m)	691.00
Hrs Run Today	6.50
Cumulative Hrs Run	30.50
Entry Date	

CUTTING STRUCTURE: Grade | TD | BDC | Reason Pulled | Inner | Outer | Total Dull Grade | BHA | 22.66

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	156MM BIT	156	32	0.18
1	MUD MOTOR	123	34	8.83
1	NM Pony Monel	119	57	3.10
1	Slick monel	119	67	8.47
1	4.75 gap sub	119	63	0.58
1	4.75 LWD SAWR	128	70	6.15
1	4.75 LWD ABS	129	70	4.78
1	x/o	120	56	0.45
1	Slick monel	119	67	9.50
1	X/O SUB	128	58	0.82
3	4" HW	132	70	27.84
1	Jars	131	59	9.07
1	4" H.W	101	65	9.53
51	Drill Pipe - Stands			969.53
1	Drill Pipe - Singles			9.51
	Kelly Down			0.00
	Total			2600.12
	Weight of BHA			
	Strength of String			69.00

DRILLING RECORD

From	To	D-R-G	RPM	WOB
2485.00	2600.00	DRILL	80	11

HOLE CONDITION: Hole Drag Up 4 Down 5 | Torque At Bottom 11200 | Fill On Bottom

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other		
Time	00:15	01:45
Density	1030	1040
Funnel Viscosity	70	73
Fluid Loss		
pH		
Location Of Sample	shaker	shaker
Depth	2500.00	2533.00
PVT	40	39

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
2	SINGLE	127	115	15000	7.00
1	SINGLE	127	115	15000	2.00

Remarks

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
2	6855	@	83	@	2513.00
		@		@	
		@		@	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type
01:15	2494.00	88.60	297.26	DIRECTIONAL
02:45	2513.50	88.20	298.56	DIRECTIONAL
04:15	2532.00	88.38	298.65	DIRECTIONAL
05:45	2551.00	87.98	297.85	DIRECTIONAL
07:00	2570.00	88.10	298.8	DIRECTIONAL

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density
Centrifuge #2	2.00	1040	1000	2100

MUD MATERIALS ADDED

Product	Amount	Type
Calcium Chloride	12	SXB
Truvis	4	SXB

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	450

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
0:00	1:00	1.00	2	Drill 156mm hole, with Smith 156mm MSi613 PDC bit, Weatherford 7/8 lobe, 3.8 stage (rpm at 0.135/L) 1.66m from bit to bend, mud motor, from 2495m to 2514m
1:00	1:15	0.25	7	Rig service function test rig smart anti collision system function test crown saver function test H.C.R 3sec open/close, grease all moving parts check fluid levels in floor motor
1:15	6:45	5.50	2	Drill 156mm hole, with Smith 156mm MSi613 PDC bit, Weatherford 7/8 lobe, 3.8 stage (rpm at 0.135/L) 1.66m from bit to bend, mud motor, from 2514m to2600 m
6:45	7:45	1.00	20A	Accumulated directional surveys
7:45	8:00	0.25	21	Crew handover meeting with both crews, tool push, conoco reps present.

Remarks
Level one overhead inspection mh
Blew down boilers 2 times @ 50L

SAFETY

Safety Topic	MEHL	MACP
steam use	72	4430

TOUR 2

Tour 2 | Driller: DEVAN SCHLITTER | Start Time: 8:00 | End Time: 16:00

BITS

Bit Number	4
Size	156
IADC Code	
Manufacturer	smith
Type	613
Serial No	jh8402
Jets	12.7 12.7 12.7 11.1 / 12.7 12.7
Depth Out (m)	
Depth In (m)	1909.00
Total Drilled (m)	843.00
Hrs Run Today	6.25
Cumulative Hrs Run	36.75
Entry Date	

CUTTING STRUCTURE: Grade | TD | BDC | Reason Pulled | Inner | Outer | Total Dull Grade | BHA | 22.94

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	156MM BIT	156	32	0.18
1	MUD MOTOR	123	34	8.83
1	NM Pony Monel	119	57	3.10
1	Slick monel	119	67	8.47
1	4.75 gap sub	119	63	0.58
1	4.75 LWD SAWR	128	70	6.15
1	4.75 LWD ABS	129	70	4.78
1	x/o	120	56	0.45
1	Slick monel	119	67	9.50
1	X/O SUB	128	58	0.82
3	4" HW	132	70	27.84
1	Jars	131	59	9.07
1	4" H.W	101	65	9.53
59	Drill Pipe - Stands			1121.72
1	Drill Pipe - Singles			9.53
	Kelly Down			0.00
	Total			2752.33
	Weight of BHA			
	Strength of String			69.00

DRILLING RECORD

From	To	D-R-G	RPM	WOB
2600.00	2752.00	DRILL	80	11

HOLE CONDITION: Hole Drag Up 5 Down 6 | Torque At Bottom 11790 | Fill On Bottom

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other		
Time	08:00	10:00
Density	1030	1045
Funnel Viscosity	75	76
Fluid Loss		
pH		
Location Of Sample	shaker	shaker
Depth	2609.00	2628.00
PVT	36	35

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	SINGLE	127	125	17000	7.00

Remarks

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
1	3451	@	53	@	2625.00
		@		@	
		@		@	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type
08:15	2589.00	88.10	299	DIRECTIONAL
10:15	2608.00	88.30	299	DIRECTIONAL
11:15	2627.00	88.40	298.6	DIRECTIONAL
12:15	2646.00	88.50	297	DIRECTIONAL
13:15	2665.00	88.80	298.6	DIRECTIONAL
14:00	2684.00	87.90	297.3	DIRECTIONAL

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density
Centrifuge #1	3.00	1045	990	1700

MUD MATERIALS ADDED

Product	Amount	Type

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	450

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
8:00	9:30	1.50	2	Drill 156mm hole, with Smith 156mm MSi613 PDC bit, Weatherford 7/8 lobe, 3.8 stage (rpm at 0.135/L) 1.66m from bit to bend, mud motor, from 2600m to 2628m
9:30	9:45	0.25	7	Rig service function test rig smart anti collision system function test crown saver function test pipe rams 6sec O/C grease all moving parts check fluid levels in floor motor
9:45	14:30	4.75	2	Drill 156mm hole, with Smith 156mm MSi613 PDC bit, Weatherford 7/8 lobe, 3.8 stage (rpm at 0.135/L) 1.66m from bit to bend, mud motor, from 2628m to 2752m
14:30	16:00	1.50	20A	Accumulated directional surveys

Remarks
Level 1 inspection on tongs and overhead equipment D.S
held weekly safety meating with all lease presanel
Blew down boilers 2 times 100L

SAFETY

Safety Topic	MEHL	MACP
rs	72	4430

TOUR 3

Tour 3 | Driller: MARCUS HALLOWES | Start Time: 16:00 | End Time: 24:00

BITS

Bit Number	4
Size	156
IADC Code	
Manufacturer	smith
Type	613
Serial No	jh8402
Jets	12.7 12.7 12.7 11.1 / 12.7 12.7
Depth Out (m)	
Depth In (m)	1909.00
Total Drilled (m)	986.00
Hrs Run Today	6.75
Cumulative Hrs Run	43.50
Entry Date	

CUTTING STRUCTURE: Grade | TD | BDC | Reason Pulled | Inner | Outer | Total Dull Grade | BHA | 22.67

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	156MM BIT	156	33	0.19
1	MUD MOTOR	123	34	8.83
1	NM Pony Monel	119	57	3.10
1	Slick monel	119	67	8.47
1	4.75 gap sub	119	63	0.58
1	4.75 LWD SAWR	128	70	6.15
1	4.75 LWD ABS	129	70	4.78
1	x/o	120	56	0.45
1	Slick monel	119	67	9.50
1	X/O SUB	128	58	0.82
3	4" HW	132	70	27.84
1	Jars	131	59	9.07
1	4" H.W	101	65	9.53
67	Drill Pipe - Stands			1273.96
0	Drill Pipe - Singles			0.00
	Kelly Down			0.00
	Total			2895.04
	Weight of BHA			
	Strength of String			69.00

DRILLING RECORD

From	To	D-R-G	RPM	WOB
2752.00	2895.00	DRILL	80	11

HOLE CONDITION: Hole Drag Up 5 Down 8 | Torque At Bottom 12250 | Fill On Bottom

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other		
Time	16:00	18:00
Density	1025	1035
Funnel Viscosity	72	70
Fluid Loss		
pH		
Location Of Sample	shaker	shaker
Depth	2756.00	2790.00
PVT	45	42

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	SINGLE	127	127	17300	8.00

Remarks

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
1	4975	@	60	@	2788.00
		@		@	
		@		@	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type
17:15	2740.00	88.00	298.5	DIRECTIONAL
17:45	2759.00	88.20	299.4	DIRECTIONAL
18:30	2778.50	88.50	301.3	DIRECTIONAL
20:00	2798.50	88.70	300.3	DIRECTIONAL
20:15	2807.50	89.20	301.3	DIRECTIONAL
21:30	2837.00	89.31	302.48	DIRECTIONAL

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density

MUD MATERIALS ADDED

Product	Amount	Type
Versacoat HF	1	bbl

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	450

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
16:00	17:15	1.25	2	Drill 156mm hole, with Smith 156mm MSi613 PDC bit, Weatherford 7/8 lobe, 3.8 stage (rpm at 0.135/L) 1.66m from bit to bend, mud motor, from 2752m to 2780m
17:15	17:30	0.25	7	Rig service function test rig smart anti collision system function test crown saver function test hydrill 13sec open/close, grease all moving parts check fluid levels in floor motor
17:30	23:00	5.50	2	Drill 156mm hole, with Smith 156mm MSi613 PDC bit, Weatherford 7/8 lobe, 3.8 stage (rpm at 0.135/L) 1.66m from bit to bend, mud motor, from 2780m to 2895m
23:00	24:00	1.00	20A	Accumulated directional survey time

Remarks
Level one inspection on overheade equipment and tongs MH
Blow down boilers 2 times 100L

SAFETY

Safety Topic	MEHL	MACP
Working at heights	71	4256

FRONT PAGE SUMMARY

Your Stand Serial Number: BEAV2_20140119_1A | Vendor Software Version: RMS 2013.8.14.27104 | Year: 2014 | Month: 01 | Day: 19

License No: WID-2082 | Well Name: COPRC Dodo Canyon E-76 65-10 126-45 | Surface Location: E-76-65-10-126-45 | Prov: NT | Lic Type: CLSS | Unique Well Id:

Operator: Conoco Canada | Contractor: Beaver Drilling Ltd. | Rig No: 2 | Well Type: HORIZ | Re-Entry: ☐

Operator's AFE: 10351817 | Contractor's Job No: 151 | Spud Date Time: 28-Dec-2013 06:30

Signature Of Operator's Representative: RICHARD TURGEON | Signature Of Contractor's Rig Manager: TONY HIEMSTRA | Rig Release Date Time:

DAILY CHECKS — OP RIG

	OP	RIG
(1.) Daily Walk Around Inspection		
(5.) Detailed Inspection - Weekly (Using Check List)		
(3.) H2S Signs Posted (If Required)		
(4.) Well Licence & Stick Diagram Posted		
(5.) Flare Lines Rigged		
(6.) BOP Drills Performed		
(7.) Visually Inspected BOPs-Flare Lines & Degasser Lines		
(1.) Rig Site Health & Safety Meeting (once/month)		TH
(2.) CAODC Rig Safety Inspection Checklist (once/month)		
(3.) Hoist Inspection before Raising or Lowering		
(4.) Crown Saver Checked		TH
(5.) Motor Kills Checked		

Kelly Bushing: | Rig Floor:

HOURS

Code	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	TOTAL
	Rig Up	Drill Actual	Reaming	Coring	Cond Mud & Circ	Trips	Rig Service	Repair Rig	Cut Off Drlg Line	Dev Survey	Wireline Logs	Run Csg & Cement	Wait On Cement	Nipple BOP	Test BOP	Drillstem Test	Plug Back	Squeeze Cement	Fishing	Dir Work	Safety Meeting	Tear Down	Welding On	Rig Watch	Other	
Tour 1		6.50					0.25													1.00	0.25					8.00
Tour 2		6.25					0.25													1.50						8.00
Tour 3		6.75					0.25													1.00						8.00
TOTAL		19.50					0.75													3.50	0.25					24.00

FULL 24 HOURS

Rig: 175 | Boiler: 180 | Time: 06:15 | Temp: -20 | Current Conditions: OVERCAST | Wind Direction: NW | Wind Strength: UP TO 19 KM/H | Road Condition: GOOD

TOUR 1

Driller: MARCUS HALLOWES

START TIME: 0:00 | END TIME: 8:00

BITS

Bit Number	4
Size	156
IADC Code	
Manufacturer	smith
Type	613
Serial No	jh8402
Jets	12.7 12.7 12.7 13.1 / 12.7 12.7
Depth Out (m)	
Depth In (m)	1909.00
Total Drilled (m)	691.00
Hrs Run Today	6.50
Cumulative Hrs Run	30.50
Entry Date	

CUTTING STRUCTURE: Grade | TO | OD | BDC | Pressure Drop | LOC | Total Rev in Bit | BRG | 22.84

WEAR UNIT

From	To	D-R-C	RPM	WOB

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	156MM BIT	156	32	0.19
1	MUD MOTOR	123	34	8.93
1	NM Pony Monel	119	57	3.10
1	Slick monel	119	67	9.47
1	4.75 gap sub	119	63	0.58
1	4.75 LWD SAWR	128	70	8.15
1	4.75 LWD ABS	129	70	4.79
1	x/o	120	56	0.45
1	Slick monel	119	67	8.50
1	X/O SUB	128	58	0.82
3	4" HW	132	70	27.94
1	Jars	131	59	5.07
1	4" H.W	101	65	8.53
51	Drill Pipe		Stands	969.53
1	Drill Pipe		Singles	9.51

Kelly Down: 0.00 | Total: 2600.12 | Weight of DC: | Weight of String: 69.00

HOLE CONDITION: Hole Drag Up: 4 Down: 5 | Torque At Bottom: 11200 | Fill On Bottom:

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other:

Time	03:30
Density	1020
Funnel Viscosity	75
Fluid Loss	
pH	
Location Of Sample	shaker
Depth	2552.00
PVT	38

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
2	SINGLE	127	115	15000	7.00
1	SINGLE	127	115	15000	2.00

Remarks

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
2	6855	@	83	@	2813.00
		@		@	
		@		@	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density
Centrifuge #2	2.00	1040	1000	2100

MUD MATERIALS ADDED

Product	Amount	Type

BOILER

BoilerNo	HoursRun	pH	StackTemp

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequence & Remarks

Remarks
Level one overhead inspection mh
Blew down boilers 2 times @ 50L

SAFETY

Safety Topic	MEHL	MACP
steam use	72	4430

TOUR 2

Driller: DEVAN SCHLITTER

START TIME: 8:00 | END TIME: 16:00

BITS

Bit Number	4
Size	156
IADC Code	
Manufacturer	smith
Type	613
Serial No	jh8402
Jets	12.7 12.7 12.7 13.1 / 12.7 12.7
Depth Out (m)	
Depth In (m)	1909.00
Total Drilled (m)	843.00
Hrs Run Today	6.25
Cumulative Hrs Run	36.75
Entry Date	

CUTTING STRUCTURE: Grade | TO | OD | BDC | Pressure Drop | LOC | Total Rev in Bit | BRG | 22.84

WEAR UNIT

From	To	D-R-C	RPM	WOB

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	156MM BIT	156	32	0.19
1	MUD MOTOR	123	34	8.93
1	NM Pony Monel	119	57	3.10
1	Slick monel	119	67	9.47
1	4.75 gap sub	119	63	0.58
1	4.75 LWD SAWR	128	70	8.15
1	4.75 LWD ABS	129	70	4.79
1	x/o	120	56	0.45
1	Slick monel	119	67	8.50
1	X/O SUB	128	58	0.82
3	4" HW	132	70	27.94
1	Jars	131	59	5.07
1	4" H.W	101	65	8.53
59	Drill Pipe		Stands	1121.72
1	Drill Pipe		Singles	9.53

Kelly Down: 0.00 | Total: 2752.33 | Weight of DC: | Weight of String: 69.00

HOLE CONDITION: Hole Drag Up: 5 Down: 6 | Torque At Bottom: 11790 | Fill On Bottom:

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other:

Time	12:00	14.00
Density	1045	1030
Funnel Viscosity	79	80
Fluid Loss		
pH		
Location Of Sample	shaker	shaker
Depth	2666.00	2704.00
PVT	40	45

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	SINGLE	127	125	17000	7.00

Remarks

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
1	3451	@	53	@	2828.00
		@		@	
		@		@	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type
14:45	2703.00	88.30	297.5	DIRECTIONAL
15:30	2721.00	88.50	298.6	DIRECTIONAL

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density
Centrifuge #1	3.00	1045	990	1700

MUD MATERIALS ADDED

Product	Amount	Type

BOILER

BoilerNo	HoursRun	pH	StackTemp

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequence & Remarks

Remarks
Level 1 inspection on tongs and overhead equipment D.S
held weekly safety meeting with all lease presanel
Blew down boilers 2 times 100L

SAFETY

Safety Topic	MEHL	MACP
trs	72	4430

TOUR 3

Driller: MARCUS HALLOWES

START TIME: 16:00 | END TIME: 24:00

BITS

Bit Number	4
Size	156
IADC Code	
Manufacturer	smith
Type	613
Serial No	jh8402
Jets	12.7 12.7 12.7 13.1 / 12.7 12.7
Depth Out (m)	
Depth In (m)	1909.00
Total Drilled (m)	986.00
Hrs Run Today	6.75
Cumulative Hrs Run	43.50
Entry Date	

CUTTING STRUCTURE: Grade | TO | OD | BDC | Pressure Drop | LOC | Total Rev in Bit | BRG | 22.67

WEAR UNIT

From	To	D-R-C	RPM	WOB

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	156MM BIT	156	33	0.19
1	MUD MOTOR	123	34	8.93
1	NM Pony Monel	119	57	3.10
1	Slick monel	119	67	9.47
1	4.75 gap sub	119	63	0.58
1	4.75 LWD SAWR	128	70	8.15
1	4.75 LWD ABS	129	70	4.78
1	x/o	120	56	0.45
1	Slick monel	119	67	8.50
1	X/O SUB	128	58	0.82
3	4" HW	132	70	27.94
1	Jars	131	59	5.07
1	4" H.W	101	65	8.53
67	Drill Pipe		Stands	1273.96
0	Drill Pipe		Singles	0.00

Kelly Down: 0.00 | Total: 2895.04 | Weight of DC: | Weight of String: 69.00

HOLE CONDITION: Hole Drag Up: 5 Down: 8 | Torque At Bottom: 12250 | Fill On Bottom:

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other:

Time	19:45	23:30
Density	1035	1040
Funnel Viscosity	75	75
Fluid Loss		
pH		
Location Of Sample	shaker	shaker
Depth	2837.95	2895.04
PVT	40	38

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	SINGLE	127	127	17300	8.00

Remarks

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
1	4975	@	60	@	2780.00
		@		@	
		@		@	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type
23:00	2855.50	89.20	300.5	DIRECTIONAL

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density

MUD MATERIALS ADDED

Product	Amount	Type

BOILER

BoilerNo	HoursRun	pH	StackTemp

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequence & Remarks

Remarks
Level one inspection on overheade equipment and tongs MH
Blow down boilers 2 times 100L

SAFETY

Safety Topic	MEHL	MACP
Working at heights	71	4258

FRONT PAGE SUMMARY

Your Sheet Serial Number: BEAV2_20140120_1B | Vendor Software Version: RMS 2013.6.14.27104 | Year: 2014 | Month: 01 | Day: 20

Licence No: WID-2082	Well Name: COPRC Dodo Canyon E-76 65-10 126-45	Surface Location: E-76-65-10-126-45	Prov: NT	Lic Type: CLSS	Unique Well Id:	
Operator: Conoco Canada	Contractor: Beaver Drilling Ltd.	Rig No: 2	Well Type: HORIZ	Re-Entry: ☐		
Operator's API#: 10351817	Contractor's Job No: 151	Spud Date Time: 28-Dec-2013 06:30				
Signature Of Operator's Representative: RICHARD TURGEON	Signature Of Contractor's Rig Manager: RICK YAVIS	Rig Release Date Time:				

DAILY CHECKS — OP RM

(1a) Daily Walk Around Inspection — RT TH
(2a) Detailed Inspection—Weekly (Derrick Unit) — RT TH
(3a) H2S Alarm Tested & Recorded — RT TH
(4a) Well Control & Shut Diagrams Posted — RT TH
(5a) Pason Lines Stabbed — RT TH
(6a) BOP Drills Performed — RT TH
(7a) Visually Inspected BOP Surface Lines & Diagrammed Lines — RT TH
(1c) Rig Site Hazard & Safety Meeting (crews/contractor) — TH
(2c) CAODC Rig Safety Preparation Checklist (crew/supervisor) — TH
(3c) Mast Inspection before Raising or Lowering — TH
(4c) Crown Saver Checked — TH
(5c) Master Kills Checked — TH

Daily Inc Cost: | Cum Cost:

HOURS

	Rig Up	Drill Ahead	Reaming	Coring	Cond Mud & Circ	Trips	Rig Service	Repair Rig	Cut Off Drlg Line	Dev Survey	Wireline Logs	Run Csg & Cement	Wait On Cement	Nipple BOP	Test BOP	Drillstem Test	Plug Back	Squeeze Cement	Fishing	Dir Work	Safety Meeting	Tear Down	Waiting On	Rig Maint.	Other	TOTAL
Tour 1		0.75			0.50	5.00	0.25		0.75												0.75					8.00
Tour 2					2.00	5.50	0.25														0.25					8.00
Tour 3						6.75	0.25														1.00					8.00
TOTAL		0.75			2.50	17.25	0.75		0.75												2.00					24.00

FLEET @ 09:30 HRS

Rig: 185 | Meter: 190 | Time: 05:45 | Temp: -16 | Current Conditions: OVERCAST | Wind Direction: NW | Wind Strength: UP TO 19 KM/H | Road Conditions: GOOD

Tour 1

Tour: 1 | Driller: MARCUS HALLOWES | Start Time: 0:00 | End Time: 8:00

BITS

Bit Number	4
Size	156
IADC Code	
Manufacturer	smith
Type	613
Serial No	jh8402
Jets	12.7 12.7 12.7 12.7 12.7 12.7
Depth Out (m)	
Depth In (m)	1909.00
Total Drilled (m)	1001.00
Hrs Run Today	0.75
Cumulative Hrs Run	44.25
Entry Date	

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	156MM BIT	156	33	0.19
1	MUD MOTOR	123	34	8.93
1	NM Pony Monel	119	57	3.10
1	Slick monel	119	67	8.47
1	4.75 gap sub	119	63	0.58
1	4.78 LWD SAWR	128	70	6.15
1	4.75 LWD ABS	129	70	4.78
1	x/o	120	56	0.45
1	Slick monel	119	67	8.50
1	X/O SUB	128	58	0.82
3	4" HW	132	70	27.84
1	Jars	131	59	5.07
1	4" H.W	101	65	8.53
68	Drill Pipe	Bends		1282.89
0	Drill Pipe	Singles		0.00

Kelly Down: -4.07 | Total: 2910.00 | Weight of DC: | Weight of String: 69.00

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other:

Time	01:30
Density	1040
Funnel Viscosity	75
Fluid Loss	
pH	
Location Of Sample	Shaker
Depth	2910.00
PVT	37

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	SWOLE	127	130	17500	2.00

Remarks:

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
1	5150	@	64	@	2909.00
		@		@	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type
00:45	2890.00	87.80	301.07	DIRECTIONAL

SOLIDS CONTROL

Equipment Name	Hours Run	Inside Density	Over Flow Density	Under Flow Density

MUD MATERIALS ADDED

Product	Amount	Type

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	450

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
0:00	0:45	0.75	2	Drill 156mm hole, with Smith 156mm MSi613 PDC bit, Weatherford 7/8 lobe, 3.8 stage (rpm at 0.135/t.) 1.66m from bit to bend, mud motor, from 2895m to 2910m. TD well at 00:42 hrs. Jan. 20 2014
0:45	1:00	0.25	7	Rig service function test rig smart anti collision system function test crown saver, function test H.C.R 3 sec open/close grease all moving parts check fluid level in floor motor
1:00	1:30	0.50	21	Weekly safety meeting, with rig crew and Conoco rep present
1:30	1:45	0.25	21A	B.O.P drill on tripping stabbing valve discused and everyones job while tripping
1:45	2:15	0.50	5	Circulate 2 bottoms up prepair to trip
2:15	4:45	2.50	6B	Trip out of hole from 2910mKB to 1988mKB flow checks at 2904m,2816m,1885m
4:45	5:30	0.75	9A	Slip and cut 45m of drilling line, grease crown and blocks
5:30	8:00	2.50	6A	Wash to bottom from 1909m to 2324m, Rotary at 35rpm pump rate of 1.0m3

Remarks:
Level one overhead inspection MH
Blew down boilers 2 times @ 50L
Trip sheet calc 3.13m3 meas 3.33m3 diff +0.2m3

HOLE CONDITION

Hole Drag: Up 6 Down 9 | Torque At Bottom: 12400 | Fill On Bottom:

DRILLING PARAMETERS

From	To	D-R-C	RPM	WOB
2686.00	2910.00	DRILL	80	11

SAFETY

Safety Topic	MEHL	MACP
Tripping out of hole with top drive, B.O.P drill	74	5246

Tour 2

Tour: 2 | Driller: DEVAN SCHLITTER | Start Time: 8:00 | End Time: 16:00

BITS

Bit Number	4
Size	156
IADC Code	
Manufacturer	smith
Type	613
Serial No	jh8402
Jets	12.7 12.7 12.7 12.7 12.7 12.7
Depth Out (m)	
Depth In (m)	1909.00
Total Drilled (m)	1001.00
Hrs Run Today	
Cumulative Hrs Run	44.25
Entry Date	

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	156MM BIT	156	33	0.19
1	MUD MOTOR	123	34	8.93
1	NM Pony Monel	119	57	3.10
1	Slick monel	119	67	8.47
1	4.75 gap sub	119	63	0.58
1	4.75 LWD SAWR	128	70	6.15
1	4.75 LWD ABS	129	70	4.78
1	x/o	120	56	0.45
1	Slick monel	119	67	8.50
1	X/O SUB	128	58	0.82
3	4" HW	132	70	27.84
1	Jars	131	59	5.07
1	4" H.W	101	65	8.53
68	Drill Pipe	Bends		1282.89
0	Drill Pipe	Singles		0.00

Kelly Down: 0.00 | Total: 2919.22 | Weight of DC: | Weight of String:

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other:

Time	08:00	13:00
Density	1045	1060
Funnel Viscosity	80	82
Fluid Loss		
pH		
Location Of Sample	shaker	shaker
Depth	2910.00	2910.00
PVT	40	42

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	SWOLE	127	125	16000	5.00

Remarks:

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
1	3873	@	62	@	2324.00
		@		@	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Inside Density	Over Flow Density	Under Flow Density

MUD MATERIALS ADDED

Product	Amount	Type
Barite	40	bags

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	450

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
8:00	8:15	0.25	7	Rig service function test rig smart anti collision system function test crown saver, function test pipe rams 6sec open/close grease all moving parts check fluid level in floor motor
8:15	11:30	3.25	6A	Wash to bottom from 2324m, Rotary at 35rpm pump rate of 1.0m3
11:30	13:30	2.00	5	Circulate hole clean, 3 bottoms up
13:30	15:15	1.75	6B	Trip out of hole to 2435m, with flow check at 2758m
15:15	15:30	0.25	21	Crew change over and safety meeting with crews and Conoco rep.
15:30	16:00	0.50	6B	Continue to trip out of the hole, with flow checks

Remarks:
Level 1 inspection on tong and overhead equipment D.S
Blew down boilers 2 times 50L

HOLE CONDITION

Hole Drag: Up Down | Torque At Bottom: | Fill On Bottom:

DRILLING PARAMETERS

From	To	D-R-C	RPM	WOB

SAFETY

Safety Topic	MEHL	MACP
Tripping out of hole	74	5246

Tour 3

Tour: 3 | Driller: DEVAN SCHLITTER | Start Time: 16:00 | End Time: 24:00

BITS

Bit Number	4
Size	156
IADC Code	
Manufacturer	smith
Type	613
Serial No	jh8402
Jets	12.7 12.7 12.7 12.7 12.7 12.7
Depth Out (m)	2910.00
Depth In (m)	1909.00
Total Drilled (m)	1001.00
Hrs Run Today	
Cumulative Hrs Run	44.25
Entry Date	

TD	1	Bearings	0
IADC	2	Gauge	NO
LOC	W/T	Reason Pulled	TD
Bit#	8	Total Run (hrs)	22.62
	X		

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	156MM BIT	156	33	0.19
1	MUD MOTOR	123	34	8.93
1	NM Pony Monel	119	57	3.10
1	Slick monel	119	67	8.47
1	4.75 gap sub	119	63	0.58
1	4.75 LWD SAWR	128	70	6.15
1	4.75 LWD ABS	129	70	4.78
1	x/o	120	56	0.45
1	Slick monel	119	67	8.50
1	X/O SUB	128	58	0.82
3	4" HW	132	70	27.84
1	Jars	131	59	5.07
1	4" H.W	101	65	8.53
68	Drill Pipe	Bends		1282.89
0	Drill Pipe	Singles		0.00

Kelly Down: 0.00 | Total: 2919.22 | Weight of DC: | Weight of String:

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other:

Time	
Density	
Funnel Viscosity	
Fluid Loss	
pH	
Location Of Sample	
Depth	
PVT	

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run

Remarks:

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
		@		@	
		@		@	
		@		@	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Inside Density	Over Flow Density	Under Flow Density

MUD MATERIALS ADDED

Product	Amount	Type

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	450

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
16:00	17:30	1.50	6B	Continue to trip out of hole, with flow check at 1668m
17:30	18:15	0.75	21	Safety stand down safety meeting with, rig crew, rig manager, Conoco well site supervisors and Conoco Calgary Staff
18:15	18:30	0.25	21A	BOP drill crew in position well secure in 90 sec function test motor kills operating properly
18:30	18:45	0.25	7	Rig service, check brake linkage and crown saver
18:45	23:00	4.25	6B	Continue to trip out of hole, with flow check at 86m
23:00	24:00	1.00	6D	Lay down directional tools, flow check OOH, close/open blind rams, 6 sec., monitor well

Remarks:
Level 1 inspection on tongs and overhead D.S
Blew down Boilers 2 times 50 litres

HOLE CONDITION

Hole Drag: Up Down | Torque At Bottom: | Fill On Bottom:

DRILLING PARAMETERS

From	To	D-R-C	RPM	WOB

SAFETY

Safety Topic	MEHL	MACP
lay down directional tools		5246

FRONT PAGE SUMMARY

Tour Sheet Serial Number: BEAV2_20140121_1C | Version Software Version: RMS 2013.8.14.27104 | Year: 2014 | Month: 01 | Day: 21

License No: WID-2082	Well Name: COPRC Dodo Canyon E-76 65-10 126-45	Surface Location: E-76-65-10-126-45	Prov: NT	Lat Type: CLSS	Unique Well Id	
Operator: Conoco Canada	Contractor: Beaver Drilling Ltd.	Rig No: 2	Well Type: HORIZ	Re-Entry: ☐		
Operator's AFE: 10351817	Contractor's Job No: 151	Spud Date Time: 28-Dec-2013	06:30			
Signature Of Operator's Representative: RICHARD TURGEON	Signature Of Contractor's Rig Manager: RICK YAVIS	Rig Release Date Time				

DAILY CHECKS — DP RM

(1.) Daily Web Around Inspection — RT / RY
(2.) Detailed Inspection - Weekly (Using Check List) — RT / RY
(3.) H2S Signs Posted If Required — RT / RY
(4.) Well Licence & Stck Diagram Posted — RT / RY
(5.) Flare Lines Staked — RT / RY
(6.) BOP Drills Performed — RT / RY
(7.) Visually Inspected BOPs-Flare Lines & Degasser Lines — RT / RY
(1.) Rig Site Health & Safety Meeting (once every 28 d) — RY
(2.) CADDC Rig Safety Inspection Checklist (once/quarter) — RY
(3.) Most Inspection before Raising or Lowering — RY
(4.) Crown Saver Checked — RY
(5.) Motor Kills Checked — RY

HOURS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	TOTAL
	Rig Up	Drill Actual	Reaming	Coring	Cond Mud & Circ	Trips	Rig Service	Repair Rig	Cut Off Drlg Line	Dev Survey	Wireline Logs	Run Csg & Cement	Wait On Cement	Nipple BOP	Test BOP	Drillstem Test	Plug Back	Squeeze Cement	Fishing	Dir Work	Safety Meeting	Tear Down	Waiting On	Rig Watch	Other	
Tour 1							0.25				7.00										0.75					8.00
Tour 2							0.25					7.50									0.25					8.00
Tour 3					0.25	6.00	0.25					1.25									0.25					8.00
TOTAL					0.25	6.00	0.75				7.00	8.75									1.25					24.00

FUEL @ 08:00 HRS: Rig 202 | Meter 182 | Temp 05:00 | Wind -31 | Current Conditions: CLEAR | Wind Direction: N | Wind Strength: UP TO 19 KMH | Road Condition: GOOD

TOUR 1

DRILLER: BRIAN BERGSETH — START TIME: 0:00 — END TIME: 8:00

BITS

Bit Number	
Size	
IADC Code	
Manufacturer	
Type	
Serial No	
Jets	
Depth Out (m)	
Depth In (m)	
Total Drilled (m)	
Hrs Run Today	
Cumulative Hrs Run	
Entry Date	

CUTTING STRUCTURE: In | Chars | TO | ODC | MDC | Reason Pulled | LOC | Tool Pushed | BHA

DRILLING CONTROLS

From	To	D-R-C	RPM	WOB

DRILLING ASSEMBLY

No	Component	OD	ID	Length

Drill Pipe: Stands | Drill Pipe: Singles | Kelly Down | Total | Weight of DC | Weight of String

HOLE CONDITION: Hole Drag Up / Down | Torque At Bottom | Fill On Bottom

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other

Time	
Density	
Funnel Viscosity	
Fluid Loss	
pH	
Location Of Sample	
Depth	
PVT	

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	PARALLEL	127	1	0	0.00
2	PARALLEL	127	1	0	0.00

Remarks

REDUCED PUMP SPEED

Pump #	Pressure	Strokes/min	Depth
	@	@	
	@	@	
	@	@	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density

MUD MATERIALS ADDED

Product	Amount	Type

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	450

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
0:00	0.15	0.25	7	Rig service function test blind ram's 3 sec to close & motor kills & crown saver
0:15	0:30	0.25	21A	Held BOP drill, while out of the hole, 45 sec.
0:30	0.45	0.25	21	Safety meeting with Schlumberger, on logging
0:45	7:45	7.00	11	Usit log with schlumberger, to point of refusal, 1824mMD (approx. 67 deg) at 03:00 Hrs, January 21 2014.
7:45	8:00	0.25	21	Crew change hand over meeting safety meeting with crews and Conoco rep.

Remarks: blow down boilers 200 l

SAFETY

Safety Topic	MEHL	MACP
b.o.p drill & logging j.s.e # 153 & Lca		5246

TOUR 2

DRILLER: DEVAN SCHLITTER — START TIME: 8:00 — END TIME: 16:00

BITS

Bit Number	
Size	
IADC Code	
Manufacturer	
Type	
Serial No	
Jets	
Depth Out (m)	
Depth In (m)	
Total Drilled (m)	
Hrs Run Today	
Cumulative Hrs Run	
Entry Date	

CUTTING STRUCTURE: In | Chars | TO | ODC | MDC | Reason Pulled | LOC | Tool Pushed | BHA

DRILLING CONTROLS

From	To	D-R-C	RPM	WOB

DRILLING ASSEMBLY

No	Component	OD	ID	Length
3	4" HW	132	70	27.84
1	4" H.W	101	65	9.53
126	4 " D.P	101	70	1943.10
36	4" HW	132	70	335.45
1	4 " D.P	101	70	5.15

68	Drill Pipe Stands	1292.89
0	Drill Pipe Singles	0.00
	Kelly Down	0.00
	Total	2870.17
	Weight of DC	
	Weight of String	

HOLE CONDITION: Hole Drag Up / Down | Torque At Bottom | Fill On Bottom

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other

Time	
Density	
Funnel Viscosity	
Fluid Loss	
pH	
Location Of Sample	
Depth	
PVT	

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run

Remarks

REDUCED PUMP SPEED

Pump #	Pressure	Strokes/min	Depth
	@	@	
	@	@	
	@	@	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density

MUD MATERIALS ADDED

Product	Amount	Type

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	450

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
8:00	8:15	0.25	7	Rig service close/open blind rams 6 sec crown saver operating properly
8:15	9:15	1.00	12A	Rig up to run 114.3mm, 17.26kg/m, P-110, LTC casing liner
9:15	9:30	0.25	21	Safety meeting with Hallmark tong hand and Trottier pipe handlers reviewed jse # 97 rig up power tongs and # 99 install shoe/float
9:30	16:00	6.50	12	Run 114.3mm, 17.26kg/m, P-110, LTC casing liner to 1430.50m Break circulation at 590m 1229m

Remarks: Level 1 inspection on tongs and overhead equipment D.S
Blew down boilers 2 times 50 litres

SAFETY

Safety Topic	MEHL	MACP
running casing		5246

TOUR 3

DRILLER: BRIAN BERGSETH — START TIME: 16:00 — END TIME: 24:00

BITS

Bit Number	
Size	
IADC Code	
Manufacturer	
Type	
Serial No	
Jets	
Depth Out (m)	
Depth In (m)	
Total Drilled (m)	
Hrs Run Today	
Cumulative Hrs Run	
Entry Date	

CUTTING STRUCTURE: In | Chars | TO | ODC | MDC | Reason Pulled | LOC | Tool Pushed | BHA

DRILLING CONTROLS

From	To	D-R-C	RPM	WOB

DRILLING ASSEMBLY

No	Component	OD	ID	Length

Drill Pipe: Stands | Drill Pipe: Singles | Kelly Down | Total | Weight of DC | Weight of String

HOLE CONDITION: Hole Drag Up / Down | Torque At Bottom | Fill On Bottom

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other

Time	
Density	
Funnel Viscosity	
Fluid Loss	
pH	
Location Of Sample	
Depth	
PVT	

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	SINGLE	127	63	3000	1.00

Remarks

REDUCED PUMP SPEED

Pump #	Pressure	Strokes/min	Depth
	@	@	
	@	@	
	@	@	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density

MUD MATERIALS ADDED

Product	Amount	Type

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	450

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
16:00	16:15	0.25	7	Rig service, check pipe spinner, slip and tong dies
16:15	16:30	0.25	12B	Make up liner top packer with Weatherford hand
16:30	17:30	1.00	12A	Rig out lay down truck and power tongs, rig up floor to trip in the hole
17:30	17:45	0.25	21	Safety meeting on tripping in the hole/Strap and drift pipe from monkey board
17:45	20:30	2.75	6A	Trip in the hole from 1436m to 1689m with drill pipe to hang Weaterford liner packer and 114.3mm, 17.26kg/m, P-110, LTC casing liner
20.30	20:45	0.25	5D	Break circulation at 1689 m circulate for 10 min.
20:45	24.00	3.25	6A	Trip in hole from 1889m to 2860m with drill pipe to hang Weaterford liner packer and 114.3mm, 17.26kg/m, P-110, LTC casing liner

Remarks: blow down boilers 200 l

SAFETY

Safety Topic	MEHL	MACP
		5246

FRONT PAGE SUMMARY

Tour Sheet Serial Number	BEAV2_20140122_1A	Vendor Software Version	RMS 2013.8.14.27104	Year	2014	Month 01	Day 22
Licence No.	WID-2082	Well Name	COPRC Dodo Canyon E-76 65-10 126-45	Surface Location	E-76-65-10-126-45	From NT	To CLSS
Operator	Conoco Canada	Contractor	Beaver Drilling Ltd.	Rig No 2	Well Type HORIZ	Re-Entry	
Operator's AFE	10351817	Contractor's Job No	151	Spud Date/Time	28-Dec-2013 06:30		
Signature Of Operator's Representative	RICHARD TURGEON	Signature Of Contractor's Rig Manager	RICK YAVIS	Rig Release Date/Time			

DAILY CHECKS — ON RIG

(1L) Daily Well Around Inspection	BT	RV
(2L) Detailed Inspection – Weekly (Using Check List)		
(3L) H2S Signs Posted If Required	BT	RV
(4L) Well Licence & Well Diagram Posted	BT	RV
(5L) Fibre Lines Slacked		
(6L) BOP Drills Performed		
(7L) Weekly Inspected BOP's/ Flare Lines & Diverter Lines	NT	RV
(1L) Rig Site Health & Safety Meeting (minimum weekly)		RV
(2L) CAODC Rig Safety Inspection Checklist (once/tour/crew)		
(3L) Lifting Inspection before Raising or Lowering		
(4L) Crown Saver Checked		PV
(5L) Motor Kills Checked		

Code	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	TOTAL
	Rig Up	Drill Ahead	Reaming	Coring	Cond Mud & Circ	Trips	Rig Service	Repair Rig	Cut Off Drilling Line	Dev Survey	Wireline Logs	Run Csg & Cement	Wait On Cement	Nipple BOP	Test BOP	Drillstem Test	Plug Back	Squeeze Cement	Fishing	Dir. Work	Safety Meeting	Tour Down	Welding On	Rig Maint.	Other	
Tour 1					3.00	0.50	0.25					3.75									0.50					8.00
Tour 2						6.50	0.75					0.50									0.25					8.00
Tour 3						5.50	0.25					2.00									0.25					8.00
TOTAL					3.00	12.50	1.25					6.25									1.00					24.00

FUEL @ 08:00 HRS: Rig 170 | Camp 120 | Total 06:00 | Camp 120 | Change 24 hrs -25

WEATHER: Conditions CLEAR | Wind Direction N | Wind Strength CALM | Road Conditions GOOD

Tour 1

Driller: BRIAN BERGSETH | Start: 0:00 | End: 8:00

BITS

Bit Number	
Size	
IADC Code	
Manufacturer	
Type	
Serial No	
Jets	
Depth Out (m)	
Depth In (m)	
Total Drilled (m)	
Hrs Run Today	
Cumulative Hrs Run	
Entry Date	

DRILLING ASSEMBLY

No	Component	OD	ID	Length

Drill Pipe: Stands | Drill Pipe: Singles | Kelly Down | Total | Weight of DC | Weight of String

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other

Time	02:00
Density	1060
Funnel Viscosity	65
Fluid Loss	
pH	
Location Of Sample	shaker
Depth	2910.00
PVT	43

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	SINGLE	127	64	4200	2.00

Remarks

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density

MUD MATERIALS ADDED

Product	Amount	Type

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequence & Remarks
0:00	0.30	0.50	6A	Rig up Hallmark power tongs, make up 1-114.3mm float shoe, 1-joint of 114.3mm, 17.26kg/m, P-110, LTC production liner and 1-114.3mm float collar and then run 102-joints of 114.3mm, 17.26kg/m, P-110, LTC production liner from 2909.32m to 1477.35m. Run 109 x Volant Hydroform centralizers from 1511m to 1908m, fill pipe every 20 joints and break circulation every 600m.
0.30	0:45	0.25	7	Rig Service function test hydril 14 sec & crown saver
0:45	3:45	3.00	5D	Tag bottom at 2910mMD, circulate bottoms up and clean hole.
3.45	4:00	0.25	21	Held safety meeting with Schlumberger cementers prior to cementing 114.3mm production liner
4:00	6:30	2.50	12	Rig up Schlumberger cementers and cement 114.3mm liner, pump 8m3 of 1000kg/m3 CW8 pre-flush, stop pressure test lines to 35,000kpa, (held ok), bleed off pressure, pump 5m3 of 1200kg/m3 of MUDPUSH II pre-flush spacer and then pump 21 tonne/15.6m3 (20% excess) of 1900kg/m3 Conventional Class G tail cement with 0.6% Fluid Loss + 0.5% Dispersant + 0.2% Anti-foam + 0.2% Retarder + 72L/tonne Gas Control Agent from 2909.32m to 1477.35m. Drop dart and displace 18.88m3 of fresh water. Bump plug at 3,500kpa over final circulating pressure of 11,200kpa at 07:30 Hrs. January 22 2014, bleed off pressure and check floats (holding ok). Presaure up to 26,000kpa and set liner with liner top packer. Circulate out pre-flush and 2m3 of excess cement
6:30	7:45	1.25	12	Displace hole with fresh water
7:45	8:00	0.25	21D	Crew change hand over meeting safety meeting wth crews and Conoco rep.

Remarks: blow down boilers 200 l string wt going up 57 daN 51 daN GOING DOWN

CUTTING STRUCTURE

B	Gauge
TO	BDC
MDC	Ring Out
LOC	Tool Runnings
BRG	

REDUCED PUMP SPEED

Pump #	Pressure	Strokes/min	Depth
	@	@	
	@	@	
	@	@	

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	450

SAFETY

Safety Topic	MEHL	MACP
cementing		5246

DRILLING BREAKS

From	To	D-R-C	RPM	WOB

HOLE CONDITION

Hole Drag: Up | Down | Torque At Bottom | Fill On Bottom

Tour 2

Driller: DEVAN SCHLITTER | Start: 8:00 | End: 16:00

BITS

Bit Number	
Size	
IADC Code	
Manufacturer	
Type	
Serial No	
Jets	
Depth Out (m)	
Depth In (m)	
Total Drilled (m)	
Hrs Run Today	
Cumulative Hrs Run	
Entry Date	

DRILLING ASSEMBLY

No	Component	OD	ID	Length

Drill Pipe: Stands | Drill Pipe: Singles | Kelly Down | Total | Weight of DC | Weight of String

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other

Time	
Density	
Funnel Viscosity	
Fluid Loss	
pH	
Location Of Sample	
Depth	
PVT	

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run

Remarks

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density

MUD MATERIALS ADDED

Product	Amount	Type

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequence & Remarks
8:00	8:15	0.25	7	Rig service
8:15	8:45	0.50	12	Rig cut cementers, flow check
8:45	9:15	0.50	7A	Clean and prepare floor to lay down drill pipe, rig up laydown truck
9:15	9:30	0.25	21	Safety meeting with Trottier lay down truckers
9:30	11:45	2.25	6F	Lay down 86 drill pipe used to hang liner
11:45	13:45	2.00	6A	Run in the hole 36 stands of drill pipe out of derrick
13:45	15:30	1.75	6F	Lay down 72 drill pipe with Trottier lay down trucker
15:30	16:00	0.50	6A	Run in the hole the 37 stands of drill pipe in derrick

Remarks: Level 1 inspection on tongs and overhead equipment D.S
Blew boilers 2 times 50L

CUTTING STRUCTURE

B	Gauge
TO	BDC
MDC	Ring Out
LOC	Tool Runnings
BRG	

REDUCED PUMP SPEED

Pump #	Pressure	Strokes/min	Depth
	@	@	
	@	@	
	@	@	

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	450

SAFETY

Safety Topic	MEHL	MACP
Lay down Drill Pipe		

DRILLING BREAKS

From	To	D-R-C	RPM	WOB

HOLE CONDITION

Hole Drag: Up | Down | Torque At Bottom | Fill On Bottom

Tour 3

Driller: BRIAN BERGSETH | Start: 16:00 | End: 24:00

BITS

Bit Number	
Size	
IADC Code	
Manufacturer	
Type	
Serial No	
Jets	
Depth Out (m)	
Depth In (m)	
Total Drilled (m)	
Hrs Run Today	
Cumulative Hrs Run	
Entry Date	

DRILLING ASSEMBLY

No	Component	OD	ID	Length

Drill Pipe: Stands | Drill Pipe: Singles | Kelly Down | Total | Weight of DC | Weight of String

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other

Time	
Density	
Funnel Viscosity	
Fluid Loss	
pH	
Location Of Sample	
Depth	
PVT	

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run

Remarks

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density

MUD MATERIALS ADDED

Product	Amount	Type

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequence & Remarks
16:00	16:45	0.75	6A	Run in the hole the 37 stands of drill pipe in derrick
16:45	17:00	0.25	7	Rig service
17:00	21:45	4.75	6F	Lay down drill pipe and HWDP with Trottier lay down truck
21:45	22:45	1.00	12A	Rig up Hallmark power tongs and Trottier lay down truck to run 114.3mm ss back casing
22:45	23:00	0.25	21	Held safety meeting with Hallmark power tongs and Trottier lay down truck prior to handle 114.3mm casing
23:00	24:00	1.00	12B	Rig up Stream-Flo Pack off seal to landing joint, run in to upper casing bowl and measure out

Remarks: blow down boilers 200 l

CUTTING STRUCTURE

B	Gauge
TO	BDC
MDC	Ring Out
LOC	Tool Runnings
BRG	

REDUCED PUMP SPEED

Pump #	Pressure	Strokes/min	Depth
	@	@	
	@	@	
	@	@	

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	450

SAFETY

Safety Topic	MEHL	MACP
lay down d.p & run casing		

DRILLING BREAKS

From	To	D-R-C	RPM	WOB

HOLE CONDITION

Hole Drag: Up | Down | Torque At Bottom | Fill On Bottom

FRONT PAGE SUMMARY

License No: WID-2082	Well Name: COPRC Dodo Canyon E-76 65-10 126-45	Your Rig Serial Number: BEAV2_20140122_1A	Vendor Software Version: RMS 2013.6.14.27104	Year: 2014	Month: 01	Day: 22			
Operator: Conoco Canada		Surface Location: E-76-65-10-126-45	Prov: NT	Lsd Type: CLSS	Unique Well Id:				
Operator's AFE: 10351817		Contractor: Beaver Drilling Ltd.	Rig No: 2	Well Type: HORIZ	Re-Entry: ☐				
Signature Of Operator's Representative: RICHARD TURGEON		Contractor's Job No: 151	Spud Date Time: 28-Dec-2013	06:30					
		Signature Of Contractor's Rig Manager: RICK YAVIS	Rig Release Date Time:						

DAILY CHECKS — DP / RM

- (1.) Daily Walk Around Inspection — RT / RT
- (1.) Detailed Inspection - Weekly (Using Check List) — / —
- (3.) H2S Signs Posted If Required — / —
- (4.) Well License & Block Diagram Posted — RT / RT
- (5.) Flare Lines Staked — RT / RT
- (6.) BOP Drills Performed — / —
- (7.) Visually Inspected BOPs-Flare Lines & Degasser Lines — RT / RT
- (1.) Rig Site Health & Safety Meeting (once/month) — RT / —
- (2.) CAODC Rig Safety Inspection Checklist (once/month) — / —
- (3.) Meet Inspector before Raising or Lowering — / —
- (4.) Crown Saver Checked — RT / —
- (5.) Motor Kills Checked — / —

CAODC

NOV

HOURS

	Rig Up	Drill Actual	Reaming	Coring	Cond Mud & Circ	Trips	Rig Service	Repair Rig	Cut Off Drlg Line	Dev Survey	Wireline Logs	Run Csg & Cement	Wait On Cement	Nipple BOP	Test BOP	Drillstem Test	Plug Back	Squeeze Cement	Fishing	Dir Work	Safety Meeting	Tear Down	Waiting On	Rig Watch	Other	TOTAL
Tour 1					3.00	0.50	0.25					3.75									0.50					8.00
Tour 2						6.50	0.75					0.50									0.25					8.00
Tour 3						5.50	0.25					2.00									0.25					8.00
TOTAL					3.00	12.50	1.25					6.25									1.00					24.00

FUEL @ 08:00 HRS: In 170 — Used 120

WEATHER: Time 06:00 — Temp -25 — General Conditions: CLEAR — Wind Direction: N — Wind Strength: CALM — Road Conditions: GOOD

TOUR 1

Driller: BRIAN BERGSETH — Start Time: 0:00 — End Time: 8:00

BITS

Bit Number	Size	IADC Code	Manufacturer	Type	Serial No	Jets	Depth Out (m)	Depth In (m)	Total Drilled (m)	Hrs Run Today	Cumulative Hrs Run	Entry Date

CUTTING STRUCTURE: In | Chars | TO | ODC | MDC | Pressure Pulse | LOC | Total Rot Hrs | BHA

DRILLING ASSEMBLY

No	Component	OD	ID	Length

Drill Pipe: Stands — Drill Pipe: Singles — Kelly Down — Total — Weight of DC — Weight of String

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other

Time	
Density	
Funnel Viscosity	
Fluid Loss	
pH	
Location Of Sample	
Depth	
PVT	

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	SINGLE	127	64	4200	2.00

Remarks

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density

MUD MATERIALS ADDED

Product	Amount	Type

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks

Remarks: blow down boilers 200 l string wt going up 57 daN 51 daN GOING DOWN

WIPER TRIPS

From	To	D-R-C	RPM	WOB

HOLE CONDITION

Hole Drag: Up — Down — Torque At Bottom — Fill On Bottom

REDUCED PUMP SPEED

Pump #	Pressure	Strokes/min	Depth
	@	@	
	@	@	
	@	@	

BOILER

BoilerNo	HoursRun	pH	StackTemp

SAFETY

Safety Topic	MEHL	MACP
cementing		5246

TOUR 2

Driller: DEVAN SCHLITTER — Start Time: 8:00 — End Time: 16:00

BITS

Bit Number	Size	IADC Code	Manufacturer	Type	Serial No	Jets	Depth Out (m)	Depth In (m)	Total Drilled (m)	Hrs Run Today	Cumulative Hrs Run	Entry Date

CUTTING STRUCTURE: In | Chars | TO | ODC | MDC | Pressure Pulse | LOC | Total Rot Hrs | BHA

DRILLING ASSEMBLY

No	Component	OD	ID	Length

Drill Pipe: Stands — Drill Pipe: Singles — Kelly Down — Total — Weight of DC — Weight of String

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other

Time	
Density	
Funnel Viscosity	
Fluid Loss	
pH	
Location Of Sample	
Depth	
PVT	

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run

Remarks

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density

MUD MATERIALS ADDED

Product	Amount	Type

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks

Remarks: Level 1 inspection on tongs and overhead equipment D.S
Blew boilers 2 times 50L

WIPER TRIPS

From	To	D-R-C	RPM	WOB

HOLE CONDITION

Hole Drag: Up — Down — Torque At Bottom — Fill On Bottom

REDUCED PUMP SPEED

Pump #	Pressure	Strokes/min	Depth
	@	@	
	@	@	
	@	@	

BOILER

BoilerNo	HoursRun	pH	StackTemp

SAFETY

Safety Topic	MEHL	MACP
Lay down Drill Pipe		

TOUR 3

Driller: BRIAN BERGSETH — Start Time: 16:00 — End Time: 24:00

BITS

Bit Number	Size	IADC Code	Manufacturer	Type	Serial No	Jets	Depth Out (m)	Depth In (m)	Total Drilled (m)	Hrs Run Today	Cumulative Hrs Run	Entry Date

CUTTING STRUCTURE: In | Chars | TO | ODC | MDC | Pressure Pulse | LOC | Total Rot Hrs | BHA

DRILLING ASSEMBLY

No	Component	OD	ID	Length

Drill Pipe: Stands — Drill Pipe: Singles — Kelly Down — Total — Weight of DC — Weight of String

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other

Time	
Density	
Funnel Viscosity	
Fluid Loss	
pH	
Location Of Sample	
Depth	
PVT	

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run

Remarks

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density

MUD MATERIALS ADDED

Product	Amount	Type

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks

Remarks: blow down boilers 200 l

WIPER TRIPS

From	To	D-R-C	RPM	WOB

HOLE CONDITION

Hole Drag: Up — Down — Torque At Bottom — Fill On Bottom

REDUCED PUMP SPEED

Pump #	Pressure	Strokes/min	Depth
	@	@	
	@	@	
	@	@	

BOILER

BoilerNo	HoursRun	pH	StackTemp

SAFETY

Safety Topic	MEHL	MACP
lay down d.p & run casing		

FRONT PAGE SUMMARY

Tour Sheet Serial Number: BEAV2_20140123_1A
Morning Software Version: RMS 2013.8.14.27104
Year: 2014 | Month: 01 | Day: 23

Daily Checks: CP RPT
(1.) Daily Walk Around Inspection — RT RY
(2.) Detailed Inspection - Weekly (Daily Check List) — RT RY
(3.) H2S Signs Posted If Required — RT RY
(4.) Well Licence & Slick Diagram Posted — RT RY
(5.) Pipe Lines Stored — RT RY
(6.) BOP Drills Performed — RT RY
(7.) Weekly Inspected BOPs, Flare Lines & Diverter Lines — RT RY
(1.) Rig Site Health & Safety Meeting (environmental) — RY
(2.) CAODC Rig Safety Inspection Checklist (semi-annual) — RY
(3.) Hoist Inspection before Raising or Lowering — RY
(4.) Crown Saver Checked — RY
(5.) Motor Kills Checked — RY

Licensee No: WID-2082
Well Name: COPRC Dodo Canyon E-76 65-10 126-45
Surface Location: E-76-65-10-126-45
Field: NT
Last Type: CLSS
Unique Well Id:
Operator: Conoco Canada
Operator's AFE: 10351817
Contractor: Beaver Drilling Ltd.
Rig No: 2
Well Type: HORIZ
Re-Entry:
Contractor's Job No: 151
Spud Date / Time: 28-Dec-2013 06:30
Rig Released Date / Time: 23-Jan-2014 23:59
Signature Of Operator's Representative: RICHARD TURGEON
Signature Of Contractor's Rig Manager: RICK YAVIS

Code	1 Rig Up	2 Drill Ahead	3 Reaming	4 Coring	5 Cond Mud & Circ	6 Trips	7 Rig Service	8 Repair Rig	9 Circ Off Drlg Line	10 Core Survey	11 Wireline Logs	12 Run Csg & Cement	13 Wait On Cement	14 Nipple BOP	15 Test BOP	16 Drillstem Test	17 Plug Back	18 Squeeze Cement	19 Fishing	20 Other Work	21 Safety Meeting	22 Tear Down	23 Welding On	24 Rig Watch	25 Other	TOTAL
HOURS Tour 1							0.25					7.50									0.25					8.00
Tour 2							2.75					1.00			0.25							4.00				8.00
Tour 3							0.25							4.75							0.25	2.75				8.00
TOTAL							3.25					8.50		4.75	0.25						0.50	6.75				24.00

FULL @ 09.00 HRS
Rig: 145 | Depth: 170
Time: 05:00 | Temp: -10
Current Operation: OVERCAST
Wind Direction: N | Wind Strength: CALM
Road Condition: GOOD

Tour 1 — Driller: BRIAN BERGSETH — Start: 0:00 — End: 8:00

BITS

Bit Number	Size	IADC Code	Manufacturer	Type	Serial No	Jets	Depth Out (m)	Depth In (m)	Total Drilled (m)	Hrs Run Today	Cumulative Hrs Run	Entry Date

DRILLING ASSEMBLY

No	Component	OD	ID	Length

Drill Pipe: Stands
Drill Pipe: Singles

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other:

Time	Density	Funnel Viscosity	Fluid Loss	pH	Location Of Sample	Depth	PVT

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run

Remarks:

REDUCED PUMP SPEED

Pump #	Pressure	@	Strokes/min	@	Depth
		@		@	
		@		@	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Inside Density	Over Flow Density	Under Flow Density

MUD MATERIALS ADDED

Product	Amount	Type

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	450

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
0:00	0:15	0.25	7	Rig service function test crown saver
0:15	5:00	4.75	12B	Run 1- 114.3mm latch assembly, 104 joints of 114.3mm, 17.26kg/m, P-110 LTC casing, 1-114.3mm, 17.26kg/m, P-110,LTC pup joint, 1-114.3mm joint of casing, 1-114.3mm pup joint, sealed Mandrel Hanger and 1-114.3mm landing joint, with Hallmark power tongs and Trottier Lay down truck
5:00	6:00	1.00	12B	Pick up and run sealed Mandrel Hanger
6:00	7:45	1.75	12	Set sealed Mandrel Haanger at 18,000, compression, tighten seal assembly bolts
7:45	8:00	0.25	21D	Crew change safety meeting with rig manager and Conoco reps

Remarks: blow down boilers 200 l

SAFETY

Safety Topic	MEHL	MACP

CUTTINGS STRUCTURE

I		Gage	
TO		ODC	
LBO		Pressure	
LOC		Bit Run Hrs	
BRG			

DRILLING PARAMETERS

From	To	D-R-C	RPM	WOB

HOLE CONDITION

Hole Drag: Up / Down
Torque At Bottom:
Fill On Bottom:

Tour 2 — Driller: DEVAN SCHLITTER — Start: 8:00 — End: 16:00

BITS

Bit Number	Size	IADC Code	Manufacturer	Type	Serial No	Jets	Depth Out (m)	Depth In (m)	Total Drilled (m)	Hrs Run Today	Cumulative Hrs Run	Entry Date

DRILLING ASSEMBLY

No	Component	OD	ID	Length

Drill Pipe: Stands
Drill Pipe: Singles

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other:

Time	Density	Funnel Viscosity	Fluid Loss	pH	Location Of Sample	Depth	PVT

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run

Remarks:

REDUCED PUMP SPEED

Pump #	Pressure	@	Strokes/min	@	Depth
		@		@	
		@		@	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Inside Density	Over Flow Density	Under Flow Density

MUD MATERIALS ADDED

Product	Amount	Type

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	450

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
8:00	8:15	0.25	7	Rig service
8:15	8:30	0.25	15D	Pressure test casing bowl with Schlumberger to 15,000kpa, held good
8:30	9:30	1.00	12A	Rig out Hallmark power tongs and Trottier lay down truck
9:30	12:00	2.50	7A	Clean floor pick top off of rotery table and clean
12:00	16:00	4.00	22	Rig out top drive and lay down

Remarks: Blew down boilers 2 times 50litres

SAFETY

Safety Topic	MEHL	MACP
Lay down top drive		

CUTTINGS STRUCTURE

I		Gage	
TO		ODC	
LBO		Pressure	
LOC		Bit Run Hrs	
BRG			

DRILLING PARAMETERS

From	To	D-R-C	RPM	WOB

HOLE CONDITION

Hole Drag: Up / Down
Torque At Bottom:
Fill On Bottom:

Tour 3 — Driller: BRIAN BERGSETH — Start: 16:00 — End: 24:00

BITS

Bit Number	Size	IADC Code	Manufacturer	Type	Serial No	Jets	Depth Out (m)	Depth In (m)	Total Drilled (m)	Hrs Run Today	Cumulative Hrs Run	Entry Date

DRILLING ASSEMBLY

No	Component	OD	ID	Length

Drill Pipe: Stands
Drill Pipe: Singles

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other:

Time	Density	Funnel Viscosity	Fluid Loss	pH	Location Of Sample	Depth	PVT

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run

Remarks:

REDUCED PUMP SPEED

Pump #	Pressure	@	Strokes/min	@	Depth
		@		@	
		@		@	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Inside Density	Over Flow Density	Under Flow Density

MUD MATERIALS ADDED

Product	Amount	Type

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	450

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
16:00	16:15	0.25	7	Rig service
16:15	19:00	2.75	22	Rig out service loop and hydraulic power unit, for top drive
19:00	19:15	0.25	21D	Crew change safety meeting with rig manager and Conoco reps
19:15	24:00	4.75	14B	Nipple down BOP stack, HCR line, , degesser line, kill line,lift off BOP stack and rack in sub, clean and prepare casing bowl to install well head

Remarks: blow down boilers 200 l

SAFETY

Safety Topic	MEHL	MACP
nipple down b.o.ps		

CUTTINGS STRUCTURE

I		Gage	
TO		ODC	
LBO		Pressure	
LOC		Bit Run Hrs	
BRG			

DRILLING PARAMETERS

From	To	D-R-C	RPM	WOB

HOLE CONDITION

Hole Drag: Up / Down
Torque At Bottom:
Fill On Bottom:

FRONT PAGE SUMMARY

Licence No	WID-2082	Well Name	COPRC Dodo Canyon E-76 65-10 126-45	Surface Location	E-76-65-10-126-45	Lic Type	CLSS
Operator	Conoco Canada	Contractor	Beaver Drilling Ltd.	Rig No	2	Well Type	HORIZ
Operator's AFE	10351817	Contractor's Job No	151	Spud Date Time	28-Dec-2013		06:30
Signature Of Operator's Representative		Signature Of Contractor's Rig Manager		Rig Release Date Time	23-Jan-2014		23:59

Test Slot # Safad Number: BEAV2_20140124_1A | Vendor Software Version: RMS 2013.8.14.27104 | Year: 2014 | Month: 01 | Day: 24

DAILY CHECKS — DP RM

(1.) Daily Walk Around Inspection — RT RV
(2.) Derrick Inspection - Monthly (Using Check List) — RT RV
(3.) H2S Signs Posted (If Required) — RT RV
(4.) Well License & Blow Diagram Posted — RT RV
(5.) Flare Lines Staked — RT RV
(6.) BOP Drills Performed — RT RV
(7.) Visually Inspected BOPs, Flare Lines & Diverter Lines — RT RV
(1.) Rig Site Health & Safety Meeting (minute entries/drl) — RV
(2.) CAODC Rig Safety Inspection Checklist (if required) — RV
(3.) Hoist Inspection before Raising or Lowering — RV
(4.) Crown Saver Checked — RV
(5.) Motor Kills Checked — RV

CAODC NOV

Code	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	TOTAL
HOURS	Rig Up	Drill Actual	Reaming	Coring	Cond Mud & Circ	Trips	Rig Service	Repair Rig	Cut Off Drlg Line	Dev Survey	Wireline Logs	Run Csg & Cement	Wait On Cement	Nipple BOP	Test BOP	Drill Out	Plug Back	Squeeze Cement	Fishing	Dir Work	Safety Meeting	Tree Down	Waiting On	Rig Watch	Other	
Tour 1							0.25							6.00							0.25	1.50				8.00
Tour 2							0.25							2.75							0.75	4.25				8.00
Tour 3							0.25														0.50	7.25				8.00
TOTAL							0.75							8.75							1.50	13.00				24.00

FUEL @ 03:00 PPS: 122 | 120

WEATHER: 06:15 | -19 | PARTLY CLOUDY | N | CALM | GOOD

TOUR 1

DRILLER: BRIAN BERGSETH

START: 0:00 | END: 8:00

BITS

Bit Number	
Size	
IADC Code	
Manufacturer	
Type	
Serial No	
Jets	
Depth Out (m)	
Depth In (m)	
Total Drilled (m)	
Hrs Run Today	
Cumulative Hrs Run	
Entry Date	

DRILLING ASSEMBLY

No	Component	OD	ID	Length

Drill Pipe: | Stands | Drill Pipe: | Singles | Kelly Down | Total | Weight of DC | Weight of String

CUTTING STRUCTURE

I		Gauge	
O		ODC	
DC		Pressure Loss	
LOC		Total Flow Area	
BRG			

MUD RECORD

Mud Type: | Water ☐ | Oil ☑ | Other

Time	
Density	
Funnel Viscosity	
Fluid Loss	
pH	
Location Of Sample	
Depth	
PVT	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density

MUD MATERIALS ADDED

Product	Amount	Type

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
0:00	0:15	0.25	7	Rig service
0:15	5:15	6.00	14E	Install wellhead with a cap
5:15	7:45	1.50	22	Tear out rig flare lines & changed out liners in pump to 6 "
7:45	8:00	0.25	21	Crew change safety meeting with rig manager and Conoco reps

Remarks: blow down bollers 200 l

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	450

SAFETY

Safety Topic	MEHL	MACP

BITS RUN

From	To	D-R-C	RPM	WOB

HOLE CONDITION

Hole Drag: Up | Down | Tongue At Bottom | Fill On Bottom

REDUCED PUMP SPEED

Pump #	Pressure	@	Strokes/min	@	Depth

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run

Remarks

TOUR 2

DRILLER: DEVAN SCHLITTER

START: 8:00 | END: 16:00

BITS

Bit Number	
Size	
IADC Code	
Manufacturer	
Type	
Serial No	
Jets	
Depth Out (m)	
Depth In (m)	
Total Drilled (m)	
Hrs Run Today	
Cumulative Hrs Run	
Entry Date	

DRILLING ASSEMBLY

No	Component	OD	ID	Length

Drill Pipe: | Stands | Drill Pipe: | Singles | Kelly Down | Total | Weight of DC | Weight of String

CUTTING STRUCTURE

I		Gauge	
O		ODC	
DC		Pressure Loss	
LOC		Total Flow Area	
BRG			

MUD RECORD

Mud Type: | Water ☐ | Oil ☑ | Other

Time	
Density	
Funnel Viscosity	
Fluid Loss	
pH	
Location Of Sample	
Depth	
PVT	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density

MUD MATERIALS ADDED

Product	Amount	Type

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
8:00	8:15	0.25	7	Rig service
8:15	11:00	2.75	14E	Tear out well head cap clean and install new bop ring put back together
11:00	11:15	0.25	21	Safety meeting on laying down torque tube reviewed jsa#257 tear out top drive
11:15	13:15	2.00	22A	Tear out torque tube
13:15	13:30	0.25	21	Safety meeting on tearing out portable
13:30	14:45	1.25	22	Tear out floor lay down portable
14:45	15:00	0.25	21	Safety meeting on bridle up & monkey board tear out
15:00	16:00	1.00	22	Tear down

Remarks: Blew down boiler 2 times 100L

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	450

SAFETY

Safety Topic	MEHL	MACP
Lay down torque tube		

BITS RUN

From	To	D-R-C	RPM	WOB

HOLE CONDITION

Hole Drag: Up | Down | Tongue At Bottom | Fill On Bottom

REDUCED PUMP SPEED

Pump #	Pressure	@	Strokes/min	@	Depth

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run

Remarks

TOUR 3

DRILLER: BRIAN BERGSETH

START: 16:00 | END: 24:00

BITS

Bit Number	
Size	
IADC Code	
Manufacturer	
Type	
Serial No	
Jets	
Depth Out (m)	
Depth In (m)	
Total Drilled (m)	
Hrs Run Today	
Cumulative Hrs Run	
Entry Date	

DRILLING ASSEMBLY

No	Component	OD	ID	Length

Drill Pipe: | Stands | Drill Pipe: | Singles | Kelly Down | Total | Weight of DC | Weight of String

CUTTING STRUCTURE

I		Gauge	
O		ODC	
DC		Pressure Loss	
LOC		Total Flow Area	
BRG			

MUD RECORD

Mud Type: | Water ☐ | Oil ☑ | Other

Time	
Density	
Funnel Viscosity	
Fluid Loss	
pH	
Location Of Sample	
Depth	
PVT	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density

MUD MATERIALS ADDED

Product	Amount	Type

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
16:00	16:15	0.25	7	Rig service
16:15	16:30	0.25	21	Safety meeting on laying down derrick reviewed jsa#175 Laying down derrick
16:30	19:00	2.50	22	Inspect derrick before laying downry,ds,er lay down derrick
19:00	19:15	0.25	21	Crew change safety meeting
19:15	24:00	4.75	22	Tear down rig

Remarks

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	450

SAFETY

Safety Topic	MEHL	MACP

BITS RUN

From	To	D-R-C	RPM	WOB

HOLE CONDITION

Hole Drag: Up | Down | Tongue At Bottom | Fill On Bottom

REDUCED PUMP SPEED

Pump #	Pressure	@	Strokes/min	@	Depth

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run

Remarks

Progress

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 56
Report Date: 3/21/2014
Final Job Status: GAS
Final Report? Yes

WELL HEADER INFORMATION

Country	State/Province	Region / Division	District	Field Name	Field Code
CANADA	N.W.T.	WCBU	NEW VENTURES	Canyon	

Surface Legal Location	API / UWI	License No.
E-76 65-10 126-45	300E7665-10126-45	EL 470

Orig KB/RT (m)	Ground Elevation (m)	KB-Grd (m)	KB-CF (m)	KB-TF (m)	Total Depth (mKB)	PBTD (All) (mKB)
273.40	268.20	5.20	5.40	4.22	2,910.00	Original Hole - 2,877.30

JOB INFORMATION

Job Category	Primary Job Type	Secondary Job Type	Total Field Estimate (Cost)
COMPLETIONS	INITIAL COMPLETION	RIGLESS	21,945,332.75

Objective
Hydrailically fracture and flow test as part of the 2014 Canol Exploration Program

Actual Start Date	End Date	Abandon Date	Responsible Grp 1	Responsible Grp 2	Responsible Grp 3
1/25/2014 00:00	3/28/2014 08:00		coved	lagartn	Chris Kendall

AFE COST SUMMARY

AFE / RFE / Maint.#	Total AFE Amount (Cost)	Total AFE + Supp Amount (Cost)	Total Field Estimate (Cost)	AFE-Field Estimate (Cost)
10351695	2,111,000.00	2,111,000.00	2,318,381.14	-207,381.14
10359413	16,997,500.00	20,641,514.00	19,626,951.61	1,014,562.39

DAILY INFORMATION

Report Start Date	Report End Date	Daily Cost Total (Cost)	Cumulative Cost (Cost)	Personnel Regular Hours (hr)
3/21/2014 06:00	3/22/2014 06:00	42,639.00	21,105,183.85	250.00

Daily Contacts
Completion Engineer, Theorn LaGarde, 403-710-9753; WS Superintendent, Derrick Cove, 780-831-1314; WS Supervisor, Chris Kendall, 780-518-3284; WS Supervisor, Myles Hahn, 780-402-0500; WS Supervisor, Michael Short, 403 348-7127; WS Supervisor, Chris Tucker,

Rig
Weatherford, FS 463

Tubing Pressure (kPa)	Casing Pressure (kPa)	Weather	Temperature (°C)	Lease Condition
9,332	9,394	Clear	-22	Ice Pad

Last 24hr Summary
Finished rig out of all Weatherford testing equipment. Moved all test equipment off location with bed truck to KM 27.5 rack site. Started to remove and stack swamp mats. Cleaned and readied shacks to be rigged out in the AM. Begin cleaning snow and ice from tank farm containment.
All pressures at 06:00am
TP=9332kPa
SICP=9394kPa

24hr Forecast
Rig out and haul out shacks. Continue to dehydrate blowback fluid.

DAILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
06:00	07:00	1.00	P	06:00 WSS Shift Change. 06:30 Crew change. Held a daily safety and operations meeting with all personnel. Reviewed and discussed CPC PJHA regarding rig out of test equipment and all associated hazards. Performed cross shift with night crews.
07:00	13:00	6.00	P	Filled all 5 dehydrators and continued to dehydrate blowback water. Rigged out NOV 250KVa generator. Rigged out all lights around test equipment and wrapped up all power cords. Rigged off Real time gauges and support equipment. Pumped methanol through casing valve and wing valve on wellhead (sides with SCADA pressure gauges). Sucked all fluid out of boiler put into dehydrators. Finished rig out of all Weatherford test equipment. Double checked all load securement.
13:00	18:00	5.00	P	Utilized bad truck to load and haul all Weatherford test equipment to km 27.5 rack site. Hauled HD boiler to rack site. Stacked HRN matting in corner of location (4 8x40s + 2 8x20s). Utilized loader and started to remove and stack swamp mats from flare stack area.
18:00	19:00	1.00	P	18:00 WSS shift change. 18:30 crew shift change. Held pre-job safety and operations meeting with all services. Review and discuss CPC PJHA on rigging out equipment and associated hazards. Perform daily walk around lease inspections and checks.
19:00	06:00	11.00	P	PBN vac truck fill Horizon dehydrators. Weatherford testers continue to clean/tidy lease/wellsite shacks. Break up ice and snow from tank farm containment to ready for liner removal, dehydrate snow from tank farm.

FLUID SUMMARY

Fluid	To lease (m³)	From lease (m³)	To well (m³)	From well (m³)	Left to recover (m³)
FRESH WATER	0.00	16.63			4,805.81
PRODUCED OIL	0.00	0.00	0.00	0.00	-53.08

DAILY COST

BU Desc	Vendor	Activity Code	Amount (Cost)
Rig Camp	***VENDOR NOT LISTED***	E500	500.00
face Completion Equipment Rental	BOREALIS COMMUNICATIONS INC	Q300	715
Service Rig	CONOCO	E120	4,20
Surface Completion Equipment Rental	CORNERSTONE OILFIELD SERVICES LTD	Q300	18
Surface Completion Equipment Rental	CORNERSTONE OILFIELD SERVICES LTD	Q300	170.00
Surface Completion Equipment Rental	CORNERSTONE OILFIELD SERVICES LTD	Q300	170.00
Service Rig	CORNERSTONE OILFIELD SERVICES LTD	E120	1,700.00

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 31
Report Date: 2/24/2014
Final Job Status: GAS
Final Report? Yes

HEADER INFORMATION

Country	State/Province	Region / Division	District	Field Name	Field Code
ADA	N.W.T.	WCBU	NEW VENTURES	Canyon	

Surface Legal Location	API / UWI	License No.
E-76 65-10 126-45	300E7665-10126-45	EL 470

Orig KB/RT (m)	Ground Elevation (m)	KB-Grd (m)	KB-CF (m)	KB-TF (m)	Total Depth (mKB)	PBTD (All) (mKB)
273.40	268.20	5.20	5.40	4.22	2,910.00	Original Hole - 2,877.30

JOB INFORMATION

Job Category	Primary Job Type	Secondary Job Type	Total Field Estimate (Cost)
COMPLETIONS	INITIAL COMPLETION	RIGLESS	21,945,332.75

Objective
Hydrailically fracture and flow test as part of the 2014 Canol Exploration Program

Actual Start Date	End Date	Abandon Date	Responsible Grp 1	Responsible Grp 2	Responsible Grp 3
1/25/2014 00:00	3/28/2014 08:00		coved	lagartn	Chris Kendall

AFE COST SUMMARY

AFE / RFE / Maint.#	Total AFE Amount (Cost)	Total AFE + Supp Amount (Cost)	Total Field Estimate (Cost)	AFE-Field Estimate (Cost)
10351695	2,111,000.00	2,111,000.00	2,318,381.14	-207,381.14
10359413	16,997,500.00	20,641,514.00	19,626,951.61	1,014,562.39

DAILY INFORMATION

Report Start Date	Report End Date	Daily Cost Total (Cost)	Cumulative Cost (Cost)	Personnel Regular Hours (hr)
2/24/2014 06:00	2/25/2014 06:00	134,639.58	18,182,710.85	560.00

Daily Contacts
Completion Engineer, Theorn LaGarde, 403-710-9753; WS Superintendent, Derrick Cove, 780-831-1314; WS Supervisor, Chris Kendall, 780-518-3284; WS Supervisor, Myles Hahn, 780-402-0500; WS Supervisor, Michael Short, 403 348-7127; WS Supervisor, Chris Tucker,

Rig
Weatherford, FS 463

Tubing Pressure (kPa)	Casing Pressure (kPa)	Weather	Temperature (°C)	Lease Condition
	0	Clear	-28	Ice Pad

Last 24hr Summary
Filled line heater with water and fired. RCS performed oil changes and serviced their equipment. Fired up NOV gen set and plugged in Weatherford jet pump. Loaded geo and liner into end dumps to be hauled away to disposal.

24hr Forecast
out fluid to disposal. MORU Nabors service rig if trucks are available.

TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
06:00	06:30	0.50	P	WSS shift change.
06:30	07:00	0.50	P	Held a daily safety and operations meeting with all personnel. Reviewed and discussed PJHA regarding job scope and all associated hazards. All tickets checked and valid. Performed cross shift with night shift personnel.
07:00	18:30	11.50	P	Fired up NOV 250KW generator. Plugged in Weatherford jet pump and started to heat building. Filled line heater with clean warm water. Fired line heater and brought up to temperature. Spotted third evaporator and filled it with water. Loaded geo and liner into end dumps to be hauled away to disposal. RCS performed oil changes on 2 115KVA generators. Chartered flight arrived and departed Norman Wells today. Testers performed short change shift. Nabors night shift crew arrived and went through CPC arctic orientation at camp. They will switch over to nights and be ready for night shift Tuesday night.
18:30	19:00	0.50	P	Held a daily safety and opertations meeting with night shift personnel. Reviewed job procedures and hazards associated with night time tasks. All tickets checked and valid. Performed cross shift with day shift hands.
19:00	06:00	11.00	P	Loaded liner and geo into 3 End dumps with loader (assisted by CPC Environmental hand Gord Saurer). Weatherford testers performed equipment checks to ensure everything is ready and rigged in correctly.

FLUID SUMMARY

Fluid	To lease (m³)	From lease (m³)	To well (m³)	From well (m³)	Left to recover (m³)
FRESH WATER	8.50	0.00			6,588.26

DAILY COST

BU Desc	Vendor	Activity Code	Amount (Cost)
Rig Camp	***VENDOR NOT LISTED***	E500	500.00
Surface Completion Equipment Rental	BOREALIS COMMUNICATIONS INC	Q300	532.43
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	3,430.00
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	3,430.00
Service Rig	CONOCO	E120	2,500.00
Service Rig	CORNERSTONE OILFIELD SERVICES LTD	E120	1,700.00
Service Rig	CORNERSTONE OILFIELD SERVICES LTD	E120	2,200.00
Service Rig	CORNERSTONE OILFIELD SERVICES LTD	E120	1,400.00
Surface Completion Equipment Rental	CORNERSTONE OILFIELD SERVICES LTD	Q300	195.00

Report Printed: 4/14/2014

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 32
Report Date: 2/25/2014
Final Job Status: GAS
Final Report? Yes

WELL HEADER INFORMATION

Country	State/Province	Region / Division	District	Field Name	Field Code
CANADA	N.W.T.	WCBU	NEW VENTURES	Canyon	

Surface Legal Location	API / UWI	License No.
E-76 65-10 126-45	300E7665-10126-45	EL 470

Orig KB/RT (m)	Ground Elevation (m)	KB-Grd (m)	KB-CF (m)	KB-TF (m)	Total Depth (mKB)	PBTD (All) (mKB)
273.40	268.20	5.20	5.40	4.22	2,910.00	Original Hole - 2,877.30

JOB INFORMATION

Job Category	Primary Job Type	Secondary Job Type	Total Field Estimate (Cost)
COMPLETIONS	INITIAL COMPLETION	RIGLESS	21,945,332.75

Objective
Hydrailically fracture and flow test as part of the 2014 Canol Exploration Program

Actual Start Date	End Date	Abandon Date	Responsible Grp 1	Responsible Grp 2	Responsible Grp 3
1/25/2014 00:00	3/28/2014 08:00		coved	lagartn	Chris Kendall

AFE COST SUMMARY

AFE / RFE / Maint.#	Total AFE Amount (Cost)	Total AFE + Supp Amount (Cost)	Total Field Estimate (Cost)	AFE-Field Estimate (Cost)
10351695	2,111,000.00	2,111,000.00	2,318,381.14	-207,381.14
AFE / RFE / Maint.#	**Total AFE Amount (Cost)**	**Total AFE + Supp Amount (Cost)**	**Total Field Estimate (Cost)**	**AFE-Field Estimate (Cost)**
10359413	16,997,500.00	20,641,514.00	19,626,951.61	1,014,562.39

DAILY INFORMATION

Report Start Date	Report End Date	Daily Cost Total (Cost)	Cumulative Cost (Cost)	Personnel Regular Hours (hr)
2/25/2014 06:00	2/26/2014 06:00	190,596.58	18,373,307.43	608.00

Daily Contacts
Completion Engineer, Theorn LaGarde, 403-710-9753; WS Superintendent, Derrick Cove, 780-831-1314; WS Supervisor, Chris Kendall, 780-518-3284; WS Supervisor, Myles Hahn, 780-402-0500; WS Supervisor, Michael Short, 403 348-7127; WS Supervisor, Chris Tucker,

Rig
Weatherford, FS 463

Tubing Pressure (kPa)	Casing Pressure (kPa)	Weather	Temperature (°C)	Lease Condition
	0	Clear	-25	Ice Pad

Last 24hr Summary
Hauled off 216m³ of waste water heading to Tervita Rainbow Lake. Functioned and tested shut downs on jet pump. Continue to heat flowback tanks and wellhead. Testers on location prepping/cleaning equipment.

Forecast
MIRU Nabors service rig.

DAILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
06:00	06:30	0.50	P	Night shift testers on location.
06:30	07:00	0.50	P	Crew shift change. Held a daily safety and operations meeting with all day shift personnel. Reviewed and discussed CPC PJHA regarding job scope and all associated hazards. All tickets checked and valid. Performed cross shift with night crews.
07:00	18:00	11.00	P	Hauled 216.0m³ of waste water off location heading to Tervita Rainbow lake (8 loads). Loaded Weatherford 69MPa line pipe skid, manifold and ESD onto VDM truck. Loaded HD work platform onto same truck. Back hauled equipment back to GP. Leveled area around wellhead with loader in preparation for service rig. Corelab hand and AGAT hand arrived on location. Went through all sampling equipment and checked supplies (including Tetra tech equipment). All equipment made it to location except for the AGAT tutwiler testers arrived broken. Trucks to move service rig did not become available and service rig move is planned for tomorrow morning.
18:00	18:30	0.50	P	WSS shift change.
18:30	19:00	0.50	P	Held pre-job safety and operations meeting with all services. Review PJHA on night operations. Heating water tanks, testers prep/tidy equipment for operations. Perform daily walk around inspections and checks. Check and ensure all workers tickets valid.
19:00	21:00	2.00	P	Service rig not moving to location until morning. Meet with rig crew, ensure all safety training is completed. Discuss operations and expectations with rig crew.
21:00	06:00	9.00	P	HD boiler hands heating flowback tanks and wellhead. 3 evaporators working on location. Testers continue to prep equipment for upcoming operations and tidy lease.

FLUID SUMMARY

Fluid	To lease (m³)	From lease (m³)	To well (m³)	From well (m³)	Left to recover (m³)
FRESH WATER	0.00	216.00			6,588.26

DAILY COST

BU Desc	Vendor	Activity Code	Amount (Cost)
Camp	***VENDOR NOT LISTED***	E500	500.00
Surface Completion Equipment Rental	BOREALIS COMMUNICATIONS INC	Q300	537
Surface Completion Equipment Rental	BOREALIS COMMUNICATIONS INC	Q300	31
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	19,270.00
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	19,740.00
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	20,580.00

Report Printed: 4/14/2014

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 33
Report Date: 2/26/2014
Final Job Status: GAS
Final Report? Yes

WELL HEADER INFORMATION

Country	State/Province	Region / Division	District	Field Name	Field Code
CANADA	N.W.T.	WCBU	NEW VENTURES	Canyon	

Surface Legal Location	API / UWI	License No.
E-76 65-10 126-45	300E7665-10126-45	EL 470

Orig KB/RT (m)	Ground Elevation (m)	KB-Grd (m)	KB-CF (m)	KB-TF (m)	Total Depth (mKB)	PBTD (All) (mKB)
273.40	268.20	5.20	5.40	4.22	2,910.00	Original Hole - 2,877.30

JOB INFORMATION

Job Category	Primary Job Type	Secondary Job Type	Total Field Estimate (Cost)
COMPLETIONS	INITIAL COMPLETION	RIGLESS	21,945,332.75

Objective
Hydrailically fracture and flow test as part of the 2014 Canol Exploration Program

Actual Start Date	End Date	Abandon Date	Responsible Grp 1	Responsible Grp 2	Responsible Grp 3
1/25/2014 00:00	3/28/2014 08:00		coved	lagartn	Chris Kendall

AFE COST SUMMARY

AFE / RFE / Maint.#	Total AFE Amount (Cost)	Total AFE + Supp Amount (Cost)	Total Field Estimate (Cost)	AFE-Field Estimate (Cost)
10351695	2,111,000.00	2,111,000.00	2,318,381.14	-207,381.14
10359413	16,997,500.00	20,641,514.00	19,626,951.61	1,014,562.39

DAILY INFORMATION

Report Start Date	Report End Date	Daily Cost Total (Cost)	Cumulative Cost (Cost)	Personnel Regular Hours (hr)
2/26/2014 06:00	2/27/2014 06:00	160,277.58	18,533,585.01	668.00

Daily Contacts
Completion Engineer, Theorn LaGarde, 403-710-9753; WS Superintendent, Derrick Cove, 780-831-1314; WS Supervisor, Chris Kendall, 780-518-3284; WS Supervisor, Myles Hahn, 780-402-0500; WS Supervisor, Michael Short, 403 348-7127; WS Supervisor, Chris Tucker,

Rig
Weatherford, FS 463

Tubing Pressure (kPa)	Casing Pressure (kPa)	Weather	Temperature (°C)	Lease Condition
	0	Clear	-25	Ice Pad

Last 24hr Summary
Rigged out and hauled off shacks (2 x super single, 1 safety shack). Moved on Nabors #414 service rig. Spotted and rigged in all equipment as per regulations. Loaded 200jts of 60.3mm J-55 tubing onto pipe racks. Reviewed Nabors equipment certs, safety valve certs expired Feb.16 2014. Talked with Derrick Cove and Nabors office, annual certification was Nabors former policy but not regulatorty. Nabors is to send documentation stating valve is ok to use prior to running tbg, as per Derrick Cove.

Forecast
After documentation from Nabors is recieved make up, RIH with production tubing and gauges.

DAILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
06:00	06:30	0.50	P	WSS shift change.
06:30	07:00	0.50	P	Held a daily safety and operations meeting with all day shift personnel. Reviewed and discussed CPC PJHA regarding job scope and all associated hazards. All tickets checked and valid. Performed cross shift with night crews.
07:00	13:45	6.75	P	Rigged out sewer systems on 4 shacks (2x super singles, 1 50/50 and 1 meeting room). Nabors #414 service rig equipment started to arrive on location (loaded and traveled from N-20 location). Off loaded skid rig equipment from tractors. Loaded 3 shacks and hauled them to P-20 location. Re-spotted 50/50 shack and rigged back in. Rigged out and hauled RCS 115KVA generator to P-20. Hauled out full garbage bin. Spotted all service rig equipment as per regulations.
13:45	14:30	0.75	P	Held a safety meeting with Nabors rig crew. Discussed job scope, CPC safety culture, expectations of individuals, CPC CMV project and tight hole operations. Discussed ERP plan and emergency procedures. All tickets checked and valid. experience
14:30	18:00	3.50	P	Backed rig up to wellhead and leveled on jacks. Walked derrick and performed a level 2 inspection of all overhead equipment. Stood derrick and rigged in top section. Tarped in BOPs and heated with a steam heater. Ran accumulator lines. Ran power lines and plugged in all equipment. Transferred 15m³ hot water across location into rig tank. Ran steam lines to pump. Moved and spotted 2 light towers to light up rig operations. Loaded 60.3mm J-55 tubing at water well and off loaded it beside catwalk. Started to rig in pump lines.
18:00	18:30	0.50	P	WSS shift change.
18:30	19:00	0.50	P	Held pre-job safety and operations meeting with all services. Review CPC PJHA on rig up service rig, pressure testing, heating, running tubing with gauges and TEC line. All tickets checked and valid. Perform daily walk around inspections and checks.
19:00	22:00	3.00	P	Nabors continue to rig up service rig and equipment to NEB, OH&S and CPC rules and regulations. Continue to heat bops to operating temperature while rigging in rest of equipment. Spot Rigid spooling unit. Removed wind board off tubing board on rig to be able to hang TEC line sheave. Rig in boiler lines to pump and tank.

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 33
Report Date: 2/26/2014
Final Job Status: GAS
Final Report? Yes

DAILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
22:00	02:00	4.00	P	Function test bops pipe rams, blind rams and annular from both sets of controls. Bottles pre-charge pressures = 7000KPa x 4 bottles Nitrogen back up pressures- 1= 13,300KPa 2=12,600KPa Start pressure=20,500KPa End pressure after 3 functions=11,500KPa Re-charge time = 51seconds Stump test 5k bops 60.3mm pipe rams, blind rams, safety valve, kill spool valve and lines to 1.5 low and 34.5MPa high for 15min each. Stump test annular to 1.5 low and 7MPa high for 15 min each. All tests good. Check and monitor well, remove production wellhead and BPV. Install 10K x 7-1/16 x 5K x 7 -1/16 adapter flange. Install landing pup with safety valve. Pull up tubing hanger, install plugs in 1/2" control line ports for pressure testing ring gasket seal, re-land tubing hanger with pup and safety valve. Install bops and close 60.3mm pipe rams. Presssure test ring gasket seal to 1.5 low and 34.5MPa high for 15 min each, all tests good.
02:00	03:30	1.50	P	Change over handling equipment to 60.3mm. Rig in work floor and handling equipment. Install new dies in tongs to ensure good bite on tubing to avoid damage to TEC line. Use crane to re-position hydraulic catwalk to floor. Rig in catwalk and pipe racks. Load 200 joints of 60.3mm, 6.99kg/m J-55 tubing on racks. Tarp in rig floor to maintain heat on bops.
03:30	06:00	2.50	T	Perform CAODC rig inspection with Rig manager Glenn Lucas. Checked all equipment certifications. Safety valves certifications expired Feb.16 2014. Contacted Derrick Cove, not able to run tubing in well until crew has certified valve. Nabors rig manager (Glenn Lucas) contacted Nabors office (Dave Solomon) and was told that it was a former Nabors policy to re-certify valves on a yearly basis but no longer a policy. Nabors office is to send a document stating that valve is presently certified and ok to use prior to running tubing as per Derrick Cove. Remove protectors from tubing, tally top tier. Ensure all equipment is ready to RIH when documentation on safety valve is recieved.

FLUID SUMMARY

Fluid	To lease (m³)	From lease (m³)	To well (m³)	From well (m³)	Left to recover (m³)
FRESH WATER	0.00	0.00	0.00	0.00	6,588.26

DAILY COST

BU Desc	Vendor	Activity Code	Amount (Cost)
Rig Camp	***VENDOR NOT LISTED***	E500	500
Surface Completion Equipment Rental	BOREALIS COMMUNICATIONS INC	Q300	532
Trucking/Hauling/ Hot Shot Services	CANOL OILFIELD SERVICES INC	P100	15,000.00
Service Rig	CONOCO	E120	2,500.00
Service Rig	CORNERSTONE OILFIELD SERVICES LTD	E120	1,700.00
Service Rig	CORNERSTONE OILFIELD SERVICES LTD	E120	2,200.00
Surface Completion Equipment Rental	CORNERSTONE OILFIELD SERVICES LTD	Q300	195.00
Slickline Services	CORNERSTONE OILFIELD SERVICES LTD	U200	2,305.00
Safety Equipment & Services	FRONTIERMEDEX CANADA LTD/ EXLOGS SAHTU LTD	T430	2,000.00
Tubing	HALLMARK TUBULARS LTD	A210	30,805.00
Surface Completion Equipment Rental	HORIZON OILFILED SOLUTIONS INC	Q300	3,446.15
Wellsite Supervision & Engineering	M HAHN CONSULTING INC	T130	1,670.00
Surface Completion Equipment Rental	MACKAY RANGE DEVELOPMENT CORP	Q300	374.00
Surface Completion Equipment Rental	MYB CONSTRUCTION LTD	Q300	1,150.00
Service Rig	NABORS PRODUCTION SERVICES LTD	E120	17,668.00
Surface Completion Equipment Rental	RIGSAT COMMUNICATIONS INC	Q300	15.00
Surface Completion Equipment Rental	RIGSAT COMMUNICATIONS INC	Q300	15.00
Surface Completion Equipment Rental	SAHTU RCS ENERGY SERVICES LTD	Q300	1,200.00
Surface Completion Equipment Rental	SAHTU RCS ENERGY SERVICES LTD	Q300	250.00
Surface Completion Equipment Rental	SAHTU RCS ENERGY SERVICES LTD	Q300	1,746.00
Surface Completion Equipment Rental	SAHTU RCS ENERGY SERVICES LTD	Q300	480.00
Surface Completion Equipment Rental	SAHTU RCS ENERGY SERVICES LTD	Q300	450.00
Wellsite Supervision & Engineering	TECTONIC ENERGY CONSULTING INC	T130	1,545.00
Welltesting (Eqpmt,Srvcs,PTA,Gov't Subs)	WEATHERFORD CANADA	M220	16,520.00
Surface Completion Equipment Rental	WEATHERFORD CANADA	Q300	1,200.00
Surface Completion Equipment Rental	WEATHERFORD CANADA	Q300	54,811.00

CUMULATIVE JOB FLARED GAS BY ZONE

Zone	Volume Gas Total (E3m³)
CANOL, Original Hole	1,595.

PERFORATIONS

Date	Zone	Top (mKB)	Btm (mKB)	Shot Dens (shots/m)	Current Status
2/8/2014	CANOL, Original Hole	2,866.00	2,867.00	6.0	Open - Flowing
2/11/2014	CANOL, Original Hole	2,857.00	2,858.00	6.0	Open - Flowing

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 34
Report Date: 2/27/2014
Final Job Status: GAS
Final Report? Yes

HEADER INFORMATION

y	State/Province	Region / Division	District	Field Name	Field Code
ADA	N.W.T.	WCBU	NEW VENTURES	Canyon	

Surface Legal Location	API / UWI	License No.
E-76 65-10 126-45	300E7665-10126-45	EL 470

Orig KB/RT (m)	Ground Elevation (m)	KB-Grd (m)	KB-CF (m)	KB-TF (m)	Total Depth (mKB)	PBTD (All) (mKB)
273.40	268.20	5.20	5.40	4.22	2,910.00	Original Hole - 2,877.30

JOB INFORMATION

Job Category	Primary Job Type	Secondary Job Type	Total Field Estimate (Cost)
COMPLETIONS	INITIAL COMPLETION	RIGLESS	21,945,332.75

Objective
Hydrailically fracture and flow test as part of the 2014 Canol Exploration Program

Actual Start Date	End Date	Abandon Date	Responsible Grp 1	Responsible Grp 2	Responsible Grp 3
1/25/2014 00:00	3/28/2014 08:00		coved	lagartn	Chris Kendall

AFE COST SUMMARY

AFE / RFE / Maint.#	Total AFE Amount (Cost)	Total AFE + Supp Amount (Cost)	Total Field Estimate (Cost)	AFE-Field Estimate (Cost)
10351695	2,111,000.00	2,111,000.00	2,318,381.14	-207,381.14
AFE / RFE / Maint.#	Total AFE Amount (Cost)	Total AFE + Supp Amount (Cost)	Total Field Estimate (Cost)	AFE-Field Estimate (Cost)
10359413	16,997,500.00	20,641,514.00	19,626,951.61	1,014,562.39

DAILY INFORMATION

Report Start Date	Report End Date	Daily Cost Total (Cost)	Cumulative Cost (Cost)	Personnel Regular Hours (hr)
2/27/2014 06:00	2/28/2014 06:00	73,652.58	18,607,237.59	740.00

Daily Contacts
Completion Engineer, Theorn LaGarde, 403-710-9753; WS Superintendent, Derrick Cove, 780-831-1314; WS Supervisor, Chris Kendall, 780-518-3284; WS Supervisor, Myles Hahn, 780-402-0500; WS Supervisor, Michael Short, 403 348-7127; WS Supervisor, Chris Tucker,

Rig
Weatherford, FS 463

Tubing Pressure (kPa)	Casing Pressure (kPa)	Weather	Temperature (°C)	Lease Condition
	0	Cear	-18	Ice Pad

Last 24hr Summary
Picked up Weatherford BHA. Installed real time down hole gauges into gauge mandrels. Pressure tested seals on gauges. Confirmed gauges were working correctly after installed. Ran in hole BHA installing Canon clamps across each tubing connection to hold cables tight and straight. Cable was rubbing/pulling on sheave. Re- positioned spooling trailer and adjusted positioning of pins on sheave so that cable is no longer rubbing. Continue to RIH 60.3mm /6.99kg/m /J-55 and BHA in hole installing Canon clamps across each tubing connection. Weatherford tech checking resistance and gauges on way in hole. All tests were 126 joints in hole at shift change.

Forecast
Continue to RIH 60.3mm tubing, BHA and TEC cable. Space out and latch onto packer.Pressure test on/off seals and tubing hanger seals. Remove bops, install and pressure test production wellhead.

DAILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
06:00	06:30	0.50	P	WSS shift change.
06:30	07:00	0.50	P	Held a daily safety and operations meeting with all day shift personnel. Reviewed and discussed CPC PJHA regarding job scope and all associated hazards. All tickets checked and valid. Performed cross shift with night crews.
07:00	08:15	1.25	P	Still waiting on certification for Nabors stabbing valves before able to run in hole. Removed protectors from tubing. Drifted pup joints and gauge madrels. Tallied BHA and obtained serial numbers. Made up BHA and readied to be picked up.
08:15	11:30	3.25	P	Rigged steam heater up on rig floor (Weatherford gauge technicians request - keeps gauges warm when pressure testing). Spooled cable off spools with recorders on ends and ran through double sheave. Hung sheave in the derrick. Finished CAODC rig inspection. All equipment appears to be rigged in correctly and in good working order. Readied to suck back. Warmed gauges in front of steam heater on rig floor. .
11:30	13:00	1.50	P	Picked up BHA. Torqued all connections to spec and lined up gauge mandrels. Lined up blanked side of sliding sleeve for control lines. BHA (Bottom to top): 1 - Weatherford On-Off tool (Extended No Jay c/w nitrile seals) 1 - Joint 60.3mm J-55 EUE 6.99kg/m tubing 1 - X profile nipple (47.63mm seal bore - WX - SN# 53833188) 1 - 2.47m 60.3mm J-55 EUE pup joint (slim hole collar) 1 - 1.56m 60.3mm L-80 Gauge carrier (slim hole collar) - SN#WGDXBRT8005539 4/4) 1 - 3.06m 60.3mm J-55 EUE pup joint (slim hole collar) 1 - 1.56m 60.3mm L-80 Gauge carrier (slim hole collar) - SN#WGDXBRT8005539 1/4) 1 - 3.09m 60.3mm J-55 EUE pup joint (slim hole collar) 1 - 60.3mm CXU Weatherford sliding sleeve (47.63mm X profile in top / shift up to open) 1 - 1.24m 60.3mm J-55 EUE pup joint Installed gauge #1 into the bottom gauge carrier.

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 34
Report Date: 2/27/2014
Final Job Status: GAS
Final Report? Yes

DAILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
13:00	15:30	2.50	P	Wrapped gauge with tarp and used steam heater to apply heat. Readied pressure testing equipment. Connected laptop to gauge and monitored temperature. Once temperature steadied out at 15°c pressure test was started. Pressure tested seal between gauge and mandrel: low 10340 kPa / high 51700 kPa. Both tests held solid for 15 minutes. Performed a TRD (Time Domain Reflectometer) test on cable. Good. Water Resource Officer Katerine Ades 867-587-2911 stopped by location and performed an inspection. She wanted to see our water storage locations and how they were set up. I showed her the flowback tank farm and containment system. She said that everything looked good and was happy to see liners underneath rig and drip trays under all motors. She will write a report and email it to Conoco.
15:30	18:00	2.50	P	Ran BHA down to second gauge madrel (3 bands installed on 10' pup inbetween mandrells). Removed protective coating on cable. Installed cable from bottom gauge into slot in the side of top gauge mandrell and secured. Installed gauge #2 into top gauge mandrell. Heated up gauge and begun pressure test. Pressure tested seal between gauge and mandrel: low 10340 kPa / high 51700 kPa. Both tests held solid for 15 minutes. Performed a TRD (Time Domain Reflectometer) test on cable. Good.
18:00	18:30	0.50	P	WSS shift change
18:30	19:00	0.50	P	Held pre-job safety and operations meeting with all services on location. Review CPC PJHA on night operations consisting of picking up tubing, RIH with TEC line, cold weather operations. Perform daily walk around inspections and checks. All workers tickets checked and valid.
19:00	20:00	1.00	P	Started to run in with tubing and TEC cable, noticed that cable was rubbing pretty bad on pins on sheave due to trailer position and placement of sheave. Used crane to re-position spooling trailer closer to well to change angle and changed pin positioning in sheave. TEC cable now running smoothly in sheave.
20:00	06:00	10.00	P	Continue to run in hole 60.3mm/6.99kg/m/J-55 tubing, BHA and TEC line. Rigid installing 1 Canon clamp acoss each tubing connection. Weatherford tech testing resistance and gauges on way in hole. All tests were good. 126 joints in well at shift change.

FLUID SUMMARY

Fluid	To lease (m³)	From lease (m³)	To well (m³)	From well (m³)	Left to recover (m³)
FRESH WATER			0.00	2.00	6,586.26

DAILY COST

BU Desc	Vendor	Activity Code	Amount (Cos
Rig Camp	***VENDOR NOT LISTED***	E500	5(
Surface Completion Equipment Rental	BOREALIS COMMUNICATIONS INC	Q300	532.
Service Rig	CONOCO	E120	3,000.00
Service Rig	CORNERSTONE OILFIELD SERVICES LTD	E120	1,700.00
Service Rig	CORNERSTONE OILFIELD SERVICES LTD	E120	2,200.00
Surface Completion Equipment Rental	CORNERSTONE OILFIELD SERVICES LTD	Q300	195.00
Slickline Services	CORNERSTONE OILFIELD SERVICES LTD	U200	2,305.00
Safety Equipment & Services	FRONTIERMEDEX CANADA LTD/ EXLOGS SAHTU LTD	T430	2,000.00
Surface Completion Equipment Rental	HORIZON OILFILED SOLUTIONS INC	Q300	3,446.15
Wellsite Supervision & Engineering	M HAHN CONSULTING INC	T130	1,670.00
Surface Completion Equipment Rental	MACKAY RANGE DEVELOPMENT CORP	Q300	374.00
Surface Completion Equipment Rental	MYB CONSTRUCTION LTD	Q300	1,150.00
Service Rig	NABORS PRODUCTION SERVICES LTD	E120	20,499.00
Surface Completion Equipment Rental	RIGSAT COMMUNICATIONS INC	Q300	15.00
Surface Completion Equipment Rental	RIGSAT COMMUNICATIONS INC	Q300	15.00
Surface Completion Equipment Rental	SAHTU RCS ENERGY SERVICES LTD	Q300	1,200.00
Surface Completion Equipment Rental	SAHTU RCS ENERGY SERVICES LTD	Q300	250.00
Surface Completion Equipment Rental	SAHTU RCS ENERGY SERVICES LTD	Q300	1,746.00
Surface Completion Equipment Rental	SAHTU RCS ENERGY SERVICES LTD	Q300	480.00
Surface Completion Equipment Rental	SAHTU RCS ENERGY SERVICES LTD	Q300	450.00
Wellsite Supervision & Engineering	TECTONIC ENERGY CONSULTING INC	T130	1,545.00
Completion Fluids & Other Chem	TERVITA CORP	G300	8,480.00
Completion Fluids & Other Chem	TERVITA CORP	G300	2,180.00
Welltesting (Eqpmt,Srvcs,PTA,Gov't Subs)	WEATHERFORD CANADA	M220	16,520.00
Surface Completion Equipment Rental	WEATHERFORD CANADA	Q300	1,200.00

CUMULATIVE JOB FLARED GAS BY ZONE

Zone	Volume Gas Total (E3m³)
CANOL, Original Hole	1,595

PERFORATIONS

Date	Zone	Top (mKB)	Btm (mKB)	Shot Dens (shots/m)	Current Status
2/8/2014	CANOL, Original Hole	2,866.00	2,867.00	6.0	Open - Flowing
2/11/2014	CANOL, Original Hole	2,857.00	2,858.00	6.0	Open - Flowing

Report Printed: 4/14/2014

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 35
Report Date: 2/28/2014
Final Job Status: GAS
Final Report? Yes

HEADER INFORMATION

Country	State/Province	Region / Division	District	Field Name	Field Code
CANADA	N.W.T.	WCBU	NEW VENTURES	Canyon	

Surface Legal Location	API / UWI	License No.
E-76 65-10 126-45	300E7665-10126-45	EL 470

Orig KB/RT (m)	Ground Elevation (m)	KB-Grd (m)	KB-CF (m)	KB-TF (m)	Total Depth (mKB)	PBTD (All) (mKB)
273.40	268.20	5.20	5.40	4.22	2,910.00	Original Hole - 2,877.30

JOB INFORMATION

Job Category	Primary Job Type	Secondary Job Type	Total Field Estimate (Cost)
COMPLETIONS	INITIAL COMPLETION	RIGLESS	21,945,332.75

Objective
Hydrailically fracture and flow test as part of the 2014 Canol Exploration Program

Actual Start Date	End Date	Abandon Date	Responsible Grp 1	Responsible Grp 2	Responsible Grp 3
1/25/2014 00:00	3/28/2014 08:00		coved	lagartn	Chris Kendall

AFE COST SUMMARY

AFE / RFE / Maint.#	Total AFE Amount (Cost)	Total AFE + Supp Amount (Cost)	Total Field Estimate (Cost)	AFE-Field Estimate (Cost)
10351695	2,111,000.00	2,111,000.00	2,318,381.14	-207,381.14
10359413	16,997,500.00	20,641,514.00	19,626,951.61	1,014,562.39

DAILY INFORMATION

Report Start Date	Report End Date	Daily Cost Total (Cost)	Cumulative Cost (Cost)	Personnel Regular Hours (hr)
2/28/2014 06:00	3/1/2014 06:00	83,853.58	18,691,091.17	488.00

Daily Contacts
Completion Engineer, Theorn LaGarde, 403-710-9753; WS Superintendent, Derrick Cove, 780-831-1314; WS Supervisor, Chris Kendall, 780-518-3284; WS Supervisor, Myles Hahn, 780-402-0500; WS Supervisor, Michael Short, 403 348-7127; WS Supervisor, Chris Tucker,

Rig
Weatherford, FS 463

Tubing Pressure (kPa)	Casing Pressure (kPa)	Weather	Temperature (°C)	Lease Condition
	0	Clear	-24	Ice Pad

Last 24hr Summary
Continued to RIH with Weatherford BHA c/w dual real time gauges. Slid over top of slick joint with On-off skirt (no jay slots). Spaced out tubing string and landed the tubing hanger with 7000 daN compression on packer. Pressure tested packer and On-off seals to 30MPa. Good test. Rig out floor and handling equipment, remove bops. Orientate tubing hanger so cables are in proper position. Install BPV in tubing hanger. Install production wellhead (install control lines through wellhead) . Re-pressure test annulus and on/off seals to 30MPa, test good. Pressure test wellhead assembly to 1.4 low and 34.5MPa high for 15min tests good. Pressure test tubing hanger extended neck seals to 1.4 low and 34.5MPa high for 15 min each, test good. Rig in work floor and tarp in wellhead. Rig in testers line to wellhead. Rig crew pour new rope socket, prep swab equipment.

24hr Forecast
Weatherford gauge tech's finish tie in control lines to wellhead and rig in surface equipment. Pressure test ring gasket seal and upper tubing hanger seal. RIH slickline to open sleeve, pressure up and shear off pump off plug then RIH set gauges in X nipple. Swab and evaluate well.

DAILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
06:00	06:30	0.50	P	WSS Shift change.
06:30	07:00	0.50	P	Held a daily safety and operations meeting with all day shift personnel. Reviewed and discussed CPC PJHA regarding job scope and all associated hazards. All tickets checked and valid. Performed cross shift with night crews.
07:00	13:00	6.00	P	Serviced rig equipment. Functioned crown saver and E-kills. Continued to run in hole Weatherford BHA c/w real time down hole gauges and dual control cables to surface. Tested cable restisance every 30 minutes and temerature/pressure every hour. All tests were good. Canon clamps were installed over every tubing collar.
13:00	14:45	1.75	P	Up weight at 1750m = 12000daN. Down weight at 1750m = 12000daN. Slid over top of extended neck slick joint 6.09m in on joint #186. Set down 7000 daN onto packer and marked tubing. Pulled up and off packer and re-tagged in the same spot. Pulled tag joint and 1 more. Installed a 1.24m pup and a 3.08m pup. Re ran joint # 185 and installed tubing hanger. Tour bus with local citizens arrived on location escorted by CPC Construction hand Norm Garberg. Several of them left tour bus when on site and took photos the completion operations (no PPE was worn by tour group). I (Myles Hahn) went onto the tour bus and introduced myself. I then answered a few questions they had regarding perforating and fracing.
14:45	17:00	2.25	P	Lowered sheave out of the derrick and removed cables. Cut cables with 16' slack above tubing hanger. Stripped off protective coating from cable. Installed 12.7mm LP feral fittings onto cables (top and bottom of tubing hanger) and threaded the cables through the tubing hanger. Banded cables up to the bottom of the tubing hanger and then tightened Feral fittings. Landed the tubing hanger with 7000daN compression on packer.

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 35
Report Date: 2/28/2014
Final Job Status: GAS
Final Report? Yes

AILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
17:00	18:00	1.00	P	Pumped down the casing and pressure tested the packer and On-off seals to 30000 kPa. Pressure held solid for 15 minutes. Good test. Started to rig out work floor and equipment. Note: Weatherford 10K memory gauges to be ran by slickline were previously sent to location. They shipped up to Norman Wells (inside a Pelican case) and left outside for aprx 10days before being moved inside to be warmed up. When I opened the pelican box there was a note inside saying that the recorders were running and to not open them. I spoke with Weatherford hand Robert Smallwood 403-813-8159 regarding the gauges being left out in the cold and expressed concern that the battery life may have been affected. He suggested to remove the battery cover on gauge (Gauge SN#8927) and to listen for a click every 60 second indicating that the recorders are working. I did this while on the phone with him and heard the click 3 times in 3 minutes. Decision was made to re-install the battery cap and that the recorders were good and ready to be ran in hole.
18:00	18:30	0.50	P	WSS shift change.
18:30	19:00	0.50	P	Held pre-job safety and operations meeting. Review CPC PJHA with all services on removing bops, installing wellhead, pressure testing. All workers tickets checked and valid. Perform daily walk around inspections and checks.
19:00	22:30	3.50	P	Finish rig out rig floor and handling equipment. With Weatherford hands watching control cables , carefully strip off bops and adapter flange and install on stump. Re-align tubing hanger to line up control lines with ports in wellhead. Re- install tubing hanger lock down screws. Install BPV in tubing hanger. Pick up production wellhead. Clean ring groove, clean, inspect and grease extended neck tubing hanger seals and bottom of wellhead. Weatherford hands fed control cables through wellhead. Carefully land production wellhead and tighten down. No issues with cables when installing wellhead. Note: 2 Weatherford techs on hand for complete job. Weatherford was not able to supply techs for day and night shift. Hands were rotating out while running control cables and tubing the best that they could during day and night operations. Some stages of job required 2 techs on lease at same time. After control cables were fed through wellhead and wellhead installed, 2 techs are required to complete the tie in. At this point Weatherford hands felt they could not complete the tie in competently due to being tired. Decision was made to send Weatherford techs to camp for rest prior to completing tie in.
22:30	01:00	2.50	P	Re- pressure test annulus and on/off connector seals to 30MPa for 15 min, test was good. Fill wellhead with methanol to avoid freezing. Pressure test complete 2 1/16 x 10K wellhead to 1.4MPa low and 34.5MPa high for 15 min each, all tests good. Release pressure,remove BPV from tubing hanger. Pressure test between extended neck seals to 1.4MPa low and 34.5MPa high for 15 min, all tests good. Not able to test ring gasket seal yet due to control line ports not sealed yet. Waiting for Weatherford to complete install.
01:00	06:00	5.00	P	Rig in rig floor for slickline and swabbing operations. Tarp in under floor to heat wellhead. Weatherford testers rig in flow line to wellhead complete with check valve and ESD. Heat trace line with steam line. Rig crew rig out accumulator lines, move catwalk and racks to accommodate egress stairs from rig floor. Cut sandline and pour new rope socket for swabbing operations. Clean and tidy lease and equipment. Rig out not needed equipment.

FLUID SUMMARY

Fluid	To lease (m³)	From lease (m³)	To well (m³)	From well (m³)	Left to recover (m³)
FRESH WATER	0.00	0.00	0.00	0.00	6,586.26

DAILY COST

BU Desc	Vendor	Activity Code	Amount (Cost)
Rig Camp	***VENDOR NOT LISTED***	E500	500.00
Surface Completion Equipment Rental	BOREALIS COMMUNICATIONS INC	Q300	532.43
Surface Completion Equipment Rental	BOREALIS COMMUNICATIONS INC	Q300	310.00
Service Rig	CONOCO	E120	3,000.00
Service Rig	CORNERSTONE OILFIELD SERVICES LTD	E120	1,700.00
Service Rig	CORNERSTONE OILFIELD SERVICES LTD	E120	2,200.00
Surface Completion Equipment Rental	CORNERSTONE OILFIELD SERVICES LTD	Q300	195.00
Slickline Services	CORNERSTONE OILFIELD SERVICES LTD	U200	2,305.00
Safety Equipment & Services	FRONTIERMEDEX CANADA LTD/ EXLOGS SAHTU LTD	T430	2,000.00
Surface Completion Equipment Rental	HORIZON OILFILED SOLUTIONS INC	Q300	3,446.15
Wellsite Supervision & Engineering	M HAHN CONSULTING INC	T130	1,670.00
Surface Completion Equipment Rental	MACKAY RANGE DEVELOPMENT CORP	Q300	374.00
Surface Completion Equipment Rental	MYB CONSTRUCTION LTD	Q300	1,150.00
Service Rig	NABORS PRODUCTION SERVICES LTD	E120	20,470.00
Completion Fluids & Other Chem	NORTHERN TRUCK SERVICES (1994) LTD	G300	20,580.00
Surface Completion Equipment Rental	RIGSAT COMMUNICATIONS INC	Q300	15.00
Surface Completion Equipment Rental	RIGSAT COMMUNICATIONS INC	Q300	1F
Surface Completion Equipment Rental	SAHTU RCS ENERGY SERVICES LTD	Q300	1,2(
Surface Completion Equipment Rental	SAHTU RCS ENERGY SERVICES LTD	Q300	25(
Surface Completion Equipment Rental	SAHTU RCS ENERGY SERVICES LTD	Q300	1,746.00
Surface Completion Equipment Rental	SAHTU RCS ENERGY SERVICES LTD	Q300	480.00
Surface Completion Equipment Rental	SAHTU RCS ENERGY SERVICES LTD	Q300	450.00

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 36
Report Date: 3/1/2014
Final Job Status: GAS
Final Report? Yes

HEADER INFORMATION

y	State/Province	Region / Division	District	Field Name	Field Code
ADA	N.W.T.	WCBU	NEW VENTURES	Canyon	

Surface Legal Location	API / UWI	License No.
E-76 65-10 126-45	300E7665-10126-45	EL 470

Orig KB/RT (m)	Ground Elevation (m)	KB-Grd (m)	KB-CF (m)	KB-TF (m)	Total Depth (mKB)	PBTD (All) (mKB)
273.40	268.20	5.20	5.40	4.22	2,910.00	Original Hole - 2,877.30

JOB INFORMATION

Job Category	Primary Job Type	Secondary Job Type	Total Field Estimate (Cost)
COMPLETIONS	INITIAL COMPLETION	RIGLESS	21,945,332.75

Objective
Hydrailically fracture and flow test as part of the 2014 Canol Exploration Program

Actual Start Date	End Date	Abandon Date	Responsible Grp 1	Responsible Grp 2	Responsible Grp 3
1/25/2014 00:00	3/28/2014 08:00		coved	lagartn	Chris Kendall

AFE COST SUMMARY

AFE / RFE / Maint.#	Total AFE Amount (Cost)	Total AFE + Supp Amount (Cost)	Total Field Estimate (Cost)	AFE-Field Estimate (Cost)
10351695	2,111,000.00	2,111,000.00	2,318,381.14	-207,381.14
AFE / RFE / Maint.#	**Total AFE Amount (Cost)**	**Total AFE + Supp Amount (Cost)**	**Total Field Estimate (Cost)**	**AFE-Field Estimate (Cost)**
10359413	16,997,500.00	20,641,514.00	19,626,951.61	1,014,562.39

DAILY INFORMATION

Report Start Date	Report End Date	Daily Cost Total (Cost)	Cumulative Cost (Cost)	Personnel Regular Hours (hr)
3/1/2014 06:00	3/2/2014 06:00	134,314.62	18,825,405.79	488.00

Daily Contacts
Completion Engineer, Theorn LaGarde, 403-710-9753; WS Superintendent, Derrick Cove, 780-831-1314; WS Supervisor, Chris Kendall, 780-518-3284; WS Supervisor, Myles Hahn, 780-402-0500; WS Supervisor, Michael Short, 403 348-7127; WS Supervisor, Chris Tucker,

Rig
Weatherford, FS 463

Tubing Pressure (kPa)	Casing Pressure (kPa)	Weather	Temperature (°C)	Lease Condition
	0	Clear	-26	Ice Pad

Last 24hr Summary
Rigged on Weatherford wellhead outlet assembly for real time down hole gauges. Pressure tested BX156 ring seal and wellhead outlet assembly to 34MPa. Rigged in slickline. Ran 48.3mm GR to top of sliding sleeve at 1773,63mKB. Opened sliding sleeve. Rig on and pressure test service rig pump line to tubing. ssure up tubing and pump off PPMP plug on bottom of tubing. (22MPa to shear).RIH slickline with 47.63mm X-lock c/w instument hanger, shock absorber ombwell. Bombwell containing 2- weatherford 10K gauges. Set in 47.63mm X profile nipple below gauge carriers @ 1786.20mKB. Rig out Slickline. e to swab well with service rig. SCADA system is up and running but data not transmitting to welltest system. Weatherford tech to be out in morning to eshoot. Not able to begin swabbing until system is operational.

24hr Forecast
Troubleshoot and repair data system. Begin to swab and evaluate well.

DAILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
06:00	06:30	0.50	P	WSS Shift change.
06:30	07:00	0.50	P	Held a daily safety and operations meeting with all day shift personnel. Reviewed and discussed CPC PJHA regarding job scope and all associated hazards. All tickets checked and valid. Performed cross shift with night crews.
07:00	14:45	7.75	P	Weatherford gauge techs installed the wellhead outlet assembly into the top of the wellhead. Performed a TDR test on cables. Good. Pressure tested the BX 156 ring seal and Weatherford gauge ports in wellhead to 34000 kPa. Pressure held solid for 15 minutes. Good test. Moved light towers and set up for night time swabbing operations. Rigged out, loaded and moved #2 250 KVA NOV generator and spotted beside #1 250 KVA NOV generator by jet pump. Mechanic fixed oil leak on #1 250 KVA generator. Fired up both generators and set up lights.
14:45	16:15	1.50	P	Slickline arrived on location. Reviewed PJHA with rig crew and slickline regarding slickline procedures and all associated hazards. Discussed directive 33. Spotted and readied all slickline equipment. Weatherford data techs hooked up armored cables to wellhead outlet assembly's.
16:15	18:00	1.75	P	Performed the following slickline runs (lubricator purged and tested with N2 before each run): 1. Pressure tested lubricator with N2 to7000 kPa. Good test. Ran in hole with a 48.3mm gauge ring. Tagged the top of the the sliding sleeve at 1773.63mKB (1775mKB slickline depth). Pulled out of the hole. Gauge ring ran in and out of the hole smoothly. 2. Ran in hole with a 50.8mm XO sleeve shifting tool. Located SS at 1773.63mKB. SITP: 1900 kPa (N2). Spanged up 6 times and sleeve opened. Tubing pressure dropped 400 kPa. Ran XO tool up and down 4 times through sliding sleeve and did not locate. Pulled out of the hole. Heated pump line with steam.
18:00	18:30	0.50	P	WSS shift change.
18:30	19:00	0.50	P	Held pre-job safety and operations meeting. Review CPC PJHA on slickline and swabbing hazards. Ensure all workers tickets are valid. Perform daily walk around inspections and checks.

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 36
Report Date: 3/1/2014
Final Job Status: GAS
Final Report? Yes

DAILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
19:00	20:30	1.50	P	After service rig pump line was heated, install onto tubing and pressure test to 30MPa. Install gauge on csg to monitor. Pressure up tubing to 5MPa, monitor csg pressure to ensure sleeve is open. Csg pressured up to 5MPa also. Increase pressure on tubing to pump off PPMP plug (set to shear @ 24.5MPa differential). 20:15pm - Plug pumped off @ 22MPa (saw same pressure on csg side). Pressure immediately dropped to 0 on both sides and well went on vac. Drain and winterize pump line.
20:30	22:30	2.00	P	Make up weatherford gauges, install in bombwell make up rest of tool string as follows: top down - 2" X -line running tool -47.63mm X lock c/w instrument hanger -Shock abosorber and bombwell. Bombwell contains 2- Weatherford 10K gauges. Bottom Primary SN 8927, Top Secondary SN 8926 All connections were locktighted. Purge and pressure test lube with nitrogen. Open well @ 21:00pm. RIH 100m/min, perform pull test (ok). Ran through sliding sleeve with no issues down to 47.63mm X profile nipple below gauge carriers @ 1786.20mKB. 21:34pm gauges landed in X profile nipple @1786.20mKB POOH and rig out Opsco wireline. Was not able to confirm a fluid level.
22:30	23:30	1.00	P	Confirmed that Weatherford SCADA system is transmitting properly. Information not being transmitted properly to well test system. Everything was working properly from 21:15 to 21:45pm then data was lost. Tried to troubleshoot well test system with no success. Suspect issue is with wires in box. Weatherford tech is to be out in A.M to troubleshoot. Not able to begin swabbing operations until data systems are up and running properly.
23:30	06:00	6.50	P	Rig crew change out hammer unions and ready swab equipment. Calipre swab mandrel (47mm). Install pump line to top of wellhead to pressure test Weatherford flow line prior to swab operations. Ready csg outlet for weatherford gauge install.

FLUID SUMMARY

Fluid	To lease (m³)	From lease (m³)	To well (m³)	From well (m³)	Left to recover (m³)
FRESH WATER	0.00	16.45	0.16	0.00	6,586.42

DAILY COST

BU Desc	Vendor	Activity Code	Amount (Cost)
, Camp	***VENDOR NOT LISTED***	E500	50(
Surface Completion Equipment Rental	BOREALIS COMMUNICATIONS INC	Q300	6(
Service Rig	CONOCO	E120	2,50
Service Rig	CORNERSTONE OILFIELD SERVICES LTD	E120	13,299.00
Surface Completion Equipment Rental	CORNERSTONE OILFIELD SERVICES LTD	Q300	180.00
Surface Completion Equipment Rental	CORNERSTONE OILFIELD SERVICES LTD	Q300	170.00
Surface Completion Equipment Rental	CORNERSTONE OILFIELD SERVICES LTD	Q300	170.00
Service Rig	CORNERSTONE OILFIELD SERVICES LTD	E120	1,700.00
Service Rig	CORNERSTONE OILFIELD SERVICES LTD	E120	8,800.00
Slickline Services	CORNERSTONE OILFIELD SERVICES LTD	U200	8,950.00
Safety Equipment & Services	FRONTIERMEDEX CANADA LTD/ EXLOGS SAHTU LTD	T430	2,000.00
Surface Completion Equipment Rental	HORIZON OILFILED SOLUTIONS INC	Q300	1,900.00
Wellsite Supervision & Engineering	M HAHN CONSULTING INC	T130	1,670.00
Surface Completion Equipment Rental	MACKAY RANGE DEVELOPMENT CORP	Q300	403.00
Service Rig	NABORS PRODUCTION SERVICES LTD	E120	18,522.00
Completion Fluids & Other Chem	NORTHERN TRUCK SERVICES (1994) LTD	G300	17,150.00
Surface Completion Equipment Rental	RIGSAT COMMUNICATIONS INC	Q300	15.00
Surface Completion Equipment Rental	RIGSAT COMMUNICATIONS INC	Q300	15.00
Surface Completion Equipment Rental	SAHTU RCS ENERGY SERVICES LTD	Q300	600.00
Surface Completion Equipment Rental	SAHTU RCS ENERGY SERVICES LTD	Q300	600.00
Surface Completion Equipment Rental	SAHTU RCS ENERGY SERVICES LTD	Q300	250.00
Surface Completion Equipment Rental	SAHTU RCS ENERGY SERVICES LTD	Q300	1,552.00
Surface Completion Equipment Rental	SAHTU RCS ENERGY SERVICES LTD	Q300	480.00
Surface Completion Equipment Rental	SAHTU RCS ENERGY SERVICES LTD	Q300	450.00
Wellsite Supervision & Engineering	TECTONIC ENERGY CONSULTING INC	T130	1,545.00
Completion Fluids & Other Chem	TERVITA CORP	G300	1,968.00
npletion Fluids & Other Chem	TERVITA CORP	G300	3,580.00
elitesting (Eqpmt,Srvcs,PTA,Gov't Subs)	WEATHERFORD CANADA	M220	24,870
Surface Completion Equipment Rental	WEATHERFORD CANADA	Q300	1,20
Downhole Completion Equipment	WEATHERFORD CANADA	C100	18,671.

CUMULATIVE JOB FLARED GAS BY ZONE

Zone	Volume Gas Total (E3m³)
CANOL, Original Hole	1,595.320

Report Printed: 4/14/2014

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 37
Report Date: 3/2/2014
Final Job Status: GAS
Final Report? Yes

WELL HEADER INFORMATION

Country	State/Province	Region / Division	District	Field Name	Field Code
CANADA	N.W.T.	WCBU	NEW VENTURES	Canyon	

Surface Legal Location	API / UWI	License No.
E-76 65-10 126-45	300E7665-10126-45	EL 470

Orig KB/RT (m)	Ground Elevation (m)	KB-Grd (m)	KB-CF (m)	KB-TF (m)	Total Depth (mKB)	PBTD (All) (mKB)
273.40	268.20	5.20	5.40	4.22	2,910.00	Original Hole - 2,877.30

JOB INFORMATION

Job Category	Primary Job Type	Secondary Job Type	Total Field Estimate (Cost)
COMPLETIONS	INITIAL COMPLETION	RIGLESS	21,945,332.75

Objective
Hydrailically fracture and flow test as part of the 2014 Canol Exploration Program

Actual Start Date	End Date	Abandon Date	Responsible Grp 1	Responsible Grp 2	Responsible Grp 3
1/25/2014 00:00	3/28/2014 08:00		coved	lagartn	Chris Kendall

AFE COST SUMMARY

AFE / RFE / Maint.#	Total AFE Amount (Cost)	Total AFE + Supp Amount (Cost)	Total Field Estimate (Cost)	AFE-Field Estimate (Cost)
10351695	2,111,000.00	2,111,000.00	2,318,381.14	-207,381.14
10359413	16,997,500.00	20,641,514.00	19,626,951.61	1,014,562.39

DAILY INFORMATION

Report Start Date	Report End Date	Daily Cost Total (Cost)	Cumulative Cost (Cost)	Personnel Regular Hours (hr)
3/2/2014 06:00	3/3/2014 06:00	366,062.61	19,191,468.40	488.00

Daily Contacts
Completion Engineer, Theorn LaGarde, 403-710-9753; WS Superintendent, Derrick Cove, 780-831-1314; WS Supervisor, Chris Kendall, 780-518-3284; WS Supervisor, Myles Hahn, 780-402-0500; WS Supervisor, Michael Short, 403 348-7127; WS Supervisor, Chris Tucker,

Rig
Weatherford, FS 463

Tubing Pressure (kPa)	Casing Pressure (kPa)	Weather	Temperature (°C)	Lease Condition
3,170	3,018	Clear	-26	Ice Pad

Last 24hr Summary
Worked on SCADA and Weatherford real time data acquisition equipment until data communication was confirmed. Swabbed well. IFL was 150m. Pulled 9 swabs total recovering 9.65m³ water and the well started to flow. Choked back flow to keep fluid returns below 10.0m³/d and ensure BHP does not drop more than 15%. Obtained Protechnics samples as per sampling schedule.

0 Flow summary (13.5 Hours flowed - 13.5 Hours Flared), FTP: 3170 kPa, SICP: 3018 kPa, Flow Temp: 42°c, Meter Run Temp: 43°c, Choke size: 12.7mm, Gas Rate: 10.52 E³m³/d, Cumulative Gas to Flare: 5.58 E³m³, LFTR: 6586.42m³, LFR last hour: 8.50m³, LFR last 6 hours: 47.27m³, TLFR: 134.00m³, TLFLTR: 6452.42m³, Oil rec. last hour: 0.0m³, Oil rec. last 6 hours: 0.0m³, Cumulative Oil rec: 0.0m³, Salinity: 38000 ppm, PH: 8, Sand: none

24hr Forecast
Continue to flow well.

DAILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
06:00	06:30	0.50	P	WSS shift change.
06:30	07:00	0.50	P	Held a daily safety and operations meeting with all day shift personnel. Reviewed and discussed CPC PJHA regarding job scope and all associated hazards. All tickets checked and valid. Performed cross shift with night crews.
07:00	12:00	5.00	P	Weatherford data techs and Weatherford SCADA hand worked on getting their real time data packages to communicate with servers. Pumped warm fluid across through the wellhead to testers. Pressure tested flow line to 34000 kPa. Good test. Weatherford "Visean" real time data communication package was now communicating properly. SCADA was also now communicating real time. Rig crew hoisted and started to rig in their swab equipment. Hammer union on the swab lubricator needed to be changed out. Rig does not have a sandline wrap sheet and the first wrap was not spooled neatly. Opened master valves and ran in hole with sinker bar to straighten out wraps and make a wrap sheet. Note: Weatherford brought up digital gauges for SCADA package to be installed onto the tubing and casing. They did not send the equipment to install the gauges (power line + data line). I spoke with Weatherford salesman Mark Bedry (403-828-3200) and he said that Weatherford failed to send up the correct equipment for the full install as planned.
12:00	14:15	2.25	P	Swabbed well: Swab # Tag Pull Water Rec. Oil Rec. Total Water Total Oil Cum. Rec. Tubing Casing 1.12:13 150 400 0.55m³ 0.00m³ 0.55m³ 0.00m³ 0.55m³ Vac Vac 2.12:40 200 600 0.70m³ 0.00m³ 1.25m³ 0.00m³ 1.25m³ Vac Vac 3.13:15 450 940 1.30m³ 0.00m³ 2.55m³ 0.00m³ 2.55m³ Vac Vac 4.13:40 100 764 0.95m³ 0.00m³ 3.50m³ 0.00m³ 3.50m³ Vac Vac 5.14:00 100 852 1.10m³ 0.00m³ 4.60m³ 0.00m³ 4.60m³ Vac Vac 6.14:25 100 852 0.90m³ 0.00m³ 5.50m³ 0.00m³ 5.50m³ Vac Vac 7.15:35 suface 582 0.75m³ 0.00m³ 6.25m³ 0.00m³ 6.25m³ 34 Vac 8.15:55 200 764 1.10m³ 0.00m³ 7.35m³ 0.00m³ 7.35m³ 42 Vac 9.16:15 100 852 2.30m³ 0.00m³ 9.65m³ 0.00m³ 9.65m³ 161 Vac Well started to flow.

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 37
Report Date: 3/2/2014
Final Job Status: GAS
Final Report? Yes

DAILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
14:15	18:00	3.75	P	16:55 Changed choke to 19.05mm 17:00 FTP: 1362 kPa / SICP: Vac 17:08 Installed 25.4mm Orifice plate into Low stage turbine meter - Burnable gas to flare 17:15 FTP: 1414 kPa / SICP: Vac 17:30 FTP: 1655 kPa / SICP: Vac 17:35 Diverted flow to High stage separator 17:42 Installed 25.4mm Orifice plate into High stage 17:45 FTP: 1804 kPa / SICP: Vac 18:00 Flow summary (1.5 Hours flowed - 1.5 Hours Flared) FTP: 1872 kPa SICP: vac Flow Temp: 32°c Meter Run Temp: 30°c Choke size: 19.05mm Gas Rate: 3.54 E³m³/d Cumulative Gas to Flare: 0.89 E³m³ LFTR: 6586.42m³ LFR last hour: 8.80m³ LFR last 6 hours: 31.35m³ TLFR: 31.35m³ TLFLTR: 6555.07m³ Oil rec. last hour: 0.0m³ Oil rec. last 6 hours: 0.0m³ Cumulative Oil rec: 0.0m³ Salinity: 40000 ppm PH: 7 Sand: none
18:00	00:00	6.00	P	18:40 increased choke to 12.7mm 20:30 Obtained first Protechnics sample (4 hours after start of flow test). All further Protechnics samples will be taken as per sampling schedule. 00:00 Flow summary (7.5 Hours flowed - 7.5 Hours Flared) FTP: 3089 kPa SICP: 1931 kPa Flow Temp: 40°c Meter Run Temp: 40°c Choke size: 12.7mm Gas Rate: 8.86 E³m³/d Cumulative Gas to Flare: 3.05 E³m³ LFTR: 6586.42m³ LFR last hour: 9.79m³ LFR last 6 hours: 55.38m³ TLFR: 86.73m³ TLFLTR: 6499.69m³ Oil rec. last hour: 0.0m³ Oil rec. last 6 hours: 0.0m³ Cumulative Oil rec: 0.0m³ Salinity: 38000 ppm PH: 7 Sand: none H2S = 0ppm

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 38
Report Date: 3/3/2014
Final Job Status: GAS
Final Report? Yes

HEADER INFORMATION

y	State/Province	Region / Division	District	Field Name	Field Code
ADA	N.W.T.	WCBU	NEW VENTURES	Canyon	

Surface Legal Location	API / UWI	License No.
E-76 65-10 126-45	300E7665-10126-45	EL 470

Orig KB/RT (m)	Ground Elevation (m)	KB-Grd (m)	KB-CF (m)	KB-TF (m)	Total Depth (mKB)	PBTD (All) (mKB)
273.40	268.20	5.20	5.40	4.22	2,910.00	Original Hole - 2,877.30

JOB INFORMATION

Job Category	Primary Job Type	Secondary Job Type	Total Field Estimate (Cost)
COMPLETIONS	INITIAL COMPLETION	RIGLESS	21,945,332.75

Objective
Hydrailically fracture and flow test as part of the 2014 Canol Exploration Program

Actual Start Date	End Date	Abandon Date	Responsible Grp 1	Responsible Grp 2	Responsible Grp 3
1/25/2014 00:00	3/28/2014 08:00		coved	lagartn	Chris Kendall

AFE COST SUMMARY

AFE / RFE / Maint.#	Total AFE Amount (Cost)	Total AFE + Supp Amount (Cost)	Total Field Estimate (Cost)	AFE-Field Estimate (Cost)
10351695	2,111,000.00	2,111,000.00	2,318,381.14	-207,381.14
AFE / RFE / Maint.#	**Total AFE Amount (Cost)**	**Total AFE + Supp Amount (Cost)**	**Total Field Estimate (Cost)**	**AFE-Field Estimate (Cost)**
10359413	16,997,500.00	20,641,514.00	19,626,951.61	1,014,562.39

DAILY INFORMATION

Report Start Date	Report End Date	Daily Cost Total (Cost)	Cumulative Cost (Cost)	Personnel Regular Hours (hr)
3/3/2014 06:00	3/4/2014 06:00	185,243.61	19,376,712.01	564.00

Daily Contacts
Completion Engineer, Theorn LaGarde, 403-710-9753; WS Superintendent, Derrick Cove, 780-831-1314; WS Supervisor, Chris Kendall, 780-518-3284; WS Supervisor, Myles Hahn, 780-402-0500; WS Supervisor, Michael Short, 403 348-7127; WS Supervisor, Chris Tucker,

Rig
Weatherford, FS 463

Tubing Pressure (kPa)	Casing Pressure (kPa)	Weather	Temperature (°C)	Lease Condition
3,170	3,018	clear	-20	Ice Pad

Last 24hr Summary
Continue to flow and evaluate well to Weatherford testers. AGAT Collected and shipped complete water, additional water and time-lapse water samples. Protechnic samples and rest of water and gas samples collected as per schedule. Shut in well @ 10:30am to remove swab tree, rig out service and move away n wellhead. Re-open well @ 11:45am. Choke size = 12.7mm.
pm Flow summary (Hours flowed - 36 Hours 15min Flared)

FTP: 3998 kPa
SICP: 6115 kPa
Flow Temp: 6°c
Meter Run Temp: 47°c
Choke size: 12.7mm
Gas Rate: 15.23 E^3m^3/d
Cumulative Gas to Flare: 16.10 E^3m^3
Cumulative Gas to Flare last 24hrs: 10.53 E^3m^3
LFTR: 6586.42m^3
LFR last hour: 7.30m^3
LFR last 24 hours: 182.51m^3 (hourly average last 24 hours = 7.60m^3)
TLFR: 316.51m^3
TLFLTR: 6269.91m^3
Oil rec. last hour: 0.0m^3
Oil rec. last 6 hours: 0.0m^3
Cumulative Oil rec: 0.0m^3
Salinity: 32000 ppm
PH: 7
Sand: Trace

24hr Forecast
Continue to flow well.

DAILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
06:00	06:30	0.50	P	Held pre-job safety and operations meeting. Review CPC PJHA on flowing well and rigging out service rig operations with all services on location. Ensure all workers tickets valid. (good) Perform daily walk around inspections and checks.

DAILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
06:30	12:00	5.50	P	Continue to flowback well to Weatherford testers on 12.7mm choke. Ensure drawdown not to exceed 15% of original BHP and not flowing more than 9m³ per hour. Shut in well @ 10:30am to rig out swab tree and service rig. Re-opened the well to flow @ 11:45am. 12:00 Flow summary (Hours flowed - 18 Hours 15min Flared) FTP: 1609 kPa SICP: 30183927 kPa Flow Temp: 24°c Meter Run Temp: 39°c Choke size: 12.7mm Gas Rate: 1.13 E³m³/d Cumulative Gas to Flare: 1.86 E³m³ LFTR: 6586.42m³ LFR last hour: 1.2m³ LFR last 6 hours: 40.16m³ (hourly average last 6 hours =6.69m³) TLFR: 174.16m³ TLFLTR: 6412.26m³ Oil rec. last hour: 0.0m³ Oil rec. last 6 hours: 0.0m³ Cumulative Oil rec: 0.0m³ Salinity: 32000 ppm PH: 8 Sand: none AGAT Collected and shipped complete water, additional water and time-lapse water samples. Protechnic samples and rest of water and gas samples collected as per schedule.
12:00	18:00	6.00	P	18:00pm Flow summary (Hours flowed - 24 Hours 15min Flared) FTP: 3142 kPa SICP:4639 kPa Flow Temp: 10°c Meter Run Temp: 45°c Choke size: 12.7mm Gas Rate: 9.43 E³m³/d Cumulative Gas to Flare: 9.64 E³m³ LFTR: 6586.42m³ LFR last hour: 9.34m³ LFR last 6 hours: 51.44m³ (hourly average last 6 hours =8.57m³) TLFR: 225.6m³ TLFLTR: 6360.82m³ Oil rec. last hour: 0.0m³ Oil rec. last 6 hours: 0.0m³ Cumulative Oil rec: 0.0m³ Salinity: 34000 ppm PH: 8 Sand: none
18:00	00:00	6.00	P	24:00pm Flow summary (Hours flowed - 30 Hours 15min Flared) FTP: 3616 kPa SICP:5327 kPa Flow Temp: 16°c Meter Run Temp: 37°c Choke size: 12.7mm Gas Rate: 12.25 E³m³/d Cumulative Gas to Flare: 12.51 E³m³ LFTR: 6586.42m³ LFR last hour: 7.29m³ LFR last 6 hours: 39.85m³ (hourly average last 6 hours =6.64m³) TLFR: 267.46m³ TLFLTR: 6318.96m³ Oil rec. last hour: 0.0m³ Oil rec. last 6 hours: 0.0m³ Cumulative Oil rec: 0.0m³ Salinity: 30000 ppm PH: 8 Sand: Trace

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 38
Report Date: 3/3/2014
Final Job Status: GAS
Final Report? Yes

Y TIME LOG

...t Time	End Time	Dur (hr)	Time P-T-X	Operation
00:00	06:00	6.00	P	06:00pm Flow summary (Hours flowed - 36 Hours 15min Flared) FTP: 3998 kPa SICP: 6115 kPa Flow Temp: 6°c Meter Run Temp: 47°c Choke size: 12.7mm Gas Rate: 15.23 E³m³/d Cumulative Gas to Flare: 16.10 E³m³ Cumulative Gas to Flare last 6 hrs: 3.59 E³m³ LFTR: 6586.42m³ LFR last hour: 7.30m³ LFR last 6 hours: 49.05m³ (hourly average last 6 hours = 8.18m³) TLFR: 316.51m³ TLFLTR: 6269.91m³ Oil rec. last hour: 0.0m³ Oil rec. last 6 hours: 0.0m³ Cumulative Oil rec: 0.0m³ Salinity: 32000 ppm PH: 7 Sand: Trace

FLUID SUMMARY

Fluid	To lease (m³)	From lease (m³)	To well (m³)	From well (m³)	Left to recover (m³)
FRESH WATER	0.00	149.00	0.00	182.51	6,269.91

DAILY COST

BU Desc	Vendor	Activity Code	Amount (Cost)
Rig Camp	***VENDOR NOT LISTED***	E500	500.00
Surface Completion Equipment Rental	BOREALIS COMMUNICATIONS INC	Q300	604.61
mpletion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	19,270.00
letion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	19,270.00
pletion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	3,430.00
Trucking/Hauling/ Hot Shot Services	CANOL OILFIELD SERVICES INC	P100	9,240.00
Service Rig	CONOCO	E120	5,100.00
Surface Completion Equipment Rental	CORNERSTONE OILFIELD SERVICES LTD	Q300	180.00
Slickline Services	CORNERSTONE OILFIELD SERVICES LTD	U200	2,200.00
Surface Completion Equipment Rental	CORNERSTONE OILFIELD SERVICES LTD	Q300	170.00
Surface Completion Equipment Rental	CORNERSTONE OILFIELD SERVICES LTD	Q300	170.00
Service Rig	CORNERSTONE OILFIELD SERVICES LTD	E120	1,700.00
Service Rig	CORNERSTONE OILFIELD SERVICES LTD	E120	2,200.00
Safety Equipment & Services	FRONTIERMEDEX CANADA LTD/ EXLOGS SAHTU LTD	T430	2,000.00
Surface Completion Equipment Rental	HORIZON OILFILED SOLUTIONS INC	Q300	1,900.00
Wellsite Supervision & Engineering	M HAHN CONSULTING INC	T130	1,670.00
Surface Completion Equipment Rental	MACKAY RANGE DEVELOPMENT CORP	Q300	403.00
Service Rig	NABORS PRODUCTION SERVICES LTD	E120	16,044.00
Completion Fluids & Other Chem	NORTHERN TRUCK SERVICES (1994) LTD	G300	17,850.00
Completion Fluids & Other Chem	NORTHERN TRUCK SERVICES (1994) LTD	G300	24,990.00
Completion Fluids & Other Chem	NORTHERN TRUCK SERVICES (1994) LTD	G300	24,990.00
Surface Completion Equipment Rental	RIGSAT COMMUNICATIONS INC	Q300	15.00
Surface Completion Equipment Rental	RIGSAT COMMUNICATIONS INC	Q300	15.00
Surface Completion Equipment Rental	SAHTU RCS ENERGY SERVICES LTD	Q300	600.00
Surface Completion Equipment Rental	SAHTU RCS ENERGY SERVICES LTD	Q300	600.00
Surface Completion Equipment Rental	SAHTU RCS ENERGY SERVICES LTD	Q300	250.00
Surface Completion Equipment Rental	SAHTU RCS ENERGY SERVICES LTD	Q300	1,552.00
Surface Completion Equipment Rental	SAHTU RCS ENERGY SERVICES LTD	Q300	480.00
rface Completion Equipment Rental	SAHTU RCS ENERGY SERVICES LTD	Q300	450.00
te Supervision & Engineering	TECTONIC ENERGY CONSULTING INC	T130	1,545.00
e Supervision & Engineering	TECTONIC ENERGY CONSULTING INC	T130	1,545.00
sting (Eqpmt,Srvcs,PTA,Gov't Subs)	WEATHERFORD CANADA	M220	23,110.00
Surface Completion Equipment Rental	WEATHERFORD CANADA	Q300	1,200.00

Report Printed: 4/14/2014

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 39
Report Date: 3/4/2014
Final Job Status: GAS
Final Report? Yes

WELL HEADER INFORMATION

Country	State/Province	Region / Division	District	Field Name	Field Code
CANADA	N.W.T.	WCBU	NEW VENTURES	Canyon	

Surface Legal Location	API / UWI	License No.
E-76 65-10 126-45	300E7665-10126-45	EL 470

Orig KB/RT (m)	Ground Elevation (m)	KB-Grd (m)	KB-CF (m)	KB-TF (m)	Total Depth (mKB)	PBTD (All) (mKB)
273.40	268.20	5.20	5.40	4.22	2,910.00	Original Hole - 2,877.30

JOB INFORMATION

Job Category	Primary Job Type	Secondary Job Type	Total Field Estimate (Cost)
COMPLETIONS	INITIAL COMPLETION	RIGLESS	21,945,332.75

Objective
Hydrailically fracture and flow test as part of the 2014 Canol Exploration Program

Actual Start Date	End Date	Abandon Date	Responsible Grp 1	Responsible Grp 2	Responsible Grp 3
1/25/2014 00:00	3/28/2014 08:00		coved	lagartn	Chris Kendall

AFE COST SUMMARY

AFE / RFE / Maint.#	Total AFE Amount (Cost)	Total AFE + Supp Amount (Cost)	Total Field Estimate (Cost)	AFE-Field Estimate (Cost)
10351695	2,111,000.00	2,111,000.00	2,318,381.14	-207,381.14
AFE / RFE / Maint.#	**Total AFE Amount (Cost)**	**Total AFE + Supp Amount (Cost)**	**Total Field Estimate (Cost)**	**AFE-Field Estimate (Cost)**
10359413	16,997,500.00	20,641,514.00	19,626,951.61	1,014,562.39

DAILY INFORMATION

Report Start Date	Report End Date	Daily Cost Total (Cost)	Cumulative Cost (Cost)	Personnel Regular Hours (hr)
3/4/2014 06:00	3/5/2014 06:00	93,728.72	19,470,440.73	564.00

Daily Contacts
Completion Engineer, Theorn LaGarde, 403-710-9753; WS Superintendent, Derrick Cove, 780-831-1314; WS Supervisor, Chris Kendall, 780-518-3284; WS Supervisor, Myles Hahn, 780-402-0500; WS Supervisor, Michael Short, 403 348-7127; WS Supervisor, Chris Tucker,

Rig
Weatherford, FS 463

Tubing Pressure (kPa)	Casing Pressure (kPa)	Weather	Temperature (°C)	Lease Condition
3,998	6,115	Clear	-16	Ice Pad

Last 24hr Summary
Continued to flow well to testers on 12.7mm choke. Samples gathered as per schedule. Change choke sizes and Monitor BHP ensure not to draw down more than 40% of original BHP.Started to see traces of condensate @ 16:00pm. AGAT recovered 2- 1L samples of condensate, 2 gas samples taken and to be sent March 5 for h2s analysis.
:00pm increase choke size to 13.49mm, BHP prior to choke change to 13.49mm = 14,072 kPa.
18:00pm increase choke size to 14.29mm, BHP prior to choke size change to 14.29mm =13,978kPa.
19:00pm increase choke size to 15.88mm, BHP prior to choke change to 15.88mm = 13870 kPa.
22:00pm increase choke size to 16.67mm, BHP prior to choke size change to 16.67mm =13,447kPa.
04:00am increase choke size to 17.46mm, BHP prior to choke change to 17.46mm = 12,949 kPa.
06:00am increase choke size to 19.05mm, BHP prior to choke change to 19.05mm = 12,827 kPa.

06:00pm Flow summary (Hours flowed - 60 Hours 15min Flared)
FTP: 5091 kPa
SICP:10776 kPa
Intemediate CSG = 1400KPa
Flow Temp: 16°c
Meter Run Temp: 43°c
Choke size: 17.46mm
Gas Rate: 110.06 E^3m^3/d
Cumulative Gas to Flare: 78.68 E^3m^3
Cumulative Gas to Flare last 24 hrs: 62.58 E^3m^3
LFTR: 6586.42m^3
LFR last hour: 7.29m^3
LFR last 24 hours: 195.16m^3 (hourly average last 24 hours = 8.13 m^3)
TLFR: 511.67m^3
TLFLTR: 6074.75m^3
Oil rec. last hour: 0.23m^3
Oil rec. last 24 hours: 2.79m^3
Cumulative Oil rec: 2.79m^3
Oil API =58.68
Salinity: 40000 ppm
PH: 8
Sand: Trace
Surface Total 282.25m^3

24hr Forecast
Continue Flow Well to testers.

DAILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
06:00	06:30	0.50	P	WSS shift change. Held pre-job safety and operations meeting. Review CPC PJHA with all services. Discuss moving rig equipment. Flow back well to Weatherford testers. Ensure all workers ticket are checked and valid. Perform daily walk around inspections and checks.

ILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
06:30	12:00	5.50	P	12:00pm Flow summary (Hours flowed - 42 Hours 15min Flared) FTP: 5061 kPa SICP:7109 kPa Flow Temp: 15°c Meter Run Temp: 48°c Choke size: 12.7mm Gas Rate: 26.17 E^3m^3/d Cumulative Gas to Flare: 21.24 E^3m^3 Cumulative Gas to Flare last 6 hrs: 5.14 E^3m^3 LFTR: 6586.42m^3 LFR last hour: 10.91m^3 LFR last 6 hours: 61.47m^3 (hourly average last 6 hours = 10.24m^3) TLFR: 377.98m^3 TLFLTR: 6208.44m^3 Oil rec. last hour: 0.0m^3 Oil rec. last 6 hours: 0.0m^3 Cumulative Oil rec: 0.0m^3 Salinity: 32000 ppm PH: 8 Sand: Trace Surface Total 242.62m^3 AGAT routine samples taken as per schedule. Protechnic samples taken as per schedule. Move service rig, pipe racks, catwalk, doghouse, and 60.3mm tubing off lease. Rack at N-20 lease until ready to go to completion.
12:00	18:00	6.00	P	2 stock condensate samples taken by AGAT @ 14:30pm 2 gas samples taken by AGAT @ 15:00pm. To be sent for rush analysis March 5 2014 17:00pm increase choke size to 13.49mm. Monitor BHP to ensure not to draw down more than 40% of original BHP. BHP prior to choke change to 13.49mm = 14,072 kPa. 18:00pm increase choke size to 14.29mm. Monitor BHP to ensure not to draw down more than 40% of origing BHP. BHP prior to choke size change to 14.29mm =13,978kPa. 18:00pm Flow Summary (Hours flowed- 48hours 15min Flared) FTP:5493 kPa SICP:8590 kPa Flow Temp: 16°c Meter Run Temp: 45°c Choke size: 12.7mm Gas Rate: 48.75E^3m^3/d Cumulative Gas to Flare: 29.16 E^3m^3 Cumulative Gas to Flare last 6 hrs:7.92 E^3m^3 LFTR: 6586.42m^3 LFR last hour: 12m^3 LFR last 6 hours: 44.47m^3 (hourly average last 6 hours = 7.41m^3) TLFR: 422.45m^3 TLFLTR: 6208.44m^3 Condensate rec. last hour: .24m^3 Condensate last 6 hours: 0.24m^3 Cumulative Condensate rec: 0.24m^3 Salinity: 36000 ppm PH: 8 Sand: Trace Surface Total 201.03m^3 WSS shift Change

DAILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
18:00	00:00	6.00	P	19:00pm increase choke size to 15.88mm. Monitor BHP to ensure not to draw down more than 40% of original BHP. BHP prior to choke change to 15.88mm = 13870 kPa. 22:00pm increase choke size to 16.67mm. Monitor BHP to ensure not to draw down more than 40% of origing BHP. BHP prior to choke size change to 16.67mm =13,447kPa. 24:00pm Flow summary (Hours flowed - 54 Hours 15min Flared) FTP: 4714 kPa SICP: 11198 kPa Flow Temp: 14°c Meter Run Temp: 43°c Choke size: 16.67mm Gas Rate: 140.67 E^3m^3/d Cumulative Gas to Flare: 51.90 E^3m^3 Cumulative Gas to Flare last 6 hrs: E^3m^3 LFTR: 6586.42m^3 LFR last hour: 10.47m^3 LFR last 6 hours: 47.22m^3 (hourly average last 6 hours = 7.87m^3) TLFR: 469.67m^3 TLFLTR: 6116.75m^3 Oil rec. last hour: 0.21m^3 Oil rec. last 6 hours: 1.33m^3 Cumulative Oil rec: 1.57m^3 Salinity: 40000 ppm PH: 8 Sand: Trace Surface Total 240.25m^3
00:00	04:00	4.00	P	04:00am Flow summary (Hours flowed - 58 Hours 15min Flared) Readings of last 6hrs flowed since 16.67mm choke changed @ 22:00hrs to 0400hrs FTP: 5582 kPa SICP:10859 kPa Flow Temp: 16°c Meter Run Temp: 48°c Choke size: 16.67mm Gas Rate: 128.51 E^3m^3/d Cumulative Gas to Flare: 70.14 E^3m^3 Cumulative Gas to Flare last 6 hrs: 27.43 E^3m^3 LFTR: 6586.42m^3 LFR last hour: 6.83m^3 LFR last 6 hours: 39.62m^3 (hourly average last 6 hours = 6.60m^3) TLFR: 498.31m^3 TLFLTR: 6088.11m^3 Oil rec. last hour: 0.21m^3 Oil rec. last 6 hours: 1.2m^3 Cumulative Oil rec: 2.37.m^3 Salinity: 40000 ppm PH: 8 Sand: Trace Surface Total 268.89m^3 04:00pm increase choke size to 17.46mm. Monitor BHP to ensure not to draw down more than 40% of original BHP. BHP prior to choke change to 17.46mm = 12,949 kPa.

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 39
Report Date: 3/4/2014
Final Job Status: GAS
Final Report? Yes

LY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
04:00	06:00	2.00	P	06:00am Flow summary (Hours flowed - 60 Hours 15min Flared) FTP: 5091 kPa SICP:10776 kPa Internediate CSG = 1400KPa Flow Temp: 16°c Meter Run Temp: 43°c Choke size: 17.46mm Gas Rate: 110.06 E³m³/d Cumulative Gas to Flare: 78.68 E³m³ Cumulative Gas to Flare last 6 hrs: 27.43 E³m³ LFTR: 6586.42m³ LFR last hour: 7.29m³ LFR last 6 hours: 42.00m³ (hourly average last 6 hours = 7.0m³) TLFR: 511.67m³ TLFLTR: 6074.75m³ Oil rec. last hour: 0.23m³ Oil rec. last 6 hours: 1.22m³ Cumulative Oil rec: 2.79m³ Oil API =58.68 Salinity: 40000 ppm PH: 8 Sand: Trace Surface Total 282.25m³ 06:00am increase choke size to 19.05mm. Monitor BHP to ensure not to draw down more than 40% of original BHP. BHP prior to choke change to 19.05mm = 12,827 kPa.

FLUID SUMMARY

Fluid	To lease (m³)	From lease (m³)	To well (m³)	From well (m³)	Left to recover (m³)
ESH WATER	0.00	129.21	0.00	195.16	6,074.75
DUCED OIL			0.00	2.79	-2.79

DAILY COST

BU Desc	Vendor	Activity Code	Amount (Cost)
Rig Camp	***VENDOR NOT LISTED***	E500	500.00
Surface Completion Equipment Rental	BOREALIS COMMUNICATIONS INC	Q300	604.62
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	3,430.00
Service Rig	CONOCO	E120	9,600.00
Surface Completion Equipment Rental	CORNERSTONE OILFIELD SERVICES LTD	Q300	180.00
Surface Completion Equipment Rental	CORNERSTONE OILFIELD SERVICES LTD	Q300	170.00
Surface Completion Equipment Rental	CORNERSTONE OILFIELD SERVICES LTD	Q300	170.00
Service Rig	CORNERSTONE OILFIELD SERVICES LTD	E120	1,700.00
Service Rig	CORNERSTONE OILFIELD SERVICES LTD	E120	2,200.00
Slickline Services	CORNERSTONE OILFIELD SERVICES LTD	U200	6,500.00
Safety Equipment & Services	FRONTIERMEDEX CANADA LTD/ EXLOGS SAHTU LTD	T430	2,000.00
Surface Completion Equipment Rental	HORIZON OILFILED SOLUTIONS INC	Q300	1,900.00
Surface Completion Equipment Rental	MACKAY RANGE DEVELOPMENT CORP	Q300	403.00
Service Rig	NABORS PRODUCTION SERVICES LTD	E120	13,429.10
Completion Fluids & Other Chem	NORTHERN TRUCK SERVICES (1994) LTD	G300	5,930.00
Completion Fluids & Other Chem	NORTHERN TRUCK SERVICES (1994) LTD	G300	5,930.00
Completion Fluids & Other Chem	NORTHERN TRUCK SERVICES (1994) LTD	G300	5,930.00
Completion Fluids & Other Chem	NORTHERN TRUCK SERVICES (1994) LTD	G300	5,930.00
Surface Completion Equipment Rental	RIGSAT COMMUNICATIONS INC	Q300	15.00
Surface Completion Equipment Rental	RIGSAT COMMUNICATIONS INC	Q300	15.00
Surface Completion Equipment Rental	SAHTU RCS ENERGY SERVICES LTD	Q300	600.00
Surface Completion Equipment Rental	SAHTU RCS ENERGY SERVICES LTD	Q300	600.00
Surface Completion Equipment Rental	SAHTU RCS ENERGY SERVICES LTD	Q300	250.00
rface Completion Equipment Rental	SAHTU RCS ENERGY SERVICES LTD	Q300	1,552.00
ce Completion Equipment Rental	SAHTU RCS ENERGY SERVICES LTD	Q300	480.00
face Completion Equipment Rental	SAHTU RCS ENERGY SERVICES LTD	Q300	450.00
Wellsite Supervision & Engineering	TECTONIC ENERGY CONSULTING INC	T130	1,545.00
Wellsite Supervision & Engineering	TECTONIC ENERGY CONSULTING INC	T130	1,545.00
Welltesting (Eqpmt,Srvcs,PTA,Gov't Subs)	WEATHERFORD CANADA	M220	17,770.00

Report Printed: 4/14/2014

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 40
Report Date: 3/5/2014
Final Job Status: GAS
Final Report? Yes

WELL HEADER INFORMATION

Country	State/Province	Region / Division	District	Field Name	Field Code
CANADA	N.W.T.	WCBU	NEW VENTURES	Canyon	

Surface Legal Location	API / UWI	License No.
E-76 65-10 126-45	300E7665-10126-45	EL 470

Orig KB/RT (m)	Ground Elevation (m)	KB-Grd (m)	KB-CF (m)	KB-TF (m)	Total Depth (mKB)	PBTD (All) (mKB)
273.40	268.20	5.20	5.40	4.22	2,910.00	Original Hole - 2,877.30

JOB INFORMATION

Job Category	Primary Job Type	Secondary Job Type	Total Field Estimate (Cost)
COMPLETIONS	INITIAL COMPLETION	RIGLESS	21,945,332.75

Objective
Hydrailically fracture and flow test as part of the 2014 Canol Exploration Program

Actual Start Date	End Date	Abandon Date	Responsible Grp 1	Responsible Grp 2	Responsible Grp 3
1/25/2014 00:00	3/28/2014 08:00		coved	lagartn	Chris Kendall

AFE COST SUMMARY

AFE / RFE / Maint.#	Total AFE Amount (Cost)	Total AFE + Supp Amount (Cost)	Total Field Estimate (Cost)	AFE-Field Estimate (Cost)
10351695	2,111,000.00	2,111,000.00	2,318,381.14	-207,381.14
AFE / RFE / Maint.#	**Total AFE Amount (Cost)**	**Total AFE + Supp Amount (Cost)**	**Total Field Estimate (Cost)**	**AFE-Field Estimate (Cost)**
10359413	16,997,500.00	20,641,514.00	19,626,951.61	1,014,562.39

DAILY INFORMATION

Report Start Date	Report End Date	Daily Cost Total (Cost)	Cumulative Cost (Cost)	Personnel Regular Hours (hr)
3/5/2014 06:00	3/6/2014 06:00	128,159.21	19,598,599.94	452.00

Daily Contacts
Completion Engineer, Theorn LaGarde, 403-710-9753; WS Superintendent, Derrick Cove, 780-831-1314; WS Supervisor, Chris Kendall, 780-518-3284; WS Supervisor, Myles Hahn, 780-402-0500; WS Supervisor, Michael Short, 403 348-7127; WS Supervisor, Chris Tucker,

Rig
Weatherford, FS 463

Tubing Pressure (kPa)	Casing Pressure (kPa)	Weather	Temperature (°C)	Lease Condition
4,952	10,742	overcast	-10	Ice Pad

Last 24hr Summary
Continue to Flow well to Weatherford testers increasing choke size by 2 increments every 4 hours. Monitor BHP to ensure not to exceed 40% draw down from original BHP or exceed 283e³m³/d gas rate (as per NEB). Take water/gas/oil samples as per schedule. First set of 12 ProTechnics samples shipped to Red Deer for analysis.
Haul in 70 oak mats and mat around flare stack to avoid melting ice pad.
06:00am Flow summary (Hours flowed - 84 Hours 15min Flared)

FTP: 4649 kPa
SICP:9975 kPa
Internediate CSG = TSTMKPa
Flow Temp: 8°c
Meter Run Temp: 43°c
Choke size: 19.05mm
Gas Rate: 121.05 E³m³/d
Cumulative Gas to Flare: 187.71 E³m³
Cumulative Gas to Flare last 24 hrs: 109.03 E³m³
LFTR: 6586.42m³
LFR last hour: 6.0m³
LFR last 24 hours: 169.03m³ (hourly average last 24 hours = 7.04m³)
TLFR: 680.70m³
TLFLTR: 5905.72m³
Oil rec. last hour: 0.15m³
Oil rec. last 24 hours: 5.63m³
Cumulative Oil rec: 8.42m³
Oil API =60.56 @ 60°F
Salinity: 44000 ppm
PH: 8
Sand: Trace
Surface Total 377.86m³
H2S = 0.4PPM

24hr Forecast
Continue Flow Well to testers.

DAILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
06:00	07:00	1.00	P	WSS shift change. Held pre-job safety and operation meeting. Review PJHA on flowing well/transfer fluid/LEL monitoring and diverting gas from vents off shipping tanks/methanol hazards and labeling. Conoco safety team on location for meeting. Perform daily walk around inspections and checks.

Y TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
07:00	10:00	3.00	P	Hauled in 70 oak mats. Lay mats with loader around flare stack to prevent melting on ice pad. 10:00am Flow summary (Hours flowed - 64 Hours 15min Flared) Readings of last 4hrs flowed on 19.05mm choke (06:00am-10:00am) BHP at choke change =12784kPa(06:00am) FTP: 5112 kPa SICP:10557 kPa Flow Temp: 16°c Meter Run Temp: 44°c Choke size: 19.05mm Gas Rate: 116.55 E³m³/d Cumulative Gas to Flare: 97.1 E³m³ Cumulative Gas to Flare last 4 hrs: 18.42 E³m³ LFTR: 6586.42m³ LFR last hour: 7.51m³ LFR last 4 hours: 31.27m³ (hourly average last 4 hours = 7.82m³) TLFR: 542.94m³ TLFLTR: 6043.48m³ Condensate rec. last hour: 0.86m³ Condensatel rec. last 4 hours: 1.93m³ Cumulative Condensate rec: 4.72.m³ Salinity: 42000 ppm PH: 8 Sand: Trace Surface Total 305.69m³ 10:00am choke size change to 19.84mm. Monitor BHP to ensure not to draw down more than 40% of original BHP.
10:00	14:00	4.00	P	14:00pm Flow summary (Hours flowed - 68 Hours 15min Flared) Readings of last 4hrs flowed on 19.84mm choke (10:00am-14:00pm) BHP at choke change =12560kPa(10:00am) FTP: 4963 kPa SICP:10406 kPa Flow Temp: 20°c Meter Run Temp: 45°c Choke size: 19.84mm Gas Rate: 104.95 E³m³/d Cumulative Gas to Flare: 115.2 E³m³ Cumulative Gas to Flare last 4 hrs: 18.10 E³m³ LFTR: 6586.42m³ LFR last hour: 7.99m³ LFR last 4 hours: 28.99m³ (hourly average last 4 hours = 7.25m³) TLFR: 571.93m³ TLFLTR: 6014.49m³ Condensate rec. last hour: 0.20m³ Condensatel rec. last 4 hours: 0.76m³ Cumulative Condensate rec: 5.48.m³ Salinity: 42000 ppm PH: 8 Sand: Trace Surface Total 345.2m³ 14:00am choke size change to 20.80mm. Monitor BHP to ensure not to draw down more than 40% of original BHP.

ILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
14:00	18:00	4.00	P	18:00pm Flow summary (Hours flowed - 72 Hours 15min Flared) Readings of last 3hrs flowed on 20.8mm choke (14:00pm-17:00pm) BHP at choke change =12361kPa(14:00pm) 1 hour flowed on 19.05mm choke. (17:00pm-18:00pm) BHP at choke change =12203kPa API=58.71@60°F FTP: 4965 kPa SICP:10294 kPa Flow Temp: 16°c Meter Run Temp: 45°c Choke size: 19.05mm Gas Rate: 105.05 E^3m^3/d Cumulative Gas to Flare: 133.64 E^3m^3 Cumulative Gas to Flare last 4 hrs: 18.44 E^3m^3 LFTR: 6586.42m^3 LFR last hour: 6.0m^3 LFR last 4 hours: 29.37m^3 (hourly average last 4 hours = 7.34m^3) TLFR: 601.91m^3 TLFLTR: 5984.51m^3 Condensate rec. last hour: 0.20m^3 Condensatel rec. last 4 hours: .92m^3 Cumulative Condensate rec: 6.4.m^3 Salinity: 40000 ppm PH: 8 Sand: Trace Surface Total 345.2m^3 17:00pm choke size change to 19.05mm. Monitor BHP to ensure not to draw down more than 40% of original BHP.
18:00	00:00	6.00	P	24:00am Flow summary (Hours flowed - 78 Hours 15min Flared) FTP: 4796 kPa SICP:10100 kPa Intemediate CSG = TSTM Flow Temp: 10°c Meter Run Temp: 44°c Choke size: 19.05mm Gas Rate: 104.47 E^3m^3/d Cumulative Gas to Flare: 160.05 E^3m^3 Cumulative Gas to Flare last 6 hrs: 26.41 E^3m^3 LFTR: 6586.42m^3 LFR last hour: 6.0m^3 LFR last 6 hours: 39.8m^3 (hourly average last 6 hours = 6.63m^3) TLFR: 641.71m^3 TLFLTR: 5944.71m^3 Oil rec. last hour: 0.20m^3 Oil rec. last 6 hours: 1.01m^3 Cumulative Oil rec: 7.41m^3 Oil API =57 @ 60°F Salinity: 40000 ppm PH: 7 Sand: Trace Surface Total 338.87m^3 H2S = 0.4PPM

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 40
Report Date: 3/5/2014
Final Job Status: GAS
Final Report? Yes

LY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
00:00	06:00	6.00	P	06:00am Flow summary (Hours flowed - 84 Hours 15min Flared) FTP: 4649 kPa SICP:9975 kPa Internediate CSG = TSTMKPa Flow Temp: 8°c Meter Run Temp: 43°c Choke size: 19.05mm Gas Rate: 121.05 E³m³/d Cumulative Gas to Flare: 187.71 E³m³ Cumulative Gas to Flare last 6 hrs: 27.66 E³m³ LFTR: 6586.42m³ LFR last hour: 6.0m³ LFR last 6 hours: 38.99m³ (hourly average last 6 hours = 6.49m³) TLFR: 680.70m³ TLFLTR: 5905.72m³ Oil rec. last hour: 0.15m³ Oil rec. last 6 hours: 1.01m³ Cumulative Oil rec: 8.42m³ Oil API =60.56 @ 60°F Salinity: 44000 ppm PH: 8 Sand: Trace Surface Total 377.86m³ H2S = 0.4PPM Took 4 x 1L oil samples off the vertical tank.

FLUID SUMMARY

Fluid	To lease (m³)	From lease (m³)	To well (m³)	From well (m³)	Left to recover (m³)
RESH WATER	0.00	80.17	0.00	169.03	5,905.72
DUCED OIL			0.00	5.63	-8.42

DAILY COST

BU Desc	Vendor	Activity Code	Amount (Cost)
Rig Camp	***VENDOR NOT LISTED***	E500	500.00
Surface Completion Equipment Rental	BOREALIS COMMUNICATIONS INC	Q300	604.61
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	3,430.00
Trucking/Hauling/ Hot Shot Services	CANOL OILFIELD SERVICES INC	P100	12,840.00
Service Rig	CONOCO	E120	5,100.00
Surface Completion Equipment Rental	CORNERSTONE OILFIELD SERVICES LTD	Q300	180.00
Slickline Services	CORNERSTONE OILFIELD SERVICES LTD	U200	2,200.00
Surface Completion Equipment Rental	CORNERSTONE OILFIELD SERVICES LTD	Q300	170.00
Surface Completion Equipment Rental	CORNERSTONE OILFIELD SERVICES LTD	Q300	170.00
Service Rig	CORNERSTONE OILFIELD SERVICES LTD	E120	1,700.00
Service Rig	CORNERSTONE OILFIELD SERVICES LTD	E120	2,200.00
Safety Equipment & Services	FRONTIERMEDEX CANADA LTD/ EXLOGS SAHTU LTD	T430	2,000.00
Surface Completion Equipment Rental	HORIZON OILFILED SOLUTIONS INC	Q300	1,900.00
Surface Completion Equipment Rental	MACKAY RANGE DEVELOPMENT CORP	Q300	403.00
Service Rig	NABORS PRODUCTION SERVICES LTD	E120	7,119.60
Completion Fluids & Other Chem	NORTHERN TRUCK SERVICES (1994) LTD	G300	10,950.00
Completion Fluids & Other Chem	NORTHERN TRUCK SERVICES (1994) LTD	G300	10,950.00
Completion Fluids & Other Chem	NORTHERN TRUCK SERVICES (1994) LTD	G300	5,930.00
Completion Fluids & Other Chem	NORTHERN TRUCK SERVICES (1994) LTD	G300	5,930.00
Completion Fluids & Other Chem	NORTHERN TRUCK SERVICES (1994) LTD	G300	5,930.00
Completion Fluids & Other Chem	NORTHERN TRUCK SERVICES (1994) LTD	G300	5,930.00
Surface Completion Equipment Rental	RIGSAT COMMUNICATIONS INC	Q300	15.00
Surface Completion Equipment Rental	RIGSAT COMMUNICATIONS INC	Q300	15.00
rface Completion Equipment Rental	SAHTU RCS ENERGY SERVICES LTD	Q300	600.00
ce Completion Equipment Rental	SAHTU RCS ENERGY SERVICES LTD	Q300	600.00
face Completion Equipment Rental	SAHTU RCS ENERGY SERVICES LTD	Q300	250.00
Surface Completion Equipment Rental	SAHTU RCS ENERGY SERVICES LTD	Q300	1,552.00
Surface Completion Equipment Rental	SAHTU RCS ENERGY SERVICES LTD	Q300	480.00
Surface Completion Equipment Rental	SAHTU RCS ENERGY SERVICES LTD	Q300	450.00

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 41
Report Date: 3/6/2014
Final Job Status: GAS
Final Report? Yes

WELL HEADER INFORMATION

Country	State/Province	Region / Division	District	Field Name	Field Code
CANADA	N.W.T.	WCBU	NEW VENTURES	Canyon	

Surface Legal Location	API / UWI	License No.
E-76 65-10 126-45	300E7665-10126-45	EL 470

Orig KB/RT (m)	Ground Elevation (m)	KB-Grd (m)	KB-CF (m)	KB-TF (m)	Total Depth (mKB)	PBTD (All) (mKB)
273.40	268.20	5.20	5.40	4.22	2,910.00	Original Hole - 2,877.30

JOB INFORMATION

Job Category	Primary Job Type	Secondary Job Type	Total Field Estimate (Cost)
COMPLETIONS	INITIAL COMPLETION	RIGLESS	21,945,332.75

Objective
Hydrailically fracture and flow test as part of the 2014 Canol Exploration Program

Actual Start Date	End Date	Abandon Date	Responsible Grp 1	Responsible Grp 2	Responsible Grp 3
1/25/2014 00:00	3/28/2014 08:00		coved	lagartn	Chris Kendall

AFE COST SUMMARY

AFE / RFE / Maint.#	Total AFE Amount (Cost)	Total AFE + Supp Amount (Cost)	Total Field Estimate (Cost)	AFE-Field Estimate (Cost)
10351695	2,111,000.00	2,111,000.00	2,318,381.14	-207,381.14
AFE / RFE / Maint.#	**Total AFE Amount (Cost)**	**Total AFE + Supp Amount (Cost)**	**Total Field Estimate (Cost)**	**AFE-Field Estimate (Cost)**
10359413	16,997,500.00	20,641,514.00	19,626,951.61	1,014,562.39

DAILY INFORMATION

Report Start Date	Report End Date	Daily Cost Total (Cost)	Cumulative Cost (Cost)	Personnel Regular Hours (hr)
3/6/2014 06:00	3/7/2014 06:00	95,029.61	19,693,629.55	412.00

Daily Contacts
Completion Engineer, Theorn LaGarde, 403-710-9753; WS Superintendent, Derrick Cove, 780-831-1314; WS Supervisor, Chris Kendall, 780-518-3284; WS Supervisor, Myles Hahn, 780-402-0500; WS Supervisor, Michael Short, 403 348-7127; WS Supervisor, Chris Tucker,

Rig
Weatherford, FS 463

Tubing Pressure (kPa)	Casing Pressure (kPa)	Weather	Temperature (°C)	Lease Condition
4,649	9,975	sunny	-15	Ice Pad

Last 24hr Summary
Continue to Flow well to Weatherford testers. Well flowing on a 19.05mm choke. Monitor BHP to ensure not to exceed 40% draw down from original BHP or exceed 283e³m³/d gas rate (as per NEB). Take water/gas/oil samples as per schedule by AGAT. First PVT oil and gas samples taken at 11:00am by Corelab. (2 ndensate and 3 gas samples).

06:00am Flow summary (Hours flowed - 108Hours 15min Flared)

FTP: 4482 kPa
SICP: 9515 kPa
DHP: 11036.4 kPa
Intemediate CSG = TSTMKPa
Flow Temp: 27°c
Meter Run Temp: 41°c
Choke size: 19.05mm
Gas Rate: 110.98 E³m³/d
Cumulative Gas to Flare: 296.09 E³m³
Cumulative Gas to Flare last 24 hrs: 108.38 E³m³
LFTR: 6586.42m³
LFR last hour: 5.44m³
LFR last 24 hours: 126.91m³ (hourly average last 24 hours = 5.29 m³)
TLFR: 807.61m³
TLFLTR: 5778.81m³
Oil rec. last hour: 0.20m³
Oil rec. last 24 hours: 4.32m³
Cumulative Oil rec: 12.74m³
Oil API = 60.87 @ 60°F
Salinity: 48000 ppm
PH: 8
Sand: Trace
Surface Total 494.1m³
H2S = 0.5PPM

24hr Forecast
Continue to flow well to testers.

DAILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
00	07:00	1.00	P	WSS shift change. Held pre-job safety and operations meeting. Review PJHA with all services on location. Discuss flowing well hazards, fluid transfer hazards (LEL in tank farm and off vent), where hearing protection is required. Perform daily walk around inspections and checks.

LY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
07:00	12:00	5.00	P	Clean filters on evaporators. Clean out debris on bottom of evaporator tanks to avoid screens being plugged off. 12:00 pm Flow summary (Hours flowed - 90 Hours 15min Flared) * NOTE - Flow temp gauge was re-adjusted, now reading proper wellhead temperature. FTP: 4615 kPa SICP:9886 kPa Internediate CSG = TSTMKPa Flow Temp: 22°c Meter Run Temp: 42°c Choke size: 19.05mm Gas Rate: 102.12 E³m³/d Cumulative Gas to Flare: 214.56 E³m³ Cumulative Gas to Flare last 6 hrs: 26.85 E³m³ LFTR: 6586.42m³ LFR last hour: 5.97m³ LFR last 6 hours: 39.08m³ (hourly average last 6 hours = 6.51m³) TLFR: 719.78m³ TLFLTR: 5866.64m³ Oil rec. last hour: 0.03m³ Oil rec. last 6 hours: 1.27m³ Cumulative Oil rec: 9.69m³ Oil API =59.11 @ 60°F Salinity: 46000 ppm PH: 8 Sand: Trace Surface Total 417.34m³ H2S = 0.5PPM
:00	18:00	6.00	P	18:00pm Flow summary (Hours flowed - 96 Hours 15min Flared) FTP: 4636 kPa SICP:9746 kPa Internediate CSG = TSTMKPa Flow Temp: 32°c Meter Run Temp: 42°c Choke size: 19.05mm Gas Rate: 106.8 E³m³/d Cumulative Gas to Flare: 242.28 E³m³ Cumulative Gas to Flare last 6 hrs: 27.04 E³m³ LFTR: 6586.42m³ LFR last hour: 4.19m³ LFR last 6 hours: 24.62m³ (hourly average last 6 hours = 6.51m³) TLFR: 744.4m³ TLFLTR: 5842.02m³ Oil rec. last hour: 0.15m³ Oil rec. last 6 hours: 1.01m³ Cumulative Oil rec: 10.76m³ Oil API =58.5 @ 60°F Salinity: 42000 ppm PH: 8 Sand: Trace Surface Total 444.91m³ H2S = 0.5PPM

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 41
Report Date: 3/6/2014
Final Job Status: GAS
Final Report? Yes

ILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
18:00	00:00	6.00	P	24:00am Flow summary (Hours flowed - 102Hours 15min Flared) FTP: 4592 kPa SICP: 9614 kPa Internediate CSG = TSTMKPa Flow Temp: 25°c Meter Run Temp: 41°c Choke size: 19.05mm Gas Rate: 106.03 E³m³/d Cumulative Gas to Flare: 269.0 E³m³ Cumulative Gas to Flare last 6 hrs: 26.72 E³m³ LFTR: 6586.42m³ LFR last hour: 5.05m³ LFR last 6 hours: 31.79m³ (hourly average last 6 hours = 5.29m³) TLFR: 776.19m³ TLFLTR: 5810.23m³ Oil rec. last hour: 0.21m³ Oil rec. last 6 hours: 0.91m³ Cumulative Oil rec: 11.67m³ Oil API =58.5 @ 60°F Salinity: 48000 ppm PH: 8 Sand: Trace Surface Total 461.61m³
00:00	06:00	6.00	P	06:00am Flow summary (Hours flowed - 108Hours 15min Flared) FTP: 4482 kPa SICP: 9515 kPa DHP: 11036.4 kPa Internediate CSG = TSTMKPa Flow Temp: 27°c Meter Run Temp: 41°c Choke size: 19.05mm Gas Rate: 110.98 E³m³/d Cumulative Gas to Flare: 296.09 E³m³ Cumulative Gas to Flare last 6 hrs: 27.09 E³m³ LFTR: 6586.42m³ LFR last hour: 5.44m³ LFR last 6 hours: 31.42m³ (hourly average last 6 hours = 5.24m³) TLFR: 807.61m³ TLFLTR: 5778.81m³ Oil rec. last hour: 0.20m³ Oil rec. last 6 hours: 1.07m³ Cumulative Oil rec: 12.74m³ Oil API = 60.87 @ 60°F Salinity: 48000 ppm PH: 8 Sand: Trace Surface Total 494.1m³ H2S = 0.5PPM

FLUID SUMMARY

Fluid	To lease (m³)	From lease (m³)	To well (m³)	From well (m³)	Left to recover (m³)
FRESH WATER	0.00	16.00	0.00	126.91	5,778.81
PRODUCED OIL			0.00	4.32	-12.74

DAILY COST

BU Desc	Vendor	Activity Code	Amount (Cost)
Rig Camp	***VENDOR NOT LISTED***	E500	500.00
Surface Completion Equipment Rental	BOREALIS COMMUNICATIONS INC	Q300	604.61
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	3,430.00
rvice Rig	CONOCO	E120	7,350.00
Surface Completion Equipment Rental	CORNERSTONE OILFIELD SERVICES LTD	Q300	180
Surface Completion Equipment Rental	CORNERSTONE OILFIELD SERVICES LTD	Q300	170.00
Surface Completion Equipment Rental	CORNERSTONE OILFIELD SERVICES LTD	Q300	170.00
Service Rig	CORNERSTONE OILFIELD SERVICES LTD	E120	1,700.00
Slickline Services	CORNERSTONE OILFIELD SERVICES LTD	U200	2,200.00

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 42
Report Date: 3/7/2014
Final Job Status: GAS
Final Report? Yes

HEADER INFORMATION

Country	State/Province	Region / Division	District	Field Name	Field Code
CANADA	N.W.T.	WCBU	NEW VENTURES	Canyon	

Surface Legal Location	API / UWI	License No.
E-76 65-10 126-45	300E7665-10126-45	EL 470

Orig KB/RT (m)	Ground Elevation (m)	KB-Grd (m)	KB-CF (m)	KB-TF (m)	Total Depth (mKB)	PBTD (All) (mKB)
273.40	268.20	5.20	5.40	4.22	2,910.00	Original Hole - 2,877.30

JOB INFORMATION

Job Category	Primary Job Type	Secondary Job Type	Total Field Estimate (Cost)
COMPLETIONS	INITIAL COMPLETION	RIGLESS	21,945,332.75

Objective
Hydrailically fracture and flow test as part of the 2014 Canol Exploration Program

Actual Start Date	End Date	Abandon Date	Responsible Grp 1	Responsible Grp 2	Responsible Grp 3
1/25/2014 00:00	3/28/2014 08:00		coved	lagartn	Chris Kendall

AFE COST SUMMARY

AFE / RFE / Maint.#	Total AFE Amount (Cost)	Total AFE + Supp Amount (Cost)	Total Field Estimate (Cost)	AFE-Field Estimate (Cost)
10351695	2,111,000.00	2,111,000.00	2,318,381.14	-207,381.14
10359413	16,997,500.00	20,641,514.00	19,626,951.61	1,014,562.39

DAILY INFORMATION

Report Start Date	Report End Date	Daily Cost Total (Cost)	Cumulative Cost (Cost)	Personnel Regular Hours (hr)
3/7/2014 06:00	3/8/2014 06:00	169,200.37	19,862,829.92	412.00

Daily Contacts
Completion Engineer, Theorn LaGarde, 403-710-9753; WS Superintendent, Derrick Cove, 780-831-1314; WS Supervisor, Chris Kendall, 780-518-3284; WS Supervisor, Myles Hahn, 780-402-0500; WS Supervisor, Michael Short, 403 348-7127; WS Supervisor, Chris Tucker,

Rig
Weatherford, FS 463

Tubing Pressure (kPa)	Casing Pressure (kPa)	Weather	Temperature (°C)	Lease Condition
4,482	9,515	sunny	-20	Ice Pad

Last 24hr Summary
Continue to Flow well to Weatherford testers. Well flowing on a 19.05mm choke. Monitor BHP to ensure not to exceed 40% draw down from original BHP or exceed 283e³m³/d gas rate (as per NEB). Take water/gas/oil samples as per schedule by AGAT. Second PVT oil and gas samples taken at 10:00am by Corelab.
condensate and 3 gas samples).
am Flow summary (Hours flowed - 132Hours 15min Flared)

FTP: 4465 kPa
SICP: 9191 kPa
DHP=10926.0kPa
Intermediate CSG = TSTMKPa
Flow Temp: 35°c
Meter Run Temp: 39°c
Choke size: 19.05mm
Gas Rate: 101.92 E³m³/d
Cumulative Gas to Flare: 400.85 E³m³
Cumulative Gas to Flare last 24 hrs: 104.76 E³m³
LFTR: 6586.42m³
LFR last hour: 4.64m³
LFR last 24 hours: 114.17m³ (hourly average last 24 hours = 4.76m³)
TLFR: 921.78m³
TLFLTR: 5664.64m³
Oil rec. last hour: 0.20m³
Oil rec. last 6 hours: 4.11m³
Cumulative Oil rec: 16.85m³
Oil API =61.61 @ 60°F
Salinity: 54000 ppm
PH: 7
Sand: Trace
Surface Total 483.76m³
H2S= 0.5ppm

24hr Forecast
Continue to flow well to testers.

DAILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
06:00	07:00	1.00	P	WSS shift change. Held pre-job safety and operations meeting. Review CPC PJHA with all services on location. Discuss level of hearing protection required in test vessel, LEL's in tank farm, flowing operations, site specific tank truck loading procedures. All tickets checked and valid. Perform daily walk around inspections and checks.

ILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
07:00	12:00	5.00	P	AGAT field hand took water/oil/gas samples as per schedule. Corelab field hand took PVT oil/gas samples as per schedule. (24 hours after first sample collected). Dave Mitchell (780-514-5219) from Nalco Champion collected 2-1L samples of condensate and was given a copy of AGAT trace gas results as per Derrick Cove. 12:00pm Flow summary (Hours flowed - 114Hours 15min Flared) FTP: 4512 kPa SICP: 9408 kPa Intemediate CSG = TSTMKPa Flow Temp: 42°c Meter Run Temp: 40°c Choke size: 19.05mm Gas Rate: 109.72 E³m³/d Cumulative Gas to Flare: 323.07 E³m³ Cumulative Gas to Flare last 6 hrs: 26.98 E³m³ LFTR: 6586.42m³ LFR last hour: 4.88m³ LFR last 6 hours: 29.85m³ (hourly average last 6 hours = 4.98m³) TLFR: 837.46m³ TLFLTR: 5748.96m³ Oil rec. last hour: 0.20m³ Oil rec. last 6 hours: 1.01m³ Cumulative Oil rec: 13.75m³ Oil API =59.91 @ 60°F Salinity: 50000 ppm PH: 8 Sand: Trace Surface Total 452.96m³ H2S= 0.4ppm
:00	18:00	6.00	P	13:15- Local tour showed up on location with Gord Sarauer & Erin Reilly. Discused flow/flare operations, air monitoring, wellsite pad. 18:00pm Flow summary (Hours flowed - 120Hours 15min Flared) FTP: 4462 kPa SICP: 9355 kPa Intemediate CSG = TSTMKPa Flow Temp: 36°c Meter Run Temp: 40°c Choke size: 19.05mm Gas Rate: 109.05 E³m³/d Cumulative Gas to Flare: 348.94 E³m³ Cumulative Gas to Flare last 6 hrs: 26.58 E³m³ LFTR: 6586.42m³ LFR last hour: 4.81m³ LFR last 6 hours: 29.07m³ (hourly average last 6 hours = 4.98m³) TLFR: 866.53m³ TLFLTR: 5719.89m³ Oil rec. last hour: 0.15m³ Oil rec. last 6 hours: 1.12m³ Cumulative Oil rec: 14.87m³ Oil API =59.70 @ 60°F Salinity: 50000 ppm PH: 7 Sand: Trace Surface Total 488.15m³ WSS shift change. Held pre-job safety and operations meeting. Review CPC PJHA with all services on location. Discuss level of hearing protection required in test vessel, LEL's in tank farm, flowing operations, site specific tank truck loading procedures. All tickets checked and valid. Perform daily walk around inspections and checks. H2S= 0.4ppm DHP=11072kPa

Y TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
18:00	00:00	6.00	P	24:00am Flow summary (Hours flowed - 126Hours 15min Flared) FTP: 4238 kPa SICP: 9264 kPa DHP=11003kPa Internediate CSG = TSTMKPa Flow Temp: 36°c Meter Run Temp: 39°c Choke size: 19.05mm Gas Rate: 108.9 E³m³/d Cumulative Gas to Flare: 374.72 E³m³ Cumulative Gas to Flare last 6 hrs: 25.78 E³m³ LFTR: 6586.42m³ LFR last hour: 4.96m³ LFR last 6 hours: 27.75m³ (hourly average last 6 hours = 4.63m³) TLFR: 894.72m³ TLFLTR: 5691.7m³ Oil rec. last hour: 0.15m³ Oil rec. last 6 hours: 0.97m³ Cumulative Oil rec: 15.84m³ Oil API =61.18 @ 60°F Salinity: 52000 ppm PH: 7 Sand: Trace Surface Total 456.7m³ H2S= 0.4ppm
00:00	06:00	6.00	P	06:00am Flow summary (Hours flowed - 132Hours 15min Flared) FTP: 4465 kPa SICP: 9191 kPa DHP=10926.0kPa Internediate CSG = TSTMKPa Flow Temp: 35°c Meter Run Temp: 39°c Choke size: 19.05mm Gas Rate: 101.92 E³m³/d Cumulative Gas to Flare: 400.85 E³m³ Cumulative Gas to Flare last 6 hrs: 26.13 E³m³ LFTR: 6586.42m³ LFR last hour: 4.64m³ LFR last 6 hours: 27.06m³ (hourly average last 6 hours = 4.51m³) TLFR: 921.78m³ TLFLTR: 5664.64m³ Oil rec. last hour: 0.20m³ Oil rec. last 6 hours: 1.01m³ Cumulative Oil rec: 16.85m³ Oil API =61.61 @ 60°F Salinity: 54000 ppm PH: 7 Sand: Trace Surface Total 483.76m³ H2S= 0.5ppm

FLUID SUMMARY

Fluid	To lease (m³)	From lease (m³)	To well (m³)	From well (m³)	Left to recover (m³)
FRESH WATER	0.00	127.17	0.00	114.17	5,664.64
PRODUCED OIL			0.00	4.11	-16.85

DAILY COST

BU Desc	Vendor	Activity Code	Amount (Cost)
Rig Camp	***VENDOR NOT LISTED***	E500	500.00
rface Completion Equipment Rental	BOREALIS COMMUNICATIONS INC	Q300	604.62
letion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	18,800.00
letion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	18,800.00
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	18,800.00
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	3,430.00
Service Rig	CONOCO	E120	7,350.00

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 43
Report Date: 3/8/2014
Final Job Status: GAS
Final Report? Yes

ELL HEADER INFORMATION

Country	State/Province	Region / Division	District	Field Name	Field Code
CANADA	N.W.T.	WCBU	NEW VENTURES	Canyon	

Surface Legal Location	API / UWI	License No.
E-76 65-10 126-45	300E7665-10126-45	EL 470

Orig KB/RT (m)	Ground Elevation (m)	KB-Grd (m)	KB-CF (m)	KB-TF (m)	Total Depth (mKB)	PBTD (All) (mKB)
273.40	268.20	5.20	5.40	4.22	2,910.00	Original Hole - 2,877.30

JOB INFORMATION

Job Category	Primary Job Type	Secondary Job Type	Total Field Estimate (Cost)
COMPLETIONS	INITIAL COMPLETION	RIGLESS	21,945,332.75

Objective
Hydrailically fracture and flow test as part of the 2014 Canol Exploration Program

Actual Start Date	End Date	Abandon Date	Responsible Grp 1	Responsible Grp 2	Responsible Grp 3
1/25/2014 00:00	3/28/2014 08:00		coved	lagartn	Chris Kendall

AFE COST SUMMARY

AFE / RFE / Maint.#	Total AFE Amount (Cost)	Total AFE + Supp Amount (Cost)	Total Field Estimate (Cost)	AFE-Field Estimate (Cost)
10351695	2,111,000.00	2,111,000.00	2,318,381.14	-207,381.14
AFE / RFE / Maint.#	**Total AFE Amount (Cost)**	**Total AFE + Supp Amount (Cost)**	**Total Field Estimate (Cost)**	**AFE-Field Estimate (Cost)**
10359413	16,997,500.00	20,641,514.00	19,626,951.61	1,014,562.39

DAILY INFORMATION

Report Start Date	Report End Date	Daily Cost Total (Cost)	Cumulative Cost (Cost)	Personnel Regular Hours (hr)
3/8/2014 06:00	3/9/2014 06:00	153,744.61	20,016,574.53	516.00

Daily Contacts
Completion Engineer, Theorn LaGarde, 403-710-9753; WS Superintendent, Derrick Cove, 780-831-1314; WS Supervisor, Chris Kendall, 780-518-3284; WS Supervisor, Myles Hahn, 780-402-0500; WS Supervisor, Michael Short, 403 348-7127; WS Supervisor, Chris Tucker,

Rig
Weatherford, FS 463

Tubing Pressure (kPa)	Casing Pressure (kPa)	Weather	Temperature (°C)	Lease Condition
4,465	9,190	sunny	-20	Ice Pad

Last 24hr Summary
Continue to Flow well to Weatherford testers. Well flowing on a 19.05mm choke. Monitor BHP to ensure not to exceed 40% draw down from original BHP or exceed 283e³m³/d gas rate (as per NEB). Take water/gas/oil samples as per schedule by AGAT.
3:00pm Flow summary (Hours flowed - 155 Hours 04min Flared)
aylight savings time change causing readings to be 5hr time frame.

FTP: 3951 kPa
SICP: 8933 kPa
DHP=10608kPa
Intermediate CSG = TSTMKPa
Flow Temp: 35°c
Meter Run Temp: 38°c
Choke size: 19.05mm
Gas Rate: 107.89 E³m³/d
Cumulative Gas to Flare: 502.00 E³m³
Cumulative Gas to Flare last 23 hrs: 101.15 E³m³
LFTR: 6586.42m³
LFR last hour: 4.26m³
LFR last 23 hours: 89.38m³ (hourly average last 23 hours = 3.89m³)
TLFR: 1011.16m³
TLFLTR: 5575.26m³
Oil rec. last hour: 0.10m³
Oil rec. last 23 hours: 3.53m³
Cumulative Oil rec: 20.38m³
Oil API = 59.95 @ 60°F
Salinity: 54000 ppm
PH: 7
Sand: Trace
Surface Total 432.65m³
H2S= 0.40ppm

24hr Forecast
Continue to flow well to testers.

DAILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
06:00	07:00	1.00	P	WSS shift change. Held pre-job safety and operations meeting. Review CPC PJHA with all service on location. Discuss site specific tank truck loading procedures, bump testing monitors, using buddy system, complacency. Ensure all workers tickets are checked and valid. Perform daily walk around inspections and checks.

Y TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
07:00	12:00	5.00	P	Shut in well @ 07:35am to repair thread leak on 4"bull plug. Re-open well @ 07:45am 12:00pm Flow summary (Hours flowed - 138Hours 04min Flared) FTP: 4276 kPa SICP: 9148 kPa DHP=10818kPa Intemediate CSG = TSTMKPa Flow Temp: 36°c Meter Run Temp: 39°c Choke size: 19.05mm Gas Rate: 115.39 E³m³/d Cumulative Gas to Flare: 429.37 E³m³ Cumulative Gas to Flare last 6 hrs: 25.26 E³m³ LFTR: 6586.42m³ LFR last hour: 3.57m³ LFR last 6 hours: 21.90m³ (hourly average last 6 hours = 3.65m³) TLFR: 943.68m³ TLFLTR: 5642.74m³ Oil rec. last hour: 0.15m³ Oil rec. last 6 hours: 0.91m³ Cumulative Oil rec: 17.76m³ Oil API =59.0 @ 60°F Salinity: 52000 ppm PH: 7 Sand: Trace Surface Total 435.57m³ H2S= 0.50ppm
	17:30	5.50	P	18:00pm Flow summary (Hours flowed - 144 Hours 04min Flared) FTP: 4152 kPa SICP: 9102 kPa DHP=10763.2kPa Intemediate CSG = TSTMKPa Flow Temp: 35°c Meter Run Temp: 39°c Choke size: 19.05mm Gas Rate: 105.47 E³m³/d Cumulative Gas to Flare: 456.13 E³m³ Cumulative Gas to Flare last 6 hrs: 26.76 E³m³ LFTR: 6586.42m³ LFR last hour: 4.55m³ LFR last 6 hours: 24.81m³ (hourly average last 6 hours = 4.14m³) TLFR: 968.49m³ TLFLTR: 5617.93m³ Oil rec. last hour: 0.10m³ Oil rec. last 6 hours: 1.06m³ Cumulative Oil rec: 18.82m³ Oil API =59.50 @ 60°F Salinity: 40000 ppm PH: 7 Sand: Trace Surface Total 387.94m³ H2S= 0.50ppm
17:30	18:00	0.50	P	WSS shift change. Held pre-job safety and operations meeting. Review CPC PJHA with all service on location. Discuss site specific tank truck loading procedures, bump testing monitors, using buddy system, complacency. Ensure all workers tickets are checked and valid. Perform daily walk around inspections and checks.

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 43
Report Date: 3/8/2014
Final Job Status: GAS
Final Report? Yes

ILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
18:00	00:00	6.00	P	24:00pm Flow summary (Hours flowed - 150 Hours 04min Flared) FTP: 4134 kPa SICP: 9014 kPa DHP=10694kPa Internediate CSG = TSTMKPa Flow Temp: 35°c Meter Run Temp: 39°c Choke size: 19.05mm Gas Rate: 101.99 E³m³/d Cumulative Gas to Flare: 481.70 E³m³ Cumulative Gas to Flare last 6 hrs: 25.57 E³m³ LFTR: 6586.42m³ LFR last hour: 4.46m³ LFR last 6 hours: 24.85m³ (hourly average last 6 hours = 4.14m³) TLFR: 993.34m³ TLFLTR: 5593.08m³ Oil rec. last hour: 0.15m³ Oil rec. last 6 hours: 0.85m³ Cumulative Oil rec: 19.67m³ Oil API =60.94 @ 60°F Salinity: 40000 ppm PH: 7 Sand: Trace Surface Total 413.64m³ H2S= 0.50ppm
00:00	06:00	6.00	P	06:00am Flow summary (Hours flowed - 155 Hours 04min Flared) Daylight savings time change causing readings to be 5hr time frame. FTP: 3951 kPa SICP: 8933 kPa DHP=10608kPa Internediate CSG = TSTMKPa Flow Temp: 35°c Meter Run Temp: 38°c Choke size: 19.05mm Gas Rate: 107.89 E³m³/d Cumulative Gas to Flare: 502.00 E³m³ Cumulative Gas to Flare last 5 hrs: 20.3 E³m³ LFTR: 6586.42m³ LFR last hour: 4.26m³ LFR last 5 hours: 17.82m³ (hourly average last 5 hours = 3.56m³) TLFR: 1011.16m³ TLFLTR: 5575.26m³ Oil rec. last hour: 0.10m³ Oil rec. last 6 hours: 0.71m³ Cumulative Oil rec: 20.38m³ Oil API = 59.95 @ 60°F Salinity: 54000 ppm PH: 7 Sand: Trace Surface Total 432.65m³ H2S= 0.40ppm

FLUID SUMMARY

Fluid	To lease (m³)	From lease (m³)	To well (m³)	From well (m³)	Left to recover (m³)
FRESH WATER	0.00	145.50	0.00	89.38	5,575.26
PRODUCED OIL			0.00	3.53	-20.38

DAILY COST

BU Desc	Vendor	Activity Code	Amount (Cost)
n Camp	***VENDOR NOT LISTED***	E500	500.00
rface Completion Equipment Rental	BOREALIS COMMUNICATIONS INC	Q300	604.8
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	19,740
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	19,740.00
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	3,430.00
Service Rig	CONOCO	E120	7,350.00

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 44
Report Date: 3/9/2014
Final Job Status: GAS
Final Report? Yes

WELL HEADER INFORMATION

Country	State/Province	Region / Division	District	Field Name	Field Code
CANADA	N.W.T.	WCBU	NEW VENTURES	Canyon	

Surface Legal Location	API / UWI	License No.
E-76 65-10 126-45	300E7665-10126-45	EL 470

Orig KB/RT (m)	Ground Elevation (m)	KB-Grd (m)	KB-CF (m)	KB-TF (m)	Total Depth (mKB)	PBTD (All) (mKB)
273.40	268.20	5.20	5.40	4.22	2,910.00	Original Hole - 2,877.30

JOB INFORMATION

Job Category	Primary Job Type	Secondary Job Type	Total Field Estimate (Cost)
COMPLETIONS	INITIAL COMPLETION	RIGLESS	21,945,332.75

Objective
Hydrailically fracture and flow test as part of the 2014 Canol Exploration Program

Actual Start Date	End Date	Abandon Date	Responsible Grp 1	Responsible Grp 2	Responsible Grp 3
1/25/2014 00:00	3/28/2014 08:00		coved	lagartn	Chris Kendall

AFE COST SUMMARY

AFE / RFE / Maint.#	Total AFE Amount (Cost)	Total AFE + Supp Amount (Cost)	Total Field Estimate (Cost)	AFE-Field Estimate (Cost)
10351695	2,111,000.00	2,111,000.00	2,318,381.14	-207,381.14
10359413	16,997,500.00	20,641,514.00	19,626,951.61	1,014,562.39

DAILY INFORMATION

Report Start Date	Report End Date	Daily Cost Total (Cost)	Cumulative Cost (Cost)	Personnel Regular Hours (hr)
3/9/2014 06:00	3/10/2014 06:00	140,439.62	20,157,014.15	480.00

Daily Contacts
Completion Engineer, Theorn LaGarde, 403-710-9753; WS Superintendent, Derrick Cove, 780-831-1314; WS Supervisor, Chris Kendall, 780-518-3284; WS Supervisor, Myles Hahn, 780-402-0500; WS Supervisor, Michael Short, 403 348-7127; WS Supervisor, Chris Tucker,

Rig
Weatherford, FS 463

Tubing Pressure (kPa)	Casing Pressure (kPa)	Weather	Temperature (°C)	Lease Condition
3,951	8,933	overcast	-20	Ice Pad

Last 24hr Summary
Continue to Flow well to Weatherford testers. Well flowing on a 19.05mm choke. Monitor BHP to ensure not to exceed 40% draw down from original BHP or exceed 283e³m³/d gas rate (as per NEB). Take water/gas/oil samples as per schedule by AGAT.
NEB and WSCC on location for inspection. Inspection went well, no deficiencies to report.
00am Flow summary (Hours flowed - 179 Hours 04min Flared)

FTP: 4249 kPa
SICP: 8745 kPa
DHP=10367kPa
Intermediate CSG = TSTMKPa
Flow Temp: 33°c
Meter Run Temp: 37°c
Choke size: 19.05mm
Gas Rate: 109.96 E³m³/d
Cumulative Gas to Flare: 604.65 E³m³
Cumulative Gas to Flare last 24 hrs: 102.65 E³m³
LFTR: 6586.42m³
LFR last hour: 3.84m³
LFR last 24 hours: 92.3m³ (hourly average last 24 hours = 3.85m³)
TLFR: 1103.46m³
TLFLTR: 5482.96m³
Oil rec. last hour: 0.15m³
Oil rec. last 24 hours: 3.63m³
Cumulative Oil rec: 24.01m³
Oil API =61.54 @ 60°F
Salinity: 52000 ppm
PH: 7
Sand: Trace
Surface Total 400.1m³
H2S= 0.40ppm

24hr Forecast
Continue to flow well to testers.

DAILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
06:00	07:00	1.00	P	WSS shift change.Held pre-job safety and operations meeting. Review CPC PJHA with all services. Discussed site specific tank loading procedures, well flowing hazards. All workers tickets checked and valid. Perform daily walk around inspections and checks.

ILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
07:00	12:00	5.00	P	10:45am- 12:20pm - NEB (Rick Turner, Saadat Javeed) and WSCC (Marc Lefebvre) on location for site inspection. I escorted personnel around location for inspection. Both agencies were happy with inspection, no deficiencies noted. 12:00pm Flow summary (Hours flowed - 161 Hours 04min Flared) FTP: 4024 kPa SICP: 8883 kPa DHP=10545kPa Intermediate CSG = TSTMKPa Flow Temp: 35°c Meter Run Temp: 38°c Choke size: 19.05mm Gas Rate: 106.68 E³m³/d Cumulative Gas to Flare: 527.57 E³m³ Cumulative Gas to Flare last 6 hrs: 25.56 E³m³ LFTR: 6586.42m³ LFR last hour: 3.82m³ LFR last 6 hours: 23.82m³ (hourly average last 6 hours = 3.97m³) TLFR: 1034.98m³ TLFLTR: 5551.44m³ Oil rec. last hour: 0.15m³ Oil rec. last 6 hours: 0.91m³ Cumulative Oil rec: 21.29m³ Oil API =59.5 @ 60°F Salinity: 50000 ppm PH: 7 Sand: Trace Surface Total 339.9m³ H2S= 0.40ppm
12:00	18:00	6.00	P	18:00pm Flow summary (Hours flowed - 167 Hours 04min Flared) FTP: 3984 kPa SICP: 8847 kPa DHP=10494kPa Intermediate CSG = TSTMKPa Flow Temp: 35°c Meter Run Temp: 38°c Choke size: 19.05mm Gas Rate: 110.90 E³m³/d Cumulative Gas to Flare: 553.13 E³m³ Cumulative Gas to Flare last 6 hrs: 25.57 E³m³ LFTR: 6586.42m³ LFR last hour: 4.14m³ LFR last 6 hours: 22.59m³ (hourly average last 6 hours = 3.77m³) TLFR: 1057.57m³ TLFLTR: 5528.85m³ Oil rec. last hour: 0.15m³ Oil rec. last 6 hours: 1.0m³ Cumulative Oil rec: 22.29m³ Oil API =59.5 @ 60°F Salinity: 54000 ppm PH: 7 Sand: Trace Surface Total 363.49m³ H2S= 0.40ppm
18:00	19:00	1.00	P	WSS shift change.Held pre-job safety and operations meeting. Review CPC PJHA with all services. Discussed site specific tank loading procedures, well flowing hazards. All workers tickets checked and valid. Perform daily walk around inspections and checks.

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 44
Report Date: 3/9/2014
Final Job Status: GAS
Final Report? Yes

ILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
19:00	00:00	5.00	P	24:00am Flow summary (Hours flowed - 173 Hours 04min Flared) FTP: 3979 kPa SICP: 8773 kPa DHP=10427kPa Intermediate CSG = TSTMKPa Flow Temp: 35°c Meter Run Temp: 38°c Choke size: 19.05mm Gas Rate: 107.01 E³m³/d Cumulative Gas to Flare: 579.08 E³m³ Cumulative Gas to Flare last 6 hrs: 25.95 E³m³ LFTR: 6586.42m³ LFR last hour: 3.82m³ LFR last 6 hours: 23.02m³ (hourly average last 6 hours = 3.84m³) TLFR: 1080.59m³ TLFLTR: 5528.85m³ Oil rec. last hour: 0.15m³ Oil rec. last 6 hours: 0.81m³ Cumulative Oil rec: 23.1m³ Oil API = 60.54 @ 60°F Salinity: 54000 ppm PH: 7 Sand: Trace Surface Total 376.32m³ H2S= 0.40ppm
00:00	06:00	6.00	P	06:00am Flow summary (Hours flowed - 179 Hours 04min Flared) FTP: 4249 kPa SICP: 8745 kPa DHP=10367kPa Intermediate CSG = TSTMKPa Flow Temp: 33°c Meter Run Temp: 37°c Choke size: 19.05mm Gas Rate: 109.96 E³m³/d Cumulative Gas to Flare: 604.65 E³m³ Cumulative Gas to Flare last 6 hrs: 25.25 E³m³ LFTR: 6586.42m³ LFR last hour: 3.84m³ LFR last 6 hours: 22.87m³ (hourly average last 6 hours = 3.81m³) TLFR: 1103.46m³ TLFLTR: 5482.96m³ Oil rec. last hour: 0.15m³ Oil rec. last 6 hours: 0.91m³ Cumulative Oil rec: 24.01m³ Oil API =61.54 @ 60°F Salinity: 52000 ppm PH: 7 Sand: Trace Surface Total 400.1m³ H2S= 0.40ppm

FLUID SUMMARY

Fluid	To lease (m³)	From lease (m³)	To well (m³)	From well (m³)	Left to recover (m³)
FRESH WATER	0.00	128.00	0.00	92.30	5,482.96
PRODUCED OIL			0.00	3.63	-24.01

DAILY COST

BU Desc	Vendor	Activity Code	Amount (Cost)
Rig Camp	***VENDOR NOT LISTED***	E500	500.00
rface Completion Equipment Rental	BOREALIS COMMUNICATIONS INC	Q300	604.62
pletion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	3,430.00
ce Rig	CONOCO	E120	6,900.00
Surface Completion Equipment Rental	CORNERSTONE OILFIELD SERVICES LTD	Q300	180.00
Surface Completion Equipment Rental	CORNERSTONE OILFIELD SERVICES LTD	Q300	170.00
Surface Completion Equipment Rental	CORNERSTONE OILFIELD SERVICES LTD	Q300	170.00

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 45
Report Date: 3/10/2014
Final Job Status: GAS
Final Report? Yes

WELL HEADER INFORMATION

Country	State/Province	Region / Division	District	Field Name	Field Code
CANADA	N.W.T.	WCBU	NEW VENTURES	Canyon	

Surface Legal Location	API / UWI	License No.
E-76 65-10 126-45	300E7665-10126-45	EL 470

Orig KB/RT (m)	Ground Elevation (m)	KB-Grd (m)	KB-CF (m)	KB-TF (m)	Total Depth (mKB)	PBTD (All) (mKB)
273.40	268.20	5.20	5.40	4.22	2,910.00	Original Hole - 2,877.30

JOB INFORMATION

Job Category	Primary Job Type	Secondary Job Type	Total Field Estimate (Cost)
COMPLETIONS	INITIAL COMPLETION	RIGLESS	21,945,332.75

Objective
Hydrailically fracture and flow test as part of the 2014 Canol Exploration Program

Actual Start Date	End Date	Abandon Date	Responsible Grp 1	Responsible Grp 2	Responsible Grp 3
1/25/2014 00:00	3/28/2014 08:00		coved	lagartn	Chris Kendall

AFE COST SUMMARY

AFE / RFE / Maint.#	Total AFE Amount (Cost)	Total AFE + Supp Amount (Cost)	Total Field Estimate (Cost)	AFE-Field Estimate (Cost)
10351695	2,111,000.00	2,111,000.00	2,318,381.14	-207,381.14
AFE / RFE / Maint.#	**Total AFE Amount (Cost)**	**Total AFE + Supp Amount (Cost)**	**Total Field Estimate (Cost)**	**AFE-Field Estimate (Cost)**
10359413	16,997,500.00	20,641,514.00	19,626,951.61	1,014,562.39

DAILY INFORMATION

Report Start Date	Report End Date	Daily Cost Total (Cost)	Cumulative Cost (Cost)	Personnel Regular Hours (hr)
3/10/2014 06:00	3/11/2014 06:00	113,699.61	20,270,713.76	482.00

Daily Contacts
Completion Engineer, Theorn LaGarde, 403-710-9753; WS Superintendent, Derrick Cove, 780-831-1314; WS Supervisor, Chris Kendall, 780-518-3284; WS Supervisor, Myles Hahn, 780-402-0500; WS Supervisor, Michael Short, 403 348-7127; WS Supervisor, Chris Tucker,

Rig
Weatherford, FS 463

Tubing Pressure (kPa)	Casing Pressure (kPa)	Weather	Temperature (°C)	Lease Condition
4,249	8,745	clear	-15	Ice Pad

Last 24hr Summary
Continue to Flow well to Weatherford testers. Well flowing on a 19.05mm choke. Monitor BHP to ensure not to exceed 40% draw down from original BHP or exceed 283e³m³/d gas rate (as per NEB). Time-Lapse and time sensitive samples taken today as per schedule and shipped to AGAT for analysis. All remaining samples on location being shipped to AGAT as per schedule.

06:00pm Flow summary (Hours flowed - 203 Hours 04min Flared)
FTP: 3752 kPa
SICP: 8516 kPa
DHP=10078kPa
Intermediate CSG = TSTMKPa
Flow Temp: 32°c
Meter Run Temp: 36°c
Choke size: 19.05mm
Gas Rate: 95.38 E³m³/d
Cumulative Gas to Flare: 705.75 E³m³
Cumulative Gas to Flare last 24 hrs: 101.10 E³m³
LFTR: 6586.42m³
LFR last hour: 3.68m³
LFR last 24 hours: 88.74m³ (hourly average last 24 hours = 3.70m³)
TLFR: 1192.20m³
TLFLTR: 5394.22m³
Oil rec. last hour: 0.05m³
Oil rec. last 24 hours: 3.44m³
Cumulative Oil rec: 27.45m³
Oil API = 58.3 @ 60°F
Salinity: 52000 ppm
PH: 7
Sand: Trace
Surface Total 422.31m³
H2S= 0.40ppm

24hr Forecast
Continue to flow well to testers.

DAILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
06:00	07:00	1.00	P	WSS shift change. Held pre-job safety and operations meeting. Review CPC PJHA with all services on location. Discuss proper lifting, emergency plan with no medic on location, hazards with flowing well and hauling fluids. Check and ensure all workers tickets are valid. Perform daily walk around inspections and checks.

LY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
07:00	12:00	5.00	P	12:00pm Flow summary (Hours flowed - 185 Hours 04min Flared) FTP: 4115 kPa SICP: 8665 kPa DHP=10283kPa Intermediate CSG = TSTMKPa Flow Temp: 35°c Meter Run Temp: 37°c Choke size: 19.05mm Gas Rate: 103.54 E³m³/d Cumulative Gas to Flare: 630.02 E³m³ Cumulative Gas to Flare last 6 hrs: 25.37 E³m³ LFTR: 6586.42m³ LFR last hour: 3.39m³ LFR last 6 hours: 21.19m³ (hourly average last 6 hours = 3.53m³) TLFR: 1124.65m³ TLFLTR: 5461.77m³ Oil rec. last hour: 0.20m³ Oil rec. last 6 hours: 1.07m³ Cumulative Oil rec: 25.08m³ Oil API = 60.70 @ 60°F Salinity: 60000 ppm PH: 7 Sand: Trace Surface Total 401.36m³ H2S= 0.40ppm
12:00	18:00	6.00	P	18:00pm Flow summary (Hours flowed - 191 Hours 04min Flared) FTP: 4057 kPa SICP: 8653 kPa DHP=10283kPa Intermediate CSG = TSTMKPa Flow Temp: 34°c Meter Run Temp: 37°c Choke size: 19.05mm Gas Rate: 96.36 E³m³/d Cumulative Gas to Flare: 655.22 E³m³ Cumulative Gas to Flare last 6 hrs: 25.20 E³m³ LFTR: 6586.42m³ LFR last hour: 4.12m³ LFR last 6 hours: 22.83m³ (hourly average last 6 hours = 3.80m³) TLFR: 1147.48m³ TLFLTR: 5438.94m³ Oil rec. last hour: 0.15m³ Oil rec. last 6 hours: 0.75m³ Cumulative Oil rec: 25.83m³ Oil API = 60.54 @ 60°F Salinity: 50000 ppm PH: 7 Sand: Trace Surface Total 385.27m³ H2S= 0.40ppm

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 45
Report Date: 3/10/2014
Final Job Status: GAS
Final Report? Yes

DAILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
18:00	00:00	6.00	P	24:00am Flow summary (Hours flowed - 197 Hours 04min Flared) FTP: 3944 kPa SICP: 8585 kPa DHP=10181Pa Intermediate CSG = TSTMKPa Flow Temp: 33°c Meter Run Temp: 37°c Choke size: 19.05mm Gas Rate: 102.27 E³m³/d Cumulative Gas to Flare: 680.32 E³m³ Cumulative Gas to Flare last 6 hrs: 25.10 E³m³ LFTR: 6586.42m³ LFR last hour: 3.18m³ LFR last 6 hours: 23.86m³ (hourly average last 6 hours = 3.97m³) TLFR: 1171.34m³ TLFLTR: 5415.08m³ Oil rec. last hour: 0.10m³ Oil rec. last 6 hours: 0.81m³ Cumulative Oil rec: 26.64m³ Oil API = 61.4 @ 60°F Salinity: 52000 ppm PH: 7 Sand: Trace Surface Total 400.64m³ H2S= 0.40ppm
00:00	06:00	6.00	P	06:00pm Flow summary (Hours flowed - 203 Hours 04min Flared) FTP: 3752 kPa SICP: 8516 kPa DHP=10078kPa Intermediate CSG = TSTMKPa Flow Temp: 32°c Meter Run Temp: 36°c Choke size: 19.05mm Gas Rate: 95.38 E³m³/d Cumulative Gas to Flare: 705.75 E³m³ Cumulative Gas to Flare last 6 hrs: 25.43 E³m³ LFTR: 6586.42m³ LFR last hour: 3.68m³ LFR last 6 hours: 20.86m³ (hourly average last 6 hours = 3.48m³) TLFR: 1192.20m³ TLFLTR: 5394.22m³ Oil rec. last hour: 0.05m³ Oil rec. last 6 hours: 0.81m³ Cumulative Oil rec: 27.45m³ Oil API = 58.3 @ 60°F Salinity: 52000 ppm PH: 7 Sand: Trace Surface Total 422.31m³ H2S= 0.40ppm

FLUID SUMMARY

Fluid	To lease (m³)	From lease (m³)	To well (m³)	From well (m³)	Left to recover (m³)
FRESH WATER	15.03	85.00	0.00	88.74	5,394.22
PRODUCED OIL			0.00	3.44	-27.45

DAILY COST

BU Desc	Vendor	Activity Code	Amount (Cost)
Rig Camp	***VENDOR NOT LISTED***	E500	500.00
face Completion Equipment Rental	BOREALIS COMMUNICATIONS INC	Q300	604.61
ompletion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	21,15
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	3,43
Service Rig	CONOCO	E120	5,300.00
Surface Completion Equipment Rental	CORNERSTONE OILFIELD SERVICES LTD	Q300	180.00
Surface Completion Equipment Rental	CORNERSTONE OILFIELD SERVICES LTD	Q300	170.00

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 46
Report Date: 3/11/2014
Final Job Status: GAS
Final Report? Yes

HEADER INFORMATION

ry	State/Province	Region / Division	District	Field Name	Field Code
ADA	N.W.T.	WCBU	NEW VENTURES	Canyon	

Surface Legal Location	API / UWI	License No.
E-76 65-10 126-45	300E7665-10126-45	EL 470

Orig KB/RT (m)	Ground Elevation (m)	KB-Grd (m)	KB-CF (m)	KB-TF (m)	Total Depth (mKB)	PBTD (All) (mKB)
273.40	268.20	5.20	5.40	4.22	2,910.00	Original Hole - 2,877.30

JOB INFORMATION

Job Category	Primary Job Type	Secondary Job Type	Total Field Estimate (Cost)
COMPLETIONS	INITIAL COMPLETION	RIGLESS	21,945,332.75

Objective
Hydrailically fracture and flow test as part of the 2014 Canol Exploration Program

Actual Start Date	End Date	Abandon Date	Responsible Grp 1	Responsible Grp 2	Responsible Grp 3
1/25/2014 00:00	3/28/2014 08:00		coved	lagartn	Chris Kendall

AFE COST SUMMARY

AFE / RFE / Maint.#	Total AFE Amount (Cost)	Total AFE + Supp Amount (Cost)	Total Field Estimate (Cost)	AFE-Field Estimate (Cost)
10351695	2,111,000.00	2,111,000.00	2,318,381.14	-207,381.14
AFE / RFE / Maint.#	**Total AFE Amount (Cost)**	**Total AFE + Supp Amount (Cost)**	**Total Field Estimate (Cost)**	**AFE-Field Estimate (Cost)**
10359413	16,997,500.00	20,641,514.00	19,626,951.61	1,014,562.39

DAILY INFORMATION

Report Start Date	Report End Date	Daily Cost Total (Cost)	Cumulative Cost (Cost)	Personnel Regular Hours (hr)
3/11/2014 06:00	3/12/2014 06:00	102,049.62	20,372,763.38	444.00

Daily Contacts
Completion Engineer, Theorn LaGarde, 403-710-9753; WS Superintendent, Derrick Cove, 780-831-1314; WS Supervisor, Chris Kendall, 780-518-3284; WS Supervisor, Myles Hahn, 780-402-0500; WS Supervisor, Michael Short, 403 348-7127; WS Supervisor, Chris Tucker,

Rig
Weatherford, FS 463

Tubing Pressure (kPa)	Casing Pressure (kPa)	Weather	Temperature (°C)	Lease Condition
3,764	8,380	Clear	-9	Ice Pad

Last 24hr Summary
Continue to Flow well to Weatherford testers. Well flowing on a 19.05mm choke. Monitor BHP to ensure not to exceed 40% draw down from original BHP or exceed 283e³m³/d gas rate (as per NEB). Took water/gas/oil samples as per schedule by AGAT.
6:00 Flow summary (Hours flowed - 227 Hours, 04min Flared)

3764 kPa
: 8380 kPa
DHP= 9904.1 kPa
Intermediate CSG = TSTM
Flow Temp: 33°c
Meter Run Temp: 36°c
Choke size: 19.05mm
Gas Rate: 103.70 E³m³/d
Cumulative Gas to Flare: 806.53 E³m³
Cumulative Gas to Flare last 24 hrs: 100.78 E³m³
LFTR: 6586.42m³
LFR last hour: 3.34 m³
LFR last 24 hours: 79.53 m³ (hourly average last 24 hours = 3.31 m³)
TLFR: 1271.73 m³
TLFLTR: 5314.69m³
Oil rec. last hour: 015.m³
Oil rec. last 24 hours: 3.68 m³
Cumulative Oil rec: 3.68m³
Oil API = 59.50 @ 60°F
Salinity: 63000
PH: 7
Sand: Trace
Surface Total 435.13 m³
H2S= 0.4 ppm

24hr Forecast
Continue to flow well to testers.

DAILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
06:00	07:00	1.00	P	06:00 WSS Shift Change. 06:30 Crew change. Held a daily safety and operations meeting with all personnel. Reviewed and discussed CPC PJHA regarding flowing well and all associated hazards. Discussed ERP plan and emergency procedures. Performed cross shift with night crews.

AILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
07:00	12:00	5.00	P	12:00 Flow summary (Hours flowed - 203 Hours, 04min Flared) FTP: 3961 kPa SICP: 8496 kPa DHP= 10076.5 kPa Intermediate CSG = TSTM Flow Temp: 33°c Meter Run Temp: 37°c Choke size: 19.05mm Gas Rate: 105.42 E³m³/d Cumulative Gas to Flare: 731.62 E³m³ Cumulative Gas to Flare last 6 hrs: 25.87 E³m³ LFTR: 6586.42m³ LFR last hour: 4.17m³ LFR last 6 hours: 21.66m³ (hourly average last 6 hours = 3.61m³/hr) TLFR: 1213.86m³ TLFLTR: 5372.56m³ Oil rec. last hour: 0.20m³ Oil rec. last 6 hours: 0.91m³ Cumulative Oil rec: 28.36m³ Oil API = 60 @ 60°F Salinity: 54000 ppm PH: 7 Sand: Trace Surface Total = 436.09m³
12:00	18:00	6.00	P	18:00 Flow summary (Hours flowed - 215 Hours, 04min Flared) FTP: 3976 kPa SICP: 8461 kPa DHP= 9986 kPa Intermediate CSG = TSTM Flow Temp: 34°c Meter Run Temp: 37°c Choke size: 19.05mm Gas Rate: 100.00 E³m³/d Cumulative Gas to Flare: 756.45 E³m³ Cumulative Gas to Flare last 6 hrs: 24.83 E³m³ LFTR: 6586.42m³ LFR last hour: 3.06m³ LFR last 6 hours: 18.93m³ (hourly average last 6 hours = 3.16m³/hr) TLFR: 1232.79m³ TLFLTR: 5353.63m³ Oil rec. last hour: 0.15m³ Oil rec. last 6 hours: 0.95m³ Cumulative Oil rec: 29.31m³ Oil API = 61 @ 60°F Salinity: 56000 ppm PH: 7 Sand: Trace Surface Total = 455.87m³ H2S= 0.4ppm (by Gastech tube)

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 46
Report Date: 3/11/2014
Final Job Status: GAS
Final Report? Yes

LY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
18:00	00:00	6.00	P	00:00 Flow summary (Hours flowed - 221 Hours, 04min Flared) FTP: 3754 kPa SICP: 8399 kPa DHP= 10010kPa Intermediate CSG = TSTM Flow Temp: 34°c Meter Run Temp: 37°c Choke size: 19.05mm Gas Rate: 101.70 E³m³/d Cumulative Gas to Flare: 781.70 E³m³ Cumulative Gas to Flare last 6 hrs: 25.25 E³m³ LFTR: 6586.42m³ LFR last hour: 3.55m³ LFR last 6 hours: 20.01 m³ (hourly average last 6 hours = 3.34 m³) TLFR: 1252.80m³ TLFLTR: 5333.62m³ Oil rec. last hour: 0.15m³ Oil rec. last 6 hours: 0.96m³ Cumulative Oil rec: 30.27m³ Oil API = 59.29 @ 60°F Salinity: 60000 PH: 7 Sand: Trace Surface Total 415.34 m³ H2S= 0.40ppm Choke checked @ 2400hrs for wear, choke is in good shape.
00:00	06:00	6.00	P	06:00 Flow summary (Hours flowed - 227 Hours, 04min Flared) FTP: 3764 kPa SICP: 8380 kPa DHP= 9904.1 kPa Intermediate CSG = TSTM Flow Temp: 33°c Meter Run Temp: 36°c Choke size: 19.05mm Gas Rate: 103.70 E³m³/d Cumulative Gas to Flare: 806.53 E³m³ Cumulative Gas to Flare last 6 hrs: 24.79 E³m³ LFTR: 6586.42m³ LFR last hour: 3.34 m³ LFR last 6 hours: 18.93 m³ (hourly average last 6 hours = 3.12 m³) TLFR: 1271.73 m³ TLFLTR: 5314.69m³ Oil rec. last hour: 015.m³ Oil rec. last 6 hours: 0.86 m³ Cumulative Oil rec: 3.68m³ Oil API = 59.50 @ 60°F Salinity: 63000 PH: 7 Sand: Trace Surface Total 435.13 m³ H2S= 0.4 ppm

FLUID SUMMARY

Fluid	To lease (m³)	From lease (m³)	To well (m³)	From well (m³)	Left to recover (m³)
FRESH WATER	0.00	70.39	0.00	79.53	5,314.69
PRODUCED OIL			0.00	3.68	-31.13

DAILY COST

BU Desc	Vendor	Activity Code	Amount (Cost)
Rig Camp	***VENDOR NOT LISTED***	E500	500.00
Surface Completion Equipment Rental	BOREALIS COMMUNICATIONS INC	Q300	604.62
mpletion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	15,745.00
pletion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	15,745.00
vice Rig	CONOCO	E120	7,500.00
Surface Completion Equipment Rental	CORNERSTONE OILFIELD SERVICES LTD	Q300	180.00
Surface Completion Equipment Rental	CORNERSTONE OILFIELD SERVICES LTD	Q300	170.00
Surface Completion Equipment Rental	CORNERSTONE OILFIELD SERVICES LTD	Q300	170.00

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 47
Report Date: 3/12/2014
Final Job Status: GAS
Final Report? Yes

WELL HEADER INFORMATION

Country	State/Province	Region / Division	District	Field Name	Field Code
CANADA	N.W.T.	WCBU	NEW VENTURES	Canyon	

Surface Legal Location	API / UWI	License No.
E-76 65-10 126-45	300E7665-10126-45	EL 470

Orig KB/RT (m)	Ground Elevation (m)	KB-Grd (m)	KB-CF (m)	KB-TF (m)	Total Depth (mKB)	PBTD (All) (mKB)
273.40	268.20	5.20	5.40	4.22	2,910.00	Original Hole - 2,877.30

JOB INFORMATION

Job Category	Primary Job Type	Secondary Job Type	Total Field Estimate (Cost)
COMPLETIONS	INITIAL COMPLETION	RIGLESS	21,945,332.75

Objective
Hydraulically fracture and flow test as part of the 2014 Canol Exploration Program

Actual Start Date	End Date	Abandon Date	Responsible Grp 1	Responsible Grp 2	Responsible Grp 3
1/25/2014 00:00	3/28/2014 08:00		coved	lagartn	Chris Kendall

AFE COST SUMMARY

AFE / RFE / Maint.#	Total AFE Amount (Cost)	Total AFE + Supp Amount (Cost)	Total Field Estimate (Cost)	AFE-Field Estimate (Cost)
10351695	2,111,000.00	2,111,000.00	2,318,381.14	-207,381.14
AFE / RFE / Maint.#	**Total AFE Amount (Cost)**	**Total AFE + Supp Amount (Cost)**	**Total Field Estimate (Cost)**	**AFE-Field Estimate (Cost)**
10359413	16,997,500.00	20,641,514.00	19,626,951.61	1,014,562.39

DAILY INFORMATION

Report Start Date	Report End Date	Daily Cost Total (Cost)	Cumulative Cost (Cost)	Personnel Regular Hours (hr)
3/12/2014 06:00	3/13/2014 06:00	79,979.62	20,452,743.00	432.00

Daily Contacts
Completion Engineer, Theorn LaGarde, 403-710-9753; WS Superintendent, Derrick Cove, 780-831-1314; WS Supervisor, Chris Kendall, 780-518-3284; WS Supervisor, Myles Hahn, 780-402-0500; WS Supervisor, Michael Short, 403 348-7127; WS Supervisor, Chris Tucker,

Rig
Weatherford, FS 463

Tubing Pressure (kPa)	Casing Pressure (kPa)	Weather	Temperature (°C)	Lease Condition
3,708	8,249	Clear	-12	Ice Pad

Last 24hr Summary
Continue to Flow well to Weatherford testers. Well flowing on a 19.05mm choke. Monitor BHP to ensure not to exceed 40% draw down from original BHP or exceed 283e³m³/d gas rate (as per NEB). Took AGAT samples as per schedule.
3:00 Flow summary (Hours flowed - 251 Hours, 04min Flared)

FTP: 3708 kPa
SICP: 8249 kPa
DHP= 9734 kPa
Intermediate CSG = TSTM
Flow Temp: 34°C
Meter Run Temp: 37°C
Choke size: 19.05mm
Gas Rate: 98.47 E³m³/d
Cumulative Gas to Flare: 904.64 E³m³
Cumulative Gas to Flare last 24 hrs: 98.11 E³m³
LFTR: 6586.42m³
LFR last hour: 2.88 m³
LFR last 24 hours: 72.80 m³ (hourly average last 24 hours = 3.03 m³/hr)
TLFR: 1344.53 m³
TLFLTR: 5241.89 m³
Oil rec. last hour: 0.20m³
Oil rec. last 24 hours: 3.22m³
Cumulative Oil rec: 34.35m³
Oil API = 59.29 @ 60°F
Salinity: 58000
PH: 7
Sand: Trace
Surface Total = 457.16 m³
H2S= 0.40ppm (by Gastech tube)

24hr Forecast
Continue to flow well to testers.

DAILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
06:00	07:00	1.00	P	06:00 WSS Shift Change. 06:30 Crew change. Held a daily safety and operations meeting with all personnel. Reviewed and discussed CPC PJHA regarding flowing well and all associated hazards. Discussed ERP plan and emergency procedures. Performed cross shift with night crews.

LY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
07:00	12:00	5.00	P	Obtained AGAT samples as required by sampling schedule: 1 - Standard water 1 - Routine Oil 1- Natural Gas 12:00 Flow summary (Hours flowed - 233 Hours, 4 min Flared) FTP: 3835 kPa SICP: 8340 kPa DHP= 9884 kPa Intermediate CSG = TSTM Flow Temp: 33°c Meter Run Temp: 36°c Choke size: 19.05mm Gas Rate: 99.58 E^3m^3/d Cumulative Gas to Flare: 831.49 E^3m^3 Cumulative Gas to Flare last 6 hrs: 24.96 E^3m^3 LFTR: 6586.42m^3 LFR last hour:3.25 m^3 LFR last 6 hours:19.48 m^3 (hourly average last 6 hours = 3.25m^3/hr) TLFR: 1291.21m^3 TLFLTR: 5295.21m^3 Oil rec. last hour: 0.10m^3 Oil rec. last 6 hours: 0.60m^3 Cumulative Oil rec: 31.73m^3 Oil API = 59.4 @ 60°F Salinity: 58000ppm PH: 7 Sand: Trace Surface Total = 454.69m^3 H2S= 0.4ppm (by Gastech tube)
0	18:00	6.00	P	13:00 Marc Dionne (867-446-0926) and Sebastion Vole from Environment Canada arrived on location and performed a site inspection. Their main areas of interest were the fluid storage in tank farm and where the C-ring let go and released water. Both men said that the site looked good and they were happy with how everything was contained and managed on location. 18:00 Flow summary (Hours flowed - 239 Hours, 4 min Flared) FTP: 3525 kPa SICP: 8293 kPa DHP= 9820 kPa Intermediate CSG = TSTM Flow Temp: 34°c Meter Run Temp: 37°c Choke size: 19.05mm Gas Rate: 88.71 E^3m^3/d Cumulative Gas to Flare: 855.64 E^3m^3 Cumulative Gas to Flare last 6 hrs: 24.15 E^3m^3 LFTR: 6586.42m^3 LFR last hour: 2.86 m^3 LFR last 6 hours: 17.05 m^3 (hourly average last 6 hours = 2.84m^3/hr) TLFR: 1308.26m^3 TLFLTR: 5278.16 m^3 Oil rec. last hour: 0.05m^3 Oil rec. last 6 hours: 0.20m^3 Cumulative Oil rec: 31.93m^3 Oil API = 60.8 @ 60°F Salinity: 54000 ppm PH: 7 Sand: Trace Surface Total = 418.46m^3 H2S= 0.5ppm (by Gastech tube)
:00	19:00	1.00	P	18:00 WSS Shift Change. 18:30 Crew change. Held a daily safety and operations meeting with all personnel. Reviewed and discussed CPC PJHA regarding flowing well and all associated hazards. Discussed ERP plan and emergency procedures. Performed cross shift with night crews.

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 47
Report Date: 3/12/2014
Final Job Status: GAS
Final Report? Yes

DAILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
19:00	00:00	5.00	P	00:00 Flow summary (Hours flowed - 245 Hours, 04min Flared) FTP: 3823 kPa SICP: 8280 kPa DHP= 9780 kPa Intermediate CSG = TSTM Flow Temp: 33°C Meter Run Temp: 36°C Choke size: 19.05mm Gas Rate: 93.52 E³m³/d Cumulative Gas to Flare: 879.95 E³m³ Cumulative Gas to Flare last 6 hrs: 24.14 E³m³ LFTR: 6586.42m³ LFR last hour: 3.37m³ LFR last 6 hours: 17.76m³ (hourly average last 6 hours = 2.96m³/hr) TLFR: 1326.01m³ TLFLTR: 5260.41m³ Oil rec. last hour: 0.15m³ Oil rec. last 6 hours: 0.61m³ Cumulative Oil rec: 33.45 m³ Oil API = 59.29 @ 60°F Salinity: 54000 PH: 7 Sand: Trace Surface Total = 438.1m³ H2S= 0.40ppm (by Gastech tube)
00:00	06:00	6.00	P	06:00 Flow summary (Hours flowed - 251 Hours, 04min Flared) FTP: 3708 kPa SICP: 8249 kPa DHP= 9734 kPa Intermediate CSG = TSTM Flow Temp: 34°C Meter Run Temp: 37°C Choke size: 19.05mm Gas Rate: 98.47 E³m³/d Cumulative Gas to Flare: 904.64 E³m³ Cumulative Gas to Flare last 6 hrs: 24.69 E³m³ LFTR: 6586.42m³ LFR last hour: 2.88 m³ LFR last 6 hours: 18.52 m³ (hourly average last 6 hours = 3.09m³/hr) TLFR: 1344.53 m³ TLFLTR: 5241.89 m³ Oil rec. last hour: 0.20m³ Oil rec. last 6 hours: 0.90m³ Cumulative Oil rec: 34.35m³ Oil API = 59.29 @ 60°F Salinity: 58000 PH: 7 Sand: Trace Surface Total = 457.16 m³ H2S= 0.40ppm (by Gastech tube)

FLUID SUMMARY

Fluid	To lease (m³)	From lease (m³)	To well (m³)	From well (m³)	Left to recover (m³)
FRESH WATER	0.00	54.00	0.00	72.80	5,241.89
PRODUCED OIL			0.00	3.22	-34.35

DAILY COST

BU Desc	Vendor	Activity Code	Amount (Cost)
Rig Camp	***VENDOR NOT LISTED***	E500	500.00
Surface Completion Equipment Rental	BOREALIS COMMUNICATIONS INC	Q300	604.62
mpletion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	14,100.00
mpletion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	19,97[illegible]
Service Rig	CONOCO	E120	7,5[illegible]
Surface Completion Equipment Rental	CORNERSTONE OILFIELD SERVICES LTD	Q300	18[illegible]
Surface Completion Equipment Rental	CORNERSTONE OILFIELD SERVICES LTD	Q300	170.00
Surface Completion Equipment Rental	CORNERSTONE OILFIELD SERVICES LTD	Q300	170.00
Service Rig	CORNERSTONE OILFIELD SERVICES LTD	E120	1,700.00

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 48
Report Date: 3/13/2014
Final Job Status: GAS
Final Report? Yes

HEADER INFORMATION

ry	State/Province	Region / Division	District	Field Name	Field Code
ADA	N.W.T.	WCBU	NEW VENTURES	Canyon	

Surface Legal Location	API / UWI	License No.
E-76 65-10 126-45	300E7665-10126-45	EL 470

Orig KB/RT (m)	Ground Elevation (m)	KB-Grd (m)	KB-CF (m)	KB-TF (m)	Total Depth (mKB)	PBTD (All) (mKB)
273.40	268.20	5.20	5.40	4.22	2,910.00	Original Hole - 2,877.30

JOB INFORMATION

Job Category	Primary Job Type	Secondary Job Type	Total Field Estimate (Cost)
COMPLETIONS	INITIAL COMPLETION	RIGLESS	21,945,332.75

Objective
Hydrailically fracture and flow test as part of the 2014 Canol Exploration Program

Actual Start Date	End Date	Abandon Date	Responsible Grp 1	Responsible Grp 2	Responsible Grp 3
1/25/2014 00:00	3/28/2014 08:00		coved	lagartn	Chris Kendall

AFE COST SUMMARY

AFE / RFE / Maint.#	Total AFE Amount (Cost)	Total AFE + Supp Amount (Cost)	Total Field Estimate (Cost)	AFE-Field Estimate (Cost)
10351695	2,111,000.00	2,111,000.00	2,318,381.14	-207,381.14
10359413	16,997,500.00	20,641,514.00	19,626,951.61	1,014,562.39

DAILY INFORMATION

Report Start Date	Report End Date	Daily Cost Total (Cost)	Cumulative Cost (Cost)	Personnel Regular Hours (hr)
3/13/2014 06:00	3/14/2014 06:00	41,024.61	20,493,767.61	416.00

Daily Contacts
Completion Engineer, Theorn LaGarde, 403-710-9753; WS Superintendent, Derrick Cove, 780-831-1314; WS Supervisor, Chris Kendall, 780-518-3284; WS Supervisor, Myles Hahn, 780-402-0500; WS Supervisor, Michael Short, 403 348-7127; WS Supervisor, Chris Tucker,

Rig
Weatherford, FS 463

Tubing Pressure (kPa)	Casing Pressure (kPa)	Weather	Temperature (°C)	Lease Condition
3,562	8,101	Clear	-8	Ice Pad

Last 24hr Summary
Continue to Flow well to Weatherford testers. Well flowing on a 19.05mm choke. Monitor BHP to ensure not to exceed 40% draw down from original BHP or exceed 283e³m³/d gas rate (as per NEB). Took Protechnics sample as per schedule.
)6:00 Flow summary (Hours flowed - 275 Hours, 4 min Flared)

3562 kPa
.': 8101 kPa
DHP= 9553 kPa
Intermediate CSG = TSTM
Flow Temp: 32°c
Meter Run Temp: 34°c
Choke size: 19.05mm
Gas Rate: 99.40 E³m³/d
Cumulative Gas to Flare: 1001.52 E³m³
Cumulative Gas to Flare last 24 hrs: 96.88 E³m³
LFTR: 6586.42m³
LFR last hour: 3.0m³
LFR last 24 hours: 72.27m³ (hourly average last 24 hours = 3.01 m³/hr)
TLFR: 1416.80m³
TLFLTR: 5169.62m³
Oil rec. last hour: 0.10m³
Oil rec. last 24 hours: 3.12m³
Cumulative Oil rec: 37.47m³
Oil API = 59.50 @ 60°F
Salinity: 54000ppm
PH: 7
Sand: Trace
Surface Total = 520.08m³
H2S= 0.3 ppm (by Gastech tube)

24hr Forecast
Continue to flow well to testers.

DAILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
06:00	07:00	1.00	P	06:00 WSS Shift Change. 06:30 Crew change. Held a daily safety and operations meeting with all personnel. Reviewed and discussed CPC PJHA regarding flowing well and all associated hazards. Performed cross shift with night crews. Continued to flow well.

ILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
07:00	12:00	5.00	P	12:00 Flow summary (Hours flowed - 257 Hours, 4 min Flared) FTP: 3560 kPa SICP: 8187 kPa DHP= 9633 kPa Intermediate CSG = TSTM Flow Temp: 35°c Meter Run Temp: 36°c Choke size: 19.05mm Gas Rate: 93.28 E³m³/d Cumulative Gas to Flare: 929.04 E³m³ Cumulative Gas to Flare last 6 hrs: 24.40 E³m³ LFTR: 6586.42m³ LFR last hour: 3.56 m³ LFR last 6 hours: 19.04m³ (hourly average last 6 hours = 3.17m³/hr) TLFR: 1363.57m³ TLFLTR: 5222.85m³ Oil rec. last hour: 0.10m³ Oil rec. last 6 hours: 0.59m³ Cumulative Oil rec: 34.94m³ Oil API = 59.2 @ 60°F Salinity: 56000ppm PH: 7 Sand: Trace Surface Total = 476.97m³ H2S= 0.4ppm (by Gastech tube)
12:00	18:00	6.00	P	18:00 Flow summary (Hours flowed - 263 Hours, 4 min Flared) FTP: 3721 kPa SICP: 8180 kPa DHP= 9633 kPa Intermediate CSG = TSTM Flow Temp: 35°c Meter Run Temp: 36°c Choke size: 19.05mm Gas Rate: 98.23 E³m³/d Cumulative Gas to Flare: 953.52 E³m³ Cumulative Gas to Flare last 6 hrs: 24.48 E³m³ LFTR: 6586.42m³ LFR last hour: 2.3m³ LFR last 6 hours: 19.07m³ (hourly average last 6 hours = 3.18 m³/hr) TLFR: 1382.64m³ TLFLTR: 5203.78m³ Oil rec. last hour: 0.10m³ Oil rec. last 6 hours: 0.90m³ Cumulative Oil rec: 35.84m³ Oil API = 60.8 @ 60°F Salinity: 54000ppm PH: 7 Sand: Trace Surface Total = 484.29m³ H2S= 0.4ppm (by Gastech tube)
18:00	19:00	1.00	P	18:00 WSS Shift Change. 18:30 Crew change. Held a daily safety and operations meeting with all personnel. Reviewed and discussed CPC PJHA regarding flowing well and all associated hazards. Performed cross shift with night crews. Continued to flow well.

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 48
Report Date: 3/13/2014
Final Job Status: GAS
Final Report? Yes

Y TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
19:00	00:00	5.00	P	00:00 Flow summary (Hours flowed - 269 Hours, 4 min Flared) FTP: 3836 kPa SICP: 8129 kPa DHP= 9610 kPa Intermediate CSG = TSTM Flow Temp: 32°c Meter Run Temp: 35°c Choke size: 19.05mm Gas Rate: 97.15 E³m³/d Cumulative Gas to Flare: 977.75 E³m³ Cumulative Gas to Flare last 6 hrs: 24.23 E³m³ LFTR: 6586.42m³ LFR last hour: 2.67m³ LFR last 6 hours: 17.12m³ (hourly average last 6 hours = 2.85 m³/hr) TLFR: 1399.76m³ TLFLTR: 5186.66m³ Oil rec. last hour: 0.15m³ Oil rec. last 6 hours: 0.86m³ Cumulative Oil rec: 36.70m³ Oil API = 59.2 @ 60°F Salinity: 54000ppm PH: 7 Sand: Trace Surface Total = 502.27m³ H2S= 0.3ppm (by Gastech tube)
00:00	06:00	6.00	P	06:00 Flow summary (Hours flowed - 275 Hours, 4 min Flared) FTP: 3562 kPa SICP: 8101 kPa DHP= 9553 kPa Intermediate CSG = TSTM Flow Temp: 32°c Meter Run Temp: 34°c Choke size: 19.05mm Gas Rate: 99.40 E³m³/d Cumulative Gas to Flare: 1001.52 E³m³ Cumulative Gas to Flare last 6 hrs: 23.70 E³m³ LFTR: 6586.42m³ LFR last hour: 3.0m³ LFR last 6 hours: 17.04m³ (hourly average last 6 hours = 2.84 m³/hr) TLFR: 1416.80m³ TLFLTR: 5169.62m³ Oil rec. last hour: 0.10m³ Oil rec. last 6 hours: 0.77m³ Cumulative Oil rec: 37.47m³ Oil API = 59.50 @ 60°F Salinity: 54000ppm PH: 7 Sand: Trace Surface Total = 520.08m³ H2S= 0.3 ppm (by Gastech tube)

FLUID SUMMARY

Fluid	To lease (m³)	From lease (m³)	To well (m³)	From well (m³)	Left to recover (m³)
FRESH WATER	0.00	12.47	0.00	72.27	5,169.62
PRODUCED OIL			0.00	3.12	-37.47

DAILY COST

BU Desc	Vendor	Activity Code	Amount (Cost)
Rig Camp	***VENDOR NOT LISTED***	E500	500.00
Surface Completion Equipment Rental	BOREALIS COMMUNICATIONS INC	Q300	604.61
rvice Rig	CONOCO	E120	5,400.00
ce Completion Equipment Rental	CORNERSTONE OILFIELD SERVICES LTD	Q300	180.00
e Completion Equipment Rental	CORNERSTONE OILFIELD SERVICES LTD	Q300	170.00
ce Completion Equipment Rental	CORNERSTONE OILFIELD SERVICES LTD	Q300	170.00
Service Rig	CORNERSTONE OILFIELD SERVICES LTD	E120	1,700.00
Service Rig	CORNERSTONE OILFIELD SERVICES LTD	E120	2,200.00
Surface Completion Equipment Rental	HORIZON OILFILED SOLUTIONS INC	Q300	1,900.00

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 49
Report Date: 3/14/2014
Final Job Status: GAS
Final Report? Yes

WELL HEADER INFORMATION

Country	State/Province	Region / Division	District	Field Name	Field Code
CANADA	N.W.T.	WCBU	NEW VENTURES	Canyon	

Surface Legal Location	API / UWI	License No.
E-76 65-10 126-45	300E7665-10126-45	EL 470

Orig KB/RT (m)	Ground Elevation (m)	KB-Grd (m)	KB-CF (m)	KB-TF (m)	Total Depth (mKB)	PBTD (All) (mKB)
273.40	268.20	5.20	5.40	4.22	2,910.00	Original Hole - 2,877.30

JOB INFORMATION

Job Category	Primary Job Type	Secondary Job Type	Total Field Estimate (Cost)
COMPLETIONS	INITIAL COMPLETION	RIGLESS	21,945,332.75

Objective
Hydraulically fracture and flow test as part of the 2014 Canol Exploration Program

Actual Start Date	End Date	Abandon Date	Responsible Grp 1	Responsible Grp 2	Responsible Grp 3
1/25/2014 00:00	3/28/2014 08:00		coved	lagartn	Chris Kendall

AFE COST SUMMARY

AFE / RFE / Maint.#	Total AFE Amount (Cost)	Total AFE + Supp Amount (Cost)	Total Field Estimate (Cost)	AFE-Field Estimate (Cost)
10351695	2,111,000.00	2,111,000.00	2,318,381.14	-207,381.14
10359413	16,997,500.00	20,641,514.00	19,626,951.61	1,014,562.39

DAILY INFORMATION

Report Start Date	Report End Date	Daily Cost Total (Cost)	Cumulative Cost (Cost)	Personnel Regular Hours (hr)
3/14/2014 06:00	3/15/2014 06:00	50,006.62	20,543,774.23	360.00

Daily Contacts
Completion Engineer, Theorn LaGarde, 403-710-9753; WS Superintendent, Derrick Cove, 780-831-1314; WS Supervisor, Chris Kendall, 780-518-3284; WS Supervisor, Myles Hahn, 780-402-0500; WS Supervisor, Michael Short, 403 348-7127; WS Supervisor, Chris Tucker,

Rig
Weatherford, FS 463

Tubing Pressure (kPa)	Casing Pressure (kPa)	Weather	Temperature (°C)	Lease Condition
3,366	7,937	Clear	-20	Ice Pad

Last 24hr Summary
Continue to Flow well to Weatherford testers flowing on a 19.05mm choke untill 00:00hrs then changed to 19.84mm, Changed choke to 20.64mm @ 0600hrs. Took Protechnics sample as per schedule.

06:00 Flow summary (Hours flowed - 299 Hours, 4 min Flared)
FTP: 3366 kPa
SICP: 7937 kPa
DHP= 9413 kPa
Intermediate CSG = TSTM
Flow Temp: 32°c
Meter Run Temp: 35°c
Choke size: 19.84mm
Gas Rate: 89.84 E^3m^3/d
Cumulative Gas to Flare: 1098.00 E^3m^3
Cumulative Gas to Flare last 6 hrs: 23.78 E^3m^3
Cumulative Gas to Flare last 24 hrs: 96.48 E^3m^3
LFTR: 6586.42m^3
LFR last hour: 2.50 m^3
LFR last 6 hours: 16.45 m^3 (hourly average last 6 hours = 2.74m^3/hr)
LFR last 24 hours: 63.43 m^3 (hourly average last 24 hours = 2.64m^3/hr)
TLFR: 1480.23m^3
TLFLTR: 5106.19m^3
Oil rec. last hour: 0.15m^3
Oil rec. last 6 hours: 0.76m^3
Oil rec. last 24 hours: 3.27m^3
Cumulative Oil rec: 40.74m^3
Oil API = 59.09 @ 60°F
Salinity: 58000ppm
PH: 7
Sand: Trace
Surface Total = 556.75m^3
H2S= 0.3ppm (by Gastech tube)
Change choke size to a 48/64 and 20/64, equal to a 52/64 choke (20.64mm) @ 0600hrs

24hr Forecast
Continue to flow well to testers.

DAILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
06:00	07:00	1.00	P	06:00 WSS Shift Change. 06:30 Crew change. Held a daily safety and operations meeting with all personnel. Reviewed and discussed CPC PJHA regarding flowing well and all associated hazards. Performed cross shift with night crews. Continued to flow well.

LY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
07:00	13:00	6.00	P	12:00 Flow summary (Hours flowed - 281 Hours, 4 min Flared) FTP: 3500 kPa SICP: 8084 kPa DHP= 9535 kPa Intermediate CSG = TSTM Flow Temp: 33°c Meter Run Temp: 35°c Choke size: 19.05mm Gas Rate: 100.99 E^3m^3/d Cumulative Gas to Flare: 1025.99 E^3m^3 Cumulative Gas to Flare last 6 hrs: 24.47 E^3m^3 LFTR: 6586.42m^3 LFR last hour: 2.66 m^3 LFR last 6 hours: 16.25m^3 (hourly average last 6 hours = 2.71m^3/hr) TLFR: 1433.05m^3 TLFLTR: 5153.37m^3 Oil rec. last hour: 0.15m^3 Oil rec. last 6 hours: 0.85m^3 Cumulative Oil rec: 38.32m^3 Oil API = 60.1 @ 60°F Salinity: 58000ppm PH: 7 Sand: Trace Surface Total = 517.2m^3 H2S= 0.5ppm (by Gastech tube)
13:00	18:00	5.00	P	18:00 Flow summary (Hours flowed - 287 Hours, 4 min Flared) FTP: 3370 kPa SICP: 8047 kPa DHP= 9453 kPa Intermediate CSG = TSTM Flow Temp: 33°c Meter Run Temp: 35°c Choke size: 19.05mm Gas Rate: 100.41 E^3m^3/d Cumulative Gas to Flare: 1049.91 E^3m^3 Cumulative Gas to Flare last 6 hrs: 23.92 E^3m^3 LFTR: 6586.42m^3 LFR last hour: 2.42 m^3 LFR last 6 hours: 16.22m^3 (hourly average last 6 hours = 2.70m^3/hr) TLFR: 1449.27m^3 TLFLTR: 5137.15m^3 Oil rec. last hour: 0.15m^3 Oil rec. last 6 hours: 1.00m^3 Cumulative Oil rec: 39.32m^3 Oil API = 60 @ 60°F Salinity: 62000ppm PH: 7 Sand: Trace Surface Total = 534.42m^3 H2S= 0.5ppm (by Gastech tube)
18:00	19:00	1.00	P	18:00 WSS Shift Change. 18:30 Crew change. Held a daily safety and operations meeting with all personnel. Reviewed and discussed CPC PJHA regarding flowing well and all associated hazards. Performed cross shift with night crews.

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 49
Report Date: 3/14/2014
Final Job Status: GAS
Final Report? Yes

DAILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
19:00	00:00	5.00	P	00:00 Flow summary (Hours flowed - 293 Hours, 4 min Flared) Change choke size to a 48/64 and 14/64, equal to a 50/64 choke (19.84mm) FTP: 3386 kPa SICP: 8002 kPa DHP= 9451 kPa Intermediate CSG = TSTM Flow Temp: 32°c Meter Run Temp: 35°c Choke size: 19.05mm Gas Rate: 103.93 E³m³/d Cumulative Gas to Flare: 1074.24 E³m³ Cumulative Gas to Flare last 6 hrs: 24.33 E³m³ LFTR: 6586.42m³ LFR last hour: 2.82 m³ LFR last 6 hours: 14.46 m³ (hourly average last 6 hours = 2.41m³/hr) TLFR: 1463.73m³ TLFLTR: 5122.69m³ Oil rec. last hour: 0.10m³ Oil rec. last 6 hours: 0.66m³ Cumulative Oil rec: 39.98m³ Oil API = 59.29 @ 60°F Salinity: 56000ppm PH: 7 Sand: Trace Surface Total = 539.54m³ H2S= 0.2ppm (by Gastech tube)
00:00	06:00	6.00	P	06:00 Flow summary (Hours flowed - 299 Hours, 4 min Flared) Change choke size to a 48/64 and 20/64, equal to a 52/64 choke (20.64mm) FTP: 3366 kPa SICP: 7937 kPa DHP= 9413 kPa Intermediate CSG = TSTM Flow Temp: 32°c Meter Run Temp: 35°c Choke size: 19.84mm Gas Rate: 89.84 E³m³/d Cumulative Gas to Flare: 1098.00 E³m³ Cumulative Gas to Flare last 6 hrs: 23.78 E³m³ LFTR: 6586.42m³ LFR last hour: 2.50 m³ LFR last 6 hours: 16.45 m³ (hourly average last 6 hours = 2.74m³/hr) TLFR: 1480.23m³ TLFLTR: 5106.19m³ Oil rec. last hour: 0.15m³ Oil rec. last 6 hours: 0.76m³ Cumulative Oil rec: 40.74m³ Oil API = 59.09 @ 60°F Salinity: 58000ppm PH: 7 Sand: Trace Surface Total = 556.75m³ H2S= 0.3ppm (by Gastech tube)

FLUID SUMMARY

Fluid	To lease (m³)	From lease (m³)	To well (m³)	From well (m³)	Left to recover (m³)
FRESH WATER	0.00	29.98	0.00	63.43	5,106.19
PRODUCED OIL			0.00	3.27	-40.74

DAILY COST

BU Desc	Vendor	Activity Code	Amount (Cost)
Rig Camp	***VENDOR NOT LISTED***	E500	500.00
face Completion Equipment Rental	BOREALIS COMMUNICATIONS INC	Q300	604.62
ervice Rig	CONOCO	E120	5,40
Surface Completion Equipment Rental	CORNERSTONE OILFIELD SERVICES LTD	Q300	18
Surface Completion Equipment Rental	CORNERSTONE OILFIELD SERVICES LTD	Q300	170.00
Surface Completion Equipment Rental	CORNERSTONE OILFIELD SERVICES LTD	Q300	170.00
Service Rig	CORNERSTONE OILFIELD SERVICES LTD	E120	1,700.00

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 50
Report Date: 3/15/2014
Final Job Status: GAS
Final Report? Yes

WELL HEADER INFORMATION

Country	State/Province	Region / Division	District	Field Name	Field Code
CANADA	N.W.T.	WCBU	NEW VENTURES	Canyon	

Surface Legal Location	API / UWI	License No.
E-76 65-10 126-45	300E7665-10126-45	EL 470

Orig KB/RT (m)	Ground Elevation (m)	KB-Grd (m)	KB-CF (m)	KB-TF (m)	Total Depth (mKB)	PBTD (All) (mKB)
273.40	268.20	5.20	5.40	4.22	2,910.00	Original Hole - 2,877.30

JOB INFORMATION

Job Category	Primary Job Type	Secondary Job Type	Total Field Estimate (Cost)
COMPLETIONS	INITIAL COMPLETION	RIGLESS	21,945,332.75

Objective
Hydrailically fracture and flow test as part of the 2014 Canol Exploration Program

Actual Start Date	End Date	Abandon Date	Responsible Grp 1	Responsible Grp 2	Responsible Grp 3
1/25/2014 00:00	3/28/2014 08:00		coved	lagartn	Chris Kendall

AFE COST SUMMARY

AFE / RFE / Maint.#	Total AFE Amount (Cost)	Total AFE + Supp Amount (Cost)	Total Field Estimate (Cost)	AFE-Field Estimate (Cost)
10351695	2,111,000.00	2,111,000.00	2,318,381.14	-207,381.14
AFE / RFE / Maint.#	**Total AFE Amount (Cost)**	**Total AFE + Supp Amount (Cost)**	**Total Field Estimate (Cost)**	**AFE-Field Estimate (Cost)**
10359413	16,997,500.00	20,641,514.00	19,626,951.61	1,014,562.39

DAILY INFORMATION

Report Start Date	Report End Date	Daily Cost Total (Cost)	Cumulative Cost (Cost)	Personnel Regular Hours (hr)
3/15/2014 06:00	3/16/2014 06:00	146,030.62	20,689,804.85	304.00

Daily Contacts
Completion Engineer, Theorn LaGarde, 403-710-9753; WS Superintendent, Derrick Cove, 780-831-1314; WS Supervisor, Chris Kendall, 780-518-3284; WS Supervisor, Myles Hahn, 780-402-0500; WS Supervisor, Michael Short, 403 348-7127; WS Supervisor, Chris Tucker,

Rig
Weatherford, FS 463

Tubing Pressure (kPa)	Casing Pressure (kPa)	Weather	Temperature (°C)	Lease Condition
3,037	7,814	Clear	-19	Ice Pad

Last 24hr Summary
Continue to Flow well to Weatherford testers. Adjusted choke size as follows: 06:00 to 20.64mm. 12:00 to 21.30mm. 18:00 to 22.05mm. 00:00 to 22.90 mm. 06:00 to 23.81mm
:00 Flow summary (Hours flowed - 323 Hours, 4 min Flared)

3037 kPa
P: 7814 kPa
DHP= 9213 kPa
Intermediate CSG = TSTM
Flow Temp: 33°c
Meter Run Temp: 36°c
Choke size: 22.90mm
Gas Rate: 109.78 E³m³/d
Cumulative Gas to Flare: 1196.22 E³m³
Cumulative Gas to Flare last 6 hrs: 25.0 E³m³
Cumulative Gas to Flare last 24 hrs: 98.22 E³m³
LFTR: 6586.42m³
LFR last hour: 2.70m³
LFR last 6 hours: 15.95m³ (hourly average last 6 hours = 2.66m³/hr)
LFR last 24 hours: 63.95m³ (hourly average last 24 hours = 63.95m³/hr)
TLFR: 1544.18m³
TLFLTR: 5042.24m³
Oil rec. last hour: 0.15m³
Oil rec. last 6 hours: 0.75m³
Oil rec. last 24 hours: 3.02m³
Cumulative Oil rec: 43.76m³
Oil API = 59.09 @ 60°F
Salinity: 58000ppm
PH: 7
Sand: Trace
Surface Total = 497.18m³
H2S= 0.40ppm (by Gastech tube)

24hr Forecast
Continue to flow well to testers.

DAILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
:00	07:00	1.00	P	06:00 WSS Shift Change. 06:30 Crew change. Held a daily safety and operations meeting with all personnel. Reviewed and discussed CPC PJHA regarding flowing well and all associated hazards. Performed cross shift with night crews. Continued to flow well.

DAILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
07:00	12:00	5.00	P	12:00 Flow summary (Hours flowed - 305 Hours, 4 min Flared) FTP: 3079 kPa SICP: 7897 kPa DHP= 9335 kPa Intermediate CSG = TSTM Flow Temp: 32°c Meter Run Temp: 34°c Choke size: 20.64mm Gas Rate: 86.03 E³m³/d Cumulative Gas to Flare: 1122.05 E³m³ Cumulative Gas to Flare last 6 hrs: 24.05 E³m³ LFTR: 6586.42m³ LFR last hour: 2.99m³ LFR last 6 hours: 16.39m³ (hourly average last 6 hours = 2.73m³/hr) TLFR: 1496.62m³ TLFLTR: 5089.80m³ Oil rec. last hour: 0.15m³ Oil rec. last 6 hours: 0.75m³ Cumulative Oil rec: 41.49m³ Oil API = 59.77 @ 60°F Salinity: 58000ppm PH: 7 Sand: Trace Surface Total = 457.71m³ H2S= 0.5ppm (by Gastech tube) 12:00 Decreased choke from 20.64mm (52/64") to 21.30mm (54/64").
12:00	18:00	6.00	P	Loaded and hauled out NOV 250KVa generator and Weatherford Jet pump to P-20 location. 18:00 Flow summary (Hours flowed - 311 Hours, 4 min Flared) FTP: 3059 kPa SICP: 7865 kPa DHP= 9275 kPa Intermediate CSG = TSTM Flow Temp: 33°c Meter Run Temp: 36°c Choke size: 21.30mm Gas Rate: 93.71 E³m³/d Cumulative Gas to Flare: 1146.95 E³m³ Cumulative Gas to Flare last 6 hrs: 24.9 E³m³ LFTR: 6586.42m³ LFR last hour: 1.98m³ LFR last 6 hours: 14.97m³ (hourly average last 6 hours = 2.50m³/hr) TLFR: 1511.59m³ TLFLTR: 5074.83m³ Oil rec. last hour: 0.10m³ Oil rec. last 6 hours: 0.71m³ Cumulative Oil rec: 42.20m³ Oil API = 59.87 @ 60°F Salinity: 66000ppm PH: 7 Sand: Trace Surface Total = 463.04m³ H2S= 0.5ppm (by Gastech tube) 18:00 Decreased choke from 21.30mm to 22.05mm.

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 50
Report Date: 3/15/2014
Final Job Status: GAS
Final Report? Yes

[redacted]LY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
18:00	23:00	5.00	P	00:00 Flow summary (Hours flowed - 317 Hours, 4 min Flared) FTP: 3327 kPa SICP: 7810 kPa DHP= 9235 kPa Intermediate CSG = TSTM Flow Temp: 33°c Meter Run Temp: 35°c Choke size: 22.05mm Gas Rate: 90.00 E³m³/d Cumulative Gas to Flare: 1171.22 E³m³ Cumulative Gas to Flare last 6 hrs: 24.27 E³m³ LFTR: 6586.42m³ LFR last hour: 2.66m³ LFR last 6 hours: 16.64m³ (hourly average last 6 hours = 2.77m³/hr) TLFR: 1528.23m³ TLFLTR: 5058.19m³ Oil rec. last hour: 0.15m³ Oil rec. last 6 hours: 0.81m³ Cumulative Oil rec: 43.01m³ Oil API = 59.29 @ 60°F Salinity: 60000ppm PH: 7 Sand: Trace Surface Total = 480.49m³ H2S= 0.40ppm (by Gastech tube) Changed choke to a 22.90mm @00:00 hrs
23:00	00:00	1.00	P	18:00 WSS Shift Change. 18:30 Crew change. Held a daily safety and operations meeting with all personnel. Reviewed and discussed CPC PJHA regarding flowing well and all associated hazards. Performed cross shift with night crews.
[redacted]0	06:00	6.00	P	06:00 Flow summary (Hours flowed - 323 Hours, 4 min Flared) FTP: 3037 kPa SICP: 7814 kPa DHP= 9213 kPa Intermediate CSG = TSTM Flow Temp: 33°c Meter Run Temp: 36°c Choke size: 22.90mm Gas Rate: 109.78 E³m³/d Cumulative Gas to Flare: 1196.22 E³m³ Cumulative Gas to Flare last 6 hrs: 25.0 E³m³ LFTR: 6586.42m³ LFR last hour: 2.70m³ LFR last 6 hours: 15.95m³ (hourly average last 6 hours = 2.66m³/hr) TLFR: 1544.18m³ TLFLTR: 5042.24m³ Oil rec. last hour: 0.15m³ Oil rec. last 6 hours: 0.75m³ Cumulative Oil rec: 43.76m³ Oil API = 59.09 @ 60°F Salinity: 58000ppm PH: 7 Sand: Trace Surface Total = 497.18m³ H2S= 0.40ppm (by Gastech tube) Changed choke to a 23.81mm @06:00 hrs

FLUID SUMMARY

Fluid	To lease (m³)	From lease (m³)	To well (m³)	From well (m³)	Left to recover (m³)
FRESH WATER	0.00	126.57	0.00	63.95	5,042.24
PRODUCED OIL			0.00	3.02	-43.76

[redacted]ILY COST

BU Desc	Vendor	Activity Code	Amount (Cost)
[redacted]amp	***VENDOR NOT LISTED***	E500	500.00
Surface Completion Equipment Rental	BOREALIS COMMUNICATIONS INC	Q300	604.62
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	18,330.00
Service Rig	CONOCO	E120	9,450.00
Surface Completion Equipment Rental	CORNERSTONE OILFIELD SERVICES LTD	Q300	180.00

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 51
Report Date: 3/16/2014
Final Job Status: GAS
Final Report? Yes

WELL HEADER INFORMATION

Country	State/Province	Region / Division	District	Field Name	Field Code
CANADA	N.W.T.	WCBU	NEW VENTURES	Canyon	

Surface Legal Location	API / UWI	License No.
E-76 65-10 126-45	300E7665-10126-45	EL 470

Orig KB/RT (m)	Ground Elevation (m)	KB-Grd (m)	KB-CF (m)	KB-TF (m)	Total Depth (mKB)	PBTD (All) (mKB)
273.40	268.20	5.20	5.40	4.22	2,910.00	Original Hole - 2,877.30

JOB INFORMATION

Job Category	Primary Job Type	Secondary Job Type	Total Field Estimate (Cost)
COMPLETIONS	INITIAL COMPLETION	RIGLESS	21,945,332.75

Objective
Hydrailically fracture and flow test as part of the 2014 Canol Exploration Program

Actual Start Date	End Date	Abandon Date	Responsible Grp 1	Responsible Grp 2	Responsible Grp 3
1/25/2014 00:00	3/28/2014 08:00		coved	lagartn	Chris Kendall

AFE COST SUMMARY

AFE / RFE / Maint.#	Total AFE Amount (Cost)	Total AFE + Supp Amount (Cost)	Total Field Estimate (Cost)	AFE-Field Estimate (Cost)
10351695	2,111,000.00	2,111,000.00	2,318,381.14	-207,381.14
10359413	16,997,500.00	20,641,514.00	19,626,951.61	1,014,562.39

DAILY INFORMATION

Report Start Date	Report End Date	Daily Cost Total (Cost)	Cumulative Cost (Cost)	Personnel Regular Hours (hr)
3/16/2014 06:00	3/17/2014 06:00	84,975.00	20,774,779.85	262.00

Daily Contacts
Completion Engineer, Theorn LaGarde, 403-710-9753; WS Superintendent, Derrick Cove, 780-831-1314; WS Supervisor, Chris Kendall, 780-518-3284; WS Supervisor, Myles Hahn, 780-402-0500; WS Supervisor, Michael Short, 403 348-7127; WS Supervisor, Chris Tucker,

Rig
Weatherford, FS 463

Tubing Pressure (kPa)	Casing Pressure (kPa)	Weather	Temperature (°C)	Lease Condition
2,439	7,645	Slight Overcast	-18	Ice Pad

Last 24hr Summary
Continue to Flow well to Weatherford testers. Time-Lapse and time sensitive samples taken today as per schedule and shipped to AGAT for analysis. Adjusted choke size as follows: 06:00 to 23.81mm. 12:00 to 24.80mm. 18:00 to 25.31mm and stay there for remainder of test
:00 Flow summary (Hours flowed - 347 Hours, 4 min Flared)

FTP: 2439 kPa
SICP: 7645 kPa
DHP= 9024 kPa
Intermediate CSG = TSTM
Flow Temp: 32°c
Meter Run Temp: 34°c
Choke size: 25.4mm
Gas Rate: 97.21 E^3m^3/d
Cumulative Gas to Flare: 1295.90 E^3m^3
Cumulative Gas to Flare last 6 hrs: 24.70 E^3m^3
Cumulative Gas to Flare last 24 hrs: 99.68 E^3m^3
LFTR: 6586.42m^3
LFR last hour: 2.72m^3
LFR last 6 hours: 15.65 m^3 (hourly average last 6 hours = 2.61 m^3/hr)
LFR last 24 hours: 57.63 m
TLFR: 1601.81m^3
TLFLTR: 4984.61m^3
Oil rec. last hour: 0.10m^3
Oil rec. last 6 hours: 0.56m^3
Oil rec. last 24 hours: 2.37m^3
Cumulative Oil rec: 46.13m^3
Oil API = 58.11 @ 60°F
Salinity: 62000ppm
PH: 7
Sand: Trace
Surface Total = 496.43m^3
H2S= 0.20 ppm (by Gastech tube)

24hr Forecast
Continue to flow well to testers.

Y TIME LOG

Time	End Time	Dur (hr)	Time P-T-X	Operation
06:00	07:00	1.00	P	06:00 WSS Shift Change. 06:30 Crew change. Held a daily safety and operations meeting with all personnel. Reviewed and discussed CPC PJHA regarding flowing well and all associated hazards. Performed cross shift with night crews. Continued to flow well. Obtained AGAT Time sensitive water samples and CPC complete water samples. AGAT hand dropped off samples to Frank (867-587-6703) with MXL at 09:00 c/w COC's and MSDS's. Samples are to be shipped via air immediately. Email confirmation of shipping to follow.
07:00	12:00	5.00	P	12:00 Flow summary (Hours flowed - 329 Hours, 4 min Flared) FTP: 2845 kPa SICP: 7729 kPa DHP= 9121 kPa Intermediate CSG = TSTM Flow Temp: 33°c Meter Run Temp: 35°c Choke size: 23.81mm Gas Rate: 94.29 E³m³/d Cumulative Gas to Flare: 1221.43 E³m³ Cumulative Gas to Flare last 6 hrs: 25.21 E³m³ LFTR: 6586.42m³ LFR last hour: 2.17m³ LFR last 6 hours: 14.30m³ (hourly average last 6 hours = 2.34m³/hr) TLFR: 1558.21m³ TLFLTR: 5028.21m³ Oil rec. last hour: 0.10m³ Oil rec. last 6 hours: 0.60m³ Cumulative Oil rec: 44.36m³ Oil API = 59.43 @ 60°F Salinity: 62000ppm PH: 7 Sand: Trace Surface Total = 511.91m³ H2S= 0.5ppm (by Gastech tube) 12:00 Decreased choke from 23.81mm (60/64") to 24.80mm.
12:00	18:00	6.00	P	18:00 Flow summary (Hours flowed - 335 Hours, 4 min Flared) FTP: 2592 kPa SICP: 7682 kPa DHP= 9102 kPa Intermediate CSG = TSTM Flow Temp: 33°c Meter Run Temp: 36°c Choke size: 24.80mm Gas Rate: 101.23 E³m³/d Cumulative Gas to Flare: 1246.33 E³m³ Cumulative Gas to Flare last 6 hrs: 24.90 E³m³ LFTR: 6586.42m³ LFR last hour: 2.46m³ LFR last 6 hours: 14.57m³ (hourly average last 6 hours = 2.43m³/hr) TLFR: 1572.78m³ TLFLTR: 5013.64m³ Oil rec. last hour: 0.10m³ Oil rec. last 6 hours: 0.60m³ Cumulative Oil rec: 44.96m³ Oil API = 59.65 @ 60°F Salinity: 64000ppm PH: 7 Sand: Trace Surface Total = 493.23m³ H2S= 0.5ppm (by Gastech tube) 12:00 Decreased choke from 24.80mm to 25.31mm.
..:00	19:00	1.00	P	18:00 WSS Shift Change. 18:30 Crew change. Held a daily safety and operations meeting with all personnel. Reviewed and discussed CPC PJHA regarding flowing well and all associated hazards. Performed cross shift with night crews.

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 51
Report Date: 3/16/2014
Final Job Status: GAS
Final Report? Yes

DAILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
19:00	00:00	5.00	P	00:00 Flow summary (Hours flowed - 341 Hours, 4 min Flared) FTP: 2624 kPa SICP: 7232 kPa DHP= 9092 kPa Intermediate CSG = TSTM Flow Temp: 32°c Meter Run Temp: 35°c Choke size: 25.4mm Gas Rate: 97.05 E³m³/d Cumulative Gas to Flare: 1271.20 E³m³ Cumulative Gas to Flare last 6 hrs: 24.87 E³m³ LFTR: 6586.42m³ LFR last hour: 2.53m³ LFR last 6 hours: 13.38 m³ (hourly average last 6 hours = 2.23 m³/hr) TLFR: 1586.16m³ TLFLTR: 5000.26m³ Oil rec. last hour: 0.10m³ Oil rec. last 6 hours: 0.61m³ Cumulative Oil rec: 45.57m³ Oil API = 57.91 @ 60°F Salinity: 60000ppm PH: 7 Sand: Trace Surface Total = 480.22m³ H2S= 0.20 ppm (by Gastech tube)
00:00	06:00	6.00	P	06:00 Flow summary (Hours flowed - 347 Hours, 4 min Flared) FTP: 2439 kPa SICP: 7645 kPa DHP= 9024 kPa Intermediate CSG = TSTM Flow Temp: 32°c Meter Run Temp: 34°c Choke size: 25.4mm Gas Rate: 97.21 E³m³/d Cumulative Gas to Flare: 1295.90 E³m³ Cumulative Gas to Flare last 6 hrs: 24.70 E³m³ LFTR: 6586.42m³ LFR last hour: 2.72m³ LFR last 6 hours: 15.65 m³ (hourly average last 6 hours = 2.61 m³/hr) TLFR: 1601.81m³ TLFLTR: 4984.61m³ Oil rec. last hour: 0.10m³ Oil rec. last 6 hours: 0.56m³ Cumulative Oil rec: 46.13m³ Oil API = 58.11 @ 60°F Salinity: 62000ppm PH: 7 Sand: Trace Surface Total = 496.43m³ H2S= 0.20 ppm (by Gastech tube)

FLUID SUMMARY

Fluid	To lease (m³)	From lease (m³)	To well (m³)	From well (m³)	Left to recover (m³)
FRESH WATER	0.00	60.76	0.00	57.63	4,984.61
PRODUCED OIL			0.00	2.37	-46.13

DAILY COST

BU Desc	Vendor	Activity Code	Amount (Cost)
Rig Camp	***VENDOR NOT LISTED***	E500	500.00
Surface Completion Equipment Rental	BOREALIS COMMUNICATIONS INC	Q300	715.00
mpletion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	21,385.00
mpletion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	22,29[illegible]
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	3,2[illegible]
Service Rig	CONOCO	E120	1,95[illegible]
Surface Completion Equipment Rental	CORNERSTONE OILFIELD SERVICES LTD	Q300	180.00
Surface Completion Equipment Rental	CORNERSTONE OILFIELD SERVICES LTD	Q300	170.00
Surface Completion Equipment Rental	CORNERSTONE OILFIELD SERVICES LTD	Q300	170.00

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 52
Report Date: 3/17/2014
Final Job Status: GAS
Final Report? Yes

WELL HEADER INFORMATION

Country	State/Province	Region / Division	District	Field Name	Field Code
CANADA	N.W.T.	WCBU	NEW VENTURES	Canyon	

Surface Legal Location	API / UWI	License No.
E-76 65-10 126-45	300E7665-10126-45	EL 470

Orig KB/RT (m)	Ground Elevation (m)	KB-Grd (m)	KB-CF (m)	KB-TF (m)	Total Depth (mKB)	PBTD (All) (mKB)
273.40	268.20	5.20	5.40	4.22	2,910.00	Original Hole - 2,877.30

JOB INFORMATION

Job Category	Primary Job Type	Secondary Job Type	Total Field Estimate (Cost)
COMPLETIONS	INITIAL COMPLETION	RIGLESS	21,945,332.75

Objective
Hydrailically fracture and flow test as part of the 2014 Canol Exploration Program

Actual Start Date	End Date	Abandon Date	Responsible Grp 1	Responsible Grp 2	Responsible Grp 3
1/25/2014 00:00	3/28/2014 08:00		coved	lagartn	Chris Kendall

AFE COST SUMMARY

AFE / RFE / Maint.#	Total AFE Amount (Cost)	Total AFE + Supp Amount (Cost)	Total Field Estimate (Cost)	AFE-Field Estimate (Cost)
10351695	2,111,000.00	2,111,000.00	2,318,381.14	-207,381.14
10359413	16,997,500.00	20,641,514.00	19,626,951.61	1,014,562.39

DAILY INFORMATION

Report Start Date	Report End Date	Daily Cost Total (Cost)	Cumulative Cost (Cost)	Personnel Regular Hours (hr)
3/17/2014 06:00	3/18/2014 06:00	137,505.00	20,912,284.85	330.00

Daily Contacts
Completion Engineer, Theorn LaGarde, 403-710-9753; WS Superintendent, Derrick Cove, 780-831-1314; WS Supervisor, Chris Kendall, 780-518-3284; WS Supervisor, Myles Hahn, 780-402-0500; WS Supervisor, Michael Short, 403 348-7127; WS Supervisor, Chris Tucker,

Rig
Weatherford, FS 463

Tubing Pressure (kPa)	Casing Pressure (kPa)	Weather	Temperature (°C)	Lease Condition
2,223	7,504	Overcast	-15	Ice Pad

Last 24hr Summary
Continue to Flow well to Weatherford testers.

:00 Flow summary (Hours flowed - 371 Hours, 4 min Flared)

2223 kPa
P: 7504 kPa
DHP= 8888 kPa
Intermediate CSG = TSTM
Flow Temp: 30°c
Meter Run Temp: 35°c
Choke size: 25.31mm
Gas Rate: 103.6 E³m³/d
Cumulative Gas to Flare: 1394.56 E³m³
Cumulative Gas to Flare last 6 hrs: 24.45 E³m³
Cumulative Gas to Flare last 24 hrs: 98.64 E³m³
LFTR: 6586.42m³
LFR last hour: 2.25m³
LFR last 6 hours: 14.75 m³ (hourly average last 6 hours = 2.46 m³/hr)
LFR last 24 hours: 60.3 m³
TLFR: 1662.11m³
TLFLTR: 4924.31m³
Oil rec. last hour: 0.10m³
Oil rec. last 6 hours: 0.6m³
Oil rec. last 24 hours: 2.21m³
Cumulative Oil rec: 48.34m³
Oil API = 59.54 @ 60°F
Salinity: 58000ppm
PH: 7
Sand: Trace
Surface Total = 442.46m³
H2S= 0.50 ppm (by Gastech tube)

24hr Forecast
Continue to flow well to testers.

DAILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
:00	07:00	1.00	P	06:00 WSS Shift Change. 06:30 Crew change. Held a daily safety and operations meeting with all personnel. Reviewed and discussed CPC PJHA regarding flowing well and all associated hazards. Performed cross shift with night crews. Continued to flow well.

Report Printed: 4/14/2014

DAILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
07:00	12:00	5.00	P	12:00 Flow summary (Hours flowed - 353 Hours, 4 min Flared) FTP: 2338 kPa SICP: 7616 kPa DHP= 8979 kPa Intermediate CSG = TSTM Flow Temp: 32°c Meter Run Temp: 34°c Choke size: 25.31mm Gas Rate: 97.46 E³m³/d Cumulative Gas to Flare: 1320.43 E³m³ Cumulative Gas to Flare last 6 hrs: 24.51 E³m³ LFTR: 6586.42m³ LFR last hour: 2.21m³ LFR last 6 hours: 14.10m³ (hourly average last 6 hours = 2.35m³/hr) TLFR: 1615.91m³ TLFLTR: 4970.51m³ Oil rec. last hour: 0.10m³ Oil rec. last 6 hours: 0.60m³ Cumulative Oil rec: 46.73m³ Oil API = 59.78 @ 60°F Salinity: 62000ppm PH: 7 Sand: Trace Surface Total = 502.65m³ H2S= 0.5ppm (by Gastech tube)
12:00	18:00	6.00	P	18:00 Flow summary (Hours flowed - 359 Hours, 4 min Flared) FTP: 2391 kPa SICP: 7558 kPa DHP= 8919 kPa Intermediate CSG = TSTM Flow Temp: 32°c Meter Run Temp: 35°c Choke size: 25.31mm Gas Rate: 100.18 E³m³/d Cumulative Gas to Flare: 1345.43 E³m³ Cumulative Gas to Flare last 6 hrs: 25.00 E³m³ LFTR: 6586.42m³ LFR last hour: 2.36m³ LFR last 6 hours: 15.37m³ (hourly average last 6 hours = 2.56m³/hr) TLFR: 1631.28m³ TLFLTR: 4955.14m³ Oil rec. last hour: 0.10m³ Oil rec. last 6 hours: 0.46m³ Cumulative Oil rec: 47.19m³ Oil API = 58.71 @ 60°F Salinity: 64000ppm PH: 7 Sand: Trace Surface Total = 410.48m³ H2S= 0.5ppm (by Gastech tube)
18:00	19:00	1.00	P	WSS shift change. Held pre-job safety and operations meeting with all services. Review CPC PJHA regarding flowing well and associated hazards. Continue to flow well.

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 52
Report Date: 3/17/2014
Final Job Status: GAS
Final Report? Yes

LY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
19:00	00:00	5.00	P	00:00 Flow summary (Hours flowed - 365 Hours, 4 min Flared) FTP: 2362 kPa SICP: 7528 kPa DHP= 8921 kPa Intermediate CSG = TSTM Flow Temp: 32°c Meter Run Temp: 33°c Choke size: 25.31mm Gas Rate: 100.69 E³m³/d Cumulative Gas to Flare: 1370.11 E³m³ Cumulative Gas to Flare last 6 hrs: 24.69E³m³ LFTR: 6586.42m³ LFR last hour: 2.56m³ LFR last 6 hours: 16.08m³ (hourly average last 6 hours = 2.68m³/hr) TLFR: 1647.36m³ TLFLTR: 4939.06m³ Oil rec. last hour: 0.10m³ Oil rec. last 6 hours: 0.55m³ Cumulative Oil rec: 47.74m³ Oil API = 59.8 @ 60°F Salinity: 64000ppm PH: 7 Sand: Trace Surface Total = 427.11m³ H2S= 0.5ppm (by Gastech tube)
00:00	00:30	0.50	P	WSS shift change. Weatherford shift change. Held pre-job safety and operations meeting. Review and discuss CPC PJHA on flowing well and associated hazards. Continue to flow well.
:30	06:00	5.50	P	06:00 Flow summary (Hours flowed - 371 Hours, 4 min Flared) FTP: 2223 kPa SICP: 7504 kPa DHP= 8888 kPa Intermediate CSG = TSTM Flow Temp: 30°c Meter Run Temp: 35°c Choke size: 25.31mm Gas Rate: 103.6 E³m³/d Cumulative Gas to Flare: 1394.56 E³m³ Cumulative Gas to Flare last 6 hrs: 24.45E³m³ LFTR: 6586.42m³ LFR last hour: 2.25m³ LFR last 6 hours: 14.75m³ (hourly average last 6 hours = 2.46m³/hr) TLFR: 1662.11m³ TLFLTR: 4924.31m³ Oil rec. last hour: 0.10m³ Oil rec. last 6 hours: 0.6m³ Cumulative Oil rec: 48.34m³ Oil API = 59.54 @ 60°F Salinity: 58000ppm PH: 7 Sand: Trace Surface Total = 442.46m³ H2S= 0.5ppm (by Gastech tube)

FLUID SUMMARY

Fluid	To lease (m³)	From lease (m³)	To well (m³)	From well (m³)	Left to recover (m³)
FRESH WATER	0.00	116.48	0.00	60.30	4,924.31
PRODUCED OIL			0.00	2.21	-48.34

DAILY COST

BU Desc	Vendor	Activity Code	Amount (Cost)
urface Completion Equipment Rental	BOREALIS COMMUNICATIONS INC	Q300	715.00
mpletion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	3,290.00
ice Rig	CONOCO	E120	2,400.00
urface Completion Equipment Rental	CORNERSTONE OILFIELD SERVICES LTD	Q300	180.00
Surface Completion Equipment Rental	CORNERSTONE OILFIELD SERVICES LTD	Q300	170.00
Surface Completion Equipment Rental	CORNERSTONE OILFIELD SERVICES LTD	Q300	170.00
Service Rig	CORNERSTONE OILFIELD SERVICES LTD	E120	1,700.00

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 53
Report Date: 3/18/2014
Final Job Status: GAS
Final Report? Yes

WELL HEADER INFORMATION

Country	State/Province	Region / Division	District	Field Name	Field Code
CANADA	N.W.T.	WCBU	NEW VENTURES	Canyon	

Surface Legal Location	API / UWI	License No.
E-76 65-10 126-45	300E7665-10126-45	EL 470

Orig KB/RT (m)	Ground Elevation (m)	KB-Grd (m)	KB-CF (m)	KB-TF (m)	Total Depth (mKB)	PBTD (All) (mKB)
273.40	268.20	5.20	5.40	4.22	2,910.00	Original Hole - 2,877.30

JOB INFORMATION

Job Category	Primary Job Type	Secondary Job Type	Total Field Estimate (Cost)
COMPLETIONS	INITIAL COMPLETION	RIGLESS	21,945,332.75

Objective
Hydrailically fracture and flow test as part of the 2014 Canol Exploration Program

Actual Start Date	End Date	Abandon Date	Responsible Grp 1	Responsible Grp 2	Responsible Grp 3
1/25/2014 00:00	3/28/2014 08:00		coved	lagartn	Chris Kendall

AFE COST SUMMARY

AFE / RFE / Maint.#	Total AFE Amount (Cost)	Total AFE + Supp Amount (Cost)	Total Field Estimate (Cost)	AFE-Field Estimate (Cost)
10351695	2,111,000.00	2,111,000.00	2,318,381.14	-207,381.14
AFE / RFE / Maint.#	**Total AFE Amount (Cost)**	**Total AFE + Supp Amount (Cost)**	**Total Field Estimate (Cost)**	**AFE-Field Estimate (Cost)**
10359413	16,997,500.00	20,641,514.00	19,626,951.61	1,014,562.39

DAILY INFORMATION

Report Start Date	Report End Date	Daily Cost Total (Cost)	Cumulative Cost (Cost)	Personnel Regular Hours (hr)
3/18/2014 06:00	3/19/2014 06:00	48,330.00	20,960,614.85	276.00

Daily Contacts
Completion Engineer, Theorn LaGarde, 403-710-9753; WS Superintendent, Derrick Cove, 780-831-1314; WS Supervisor, Chris Kendall, 780-518-3284; WS Supervisor, Myles Hahn, 780-402-0500; WS Supervisor, Michael Short, 403 348-7127; WS Supervisor, Chris Tucker,

Rig
Weatherford, FS 463

Tubing Pressure (kPa)	Casing Pressure (kPa)	Weather	Temperature (°C)	Lease Condition
2,359	7,212	Overcast	-20	Ice Pad

Last 24hr Summary
Continue to Flow well to Weatherford testers. Obtained AGAT samples as per schedule.

06:00 Flow summary (Hours flowed - 395 Hours, 4 min Flared)

FTP: 2352kPa
SICP: 7262 kPa
DHP= 8811 kPa
Intermediate CSG = TSTM
Flow Temp: 30°c
Meter Run Temp: 32°c
Choke size: 25.31mm
Gas Rate: 94.20 E³m³/d
Cumulative Gas to Flare: 1491.97 E³m³
Cumulative Gas to Flare last 6 hrs: 24.01 E³m³
Cumulative Gas to Flare last 24 hrs: 97.33 E³m³
LFTR: 6586.42m³
LFR last hour: 2.12m³
LFR last 6 hours: 14.11m³ (hourly average last 6 hours = 2.35m³/hr)
LFR last 24 hours: 58.08m³
TLFR: 1720.19m³
TLFLTR: 4866.23m³
Oil rec. last hour: 0.1m³
Oil rec. last 6 hours: 0.60m³
Oil rec. last 24 hours: 2.37m³
Cumulative Oil rec: 50.71m³
Oil API = 59.87 @ 60°F
Salinity: 62000ppm
PH: 7
Sand: trace
Surface Total = 474.62m³
H2S= 0.3ppm (by Raytech tube)

24hr Forecast
Continue to flow well to testers.

DAILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
06:00	07:00	1.00	P	06:00 WSS Shift Change. 06:30 Crew change. Held a daily safety and operations meeting with all personnel. Reviewed and discussed CPC PJHA regarding flowing well and all associated hazards. Performed cross shift with night crews. Continued to flow well.

Y TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
07:00	12:00	5.00	P	Obtained AGAT water, oil and gas samples as per sample schedule. 12:00 Flow summary (Hours flowed - 377 Hours, 4 min Flared) FTP: 2405 kPa SICP: 7464 kPa DHP= 8882 kPa Intermediate CSG = TSTM Flow Temp: 31°c Meter Run Temp: 34°c Choke size: 25.31mm Gas Rate: 95.32 E³m³/d Cumulative Gas to Flare: 1419.08 E³m³ Cumulative Gas to Flare last 6 hrs: 24.52 E³m³ LFTR: 6586.42m³ LFR last hour: 2.28m³ LFR last 6 hours: 15.11m³ (hourly average last 6 hours = 2.52m³/hr) TLFR: 1677.22m³ TLFLTR: 4909.20m³ Oil rec. last hour: 0.10m³ Oil rec. last 6 hours: 0.66m³ Cumulative Oil rec: 49.00m³ Oil API = 61.54 @ 60°F Salinity: 62000ppm PH: 7 Sand: trace Surface Total = 451.17m³ H2S= 0.5ppm (by Raytech tube)
12:00	18:00	6.00	P	18:00 Flow summary (Hours flowed - 383 Hours, 4 min Flared) FTP: 2429 kPa SICP: 7502 kPa DHP= 8853 kPa Intermediate CSG = TSTM Flow Temp: 32°c Meter Run Temp: 34°c Choke size: 25.31mm Gas Rate: 96.14 E³m³/d Cumulative Gas to Flare: 1443.65 E³m³ Cumulative Gas to Flare last 6 hrs: 24.57 E³m³ LFTR: 6586.42m³ LFR last hour: 2.38m³ LFR last 6 hours: 14.54m³ (hourly average last 6 hours = 2.42m³/hr) TLFR: 1691.76m³ TLFLTR: 4894.66m³ Oil rec. last hour: 0.10m³ Oil rec. last 6 hours: 0.56m³ Cumulative Oil rec: 49.56m³ Oil API = 61.91 @ 60°F Salinity: 64000ppm PH: 7 Sand: trace Surface Total = 466.27m³ H2S= 0.3ppm (by Raytech tube)
18:00	19:00	1.00	P	18:00 WSS shift change. 18:30 crew change. Held pre-job safety and operations meeting with all services. Review and discuss CPC PJHA on flowing well and associated hazards. Discuss hazards with loading vac truck to fill evaporators. Check all workers safety tickets to ensure valid. Perfrom daily walk around inspections and checks. Continue to flow well to Weatherford testers.

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 53
Report Date: 3/18/2014
Final Job Status: GAS
Final Report? Yes

DAILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
19:00	00:00	5.00	P	00:00 Flow summary (Hours flowed - 389 Hours, 4 min Flared) FTP: 2319 kPa SICP: 7439 kPa DHP= 8825 kPa Intermediate CSG = TSTM Flow Temp: 30°c Meter Run Temp: 33°c Choke size: 25.31mm Gas Rate: 97.62 E³m³/d Cumulative Gas to Flare: 1467.88 E³m³ Cumulative Gas to Flare last 6 hrs: 24.36 E³m³ LFTR: 6586.42m³ LFR last hour: 2.25m³ LFR last 6 hours: 14.32m³ (hourly average last 6 hours = 2.39m³/hr) TLFR: 1706.08m³ TLFLTR: 4880.34m³ Oil rec. last hour: 0.05m³ Oil rec. last 6 hours: 0.55m³ Cumulative Oil rec: 50.11m³ Oil API = 58.55 @ 60°F Salinity: 60000ppm PH: 7 Sand: trace Surface Total = 459.47m³ H2S= 0.3ppm (by Raytech tube)
00:00	06:00	6.00	P	06:00 Flow summary (Hours flowed - 395 Hours, 4 min Flared) FTP: 2352kPa SICP: 7262 kPa DHP= 8811 kPa Intermediate CSG = TSTM Flow Temp: 30°c Meter Run Temp: 32°c Choke size: 25.31mm Gas Rate: 94.20 E³m³/d Cumulative Gas to Flare: 1491.97 E³m³ Cumulative Gas to Flare last 6 hrs: 24.01 E³m³ LFTR: 6586.42m³ LFR last hour: 2.12m³ LFR last 6 hours: 14.11m³ (hourly average last 6 hours = 2.35m³/hr) TLFR: 1720.19m³ TLFLTR: 4866.23m³ Oil rec. last hour: 0.1m³ Oil rec. last 6 hours: 0.60m³ Cumulative Oil rec: 50.71m³ Oil API = 59.87 @ 60°F Salinity: 62000ppm PH: 7 Sand: trace Surface Total = 474.62m³ H2S= 0.3ppm (by Raytech tube)

FLUID SUMMARY

Fluid	To lease (m³)	From lease (m³)	To well (m³)	From well (m³)	Left to recover (m³)
FRESH WATER	0.00	28.29	0.00	58.08	4,866.23
PRODUCED OIL			0.00	2.37	-50.71

DAILY COST

BU Desc	Vendor	Activity Code	Amount (Cost)
Rig Camp	***VENDOR NOT LISTED***	E500	500.00
Surface Completion Equipment Rental	BOREALIS COMMUNICATIONS INC	Q300	715.00
ompletion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	3,290.00
rvice Rig	CONOCO	E120	2,40
Surface Completion Equipment Rental	CORNERSTONE OILFIELD SERVICES LTD	Q300	1
Surface Completion Equipment Rental	CORNERSTONE OILFIELD SERVICES LTD	Q300	17
Surface Completion Equipment Rental	CORNERSTONE OILFIELD SERVICES LTD	Q300	170.00
Service Rig	CORNERSTONE OILFIELD SERVICES LTD	E120	1,700.00
Service Rig	CORNERSTONE OILFIELD SERVICES LTD	E120	2,200.00

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 54
Report Date: 3/19/2014
Final Job Status: GAS
Final Report? Yes

L HEADER INFORMATION

ry	State/Province	Region / Division	District	Field Name	Field Code
ADA	N.W.T.	WCBU	NEW VENTURES	Canyon	

Surface Legal Location	API / UWI	License No.
E-76 65-10 126-45	300E7665-10126-45	EL 470

Orig KB/RT (m)	Ground Elevation (m)	KB-Grd (m)	KB-CF (m)	KB-TF (m)	Total Depth (mKB)	PBTD (All) (mKB)
273.40	268.20	5.20	5.40	4.22	2,910.00	Original Hole - 2,877.30

JOB INFORMATION

Job Category	Primary Job Type	Secondary Job Type	Total Field Estimate (Cost)
COMPLETIONS	INITIAL COMPLETION	RIGLESS	21,945,332.75

Objective
Hydrailically fracture and flow test as part of the 2014 Canol Exploration Program

Actual Start Date	End Date	Abandon Date	Responsible Grp 1	Responsible Grp 2	Responsible Grp 3
1/25/2014 00:00	3/28/2014 08:00		coved	lagartn	Chris Kendall

AFE COST SUMMARY

AFE / RFE / Maint.#	Total AFE Amount (Cost)	Total AFE + Supp Amount (Cost)	Total Field Estimate (Cost)	AFE-Field Estimate (Cost)
10351695	2,111,000.00	2,111,000.00	2,318,381.14	-207,381.14
AFE / RFE / Maint.#	**Total AFE Amount (Cost)**	**Total AFE + Supp Amount (Cost)**	**Total Field Estimate (Cost)**	**AFE-Field Estimate (Cost)**
10359413	16,997,500.00	20,641,514.00	19,626,951.61	1,014,562.39

DAILY INFORMATION

Report Start Date	Report End Date	Daily Cost Total (Cost)	Cumulative Cost (Cost)	Personnel Regular Hours (hr)
3/19/2014 06:00	3/20/2014 06:00	50,252.00	21,010,866.85	260.00

Daily Contacts
Completion Engineer, Theorn LaGarde, 403-710-9753; WS Superintendent, Derrick Cove, 780-831-1314; WS Supervisor, Chris Kendall, 780-518-3284; WS Supervisor, Myles Hahn, 780-402-0500; WS Supervisor, Michael Short, 403 348-7127; WS Supervisor, Chris Tucker,

Rig
Weatherford, FS 463

Tubing Pressure (kPa)	Casing Pressure (kPa)	Weather	Temperature (°C)	Lease Condition
2,335	5,277	Overcast	-19	Ice Pad

Last 24hr Summary
Continue to Flow well to Weatherford testers.

00 Flow summary (Hours flowed - 419 Hours, 4 min Flared)

2335 kPa
: 5277 kPa
DHP= 8704 kPa
Intermediate CSG = TSTM
Flow Temp: 30°c
Meter Run Temp: 33°c
Choke size: 25.31mm
Gas Rate: 94.66 E³m³/d
Cumulative Gas to Flare: 1587.4 E³m³
Cumulative Gas to Flare last 6 hrs: 23.55 E³m³
Cumulative Gas to Flare last 24 hrs: 95.43 E³m³
LFTR: 6586.42m³
LFR last hour: 2.28m³
LFR last 6 hours: 13.71 m³ (hourly average last 6 hours = 2.29 m³/hr)
LFR last 24 hours: 55.92 m³
TLFR: 1776.11m³
TLFLTR: 4810.31m³
Oil rec. last hour: 0.10m³
Oil rec. last 6 hours: 0.6m³
Oil rec. last 24 hours: 2.23m³
Cumulative Oil rec: 52.93m³
Oil API = 59.76 @ 60°F
Salinity: 70000ppm
PH: 7
Sand: Trace
Surface Total = 477.37m³
H2S= 0.30 ppm (by Gastech tube)

24hr Forecast
Continue to Flow well to Weatherford testers until 08:00am. Shut in well and rig out equipment.
Take AGAT time-lapse oil/water/gas samples, complete water, additional water, routine water/oil/gas samples prior to shutting in well.

DAILY TIME LOG

Time	End Time	Dur (hr)	Time P-T-X	Operation
	07:00	1.00	P	06:00 WSS Shift Change. 06:30 Crew change. Held a daily safety and operations meeting with all personnel. Reviewed and discussed CPC PJHA regarding flowing well and all associated hazards. Performed cross shift with night crews. Continued to flow well.

Report Printed: 4/14/2014

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 54
Report Date: 3/19/2014
Final Job Status: GAS
Final Report? Yes

DAILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
07:00	12:00	5.00	P	Loaded and hauled out 1 load of Condensate to Imperial. 12:00 Flow summary (Hours flowed - 401 Hours, 4 min Flared) FTP: 2361 kPa SICP: 7011 kPa DHP= 8781 kPa Intermediate CSG = TSTM Flow Temp: 29°c Meter Run Temp: 31°c Choke size: 25.31mm Gas Rate: 93.52 E³m³/d Cumulative Gas to Flare: 1516.13 E³m³ Cumulative Gas to Flare last 6 hrs: 24.16 E³m³ LFTR: 6586.42m³ LFR last hour: 2.38m³ LFR last 6 hours: 13.56m³ (hourly average last 6 hours = 2.26m³/hr) TLFR: 1677.22m³ TLFLTR: 4852.67m³ Oil rec. last hour: 0.10m³ Oil rec. last 6 hours: 0.56m³ Cumulative Oil rec: 51.27m³ Oil API = 59.32 @ 60°F Salinity: 66000ppm PH: 7 Sand: trace Surface Total = 448.34m³ H2S= 0.3ppm (by Raytech tube)
12:00	18:00	6.00	P	Corelab hand on location obtained PVT samples. 18:00 Flow summary (Hours flowed - 407 Hours, 4 min Flared) FTP: 2307 kPa SICP: 7013 kPa DH= 8749 kPa Intermediate CSG = TSTM Flow Temp: 31°c Meter Run Temp: 33°c Choke size: 25.31mm Gas Rate: 94.55 E³m³/d Cumulative Gas to Flare: 1540.16 E³m³ Cumulative Gas to Flare last 6 hrs: 24.03 E³m³ LFTR: 6586.42m³ LFR last hour: 2.34m³ LFR last 6 hours: 14.83m³ (hourly average last 6 hours = 2.47m³/hr) TLFR: 1748.58m³ TLFLTR: 4837.84m³ Oil rec. last hour: 0.05m³ Oil rec. last 6 hours: 0.56m³ Cumulative Oil rec: 51.83m³ Oil API = 58.32 @ 60°F Salinity: 64000ppm PH: 7 Sand: trace Surface Total = 443.1m³ H2S= 0.3ppm (by Raytech tube)
18:00	19:00	1.00	P	18:00 WSS shift change. 18:30 crew change. Held pre-job safety and operations meeting. Review and discuss CPC PJHA on flowing well, gauging tanks and working in tank farm. Ensure all workers tickes are valid. Perform daily walk around inspections and checks. Continue to flow well to Weatherford testers.

Y TIME LOG

Start Time	End Time	Dur.(hr)	Time P-T-X	Operation
19:00	00:00	5.00	P	00:00 Flow summary (Hours flowed - 413 Hours, 4 min Flared) FTP: 2332 kPa SICP: 6212 kPa DHP= 8740 kPa Intermediate CSG = TSTM Flow Temp: 31°c Meter Run Temp: 32°c Choke size: 25.31mm Gas Rate: 93.5 E³m³/d Cumulative Gas to Flare: 1563.85 E³m³ Cumulative Gas to Flare last 6 hrs: 23.69 E³m³ LFTR: 6586.42m³ LFR last hour: 2.09m³ LFR last 6 hours: 13.82m³ (hourly average last 6 hours = 2.30m³/hr) TLFR: 1762.4m³ TLFLTR: 4824.02m³ Oil rec. last hour: 0.05m³ Oil rec. last 6 hours: 0.50m³ Cumulative Oil rec: 52.33m³ Oil API = 59.54 @ 60°F Salinity: 66000ppm PH: 7 Sand: trace Surface Total = 463.06m³ H2S= 0.3ppm (by Raytech tube)
00:00	06:00	6.00	P	06:00 Flow summary (Hours flowed - 419 Hours, 4 min Flared) FTP: 2335 kPa SICP: 5277 kPa DHP= 8704 kPa Intermediate CSG = TSTM Flow Temp: 30°c Meter Run Temp: 33°c Choke size: 25.31mm Gas Rate: 94.66 E³m³/d Cumulative Gas to Flare: 1587.4 E³m³ Cumulative Gas to Flare last 6 hrs: 23.55 E³m³ LFTR: 6586.42m³ LFR last hour: 2.28m³ LFR last 6 hours: 13.71m³ (hourly average last 6 hours = 2.29m³/hr) TLFR: 1776.11m³ TLFLTR: 4810.31m³ Oil rec. last hour: 0.1m³ Oil rec. last 6 hours: 0.60m³ Cumulative Oil rec: 52.93m³ Oil API = 59.76 @ 60°F Salinity: 70000ppm PH: 7 Sand: trace Surface Total = 477.37m³ H2S= 0.3ppm (by Raytech tube)

FLUID SUMMARY

Fluid	To lease (m³)	From lease (m³)	To well (m³)	From well (m³)	Left to recover (m³)
FRESH WATER	0.00	25.50	0.00	55.92	4,810.31
PRODUCED OIL	0.00	29.89	0.00	2.22	-52.93

DAILY COST

BU Desc	Vendor	Activity Code	Amount (Cost)
Rig Camp	***VENDOR NOT LISTED***	E500	500.00
Surface Completion Equipment Rental	BOREALIS COMMUNICATIONS INC	Q300	715.00
mpletion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	3,290.00
ice Rig	CONOCO	E120	4,200.00
e Completion Equipment Rental	CORNERSTONE OILFIELD SERVICES LTD	Q300	180.00
ce Completion Equipment Rental	CORNERSTONE OILFIELD SERVICES LTD	Q300	170.00
Surface Completion Equipment Rental	CORNERSTONE OILFIELD SERVICES LTD	Q300	170.00
Service Rig	CORNERSTONE OILFIELD SERVICES LTD	E120	1,700.00
Service Rig	CORNERSTONE OILFIELD SERVICES LTD	E120	2,200.00

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 55
Report Date: 3/20/2014
Final Job Status: GAS
Final Report? Yes

WELL HEADER INFORMATION

Country	State/Province	Region / Division	District	Field Name	Field Code
CANADA	N.W.T.	WCBU	NEW VENTURES	Canyon	

Surface Legal Location	API / UWI	License No.
E-76 65-10 126-45	300E7665-10126-45	EL 470

Orig KB/RT (m)	Ground Elevation (m)	KB-Grd (m)	KB-CF (m)	KB-TF (m)	Total Depth (mKB)	PBTD (All) (mKB)
273.40	268.20	5.20	5.40	4.22	2,910.00	Original Hole - 2,877.30

JOB INFORMATION

Job Category	Primary Job Type	Secondary Job Type	Total Field Estimate (Cost)
COMPLETIONS	INITIAL COMPLETION	RIGLESS	21,945,332.75

Objective
Hydrailically fracture and flow test as part of the 2014 Canol Exploration Program

Actual Start Date	End Date	Abandon Date	Responsible Grp 1	Responsible Grp 2	Responsible Grp 3
1/25/2014 00:00	3/28/2014 08:00		coved	lagartn	Chris Kendall

AFE COST SUMMARY

AFE / RFE / Maint.#	Total AFE Amount (Cost)	Total AFE + Supp Amount (Cost)	Total Field Estimate (Cost)	AFE-Field Estimate (Cost)
10351695	2,111,000.00	2,111,000.00	2,318,381.14	-207,381.14
AFE / RFE / Maint.#	**Total AFE Amount (Cost)**	**Total AFE + Supp Amount (Cost)**	**Total Field Estimate (Cost)**	**AFE-Field Estimate (Cost)**
10359413	16,997,500.00	20,641,514.00	19,626,951.61	1,014,562.39

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 55
Report Date: 3/20/2014
Final Job Status: GAS
Final Report? Yes

Y INFORMATION

Start Date	Report End Date	Daily Cost Total (Cost)	Cumulative Cost (Cost)	Personnel Regular Hours (hr)
/2014 06:00	3/21/2014 06:00	51,678.00	21,062,544.85	231.00

Daily Contacts
Completion Engineer, Theorn LaGarde, 403-710-9753; WS Superintendent, Derrick Cove, 780-831-1314; WS Supervisor, Chris Kendall, 780-518-3284; WS Supervisor, Myles Hahn, 780-402-0500; WS Supervisor, Michael Short, 403 348-7127; WS Supervisor, Chris Tucker,

Rig
Weatherford, FS 463

Tubing Pressure (kPa)	Casing Pressure (kPa)	Weather	Temperature (°C)	Lease Condition
9,070	9,162	Overcast	-18	Ice Pad

Last 24hr Summary
Continue to Flow well to Weatherford testers. Obtained AGAT time sensitive samples as per sampling schedule. Delivered all samples to MXL for immediate shipping (AGAT, Tetra Tech + Protechnics). 08:00 Shut in the well.
08:00 Flow summary (Total Hours flowed - 421 Hours, 4 min Flared)

FTP: 2433 kPa
SICP: 5204 kPa
DHP= 8711 kPa
Intermediate CSG = TSTM
Flow Temp: 30°c
Meter Run Temp: 32°c
Choke size: 25.31mm
Gas Rate: 94.24 E³m³/d
Cumulative Gas to Flare: 1595.32 E³m³
Cumulative Gas to Flare last 2 hrs: 7.92 E³m³
LFTR: 6586.42m³
LFR last hour: 2.81m³
LFR last 2 hours: 4.50m³ (hourly average last 2 hours = 2.25m³/hr)
TLFR: 1780.61m³
TLFLTR: 4805.81m³
Oil rec. last hour: 0.05m³
Oil rec. last 2 hours: 0.15m³
Cumulative Oil rec: 53.08m³
Oil API = 59.95 @ 60°F
linity: 68000ppm

trace
ce Total = 439.13m³
H2S= 0.3ppm (by Raytech tube)

Sucked out and cleaned high stage and low stage P-tanks. Sucked out all lines and started to rig out all Weatherford test equipment.
Cool down and rig out HD boiler.

Take pressure build ups for 24 hours.

08:05 Tbg: 7429 kPa, Csg: 5217 kPa, BHP: 9300 kPa
08:10 Tbg: 7596 kPa, Csg: 5229 kPa, BHP: 9468 kPa
08:15 Tbg: 7654 kPa, Csg: 5211 kPa, BHP: 9536 kPa
08:30 Tbg: 7842 kPa, Csg: 5141 kPa, BHP: 9629 kPa
09:00 Tbg: 8137 kPa, Csg: 5279 kPa, BHP: 9780 kPa
12:00 Tbg: 8510 kPa, Csg: 5894 kPa, BHP: 10211 kPa
18:00 Tbg: 8781 kPa, Csg: 8866 kPa, BHP: 10605 kPa
00:00 Tbg: 8939 kPa, Csg: 9032 kPa, BHP: 10872 kPa
06:00 Tbg: 9070 kPa, Csg: 9162 kPa, BHP: 11041 kPa

24hr Forecast
Continue to monitor build up pressures.
Continue to rig out test equipment and prepare for move.
Start to move equipment off to side of lease with bed truck to prep for hauling off location.

DAILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
06:00	07:00	1.00	P	06:00 WSS Shift Change. 06:30 Crew change. Held a daily safety and operations meeting with all personnel. Reviewed and discussed CPC PJHA regarding flowing well and all associated hazards. Performed cross shift with night crews. Continued to flow well. Obtained the last set of AGAT time lapse and compositional samples. Delivered all samples on location (AGAT, Tetra Tech and Protechnics) c/w COCs to MXL for immediate shipping.

AILY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
07:00	08:00	1.00	P	08:00 SHUT IN THE WELL and begun to take pressure build ups. 08:00 Flow summary (Total Hours flowed - 421 Hours, 4 min Flared) FTP: 2433 kPa SICP: 5204 kPa DHP= 8711 kPa Intermediate CSG = TSTM Flow Temp: 30°c Meter Run Temp: 32°c Choke size: 25.31mm Gas Rate: 94.24 E³m³/d Cumulative Gas to Flare: 1595.32 E³m³ Cumulative Gas to Flare last 2 hrs: 7.92 E³m³ LFTR: 6586.42m³ LFR last hour: 2.81m³ LFR last 2 hours: 4.50m³ (hourly average last 2 hours = 2.25m³/hr) TLFR: 1780.61m³ TLFLTR: 4805.81m³ Oil rec. last hour: 0.05m³ Oil rec. last 2 hours: 0.15m³ Cumulative Oil rec: 53.08m³ Oil API = 59.95 @ 60°F Salinity: 68000ppm PH: 7 Sand: trace Surface Total = 439.13m³ H2S= 0.3ppm (by Raytech tube)
08:00	12:00	4.00	P	Obtained pressure build ups: 08:05 Tbg: 7429 kPa, Csg: 5217 kPa, BHP: 9300 kPa 08:10 Tbg: 7596 kPa, Csg: 5229 kPa, BHP: 9468 kPa 08:15 Tbg: 7654 kPa, Csg: 5211 kPa, BHP: 9536 kPa 08:30 Tbg: 7842 kPa, Csg: 5141 kPa, BHP: 9629 kPa 09:00 Tbg: 8137 kPa, Csg: 5279 kPa, BHP: 9780 kPa 09:30 Tbg: 8218 kPa, Csg: 5327 kPa, BHP: 9886 kPa 10:00 Tbg: 8262 kPa, Csg: 5061 kPa, BHP: 9947 kPa 10:30 Tbg: 8354 kPa, Csg: 4856 kPa, BHP: 10016 kPa 11:00 Tbg: 8423 kPa, Csg: 4871 kPa, BHP: 10092 kPa 11:30 Tbg: 8474 kPa, Csg: 4854 kPa, BHP: 10155 kPa 12:00 Tbg: 8510 kPa, Csg: 5894 kPa, BHP: 10211 kPa Shipped all water and oil out of high stage and low stage P-tank. Removed all safety cables and disconnected flow line from the wellhead. Disconnected flare and POP lines from P-tank. Spotted Vac truck and sucked out all lines and remaining fluid from P-tanks. Started general rig out of all test equipment. Shipped out PVT sample crate with all PVT samples on Canol (Wind Dancer Contracting) Hot shot. Driver/owner Dave Felker (867-874-4324 / cell 867-875-8686). Crate will be delivered to Corelab in Calgary attn: Dawson Millbury.
12:00	18:00	6.00	P	Pressure build ups: 12:30 Tbg: 8543 kPa, Csg: 6134 kPa, BHP: 10254 kPa 13:00 Tbg: 8570 kPa, Csg: 8615 kPa, BHP: 10305 kPa 13:30 Tbg: 8599 kPa, Csg: 8662 kPa, BHP: 10325 kPa 14:00 Tbg: 8367 kPa, Csg: 8383 kPa, BHP: 10367 kPa 14:30 Tbg: 8656 kPa, Csg: 8706 kPa, BHP: 10411 kPa 15:00 Tbg: 8669 kPa, Csg: 8722 kPa, BHP: 10439 kPa 15:30 Tbg: 8705 kPa, Csg: 8732 kPa, BHP: 10470 kPa 16:00 Tbg: 8702 kPa, Csg: 8774 kPa, BHP: 10480 kPa 16:30 Tbg: 8728 kPa, Csg: 8797 kPa, BHP: 10521 kPa 17:00 Tbg: 8748 kPa, Csg: 8824 kPa, BHP: 10556 kPa 17:30 Tbg: 8764 kPa, Csg: 8846 kPa, BHP: 10565 kPa 18:00 Tbg: 8781 kPa, Csg: 8866 kPa, BHP: 10605 kPa Held PJHA and discussed cleaning out P-tanks. Opened up hatch on low stage P-tank. Small amount of gell was seen inside of tank. Washed out low stage. Opened up hatches on High stage P-tank. Approximately 1 pail of sand in the first compartment. Washed out high stage. Rigged out all hoses and fittings from tank farm. Racked flow, flare and POP lines. Hoisted 4 400bbl tanks out of tank farm and hauled to CPC rack site in Norman Wells.

ConocoPhillips Canada

Daily Morning Report
COPRC DODO CANYON E-76 65-10 126-45

Report #: 55
Report Date: 3/20/2014
Final Job Status: GAS
Final Report? Yes

LY TIME LOG

Start Time	End Time	Dur (hr)	Time P-T-X	Operation
18:00	19:00	1.00	P	18:00 WSS shift change. 18:30 crew change. Held pre-job safety and operations meeting. Review and discuss CPC PJHA on rigging out test equipment and associated hazards. Continue to monitor build ups on well.
19:00	00:00	5.00	P	Pressure build ups: 18:30 Tbg: 8797 kPa, Csg: 8872 kPa, BHP: 10627 kPa 19:00 Tbg: 8813 kPa, Csg: 8893 kPa, BHP: 10637 kPa 19:30 Tbg: 8824 kPa, Csg: 8913 kPa, BHP: 10681 kPa 20:00 Tbg: 8837 kPa, Csg: 8927 kPa, BHP: 10694 kPa 20:30 Tbg: 8851 kPa, Csg: 8939 kPa, BHP: 10704 kPa 21:00 Tbg: 8862 kPa, Csg: 8956 kPa, BHP: 10728 kPa 21:30 Tbg: 8877 kPa, Csg: 8962 kPa, BHP: 10748 kPa 22:00 Tbg: 8887 kPa, Csg: 8975 kPa, BHP: 10786 kPa 22:30 Tbg: 8896 kPa, Csg: 8996 kPa, BHP: 10737 kPa 23:00 Tbg: 8909 kPa, Csg: 9004 kPa, BHP: 10834 kPa 23:30 Tbg: 8926 kPa, Csg: 9018 kPa, BHP: 10851 kPa 00:00 Tbg: 8939 kPa, Csg: 9032 kPa, BHP: 10872 kPa Continue to rig out Weatherford test lines, clean up and rig out equipment to prepare for move. Cool down boiler and finish rigging out. Continue to evaporate water.
00:00	06:00	6.00	P	Pressure build ups: 00:30 Tbg: 8953 kPa, Csg: 9043 kPa, BHP: 10885 kPa 01:00 Tbg: 8962 kPa, Csg: 9058 kPa, BHP: 10903 kPa 01:30 Tbg: 8981 kPa, Csg: 9070 kPa, BHP: 10920 kPa 02:00 Tbg: 8988 kPa, Csg: 9080 kPa, BHP: 10909 kPa 02:30 Tbg: 8997 kPa, Csg: 9092 kPa, BHP: 10922 kPa 03:00 Tbg: 9007 kPa, Csg: 9102 kPa, BHP: 10959 kPa 03:30 Tbg: 9023 kPa, Csg: 9113 kPa, BHP: 10986 kPa 04:00 Tbg: 9037 kPa, Csg: 9125 kPa, BHP: 10993 kPa 04:30 Tbg: 9044 kPa, Csg: 9134 kPa, BHP: 10998 kPa 05:00 Tbg: 9044 kPa, Csg: 9145 kPa, BHP: 10994 kPa 05:30 Tbg: 9065 kPa, Csg: 9157 kPa, BHP: 11023 kPa 06:00 Tbg: 9070 kPa, Csg: 9162 kPa, BHP: 11041 kPa Continue to rig out Weatherford test lines, clean up and rig out equipment to prepare for move. Cool down boiler and finish rigging out. Continue to evaporate water.

FLUID SUMMARY

Fluid	To lease (m³)	From lease (m³)	To well (m³)	From well (m³)	Left to recover (m³)
FRESH WATER	0.00	39.11	0.00	4.50	4,805.81
PRODUCED OIL	0.00	20.29	0.00	0.15	-53.08

DAILY COST

BU Desc	Vendor	Activity Code	Amount (Cost)
Rig Camp	***VENDOR NOT LISTED***	E500	500.00
Surface Completion Equipment Rental	BOREALIS COMMUNICATIONS INC	Q300	715.00
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	3,290.00
Service Rig	CONOCO	E120	4,200.00
Surface Completion Equipment Rental	CORNERSTONE OILFIELD SERVICES LTD	Q300	180.00
Surface Completion Equipment Rental	CORNERSTONE OILFIELD SERVICES LTD	Q300	170.00
Surface Completion Equipment Rental	CORNERSTONE OILFIELD SERVICES LTD	Q300	170.00
Service Rig	CORNERSTONE OILFIELD SERVICES LTD	E120	1,700.00
Service Rig	CORNERSTONE OILFIELD SERVICES LTD	E120	2,200.00
Surface Completion Equipment Rental	HORIZON OILFILED SOLUTIONS INC	Q300	2,700.00
Wellsite Supervision & Engineering	M HAHN CONSULTING INC	T130	1,670.00
face Completion Equipment Rental	MACKAY RANGE DEVELOPMENT CORP	Q300	403.00
pletion Fluids & Other Chem	PBN ENERGY SERVICES LTD	G300	2,520.00
ce Completion Equipment Rental	RIGSAT COMMUNICATIONS INC	Q300	15.00
Surface Completion Equipment Rental	RIGSAT COMMUNICATIONS INC	Q300	15.00
Maintain Road & Location	SAHTU BUILDING SUPPLIES	D230	3,031.00
Surface Completion Equipment Rental	SAHTU RCS ENERGY SERVICES LTD	Q300	600.00

ConocoPhillips Canada

Mud Properties Summary (legal size)

COPRC DODO CANYON E-76 65-10 126-45

UWI	Surface Legal Location	License No.	Well Configuration Type	Ground Elevation (m)	Casing Flange Elevation (m)	KB-Ground Distance (m)	KB-Casing Flange Distance (m)
00E7665-10126-45	E-76 65-10 126-45	EL 470	HORIZONTAL	268.20	268.00	5.20	5.40

gs

AFE / RFE	Job Typ	Job SubTyp	Plan TMD (mKB)	Plan Form	Contractor	Rig Name/#	Rig Type	Rig Accept Date	RR Date
0351817	DRILLING ORIGINAL		2,881.00	Lower Canol	Beaver Drilling Ltd.	2	DRILLING-DOUBLE	12/23/2013	1/23/2014

luid / Mud Checks

Date	Depth (mKB)	Depth (TVD) (mKB)	Type	Dens (kg/m³)	Vis (s/L)	PV Calc (Pa·s)	YP Calc (Pa)	Gel (10s) (Pa)	Gel (10m) (Pa)	API Filtrate (mL/30 min)	pH	Pom (mL/mL)	Retort Solids (%)	CaCl (ppm)	Ca (mg/L)	Chlor (mg/L)	K	LCM	Lime (kg/m³)	LGS (%)	Mg (mg/L)	MBT (kg/m³)	n	OW Ratio	Pf (mL/mL)	Pm (mL/mL)	Pot (mg/L)	Sand (%)	Solids, Corr. (%)	Wellbore
2/28/2013	95.00	95.00	Gel-Chem	1,040.0	33	4.0	3.0	2.5	2.5	25.0	9.5				80	100	19			2.4			0		0.100			0.0	2.5	Original Hole
2/29/2013	95.00	95.00	Gel-Chem	1,040.0	33	4.0	3.0	2.5	2.5	25.0	9.5				80	100	19			2.4			0		0.100			0.0	2.5	Original Hole
2/30/2013	95.00	95.00	Gel-Chem	1,040.0	33	4.0	3.0	2.5	2.5	25.0	9.5				80	100	19			2.4			0		0.100			0.0	2.5	Original Hole
2/31/2013	331.00	330.99	Gel-Chem	1,040.0	40	11.0	3.5	2.0	8.0	13.0	8.0				160	2,000	9			8.7			0		0.100			0.0	8.8	Original Hole
/1/2014	415.00	414.98	Gel-Chem	1,160.0	42	8.0	3.0	2.0	6.0	11.0	8.0				120	2,100	2			9.8			1		0.100			0.0	10.0	Original Hole
/2/2014	589.00	588.97	Gel-Chem	1,170.0	80	8.0	3.0	2.0	6.0	11.0	8.0				120	2,100	2			9.8			1		0.100			0.0	10.0	Original Hole
/3/2014	603.00	602.97	Gel-Chem	1,210.0	95	27.0	11.5	6.0	21.0	9.0	8.5				120	2,300	24			12.9			0		0.100			0.0	13.1	Original Hole
/4/2014	603.00	602.97		1,200.0	53																									Original Hole
/6/2014	646.00	645.97	Megadril D invert	950.0	50	0.0	4.0	7.0	10.0			5.300	8.0		39	114,259	22		20	6.9			0	78/22				8.0	7.1	Original Hole
/7/2014	1,008.00	1,007.93	Megadril D invert	920.0	46	8.0	3.5	5.0	8.5			5.300	5.5		44	147,126	14		20	4.4			0	81/19				4.0	4.5	Original Hole
/8/2014	1,434.00	1,433.71	Megadril D invert	975.0	48	11.0	4.0	5.0	9.0			4.300	7.5		39	156,915	13		16	4.7			0	84/16				3.0	6.6	Original Hole
/9/2014	1,597.00	1,594.26	Megadril D invert	1,000.0	53	13.0	3.5	7.5	12.0			4.000	8.0		47	197,729	21		15	4.8			0	85/15				3.1	6.8	Original Hole
/10/2014	1,622.00	1,617.83	Megadril D invert	1,020.0	54	12.0	5.0	7.0	12.5			4.500	9.0		47	197,729	17		17	5.0			0	85/15				3.1	7.8	Original Hole
/11/2014	1,712.00	1,698.06	Megadril D invert	1,010.0	55	12.0	5.0	6.5	11.5			4.500	9.0		47	197,729	18		17	5.0			0	85/15				3.1	7.8	Original Hole
/12/2014	1,788.00	1,748.23	Megadril D invert	1,020.0	56	14.0	5.0	6.5	11.5			4.500	9.5		53	221,336	16		17	5.7			0	85/15				3.0	8.1	Original Hole
/13/2014	1,864.00	1,774.35	Megadril D invert	1,015.0	59	14.0	5.0	6.0	11.5			4.500	9.0		55	242,546	12		17	4.8			0	85/15				3.1	7.6	Original Hole
/14/2014	1,908.00	1,777.91	Megadril D invert	1,015.0	59	14.0	5.0	5.5	15.0			4.300	10.5		58	263,512	12		16	5.5			0	86/14				3.2	9.0	Original Hole
/15/2014	1,908.00	1,777.91	Megadril D invert	1,055.0	68	14.0	5.0	6.0	15.0			4.500	10.5		58	263,512	12		16	5.2			0	86/14				3.2	9.0	Original Hole
/16/2014	1,906.00	1,777.91		1,080.0	75																									Original Hole

ConocoPhillips Canada

Mud Properties Summary (legal size)

COPRC DODO CANYON E-76 65-10 126-45

luid / Mud Checks

Date	Depth (mKB)	Depth (TVD) (mKB)	Type	Dens (kg/m³)	Vis (s/L)	PV Calc (Pa·s)	YP Calc (Pa)	Gel (10s) (Pa)	Gel (10m) (Pa)	API Filtrate (mL/30 min)	pH	Pom (mL/mL)	Retort Solids (%)	CaCl (ppm)	Ca (mg/L)	Chlor (mg/L)	K	LCM	Lime (kg/m³)	LGS (%)	Mg (mg/L)	MBT (kg/m³)	n	OW Ratio	Pf (mL/mL)	Pm (mL/mL)	Pot (mg/L)	Sand (%)	Solids, Corr. (%)	Wellbore
/17/2014	2,045.00	1,777.27	Megadril D invert	1,045.0	67	18.0	5.0	6.5	18.0			4.500	10.0		38	211,825	16		17	5.5			0	82/18				8.5	8.5	Original Hole
/18/2014	2,285.00	1,790.97	Megadril D invert	1,040.0	74	18.0	4.5	5.5	16.0			4.500	11.0		38	254,082	12		17	6.9			0	83/17				3.0	9.2	Original Hole
/19/2014	2,630.00	1,798.20	Megadril D invert	1,045.0	83	23.0	5.0	7.0	23.0			4.500	11.5		47	284,951	12		17	8.2			0	84/16				2.8	9.5	Original Hole
/20/2014	2,910.00	1,805.47	Megadril D invert	1,060.0	83	23.0	5.0	7.0	23.0			4.500	11.5		47	284,951	12		17	8.2			0	84/16				2.8	9.5	Original Hole
/22/2014	2,910.00	1,805.47	Megadril D invert	1,080.0	88	24.0	5.0	7.0	22.0			4.500	13.0		45,500	285,598	15		17	9.8			0	84/16				2.8	11.1	Original Hole

IV. Leak Off Test Charts

Provided as separate report

V. Geological Strip log

Provided under separate cover

National Energy Board  Office national de l'énergie

Instructions for Form Completion

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- Open this form as a "copy" in order to preserve the original for future use.
- Place your curser at the beginning of the field you wish to complete.
- Type in the relevant information. All fields are large enough to accommodate the data required. Fields on the form where large amounts of information are to be entered are self-expanding. If you find there is not enough room in a field to put in the information, check that the information you are entering is in the correct format.
- Note that some fields have a drop down list to assist in data entry and clarity as to the type of information required. For these fields, click on the appropriate value from the drop down list to enter the value on the form.
- Once you have completed all required fields on the form, print one (1) copy then have the copy signed and dated in blue ink by a responsible officer of the company.
- The printed copies of the forms, along with the appropriate supporting technical documentation, are to be submitted to:

  Chief Conservation Officer
  National Energy Board
  444 Seventh Avenue SW
  Calgary, AB T2P 0X8

- The National Energy Board is implementing a process for submission of electronic application documents. However, until further notice, all application forms and supporting documentation must continue to be supplied as paper documents along with an electronic version on DVD/CD (.pdf preferred).

Canada

National Energy Board | Office national de l'énergie

WELL TERMINATION RECORD

Well Name	COPRC Dodo Canyon E-76	Well ID	2082
Operator	ConocoPhillips Canada Resources Corp.	Current Well Status	Suspended
Total Depth	2910m KB	Licence No.	Exploration Licence 470
Location Unit	E	Section 76	Grid 65-10 126-45
Coordinates (NAD27)	*Surface*	Lat 65 ° 05 ' 27.0 "	Long 126 ° 59 ' 58.0 "
	Bottom Hole	Lat 65 ° 05 ' 46.3 "	Long 127 ° 01 ' 26.2 "
Region	NWT Mainland		
Target Formation	Canol	Field/Pool	/
Elevation KB/RT	273.40 m	Ground Level / Seafloor	268.20 m
Spud/Re-Entry Date	28-Dec-13	Rig Release Date	01/23/14

CASING AND CEMENTING PROGRAM

O.D. (mm)	Weight (kg/m)	Grade	Setting Depth (m KB)	Cementing (m^3)
244.5	53.57	J-55	603.0	29.5
177.8	38.69	P-110	1908.0	34.6
114.3	17.26	P-110	2909	15.6

PLUGGING PROGRAM

Type of Plug	Interval (m KB)	Felt	Depth (m KB)	Cement (m^3)
Other	-	No		
Other	-	No		
Other	-	No		
Other	-	No		
Other	-	No		

PERFORATION

Interval (m KB)	Comments
2789-2858	Stage 1
2685-2763	Stage 2
2590-2667	Stage 3
2494-2572	Stage 4 Details of stages 5 to 10 provided in COPRC Dodo Canyon E-76 end of well Report

Lost Circulation/Overpressure Zones	n/a
Equipment Left on Seafloor (Describe)	n/a
Provision for Re-entry (Describe and attach sketch)	See Current Well Schematic. 60.3 mm tubing set in wellhead w/downhole gauges with surface readout in place
Other Downhole Completion/Suspension	

"I certify that the information provided on this form is true and correct"

Name	*Eric Hanson*	Telephone	(403) 233-3250 Ext
Job Designation	Team Lead, Central Mackenzie Valley	E-Mail	Eric.S.Hanson @cop.com
Operator	ConocoPhillips Canada		

Signature _____ Date May 12 2014

Responsible Officer of Company

NATIONAL ENERGY BOARD USE ONLY

The details of this document have been examined and verified by

Job Designation _____ Well Identifier _____ Unique Well Identifier _____

Signature _____ Date _____

NEB Authority

Canada