ConocoPhillips Resources Canada

NEB COPY

COPRC Loon Creek O-06 Final Well Report

Grid # 65°10', 127°00'

2013/04/12

ConocoPhillips Resources Canada

COPRC Loon Creek O-06 Final Well Report

Grid # 65°10', 127°00'

2013/04/12

NATIONAL ENERGY BOARD
Exploration and Production
APR 29 2013

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INTRODUCTION

GENERAL DATA

SUMMARY OF DRILLING OPERATIONS

GEOLOGY

WELL EVALUATION

APPENDICES TO WELL HISTORY REPORT

COPRC Loon Creek O-06

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1.0 Introduction

1.1 Summary

The COPRC Loon Creek well was spudded on January 26, 2013 and the rig was released on February 21 2013 after reaching a total depth of 1856 m KB with a total of 26 operating days on the well.

Construction operations to support COPRC's 2012/2013 exploration program commenced on November 27 2012 when profiling of the ice cover on the Mackenzie River began. Clearing of the route of the ice bridge was done and flooding and thickening of the 6 kilometre ice bridge from Norman Wells to EL 470 began in early December 2012. The ice bridge was thick enough to support heavy loads by January 4 2013 and construction of the EL 470 ice roads began January 5 2013.

The well pad at the Loon Creek O-06 location was completed by January 19 2013 at about the same time that the main camp pad was constructed and the drill camp installed.

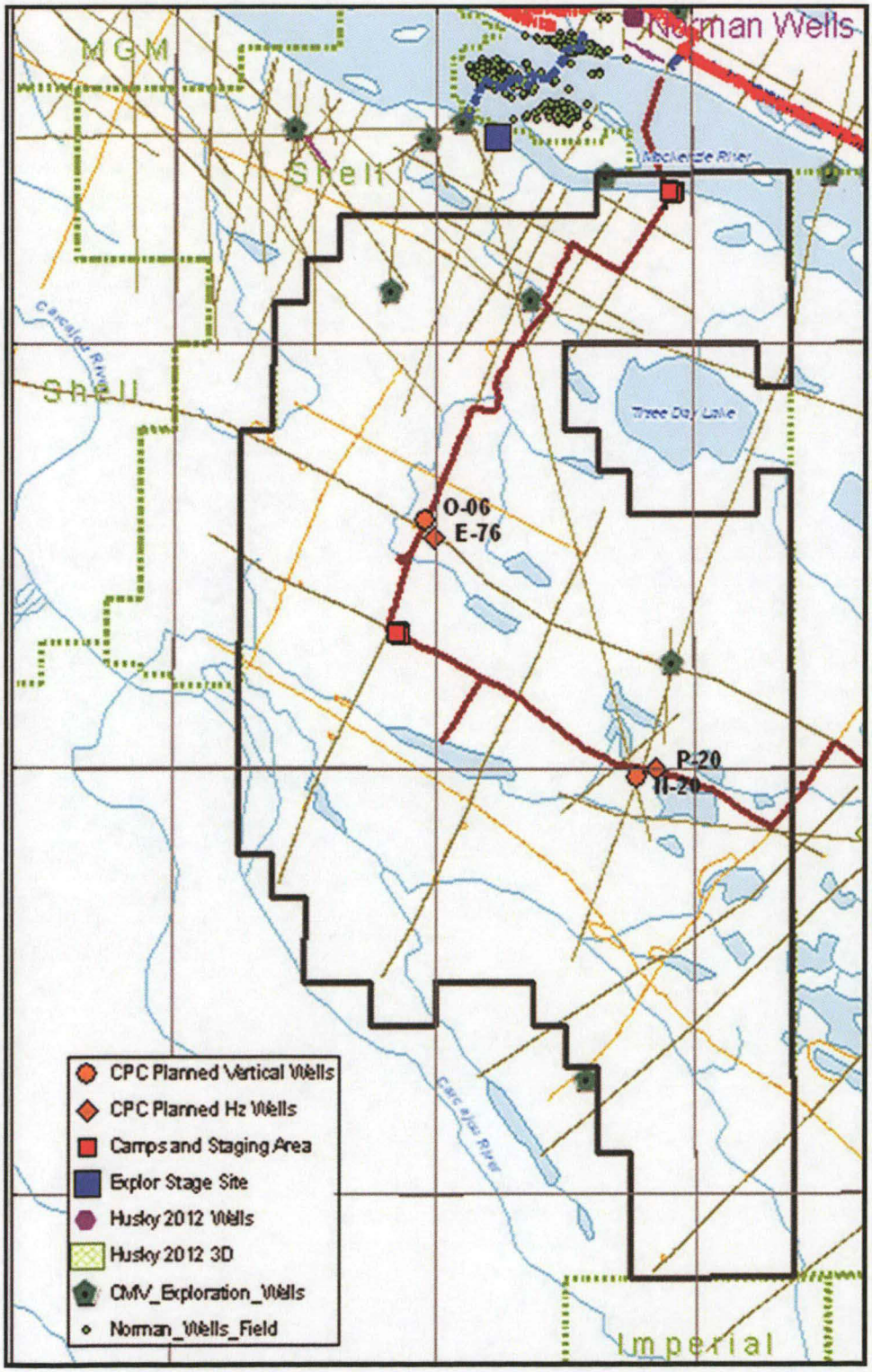
Beaver Drilling Rig # 2 was mobilized to Norman Wells starting on January 15 2013 and all rig loads were on location by January 21 2013. Rig up took approximately 5 days due to the extremely cold weather and short days.

Drilling operations were conducted with no major issues and no safety incidents occurred. The Canol target zone was encountered at 1643 m KB and the secondary target, the Bluefish member, came in at 1746 m KB. Wire line retrievable coring techniques were used to core a total of 234 meters from 1622 m KB to 1856 m KB. The surface hole was logged using Schlumberger's platform express suite of logs. Production hole was logged with a full suite of electric logs. A long string of 177.8 mm casing was run to bottom and cemented full length using Hi Lite fill cement from surface to 1382 m KB and Oilwell 'G' cement from 1382 m to 1856 m KB.

A VSP survey was conducted on COPRC Loon Creek O-06 between February 25 and March 1 2013. Completion operations commenced March 1 and were finished by March 4 2013; having conducted 3 DFIT's on the Canol formation. The intervals for the DFIT's were 1769 – 1770 m KB, 1727 – 1728 m KB and 1692 – 1693 m KB. Each interval was suspended by setting two wire line retrievable bridge plugs with recorders installed beneath the bottom WRBP.

Nabors Service Rig #414 was rigged up on location on March 16 2013. Each set of Bridge plugs and gauges were recovered with no problems. Casing patches were set on wire line over all 3 perforated intervals. Nabors #414 was rigged out on March 24 2013 and the Loon Creek O-06 well is suspended with wellhead installed and locked.

1.2 Locality Map



2.0 General Data

2.1 Well Name

COPRC Loon Creek O-06

2.2 Unique Well Identifier

300O066510127000

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: 252.40 m

Kelly Bushing: 257.60 m

KB – Ground Level: 5.20 m

3.2 Total depth

1856 m KB

3.3 Spud Date and Time

January 26 2013 @ 1200 Hours

3.4 Date Drilling Completed

Drilling completed 2/20/2103

3.5 Rig Release Date and Time

Rig Released 02 /20/13 @2400 Hrs.

3.6 Well Status

Suspended

3.7 Hole sizes and depths

Surface Hole: 311 mm to 600 m KB

Main Hole: 222 mm to 1856 m KB (TD)

3.8 Casing and Cementing Record

3.7.1 Conductor Hole

3.8.2 Surface Hole

244.5 mm, 53.57 kg/m, J-55 LTC set at 597.0 m KB

3.8.3 Main Hole

177.8 mm, 38.69 kg/m P-110 LTC set at 1856.0 m KB

3.9 Drilling Fluids

3.9.1 Surface Hole

Gel Chemical (MI Swaco)

3.9.2 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 Loon Creek O-06 on February 3, 2013 after drilling out the surface casing shoe at 597 m KB and making 3 metres of new hole. The FIT at 603 m KB was conducted with 855.0 kg/m^3 OBM in the hole and was taken to a pressure of 6000 kPa with no leak off. This equates to an equivalent fracture pressure of 11055 kPa or an equivalent mud weight of 1870 kg/m^3.

3.11 Time Distribution

Casing: 26.5 hrs.

Cementing: 14.74 hrs.

Coring: 196.50 hrs.

Drilling: 204.50 hrs.

Formation Evaluation: 93.0 hrs.

Rig Move: 303.50 hrs.

Rig Maintenance: 23.25 hrs.

Wellhead/BOP testing: 50.0 hrs.

Trouble Time: 4.75 hrs.

3.12 Deviation Survey

The maximum deviation encountered on this well was 2.59^0 at 1465.0 m KB

3.13 Suspension Status

CPORC O-06 is suspended. A StreamFlo 34.5 MPa wellhead with two master valves is installed and chained and locked.

3.14 Composite Well Record

ConocoPhillips Canada

Daily Schematic

COPRC LOON CREEK O-06 65-10 127-00

Rig: Beaver Drilling Ltd. 2

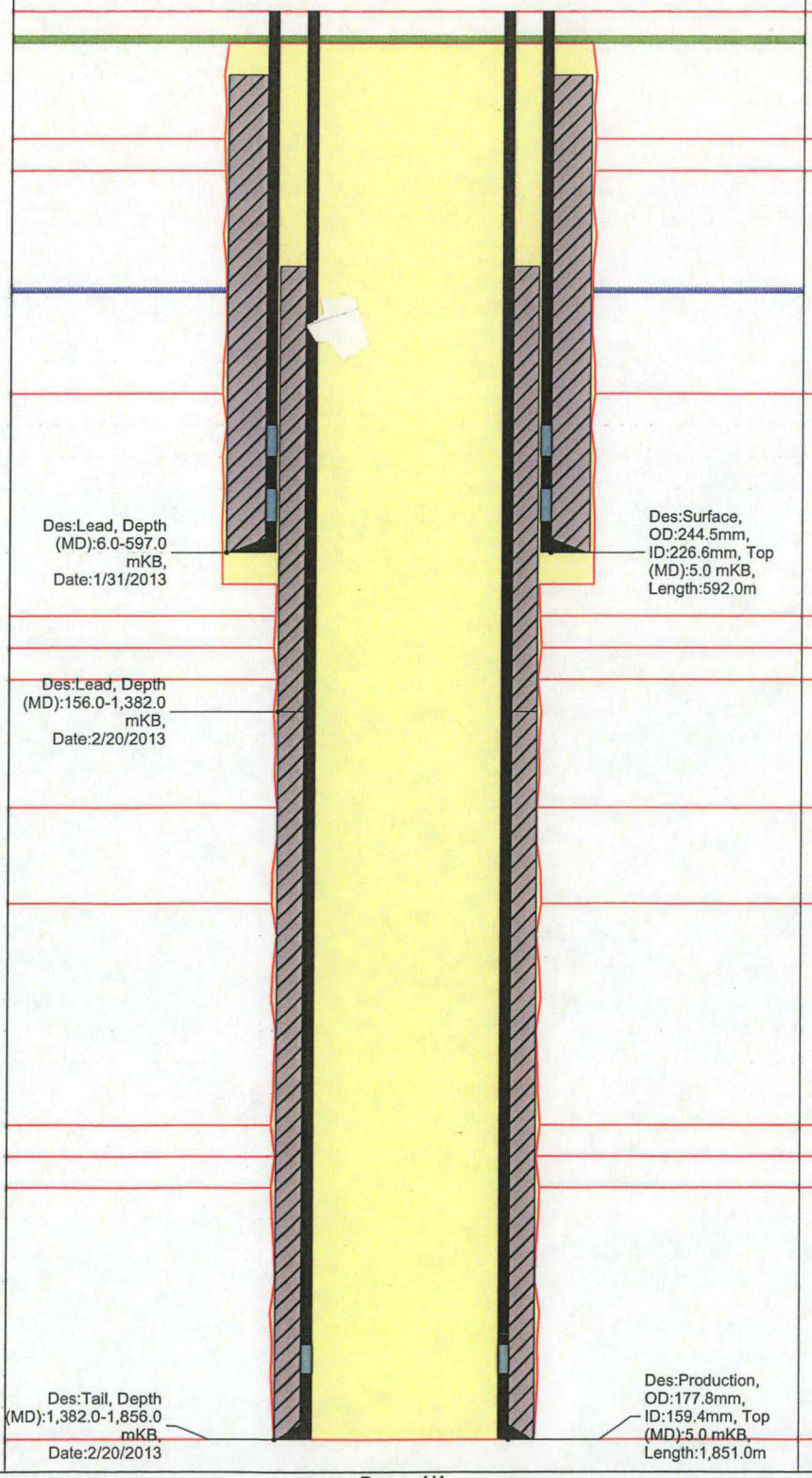
Report Date: 2/20/2013
Report #: 38
Depth Progress: 0.00 m
Depth End: 1,856.00 mKB
Rig Release Date: 2/20/2013

District	Field Name	Surface Legal Location	API / UWI	License No.
W VENTURES	Loon	O-6 65-10 127-00	300/O-06 6510 127000	470
Program	**Well Type**	**Well Configuration Type**	**Original KB/RT Elevation (m)**	**KB-Ground Distance (m)**
	Exploration	VERTICAL	257.60	5.20

Well Config: VERTICAL - Original Hole, 2/21/2013

mKB (MD)	Incl	mKB (TVD)
-2		
-2		
0		
5		
5		
6		
28		
31	0.5	31
36	0.5	36
48	0.5	48
126	0.5	126
156	0.3	156
279	0.4	279
298	0.5	298
471	1.3	471
570	1.0	570
583	0.7	583
583	0.7	583
596	0.8	596
597	0.8	597
597	0.8	597
600	1.0	600
787	1.3	787
883	1.8	882
962	1.7	962
1,382	0.7	1,382
1,622	1.1	1,622
1,631	1.1	1,631
1,643	1.1	1,643
1,649	1.1	1,649
1,676	1.1	1,676
1,679	1.1	1,679
1,686	1.1	1,686
1,703	1.1	1,703
1,730	1.1	1,730
1,730	1.1	1,730
1,757	1.0	1,757
1,784	1.0	1,784
1,788	1.0	1,788
1,796	1.0	1,796
1,804	1.0	1,804
1,811	1.0	1,811
1,824	1.0	1,824
1,830	1.0	1,830
1,838	1.0	1,838
1,842	1.0	1,842
1,843	1.0	1,842
1,856	1.0	1,855
1,856	1.0	1,856

Schematic - Actual



Frm Drill

6	Quaternary System, 5.0
31	Alberta Grp, 31.0
36	Slater River, 36.0
570	Artic Red, 570.0
787	Sams Sault, 787.0
882	Martin House, 882.5
962	Imperial Shale, 962.0
1,643	Upper Canol, 1,643.0
1,679	Lower Canol, 1,679.0
1,788	Hare Indian, 1,788.0
1,796	Bluefish Member, 1,796.0
1,804	Hume, 1,804.0

Report Printed: 3/13/2013

ConocoPhillips Canada

Drilling Summary
LOON O-06 65-10 127-00

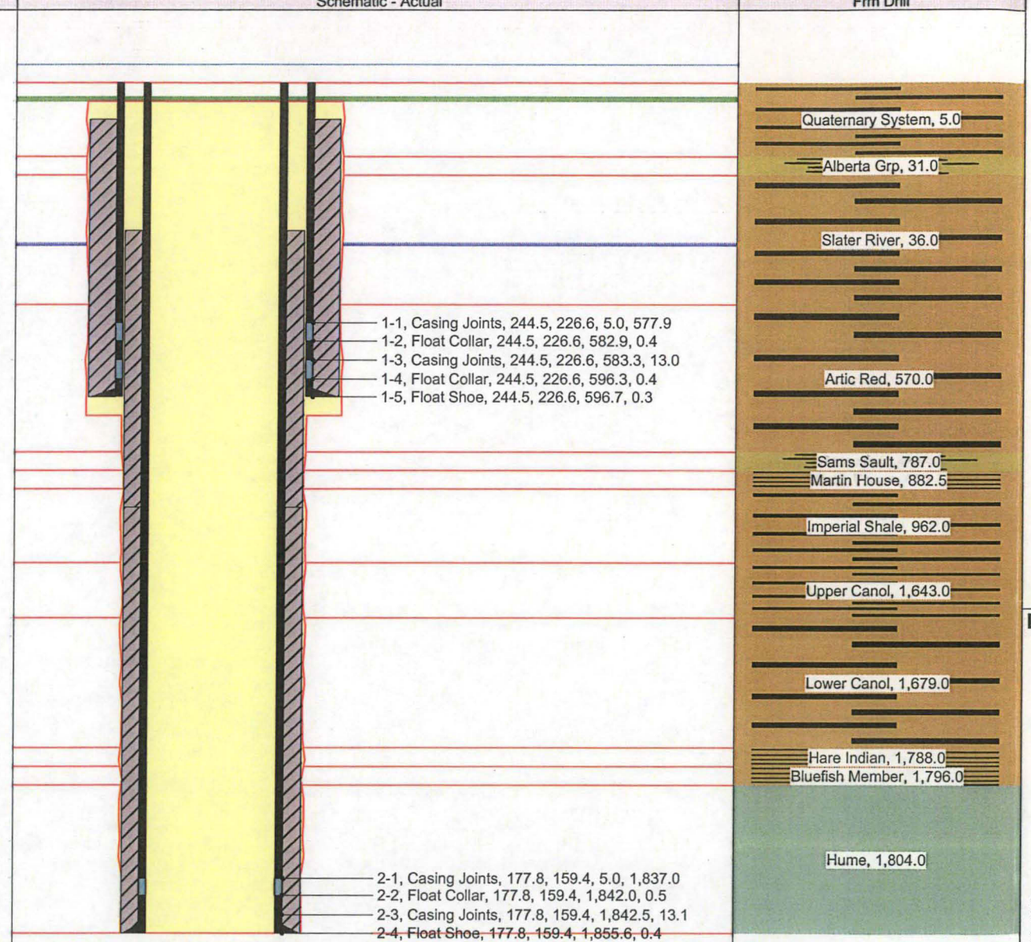
API / UWI	Field Name	Area	Operator	County	State/Province
300/O-06 6510 127000	Loon		CONOCOPHILLIPS		N.W.T.

Ground Elevation (m)	Casing Flange Elevation (m)	KB-Ground Distance (m)	KB-Casing Flange Distance (m)	Original Spud Date	Rig Release Date
252.40	252.73	5.20	4.87	1/26/2013	2/20/2013 11:59:59 PM

Schematic

Well Config: VERTICAL - Original Hole, 2/21/2013

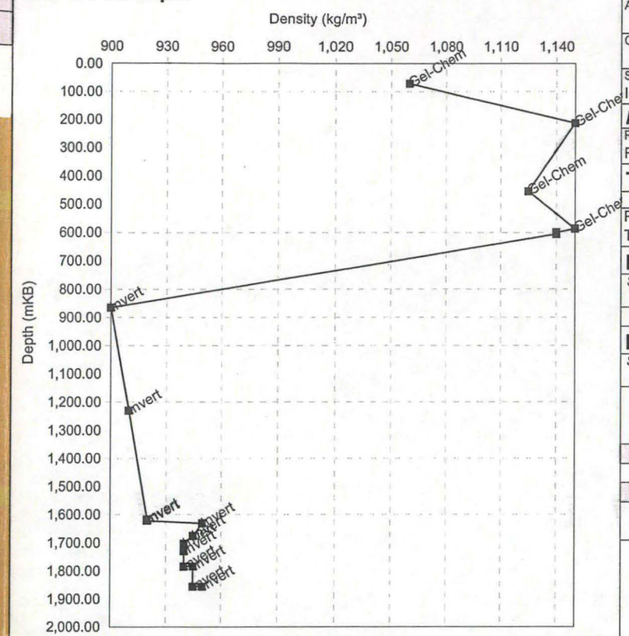
mKB (MD)	mKB (TVD)	Incl
-2		
-2		
0		
5		
5		
6		
28		
31	31	0.5
36	36	0.5
48	48	0.5
126	126	0.5
156	156	0.3
279	279	0.4
298	298	0.5
471	471	1.3
570	570	1.0
583	583	0.7
583	583	0.7
596	596	0.8
597	597	0.8
597	597	0.8
600	600	1.0
603	603	1.0
787	787	1.3
883	882	1.8
962	962	1.7
1,382	1,382	0.7
1,622	1,622	1.1
1,631	1,631	1.1
1,643	1,643	1.1
1,649	1,649	1.1
1,676	1,676	1.1
1,679	1,679	1.1
1,686	1,686	1.1
1,703	1,703	1.1
1,730	1,730	1.1
1,730	1,730	1.1
1,757	1,757	1.0
1,784	1,784	1.0
1,788	1,788	1.0
1,796	1,796	1.0
1,804	1,804	1.0
1,811	1,811	1.0
1,824	1,824	1.0
1,830	1,830	1.0
1,838	1,838	1.0
1,842	1,842	1.0
1,843	1,842	1.0
1,856	1,855	1.0
1,856	1,856	1.0



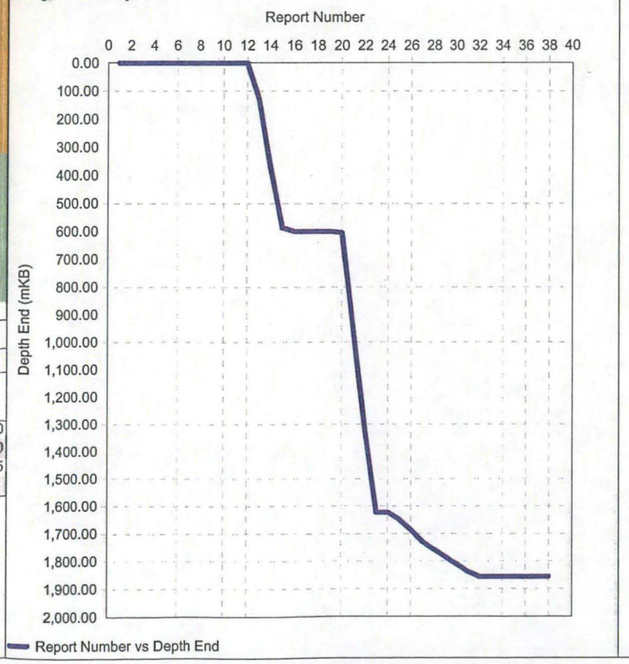
Bit Summary

Bit Run	Drill Bit	Bit Dull	Depth In (mKB)	Depth Out (mKB)	Drilled (m)	Drill Time (hrs)	BHA ROP (m/hr)	WOB (max) (daN)	WOB (min) (daN)	RPM (max) (rpm)	RPM (min) (rpm)
1A	311.0mm, REED, S11G, D146225	-------	0.00	600.00	610.00	49.00	12.4	14,000	3,000	120	120
1	222.0mm, Reed, MSR616M, A1414...	2-2-CT-S-X-0-NO-TD	600.00	1,622.00	1,178.02	55.25	21.3	6,500	4,000	190	180
1 C	222.0mm, NOV, PR 513, E140308	-------	1,622.00	1,856.00	234.10	37.75	6.2	7,000	2,300	65	45
CLE...	222.0mm, GML, <Model?>, RR05654	-------									

Mud WT vs Depth



Days vs Depth



Job Summary Information

Job Category	Well Configuration Type	Actual Start D...	End Date	Drilled Depth (m)
DRILLING	VERTICAL	1/3/2013	2/21/2013	2,022.12

AFE / RFE / Maint.#	Total Job AFE Amount	Total AFE+Sup	Total Fld Cost
10342919	10,990,100.00	10,990,100.00	8,033,551.39

Average ROP (m/hr)	Spud to TD Duration (hrs)	Cost Per Depth Drilled (Cost/m)
14.2	448.50	3,972.84

Objective

Summary
Invert Waste approval / 1333-13-0020-26

Beaver Drilling Ltd., 2

Rig Supervisor	Phone Mobile
RICK YAVIS, Rig Manager	

Time Log Summarized by Time P-N-T

Time P-N-T	Dur (hrs)	% Total Time (%)
P	907.25	99.48
T	4.75	0.52

Interval Lessons

Start Depth (mKB)	End Depth (mKB)	LL ActivityCode	Comment	Pot Savings ($)
0.00	600.00		Need wiper trips in surface with WBM	58,000.00

Interval Problems

Start Depth (mKB)	End Depth (mKB)	Trouble Code	Problem Summary	Problem Cost
0.00	600.00	Hole Conditions	Mud rings POOH after TD of surface. WBM culprit. Need wiper trips at spaced intervals in surface.	6,671.00
126.00	126.00	Hole Conditions	Mud rings	2,668.00
279.00	279.00	Rig	Work on shaker	3,953.00
298.00	298.00	Rig	Work on pump #2 tighten belts	1,318.00
471.00	471.00	Rig	Changed out break out line on drwworks	4,126.00

4. Geology

4.1 Drill Cuttings

Drill cuttings were collected at 5 metre intervals from spud to TD (1873 m KB). A set of bulk samples as well as a set of washed samples in vials have been delivered to the GSC (03/28/2013).

4.2 Cores

The interval from 1622.0 m to 1838 m KB was wire line cored in the Loon Creek O-06 well. A total of 8 – 27 metre cores were cut with 100% recovery.

4.3 Lithology

Formation	Prognosis		Sample		
Marker Tops	**TVD**	**SS**	**MD**	**TVD**	**SS**
Quaternary	5	252	5.0	5.0	255.0
Little Bear	28	229	31.0	31.0	227
Slater River	48	210	36.0	36.0	222
Arctic Red	578	-320	570.0	570.0	-312
Sans Sault	813	-555	787.0	787.0	-529
Martin House	888	-630.0	882.0	882.0	-625
Imperial	958	-700.0	962.5	962.5	-705
Upper Canol	1648	-1390.0	1642.5	1642.5	-1385
Lower Canol	1673	-1415.0	1679.0	1679.0	-1409
Hare Indian	1768	-1510.0	1788.0	1788.0	-1530
Bluefish Member	1783	-1525.0	1796.0	1796.0	-1538
Hume	1798	-1540.0	1804.0	1804.0	-1546
TD	1856	-1598.0	1856	1856.0	-1598.0

5. Well Evaluation

5.1 Open Hole Logs

Hole Section	Run Number	Log description	Depth In	Depth Out
Surface	1	Resistivity/Dual Density/ Neutron/Total GR/Sonic/GPIT	600	0
Main	1	AIT/NEXT/TLD/HGNS/TLD2	1858	600
	2	UBI/OBMI/OBMI2/PPC/MSIP/GPIT	1858	600
	3	ADT/HNGS/CMR (NTR)	1858	600
	4	RST	1858	600

5.2 DFIT Results

Completion operations commenced March 1 and were finished by March 4 2013, # DFIT's having been conducted on the Canol formation. The intervals for the DFIT's were 1769 – 1770 m KB, 1727 – 1728 m KB and 1692 – 1693 m KB. Each interval was suspended by setting two wire line retrievable bridge plugs with recorders installed beneath the bottom WRBP.

The wire line retrievable bridge plugs were left in place for 2 weeks in order to allow sufficient time for pressure bleed off. The bridge plugs and recorders were retrieved without incident and interpretation of the results is underway.

Appendices to Well History Report

I. Final Survey Plot of COPRC Loon Creek O-06
II. Casing and Cementing Report
III. Coring Report
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V. Leak Off Test Charts
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XVII. Electric Logs

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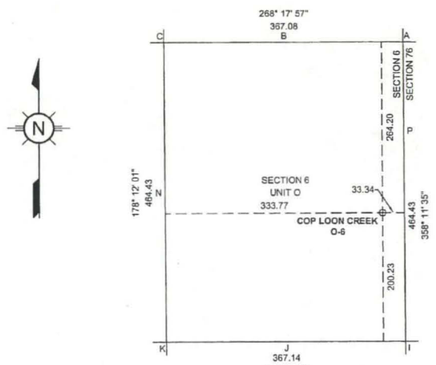
CANADA LANDS SURVEYS RECORDS
101892
Date: June 11 2013

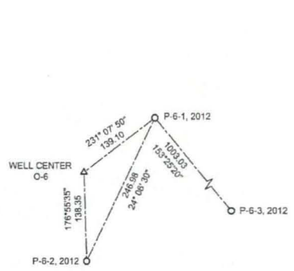
CANADA LANDS SURVEYS RECORDS
101894

CANADA LANDS SURVEYS RECORDS
P8101



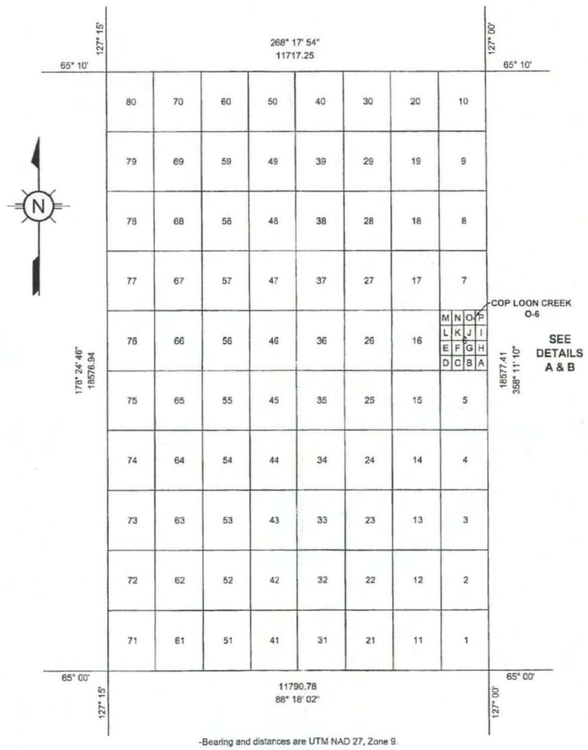
UNIT O, SECTION 6
-Bearing and distances are UTM NAD 27, Zone 9.

DETAIL A: SURFACE UNIT
SCALE 1 : 5000



DETAIL B: G.P.S SURVEY
SCALE 1:5000

-BEARINGS ARE UTM NAD27, ZONE 9.
-DISTANCES ARE REDUCED TO THE HORIZONTAL AT GENERAL GROUND LEVEL.



-Bearing and distances are UTM NAD 27, Zone 9.

GRID AREA 65° 10', 127° 00'
SCALE 1 : 100 000

TABLE OF CO-ORDINATES

STATION	U.T.M. ZONE 9, C.M. 129 (NAD83)		UT.M. ZONE 9, C.M. 129 (NAD27)		GEOGRAPHIC CO-ORDINATES (NAD27)	
	NORTHING	EASTING	NORTHING	EASTING	LATITUDE	LONGITUDE
SURVEYED CO-ORDINATES - Derived Using NRCAN PPP Website and Local Static Observations						
CLS 77 P-6-1, 2012	7220901.72	593577.76	7220705.57	593668.41		
CLS 77 P-6-2, 2012	7220676.36	593476.91	7220480.20	593567.56		
CLS 77 P-6-3, 2012	7220005.00	594026.36	7219808.81	594117.02		
GRID AREA						
N.E.			7228321.52	593716.87	65°10'	127°00'
N.W.			7227973.56	582004.79	65°10'	127°15'
S.E.			7209753.42	594304.93	65°00'	127°00'
S.W.			7209403.75	582519.34	65°00'	127°15'
O-6 N.E.			7220883.38	593585.17	65°06'00.02"	127°00'28.13"
O-6 N.W.			7220872.49	593218.25	65°06'00.05"	127°00'56.26"
O-6 S.E.			7220419.18	593599.82	65°05'45.02"	127°00'28.13"
O-6 S.W.			7220408.28	593232.84	65°05'45.05"	127°00'56.26"
WELL CENTRE						
O-6	7220814.48	593469.53	7220618.32	593560.18	65°05'51.49"	127°00'30.69"

PLAN AND FIELD NOTES
OF SURVEY OF

EXPLORATORY WELL

COPRC LOON CREEK O-6
IN UNIT O, SECTION 6
GRID AREA 65° 10', 127° 00'

EXPLORATION LICENCE 470

NORTHWEST TERRITORIES
CANADA OIL AND GAS LAND REGULATIONS

100 50 0 100 200 metres
SCALE 1 : 5000

SURVEYED FOR
CONOCOPHILLIPS CANADA RESOURCES CORPORATION
BY: R. ROBINSON, C.L.S.
2013

-NAD 83 UTM COORDINATES ARE COMPUTED FOR ZONE 9, CENTRAL MERIDIAN 129°W. BEARINGS WERE DERIVED FROM GPS OBSERVATIONS.
-DISTANCES ARE EXPRESSED IN METRES AND DECIMALS THEREOF.
-DISTANCES SHOWN IN G.P.S. TRAVERSE ARE MEASURED DISTANCES REDUCED TO THE HORIZONTAL AT GENERAL GROUND LEVEL UNLESS SHOWN OTHERWISE.
-FOR THE COMPUTATION OF COORDINATES MEASURED DISTANCES HAVE BEEN REDUCED TO THE UTM PLANE BY MULTIPLYING THEM BY AN AVERAGE COMBINED SCALE FACTOR OF 0.999682.
-NAD 83 UTM COORDINATES ARE CONVERTED TO NAD 27 USING NATIONAL TRANSFORMATION VERSION 2.

-DISTANCES SHOWN ON GRID AREA SUBDIVISIONS ARE UTM PLANE.

C.L.S. 77 TYPE MONUMENTS FOUND..... ●
C.L.S. 77 TYPE MONUMENTS PLACED..... ○
TEMPORARY TRAVERSE POINTS SHOWN THUS (SPIKE 10").....△

REFER TO FB 39795 CLSR FOR THE SURVEY REPORT PERTAINING TO THIS SURVEY.

GROUND ELEVATION AT WELL CENTRE IS **252.44 metres.**
ELEVATION AT TOP OF FLANGE IS **253.40 metres.**
ELEVATIONS WERE DERIVED FROM GPS OBSERVATIONS.

THIS SURVEY WAS EXECUTED DURING THE PERIOD
JULY 17th, 2012 TO JULY 20th, 2012 AND MARCH 24th, 2013 BY RON ROBINSON, C.L.S.

Certified Correct and completed on the
4 th day of APRIL 2013

RON ROBINSON C.L.S.
April 4 th, 2013

ASSOCIATION OF CANADA LANDS SURVEYORS
ASSOCIATION DES ARPENTEURS DES TERRES DU CANADA
Ron Robinson
Comm. No. 1613

CONOCOPHILLIPS CANADA RESOURCES CORPORATION
(SIGNATURE, TITLE) Drilling Team Lead Exploration & New Ventures
(SIGNATURE) ..... WITNESS
May 28, 2013
DATE

DRAWN : MB
DATE : 2013-04-08
ACAD NO. : 39020_WS-O-6

CHALLENGER GEOMATICS LTD.
300-6940 FISHER ROAD S.E.
CALGARY, ALBERTA T2H 0W3
PH: (403) 253-8101
www.challengergeomatics.com
Email:calgary@chalgeo.com

File: _____
Item: 2013-18-005

Examined: _____
Date:

Reviewed:
Date: June 8, 2013

ConocoPhillips Canada

Casing Summary
LOON O-06 65-10 127-00

API / UWI	Surface Legal Location	District	Field Name	License No.
300/O-06 6510 127000	O-6 65-10 127-00	NEW VENTURES	Loon	470
F	Well Type	Well Configuration Type	Original KB/RT Elevation (m)	KB-Ground Distance (m)
	Exploration	VERTICAL	257.60	5.20

Surface, 597.00mKB

Set Depth (mKB)	Set Tension (daN)	String Nominal OD (mm)	Minimum Drift (mm)	Centralizers Count	Scratchers Count
597.00	28.0	244.5		16	

Jts	Item Description	OD Nominal (mm)	Nominal ID (mm)	Wt (kg/m)	Grade	Top Thread	Top (mKB)	Btm (mKB)	Section Length (m)	Burst Pres (kPa)	P (collapse) (kPa)
45	Casing Joints	244.5	226.6	53.574	K-55	LTC	-1.78	582.87	584.65		13,927
1	Float Collar	244.5	226.6	53.574	K-55	LTC	582.87	583.29	0.42		13,927
1	Casing Joints	244.5	226.6	53.574	K-55	LTC	583.29	596.29	13.00		13,927
1	Float Collar	244.5	226.6	53.574	K-55	LTC	596.29	596.71	0.42		13,927
1	Float Shoe	244.5	226.6	53.574	K-55	LTC	596.71	597.00	0.29		13,927

Production, 1,856.00mKB

Set Depth (mKB)	Set Tension (daN)	String Nominal OD (mm)	Minimum Drift (mm)	Centralizers Count	Scratchers Count
1,856.00	48,000.0	177.8		86	

Jts	Item Description	OD Nominal (mm)	Nominal ID (mm)	Wt (kg/m)	Grade	Top Thread	Top (mKB)	Btm (mKB)	Section Length (m)	Burst Pres (kPa)	P (collapse) (kPa)
146	Casing Joints	177.8	159.4	38.692	P-110	LTC	-1.74	1,842.01	1,843.75		42,954
1	Float Collar	177.8	159.4	38.692	P-110	LTC	1,842.01	1,842.47	0.46		42,954
1	Casing Joints	177.8	159.4	38.692	P-110	LTC	1,842.47	1,855.57	13.10		42,954
1	Float Shoe	177.8	159.4	38.692	P-110	LTC	1,855.57	1,856.00	0.43		42,954

ConocoPhillips Canada

Cement Summary

LOON O-06 65-10 127-00

Production

API / UWI	Surface Legal Location	District	Field Name	License No.
300/O-06 6510 127000	O-6 65-10 127-00	NEW VENTURES	Loon	470
[redacted]	Well Type: Exploration	Well Configuration Type: VERTICAL	Original KB/RT Elevation (m): 257.60	KB-Ground Distance (m): 5.20

Original Hole

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

Section	Size (mm)	Act Top (mKB)	Act Btm (mKB)
SURFAC	311.0	5.20	600.00
PROD1	222.0	600.00	1,856.00

Screw On Bowl, Flow Stream on 1/31/2013 11:45:00 PM

Type	Install Date
Screw On Bowl	1/31/2013

Description	Make	Model	WP (kPa)	Service	SN
Screw On Casing Bowl	STREAM FLOW	SOW	34,500	Sweet	

Surface, 597.00mKB

Casing Description	Wellbore	Run Date	Set Depth (mKB)	Stick Up (mKB)	Set Tension (daN)
Surface	Original Hole	1/31/2013	597.00	1.78	28.0

Centralizers Count	Scratchers Count
16	

Jts	Item Description	OD Nominal (mm)	Nominal ID (mm)	Wt (kg/m)	Grade	Top Conn Sz (mm)	Top Thread	Section Length (m)	Top (mKB)	Btm (mKB)
45	Casing Joints	244.5	226.6	53.574	K-55		LTC	584.65	-1.78	582.87
1	Float Collar	244.5	226.6	53.574	K-55		LTC	0.42	582.87	583.29
1	Casing Joints	244.5	226.6	53.574	K-55		LTC	13.00	583.29	596.29
1	Float Collar	244.5	226.6	53.574	K-55		LTC	0.42	596.29	596.71
1	Float Shoe	244.5	226.6	53.574	K-55		LTC	0.29	596.71	597.00

Production, 1,856.00mKB

Casing Description	Wellbore	Run Date	Set Depth (mKB)	Stick Up (mKB)	Set Tension (daN)
Production	Original Hole	2/19/2013	1,856.00	1.74	48,000.0

Centralizers Count	Scratchers Count
86	

	Item Description	OD Nominal (mm)	Nominal ID (mm)	Wt (kg/m)	Grade	Top Conn Sz (mm)	Top Thread	Section Length (m)	Top (mKB)	Btm (mKB)
	ısing Joints	177.8	159.4	38.692	P-110		LTC	1,843.75	-1.74	1,842.01
	loat Collar	177.8	159.4	38.692	P-110		LTC	0.46	1,842.01	1,842.47
1	Casing Joints	177.8	159.4	38.692	P-110		LTC	13.10	1,842.47	1,855.57
1	Float Shoe	177.8	159.4	38.692	P-110		LTC	0.43	1,855.57	1,856.00

Production, casing, 2/20/2013 01:15

Cementing Start Date	Cementing End Date	Wellbore
2/20/2013	2/20/2013	Original Hole

Evaluation Method	Cement Evaluation Results
Cement Bond Log	Will run USIT log to confirm cement top

Comment

Cemented 177.8mm casing from surface to 1382m with 21.64 tonne HiLite Lead cement 23.55m3 slurry with 1.2% FLAC B348, 0.3% retarder and 0.2% antifoam at 1400kg/m3. From 1382m to 1856m 12 tonne ClassG 9.12m3 slurry with 0.4% fluild loss,0.5% dispersant,0.2% antifoam and 0.3% retarder, displaced with 36m3 water ,Total lost of returns while displacing the last 10m3 prior to bumping plug estimated cement top at 500m. Bumped plug bled back Floats held, Pump up to 17500kpa pressure test casing good.

1, 156.00-1,382.00mKB

Top (mKB)	Bottom (mKB)	Full Return?	Cmnt Rtrn (m³)	Top Plug?	Bottom Plug?
156.00	1,382.00	No		No	No

Initial Pump Rate (m³/min)	Final Pump Rate (m³/min)	Average Pump Rate (m³/min)	Final Pump Pressure (kPa)	Plug Bump Pressure (kPa)
0.700	1.000	0.850	7,500	17,500

Pipe Reciprocated?	Reciprocation Stroke Length (m)	Reciprocation Rate (spm)	Pipe Rotated?	Pipe RPM (rpm)
Yes	2.00		No	

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

Lead Cement

Fluid Type	Fluid Description	Amount (1000kg)	Class	Volume Pumped (m³)
Lead Cement	HiLite Lead Cement	21,648.0	HiLite	23.55

Estimated Top (mKB)	Estimated Bottom (mKB)	Percent Excess Pumped (%)	Yield (m³/tonnes)	Mix H20 Ratio (m³/tonnes)
500.00	1,382.00	30.0	1.300	0.82

Free Water (%)	Density (kg/m³)	Plastic Viscosity (cp)	Thickening Time (hrs)	1st Compressive Strength (kPa)
	1400.0			

Fluid Additives

Add	Type	Conc
[illegible]am		0.2
FLAC		1.2
Retarder		0.3

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ConocoPhillips Canada

Cement Summary

LOON O-06 65-10 127-00

Production

API / UWI	Surface Legal Location	District	Field Name	License No.
300[illegible]-06 6510 127000	O-6 65-10 127-00	NEW VENTURES	Loon	470
[illegible]	**Well Type**	**Well Configuration Type**	**Original KB/RT Elevation (m)**	**KB-Ground Distance (m)**
	Exploration	VERTICAL	257.60	5.20

Tail Cement

Fluid Type	Fluid Description	Amount (1000kg)	Class	Volume Pumped (m³)
Tail Cement	Class G Tail Cement	12,000.0	G	8.61
Estimated Top (mKB)	**Estimated Bottom (mKB)**	**Percent Excess Pumped (%)**	**Yield (m³/tonnes)**	**Mix H20 Ratio (m³/tonnes)**
1,382.00	1,856.00	30.0	0.760	0.43
Free Water (%)	**Density (kg/m³)**	**Plastic Viscosity (cp)**	**Thickening Time (hrs)**	**1st Compressive Strength (kPa)**
	1900.0			

Cement Fluid Additives

Add	Type	Conc
Antifoam		0.2
Dispersant		0.5
Fluid Loss Control		0.4
Retarder		0.3

2, 1,382.00-1,856.00mKB

Top (mKB)	Bottom (mKB)	Full Return?	Cmnt Rtrn (m³)	Top Plug?	Bottom Plug?
1,382.00	1,856.00				
Initial Pump Rate (m³/min)	**Final Pump Rate (m³/min)**	**Average Pump Rate (m³/min)**		**Final Pump Pressure (kPa)**	**Plug Bump Pressure (kPa)**
0.700	1.000	0.850		7,500	17,500
Pipe Reciprocated?	**Reciprocation Stroke Length (m)**	**Reciprocation Rate (spm)**		**Pipe Rotated?**	**Pipe RPM (rpm)**
Yes	2.00				
Depth tagged (mKB)	**Tag Method**	**Depth Plug Drilled Out To (mKB)**		**Drill Out Diameter (mm)**	**Drill Out Date**

Fluid Type	Fluid Description	Amount (1000kg)	Class	Volume Pumped (m³)
Estimated Top (mKB)	**Estimated Bottom (mKB)**	**Percent Excess Pumped (%)**	**Yield (m³/tonnes)**	**Mix H20 Ratio (m³/tonnes)**
Free Water (%)	**Density (kg/m³)**	**Plastic Viscosity (cp)**	**Thickening Time (hrs)**	**1st Compressive Strength (kPa)**

[illegible]t Fluid Additives

Add	Type	Conc

Schlumberger

Cementing Service Report

Customer	Job Number
Conoco Phillips	202800171

Well	Location (legal)	Schlumberger Location	Job Start
Loon Creek O6			Feb/20/2013

Field	Formation Name/Type	Deviation	Bit Size	Well MD	Well TVD
Norman Wells	Shale	0 deg	222 mm	1860.0 m	1860.0 m

County	State/P	BHP	BHST	BHCT	Pore Press. Gradient
	Northwest Territories	kPa	66 degC	42 degC	kg/m3
Well Master	**API/UWI**				

Rig Name	Drilled For	Service Via
	Oil	Land

Offshore Zone	Well Class	Well Type
	New	Exploration

Drilling Fluid Type	Max. Density	Plastic Viscosity
Invert	950.00 kg/m3	cP

Service Line	Job Type
Cementing	Long String

Max. Allowed Tub. Press	Max. Allowed Ann. Press	WH Connection
kPa	kPa	

Service Instructions

Supply men and equipment to cement production casing using 21.5 tn Hi-lite 1400 for lead and 12 tn D907 for tail

Casing/Liner

Depth, m	Size, mm	Weight, kg/m	Grade	Thread
1860.0	178	38.6	P110	LTC
600.0	244	53.6	J55	LTC

Tubing/Drill Pipe

T/D	Depth, m	Size, mm	Weight, kg/m	Grade	Thread

Perforations/Open Hole

Top, m	Bottom, m	shot/m	No. of Shots	Total Interval
m	m			m
m	m			Diameter
m	m			mm

Treat Down	Displacement	Packer Type	Packer Depth
Casing	m3		m

Tubing Vol.	Casing Vol.	Annular Vol.	Openhole Vol.
m3	m3	m3	m3

Casing/Tubing Secured	☐	1 Hole Vol. Circulated prior to Cement	☒
Lift Pressure	kPa		
Pipe Rotated	☐	Pipe Reciprocated	☐
No. Centralizers		Top Plugs 1	Bottom Plugs 1
Cement Head Type	Single		

Job Scheduled For	Arrived on Location	Leave Location
Feb/19/2013 19:00	Feb/19/2013 19:00	Feb/20/2013

Casing Tools		Squeeze Job	
Shoe Type		Squeeze Type	
Shoe Depth	1860.0 m	Tool Type	
Stage Tool Type		Tool Depth	m
Stage Tool Depth	m	Tail Pipe Size	mm
Collar Type	Float	Tail Pipe Depth	m
Collar Depth	1845.0 m	Sqz. Total Vol.	m3

Date	Time 24-hr clock	Treating Pressure KPA	Flow Rate M3MN	Density K/M3	Volume M3	Message
02/20/2013	00:00:32	-712	0.01	120.62	0.0	
02/20/2013	00:03:02	-726	0.01	120.56	0.0	
02/20/2013	00:05:32	-730	0.00	120.68	0.0	
02/20/2013	00:08:02	-736	0.00	120.62	0.0	
02/20/2013	00:10:32	1180	0.89	916.62	0.5	
02/20/2013	00:13:02	142	0.44	1021.24	1.7	
02/20/2013	00:15:32	213	0.57	1023.98	3.1	
02/20/2013	00:18:02	-247	0.02	1022.72	4.3	
02/20/2013	00:20:32	-592	0.01	1022.78	4.4	
02/20/2013	00:23:02	-539	0.01	1022.72	4.4	
02/20/2013	00:25:32	-464	0.01	1022.72	4.4	
02/20/2013	00:28:02	-414	0.01	1022.78	4.5	
02/20/2013	00:30:32	-454	0.01	1022.72	4.5	
02/20/2013	00:33:02	-420	0.01	1022.72	4.5	
02/20/2013	00:35:32	-383	0.01	1022.72	4.5	
02/20/2013	00:38:02	-369	0.01	1022.72	4.6	
02/20/2013	00:40:32	-367	0.01	1023.98	4.6	
02/20/2013	00:43:02	-359	0.01	1023.98	4.6	
02/20/2013	00:45:32	-363	0.00	1023.98	4.9	
02/20/2013	00:48:02	-377	0.00	1023.98	4.9	
02/20/2013	00:50:32	-381	0.00	1023.98	4.9	

Well	Field	Job Start	Customer	Job Number
Loon Creek O6	Norman Wells	Feb/20/2013	Conoco Phillips	202800171

Date	Time 24-hr clock	Treating Pressure KPA	Flow Rate M3MN	Density K/M3	Volume M3	Message
02/20/2013	00:55:32	-408	0.00	1023.98	4.9	
02/20/2013	00:58:02	-428	0.00	1023.98	0.0	
02/20/2013	01:00:32	-580	0.00	1023.98	0.0	
02/20/2013	01:01:17	-554	0.00	1024.04	0.0	Fill line
02/20/2013	01:03:02	838	0.26	1023.98	0.4	
02/20/2013	01:05:32	9437	0.00	1023.98	0.5	
02/20/2013	01:05:35	11936	0.00	1023.98	0.5	Pressure Test Lines
02/20/2013	01:05:39	19930	0.01	1023.98	0.5	Reset Total, Vol = 0.51 m3
02/20/2013	01:08:02	191	0.00	1023.92	0.0	
02/20/2013	01:10:32	154	0.00	1024.04	0.0	
02/20/2013	01:13:02	146	0.00	1025.24	0.0	
02/20/2013	01:15:14	1341	0.23	1081.06	0.1	Start pumping MudPUSH
02/20/2013	01:15:32	821	0.24	1159.74	0.2	
02/20/2013	01:18:02	957	0.32	1167.51	1.2	
02/20/2013	01:20:32	1801	0.47	1168.83	2.0	
02/20/2013	01:23:02	1312	0.47	1159.86	3.1	
02/20/2013	01:23:36	-197	0.00	1157.34	3.4	end mudpush
02/20/2013	01:23:40	-280	0.00	1157.40	3.4	Reset Total, Vol = 3.38 m3
02/20/2013	01:25:32	-393	0.00	1156.14	0.0	
02/20/2013	01:27:40	-422	0.00	1154.88	0.0	Start Mixing Lead Slurry
02/20/2013	01:28:02	-424	0.00	1154.88	0.0	
02/20/2013	01:30:32	-260	0.11	1162.66	0.0	
02/20/2013	01:30:53	-249	0.11	1360.81	0.1	Start pumping lead
02/20/2013	01:33:02	507	0.70	1404.01	0.4	
02/20/2013	01:35:32	1629	0.68	1398.81	2.1	
02/20/2013	01:38:02	2231	0.83	1421.66	4.0	
02/20/2013	01:40:32	1766	0.89	1396.30	6.2	
02/20/2013	01:43:02	1158	0.96	1405.15	8.5	
02/20/2013	01:45:32	1330	0.96	1421.61	10.9	
02/20/2013	01:48:02	2075	1.18	1431.72	13.7	
02/20/2013	01:50:32	1801	1.10	1424.12	16.5	
02/20/2013	01:53:02	1748	1.08	1425.38	19.2	
02/20/2013	01:55:32	1643	1.05	1426.58	21.9	
02/20/2013	01:58:02	1766	1.05	1432.92	24.5	
02/20/2013	02:00:32	-114	0.32	1402.18	26.1	
02/20/2013	02:03:02	-37	0.32	1417.66	26.9	
02/20/2013	02:03:46	-4	0.32	1685.19	27.2	End Lead Slurry
02/20/2013	02:03:51	12	0.32	1704.33	27.2	Reset Total, Vol = 27.19 m3
02/20/2013	02:05:32	783	0.57	1784.78	0.8	
02/20/2013	02:06:29	1892	0.80	1865.69	1.4	Start Mixing Tail Slurry
02/20/2013	02:08:02	1872	0.80	1886.37	2.6	
02/20/2013	02:10:32	1939	0.81	1905.40	4.6	
02/20/2013	02:13:02	1876	0.80	1914.26	6.6	
02/20/2013	02:15:32	2130	0.80	1935.85	7.9	
02/20/2013	02:17:21	-176	0.10	1939.00	9.3	End Tail Slurry
02/20/2013	02:17:22	-181	0.10	1939.63	9.3	Reset Total, Vol = 9.33 m3
02/20/2013	02:18:02	-310	0.00	1939.68	0.0	
02/20/2013	02:20:32	193	0.00	1356.41	0.0	
02/20/2013	02:23:02	-327	0.00	1022.38	0.0	
02/20/2013	02:25:32	45671	0.00	1065.63	0.0	
02/20/2013	02:28:02	43258	0.00	1042.78	0.0	
02/20/2013	02:30:32	-166	0.37	1033.92	0.1	
02/20/2013	02:33:02	570	0.93	1024.95	2.3	
02/20/2013	02:35:30	732	0.93	1023.69	4.6	Start Displacement

Well	Field	Job Start	Customer	Job Number
Loon Creek O6	Norman Wells	Feb/20/2013	Conoco Phillips	202800171

Date	Time 24-hr clock	Treating Pressure KPA	Flow Rate M3MN	Density K/M3	Volume M3	Message
02/20/2013	02:38:02	669	0.96	1022.44	7.0	
02/20/2013	02:40:32	773	0.96	1022.44	9.4	
02/20/2013	02:43:02	740	0.94	1022.49	11.7	
02/20/2013	02:45:32	675	0.96	1022.44	14.1	
02/20/2013	02:48:02	2452	0.96	1022.44	16.5	
02/20/2013	02:50:32	3594	0.96	1022.44	18.8	
02/20/2013	02:53:02	4939	0.94	1021.12	21.2	
02/20/2013	02:55:32	6541	0.94	1022.44	23.6	
02/20/2013	02:58:02	7259	0.91	1022.38	25.9	
02/20/2013	03:00:32	8303	0.93	1022.32	28.3	
02/20/2013	03:03:02	5338	0.58	1022.38	30.5	
02/20/2013	03:05:32	5344	0.41	1022.38	31.6	
02/20/2013	03:08:02	6117	0.47	1022.38	32.7	
02/20/2013	03:10:32	6896	0.48	1022.32	33.9	
02/20/2013	03:13:02	5849	0.16	1022.27	34.2	
02/20/2013	03:15:32	6819	0.44	1022.32	34.9	
02/20/2013	03:18:02	5796	0.09	1022.32	35.4	
02/20/2013	03:20:32	6121	0.10	1022.32	35.6	
02/20/2013	03:23:02	6129	0.10	1023.64	35.9	
02/20/2013	03:25:32	6539	0.10	1023.69	36.1	
02/20/2013	03:28:02	6737	0.10	1023.69	36.3	
02/20/2013	03:30:32	6671	0.10	1023.69	36.6	
02/20/2013	03:33:02	6886	0.10	1023.69	36.8	
02/20/2013	03:35:32	7683	0.30	1023.69	37.4	
02/20/2013	03:38:02	12223	0.00	1023.69	38.2	
02/20/2013	03:40:32	12142	0.00	1023.69	38.2	
02/20/2013	03:43:02	12171	0.00	1023.69	38.2	
02/20/2013	03:45:32	12209	0.00	1023.75	38.2	
02/20/2013	03:48:02	12232	0.00	1023.69	38.2	
02/20/2013	03:50:32	12329	0.00	1023.69	38.2	
02/20/2013	03:53:02	12341	0.00	1023.75	38.2	
02/20/2013	03:55:32	12390	0.00	1025.01	38.2	
02/20/2013	03:58:02	12477	0.00	1025.07	38.2	
02/20/2013	04:00:32	12522	0.00	1025.07	38.2	
02/20/2013	04:03:02	12512	0.00	1025.07	38.2	
02/20/2013	04:05:32	4133	0.00	1025.12	38.2	
02/20/2013	04:08:02	-339	0.00	1025.07	38.2	
02/20/2013	04:10:32	2572	0.14	1028.89	38.2	
02/20/2013	04:11:13	4685	0.00	1026.32	38.3	Float holding
02/20/2013	04:13:02	13059	0.11	1022.55	38.4	
02/20/2013	04:14:07	17631	0.00	1022.55	38.5	Pressure Test Casing
02/20/2013	04:14:13	17562	0.00	1022.55	38.5	Reset Total, Vol = 38.53 m3
02/20/2013	04:15:32	17657	0.00	1022.61	0.0	
02/20/2013	04:18:02	17683	0.00	1022.55	0.0	
02/20/2013	04:20:32	17693	0.00	1022.55	0.0	
02/20/2013	04:23:02	17738	0.00	1022.55	0.0	
02/20/2013	04:25:25	17766	0.00	1022.55	0.0	End off casing test
02/20/2013	04:25:32	17768	0.00	1022.61	0.0	
02/20/2013	04:28:02	12082	0.00	1022.55	0.0	
02/20/2013	04:30:32	-398	0.00	1022.55	0.0	
02/20/2013	04:32:32	-347	0.00	1023.87	0.0	End Job

Well	Field	Job Start	Customer	Job Number
Loon Creek O6	Norman Wells	Feb/20/2013	Conoco Phillips	202800171

Post Job Summary

Average Pump Rates, m3/min				Volume of Fluid Injected, m3			
Slurry	N2	Mud	Maximum Rate	Total Slurry	Mud	Spacer	N2
0.50			1.23	36.500	0.0	3.4	

Treating Pressure Summary, kPa					Breakdown Fluid		
Maximum	Final	Average	Bump Plug to	Breakdown	Type	Volume	Density
46266	-357	6555				m3	kg/m3

Avg. N2 Percent	Designed Slurry Volume	Displacement	Mix Water Temp		
%	36.000 m3	38.500 m3	22 degC	Cement Circulated to Surface? ☐	Volume m3
				Washed Thru Perfs ☐	To m

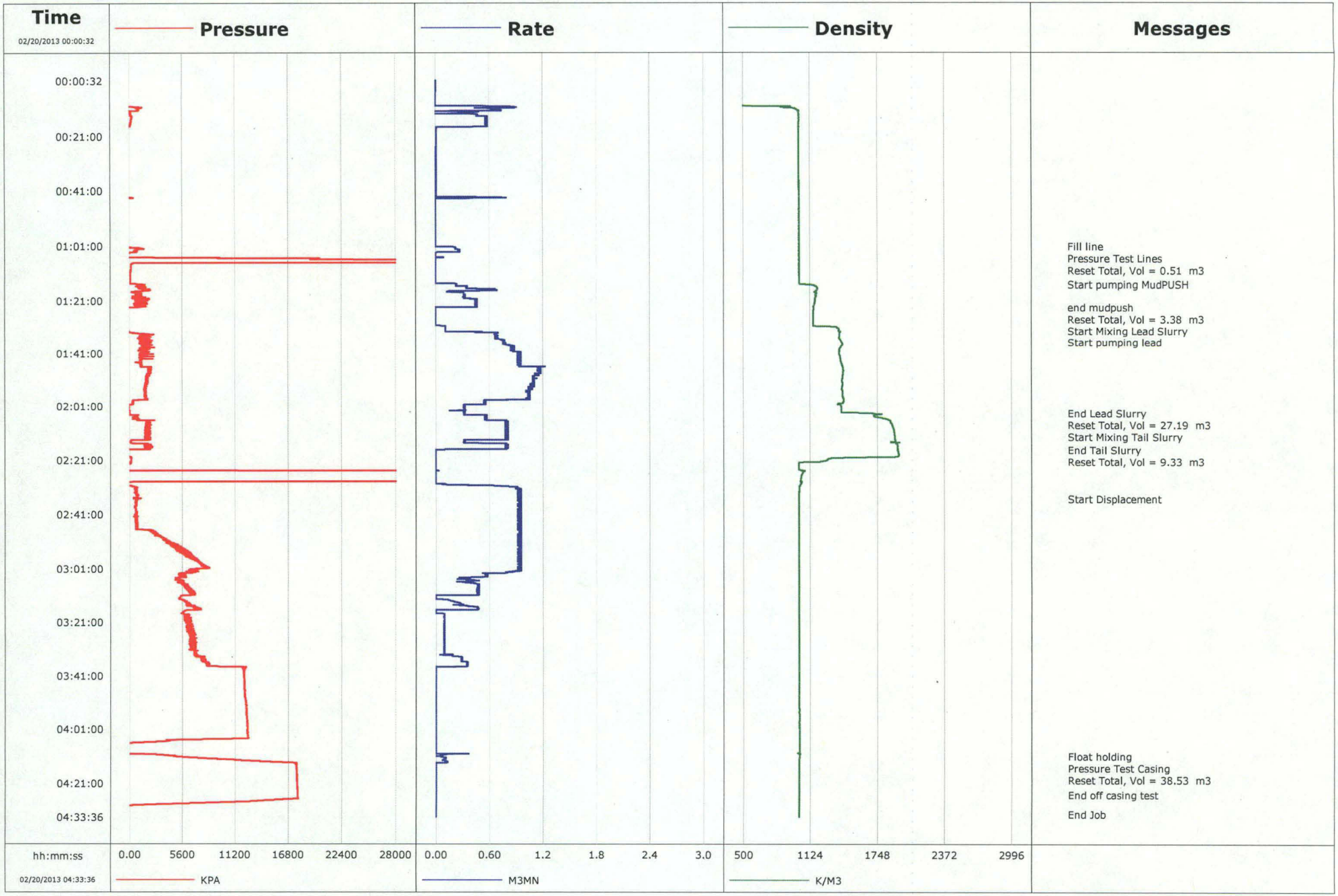
Customer or Authorized Representative	Schlumberger Supervisor	Circulation Lost ☐	Job Completed ☒
		-	-

Schlumberger

Cementing Job Report

CemCAT v1.5

Well	Loon Creek O6	**Client**	Conoco Phillips
Field	Norman Wells	**SIR No.**	202800171
Engineer		**Job Type**	Long String
Country	Canada	**Job Date**	02-20-2013



ConocoPhillips Canada

Coring

COPRC LOON CREEK O-06 65-10 127-00

API / UWI	Surface Legal Location	District	Field Name	License No.	Program	Well Type	Well Config	Orig KB/RT (m)	KB-Grd (m)
300/O-06 6510 127000	O-6 65-10 127-00	NEW VENTURES	Loon	470		Exploration	VERTICAL	257.60	5.20

Bottom Hole Cores

Date	Core No.	Type	Top (mKB)	Btm (mKB)	Recov (m)	Coring Company	Comment
2/7/2013	1	WL Coring	1,622.00	1,631.00	9.0	NOV	
2/7/2013 8:00:00 AM	1	WL Coring	1,631.00	1,649.00	18.0	NOV	
2/8/2013 4:15:00 AM	2	WL Coring	1,649.00	1,676.00	27.0	NOV	
2/8/2013 11:00:00 PM	3	WL Coring	1,676.00	1,686.00	10.0	NOV	
2/9/2013 2:30:00 AM	3	WL Coring	1,686.00	1,703.00	17.0	NOV	
2/9/2013 6:45:00 PM	4	WL Coring	1,703.00	1,730.10	27.0	NOV	
2/10/2013 4:00:00 PM	5	WL Coring	1,730.00	1,757.00	27.0	NOV	
2/11/2013 8:00:00 AM	6	WL Coring	1,757.00	1,784.00	27.0	NOV	
2/12/2013 8:00:00 AM	7	WL Coring	1,784.00	1,811.00	27.0	NOV	
2/13/2013 4:30:00 AM	8	WL Coring	1,811.00	1,824.00	13.0	NOV	
2/13/2013 8:00:00 AM	8	WL Coring	1,824.00	1,830.00	6.0	NOV	
2/13/2013 10:30:00 AM	8	WL Coring	1,830.00	1,838.00	8.0	NOV	

ConocoPhillips Canada

Mud Properties Summary (legal size)

COPRC LOON CREEK O-06 65-10 127-00

PI / 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)
)0/O-06 6510 127000	O-6 65-10 127-00	470	VERTICAL	252.40	252.73	5.20	4.87

igs

AFE / RFE	Type	Sub-type	Plan TMD (mKB)	Plan Form	Contractor	Rig Name/#	Rig Type	Rig Accept Date	RR Date
)342919	DRILLING ORIGINAL		1,873.00		Beaver Drilling Ltd.	2	DRILLING-DOUBLE	1/26/2013	2/20/2013

luid / Mud Checks

Date	Depth (mKB)	Depth (TVD) (mKB)	Type	Dens (kg/m³)	Vis (s/L)	PV Calc (cp)	YP Calc (Pa)	Gel (10s) (Pa)	Gel (10m) (Pa)	API Filtrate (mL/...	pH	Pom (mL/mL)	Retort Solids (%)	CaCl (ppm)	Ca (mg/L)	Chlor (mg/L)	K	Vendor	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
26/2013	71.00	71.00	Gel-Chem	1060.0	40	2.0	6.0	2.5	2.5	20.0	10.5				40	600	18.5...	MI Swaco		3.8			0.198		0.100			0.0	5.0	Original Hole
27/2013	213.00	212.99	Gel-Chem	1150.0	52	10.0	12.0	7.0	20.0	7.5	9.0				20	700	45.2...	MI Swaco		9.5			0.186		0.200			0.0	6.0	Original Hole
2[illegible]13	455.00	454.96	Gel-Chem	1125.0	50	19.0	7.5	4.0	7.0	5.5	8.0				20	500	22.4...	MI Swaco		7.9		64	0.285		0.100			0.0	5.0	Original Hole
3	587.00	586.94	Gel-Chem	1150.0	68	27.0	11.0	6.5	14.0	7.0	8.0				20	500	31.1...	MI Swaco		9.5		84	0.361		0.500			0.0	5.5	Original Hole
30/2013	600.00	599.94		1140.0	80																								Original Hole
31/2013	606.00	605.94		1140.0	56																								Original Hole
3/2013	865.00	864.87	Invert	900.0	50	12.0	3.5	6.0	9.0			5.700	6.0		39,000	249,926	22.2...	MI Swaco	21	4.2			0.198	85/15						Original Hole
4/2013	1,230.00	1,229.71	Invert	910.0	54	11.0	4.0	6.0	8.5			5.700	7.2		35,500	263,383	16.9...	MI Swaco	21	5.5			0.25	87/13						Original Hole
5/2013	1,617.00	1,616.62	Invert	920.0	60	13.0	5.5	7.5	10.0			5.100	8.5		33,000	266,597	25.0...	MI Swaco	19	6.9			0.217	88/12						Original Hole
6/2013	1,622.00	1,621.62	Invert	920.0	60	13.0	5.5	7.5	10.0			5.100	8.5		33,000	266,597	25.0...	MI Swaco	19	6.9			0.217	88/12						Original Hole
7/2013	1,631.00	1,630.62	Invert	950.0	58	12.0	4.5	6.0	11.0			5.300	9.5		35,000	260,156	22.2...	MI Swaco	20	7.4			0.198	87/13						Original Hole
8/2013	1,676.00	1,675.61	Invert	945.0	68	12.0	4.5	6.5	10.0			5.100	9.7		32,000	259,568	22.2...	MI Swaco	19	8.1			0.198	88/12						Original Hole
9/2013	1,703.00	1,702.60	Invert	940.0	78	12.0	4.5	5.5	8.0			4.800	10.0		32,500	277,514	16.3...	MI Swaco	18	8.3			0.273	88.3/...					8.6	Original Hole
10/2013	1,730.00	1,729.60	Invert	940.0	64	12.0	4.0	5.0	8.0			4.400	10.5		31,000	274,255	12.7...	MI Swaco	16	8.7			0.289	89/11					9.1	Original Hole
11/2013	1,784.00	1,783.59	Invert	940.0	80	13.0	5.5	5.5	11.5			5.700	10.5		31,000	274,255	0.084	MI Swaco	21	9.0			0.752	88.8/...					9.2	Original Hole
11/2013	1,785.00	1,784.59		940.0	74																								Original Hole
12/2013	1,784.00	1,783.59	Invert	940.0	80	13.0	5.5	5.5	11.5			5.700	10.5		31,000	274,255	0.084	MI Swaco	21	9.0			0.752	88.8/...					9.2	Original Hole
[illegible]	1,784.00	1,783.59	Invert	945.0	75	13.0	4.5	5.5	11.5			5.700			31,000	252,475	0.037	MI Swaco	16	8.7			0.866	88/12					8.7	Original Hole
[illegible]13	1,784.00	1,783.59	Invert	945.0	77	14.0	4.0	5.5	12.0			5.700			31,000	274,255	0.037	MI Swaco	22	8.7			0.866	88/12					8.7	Original Hole
15/2013	1,856.00		Invert	945.0	77	14.0	4.0	5.5	12.0			5.700			31,000	274,255	20.6...	MI Swaco	22	8.7			0.242	88/12					8.7	

ConocoPhillips Canada

Mud Properties Summary (legal size)

COPRC LOON CREEK O-06 65-10 127-00

I / 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)
)0/O-06 6510 127000	O-6 65-10 127-00	470	VERTICAL	252.40	252.73	5.20	4.87

luid / Mud Checks

Date	Depth (mKB)	Depth (TVD) (mKB)	Type	Dens (kg/m³)	Vis (s/L)	PV Calc (cp)	YP Calc (Pa)	Gel (10s) (Pa)	Gel (10m) (Pa)	API Filtrate (mL/...	pH	Pom (mL/mL)	Retort Solids (%)	CaCl (ppm)	Ca (mg/L)	Chlor (mg/L)	K	Vendor	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
16/2013	1,856.00		Invert	945.0	77	14.0	4.0	5.5	12.0			5.700			31,000	274,255	20.6...	MI Swaco	22	8.7			0.242	88/12					8.7	
17/2013	1,856.00		Invert	950.0	77	14.0	4.0	5.5	12.0			5.700			31,000	274,255		MI Swaco	22	8.7				88/12					8.7	
18/2013	1,856.00		Invert	950.0	77	14.0	4.0	5.5	12.0			5.700			31,000	274,255		MI Swaco	22	8.7				88/12					8.7	
19/2013	1,856.00		Invert	950.0	77	14.0	4.0	5.5	12.0			5.700			31,000	274,255		MI Swaco	22	8.7				88/12					8.7	

ConocoPhillips Canada

LOT & Fit with Graph

COPRC LOON CREEK O-06 65-10 127-00

Spud Date: 1/26/2013

RR: 2/20/2013 11:59:59 PM

[redacted] Off and Formation Integrity Tests

FIT,2/3/2013 1:30:00 AM

Last Casing String Run	Test Date	Test Type	Leak off?	Formation Tested	P (Surf) (k...	Depth (mKB)	TVD (mKB)
Surface, 597.00mKB	2/3/2013	FIT	No	Artic Red	6,000	603.00	602.94

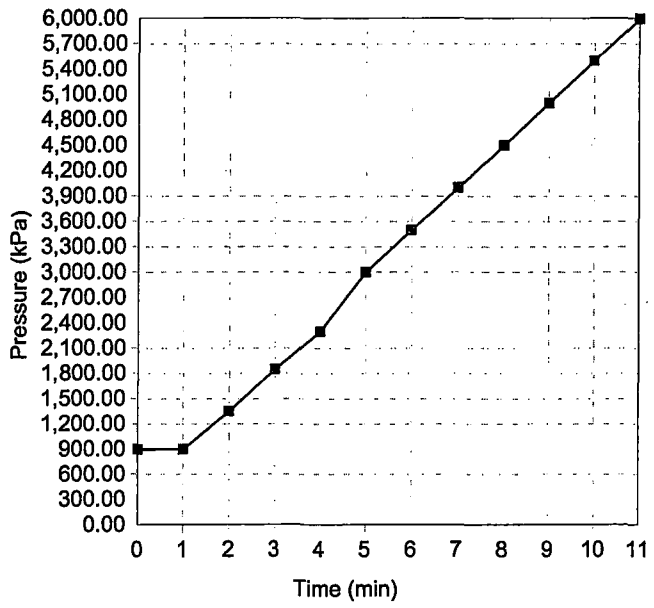
Fluid Density (kg/m³)	Fluid Type	LO Eq Fluid Den (k...	Leak Off Pressure (kPa)	Volume Pumped (m³)
855.0	OBM	1869.7	11,055	0.11

Comment

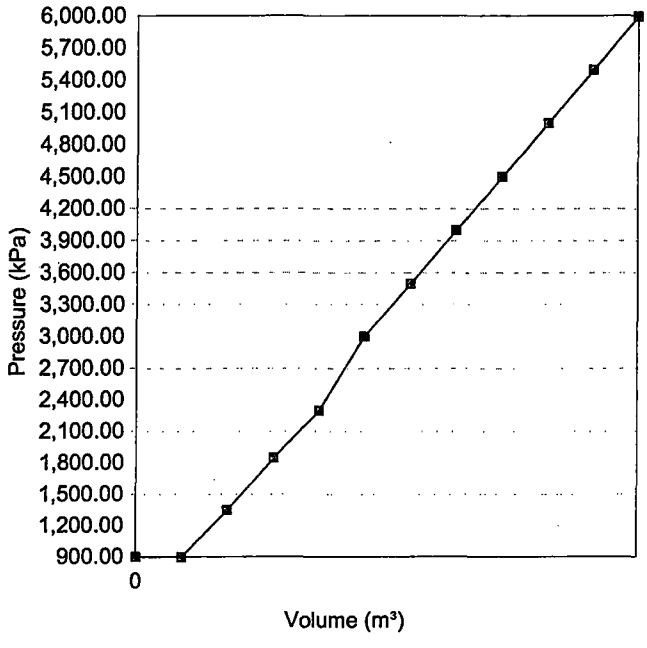
Test Data

Time (min)	Pres (kPa)	Vol (m³)	Note
0.00	900	0.00	
1.00	900	0.01	
2.00	1,350	0.02	
3.00	1,850	0.03	
4.00	2,300	0.04	
5.00	3,000	0.05	
6.00	3,500	0.06	
7.00	4,000	0.07	
8.00	4,500	0.08	
9.00	5,000	0.09	
10.00	5,500	0.10	
11.00	6,000	0.11	

Pressure vs. Time Graph



Pressure vs. Volume Graph



Well Information

Operator:	**ConocoPhillips Canada Resources Corp.**
Well Name:	**COPRC Loon Creek O-6**
Location:	**Unit O, Section 6, Grid 65-10 127-00**
UWI:	300O066510127000
Pool / Field:	Undefined / Loon Creek
Well License #:	470
Province / State:	Northwest Territories
Country:	Canada

Elevations

Reference:	Ground	**Ground:**	252.4 m
Cut(-) / Fill(+):		**Kelly Bushing:**	257.6 m
K.B. to Ground:	5.2 m	**Casing Flange:**	252.73 m

Total Depth

Measurement Type	Measured Depth	True Vertical Depth
Drillers TD (Tally)	1856 m	1855.94 m
Drillers TD (Strap or SLM)	m	m
Loggers TD	1857.6 m	1857.54 m

Well Co - Ordinates

	Longitude	Latitude	
Surface Co-Ordinates:	127 00 30.7 W	65 05 51.5 N	**Well Type:** Vertical **NS:** **EW:**
Int. Casing Co-Ordinates:			**NS:** **EW:**
Bottom Hole Co-Ordinates:			**NS:** 9.69 Meters North **EW:** 28.17 Meters East of the surface location.
UTM Surface Co-Ordinates:	**Northing:** 7220618.3		**Easting:** 593560.14

Drilling Fluid Summary

Fluid Type	From	To
Spud Mud & Gel Chem	0 m	600 m
Invert (Versaclean)	600 m	1856 m

Casing Summary

Type	Hole Size	Casing Size	Landed At
Surface	311 mm	244.5 mm	596.78 m

Well Summary

Spud Date:	Jan 26, 2013 @ 12:00hrs	**Contractor:**	Beaver Drilling Ltd.
TD Date:	Feb 14, 2013 @ 06:35hrs	**Rig Release Date:**	

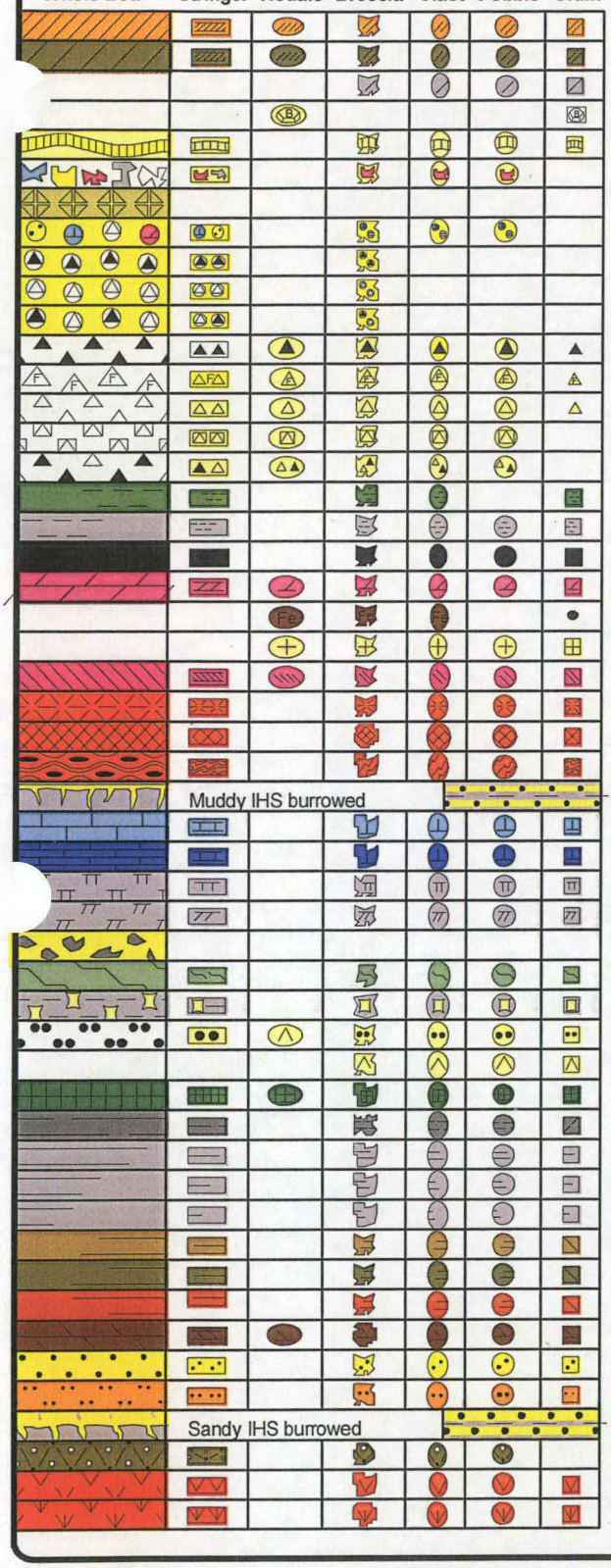
Work Schedule

Contractor	Geologist	Log Interval	Dates Logged
Black Gold Geotechnical	Dave Lawrence	0 m - 1856 m	Jan 24, 2013 - Feb 14, 2013

Remarks

Legend

Rock Types and Thin Beds



Accessories

	Anhydritic	G	Gibbsitic
	Argillaceous	I	Illitic
Ba	Baritic	K	Kaolinitic
	Bentonitic	L	Lithic Fragment
	Bituminous		Marly - calcareous
	Calcareous		Marly - dolomitic
	Carbonaceous		Micromicaceous
	Cherty - dark	ML	Mixed layer clayey
F	Cherty - fossiliferous	M	Montmorillonitic
	Cherty - light		Phosphate pellets
	Cherty - tripolitic	P	Pyritic
	Cherty - varicolored		Salt casts
C	Chloritic		Sandy
	Clayey		Sideritic
	Dolomitic		Siliceous
Fe	Ferruginous staining		Silty
	Fractures		Stylolitic
	Glauconitic		Tuffaceous
	Gypsiferous	Z	Zeolitic

Fossils (Rock Builders)

	Aggregate grains		Foraminifera
	Algae - laminations	F	Fossil
	Algae - non descript		Fragmental
	Algae - ootoid		Gastropod
	Algae - skeletal		Graptolite
	Amphipora		Hydrozoa
	Belemnite		Intraclast
	Bioclastic		Mollusc
	Brachiopod		Oncolite
	Bryozoa		Oolite
	Calciphaera		Ostracod
	Cephalopod		Pelecypod
	Chaetetes		Pellet
	Coated grain		Pisolite
	Conodont		Plant Remains
	Coral	S	Plant Spores
	Coral - branching		Scaphopod
	Coral - head		Spicule
	Coral - colonial		Sponge
S	Coral - solitary		Stromatoporoid
	Crinoid	B	Stromatoporoid - bulbous
	Diatom	M	Stromatoporoid - massive
	Echnoid		Stromatoporoid - tabular
	Echnoid - spine		Tentaculites
	Fish Remains		Trilobite
	Euryamphipora		

Matrix

	Argillaceous		Marl - calcareous
BFS	Bafflestone		Marl - dolomitic
B	Bentonite		Micrite
BS	Bindstone	ML	Mixed Clay
	Bituminous	M	Montmorillonite
	Clay	MS	Mudstone
C	Chlorite	PS	Packstone
FLS	Floatstone	RS	Rudstone
FS	Framestone		Sand
G	Gibbsite		Silt
GS	Grainstone		Sparry Calcite
I	Illite	WS	Wackestone
K	Kaolinite	Z	Zeolite

Textures

C	Chalky	e	Earthy	mx	Microcrystalline
Y	Cryptocrystalline	L	Lithographic		Slickenside
S	Mudstone	GS	Grainstone	BFS	Bafflestone
WS	Wackestone	FLS	Floatstone	BS	Bindstone
PS	Packstone	RS	Rudstone	FS	Framestone

Miscellaneous Grains

(B)	Biotite		Mineral crystal		Orthoclase
	Glauconite		Mineral - dark		Plagioclase
(m)	Mica flakes	(M)	Muscovite	∘	Sand grain

Porosity Type Track

e	Earthy - low permeability - crystals / grains less than 1 / 16 mm		
⊡	Fenestral - voids from gas bubbles - shrinkage cracks - birdseye texture		
X	Intercrystalline - Interfragmental - Intergranular		
F	Fracture	O	Organic - Bridged - Intrafossil
⚲	Interoolitic - Interpelletoidal	P	Pinpoint - voids less than 1/ 16 mm
⌇	Moldic	V	Vuggy - voids greater than 1 / 16 mm

Oil Show Track

●	Even staining (75 - 100% of the rock is stained) - fluoresces in solvent
◉	Spotted staining (50 - 75% of the rock is stained) - fluoresces in solvent
◉	Spotted staining (25 - 50% of the rock is stained) - fluoresces in solvent
⊙	Spotted staining (1 - 25% of the rock is stained) - fluoresces in solvent
○	Questionable oil staining - No fluorescents in solvent
D	Dead oil staining - asphaltic - bitumen - pyrobitumen etc.
F	Fluoresces - no visible oil staining

Trace Fossil Track

An	Anconichnus	Ar	Arenicolites	At	Arthrophycus	As	Asterosoma
Au	Aulichnites	Be	Bergaueria	Cg	Camborygma	Cf	Celliforma
Cb	Chabutolithes	Ch	Chondrites	Cl	Climactichnites	Co	Conichnus
Cp	Cosmoraphe	C	Cruziana	Cy	Cylindrichnus	Da	Dactyloidites
Dm	Dimorphichnus	D	Diplocraterion	Ea	Eatonichnus	En	Entobia
Et	Entomichnus	Esc	Escape Traces	Ga	Gastrochaenolites	Gl	Glossifungites
G	Gyrolithes	Gy	Gyrophyllites	H	Helminthopsis	K	Kouphichnium
	Lockeia	Lo	Lorenzinia	Mp	Macanopsis	Ma	Macaronichnus
ɔ	Monocraterion	Ne	Neonereites	N	Nereites	O	Ophiomorpha
Pa	Palaeophycus	Pd	Paleodictyon	Pc	Paleohelcura	Pl	Paleoscolytus
Pt	Petalichnus	Py	Phycodes	Ph	Phycosiphon	P	Planolites
Pm	Psammichnites	Ps	Psilonichnus	Rh	Rhizocorallium	Rg	Rogerella
Ro	Rosselia	Ru	Rusophycus	Sb	Scalarituba	Sc	Schaubcylindrichnus
Sy	Scoyenia	Si	Siphonichnus	S	Skolithos	Sp	Spirophycus
Su	Subphyllochorda	Syn	Synaeresis Cracks	Te	Teichichnus	Tr	Terebellina
Td	Teredolites	Th	Thalassinoides	Tc	Trichichnus	Tp	Trichophycus
Ty	Trypanites	Z	Zoophycos				

Sedimentary Structures

	Ball and pillow		Bioturb-churned	–0–	Bioturb-slightly	m0–	Bioturb-moderate
m0w	Bioturb-mod well	–0w	Bioturb-well		Boudinage		Burrows
	Clastic Dike		Clastic sill		Desiccation crack		Dish structure
	Fault-Large scale		Fault-Small scale		Flame structure		Flute mark
	Geopetal		Groove casts		Gutter casts		Load casts
IHS	Inclined heterolithic strata				Mud chips		Mud drapes
	Neptunian dike		Pit marks	←→	Pull-a-part		Rill marks
	Rip up clasts		Roots / root trace		Scour and Fill		Slump structure
	Swash marks		Synersis crack		Teepee structure		Tool marks
	Water Escape						

Cement

	Anhydritic		Gypsiferous
	Baritic	H	Hematitic
	Bituminous		Limonitic
	Calcareous	P	Pyritic
	Chert - dark		Salt
	Chert - light		Sideritic
	Dolomitic		Siliceous
	Ferruginous		

Sorting Track

vP	Very poorly sorted - > 10 phi size grade classes
P	Poorly sorted - 6-10 phi size grade classes
M	Moderately sorted - 3-6 phi size grade classes
mW	Moderately well sorted - 2-3 phi size grade classes
W	Well sorted - < 2 phi size grade classes

Rounding Track

vA	Very Angular	r	Subrounded
A	Angular	R	Rounded
a	Subangular	wR	Well Rounded

Framework Track

Framework is a ratio between clastic material greater than 1/16 mm and primary void filler less than 1/16 mm.
? indicates questionable interpretation

Core Track

Indicates Cored Interval
Indicates Lost Core

Test Track

Indicates Tested Interval

Sedimentary Structures Bedding / Cross Bedding

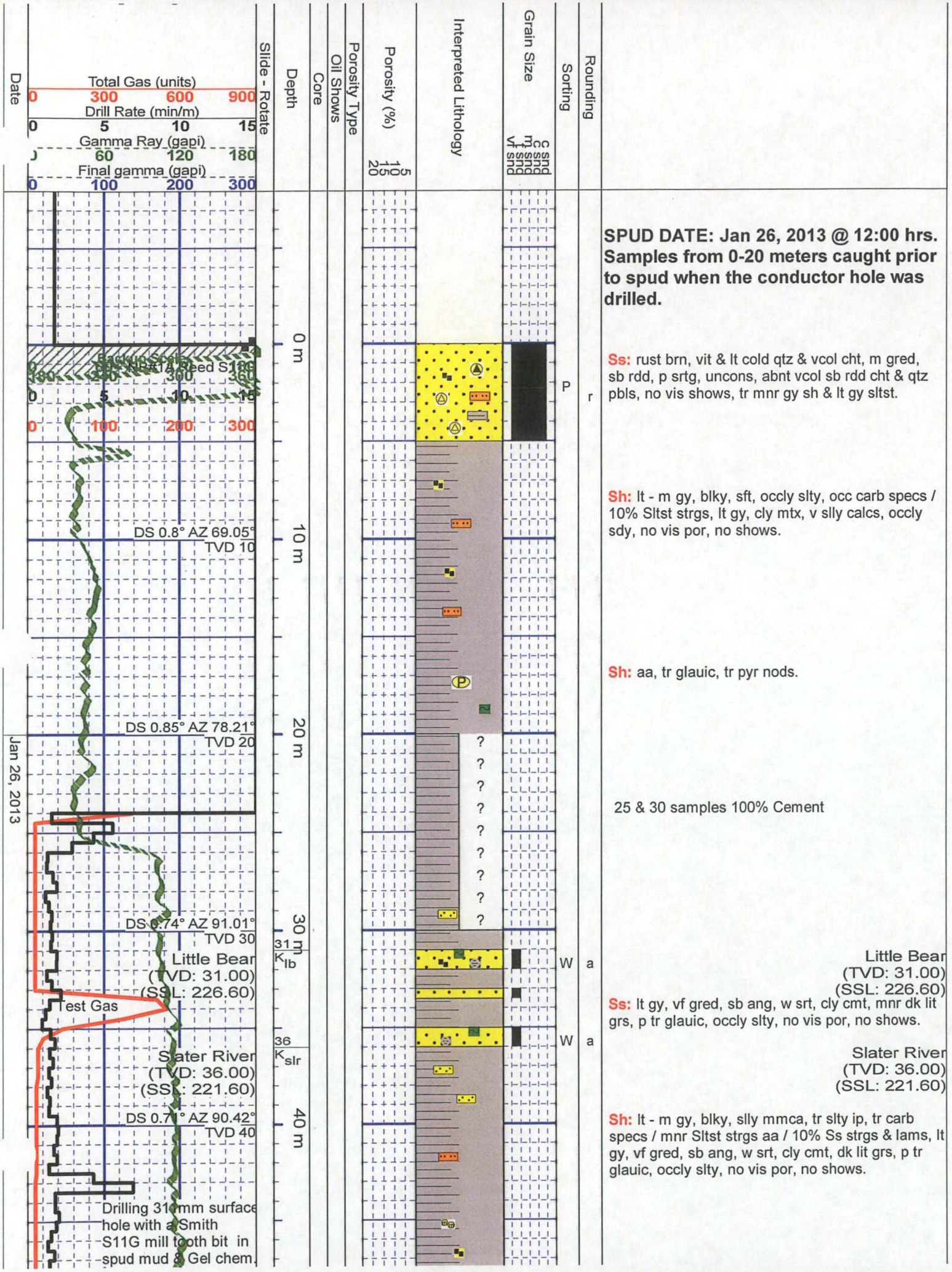
CM	Centimeter bedding		Inverted graded bedding
DM	Decimeter bedding		Massive bedding
MM	Millimeter bedding		Normal graded bedding
	Chevron x-bedding		Herringbone x-bedding
	Sigmoidal x-bedding		Hummocky x-bedding
	Swaley x-bedding		Planar/Tabular x-bedding
	Trough x-bedding		

Sedimentary Structures Laminations / Cross Laminations

	Climbing ripple xlam		Contorted/Slumped lams
	Current ripple xlam		Flaser laminations
	High angle xlam	///	High angle parrallel lams
	Lenticular lams		Low angle xlam
	Low angle para lam		Parallel laminations
	Trough xlam		Varved laminations
	Wave ripple xlam		Wavy laminations

Sedimentary Bedding Contacts

BIO	Bioturbated	BORED	Bored	CAL	Caliche / calcrete	COR	Corrosional	DC	Dessication cracks
EX	Exposure	FS	Flooding surface	GLOSS	Glossifungites	GRAD	Gradational	HG	Hardground
ICL	Inclined - sharp	IRR	Irregular - sharp	MFS	Maximum flooding surface			MC	Mud cracks
NOD	Nodular	PB	Parasequence boundary	RS	Ravinement surface	RSE	Regressive surface of erosion		
ROOT	Rooted	SCOUR	Scour	SB	Sequence boundary	SHARP	Sharp	TRUN	Truncation
TSE	Transgressive surface of erosion			UNCON	Unconformity	WAVY	Wavy		



SPUD DATE: Jan 26, 2013 @ 12:00 hrs. Samples from 0-20 meters caught prior to spud when the conductor hole was drilled.

Ss: rust brn, vit & lt cold qtz & vcol cht, m gred, sb rdd, p srtg, uncons, abnt vcol sb rdd cht & qtz pbls, no vis shows, tr mnr gy sh & lt gy sltst.

Sh: lt - m gy, blky, sft, occly slty, occ carb specs / 10% Sltst strgs, lt gy, cly mtx, v slly calcs, occly sdy, no vis por, no shows.

Sh: aa, tr glauic, tr pyr nods.

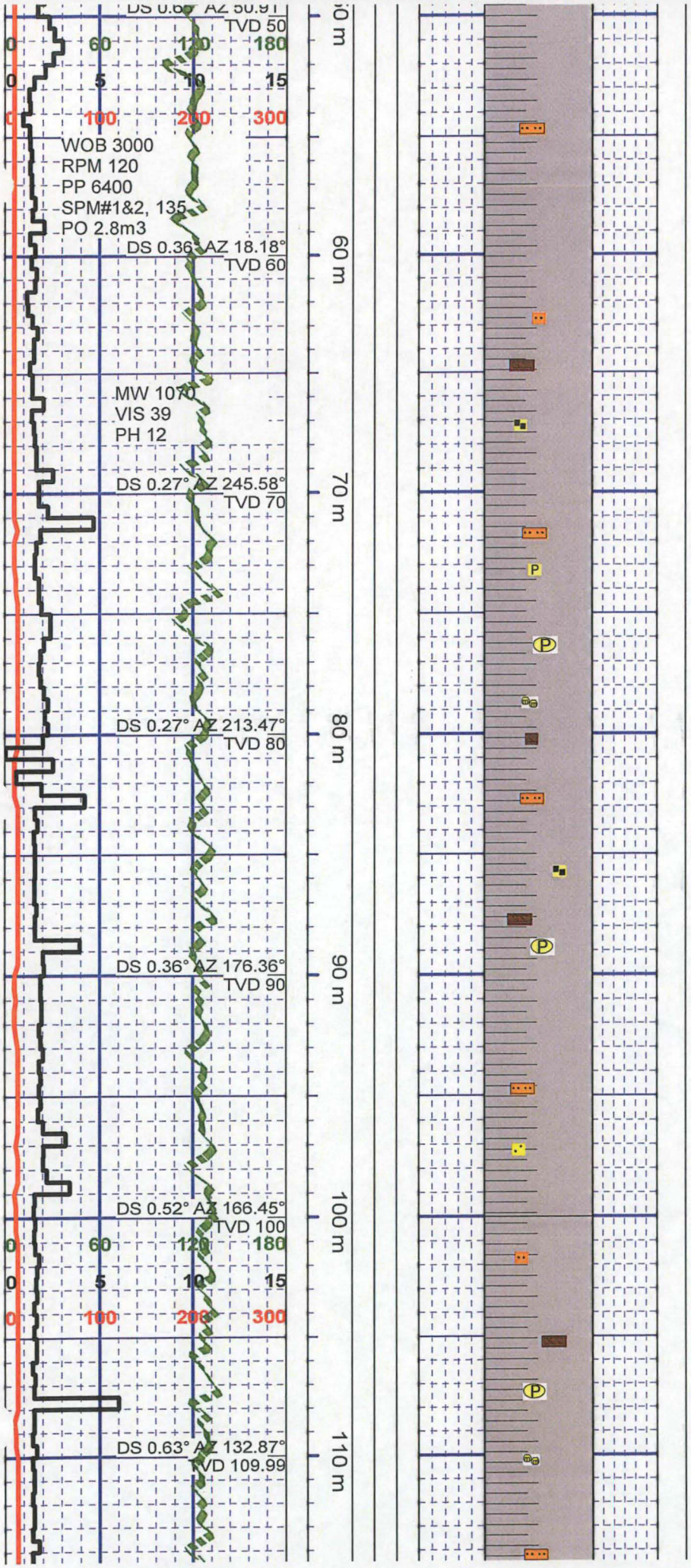
25 & 30 samples 100% Cement

Little Bear
(TVD: 31.00)
(SSL: 226.60)

Ss: lt gy, vf gred, sb ang, w srt, cly cmt, mnr dk lit grs, p tr glauic, occly slty, no vis por, no shows.

Slater River
(TVD: 36.00)
(SSL: 221.60)

Sh: lt - m gy, blky, slly mmca, tr slty ip, tr carb specs / mnr Sltst strgs aa / 10% Ss strgs & lams, lt gy, vf gred, sb ang, w srt, cly cmt, dk lit grs, p tr glauic, occly slty, no vis por, no shows.



Sh: lt - m gy, blky, slly mmca, tr slty ip, tr carb specs / 10% Sltst strgs aa ip / Sltst lt gy brn, sdy, sidic, shy, tt, no shows.

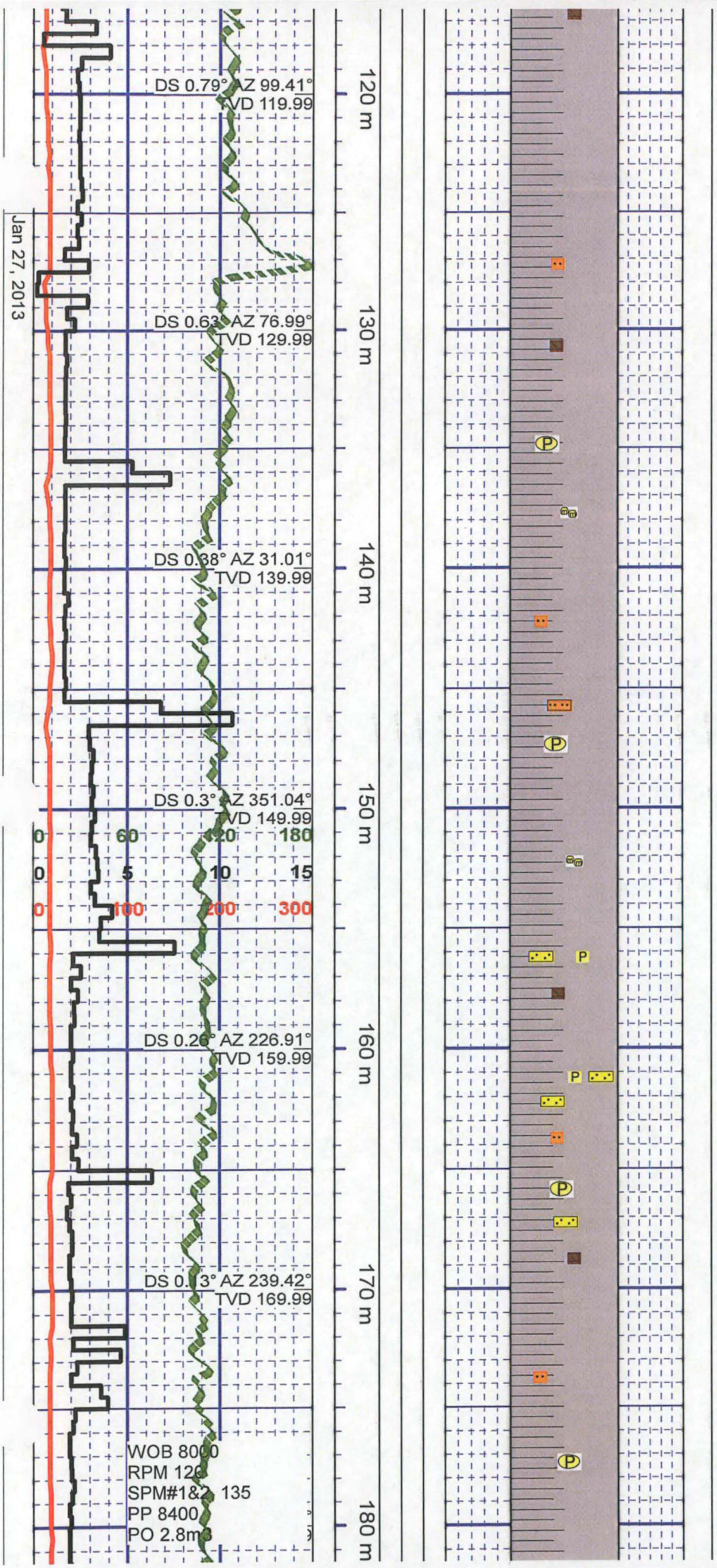
Sh: lt - m gy, tr gy brn ip, blky, slly mmca, tr slty ip, tr carb specs, sidic ip / tr brn sid frags / mnr Sltst strgs aa.

Sh: predly m gy, blky, plty ip, slly mmca, tr slty, sft - frm, mnr dism pyr & tr pyr nods, mnr Sltst strgs, lt gy, cly mtx, tr calcs, tr dk lit grs, tt, no vis show.

Sh: lt - m gy, tr gy brn ip, blky, tr plty, slly mmca, tr slty ip, tr carb specs, pyr nods, mnr sidic ip / tr brn sid frags / mnr Sltst strgs aa.

Sh: lt - m gy, tr gy brn ip, blky, plty ip, slly mmca, tr slty ip, occly sdy, tr carb specs, pyric / occ pyr nods, mnr sidic ip / tr brn sid frags / mnr Sltst strgs, lt - m gy, cly mtx, slly sdy, tr dk lit grs, tt, no shows.

Sh: lt - m gy, tr gy brn ip, blky, plty ip, sft - slly frm, slly mmca, tr slty ip, tr sdy, tr carb specs, pyric / tr pyr nods, mnr sidic ip / tr brn sid frags.



slly mmca, tr slty ip, tr sdy, tr carb specs, pyric / tr pyr nods, mnr sidic ip / mnr Sltst lams aa.

Sh: predly lt - m gy, blky, tr plty ip, modly frm, slly mmca, tr slty ip, tr carb specs, tr pyric / p tr pyr nods, mnr sidic ip / mnr Sltst lams aa.

Sh: predly m gy, blky, tr plty ip, modly frm, slly mmca, tr pyric / p tr pyr nods.

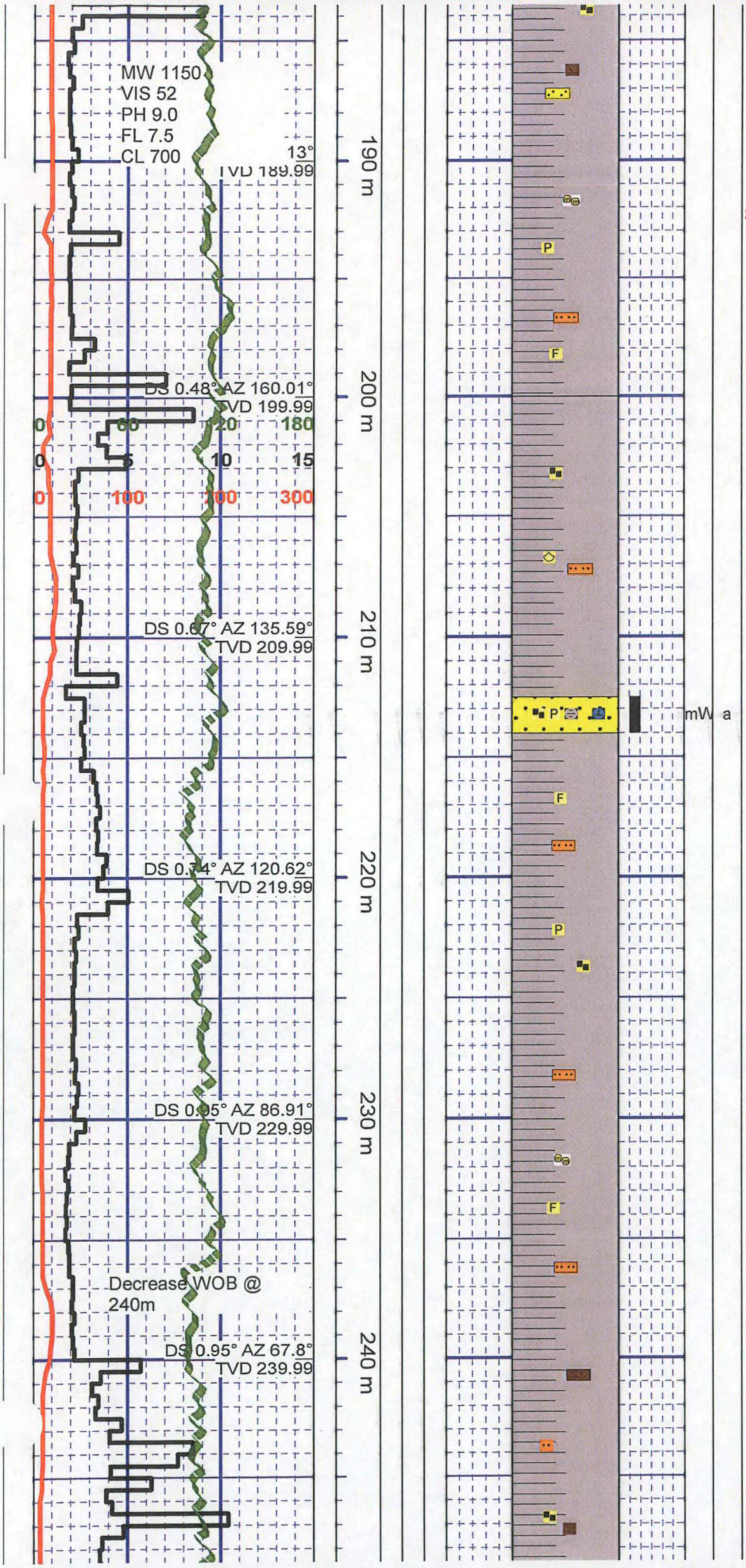
Sh: predly m gy, blky, tr plty ip, modly frm, slly mmca, occly slty, pyric / tr pyr nods / mnr Sltst lams lt - m gy, cly cmt, grds to slty sh ip, tt, no shows.

Sh: aa, incrg sidic / Ss strgs 10%, lt gy, vf gred, sb ang, w srt, cly cmt, slly calcs, pyric, grds to sdy sltst ip, tt, no shows.

Sh: aa, Ss strgs incrg to 15%.

Sh: lt - m gy, blky, tr plty ip, modly frm, slly mmca, occly slty, sdy ip, sidic ip / tr brn sid frags, tr pyric / tr pyr nods / mnr Ss lams aa.

Sh: lt - m gy, blky, plty ip, modly frm, slly mmca, occly slty, tr sdy ip, slly sidic ip, tr pyric / tr pyr nods / mnr Ss lams lt gy, s&p, l f gred, sb ang, modly w srt, calcs, slly carb, tr glauic, shy ip, tt, no show.



occly slty, tr sdy ip, slly sidic ip, tr pyric / tr pyr nods / 10% Ss lams lt gy, s&p, l f gred, sb ang, modly w srt, calcs, slly carb, tr glauic, shy ip, tt, no show.

Sh: predly Sh aa.

Sh: predly m gy, blky, tr plty, slly mmca, modly frm, tr mnr carb specs, tr inoc, tr pyr, mnr Sltst strgs aa.

Sh: aa, incrg slty, tr mnr shell frags (bracs?), tr sidic / 5% Sltst strgs, m gy, cly mtx, pyric, shy, sdy ip, occly grds to vf gred ss ip, tt, no shows.

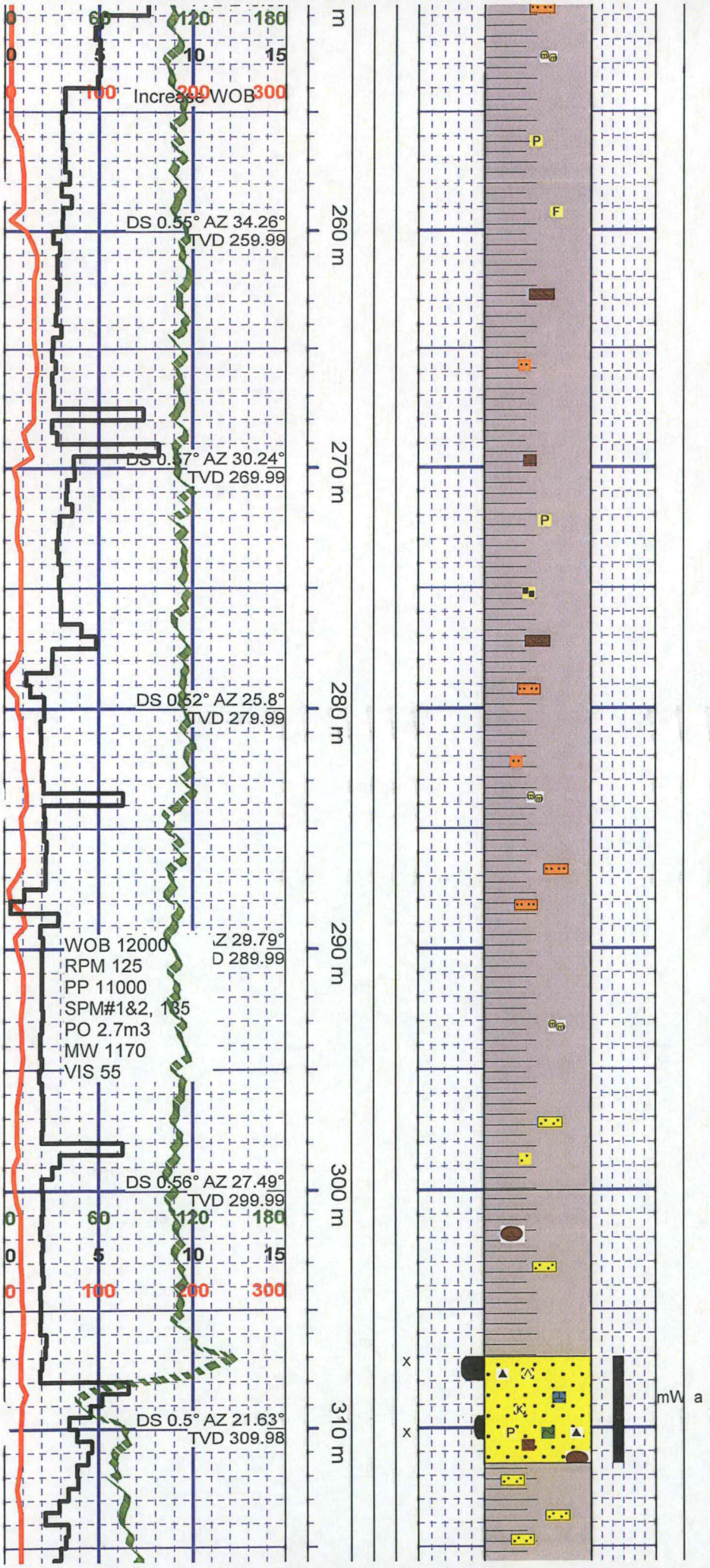
Ss: lt - m gy, vf gred, sb ang, modly w srt, calcs & cly cmt, carb grs, slly pyric, slty, shy, tt, no shows.

Sh: predly m gy, blky, tr plty, slly mmca, modly frm, tr mnr carb specs, tr inoc, tr pyr, mnr Sltst strgs, lt - m gy, cly & calcs cmt, carb grs, shy, tr pyric, tt, no shows.

Sh: predly m gy, blky, tr plty, slly mmca, modly frm, tr mnr carb specs, tr inoc, tr pyr, mnr Sltst strgs, lt - m gy, cly & calcs cmt, carb grs, shy, tr pyric, tt, no shows.

Sh: predly m gy, blky, tr plty, slly mmca, modly frm, tr mnr carb specs, tr inoc, tr pyr, mnr Sltst strgs, lt - m gy, cly & calcs cmt, carb grs, shy, tr pyric, tt, no shows.

Sh: predly m gy, blky, tr plty, slly mmca, modly frm, tr mnr carb specs, tr inoc, tr pyr, tr sidic / mnr Sltst strgs, lt - m gy, cly & calcs cmt, carb grs, shy, tr pyric, tt, no shows.



Sh: predly m gy, blky, tr plty, slly mmca, slly slty, modly frm, tr mnr carb specs, tr pyric, tr sidic / tr brn sid frags, tr inoc.

Sh: predly m gy, blky, tr plty, slly mmca, slly slty, modly frm, tr mnr carb specs, tr pyric, tr sidic / tr brn sid frags.

Sh: predly m gy, blky, tr plty, slly mmca, modly frm, tr mnr carb specs, tr pyric, slly slty ip, tr sidic / tr brn sid frags / tr mnr Sltst strgs, m gy, cly cmt, tt, no shows.

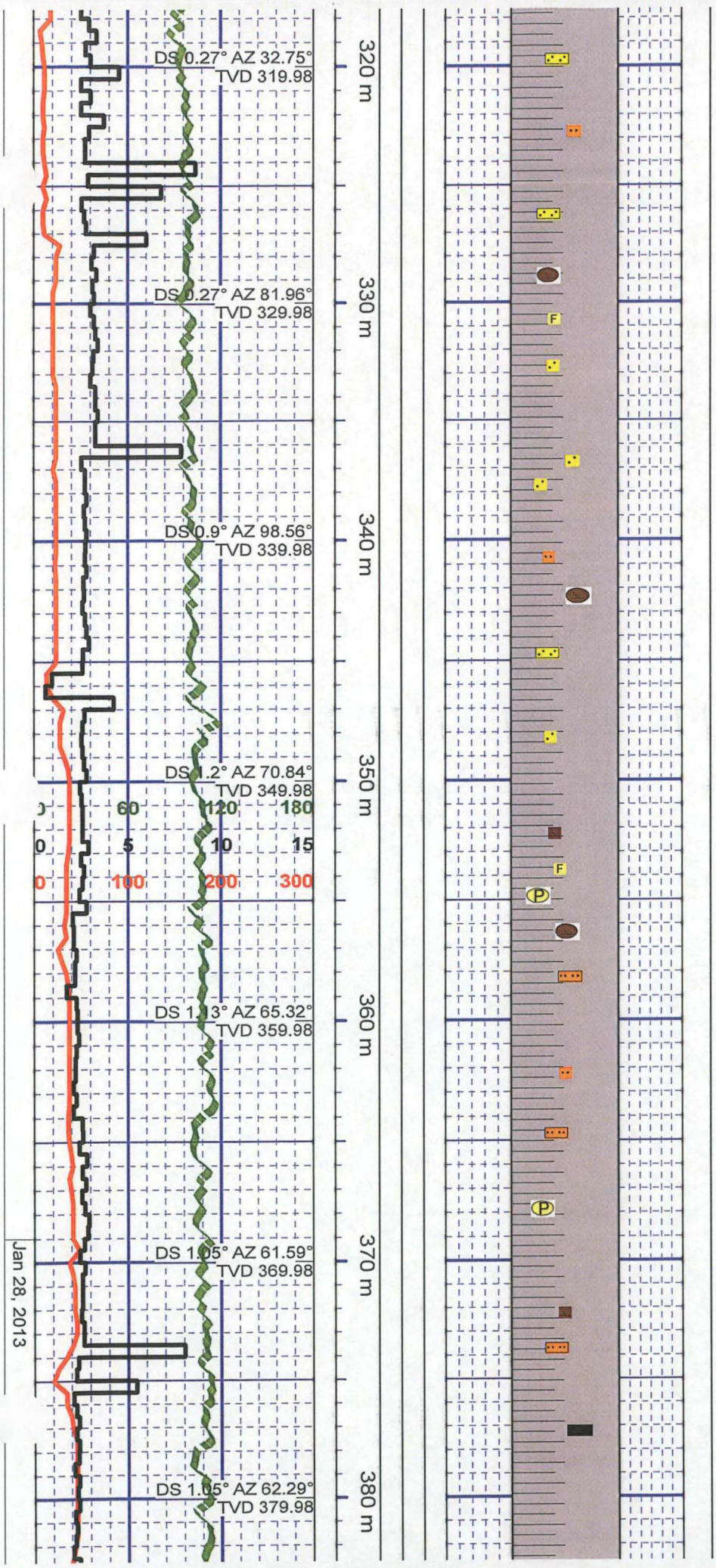
Sh: predly m gy, blky, tr plty, slly mmca, modly frm, tr mnr carb specs, tr pyric, slly slty ip, tr sidic / tr brn sid frags / 5% Sltst strgs, m gy, cly cmt, sdy, grds to vf gred ss ip, carb specs, tt, no shows.

Sh: predly m gy, mnr sb fis, slly mmca, slly aren, tr dism pyr, tr sid frags / 5% Ss lams, lt gy, vf gred, sb ang, w srt, cly & calcs cmt, slly slty, no vis por, no shows

Sh: predly m gy, mnr sb fis, slly mmca, slly aren, modly frm, tr dism pyr / 5% Ss lams aa.

Ss: s&p, f gred, sb ang, modly w srt, sils & slly calcs cmt, kao mtx ip, occ dk lit grs, p tr pyric, p - fr intgran por 8%, no vis shows.

Ss: lt gy, s&p, f gred, sb ang, modly w srt, sils & slly calcs cmt, kao cmt ip, dk lit grs, tr glauic, tr pyric, slly sidic, tt - p intgran por 4%, no vis shows / occ brn sid frags (nods?)



Sh: predly m gy, mnr sb fis, slly mmca, slly aren, tr pyr, occly sidic / brn sid frags in sample / 10% Ss lams & strgs lt - m gy, lt gy brn, l f gred, sb ang, modly w srt, sils & slly calcs, kao mtx ip, sidic, tr glauic, pyr, dk lit grs, incrg shy, no vis por or show.

Sh: lt - m gy, modly frm,, tr carb specs, tr inoc, occly cold brn (sidic) / tr brn sid frags, slty & slly aren ip / 5% Ss lams & strgs aa.

Sh: aa, incrg aren / 5% ss strgs & lams aa.

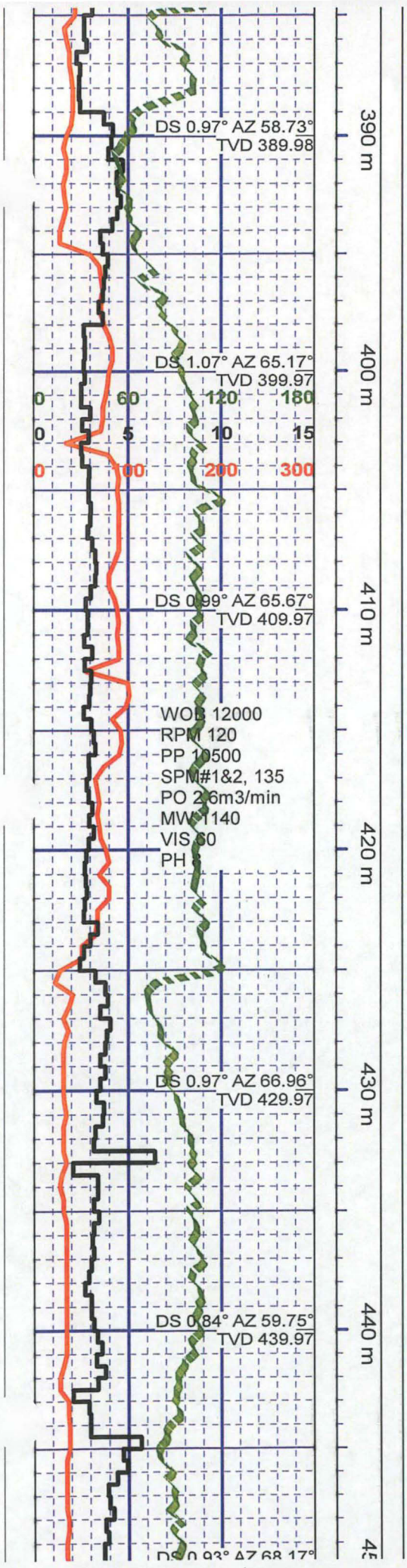
Sh: lt - m gy, modly frm,, tr carb specs, tr inoc, occly cold brn (sidic) / tr bnr sid frags, slty & slly aren ip / 5% Ss lams & strgs aa.

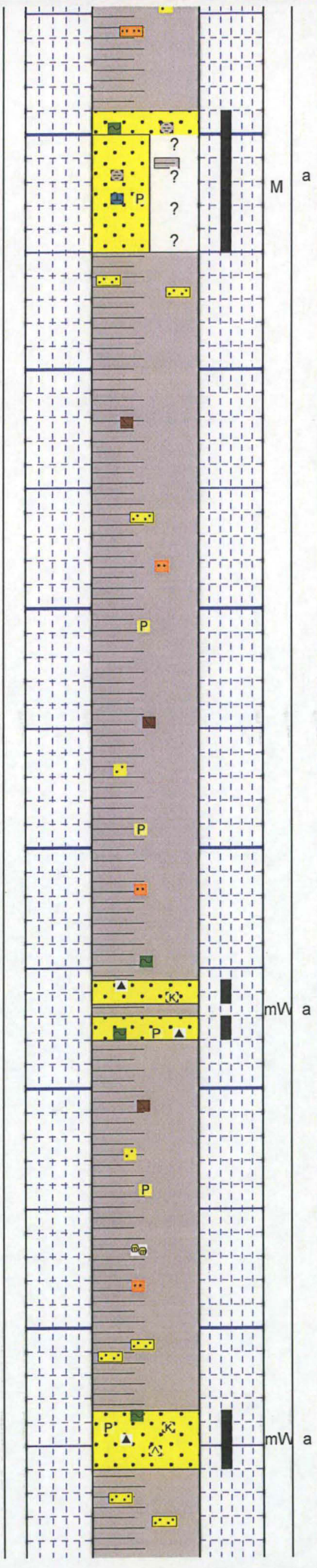
Sh: lt - m gy, modly frm,, tr carb specs, tr inoc, occly lt gy brn (sidic), tr brn sid frags (nods), mnr slty & slly sdy ip, tr pyr nods / tr Sltst lams & lenses, lt gy, cly & slly calcs cmt, no vis por, or show.

Sh: lt - m gy, modly frm,, tr carb specs, tr inoc, occly lt gy brn (sidic), tr brn sid frags (nods), occly slly slty & slly sdy ip, tr pyr nods / tr Sltst lams aa.

Sh: lt - m gy, modly frm,, tr carb specs, tr inoc, occly lt gy brn (sidic), tr brn sid frags (nods), occly slly slty & slly sdy ip, tr pyr nods / tr Sltst lams aa.

Sh: aa / tr mnr coal lenses.





mod, occly lt gy brn (sidic), tr brn sid frags (nods), occly slly slty & slly sdy ip, tr pyr nods / tr Sltst lams aa.

Sh: aa / 20% Ss lt - m gy, s&p, u f gred, sb ang, m srtg, qtz & cht, cly mtx, slly calcs, tr sils cmt, occ dk lit grs, tr glauic grs, pyirc, occly shy / occ m gy sh lenses, no vis por, no shows.

Missed sample @ 395 meters

Sh: lt - m gy, mnr sb fis, modly frm, slly mmca, mnr lt gy brn sh (sidic), tr slty & slly sdy ip, tr pyric / mnr Ss lams aa.

Sh: lt - m gy, mnr sb fis, modly frm, slly mmca, mnr lt gy brn sh (sidic), tr slty & slly sdy ip, tr pyric / mnr Ss lams aa.

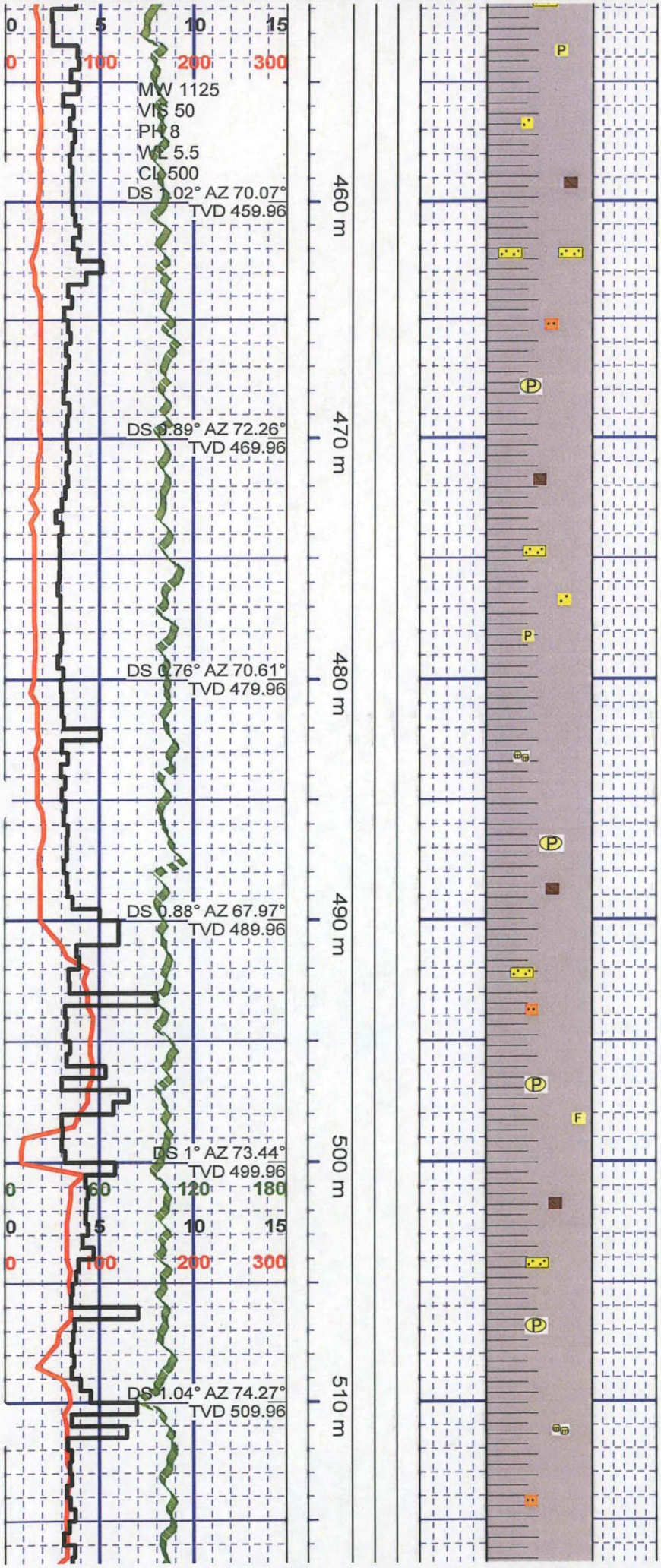
Sh: lt - m gy, mnr sb fis, modly frm, slly mmca, mnr lt gy brn sh (sidic), tr slty & slly sdy ip, tr pyric / mnr Ss lams aa.

Sh: aa, incrg aren, bcmg glauic.

Ss: s&p, u f gred, sb ang, modly w srt, kao mtx, slly sils, dk lit grs, p tr glauic, tr pyric, no vis por or shows.

Sh: predly m gy, modly frm, sbfis ip, slly mmca, mnr lt gy brn sh (sidic), tr slty & slly sdy ip, tr pyric. / 5% Ss strgs aa.

Ss: lt gy, s&p, u f gred, sb ang, modly w srt, kao mtx, slly sils, dk lit grs, p tr glauic, tr pyric, no vis por or shows.



Sh: predly m gy, modly frm, sbfis ip, slly mmca, mnr lt gy brn sh (sidic), tr slty & slly sdy ip, tr pyric.

Sh: predly m gy, modly frm, sbfis ip, slly mmca, mnr lt gy brn sh (sidic), tr slty & tr sdy ip, tr pyric, tr pyr nods.

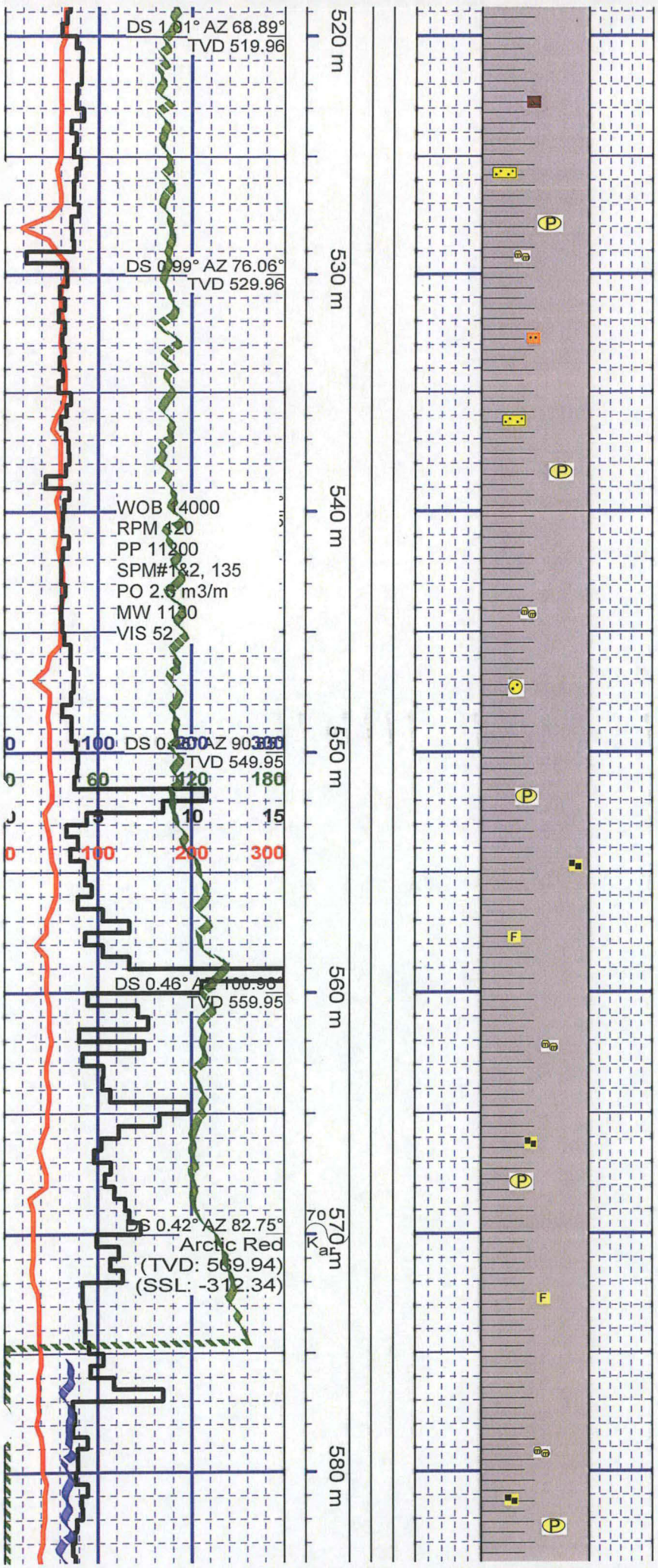
Sh: predly m gy, modly frm, sbfis ip, slly mmca, mnr lt gy brn sh (sidic), tr slty & tr sdy ip, tr pyric, tr pyr nods / 5% Ss aa.

Sh: predly m gy, modly frm, sbfis ip, slly mmca, mnr lt gy brn sh (sidic), tr slty & tr sdy ip, tr pyric, tr pyr nods.

Sh: predly m gy, mnr sbfis, slly mmca, slly slty, pyr nods, mnr gy brn sidic sh / tr Ss lams aa, tr amb.

Sh: predly m gy, mnr sbfis, slly mmca, slly slty, pyr nods, mnr lt gy brn sidic sh / tr Ss lams aa.

Sh: predly m gy, sbfis ip, slly mmca, tr slty, tr pyr



Sh: predly m gy, sbfis ip, slty ip, slly mmca, modly frm, tr pyr nods, tr mnr lt gy brn sidic sh, tr mnr Ss lenses aa.

Sh: predly m gy, sbfis ip, slty ip, slly mmca, modly frm, tr pyr nods, tr mnr Ss lenses aa.

Sh: predly m gy, sbfis ip, slty ip, slly mmca, modly frm, tr pyr nods, tr mnr Ss lenses aa.

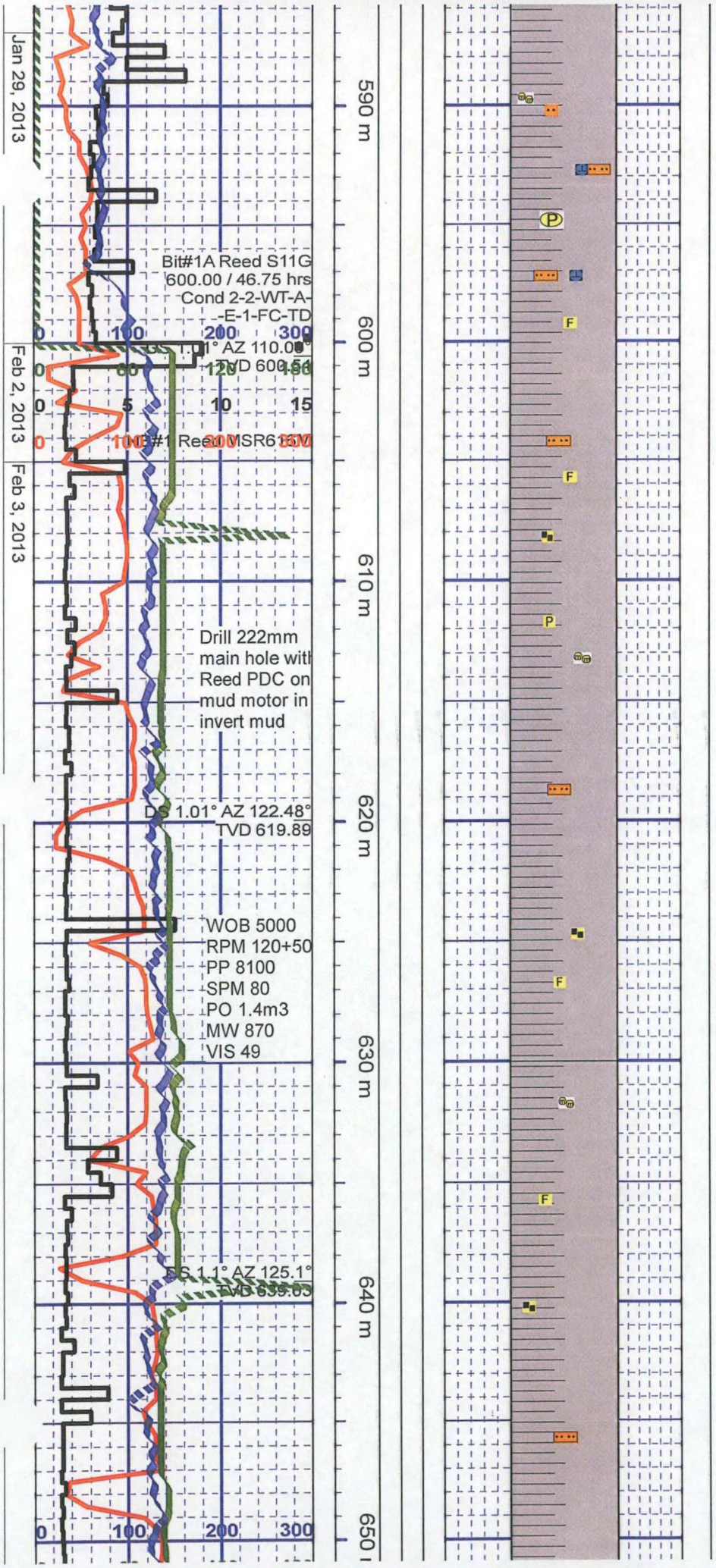
Sh: m gy, mnr dk gy, incrg sbfis ip, slly carb, slly mmca, tr pyr, tr inoc.

Sh: m gy, mnr dk gy, incrg sbfis, incrg carb, slly mmca, tr pyr nods, inoc.

Arctic Red
(TVD: 569.94)
(SSL: -312.34)

Sh: m gy, mnr dk gy, occly sbfis, carb ip, slly mmca, tr pyr nods, inoc.

Sh: m gy, occly dk gy, occly sbfis, carb ip, mmca



Sh: m - occly dk gy, sbfis ip, slly carb ip, occly mmca, slly slty ip, pyr nods, inoc / tr mnr Sltst lams, lt - m gy, calcs & cly cmt, tr carb specs, sdy ip, no vis por, no shows.

Surface hole TD 600m @ 19:45hrs, Jan 29/13
Casing set @ 597 meters.

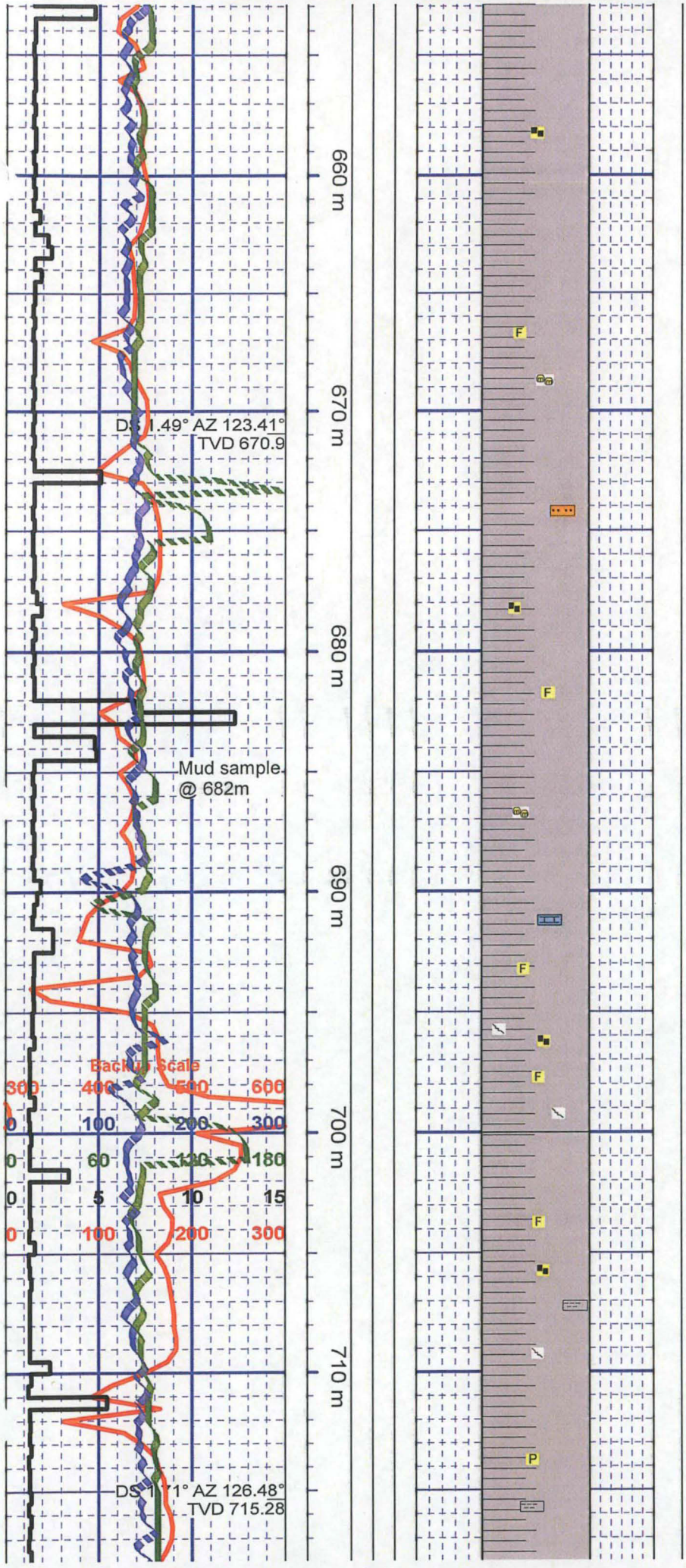
Sh: m - dk gy, sbfis ip, slly carb ip, occly mmca, slly slty ip / mnr Sltst lams, lt - m gy, calcs & cly cmt, tr carb specs, no vis por, no shows.

Sh: m - dk gy, sbfis ip, slly carb ip, occly mmca, slly slty ip / mnr Sltst strgs & lams aa.

Sh: m - dk gy, sbfis, slly carb, occly slly mmca, tr pyr, tr inoc., p tr sltst lams aa.

Sh: m - dk gy, sbfis, slly carb, occly slly mmca, tr pyr, tr inoc., p tr sltst lams aa.

Sh: m - dk gy, sbfis, slly carb, occly slly mmca, tr pyr, tr inoc., p tr sltst lams aa.



Sh: m - dk gy, sbfis, slly carb, occly slly mmca, inoc., tr Sltst strgs lt - m gy, calcs & cly cmt, tt, no show.

Sh: m - dk gy, sbfis, slly carb, occly slly mmca, inoc, p tr sltst lams aa.

Sh: m - dk gy, sbfis, slly carb, occly slly mmca, inoc, p tr sltst lams aa.

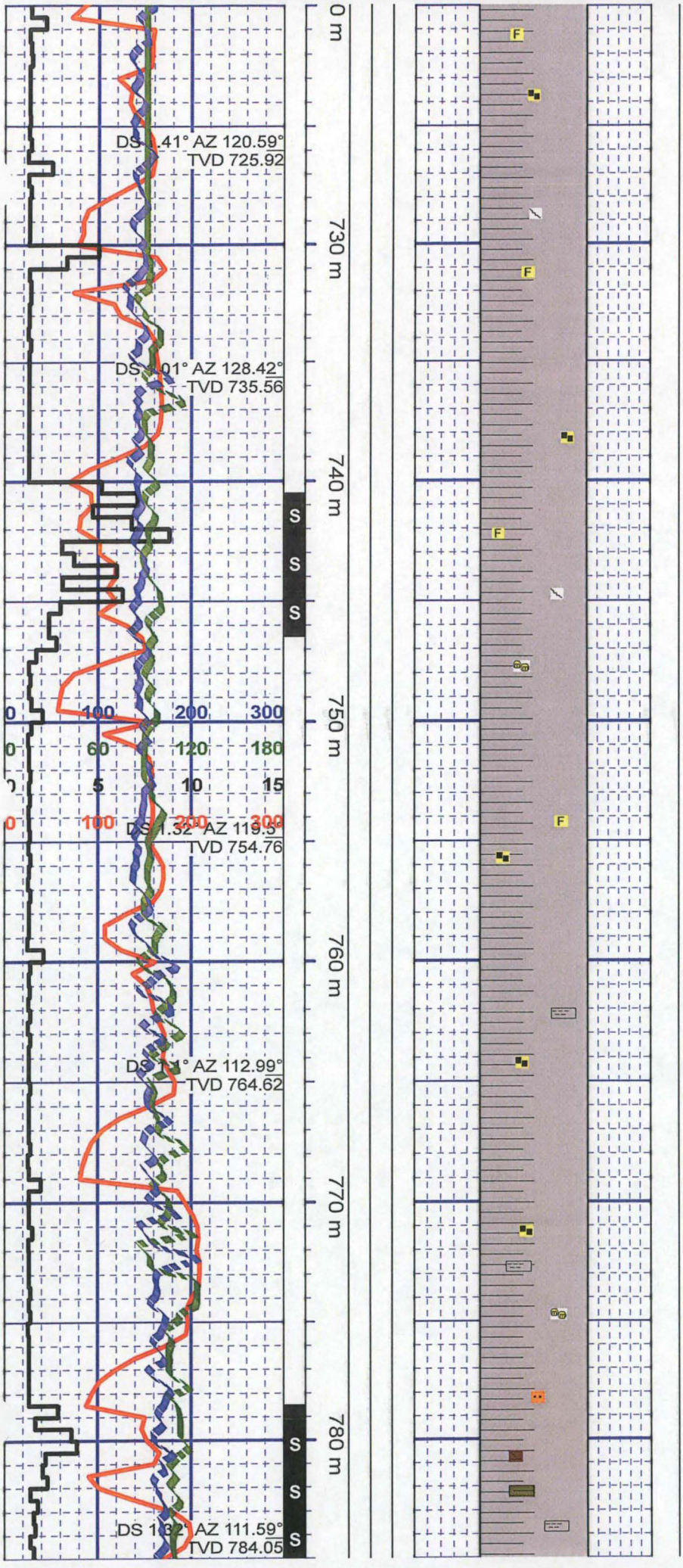
Sh: m - dk gy, sbfis, slly carb, occly slly mmca, inoc.

Sh: aa / tr mnr Ls lams, mot crn wh, sft, chly, tr small fracs infilled / calc, dns.

Sh: m - dk gy, sbfis, slly carb, occly slly mmca, g tr inoc.

Sh: m - dk gy, sbfis, slly carb, occly slly mmca, g tr inoc, tr small fracs infilled / wh calc & crm chky ls ip.

Sh: aa , p tr pyr / tr mnr lt gy clyst lams, sft, wxy.



Sh: m - dk gy, sbfis, slly carb, occly slly mmca, g tr inoc, tr small fracs aa

Sh: m - dk gy, sbfis, slly mmca, slly carb, inoc, tr mnr micro fracs infilled / calc aa.

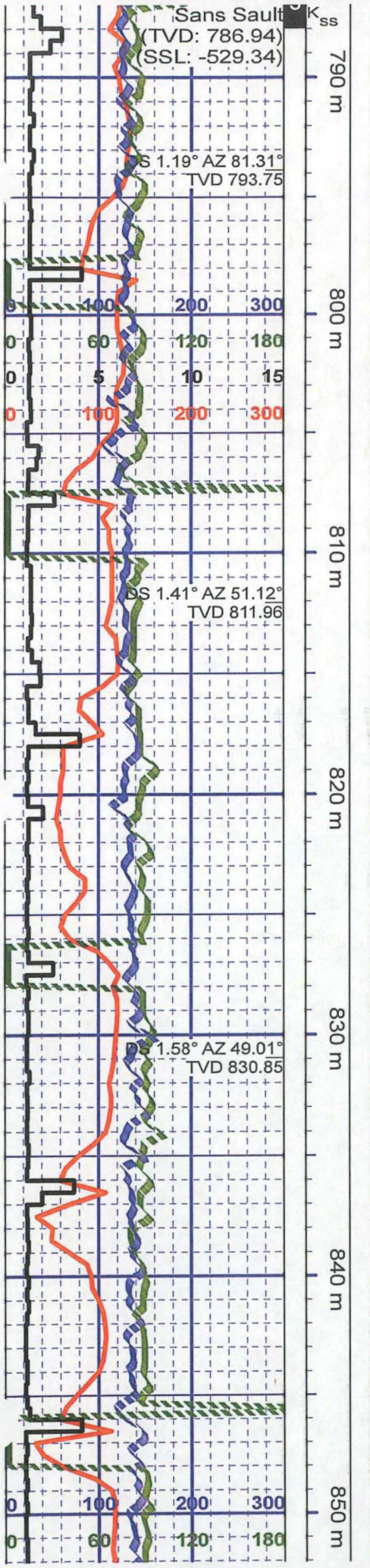
Sh: m - dk gy, sbfis, slly mmca, slly carb, inoc, tr mnr micro fracs infilled / calc aa.

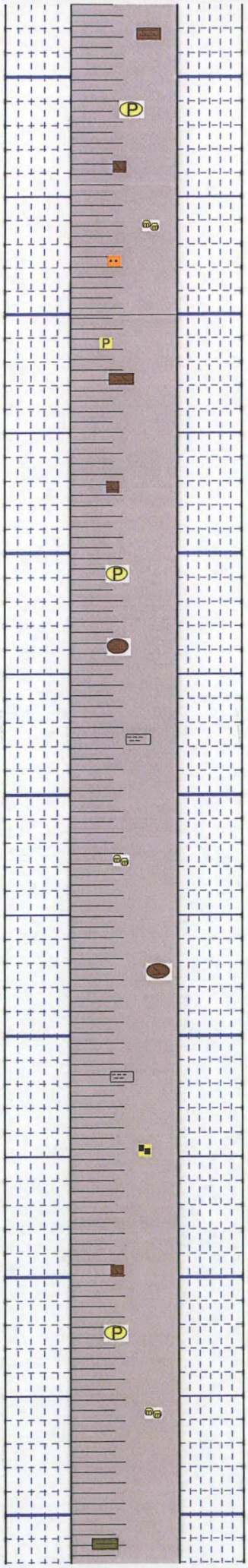
Sh: m - dk gy, sbfis, slly carb, occly slly mmca, tr inoc.

Sh: aa, mnr Clyst lams, lt gy, sdy, slly calcs, occ abnt mics flks, grds to clyy ss ip.

Sh: m - dk gy, sbfis, slly carb, occly slly mmca, tr inoc / p tr Clyst lams, lt gy, sft, wxy, tr sdy aa.

Sh: m - occly dk gy, sbfis, slly wxy tex ip, slly mmca ip, slly carb, occly slly sidic / tr mnr clyst strgs aa, sdy aa. P tr lt gn sh, wxy tex.





Sans Sault
(TVD: 786.94)
(SSL: -529.34)

Sh: predly m gy, sbfis, slly wxy tex ip, slly mmca ip, slly carb, slly slty ip, tr pyr nods, occly slly sidic / occ brn sid frags / tr lt gy brn sidic clyst lams.

Sh: m / mnr dk gy, sbfis ip, slly mmca ip, slly carb, slly slty ip, tr pyr nods & dism pyr, occly slly sidic / occ brn sid frags.

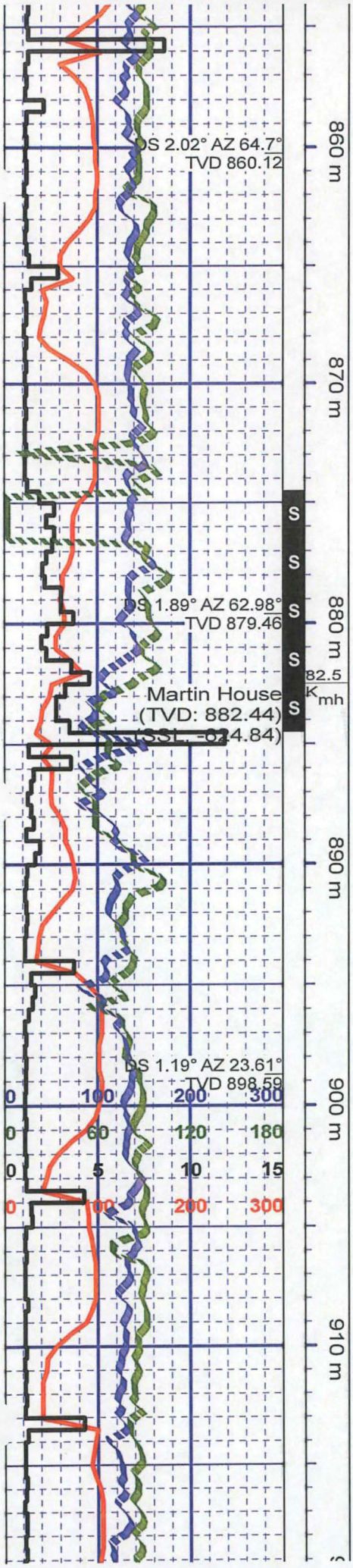
Sh: m - dk gy, sbfis, slly mmca, slly carb, tr pyr nods, occly sidic / tr brn sid frags (nods?), tr mnr lt gy clyst lams.

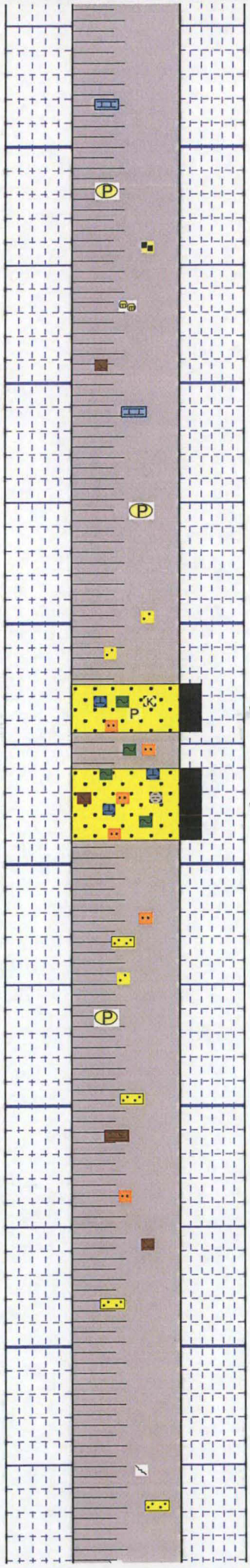
Sh: m - occly dk gy, sbfis, slly mmca, slly carb, tr pyr nods, occly sidic / tr brn sid frags (nods?)

Sh: m - occly dk gy, sbfis, slly mmca, slly carb, tr pyr nods, occly sidic / tr brn sid frags / tr mnr lt gy clyst lams aa.

Sh: m - occly dk gy, sbfis, slly mmca, slly carb, tr pyr nods, occly sidic / tr brn sid frags.

Sh: m - occly dk gy, sbfis, slly mmca, slly carb, tr pyr nods, occly sidic / tr brn sid frags / tr mnr lt gn





Sh: aa / tr Ls strgs bf, mdst - wkest, occly chky, no vis por or show

Sh: m gy, mnr dk gy, sbfis, slly mmca, slly sidic ip, tr pyr nods, p tr mnr ls lenses aa.

Sh: m gy, mnr dk gy, sbfis, slly mmca, slly sidic ip, tr pyr nods, p tr mnr ls lenses aa.

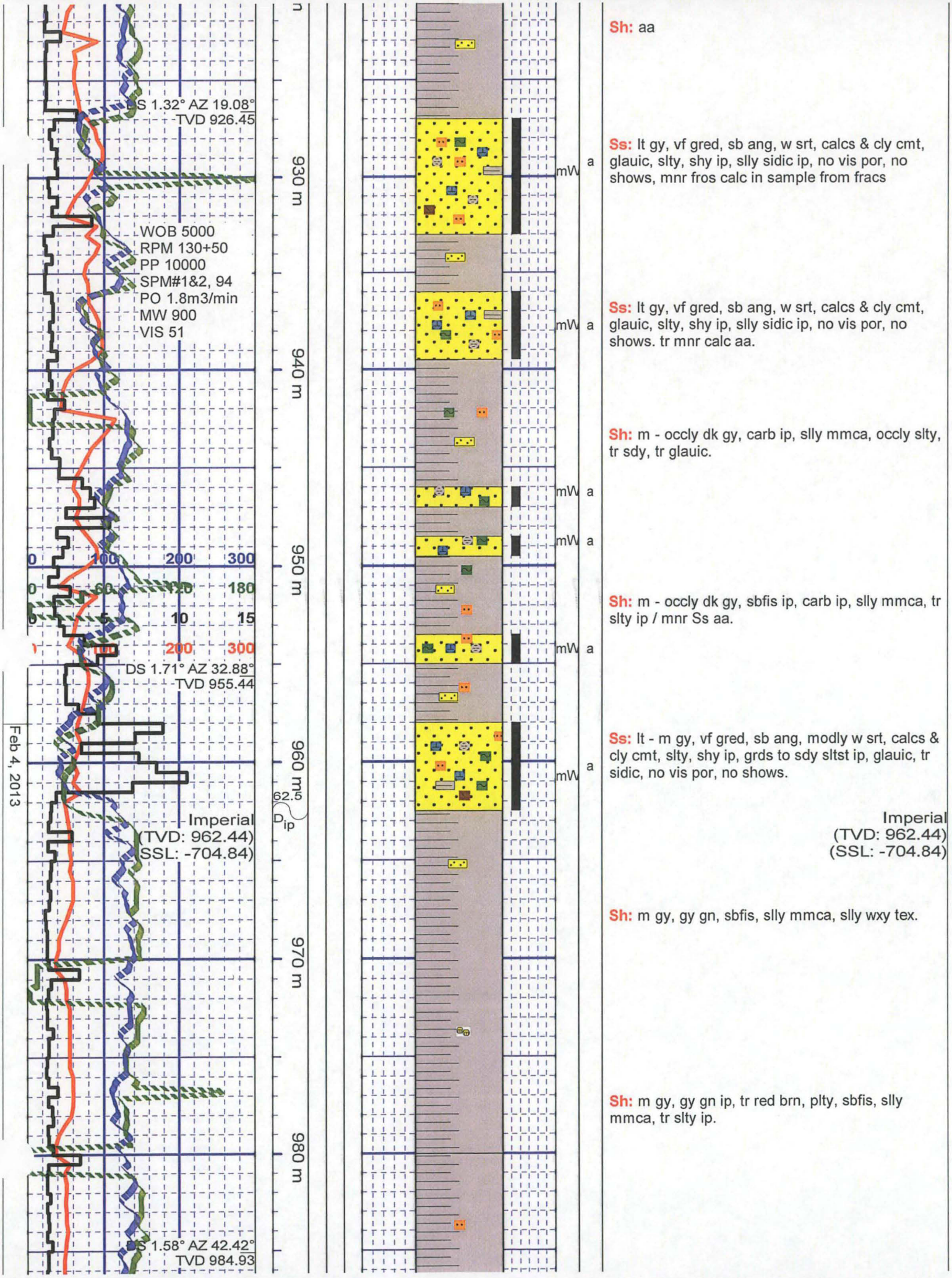
Ss: crm - v lt gy, vf gred, sb ang, w srt, qtz & lt cold cht, tr dk lit grs, calcs & kao cmt, slty, grds to sdy sltst ip, p tr pyric, occly glauic, no vis por, no shows.

Martin House (TVD: 882.44) (SSL: -624.84)

Sh: m gy, mnr dk gy, sbfis, slly mmca, slly carb, tr pyr nods, tr sdy, sdy ip, tr sidic / mnr Ss strgs aa.

Sh: m - occly dk gy, sbfis, slly mmca, slly carb, tr pyr nods, tr sdy, sdy ip, tr brn sid frags.

Sh: m - occly dk gy, sbfis, slly mmca, slly carb, tr wh c xln calc (fracs)



Sh: aa

Ss: lt gy, vf gred, sb ang, w srt, calcs & cly cmt, glauic, slty, shy ip, slly sidic ip, no vis por, no shows, mnr fros calc in sample from fracs

Ss: lt gy, vf gred, sb ang, w srt, calcs & cly cmt, glauic, slty, shy ip, slly sidic ip, no vis por, no shows. tr mnr calc aa.

Sh: m - occly dk gy, carb ip, slly mmca, occly slty, tr sdy, tr glauic.

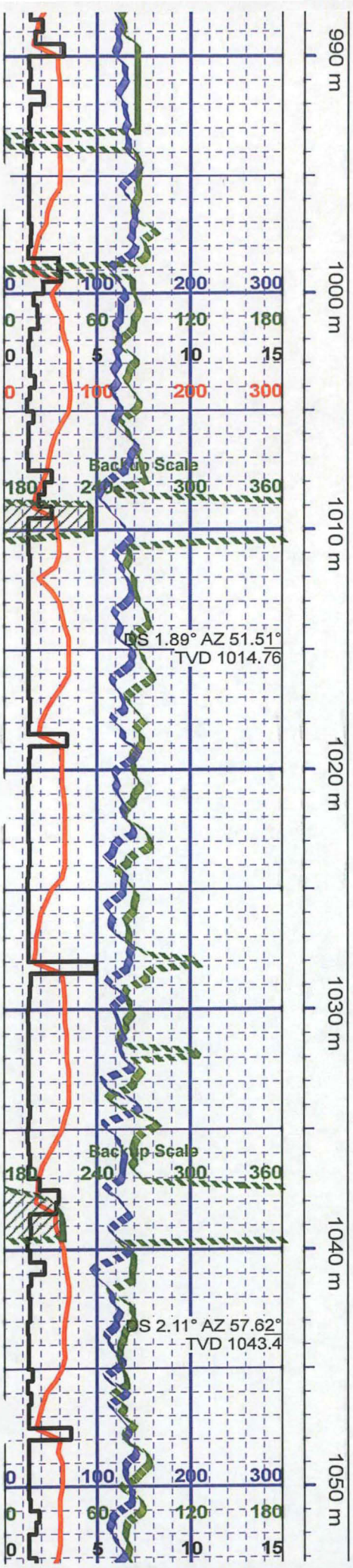
Sh: m - occly dk gy, sbfis ip, carb ip, slly mmca, tr slty ip / mnr Ss aa.

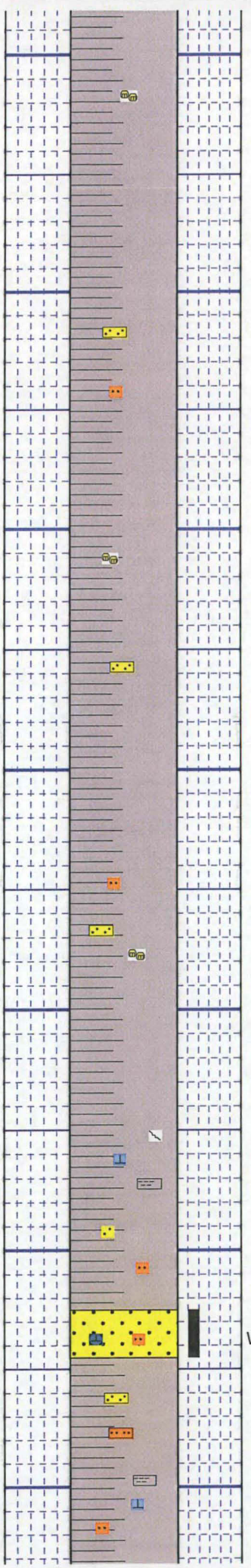
Ss: lt - m gy, vf gred, sb ang, modly w srt, calcs & cly cmt, slty, shy ip, grds to sdy sltst ip, glauic, tr sidic, no vis por, no shows.

Imperial
(TVD: 962.44)
(SSL: -704.84)

Sh: m gy, gy gn, sbfis, slly mmca, slly wxy tex.

Sh: m gy, gy gn ip, tr red brn, plty, sbfis, slly mmca, tr slty ip.





W a

mmca, tr slty ip.

Sh: m gy, gy gn ip, tr red brn, plty, sbfis, slly mmca, tr slty ip.

Sh: m gy, gy gn ip, tr red brn, plty, sbfis, slly mmca, tr slty ip / occ intbd Ss strgs, lt - m gy, gy gn, vf gred, sb ang, w srt, calcs & cly cmt, shy, tt, no shows.

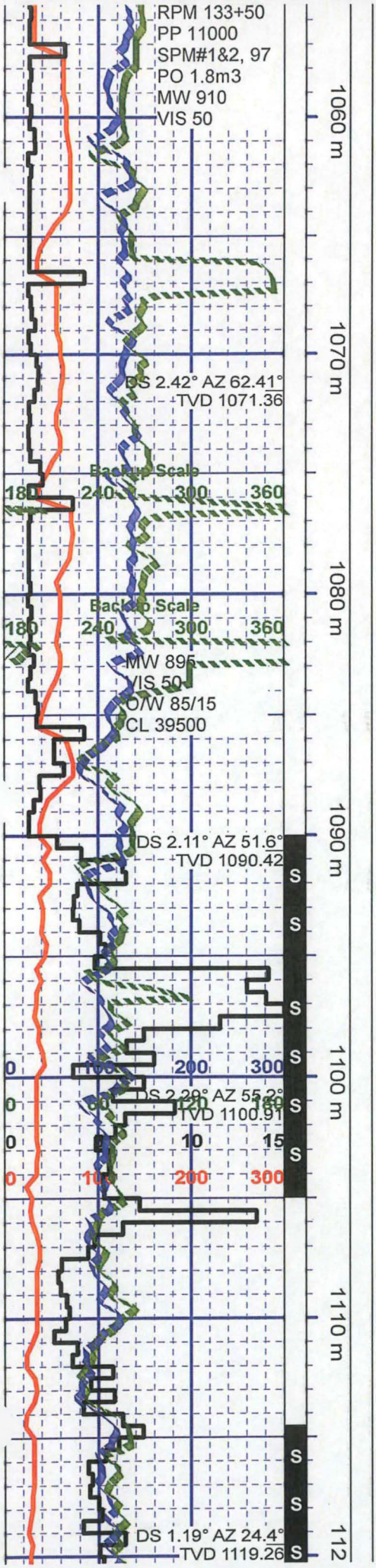
Sh: m gy, gy gn ip, tr red brn, plty, sbfis, slly mmca, tr slty ip / occ intbd Ss strgs, lt - m gy, gy gn, vf gred, sb ang, w srt, calcs & cly cmt, shy, tt, no shows.

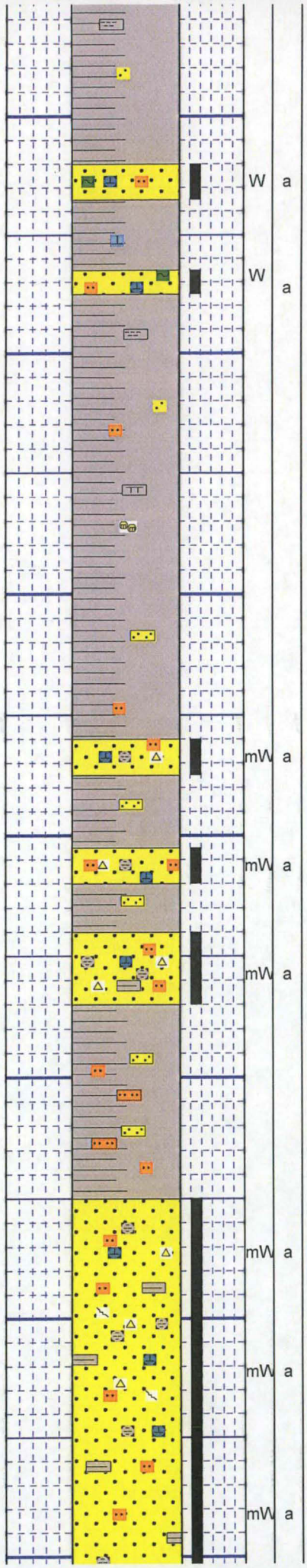
Sh: m gy, gy gn ip, tr red brn, plty, sbfis, slly mmca, tr slty ip / occ 5% intbd Ss strgs, lt - m gy, gy gn, vf gred, sb ang, w srt, calcs & cly cmt, shy, tt, no shows.

Sh: lt - m gy, sbfis ip, slly mmca, occly slty, slly calcs ip, grds to shy slty ip, tr fros calc (mnr fracs) tr mnr lt gy clyst strgs, tr mnr Ss strgs aa.

Ss: lt gy, vf gred, sb ang, w srt, calcs & cly cmt, tr dk lit grs, grds to sdy sltst ip, slty, shy, tt, no shows.

Sh: predly m gy, sbfis ip, slly mmca, occly slty, slly calcs ip, grds to shy slty ip, tr mnr Ss strgs aa.





Sh: predly m gy, sbfis ip, slly mmca, occ slly wxy tex, occly slty, slly sdy ip / occ intbd clyst lt gy, sft, slly calcs.

Ss: lt gy, vf gred, sb ang, w srt, qtz & lt cold cht, calcs & cly cmt, slty, shy, p tr glauic, tr dk lit grs, occly grds to sdy sltst, no vis por, no shows.

Sh: lt - m gy, sbfis ip, slly mmca, occ slly wxy tex, occly slty, tr sdy / occ intbd clyst lt gy, sft, slly calcs, grds to mrlst ip.

Sh: aa

Ss: lt gy, vf gred, sb ang, modly w srt, qtz & lt cold cht, calcs & cly cmt, tr mnr dk lit grs, slty, occly shy, no vis por or shows.

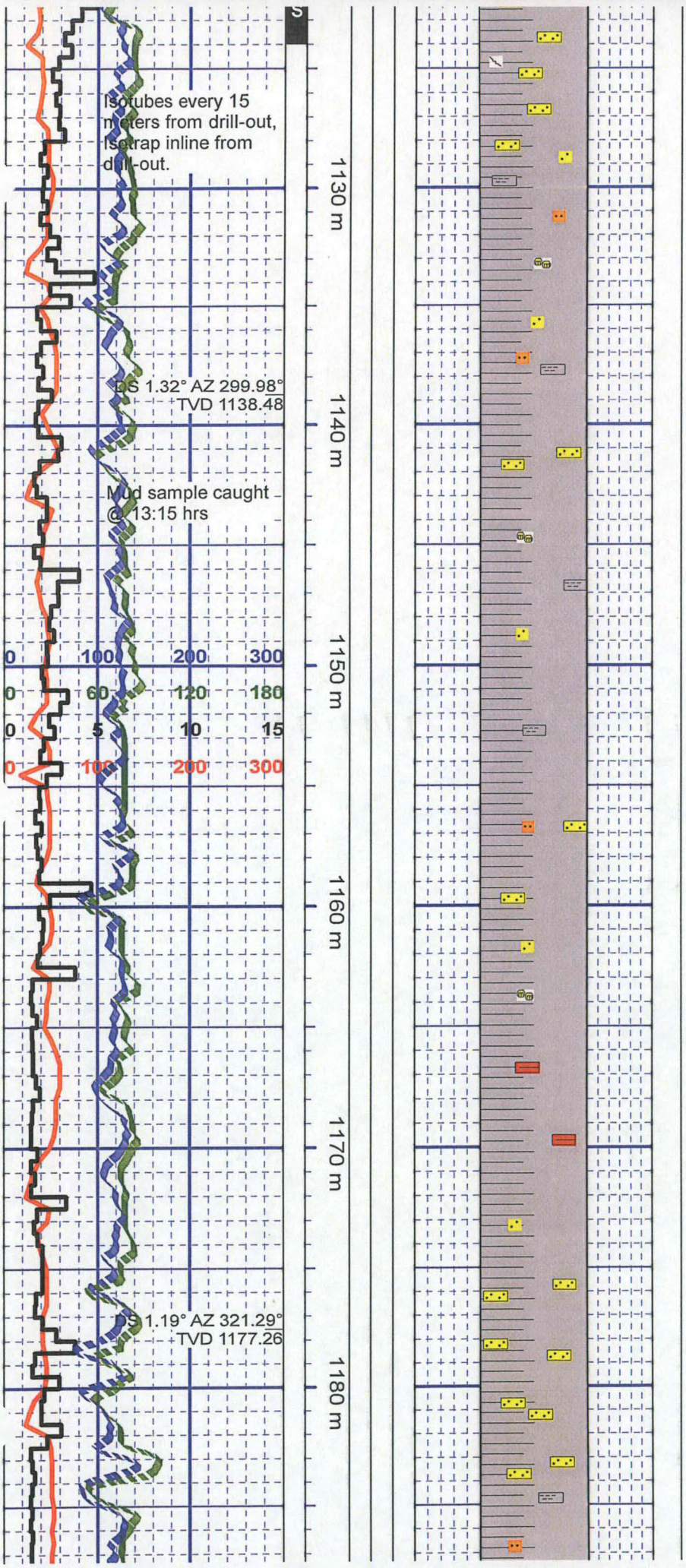
Ss: lt gy, vf gred, sb ang, modly w srt, qtz & lt cold cht, calcs & cly cmt, tr mnr dk lit grs, slty, occly shy, no vis por or shows.

Sh: aa / abnt crm clyst, sft, calcs, grds to mrlst ip, occly sdy & slly slty.

Ss: lt gy, vf gred, sb ang, modly w srt, qtz & lt cold cht, calcs & cly cmt, tr mnr dk lit grs, slty, occly grds to sdy sltst ip, occly shy, no vis por or shows.

Ss: aa, occ red brn ss, fer, tr fros calc in sample indicating fracs.

Ss: lt gy, vf gred, sb ang, modly w srt, qtz & lt cold cht, calcs & cly cmt, tr mnr dk lit grs, slty, occly shy, slly sidic ip, no vis por or shows.



Sh: m gy / mnr lt & dkr gy, sbfis ip, occly slty & sdy, slly mmca, occ intbd lt gy & rust gy clyst, v sft, occly grds to mrlst ip, fros calc in sample ab.

Sh: m gy / mnr lt & dkr gy, sbfis ip, occly slty & sdy, slly mmca, occ intbd lt gy clyst, v sft, occly grds to mrlst ip.

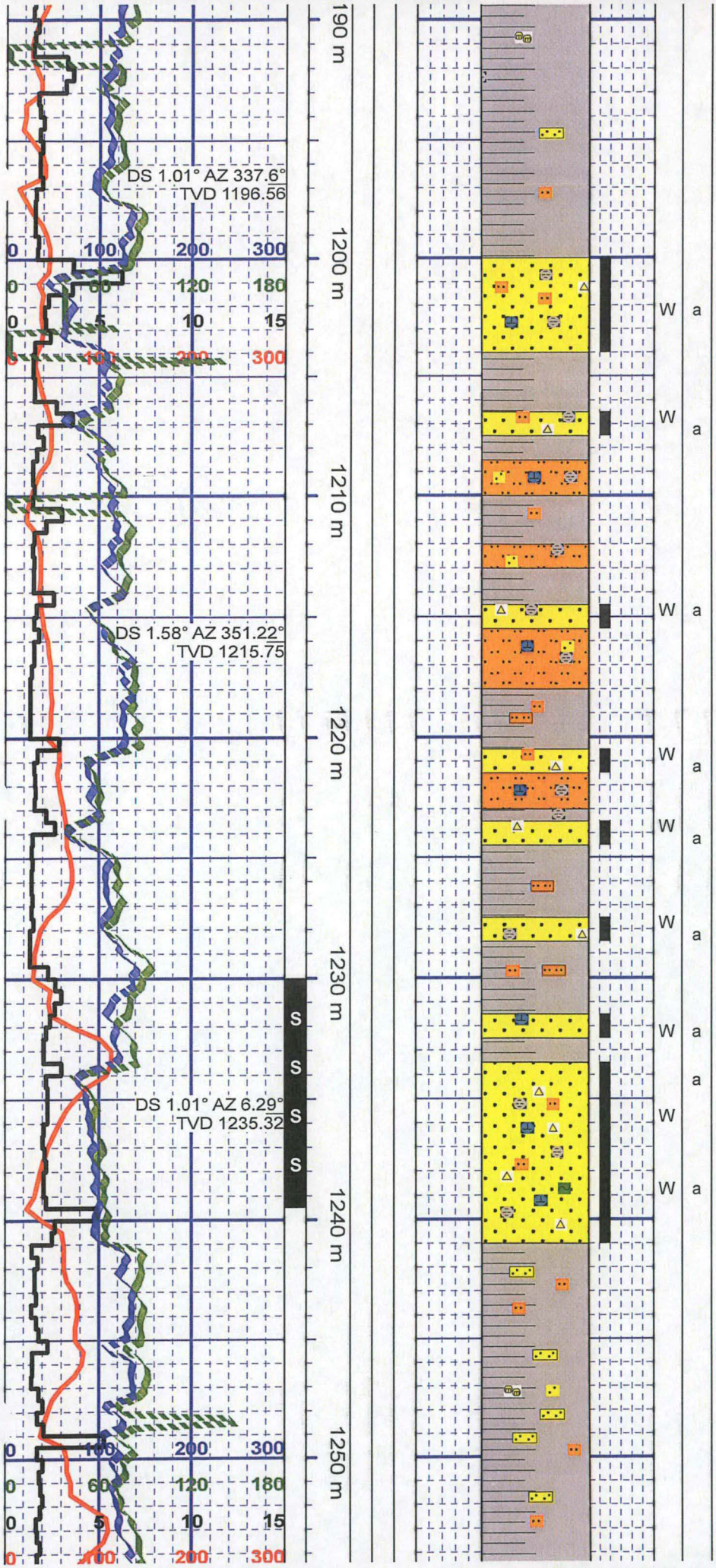
Sh: m gy / mnr lt & dkr gy, sbfis ip, occly slty & sdy, slly mmca, occ intbd lt gy clyst, v sft, occly grds to mrlst ip / mnr Ss strgs aa.

Sh: m gy / mnr lt & dkr gy, sbfis ip, occly slty & sdy, slly mmca, tr clyst aa / 10% intbd Ss strgs aa.

Sh: aa, tr mnr red gy fer sh strgs.

Sh: aa / 10-15% Ss strgs crm - lt gy, vf gred, sb ang, w srt, qtz & lt cold cht, calcs & cly cmt, tr dk lit grs, slty, shy, tt, no shows.

Sh: lt - m gy, mnr dk gy aa.



Sh: m - dk gy, sbfis ip, slly carb, slly mmca, slty & tr sdy ip, occly grds to shy sltst ip / 5% Ss strgs aa.

Ss: crm, vf gred, sb ang, w srt, qtz & lt cold cht, calcs & cly cmt, slty, p tr dk lit grs, p tr arkic, no vis por or shows.

Sltst: lt - m gy, cly cmt, calcs ip, shy, sdy, grds to vf gred ss ip, tr dk lit grs, tt, no shows.

Sltst: lt - m gy, cly cmt, calcs ip, shy, sdy, grds to vf gred ss ip, tr dk lit grs, tt, no shows.

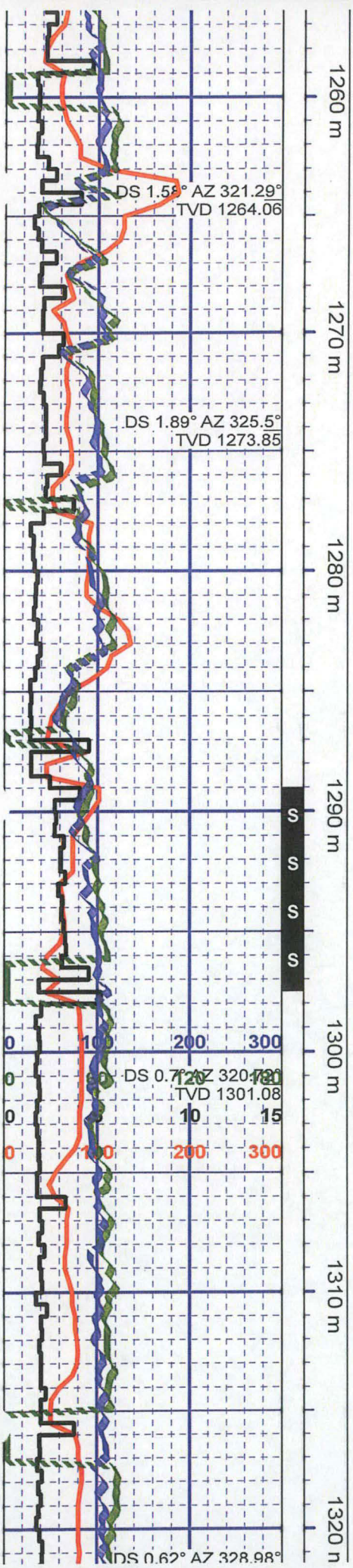
Sltst: lt - m gy, cly cmt, calcs ip, shy, sdy, grds to vf gred ss ip, tr dk lit grs, tt, no shows.

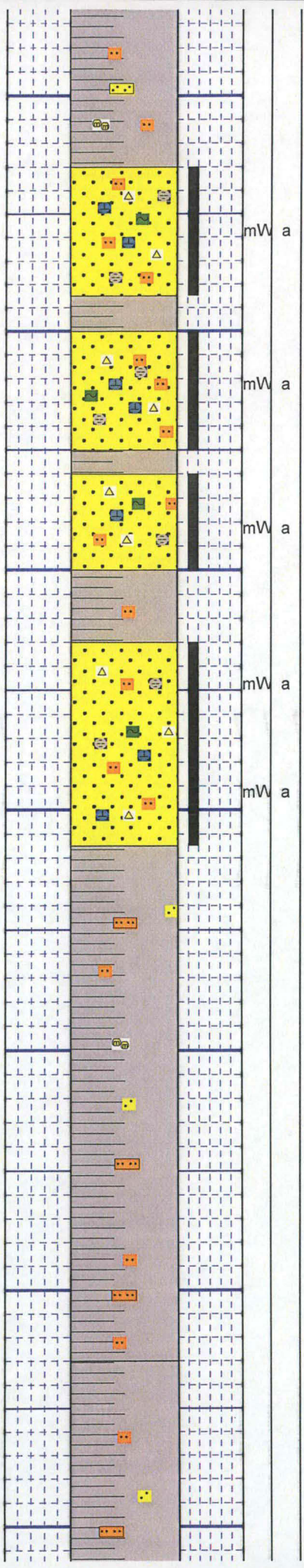
Sh: m - occly dk gy, sbfis ip, slly carb ip, occly v slty, tr sdy, slly mmca, slly wxy tex ip.

Ss: v lt gy, vf gred, sb ang, w srt, qtz & lt cold cht, calcs & cly cmt, slty, shy ip, tr dk lit grs, p tr glauic, grds to sltst, tt, no shows.

Sh: m - occly dk gy, sbfis ip, slly carb ip, occly v slty, tr sdy, slly mmca, slly wxy tex ip.

Sh: m - occly dk gy, sbfis ip, slly carb ip, occly v slty, tr sdy, slly mmca, slly wxy tex ip.





glauic, grds to sltst, tt, no shows.

Ss: v lt gy, vf gred, sb ang, modly w srt, qtz & lt cold, calcs & cly cmt, tr glauic, slty, shy, tr dk lit grs, tt, no shows.

Ss: lt gy, vf gred, sb ang, modly w srt, qtz & lt cold, calcs & cly cmt, tr glauic, slty, shy ip, tr dk lit grs, tt, no shows.

Ss: lt gy, vf gred, sb ang, modly w srt, qtz & lt cold, calcs & cly cmt, tr glauic, slty, shy ip, tr dk lit grs, tt, no shows.

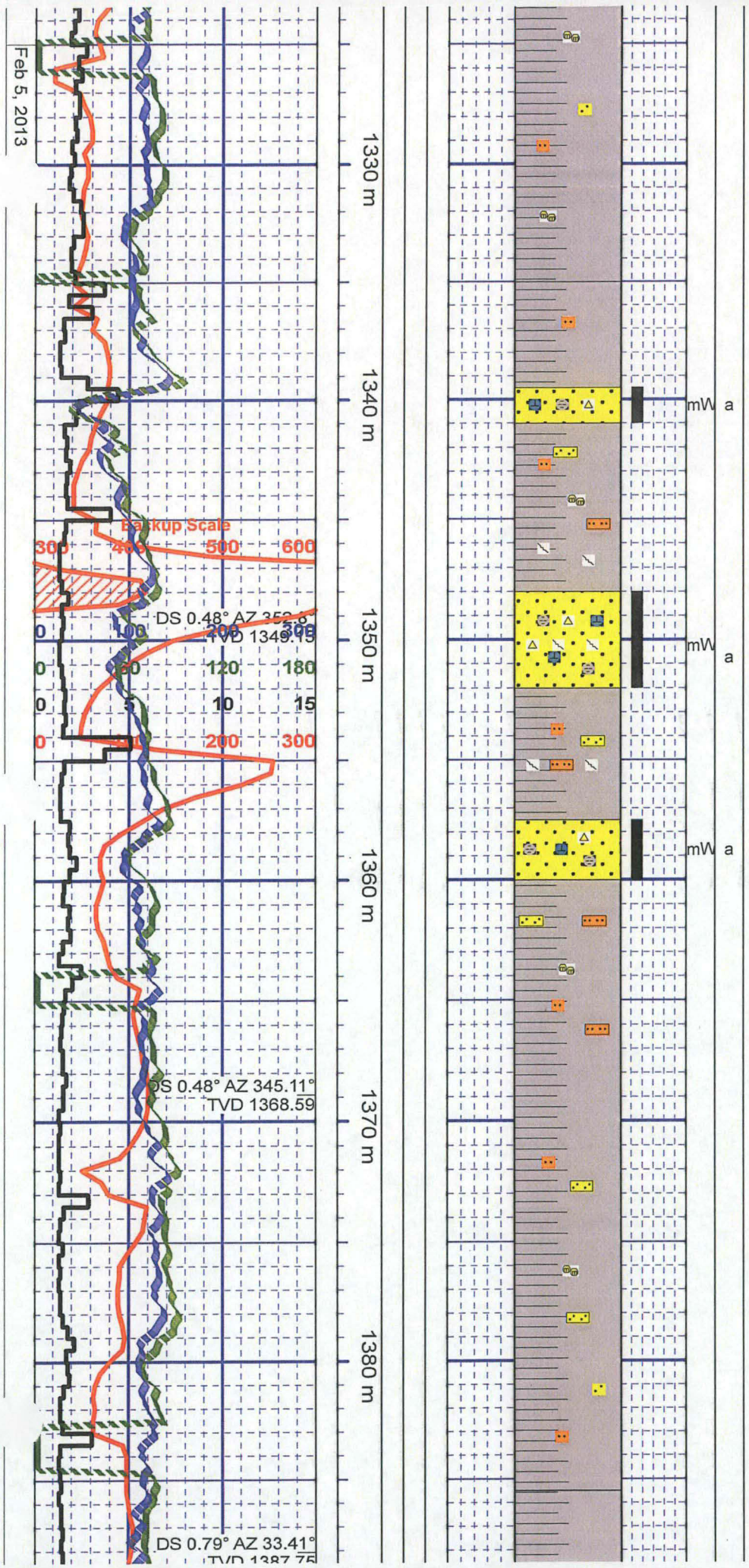
Ss: lt gy, vf gred, sb ang, modly w srt, qtz & lt cold, calcs & cly cmt, tr glauic, slty, shy ip, tr dk lit grs, tt, no shows. Occly grds to sdy Sltst ip.

Sh: m gy, blky, slty, sdy ip, slly mmca, grds to shy sltst ip.

Sh: m gy, blky, slty, sdy ip, slly mmca, grds to shy sltst ip.

Sh: m gy, blky, slty, sdy ip, slly mmca, grds to shy sltst ip.

Sh: m gy, blky, slty, sdy ip, slly mmca, grds to shy



Sh: m gy, blky, slty, sdy ip, slly mmca, grds to shy sltst ip.

Sh: m gy, blky, slty, sdy ip, slly mmca, grds to shy sltst ip.

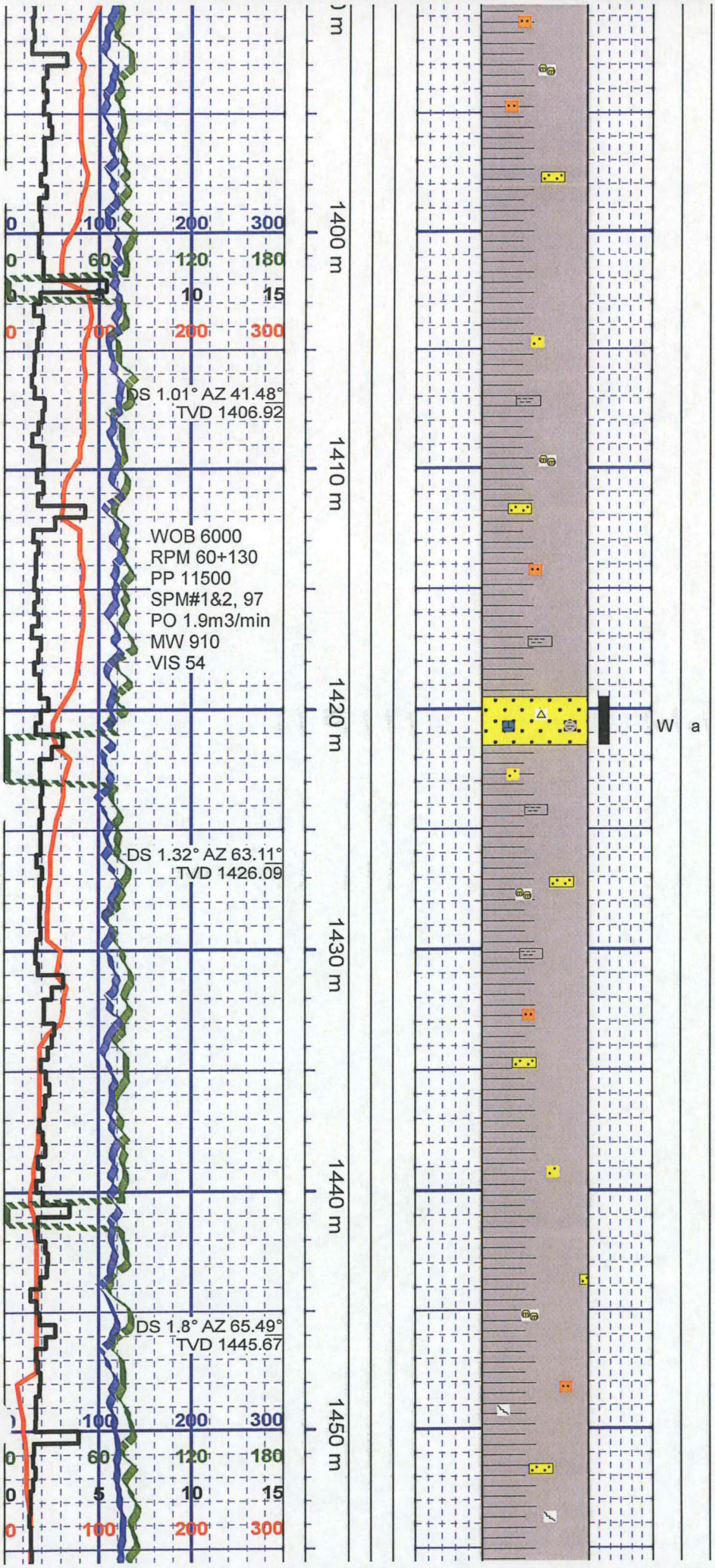
Ss: lt gy, vf gred, sb ang, modly w srt, qtz & lt cold, calcs & cly cmt, tr glauic, slty, shy ip, tr dk lit grs, tr fros calc (fracs)no vis por, no shows.

Ss: lt gy, vf gred, sb ang, modly w srt, qtz & lt cold, calcs & cly cmt, tr glauic, slty, shy ip, tr dk lit grs, tr fros calc (fracs)no vis por, no shows.

Sh: m gy, dk gy ip, sbfis ip, slly mmca, occly slty, tr sdy, slly carb ip / 10% Ss aa.

Sh: m gy, dk gy ip, sbfis ip, slly mmca, occly slty, tr sdy, slly carb ip / 5% Ss strgs aa.

Sh: m gy, dk gy ip, sbfis ip, slly mmca, occly slty, tr sdy, slly carb ip / 5% Ss strgs aa.



Sh: m gy, dk gy ip, sbfis ip, slly mmca, occly slty, tr sdy, slly carb ip / 5% Ss strgs aa.

Sh: m gy, dk gy ip, sbfis ip, slly mmca, occly slty, tr sdy, slly carb ip / 5% Ss strgs aa.

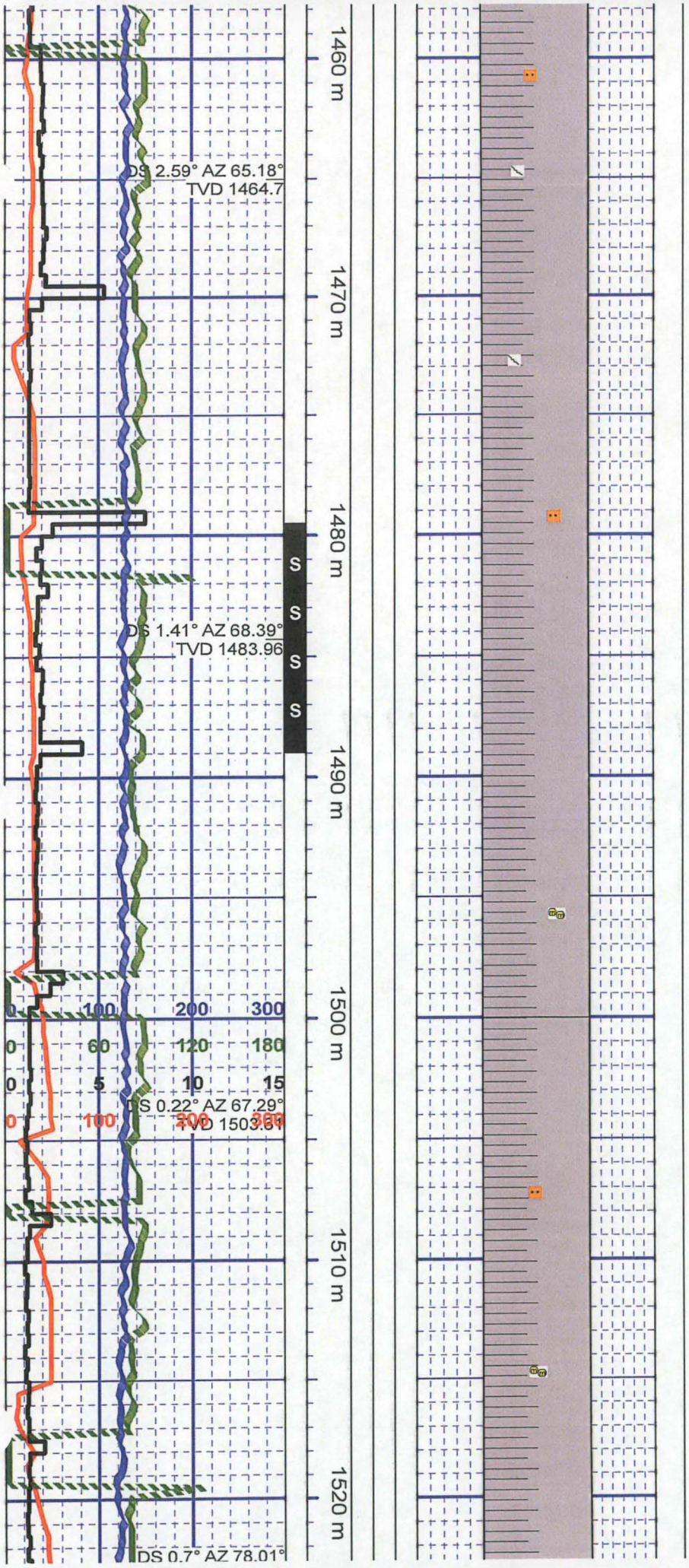
Sh: aa

Ss: lt gy, l vf gred, sb ang, w srt, qtz & lt cold cht, calcs & cly cmt, slty, shy ip, tr dk lit grs, grds to sdy sltst ip, tt, no shows

Sh: m gy, dk gy ip, sbfis ip, slly mmca, occly slty, tr sdy, slly carb ip / occ lt gy Clyst, sft, occly slty, slly calcs ip, grds to mrlst ip / 5% Ss strgs aa.

Sh: m gy, mnr dk gy ip, sbfis ip, slly mmca, occly slty, tr sdy, slly carb ip, tr mnr SS lams aa.

Sh: m gy, mnr dk gy, sbfis ip, slly mmca, tr slty ip / tr fros calc in sample (mnr fracs?)



Sh: m - occly dk gy, plty, fis, slly mmca, slly wxy tex, tr slty ip.

Sh: m - occly dk gy, plty, fis, slly mmca, slly wxy tex, tr slty ip.

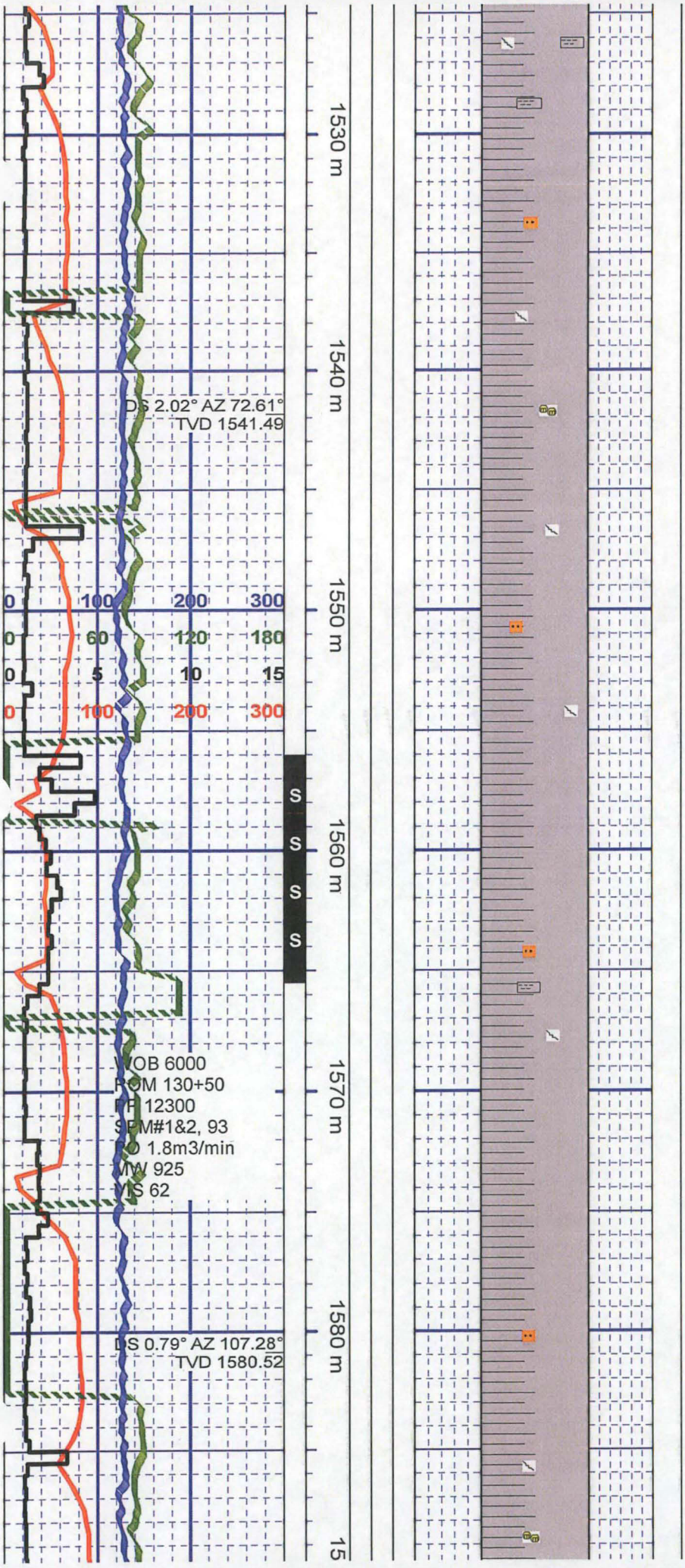
Sh: m - occly dk gy, plty, fis, slly mmca, slly wxy tex, tr slty ip.

Sh: m - occly dk gy, plty, fis, slly mmca, slly wxy tex, tr slty ip.

Sh: m - occly dk gy, plty, fis, slly mmca, slly wxy tex, tr slty ip.

Sh: m - dk gy, sbfis, slly mmca, slly wxy tex, tr slty ip.

Sh: m - dk gy, sbfis, slly mmca, slly wxy tex, tr slty ip.



Sh: m - dk gy, sbfis, slly mmca, slly wxy tex, tr slty ip / mnr Clyst strgs aa / tr fros calc in sample from pos fracs.

Sh: predly m gy, plty, sbfis, slly mmca, p tr slty ip, tr clyst aa, tr fros calc aa.

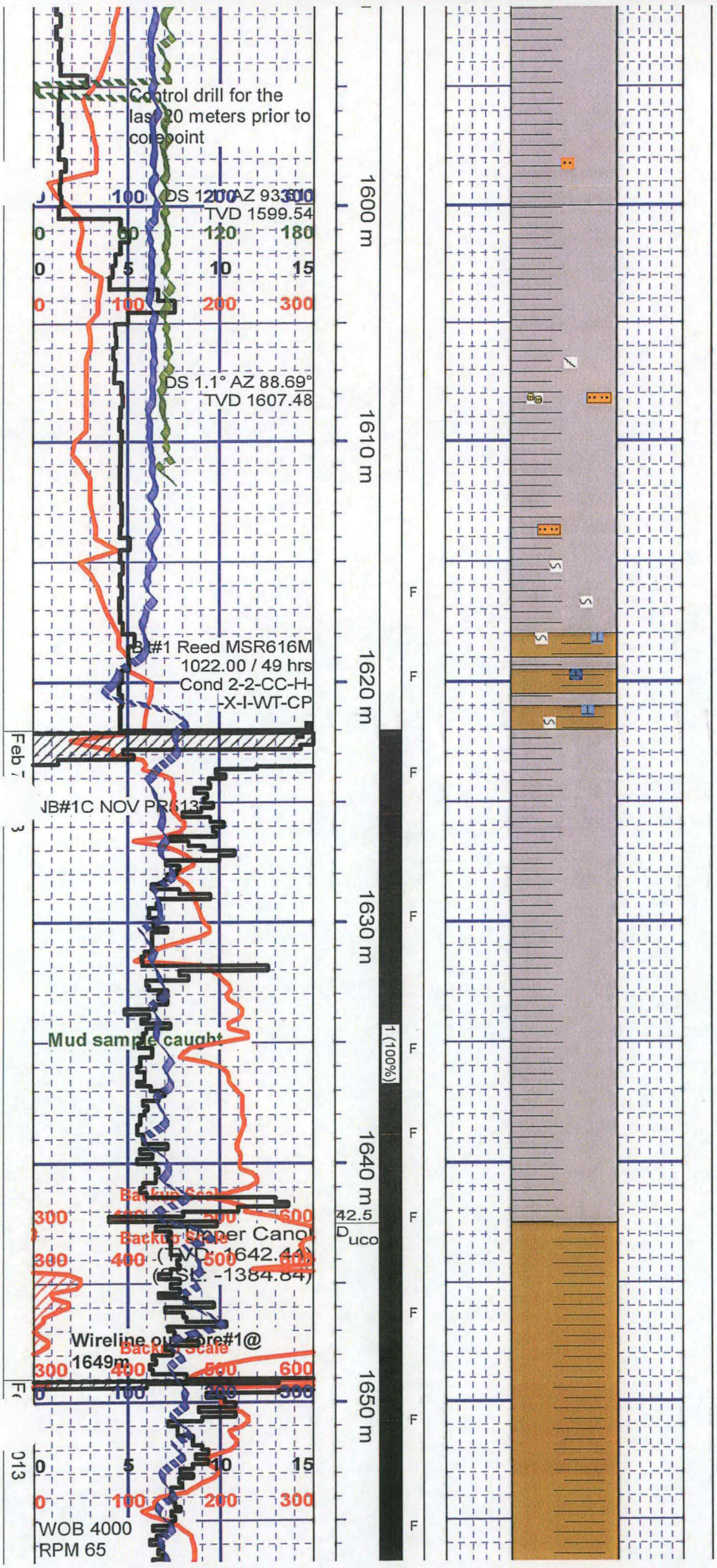
Sh: aa.

Sh: predly m gy, plty, sbfis, slly mmca, p tr slty ip, tr clyst aa, tr fros calc aa.

Sh: predly m gy, sbfis, slly mmca, p tr slty ip, tr clyst aa, tr fros calc aa.

Sh: predly m gy, mnr dk gy, predly sbfis, slly mmca, tr slty ip.

Sh: predly m gy, incrg dk gy, predly sbfis, slly mmca, tr slty ip, tr mnr fros cxln calc (fracs?)



Sh: m - dk gy, predly sbfis, slly mmca, tr slty ip.

Sh: aa / tr calc aa / tr mnr Sltst strgs, lt gy, sdy, cly cmt, tr calcs, grds to vf gred ss ip, tt, no shows.

Sh: aa / tr mnr Sh m gy brn, blky, bcmg slly bits, yel flor in solvent.

Sh: aa / Sh m - dk gy brn, blky, bits, sft, calcs, tr pyr, flor yel in solvent.

1623.5 **Sh:** dk gy, sbfis, slly mmca, frm - hd, sils? no dry flor, slow pale yel cut with solvent.

CORE#1 FROM 1622 - 1649m

Sh: 1629.5m, dk gy, sbfis, slly mmca, frm - hd, sils? flor aa.

1634.0 **Sh:** dk gy, sbfis, slly mmca, frm - hd, modly brit, sils? tr mnr carb mat (pl rmns?) flor aa.

1637.0 **Sh:** dk gy, sbfis, slly mmca, frm - hd, modly brit, sils? tr pyr, flor aa.

1641.5 **Sh:** dk gy, sbfis, slly mmca, frm - hd, modly brit, slly bits, slly sils? tr small pyr nods, abnt spg spics, flor aa.

1643 **Sh:** aa occly abnt dism pyr inf / frac infilled / fros m xln calc

Upper Canol
(TVD: 1642.44)
(SSL: -1384.84)

1644.5 **Sh:** dk gy, dk gy brn, bri[illegible] bits, occ spics aa, show aa incrg flor, hydc odor.

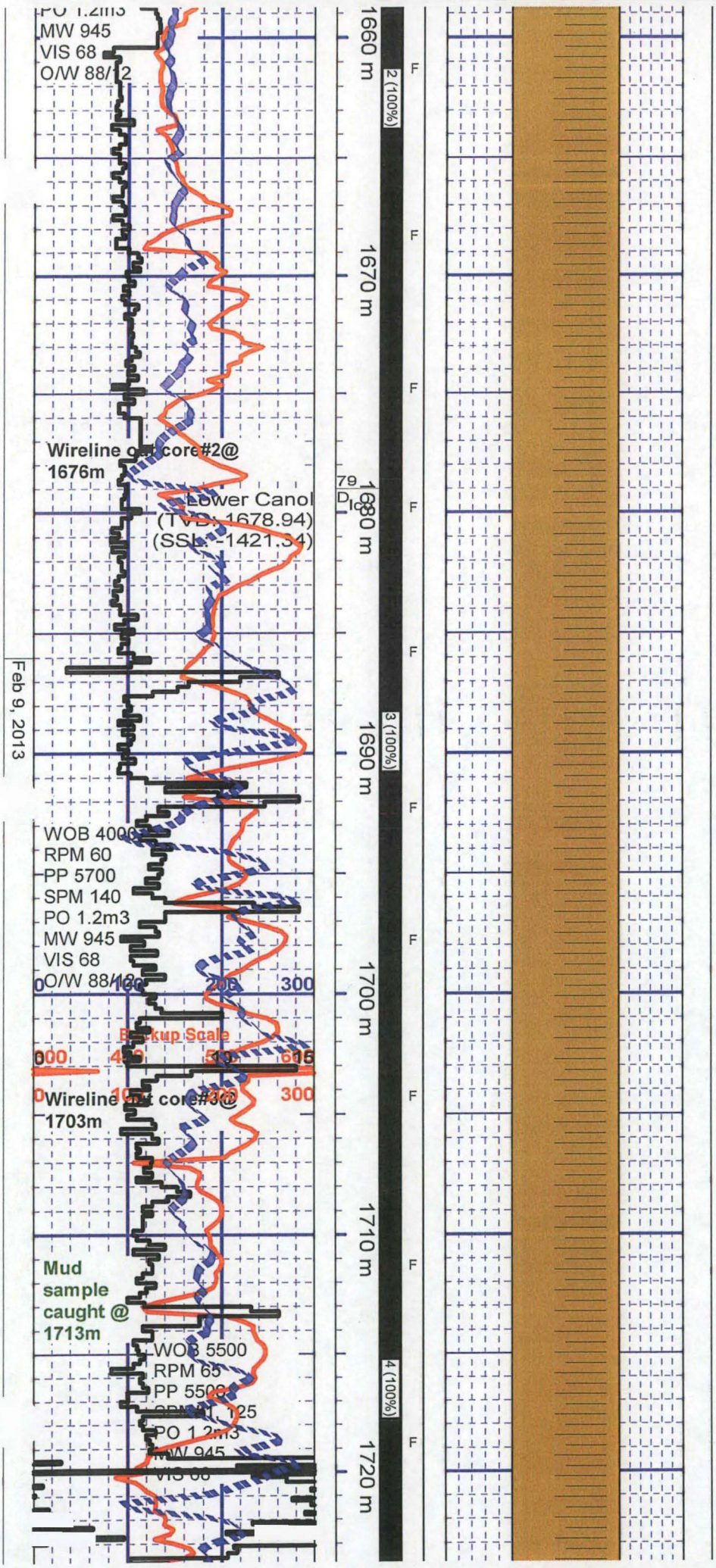
1646 **Sh:** dk gy, dk gy brn, slly calcs, slly bits, occ spics aa, show aa, hydc odor aa

1647.5 **Sh:** dk gy - dk gy brn, slly bits, tr spics, slly calcs, shows aa.

Sh: dk gy, grds to dk gy brn ip, sbfis, slly mmca, v slly calcs, p tr pyr, tr mnr carb mat, no dry flor, pale slow yel cut.

Sh: dk gy, grds to dk gy brn ip, sbfis, slly mmca, v slly calcs, p tr pyr, incrg org carb mat, no dry flor,

Sh: m gy brn, sbfis, slly mmca, slly bits, mnr carb mat, no dry flor, v faint pale slow yel cut.



slow vel cut.

Sh: gy brn, sbfis, slly mmca, slly bits, mnr org carb mat, no dry flor, v faint pale slow yel cut.

CORE#2 FROM 1649 - 1676m

Sh: gy brn, sbfis, slly mmca, slly bits, mnr org carb mat, tr slly slty, tr dism pyr, no dry flor, v faint pale slow yel cut.

Sh: gy brn, sbfis, slly mmca, slly bits, mnr org carb mat, tr slly slty, no dry flor, v faint pale slow yel cut.

Sh: gy brn, sbfis, slly mmca, slly bits, mnr org carb mat, tr slly slty, tr dism pyr, no dry flor, v faint pale slow vel cut.

Sh: gy brn, sbfis, slly mmca, slly bits, mnr org carb mat, tr slly slty, tr dism pyr, no dry flor, v faint

Sh: gy brn, sbfis, slly mmca, slly bits, mnr org carb mat, tr slly slty, no dry flor, v faint pale slow vel cut.

Sh: gy brn, fis, slly mmca, frm - hd, bcmg sils? slly bits, mnr org carb mat, tr slly slty, no dry flor,

CORE#3 FROM 1676.0 - 1703.0m
CUT:27.0M, REC: 27.0m

Lower Canol
(TVD: 1678.94)
(SSL: -1421.34)

Sh: dk gy brn, fis, slly mmca, fr bcmg brit, carb org mat, faint shows aa.

Sh: aa, incrg dism pyr, micro fracs infilled / pyr.

Sh: gy brn, fis, slly mmca, frm - hd, slly sils? occly brit, sh lamd / pyr, tr lamd / sdy sh ip, faint shows aa.

Sh: aa, abnt dism pyr, abnt unident fos (pl rmn) casts lined / carb mat, tr spics?

Sh: gy brn, fis, slly mmca, frm - hd, sils? brit, carb org mat, tr pyr aa, faint shows aa.

Sh: dk gy brn - blk, sils, brit, hd, tr unident fos casts? mnr pyr aa, faint show aa.

Sh: dk gy brn, aa, sils? , tr occly specd / lt & dk rdd cht, shows aa.

Sh: dk gy brn, sils, hd, brit, slly mmca, dism pyr, tr micro fracs, v faint slow pale yel cut.

Sh: dk gy - dk gy brn, fis, splty, mmca incrg slly, sils? dism pyr, abnt carb org mat, no dry flor, slow pale yel stmg cut. No vis o bldg from core thru.

Sh: aa, abnt dism pyr.

Sh: dk gy brn, hd, sbfis, slly mmca, mnr dism pyr, mnr carb org mat, faint flor aa.

CORE#4, 1703.0 - 1730.0m, Cut: 27.0m, Rec: 27.0m

Sh: dk gy brn, hd, sils?, slly mmca, dism pyr, mnr carb org mat, unident fos casts, (brac?) faint flor aa.

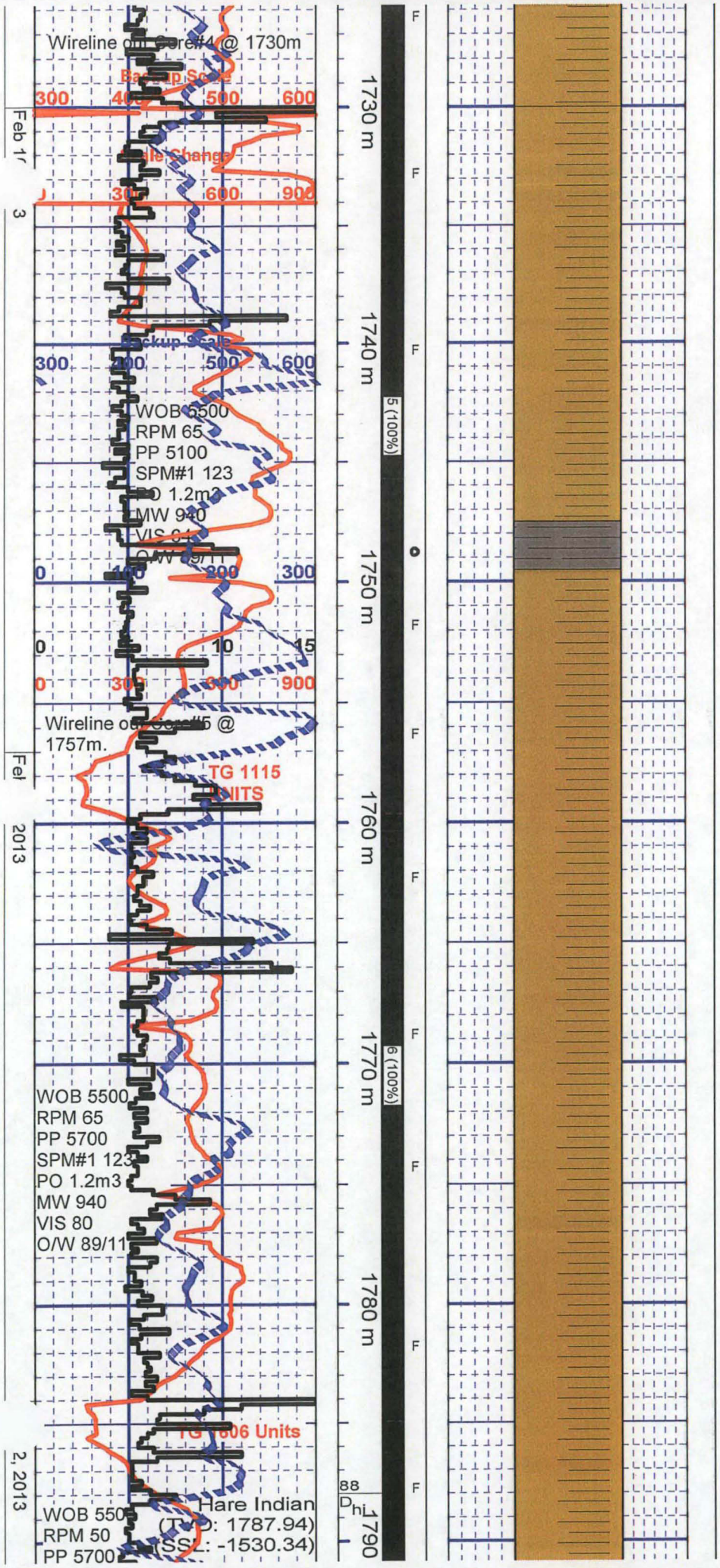
Sh: dk gy brn, hd, sils?, slly mmca, dism pyr, mnr carb org mat, faint flor aa.

Sh: dk gy brn, hd, sils?, v slly calcs, slly mmca, dism pyr, mnr carb org mat, mnr thin bioturb lavers. faint flor aa.

Sh: dk gy brn, hd, sils?, v slly calcs, slly mmca, dism pyr, mnr carb org mat, poss hydc odor, faint flor aa.

Sh: aa, hd, brit, lamd / brn cht strgs?

Sh: dk gy brn - occly blk aa, lamd / brn cht strgs



Sh: dk gy brn, hd, brit, sbfis, sils, slly calcs, slly mmca, tr dism pyr, tr org mat aa, tr v slow flor aa.

Sh: dk gy brn, hd, brit, sbfis, sils, slly calcs, slly mmca, tr dism pyr, tr org mat aa, tr v slow flor aa. No vis o bldg from core thru.

Core#5 1730-1757, Cut:27m, Rec:

Sh: dk gy brn, sbfis, slly sils, slly calcs, mmca, no vis pyr, tr org mat aa, slow pale yel stmg cut flor.

Sh: dk gy brn, hd, brit, slly sils? incrg calcs, slly mmca, tr dism pyr, slly calcs, shows aa.

Sh: dk gy brn, aa, incrg calcs, slly mmca, incrg carb org mat, thin fracs infilled / fros vf xln calc, shows aa.

Sh: dk gy brn, calcs, frm, less brit, sbfis, slly mmca, tr dism pyr, mnr carb org mat, flor aa.

Sh: dk gy brn, incrg calcs, frm, sbfis, slly mmca, tr dism pyr, mnr carb org mat, flor aa. Core appeared fracd at end of sleeve.

Sh: aa / strgs bioturb sh, dk gy, brit, tr v small fracs?

Sh: v dk gy brn - blk, carb, occly v calcs, tr small fracs, occ brit, strong hydc odor, wxy lstr with scr, g fast yel stmg cut flor.

Sh: dk gy brn, calcs, frm, sbfis, slly mmca, brit ip, tr dism pyr, mnr carb org mat, flor aa.

Sh: dk gy brn, calcs, frm, sbfis, slly mmca, dism pyr / pyr lamd within sh, abnt carb org mat, flor

Sh: dk gy brn, calcs, frm, sbfis, splty, slly mmca, tr dism pyr, mnr carb org mat, flor aa. No vis o bldg from core thru.

Sh: dk gy brn, calcs, frm, sbfis, slly mmca, thin lamd pyr with sh, mnr carb org mat, flor aa.

Core#6, 1757-1784, Cut:27m, Rec:27m

Sh: dk gy brn - occly blk, slly calcs, hd, brit, fis, carb / carb org mat, slly mmca, mnr dism pyr, flor aa.

Sh: dk gy brn, slly calcs, hd, brit, fis, sils? slly mmca, tr pyr, occ carb org mat, flor aa.

Sh: v dk gy brn, slly calcs, frm - hd, brit, fis, slly mmca, no vis pyr, occ carb org mat, flor aa.

Sh: dk gy brn, slly calcs, frm - hd, sbfis, slly mmca, no vis pyr, occ carb org mat, flor aa.

Sh: dk gy brn, slly calcs, frm - hd, plty, fis, slly mmca, no vis pyr, occ carb org mat, flor aa.

Sh: dk gy brn - blk, slly calcs, frm, sbfis, slly mmca, tr dism pyr, tr micro fracs? occ carb org mat. flor aa.

Sh: dk gy brn, slly calcs, frm - hd, plty, fis, slly mmca, no vis pyr, occ carb org mat, flor aa.

Sh: dk gy brn, slly calcs, frm - hd, plty, sbfis, slly mmca, tr pyr, occ carb org mat, flor aa

Sh: dk gy brn, slly calcs, frm, plty, sbfis, slly mmca, no vis pyr, occ carb org mat, flor aa. No vis o bldg from core thru.

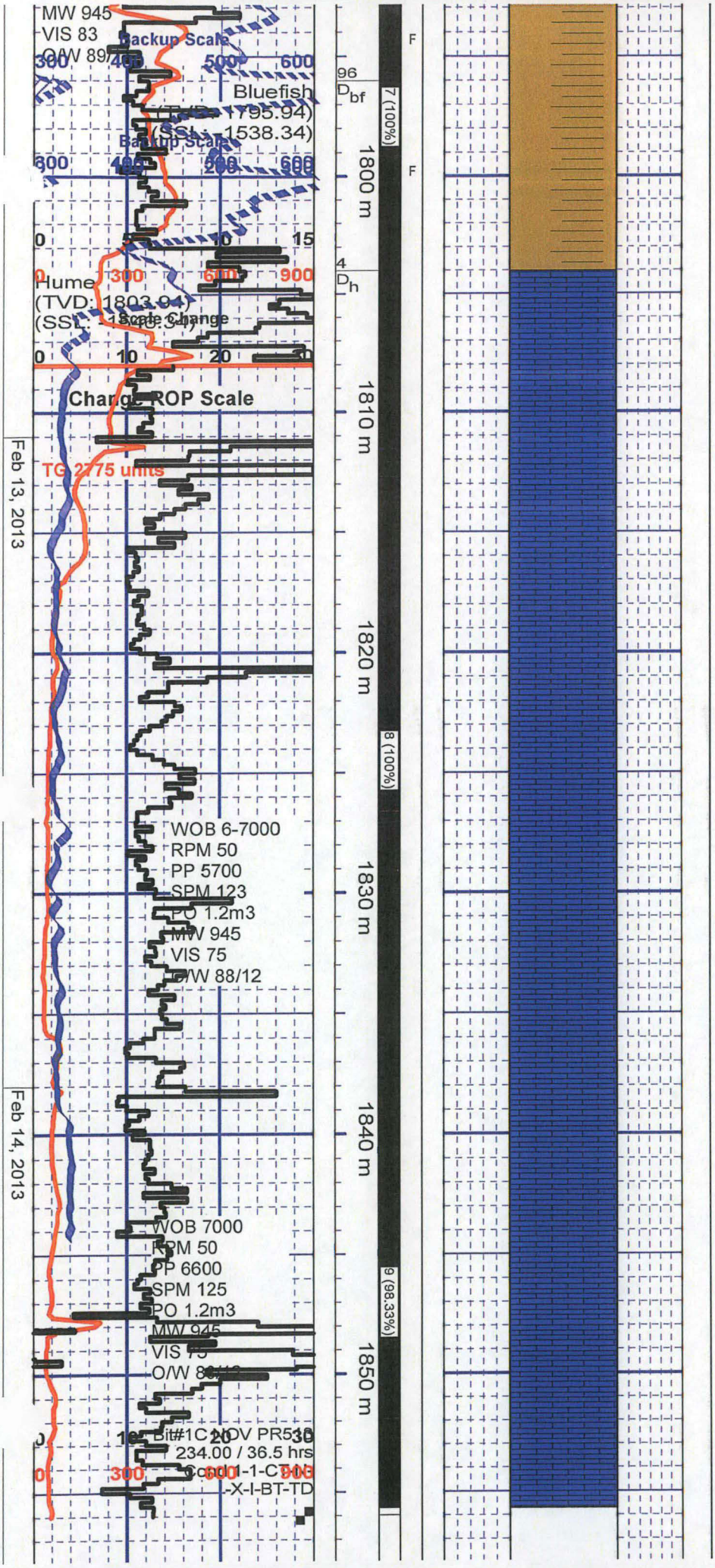
Sh: dk gy brn - v dk gy, plty, fis, slly mmca, slly calcs, abnt carb org mat, slly mmca, abnt dism

Core#7, 1784-1811m, Cut:27, Rec: 27m

Sh: dk gy brn - v dk gy, plty, fis, slly mmca, non calcs, carb org mat. slly mmca. dism pyr lamd

Hare Indian
(TVD: 1787.94)
(SSL: -1530.34)

Sh: v dk gy, plty, fis, slly mmca, abnt carb org



Sh: v dk gy - blk, plty, fis, slly mmca, abnt carb org mat, slly mmca, tr pyr.

Sh: dk gy - dk gy brn, plty, fis, slly mmca, mot / abnt carb org mat, slly mmca, p tr calcs, tr pyr, flor aa.

Bluefish
(TVD: 1795.94)
(SSL: -1538.34)

Sh: dk gy brn, calcs, mmca, abnt unident fos casts, carb mat aa, no dry flor, pale lt yel cloudy cut.

Sh: aa, tr plcy.

Hume
(TVD: 1803.94)
(SSL: -1546.34)

Ls: lt brn, wkest, micr mtx, unident fos casts & frags, no vis por, no shows.

Ls: brn - dk brn, wkest / micr mtx, slly arg, unident fos shad, no vis por, no show

Ls: lt brn, fragl pkst? rexld f - m xln, abnt unident fos shad, no vis por, no show

Ls: lt brn, fragl wkest, micr mtx, unident fos casts infilled / calc, cor?, osts, bracs? no vis por, no show.

Ls: lt brn, fragl wkest, micr mtx, unident fos casts infilled / calc, no vis por, no show.

Ls: m brn, fragl wkest, micr mtx, slly arg, unident fos casts infilled / calc, no vis por, no show.

Ls: brn, fragl wkest, micr mtx, unident fos casts infilled / calc, osts, no vis por, no show.

Ls: brn, mdst - wkest, micr mtx, rexld vf xln, osts, unident fos infilled / fros calc (cor?) no vis por or shows.

Ls: brn, mdst, tr fos aa, dns, no show

Ls: brn, mdst - wkest, micr mtx, rexld vf xln ip, osts, unident fos casts infilled / fros calc, no vis por or shows.

Ls: brn, mdst - wkest, micr mtx, rexld mic - vf xln, osts, unident fos shad, no vis por or shows.

Ls: m brn, mdst, pels, ools, tr unident fos shad, dns, no shows.

Ls: brn, wkest, micr mtx, rexld f -m xln, osts, unident fos casts infilled / fros calc, no vis por or

Ls: brn, mdst - wkest, micr mtx, rexld vf xln, cor?, unident fos shad, no vis por or shows.

Core# 9, 1838 - 1856m.

Ls: brn, mdst - wkest, micr mtx, slly arg, rexld mic - vf xln, unident cor, amph? unident fos shad, no vis por or shows.

Ls: brn, mdst, slly arg, no vis fos, no vis por or shows.

Ls: aa, tr pyric, tr osts, dns, no shows / mnr dk gy - blk, sh lams, plty, fis, carb.

Ls: brn, mdst - wkest, micr mtx, slly arg, rexld mic - vf xln ip, unident fos shad, no vis por or shows.

Ls: brn, mdst - wkest, micr mtx, slly arg, unident fos shad, pels, osts, no vis por or shows

Ls: dk brn, floatstone / nod stroms, lime mud mtx, rexld mic - vf xln, arg, shy ip, unident fos casts, no

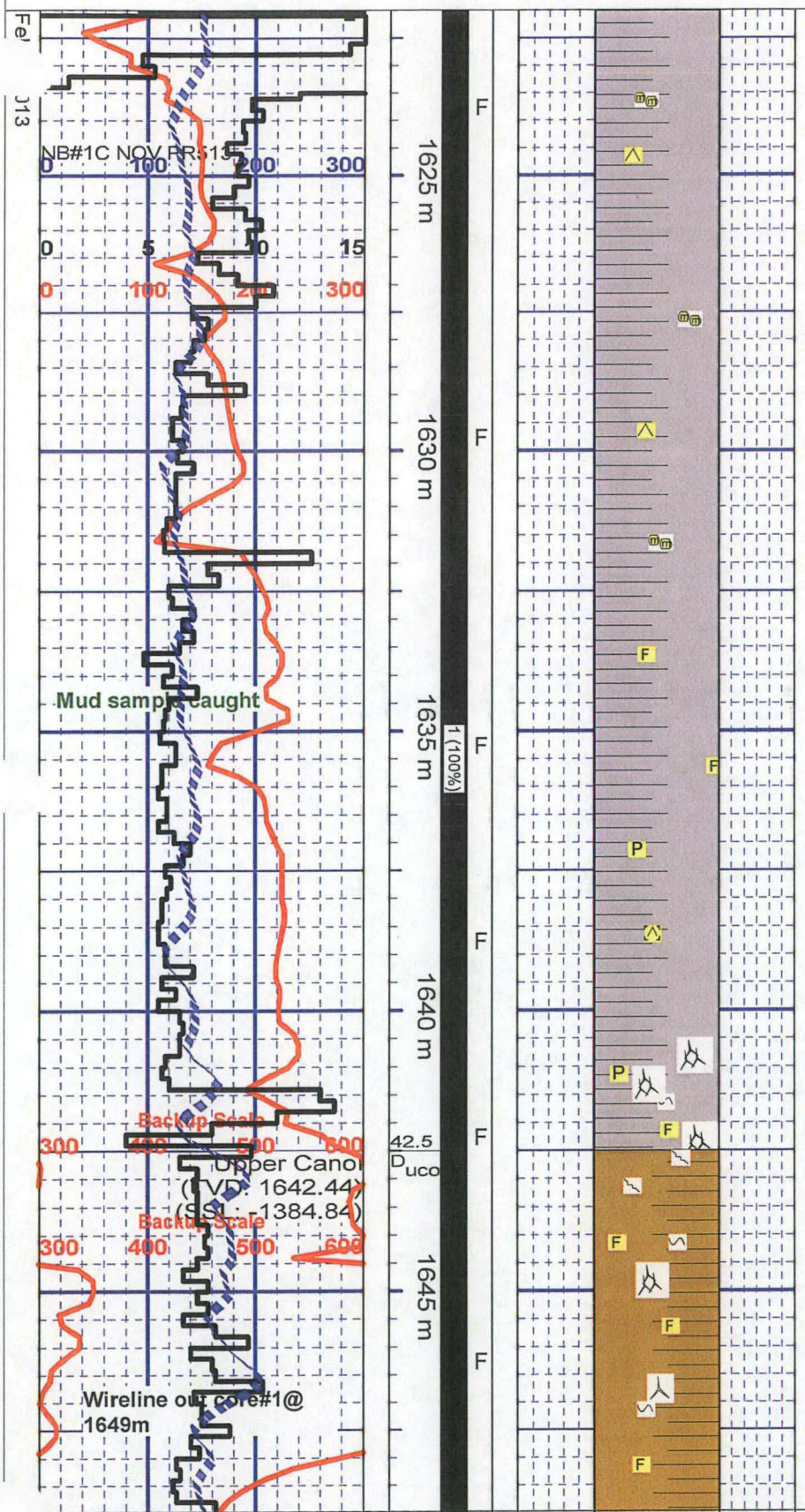
Ls: aa

Ls: brn, mdst - wkest, micr mtx, slly arg, unident fos shad, no vis por or shows.

Date	Drilling Progress	Slide - Rotate	Depth	Core	Oil Shows	Porosity Type	Porosity (%)	Interpreted Lithology	Grain Size	Sorting	Rounding	Lithology Description
	Final gamma (gapi) 0 100 200 300 Gamma Ray (gapi) 0 60 120 180 Drill Rate (min/m) 0 10 20 30 Total Gas (units) 0 300 600 900						5 10 15 20		c snd m snd f snd vf snd			

Expanded Core Log (1:120) Feb 7, 2013

Core #1 Interval: 1622.00m to 1649.00m Cut: 27m Recovered: 27m (100%)



1623.5 **Sh:** dk gy, sbfis, slly mmca, frm - hd, sils? no dry flor, slow pale yel cut with solvent.

CORE#1 FROM 1622 - 1649m

Sh: 1629.5m, dk gy, sbfis, slly mmca, frm - hd, sils? flor aa.

1634.0 **Sh:** dk gy, sbfis, slly mmca, frm - hd, modly brit, sils? tr mnr carb mat (pl rmns?) flor aa.

1637.0 **Sh:** dk gy, sbfis, slly mmca, frm - hd, modly brit, sils? tr pyr, flor aa.

1641.5 **Sh:** dk gy, sbfis, slly mmca, frm - hd, modly brit, slly bits, slly sils? tr small pyr nods, abnt spg spics, flor aa.

1643 **Sh:** aa occly abnt dism pyr inf / frac infilled / fros m xln calc.

Upper Canol
(TVD: 1642.44)
(SSL: -1384.84)

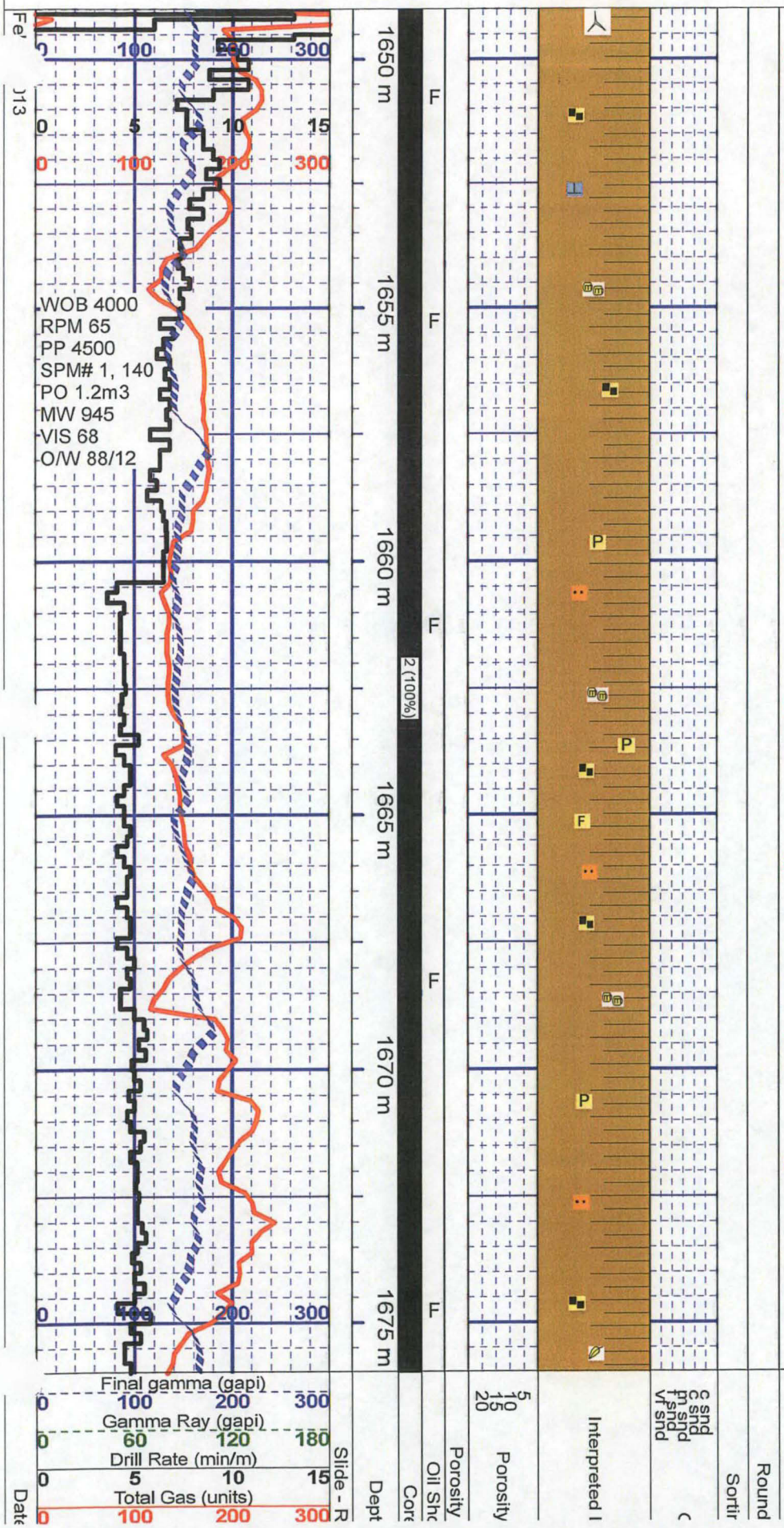
1644.5 **Sh:** dk gy, dk gy brn, brit, slly calcs, slly bits, occ spics aa, show aa incrg flor, hydc odor.

1646 **Sh:** dk gy, dk gy brn, slly calcs, slly bits, occ spics aa, show aa, hydc odor aa.

1647.5 **Sh:** dk gy - dk gy brn, slly bits, tr spics, slly calcs, shows aa.

Expanded Core Log (1:120) Feb 8, 2013

Core #2 Interval: 1649.00m to 1676.00m Cut: 27m Recovered: 27m (100%)



Sh: dk gy, grds to dk gy brn ip, sbfis, slly mmca, v slly calcs, p tr pyr, tr mnr carb mat, no dry flor, pale slow yel cut.

Sh: dk gy, grds to dk gy brn ip, sbfis, slly mmca, v slly calcs, p tr pyr, incrg org carb mat, no dry flor, pale slow yel cut.

Sh: m gy brn, sbfis, slly mmca, slly bits, mnr carb mat, no dry flor, v faint pale slow yel cut.

Sh: m - dk gy, gy brn, sbfis, slly mmca, mnr org carb mat, freq dism pyr, no dry flor, v faint pale slow yel cut.

Sh: gy brn, sbfis, slly mmca, slly bits, mnr org carb mat, no dry flor, v faint pale slow yel cut.

CORE#2 FROM 1649 - 1676m

Sh: gy brn, sbfis, slly mmca, slly bits, mnr org carb mat, tr slly slty, tr dism pyr, no dry flor, v faint pale slow yel cut.

Sh: gy brn, sbfis, slly mmca, slly bits, mnr org carb mat, tr slly slty, no dry flor, v faint pale slow yel cut.

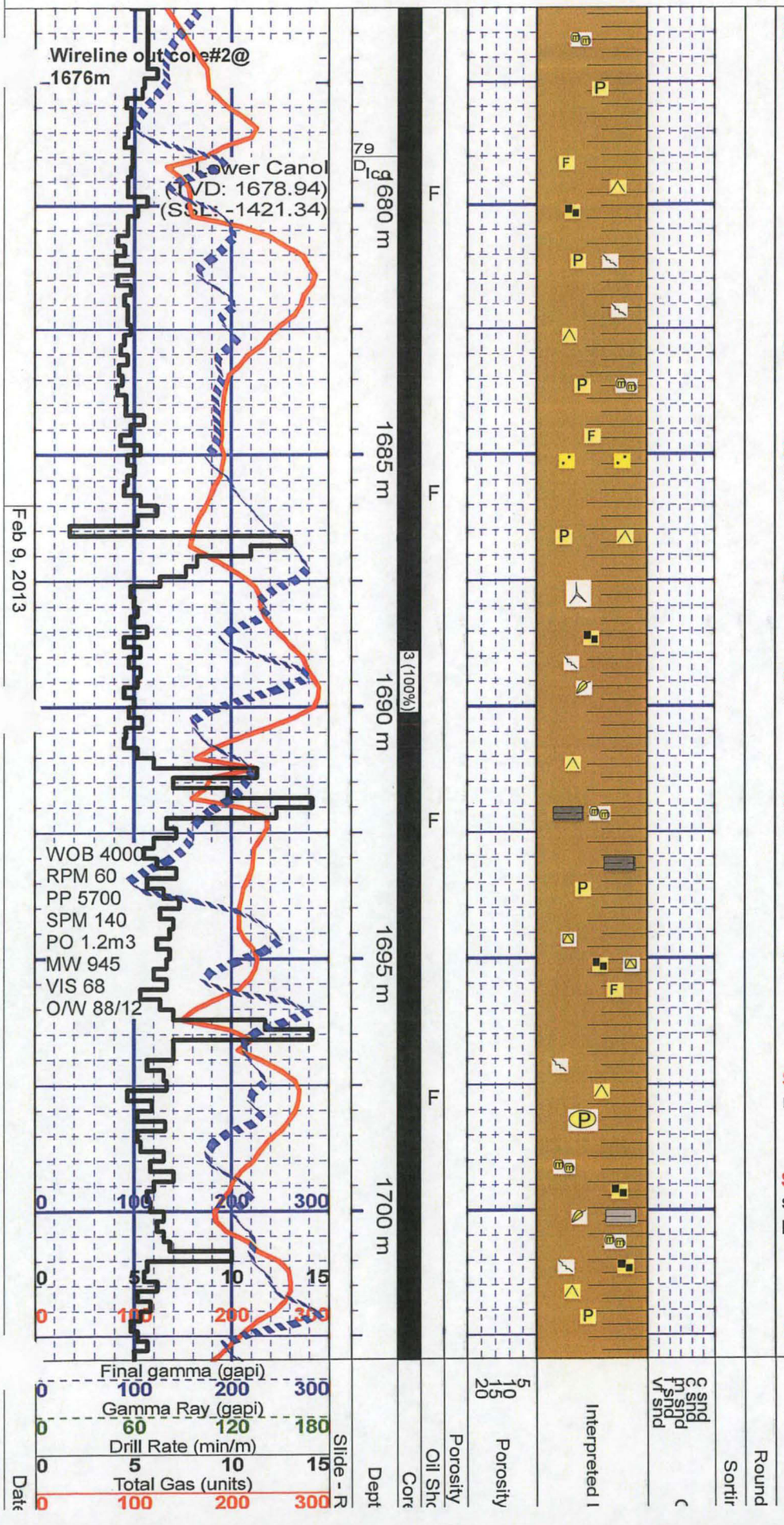
Sh: gy brn, sbfis, slly mmca, slly bits, mnr org carb mat, tr slly slty, tr dism pyr, no dry flor, v faint pale slow yel cut.

Sh: gy brn, sbfis, slly mmca, slly bits, mnr org carb mat, tr slly slty, tr dism pyr, no dry flor, v faint pale slow yel cut.

Sh: gy brn, sbfis, slly mmca, slly bits, mnr org carb mat, tr slly slty, no dry flor, v faint pale slow yel cut.

Expanded Core Log (1:120) Feb 8, 2013

Core #3 Interval: 1676.00m to 1703.00m Cut: 27m Recovered: 27m (100%)



Sh: gy brn, fis, slly mmca, frm - hd, bcmg sils? slly bits, mnr org carb mat, tr slly slty, no dry flor, v faint pale slow yel cut.

CORE#3 FROM 1676.0 - 1703.0m, CUT:27.0M, REC: 27.0m

Lower Canol
(TVD: 1678.94)
(SSL: -1421.34)

Sh: dk gy brn, fis, slly mmca, frm - hd, bcmg sils? bcmg brit, carb org mat, faint shows aa.

Sh: aa, incrg dism pyr, micro fracs infilled / pyr.

Sh: gy brn, fis, slly mmca, frm - hd, slly sils? occly brit, sh lamd / pyr, tr lamd / sdy sh ip, faint shows aa.

Sh: aa, abnt dism pyr, abnt unident fos (pl rmn) casts lined / carb mat, tr spics?

Sh: gy brn, fis, slly mmca, frm - hd, sils? brit, carb org mat, tr pyr aa, faint shows aa.

Sh: dk gy brn - blk, sils, brit, hd, tr unident fos casts? mnr pyr aa, faint show aa.

Sh: dk gy brn, aa, sils? , tr occly specd / lt & dk rdd cht, shows aa.

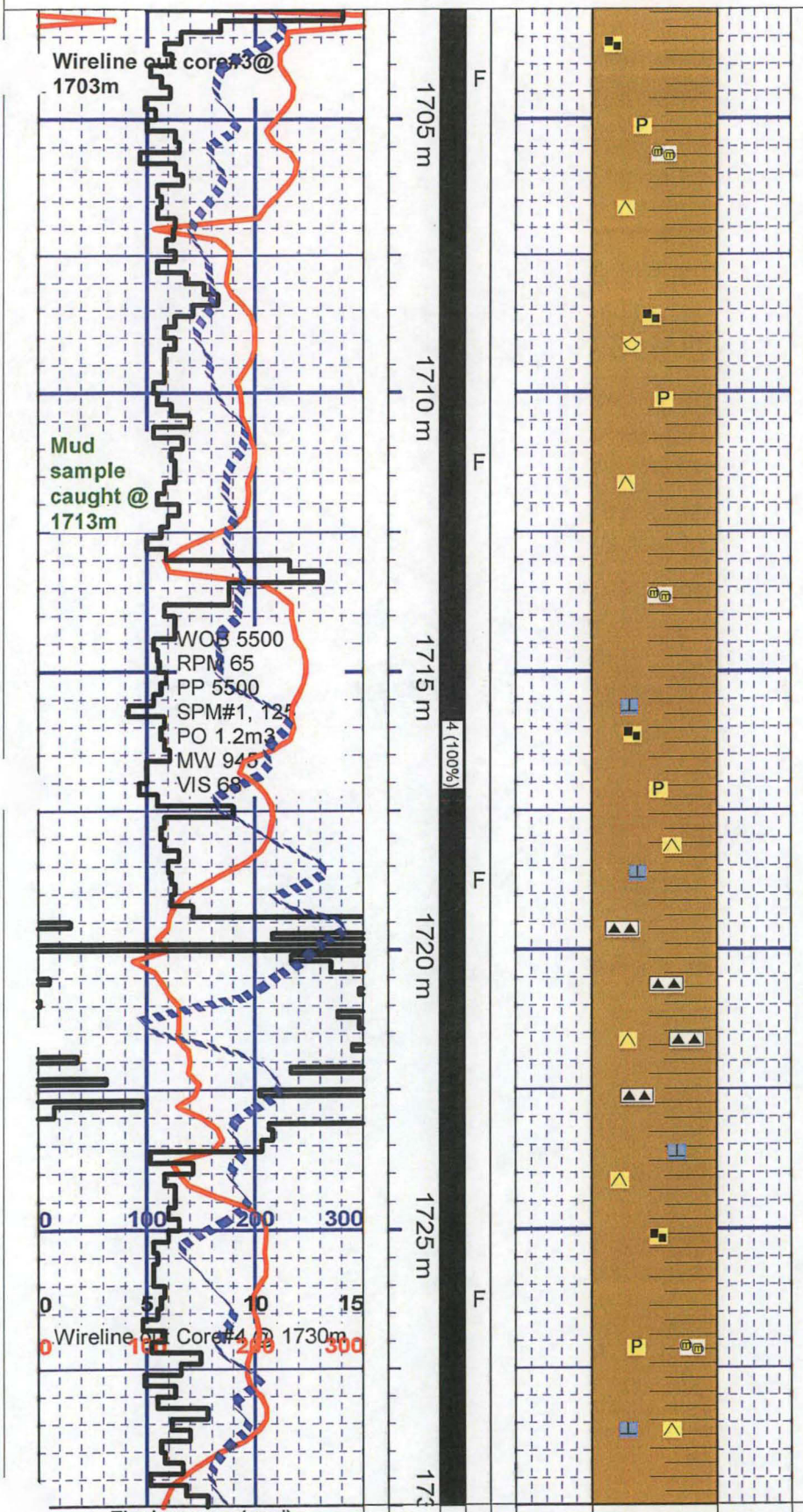
Sh: dk gy brn, sils, hd, brit, slly mmca, dism pyr, tr micro fracs, v faint slow pale yel cut.

Sh: dk gy - dk gy brn, fis, splty, mmca incrg slly, sils? dism pyr, abnt carb org mat, no dry flor, slow pale yel stmg cut. No vis o bldg from core thru.

Sh: aa, abnt dism pyr.

Expanded Core Log (1:120) Feb 9, 2013

Core #4 Interval: 1703.00m to 1730.00m Cut: 27m Recovered: 27m (100%)



Sh: dk gy brn, hd, sbfis, slly mmca, mnr dism pyr, mnr carb org mat, faint flor aa.

CORE#4, 1703.0 - 1730.0m, Cut: 27.0m, Rec: 27.0m

Sh: dk gy brn, hd, sils?, slly mmca, dism pyr, mnr carb org mat, unident fos casts, (brac?) faint flor aa.

Sh: dk gy brn, hd, sils?, slly mmca, dism pyr, mnr carb org mat, faint flor aa.

Sh: dk gy brn, hd, sils?, v slly calcs, slly mmca, dism pyr, mnr carb org mat, mnr thin bioturb layers, faint flor aa.

Sh: dk gy brn, hd, sils?, v slly calcs, slly mmca, dism pyr, mnr carb org mat, poss hydc odor, faint flor aa.

Sh: aa, hd, brit, lamd / brn cht strgs?

Sh: dk gy brn - occly blk aa, lamd / brn cht strgs

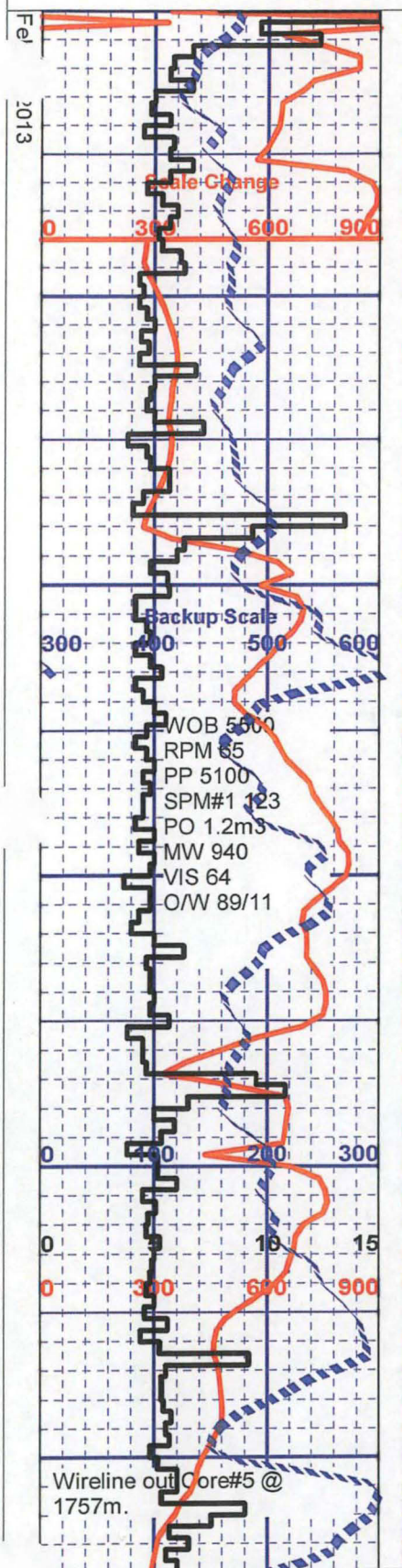
Sh: gy brn, hd, brit, sils, incrg calcs, slly mmca, dism pyr, carb org mat, flor aa.

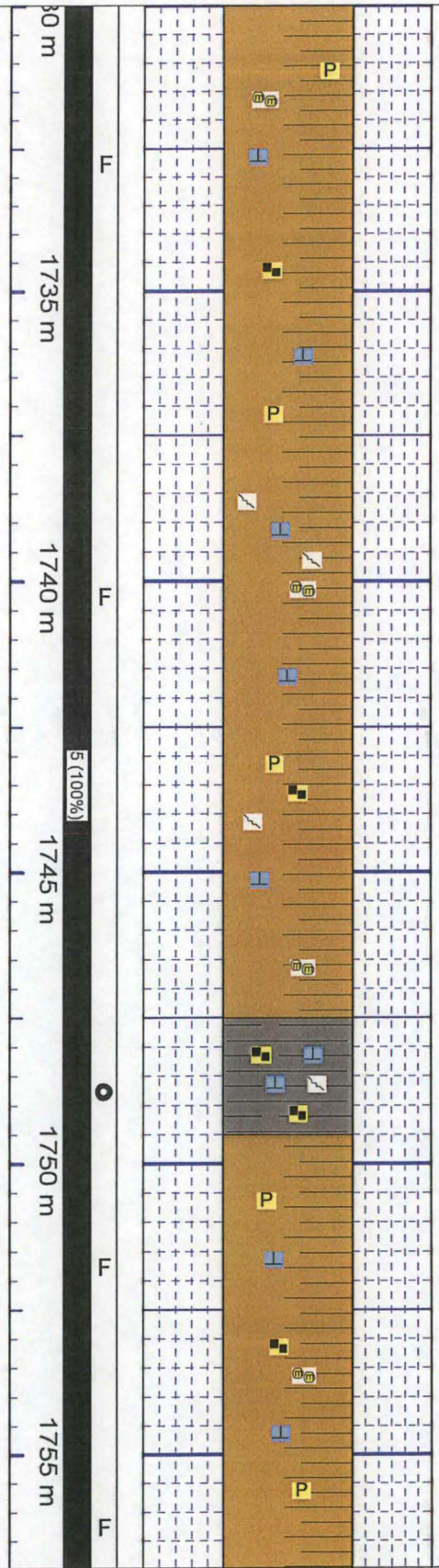
Sh: dk gy brn, hd, brit, sbfis, sils, slly calcs, slly mmca, tr dism pyr, tr org mat aa, tr v slow flor aa.

Sh: dk gy brn, hd, brit, sbfis, sils, slly calcs, slly mmca, tr dism pyr, tr org mat aa, tr v slow flor aa. No vis o bldg from core thru.

Expanded Core Log (1:120) Feb 10, 2013

Core #5 Interval: 1730.00m to 1757.00m Cut: 27m Recovered: 27m (100%)





Core#5 1730-1757, Cut:27m, Rec:

Sh: dk gy brn, sbfis, slly sils, slly calcs, mmca, no vis pyr, tr org mat aa, slow pale yel stmg cut flor.

Sh: dk gy brn, hd, brit, slly sils? incrg calcs, slly mmca, tr dism pyr, slly calcs, shows aa.

Sh: dk gy brn, aa, incrg calcs, slly mmca, incrg carb org mat, thin fracs infilled / fros vf xln calc, shows aa.

Sh: dk gy brn, calcs, frm, less brit, sbfis, slly mmca, tr dism pyr, mnr carb org mat, flor aa.

Sh: dk gy brn, incrg calcs, frm, sbfis, slly mmca, tr dism pyr, mnr carb org mat, flor aa. Core appeared fracd at end of sleeve.

Sh: aa / strgs bioturb sh, dk gy, brit, tr v small fracs?

Sh: v dk gy brn - blk, carb, occly v calcs, tr small fracs, occ brit, strong hydc odor, wxy lstr with scr, g fast yel stmg cut flor.

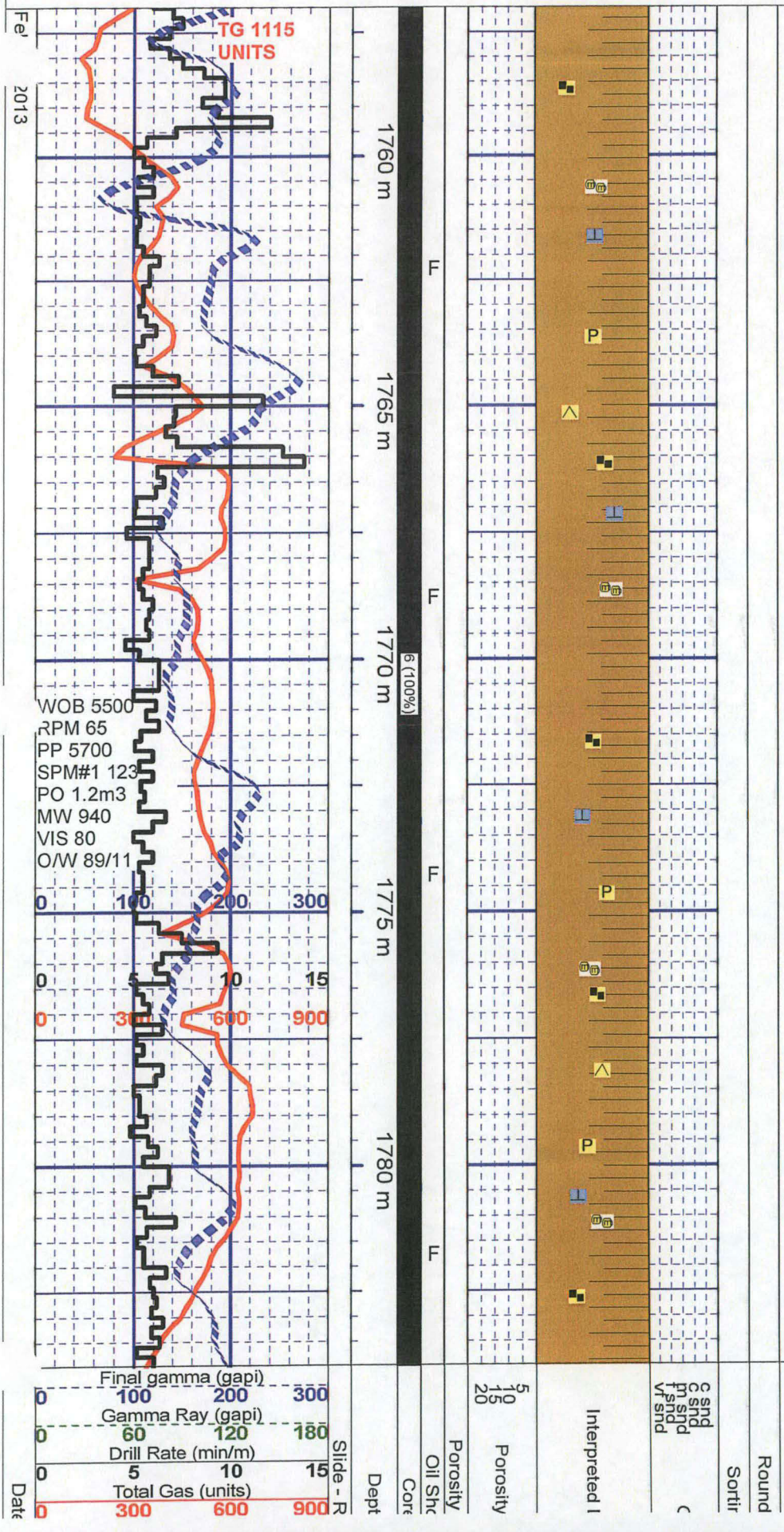
Sh: dk gy brn, calcs, frm, sbfis, slly mmca, brit ip, tr dism pyr, mnr carb org mat, flor aa.

Sh: dk gy brn, calcs, frm, sbfis, slly mmca, dism pyr / pyr lamd within sh, abnt carb org mat, flor aa.

Sh: dk gy brn, calcs, frm, sbfis, splty, slly mmca, tr dism pyr, mnr carb org mat, flor aa. No vis o bldg from core thru.

Expanded Core Log (1:120) Feb 11, 2013

Core #6 Interval: 1757.00m to 1784.00m Cut: 27m Recovered: 27m (100%)



Sh: dk gy brn, calcs, frm, sbfis, slly mmca, thin lamd pyr with sh, mnr carb org mat, flor aa.

Core#6, 1757-1784, Cut:27m, Rec:27m

Sh: dk gy brn - occly blk, slly calcs, hd, brit, fis, carb / carb org mat, slly mmca, mnr dism pyr, flor aa.

Sh: dk gy brn, slly calcs, hd, brit, fis, sils? slly mmca, tr pyr, occ carb org mat, flor aa.

Sh: v dk gy brn, slly calcs, frm - hd, brit, fis, slly mmca, no vis pyr, occ carb org mat, flor aa.

Sh: dk gy brn, slly calcs, frm - hd, sbfis, slly mmca, no vis pyr, occ carb org mat, flor aa.

Sh: dk gy brn, slly calcs, frm - hd, plty, fis, slly mmca, no vis pyr, occ carb org mat, flor aa.

Sh: dk gy brn - blk, slly calcs, frm, sbfis, slly mmca, tr dism pyr, tr micro fracs? occ carb org mat, flor aa.

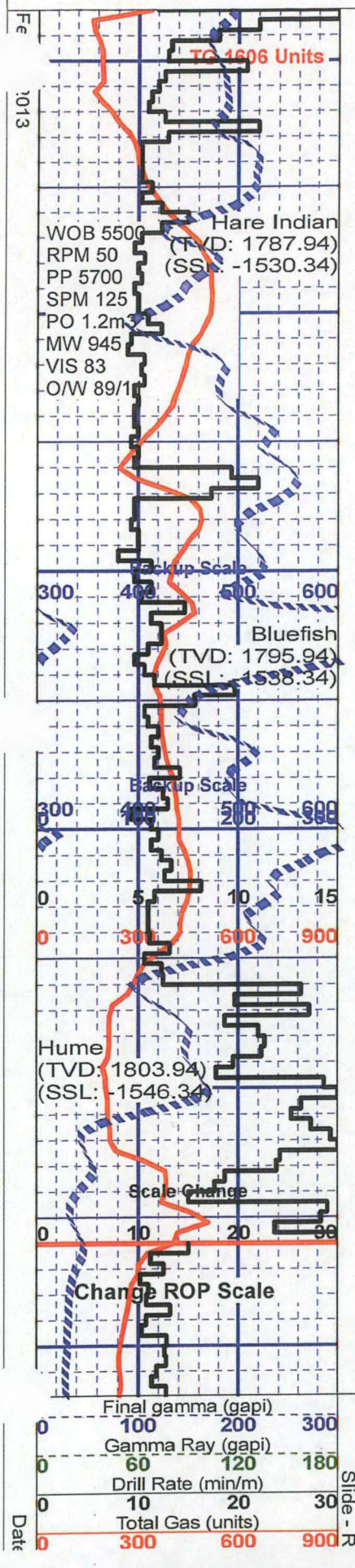
Sh: dk gy brn, slly calcs, frm - hd, plty, fis, slly mmca, no vis pyr, occ carb org mat, flor aa.

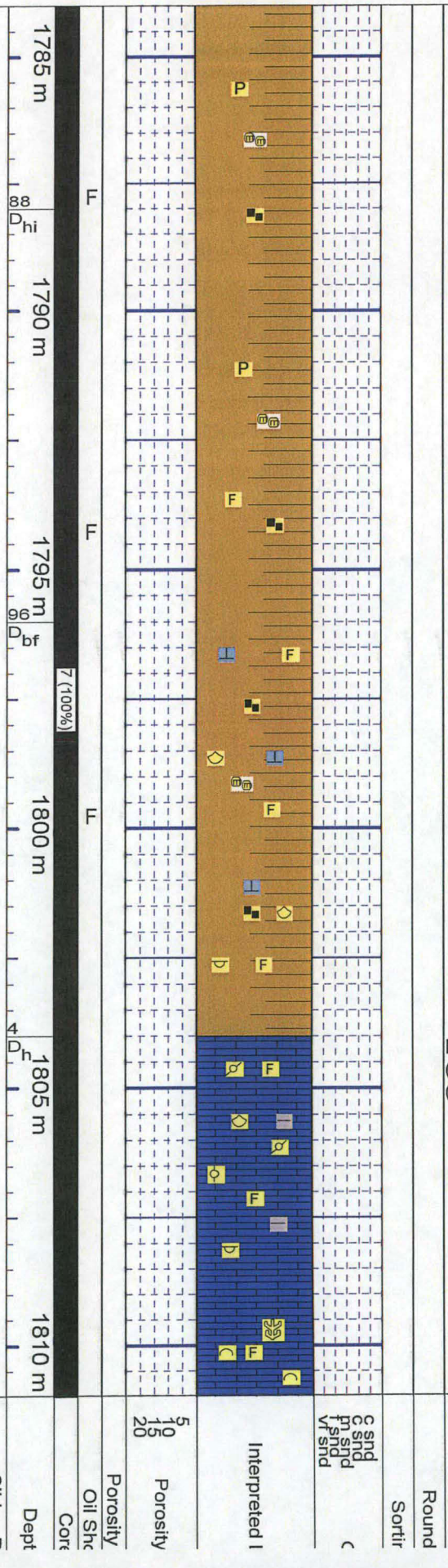
Sh: dk gy brn, slly calcs, frm - hd, plty, sbfis, slly mmca, tr pyr, occ carb org mat, flor aa.

Sh: dk gy brn, slly calcs, frm, plty, sbfis, slly mmca, no vis pyr, occ carb org mat, flor aa. No vis o bldg from core thru.

Expanded Core Log (1:120) Feb 12, 2013

Core #7 Interval: 1784.00m to 1811.00m Cut: 27m Recovered: 27m (100%)





Sh: dk gy brn - v dk gy, plty, fis, slly mmca, slly calcs, abnt carb org mat, slly mmca, abnt dism pyr, flor aa.

Core#7, 1784-1811m, Cut:27, Rec: 27m

Sh: dk gy brn - v dk gy, plty, fis, slly mmca, non calcs, carb org mat, slly mmca, dism pyr lamd / sh, flor aa.

Hare Indian
(TVD: 1787.94)
(SSL: -1530.34)

Sh: v dk gy, plty, fis, slly mmca, abnt carb org mat, slly mmca, dism pyr, flor aa.

Sh: v dk gy - blk, plty, fis, slly mmca, abnt carb org mat, slly mmca, tr pyr.

Sh: dk gy - dk gy brn, plty, fis, slly mmca, mot / abnt carb org mat, slly mmca, p tr calcs, no vis pyr, flor aa.

Bluefish
(TVD: 1795.94)
(SSL: -1538.34)

Sh: dk gy brn, calcs, mmca, abnt unident fos casts, carb mat aa, no dry flor, pale lt yel cloudy cut.

Sh: aa, tr plcy.

Hume
(TVD: 1803.94)
(SSL: -1546.34)

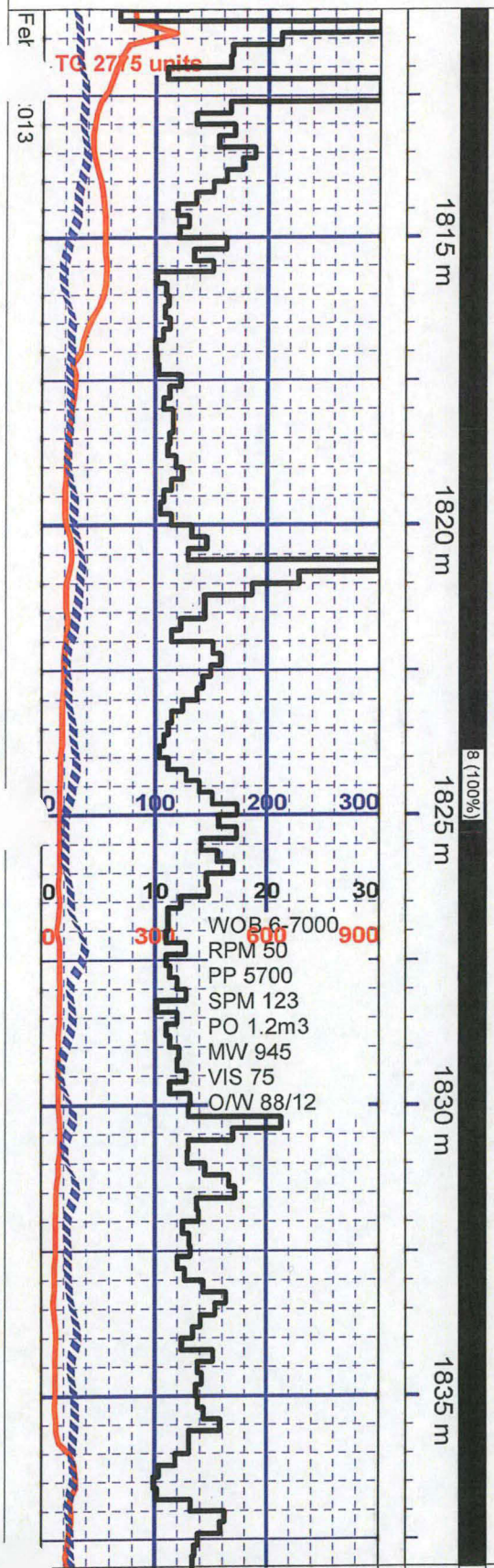
Ls: lt brn, wkest, micr mtx, unident fos casts & frags, no vis por, no shows.

Ls: brn - dk brn, wkest / micr mtx, slly arg, unident fos shad, no vis por, no show

Ls: lt brn, fragl pkst? rexld f - m xln, abnt unident fos shad, no vis por, no show

Expanded Core Log (1:120) Feb 13, 2013

Core #8 Interval: 1811.00m to 1838.00m Cut: 27m Recovered: 27m (100%)



Ls: lt brn, fragl wkest, micr mtx, unident fos casts infilled / calc, cor?, osts, bracs? no vis por, no show.

Ls: lt brn, fragl wkest, micr mtx, unident fos casts infilled / calc, no vis por, no show.

Ls: m brn, fragl wkest, micr mtx, slly arg, unident fos casts infilled / calc, no vis por, no show.

Ls: brn, fragl wkest, micr mtx, unident fos casts infilled / calc, osts, no vis por, no show.

Ls: brn, mdst - wkest, micr mtx, rexld vf xln, osts, unident fos infilled / fros calc (cor?) no vis por or shows.

Ls: brn, mdst, tr fos aa, dns, no show

Ls: brn, mdst - wkest, micr mtx, rexld vf xln ip, osts, unident fos casts infilled / fros calc, no vis por or shows.

Ls: brn, mdst - wkest, micr mtx, rexld mic - vf xln, osts, unident fos shad, no vis por or shows.

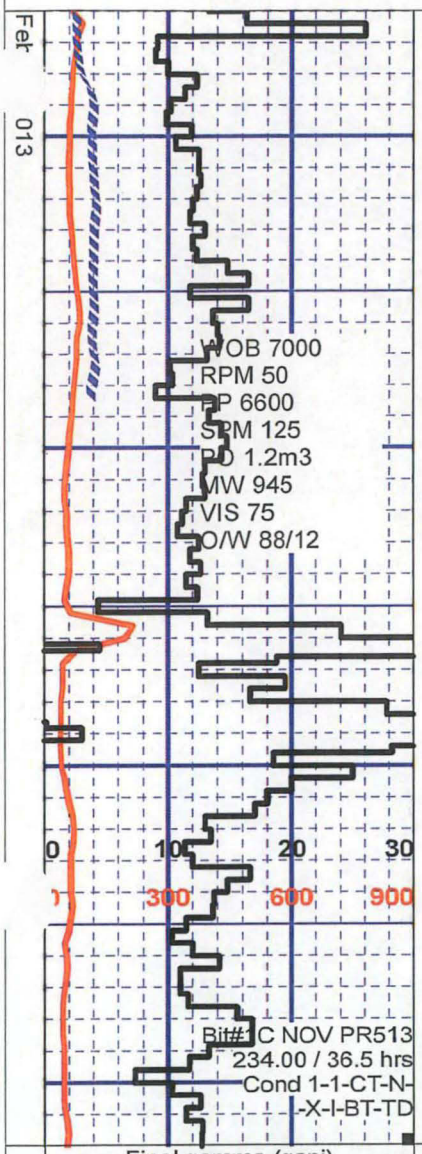
Ls: m brn, mdst, pels, ools, tr unident fos shad, dns, no shows.

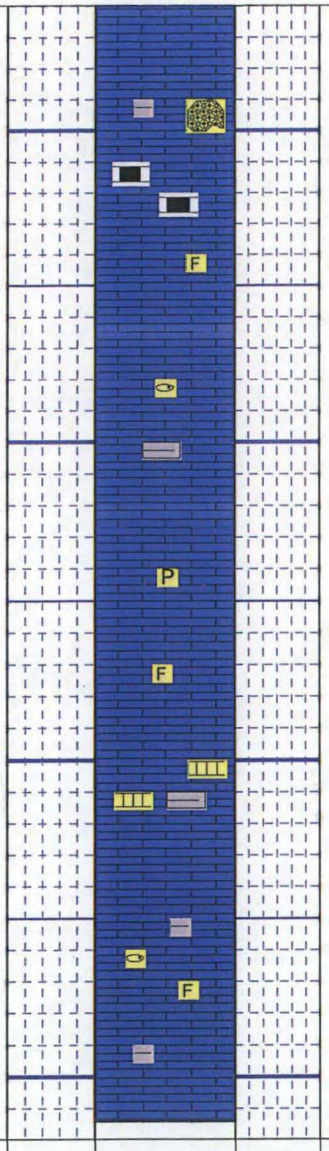
Ls: brn, wkest, micr mtx, rexld f -m xln, osts, unident fos casts infilled / fros calc, no vis por or shows.

Ls: brn, mdst - wkest, micr mtx, rexld vf xln, cor?, unident fos shad, no vis por or shows.

Expanded Core Log (1:120) Feb 14, 2013

Core #9 Interval: 1838.00m to 1856.00m Cut: 18m Recovered: 17.7m (98.33%)





Core# 9, 1838 - 1856m.

Ls: brn, mdst - wkest, micr mtx, slly arg, rexld mic - vf xln, unident cor, amph? unident fos shad, no vis por or shows.

Ls: brn, mdst, slly arg, no vis fos, no vis por or shows.

Ls: aa, tr pyric, tr osts, dns, no shows / mnr dk gy - blk, sh lams, plty, fis, carb.

Ls: brn, mdst - wkest, micr mtx, slly arg, rexld mic - vf xln ip, unident fos shad, no vis por or shows.

Ls: brn, mdst - wkest, micr mtx, slly arg, unident fos shad, pels, osts, no vis por or shows.

Ls: dk brn, floatstone / nod stroms, lime mud mtx, rexld mic - vf xln, arg, shy ip, unident fos casts, no vis por, no shows.

Ls: aa

Ls: brn, mdst - wkest, micr mtx, slly arg, unident fos shad, no vis por or shows.

Date

Final gamma (gapi)
0 100 200 300
Gamma Ray (gapi)
0 60 120 180
Drill Rate (min/m)
0 10 20 30
Total Gas (units)
0 300 600 900

Drilling Progress

Slide - Rotate

Depth

Core

Oil Shows

Porosity Type

5 10 15 20
Porosity (%)

Interpreted Lithology

c snd
m snd
f snd
vf snd
Grain Size

Sorting

Rounding

Lithology Description

ConocoPhillips Canada

Daily Activity and Cost Summary
LOON O-06 65-10 127-00

API / UWI	Surface Legal Location	District	Field Name	License No.
300/O-06 6510 127000	O-6 65-10 127-00	NEW VENTURES	Loon	470
...am	Well Type	Well Configuration Type	Original KB/RT Elevation (m)	KB-Ground Distance (m)
	Exploration	VERTICAL	257.60	5.20

...Category	Primary Job Type	Secondary Job Type
DRILLING	DRILLING ORIGINAL	

Actual Start Date	End Date	AFE / RFE / Maint.#	Total Job AFE Amount
1/3/2013	2/21/2013	10342919	10,990,100.00

Objective

Summary
Invert Waste approval / 1333-13-0020-26

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

Report No.	Start Date	End Date	Depth Start (mKB)	Depth End (mKB)	Day Total	Cum Cost	Last 24hr Sum
1	1/3/2013	1/4/2013	0.00	0.00	650,799.60	650,799.60	Tear out and mobilize rig to Grande Praire
2	1/8/2013	1/9/2013	0.00	0.00	27,494.00	678,293.60	Orientate personal for Chinook Project
3	1/9/2013	1/10/2013	0.00	0.00	27,494.00	705,787.60	Orientate personal for Chinook Project and start well control simulater
4	1/10/2013	1/11/2013	0.00	0.00	168,863.00	874,650.60	Finish well control simulater
5	1/18/2013	1/19/2013	0.00	0.00	1,825,302...	2,699,952.60	Continue to build and prepare rig to move on to 0-06,65-10127-00
6	1/19/2013	1/20/2013	0.00	0.00	27,494.00	2,727,446.60	Continue to build and prepare rig to move on to 0-06,65-10127-00
7	1/20/2013	1/21/2013	0.00	0.00	27,494.00	2,754,940.60	Attempt to lay preheated rig liner, too cold liner shattered due to -40 temp. Lay poly spot Matting and Sub,Pin derrick together.
8	1/21/2013	1/22/2013	0.00	0.00	37,516.50	2,792,457.10	Continue to spot rig and third party equipment
9	1/22/2013	1/23/2013	0.00	0.00	45,219.00	2,837,676.10	Continue to spot third party equipment, general rig up to raise derrick and raise derrick, Fire boiler ,unload casing.
10	1/23/2013	1/24/2013	0.00	0.00	29,794.00	2,867,470.10	General rig up, fire boiler rig up power cords ,lightes,steam lines and water lines.
11	1/24/2013	1/25/2013	0.00	0.00	260,055.09	3,127,525.19	No accidents or incidents 5 Hazard ID's 1 Reportable spill: General rig up, Weld on diverter flange and nipple up diverter, Rig up diverter lines, Recieved 3 loads sawdust, Directional tools,High side shale bins, ConleyMax heaters 3 loads of New Invert, Continue installing rig septic system
12	1/25/2013	1/26/2013	0.00	0.00	53,555.00	3,181,080.19	No accidents or incidents 5 Hazard ID's : Weld on diverter flow T and nipple up diverter, Rig up diverter lines and flare tank, Modify and build mud pump suction and discharge lines,
13	1/26/2013	1/27/2013	0.00	126.00	134,311.71	3,315,391.90	No accidents or incidents 2 Hazard ID's:4 Job obersvations : Weld on diverter flow T , Modify and build mud pump suction and discharge lines, Mix spud mud, Perform pre-spud inspection and provide NEB with documentation. Received confirmation from NEB representative of pre-spud inspection , Hold pre-spud safety meeting with drill crew and relevant service providers, Hold diverter drill and man down drill, Spud well @12:00 Hours, Drill 311mm surface hole F/ 0 to 126m with Reed S11G Mill Tooth bit and slick rotary BHA, Accumulated survey,connection and Work tight hole time.
14	1/27/2013	1/28/2013	126.00	370.00	66,777.18	3,382,169.08	No accidents or incidents1 Hazard ID's:4 Job obersvations : Drill 311mm surface hole F/ 126 to 370m with Reed S11G Mill Tooth bit and slick rotary BHA, Accumulated survey and connection time
15	1/28/2013	1/29/2013	370.00	587.00	105,046.38	3,487,215.46	No accidents or incidents1 Hazard ID's:4 Job obersvations : Drill 311mm surface hole F/ 370 to 587m with Reed S11G Mill Tooth bit and slick rotary BHA, Accumulated survey and connection time
16	1/29/2013	1/30/2013	587.00	600.00	171,939.88	3,659,155.34	No accidents or incidents1 Hazard ID's:4 Job obersvations :Pull out of hole, Work mud ring from 400m to surface, Clean bit and run in hole, Wash and ream F/ 290 - 410 ,Drill 311mm surface hole F/ 587 to 600m with Reed S11G Mill Tooth bit and slick rotary BHA, Accumulated survey and connection time.Circulate condition hole,Wiper trip to 200m and back.
17	1/30/2013	1/31/2013	600.00	600.00	297,930.57	3,957,085.91	No accidents or incidents1 Hazard ID's:5 Job obersvations 3 : Run in hole, Circulate hole clean, Pull out of hole (hole in good condition) Lay down 220mm DC's, Rig to and run wireline logs with Schlumberger, Rig in power tongs and run 244.5mm surface casing
18	1/31/2013	2/1/2013	600.00	600.00	191,033.34	4,148,119.25	No accidents or incidents1 Hazard ID's:5 Job obersvations 3 :Run 244.5mm surface casing, Circulate and condition mud, Transfer surface mud to storage and prepare for cementing, Rig to and cement surface casing with Schlumberger, Recieved 6.5m3 good cement returns, Annulus remained static after job complete, Wait on cement, Nipple down diverter system,Screw on casing Bowl.

ConocoPhillips Canada

Daily Activity and Cost Summary

LOON O-06 65-10 127-00

API / UWI	Surface Legal Location	District	Field Name	License No.
300/O-06 6510 127000	O-6 65-10 127-00	NEW VENTURES	Loon	470
·am	Well Type	Well Configuration Type	Original KB/RT Elevation (m)	KB-Ground Distance (m)
	Exploration	VERTICAL	257.60	5.20

rt No.	Start Date	End Date	Depth Start (mKB)	Depth End (mKB)	Day Total	Cum Cost	Last 24hr Sum
19	2/1/2013	2/2/2013	600.00	600.00	119,755.70	4,267,874.95	No accidents or incidents1 Hazard ID's:5 Job obersvations 3 :Screw on casing Bowl, Nipple up BOP's,NEB representatives Rick Turner and Lori Croal inspected base camp and the drilling operation, Pressure test Bop's and related equipment to 1400kpa Low 10min. each and 20000kpa high 10min. each, Annular 1400kpa low and 17500kpa high 10min. each
20	2/2/2013	2/3/2013	600.00	605.00	84,165.76	4,352,040.71	No accidents or incidents4 Hazard ID's:1 Job obersvations 3 Pressure test Bop's and related equipment to 1400kpa Low 10min. each and 20000kpa high 10min. each, Annular 1400kpa low and 17500kpa high 10min. each, Make up Directional BHA and run in hole, Displace wellbore to invert,
21	2/3/2013	2/4/2013	605.00	958.00	112,744.94	4,464,785.65	No accidents or incidents5 Hazard ID's:1 Job obersvations : Conduct formation integrity test ,Surface aplied pressure of 6000kpa Fluild 875kg/m3 equivelant mud density of 1900kg/m3,Drill 222mm hole from 605m to 958m with Reed MSR616M bit Schlumberger 7/8 5stage motor ,directional BHA and Gama, pumping at 1.8m3/min. Accumulated survey and Rig service time.
22	2/4/2013	2/5/2013	958.00	1,325.00	241,697.88	4,706,483.53	No accidents or incidents5 Hazard ID's:0 Job obersvations :Drill 222mm hole from 958m to 1325m with Reed MSR616M bit Schlumberger 7/8 5stage motor ,directional BHA and Gama, pumping at 1.8m3/min. Accumulated survey and Rig service time. Average ROP 18m/hr ,Slide 30m to keep inclination under 2*
23	2/5/2013	2/6/2013	1,325.00	1,622.00	213,895.08	4,920,378.61	No accidents or incidents 3 Hazard ID's:2 Job obersvations :Drill 222mm hole from 1325m to 1622m (Core Point) with Reed MSR616M bit Schlumberger 7/8 5stage motor ,directional BHA and Gama, pumping at 1.8m3/min. Circulate clean and condition hole to Core, Pull out of hole lay down BHA ,Accumulated survey and Rig service time. Average ROP 21.21m/hr
4	2/6/2013	2/7/2013	1,622.00	1,622.00	135,525.33	5,055,903.94	No accidents or incidents 5 Hazard ID's:1 Job obersvations :Continue to pull out of hole lay down BHA,Pickup and make up 27m Core barrle and run in hole 1618 mkb. pick up kelly and circulate bottom's up. Rig in coreing companys flow tee and try to make up the pack off assembly. The flow tee is machined 4" 602 thread and the pack off was 4" 200 wing. We found a 602 wing and change it out.
25	2/7/2013	2/8/2013	1,622.00	1,649.00	85,361.61	5,141,265.55	No accidents or incidents 4 Hazard ID's:1 Job obersvations :Pull Drill rod and install Core barrell inner and pump it down. Cut core #1, From 1622m to 1649m,27m ,Circulate clean hole prior to pulling core,Rig in wire line and retrieve core at programmed speed.
26	2/8/2013	2/9/2013	1,649.00	1,686.00	85,689.31	5,226,954.86	No accidents or incidents 4 Hazard ID's:1 Job obersvations :Recover Core # 1 full 27m ,run new inner barrel and cut Core #2 from1649m to 1676m (27m),rig in wire line and recover Core #2 pulling at programed speed. Remove inner core barrel & recover full 27 meters of Core. Circulate and clean up hole. Trip 3 stand back in the hole. Make up inner core barrel and pump it to bottom. Cut core #3 from 1676 - 1686 mkb.
27	2/9/2013	2/10/2013	1,686.00	1,730.10	86,621.75	5,313,576.61	No accidents or incidents 4 Hazard ID's:0 Job obersvations :Finish cutting Core #3 from1676m to 1703m (27m),rig in wire line and recover Core #3 pulling at programed speed. Remove inner core barrel & recover full 27 meters of core.Run back down to 1703, circulate and pump down inner core barrel. Cut core #4 from 1703 - 1730 mkb. Circulate bottoms up & pull back to 1616 mkb.
28	2/10/2013	2/11/2013	1,730.00	1,757.00	123,072.12	5,436,648.73	No accidents or incidents 7 Hazard ID's:1 Job obersvations : Rig in wire line and recover Core #4 pulling at programed speed.Remove inner core barrel & recover full 27 meters of core, Run in hole from 1616m to 1724m,Circulate condition hole prior to cutting Core #5 ,Cut Core #5 from 1730m to 1757m (27m) Circulate bottoms up flow check and wire line retrieve Core #5.
29	2/11/2013	2/12/2013	1,757.00	1,784.00	86,014.28	5,522,663.01	No accidents or incidents 7 Hazard ID's:1 Job obersvations : Wire line retrieve Core # 5. recovered full 27m, Run and set inner barrle cut Core # 6 from 1757m to 1784m 27 m, wire line retrieve core # 6.

ConocoPhillips Canada

Daily Activity and Cost Summary

LOON O-06 65-10 127-00

API / UWI	Surface Legal Location	District	Field Name	License No.
300/O-06 6510 127000	O-6 65-10 127-00	NEW VENTURES	Loon	470
...m	Well Type	Well Configuration Type	Original KB/RT Elevation (m)	KB-Ground Distance (m)
	Exploration	VERTICAL	257.60	5.20

...rt No.	Start Date	End Date	Depth Start (mKB)	Depth End (mKB)	Day Total	Cum Cost	Last 24hr Sum
30	2/12/2013	2/13/2013	1,784.00	1,811.00	141,438.06	5,664,101.07	No accidents or incidents 6 Hazard ID's: 0 Job obersvations : Wire line retrieve Core # 6. recovered full 27m, Run and set inner barrel cut Core # 7 from 1784m to 1811m 27 m, circulate bottoms up, wire line retrieve core # 7.
31	2/13/2013	2/14/2013	1,811.00	1,838.00	110,890.73	5,774,991.80	No accidents or incidents 7 Hazard ID's: 2 Job obersvations : Wire line retrieve Core # 7. recovered full 27m, Run and set inner barrel cut Core # 8 from 1811m to 1838m 27 m, circulate bottoms up, wire line retrieve core # 8. Full 27 meter recovery. Run back in the hole ream a tight spot 1830 mkb.
32	2/14/2013	2/15/2013	1,838.00	1,856.00	154,106.96	5,929,098.76	No accidents or incidents 6 Hazard ID's: 1 Job obersvations :Pump down core barrels, Cut core #9 F/1838-1847m Worked and reamed tight hole @ 1842m while coring,Circulate bottoms up, Pull 5 stands drill pipe Wire line retrieve Core #9. recovered 17.7mm,Run drill rod on wireline, Wiper trip to casing shoe.
33	2/15/2013	2/16/2013	1,856.00	1,856.00	349,053.05	6,278,151.81	No accidents or incidents 3 Hazard ID's: 2 Job obersvations : Slip and cut drilling line, Run in hole, Circulate, (4100 units bottoms up gas) pull out of hole, (hole in good condition) Lay down coring drill collars and core barrels, Rig to and run Schlumberger wireline logs
34	2/16/2013	2/17/2013	1,856.00	1,856.00	240,161.50	6,518,313.31	No accidents or incidents 4 Hazard ID's: 2 Job obersvations :Run Schlumberger wireline logs, Log #2 UBI,OBMI, OBMI2,PPC, MSIP, GPIT. Pick up tools for run #3 and start running to bottom.
35	2/17/2013	2/18/2013	1,856.00	1,856.00	59,161.50	6,577,474.81	No accidents or incidents 4 Hazard ID's: 1 Job obersvations :Run Schlumberger wireline logs, Log #3 ADT, HNGS, CMR (NRTA). Log run #4 RST tools.
36	2/18/2013	2/19/2013	1,856.00	1,856.00	538,386.36	7,115,861.17	No accidents or incidents 4 Hazard ID's: 1 Job obersvations :Run Schlumberger wireline logs, Log run #4 RST tools. Run log #5 USIT - CBL. Rig out loggers. Make up a bit and run in to 1838 mkb.
7	2/19/2013	2/20/2013	1,856.00	1,856.00	407,584.12	7,523,445.29	No accidents or incidents 4 Hazard ID's: 2 Job obersvations :Run in hole to 1856m, Circulate, (10,000 units bottoms up gas) Rig in laydown truck and laydown drillstring, Rig to and run 177.8mm casing,Circulate casing condition hole prior to cementing.
38	2/20/2013	2/21/2013	1,856.00	1,856.00	510,106.10	8,033,551.39	No accidents or incidents 4 Hazard ID's: 2 Job obersvations :Circulate casing condition hole prior to cementing. Cement with Schlumberger, Lost returns with 10m3 left to displace, Bumped plug and pressure tested casing to 17.5MPA, Fluid level was visible in annulus after flushing BOP stack with 2.55m3 water, Estimated cement top 358m ,Set casing slips with 50dan tension, cut casing nipple down BOPs , clean tanks and general tear out

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00

Rig:

Report Date: 1/8/2013
Report #: 2
Depth Progress: m
Depth End: 0.00 mKB
Rig Release Date:

API / UWI	Surface Legal Location	MaxWell Job Number	License No.
300/O-06 6510 127000	O-6 65-10 127-00	JOB01@2006	470

Ground Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
252.40	257.60	252.73	1/26/2013	-17.50

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	1/3/2013 00:00	2/21/2013 00:00	DRILLED & CASE	Yes

Daily Cost Total	Cumulative Cost	Total Job AFE Amount	Total AFE+Sup	AFE / RFE / Maint.#	Estimated Days
27,494.00	681,493.60	10,990,100.00	10,990,100.00	10342919	35.34

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hrs)	Cum Personnel Total Hours (hrs)
1,873.00	1,856.00			

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)

Road Condition	Weather	Temperature (°C)	Wind

Ops and Depth @ Morning Report	Wellbore
Prepare to orient personal for Chinook project	Original Hole

Last 24hr Summary
Orientate personal for Chinook Project

24hr Forecast
Continue Chinook project orientation

Daily Contacts

Last Casing String

Time Log

Start Time	End Time	Dur (hrs)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Depth Start (mKB)	Depth End (mKB)	Operation
00:00	00:00	24.00	MIRU	MOVE	MOB	P		0.00	0.00	Arctic HSE training for Beaver Drilling rig crews and service personal for Chinook project

Fluid / Mud Checks: Mud Engineer: <Mud Engineer?>

Time	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (cp)	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 (fl) (°C)	HTHP Pressure (kPa)	HTHP Filt (mL/30min)

API Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Cost

Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost

Last BOP Drill

Type	Days Since Last ...	Last Date	Days Until Next ...	Next Check Date
BOP Drill (Pit)				

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)

Safety Incidents

Date	Comment	Category

Drill Strings: 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)	Rotating Hook Load (maximum) (daN)

Depth In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hrs)	Total Drill Hrs (hrs)

Comment

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00
Rig:

Report Date: 1/8/201
Report #: 2
Depth Progress: m
Depth End: 0.00 mKB
Rig Release Date:

Hydraulic Calculations

Bit Hydraulic Powe...	HP/Area (kW/mm²)	% P @ bit (%)	Bit Jet Velocity (m/s)	Bit dP (kPa)	Ann. dP (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Shoe to Top of Casing...	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m...

Error

Mud Pumps: 1, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
1	NATIONAL	8-P-80		216.0

Pump Checks

Date	Depth (mKB)	Q (m³/min)	Pres (kPa)	Strokes (spm)
2/19/2013 00:00	1,855.00		686	59
2/20/2013 00:00				115

Pump Operations

Start Date	End Date	Liner Size (mm)	P (max) (kPa)	Vol/Stk OR (m³/stk)
1/29/2013		140.0		

Mud Pumps: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80		216.0

Pump Checks

Date	Depth (mKB)	Q (m³/min)	Pres (kPa)	Strokes (spm)
2/10/2013 08:00	1,724.00	0.587	357	60
2/10/2013 18:00	1,747.00	1.232	5,300	126

Pump Operations

Start Date	End Date	Liner Size (mm)	P (max) (kPa)	Vol/Stk OR (m³/stk)
1/29/2013		140.0		
2/5/2013		140.0		

Shaker Screens

Description	Start Date	End Date	Scr Sz X	Scr Sz Y	Note

Centrifuges/Cyclones:

Number	Make	Model	Diameter (mm)

Centrifuge/Cyclone Checks

Date	Hrs (hrs)	RPM (rpm)	Dens OF (kg/m³)	Q (ovrflw) (L/min)	Dens UF (kg/m³)	Q (undrflw) (L/min)

Fluid / Mud Additive Amounts

Description	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)
Quaternary System	5.00	5.00	5.00
Alberta Grp	31.00	31.00	28.00
Slater River	36.00	36.00	48.00
Artic Red	570.00	569.94	570.00
Sams Sault	787.00	786.89	787.00
Martin House	882.50	882.35	882.50
Imperial Shale	962.00	961.82	962.00
Upper Canol	1,643.00	1,642.61	962.00
Lower Canol	1,679.00	1,678.61	962.00
Hare Indian	1,788.00	1,787.59	962.00
Bluefish Member	1,796.00	1,795.59	962.00
Hume	1,804.00	1,803.59	962.00

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00
Rig:

Report Date: 1/9/2013
Report #: 3
Depth Progress: m
Depth End: 0.00 mKB
Rig Release Date:

API / UWI	Surface Legal Location	MaxWell Job Number	License No.
300/O-06 6510 127000	O-6 65-10 127-00	JOB01@2006	470

Ground Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
252.40	257.60	252.73	1/26/2013	-16.50

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	1/3/2013 00:00	2/21/2013 00:00	DRILLED & CASE	Yes

Daily Cost Total	Cumulative Cost	Total Job AFE Amount	Total AFE+Sup	AFE / RFE / Maint.#	Estimated Days
27,494.00	708,987.60	10,990,100.00	10,990,100.00	10342919	35.34

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hrs)	Cum Personnel Total Hours (hrs)
1,873.00	1,856.00			

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)

Road Condition	Weather	Temperature (°C)	Wind

Ops and Depth @ Morning Report
Prepare to orient personal for Chinook project

Wellbore
Original Hole

Last 24hr Summary
Orientate personal for Chinook Project and start well control simulater

24hr Forecast
Continue Chinook project orientation

Daily Contacts

Last Casing String

Time Log

Start Time	End Time	Dur (hrs)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Depth Start (mKB)	Depth End (mKB)	Operation
00:00	00:00	24.00	MIRU	MOVE	MOB	P		0.00	0.00	Finish Arctic HSE training and cultural awareness for Beaver Drilling rig crews and service personal for Chinook project. Start simulator well control session.

Fluid / Mud Checks: Mud Engineer: <Mud Engineer?>

Time	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (cp)	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 (fl) (°C)	HTHP Pressure (kPa)	HTHP Filt (mL/30min)

API Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Cost

Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost

Last BOP Drill

Type	Days Since Last ...	Last Date	Days Until Next ...	Next Check Date
BOP Drill (Pit)				

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)

Safety Incidents

Date	Comment	Category

Drill Strings: 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)	Rotating Hook Load (maximum) (daN)

Depth In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hrs)	Total Drill Hrs (hrs)

Comment

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00
Rig:

Report Date: 1/9/201
Report #: 3
Depth Progress: m
Depth End: 0.00 mKB
Rig Release Date:

Hydraulic Calculations

Bit Hydraulic Powe...	HP/Area (kW/mm²)	% P @ bit (%)	Bit Jet Velocity (m/s)	Bit dP (kPa)	Ann. dP (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Shoe to Top of Casing...	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m...

Error

Mud Pumps: 1, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
1	NATIONAL	8-P-80		216.0

Pump Checks

Date	Depth (mKB)	Q (m³/min)	Pres (kPa)	Strokes (spm)
2/19/2013 00:00	1,855.00		686	59
2/20/2013 00:00				115

Pump Operations

Start Date	End Date	Liner Size (mm)	P (max) (kPa)	Vol/Stk OR (m³/stk)
1/29/2013		140.0		

Mud Pumps: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80		216.0

Pump Checks

Date	Depth (mKB)	Q (m³/min)	Pres (kPa)	Strokes (spm)
2/10/2013 08:00	1,724.00	0.587	357	60
2/10/2013 18:00	1,747.00	1.232	5,300	126

Pump Operations

Start Date	End Date	Liner Size (mm)	P (max) (kPa)	Vol/Stk OR (m³/stk)
1/29/2013		140.0		
2/5/2013		140.0		

Shaker Screens

Description	Start Date	End Date	Scr Sz X	Scr Sz Y	Note

Centrifuges/Cyclones:

Number	Make	Model	Diameter (mm)

Centrifuge/Cyclone Checks

Date	Hrs (hrs)	RPM (rpm)	Dens OF (kg/m³)	Q (ovrflw) (L/min)	Dens UF (kg/m³)	Q (undrflw) (L/min)

Fluid / Mud Additive Amounts

Description	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)
Quaternary System	5.00	5.00	5.00
Alberta Grp	31.00	31.00	28.00
Slater River	36.00	36.00	48.00
Artic Red	570.00	569.94	570.00
Sams Sault	787.00	786.89	787.00
Martin House	882.50	882.35	882.50
Imperial Shale	962.00	961.82	962.00
Upper Canol	1,643.00	1,642.61	962.00
Lower Canol	1,679.00	1,678.61	962.00
Hare Indian	1,788.00	1,787.59	962.00
Bluefish Member	1,796.00	1,795.59	962.00
Hume	1,804.00	1,803.59	962.00

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00

Rig:

Report Date: 1/10/201
Report #: 4
Depth Progress: m
Depth End: 0.00 mKB
Rig Release Date:

API / UWI	Surface Legal Location	MaxWell Job Number	License No.
300/O-06 6510 127000	O-6 65-10 127-00	JOB01@2006	470

Ground Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
252.40	257.60	252.73	1/26/2013	-15.50

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	1/3/2013 00:00	2/21/2013 00:00	DRILLED & CASE	Yes

Daily Cost Total	Cumulative Cost	Total Job AFE Amount	Total AFE+Sup	AFE / RFE / Maint.#	Estimated Days
168,863.00	877,850.60	10,990,100.00	10,990,100.00	10342919	35.34

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hrs)	Cum Personnel Total Hours (hrs)
1,873.00	1,856.00			

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)

Road Condition	Weather	Temperature (°C)	Wind

Ops and Depth @ Morning Report
Prepare to orient personal for Chinook project

Wellbore
Original Hole

Last 24hr Summary
Finish well control simulater

24hr Forecast
Ready services and people to mobilize rig to Chinook Project

Daily Contacts

Last Casing String

Time Log

Start Time	End Time	Dur (hrs)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Depth Start (mKB)	Depth End (mKB)	Operation
00:00	00:00	24.00	MIRU	MOVE	MOB	P		0.00	0.00	Finish simulator well control session.

Fluid / Mud Checks: Mud Engineer: <Mud Engineer?>

Time	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (cp)	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 (fl) (°C)	HTHP Pressure (kPa)	HTHP Filt (mL/30min)

API Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Cost

Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost

Last BOP Drill

Type	Days Since Last ...	Last Date	Days Until Next ...	Next Check Date
BOP Drill (Pit)				

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)

Safety Incidents

Date	Comment	Category

Drill Strings: 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)	Rotating Hook Load (maximum) (daN)

Depth In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hrs)	Total Drill Hrs (hrs)

Comment

Drill String Components

Item Description	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)

Drilling Parameters:

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)	Ann. dP (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Shoe to Top of Casing...	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m...

Error

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00
Rig:

Report Date: 1/10/2013
Report #: 4
Depth Progress: m
Depth End: 0.00 mKB
Rig Release Date:

Mud Pumps: 1, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
1	NATIONAL	8-P-80		216.0

Pump Checks

Date	Depth (mKB)	Q (m³/min)	Pres (kPa)	Strokes (spm)
2/19/2013 00:00	1,855.00		686	59
2/20/2013 00:00				115

Pump Operations

Start Date	End Date	Liner Size (mm)	P (max) (kPa)	Vol/Stk OR (m³/stk)
1/29/2013		140.0		

Mud Pumps: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80		216.0

Pump Checks

Date	Depth (mKB)	Q (m³/min)	Pres (kPa)	Strokes (spm)
2/10/2013 08:00	1,724.00	0.587	357	60
2/10/2013 18:00	1,747.00	1.232	5,300	126

Pump Operations

Start Date	End Date	Liner Size (mm)	P (max) (kPa)	Vol/Stk OR (m³/stk)
1/29/2013		140.0		
2/5/2013		140.0		

Shaker Screens

Description	Start Date	End Date	Scr Sz X	Scr Sz Y	Note

Centrifuges/Cyclones:

Number	Make	Model	Diameter (mm)

Centrifuge/Cyclone Checks

Date	Hrs (hrs)	RPM (rpm)	Dens OF (kg/m³)	Q (ovrflw) (L/min)	Dens UF (kg/m³)	Q (undrflw) (L/min)

Fluid / Mud Additive Amounts

Description	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)
Quaternary System	5.00	5.00	5.00
Alberta Grp	31.00	31.00	28.00
Slater River	36.00	36.00	48.00
Artic Red	570.00	569.94	570.00
Sams Sault	787.00	786.89	787.00
Martin House	882.50	882.35	882.50
Imperial Shale	962.00	961.82	962.00
Upper Canol	1,643.00	1,642.61	962.00
Lower Canol	1,679.00	1,678.61	962.00
Hare Indian	1,788.00	1,787.59	962.00
Bluefish Member	1,796.00	1,795.59	962.00
Hume	1,804.00	1,803.59	962.00

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00
Rig:

Report Date: 1/18/2013
Report #: 5
Depth Progress: m
Depth End: 0.00 mKB
Rig Release Date:

API / UWI	Surface Legal Location	MaxWell Job Number	License No.
300/O-06 6510 127000	O-6 65-10 127-00	JOB01@2006	470

Ground Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
252.40	257.60	252.73	1/26/2013	-7.50

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	1/3/2013 00:00	2/21/2013 00:00	DRILLED & CASE	Yes

Daily Cost Total	Cumulative Cost	Total Job AFE Amount	Total AFE+Sup	AFE / RFE / Maint.#	Estimated Days
1,825,302.00	2,703,152.60	10,990,100.00	10,990,100.00	10342919	35.34

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hrs)	Cum Personnel Total Hours (hrs)
1,873.00	1,856.00	35.0	422.00	422.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)
Road Condition	Weather	Temperature (°C)	Wind

Ops and Depth @ Morning Report
Continue to build and prepare 0-06,65-10127-00

Wellbore
Original Hole

Last 24hr Summary
Continue to build and prepare rig to move on to 0-06,65-10127-00

24hr Forecast
Continue to build and prepare 0-06,65-10127-00

Daily Contacts
WS Supervisor, Mike Hobmaier, 403-844-3210; Drilling Engineer, Mike Greener, 403-771-5039; Drilling Superintend, Sheldon Vamplew, 403-999-1302; WS Supervisor, Dave Forsberg, 780-361-6417

Last Casing String

Time Log

Start Time	End Time	Dur (hrs)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Depth Start (mKB)	Depth End (mKB)	Operation
00:00	00:00	24.00	MIRU	MOVE	MOB	P		0.00	0.00	Continue to build and prepare rig to move on to Loon Creek O-06 65-10 127-00

Fluid / Mud Checks: Mud Engineer: <Mud Engineer?>

Time	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (cp)	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 (fl) (°C)	HTHP Pressure (kPa)	HTHP Filt (mL/30min)

API Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Cost
Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost	

Last BOP Drill

Type	Days Since Last ...	Last Date	Days Until Next ...	Next Check Date
BOP Drill (Pit)				

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
344.00	

Safety Incidents

Date	Comment	Category

Drill Strings: 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)	Rotating Hook Load (maximum) (daN)		

Depth In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hrs)	Total Drill Hrs (hrs)

Comment

Drill String Components

Item Description	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)

Drilling Parameters:

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 LOON CREEK O-06 65-10 127-00
Rig:

Report Date: 1/18/201
Report #: 5
Depth Progress: m
Depth End: 0.00 mKB
Rig Release Date:

Hydraulic Calculations

Bit Hydraulic Powe...	HP/Area (kW/mm²)	% P @ bit (%)	Bit Jet Velocity (m/s)	Bit dP (kPa)	Ann. dP (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Shoe to Top of Casing...	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m...

Error

Mud Pumps: 1, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
1	NATIONAL	8-P-80		216.0

Pump Checks

Date	Depth (mKB)	Q (m³/min)	Pres (kPa)	Strokes (spm)
2/19/2013 00:00	1,855.00		686	5
2/20/2013 00:00				11

Pump Operations

Start Date	End Date	Liner Size (mm)	P (max) (kPa)	Vol/Stk OR (m³/stk)
1/29/2013		140.0		

Mud Pumps: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80		216.0

Pump Checks

Date	Depth (mKB)	Q (m³/min)	Pres (kPa)	Strokes (spm)
2/10/2013 08:00	1,724.00	0.587	357	6
2/10/2013 18:00	1,747.00	1.232	5,300	12

Pump Operations

Start Date	End Date	Liner Size (mm)	P (max) (kPa)	Vol/Stk OR (m³/stk)
1/29/2013		140.0		
2/5/2013		140.0		

Shaker Screens

Description	Start Date	End Date	Scr Sz X	Scr Sz Y	Note

Centrifuges/Cyclones:

Number	Make	Model	Diameter (mm)

Centrifuge/Cyclone Checks

Date	Hrs (hrs)	RPM (rpm)	Dens OF (kg/m³)	Q (ovrflw) (L/min)	Dens UF (kg/m³)	Q (undrflw) (L/min)

Fluid / Mud Additive Amounts

Description	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)
Quaternary System	5.00	5.00	5.0
Alberta Grp	31.00	31.00	28.0
Slater River	36.00	36.00	48.0
Artic Red	570.00	569.94	570.0
Sams Sault	787.00	786.89	787.0
Martin House	882.50	882.35	882.5
Imperial Shale	962.00	961.82	962.0
Upper Canol	1,643.00	1,642.61	962.0
Lower Canol	1,679.00	1,678.61	962.0
Hare Indian	1,788.00	1,787.59	962.0
Bluefish Member	1,796.00	1,795.59	962.0
Hume	1,804.00	1,803.59	962.0

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00
Rig:

Report Date: 1/19/2013
Report #: 6
Depth Progress: m
Depth End: 0.00 mKB
Rig Release Date:

API / UWI	Surface Legal Location	MaxWell Job Number	License No.
300/O-06 6510 127000	O-6 65-10 127-00	JOB01@2006	470

Ground Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
252.40	257.60	252.73	1/26/2013	-6.50

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	1/3/2013 00:00	2/21/2013 00:00	DRILLED & CASE	Yes

Daily Cost Total	Cumulative Cost	Total Job AFE Amount	Total AFE+Sup	AFE / RFE / Maint.#	Estimated Days
27,609.00	2,730,761.60	10,990,100.00	10,990,100.00	10342919	35.34

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hrs)	Cum Personnel Total Hours (hrs)
1,873.00	1,856.00	37.0	446.00	868.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)

Road Condition	Weather	Temperature (°C)	Wind

Ops and Depth @ Morning Report
Continue to build and prepare 0-06,65-10127-00

Wellbore
Original Hole

Last 24hr Summary
Continue to build and prepare rig to move on to 0-06,65-10127-00

24hr Forecast
Continue to build and prepare 0-06,65-10127-00

Daily Contacts
WS Supervisor, Dave Forsberg, 780-361-6417; Rig Manager, Rick Yavis; Drilling Engineer, Mike Greener, 403-771-5039; WS Supervisor, Mike Hobmaier, 403-844-3210; Drilling Superintend, Sheldon Vamplew, 403-999-1302

Last Casing String

Time Log

Start Time	End Time	Dur (hrs)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Depth Start (mKB)	Depth End (mKB)	Operation
00:00	00:00	24.00	MIRU	MOVE	MOB	P		0.00	0.00	Continue to build and prepare rig to move on to Loon Creek O-06 65-10 127-00

Fluid / Mud Checks: Mud Engineer: <Mud Engineer?>

Time	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (cp)	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 (fl) (°C)	HTHP Pressure (kPa)	HTHP Filt (mL/30min)

API Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Cost

Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost

Last BOP Drill

Type	Days Since Last ...	Last Date	Days Until Next ...	Next Check Date
BOP Drill (Pit)				

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
345.00	

Safety Incidents

Date	Comment	Category

Drill Strings: 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)	Rotating Hook Load (maximum) (daN)

Depth In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hrs)	Total Drill Hrs (hrs)

Comment

Drill String Components

Item Description	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)

Drilling Parameters:

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 LOON CREEK O-06 65-10 127-00
Rig:

Report Date: 1/19/2013
Report #: 6
Depth Progress: m
Depth End: 0.00 mKB
Rig Release Date:

Hydraulic Calculations

Bit Hydraulic Powe...	HP/Area (kW/mm²)	% P @ bit (%)	Bit Jet Velocity (m/s)	Bit dP (kPa)	Ann. dP (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Shoe to Top of Casing...	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m...

Error

Mud Pumps: 1, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
1	NATIONAL	8-P-80		216.0

Pump Checks

Date	Depth (mKB)	Q (m³/min)	Pres (kPa)	Strokes (spm)
2/19/2013 00:00	1,855.00		686	59
2/20/2013 00:00				115

Pump Operations

Start Date	End Date	Liner Size (mm)	P (max) (kPa)	Vol/Stk OR (m³/stk)
1/29/2013		140.0		

Mud Pumps: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80		216.0

Pump Checks

Date	Depth (mKB)	Q (m³/min)	Pres (kPa)	Strokes (spm)
2/10/2013 08:00	1,724.00	0.587	357	60
2/10/2013 18:00	1,747.00	1.232	5,300	126

Pump Operations

Start Date	End Date	Liner Size (mm)	P (max) (kPa)	Vol/Stk OR (m³/stk)
1/29/2013		140.0		
2/5/2013		140.0		

Shaker Screens

Description	Start Date	End Date	Scr Sz X	Scr Sz Y	Note

Centrifuges/Cyclones:

Number	Make	Model	Diameter (mm)

Centrifuge/Cyclone Checks

Date	Hrs (hrs)	RPM (rpm)	Dens OF (kg/m³)	Q (ovrflw) (L/min)	Dens UF (kg/m³)	Q (undrflw) (L/min)

Fluid / Mud Additive Amounts

Description	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)
Quaternary System	5.00	5.00	5.00
Alberta Grp	31.00	31.00	28.00
Slater River	36.00	36.00	48.00
Artic Red	570.00	569.94	570.00
Sams Sault	787.00	786.89	787.00
Martin House	882.50	882.35	882.50
Imperial Shale	962.00	961.82	962.00
Upper Canol	1,643.00	1,642.61	962.00
Lower Canol	1,679.00	1,678.61	962.00
Hare Indian	1,788.00	1,787.59	962.00
Bluefish Member	1,796.00	1,795.59	962.00
Hume	1,804.00	1,803.59	962.00

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00

Rig:

Report Date: 1/20/2013
Report #: 7
Depth Progress: m
Depth End: 0.00 mKB
Rig Release Date:

API / UWI	Surface Legal Location	MaxWell Job Number	License No.
300/O-06 6510 127000	O-6 65-10 127-00	JOB01@2006	470

Ground Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
252.40	257.60	252.73	1/26/2013	-5.50

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	1/3/2013 00:00	2/21/2013 00:00	DRILLED & CASE	Yes

Daily Cost Total	Cumulative Cost	Total Job AFE Amount	Total AFE+Sup	AFE / RFE / Maint.#	Estimated Days
27,609.00	2,758,370.60	10,990,100.00	10,990,100.00	10342919	35.34

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hrs)	Cum Personnel Total Hours (hrs)
1,873.00	1,856.00	37.0	446.00	1,314.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)

Road Condition	Weather	Temperature (°C)	Wind

Ops and Depth @ Morning Report
Prepare to spot Matting

Wellbore
Original Hole

Last 24hr Summary
Attempt to lay preheated rig liner, too cold liner shattered due to -40 temp. Lay poly spot Matting and Sub,Pin derrick together.

24hr Forecast
Continue to spot rig

Daily Contacts
Drilling Superintend, Sheldon Vamplew, 403-999-1302; WS Supervisor, Dave Forsberg, 780-361-6417; Rig Manager, Rick Yavis; Drilling Engineer, Mike Greener, 403-771-5039; WS Supervisor, Mike Hobmaier, 403-844-3210

Last Casing String

Time Log

Start Time	End Time	Dur (hrs)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Depth Start (mKB)	Depth End (mKB)	Operation
00:00	00:00	24.00	MIRU	MOVE	MOB	P		0.00	0.00	Atempt to lay preheated rig liner, too cold liner shattered due to -40 temp. Lay poly spot Matting and Sub. Pin derrick together.

Fluid / Mud Checks: Mud Engineer: <Mud Engineer?>

Time	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (cp)	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 (fl) (°C)	HTHP Pressure (kPa)	HTHP Filt (mL/30min)

API Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Cost

Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost

Last BOP Drill

Type	Days Since Last ...	Last Date	Days Until Next ...	Next Check Date
BOP Drill (Pit)				

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
346.00	

Safety Incidents

Date	Comment	Category

Drill Strings: 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)	Rotating Hook Load (maximum) (daN)

Depth In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hrs)	Total Drill Hrs (hrs)

Comment

Drill String Components

Item Description	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)

Drilling Parameters:

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 LOON CREEK O-06 65-10 127-00
Rig:

Report Date: 1/20/201
Report #: 7
Depth Progress: m
Depth End: 0.00 mKE
Rig Release Date:

Hydraulic Calculations

Bit Hydraulic Powe...	HP/Area (kW/mm²)	% P @ bit (%)	Bit Jet Velocity (m/s)	Bit dP (kPa)	Ann. dP (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Shoe to Top of Casing...	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m...

Error

Mud Pumps: 1, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
1	NATIONAL	8-P-80		216.0

Pump Checks

Date	Depth (mKB)	Q (m³/min)	Pres (kPa)	Strokes (spm)
2/19/2013 00:00	1,855.00		686	5
2/20/2013 00:00				11

Pump Operations

Start Date	End Date	Liner Size (mm)	P (max) (kPa)	Vol/Stk OR (m³/stk)
1/29/2013		140.0		

Mud Pumps: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80		216.0

Pump Checks

Date	Depth (mKB)	Q (m³/min)	Pres (kPa)	Strokes (spm)
2/10/2013 08:00	1,724.00	0.587	357	6
2/10/2013 18:00	1,747.00	1.232	5,300	12

Pump Operations

Start Date	End Date	Liner Size (mm)	P (max) (kPa)	Vol/Stk OR (m³/stk)
1/29/2013		140.0		
2/5/2013		140.0		

Shaker Screens

Description	Start Date	End Date	Scr Sz X	Scr Sz Y	Note

Centrifuges/Cyclones:

Number	Make	Model	Diameter (mm)

Centrifuge/Cyclone Checks

Date	Hrs (hrs)	RPM (rpm)	Dens OF (kg/m³)	Q (ovrflw) (L/min)	Dens UF (kg/m³)	Q (undrflw) (L/min)

Fluid / Mud Additive Amounts

Description	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)
Quaternary System	5.00	5.00	5.0
Alberta Grp	31.00	31.00	28.0
Slater River	36.00	36.00	48.0
Artic Red	570.00	569.94	570.0
Sams Sault	787.00	786.89	787.0
Martin House	882.50	882.35	882.5
Imperial Shale	962.00	961.82	962.0
Upper Canol	1,643.00	1,642.61	962.0
Lower Canol	1,679.00	1,678.61	962.0
Hare Indian	1,788.00	1,787.59	962.0
Bluefish Member	1,796.00	1,795.59	962.0
Hume	1,804.00	1,803.59	962.0

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00

Rig:

Report Date: 1/21/201
Report #: 8
Depth Progress: m
Depth End: 0.00 mKB
Rig Release Date:

API / UWI	Surface Legal Location	MaxWell Job Number	License No.
300/O-06 6510 127000	O-6 65-10 127-00	JOB01@2006	470

Ground Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
252.40	257.60	252.73	1/26/2013	-4.50

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	1/3/2013 00:00	2/21/2013 00:00	DRILLED & CASE	Yes

Daily Cost Total	Cumulative Cost	Total Job AFE Amount	Total AFE+Sup	AFE / RFE / Maint.#	Estimated Days
177,631.50	2,936,002.10	10,990,100.00	10,990,100.00	10342919	35.34

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hrs)	Cum Personnel Total Hours (hrs)
1,873.00	1,856.00	49.0	590.00	1,904.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)
Road Condition	Weather	Temperature (°C)	Wind

Ops and Depth @ Morning Report
Prepare to spot rig on location

Wellbore
Original Hole

Last 24hr Summary
Continue to spot rig and third party equipment

24hr Forecast
Continue to spot third party equipment

Daily Contacts
WS Supervisor, Dave Forsberg, 780-361-6417; Rig Manager, Rick Yavis; Drilling Engineer, Mike Greener, 403-771-5039; WS Supervisor, Mike Hobmaier, 403-844-3210; Drilling Superintend, Sheldon Vamplew, 403-999-1302

Last Casing String

Time Log

Start Time	End Time	Dur (hrs)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Depth Start (mKB)	Depth End (mKB)	Operation
00:00	00:00	24.00	MIRU	MOVE	MOB	P		0.00	0.00	Continue to set equipment and wait on loads.

Fluid / Mud Checks: Mud Engineer: <Mud Engineer?>

Time	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (cp)	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 (fl) (°C)	HTHP Pressure (kPa)	HTHP Filt (mL/30min)

API Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Cost
Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost	

Last BOP Drill

Type	Days Since Last ...	Last Date	Days Until Next ...	Next Check Date
BOP Drill (Pit)				

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
347.00	

Safety Incidents

Date	Comment	Category

Drill Strings: 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)	Rotating Hook Load (maximum) (daN)

Depth In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hrs)	Total Drill Hrs (hrs)

Comment

Drill String Components

Item Description	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)

Drilling Parameters:

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 LOON CREEK O-06 65-10 127-00
Rig:

Report Date: 1/21/201
Report #: 8
Depth Progress: m
Depth End: 0.00 mKE
Rig Release Date:

Hydraulic Calculations

Bit Hydraulic Powe...	HP/Area (kW/mm²)	% P @ bit (%)	Bit Jet Velocity (m/s)	Bit dP (kPa)	Ann. dP (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Shoe to Top of Casing...	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m...

Error

Mud Pumps: 1, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
1	NATIONAL	8-P-80		216.0

Pump Checks

Date	Depth (mKB)	Q (m³/min)	Pres (kPa)	Strokes (spm)
2/19/2013 00:00	1,855.00		686	59
2/20/2013 00:00				115

Pump Operations

Start Date	End Date	Liner Size (mm)	P (max) (kPa)	Vol/Stk OR (m³/stk)
1/29/2013		140.0		

Mud Pumps: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80		216.0

Pump Checks

Date	Depth (mKB)	Q (m³/min)	Pres (kPa)	Strokes (spm)
2/10/2013 08:00	1,724.00	0.587	357	60
2/10/2013 18:00	1,747.00	1.232	5,300	126

Pump Operations

Start Date	End Date	Liner Size (mm)	P (max) (kPa)	Vol/Stk OR (m³/stk)
1/29/2013		140.0		
2/5/2013		140.0		

Shaker Screens

Description	Start Date	End Date	Scr Sz X	Scr Sz Y	Note

Centrifuges/Cyclones:

Number	Make	Model	Diameter (mm)

Centrifuge/Cyclone Checks

Date	Hrs (hrs)	RPM (rpm)	Dens OF (kg/m³)	Q (ovrflw) (L/min)	Dens UF (kg/m³)	Q (undrflw) (L/min)

Fluid / Mud Additive Amounts

Description	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)
Quaternary System	5.00	5.00	5.00
Alberta Grp	31.00	31.00	28.00
Slater River	36.00	36.00	48.00
Artic Red	570.00	569.94	570.00
Sams Sault	787.00	786.89	787.00
Martin House	882.50	882.35	882.50
Imperial Shale	962.00	961.82	962.00
Upper Canol	1,643.00	1,642.61	962.00
Lower Canol	1,679.00	1,678.61	962.00
Hare Indian	1,788.00	1,787.59	962.00
Bluefish Member	1,796.00	1,795.59	962.00
Hume	1,804.00	1,803.59	962.00

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00

Rig:

Report Date: 7/22/201
Report #: 9
Depth Progress: m
Depth End: 0.00 mKB
Rig Release Date:

API / UWI	Surface Legal Location	MaxWell Job Number	License No.
300/O-06 6510 127000	O-6 65-10 127-00	JOB01@2006	470

Ground Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
252.40	257.60	252.73	1/26/2013	-3.50

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	1/3/2013 00:00	2/21/2013 00:00	DRILLED & CASE	Yes

Daily Cost Total	Cumulative Cost	Total Job AFE Amount	Total AFE+Sup	AFE / RFE / Maint.#	Estimated Days
45,334.00	2,981,336.10	10,990,100.00	10,990,100.00	10342919	35.34

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hrs)	Cum Personnel Total Hours (hrs)
1,873.00	1,856.00	27.0	326.00	2,230.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)
Road Condition	Weather	Temperature (°C)	Wind

Ops and Depth @ Morning Report
Rig up and continue to spot third party equipment

Wellbore
Original Hole

Last 24hr Summary
Continue to spot third party equipment, general rig up to raise derrick and raise derrick, Fire boiler ,unload casing.

24hr Forecast
General rig up.

Daily Contacts
WS Supervisor, Dave Forsberg, 780-361-6417; WS Supervisor, Mike Hobmaier, 403-844-3210; Drilling Superintend, Sheldon Vamplew, 403-999-1302; Rig Manager, Rick Yavis; Drilling Engineer, Mike Greener, 403-771-5039

Last Casing String

Time Log

Start Time	End Time	Dur (hrs)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Depth Start (mKB)	Depth End (mKB)	Operation
00:00	00:00	24.00	MIRU	MOVE	MOB	P		0.00	0.00	Continue to spot third party equipment, general rig up to raise derrick and raise derrick, unload casing.

Fluid / Mud Checks: Mud Engineer: <Mud Engineer?>

Time	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (cp)	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 (fl) (°C)	HTHP Pressure (kPa)	HTHP Filt (mL/30min)

API Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Cost
Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost	

Last BOP Drill

Type	Days Since Last ...	Last Date	Days Until Next ...	Next Check Date
BOP Drill (Pit)				

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
348.00	

Safety Incidents

Date	Comment	Category

Drill Strings: 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)		Rotating Hook Load (maximum) (daN)	

Depth In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hrs)	Total Drill Hrs (hrs)

Comment

Drill String Components

Item Description	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)

Drilling Parameters:

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 LOON CREEK O-06 65-10 127-00
Rig:

Report Date: 1/22/201
Report #: 9
Depth Progress: m
Depth End: 0.00 mKE
Rig Release Date:

Hydraulic Calculations

Bit Hydraulic Powe...	HP/Area (kW/mm²)	% P @ bit (%)	Bit Jet Velocity (m/s)	Bit dP (kPa)	Ann. dP (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Shoe to Top of Casing...	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m...

Error

Mud Pumps: 1, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
1	NATIONAL	8-P-80		216.0

Pump Checks

Date	Depth (mKB)	Q (m³/min)	Pres (kPa)	Strokes (spm)
2/19/2013 00:00	1,855.00		686	5
2/20/2013 00:00				11

Pump Operations

Start Date	End Date	Liner Size (mm)	P (max) (kPa)	Vol/Stk OR (m³/stk)
1/29/2013		140.0		

Mud Pumps: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80		216.0

Pump Checks

Date	Depth (mKB)	Q (m³/min)	Pres (kPa)	Strokes (spm)
2/10/2013 08:00	1,724.00	0.587	357	6
2/10/2013 18:00	1,747.00	1.232	5,300	12

Pump Operations

Start Date	End Date	Liner Size (mm)	P (max) (kPa)	Vol/Stk OR (m³/stk)
1/29/2013		140.0		
2/5/2013		140.0		

Shaker Screens

Description	Start Date	End Date	Scr Sz X	Scr Sz Y	Note

Centrifuges/Cyclones:

Number	Make	Model	Diameter (mm)

Centrifuge/Cyclone Checks

Date	Hrs (hrs)	RPM (rpm)	Dens OF (kg/m³)	Q (ovrflw) (L/min)	Dens UF (kg/m³)	Q (undrflw) (L/min)

Fluid / Mud Additive Amounts

Description	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)
Quaternary System	5.00	5.00	5.0
Alberta Grp	31.00	31.00	28.0
Slater River	36.00	36.00	48.0
Artic Red	570.00	569.94	570.0
Sams Sault	787.00	786.89	787.0
Martin House	882.50	882.35	882.5
Imperial Shale	962.00	961.82	962.0
Upper Canol	1,643.00	1,642.61	962.0
Lower Canol	1,679.00	1,678.61	962.0
Hare Indian	1,788.00	1,787.59	962.0
Bluefish Member	1,796.00	1,795.59	962.0
Hume	1,804.00	1,803.59	962.0

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00

Rig:

Report Date: 1/23/2013
Report #: 10
Depth Progress: m
Depth End: 0.00 mKB
Rig Release Date:

API / UWI	Surface Legal Location	MaxWell Job Number	License No.
300/O-06 6510 127000	O-6 65-10 127-00	JOB01@2006	470

Ground Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
252.40	257.60	252.73	1/26/2013	-2.50

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	1/3/2013 00:00	2/21/2013 00:00	DRILLED & CASE	Yes

Daily Cost Total	Cumulative Cost	Total Job AFE Amount	Total AFE+Sup	AFE / RFE / Maint.#	Estimated Days
29,909.00	3,011,245.10	10,990,100.00	10,990,100.00	10342919	35.34

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hrs)	Cum Personnel Total Hours (hrs)
1,873.00	1,856.00	39.0	470.00	2,700.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)

Road Condition	Weather	Temperature (°C)	Wind
Fair	Cloudy	-36	West 10km/hr

Ops and Depth @ Morning Report
Continue to rig up

Wellbore
Original Hole

Last 24hr Summary
General rig up, fire boiler rig up power cords ,lightes,steam lines and water lines.

24hr Forecast
General rig to Spud

Daily Contacts
WS Supervisor, Mike Hobmaier, 403-844-3210; Drilling Superintend, Sheldon Vamplew, 403-999-1302; Drilling Engineer, Mike Greener, 403-771-5039; Rig Manager, Rick Yavis; WS Supervisor, Dave Forsberg, 780-361-6417

Last Casing String

Time Log

Start Time	End Time	Dur (hrs)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Depth Start (mKB)	Depth End (mKB)	Operation
00:00	00:00	24.00	MIRU	MOVE	MOB	P		0.00	0.00	General rig up, fire boiler, rig up power cords, lights, steam lines and water lines.

Fluid / Mud Checks: Mud Engineer: <Mud Engineer?>

Time	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (cp)	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 (fl) (°C)	HTHP Pressure (kPa)	HTHP Filt (mL/30min)

API Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Cost

Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost

Last BOP Drill

Type	Days Since Last ...	Last Date	Days Until Next ...	Next Check Date
BOP Drill (Pit)				

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
349.00	

Safety Incidents

Date	Comment	Category

Drill Strings: 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)	Rotating Hook Load (maximum) (daN)

Depth In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hrs)	Total Drill Hrs (hrs)

Comment

Drill String Components

Item Description	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)

Drilling Parameters:

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 LOON CREEK O-06 65-10 127-00
Rig:

Report Date: 1/23/201
Report #: 1
Depth Progress: m
Depth End: 0.00 mKB
Rig Release Date:

Hydraulic Calculations

Bit Hydraulic Powe...	HP/Area (kW/mm²)	% P @ bit (%)	Bit Jet Velocity (m/s)	Bit dP (kPa)	Ann. dP (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Shoe to Top of Casing...	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m...

Error

Mud Pumps: 1, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
1	NATIONAL	8-P-80		216.0

Pump Checks

Date	Depth (mKB)	Q (m³/min)	Pres (kPa)	Strokes (spm)
2/19/2013 00:00	1,855.00		686	5
2/20/2013 00:00				11

Pump Operations

Start Date	End Date	Liner Size (mm)	P (max) (kPa)	Vol/Stk OR (m³/stk)
1/29/2013		140.0		

Mud Pumps: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80		216.0

Pump Checks

Date	Depth (mKB)	Q (m³/min)	Pres (kPa)	Strokes (spm)
2/10/2013 08:00	1,724.00	0.587	357	6
2/10/2013 18:00	1,747.00	1.232	5,300	12

Pump Operations

Start Date	End Date	Liner Size (mm)	P (max) (kPa)	Vol/Stk OR (m³/stk)
1/29/2013		140.0		
2/5/2013		140.0		

Shaker Screens

Description	Start Date	End Date	Scr Sz X	Scr Sz Y	Note
1	1/23/2013		84	84	
1	1/23/2013		84	84	
1	1/23/2013		84	84	
1	1/23/2013		84	84	

Centrifuges/Cyclones:

Number	Make	Model	Diameter (mm)

Centrifuge/Cyclone Checks

Date	Hrs (hrs)	RPM (rpm)	Dens OF (kg/m³)	Q (ovrflw) (L/min)	Dens UF (kg/m³)	Q (undrflw) (L/min)

Fluid / Mud Additive Amounts

Description	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)
Quaternary System	5.00	5.00	5.0
Alberta Grp	31.00	31.00	28.0
Slater River	36.00	36.00	48.0
Artic Red	570.00	569.94	570.0
Sams Sault	787.00	786.89	787.0
Martin House	882.50	882.35	882.5
Imperial Shale	962.00	961.82	962.0
Upper Canol	1,643.00	1,642.61	962.0
Lower Canol	1,679.00	1,678.61	962.0
Hare Indian	1,788.00	1,787.59	962.0
Bluefish Member	1,796.00	1,795.59	962.0
Hume	1,804.00	1,803.59	962.0

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00

Rig:

Report Date: 1/24/2013
Report #: 11
Depth Progress: m
Depth End: 0.00 mKB
Rig Release Date:

API / UWI	Surface Legal Location	MaxWell Job Number	License No.
300/O-06 6510 127000	O-6 65-10 127-00	JOB01@2006	470

Ground Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
252.40	257.60	252.73	1/26/2013	-1.50

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	1/3/2013 00:00	2/21/2013 00:00	DRILLED & CASE	Yes

Daily Cost Total	Cumulative Cost	Total Job AFE Amount	Total AFE+Sup	AFE / RFE / Maint.#	Estimated Days
260,170.09	3,271,415.19	10,990,100.00	10,990,100.00	10342919	35.34

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hrs)	Cum Personnel Total Hours (hrs)
1,873.00	1,856.00	39.0	470.00	3,170.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)

Road Condition	Weather	Temperature (°C)	Wind
Good	Partly Cloudy	-40	West 10km/hr

Ops and Depth @ Morning Report
Continue to weld and nipple up Diverter

Wellbore
Original Hole

Last 24hr Summary
No accidents or incidents 5 Hazard ID's 1 Reportable spill: General rig up, Weld on diverter flange and nipple up diverter, Rig up diverter lines, Recieved 3 loads sawdust, Directional tools,High side shale bins, ConleyMax heaters 3 loads of New Invert, Continue installing rig septic system

24hr Forecast
General rig to Spud

Daily Contacts
WS Supervisor, Dave Forsberg, 780-361-6417; WS Supervisor, Mike Hobmaier, 403-844-3210; Drilling Engineer, Mike Greener, 403-771-5039; Drilling Superintend, Sheldon Vamplew, 403-999-1302; Rig Manager, Rick Yavis

Last Casing String

Time Log

Start Time	End Time	Dur (hrs)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Depth Start (mKB)	Depth End (mKB)	Operation
00:00	08:00	8.00	MIRU	MOVE	MOB	P		0.00	0.00	General rig to spud,Rig in Flare and Booey lines.(Bag damaged location liner)
08:00	08:15	0.25	MIRU	MOVE	MOB	P		0.00	0.00	Rig service ,Function Crown saver
08:15	10:00	1.75	MIRU	MOVE	MOB	P		0.00	0.00	Continue general rig to spud.
10:00	10:15	0.25	MIRU	MOVE	MOB	P		0.00	0.00	Safety meeting with Welder prior to welding Diverter flange.
10:15	16:00	5.75	MIRU	MOVE	MOB	P		0.00	0.00	Cut and weld on Diverter Flange
16:00	16:15	0.25	MIRU	MOVE	MOB	P		0.00	0.00	Rig service ,Function Crown saver
16:15	19:00	2.75	MIRU	MOVE	MOB	P		0.00	0.00	Weld on diverter Flange. (Strap and caliper BHA
19:00	19:15	0.25	MIRU	MOVE	MOB	P		0.00	0.00	Crew hand over meeting.
19:15	00:00	4.75	MIRU	MOVE	MOB	P		0.00	0.00	Weld on diverter Flange and nipple up.

Fluid / Mud Checks: Mud Engineer: <Mud Engineer?>

Time	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (cp)	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 (fl) (°C)	HTHP Pressure (kPa)	HTHP Filt (mL/30min)

API Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Cost

Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost

Last BOP Drill

Type	Days Since Last ...	Last Date	Days Until Next ...	Next Check Date
BOP Drill (Pit)				

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
350.00	

Safety Incidents

Date	Comment	Category

Drill Strings: 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)	Rotating Hook Load (maximum) (daN)

Depth In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hrs)	Total Drill Hrs (hrs)

Comment

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00
Rig:

Report Date: 1/24/201
Report #: 11
Depth Progress: m
Depth End: 0.00 mKB
Rig Release Date:

Drill String Components

Item Description	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)

Drilling Parameters:

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)	Ann. dP (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Shoe to Top of Casing...	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m...

Error

Mud Pumps: 1, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
1	NATIONAL	8-P-80		216.0

Pump Checks

Date	Depth (mKB)	Q (m³/min)	Pres (kPa)	Strokes (spm)
2/19/2013 00:00	1,855.00		686	59
2/20/2013 00:00				115

Pump Operations

Start Date	End Date	Liner Size (mm)	P (max) (kPa)	Vol/Stk OR (m³/stk)
1/29/2013		140.0		

Mud Pumps: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80		216.0

Pump Checks

Date	Depth (mKB)	Q (m³/min)	Pres (kPa)	Strokes (spm)
2/10/2013 08:00	1,724.00	0.587	357	60
2/10/2013 18:00	1,747.00	1.232	5,300	126

Pump Operations

Start Date	End Date	Liner Size (mm)	P (max) (kPa)	Vol/Stk OR (m³/stk)
1/29/2013		140.0		
2/5/2013		140.0		

Shaker Screens

Description	Start Date	End Date	Scr Sz X	Scr Sz Y	Note
1	1/23/2013		84	84	
1	1/23/2013		84	84	
1	1/23/2013		84	84	
1	1/23/2013		84	84	

Centrifuges/Cyclones:

Number	Make	Model	Diameter (mm)

Centrifuge/Cyclone Checks

Date	Hrs (hrs)	RPM (rpm)	Dens OF (kg/m³)	Q (ovrflw) (L/min)	Dens UF (kg/m³)	Q (undrflw) (L/min)

Fluid / Mud Additive Amounts

Description	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)
Quaternary System	5.00	5.00	5.00
Alberta Grp	31.00	31.00	28.00
Slater River	36.00	36.00	48.00
Artic Red	570.00	569.94	570.00
Sams Sault	787.00	786.89	787.00
Martin House	882.50	882.35	882.50
Imperial Shale	962.00	961.82	962.00
Upper Canol	1,643.00	1,642.61	962.00
Lower Canol	1,679.00	1,678.61	962.00
Hare Indian	1,788.00	1,787.59	962.00
Bluefish Member	1,796.00	1,795.59	962.00
Hume	1,804.00	1,803.59	962.00

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00

Rig:

Report Date: 1/25/2013
Report #: 12
Depth Progress: m
Depth End: 0.00 mKB
Rig Release Date:

API / UWI	Surface Legal Location	MaxWell Job Number	License No.
300/O-06 6510 127000	O-6 65-10 127-00	JOB01@2006	470

Ground Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
252.40	257.60	252.73	1/26/2013	-0.50

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	1/3/2013 00:00	2/21/2013 00:00	DRILLED & CASE	Yes

Daily Cost Total	Cumulative Cost	Total Job AFE Amount	Total AFE+Sup	AFE / RFE / MaintJ#	Estimated Days
53,670.00	3,325,085.19	10,990,100.00	10,990,100.00	10342919	35.34

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hrs)	Cum Personnel Total Hours (hrs)
1,873.00	1,856.00	39.0	470.00	3,640.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)

Road Condition	Weather	Temperature (°C)	Wind
Fair	O/C Snow	-35	Dir: N, Strength:UP TO 19 KM/H

Ops and Depth @ Morning Report
Install flow T and mix Spud Mud

Wellbore
Original Hole

Last 24hr Summary
No accidents or incidents 5 Hazard ID's : Weld on diverter flow T and nipple up diverter, Rig up diverter lines and flare tank, Modify and build mud pump suction and discharge lines,

24hr Forecast
Spud and drill 311mm Surface hole

Daily Contacts
Drilling Superintend, Sheldon Vamplew, 403-999-1302; WS Supervisor, Mike Hobmaier, 403-844-3210; Drilling Engineer, Mike Greener, 403-771-5039; WS Supervisor, Dave Forsberg, 780-361-6417; Rig Manager, Rick Yavis

Last Casing String

Time Log

Start Time	End Time	Dur (hrs)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Depth Start (mKB)	Depth End (mKB)	Operation
00:00	07:45	7.75	MIRU	WHDBOP	NUND	P		0.00	0.00	Nipple up diverter weld up flow T/rig up flare tank and clean rig
07:45	08:00	0.25	MIRU	MOVE	SFTY	P		0.00	0.00	crew change safety meeting
08:00	08:15	0.25	MIRU	RIGMNT	SVRG	P		0.00	0.00	Rig service function test crown saver
08:15	16:00	7.75	MIRU	MOVE	MOB	P		0.00	0.00	Rig up evaporator, get 5" pipe and x/o ready, & surface equipment
16:00	16:15	0.25	MIRU	RIGMNT	SVRG	P		0.00	0.00	Rig service
16:15	00:00	7.75	MIRU	MOVE	MOB	P		0.00	0.00	Rig up evaporator, get 5" pipe and x/o ready,weld pump sucktion line re-modify pop valve lines and bleed off lines on pump house with welder/put water in tanks circulate threw hopper

Fluid / Mud Checks: Mud Engineer: <Mud Engineer?>

Time	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (cp)	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 (fl) (°C)	HTHP Pressure (kPa)	HTHP Filt (mL/30min)

API Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Cost

Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost

Last BOP Drill

Type	Days Since Last ...	Last Date	Days Until Next ...	Next Check Date
BOP Drill (Pit)				

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
351.00	

Safety Incidents

Date	Comment	Category

Drill Strings: 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)	Rotating Hook Load (maximum) (daN)

Depth In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hrs)	Total Drill Hrs (hrs)

Comment

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00
Rig:

Report Date: 1/29/2013
Report #: 12
Depth Progress: m
Depth End: 0.00 mKB
Rig Release Date:

Drill String Components

Item Description	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)

Drilling Parameters:

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)	Ann. dP (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Shoe to Top of Casing...	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m...

Error

Mud Pumps: 1, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
1	NATIONAL	8-P-80		216.0

Pump Checks

Date	Depth (mKB)	Q (m³/min)	Pres (kPa)	Strokes (spm)
2/19/2013 00:00	1,855.00		686	59
2/20/2013 00:00				115

Pump Operations

Start Date	End Date	Liner Size (mm)	P (max) (kPa)	Vol/Stk OR (m³/stk)
1/29/2013		140.0		

Mud Pumps: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80		216.0

Pump Checks

Date	Depth (mKB)	Q (m³/min)	Pres (kPa)	Strokes (spm)
2/10/2013 08:00	1,724.00	0.587	357	60
2/10/2013 18:00	1,747.00	1.232	5,300	126

Pump Operations

Start Date	End Date	Liner Size (mm)	P (max) (kPa)	Vol/Stk OR (m³/stk)
1/29/2013		140.0		
2/5/2013		140.0		

Shaker Screens

Description	Start Date	End Date	Scr Sz X	Scr Sz Y	Note
1	1/23/2013		84	84	
1	1/23/2013		84	84	
1	1/23/2013		84	84	
1	1/23/2013		84	84	

Centrifuges/Cyclones:

Number	Make	Model	Diameter (mm)

Centrifuge/Cyclone Checks

Date	Hrs (hrs)	RPM (rpm)	Dens OF (kg/m³)	Q (ovrflw) (L/min)	Dens UF (kg/m³)	Q (undrflw) (L/min)

Fluid / Mud Additive Amounts

Description	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)
Quaternary System	5.00	5.00	5.00
Alberta Grp	31.00	31.00	28.00
Slater River	36.00	36.00	48.00
Artic Red	570.00	569.94	570.00
Sams Sault	787.00	786.89	787.00
Martin House	882.50	882.35	882.50
Imperial Shale	962.00	961.82	962.00
Upper Canol	1,643.00	1,642.61	962.00
Lower Canol	1,679.00	1,678.61	962.00
Hare Indian	1,788.00	1,787.59	962.00
Bluefish Member	1,796.00	1,795.59	962.00
Hume	1,804.00	1,803.59	962.00

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00
Rig: Beaver Drilling Ltd. 2

Report Date: 1/26/2013
Report #: 13
Depth Progress: 126.00 m
Depth End: 126.00 mKB
Rig Release Date: 2/20/2013

API / UWI	Surface Legal Location	MaxWell Job Number	License No.
300/O-06 6510 127000	O-6 65-10 127-00	JOB01@2006	470

Ground Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
252.40	257.60	252.73	1/26/2013	0.50

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	1/3/2013 00:00	2/21/2013 00:00	DRILLED & CASE	Yes

Daily Cost Total	Cumulative Cost	Total Job AFE Amount	Total AFE+Sup	AFE / RFE / Maint.#	Estimated Days
134,426.71	3,459,511.90	10,990,100.00	10,990,100.00	10342919	35.34

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hrs)	Cum Personnel Total Hours (hrs)
1,873.00	1,856.00	43.0	508.00	4,148.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)
10	10		0

Road Condition	Weather	Temperature (°C)	Wind
Fair	Cloudy	-32	Northwest 20km/hr

Ops and Depth @ Morning Report
Drill 311mm surface hole at 190m

Wellbore
Original Hole

Last 24hr Summary
No accidents or incidents 2 Hazard ID's:4 Job obersvations : Weld on diverter flow T , Modify and build mud pump suction and discharge lines, Mix spud mud, Perform pre-spud inspection and provide NEB with documentation. Received confirmation from NEB representative of pre-spud inspection , Hold pre-spud safety meeting with drill crew and relevant service providers, Hold diverter drill and man down drill, Spud well @12:00 Hours, Drill 311mm surface hole F/ 0 to 126m with Reed S11G Mill Tooth bit and slick rotary BHA, Accumulated survey,connection and Work tight hole time.

24hr Forecast
Drill 311mm sirface hole.

Daily Contacts
Drilling Engineer, Mike Greener, 403-771-5039; Rig Manager, Rick Yavis; WS Supervisor, Mike Hobmaier, 403-844-3210; Drilling Superintend, Sheldon Vamplew, 403-999-1302; WS Supervisor, Dave Forsberg, 780-361-6417

Last Casing String

Time Log

Start Time	End Time	Dur (hrs)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Depth Start (mKB)	Depth End (mKB)	Operation
00:00	00:15	0.25	MIRU	RIGMNT	SVRG	P		0.00	0.00	Rig servise
00:15	01:00	0.75	MIRU	MOVE	MOB	P		0.00	0.00	Weld pop valve lines
01:00	07:00	6.00	MIRU	MOVE	MOB	P		0.00	0.00	weld flow t and install
07:00	07:45	0.75	MIRU	MOVE	SFTY	P		0.00	0.00	CAODC rig inspection/Function tested motor kills operating properly
07:45	08:00	0.25	MIRU	MOVE	SFTY	P		0.00	0.00	Crew change safety meeting
08:00	08:15	0.25	MIRU	RIGMNT	SVRG	P		0.00	0.00	Rig service function test crown saver
08:15	09:45	1.50	MIRU	MOVE	RURD	P		0.00	0.00	Rig up to spud
09:45	10:00	0.25	MIRU	MOVE	SFTY	P		0.00	0.00	Diverter b.o.p drill
10:00	11:30	1.50	MIRU	MOVE	SFTY	P		0.00	0.00	Pre spud safety meeting with Consultant and Geologist
11:30	12:00	0.50	MIRU	MOVE	SFTY	P		0.00	0.00	Man down drill
12:00	15:30	3.50	SURFAC	DRILL	DRLG	P		0.00	70.00	Drill 311mm hole from 0m to 70m with Reed S11G bit and slick rotary assembly
15:30	16:00	0.50	SURFAC	DRILL	SRVY	P		70.00	70.00	Accumulated survey time
16:00	17:15	1.25	SURFAC	DRILL	CIRC	T	Hole Con...	70.00	70.00	Work pipe & clean out mud ring @ 70 m
17:15	17:30	0.25	SURFAC	RIGMNT	SVRG	P		70.00	70.00	Rig service function test hydril 52 sec
17:30	19:00	1.50	SURFAC	DRILL	DRLG	P		70.00	89.00	Drill 311mm hole from 70m to 89m with Reed S11G bit and slick rotary assembly
19:00	19:15	0.25	SURFAC	DRILL	SFTY	P		89.00	89.00	Crew handover meeting
19:15	20:30	1.25	SURFAC	DRILL	DRLG	P		89.00	98.00	Drill 311mm hole from 89m to 98m with Reed S11G bit and slick rotary assembly
20:30	21:00	0.50	SURFAC	DRILL	SFTY	P		98.00	98.00	Man down drill and diverter drill crew in position well secure in 90 sec
21:00	23:00	2.00	SURFAC	DRILL	DRLG	P		98.00	126.00	Drill 311mm hole from 98m to 126m with Reed S11G Mill tooth bit and slick rotary assembly
23:00	23:30	0.50	SURFAC	DRILL	CIRC	T	Hole Con...	126.00	126.00	Accumulated work tight hole time
23:30	00:00	0.50	SURFAC	DRILL	SRVY	P		126.00	126.00	Accumulated survey time

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00
Rig: Beaver Drilling Ltd. 2

Report Date: 1/26/201
Report #: 1
Depth Progress: 126.00 m
Depth End: 126.00 mKE
Rig Release Date: 2/20/201

Fluid / Mud Checks: Mud Engineer: Tri Pham

Time	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (cp)	YP Override (Pa)
15:45	71.00	1060.0	40	10.5	2.0	6.0

Low Gravity Solids (%)	MBT (kg/m³)	Oil Water Ratio	Chlorides (mg/L)	Calcium (mg/L)	Lime (kg/m³)	Potassium (mg/L)
3.8			600	40		

Electric Stab (V)	ECD - Manual Entry (k...	Sand (%)	Solids, Corr. (%)	T (fl) (°C)	HTHP Pressure (kPa)	HTHP Filt (mL/30min)
		0.0	5.0	25		

API Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Cost
20.0			932.71

Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost
		932.71

Last BOP Drill

Type	Days Since Last ...	Last Date	Days Until Next ...	Next Check Date
BOP Drill (Pit)				

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
352.00	

Safety Incidents

Date	Comment	Category

Drill Strings: BHA # 1

Bit Run	Drill Bit	Length (m)	IADC Bit Dull	TFA (Incl Noz) (mm²)	BHA ROP (m/hr)
1A	311.0mm, REED, S11G, D146225		——	596	12.4

Nozzles (mm)	String Length (m)	OD (mm)	Rotating Hook Load (maximum) (daN)
15.9/15.9/15.9	600.00	233.0	44,000

Depth In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hrs)	Total Drill Hrs (hrs)
0.00	600.00	12.4	610.00	610.00	49.00	49.00

Comment

Drill String Components

Item Description	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)
Kelly	76.0	114.0		6.38	600.0
Drill Pipe	101.6	127.0	19	366.31	593.62
4 1/2 IF X/O XT54	109.0	167.0	1	0.31	227.31
HWDP	76.2	127.0	10	93.55	227.0
XO	60.0	160.0	2	1.08	133.45
5 D.C	60.0	160.0	12	112.27	132.37
BELL SUB	59.0	130.0	1	0.66	20.1
9 D.C	71.0	233.0	2	18.50	19.44
Bit sub	70.0	232.0	1	0.94	0.94

Drilling Parameters: 70.00 - 126.00 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
126.00	8.25	11.8	2.600	7,000	120	6,700	30,000	30,000	30,000	30,000	

Hydraulic Calculations

Bit Hydraulic Powe...	HP/Area (kW/mm²)	% P @ bit (%)	Bit Jet Velocity (m/s)	Bit dP (kPa)	Ann. dP (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)
136.4	0.00180	47	72.7	3,147.2	17.3	1060.0	1074.0

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Shoe to Top of Casing...	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m...
0.38	11.74		0.0	0.0	41.5	78.0

Error

Mud Pumps: 1, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
1	NATIONAL	8-P-80		216.0

Pump Checks

Date	Depth (mKB)	Q (m³/min)	Pres (kPa)	Strokes (spm)
2/19/2013 00:00	1,855.00		686	59
2/20/2013 00:00				115

Pump Operations

Start Date	End Date	Liner Size (mm)	P (max) (kPa)	Vol/Stk OR (m³/stk)
1/29/2013		140.0		

Mud Pumps: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80		216.0

Pump Checks

Date	Depth (mKB)	Q (m³/min)	Pres (kPa)	Strokes (spm)
2/10/2013 08:00	1,724.00	0.587	357	60
2/10/2013 18:00	1,747.00	1,232	5,300	126

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00
Rig: Beaver Drilling Ltd. 2

Report Date: 1/26/2013
Report #: 13
Depth Progress: 126.00 m
Depth End: 126.00 mKB
Rig Release Date: 2/20/2013

Pump Operations

Start Date	End Date	Liner Size (mm)	P (max) (kPa)	Vol/Stk OR (m³/stk)
1/29/2013		140.0		
2/5/2013		140.0		

Shaker Screens

Description	Start Date	End Date	Scr Sz X	Scr Sz Y	Note
1	1/23/2013		84	84	
1	1/23/2013		84	84	
1	1/23/2013		84	84	
1	1/23/2013		84	84	

Centrifuges/Cyclones:

Number	Make	Model	Diameter (mm)

Centrifuge/Cyclone Checks

Date	Hrs (hrs)	RPM (rpm)	Dens OF (kg/m³)	Q (ovrflw) (L/min)	Dens UF (kg/m³)	Q (undrflw) (L/min)

Fluid / Mud Additive Amounts

Description	Consumed	Cost	Size	Units
SULFAMIC ACID - 25KG	1.0	74.630	25.0	sks
FED PAC R - 22.68KG	1.0	139.450	22.68	sks
FED ZAN D - 11.34 KG	2.0	114.290	11.34	sks
FEDERAL GEL - 40KG	45.0	10.890	40.0	sks

Survey Data

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	Depart (m)	NS (m)	EW (m)	VS (m)	DLS (°/30m)
1/26/2013	29.00	0.50	110.00	29.00	0.13	-0.04	0.12	0.10	0.52
1/26/2013	58.00	0.50	110.00	58.00	0.38	-0.13	0.36	0.31	0.00
1/26/2013	86.00	0.20	110.00	86.00	0.55	-0.19	0.52	0.45	0.32
1/26/2013	114.00	0.80	110.00	114.00	0.79	-0.27	0.75	0.64	0.64

Formations

Formation Name	Drill Top MD (mKB)	Drill Top TVD (mKB)	Prog Top TVD (mKB)
Quaternary System	5.00	5.00	5.00
Alberta Grp	31.00	31.00	28.00
Slater River	36.00	36.00	48.00
Artic Red	570.00	569.94	570.00
Sams Sault	787.00	786.89	787.00
Martin House	882.50	882.35	882.50
Imperial Shale	962.00	961.82	962.00
Upper Canol	1,643.00	1,642.61	962.00
Lower Canol	1,679.00	1,678.61	962.00
Hare Indian	1,788.00	1,787.59	962.00
Bluefish Member	1,796.00	1,795.59	962.00
Hume	1,804.00	1,803.59	962.00

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00
Rig: Beaver Drilling Ltd. 2

Report Date: 1/27/2013
Report #: 14
Depth Progress: 254.00 m
Depth End: 370.00 mKB
Rig Release Date: 2/20/2013

API / UWI	Surface Legal Location	MaxWell Job Number	License No.
300/O-06 6510 127000	O-6 65-10 127-00	JOB01@2006	470

Ground Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
252.40	257.60	252.73	1/26/2013	1.50

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	1/3/2013 00:00	2/21/2013 00:00	DRILLED & CASE	Yes

Daily Cost Total	Cumulative Cost	Total Job AFE Amount	Total AFE+Sup	AFE / RFE / Maint.#	Estimated Days
66,892.18	3,526,404.08	10,990,100.00	10,990,100.00	10342919	35.34

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hrs)	Cum Personnel Total Hours (hrs)
1,873.00	1,856.00	40.0	402.00	4,550.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)
38	23		0

Road Condition	Weather	Temperature (°C)	Wind
Fair	Clear	-34	Southwest 10km/hr

Ops and Depth @ Morning Report
Drill 311mm surface hole at 430m

Wellbore
Original Hole

Last 24hr Summary
No accidents or incidents1 Hazard ID's:4 Job obersvations : Drill 311mm surface hole F/ 126 to 370m with Reed S11G Mill Tooth bit and slick rotary BHA, Accumulated survey and connection time

24hr Forecast
Drill 311mm sirface hole.

Daily Contacts
WS Supervisor, Mike Hobmaier, 403-844-3210; Drilling Engineer, Mike Greener, 403-771-5039; Drilling Superintend, Sheldon Vamplew, 403-999-1302; Command Center, 587-794-4599; WS Supervisor, Dave Forsberg, 780-361-6417; Rig Manager, Rick Yavis

Last Casing String

Time Log

Start Time	End Time	Dur (hrs)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Depth Start (mKB)	Depth End (mKB)	Operation
00:00	01:00	1.00	SURFAC	DRILL	DRLG	P		126.00	135.00	Drill 311mm hole from 126m to 135m with Reed S11G Mill tooth bit and slick rotary assembly
01:00	01:15	0.25	SURFAC	RIGMNT	SVRG	P		135.00	135.00	Rig service function test crown saver
01:15	07:30	6.25	SURFAC	DRILL	DRLG	P		135.00	211.00	Drill 311mm hole from 135m to211m with Reed S11G Mill tooth bit and slick rotary assembly
07:30	07:45	0.25	SURFAC	DRILL	SFTY	P		211.00	211.00	Crew handover meeting
07:45	08:00	0.25	SURFAC	DRILL	SRVY	P		211.00	211.00	Accumulated survey time
08:00	08:15	0.25	SURFAC	RIGMNT	SVRG	P		211.00	211.00	RIG SERVICE function test crown saver & hydril 54 sec to close
08:15	13:45	5.50	SURFAC	DRILL	DRLG	P		211.00	279.00	Drill 311mm hole from 211m to 279 m with Reed S11G Mill tooth bit and slick rotary assembly
13:45	14:30	0.75	SURFAC	DRILL	SRVY	P		279.00	279.00	Accumulated time for surveys
14:30	16:00	1.50	SURFAC	RIGMNT	RGRP	T	Rig	279.00	279.00	Work on shaker
16:00	16:15	0.25	SURFAC	RIGMNT	SVRG	P		279.00	279.00	Rig service function rest hydril 50 sec & crown saver
16:15	17:30	1.25	SURFAC	DRILL	DRLG	P		279.00	298.00	Drill 311mm hole from 279m to 298 m with Reed S11G Mill tooth bit and slick rotary assembly
17:30	18:00	0.50	SURFAC	RIGMNT	RGRP	T	Rig	298.00	298.00	Tighten up belts on pump # two
18:00	19:30	1.50	SURFAC	DRILL	DRLG	P		298.00	317.00	Drill 311mm hole from 298m to317 m with Reed S11G Mill tooth bit and slick rotary assembly
19:30	20:00	0.50	SURFAC	DRILL	SFTY	P		317.00	317.00	Crew handover meeting weekly meeting
20:00	23:30	3.50	SURFAC	DRILL	DRLG	P		317.00	370.00	Drill 311mm hole from 317m to 370m with Reed S11G Mill tooth bit and slick rotary assembly
23:30	00:00	0.50	SURFAC	DRILL	SRVY	P		370.00	370.00	Accumulated wire line surveys

Fluid / Mud Checks: Mud Engineer: Tri Pham

Time	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (cp)	YP Override (Pa)
07:15	455.00	1125.0	50	8.0	19.0	7.5

Low Gravity Solids (%)	MBT (kg/m³)	Oil Water Ratio	Chlorides (mg/L)	Calcium (mg/L)	Lime (kg/m³)	Potassium (mg/L)
7.9	64		500	20		

Electric Stab (V)	ECD - Manual Entry (k...	Sand (%)	Solids, Corr. (%)	T (fl) (°C)	HTHP Pressure (kPa)	HTHP Filt (mL/30min)
		0.0	5.0	32		

API Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Cost
5.5			814.18

Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost
		1,746.89

Last BOP Drill

Type	Days Since Last ...	Last Date	Days Until Next ...	Next Check Date
BOP Drill (Pit)				

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
353.00	

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00
Rig: Beaver Drilling Ltd. 2

Report Date: 1/27/2013
Report #: 14
Depth Progress: 254.00 m
Depth End: 370.00 mKB
Rig Release Date: 2/20/2013

Safety Incidents

Date	Comment	Category

Drill Strings: BHA # 1

Bit Run	Drill Bit	Length (m)	IADC Bit Dull	TFA (incl Noz) (mm²)	BHA ROP (m/hr)
1A	311.0mm, REED, S11G, D146225		———	596	12.4

Nozzles (mm)	String Length (m)	OD (mm)	Rotating Hook Load (maximum) (daN)
15.9/15.9/15.9	600.00	233.0	44,000

Depth In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hrs)	Total Drill Hrs (hrs)
0.00	600.00	12.4	610.00	610.00	49.00	49.00

Comment

Drill String Components

Item Description	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)
Kelly	76.0	114.0		6.38	600.0
Drill Pipe	101.6	127.0	19	366.31	593.62
4 1/2 IF X/O XT54	109.0	167.0	1	0.31	227.31
HWDP	76.2	127.0	10	93.55	227.0
XO	60.0	160.0	2	1.08	133.45
6 D.C	60.0	160.0	12	112.27	132.37
BELL SUB	59.0	130.0	1	0.66	20.1
9 D.C	71.0	233.0	2	18.50	19.44
Bit sub	70.0	232.0	1	0.94	0.94

Drilling Parameters: 279.00 - 370.00 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
380.00	26.25	17.3	2.600	12,000	120	10,600	42,000	42,000	42,000	42,000	

Hydraulic Calculations

Bit Hydraulic Powe...	HP/Area (kW/mm²)	% P @ bit (%)	Bit Jet Velocity (m/s)	Bit dP (kPa)	Ann. dP (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)
148.0	0.00195	32	72.7	3,414.4	104.7	1150.0	1178.9

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Shoe to Top of Casing...	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m...
1.99	11.74		0.0	0.0	41.1	78.0

Error

Mud Pumps: 1, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
1	NATIONAL	8-P-80		216.0

Pump Checks

Date	Depth (mKB)	Q (m³/min)	Pres (kPa)	Strokes (spm)
2/19/2013 00:00	1,855.00		686	5
2/20/2013 00:00				11

Pump Operations

Start Date	End Date	Liner Size (mm)	P (max) (kPa)	Vol/Stk OR (m³/stk)
1/29/2013		140.0		

Mud Pumps: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80		216.0

Pump Checks

Date	Depth (mKB)	Q (m³/min)	Pres (kPa)	Strokes (spm)
2/10/2013 08:00	1,724.00	0.587	357	6
2/10/2013 18:00	1,747.00	1.232	5,300	12

Pump Operations

Start Date	End Date	Liner Size (mm)	P (max) (kPa)	Vol/Stk OR (m³/stk)
1/29/2013		140.0		
2/5/2013		140.0		

Shaker Screens

Description	Start Date	End Date	Scr Sz X	Scr Sz Y	Note
1	1/23/2013		84	84	
1	1/23/2013		84	84	
1	1/23/2013		84	84	
1	1/23/2013		84	84	

Centrifuges/Cyclones:

Number	Make	Model	Diameter (mm)

Centrifuge/Cyclone Checks

Date	Hrs (hrs)	RPM (rpm)	Dens OF (kg/m³)	Q (ovrflw) (L/min)	Dens UF (kg/m³)	Q (undrflw) (L/min)

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00
Rig: Beaver Drilling Ltd. 2

Report Date: 1/27/2013
Report #: 14
Depth Progress: 254.00 m
Depth End: 370.00 mKB
Rig Release Date: 2/20/2013

Fluid / Mud Additive Amounts

Description	Consumed	Cost	Size	Units
FED ZAN D - 11.34 KG	4.0	114.290	11.34	sks
SAWDUST - 7.3KG	8.0	3.790	7.3	sks
FEDERAL GEL - 40KG	30.0	10.890	40.0	sks

Survey Data

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	Depart (m)	NS (m)	EW (m)	VS (m)	DLS (°/30m)
1/27/2013	142.00	0.10	110.00	142.00	1.01	-0.35	0.95	0.82	0.75
1/27/2013	171.00	0.60	110.00	171.00	1.19	-0.41	1.12	0.97	0.52
1/27/2013	199.00	0.70	110.00	198.99	1.51	-0.52	1.42	1.22	0.11
1/27/2013	228.00	1.20	110.00	227.99	1.99	-0.68	1.87	1.61	0.52
1/27/2013	257.00	0.90	110.00	256.98	2.52	-0.86	2.37	2.04	0.31
1/27/2013	287.00	0.20	110.00	286.98	2.81	-0.96	2.64	2.28	0.70
1/27/2013	314.00	1.00	110.00	313.98	3.09	-1.06	2.91	2.51	0.89
1/27/2013	354.00	0.90	110.00	353.98	3.76	-1.28	3.53	3.04	0.08

Formations

Formation Name	Drill Top MD (mKB)	Drill Top TVD (mKB)	Prog Top TVD (mKB)
Quaternary System	5.00	5.00	5.00
Alberta Grp	31.00	31.00	28.00
Slater River	36.00	36.00	48.00
Artic Red	570.00	569.94	570.00
Sams Sault	787.00	786.89	787.00
Martin House	882.50	882.35	882.50
Imperial Shale	962.00	961.82	962.00
Upper Canol	1,643.00	1,642.61	962.00
Lower Canol	1,679.00	1,678.61	962.00
Hare Indian	1,788.00	1,787.59	962.00
Bluefish Member	1,796.00	1,795.59	962.00
Hume	1,804.00	1,803.59	962.00

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00
Rig: Beaver Drilling Ltd. 2

Report Date: 1/28/2013
Report #: 15
Depth Progress: 217.00 m
Depth End: 587.00 mKB
Rig Release Date: 2/20/2013

API / UWI	Surface Legal Location	MaxWell Job Number	License No.
300/O-06 6510 127000	O-6 65-10 127-00	JOB01@2006	470

Ground Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
252.40	257.60	252.73	1/26/2013	2.50

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	1/3/2013 00:00	2/21/2013 00:00	DRILLED & CASE	Yes

Daily Cost Total	Cumulative Cost	Total Job AFE Amount	Total AFE+Sup	AFE / RFE / Maint.#	Estimated Days
105,161.38	3,631,565.46	10,990,100.00	10,990,100.00	10342919	35.34

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hrs)	Cum Personnel Total Hours (hrs)
1,873.00	1,856.00	40.0	402.00	4,952.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)
38	38		0

Road Condition	Weather	Temperature (°C)	Wind
Fair	Clear	-33	West 10km/hr

Ops and Depth @ Morning Report
Wiper trip condition hole to Log and run casing .

Wellbore
Original Hole

Last 24hr Summary
No accidents or incidents1 Hazard ID's:4 Job obersvations : Drill 311mm surface hole F/ 370 to 587m with Reed S11G Mill Tooth bit and slick rotary BHA, Accumulated survey and connection time

24hr Forecast
Finish drilling 311mm hole and run Wire line logs

Daily Contacts
Command Center, 587-794-4599; Drilling Engineer, Mike Greener, 403-771-5039; Rig Manager, Rick Yavis; Drilling Superintend, Sheldon Vamplew, 403-999-1302; WS Supervisor, Dave Forsberg, 780-361-6417; WS Supervisor, Mike Hobmaier, 403-844-3210

Last Casing String

Time Log

Start Time	End Time	Dur (hrs)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Depth Start (mKB)	Depth End (mKB)	Operation
00:00	00:15	0.25	SURFAC	DRILL	DRLG	P		370.00	375.00	Drill 311mm hole from 370M to 375m with Reed S11G Mill tooth bit and slick rotary assembly
00:15	00:30	0.25	SURFAC	RIGMNT	SVRG	P		375.00	375.00	Rig service function hydrill 50 sec crown saver operating properly
00:30	05:15	4.75	SURFAC	DRILL	DRLG	P		375.00	427.00	Drill 311mm hole from 375M to 427m with Reed S11G Mill tooth bit and slick rotary assembly
05:15	05:45	0.50	SURFAC	RIGMNT	SVRG	P		427.00	427.00	Clean out shaker
05:45	07:00	1.25	SURFAC	DRILL	DRLG	P		427.00	442.00	Drill 311mm hole from 427M to 442m with Reed S11G Mill tooth bit and slick rotary assembly
07:00	07:15	0.25	SURFAC	DRILL	SFTY	P		442.00	442.00	Crew handover meeting
07:15	07:30	0.25	SURFAC	DRILL	DRLG	P		442.00	452.00	Drill 311mm hole from 442M to 452m with Reed S11G Mill tooth bit and slick rotary assembly
07:30	08:00	0.50	SURFAC	DRILL	SRVY	P		452.00	452.00	Accumilated wireline survey
08:00	08:15	0.25	SURFAC	RIGMNT	SVRG	P		452.00	452.00	Rig service function hydril 53 sec & crown saver
08:15	10:30	2.25	SURFAC	DRILL	DRLG	P		452.00	471.00	Drill 311mm hole from 452m to 471m with Reed S11G Mill tooth bit and slick rotary assembly
10:30	11:30	1.00	SURFAC	RIGMNT	RGRP	T	Rig	471.00	471.00	Changed out break out line on drawworks
11:30	13:45	2.25	SURFAC	DRILL	DRLG	P		471.00	500.00	Drill 311mm hole from 471m to 500 m with Reed S11G Mill tooth bit and slick rotary assembly
13:45	14:00	0.25	SURFAC	RIGMNT	PSIT	P		500.00	500.00	Level rig
14:00	15:30	1.50	SURFAC	DRILL	DRLG	P		500.00	519.00	Drill 311mm hole from 500m to 519 m with Reed S11G Mill tooth bit and slick rotary assembly
15:30	16:00	0.50	SURFAC	DRILL	SRVY	P		519.00	519.00	Accumulated time for surveys
16:00	16:15	0.25	SURFAC	RIGMNT	SVRG	P		519.00	519.00	Rig service function test h.c.r 2 sec & crown saver
16:15	23:00	6.75	SURFAC	DRILL	DRLG	P		519.00	587.00	Drill 311mm hole from 519m to 587 m with Reed S11G Mill tooth bit and slick rotary assembly
23:00	00:00	1.00	SURFAC	DRILL	CIRC	P		587.00	587.00	Circulate and clean well for wiper trip

Fluid / Mud Checks: Mud Engineer: Tri Pham

Time	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (cp)	YP Override (Pa)
07:45	213.00	1150.0	52	9.0	10.0	12.0
Low Gravity Solids (%)	**MBT (kg/m³)**	**Oil Water Ratio**	**Chlorides (mg/L)**	**Calcium (mg/L)**	**Lime (kg/m³)**	**Potassium (mg/L)**
9.5			700	20		
Electric Stab (V)	**ECD - Manual Entry (k...**	**Sand (%)**	**Solids, Corr. (%)**	**T (fl) (°C)**	**HTHP Pressure (kPa)**	**HTHP Filt (mL/30min)**
		0.0	6.0	30		

API Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Cost
7.5			1,904.88
Cum Mud Lost to Surface (m³)	**Cum Mud Lost to Hole (m³)**		**Cumulative Mud Cost**
			3,651.77

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00
Rig: Beaver Drilling Ltd. 2

Report Date: 1/28/2013
Report #: 15
Depth Progress: 217.00 m
Depth End: 587.00 mKB
Rig Release Date: 2/20/2013

Last BOP Drill

Type	Days Since Last ...	Last Date	Days Until Next ...	Next Check Date
BOP Drill (Pit)				

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
354.00	

Safety Incidents

Date	Comment	Category

Drill Strings: BHA # 1

Bit Run	Drill Bit	Length (m)	IADC Bit Dull	TFA (Incl Noz) (mm²)	BHA ROP (m/hr)
1A	311.0mm, REED, S11G, D146225		----	596	12.4

Nozzles (mm)	String Length (m)	OD (mm)	Rotating Hook Load (maximum) (daN)
15.9/15.9/15.9	600.00	233.0	44,000

Depth In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hrs)	Total Drill Hrs (hrs)
0.00	600.00	12.4	610.00	610.00	49.00	49.00

Comment

Drill String Components

Item Description	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)
Kelly	76.0	114.0		6.38	600.0
Drill Pipe	101.6	127.0	19	366.31	593.62
4 1/2 IF X/O XT54	109.0	167.0	1	0.31	227.31
HWDP	76.2	127.0	10	93.55	227.0
XO	60.0	160.0	2	1.08	133.4
6 D.C	60.0	160.0	12	112.27	132.37
BELL SUB	59.0	130.0	1	0.66	20.1
9 D.C	71.0	233.0	2	18.50	19.44
Bit sub	70.0	232.0	1	0.94	0.94

Drilling Parameters: 519.00 - 587.00 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
597.00	45.50	10.1	2.600	14,000	120	11,000	43,000	43,000	43,000	43,000	

Hydraulic Calculations

Bit Hydraulic Powe...	HP/Area (kW/mm²)	% P @ bit (%)	Bit Jet Velocity (m/s)	Bit dP (kPa)	Ann. dP (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)
144.7	0.00191	30	72.7	3,340.2	115.8	1125.0	1145.1

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Shoe to Top of Casing...	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m...
3.74	11.74		0.0	0.0	41.1	78.0

Error

Mud Pumps: 1, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
1	NATIONAL	8-P-80		216.0

Pump Checks

Date	Depth (mKB)	Q (m³/min)	Pres (kPa)	Strokes (spm)
2/19/2013 00:00	1,855.00		686	5
2/20/2013 00:00				11

Pump Operations

Start Date	End Date	Liner Size (mm)	P (max) (kPa)	Vol/Stk OR (m³/stk)
1/29/2013		140.0		

Mud Pumps: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80		216.0

Pump Checks

Date	Depth (mKB)	Q (m³/min)	Pres (kPa)	Strokes (spm)
2/10/2013 08:00	1,724.00	0.587	357	6
2/10/2013 18:00	1,747.00	1.232	5,300	12

Pump Operations

Start Date	End Date	Liner Size (mm)	P (max) (kPa)	Vol/Stk OR (m³/stk)
1/29/2013		140.0		
2/5/2013		140.0		

Shaker Screens

Description	Start Date	End Date	Scr Sz X	Scr Sz Y	Note
1	1/23/2013		84	84	
1	1/23/2013		84	84	
1	1/23/2013		84	84	
1	1/23/2013		84	84	

Centrifuges/Cyclones:

Number	Make	Model	Diameter (mm)

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00
Rig: Beaver Drilling Ltd. 2

Report Date: 1/28/2013
Report #: 15
Depth Progress: 217.00 m
Depth End: 587.00 mKB
Rig Release Date: 2/20/2013

Centrifuge/Cyclone Checks

Date	Hrs (hrs)	RPM (rpm)	Dens OF (kg/m³)	Q (ovrflw) (L/min)	Dens UF (kg/m³)	Q (undrflw) (L/min)

Fluid / Mud Additive Amounts

Description	Consumed	Cost	Size	Units
FED ZAN D - 11.34 KG	7.0	114.290	11.34	sks
BARITE - 40KG	20.0	19.850	40.0	sks
FEDERAL GEL - 40KG	65.0	10.890	40.0	sks

Survey Data

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	Depart (m)	NS (m)	EW (m)	VS (m)	DLS (°/30m)
1/28/2013	390.00	1.10	110.00	389.97	4.38	-1.50	4.12	3.55	0.17
1/28/2013	439.00	1.10	110.00	438.96	5.32	-1.82	5.00	4.31	0.00
1/28/2013	478.00	1.30	110.00	477.95	6.14	-2.10	5.77	4.97	0.15
1/28/2013	516.00	0.30	110.00	515.95	6.67	-2.28	6.27	5.40	0.79
1/28/2013	555.00	1.20	110.00	554.94	7.18	-2.46	6.75	5.82	0.69

Formations

Formation Name	Drill Top MD (mKB)	Drill Top TVD (mKB)	Prog Top TVD (mKB)
Quaternary System	5.00	5.00	5.00
Alberta Grp	31.00	31.00	28.00
Slater River	36.00	36.00	48.00
Artic Red	570.00	569.94	570.00
Sams Sault	787.00	786.89	787.00
Martin House	882.50	882.35	882.50
Imperial Shale	962.00	961.82	962.00
Upper Canol	1,643.00	1,642.61	962.00
Lower Canol	1,679.00	1,678.61	962.00
Hare Indian	1,788.00	1,787.59	962.00
Bluefish Member	1,796.00	1,795.59	962.00
Hume	1,804.00	1,803.59	962.00

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00
Rig: Beaver Drilling Ltd. 2

Report Date: 1/29/2013
Report #: 16
Depth Progress: 13.00 m
Depth End: 600.00 mKB
Rig Release Date: 2/20/2013

API / UWI	Surface Legal Location	MaxWell Job Number	License No.
300/O-06 6510 127000	O-6 65-10 127-00	JOB01@2006	470

Ground Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
252.40	257.60	252.73	1/26/2013	3.50

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	1/3/2013 00:00	2/21/2013 00:00	DRILLED & CASE	Yes

Daily Cost Total	Cumulative Cost	Total Job AFE Amount	Total AFE+Sup	AFE / RFE / Maint.#	Estimated Days
173,721.44	3,805,286.90	10,990,100.00	10,990,100.00	10342919	35.34

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hrs)	Cum Personnel Total Hours (hrs)
1,873.00	1,856.00	40.0	422.00	5,374.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)
21	21		0

Road Condition	Weather	Temperature (°C)	Wind
Fair	Clear	-40	Southeast 10km/hr

Ops and Depth @ Morning Report
Lay down 200mm DCs

Wellbore
Original Hole

Last 24hr Summary
No accidents or incidents1 Hazard ID's:4 Job obersvations :Pull out of hole, Work mud ring from 400m to surface, Clean bit and run in hole, Wash and ream F/ 290 - 410 ,Drill 311mm surface hole F/ 587 to 600m with Reed S11G Mill Tooth bit and slick rotary BHA, Accumulated survey and connection time.Circulate condition hole,Wiper trip to 200m and back.

24hr Forecast
Run open hole Logs and run surface casing

Daily Contacts
Command Center, 587-794-4599; WS Supervisor, Dave Forsberg, 780-361-6417; Drilling Engineer, Mike Greener, 403-771-5039; Drilling Superintend, Sheldon Vamplew, 403-999-1302; Rig Manager, Rick Yavis; WS Supervisor, Mike Hobmaier, 403-844-3210

Last Casing String

Time Log

Start Time	End Time	Dur (hrs)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Depth Start (mKB)	Depth End (mKB)	Operation
00:00	00:15	0.25	SURFAC	RIGMNT	SVRG	P		587.00	587.00	Rig service function test annular and crown saver
00:15	03:15	3.00	SURFAC	DRILL	TRIP	P		587.00	587.00	Trip out of hole from 573 to 400m flow check@573m,503m
03:15	03:45	0.50	SURFAC	DRILL	REAM	P		587.00	587.00	Pick up kelly and ream mud ring @400m
03:45	04:15	0.50	SURFAC	DRILL	TRIP	P		587.00	587.00	Trip out of hole @ 400m to 350m
04:15	05:30	1.25	SURFAC	DRILL	REAM	P		587.00	587.00	Pick up kelly and ream mud ring @ 350m
05:30	07:45	2.25	SURFAC	DRILL	TRIP	P		587.00	587.00	Trip out of hole
07:45	08:00	0.25	SURFAC	DRILL	SFTY	P		587.00	587.00	Crew change safety meeting
08:00	09:30	1.50	SURFAC	DRILL	TRIP	P		587.00	587.00	Pull out of hole flow checks @ 218 m & out of hole
09:30	09:45	0.25	SURFAC	RIGMNT	SVRG	P		587.00	587.00	Rig service function test crown saver
09:45	11:15	1.50	SURFAC	DRILL	TRIP	P		587.00	587.00	Run in hole flow check @ 290 m
11:15	16:00	4.75	SURFAC	DRILL	REAM	P		587.00	587.00	Circ & condition & ream & clean from @ 290 m to 460 m
16:00	18:15	2.25	SURFAC	DRILL	REAM	P		587.00	587.00	Ream & clean from 460 m to 587 m
18:15	18:30	0.25	SURFAC	RIGMNT	SVRG	P		587.00	587.00	Rig service function test hydril 52 sec & crown saver
18:30	19:45	1.25	SURFAC	DRILL	DRLG	P		587.00	600.00	Drill 311mm hole from 587m to 600 m with Reed S11G Mill tooth bit and slick rotary assembly
19:45	22:00	2.25	SURFAC	DRILL	CIRC	P		600.00	600.00	Build volume raise viscosity circulate hole clean
22:00	00:00	2.00	SURFAC	DRILL	TRIP	P		600.00	600.00	Trip out of hole flow checks @ on bottom 571m 307m

Fluid / Mud Checks: Mud Engineer: Tri Pham

Time	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (cp)	YP Override (Pa)
07:45	587.00	1150.0	68	8.0	27.0	11.0

Low Gravity Solids (%)	MBT (kg/m³)	Oil Water Ratio	Chlorides (mg/L)	Calcium (mg/L)	Lime (kg/m³)	Potassium (mg/L)
9.5	84		500	20		

Electric Stab (V)	ECD - Manual Entry (k...	Sand (%)	Solids, Corr. (%)	T (fl) (°C)	HTHP Pressure (kPa)	HTHP Filt (mL/30min)
		0.0	5.5	22		

API Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Cost
7.0			843.38

Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost
		4,495.15

Last BOP Drill

Type	Days Since Last ...	Last Date	Days Until Next ...	Next Check Date
BOP Drill (Pit)				

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
355.00	

Safety Incidents

Date	Comment	Category

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00
Rig: Beaver Drilling Ltd. 2

Report Date: 1/29/2013
Report #: 16
Depth Progress: 13.00 m
Depth End: 600.00 mKB
Rig Release Date: 2/20/2013

Drill Strings: BHA # 1

Bit Run	Drill Bit	Length (m)	IADC Bit Dull	TFA (incl Noz) (mm²)	BHA ROP (m/hr)
1A	311.0mm, REED, S11G, D146225		—	596	12.4

Nozzles (mm)	String Length (m)	OD (mm)	Rotating Hook Load (maximum) (daN)
15.9/15.9/15.9	600.00	233.0	44,000

Depth In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hrs)	Total Drill Hrs (hrs)
0.00	600.00	12.4	610.00	610.00	49.00	49.00

Comment

Drill String Components

Item Description	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)
Kelly	76.0	114.0		6.38	600.0
Drill Pipe	101.6	127.0	19	366.31	593.62
4 1/2 IF X/O XT54	109.0	167.0	1	0.31	227.31
HWDP	76.2	127.0	10	93.55	227.0
XO	60.0	160.0	2	1.08	133.45
8 D.C	60.0	160.0	12	112.27	132.37
BELL SUB	59.0	130.0	1	0.66	20.1
9 D.C	71.0	233.0	2	18.50	19.44
Bit sub	70.0	232.0	1	0.94	0.94

Drilling Parameters: 587.00 - 600.00 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
610.00	49.00	3.7	2.600	13,000	120	12,000	44,000	44,000	44,000	44,000	

Hydraulic Calculations

Bit Hydraulic Powe...	HP/Area (kW/mm²)	% P @ bit (%)	Bit Jet Velocity (m/s)	Bit dP (kPa)	Ann. dP (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)
148.0	0.00195	28	72.7	3,414.4	221.2	1150.0	1187.6

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Shoe to Top of Casing...	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m...
3.83	11.74		0.0	0.0	39.5	78.0

Error

Mud Pumps: 1, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
1	NATIONAL	8-P-80		216.0

Pump Checks

Date	Depth (mKB)	Q (m³/min)	Pres (kPa)	Strokes (spm)
2/19/2013 00:00	1,855.00		686	5
2/20/2013 00:00				11

Pump Operations

Start Date	End Date	Liner Size (mm)	P (max) (kPa)	Vol/Stk OR (m³/stk)
1/29/2013		140.0		

Mud Pumps: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80		216.0

Pump Checks

Date	Depth (mKB)	Q (m³/min)	Pres (kPa)	Strokes (spm)
2/10/2013 08:00	1,724.00	0.587	357	6
2/10/2013 18:00	1,747.00	1.232	5,300	12

Pump Operations

Start Date	End Date	Liner Size (mm)	P (max) (kPa)	Vol/Stk OR (m³/stk)
1/29/2013		140.0		
2/5/2013		140.0		

Shaker Screens

Description	Start Date	End Date	Scr Sz X	Scr Sz Y	Note
1	1/23/2013		84	84	
1	1/23/2013		84	84	
1	1/23/2013		84	84	
1	1/23/2013		84	84	

Centrifuges/Cyclones:

Number	Make	Model	Diameter (mm)

Centrifuge/Cyclone Checks

Date	Hrs (hrs)	RPM (rpm)	Dens OF (kg/m³)	Q (ovrflw) (L/min)	Dens UF (kg/m³)	Q (undrflw) (L/min)

Fluid / Mud Additive Amounts

Description	Consumed	Cost	Size	Units
FEDERAL GEL - 40KG	20.0	10.890	40.0	sks
FED ZAN D - 11.34 KG	2.0	114.290	11.34	sks
BARITE - 40KG	20.0	19.850	40.0	sks

ConocoPhillips Canada

Daily Drilling

COPRC LOON CREEK O-06 65-10 127-00

Rig: Beaver Drilling Ltd. 2

Report Date: 1/29/2013
Report #: 16
Depth Progress: 13.00 m
Depth End: 600.00 mKB
Rig Release Date: 2/20/2013

Survey Data

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	Depart (m)	NS (m)	EW (m)	VS (m)	DLS (°/30m)
1/29/2013	592.00	0.60	110.00	591.94	7.76	-2.66	7.30	6.29	0.49

Formations

Formation Name	Drill Top MD (mKB)	Drill Top TVD (mKB)	Prog Top TVD (mKB)
Quaternary System	5.00	5.00	5.00
Alberta Grp	31.00	31.00	28.00
Slater River	36.00	36.00	48.00
Artic Red	570.00	569.94	570.00
Sams Sault	787.00	786.89	787.00
Martin House	882.50	882.35	882.50
Imperial Shale	962.00	961.82	962.00
Upper Canol	1,643.00	1,642.61	962.00
Lower Canol	1,679.00	1,678.61	962.00
Hare Indian	1,788.00	1,787.59	962.00
Bluefish Member	1,796.00	1,795.59	962.00
Hume	1,804.00	1,803.59	962.00

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00
Rig: Beaver Drilling Ltd. 2

Report Date: 1/30/2013
Report #: 17
Depth Progress: 0.00 m
Depth End: 600.00 mKB
Rig Release Date: 2/20/2013

API / UWI	Surface Legal Location	MaxWell Job Number	License No.
300/O-06 6510 127000	O-6 65-10 127-00	JOB01@2006	470

Ground Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
252.40	257.60	252.73	1/26/2013	4.50

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	1/3/2013 00:00	2/21/2013 00:00	DRILLED & CASE	Yes

Daily Cost Total	Cumulative Cost	Total Job AFE Amount	Total AFE+Sup	AFE / RFE / Maint.#	Estimated Days
297,930.57	4,103,217.47	10,990,100.00	10,990,100.00	10342919	35.34

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hrs)	Cum Personnel Total Hours (hrs)
1,873.00	1,856.00	43.0	458.00	5,832.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)

Road Condition	Weather	Temperature (°C)	Wind
Fair	Clear	-29	Southeast 10km/hr

Ops and Depth @ Morning Report
Circulate condition hole to cement at 600m.

Wellbore
Original Hole

Last 24hr Summary
No accidents or incidents1 Hazard ID's:5 Job obersvations 3 : Run in hole, Circulate hole clean, Pull out of hole (hole in good condition) Lay down 220mm DC's. Rig to and run wireline logs with Schlumberger, Rig in power tongs and run 244.5mm surface casing

24hr Forecast
Run and cement surface casing

Daily Contacts
WS Supervisor, Mike Hobmaier, 403-844-3210; Rig Manager, Rick Yavis; WS Supervisor, Dave Forsberg, 780-361-6417; Drilling Engineer, Mike Greener, 403-771-5039; Command Center, 587-794-4599; Drilling Superintend, Sheldon Vamplew, 403-999-1302

Last Casing String

Time Log

Start Time	End Time	Dur (hrs)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Depth Start (mKB)	Depth End (mKB)	Operation
00:00	02:00	2.00	SURFAC	DRILL	TRIP	P		600.00	600.00	Trip in hole flow checks @ 363m
02:00	02:15	0.25	SURFAC	RIGMNT	SVRG	P		600.00	600.00	Rig service function test hydrill closed in 53 sec
02:15	03:00	0.75	SURFAC	DRILL	CIRC	P		600.00	600.00	Circulate bottoms up
03:00	06:15	3.25	SURFAC	DRILL	TRIP	P		600.00	600.00	Trip out of hole flow checks @ 592.38m, 570.38m, 285.70m, 132.69m
06:15	06:30	0.25	SURFAC	DRILL	SFTY	P		600.00	600.00	Safety meeting prior to laying down 9"dcs
06:30	07:45	1.25	SURFAC	DRILL	PULD	P		600.00	600.00	Lay down 9"dcs & bha
07:45	08:00	0.25	SURFAC	DRILL	SFTY	P		600.00	600.00	Crew change safety meeting
08:00	08:15	0.25	SURFAC	RIGMNT	SVRG	P		600.00	600.00	Rig service function test crown saver
08:15	08:30	0.25	SURFAC	DRILL	SFTY	P		600.00	600.00	Safety meeting
08:30	16:00	7.50	SURFAC	DRILL	ELOG	P		600.00	600.00	Rig to & log with schlumberger,ran Resistivity,Dual Density,Neutron,Total GR,Sonic and GPIT
16:00	18:00	2.00	SURFAC	DRILL	ELOG	P		600.00	600.00	Continue to log with schlumberger,ran Resistivity,Dual Density,Neutron,Total GR,Sonic and GPIT
18:00	18:15	0.25	SURFAC	RIGMNT	SVRG	P		600.00	600.00	Rig service function test crown saver
18:15	18:30	0.25	SURFAC	CASING	SFTY	P		600.00	600.00	Safety meeting rig to & run casing
18:30	00:00	5.50	SURFAC	CASING	RNCS	P		600.00	600.00	Rig in Power Tongs Make up 244.5mm Guide Shoe,Float Collar 1 jt. 244.5mmX 53.57kg/m J55 casing,1 244.5mm Float collar.

Fluid / Mud Checks: Mud Engineer: <Mud Engineer?>

Time	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (cp)	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 (fl) (°C)	HTHP Pressure (kPa)	HTHP Filt (mL/30min)

API Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Cost
			397.00

Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost
		4,892.15

Last BOP Drill

Type	Days Since Last ...	Last Date	Days Until Next ...	Next Check Date
BOP Drill (Pit)				

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
356.00	

Safety Incidents

Date	Comment	Category

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00
Rig: Beaver Drilling Ltd. 2

Report Date: 1/30/2013
Report #: 17
Depth Progress: 0.00 m
Depth End: 600.00 mKB
Rig Release Date: 2/20/2013

Drill Strings: 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)	Rotating Hook Load (maximum) (daN)

Depth In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hrs)	Total Drill Hrs (hrs)

Comment

Drill String Components

Item Description	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)

Drilling Parameters:

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)	Ann. dP (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Shoe to Top of Casing...	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m...

Error

Mud Pumps: 1, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
1	NATIONAL	8-P-80		216.0

Pump Checks

Date	Depth (mKB)	Q (m³/min)	Pres (kPa)	Strokes (spm)
2/19/2013 00:00	1,855.00		686	59
2/20/2013 00:00				119

Pump Operations

Start Date	End Date	Liner Size (mm)	P (max) (kPa)	Vol/Stk OR (m³/stk)
1/29/2013		140.0		

Mud Pumps: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80		216.0

Pump Checks

Date	Depth (mKB)	Q (m³/min)	Pres (kPa)	Strokes (spm)
2/10/2013 08:00	1,724.00	0.587	357	60
2/10/2013 18:00	1,747.00	1.232	5,300	126

Pump Operations

Start Date	End Date	Liner Size (mm)	P (max) (kPa)	Vol/Stk OR (m³/stk)
1/29/2013		140.0		
2/5/2013		140.0		

Shaker Screens

Description	Start Date	End Date	Scr Sz X	Scr Sz Y	Note
1	1/23/2013		84	84	
1	1/23/2013		84	84	
1	1/23/2013		84	84	
1	1/23/2013		84	84	

Centrifuges/Cyclones:

Number	Make	Model	Diameter (mm)

Centrifuge/Cyclone Checks

Date	Hrs (hrs)	RPM (rpm)	Dens OF (kg/m³)	Q (ovrflw) (L/min)	Dens UF (kg/m³)	Q (undrflw) (L/min)

Fluid / Mud Additive Amounts

Description	Consumed	Cost	Size	Units
BARITE - 40KG	20.0	19,850	40.0	sks

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)
Quaternary System	5.00	5.00	5.00
Alberta Grp	31.00	31.00	28.00
Slater River	36.00	36.00	48.00
Artic Red	570.00	569.94	570.00
Sams Sault	787.00	786.89	787.00
Martin House	882.50	882.35	882.50

Formations

Formation Name	Drill Top MD (mKB)	Drill Top TVD (mKB)	Prog Top TVD (mKB)
Imperial Shale	962.00	961.82	962.00
Upper Canol	1,643.00	1,642.61	962.00
Lower Canol	1,679.00	1,678.61	962.00
Hare Indian	1,788.00	1,787.59	962.00
Bluefish Member	1,796.00	1,795.59	962.00
Hume	1,804.00	1,803.59	962.00

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00
Rig: Beaver Drilling Ltd. 2

Report Date: 1/30/2013
Report #: 17
Depth Progress: 0.00 m
Depth End: 600.00 mKB
Rig Release Date: 2/20/2013

API / UWI	Surface Legal Location	MaxWell Job Number	License No.
300/O-06 6510 127000	O-6 65-10 127-00	JOB01@2006	470

Ground Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
252.40	257.60	252.73	1/26/2013	4.50

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	1/3/2013 00:00	2/21/2013 00:00	DRILLED & CASE	Yes

Daily Cost Total	Cumulative Cost	Total Job AFE Amount	Total AFE+Sup	AFE / RFE / Maint.#	Estimated Days
297,930.57	4,103,217.47	10,990,100.00	10,990,100.00	10342919	35.34

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hrs)	Cum Personnel Total Hours (hrs)
1,873.00	1,856.00	43.0	458.00	5,832.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)

Road Condition	Weather	Temperature (°C)	Wind
Fair	Clear	-29	Southeast 10km/hr

Ops and Depth @ Morning Report
Circulate condition hole to cement at 600m.

Wellbore
Original Hole

Last 24hr Summary
No accidents or incidents1 Hazard ID's:5 Job obersvations 3 : Run in hole, Circulate hole clean, Pull out of hole (hole in good condition) Lay down 220mm DC's Rig to and run wireline logs with Schlumberger, Rig in power tongs and run 244.5mm surface casing

24hr Forecast
Run and cement surface casing

Daily Contacts
WS Supervisor, Mike Hobmaier, 403-844-3210; Rig Manager, Rick Yavis; WS Supervisor, Dave Forsberg, 780-361-6417; Drilling Engineer, Mike Greener, 403-771-5039; Command Center, 587-794-4599; Drilling Superintend, Sheldon Vamplew, 403-999-1302

Last Casing String

Time Log

Start Time	End Time	Dur (hrs)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Depth Start (mKB)	Depth End (mKB)	Operation
00:00	02:00	2.00	SURFAC	DRILL	TRIP	P		600.00	600.00	Trip in hole flow checks @ 363m
02:00	02:15	0.25	SURFAC	RIGMNT	SVRG	P		600.00	600.00	Rig service function test hydrill closed in 53 sec
02:15	03:00	0.75	SURFAC	DRILL	CIRC	P		600.00	600.00	Circulate bottoms up
03:00	06:15	3.25	SURFAC	DRILL	TRIP	P		600.00	600.00	Trip out of hole flow checks @ 592.38m, 570.38m, 285.70m, 132.69m
06:15	06:30	0.25	SURFAC	DRILL	SFTY	P		600.00	600.00	Safety meeting prior to laying down 9"dcs
06:30	07:45	1.25	SURFAC	DRILL	PULD	P		600.00	600.00	Lay down 9"dcs & bha
07:45	08:00	0.25	SURFAC	DRILL	SFTY	P		600.00	600.00	Crew change safety meeting
08:00	08:15	0.25	SURFAC	RIGMNT	SVRG	P		600.00	600.00	Rig service function test crown saver
08:15	08:30	0.25	SURFAC	DRILL	SFTY	P		600.00	600.00	Safety meeting
08:30	16:00	7.50	SURFAC	DRILL	ELOG	P		600.00	600.00	Rig to & log with schlumberger,ran Resistivity,Dual Density,Neutron,Total GR,Sonic and GPIT
16:00	18:00	2.00	SURFAC	DRILL	ELOG	P		600.00	600.00	Continue to log with schlumberger,ran Resistivity,Dual Density,Neutron,Total GR,Sonic and GPIT
18:00	18:15	0.25	SURFAC	RIGMNT	SVRG	P		600.00	600.00	Rig service function test crown saver
18:15	18:30	0.25	SURFAC	CASING	SFTY	P		600.00	600.00	Safety meeting rig to & run casing
18:30	00:00	5.50	SURFAC	CASING	RNCS	P		600.00	600.00	Rig in Power Tongs Make up 244.5mm Guide Shoe,Float Collar 1 jt. 244.5mmX 53.57kg/m J55 casing,1 244.5mm Float collar.

Fluid / Mud Checks: Mud Engineer: <Mud Engineer?>

Time	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (cp)	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 (fi) (°C)	HTHP Pressure (kPa)	HTHP Filt (mL/30min)

API Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Cost
			397.00

Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost
		4,892.15

Last BOP Drill

Type	Days Since Last ...	Last Date	Days Until Next ...	Next Check Date
BOP Drill (Pit)				

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
356.00	

Safety Incidents

Date	Comment	Category

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00
Rig: Beaver Drilling Ltd. 2

Report Date: 1/30/2013
Report #: 17
Depth Progress: 0.00 m
Depth End: 600.00 mKB
Rig Release Date: 2/20/2013

Drill Strings: 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)	Rotating Hook Load (maximum) (daN)

Depth In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hrs)	Total Drill Hrs (hrs)

Comment

Drill String Components

Item Description	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)

Drilling Parameters:

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)	Ann. dP (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Shoe to Top of Casing...	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m...

Error

Mud Pumps: 1, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
1	NATIONAL	8-P-80		216.0

Pump Checks

Date	Depth (mKB)	Q (m³/min)	Pres (kPa)	Strokes (spm)
2/19/2013 00:00	1,855.00		686	59
2/20/2013 00:00				115

Pump Operations

Start Date	End Date	Liner Size (mm)	P (max) (kPa)	Vol/Stk OR (m³/stk)
1/29/2013		140.0		

Mud Pumps: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80		216.0

Pump Checks

Date	Depth (mKB)	Q (m³/min)	Pres (kPa)	Strokes (spm)
2/10/2013 08:00	1,724.00	0.587	357	60
2/10/2013 18:00	1,747.00	1.232	5,300	126

Pump Operations

Start Date	End Date	Liner Size (mm)	P (max) (kPa)	Vol/Stk OR (m³/stk)
1/29/2013		140.0		
2/5/2013		140.0		

Shaker Screens

Description	Start Date	End Date	Scr Sz X	Scr Sz Y	Note
1	1/23/2013		84	84	
1	1/23/2013		84	84	
1	1/23/2013		84	84	
1	1/23/2013		84	84	

Centrifuges/Cyclones:

Number	Make	Model	Diameter (mm)

Centrifuge/Cyclone Checks

Date	Hrs (hrs)	RPM (rpm)	Dens OF (kg/m³)	Q (ovrflw) (L/min)	Dens UF (kg/m³)	Q (undrflw) (L/min)

Fluid / Mud Additive Amounts

Description	Consumed	Cost	Size	Units
BARITE - 40KG	20.0	19,850	40.0	sks

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)
Quaternary System	5.00	5.00	5.00
Alberta Grp	31.00	31.00	28.00
Slater River	36.00	36.00	48.00
Artic Red	570.00	569.94	570.00
Sams Sault	787.00	786.89	787.00
Martin House	882.50	882.35	882.50

Formations

Formation Name	Drill Top MD (mKB)	Drill Top TVD (mKB)	Prog Top TVD (mKB)
Imperial Shale	962.00	961.82	962.0
Upper Canol	1,643.00	1,642.61	962.0
Lower Canol	1,679.00	1,678.61	962.0
Hare Indian	1,788.00	1,787.59	962.0
Bluefish Member	1,796.00	1,795.59	962.0
Hume	1,804.00	1,803.59	962.0

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00
Rig: Beaver Drilling Ltd. 2

Report Date: 1/31/2013
Report #: 18
Depth Progress: 0.00 m
Depth End: 600.00 mKB
Rig Release Date: 2/20/2013

API / UWI	Surface Legal Location	MaxWell Job Number	License No.
300/O-06 6510 127000	O-6 65-10 127-00	JOB01@2006	470

Ground Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
252.40	257.60	252.73	1/26/2013	5.50

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	1/3/2013 00:00	2/21/2013 00:00	DRILLED & CASE	Yes

Daily Cost Total	Cumulative Cost	Total Job AFE Amount	Total AFE+Sup	AFE / RFE / Maint.#	Estimated Days
195,272.32	4,298,489.79	10,990,100.00	10,990,100.00	10342919	35.34

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hrs)	Cum Personnel Total Hours (hrs)
1,873.00	1,856.00	42.0	446.00	6,278.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)

Road Condition	Weather	Temperature (°C)	Wind
Fair	O/C Light Snow	-26	Southeast 10km/hr

Ops and Depth @ Morning Report
Nipple up BOPs

Wellbore
Original Hole

Last 24hr Summary
No accidents or incidents1 Hazard ID's:5 Job obersvations 3 :Run 244.5mm surface casing, Circulate and condition mud, Transfer surface mud to storage and prepare for cementing, Rig to and cement surface casing with Schlumberger, Recieved 6.5m3 good cement returns, Annulus remained static after job complete, Wait on cement, Nipple down diverter system,Screw on casing Bowl.

24hr Forecast
Nipple up BOPs and pressure test

Daily Contacts
WS Supervisor, Mike Hobmaier, 403-844-3210; Drilling Superintend, Sheldon Vamplew, 403-999-1302; Drilling Engineer, Mike Greener, 403-771-5039; Command Center, 587-794-4599; WS Supervisor, Dave Forsberg, 780-361-6417; Rig Manager, Rick Yavis

Last Casing String
Surface, 597.00mKB

Time Log

Start Time	End Time	Dur (hrs)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Depth Start (mKB)	Depth End (mKB)	Operation
00:00	00:15	0.25	SURFAC	RIGMNT	SVRG	P		600.00	600.00	Rig service function test crown saver
00:15	05:00	4.75	SURFAC	CASING	RNCS	P		600.00	600.00	Rig in Power Tongs Make up 244.5mm Guide Shoe,Float Collar 1 jt. 244.5mmX 53.57kg/m J55 casing,1 244.5mm Float collar Followed by 44jts 244.5mmX53.57kg/m J55 casing, 1 244.5mmX53.57kg/m J55 Landing joint,Total 598.78m. Set at 597m
05:00	07:45	2.75	SURFAC	CASING	CIRC	P		600.00	600.00	Rig up and circulate casing
07:45	08:00	0.25	SURFAC	CASING	SFTY	P		600.00	600.00	Crew handover meeting
08:00	08:15	0.25	SURFAC	RIGMNT	SVRG	P		600.00	600.00	Rig service function test crown saver
08:15	11:30	3.25	SURFAC	CASING	CIRC	P		600.00	600.00	Circ casing
11:30	11:45	0.25	SURFAC	CEMENT	SFTY	P		600.00	600.00	Safety meeting cementing
11:45	14:30	2.75	SURFAC	CEMENT	CMNT	P		600.00	600.00	Rig to & cement casing with schlumberger plug down @ 1430 hrs Cemented 244.5mm surface casing from 597m to 6m with 26.1m3 (28.0 Tonne) Thixotropic D804A-P + 2%CaCl2 +0.2% Antifoam, displaced with drilling mud,Plug bumped,Pressure tested casing tc 11,
14:30	16:00	1.50	SURFAC	CEMENT	WOC	P		600.00	600.00	Wait on cement
16:00	18:30	2.50	SURFAC	CEMENT	WOC	P		600.00	600.00	Wait on cement
18:30	18:45	0.25	SURFAC	RIGMNT	SVRG	P		600.00	600.00	Rig service function test crown saver
18:45	23:30	4.75	SURFAC	WHDBOP	NUND	P		600.00	600.00	Nipple down diverter system spot BOP
23:30	00:00	0.50	SURFAC	WHDBOP	NUND	P		600.00	600.00	Install casing bowl and torque to 7000ft/bl

Fluid / Mud Checks: Mud Engineer: <Mud Engineer?>

Time	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (cp)	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 (fl) (°C)	HTHP Pressure (kPa)	HTHP Filt (mL/30min)

API Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Cost
			65.12

Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost
		4,957.27

Last BOP Drill

Type	Days Since Last ...	Last Date	Days Until Next ...	Next Check Date
BOP Drill (Pit)				

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
357.00	

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00
Rig: Beaver Drilling Ltd. 2

Report Date: 1/31/2013
Report #: 18
Depth Progress: 0.00 m
Depth End: 600.00 mKB
Rig Release Date: 2/20/2013

Safety Incidents

Date	Comment	Category

Drill Strings: 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)	Rotating Hook Load (maximum) (daN)

Depth In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hrs)	Total Drill Hrs (hrs)

Comment

Drill String Components

Item Description	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)

Drilling Parameters:

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)	Ann. dP (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Shoe to Top of Casing...	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m...

Error

Mud Pumps: 1, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
1	NATIONAL	8-P-80		216.0

Pump Checks

Date	Depth (mKB)	Q (m³/min)	Pres (kPa)	Strokes (spm)
2/19/2013 00:00	1,855.00		686	5
2/20/2013 00:00				11

Pump Operations

Start Date	End Date	Liner Size (mm)	P (max) (kPa)	Vol/Stk OR (m³/stk)
1/29/2013		140.0		

Mud Pumps: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80		216.0

Pump Checks

Date	Depth (mKB)	Q (m³/min)	Pres (kPa)	Strokes (spm)
2/10/2013 08:00	1,724.00	0.587	357	6
2/10/2013 18:00	1,747.00	1.232	5,300	12

Pump Operations

Start Date	End Date	Liner Size (mm)	P (max) (kPa)	Vol/Stk OR (m³/stk)
1/29/2013		140.0		
2/5/2013		140.0		

Shaker Screens

Description	Start Date	End Date	Scr Sz X	Scr Sz Y	Note
1	1/23/2013		84	84	
1	1/23/2013		84	84	
1	1/23/2013		84	84	
1	1/23/2013		84	84	

Centrifuges/Cyclones:

Number	Make	Model	Diameter (mm)

Centrifuge/Cyclone Checks

Date	Hrs (hrs)	RPM (rpm)	Dens OF (kg/m³)	Q (ovrflw) (L/min)	Dens UF (kg/m³)	Q (undrflw) (L/min)

Fluid / Mud Additive Amounts

Description	Consumed	Cost	Size	Units
DESCO CF - 11KG	1.0	65.120	11.34	sks

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)
Quaternary System	5.00	5.00	5.0
Alberta Grp	31.00	31.00	28.0
Slater River	36.00	36.00	48.0

Formations

Formation Name	Drill Top MD (mKB)	Drill Top TVD (mKB)	Prog Top TVD (mKB)
Artic Red	570.00	569.94	570.00
Sams Sault	787.00	786.89	787.00
Martin House	882.50	882.35	882.50
Imperial Shale	962.00	961.82	962.00
Upper Canol	1,643.00	1,642.61	962.00
Lower Canol	1,679.00	1,678.61	962.00
Hare Indian	1,788.00	1,787.59	962.00
Bluefish Member	1,796.00	1,795.59	962.00
Hume	1,804.00	1,803.59	962.00

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00
Rig: Beaver Drilling Ltd. 2

Report Date: 2/1/2013
Report #: 19
Depth Progress: 0.00 m
Depth End: 600.00 mKB
Rig Release Date: 2/20/2013

API / UWI	Surface Legal Location	MaxWell Job Number	License No.
300/O-06 6510 127000	O-6 65-10 127-00	JOB01@2006	470

Ground Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
252.40	257.60	252.73	1/26/2013	6.50

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	1/3/2013 00:00	2/21/2013 00:00	DRILLED & CASE	Yes

Daily Cost Total	Cumulative Cost	Total Job AFE Amount	Total AFE+Sup	AFE / RFE / Maint.#	Estimated Days
119,755.70	4,418,245.49	10,990,100.00	10,990,100.00	10342919	35.34

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hrs)	Cum Personnel Total Hours (hrs)
1,873.00	1,856.00	37.0	386.00	6,664.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)

Road Condition	Weather	Temperature (°C)	Wind
Fair	Cloudy	-26	Northwest10km/hr

Ops and Depth @ Morning Report
Pressure test upper Kelly Cock

Wellbore
Original Hole

Last 24hr Summary
No accidents or incidents1 Hazard ID's:5 Job obersvations 3 :Screw on casing Bowl, Nipple up BOP's,NEB representatives Rick Turner and Lori Croal inspectec base camp and the drilling operation, Pressure test Bop's and related equipment to 1400kpa Low 10min. each and 20000kpa high 10min. each, Annular 1400kpa low and 17500kpa high 10min. each

24hr Forecast
Finish pressure testing make up BHA and drill out.

Daily Contacts
Rig Manager, Rick Yavis; Command Center, 587-794-4599; WS Supervisor, Dave Forsberg, 780-361-6417; WS Supervisor, Mike Hobmaier, 403-844-3210; Drilling Engineer, Mike Greener, 403-771-5039; Drilling Superintend, Sheldon Vamplew, 403-999-1302

Last Casing String
Surface, 597.00mKB

Time Log

Start Time	End Time	Dur (hrs)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Depth Start (mKB)	Depth End (mKB)	Operation
00:00	00:15	0.25	SURFAC	RIGMNT	SVRG	P		600.00	600.00	Rig service
00:15	01:15	1.00	SURFAC	WHDBOP	NUND	P		600.00	600.00	Install casing bowl and torque to 7000ft/bl
01:15	01:30	0.25	SURFAC	WHDBOP	SFTY	P		600.00	600.00	Safety meeting
01:30	07:45	6.25	SURFAC	WHDBOP	NUND	P		600.00	600.00	Nipple up BOPs
07:45	08:00	0.25	SURFAC	WHDBOP	SFTY	P		600.00	600.00	Crew change safety meeting
08:00	08:15	0.25	SURFAC	RIGMNT	SVRG	P		600.00	600.00	Rig servive
08:15	16:00	7.75	SURFAC	WHDBOP	NUND	P		600.00	600.00	Nipple up b.o.p & make up & weld flow tee & modified & install catch can & rig up flare lines NEB Representatives Rick Turner and Lori Croal inspected base camp and the drilling operation
16:00	16:15	0.25	SURFAC	RIGMNT	SVRG	P		600.00	600.00	Rig service
16:15	16:30	0.25	SURFAC	WHDBOP	SFTY	P		600.00	600.00	Safety meeting
16:30	00:00	7.50	SURFAC	WHDBOP	BOPE	P		600.00	600.00	Test BOPs with schlumberger as follows,Pressure test Annular 1400kpa low and 17500kpa high 10 min. each,test Blind rams all Manifold valves,Kill line valves with Check valve and Choke line valves with HCR valve 1400kpa low and 20,000kpa high 10 min. each

Fluid / Mud Checks: Mud Engineer: <Mud Engineer?>

Time	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (cp)	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 (fl) (°C)	HTHP Pressure (kPa)	HTHP Filt (mL/30min)

API Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Cost

Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost
		4,957.27

Last BOP Drill

Type	Days Since Last ...	Last Date	Days Until Next ...	Next Check Date
BOP Drill (Pit)				

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
358.00	

Safety Incidents

Date	Comment	Category

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00
Rig: Beaver Drilling Ltd. 2

Report Date: 2/1/2013
Report #: 19
Depth Progress: 0.00 m
Depth End: 600.00 mKB
Rig Release Date: 2/20/2013

Drill Strings: 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)	Rotating Hook Load (maximum) (daN)

Depth In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hrs)	Total Drill Hrs (hrs)

Comment

Drill String Components

Item Description	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)

Drilling Parameters:

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)	Ann. dP (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Shoe to Top of Casing...	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m...

Error

Mud Pumps: 1, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
1	NATIONAL	8-P-80		216.0

Pump Checks

Date	Depth (mKB)	Q (m³/min)	Pres (kPa)	Strokes (spm)
2/19/2013 00:00	1,855.00		686	59
2/20/2013 00:00				115

Pump Operations

Start Date	End Date	Liner Size (mm)	P (max) (kPa)	Vol/Stk OR (m³/stk)
1/29/2013		140.0		

Mud Pumps: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80		216.0

Pump Checks

Date	Depth (mKB)	Q (m³/min)	Pres (kPa)	Strokes (spm)
2/10/2013 08:00	1,724.00	0.587	357	60
2/10/2013 18:00	1,747.00	1.232	5,300	126

Pump Operations

Start Date	End Date	Liner Size (mm)	P (max) (kPa)	Vol/Stk OR (m³/stk)
1/29/2013		140.0		
2/5/2013		140.0		

Shaker Screens

Description	Start Date	End Date	Scr Sz X	Scr Sz Y	Note
1	1/23/2013		84	84	
1	1/23/2013		84	84	
1	1/23/2013		84	84	
1	1/23/2013		84	84	

Centrifuges/Cyclones:

Number	Make	Model	Diameter (mm)

Centrifuge/Cyclone Checks

Date	Hrs (hrs)	RPM (rpm)	Dens OF (kg/m³)	Q (ovrflw) (L/min)	Dens UF (kg/m³)	Q (undrflw) (L/min)

Fluid / Mud Additive Amounts

Description	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)
Quaternary System	5.00	5.00	5.00
Alberta Grp	31.00	31.00	28.00
Slater River	36.00	36.00	48.00
Artic Red	570.00	569.94	570.00
Sams Sault	787.00	786.89	787.00
Martin House	882.50	882.35	882.50

Formations

Formation Name	Drill Top MD (mKB)	Drill Top TVD (mKB)	Prog Top TVD (mKB)
Imperial Shale	962.00	961.82	962.00
Upper Canol	1,643.00	1,642.61	962.00
Lower Canol	1,679.00	1,678.61	962.00
Hare Indian	1,788.00	1,787.59	962.00
Bluefish Member	1,796.00	1,795.59	962.00
Hume	1,804.00	1,803.59	962.00

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00
Rig: Beaver Drilling Ltd. 2

Report Date: 2/2/2013
Report #: 20
Depth Progress: 5.00 m
Depth End: 605.00 mKB
Rig Release Date: 2/20/2013

API / UWI	Surface Legal Location	MaxWell Job Number	License No.
300/O-06 6510 127000	O-6 65-10 127-00	JOB01@2006	470

Ground Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
252.40	257.60	252.73	1/26/2013	7.50

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	1/3/2013 00:00	2/21/2013 00:00	DRILLED & CASE	Yes

Daily Cost Total	Cumulative Cost	Total Job AFE Amount	Total AFE+Sup	AFE / RFE / Maint.#	Estimated Days
84,165.76	4,502,411.25	10,990,100.00	10,990,100.00	10342919	35.34

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hrs)	Cum Personnel Total Hours (hrs)
1,873.00	1,856.00	40.0	432.00	7,096.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)

Road Condition	Weather	Temperature (°C)	Wind
Fair	Clear	-30	Calm

Ops and Depth @ Morning Report
Drill 222mm hole ahead at 660m

Wellbore
Original Hole

Last 24hr Summary
No accidents or incidents4 Hazard ID's:1 Job obersvations 3 Pressure test Bop's and related equipment to 1400kpa Low 10min. each and 20000kpa high 10min. each, Annular 1400kpa low and 17500kpa high 10min. each, Make up Directional BHA and run in hole, Displace wellbore to invert,

24hr Forecast
Drill 222mm main hole to Core point.

Daily Contacts
WS Supervisor, Mike Hobmaier, 403-844-3210; Command Center, 587-794-4599; Rig Manager, Rick Yavis; Drilling Engineer, Mike Greener, 403-771-5039; Drilling Superintend, Sheldon Vamplew, 403-999-1302; WS Supervisor, Dave Forsberg, 780-361-6417

Last Casing String
Surface, 597.00mKB

Time Log

Start Time	End Time	Dur (hrs)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Depth Start (mKB)	Depth End (mKB)	Operation
00:00	07:45	7.75	SURFAC	WHDBOP	BOPE	P		600.00	600.00	Continue to pressure test with Schlumberg, pressure test Kelly Cock ,Stabbing Valve and in side BOP. 1400kpa low and 20,000kpa high 10 min. each.
07:45	08:00	0.25	SURFAC	DRILL	SFTY	P		600.00	600.00	Crew change safety meeting
08:00	08:15	0.25	SURFAC	RIGMNT	SVRG	P		600.00	600.00	Rig service function test crown saver
08:15	08:30	0.25	SURFAC	DRILL	SFTY	P		600.00	600.00	Safety meeting function test motor kills
08:30	11:30	3.00	SURFAC	DRILL	PULD	P		600.00	600.00	Pick up & make up dir tools
11:30	15:15	3.75	SURFAC	DRILL	TRIP	P		600.00	600.00	Run in hole to 573m
15:15	16:00	0.75	SURFAC	DRILL	CIRC	P		600.00	600.00	Displace hole to inverte mud @ 573 m
16:00	16:45	0.75	SURFAC	DRILL	CIRC	P		600.00	600.00	Displace hole to inverte @ 573 m
16:45	17:00	0.25	SURFAC	RIGMNT	SVRG	P		600.00	600.00	Rig service function test pipe rams 3 sec & crown saver
17:00	19:30	2.50	SURFAC	WHDBOP	BOPE	P		600.00	600.00	Pressure test Pipe rams and upper Kelly cock 1400kpa low and 19500kpa high 10 min.each.Accumulater function test as follows Precharge pressure 7200kpa, Starting pressure 20,000kpa close Annular, open HCR and close Pipe rams end pressure of 10,500kpa ,Rec
19:30	21:30	2.00	SURFAC	DRILL	CIRC	P		600.00	600.00	Displace hole to Invert
21:30	21:45	0.25	SURFAC	DRILL	SFTY	P		600.00	600.00	Man down drill
21:45	22:00	0.25	SURFAC	DRILL	SFTY	P		600.00	600.00	BOP drill well secure in 90 sec crew in positions
22:00	23:00	1.00	SURFAC	CEMENT	DRLG	P		600.00	600.00	Drill out cement and two floats one at 585m and 595m
23:00	00:00	1.00	INTRM1	DRILL	DRLG	P		600.00	605.00	Drill 222mm hole from 600m to 605m with Reed MSR616M bit Schlumberger 7/8 5stage motor set at 1.15* and directional BHA with Gama, pumping 1.4m3/min

Fluid / Mud Checks: Mud Engineer: <Mud Engineer?>

Time	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (cp)	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 (fl) (°C)	HTHP Pressure (kPa)	HTHP Filt (mL/30min)

API Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Cost
			2,993.94

Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost
		7,951.21

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00
Rig: Beaver Drilling Ltd. 2

Report Date: 2/2/2013
Report #: 20
Depth Progress: 5.00 m
Depth End: 605.00 mKB
Rig Release Date: 2/20/2013

Last BOP Drill

Type	Days Since Last ...	Last Date	Days Until Next ...	Next Check Date
BOP Drill (Pit)	0	2/2/2013	7	2/9/2013

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
359.00	

Safety Incidents

Date	Comment	Category

Drill Strings: BHA # 2

Bit Run	Drill Bit	Length (m)	IADC Bit Dull	TFA (Incl Noz) (mm²)	BHA ROP (m/hr)
1	222.0mm, Reed, MSR616M, A141416	0.28	2-2-CT-S-X-0-NO-TD	581	21.3

Nozzles (mm)	String Length (m)	OD (mm)	Rotating Hook Load (maximum) (daN)
11.1/11.1/11.1/11.1/11.1/11.1	1,622.00	192.0	62,500

Depth In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hrs)	Total Drill Hrs (hrs)
600.00	1,622.00	21.3	1,178.02	1,788.02	55.25	55.25

Comment
Path finder 171mm 7/8 5stage motor

Drill String Components

Item Description	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)
Kelly	71.0	112.0		10.67	1,622.0
Drill Pipe	101.6	127.0	71	1,355.98	1,611.3
4 1/2 IF X/O XT54	109.0	167.0	1	0.31	255.3
HWDP	76.2	127.0	10	93.55	255.0
XO	71.0	165.0	2	1.08	161.4
5 D.C	60.0	160.0	12	112.27	160.4
X/O	75.0	165.0	1	0.89	48.1
Jar	76.0	157.0	1	9.77	47.2
N.M. DC	72.0	168.0	2	18.96	37.4
Landing Sub	86.0	164.0	1	0.55	18.5
Monel	73.0	170.0	1	9.48	17.9
Mud Motor	59.0	192.0	1	8.21	8.4

Drilling Parameters: 600.00 - 605.00 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
5.00	2.00	2.5	1.350	4,000	50	5,300	43,000	43,000	43,000	43,000	43,000.0

Hydraulic Calculations

Bit Hydraulic Powe...	HP/Area (kW/mm²)	% P @ bit (%)	Bit Jet Velocity (m/s)	Bit dP (kPa)	Ann. dP (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Shoe to Top of Casing...	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m...

Error
No wellbore specified for drilling parameter with end date 2/2/2013 6:00:00 PM

Mud Pumps: 1, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
1	NATIONAL	8-P-80		216.0

Pump Checks

Date	Depth (mKB)	Q (m³/min)	Pres (kPa)	Strokes (spm)
2/19/2013 00:00	1,855.00		686	5
2/20/2013 00:00				11

Pump Operations

Start Date	End Date	Liner Size (mm)	P (max) (kPa)	Vol/Stk OR (m³/stk)
1/29/2013		140.0		

Mud Pumps: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80		216.0

Pump Checks

Date	Depth (mKB)	Q (m³/min)	Pres (kPa)	Strokes (spm)
2/10/2013 08:00	1,724.00	0.587	357	6
2/10/2013 18:00	1,747.00	1.232	5,300	12

Pump Operations

Start Date	End Date	Liner Size (mm)	P (max) (kPa)	Vol/Stk OR (m³/stk)
1/29/2013		140.0		
2/5/2013		140.0		

Shaker Screens

Description	Start Date	End Date	Scr Sz X	Scr Sz Y	Note
1	1/23/2013		84	84	
1	1/23/2013		84	84	
1	1/23/2013		84	84	
1	1/23/2013		84	84	

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00
Rig: Beaver Drilling Ltd. 2

Report Date: 2/2/2013
Report #: 20
Depth Progress: 5.00 m
Depth End: 605.00 mKB
Rig Release Date: 2/20/2013

Centrifuges/Cyclones:

Number	Make	Model	Diameter (mm)

Centrifuge/Cyclone Checks

Date	Hrs (hrs)	RPM (rpm)	Dens OF (kg/m³)	Q (ovrflw) (L/min)	Dens UF (kg/m³)	Q (undrflw) (L/min)

Fluid / Mud Additive Amounts

Description	Consumed	Cost	Size	Units
CAL-CHLR 94-97%-40KG	20.0	46.970	40.0	sks
VERSAMUL - 208LT	2.0	940.470	208.0	bbl
LIME - 20KG	20.0	8.680	20.0	sks

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)
Quaternary System	5.00	5.00	5.00
Alberta Grp	31.00	31.00	28.00
Slater River	36.00	36.00	48.00
Artic Red	570.00	569.94	570.00
Sams Sault	787.00	786.89	787.00
Martin House	882.50	882.35	882.50
Imperial Shale	962.00	961.82	962.00
Upper Canol	1,643.00	1,642.61	962.00
Lower Canol	1,679.00	1,678.61	962.00
Hare Indian	1,788.00	1,787.59	962.00
Bluefish Member	1,796.00	1,795.59	962.00
Hume	1,804.00	1,803.59	962.00

ConocoPhillips Canada

Daily Drilling

COPRC LOON CREEK O-06 65-10 127-00

Rig: Beaver Drilling Ltd. 2

Report Date: 2/3/2013
Report #: 21
Depth Progress: 353.00 m
Depth End: 958.00 mKB
Rig Release Date: 2/20/2013

API / UWI	Surface Legal Location	MaxWell Job Number	License No.
300/O-06 6510 127000	O-6 65-10 127-00	JOB01@2006	470

Ground Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
252.40	257.60	252.73	1/26/2013	8.50

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	1/3/2013 00:00	2/21/2013 00:00	DRILLED & CASE	Yes

Daily Cost Total	Cumulative Cost	Total Job AFE Amount	Total AFE+Sup	AFE / RFE / Maint.#	Estimated Days
112,744.94	4,615,156.19	10,990,100.00	10,990,100.00	10342919	35.34

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hrs)	Cum Personnel Total Hours (hrs)
1,873.00	1,856.00	40.0	432.00	7,528.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)
70	42		0

Road Condition	Weather	Temperature (°C)	Wind
Fair	O/C Light Snow	-27	Calm

Ops and Depth @ Morning Report
Drill 222mm hole ahead at 1070m

Wellbore
Original Hole

Last 24hr Summary
No accidents or incidents5 Hazard ID's:1 Job obersvations : Conduct formation integrity test ,Surface aplied pressure of 6000kpa Fluild 875kg/m3 equivelant mud density of 1900kg/m3,Drill 222mm hole from 605m to 958m with Reed MSR616M bit Schlumberger 7/8 5stage motor ,directional BHA and Gama, pumping at 1.8m3/min. Accumulated survey and Rig service time.

24hr Forecast
Drill 222mm main hole to Core point.

Daily Contacts
WS Supervisor, Mike Hobmaier, 403-844-3210; Drilling Superintend, Sheldon Vamplew, 403-999-1302; WS Supervisor, Dave Forsberg, 780-361-6417; Drilling Engineer, Mike Greener, 403-771-5039; Rig Manager, Rick Yavis; Command Center, 587-794-4599

Last Casing String
Surface, 597.00mKB

Time Log

Start Time	End Time	Dur (hrs)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Depth Start (mKB)	Depth End (mKB)	Operation
00:00	01:15	1.25	INTRM1	DRILL	DRLG	P		605.00	613.00	Drill 222mm hole from 605m to 613m with Reed MSR616M bit Schlumberger 7/8 5stage motor set at 1.15* and directional BHA with Gama, pumping 1.4m3/min
01:15	01:30	0.25	INTRM1	RIGMNT	SVRG	P		613.00	613.00	Rig service function test annular 13sec to close test crown saver
01:30	02:00	0.50	INTRM1	DRILL	FIT	P		613.00	613.00	formation gradient test at 613m
02:00	07:45	5.75	INTRM1	DRILL	DRLG	P		613.00	691.00	Drill 222mm hole from 613m to 691m with Reed MSR616M bit Schlumberger 7/8 5stage motor set at 1.15* and directional BHA with Gama, pumping 1.4m3/min
07:45	08:00	0.25	INTRM1	DRILL	SFTY	P		691.00	691.00	Crew handover meeting
08:00	08:15	0.25	INTRM1	DRILL	SFTY	P		691.00	691.00	Held BOP drill well secure in 85 sec
08:15	08:30	0.25	INTRM1	DRILL	SFTY	P		691.00	691.00	Man down drill
08:30	08:45	0.25	INTRM1	RIGMNT	SVRG	P		691.00	691.00	Rig service function test pipe rams 3 sec & crown saver
08:45	15:00	6.25	INTRM1	DRILL	DRLG	P		691.00	827.00	Drill 222mm hole from 691m to 827m with Reed MSR616M bit Schlumberger 7/8 5stage motor set at 1.15* and directional BHA with Gamma, pumping 1.8m3/min
15:00	16:00	1.00	INTRM1	DRILL	SRVY	P		827.00	827.00	Accumulated time for surveys
16:00	16:15	0.25	INTRM1	RIGMNT	SVRG	P		827.00	827.00	Rig service function test hydril 14 sec & crown saver
16:15	23:00	6.75	INTRM1	DRILL	DRLG	P		827.00	958.00	Drill 222mm hole from 827m to 958m with Reed MSR616M bit Schlumberger 7/8 5stage motor set at 1.15* and directional BHA with Gamma, pumping 1.8m3/min
23:00	00:00	1.00	INTRM1	DRILL	SRVY	P		958.00	958.00	Accumulated time for surveys

Fluid / Mud Checks: Mud Engineer: Tri Pham

Time	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (cp)	YP Override (Pa)
19:30	865.00	900.0	50		12.0	3.5

Low Gravity Solids (%)	MBT (kg/m³)	Oil Water Ratio	Chlorides (mg/L)	Calcium (mg/L)	Lime (kg/m³)	Potassium (mg/L)
4.2		85/15	249,926	39,000	21	

Electric Stab (V)	ECD - Manual Entry (k...	Sand (%)	Solids, Corr. (%)	T (fl) (°C)	HTHP Pressure (kPa)	HTHP Filt (mL/30min)
620.0	977.6			20		8.0

API Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Cost
	10.00		5,116.58

Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost
10.00		13,067.79

Last BOP Drill

Type	Days Since Last ...	Last Date	Days Until Next ...	Next Check Date
BOP Drill (Pit)	0	2/3/2013	7	2/10/2013

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
360.00	

ConocoPhillips Canada

Daily Drilling

COPRC LOON CREEK O-06 65-10 127-00

Rig: Beaver Drilling Ltd. 2

Report Date: 2/3/2013
Report #: 21
Depth Progress: 353.00 m
Depth End: 958.00 mKB
Rig Release Date: 2/20/2013

Safety Incidents

Date	Comment	Category

Drill Strings: BHA # 2

Bit Run	Drill Bit	Length (m)	IADC Bit Dull	TFA (incl Noz) (mm²)	BHA ROP (m/hr)
1	222.0mm, Reed, MSR616M, A141416	0.28	2-2-CT-S-X-0-NO-TD	581	21.3

Nozzles (mm)	String Length (m)	OD (mm)	Rotating Hook Load (maximum) (daN)
11.1/11.1/11.1/11.1/11.1/11.1	1,622.00	192.0	62,500

Depth In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hrs)	Total Drill Hrs (hrs)
600.00	1,622.00	21.3	1,178.02	1,788.02	55.25	55.25

Comment

Path finder 171mm 7/8 5stage motor

Drill String Components

Item Description	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)
Kelly	71.0	112.0		10.67	1,622.0
Drill Pipe	101.6	127.0	71	1,355.98	1,611.3
4 1/2 IF X/O XT54	109.0	167.0	1	0.31	255.3
HWDP	76.2	127.0	10	93.55	255.0
XO	71.0	165.0	2	1.08	161.4
5 D.C	60.0	160.0	12	112.27	160.4
X/O	75.0	165.0	1	0.89	48.1
Jar	76.0	157.0	1	9.77	47.2
N.M. DC	72.0	168.0	2	18.96	37.4
Landing Sub	86.0	164.0	1	0.55	18.5
Monel	73.0	170.0	1	9.48	17.9
Mud Motor	59.0	192.0	1	8.21	8.4

Drilling Parameters: 827.00 - 958.00 mKB

Sum 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
358.00	21.25	19.4	1.800	5,000	50	10,000	49,000	49,000	49,000	49,000	49,000.0

Hydraulic Calculations

Bit Hydraulic Powe...	HP/Area (kW/mm²)	% P @ bit (%)	Bit Jet Velocity (m/s)	Bit dP (kPa)	Ann. dP (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Shoe to Top of Casing...	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m...

Error

No wellbore specified for drilling parameter with end date 2/3/2013 10:45:00 PM

Mud Pumps: 1, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
1	NATIONAL	8-P-80		216.0

Pump Checks

Date	Depth (mKB)	Q (m³/min)	Pres (kPa)	Strokes (spm)
2/19/2013 00:00	1,855.00		686	5
2/20/2013 00:00				11

Pump Operations

Start Date	End Date	Liner Size (mm)	P (max) (kPa)	Vol/Stk OR (m³/stk)
1/29/2013		140.0		

Mud Pumps: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80		216.0

Pump Checks

Date	Depth (mKB)	Q (m³/min)	Pres (kPa)	Strokes (spm)
2/10/2013 08:00	1,724.00	0.587	357	6
2/10/2013 18:00	1,747.00	1.232	5,300	12

Pump Operations

Start Date	End Date	Liner Size (mm)	P (max) (kPa)	Vol/Stk OR (m³/stk)
1/29/2013		140.0		
2/5/2013		140.0		

Shaker Screens

Description	Start Date	End Date	Scr Sz X	Scr Sz Y	Note
1	1/23/2013		84	84	
1	1/23/2013		84	84	
1	1/23/2013		84	84	
1	1/23/2013		84	84	

Centrifuges/Cyclones:

Number	Make	Model	Diameter (mm)

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00
Rig: Beaver Drilling Ltd. 2

Report Date: 2/3/2013
Report #: 21
Depth Progress: 353.00 m
Depth End: 958.00 mKB
Rig Release Date: 2/20/2013

Centrifuge/Cyclone Checks

Date	Hrs (hrs)	RPM (rpm)	Dens OF (kg/m³)	Q (ovrflw) (L/min)	Dens UF (kg/m³)	Q (undrflw) (L/min)

Fluid / Mud Additive Amounts

Description	Consumed	Cost	Size	Units
VERSAMUL - 208LT	3.0	940.470	208.0	bbl
CAL-CHLR 94-97%-40KG	35.0	46.970	40.0	sks
OPTISEAL IV 25KG	4.0	61.180	25.0	sks
MIX II MED. - 25LB	5.0	27.630	25.0	sks
MIX II FINE - 25LB	5.0	27.630	25.0	sks
LIME - 20KG	15.0	8.680	20.0	sks

Survey Data

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	Depart (m)	NS (m)	EW (m)	VS (m)	DLS (°/30m)
2/3/2013	600.62	1.01	110.09	600.56	7.88	-2.70	7.41	6.39	1.43
2/3/2013	619.94	1.01	122.48	619.88	8.22	-2.85	7.71	6.64	0.34
2/3/2013	639.13	1.10	125.10	639.06	8.57	-3.04	8.01	6.87	0.16
2/3/2013	652.00	1.10	125.12	651.93	8.80	-3.19	8.21	7.02	0.00
2/3/2013	671.00	1.49	123.41	670.93	9.22	-3.43	8.56	7.30	0.62
2/3/2013	715.36	1.71	126.48	715.27	10.43	-4.14	9.58	8.08	0.16
2/3/2013	726.00	1.41	120.59	725.90	10.72	-4.30	9.82	8.26	0.96
2/3/2013	735.65	1.01	128.42	735.55	10.92	-4.41	9.99	8.40	1.34
2/3/2013	754.85	1.32	119.50	754.75	11.30	-4.63	10.31	8.65	0.56
2/3/2013	764.71	1.10	112.99	764.61	11.51	-4.72	10.50	8.80	0.79
2/3/2013	784.15	1.32	111.59	784.04	11.92	-4.87	10.88	9.13	0.34
2/3/2013	793.85	1.19	81.31	793.74	12.12	-4.90	11.08	9.31	2.06
2/3/2013	812.15	1.41	51.12	812.03	12.38	-4.73	11.44	9.71	1.16
2/3/2013	831.00	1.58	49.01	830.88	12.62	-4.41	11.82	10.16	0.28
2/3/2013	860.00	2.02	64.70	859.86	13.19	-3.93	12.58	11.03	0.68
2/3/2013	879.00	1.89	64.74	878.85	13.67	-3.66	13.17	11.66	0.21
2/3/2013	898.00	1.19	23.61	897.85	13.94	-3.34	13.53	12.10	2.00
2/3/2013	926.00	1.32	19.08	925.84	14.03	-2.77	13.76	12.47	0.18

Formations

Formation Name	Drill Top MD (mKB)	Drill Top TVD (mKB)	Prog Top TVD (mKB)
Quaternary System	5.00	5.00	5.00
Alberta Grp	31.00	31.00	28.00
Slater River	36.00	36.00	48.00
Artic Red	570.00	569.94	570.00
Sams Sault	787.00	786.89	787.00
Martin House	882.50	882.35	882.50
Imperial Shale	962.00	961.82	962.00
Upper Canol	1,643.00	1,642.61	962.00
Lower Canol	1,679.00	1,678.61	962.00
Hare Indian	1,788.00	1,787.59	962.00
Bluefish Member	1,796.00	1,795.59	962.00
Hume	1,804.00	1,803.59	962.00

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00
Rig: Beaver Drilling Ltd. 2

Report Date: 2/4/2013
Report #: 22
Depth Progress: 367.00 m
Depth End: 1,325.00 mKB
Rig Release Date: 2/20/2013

API / UWI	Surface Legal Location	MaxWell Job Number	License No.
300/O-06 6510 127000	O-6 65-10 127-00	JOB01@2006	470

Ground Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
252.40	257.60	252.73	1/26/2013	9.50

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	1/3/2013 00:00	2/21/2013 00:00	DRILLED & CASE	Yes

Daily Cost Total	Cumulative Cost	Total Job AFE Amount	Total AFE+Sup	AFE / RFE / Maint.#	Estimated Days
241,697.88	4,856,854.07	10,990,100.00	10,990,100.00	10342919	35.34

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hrs)	Cum Personnel Total Hours (hrs)
1,873.00	1,856.00	38.0	408.00	7,936.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)
102	58		0

Road Condition	Weather	Temperature (°C)	Wind
Fair	O/C Light Snow	-24	Calm

Ops and Depth @ Morning Report
Drill 222mm hole ahead at 1425m

Wellbore
Original Hole

Last 24hr Summary
No accidents or incidents5 Hazard ID's:0 Job obersvations :Drill 222mm hole from 958m to 1325m with Reed MSR616M bit Schlumberger 7/8 5stage motor ,directional BHA and Gama, pumping at 1.8m3/min. Accumulated survey and Rig service time. Average ROP 18m/hr ,Slide 30m to keep inclination under 2*

24hr Forecast
Drill 222mm main hole to Core point.

Daily Contacts
Rig Manager, Rick Yavis; WS Supervisor, Dave Forsberg, 780-361-6417; WS Supervisor, Mike Hobmaier, 403-844-3210; Drilling Engineer, Mike Greener, 403-771-5039; Drilling Superintend, Sheldon Vamplew, 403-999-1302; Command Center, 587-794-4599

Last Casing String
Surface, 597.00mKB

Time Log

Start Time	End Time	Dur (hrs)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Depth Start (mKB)	Depth End (mKB)	Operation
00:00	00:15	0.25	INTRM1	DRILL	DRLG	P		958.00	961.00	Drill 222mm hole from 958m to 961m with Reed MSR616M bit Schlumberger 7/8 5stage motor set at 1.15* and directional BHA with Gamma, pumping 1.8m3/min
00:15	00:30	0.25	INTRM1	RIGMNT	SVRG	P		961.00	961.00	Rig service function test annular 13 sec to close function test crown saver
00:30	06:45	6.25	INTRM1	DRILL	DRLG	P		961.00	1,095.00	Drill 222mm hole from 961m to1095 m with Reed MSR616M bit Schlumberger 7/8 5stage motor set at 1.15* and directional BHA with Gamma, pumping 1.8m3/min
06:45	07:45	1.00	INTRM1	DRILL	SRVY	P		1,095.00	1,095.00	Accumulated time for surveys
07:45	08:00	0.25	INTRM1	DRILL	SFTY	P		1,095.00	1,095.00	Crew handover meeting
08:00	08:15	0.25	INTRM1	RIGMNT	SVRG	P		1,095.00	1,095.00	Rig Service function test pipe rams 3 sec & crown saver
08:15	15:00	6.75	INTRM1	DRILL	DRLG	P		1,095.00	1,191.00	Drill 222mm hole from 1095m to1191 m with Reed MSR616M bit Schlumberger 7/8 5stage motor set at 1.15* and directional BHA with Gamma, pumping 1.8m3/min
15:00	16:00	1.00	INTRM1	DRILL	SRVY	P		1,191.00	1,191.00	Accumulated time for surveys
16:00	16:15	0.25	INTRM1	RIGMNT	SVRG	P		1,191.00	1,191.00	Rig service function test hydril 14 sec
16:15	23:00	6.75	INTRM1	DRILL	DRLG	P		1,191.00	1,325.00	Drill 222mm hole from 1191m to1325m with Reed MSR616M bit Schlumberger 7/8 5stage motor set at 1.15* and directional BHA with Gamma, pumping 1.8m3/min
23:00	00:00	1.00	INTRM1	DRILL	SRVY	P		1,325.00	1,325.00	Accumulated time for surveys

Fluid / Mud Checks: Mud Engineer: Tri Pham

Time	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (cp)	YP Override (Pa)
17:00	1,230.00	910.0	54		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)
5.5		87/13	263,383	35,500	21	

Electric Stab (V)	ECD - Manual Entry (k...	Sand (%)	Solids, Corr. (%)	T (fl) (°C)	HTHP Pressure (kPa)	HTHP Filt (mL/30min)
650.0	964.0			25		6.8

API Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Cost
	6.00		4,309.29

Sum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost
16.00		17,377.08

Last BOP Drill

Type	Days Since Last ...	Last Date	Days Until Next ...	Next Check Date
BOP Drill (Pit)	1	2/3/2013	6	2/10/2013

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
361.00	

Safety Incidents

Date	Comment	Category

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00
Rig: Beaver Drilling Ltd. 2

Report Date: 2/4/2013
Report #: 22
Depth Progress: 367.00 m
Depth End: 1,325.00 mKB
Rig Release Date: 2/20/2013

Drill Strings: BHA # 2

Bit Run	Drill Bit	Length (m)	IADC Bit Dull	TFA (incl Noz) (mm²)	BHA ROP (m/hr)
1	222.0mm, Reed, MSR616M, A141416	0.28	2-2-CT-S-X-0-NO-TD	581	21.3

Nozzles (mm)	String Length (m)	OD (mm)	Rotating Hook Load (maximum) (daN)
11.1/11.1/11.1/11.1/11.1/11.1	1,622.00	192.0	62,500

Depth In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hrs)	Total Drill Hrs (hrs)
600.00	1,622.00	21.3	1,178.02	1,788.02	55.25	55.25

Comment
Path finder 171mm 7/8 5stage motor

Drill String Components

Item Description	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)
Kelly	71.0	112.0		10.67	1,622.0
Drill Pipe	101.6	127.0	71	1,355.98	1,611.3
4 1/2 IF X/O XT54	109.0	167.0	1	0.31	255.3
HWDP	76.2	127.0	10	93.55	255.0
XO	71.0	165.0	2	1.08	161.4
8 D.C	60.0	160.0	12	112.27	160.4
X/O	75.0	165.0	1	0.89	48.1
Jar	76.0	157.0	1	9.77	47.2
N.M. DC	72.0	168.0	2	18.96	37.4
Landing Sub	86.0	164.0	1	0.55	18.5
Monel	73.0	170.0	1	9.48	17.9
Mud Motor	59.0	192.0	1	8.21	8.4

Drilling Parameters: 1,191.00 - 1,325.00 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
725.00	41.25	19.9	1.800	6,500	60	10,300	59,000	59,000	59,000	59,000	59,000.0

Hydraulic Calculations

Bit Hydraulic Powe...	HP/Area (kW/mm²)	% P @ bit (%)	Bit Jet Velocity (m/s)	Bit dP (kPa)	Ann. dP (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)
40.9	0.00106	13	51.7	1,363.0	400.2	910.0	940.8

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Shoe to Top of Casing...	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m...
9.63	11.74	16.56	65.1	65.1	28.4	184.5

Error

Mud Pumps: 1, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
1	NATIONAL	8-P-80		216.0

Pump Checks

Date	Depth (mKB)	Q (m³/min)	Pres (kPa)	Strokes (spm)
2/19/2013 00:00	1,855.00		686	5
2/20/2013 00:00				11

Pump Operations

Start Date	End Date	Liner Size (mm)	P (max) (kPa)	Vol/Stk OR (m³/stk)
1/29/2013		140.0		

Mud Pumps: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80		216.0

Pump Checks

Date	Depth (mKB)	Q (m³/min)	Pres (kPa)	Strokes (spm)
2/10/2013 08:00	1,724.00	0.587	357	6
2/10/2013 18:00	1,747.00	1.232	5,300	12

Pump Operations

Start Date	End Date	Liner Size (mm)	P (max) (kPa)	Vol/Stk OR (m³/stk)
1/29/2013		140.0		
2/5/2013		140.0		

Shaker Screens

Description	Start Date	End Date	Scr Sz X	Scr Sz Y	Note
1	1/23/2013		84	84	
1	1/23/2013		84	84	
1	1/23/2013		84	84	
1	1/23/2013		84	84	

Centrifuges/Cyclones:

Number	Make	Model	Diameter (mm)

Centrifuge/Cyclone Checks

Date	Hrs (hrs)	RPM (rpm)	Dens OF (kg/m³)	Q (ovrflw) (L/min)	Dens UF (kg/m³)	Q (undrflw) (L/min)

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00
Rig: Beaver Drilling Ltd. 2

Report Date: 2/4/2013
Report #: 22
Depth Progress: 367.00 m
Depth End: 1,325.00 mKB
Rig Release Date: 2/20/2013

Fluid / Mud Additive Amounts

Description	Consumed	Cost	Size	Units
VERSAMOD - 208LT	1.0	1,071.390	208.0	bbl
VERSAMUL - 208LT	1.0	940.470	208.0	bbl
TRUVIS - 25KG	3.0	152.410	25.0	sks
MIX II MED. - 25LB	5.0	27.630	25.0	sks
MIX II FINE - 25LB	5.0	27.630	25.0	sks
VERSATROL M - 22KG	8.0	49.450	22.0	sks
CAL-CHLR 94-97%-40KG	10.0	46.970	40.0	sks
LIME - 20KG	10.0	8.680	20.0	sks
OPTISEAL IV 25KG	10.0	61.180	25.0	sks

Survey Data

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	Depart (m)	NS (m)	EW (m)	VS (m)	DLS (°/30m)
2/4/2013	955.60	1.71	32.88	955.43	14.26	-2.08	14.11	13.00	0.54
2/4/2013	985.10	1.58	42.42	984.92	14.69	-1.41	14.62	13.67	0.31
2/4/2013	1,014.95	1.89	51.51	1,014.75	15.30	-0.80	15.28	14.48	0.42
2/4/2013	1,043.60	2.11	57.62	1,043.39	16.10	-0.22	16.10	15.42	0.32
2/4/2013	1,071.58	2.42	62.41	1,071.34	17.06	0.33	17.06	16.49	0.39
2/4/2013	1,090.66	2.11	51.60	1,090.41	17.70	0.73	17.69	17.21	0.83
2/4/2013	1,101.16	2.29	55.20	1,100.90	18.04	0.97	18.01	17.59	0.65
2/4/2013	1,119.52	1.19	24.40	1,119.25	18.44	1.36	18.39	18.06	2.30
2/4/2013	1,138.74	1.32	299.98	1,138.47	18.36	1.65	18.28	18.03	2.64
2/4/2013	1,177.53	1.19	321.29	1,177.25	17.78	2.19	17.64	17.57	0.37
2/4/2013	1,196.83	1.01	337.60	1,196.55	17.63	2.50	17.45	17.47	0.56
2/4/2013	1,216.03	1.58	351.22	1,215.74	17.59	2.92	17.35	17.48	1.01
2/4/2013	1,235.60	1.01	6.29	1,235.31	17.65	3.36	17.33	17.58	1.01
2/4/2013	1,264.35	1.58	321.29	1,264.05	17.55	3.92	17.11	17.52	1.17
2/4/2013	1,274.14	1.89	325.50	1,273.84	17.43	4.16	16.93	17.42	1.03
2/4/2013	1,301.38	0.70	320.72	1,301.07	17.21	4.65	16.57	17.21	1.31

Formations

Formation Name	Drill Top MD (mKB)	Drill Top TVD (mKB)	Prog Top TVD (mKB)
Quaternary System	5.00	5.00	5.00
Alberta Grp	31.00	31.00	28.00
Slater River	36.00	36.00	48.00
Artic Red	570.00	569.94	570.00
Sams Sault	787.00	786.89	787.00
Martin House	882.50	882.35	882.50
Imperial Shale	962.00	961.82	962.00
Upper Canol	1,643.00	1,642.61	962.00
Lower Canol	1,679.00	1,678.61	962.00
Hare Indian	1,788.00	1,787.59	962.00
Bluefish Member	1,796.00	1,795.59	962.00
Hume	1,804.00	1,803.59	962.00

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00
Rig: Beaver Drilling Ltd. 2

Report Date: 2/5/2013
Report #: 23
Depth Progress: 453.02 m
Depth End: 1,622.00 mKB
Rig Release Date: 2/20/2013

API / UWI	Surface Legal Location	MaxWell Job Number	License No.
300/O-06 6510 127000	O-6 65-10 127-00	JOB01@2006	470

Ground Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
252.40	257.60	252.73	1/26/2013	10.50

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	1/3/2013 00:00	2/21/2013 00:00	DRILLED & CASE	Yes

Daily Cost Total	Cumulative Cost	Total Job AFE Amount	Total AFE+Sup	AFE / RFE / Maint.#	Estimated Days
188,395.08	5,045,249.15	10,990,100.00	10,990,100.00	10342919	35.34

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hrs)	Cum Personnel Total Hours (hrs)
1,873.00	1,856.00	44.0	480.00	8,416.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)
28	28		0

Road Condition	Weather	Temperature (°C)	Wind
Fair	Clear	-24	nw 7 km

Ops and Depth @ Morning Report
Lay down directional tools

Wellbore
Original Hole

Last 24hr Summary
No accidents or incidents 3 Hazard ID's:2 Job obersvations :Drill 222mm hole from 1325m to 1622m (Core Point) with Reed MSR616M bit Schlumberger 7/8 5stage motor ,directional BHA and Gama, pumping at 1.8m3/min. Circulate clean and condition hole to Core, Pull out of hole lay down BHA ,Accumulated survey and Rig service time. Average ROP 21.21m/hr

24hr Forecast
Cut full hole core's

Daily Contacts
Command Center, 587-794-4599; Drilling Engineer, Mike Greener, 403-771-5039; WS Supervisor, Brian Neigum, 403-548-5013; WS Supervisor, Mike Hobmaier, 403-844-3210; Rig Manager, Rick Yavis; Drilling Superintend, Sheldon Vamplew, 403-999-1302

Last Casing String
Surface, 597.00mKB

Time Log

Start Time	End Time	Dur (hrs)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Depth Start (mKB)	Depth End (mKB)	Operation
00:00	00:15	0.25	INTRM1	DRILL	DRLG	P		1,325.00	1,335.00	Drill 222mm hole from 1325m to1335m with Reed MSR616M bit Schlumberger 7/8 5stage motor set at 1.15* and directional BHA with Gamma, pumping 1.8m3/min
00:15	00:30	0.25	INTRM1	RIGMNT	SVRG	P		1,335.00	1,335.00	Rig service function test pipe rams closed in 4 sec function test crown saver
00:30	06:45	6.25	INTRM1	DRILL	DRLG	P		1,335.00	1,459.00	Drill 222mm hole from 1335m to 1459m with Reed MSR616M bit Schlumberger 7/8 5stage motor set at 1.15* and directional BHA with Gamma, pumping 1.8m3/min
06:45	07:45	1.00	INTRM1	DRILL	SRVY	P		1,459.00	1,459.00	Accumulated time for surveys
07:45	08:00	0.25	INTRM1	DRILL	SFTY	P		1,459.00	1,459.00	Crew handover meeting
08:00	08:15	0.25	INTRM1	RIGMNT	SVRG	P		1,459.00	1,459.00	Rig service function test hydril 14 sec & crown saver
08:15	15:00	6.75	INTRM1	DRILL	DRLG	P		1,459.00	1,616.00	Drill 222mm hole from 1459m to 1616mm with Reed MSR616M bit Schlumberger 7/8 5stage motor set at 1.15* and directional BHA with Gamma, pumping 1.8m3/min
15:00	15:45	0.75	INTRM1	DRILL	SRVY	P		1,616.00	1,616.00	Accumulated time for surveys
15:45	16:00	0.25	INTRM1	DRILL	SFTY	P		1,616.00	1,616.00	Crew hand over meeting
16:00	16:45	0.75	INTRM1	DRILL	DRLG	P		1,616.00	1,622.00	Drill 222mm hole from 1616m to 1622mm with Reed MSR616M bit Schlumberger 7/8 5stage motor set at 1.15* and directional BHA with Gamma, pumping 1.8m3/min
16:45	17:00	0.25	INTRM1	RIGMNT	SVRG	P		1,622.00	1,622.00	Rig service function pipe rams 3 sec crown saver operating properly
17:00	17:30	0.50	INTRM1	DRILL	CIRC	P		1,622.00	1,622.00	Circulate hole clean@1622m
17:30	00:00	6.50	INTRM1	DRILL	TRIP	P		1,622.00	1,622.00	Trip out of hole flow check@1610m/1534m/856m

Fluid / Mud Checks: Mud Engineer: Tri Pham

Time	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (cp)	YP Override (Pa)
15:30	1,617.00	920.0	60		13.0	5.5

Low Gravity Solids (%)	MBT (kg/m³)	Oil Water Ratio	Chlorides (mg/L)	Calcium (mg/L)	Lime (kg/m³)	Potassium (mg/L)
6.9		88/12	266,597	33,000	19	

Electric Stab (V)	ECD - Manual Entry (k...	Sand (%)	Solids, Corr. (%)	T (fl) (°C)	HTHP Pressure (kPa)	HTHP Filt (mL/30min)
967.0	988.0			31		5.7

API Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Cost
	10.00		7,004.83

Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost
26.00		24,381.91

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00
Rig: Beaver Drilling Ltd. 2

Report Date: 2/9/2013
Report #: 23
Depth Progress: 453.02 m
Depth End: 1,622.00 mKB
Rig Release Date: 2/20/2013

Last BOP Drill

Type	Days Since Last ...	Last Date	Days Until Next ...	Next Check Date
BOP Drill (Pit)	2	2/3/2013	5	2/10/2013

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
362.00	

Safety Incidents

Date	Comment	Category

Drill Strings: BHA # 2

Bit Run	Drill Bit	Length (m)	IADC Bit Dull	TFA (incl Noz) (mm²)	BHA ROP (m/hr)
1	222.0mm, Reed, MSR616M, A141416	0.28	2-2-CT-S-X-0-NO-TD	581	21.3

Nozzles (mm)	String Length (m)	OD (mm)	Rotating Hook Load (maximum) (daN)
11.1/11.1/11.1/11.1/11.1/11.1	1,622.00	192.0	62,500

Depth In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hrs)	Total Drill Hrs (hrs)
600.00	1,622.00	21.3	1,178.02	1,788.02	55.25	55.25

Comment
Path finder 171mm 7/8 5stage motor

Drill String Components

Item Description	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)
Kelly	71.0	112.0		10.67	1,622.0C
Drill Pipe	101.6	127.0	71	1,355.98	1,611.3
4 1/2 IF X/O XT54	109.0	167.0	1	0.31	255.3
HWDP	76.2	127.0	10	93.55	255.04
XO	71.0	165.0	2	1.08	161.4
5 D.C	60.0	160.0	12	112.27	160.41
X/O	75.0	165.0	1	0.89	48.14
Jar	76.0	157.0	1	9.77	47.2
N.M. DC	72.0	168.0	2	18.96	37.4
Landing Sub	86.0	164.0	1	0.55	18.52
Monel	73.0	170.0	1	9.48	17.97
Mud Motor	59.0	192.0	1	8.21	8.4

Drilling Parameters: 1,459.98 - 1,622.00 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
1,178.02	55.25	216.0	1.800	6,500	50	10,300	62,500	69,000	69,000	69,000	

Hydraulic Calculations

Bit Hydraulic Powe...	HP/Area (kW/mm²)	% P @ bit (%)	Bit Jet Velocity (m/s)	Bit dP (kPa)	Ann. dP (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)
41.3	0.00107	13	51.7	1,378.0	592.9	920.0	957.3

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Shoe to Top of Casing...	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m...
11.98	11.74	16.60	59.1	65.1	28.4	184.5

Error

Mud Pumps: 1, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
1	NATIONAL	8-P-80		216.0

Pump Checks

Date	Depth (mKB)	Q (m³/min)	Pres (kPa)	Strokes (spm)
2/19/2013 00:00	1,855.00		686	5
2/20/2013 00:00				11

Pump Operations

Start Date	End Date	Liner Size (mm)	P (max) (kPa)	Vol/Stk OR (m³/stk)
1/29/2013		140.0		

Mud Pumps: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80		216.0

Pump Checks

Date	Depth (mKB)	Q (m³/min)	Pres (kPa)	Strokes (spm)
2/10/2013 08:00	1,724.00	0.587	357	6
2/10/2013 18:00	1,747.00	1.232	5,300	12

Pump Operations

Start Date	End Date	Liner Size (mm)	P (max) (kPa)	Vol/Stk OR (m³/stk)
1/29/2013		140.0		
2/5/2013		140.0		

Shaker Screens

Description	Start Date	End Date	Scr Sz X	Scr Sz Y	Note
1	1/23/2013		84	84	
1	1/23/2013		84	84	
1	1/23/2013		84	84	
1	1/23/2013		84	84	

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00
Rig: Beaver Drilling Ltd. 2

Report Date: 2/5/2013
Report #: 23
Depth Progress: 453.02 m
Depth End: 1,622.00 mKB
Rig Release Date: 2/20/2013

Centrifuges/Cyclones:

Number	Make	Model	Diameter (mm)

Centrifuge/Cyclone Checks

Date	Hrs (hrs)	RPM (rpm)	Dens OF (kg/m³)	Q (ovrflw) (L/min)	Dens UF (kg/m³)	Q (undrflw) (L/min)

Fluid / Mud Additive Amounts

Description	Consumed	Cost	Size	Units
VERSAMOD - 208LT	1.0	1,071.390	208.0	bbl
VERSAMUL - 208LT	3.0	940.470	208.0	bbl
VERSATROL M - 22KG	7.0	49.450	22.0	sks
TRUVIS - 25KG	7.0	152.410	25.0	sks
LIME - 20KG	5.0	8.680	20.0	sks
CAL-CHLR 94-97%-40KG	5.0	46.970	40.0	sks
BARITE - 40KG	50.0	19.850	40.0	sks
OPTISEAL IV 25KG	7.0	61.180	25.0	sks

Survey Data

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	Depart (m)	NS (m)	EW (m)	VS (m)	DLS (°/30m)
2/5/2013	1,321.64	0.62	328.98	1,321.33	17.13	4.84	16.44	17.13	0.1
2/5/2013	1,349.45	0.48	352.80	1,349.14	17.12	5.09	16.34	17.11	0.2
2/5/2013	1,368.89	0.48	345.11	1,368.58	17.14	5.25	16.31	17.13	0.1
2/5/2013	1,388.05	0.79	33.41	1,387.74	17.24	5.44	16.36	17.23	0.9
2/5/2013	1,407.23	1.01	41.58	1,406.91	17.50	5.67	16.55	17.47	0.4
2/5/2013	1,426.40	1.32	63.11	1,426.08	17.86	5.90	16.86	17.83	0.8
2/5/2013	1,465.03	2.59	65.18	1,464.69	19.17	6.47	18.05	19.13	0.9
2/5/2013	1,484.30	1.41	68.39	1,483.94	19.84	6.74	18.66	19.80	1.84
2/5/2013	1,503.96	0.22	67.29	1,503.60	20.12	6.84	18.92	20.07	1.82
2/5/2013	1,522.79	0.70	78.01	1,522.43	20.27	6.88	19.07	20.22	0.77
2/5/2013	1,541.84	2.02	72.61	1,541.47	20.72	7.00	19.50	20.68	2.0
2/5/2013	1,580.88	0.79	107.28	1,580.50	21.63	7.13	20.42	21.59	1.11
2/5/2013	1,599.91	1.10	93.61	1,599.53	21.90	7.08	20.72	21.87	0.6
2/5/2013	1,607.85	1.10	88.69	1,607.47	22.04	7.07	20.88	22.02	0.3

Formations

Formation Name	Drill Top MD (mKB)	Drill Top TVD (mKB)	Prog Top TVD (mKB)
Quaternary System	5.00	5.00	5.0
Alberta Grp	31.00	31.00	28.0
Slater River	36.00	36.00	48.0
Artic Red	570.00	569.94	570.0
Sams Sault	787.00	786.89	787.0
Martin House	882.50	882.35	882.5
Imperial Shale	962.00	961.82	962.0
Upper Canol	1,643.00	1,642.61	962.0
Lower Canol	1,679.00	1,678.61	962.0
Hare Indian	1,788.00	1,787.59	962.0
Bluefish Member	1,796.00	1,795.59	962.0
Hume	1,804.00	1,803.59	962.0

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00
Rig: Beaver Drilling Ltd. 2

Report Date: 2/6/2013
Report #: 24
Depth Progress: 0.00 m
Depth End: 1,622.00 mKB
Rig Release Date: 2/20/2013

API / UWI	Surface Legal Location	MaxWell Job Number	License No.
300/O-06 6510 127000	O-6 65-10 127-00	JOB01@2006	470

Ground Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
252.40	257.60	252.73	1/26/2013	11.50

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	1/3/2013 00:00	2/21/2013 00:00	DRILLED & CASE	Yes

Daily Cost Total	Cumulative Cost	Total Job AFE Amount	Total AFE+Sup	AFE / RFE / Maint.#	Estimated Days
134,025.33	5,179,274.48	10,990,100.00	10,990,100.00	10342919	35.34

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hrs)	Cum Personnel Total Hours (hrs)
1,873.00	1,856.00	44.0	480.00	8,896.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)
		32	0

Road Condition	Weather	Temperature (°C)	Wind
Fair	Clear	-29	Calm

Ops and Depth @ Morning Report
Pump down inner core barrel

Wellbore
Original Hole

Last 24hr Summary
No accidents or incidents 5 Hazard ID's:1 Job obersvations :Continue to pull out of hole lay down BHA,Pickup and make up 27m Core barrle and run in hole 1618 mkb. pick up kelly and circulate bottom's up. Rig in coreing companys flow tee and try to make up the pack off assembly. The flow tee is machined 4" 602 thread and the pack off was 4" 200 wing. We found a 602 wing and change it out.

24hr Forecast
Cut core #1

Daily Contacts
WS Supervisor, Mike Hobmaier, 403-844-3210; Drilling Superintend, Sheldon Vamplew, 403-999-1302; Rig Manager, Rick Yavis; Drilling Engineer, Mike Greener, 403-771-5039; WS Supervisor, Brian Neigum, 403-548-5013; Command Center, 587-794-4599

Last Casing String
Surface, 597.00mKB

Time Log

Start Time	End Time	Dur (hrs)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Depth Start (mKB)	Depth End (mKB)	Operation
00:00	01:15	1.25	INTRM1	DRILL	TRIP	P		1,622.00	1,622.00	Pull out of hole & strap out flow check out of hole
01:15	01:30	0.25	INTRM1	RIGMNT	SVRG	P		1,622.00	1,622.00	Rig service function Crown saver and Pipe rams Close 3sec.
01:30	01:45	0.25	INTRM1	CORING	SFTY	P		1,622.00	1,622.00	Safety meeting Prior to laying down BHA
01:45	04:00	2.25	INTRM1	DRILL	PULD	P		1,622.00	1,622.00	Lay down 10 h.w & 12 d.c
04:00	04:15	0.25	INTRM1	CORING	SFTY	P		1,622.00	1,622.00	Safety meeting prior to handling directional tools
04:15	06:15	2.00	INTRM1	DRILL	PULD	P		1,622.00	1,622.00	Handle directional tools & lay down tools
06:15	06:30	0.25	INTRM1	CORING	SFTY	P		1,622.00	1,622.00	Safety meeting prior to picking up NOV Core barries
06:30	07:45	1.25	PROD1	CORING	PULD	P		1,622.00	1,622.00	Pick up NOV Coring tools
07:45	08:00	0.25	PROD1	CORING	SFTY	P		1,622.00	1,622.00	Crew change safety meeting
08:00	08:15	0.25	PROD1	RIGMNT	SVRG	P		1,622.00	1,622.00	Rig service function test blind rams & crown saver operating properly
08:15	15:15	7.00	PROD1	CORING	PULD	P		1,622.00	1,622.00	Make up core tools pick up 8 core collars
15:15	16:00	0.75	PROD1	CORING	TRIP	P		1,622.00	1,622.00	Trip in the hole with drill pipe
16:00	17:00	1.00	PROD1	CORING	TRIP	P		1,622.00	1,622.00	Trip in the hole with drill pipe fill pipe,flow check@607m
17:00	17:15	0.25	PROD1	CORING	SFTY	P		1,622.00	1,622.00	BOP drill while runing in the hole crew in position well secure in 90 sec with day lights crew
17:15	17:30	0.25	PROD1	CORING	SFTY	P		1,622.00	1,622.00	Man down drill with day lights crew reviewed lease search pattern
17:30	17:45	0.25	PROD1	RIGMNT	SVRG	P		1,622.00	1,622.00	Rig service function hydrill 13 sec crown saver operating properly,function test motor kills operating properly
17:45	19:15	1.50	PROD1	CORING	TRIP	P		1,622.00	1,622.00	Trip in the hole fill pipe flow check@ 973 m
19:15	19:30	0.25	PROD1	CORING	SFTY	P		1,622.00	1,622.00	Held BOP drill well secure in 85 sec
19:30	22:30	3.00	PROD1	CORING	TRIP	P		1,622.00	1,622.00	Run in hole & pick up 17 D.P
22:30	23:30	1.00	PROD1	CORING	CIRC	P		1,622.00	1,622.00	Circulate bottoms up clean hole prior to cutting core #1
23:30	23:45	0.25	PROD1	CORING	SFTY	P		1,622.00	1,622.00	Safety meeting with NOV prior to retreiving drill rod
23:45	00:00	0.25	PROD1	CORING	ELNE	P		1,622.00	1,622.00	Work on getting the hammer union on the diverter sub and the pack off union together. the sub is 4"figure 602 and the wing half on the pack off was 4" figure 200. Retrieving drill rod with schlumberger

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00
Rig: Beaver Drilling Ltd. 2

Report Date: 2/6/2013
Report #: 24
Depth Progress: 0.00 m
Depth End: 1,622.00 mKB
Rig Release Date: 2/20/2013

Fluid / Mud Checks: Mud Engineer: Tri Pham

Time	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (cp)	YP Override (Pa)
15:30	1,622.00	920.0	60		13.0	5.5

Low Gravity Solids (%)	MBT (kg/m³)	Oil Water Ratio	Chlorides (mg/L)	Calcium (mg/L)	Lime (kg/m³)	Potassium (mg/L)
6.9		88/12	266,597	33,000	19	

Electric Stab (V)	ECD - Manual Entry (k...	Sand (%)	Solids, Corr. (%)	T (fl) (°C)	HTHP Pressure (kPa)	HTHP Filt (mL/30min)
967.0	988.0			31		5.7

API Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Cost
	10.00		

Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost
36.00		24,381.91

Last BOP Drill

Type	Days Since Last ...	Last Date	Days Until Next ...	Next Check Date
BOP Drill (Pit)	0	2/6/2013	7	2/13/2013

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
363.00	

Safety Incidents

Date	Comment	Category

Drill Strings: 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)	Rotating Hook Load (maximum) (daN)

Depth In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hrs)	Total Drill Hrs (hrs)

Comment

Drill String Components

Item Description	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)

Drilling Parameters:

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)	Ann. dP (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Shoe to Top of Casing...	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m...

Error

Mud Pumps: 1, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
1	NATIONAL	8-P-80		216.0

Pump Checks

Date	Depth (mKB)	Q (m³/min)	Pres (kPa)	Strokes (spm)
2/19/2013 00:00	1,855.00		686	5
2/20/2013 00:00				11

Pump Operations

Start Date	End Date	Liner Size (mm)	P (max) (kPa)	Vol/Stk OR (m³/stk)
1/29/2013		140.0		

Mud Pumps: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80		216.0

Pump Checks

Date	Depth (mKB)	Q (m³/min)	Pres (kPa)	Strokes (spm)
2/10/2013 08:00	1,724.00	0.587	357	6
2/10/2013 18:00	1,747.00	1.232	5,300	12

Pump Operations

Start Date	End Date	Liner Size (mm)	P (max) (kPa)	Vol/Stk OR (m³/stk)
1/29/2013		140.0		
2/5/2013		140.0		

Shaker Screens

Description	Start Date	End Date	Scr Sz X	Scr Sz Y	Note
1	1/23/2013		84	84	
1	1/23/2013		84	84	
1	1/23/2013		84	84	
1	1/23/2013		84	84	

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00
Rig: Beaver Drilling Ltd. 2

Report Date: 2/6/2013
Report #: 24
Depth Progress: 0.00 m
Depth End: 1,622.00 mKB
Rig Release Date: 2/20/2013

Centrifuges/Cyclones:

Number	Make	Model	Diameter (mm)

Centrifuge/Cyclone Checks

Date	Hrs (hrs)	RPM (rpm)	Dens OF (kg/m³)	Q (ovrflw) (L/min)	Dens UF (kg/m³)	Q (undrflw) (L/min)

Fluid / Mud Additive Amounts

Description	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)
Quaternary System	5.00	5.00	5.0C
Alberta Grp	31.00	31.00	28.0C
Slater River	36.00	36.00	48.0C
Artic Red	570.00	569.94	570.0C
Sams Sault	787.00	786.89	787.0C
Martin House	882.50	882.35	882.5C
Imperial Shale	962.00	961.82	962.0C
Upper Canol	1,643.00	1,642.61	962.0C
Lower Canol	1,679.00	1,678.61	962.0C
Hare Indian	1,788.00	1,787.59	962.0C
Bluefish Member	1,796.00	1,795.59	962.0C
Hume	1,804.00	1,803.59	962.0C

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00
Rig: Beaver Drilling Ltd. 2

Report Date: 2/7/2013
Report #: 25
Depth Progress: 27.00 m
Depth End: 1,649.00 mKB
Rig Release Date: 2/20/2013

API / UWI	Surface Legal Location	MaxWell Job Number	License No.
300/O-06 6510 127000	O-6 65-10 127-00	JOB01@2006	470

Ground Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
252.40	257.60	252.73	1/26/2013	12.50

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	1/3/2013 00:00	2/21/2013 00:00	DRILLED & CASE	Yes

Daily Cost Total	Cumulative Cost	Total Job AFE Amount	Total AFE+Sup	AFE / RFE / Maint.#	Estimated Days
193,861.61	5,373,136.09	10,990,100.00	10,990,100.00	10342919	35.34

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hrs)	Cum Personnel Total Hours (hrs)
1,873.00	1,856.00	46.0	504.00	9,400.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)
187	221		0

Road Condition	Weather	Temperature (°C)	Wind
Fair	Clear	-28	10

Ops and Depth @ Morning Report
Cut core #2 at 1661 mkb

Wellbore
Original Hole

Last 24hr Summary
No accidents or incidents 4 Hazard ID's:1 Job obersvations :Pull Drill rod and install Core barrell inner and pump it down. Cut core #1, From 1622m to 1649m,27m ,Circulate clean hole prior to pulling core,Rig in wire line and retrieve core at programmed speed.

24hr Forecast
Cut core #2 & pull it

Daily Contacts
Drilling Engineer, Mike Greener, 403-771-5039; Command Center, 587-794-4599; WS Supervisor, Mike Hobmaier, 403-844-3210; Rig Manager, Rick Yavis; Drilling Superintend, Sheldon Vamplew, 403-999-1302; WS Supervisor, Brian Neigum, 403-548-5013

Last Casing String
Surface, 597.00mKB

Time Log

Start Time	End Time	Dur (hrs)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Depth Start (mKB)	Depth End (mKB)	Operation
00:00	04:30	4.50	PROD1	CORING	RECR	P		1,622.00	1,622.00	Retrieving drill rod with schlumberger. The over shot needs to have a centralizer put on because there is room in the pipe for the overshot to go by the fish neck. This was fixed once it was out of the hole.
04:30	04:45	0.25	PROD1	RIGMNT	SVRG	P		1,622.00	1,622.00	Rig service function test hydril 14 sec & crown saver
04:45	05:45	1.00	PROD1	CORING	PULD	P		1,622.00	1,622.00	Handle & rig up inner core bbl
05:45	07:45	2.00	PROD1	CORING	CORE	P		1,622.00	1,631.00	Cut 89 mm core from 1622 m to 1631 m with national oilwell varco with bit # 1c nov PR513 pumping @ 1.2 m3 /min
07:45	08:00	0.25	PROD1	CORING	SFTY	P		1,631.00	1,631.00	Crew change safety meeting
08:00	10:30	2.50	PROD1	CORING	CORE	P		1,631.00	1,649.00	Cut 89 mm core #1 from 1631m to 1649m with national oilwell varco with bit # 1c nov PR513 pumping @ 1.2 m3 /min WOB 4.5,ROP 7M/HR 5000 KPA Pump pressure
10:30	11:30	1.00	PROD1	CORING	CIRC	P		1,649.00	1,649.00	Circulate bottoms up
11:30	11:45	0.25	PROD1	CORING	SFTY	P		1,649.00	1,649.00	Safety meeting with MI SWACO on invert reviewed MSDS and invert exsposure
11:45	12:00	0.25	PROD1	CORING	SFTY	P		1,649.00	1,649.00	Safety meeting with NOV core hands and Schlumberger wire line hands
12:00	19:15	7.25	PROD1	CORING	RECR	P		1,649.00	1,649.00	Rig to and pull core #1 @1616m with wireline truck. Pull out core #1 with wireline truck
19:15	19:30	0.25	PROD1	RIGMNT	SVRG	P		1,649.00	1,649.00	Rig service function test crown saver
19:30	00:00	4.50	PROD1	CORING	RECR	P		1,649.00	1,649.00	Pull out core # 1 with schlumberger wire line

Fluid / Mud Checks: Mud Engineer: Tri Pham

Time	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (cp)	YP Override (Pa)
15:30	1,631.00	950.0	58		12.0	4.5

Low Gravity Solids (%)	MBT (kg/m³)	Oil Water Ratio	Chlorides (mg/L)	Calcium (mg/L)	Lime (kg/m³)	Potassium (mg/L)
7.4		87/13	260,156	35,000	20	

Electric Stab (V)	ECD - Manual Entry (k...	Sand (%)	Solids, Corr. (%)	T (fl) (°C)	HTHP Pressure (kPa)	HTHP Filt (mL/30min)
800.0	997.0			31		5.5

API Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Cost
	10.00		2,290.11

Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost
46.00		26,672.02

Last BOP Drill

Type	Days Since Last ...	Last Date	Days Until Next ...	Next Check Date
BOP Drill (Plt)	1	2/6/2013	6	2/13/2013

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
364.00	

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00
Rig: Beaver Drilling Ltd. 2

Report Date: 2/7/2013
Report #: 25
Depth Progress: 27.00 m
Depth End: 1,649.00 mKB
Rig Release Date: 2/20/2013

Safety Incidents

Date	Comment	Category

Drill Strings: BHA # 3

Bit Run	Drill Bit	Length (m)	IADC Bit Dull	TFA (incl Noz) (mm²)	BHA ROP (m/hr)
1 C	222.0mm, NOV, PR 513, E140308	0.58	----	667	6.2

Nozzles (mm)	String Length (m)	OD (mm)	Rotating Hook Load (maximum) (daN)
11.9/11.9/11.9/11.9/11.9/11.9	1,856.00	165.0	58,000

Depth In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hrs)	Total Drill Hrs (hrs)
1,622.00	1,856.00	6.2	234.10	1,856.10	37.75	37.75

Comment

Drill String Components

Item Description	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)
Kelly & pup jts	89.0	165.0		18.99	1,856.0
Drill Pipe	108.0	127.0	180	1,730.64	1,837.01
XO Sub	108.0	165.0	1	0.77	106.37
Drill Collar	108.0	165.0	8	75.82	105.6
Stabilizer	108.0	165.0	1	1.23	29.7
Seat Sub	108.0	165.0	1	0.49	28.5
Core Barrel	108.0	165.0	1	7.92	28.0
Stabilizer	108.0	165.0	1	0.83	20.14
Core Barrel	108.0	165.0	1	9.57	19.31
Stabilizer	108.0	165.0	1	1.23	9.74
Core Barrel	108.0	165.0	1	7.93	8.51

Drilling Parameters: 1,631.00 - 1,649.00 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
27.00	4.50	7.2	1.200	4,500	65	5,700	55,500	60,000	60,000	60,000	

Hydraulic Calculations

Bit Hydraulic Powe...	HP/Area (kW/mm²)	% P @ bit (%)	Bit Jet Velocity (m/s)	Bit dP (kPa)	Ann. dP (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)
9.3	0.00024	8	30.0	463.6	581.8	920.0	956.0

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Shoe to Top of Casing...	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m...
15.12	11.74	16.56	43.4	43.4	19.0	69.3

Error

Mud Pumps: 1, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
1	NATIONAL	8-P-80		216.0

Pump Checks

Date	Depth (mKB)	Q (m³/min)	Pres (kPa)	Strokes (spm)
2/19/2013 00:00	1,855.00		686	5
2/20/2013 00:00				11

Pump Operations

Start Date	End Date	Liner Size (mm)	P (max) (kPa)	Vol/Stk OR (m³/stk)
1/29/2013		140.0		

Mud Pumps: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80		216.0

Pump Checks

Date	Depth (mKB)	Q (m³/min)	Pres (kPa)	Strokes (spm)
2/10/2013 08:00	1,724.00	0.587	357	6
2/10/2013 18:00	1,747.00	1.232	5,300	12

Pump Operations

Start Date	End Date	Liner Size (mm)	P (max) (kPa)	Vol/Stk OR (m³/stk)
1/29/2013		140.0		
2/5/2013		140.0		

Shaker Screens

Description	Start Date	End Date	Scr Sz X	Scr Sz Y	Note
1	1/23/2013		84	84	
1	1/23/2013		84	84	
1	1/23/2013		84	84	
1	1/23/2013		84	84	

Centrifuges/Cyclones:

Number	Make	Model	Diameter (mm)

Centrifuge/Cyclone Checks

Date	Hrs (hrs)	RPM (rpm)	Dens OF (kg/m³)	Q (ovrflw) (L/min)	Dens UF (kg/m³)	Q (undrflw) (L/min)

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00
Rig: Beaver Drilling Ltd. 2

Report Date: 2/7/2013
Report #: 25
Depth Progress: 27.00 m
Depth End: 1,649.00 mKB
Rig Release Date: 2/20/2013

Fluid / Mud Additive Amounts

Description	Consumed	Cost	Size	Units
LIME - 20KG	5.0	8.680	20.0	sks
CAL-CHLR 94-97%-40KG	5.0	46.970	40.0	sks
VERSAMOD - 208LT	1.0	1,071.390	208.0	bbl
VERSAMUL - 208LT	1.0	940.470	208.0	bbl

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)
Quaternary System	5.00	5.00	5.00
Alberta Grp	31.00	31.00	28.00
Slater River	36.00	36.00	48.00
Artic Red	570.00	569.94	570.00
Sams Sault	787.00	786.89	787.00
Martin House	882.50	882.35	882.50
Imperial Shale	962.00	961.82	962.00
Upper Canol	1,643.00	1,642.61	962.00
Lower Canol	1,679.00	1,678.61	962.00
Hare Indian	1,788.00	1,787.59	962.00
Bluefish Member	1,796.00	1,795.59	962.00
Hume	1,804.00	1,803.59	962.00

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00
Rig: Beaver Drilling Ltd. 2

Report Date: 2/8/2013
Report #: 26
Depth Progress: 37.00 m
Depth End: 1,686.00 mKB
Rig Release Date: 2/20/2013

API / UWI	Surface Legal Location	MaxWell Job Number	License No.
300/O-06 6510 127000	O-6 65-10 127-00	JOB01@2006	470

Ground Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
252.40	257.60	252.73	1/26/2013	13.50

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	1/3/2013 00:00	2/21/2013 00:00	DRILLED & CASE	Yes

Daily Cost Total	Cumulative Cost	Total Job AFE Amount	Total AFE+Sup	AFE / RFE / Maint.#	Estimated Days
84,189.31	5,457,325.40	10,990,100.00	10,990,100.00	10342919	35.34

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hrs)	Cum Personnel Total Hours (hrs)
1,873.00	1,856.00	48.0	528.00	9,928.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)
230	185		0

Road Condition	Weather	Temperature (°C)	Wind
Fair	Clear	-23	7

Ops and Depth @ Morning Report
Pull core # 3 on wireline

Wellbore
Original Hole

Last 24hr Summary
No accidents or incidents 4 Hazard ID's:1 Job obersvations :Recover Core # 1 full 27m ,run new inner barrel and cut Core #2 from1649m to 1676m (27m),rig in wire line and recover Core #2 pulling at programed speed. Remove inner core barrel & recover full 27 meters of Core. Circulate and clean up hole. Trip 3 stand back in the hole. Make up inner core barrel and pump it to bottom. Cut core #3 from 1676 - 1686 mkb.

24hr Forecast
recover core #3 and cut core #4

Daily Contacts
Command Center, 587-794-4599; Drilling Engineer, Mike Greener, 403-771-5039; WS Supervisor, Mike Hobmaier, 403-844-3210; Drilling Superintend, Sheldon Vamplew, 403-999-1302; WS Supervisor, Brian Neigum, 403-548-5013; Rig Manager, Rick Yavis

Last Casing String
Surface, 597.00mKB

Time Log

Start Time	End Time	Dur (hrs)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Depth Start (mKB)	Depth End (mKB)	Operation
00:00	00:15	0.25	PROD1	RIGMNT	SVRG	P		1,649.00	1,649.00	Rig service function test hydril 14 sec & crown saver
00:15	00:30	0.25	PROD1	CORING	SFTY	P		1,649.00	1,649.00	Safety meeting recover core # 1
00:30	02:30	2.00	PROD1	CORING	RECR	P		1,649.00	1,649.00	recover core # 1 & lay down recover 27 m core
02:30	03:15	0.75	PROD1	CORING	CIRC	P		1,649.00	1,649.00	Circulate bottoms up & flow check @ 1635 m
03:15	04:15	1.00	PROD1	CORING	RECR	P		1,649.00	1,649.00	Rig up inner core bbl & set drill rod
04:15	08:00	3.75	PROD1	CORING	CORE	P		1,649.00	1,676.00	Cut 89 mm core # 2 from 1649 m to 1676 m (full 27m) with National Oilwell Varco with bit # 1c nov PR513 pumping @ 1.2 m3 /min ROP 10M/HR WOB 4dan
08:00	09:30	1.50	PROD1	CORING	CIRC	P		1,676.00	1,676.00	Circulate bottoms up clean hole prior to pulling core #2
09:30	09:45	0.25	PROD1	RIGMNT	SVRG	P		1,676.00	1,676.00	Rig service function pipe rams 3 sec crown saver operating properly
09:45	10:00	0.25	PROD1	CORING	TRIP	P		1,676.00	1,676.00	Pull 3 stds up to 1607M to recover core #2 with Schlumberger wire line
10:00	10:15	0.25	PROD1	CORING	SFTY	P		1,676.00	1,676.00	Safety meeting with Schlumberger wire line and NOV core hands
10:15	19:15	9.00	PROD1	CORING	RECR	P		1,676.00	1,676.00	Rig to and recover core #2 with Schumberger wire line and NOV core hands. Pull core #2
19:15	19:30	0.25	PROD1	RIGMNT	SVRG	P		1,676.00	1,676.00	Rig service function test hydril 14 sec & crown saver
19:30	19:45	0.25	PROD1	CORING	SFTY	P		1,676.00	1,676.00	Safety meeting on laying down core # 2
19:45	20:45	1.00	PROD1	CORING	RECR	P		1,676.00	1,676.00	recover core # 2 & lay down core # 2 we got full 27 meter recovery
20:45	21:00	0.25	PROD1	CORING	TRIP	P		1,676.00	1,676.00	Run in 3 stds d.p
21:00	21:45	0.75	PROD1	CORING	CIRC	P		1,676.00	1,676.00	Circulate bottoms up
21:45	23:00	1.25	PROD1	CORING	RECR	P		1,676.00	1,676.00	Rig up inner core bbl & set drill rod
23:00	00:00	1.00	PROD1	CORING	CORE	P		1,676.00	1,686.00	Cut 89 mm core # 3 from 1676 m to 1686 m with National Oilwell Varco with bit # 1c nov PR513 pumping @ 1.2 m3 /min ROP 10M/HR WOB 5dan

Fluid / Mud Checks: Mud Engineer: Tri Pham

Time	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (cp)	YP Override (Pa)
07:00	1,676.00	945.0	68		12.0	4.5
Low Gravity Solids (%)	**MBT (kg/m³)**	**Oil Water Ratio**	**Chlorides (mg/L)**	**Calcium (mg/L)**	**Lime (kg/m³)**	**Potassium (mg/L)**
8.1		88/12	259,568	32,000	19	
Electric Stab (V)	**ECD - Manual Entry (k...**	**Sand (%)**	**Solids, Corr. (%)**	**T (fl) (°C)**	**HTHP Pressure (kPa)**	**HTHP Filt (mL/30min)**
800.0	988.0			21		5.5

API Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Cost
	1.00		2,617.81

Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost
47.00		29,289.83

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00
Rig: Beaver Drilling Ltd. 2

Report Date: 2/8/2013
Report #: 2
Depth Progress: 37.00 m
Depth End: 1,686.00 mKB
Rig Release Date: 2/20/2013

Last BOP Drill

Type	Days Since Last ...	Last Date	Days Until Next ...	Next Check Date
BOP Drill (Pit)	2	2/6/2013	5	2/13/2013

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
365.00	

Safety Incidents

Date	Comment	Category

Drill Strings: BHA # 3

Bit Run	Drill Bit	Length (m)	IADC Bit Dull	TFA (incl Noz) (mm²)	BHA ROP (m/hr)
1 C	222.0mm, NOV, PR 513, E140308	0.58	——	667	6.2

Nozzles (mm)	String Length (m)	OD (mm)	Rotating Hook Load (maximum) (daN)
11.9/11.9/11.9/11.9/11.9/11.9	1,856.00	165.0	58,000

Depth In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hrs)	Total Drill Hrs (hrs)
1,622.00	1,856.00	6.2	234.10	1,856.10	37.75	37.75

Comment

Drill String Components

Item Description	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)
Kelly & pup jts	89.0	165.0		18.99	1,856.0
Drill Pipe	108.0	127.0	180	1,730.64	1,837.01
XO Sub	108.0	165.0	1	0.77	106.37
Drill Collar	108.0	165.0	8	75.82	105.6
Stabilizer	108.0	165.0	1	1.23	29.7
Seat Sub	108.0	165.0	1	0.49	28.5
Core Barrel	108.0	165.0	1	7.92	28.0
Stabilizer	108.0	165.0	1	0.83	20.14
Core Barrel	108.0	165.0	1	9.57	19.31
Stabilizer	108.0	165.0	1	1.23	9.74
Core Barrel	108.0	165.0	1	7.93	8.51

Drilling Parameters: 1,676.00 - 1,686.00 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
64.00	10.75	4.0	1.200	5,000	65	5,300	57,000	62,000	62,000	62,000	

Hydraulic Calculations

Bit Hydraulic Powe...	HP/Area (kW/mm²)	% P @ bit (%)	Bit Jet Velocity (m/s)	Bit dP (kPa)	Ann. dP (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)
9.5	0.00025	9	30.0	476.2	478.9	945.0	974.0

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Shoe to Top of Casing...	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m...
15.46	11.74	16.56	43.4	43.4	19.0	69.3

Error

Mud Pumps: 1, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
1	NATIONAL	8-P-80		216.0

Pump Checks

Date	Depth (mKB)	Q (m³/min)	Pres (kPa)	Strokes (spm)
2/19/2013 00:00	1,855.00		686	5
2/20/2013 00:00				11

Pump Operations

Start Date	End Date	Liner Size (mm)	P (max) (kPa)	Vol/Stk OR (m³/stk)
1/29/2013		140.0		

Mud Pumps: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80		216.0

Pump Checks

Date	Depth (mKB)	Q (m³/min)	Pres (kPa)	Strokes (spm)
2/10/2013 08:00	1,724.00	0.587	357	6
2/10/2013 18:00	1,747.00	1.232	5,300	12

Pump Operations

Start Date	End Date	Liner Size (mm)	P (max) (kPa)	Vol/Stk OR (m³/stk)
1/29/2013		140.0		
2/5/2013		140.0		

Shaker Screens

Description	Start Date	End Date	Scr Sz X	Scr Sz Y	Note
1	1/23/2013		84	84	
1	1/23/2013		84	84	
1	1/23/2013		84	84	
1	1/23/2013		84	84	

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00
Rig: Beaver Drilling Ltd. 2

Report Date: 2/8/201
Report #: 26
Depth Progress: 37.00 m
Depth End: 1,686.00 mKB
Rig Release Date: 2/20/201

Centrifuges/Cyclones:

Number	Make	Model	Diameter (mm)

Centrifuge/Cyclone Checks

Date	Hrs (hrs)	RPM (rpm)	Dens OF (kg/m³)	Q (ovrflw) (L/min)	Dens UF (kg/m³)	Q (undrflw) (L/min)

Fluid / Mud Additive Amounts

Description	Consumed	Cost	Size	Units
TRUVIS - 25KG	3.0	152.410	25.0	sks
LIME - 20KG	10.0	8.680	20.0	sks
CAL-CHLR 94-97%-40KG	2.0	46.970	40.0	sks
VERSAMUL - 208LT	2.0	940.470	208.0	bbl
VERSATROL M - 22KG	2.0	49.450	22.0	sks

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)
Quaternary System	5.00	5.00	5.00
Alberta Grp	31.00	31.00	28.00
Slater River	36.00	36.00	48.00
Artic Red	570.00	569.94	570.00
Sams Sault	787.00	786.89	787.00
Martin House	882.50	882.35	882.50
Imperial Shale	962.00	961.82	962.00
Upper Canol	1,643.00	1,642.61	962.00
Lower Canol	1,679.00	1,678.61	962.00
Hare Indian	1,788.00	1,787.59	962.00
Bluefish Member	1,796.00	1,795.59	962.00
Hume	1,804.00	1,803.59	962.00

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00
Rig: Beaver Drilling Ltd. 2

Report Date: 2/9/2013
Report #: 27
Depth Progress: 44.10 m
Depth End: 1,730.10 mKB
Rig Release Date: 2/20/2013

API / UWI	Surface Legal Location	MaxWell Job Number	License No.
300/O-06 6510 127000	O-6 65-10 127-00	JOB01@2006	470

Ground Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
252.40	257.60	252.73	1/26/2013	14.50

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	1/3/2013 00:00	2/21/2013 00:00	DRILLED & CASE	Yes

Daily Cost Total	Cumulative Cost	Total Job AFE Amount	Total AFE+Sup	AFE / RFE / Maint.#	Estimated Days
85,121.75	5,542,447.15	10,990,100.00	10,990,100.00	10342919	35.34

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hrs)	Cum Personnel Total Hours (hrs)
1,873.00	1,856.00	48.0	528.00	10,456.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)
266	206	217	0

Road Condition	Weather	Temperature (°C)	Wind
Fair	Clear	-16	5

Ops and Depth @ Morning Report
Pull core #4 on wire line @ 600 mkb

Wellbore
Original Hole

Last 24hr Summary
No accidents or incidents 4 Hazard ID's:0 Job obersvations :Finish cutting Core #3 from1676m to 1703m (27m),rig in wire line and recover Core #3 pulling at programed speed. Remove inner core barrel & recover full 27 meters of core.Run back down to 1703, circulate and pump down inner core barrel. Cut core #4 from 1703 - 1730 mkb. Circulate bottoms up & pull back to 1616 mkb.

24hr Forecast
Pull core #4 on wireline & cut core #5

Daily Contacts
Command Center, 587-794-4599; Drilling Engineer, Mike Greener, 403-771-5039; WS Supervisor, Brian Neigum, 403-548-5013; Drilling Superintend, Sheldon Vamplew, 403-999-1302; WS Supervisor, Mike Hobmaier, 403-844-3210; Rig Manager, Rick Yavis

Last Casing String
Surface, 597.00mKB

Time Log

Start Time	End Time	Dur (hrs)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Depth Start (mKB)	Depth End (mKB)	Operation
00:00	02:30	2.50	PROD1	CORING	CORE	P		1,686.00	1,703.00	Cut 89 mm core # 3 from 1686 m to 1703 m (full 27 m) with National Oilwell Varco with bit # 1C NOV PR513 pumping @ 1.2 m3 /min ROP 10M/HR WOB 5 daN
02:30	03:30	1.00	PROD1	CORING	CIRC	P		1,703.00	1,703.00	Circulate and Condition well @ 1704m
03:30	03:45	0.25	PROD1	RIGMNT	SVRG	P		1,703.00	1,703.00	Rig service function test pipe rams 3 sec & crown saver
03:45	04:00	0.25	PROD1	CORING	TRIP	P		1,703.00	1,703.00	Flow check 10 min. and pull out 4 stands
04:00	04:15	0.25	PROD1	CORING	SFTY	P		1,703.00	1,703.00	Safety meeting wire line to pull out core # 3
04:15	08:00	3.75	PROD1	CORING	RECR	P		1,703.00	1,703.00	Rig up schlumberger to retrieve core # 3 & pull out core
08:00	08:15	0.25	PROD1	RIGMNT	SVRG	P		1,703.00	1,703.00	Rig service function test hcr
08:15	14:30	6.25	PROD1	CORING	RECR	P		1,703.00	1,703.00	Pull core #3 out of hole with schlumberger wire line and NOV core hands
14:30	14:45	0.25	PROD1	CORING	SFTY	P		1,703.00	1,703.00	Safety meeting with NOV core hands and Schlumberger wire line
14:45	16:00	1.25	PROD1	CORING	RECR	P		1,703.00	1,703.00	Rig out wire line and lay down core #3 recover full 27 meters
16:00	16:30	0.50	PROD1	CORING	TRIP	P		1,703.00	1,703.00	Trip in the hole 3 STDS from 1616m to 1690m
16:30	17:15	0.75	PROD1	CORING	CIRC	P		1,703.00	1,703.00	Circulate and work string@1690m
17:15	17:30	0.25	PROD1	RIGMNT	SVRG	P		1,703.00	1,703.00	Rig service function hydrill 13 sec crown saver operating properly
17:30	18:30	1.00	PROD1	CORING	RECR	P		1,703.00	1,703.00	Make up core barrels for run #4 with NOV core hands
18:30	18:45	0.25	PROD1	CORING	CIRC	P		1,703.00	1,703.00	Circulate and pump core barrels down
18:45	22:30	3.75	PROD1	CORING	CORE	P		1,703.00	1,730.00	Cut 89 mm core # 4 from 1703m to 1730m (full 27 m) with National Oilwell Varco with bit # 1C NOV PR513 pumping @ 1.2 m3 /min ROP 7.2M/HR WOB 5 daN
22:30	23:15	0.75	PROD1	CORING	CIRC	P		1,730.00	1,730.00	Circulate bottoms up
23:15	00:00	0.75	PROD1	CORING	TRIP	P		1,730.00	1,730.00	Flow check 1711 m 10 min and pull 5 stands

Fluid / Mud Checks: Mud Engineer: Tri Pham

Time	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (cp)	YP Override (Pa)
17:00	1,703.00	940.0	78		12.0	4.5

Low Gravity Solids (%)	MBT (kg/m³)	Oil Water Ratio	Chlorides (mg/L)	Calcium (mg/L)	Lime (kg/m³)	Potassium (mg/L)
8.3		88.3/11.7	277,514	32,500	18	

Electric Stab (V)	ECD - Manual Entry (k...	Sand (%)	Solids, Corr. (%)	T (fl) (°C)	HTHP Pressure (kPa)	HTHP Filt (mL/30min)
734.0	980.0		8.6	19	3,500	5.5

API Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Cost
	0.40		3,550.25

Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost
47.40		32,840.08

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00
Rig: Beaver Drilling Ltd. 2

Report Date: 2/9/2013
Report #: 27
Depth Progress: 44.10 m
Depth End: 1,730.10 mKB
Rig Release Date: 2/20/2013

Last BOP Drill

Type	Days Since Last ...	Last Date	Days Until Next ...	Next Check Date
BOP Drill (Pit)	3	2/6/2013	4	2/13/2013

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
366.00	

Safety Incidents

Date	Comment	Category

Drill Strings: BHA # 3

Bit Run	Drill Bit	Length (m)	IADC Bit Dull	TFA (incl Noz) (mm²)	BHA ROP (m/hr)
1 C	222.0mm, NOV, PR 513, E140308	0.58	-----	667	6.2

Nozzles (mm)	String Length (m)	OD (mm)	Rotating Hook Load (maximum) (daN)
11.9/11.9/11.9/11.9/11.9/11.9	1,856.00	165.0	58,000

Depth In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hrs)	Total Drill Hrs (hrs)
1,622.00	1,856.00	6.2	234.10	1,856.10	37.75	37.75

Comment

Drill String Components

Item Description	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)
Kelly & pup jts	89.0	165.0		18.99	1,856.0
Drill Pipe	108.0	127.0	180	1,730.64	1,837.01
XO Sub	108.0	165.0	1	0.77	106.37
Drill Collar	108.0	165.0	8	75.82	105.6
Stabilizer	108.0	165.0	1	1.23	29.7
Seat Sub	108.0	165.0	1	0.49	28.5
Core Barrel	108.0	165.0	1	7.92	28.0
Stabilizer	108.0	165.0	1	0.83	20.14
Core Barrel	108.0	165.0	1	9.57	19.31
Stabilizer	108.0	165.0	1	1.23	9.74
Core Barrel	108.0	165.0	1	7.93	8.51

Drilling Parameters: 1,703.00 - 1,730.10 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
108.10	17.00	7.2	1.200	5,500	60	5,300	57,000	62,000	62,000	62,000	

Hydraulic Calculations

Bit Hydraulic Powe...	HP/Area (kW/mm²)	% P @ bit (%)	Bit Jet Velocity (m/s)	Bit dP (kPa)	Ann. dP (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)
9.5	0.00024	9	30.0	473.7	515.2	940.0	970.4

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Shoe to Top of Casing...	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m...
15.86	11.74	16.56	43.4	43.4	19.0	69.3

Error

Mud Pumps: 1, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
1	NATIONAL	8-P-80		216.0

Pump Checks

Date	Depth (mKB)	Q (m³/min)	Pres (kPa)	Strokes (spm)
2/19/2013 00:00	1,855.00		686	5
2/20/2013 00:00				11

Pump Operations

Start Date	End Date	Liner Size (mm)	P (max) (kPa)	Vol/Stk OR (m³/stk)
1/29/2013		140.0		

Mud Pumps: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80		216.0

Pump Checks

Date	Depth (mKB)	Q (m³/min)	Pres (kPa)	Strokes (spm)
2/10/2013 08:00	1,724.00	0.587	357	6
2/10/2013 18:00	1,747.00	1.232	5,300	12

Pump Operations

Start Date	End Date	Liner Size (mm)	P (max) (kPa)	Vol/Stk OR (m³/stk)
1/29/2013		140.0		
2/5/2013		140.0		

Shaker Screens

Description	Start Date	End Date	Scr Sz X	Scr Sz Y	Note
1	1/23/2013		84	84	
1	1/23/2013		84	84	
1	1/23/2013		84	84	
1	1/23/2013		84	84	

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00
Rig: Beaver Drilling Ltd. 2

Report Date: 2/9/2013
Report #: 27
Depth Progress: 44.10 m
Depth End: 1,730.10 mKB
Rig Release Date: 2/20/2013

Centrifuges/Cyclones:

Number	Make	Model	Diameter (mm)

Centrifuge/Cyclone Checks

Date	Hrs (hrs)	RPM (rpm)	Dens OF (kg/m³)	Q (ovrflw) (L/min)	Dens UF (kg/m³)	Q (undrflw) (L/min)

Fluid / Mud Additive Amounts

Description	Consumed	Cost	Size	Units
CAL-CHLR 94-97%-40KG	1.0	46.970	40.0	sks
TRUVIS - 25KG	9.0	152.410	25.0	sks
LIME - 20KG	12.0	8.680	20.0	sks
VERSACOAT HF - 208LT	1.0	906.590	208.0	bbl
VERSAMOD - 208LT	1.0	1,071.390	208.0	bbl
VERSATROL M - 22KG	1.0	49.450	22.0	sks

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)
Quaternary System	5.00	5.00	5.00
Alberta Grp	31.00	31.00	28.00
Slater River	36.00	36.00	48.00
Artic Red	570.00	569.94	570.00
Sams Sault	787.00	786.89	787.00
Martin House	882.50	882.35	882.50
Imperial Shale	962.00	961.82	962.00
Upper Canol	1,643.00	1,642.61	962.00
Lower Canol	1,679.00	1,678.61	962.00
Hare Indian	1,788.00	1,787.59	962.00
Bluefish Member	1,796.00	1,795.59	962.00
Hume	1,804.00	1,803.59	962.00

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00
Rig: Beaver Drilling Ltd. 2

Report Date: 2/10/2013
Report #: 28
Depth Progress: 27.00 m
Depth End: 1,757.00 mKB
Rig Release Date: 2/20/2013

API / UWI	Surface Legal Location	MaxWell Job Number	License No.
300/O-06 6510 127000	O-6 65-10 127-00	JOB01@2006	470

Ground Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
252.40	257.60	252.73	1/26/2013	15.50

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	1/3/2013 00:00	2/21/2013 00:00	DRILLED & CASE	Yes

Daily Cost Total	Cumulative Cost	Total Job AFE Amount	Total AFE+Sup	AFE / RFE / Maint.#	Estimated Days
121,572.12	5,664,019.27	10,990,100.00	10,990,100.00	10342919	35.34

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hrs)	Cum Personnel Total Hours (hrs)
1,873.00	1,856.00	53.0	588.00	11,044.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)
665	257	347	0

Road Condition	Weather	Temperature (°C)	Wind
Fair	Cloudy	-15	7

Ops and Depth @ Morning Report
Pull core # 5 with Schlumberger

Wellbore
Original Hole

Last 24hr Summary
No accidents or incidents 7 Hazard ID's:1 Job obersvations : Rig in wire line and recover Core #4 pulling at programed speed.Remove inner core barrel & recover full 27 meters of core, Run in hole from 1616m to 1724m,Circulate condition hole prior to cutting Core #5 ,Cut Core #5 from 1730m to 1757m (27m) Circulate bottoms up flow check and wire line retrieve Core #5.

24hr Forecast
Recover core # 5 & Cut core # 6 & pull it.

Daily Contacts
Drilling Superintend, Sheldon Vamplew, 403-999-1302; WS Supervisor, Brian Neigum, 403-548-5013; WS Supervisor, Mike Hobmaier, 403-844-3210; Command Center, 587-794-4599; Drilling Engineer, Mike Greener, 403-771-5039; Rig Manager, Rick Yavis

Last Casing String
Surface, 597.00mKB

Time Log

Start Time	End Time	Dur (hrs)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Depth Start (mKB)	Depth End (mKB)	Operation
00:00	00:15	0.25	PROD1	RIGMNT	SVRG	P		1,730.00	1,730.00	Rig service function test pipe rams 3 sec & crown saver
00:15	00:30	0.25	PROD1	CORING	SFTY	P		1,730.00	1,730.00	Safety meeting with schlumberger & core hand
00:30	10:45	10.25	PROD1	CORING	RECR	P		1,730.00	1,730.00	Rig up schlumberger wire line to retrieve core # 4 & pull out core. Pull core #4 with Schlumberger wire line and NOV core hands
10:45	11:00	0.25	PROD1	CORING	SFTY	P		1,730.00	1,730.00	Safety meeting with Schlumberger wire line and NOV core hands reviewed NOV jsa#14 laying down express core
11:00	12:45	1.75	PROD1	CORING	RECR	P		1,730.00	1,730.00	Lay down core #4 with NOV Core hands full 27m recovery
12:45	13:15	0.50	PROD1	CORING	TRIP	P		1,730.00	1,730.00	Trip in the hole 5 STDS 1616m to 1724m
13:15	14:30	1.25	PROD1	CORING	CIRC	P		1,730.00	1,730.00	Circulate and work string@1724m
14:30	14:45	0.25	PROD1	RIGMNT	SVRG	P		1,730.00	1,730.00	Rig service function hydrill 13 sec crown saver operating properly
14:45	15:45	1.00	PROD1	CORING	RECR	P		1,730.00	1,730.00	Make up core barrels for run #5
15:45	16:00	0.25	PROD1	CORING	CIRC	P		1,730.00	1,730.00	Circulate and pump down core barrels @.80m3/min
16:00	18:30	2.50	PROD1	CORING	CORE	P		1,730.00	1,757.00	Cut 89mm core #5 from 1730m to 1757m 27 meters with National Oilwell Varco with bit #1C PR513 pumping @ 1.2m3/min rop 10m/hr wob 5 daN
18:30	19:00	0.50	PROD1	CORING	SFTY	P		1,757.00	1,757.00	Safety Stand Down with day crew ,Guy Goodine,Brian Krausert,Jeff Mccuaig
19:00	20:00	1.00	PROD1	CORING	CIRC	P		1,757.00	1,757.00	Circulate & condition
20:00	20:30	0.50	PROD1	CORING	SFTY	P		1,757.00	1,757.00	Safety Stand Down with night crew,Guy Goodine,Brian Krausert,Jeff Mccuaig
20:30	20:45	0.25	PROD1	RIGMNT	SVRG	P		1,757.00	1,757.00	Rig service function test pipe rams 3 sec & crown saver
20:45	21:00	0.25	PROD1	CORING	TRIP	P		1,757.00	1,757.00	Pull out 4 stds d.p
21:00	21:15	0.25	PROD1	CORING	SFTY	P		1,757.00	1,757.00	Safety meeting with schlumberger & core hand
21:15	00:00	2.75	PROD1	CORING	RECR	P		1,757.00	1,757.00	Rig up schlumberger wire line to retrieve core # 5

Fluid / Mud Checks: Mud Engineer: Tri Pham

Time	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (cp)	YP Override (Pa)
14:15	1,730.00	940.0	64		12.0	4.0

Low Gravity Solids (%)	MBT (kg/m³)	Oil Water Ratio	Chlorides (mg/L)	Calcium (mg/L)	Lime (kg/m³)	Potassium (mg/L)
8.7		89/11	274,255	31,000	16	

Electric Stab (V)	ECD - Manual Entry (k...	Sand (%)	Solids, Corr. (%)	T (fl) (°C)	HTHP Pressure (kPa)	HTHP Filt (mL/30min)
760.0	980.0		9.1	26	3,500	5.2

API Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Cost
	1.00		1,607.50

Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost
48.40		34,447.58

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00
Rig: Beaver Drilling Ltd. 2

Report Date: 2/10/2013
Report #: 28
Depth Progress: 27.00 m
Depth End: 1,757.00 mKB
Rig Release Date: 2/20/2013

Last BOP Drill

Type	Days Since Last ...	Last Date	Days Until Next ...	Next Check Date
BOP Drill (Pit)	4	2/6/2013	3	2/13/2013

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
367.00	

Safety Incidents

Date	Comment	Category

Drill Strings: BHA # 3

Bit Run	Drill Bit	Length (m)	IADC Bit Dull	TFA (incl Noz) (mm²)	BHA ROP (m/hr)
1 C	222.0mm, NOV, PR 513, E140308	0.58	-----	667	6.2

Nozzles (mm)	String Length (m)	OD (mm)	Rotating Hook Load (maximum) (daN)
11.9/11.9/11.9/11.9/11.9/11.9	1,856.00	165.0	58,000

Depth In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hrs)	Total Drill Hrs (hrs)
1,622.00	1,856.00	6.2	234.10	1,856.10	37.75	37.75

Comment

Drill String Components

Item Description	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)
Kelly & pup jts	89.0	165.0		18.99	1,856.0
Drill Pipe	108.0	127.0	180	1,730.64	1,837.01
XO Sub	108.0	165.0	1	0.77	106.37
Drill Collar	108.0	165.0	8	75.82	105.6
Stabilizer	108.0	165.0	1	1.23	29.7
Seat Sub	108.0	165.0	1	0.49	28.5
Core Barrel	108.0	165.0	1	7.92	28.0
Stabilizer	108.0	165.0	1	0.83	20.14
Core Barrel	108.0	165.0	1	9.57	19.31
Stabilizer	108.0	165.0	1	1.23	9.74
Core Barrel	108.0	165.0	1	7.93	8.51

Drilling Parameters: 1,730.00 - 1,757.00 mKB

Sum 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
135.10	19.50	10.8	1.200	6,000	60	5,300	56,000	62,000	62,000	62,000	

Hydraulic Calculations

Bit Hydraulic Powe...	HP/Area (kW/mm²)	% P @ bit (%)	Bit Jet Velocity (m/s)	Bit dP (kPa)	Ann. dP (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)
9.5	0.00024	9	30.0	473.7	438.8	940.0	965.5

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Shoe to Top of Casing...	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m...
16.11	11.74	16.56	43.4	43.4	19.0	69.3

Error

Mud Pumps: 1, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
1	NATIONAL	8-P-80		216.0

Pump Checks

Date	Depth (mKB)	Q (m³/min)	Pres (kPa)	Strokes (spm)
2/19/2013 00:00	1,855.00		686	5
2/20/2013 00:00				11

Pump Operations

Start Date	End Date	Liner Size (mm)	P (max) (kPa)	Vol/Stk OR (m³/stk)
1/29/2013		140.0		

Mud Pumps: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80		216.0

Pump Checks

Date	Depth (mKB)	Q (m³/min)	Pres (kPa)	Strokes (spm)
2/10/2013 08:00	1,724.00	0.587	357	6
2/10/2013 18:00	1,747.00	1.232	5,300	12

Pump Operations

Start Date	End Date	Liner Size (mm)	P (max) (kPa)	Vol/Stk OR (m³/stk)
1/29/2013		140.0		
2/5/2013		140.0		

Shaker Screens

Description	Start Date	End Date	Scr Sz X	Scr Sz Y	Note
1	1/23/2013		84	84	
1	1/23/2013		84	84	
1	1/23/2013		84	84	
1	1/23/2013		84	84	

Centrifuges/Cyclones:

Number	Make	Model	Diameter (mm)

Centrifuge/Cyclone Checks

Date	Hrs (hrs)	RPM (rpm)	Dens OF (kg/m³)	Q (ovrflw) (L/min)	Dens UF (kg/m³)	Q (undrflw) (L/min)

Fluid / Mud Additive Amounts

Description	Consumed	Cost	Size	Units
SODIUM BICARBONATE 50LB	1.0	16.930	50.0	sks
LIME - 20KG	3.0	8.680	20.0	sks
CAL-CHLR 94-97%-40KG	2.0	46.970	40.0	sks
TRUVIS - 25KG	9.0	152.410	25.0	sks
VERSATROL M - 22KG	2.0	49.450	22.0	sks

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)
Quaternary System	5.00	5.00	5.0
Alberta Grp	31.00	31.00	28.0
Slater River	36.00	36.00	48.0
Artic Red	570.00	569.94	570.0
Sams Sault	787.00	786.89	787.0
Martin House	882.50	882.35	882.5
Imperial Shale	962.00	961.82	962.0
Upper Canol	1,643.00	1,642.61	962.0
Lower Canol	1,679.00	1,678.61	962.0
Hare Indian	1,788.00	1,787.59	962.0
Bluefish Member	1,796.00	1,795.59	962.0
Hume	1,804.00	1,803.59	962.0

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00
Rig: Beaver Drilling Ltd. 2

Report Date: 2/11/2013
Report #: 29
Depth Progress: 27.00 m
Depth End: 1,784.00 mKB
Rig Release Date: 2/20/2013

API / UWI	Surface Legal Location	MaxWell Job Number	License No.
300/O-06 6510 127000	O-6 65-10 127-00	JOB01@2006	470

Ground Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
252.40	257.60	252.73	1/26/2013	16.50

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	1/3/2013 00:00	2/21/2013 00:00	DRILLED & CASE	Yes

Daily Cost Total	Cumulative Cost	Total Job AFE Amount	Total AFE+Sup	AFE / RFE / Maint.#	Estimated Days
84,514.28	5,748,533.55	10,990,100.00	10,990,100.00	10342919	35.34

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hrs)	Cum Personnel Total Hours (hrs)
1,873.00	1,856.00	53.0	588.00	11,632.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)
239	238	245	0

Road Condition	Weather	Temperature (°C)	Wind
Fair	Cloudy	-17	5

Ops and Depth @ Morning Report
Recover core # 6.

Wellbore
Original Hole

Last 24hr Summary
No accidents or incidents 7 Hazard ID's:1 Job obersvations : Wire line retrieve Core # 5. recovered full 27m, Run and set inner barrie cut Core # 6 from 1757m to 1784m 27 m, wire line retrieve core # 6.

24hr Forecast
Recover core # 6 and cut core # 7

Daily Contacts
WS Supervisor, Mike Hobmaier, 403-844-3210; Drilling Engineer, Mike Greener, 403-771-5039; Rig Manager, Rick Yavis; Command Center, 587-794-4599; WS Supervisor, Brian Neigum, 403-548-5013; Drilling Superintend, Sheldon Vamplew, 403-999-1302

Last Casing String
Surface, 597.00mKB

Time Log

Start Time	End Time	Dur (hrs)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Depth Start (mKB)	Depth End (mKB)	Operation
00:00	00:15	0.25	PROD1	RIGMNT	SVRG	P		1,757.00	1,757.00	Rig service f.t crown saver
00:15	07:45	7.50	PROD1	CORING	RECR	P		1,757.00	1,757.00	Rig up schlumberger wire line to retrieve core # 5
07:45	08:00	0.25	PROD1	CORING	SFTY	P		1,757.00	1,757.00	Crew change safety meeting/safety with NOV core hands
08:00	09:00	1.00	PROD1	CORING	RECR	P		1,757.00	1,757.00	Laydown core #5 with NOV core hands and Schlumberger wire line recover 27m
09:00	09:45	0.75	PROD1	CORING	TRIP	P		1,757.00	1,757.00	Trip in the hole from 1664m to 1753m
09:45	10:45	1.00	PROD1	CORING	CIRC	P		1,757.00	1,757.00	Circulate and work string @1753m
10:45	11:00	0.25	PROD1	RIGMNT	SVRG	P		1,757.00	1,757.00	Rig service function pipe rams 3sec crown saver operating properly
11:00	12:00	1.00	PROD1	CORING	RECR	P		1,757.00	1,757.00	Make up core barrels for run #6 with NOV core hands
12:00	12:15	0.25	PROD1	CORING	CIRC	P		1,757.00	1,757.00	Circulate and pump down core barrels pumping @.80m3/min
12:15	15:45	3.50	PROD1	CORING	CORE	P		1,757.00	1,784.00	Cut 89mm core #6 from 1757m to 1784m 27m with National Oilwell Varco with bit #1C PR513 pumping @ 1.2m3/min rop 7.7m/hr wob 5 daN
15:45	16:00	0.25	PROD1	CORING	CIRC	P		1,784.00	1,784.00	Circulate bottoms up to retrieve core #6
16:00	16:30	0.50	PROD1	CORING	CIRC	P		1,784.00	1,784.00	Circulate hole clean to retrieve core #6
16:30	16:45	0.25	PROD1	CORING	SFTY	P		1,784.00	1,784.00	Safety meeting with NOV core hands and Schlumberger wire line
16:45	17:00	0.25	PROD1	CORING	TRIP	P		1,784.00	1,784.00	Pull 4 STDS up to
17:00	00:00	7.00	PROD1	CORING	RECR	P		1,784.00	1,784.00	Rig in Schlumberger wire line to retrieve core #6

Fluid / Mud Checks: Mud Engineer: Tri Pham

Time	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (cp)	YP Override (Pa)
15:00	1,784.00	940.0	80		13.0	5.5

Low Gravity Solids (%)	MBT (kg/m³)	Oil Water Ratio	Chlorides (mg/L)	Calcium (mg/L)	Lime (kg/m³)	Potassium (mg/L)
9.0		88.8/11.2	274,255	31,000	21	

Electric Stab (V)	ECD - Manual Entry (k...	Sand (%)	Solids, Corr. (%)	T (fl) (°C)	HTHP Pressure (kPa)	HTHP Filt (mL/30min)
736.0	983.5		9.2	28	3,500	5.2

API Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Cost
	1.00		1,276.22

Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost
49.40		35,723.80

Last BOP Drill

Type	Days Since Last ...	Last Date	Days Until Next ...	Next Check Date
BOP Drill (Pit)	5	2/6/2013	2	2/13/2013

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
368.00	

Safety Incidents

Date	Comment	Category

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00
Rig: Beaver Drilling Ltd. 2

Report Date: 2/11/2013
Report #: 29
Depth Progress: 27.00 m
Depth End: 1,784.00 mKB
Rig Release Date: 2/20/2013

Drill Strings: BHA # 3

Bit Run	Drill Bit	Length (m)	IADC Bit Dull	TFA (incl Noz) (mm²)	BHA ROP (m/hr)
1 C	222.0mm, NOV, PR 513, E140308	0.58	——	667	6.2

Nozzles (mm)	String Length (m)	OD (mm)	Rotating Hook Load (maximum) (daN)
11.9/11.9/11.9/11.9/11.9/11.9	1,856.00	165.0	58,000

Depth In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hrs)	Total Drill Hrs (hrs)
1,622.00	1,856.00	6.2	234.10	1,856.10	37.75	37.75

Comment

Drill String Components

Item Description	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)
Kelly & pup jts	89.0	165.0		18.99	1,856.0
Drill Pipe	108.0	127.0	180	1,730.64	1,837.01
XO Sub	108.0	165.0	1	0.77	106.37
Drill Collar	108.0	165.0	8	75.82	105.6
Stabilizer	108.0	165.0	1	1.23	29.7
Seat Sub	108.0	165.0	1	0.49	28.5
Core Barrel	108.0	165.0	1	7.92	28.0
Stabilizer	108.0	165.0	1	0.83	20.14
Core Barrel	108.0	165.0	1	9.57	19.31
Stabilizer	108.0	165.0	1	1.23	9.74
Core Barrel	108.0	165.0	1	7.93	8.51

Drilling Parameters: 1,757.00 - 1,784.00 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
162.10	23.00	7.7	1.200	5,500	65	5,500	56,500	62,000	62,000	62,000	

Hydraulic Calculations

Bit Hydraulic Powe...	HP/Area (kW/mm²)	% P @ bit (%)	Bit Jet Velocity (m/s)	Bit dP (kPa)	Ann. dP (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)
9.5	0.00024	9	30.0	473.7	445.3	940.0	965.5

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Shoe to Top of Casing...	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m...
16.35	11.74	16.56	43.4	43.4	19.0	69.3

Error

Mud Pumps: 1, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
1	NATIONAL	8-P-80		216.0

Pump Checks

Date	Depth (mKB)	Q (m³/min)	Pres (kPa)	Strokes (spm)
2/19/2013 00:00	1,855.00		686	5
2/20/2013 00:00				11

Pump Operations

Start Date	End Date	Liner Size (mm)	P (max) (kPa)	Vol/Stk OR (m³/stk)
1/29/2013		140.0		

Mud Pumps: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80		216.0

Pump Checks

Date	Depth (mKB)	Q (m³/min)	Pres (kPa)	Strokes (spm)
2/10/2013 08:00	1,724.00	0.587	357	6
2/10/2013 18:00	1,747.00	1.232	5,300	12

Pump Operations

Start Date	End Date	Liner Size (mm)	P (max) (kPa)	Vol/Stk OR (m³/stk)
1/29/2013		140.0		
2/5/2013		140.0		

Shaker Screens

Description	Start Date	End Date	Scr Sz X	Scr Sz Y	Note
1	1/23/2013		84	84	
1	1/23/2013		84	84	
1	1/23/2013		84	84	
1	1/23/2013		84	84	

Centrifuges/Cyclones:

Number	Make	Model	Diameter (mm)

Centrifuge/Cyclone Checks

Date	Hrs (hrs)	RPM (rpm)	Dens OF (kg/m³)	Q (ovrflw) (L/min)	Dens UF (kg/m³)	Q (undrflw) (L/min)

Fluid / Mud Additive Amounts

Description	Consumed	Cost	Size	Units
SULFAMIC ACID - 25KG	1.0	74.630	25.0	sks

Fluid / Mud Additive Amounts

Description	Consumed	Cost	Size	Units
VERSAMOD - 208LT	1.0	1,071.390	208.0	bbl
LIME - 20KG	15.0	8.680	20.0	sks

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)
Quaternary System	5.00	5.00	5.00
Alberta Grp	31.00	31.00	28.00
Slater River	36.00	36.00	48.00
Artic Red	570.00	569.94	570.00
Sams Sault	787.00	786.89	787.00
Martin House	882.50	882.35	882.50
Imperial Shale	962.00	961.82	962.00
Upper Canol	1,643.00	1,642.61	962.00
Lower Canol	1,679.00	1,678.61	962.00
Hare Indian	1,788.00	1,787.59	962.00
Bluefish Member	1,796.00	1,795.59	962.00
Hume	1,804.00	1,803.59	962.00

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00
Rig: Beaver Drilling Ltd. 2

Report Date: 2/12/2013
Report #: 30
Depth Progress: 27.00 m
Depth End: 1,811.00 mKB
Rig Release Date: 2/20/2013

API / UWI	Surface Legal Location	MaxWell Job Number	License No.
300/O-06 6510 127000	O-6 65-10 127-00	JOB01@2006	470

Ground Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
252.40	257.60	252.73	1/26/2013	17.50

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	1/3/2013 00:00	2/21/2013 00:00	DRILLED & CASE	Yes

Daily Cost Total	Cumulative Cost	Total Job AFE Amount	Total AFE+Sup	AFE / RFE / Maint.#	Estimated Days
139,938.06	5,888,471.61	10,990,100.00	10,990,100.00	10342919	35.34

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hrs)	Cum Personnel Total Hours (hrs)
1,873.00	1,856.00	53.0	588.00	12,220.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)
458	215	280	0

Road Condition	Weather	Temperature (°C)	Wind
Fair	Cloudy	-20	5

Ops and Depth @ Morning Report
Cut core # 8 @ 1815mkb

Wellbore
Original Hole

Last 24hr Summary
No accidents or incidents 6 Hazard ID's: 0 Job obersvations : Wire line retrieve Core # 6. recovered full 27m, Run and set inner barrel cut Core # 7 from 1784m to 1811m 27 m, circulate bottoms up, wire line retrieve core # 7.

24hr Forecast
Finish coring & get ready to log.

Daily Contacts
Command Center, 587-794-4599; Rig Manager, Rick Yavis; WS Supervisor, Brian Neigum, 403-548-5013; Drilling Superintend, Sheldon Vamplew, 403-999-1302; Drilling Engineer, Mike Greener, 403-771-5039; WS Supervisor, Dave Forsberg, 780-361-6417

Last Casing String
Surface, 597.00mKB

Time Log

Start Time	End Time	Dur (hrs)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Depth Start (mKB)	Depth End (mKB)	Operation
00:00	00:15	0.25	PROD1	RIGMNT	SVRG	P		1,784.00	1,784.00	Rig service function test crown saver
00:15	05:00	4.75	PROD1	CORING	RECR	P		1,784.00	1,784.00	Retrieve core # 6 with schlumberger wire line
05:00	05:15	0.25	PROD1	CORING	SFTY	P		1,784.00	1,784.00	Safety meeting with core hand laying down core # 6
05:15	06:15	1.00	PROD1	CORING	RECR	P		1,784.00	1,784.00	Lay down core # 6 with nov core hand, recover 27m & make up inner core bbl
06:15	06:45	0.50	PROD1	CORING	TRIP	P		1,784.00	1,784.00	Run in 4 stds d.p
06:45	07:45	1.00	PROD1	CORING	CIRC	P		1,784.00	1,784.00	Circulate & condition hole/pump core barrels down to do run #7
07:45	08:00	0.25	PROD1	CORING	SFTY	P		1,784.00	1,784.00	Crew hand meeting
08:00	08:15	0.25	PROD1	RIGMNT	SVRG	P		1,784.00	1,784.00	Rig service function hydrill 13 sec crown saver operating ok
08:15	11:45	3.50	PROD1	CORING	CORE	P		1,784.00	1,811.00	Cut 89mm core #7 from 1784m to 1811m 27m with National Oilwell Varco with bit #1C PR513 pumping @ 1.2m3/min rop 7.7m/hr wob 5 daN
11:45	12:45	1.00	PROD1	CORING	CIRC	P		1,811.00	1,811.00	Circulate bottoms up to retreve core #7
12:45	13:00	0.25	PROD1	CORING	SFTY	P		1,811.00	1,811.00	BOP drill crew in position well secure in 90 sec
13:00	13:15	0.25	PROD1	CORING	SFTY	P		1,811.00	1,811.00	Safety meeting with NOV core hands and schlumberger wire line
13:15	13:30	0.25	PROD1	CORING	TRIP	P		1,811.00	1,811.00	Pull 4 stds of drill pipe up to to retreve core #7
13:30	16:00	2.50	PROD1	CORING	RECR	P		1,811.00	1,811.00	Rig to and retreve core #7 with NOV core hands and Sclumberger wire line
16:00	16:30	0.50	PROD1	CORING	RECR	P		1,811.00	1,811.00	Rig to and retreve core #7 with NOV core hands and Sclumberger wire line
16:30	16:45	0.25	PROD1	RIGMNT	SVRG	P		1,811.00	1,811.00	Rig service function test motor kills
16:45	17:00	0.25	PROD1	CORING	SFTY	P		1,811.00	1,811.00	B.O.P drill go through crew positions
17:00	00:00	7.00	PROD1	CORING	RECR	P		1,811.00	1,811.00	Rig to and retreve core #7 with NOV core hands and Sclumberger wire line

Fluid / Mud Checks: Mud Engineer: <Mud Engineer?>

Time	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (cp)	YP Override (Pa)
12:00	1,784.00	940.0	80		13.0	5.5

Low Gravity Solids (%)	MBT (kg/m³)	Oil Water Ratio	Chlorides (mg/L)	Calcium (mg/L)	Lime (kg/m³)	Potassium (mg/L)
9.0		88.8/11.2	274,255	31,000	21	

Electric Stab (V)	ECD - Manual Entry (k...	Sand (%)	Solids, Corr. (%)	T (fl) (°C)	HTHP Pressure (kPa)	HTHP Filt (mL/30min)
736.0	983.5		9.2	28	3,500	5.2

API Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Cost
	1.00		55,100.00

Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost
50.40		90,823.80

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00
Rig: Beaver Drilling Ltd. 2

Report Date: 2/12/2013
Report #: 30
Depth Progress: 27.00 m
Depth End: 1,811.00 mKB
Rig Release Date: 2/20/2013

Last BOP Drill

Type	Days Since Last ...	Last Date	Days Until Next ...	Next Check Date
BOP Drill (Pit)	0	2/12/2013	7	2/19/2013

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
369.00	

Safety Incidents

Date	Comment	Category

Drill Strings: BHA # 3

Bit Run	Drill Bit	Length (m)	IADC Bit Dull	TFA (incl Noz) (mm²)	BHA ROP (m/hr)
1 C	222.0mm, NOV, PR 513, E140308	0.58	-----	667	6.2

Nozzles (mm)	String Length (m)	OD (mm)	Rotating Hook Load (maximum) (daN)
11.9/11.9/11.9/11.9/11.9/11.9	1,856.00	165.0	58,000

Depth In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hrs)	Total Drill Hrs (hrs)
1,622.00	1,856.00	6.2	234.10	1,856.10	37.75	37.75

Comment

Drill String Components

Item Description	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)
Kelly & pup jts	89.0	165.0		18.99	1,856.00
Drill Pipe	108.0	127.0	180	1,730.64	1,837.01
XO Sub	108.0	165.0	1	0.77	106.37
Drill Collar	108.0	165.0	8	75.82	105.60
Stabilizer	108.0	165.0	1	1.23	29.78
Seat Sub	108.0	165.0	1	0.49	28.55
Core Barrel	108.0	165.0	1	7.92	28.06
Stabilizer	108.0	165.0	1	0.83	20.14
Core Barrel	108.0	165.0	1	9.57	19.31
Stabilizer	108.0	165.0	1	1.23	9.74
Core Barrel	108.0	165.0	1	7.93	8.51

Drilling Parameters: 1,784.00 - 1,811.00 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
189.10	26.50	7.7	1.200	5,500	55	5,300	56,500	62,000	62,000	62,000	

Hydraulic Calculations

Bit Hydraulic Powe...	HP/Area (kW/mm²)	% P @ bit (%)	Bit Jet Velocity (m/s)	Bit dP (kPa)	Ann. dP (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)
9.5	0.00024	9	30.0	473.7	120.3	940.0	946.8

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Shoe to Top of Casing...	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m...
16.60	11.74	16.56	43.4	43.4	19.0	69.3

Error

Mud Pumps: 1, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
1	NATIONAL	8-P-80		216.0

Pump Checks

Date	Depth (mKB)	Q (m³/min)	Pres (kPa)	Strokes (spm)
2/19/2013 00:00	1,855.00		686	59
2/20/2013 00:00				115

Pump Operations

Start Date	End Date	Liner Size (mm)	P (max) (kPa)	Vol/Stk OR (m³/stk)
1/29/2013		140.0		

Mud Pumps: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80		216.0

Pump Checks

Date	Depth (mKB)	Q (m³/min)	Pres (kPa)	Strokes (spm)
2/10/2013 08:00	1,724.00	0.587	357	60
2/10/2013 18:00	1,747.00	1.232	5,300	126

Pump Operations

Start Date	End Date	Liner Size (mm)	P (max) (kPa)	Vol/Stk OR (m³/stk)
1/29/2013		140.0		
2/5/2013		140.0		

Shaker Screens

Description	Start Date	End Date	Scr Sz X	Scr Sz Y	Note
1	1/23/2013		84	84	
1	1/23/2013		84	84	
1	1/23/2013		84	84	
1	1/23/2013		84	84	

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00
Rig: Beaver Drilling Ltd. 2

Report Date: 2/12/2013
Report #: 30
Depth Progress: 27.00 m
Depth End: 1,811.00 mKB
Rig Release Date: 2/20/2013

Centrifuges/Cyclones:

Number	Make	Model	Diameter (mm)

Centrifuge/Cyclone Checks

Date	Hrs (hrs)	RPM (rpm)	Dens OF (kg/m³)	Q (ovrflw) (L/min)	Dens UF (kg/m³)	Q (undrflw) (L/min)

Fluid / Mud Additive Amounts

Description	Consumed	Cost	Size	Units
VERSACLEAN INVERT	38.0	1,450.000		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)
Quaternary System	5.00	5.00	5.00
Alberta Grp	31.00	31.00	28.00
Slater River	36.00	36.00	48.00
Artic Red	570.00	569.94	570.00
Sams Sault	787.00	786.89	787.00
Martin House	882.50	882.35	882.50
Imperial Shale	962.00	961.82	962.00
Upper Canol	1,643.00	1,642.61	962.00
Lower Canol	1,679.00	1,678.61	962.00
Hare Indian	1,788.00	1,787.59	962.00
Bluefish Member	1,796.00	1,795.59	962.00
Hume	1,804.00	1,803.59	962.00

ConocoPhillips Canada

Daily Drilling

COPRC LOON CREEK O-06 65-10 127-00

Rig: Beaver Drilling Ltd. 2

Report Date: 2/13/2013
Report #: 31
Depth Progress: 27.00 m
Depth End: 1,838.00 mKB
Rig Release Date: 2/20/2013

API / UWI	Surface Legal Location	MaxWell Job Number	License No.
300/O-06 6510 127000	O-6 65-10 127-00	JOB01@2006	470

Ground Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
252.40	257.60	252.73	1/26/2013	18.50

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	1/3/2013 00:00	2/21/2013 00:00	DRILLED & CASE	Yes

Daily Cost Total	Cumulative Cost	Total Job AFE Amount	Total AFE+Sup	AFE / RFE / Maint.#	Estimated Days
109,390.73	5,997,862.34	10,990,100.00	10,990,100.00	10342919	35.34

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hrs)	Cum Personnel Total Hours (hrs)
1,873.00	1,856.00	53.0	588.00	12,808.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)
350	147		0

Road Condition	Weather	Temperature (°C)	Wind
Fair	Clear	-24	4

Ops and Depth @ Morning Report
Cut core # 9 @ 1852 mkb

Wellbore
Original Hole

Last 24hr Summary
No accidents or incidents 7 Hazard ID's: 2 Job obersvations : Wire line retrieve Core # 7. recovered full 27m, Run and set inner barrel cut Core # 8 from 1811m to 1838m 27 m, circulate bottoms up, wire line retrieve core # 8. Full 27 meter recovery. Run back in the hole ream a tight spot 1830 mkb.

24hr Forecast
Finish coring & wiper trip.

Daily Contacts
Rig Manager, Rick Yavis; WS Supervisor, Brian Neigum, 403-548-5013; Drilling Superintend, Sheldon Vamplew, 403-999-1302; WS Supervisor, Dave Forsberg, 780-361-6417; Drilling Engineer, Mike Greener, 403-771-5039; Command Center, 587-794-4599

Last Casing String
Surface, 597.00mKB

Time Log

Start Time	End Time	Dur (hrs)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Depth Start (mKB)	Depth End (mKB)	Operation
00:00	01:00	1.00	PROD1	CORING	RECR	P		1,811.00	1,811.00	Pull core #7 with NOV core hands and Schlumberger wire line
01:00	01:15	0.25	PROD1	CORING	SFTY	P		1,811.00	1,811.00	Safety meeting with NOV core hands and Schlumberger wire line
01:15	02:30	1.25	PROD1	CORING	RECR	P		1,811.00	1,811.00	Lay down core #7 with NOV core hands full 27 m recovery
02:30	02:45	0.25	PROD1	CORING	TRIP	P		1,811.00	1,811.00	Trip in the hole 4 stds to 1800m
02:45	03:30	0.75	PROD1	CORING	CIRC	P		1,811.00	1,811.00	Circulate and work string @1810m
03:30	03:45	0.25	PROD1	RIGMNT	SVRG	P		1,811.00	1,811.00	Rig service function pipe rams 3 sec crown saver operating properly
03:45	04:15	0.50	PROD1	CORING	RECR	P		1,811.00	1,811.00	Make up core barrels for run #8 with NOV core hands
04:15	04:30	0.25	PROD1	CORING	CIRC	P		1,811.00	1,811.00	Circulate and pump core barrels down pumping@ .80 m3/min
04:30	07:45	3.25	PROD1	CORING	CORE	P		1,811.00	1,824.00	Cut 89mm core #8 from 1811m to 1824m with National Oilwell Varco with bit #1C PR513 pumping @ 1.2m3/min rop 4.5m/hr wob 5 daN
07:45	08:00	0.25	PROD1	CORING	SFTY	P		1,824.00	1,824.00	Crew change safety meeting
08:00	09:30	1.50	PROD1	CORING	CORE	P		1,824.00	1,830.00	Cut 89mm core #8 from 1824m to 1830m with National Oilwell Varco with bit #1C PR513 pumping @ 1.2m3/min rop 4.5m/hr wob 5 daN
09:30	10:30	1.00	PROD1	CORING	REAM	P		1,830.00	1,830.00	Ream core from 1824m to 1830m
10:30	12:30	2.00	PROD1	CORING	CORE	P		1,830.00	1,838.00	Cut 89mm core #8 from 1830m to 1838m with National Oilwell Varco with bit #1C PR513 pumping @ 1.2m3/min rop 4.5m/hr wob 5 daN
12:30	12:45	0.25	PROD1	RIGMNT	SVRG	P		1,838.00	1,838.00	Rig service function test annular 13 seconds to close function test crown saver
12:45	14:00	1.25	PROD1	CORING	CIRC	P		1,838.00	1,838.00	Circulate and work string at 1838m
14:00	14:45	0.75	PROD1	CORING	TRIP	P		1,838.00	1,838.00	Pull out 5 stds of drill pipe
14:45	16:00	1.25	PROD1	CORING	RECR	P		1,838.00	1,838.00	Rig up to recover core #8 with nov core hands and schlumberger wireline
16:00	16:30	0.50	PROD1	CORING	RECR	P		1,838.00	1,838.00	Rig up to recover core #8 with nov core hands and schlumberger wireline
16:30	16:45	0.25	PROD1	RIGMNT	SVRG	P		1,838.00	1,838.00	Rig service function test pipe rams closed in 3 sec function test crown saver
16:45	20:15	3.50	PROD1	CORING	RECR	P		1,838.00	1,838.00	Rig up to recover core #8 with nov core hands and schlumberger wireline
20:15	20:30	0.25	PROD1	CORING	SFTY	P		1,838.00	1,838.00	Safety meeting with NOV core hands and Schlumberger wireline
20:30	21:30	1.00	PROD1	CORING	RECR	P		1,838.00	1,838.00	Lay down core #8 with NOV core hands full 27m recovery
21:30	22:00	0.50	PROD1	CORING	TRIP	P		1,838.00	1,838.00	Trip drill pipe in the hole to 1815m
22:00	23:30	1.50	PROD1	CORING	CIRC	P		1,838.00	1,838.00	Wash to bottom to 1838m circulate out trip gas and work string
23:30	00:00	0.50	PROD1	CORING	RECR	P		1,838.00	1,838.00	Make up core barrels for run #9

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00
Rig: Beaver Drilling Ltd. 2

Report Date: 2/13/2013
Report #: 31
Depth Progress: 27.00 m
Depth End: 1,838.00 mKB
Rig Release Date: 2/20/2013

Fluid / Mud Checks: Mud Engineer: Tom Buhler

Time	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (cp)	YP Override (Pa)
07:00	1,784.00	945.0	75		13.0	4.5

Low Gravity Solids (%)	MBT (kg/m³)	Oil Water Ratio	Chlorides (mg/L)	Calcium (mg/L)	Lime (kg/m³)	Potassium (mg/L)
8.7		88/12	252,475	31,000	16	

Electric Stab (V)	ECD - Manual Entry (k...	Sand (%)	Solids, Corr. (%)	T (fl) (°C)	HTHP Pressure (kPa)	HTHP Filt (mL/30min)
709.0	995.9		8.7	29	80	6.0

API Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Cost
	1.00		217.00

Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost
51.40		91,040.80

Last BOP Drill

Type	Days Since Last ...	Last Date	Days Until Next ...	Next Check Date
BOP Drill (Pit)	1	2/12/2013	6	2/19/2013

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
370.00	

Safety Incidents

Date	Comment	Category

Drill Strings: BHA # 3

Bit Run	Drill Bit	Length (m)	IADC Bit Dull	TFA (Incl Noz) (mm²)	BHA ROP (m/hr)
1 C	222.0mm, NOV, PR 513, E140308	0.58	-----	667	6.2

Nozzles (mm)	String Length (m)	OD (mm)	Rotating Hook Load (maximum) (daN)
11.9/11.9/11.9/11.9/11.9/11.9	1,856.00	165.0	58,000

Depth In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hrs)	Total Drill Hrs (hrs)
1,622.00	1,856.00	6.2	234.10	1,856.10	37.75	37.75

Comment

Drill String Components

Item Description	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)
Kelly & pup jts	89.0	165.0		18.99	1,856.0
Drill Pipe	108.0	127.0	180	1,730.64	1,837.01
XO Sub	108.0	165.0	1	0.77	106.37
Drill Collar	108.0	165.0	8	75.82	105.6
Stabilizer	108.0	165.0	1	1.23	29.78
Seat Sub	108.0	165.0	1	0.49	28.55
Core Barrel	108.0	165.0	1	7.92	28.06
Stabilizer	108.0	165.0	1	0.83	20.14
Core Barrel	108.0	165.0	1	9.57	19.31
Stabilizer	108.0	165.0	1	1.23	9.74
Core Barrel	108.0	165.0	1	7.93	8.51

Drilling Parameters: 1,824.00 - 1,838.00 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
216.10	33.25	4.0	1,200	6,000	45	5,600	58,000	64,000	64,000	64,000	

Hydraulic Calculations

Bit Hydraulic Powe...	HP/Area (kW/mm²)	% P @ bit (%)	Bit Jet Velocity (m/s)	Bit dP (kPa)	Ann. dP (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)
9.5	0.00025	9	30.0	476.2	125.5	945.0	952.0

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Shoe to Top of Casing...	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m...
16.84	11.74	16.54	43.4	63.3	19.0	69.3

Error

Mud Pumps: 1, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
1	NATIONAL	8-P-80		216.0

Pump Checks

Date	Depth (mKB)	Q (m³/min)	Pres (kPa)	Strokes (spm)
2/19/2013 00:00	1,855.00		686	5
2/20/2013 00:00				11

Pump Operations

Start Date	End Date	Liner Size (mm)	P (max) (kPa)	Vol/Stk OR (m³/stk)
1/29/2013		140.0		

Mud Pumps: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80		216.0

Pump Checks

Date	Depth (mKB)	Q (m³/min)	Pres (kPa)	Strokes (spm)
2/10/2013 08:00	1,724.00	0.587	357	6
2/10/2013 18:00	1,747.00	1.232	5,300	12

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00
Rig: Beaver Drilling Ltd. 2

Report Date: 2/13/2013
Report #: 31
Depth Progress: 27.00 m
Depth End: 1,838.00 mKB
Rig Release Date: 2/20/2013

Pump Operations

Start Date	End Date	Liner Size (mm)	P (max) (kPa)	Vol/Stk OR (m³/stk)
1/29/2013		140.0		
2/5/2013		140.0		

Shaker Screens

Description	Start Date	End Date	Scr Sz X	Scr Sz Y	Note
1	1/23/2013		84	84	
1	1/23/2013		84	84	
1	1/23/2013		84	84	
1	1/23/2013		84	84	

Centrifuges/Cyclones:

Number	Make	Model	Diameter (mm)

Centrifuge/Cyclone Checks

Date	Hrs (hrs)	RPM (rpm)	Dens OF (kg/m³)	Q (ovrflw) (L/min)	Dens UF (kg/m³)	Q (undrflw) (L/min)

Fluid / Mud Additive Amounts

Description	Consumed	Cost	Size	Units
LIME - 20KG	15.0	8.680	20.0	sks
LIME - 20KG	10.0	8.680	20.0	sks

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)
Quaternary System	5.00	5.00	5.00
Alberta Grp	31.00	31.00	28.00
Slater River	36.00	36.00	48.00
Artic Red	570.00	569.94	570.00
Sams Sault	787.00	786.89	787.00
Martin House	882.50	882.35	882.50
Imperial Shale	962.00	961.82	962.00
Upper Canol	1,643.00	1,642.61	962.00
Lower Canol	1,679.00	1,678.61	962.00
Hare Indian	1,788.00	1,787.59	962.00
Bluefish Member	1,796.00	1,795.59	962.00
Hume	1,804.00	1,803.59	962.00

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00
Rig: Beaver Drilling Ltd. 2

Report Date: 2/14/2013
Report #: 32
Depth Progress: 18.00 m
Depth End: 1,856.00 mKB
Rig Release Date: 2/20/2013

API / UWI	Surface Legal Location	MaxWell Job Number	License No.
300/O-06 6510 127000	O-6 65-10 127-00	JOB01@2006	470

Ground Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
252.40	257.60	252.73	1/26/2013	19.50

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	1/3/2013 00:00	2/21/2013 00:00	DRILLED & CASE	Yes

Daily Cost Total	Cumulative Cost	Total Job AFE Amount	Total AFE+Sup	AFE / RFE / Maint.#	Estimated Days
152,606.96	6,150,469.30	10,990,100.00	10,990,100.00	10342919	35.34

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hrs)	Cum Personnel Total Hours (hrs)
1,873.00	1,856.00	53.0	588.00	13,396.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)
	28		

Road Condition	Weather	Temperature (°C)	Wind
Fair	Overcast	-16	light

Ops and Depth @ Morning Report
Circulate and condition the hole before coming out

Wellbore
Original Hole

Last 24hr Summary
No accidents or incidents 6 Hazard ID's: 1 Job obersvations :Pump down core barrels, Cut core #9 F/1838-1847m Worked and reamed tight hole @ 1842m while coring,Circulate bottoms up, Pull 5 stands drill pipe Wire line retrieve Core #9. recovered 17.7mm,Run drill rod on wireline, Wiper trip to casing shoe.

24hr Forecast
Log well

Daily Contacts
Rig Manager, Rick Yavis; WS Supervisor, Brian Neigum, 403-548-5013; WS Supervisor, Dave Forsberg, 780-361-6417; Drilling Superintend, Sheldon Vamplew, 403-999-1302; Drilling Engineer, Mike Greener, 403-771-5039; Command Center, 587-794-4599

Last Casing String
Surface, 597.00mKB

Time Log

Start Time	End Time	Dur (hrs)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Depth Start (mKB)	Depth End (mKB)	Operation
00:00	00:15	0.25	PROD1	RIGMNT	SVRG	P		1,838.00	1,838.00	Rig service function pipe rams 3 sec crown saver operating properly
00:15	00:30	0.25	PROD1	CORING	CIRC	P		1,838.00	1,838.00	Circulate and pump core barrels down@ .80m3/min
00:30	02:30	2.00	PROD1	CORING	CORE	P		1,838.00	1,847.00	Cut 89mm core #9 from 1838m to 1847m with National Oilwell Varco with bit #1C PR513 pumping @ 1.2m3/min rop 4.5m/hr wob 7 daN
02:30	04:15	1.75	PROD1	CORING	CIRC	P		1,847.00	1,847.00	Work tight hole @1842m and circulate
04:15	06:45	2.50	PROD1	CORING	CORE	P		1,847.00	1,856.00	Cut 89mm core #9 from 1847m to1856m with National Oilwell Varco with bit #1C PR513 pumping @ 1.2m3/min rop 4.5m/hr wob 7 daN
06:45	07:45	1.00	PROD1	CORING	CIRC	P		1,856.00	1,856.00	Circulate bottoms up
07:45	08:00	0.25	PROD1	CORING	SFTY	P		1,856.00	1,856.00	Crew change safety meeting
08:00	08:45	0.75	PROD1	CORING	TRIP	P		1,856.00	1,856.00	Trip out five stds
08:45	09:15	0.50	PROD1	CORING	RECR	P		1,856.00	1,856.00	rig up to retrieve core #9 with nov core hands and schlumberger wireline
09:15	09:30	0.25	PROD1	RIGMNT	SVRG	P		1,856.00	1,856.00	Rig service function test hydrill 13 seconds to close function test crown saver
09:30	15:00	5.50	PROD1	CORING	RECR	P		1,856.00	1,856.00	rig up to retrieve core #9 with nov core hands and schlumberger wireline
15:00	15:15	0.25	PROD1	CORING	SFTY	P		1,856.00	1,856.00	Safety meeting with nov on laying down cores
15:15	16:00	0.75	PROD1	CORING	RECR	P		1,856.00	1,856.00	Lay down cores #9 with nov core hands
16:00	16:15	0.25	PROD2	EVALFM	CIRC	P		1,856.00	1,856.00	Circulate
16:15	16:30	0.25	PROD2	EVALFM	SFTY	P		1,856.00	1,856.00	Safety meeting on running nov drill rods
16:30	16:45	0.25	PROD2	RIGMNT	SVRG	P		1,856.00	1,856.00	Rig service function test pipe rams function test crown saver
16:45	20:15	3.50	PROD2	EVALFM	RECR	P		1,856.00	1,856.00	Run down nov drill rods with nov core hands and sclumberger/pull wire line
20:15	20:30	0.25	PROD2	EVALFM	CIRC	P		1,856.00	1,856.00	Circulate and pump pill
20:30	00:00	3.50	PROD2	EVALFM	WPRT	P		1,856.00	1,856.00	Wiper trip out of hole up to 600m flow check@1741m/1647m/1080m/609m

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00
Rig: Beaver Drilling Ltd. 2

Report Date: 2/14/2013
Report #: 32
Depth Progress: 18.00 m
Depth End: 1,856.00 mKB
Rig Release Date: 2/20/2013

Fluid / Mud Checks: Mud Engineer: Tom Buhler

Time	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (cp)	YP Override (Pa)
07:15	1,784.00	945.0	77		14.0	4.0

Low Gravity Solids (%)	MBT (kg/m³)	Oil Water Ratio	Chlorides (mg/L)	Calcium (mg/L)	Lime (kg/m³)	Potassium (mg/L)
8.7		88/12	274,255	31,000	22	

Electric Stab (V)	ECD - Manual Entry (k...	Sand (%)	Solids, Corr. (%)	T (fl) (°C)	HTHP Pressure (kPa)	HTHP Filt (mL/30min)
709.0			8.7	37	3,500	6.0

API Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Cost
	1.00		496.25

Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost
52.40		91,537.05

Last BOP Drill

Type	Days Since Last ...	Last Date	Days Until Next ...	Next Check Date
BOP Drill (Pit)	2	2/12/2013	5	2/19/2013

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
371.00	

Safety Incidents

Date	Comment	Category

Drill Strings: BHA # 3

Bit Run	Drill Bit	Length (m)	IADC Bit Dull	TFA (incl Noz) (mm²)	BHA ROP (m/hr)
1 C	222.0mm, NOV, PR 513, E140308	0.58	----	667	6.2

Nozzles (mm)	String Length (m)	OD (mm)	Rotating Hook Load (maximum) (daN)
11.9/11.9/11.9/11.9/11.9/11.9	1,856.00	165.0	58,000

Depth In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hrs)	Total Drill Hrs (hrs)
1,622.00	1,856.00	6.2	234.10	1,856.10	37.75	37.75

Comment

Drill String Components

Item Description	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)
Kelly & pup jts	89.0	165.0		18.99	1,856.0
Drill Pipe	108.0	127.0	180	1,730.64	1,837.01
XO Sub	108.0	165.0	1	0.77	106.37
Drill Collar	108.0	165.0	8	75.82	105.6
Stabilizer	108.0	165.0	1	1.23	29.7
Seat Sub	108.0	165.0	1	0.49	28.5
Core Barrel	108.0	165.0	1	7.92	28.0
Stabilizer	108.0	165.0	1	0.83	20.14
Core Barrel	108.0	165.0	1	9.57	19.31
Stabilizer	108.0	165.0	1	1.23	9.74
Core Barrel	108.0	165.0	1	7.93	8.51

Drilling Parameters: 1,838.00 - 1,856.00 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
234.10	37.75	4.0	1.200	7,000	50	6,600	57,000	64,000	64,000	64,000	

Hydraulic Calculations

Bit Hydraulic Powe...	HP/Area (kW/mm²)	% P @ bit (%)	Bit Jet Velocity (m/s)	Bit dP (kPa)	Ann. dP (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)
9.5	0.00025	7	30.0	476.2	128.9	945.0	952.1

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Shoe to Top of Casing...	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m...
16.95	11.74	16.38	43.4	63.3	19.0	69.3

Error

Mud Pumps: 1, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
1	NATIONAL	8-P-80		216.0

Pump Checks

Date	Depth (mKB)	Q (m³/min)	Pres (kPa)	Strokes (spm)
2/19/2013 00:00	1,855.00		686	5
2/20/2013 00:00				11

Pump Operations

Start Date	End Date	Liner Size (mm)	P (max) (kPa)	Vol/Stk OR (m³/stk)
1/29/2013		140.0		

Mud Pumps: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80		216.0

Pump Checks

Date	Depth (mKB)	Q (m³/min)	Pres (kPa)	Strokes (spm)
2/10/2013 08:00	1,724.00	0.587	357	6
2/10/2013 18:00	1,747.00	1.232	5,300	12

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00
Rig: Beaver Drilling Ltd. 2

Report Date: 2/14/2013
Report #: 32
Depth Progress: 18.00 m
Depth End: 1,856.00 mKB
Rig Release Date: 2/20/2013

Pump Operations

Start Date	End Date	Liner Size (mm)	P (max) (kPa)	Vol/Stk OR (m³/stk)
1/29/2013		140.0		
2/5/2013		140.0		

Shaker Screens

Description	Start Date	End Date	Scr Sz X	Scr Sz Y	Note
1	1/23/2013		84	84	
1	1/23/2013		84	84	
1	1/23/2013		84	84	
1	1/23/2013		84	84	

Centrifuges/Cyclones:

Number	Make	Model	Diameter (mm)

Centrifuge/Cyclone Checks

Date	Hrs (hrs)	RPM (rpm)	Dens OF (kg/m³)	Q (ovrflw) (L/min)	Dens UF (kg/m³)	Q (undrflw) (L/min)

Fluid / Mud Additive Amounts

Description	Consumed	Cost	Size	Units
BARITE - 40KG	25.0	19.850	40.0	sks

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)
Quaternary System	5.00	5.00	5.00
Alberta Grp	31.00	31.00	28.00
Slater River	36.00	36.00	48.00
Artic Red	570.00	569.94	570.00
Sams Sault	787.00	786.89	787.00
Martin House	882.50	882.35	882.50
Imperial Shale	962.00	961.82	962.00
Upper Canol	1,643.00	1,642.61	962.00
Lower Canol	1,679.00	1,678.61	962.00
Hare Indian	1,788.00	1,787.59	962.00
Bluefish Member	1,796.00	1,795.59	962.00
Hume	1,804.00	1,803.59	962.00

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00
Rig: Beaver Drilling Ltd. 2

Report Date: 2/15/2013
Report #: 33
Depth Progress: 0.00 m
Depth End: 1,856.00 mKB
Rig Release Date: 2/20/2013

API / UWI	Surface Legal Location	MaxWell Job Number	License No.
300/O-06 6510 127000	O-6 65-10 127-00	JOB01@2006	470

Ground Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
252.40	257.60	252.73	1/26/2013	20.50

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	1/3/2013 00:00	2/21/2013 00:00	DRILLED & CASE	Yes

Daily Cost Total	Cumulative Cost	Total Job AFE Amount	Total AFE+Sup	AFE / RFE / Maint.#	Estimated Days
348,865.55	6,499,334.85	10,990,100.00	10,990,100.00	10342919	35.34

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hrs)	Cum Personnel Total Hours (hrs)
1,873.00	1,856.00	51.0	588.00	13,984.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)
	61		0

Road Condition	Weather	Temperature (°C)	Wind
Fair	Overcast	-18	7

Ops and Depth @ Morning Report
Pull log run #2

Wellbore
Original Hole

Last 24hr Summary
No accidents or incidents 3 Hazard ID's: 2 Job obersvations : Slip and cut drilling line, Run in hole, Circulate, (4100 units bottoms up gas) pull out of hole, (hole in good condition) Lay down coring drill collars and core barrels, Rig to and run Schlumberger wireline logs

24hr Forecast
Log well

Daily Contacts
Command Center, 587-794-4599; WS Supervisor, Dave Forsberg, 780-361-6417; Rig Manager, Rick Yavis; Drilling Engineer, Mike Greener, 403-771-5039; Drilling Superintend, Sheldon Vamplew, 403-999-1302; WS Supervisor, Brian Neigum, 403-548-5013

Last Casing String
Surface, 597.00mKB

Time Log

Start Time	End Time	Dur (hrs)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Depth Start (mKB)	Depth End (mKB)	Operation
00:00	00:15	0.25	PROD2	RIGMNT	SVRG	P		1,856.00	1,856.00	Rig service function hydrill 13 sec crown saver operating properly
00:15	01:00	0.75	PROD2	RIGMNT	SLPC	P		1,856.00	1,856.00	Slip and cut drill line @9377MJ Cut 16m
01:00	05:00	4.00	PROD2	EVALFM	WPRT	P		1,856.00	1,856.00	Trip in the hole to 1836m fill pipe flow check@1203m
05:00	07:00	2.00	PROD2	EVALFM	CIRC	P		1,856.00	1,856.00	Wash to bottom from 1836m to 1856m Circulate bottoms up work pipe
07:00	07:15	0.25	PROD2	EVALFM	SFTY	P		1,856.00	1,856.00	Crew change safety meeting
07:15	08:00	0.75	PROD2	EVALFM	TRIP	P		1,856.00	1,856.00	Trip out of hole flow check@1845
08:00	08:15	0.25	PROD2	RIGMNT	SVRG	P		1,856.00	1,856.00	Rig service function test annular 13 seconds to close function test crown saver
08:15	13:30	5.25	PROD2	EVALFM	TRIP	P		1,856.00	1,856.00	Trip out of hole to lay down core tools and log flow checks @ 1749m 955m 578m 113m ooh
13:30	15:00	1.50	PROD2	EVALFM	PULD	P		1,856.00	1,856.00	Lay down drill collars and core tools with nov core hands break bit function test blind rams
15:00	15:45	0.75	PROD2	EVALFM	ELOG	P		1,856.00	1,856.00	Clean floor get logging tools ready to go
15:45	16:00	0.25	PROD2	EVALFM	ELOG	P		1,856.00	1,856.00	Safety meeting with schlumberger wire line
16:00	00:00	8.00	PROD2	EVALFM	ELOG	P		1,856.00	1,856.00	Run log number #1 with schlumberger TD 1858.15m Time on bottom 18:00 hrs tools ran AIT,NEXT,TLD,HGNS,TLD2

Fluid / Mud Checks: Mud Engineer: <Mud Engineer?>

Time	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (cp)	YP Override (Pa)
07:15	1,856.00	945.0	77		14.0	4.0

Low Gravity Solids (%)	MBT (kg/m³)	Oil Water Ratio	Chlorides (mg/L)	Calcium (mg/L)	Lime (kg/m³)	Potassium (mg/L)
8.7		88/12	274,255	31,000	22	

Electric Stab (V)	ECD - Manual Entry (k...	Sand (%)	Solids, Corr. (%)	T (fl) (°C)	HTHP Pressure (kPa)	HTHP Filt (mL/30min)
709.0			8.7			6.0

API Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Cost
	1.00		456.55

Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost
53.40		91,993.60

Last BOP Drill

Type	Days Since Last ...	Last Date	Days Until Next ...	Next Check Date
BOP Drill (Pit)	3	2/12/2013	4	2/19/2013

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
372.00	

Safety Incidents

Date	Comment	Category

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00
Rig: Beaver Drilling Ltd. 2

Report Date: 2/15/2013
Report #: 33
Depth Progress: 0.00 m
Depth End: 1,856.00 mKB
Rig Release Date: 2/20/2013

Drill Strings: 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)	Rotating Hook Load (maximum) (daN)

Depth In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hrs)	Total Drill Hrs (hrs)

Comment

Drill String Components

Item Description	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)

Drilling Parameters:

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)	Ann. dP (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Shoe to Top of Casing...	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m...

Error

Mud Pumps: 1, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
1	NATIONAL	8-P-80		216.0

Pump Checks

Date	Depth (mKB)	Q (m³/min)	Pres (kPa)	Strokes (spm)
2/19/2013 00:00	1,855.00		686	59
2/20/2013 00:00				115

Pump Operations

Start Date	End Date	Liner Size (mm)	P (max) (kPa)	Vol/Stk OR (m³/stk)
1/29/2013		140.0		

Mud Pumps: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80		216.0

Pump Checks

Date	Depth (mKB)	Q (m³/min)	Pres (kPa)	Strokes (spm)
2/10/2013 08:00	1,724.00	0.587	357	60
2/10/2013 18:00	1,747.00	1.232	5,300	126

Pump Operations

Start Date	End Date	Liner Size (mm)	P (max) (kPa)	Vol/Stk OR (m³/stk)
1/29/2013		140.0		
2/5/2013		140.0		

Shaker Screens

Description	Start Date	End Date	Scr Sz X	Scr Sz Y	Note
1	1/23/2013		84	84	
1	1/23/2013		84	84	
1	1/23/2013		84	84	
1	1/23/2013		84	84	

Centrifuges/Cyclones:

Number	Make	Model	Diameter (mm)

Centrifuge/Cyclone Checks

Date	Hrs (hrs)	RPM (rpm)	Dens OF (kg/m³)	Q (ovrflw) (L/min)	Dens UF (kg/m³)	Q (undrflw) (L/min)

Fluid / Mud Additive Amounts

Description	Consumed	Cost	Size	Units
BARITE - 40KG	23.0	19,850	40.0	sks

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)
Quaternary System	5.00	5.00	5.00
Alberta Grp	31.00	31.00	28.00
Slater River	36.00	36.00	48.00
Artic Red	570.00	569.94	570.00
Sams Sault	787.00	786.89	787.00
Martin House	882.50	882.35	882.50

Formations

Formation Name	Drill Top MD (mKB)	Drill Top TVD (mKB)	Prog Top TVD (mKB)
Imperial Shale	962.00	961.82	962.00
Upper Canol	1,643.00	1,642.61	962.00
Lower Canol	1,679.00	1,678.61	962.00
Hare Indian	1,788.00	1,787.59	962.00
Bluefish Member	1,796.00	1,795.59	962.00
Hume	1,804.00	1,803.59	962.00

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00
Rig: Beaver Drilling Ltd. 2

Report Date: 2/16/2013
Report #: 34
Depth Progress: 0.00 m
Depth End: 1,856.00 mKB
Rig Release Date: 2/20/2013

API / UWI	Surface Legal Location	MaxWell Job Number	License No.
300/O-06 6510 127000	O-6 65-10 127-00	JOB01@2006	470

Ground Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
252.40	257.60	252.73	1/26/2013	21.50

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	1/3/2013 00:00	2/21/2013 00:00	DRILLED & CASE	Yes

Daily Cost Total	Cumulative Cost	Total Job AFE Amount	Total AFE+Sup	AFE / RFE / Maint.#	Estimated Days
238,661.50	6,737,996.35	10,990,100.00	10,990,100.00	10342919	35.34

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hrs)	Cum Personnel Total Hours (hrs)
1,873.00	1,856.00	50.0	552.00	14,536.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)
			0

Road Condition	Weather	Temperature (°C)	Wind
Fair	Overcast	-29	5

Ops and Depth @ Morning Report
Pull log run #3

Wellbore
Original Hole

Last 24hr Summary
No accidents or incidents 4 Hazard ID's: 2 Job obersvations :Run Schlumberger wireline logs, Log #2 UBI,OBMI, OBMI2,PPC, MSIP, GPIT. Pick up tools for run #3 and start running to bottom.

24hr Forecast
Log well

Daily Contacts
Drilling Superintend, Sheldon Vamplew, 403-999-1302; Command Center, 587-794-4599; Rig Manager, Rick Yavis; Drilling Engineer, Mike Greener, 403-771-5039; WS Supervisor, Brian Neigum, 403-548-5013; WS Supervisor, Dave Forsberg, 780-361-6417

Last Casing String
Surface, 597.00mKB

Time Log

Start Time	End Time	Dur (hrs)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Depth Start (mKB)	Depth End (mKB)	Operation
00:00	00:15	0.25	PROD2	RIGMNT	SVRG	P		1,856.00	1,856.00	Rig service function blind rams 3 sec
00:15	07:45	7.50	PROD2	EVALFM	ELOG	P		1,856.00	1,856.00	Logging with Sclumberger run #2 tools ran UBI,OBMI,OBMI2,PPC,MSIP,GPIT
07:45	08:00	0.25	PROD2	EVALFM	SFTY	P		1,856.00	1,856.00	Crew change safety meeting
08:00	08:15	0.25	PROD2	EVALFM	ELOG	P		1,856.00	1,856.00	Logging with Sclumberger run #2 tools ran UBI,OBMI,OBMI2,PPC,MSIP,GPIT
08:15	08:30	0.25	PROD2	RIGMNT	SVRG	P		1,856.00	1,856.00	Rig service function test H.C.R
08:30	16:00	7.50	PROD2	EVALFM	ELOG	P		1,856.00	1,856.00	Logging with Sclumberger run #2 tools ran UBI,OBMI,OBMI2,PPC,MSIP,GPIT
16:00	16:15	0.25	PROD2	RIGMNT	SVRG	P		1,856.00	1,856.00	Rig service
16:15	22:30	6.25	PROD2	EVALFM	ELOG	P		1,856.00	1,856.00	Logging with Sclumberger run #2 tools ran UBI,OBMI,OBMI2,PPC,MSIP,GPIT
22:30	00:00	1.50	PROD2	EVALFM	ELOG	P		1,856.00	1,856.00	Logging with Sclumberger run #3 tools ran ADT,HNGS,CMR,(NRTA)

Fluid / Mud Checks: Mud Engineer: <Mud Engineer?>

Time	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (cp)	YP Override (Pa)
07:15	1,856.00	945.0	77		14.0	4.0

Low Gravity Solids (%)	MBT (kg/m³)	Oil Water Ratio	Chlorides (mg/L)	Calcium (mg/L)	Lime (kg/m³)	Potassium (mg/L)
8.7		88/12	274,255	31,000	22	

Electric Stab (V)	ECD - Manual Entry (k...	Sand (%)	Solids, Corr. (%)	T (fl) (°C)	HTHP Pressure (kPa)	HTHP Filt (mL/30min)
709.0			8.7			6.0

API Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Cost
	1.00		

Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost
54.40		91,993.60

Last BOP Drill

Type	Days Since Last ...	Last Date	Days Until Next ...	Next Check Date
BOP Drill (Pit)	4	2/12/2013	3	2/19/2013

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
373.00	

Safety Incidents

Date	Comment	Category

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00
Rig: Beaver Drilling Ltd. 2

Report Date: 2/16/2013
Report #: 34
Depth Progress: 0.00 m
Depth End: 1,856.00 mKB
Rig Release Date: 2/20/2013

Drill Strings: 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)	Rotating Hook Load (maximum) (daN)

Depth In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hrs)	Total Drill Hrs (hrs)

Comment

Drill String Components

Item Description	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)

Drilling Parameters:

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)	Ann. dP (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Shoe to Top of Casing...	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m...

Error

Mud Pumps: 1, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
1	NATIONAL	8-P-80		216.0

Pump Checks

Date	Depth (mKB)	Q (m³/min)	Pres (kPa)	Strokes (spm)
2/19/2013 00:00	1,855.00		686	5
2/20/2013 00:00				11

Pump Operations

Start Date	End Date	Liner Size (mm)	P (max) (kPa)	Vol/Stk OR (m³/stk)
1/29/2013		140.0		

Mud Pumps: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80		216.0

Pump Checks

Date	Depth (mKB)	Q (m³/min)	Pres (kPa)	Strokes (spm)
2/10/2013 08:00	1,724.00	0.587	357	6
2/10/2013 18:00	1,747.00	1.232	5,300	12

Pump Operations

Start Date	End Date	Liner Size (mm)	P (max) (kPa)	Vol/Stk OR (m³/stk)
1/29/2013		140.0		
2/5/2013		140.0		

Shaker Screens

Description	Start Date	End Date	Scr Sz X	Scr Sz Y	Note
1	1/23/2013		84	84	
1	1/23/2013		84	84	
1	1/23/2013		84	84	
1	1/23/2013		84	84	

Centrifuges/Cyclones:

Number	Make	Model	Diameter (mm)

Centrifuge/Cyclone Checks

Date	Hrs (hrs)	RPM (rpm)	Dens OF (kg/m³)	Q (ovrflw) (L/min)	Dens UF (kg/m³)	Q (undrflw) (L/min)

Fluid / Mud Additive Amounts

Description	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)
Quaternary System	5.00	5.00	5.0
Alberta Grp	31.00	31.00	28.0
Slater River	36.00	36.00	48.0
Artic Red	570.00	569.94	570.0
Sams Sault	787.00	786.89	787.0
Martin House	882.50	882.35	882.5

Formations

Formation Name	Drill Top MD (mKB)	Drill Top TVD (mKB)	Prog Top TVD (mKB)
Imperial Shale	962.00	961.82	962.00
Upper Canol	1,643.00	1,642.61	962.00
Lower Canol	1,679.00	1,678.61	962.00
Hare Indian	1,788.00	1,787.59	962.00
Bluefish Member	1,796.00	1,795.59	962.00
Hume	1,804.00	1,803.59	962.00

ConocoPhillips Canada

Daily Drilling

COPRC LOON CREEK O-06 65-10 127-00

Rig: Beaver Drilling Ltd. 2

Report Date: 2/17/2013
Report #: 35
Depth Progress: 0.00 m
Depth End: 1,856.00 mKB
Rig Release Date: 2/20/2013

API / UWI	Surface Legal Location	MaxWell Job Number	License No.
300/O-06 6510 127000	O-6 65-10 127-00	JOB01@2006	470

Ground Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
252.40	257.60	252.73	1/26/2013	22.50

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	1/3/2013 00:00	2/21/2013 00:00	DRILLED & CASE	Yes

Daily Cost Total	Cumulative Cost	Total Job AFE Amount	Total AFE+Sup	AFE / RFE / Maint.#	Estimated Days
57,661.50	6,795,657.85	10,990,100.00	10,990,100.00	10342919	35.34

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hrs)	Cum Personnel Total Hours (hrs)
1,873.00	1,856.00	48.0	528.00	15,064.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)
			0

Road Condition	Weather	Temperature (°C)	Wind
Fair	Light snow	-25	7

Ops and Depth @ Morning Report
Log run #4 RST tools

Wellbore
Original Hole

Last 24hr Summary
No accidents or incidents 4 Hazard ID's: 1 Job obersvations :Run Schlumberger wireline logs, Log #3 ADT, HNGS, CMR (NRTA). Log run #4 RST tools.

24hr Forecast
Finish logging & wiper trip

Daily Contacts
Command Center, 587-794-4599; Rig Manager, Rick Yavis; WS Supervisor, Brian Neigum, 403-548-5013; WS Supervisor, Dave Forsberg, 780-361-6417; Drilling Engineer, Mike Greener, 403-771-5039; Drilling Superintend, Sheldon Vamplew, 403-999-1302

Last Casing String
Surface, 597.00mKB

Time Log

Start Time	End Time	Dur (hrs)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Depth Start (mKB)	Depth End (mKB)	Operation
00:00	00:15	0.25	PROD2	RIGMNT	SVRG	P		1,856.00	1,856.00	Rig service
00:15	07:45	7.50	PROD2	EVALFM	ELOG	P		1,856.00	1,856.00	Run #3 with schlumberger Tools ADT HNGS CMR (NTR)
07:45	08:00	0.25	PROD2	EVALFM	SFTY	P		1,856.00	1,856.00	Crew change safety meeting
08:00	08:30	0.50	PROD2	EVALFM	ELOG	P		1,856.00	1,856.00	Run #3 with schlumberger Tools ADT HNGS CMR (NTR)
08:30	08:45	0.25	PROD2	RIGMNT	SVRG	P		1,856.00	1,856.00	Rig service function test blind rams 3 seconds to close
08:45	16:00	7.25	PROD2	EVALFM	ELOG	P		1,856.00	1,856.00	Wire line with schlumberger Run # 4 tools RST
16:00	16:15	0.25	PROD2	EVALFM	ELOG	P		1,856.00	1,856.00	Wire line with schlumberger Run # 4 tools RST
16:15	16:30	0.25	PROD2	RIGMNT	SVRG	P		1,856.00	1,856.00	Rig service function test H.C.R
16:30	00:00	7.50	PROD2	EVALFM	ELOG	P		1,856.00	1,856.00	Wire line with schlumberger Run # 4 tools RST

Fluid / Mud Checks: Mud Engineer: <Mud Engineer?>

Time	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (cp)	YP Override (Pa)
07:00	1,856.00	950.0	77		14.0	4.0

Low Gravity Solids (%)	MBT (kg/m³)	Oil Water Ratio	Chlorides (mg/L)	Calcium (mg/L)	Lime (kg/m³)	Potassium (mg/L)
8.7		88/12	274,255	31,000	22	

Electric Stab (V)	ECD - Manual Entry (k...	Sand (%)	Solids, Corr. (%)	T (fl) (°C)	HTHP Pressure (kPa)	HTHP Filt (mL/30min)
709.0			8.7			6.0

API Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Cost
	1.00		

Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost
55.40		91,993.60

Last BOP Drill

Type	Days Since Last ...	Last Date	Days Until Next ...	Next Check Date
BOP Drill (Pit)	5	2/12/2013	2	2/19/2013

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
374.00	

Safety Incidents

Date	Comment	Category

Drill Strings: 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)	Rotating Hook Load (maximum) (daN)

Depth In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hrs)	Total Drill Hrs (hrs)

Comment

Drill String Components

Item Description	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00
Rig: Beaver Drilling Ltd. 2

Report Date: 2/17/2013
Report #: 35
Depth Progress: 0.00 m
Depth End: 1,856.00 mKB
Rig Release Date: 2/20/2013

Drilling Parameters:

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)	Ann. dP (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Shoe to Top of Casing...	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m...

Error

Mud Pumps: 1, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
1	NATIONAL	8-P-80		216.0

Pump Checks

Date	Depth (mKB)	Q (m³/min)	Pres (kPa)	Strokes (spm)
2/19/2013 00:00	1,855.00		686	59
2/20/2013 00:00				118

Pump Operations

Start Date	End Date	Liner Size (mm)	P (max) (kPa)	Vol/Stk OR (m³/stk)
1/29/2013		140.0		

Mud Pumps: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80		216.0

Pump Checks

Date	Depth (mKB)	Q (m³/min)	Pres (kPa)	Strokes (spm)
2/10/2013 08:00	1,724.00	0.587	357	60
2/10/2013 18:00	1,747.00	1.232	5,300	126

Pump Operations

Start Date	End Date	Liner Size (mm)	P (max) (kPa)	Vol/Stk OR (m³/stk)
1/29/2013		140.0		
2/5/2013		140.0		

Shaker Screens

Description	Start Date	End Date	Scr Sz X	Scr Sz Y	Note
1	1/23/2013		84	84	
1	1/23/2013		84	84	
1	1/23/2013		84	84	
1	1/23/2013		84	84	

Centrifuges/Cyclones:

Number	Make	Model	Diameter (mm)

Centrifuge/Cyclone Checks

Date	Hrs (hrs)	RPM (rpm)	Dens OF (kg/m³)	Q (ovrflw) (L/min)	Dens UF (kg/m³)	Q (undrflw) (L/min)

Fluid / Mud Additive Amounts

Description	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)
Quaternary System	5.00	5.00	5.00
Alberta Grp	31.00	31.00	28.00
Slater River	36.00	36.00	48.00
Artic Red	570.00	569.94	570.00
Sams Sault	787.00	786.89	787.00
Martin House	882.50	882.35	882.50
Imperial Shale	962.00	961.82	962.00
Upper Canol	1,643.00	1,642.61	962.00
Lower Canol	1,679.00	1,678.61	962.00
Hare Indian	1,788.00	1,787.59	962.00
Bluefish Member	1,796.00	1,795.59	962.00
Hume	1,804.00	1,803.59	962.00

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00
Rig: Beaver Drilling Ltd. 2

Report Date: 2/18/2013
Report #: 36
Depth Progress: 0.00 m
Depth End: 1,856.00 mKB
Rig Release Date: 2/20/2013

API / UWI	Surface Legal Location	MaxWell Job Number	License No.
300/O-06 6510 127000	O-6 65-10 127-00	JOB01@2006	470

Ground Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
252.40	257.60	252.73	1/26/2013	23.50

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	1/3/2013 00:00	2/21/2013 00:00	DRILLED & CASE	Yes

Daily Cost Total	Cumulative Cost	Total Job AFE Amount	Total AFE+Sup	AFE / RFE / Maint.#	Estimated Days
550,469.36	7,346,127.21	10,990,100.00	10,990,100.00	10342919	35.34

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hrs)	Cum Personnel Total Hours (hrs)
1,873.00	1,856.00	48.0	528.00	15,592.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)
			0

Road Condition	Weather	Temperature (°C)	Wind
Fair	Clear	-28	13

Ops and Depth @ Morning Report
Lay down drill string @1350 mkb

Wellbore
Original Hole

Last 24hr Summary
No accidents or incidents 4 Hazard ID's: 1 Job obersvations :Run Schlumberger wireline logs, Log run #4 RST tools. Run log #5 USIT - CBL. Rig out loggers. Make up a bit and run in to 1838 mkb.

24hr Forecast
LDDS,Run Casing & cement

Daily Contacts
WS Supervisor, Brian Neigum, 403-548-5013; Drilling Superintend, Sheldon Vamplew, 403-999-1302; Drilling Engineer, Mike Greener, 403-771-5039; Rig Manager, Rick Yavis; WS Supervisor, Dave Forsberg, 780-361-6417; Command Center, 587-794-4599

Last Casing String
Surface, 597.00mKB

Time Log

Start Time	End Time	Dur (hrs)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Depth Start (mKB)	Depth End (mKB)	Operation
00:00	00:15	0.25	PROD2	RIGMNT	SVRG	P		1,856.00	1,856.00	Rig service
00:15	07:45	7.50	PROD2	EVALFM	ELOG	P		1,856.00	1,856.00	Wire line logs with Schlumberger run#4 tools ran RST
07:45	08:00	0.25	PROD2	EVALFM	SFTY	P		1,856.00	1,856.00	Crew change safety meeting
08:00	08:30	0.50	PROD2	EVALFM	ELOG	P		1,856.00	1,856.00	Wire line logs with Schlumberger run#4 tools ran RST
08:30	08:45	0.25	PROD2	RIGMNT	SVRG	P		1,856.00	1,856.00	Rig service function test H.C.R
08:45	13:30	4.75	PROD2	EVALFM	ELOG	P		1,856.00	1,856.00	Wire line logs with Schlumberger run#4 tools ran RST
13:30	13:45	0.25	PROD2	RIGMNT	SVRG	P		1,856.00	1,856.00	Function test blind rams loggers out of hole
13:45	16:00	2.25	PROD2	EVALFM	ELOG	P		1,856.00	1,856.00	Wire line logs with schlumberger run#5 tools ran USIT-CBL
16:00	16:30	0.50	PROD2	EVALFM	ELOG	P		1,856.00	1,856.00	Wire line logs with schlumberger run#5 tools ran USIT-CBL
16:30	16:45	0.25	PROD2	EVALFM	SVRG	P		1,856.00	1,856.00	Rig service function test H.C.R
16:45	17:45	1.00	PROD2	DRILL	ELOG	P		1,856.00	1,856.00	Rig out schlumbger wire line
17:45	23:00	5.25	PROD2	DRILL	TRIP	P		1,856.00	1,856.00	Make up bit and run in hole fill to1618m pipe flow check@619m/1213m/1618m
23:00	23:15	0.25	PROD2	DRILL	CIRC	P		1,856.00	1,856.00	Circulate
23:15	00:00	0.75	PROD2	DRILL	TRIP	P		1,856.00	1,856.00	Trip in the hole from 1618m to 1838m

Fluid / Mud Checks: Mud Engineer: <Mud Engineer?>

Time	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (cp)	YP Override (Pa)
07:00	1,856.00	950.0	77		14.0	4.0

Low Gravity Solids (%)	MBT (kg/m³)	Oil Water Ratio	Chlorides (mg/L)	Calcium (mg/L)	Lime (kg/m³)	Potassium (mg/L)
8.7		88/12	274,255	31,000	22	

Electric Stab (V)	ECD - Manual Entry (k...	Sand (%)	Solids, Corr. (%)	T (fl) (°C)	HTHP Pressure (kPa)	HTHP Flt (mL/30min)
709.0			8.7			6.0

API Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Cost
	1.00		

Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost
56.40		91,993.60

Last BOP Drill

Type	Days Since Last ...	Last Date	Days Until Next ...	Next Check Date
BOP Drill (Pit)	6	2/12/2013	1	2/19/2013

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
375.00	

Safety Incidents

Date	Comment	Category

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00
Rig: Beaver Drilling Ltd. 2

Report Date: 2/18/2013
Report #: 3
Depth Progress: 0.00 m
Depth End: 1,856.00 mKB
Rig Release Date: 2/20/2013

Drill Strings: 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)	Rotating Hook Load (maximum) (daN)

Depth In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hrs)	Total Drill Hrs (hrs)

Comment

Drill String Components

Item Description	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)

Drilling Parameters:

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)	Ann. dP (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Shoe to Top of Casing...	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m...

Error

Mud Pumps: 1, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
1	NATIONAL	8-P-80		216.0

Pump Checks

Date	Depth (mKB)	Q (m³/min)	Pres (kPa)	Strokes (spm)
2/19/2013 00:00	1,855.00		686	5
2/20/2013 00:00				11

Pump Operations

Start Date	End Date	Liner Size (mm)	P (max) (kPa)	Vol/Stk OR (m³/stk)
1/29/2013		140.0		

Mud Pumps: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80		216.0

Pump Checks

Date	Depth (mKB)	Q (m³/min)	Pres (kPa)	Strokes (spm)
2/10/2013 08:00	1,724.00	0.587	357	6
2/10/2013 18:00	1,747.00	1.232	5,300	12

Pump Operations

Start Date	End Date	Liner Size (mm)	P (max) (kPa)	Vol/Stk OR (m³/stk)
1/29/2013		140.0		
2/5/2013		140.0		

Shaker Screens

Description	Start Date	End Date	Scr Sz X	Scr Sz Y	Note
1	1/23/2013		84	84	
1	1/23/2013		84	84	
1	1/23/2013		84	84	
1	1/23/2013		84	84	

Centrifuges/Cyclones:

Number	Make	Model	Diameter (mm)

Centrifuge/Cyclone Checks

Date	Hrs (hrs)	RPM (rpm)	Dens OF (kg/m³)	Q (ovrflw) (L/min)	Dens UF (kg/m³)	Q (undrflw) (L/min)

Fluid / Mud Additive Amounts

Description	Consumed	Cost	Size	Units

Survey Data

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	Depart (m)	NS (m)	EW (m)	VS (m)	DLS (°/30m)
2/18/2013	1,856.00	1.00	89.00	1,855.58	26.41	7.17	25.42	26.41	0.01

Formations

Formation Name	Drill Top MD (mKB)	Drill Top TVD (mKB)	Prog Top TVD (mKB)
Quaternary System	5.00	5.00	5.0
Alberta Grp	31.00	31.00	28.0
Slater River	36.00	36.00	48.0
Artic Red	570.00	569.94	570.0
Sams Sault	787.00	786.89	787.0
Martin House	882.50	882.35	882.5

Formations

Formation Name	Drill Top MD (mKB)	Drill Top TVD (mKB)	Prog Top TVD (mKB)
Imperial Shale	962.00	961.82	962.00
Upper Canol	1,643.00	1,642.61	962.00
Lower Canol	1,679.00	1,678.61	962.00
Hare Indian	1,788.00	1,787.59	962.00
Bluefish Member	1,796.00	1,795.59	962.00
Hume	1,804.00	1,803.59	962.00

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00
Rig: Beaver Drilling Ltd. 2

Report Date: 2/19/2013
Report #: 37
Depth Progress: 0.00 m
Depth End: 1,856.00 mKB
Rig Release Date: 2/20/2013

API / UWI	Surface Legal Location	MaxWell Job Number	License No.
300/O-06 6510 127000	O-6 65-10 127-00	JOB01@2006	470

Ground Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
252.40	257.60	252.73	1/26/2013	24.50

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	1/3/2013 00:00	2/21/2013 00:00	DRILLED & CASE	Yes

Daily Cost Total	Cumulative Cost	Total Job AFE Amount	Total AFE+Sup	AFE / RFE / Maint.#	Estimated Days
406,084.12	7,752,211.33	10,990,100.00	10,990,100.00	10342919	35.34

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hrs)	Cum Personnel Total Hours (hrs)
1,873.00	1,856.00	37.0	414.00	16,006.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)
	24		24

Road Condition	Weather	Temperature (°C)	Wind
Fair	Cloudy	-30	West 10km/hr.

Ops and Depth @ Morning Report
Wait on cement

Wellbore
Original Hole

Last 24hr Summary
No accidents or incidents 4 Hazard ID's: 2 Job obersvations :Run in hole to 1856m, Circulate, (10,000 units bottoms up gas) Rig in laydown truck and laydown drillstring, Rig to and run 177.8mm casing,Circulate casing condition hole prior to cementing.

24hr Forecast
Cement 177.8mm production casing ,set casing slips nipple down BOPs and tear out rig.

Daily Contacts
Drilling Superintend, Sheldon Vamplew, 403-999-1302; Drilling Engineer, Mike Greener, 403-771-5039; WS Supervisor, Mike Hobmaier, 403-844-3210; Command Center, 587-794-4599; Rig Manager, Rick Yavis; WS Supervisor, Dave Forsberg, 780-361-8417

Last Casing String
Production, 1,856.00mKB

Time Log

Start Time	End Time	Dur (hrs)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Depth Start (mKB)	Depth End (mKB)	Operation
00:00	00:15	0.25	PROD2	DRILL	TRIP	P		1,856.00	1,856.00	Trip in the hole to 1838m
00:15	00:30	0.25	PROD2	DRILL	WASH	P		1,856.00	1,856.00	Wash to bottom from 1838m to 1856m
00:30	00:45	0.25	PROD2	RIGMNT	SVRG	P		1,856.00	1,856.00	Rig service function pipe rams 3 sec crown saver operating properly
00:45	02:45	2.00	PROD2	DRILL	CIRC	P		1,856.00	1,856.00	Circulate and work pipe @1855m/Rig up lay down truck from 1:45 to 3:00
02:45	03:00	0.25	PROD2	DRILL	SFTY	P		1,856.00	1,856.00	Safety meeting with Trottier pipe handlers reviewed jsa#157 lay down dp with lay down truck
03:00	06:30	3.50	PROD2	DRILL	PULD	P		1,856.00	1,856.00	Lay down drill pipe Flow check@1847m/1735m/
06:30	06:45	0.25	PROD2	DRILL	SFTY	P		1,856.00	1,856.00	Crew hand over meeting
06:45	07:00	0.25	PROD2	DRILL	SFTY	P		1,856.00	1,856.00	Safety meeting with laydown truck trottier pipe handlers reviewed JSA 157
07:00	08:00	1.00	PROD2	DRILL	PULD	P		1,856.00	1,856.00	Lay down drill pipe with trottier pipe handlers
08:00	08:45	0.75	PROD2	DRILL	PULD	P		1,856.00	1,856.00	Lay down drill pipe with trottier pipe handlers flow checks @ 908m,608m
08:45	09:00	0.25	PROD2	RIGMNT	SVRG	P		1,856.00	1,856.00	Rig service function test hydrill closed in 13 seconds function test motor kills
09:00	09:15	0.25	PROD2	DRILL	SFTY	P		1,856.00	1,856.00	B.O.P drill crew in positions well secure in 90 seconds
09:15	11:45	2.50	PROD2	DRILL	PULD	P		1,856.00	1,856.00	Break down kelly continue laying down drill pipe Flow checks Out of hole
11:45	13:30	1.75	PROD2	DRILL	PULD	P		1,856.00	1,856.00	Clean up floor and rig up tong hand
13:30	13:45	0.25	PROD2	CASING	SFTY	P		1,856.00	1,856.00	Saftey meeting with hallmark powertongs and trottier pipe handlers crew reveiwed JSA # 97 and # 95
13:45	16:00	2.25	PROD2	CASING	RNCS	P		1,856.00	1,856.00	Run 177.8mm casing- Ran 177.8mm 38.69kg/m P-110 casing as follows, Float shoe, 1 joint casing, Float Collar,146 joints casing, Total 1857.74m, Landed at
16:00	16:15	0.25	PROD2	CASING	SFTY	P		1,856.00	1,856.00	Safety meeting with Hallmark powertongs and Trottier Pipe Handlers
16:15	16:30	0.25	PROD2	RIGMNT	SVRG	P		1,856.00	1,856.00	Rig Service function test crown saver
16:30	16:45	0.25	PROD2	CASING	SFTY	P		1,856.00	1,856.00	B.O.P drill, well secure in 85 seconds
16:45	23:00	6.25	PROD2	CASING	RNCS	P		1,856.00	1,856.00	Ran 177.8mm 38.69kg/m P-110 casing as follows, Float shoe, 1 joint casing, Float Collar,146 joints casing, Total 1857.74m, Landed at 1856m
23:00	23:15	0.25	PROD2	CASING	SFTY	P		1,856.00	1,856.00	Crew hand over meeting
23:15	23:30	0.25	PROD2	CASING	SFTY	P		1,856.00	1,856.00	Rig out tong hand and laydown safety meeting
23:30	00:00	0.50	PROD2	CEMENT	CIRC	P		1,856.00	1,856.00	Circulate casing condition hole prior to cementing casing.

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00
Rig: Beaver Drilling Ltd. 2

Report Date: 2/19/2013
Report #: 37
Depth Progress: 0.00 m
Depth End: 1,856.00 mKB
Rig Release Date: 2/20/2013

Fluid / Mud Checks: Mud Engineer: <Mud Engineer?>

Time	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (cp)	YP Override (Pa)
07:00	1,856.00	950.0	77		14.0	4.0

Low Gravity Solids (%)	MBT (kg/m³)	Oil Water Ratio	Chlorides (mg/L)	Calcium (mg/L)	Lime (kg/m³)	Potassium (mg/L)
8.7		88/12	274,255	31,000	22	

Electric Stab (V)	ECD - Manual Entry (k...	Sand (%)	Solids, Corr. (%)	T (fl) (°C)	HTHP Pressure (kPa)	HTHP Filt (mL/30min)
709.0			8.7			6.0

API Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Cost
	1.00		833.70

Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost
57.40		92,827.30

Last BOP Drill

Type	Days Since Last ...	Last Date	Days Until Next ...	Next Check Date
BOP Drill (Pit)	7	2/12/2013	0	2/19/2013

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
376.00	

Safety Incidents

Date	Comment	Category

Drill Strings: 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)	Rotating Hook Load (maximum) (daN)

Depth In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hrs)	Total Drill Hrs (hrs)

Comment

Drill String Components

Item Description	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)

Drilling Parameters:

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)	Ann. dP (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Shoe to Top of Casing...	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m...

Error

Mud Pumps: 1, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
1	NATIONAL	8-P-80		216.0

Pump Checks

Date	Depth (mKB)	Q (m³/min)	Pres (kPa)	Strokes (spm)
2/19/2013 00:00	1,855.00		686	59
2/20/2013 00:00				115

Pump Operations

Start Date	End Date	Liner Size (mm)	P (max) (kPa)	Vol/Stk OR (m³/stk)
1/29/2013		140.0		

Mud Pumps: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80		216.0

Pump Checks

Date	Depth (mKB)	Q (m³/min)	Pres (kPa)	Strokes (spm)
2/10/2013 08:00	1,724.00	0.587	357	60
2/10/2013 18:00	1,747.00	1.232	5,300	126

Pump Operations

Start Date	End Date	Liner Size (mm)	P (max) (kPa)	Vol/Stk OR (m³/stk)
1/29/2013		140.0		
2/5/2013		140.0		

Shaker Screens

Description	Start Date	End Date	Scr Sz X	Scr Sz Y	Note
1	1/23/2013		84	84	
1	1/23/2013		84	84	
1	1/23/2013		84	84	
1	1/23/2013		84	84	

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00
Rig: Beaver Drilling Ltd. 2

Report Date: 2/19/2013
Report #: 37
Depth Progress: 0.00 m
Depth End: 1,856.00 mKB
Rig Release Date: 2/20/2013

Centrifuges/Cyclones:

Number	Make	Model	Diameter (mm)

Centrifuge/Cyclone Checks

Date	Hrs (hrs)	RPM (rpm)	Dens OF (kg/m³)	Q (ovrflw) (L/min)	Dens UF (kg/m³)	Q (undrflw) (L/min)

Fluid / Mud Additive Amounts

Description	Consumed	Cost	Size	Units
BARITE - 40KG	42.0	19.850	40.0	sks

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)
Quaternary System	5.00	5.00	5.00
Alberta Grp	31.00	31.00	28.00
Slater River	36.00	36.00	48.00
Artic Red	570.00	569.94	570.00
Sams Sault	787.00	786.89	787.00
Martin House	882.50	882.35	882.50
Imperial Shale	962.00	961.82	962.00
Upper Canol	1,643.00	1,642.61	962.00
Lower Canol	1,679.00	1,678.61	962.00
Hare Indian	1,788.00	1,787.59	962.00
Bluefish Member	1,796.00	1,795.59	962.00
Hume	1,804.00	1,803.59	962.00

ConocoPhillips Canada

Daily Drilling
COPRC LOON CREEK O-06 65-10 127-00
Rig: Beaver Drilling Ltd. 2

Report Date: 2/20/2013
Report #: 38
Depth Progress: 0.00 m
Depth End: 1,856.00 mKB
Rig Release Date: 2/20/2013

API / UWI	Surface Legal Location	MaxWell Job Number	License No.
300/O-06 6510 127000	O-6 65-10 127-00	JOB01@2006	470

Ground Elevation (m)	Original KB/RT Elevation (m)	Casing Flange Elevation (m)	Original Spud Date	Days From Spud (days)
252.40	257.60	252.73	1/26/2013	25.50

Job Category	Primary Job Type	Actual Start Date	End Date	Final Job Status	Final Report?
DRILLING	DRILLING ORIGINAL	1/3/2013 00:00	2/21/2013 00:00	DRILLED & CASE	Yes

Daily Cost Total	Cumulative Cost	Total Job AFE Amount	Total AFE+Sup	AFE / RFE / Maint.#	Estimated Days
530,022.00	8,282,233.33	10,990,100.00	10,990,100.00	10342919	35.34

Planned Depth (TMD) (mKB)	Override TVD (mKB)	Head Count	Personnel Total Hours (hrs)	Cum Personnel Total Hours (hrs)
1,873.00	1,856.00	40.0	442.00	16,448.00

Avg Connection Gas	Avg Background Gas	Avg Trip Gas	Max H2S (ppm)

Road Condition	Weather	Temperature (°C)	Wind
Fair	Cloudy	-34	Calm

Ops and Depth @ Morning Report
General rig tear out

Wellbore
Original Hole

Last 24hr Summary
No accidents or incidents 4 Hazard ID's: 2 Job obersvations :Circulate casing condition hole prior to cementing. Cement with Schlumberger, Lost returns with 10m3 left to displace, Bumped plug and pressure tested casing to 17.5MPA, Fluid level was visible in annulus after flushing BOP stack with 2.55m3 water, Estimated cement top 358m ,Set casing slips with 50dan tension, cut casing nipple down BOPs , clean tanks and general tear out

24hr Forecast
Tear out and move

Daily Contacts
Rig Manager, Rick Yavis; WS Supervisor, Dave Forsberg, 780-361-6417; WS Supervisor, Mike Hobmaier, 403-844-3210; Command Center, 587-794-4599; Drilling Superintend, Sheldon Vamplew, 403-999-1302; Drilling Engineer, Mike Greener, 403-771-5039

Last Casing String
Production, 1,856.00mKB

Time Log

Start Time	End Time	Dur (hrs)	Phase	Op Code	Activity Code	Time P-T-X	Trbl Code	Depth Start (mKB)	Depth End (mKB)	Operation
00:00	01:30	1.50	PROD2	DRILL	CIRC	P		1,856.00	1,856.00	Circulate casing condition hole prior to cementing production casing.
01:30	01:45	0.25	PROD2	CEMENT	SFTY	P		1,856.00	1,856.00	Safety meeting with Schlumberger
01:45	04:15	2.50	PROD2	CEMENT	CMNT	P		1,856.00	1,856.00	Cemented 177.8mm casing from surface to 1382m with 21.64 Tonne HiLite Lead cement (23.55m3)with1.2%FLAC B348,0.3%retarder and 0.2% antifoam @ 1400 KGM3, from 1382 to 1856m,12 Tonne Class"G" (9.12m3) with 0.4% fluid loss, 0.5%dispersant,0.2%antifoam and 0.3%r
04:15	07:45	3.50	PROD2	CEMENT	CMNT	P		1,856.00	1,856.00	Wait on cement
07:45	08:00	0.25	PROD2	MOVE	SFTY	P		1,856.00	1,856.00	Crew change safety meeting
08:00	08:15	0.25	DEMOB	RIGMNT	SVRG	P		1,856.00	1,856.00	Rig service function test crown saver
08:15	08:30	0.25	DEMOB	MOVE	SFTY	P		1,856.00	1,856.00	Safety meeting tear out b.o.p
08:30	12:00	3.50	DEMOB	WHDBOP	NUND	P		1,856.00	1,856.00	Nipple down b.o.p set slips with 50dan tension, cut casing and lay down b.o.p
12:00	16:00	4.00	DEMOB	MOVE	DMOB	P		1,856.00	1,856.00	Tear out rig, clean mud tanks
16:00	16:15	0.25	DEMOB	RIGMNT	SVRG	P		1,856.00	1,856.00	Rig Service
16:15	00:00	7.75	DEMOB	MOVE	DMOB	P		1,856.00	1,856.00	Tear out rig, clean mud tanks

Fluid / Mud Checks: Mud Engineer: <Mud Engineer?>

Time	Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (cp)	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 (fl) (°C)	HTHP Pressure (kPa)	HTHP Filt (mL/30min)

API Filtrate (mL/30min)	Mud Lost to Surface (m³)	Mud Lost to Hole (m³)	Daily Mud Cost

Cum Mud Lost to Surface (m³)	Cum Mud Lost to Hole (m³)	Cumulative Mud Cost
		92,827.30

Last BOP Drill

Type	Days Since Last ...	Last Date	Days Until Next ...	Next Check Date
BOP Drill (Pit)	8	2/12/2013	-1	2/19/2013

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
377.00	

Safety Incidents

Date	Comment	Category

ConocoPhillips Canada

Daily Drilling

COPRC LOON CREEK O-06 65-10 127-00

Rig: Beaver Drilling Ltd. 2

Report Date: 2/20/2013
Report #: 38
Depth Progress: 0.00 m
Depth End: 1,856.00 mKB
Rig Release Date: 2/20/2013

Drill Strings: 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)	Rotating Hook Load (maximum) (daN)

Depth In (mKB)	Depth Out (mKB)	Avg ROP (m/hr)	Depth This Job (m)	Total Depth Drilled b...	Job Drill Hrs (hrs)	Total Drill Hrs (hrs)

Comment

Drill String Components

Item Description	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)

Drilling Parameters:

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)	Ann. dP (kPa)	Mud Density (kg/m³)	ECD End (kg/m³)

Drill String Volume (m³)	Bit to Shoe Volume (m³)	Shoe to Top of Casing...	Min Casing AV (m/min)	Max Casing AV (m/min)	Min Open Hole AV (m/...	Max Open Hole AV (m...

Error

Mud Pumps: 1, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
1	NATIONAL	8-P-80		216.0

Pump Checks

Date	Depth (mKB)	Q (m³/min)	Pres (kPa)	Strokes (spm)
2/19/2013 00:00	1,855.00		686	5
2/20/2013 00:00				11

Pump Operations

Start Date	End Date	Liner Size (mm)	P (max) (kPa)	Vol/Stk OR (m³/stk)
1/29/2013		140.0		

Mud Pumps: 2, NATIONAL, 8-P-80

Pump Number	Make	Model	Rod Diameter (mm)	Stroke Length (mm)
2	NATIONAL	8-P-80		216.0

Pump Checks

Date	Depth (mKB)	Q (m³/min)	Pres (kPa)	Strokes (spm)
2/10/2013 08:00	1,724.00	0.587	357	6
2/10/2013 18:00	1,747.00	1.232	5,300	12

Pump Operations

Start Date	End Date	Liner Size (mm)	P (max) (kPa)	Vol/Stk OR (m³/stk)
1/29/2013		140.0		
2/5/2013		140.0		

Shaker Screens

Description	Start Date	End Date	Scr Sz X	Scr Sz Y	Note
1	1/23/2013		84	84	
1	1/23/2013		84	84	
1	1/23/2013		84	84	
1	1/23/2013		84	84	

Centrifuges/Cyclones:

Number	Make	Model	Diameter (mm)

Centrifuge/Cyclone Checks

Date	Hrs (hrs)	RPM (rpm)	Dens OF (kg/m³)	Q (ovrflw) (L/min)	Dens UF (kg/m³)	Q (undrflw) (L/min)

Fluid / Mud Additive Amounts

Description	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)
Quaternary System	5.00	5.00	5.0
Alberta Grp	31.00	31.00	28.0
Slater River	36.00	36.00	48.0
Artic Red	570.00	569.94	570.0
Sams Sault	787.00	786.89	787.0
Martin House	882.50	882.35	882.5

Formations

Formation Name	Drill Top MD (mKB)	Drill Top TVD (mKB)	Prog Top TVD (mKB)
Imperial Shale	962.00	961.82	962.00
Upper Canol	1,643.00	1,642.61	962.00
Lower Canol	1,679.00	1,678.61	962.00
Hare Indian	1,788.00	1,787.59	962.00
Bluefish Member	1,796.00	1,795.59	962.00
Hume	1,804.00	1,803.59	962.00

Well Header

COPRC LOON CREEK O-06 65-10 127-00

API / UWI	District	Field Name	KB-Grd (m)	License No.
300/O-06 6510 127000	NEW VENTURES	Loon	5.20	470

KB-Grd (m)	Orig KB/RT (m)	Well Configuration Type	Well Type
5.20	257.60	VERTICAL	Exploration

.LING ORIGINAL, 1/3/2013 00:00

_ / RFE / Maint.#	Estimated Days	Actual Start Date	End Date
10342919	35.34	1/3/2013	2/21/2013

Time Log

Start Time	End Time	Dur (hrs)	Phase	Op Code	Activity Code	Tl... P-...	Trbl Code	Trbl Class.	Depth Start (mKB)	Depth End (mKB)	Operation
00:00	00:00	24.00	MIRU	MOVE	MOB	P			0.00	0.00	Tear out and mobilize rig to Grande Prairie
00:00	00:00	24.00	MIRU	MOVE	MOB	P			0.00	0.00	Arctic HSE training for Beaver Drilling rig crews and service personal for Chinook project
00:00	00:00	24.00	MIRU	MOVE	MOB	P			0.00	0.00	Finish Arctic HSE training and cultural awareness for Beaver Drilling rig crews and service personal for Chinook project Start simulator well control session.
00:00	00:00	24.00	MIRU	MOVE	MOB	P			0.00	0.00	Finish simulator well control session.
00:00	00:00	24.00	MIRU	MOVE	MOB	P			0.00	0.00	Continue to build and prepare rig to mov on to Loon Creek O-06 65-10 127-00
00:00	00:00	24.00	MIRU	MOVE	MOB	P			0.00	0.00	Continue to build and prepare rig to mov on to Loon Creek O-06 65-10 127-00
00:00	00:00	24.00	MIRU	MOVE	MOB	P			0.00	0.00	Atempt to lay preheated rig liner, too col liner shattered due to -40 temp. Lay poly spot Matting and Sub. Pin derrick together.
00:00	00:00	24.00	MIRU	MOVE	MOB	P			0.00	0.00	Continue to set equipment and wait on loads.
00:00	00:00	24.00	MIRU	MOVE	MOB	P			0.00	0.00	Continue to spot third party equipment, general rig up to raise derrick and raise derrick, unload casing.
0	00:00	24.00	MIRU	MOVE	MOB	P			0.00	0.00	General rig up, fire boiler, rig up power cords, lights, steam lines and water lines
00:00	08:00	8.00	MIRU	MOVE	MOB	P			0.00	0.00	General rig to spud,Rig in Flare and Booey lines.(Bag damaged location liner
08:00	08:15	0.25	MIRU	MOVE	MOB	P			0.00	0.00	Rig service ,Function Crown saver
08:15	10:00	1.75	MIRU	MOVE	MOB	P			0.00	0.00	Continue general rig to spud.
10:00	10:15	0.25	MIRU	MOVE	MOB	P			0.00	0.00	Safety meeting with Welder prior to welding Diverter flange.
10:15	16:00	5.75	MIRU	MOVE	MOB	P			0.00	0.00	Cut and weld on Diverter Flange
16:00	16:15	0.25	MIRU	MOVE	MOB	P			0.00	0.00	Rig service ,Function Crown saver
16:15	19:00	2.75	MIRU	MOVE	MOB	P			0.00	0.00	Weld on diverter Flange. (Strap and caliper BHA
19:00	19:15	0.25	MIRU	MOVE	MOB	P			0.00	0.00	Crew hand over meeting.
19:15	00:00	4.75	MIRU	MOVE	MOB	P			0.00	0.00	Weld on diverter Flange and nipple up.
00:00	07:45	7.75	MIRU	WHDBOP	NUND	P			0.00	0.00	Nipple up diverter weld up flow T/rig up flare tank and clean rig
07:45	08:00	0.25	MIRU	MOVE	SFTY	P			0.00	0.00	crew change safety meeting
08:00	08:15	0.25	MIRU	RIGMNT	SVRG	P			0.00	0.00	Rig service function test crown saver
08:15	16:00	7.75	MIRU	MOVE	MOB	P			0.00	0.00	Rig up evaporator, get 5" pipe and x/o ready, & surface equipment
16:00	16:15	0.25	MIRU	RIGMNT	SVRG	P			0.00	0.00	Rig service
16:15	00:00	7.75	MIRU	MOVE	MOB	P			0.00	0.00	Rig up evaporator, get 5" pipe and x/o ready,weld pump sucktion line re-modify pop valve lines and bleed off lines on pump house with welder/put water in tanks circulate threw hopper
00:00	00:15	0.25	MIRU	RIGMNT	SVRG	P			0.00	0.00	Rig servise
[illegible]15	01:00	0.75	MIRU	MOVE	MOB	P			0.00	0.00	Weld pop valve lines
)	07:00	6.00	MIRU	MOVE	MOB	P			0.00	0.00	weld flow t and install
0	07:45	0.75	MIRU	MOVE	SFTY	P			0.00	0.00	CAODC rig inspection/Function tested motor kills operating properly
07:45	08:00	0.25	MIRU	MOVE	SFTY	P			0.00	0.00	Crew change safety meeting
08:00	08:15	0.25	MIRU	RIGMNT	SVRG	P			0.00	0.00	Rig service function test crown saver
08:15	09:45	1.50	MIRU	MOVE	RURD	P			0.00	0.00	Rig up to spud
09:45	10:00	0.25	MIRU	MOVE	SFTY	P			0.00	0.00	Diverter b.o.p drill

Well Header

COPRC LOON CREEK O-06 65-10 127-00

API / UWI	District	Field Name	KB-Grd (m)	License No.
300/O-06 6510 127000	NEW VENTURES	Loon	5.20	470

KB-Grd (m)	Orig KB/RT (m)	Well Configuration Type	Well Type
5.20	257.60	VERTICAL	Exploration

Time Log

Start Time	End Time	Dur (hrs)	Phase	Op Code	Activity Code	Ti... P-...	Trbl Code	Trbl Class.	Depth Start (mKB)	Depth End (mKB)	Operation
10:00	11:30	1.50	MIRU	MOVE	SFTY	P			0.00	0.00	Pre spud safety meeting with Consultant and Geologist
11:30	12:00	0.50	MIRU	MOVE	SFTY	P			0.00	0.00	Man down drill
12:00	15:30	3.50	SURFAC	DRILL	DRLG	P			0.00	70.00	Drill 311mm hole from 0m to 70m with Reed S11G bit and slick rotary assembly
15:30	16:00	0.50	SURFAC	DRILL	SRVY	P			70.00	70.00	Accumulated survey time
16:00	17:15	1.25	SURFAC	DRILL	CIRC	T	Hole Conditions	Shale	70.00	70.00	Work pipe & clean out mud ring @ 70 m
17:15	17:30	0.25	SURFAC	RIGMNT	SVRG	P			70.00	70.00	Rig service function test hydril 52 sec
17:30	19:00	1.50	SURFAC	DRILL	DRLG	P			70.00	89.00	Drill 311mm hole from 70m to 89m with Reed S11G bit and slick rotary assembly
19:00	19:15	0.25	SURFAC	DRILL	SFTY	P			89.00	89.00	Crew handover meeting
19:15	20:30	1.25	SURFAC	DRILL	DRLG	P			89.00	98.00	Drill 311mm hole from 89m to 98m with Reed S11G bit and slick rotary assembly
20:30	21:00	0.50	SURFAC	DRILL	SFTY	P			98.00	98.00	Man down drill and diverter drill crew in position well secure in 90 sec
21:00	23:00	2.00	SURFAC	DRILL	DRLG	P			98.00	126.00	Drill 311mm hole from 98m to 126m with Reed S11G Mill tooth bit and slick rotary assembly
23:00	23:30	0.50	SURFAC	DRILL	CIRC	T	Hole Conditions	Shale	126.00	126.00	Accumulated work tight hole time
)	00:00	0.50	SURFAC	DRILL	SRVY	P			126.00	126.00	Accumulated survey time
	01:00	1.00	SURFAC	DRILL	DRLG	P			126.00	135.00	Drill 311mm hole from 126m to 135m wit Reed S11G Mill tooth bit and slick rotary assembly
01:00	01:15	0.25	SURFAC	RIGMNT	SVRG	P			135.00	135.00	Rig service function test crown saver
01:15	07:30	6.25	SURFAC	DRILL	DRLG	P			135.00	211.00	Drill 311mm hole from 135m to211m witl Reed S11G Mill tooth bit and slick rotary assembly
07:30	07:45	0.25	SURFAC	DRILL	SFTY	P			211.00	211.00	Crew handover meeting
07:45	08:00	0.25	SURFAC	DRILL	SRVY	P			211.00	211.00	Accumulated survey time
08:00	08:15	0.25	SURFAC	RIGMNT	SVRG	P			211.00	211.00	RIG SERVICE function test crown saver & hydril 54 sec to close
08:15	13:45	5.50	SURFAC	DRILL	DRLG	P			211.00	279.00	Drill 311mm hole from 211m to 279 m wi Reed S11G Mill tooth bit and slick rotary assembly
13:45	14:30	0.75	SURFAC	DRILL	SRVY	P			279.00	279.00	Accumulated time for surveys
14:30	16:00	1.50	SURFAC	RIGMNT	RGRP	T	Rig	Shale Shaker	279.00	279.00	Work on shaker
16:00	16:15	0.25	SURFAC	RIGMNT	SVRG	P			279.00	279.00	Rig service function rest hydril 50 sec & crown saver
16:15	17:30	1.25	SURFAC	DRILL	DRLG	P			279.00	298.00	Drill 311mm hole from 279m to 298 m wi Reed S11G Mill tooth bit and slick rotary assembly
17:30	18:00	0.50	SURFAC	RIGMNT	RGRP	T	Rig	Pump	298.00	298.00	Tighten up belts on pump # two
18:00	19:30	1.50	SURFAC	DRILL	DRLG	P			298.00	317.00	Drill 311mm hole from 298m to317 m wit Reed S11G Mill tooth bit and slick rotary assembly
19:30	20:00	0.50	SURFAC	DRILL	SFTY	P			317.00	317.00	Crew handover meeting weekly meeting
20:00	23:30	3.50	SURFAC	DRILL	DRLG	P			317.00	370.00	Drill 311mm hole from 317m to 370m wit Reed S11G Mill tooth bit and slick rotary assembly
0	00:00	0.50	SURFAC	DRILL	SRVY	P			370.00	370.00	Accumulated wire line surveys
,0	00:15	0.25	SURFAC	DRILL	DRLG	P			370.00	375.00	Drill 311mm hole from 370M to 375m wit Reed S11G Mill tooth bit and slick rotary assembly
00:15	00:30	0.25	SURFAC	RIGMNT	SVRG	P			375.00	375.00	Rig service function hydrill 50 sec crown saver operating properly

Well Header

COPRC LOON CREEK O-06 65-10 127-00

API / UWI	District	Field Name	KB-Grd (m)	License No.
300/O-06 6510 127000	NEW VENTURES	Loon	5.20	470

KB-Grd (m)	Orig KB/RT (m)	Well Configuration Type	Well Type
5.20	257.60	VERTICAL	Exploration

Time Log

Start Time	End Time	Dur (hrs)	Phase	Op Code	Activity Code	Tl... P-...	Trbl Code	Trbl Class.	Depth Start (mKB)	Depth End (mKB)	Operation
00:30	05:15	4.75	SURFAC	DRILL	DRLG	P			375.00	427.00	Drill 311mm hole from 375M to 427m wit Reed S11G Mill tooth bit and slick rotary assembly
05:15	05:45	0.50	SURFAC	RIGMNT	SVRG	P			427.00	427.00	Clean out shaker
05:45	07:00	1.25	SURFAC	DRILL	DRLG	P			427.00	442.00	Drill 311mm hole from 427M to 442m wit Reed S11G Mill tooth bit and slick rotary assembly
07:00	07:15	0.25	SURFAC	DRILL	SFTY	P			442.00	442.00	Crew handover meeting
07:15	07:30	0.25	SURFAC	DRILL	DRLG	P			442.00	452.00	Drill 311mm hole from 442M to 452m wit Reed S11G Mill tooth bit and slick rotary assembly
07:30	08:00	0.50	SURFAC	DRILL	SRVY	P			452.00	452.00	Accumilated wireline survey
08:00	08:15	0.25	SURFAC	RIGMNT	SVRG	P			452.00	452.00	Rig service function hydril 53 sec & crov saver
08:15	10:30	2.25	SURFAC	DRILL	DRLG	P			452.00	471.00	Drill 311mm hole from 452m to 471m wit Reed S11G Mill tooth bit and slick rotary assembly
10:30	11:30	1.00	SURFAC	RIGMNT	RGRP	T	Rig	Other	471.00	471.00	Changed out break out line on drawwork
11:30	13:45	2.25	SURFAC	DRILL	DRLG	P			471.00	500.00	Drill 311mm hole from 471m to 500 m wi Reed S11G Mill tooth bit and slick rotary assembly
	14:00	0.25	SURFAC	RIGMNT	PSIT	P			500.00	500.00	Level rig
	15:30	1.50	SURFAC	DRILL	DRLG	P			500.00	519.00	Drill 311mm hole from 500m to 519 m wi Reed S11G Mill tooth bit and slick rotary assembly
15:30	16:00	0.50	SURFAC	DRILL	SRVY	P			519.00	519.00	Accumulated time for surveys
16:00	16:15	0.25	SURFAC	RIGMNT	SVRG	P			519.00	519.00	Rig service function test h.c.r 2 sec & crown saver
16:15	23:00	6.75	SURFAC	DRILL	DRLG	P			519.00	587.00	Drill 311mm hole from 519m to 587 m wi Reed S11G Mill tooth bit and slick rotary assembly
23:00	00:00	1.00	SURFAC	DRILL	CIRC	P			587.00	587.00	Circulate and clean well for wiper trip
00:00	00:15	0.25	SURFAC	RIGMNT	SVRG	P			587.00	587.00	Rig service function test annular and crown saver
00:15	03:15	3.00	SURFAC	DRILL	TRIP	P			587.00	587.00	Trip out of hole from 573 to 400m flow check@573m,503m
03:15	03:45	0.50	SURFAC	DRILL	REAM	P			587.00	587.00	Pick up kelly and ream mud ring @400m
03:45	04:15	0.50	SURFAC	DRILL	TRIP	P			587.00	587.00	Trip out of hole @ 400m to 350m
04:15	05:30	1.25	SURFAC	DRILL	REAM	P			587.00	587.00	Pick up kelly and ream mud ring @ 350n
05:30	07:45	2.25	SURFAC	DRILL	TRIP	P			587.00	587.00	Trip out of hole
07:45	08:00	0.25	SURFAC	DRILL	SFTY	P			587.00	587.00	Crew change safety meeting
08:00	09:30	1.50	SURFAC	DRILL	TRIP	P			587.00	587.00	Pull out of hole flow checks @ 218 m & out of hole
09:30	09:45	0.25	SURFAC	RIGMNT	SVRG	P			587.00	587.00	Rig service function test crown saver
09:45	11:15	1.50	SURFAC	DRILL	TRIP	P			587.00	587.00	Run in hole flow check @ 290 m
11:15	16:00	4.75	SURFAC	DRILL	REAM	P			587.00	587.00	Circ & condition & ream & clean from @ 290 m to 460 m
16:00	18:15	2.25	SURFAC	DRILL	REAM	P			587.00	587.00	Ream & clean from 460 m to 587 m
18:15	18:30	0.25	SURFAC	RIGMNT	SVRG	P			587.00	587.00	Rig service function test hydril 52 sec & crown saver
30	19:45	1.25	SURFAC	DRILL	DRLG	P			587.00	600.00	Drill 311mm hole from 587m to 600 m wi Reed S11G Mill tooth bit and slick rotary assembly
+5	22:00	2.25	SURFAC	DRILL	CIRC	P			600.00	600.00	Build volume raise viscosity circulate hol clean
22:00	00:00	2.00	SURFAC	DRILL	TRIP	P			600.00	600.00	Trip out of hole flow checks @ on bottor 571m 307m
00:00	02:00	2.00	SURFAC	DRILL	TRIP	P			600.00	600.00	Trip in hole flow checks @ 363m

Well Header

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KB-Grd (m)	Orig KB/RT (m)	Well Configuration Type	Well Type
5.20	257.60	VERTICAL	Exploration

Time Log

Start Time	End Time	Dur (hrs)	Phase	Op Code	Activity Code	Ti... P-...	Trbl Code	Trbl Class.	Depth Start (mKB)	Depth End (mKB)	Operation
02:00	02:15	0.25	SURFAC	RIGMNT	SVRG	P			600.00	600.00	Rig service function test hydrill closed in 53 sec
02:15	03:00	0.75	SURFAC	DRILL	CIRC	P			600.00	600.00	Circulate bottoms up
03:00	06:15	3.25	SURFAC	DRILL	TRIP	P			600.00	600.00	Trip out of hole flow checks @ 592.38m, 570.38m, 285.70m, 132.69m
06:15	06:30	0.25	SURFAC	DRILL	SFTY	P			600.00	600.00	Safety meeting prior to laying down 9"dc
06:30	07:45	1.25	SURFAC	DRILL	PULD	P			600.00	600.00	Lay down 9"dcs & bha
07:45	08:00	0.25	SURFAC	DRILL	SFTY	P			600.00	600.00	Crew change safety meeting
08:00	08:15	0.25	SURFAC	RIGMNT	SVRG	P			600.00	600.00	Rig service function test crown saver
08:15	08:30	0.25	SURFAC	DRILL	SFTY	P			600.00	600.00	Safety meeting
08:30	16:00	7.50	SURFAC	DRILL	ELOG	P			600.00	600.00	Rig to & log with schlumberger,ran Resistivity,Dual Density,Neutron,Total GR,Sonic and GPIT
16:00	18:00	2.00	SURFAC	DRILL	ELOG	P			600.00	600.00	Continue to log with schlumberger,ran Resistivity,Dual Density,Neutron,Total GR,Sonic and GPIT
18:00	18:15	0.25	SURFAC	RIGMNT	SVRG	P			600.00	600.00	Rig service function test crown saver
18:15	18:30	0.25	SURFAC	CASING	SFTY	P			600.00	600.00	Safety meeting rig to & run casing
18:30	00:00	5.50	SURFAC	CASING	RNCS	P			600.00	600.00	Rig in Power Tongs Make up 244.5mm Guide Shoe,Float Collar 1 jt. 244.5mmX 53.57kg/m J55 casing,1 244.5mm Float collar.
	00:15	0.25	SURFAC	RIGMNT	SVRG	P			600.00	600.00	Rig service function test crown saver
5	05:00	4.75	SURFAC	CASING	RNCS	P			600.00	600.00	Rig in Power Tongs Make up 244.5mm Guide Shoe,Float Collar 1 jt. 244.5mmX 53.57kg/m J55 casing,1 244.5mm Float collar Followed by 44jts 244.5mmX53.57kg/m J55 casing, 1 244.5mmX53.57kg/m J55 Landing joint,Total 598.78m. Set at 597m
05:00	07:45	2.75	SURFAC	CASING	CIRC	P			600.00	600.00	Rig up and circulate casing
07:45	08:00	0.25	SURFAC	CASING	SFTY	P			600.00	600.00	Crew handover meeting
08:00	08:15	0.25	SURFAC	RIGMNT	SVRG	P			600.00	600.00	Rig service function test crown saver
08:15	11:30	3.25	SURFAC	CASING	CIRC	P			600.00	600.00	Circ casing
11:30	11:45	0.25	SURFAC	CEMENT	SFTY	P			600.00	600.00	Safety meeting cementing
11:45	14:30	2.75	SURFAC	CEMENT	CMNT	P			600.00	600.00	Rig to & cement casing with schlumberg plug down @ 1430 hrs Cemented 244.5mm surface casing from 597m to 6 with 26.1m3 (28.0 Tonne) Thixotropic D804A-P + 2%CaCl2 +0.2% Antifoam, displaced with drilling mud,Plug bumped,Pressure tested casing to 11,
14:30	16:00	1.50	SURFAC	CEMENT	WOC	P			600.00	600.00	Wait on cement
16:00	18:30	2.50	SURFAC	CEMENT	WOC	P			600.00	600.00	Wait on cement
18:30	18:45	0.25	SURFAC	RIGMNT	SVRG	P			600.00	600.00	Rig service function test crown saver
18:45	23:30	4.75	SURFAC	WHDBOP	NUND	P			600.00	600.00	Nipple down diverter system spot BOP
23:30	00:00	0.50	SURFAC	WHDBOP	NUND	P			600.00	600.00	Install casing bowl and torque to 7000ft/l
00:00	00:15	0.25	SURFAC	RIGMNT	SVRG	P			600.00	600.00	Rig service
00:15	01:15	1.00	SURFAC	WHDBOP	NUND	P			600.00	600.00	Install casing bowl and torque to 7000ft/l
01:15	01:30	0.25	SURFAC	WHDBOP	SFTY	P			600.00	600.00	Safety meeting
[illegible]0	07:45	6.25	SURFAC	WHDBOP	NUND	P			600.00	600.00	Nipple up BOPs
	08:00	0.25	SURFAC	WHDBOP	SFTY	P			600.00	600.00	Crew change safety meeting
[illegible]	08:15	0.25	SURFAC	RIGMNT	SVRG	P			600.00	600.00	Rig servive
[illegible]5	16:00	7.75	SURFAC	WHDBOP	NUND	P			600.00	600.00	Nipple up b.o.p & make up & weld flow te & modified & install catch can & rig up flare lines NEB Representatives Rick Turner and Lori Croal inspected base camp and the drilling operation

Well Header

COPRC LOON CREEK O-06 65-10 127-00

API / UWI	District	Field Name	KB-Grd (m)	License No.
300/O-06 6510 127000	NEW VENTURES	Loon	5.20	470

KB-Grd (m)	Orig KB/RT (m)	Well Configuration Type	Well Type
5.20	257.60	VERTICAL	Exploration

Time Log

Start Time	End Time	Dur (hrs)	Phase	Op Code	Activity Code	Ti... P-...	Trbl Code	Trbl Class.	Depth Start (mKB)	Depth End (mKB)	Operation
16:00	16:15	0.25	SURFAC	RIGMNT	SVRG	P			600.00	600.00	Rig service
16:15	16:30	0.25	SURFAC	WHDBOP	SFTY	P			600.00	600.00	Safety meeting
16:30	00:00	7.50	SURFAC	WHDBOP	BOPE	P			600.00	600.00	Test BOPs with schlumberger as follows,Pressure test Annular 1400kpa lc and 17500kpa high 10 min. each,test Blind rams all Manifold valves,Kill line valves with Check valve and Choke line valves with HCR valve 1400kpa low and 20,000kpa high 10 min. each
00:00	07:45	7.75	SURFAC	WHDBOP	BOPE	P			600.00	600.00	Continue to pressure test with Schlumberg, pressure test Kelly Cock ,Stabbing Valve and in side BOP. 1400kpa low and 20,000kpa high 10 min each.
07:45	08:00	0.25	SURFAC	DRILL	SFTY	P			600.00	600.00	Crew change safety meeting
08:00	08:15	0.25	SURFAC	RIGMNT	SVRG	P			600.00	600.00	Rig service function test crown saver
08:15	08:30	0.25	SURFAC	DRILL	SFTY	P			600.00	600.00	Safety meeting function test motor kills
08:30	11:30	3.00	SURFAC	DRILL	PULD	P			600.00	600.00	Pick up & make up dir tools
11:30	15:15	3.75	SURFAC	DRILL	TRIP	P			600.00	600.00	Run in hole to 573m
15:15	16:00	0.75	SURFAC	DRILL	CIRC	P			600.00	600.00	Displace hole to inverte mud @ 573 m
16:00	16:45	0.75	SURFAC	DRILL	CIRC	P			600.00	600.00	Displace hole to inverte @ 573 m
5	17:00	0.25	SURFAC	RIGMNT	SVRG	P			600.00	600.00	Rig service function test pipe rams 3 sec & crown saver
0	19:30	2.50	SURFAC	WHDBOP	BOPE	P			600.00	600.00	Pressure test Pipe rams and upper Kelly cock 1400kpa low and 19500kpa high 1(min.each.Accumulater function test as follows Precharge pressure 7200kpa, Starting pressure 20,000kpa close Annular, open HCR and close Pipe rams end pressure of 10,500kpa ,Rec
19:30	21:30	2.00	SURFAC	DRILL	CIRC	P			600.00	600.00	Displace hole to invert
21:30	21:45	0.25	SURFAC	DRILL	SFTY	P			600.00	600.00	Man down drill
21:45	22:00	0.25	SURFAC	DRILL	SFTY	P			600.00	600.00	BOP drill well secure in 90 sec crew in positions
22:00	23:00	1.00	SURFAC	CEMENT	DRLG	P			600.00	600.00	Drill out cement and two floats one at 585m and 595m
23:00	00:00	1.00	INTRM1	DRILL	DRLG	P			600.00	605.00	Drill 222mm hole from 600m to 605m wit Reed MSR616M bit Schlumberger 7/8 5stage motor set at 1.15* and directional BHA with Gama, pumping 1.4m3/min
00:00	01:15	1.25	INTRM1	DRILL	DRLG	P			605.00	613.00	Drill 222mm hole from 605m to 613m wit Reed MSR616M bit Schlumberger 7/8 5stage motor set at 1.15* and directional BHA with Gama, pumping 1.4m3/min
01:15	01:30	0.25	INTRM1	RIGMNT	SVRG	P			613.00	613.00	Rig service function test annular 13sec t close test crown saver
01:30	02:00	0.50	INTRM1	DRILL	FIT	P			613.00	613.00	formation gradient test at 613m
02:00	07:45	5.75	INTRM1	DRILL	DRLG	P			613.00	691.00	Drill 222mm hole from 613m to 691m wit Reed MSR616M bit Schlumberger 7/8 5stage motor set at 1.15* and directional BHA with Gama, pumping 1.4m3/min
5	08:00	0.25	INTRM1	DRILL	SFTY	P			691.00	691.00	Crew handover meeting
0	08:15	0.25	INTRM1	DRILL	SFTY	P			691.00	691.00	Held BOP drill well secure in 85 sec
5	08:30	0.25	INTRM1	DRILL	SFTY	P			691.00	691.00	Man down drill
08:30	08:45	0.25	INTRM1	RIGMNT	SVRG	P			691.00	691.00	Rig service function test pipe rams 3 sec & crown saver

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COPRC LOON CREEK O-06 65-10 127-00

API / UWI	District	Field Name	KB-Grd (m)	License No.
300/O-06 6510 127000	NEW VENTURES	Loon	5.20	470

KB-Grd (m)	Orig KB/RT (m)	Well Configuration Type	Well Type
5.20	257.60	VERTICAL	Exploration

Time Log

Start Time	End Time	Dur (hrs)	Phase	Op Code	Activity Code	Ti... P-...	Trbl Code	Trbl Class.	Depth Start (mKB)	Depth End (mKB)	Operation
08:45	15:00	6.25	INTRM1	DRILL	DRLG	P			691.00	827.00	Drill 222mm hole from 691m to 827m wit Reed MSR616M bit Schlumberger 7/8 5stage motor set at 1.15* and directional BHA with Gamma, pumping 1.8m3/min
15:00	16:00	1.00	INTRM1	DRILL	SRVY	P			827.00	827.00	Accumulated time for surveys
16:00	16:15	0.25	INTRM1	RIGMNT	SVRG	P			827.00	827.00	Rig service function test hydril 14 sec & crown saver
16:15	23:00	6.75	INTRM1	DRILL	DRLG	P			827.00	958.00	Drill 222mm hole from 827m to 958m wit Reed MSR616M bit Schlumberger 7/8 5stage motor set at 1.15* and directional BHA with Gamma, pumping 1.8m3/min
23:00	00:00	1.00	INTRM1	DRILL	SRVY	P			958.00	958.00	Accumulated time for surveys
00:00	00:15	0.25	INTRM1	DRILL	DRLG	P			958.00	961.00	Drill 222mm hole from 958m to 961m wit Reed MSR616M bit Schlumberger 7/8 5stage motor set at 1.15* and directional BHA with Gamma, pumping 1.8m3/min
00:15	00:30	0.25	INTRM1	RIGMNT	SVRG	P			961.00	961.00	Rig service function test annular 13 sec t close function test crown saver
00:30	06:45	6.25	INTRM1	DRILL	DRLG	P			961.00	1,095.00	Drill 222mm hole from 961m to1095 m with Reed MSR616M bit Schlumberger 7/8 5stage motor set at 1.15* and directional BHA with Gamma, pumping 1.8m3/min
5	07:45	1.00	INTRM1	DRILL	SRVY	P			1,095.00	1,095.00	Accumulated time for surveys
07.45	08:00	0.25	INTRM1	DRILL	SFTY	P			1,095.00	1,095.00	Crew handover meeting
08:00	08:15	0.25	INTRM1	RIGMNT	SVRG	P			1,095.00	1,095.00	Rig Service function test pipe rams 3 sec & crown saver
08:15	15:00	6.75	INTRM1	DRILL	DRLG	P			1,095.00	1,191.00	Drill 222mm hole from 1095m to1191 m with Reed MSR616M bit Schlumberger 7/8 5stage motor set at 1.15* and directional BHA with Gamma, pumping 1.8m3/min
15:00	16:00	1.00	INTRM1	DRILL	SRVY	P			1,191.00	1,191.00	Accumulated time for surveys
16:00	16:15	0.25	INTRM1	RIGMNT	SVRG	P			1,191.00	1,191.00	Rig service function test hydril 14 sec
16:15	23:00	6.75	INTRM1	DRILL	DRLG	P			1,191.00	1,325.00	Drill 222mm hole from 1191m to1325m with Reed MSR616M bit Schlumberger 7/8 5stage motor set at 1.15* and directional BHA with Gamma, pumping 1.8m3/min
23:00	00:00	1.00	INTRM1	DRILL	SRVY	P			1,325.00	1,325.00	Accumulated time for surveys
00:00	00:15	0.25	INTRM1	DRILL	DRLG	P			1,325.00	1,335.00	Drill 222mm hole from 1325m to1335m with Reed MSR616M bit Schlumberger 7/8 5stage motor set at 1.15* and directional BHA with Gamma, pumping 1.8m3/min
00:15	00:30	0.25	INTRM1	RIGMNT	SVRG	P			1,335.00	1,335.00	Rig service function test pipe rams close in 4 sec function test crown saver
00:30	06:45	6.25	INTRM1	DRILL	DRLG	P			1,335.00	1,459.00	Drill 222mm hole from 1335m to 1459m with Reed MSR616M bit Schlumberger 7/8 5stage motor set at 1.15* and directional BHA with Gamma, pumping 1.8m3/min
5	07:45	1.00	INTRM1	DRILL	SRVY	P			1,459.00	1,459.00	Accumulated time for surveys
45	08:00	0.25	INTRM1	DRILL	SFTY	P			1,459.00	1,459.00	Crew handover meeting
08:00	08:15	0.25	INTRM1	RIGMNT	SVRG	P			1,459.00	1,459.00	Rig service function test hydril 14 sec & crown saver

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COPRC LOON CREEK O-06 65-10 127-00

API / UWI	District	Field Name	KB-Grd (m)	License No.
300/O-06 6510 127000	NEW VENTURES	Loon	5.20	470

KB-Grd (m)	Orig KB/RT (m)	Well Configuration Type	Well Type
5.20	257.60	VERTICAL	Exploration

Time Log

Start Time	End Time	Dur (hrs)	Phase	Op Code	Activity Code	Ti... P-...	Trbl Code	Trbl Class.	Depth Start (mKB)	Depth End (mKB)	Operation
08:15	15:00	6.75	INTRM1	DRILL	DRLG	P			1,459.00	1,616.00	Drill 222mm hole from 1459m to 1616mr with Reed MSR616M bit Schlumberger 7/8 5stage motor set at 1.15* and directional BHA with Gamma, pumping 1.8m3/min
15:00	15:45	0.75	INTRM1	DRILL	SRVY	P			1,616.00	1,616.00	Accumulated time for surveys
15:45	16:00	0.25	INTRM1	DRILL	SFTY	P			1,616.00	1,616.00	Crew hand over meeting
16:00	16:45	0.75	INTRM1	DRILL	DRLG	P			1,616.00	1,622.00	Drill 222mm hole from 1616m to 1622mr with Reed MSR616M bit Schlumberger 7/8 5stage motor set at 1.15* and directional BHA with Gamma, pumping 1.8m3/min
16:45	17:00	0.25	INTRM1	RIGMNT	SVRG	P			1,622.00	1,622.00	Rig service function pipe rams 3 sec crown saver operating properly
17:00	17:30	0.50	INTRM1	DRILL	CIRC	P			1,622.00	1,622.00	Circulate hole clean@1622m
17:30	00:00	6.50	INTRM1	DRILL	TRIP	P			1,622.00	1,622.00	Trip out of hole flow check@1610m/1534m/856m
00:00	01:15	1.25	INTRM1	DRILL	TRIP	P			1,622.00	1,622.00	Pull out of hole & strap out flow check o of hole
01:15	01:30	0.25	INTRM1	RIGMNT	SVRG	P			1,622.00	1,622.00	Rig service function Crown saver and Pipe rams Close 3sec.
	01:45	0.25	INTRM1	CORING	SFTY	P			1,622.00	1,622.00	Safety meeting Prior to laying down BHA
	04:00	2.25	INTRM1	DRILL	PULD	P			1,622.00	1,622.00	Lay down 10 h.w & 12 d.c
0	04:15	0.25	INTRM1	CORING	SFTY	P			1,622.00	1,622.00	Safety meeting prior to handling directional tools
04:15	06:15	2.00	INTRM1	DRILL	PULD	P			1,622.00	1,622.00	Handle directional tools & lay down tools
06:15	06:30	0.25	INTRM1	CORING	SFTY	P			1,622.00	1,622.00	Safety meeting prior to picking up NOV Core barrles
06:30	07:45	1.25	PROD1	CORING	PULD	P			1,622.00	1,622.00	Pick up NOV Coring tools
07:45	08:00	0.25	PROD1	CORING	SFTY	P			1,622.00	1,622.00	Crew change safety meeting
08:00	08:15	0.25	PROD1	RIGMNT	SVRG	P			1,622.00	1,622.00	Rig service function test blind rams & crown saver operating properly
08:15	15:15	7.00	PROD1	CORING	PULD	P			1,622.00	1,622.00	Make up core tools pick up 8 core collars
15:15	16:00	0.75	PROD1	CORING	TRIP	P			1,622.00	1,622.00	Trip in the hole with drill pipe
16:00	17:00	1.00	PROD1	CORING	TRIP	P			1,622.00	1,622.00	Trip in the hole with drill pipe fill pipe,flow check@607m
17:00	17:15	0.25	PROD1	CORING	SFTY	P			1,622.00	1,622.00	BOP drill while runing in the hole crew in position well secure in 90 sec with day lights crew
17:15	17:30	0.25	PROD1	CORING	SFTY	P			1,622.00	1,622.00	Man down drill with day lights crew reviewed lease search pattern
17:30	17:45	0.25	PROD1	RIGMNT	SVRG	P			1,622.00	1,622.00	Rig service function hydrill 13 sec crown saver operating properly,function test motor kills operating properly
17:45	19:15	1.50	PROD1	CORING	TRIP	P			1,622.00	1,622.00	Trip in the hole fill pipe flow check@ 973 m
19:15	19:30	0.25	PROD1	CORING	SFTY	P			1,622.00	1,622.00	Held BOP drill well secure in 85 sec
19:30	22:30	3.00	PROD1	CORING	TRIP	P			1,622.00	1,622.00	Run in hole & pick up 17 D.P
22:30	23:30	1.00	PROD1	CORING	CIRC	P			1,622.00	1,622.00	Circulate bottoms up clean hole prior to cutting core #1
0	23:45	0.25	PROD1	CORING	SFTY	P			1,622.00	1,622.00	Safety meeting with NOV prior to retreiving drill rod
5	00:00	0.25	PROD1	CORING	ELNE	P			1,622.00	1,622.00	Work on getting the hammer union on th diverter sub and the pack off union together. the sub is 4"figure 602 and the wing half on the pack off was 4" figure 200. Retrieving drill rod with schlumberg

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COPRC LOON CREEK O-06 65-10 127-00

API / UWI	District	Field Name	KB-Grd (m)	License No.
300/O-06 6510 127000	NEW VENTURES	Loon	5.20	470

KB-Grd (m)	Orig KB/RT (m)	Well Configuration Type	Well Type
5.20	257.60	VERTICAL	Exploration

Time Log

Start Time	End Time	Dur (hrs)	Phase	Op Code	Activity Code	Ti... P-...	Trbl Code	Trbl Class	Depth Start (mKB)	Depth End (mKB)	Operation
00:00	04:30	4.50	PROD1	CORING	RECR	P			1,622.00	1,622.00	Retrieving drill rod with schlumberger. Th over shot needs to have a centralizer pu on because there is room in the pipe for the overshot to go by the fish neck. This was fixed once it was out of the hole.
04:30	04:45	0.25	PROD1	RIGMNT	SVRG	P			1,622.00	1,622.00	Rig service function test hydril 14 sec & crown saver
04:45	05:45	1.00	PROD1	CORING	PULD	P			1,622.00	1,622.00	Handle & rig up inner core bbl
05:45	07:45	2.00	PROD1	CORING	CORE	P			1,622.00	1,631.00	Cut 89 mm core from 1622 m to 1631 m with national oilwell varco with bit # 1c nc PR513 pumping @ 1.2 m3 /min
07:45	08:00	0.25	PROD1	CORING	SFTY	P			1,631.00	1,631.00	Crew change safety meeting
08:00	10:30	2.50	PROD1	CORING	CORE	P			1,631.00	1,649.00	Cut 89 mm core #1 from 1631m to 1649 with national oilwell varco with bit # 1c nc PR513 pumping @ 1.2 m3 /min WOB 4.5,ROP 7M/HR 5000 KPA Pump pressure
10:30	11:30	1.00	PROD1	CORING	CIRC	P			1,649.00	1,649.00	Circulate bottoms up
11:30	11:45	0.25	PROD1	CORING	SFTY	P			1,649.00	1,649.00	Safety meeting with MI SWACO on inver reviewed MSDS and invert exsposure
11:45	12:00	0.25	PROD1	CORING	SFTY	P			1,649.00	1,649.00	Safety meeting with NOV core hands an Schlumberger wire line hands
	19:15	7.25	PROD1	CORING	RECR	P			1,649.00	1,649.00	Rig to and pull core #1 @1616m with wireline truck. Pull out core #1 with wireline truck
19:15	19:30	0.25	PROD1	RIGMNT	SVRG	P			1,649.00	1,649.00	Rig service function test crown saver
19:30	00:00	4.50	PROD1	CORING	RECR	P			1,649.00	1,649.00	Pull out core # 1 with schlumberger wire line
00:00	00:15	0.25	PROD1	RIGMNT	SVRG	P			1,649.00	1,649.00	Rig service function test hydril 14 sec & crown saver
00:15	00:30	0.25	PROD1	CORING	SFTY	P			1,649.00	1,649.00	Safety meeting recover core # 1
00:30	02:30	2.00	PROD1	CORING	RECR	P			1,649.00	1,649.00	recover core # 1 & lay down recover 27 core
02:30	03:15	0.75	PROD1	CORING	CIRC	P			1,649.00	1,649.00	Circulate bottoms up & flow check @ 1635 m
03:15	04:15	1.00	PROD1	CORING	RECR	P			1,649.00	1,649.00	Rig up inner core bbl & set drill rod
04:15	08:00	3.75	PROD1	CORING	CORE	P			1,649.00	1,676.00	Cut 89 mm core # 2 from 1649 m to 167 m (full 27m) with National Oilwell Varco with bit # 1c nov PR513 pumping @ 1.2 m3 /min ROP 10M/HR WOB 4dan
08:00	09:30	1.50	PROD1	CORING	CIRC	P			1,676.00	1,676.00	Circulate bottoms up clean hole prior to pulling core #2
09:30	09:45	0.25	PROD1	RIGMNT	SVRG	P			1,676.00	1,676.00	Rig service function pipe rams 3 sec crown saver operating properly
09:45	10:00	0.25	PROD1	CORING	TRIP	P			1,676.00	1,676.00	Pull 3 stds up to 1607M to recover core with Schlumberger wire line
10:00	10:15	0.25	PROD1	CORING	SFTY	P			1,676.00	1,676.00	Safety meeting with Schlumberger wire line and NOV core hands
10:15	19:15	9.00	PROD1	CORING	RECR	P			1,676.00	1,676.00	Rig to and recover core #2 with Schumberger wire line and NOV core hands. Pull core #2
	19:30	0.25	PROD1	RIGMNT	SVRG	P			1,676.00	1,676.00	Rig service function test hydril 14 sec & crown saver
0	19:45	0.25	PROD1	CORING	SFTY	P			1,676.00	1,676.00	Safety meeting on laying down core # 2
19:45	20:45	1.00	PROD1	CORING	RECR	P			1,676.00	1,676.00	recover core # 2 & lay down core # 2 we got full 27 meter recovery
20:45	21:00	0.25	PROD1	CORING	TRIP	P			1,676.00	1,676.00	Run in 3 stds d.p
21:00	21:45	0.75	PROD1	CORING	CIRC	P			1,676.00	1,676.00	Circulate bottoms up

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COPRC LOON CREEK O-06 65-10 127-00

API / UWI	District	Field Name	KB-Grd (m)	License No.
300/O-06 6510 127000	NEW VENTURES	Loon	5.20	470

KB-Grd (m)	Orig KB/RT (m)	Well Configuration Type	Well Type
5.20	257.60	VERTICAL	Exploration

Time Log

Start Time	End Time	Dur (hrs)	Phase	Op Code	Activity Code	Ti... P-...	Trbl Code	Trbl Class.	Depth Start (mKB)	Depth End (mKB)	Operation
21:45	23:00	1.25	PROD1	CORING	RECR	P			1,676.00	1,676.00	Rig up inner core bbl & set drill rod
23:00	00:00	1.00	PROD1	CORING	CORE	P			1,676.00	1,686.00	Cut 89 mm core # 3 from 1676 m to 168 m with National Oilwell Varco with bit # 1 nov PR513 pumping @ 1.2 m3 /min RO 10M/HR WOB 5dan
00:00	02:30	2.50	PROD1	CORING	CORE	P			1,686.00	1,703.00	Cut 89 mm core # 3 from 1686 m to 170 m (full 27 m) with National Oilwell Varc with bit # 1C NOV PR513 pumping @ 1. m3 /min ROP 10M/HR WOB 5 daN
02:30	03:30	1.00	PROD1	CORING	CIRC	P			1,703.00	1,703.00	Circulate and Condition well @ 1704m
03:30	03:45	0.25	PROD1	RIGMNT	SVRG	P			1,703.00	1,703.00	Rig service function test pipe rams 3 sec & crown saver
03:45	04:00	0.25	PROD1	CORING	TRIP	P			1,703.00	1,703.00	Flow check 10 min. and pull out 4 stands
04:00	04:15	0.25	PROD1	CORING	SFTY	P			1,703.00	1,703.00	Safety meeting wire line to pull out core 3
04:15	08:00	3.75	PROD1	CORING	RECR	P			1,703.00	1,703.00	Rig up schlumberger to retrieve core # 3 pull out core
08:00	08:15	0.25	PROD1	RIGMNT	SVRG	P			1,703.00	1,703.00	Rig service function test hcr
08:15	14:30	6.25	PROD1	CORING	RECR	P			1,703.00	1,703.00	Pull core #3 out of hole with schlumberg wire line and NOV core hands
14:30	14:45	0.25	PROD1	CORING	SFTY	P			1,703.00	1,703.00	Safety meeting with NOV core hands an Schlumberger wire line
5	16:00	1.25	PROD1	CORING	RECR	P			1,703.00	1,703.00	Rig out wire line and lay down core #3 recover full 27 meters
:00	16:30	0.50	PROD1	CORING	TRIP	P			1,703.00	1,703.00	Trip in the hole 3 STDS from 1616m to 1690m
16:30	17:15	0.75	PROD1	CORING	CIRC	P			1,703.00	1,703.00	Circulate and work string@1690m
17:15	17:30	0.25	PROD1	RIGMNT	SVRG	P			1,703.00	1,703.00	Rig service function hydrill 13 sec crown saver operating properly
17:30	18:30	1.00	PROD1	CORING	RECR	P			1,703.00	1,703.00	Make up core barrels for run #4 with NO core hands
18:30	18:45	0.25	PROD1	CORING	CIRC	P			1,703.00	1,703.00	Circulate and pump core barrels down
18:45	22:30	3.75	PROD1	CORING	CORE	P			1,703.00	1,730.00	Cut 89 mm core # 4 from 1703m to 1730 (full 27 m) with National Oilwell Varco with bit # 1C NOV PR513 pumping @ 1. m3 /min ROP 7.2M/HR WOB 5 daN
22:30	23:15	0.75	PROD1	CORING	CIRC	P			1,730.00	1,730.00	Circulate bottoms up
23:15	00:00	0.75	PROD1	CORING	TRIP	P			1,730.00	1,730.00	Flow check 1711 m 10 min and pull 5 stands
00:00	00:15	0.25	PROD1	RIGMNT	SVRG	P			1,730.00	1,730.00	Rig service function test pipe rams 3 sec & crown saver
00:15	00:30	0.25	PROD1	CORING	SFTY	P			1,730.00	1,730.00	Safety meeting with schlumberger & cor hand
00:30	10:45	10.25	PROD1	CORING	RECR	P			1,730.00	1,730.00	Rig up schlumberger wire line to retrieve core # 4 & pull out core. Pull core #4 wit Schlumberger wire line and NOV core hands
10:45	11:00	0.25	PROD1	CORING	SFTY	P			1,730.00	1,730.00	Safety meeting with Schlumberger wire line and NOV core hands reviewed NOV jsa#14 laying down express core
:00	12:45	1.75	PROD1	CORING	RECR	P			1,730.00	1,730.00	Lay down core #4 with NOV Core hands full 27m recovery
5	13:15	0.50	PROD1	CORING	TRIP	P			1,730.00	1,730.00	Trip in the hole 5 STDS 1616m to 1724m
5	14:30	1.25	PROD1	CORING	CIRC	P			1,730.00	1,730.00	Circulate and work string@1724m
14:30	14:45	0.25	PROD1	RIGMNT	SVRG	P			1,730.00	1,730.00	Rig service function hydrill 13 sec crown saver operating properly
14:45	15:45	1.00	PROD1	CORING	RECR	P			1,730.00	1,730.00	Make up core barrels for run #5

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COPRC LOON CREEK O-06 65-10 127-00

API / UWI	District	Field Name	KB-Grd (m)	License No.
300/O-06 6510 127000	NEW VENTURES	Loon	5.20	470

KB-Grd (m)	Orig KB/RT (m)	Well Configuration Type	Well Type
5.20	257.60	VERTICAL	Exploration

Time Log

Start Time	End Time	Dur (hrs)	Phase	Op Code	Activity Code	Ti... P-...	Trbl Code	Trbl Class.	Depth Start (mKB)	Depth End (mKB)	Operation
15:45	16:00	0.25	PROD1	CORING	CIRC	P			1,730.00	1,730.00	Circulate and pump down core barrels @.80m3/min
16:00	18:30	2.50	PROD1	CORING	CORE	P			1,730.00	1,757.00	Cut 89mm core #5 from 1730m to 1757n 27 meters with National Oilwell Varco wit bit #1C PR513 pumping @ 1.2m3/min rop 10m/hr wob 5 daN
18:30	19:00	0.50	PROD1	CORING	SFTY	P			1,757.00	1,757.00	Safety Stand Down with day crew ,Guy Goodine,Brian Krausert,Jeff Mccuaig
19:00	20:00	1.00	PROD1	CORING	CIRC	P			1,757.00	1,757.00	Circulate & condition
20:00	20:30	0.50	PROD1	CORING	SFTY	P			1,757.00	1,757.00	Safety Stand Down with night crew,Guy Goodine,Brian Krausert,Jeff Mccuaig
20:30	20:45	0.25	PROD1	RIGMNT	SVRG	P			1,757.00	1,757.00	Rig service function test pipe rams 3 sec & crown saver
20:45	21:00	0.25	PROD1	CORING	TRIP	P			1,757.00	1,757.00	Pull out 4 stds d.p
21:00	21:15	0.25	PROD1	CORING	SFTY	P			1,757.00	1,757.00	Safety meeting with schlumberger & core hand
21:15	00:00	2.75	PROD1	CORING	RECR	P			1,757.00	1,757.00	Rig up schlumberger wire line to retrieve core # 5
00:00	00:15	0.25	PROD1	RIGMNT	SVRG	P			1,757.00	1,757.00	Rig service f.t crown saver
00:15	07:45	7.50	PROD1	CORING	RECR	P			1,757.00	1,757.00	Rig up schlumberger wire line to retrieve core # 5
5	08:00	0.25	PROD1	CORING	SFTY	P			1,757.00	1,757.00	Crew change safety meeting/safety with NOV core hands
0	09:00	1.00	PROD1	CORING	RECR	P			1,757.00	1,757.00	Laydown core #5 with NOV core hands and Schlumberger wire line recover 27m
09:00	09:45	0.75	PROD1	CORING	TRIP	P			1,757.00	1,757.00	Trip in the hole from 1664m to 1753m
09:45	10:45	1.00	PROD1	CORING	CIRC	P			1,757.00	1,757.00	Circulate and work string @1753m
10:45	11:00	0.25	PROD1	RIGMNT	SVRG	P			1,757.00	1,757.00	Rig service function pipe rams 3sec crov saver operating properly
11:00	12:00	1.00	PROD1	CORING	RECR	P			1,757.00	1,757.00	Make up core barrels for run #6 with NO core hands
12:00	12:15	0.25	PROD1	CORING	CIRC	P			1,757.00	1,757.00	Circulate and pump down core barrels pumping @.80m3/min
12:15	15:45	3.50	PROD1	CORING	CORE	P			1,757.00	1,784.00	Cut 89mm core #6 from 1757m to 1784n 27m with National Oilwell Varco with bit #1C PR513 pumping @ 1.2m3/min rop 7.7m/hr wob 5 daN
15:45	16:00	0.25	PROD1	CORING	CIRC	P			1,784.00	1,784.00	Circulate bottoms up to retrieve core #6
16:00	16:30	0.50	PROD1	CORING	CIRC	P			1,784.00	1,784.00	Circulate hole clean to retrieve core #6
16:30	16:45	0.25	PROD1	CORING	SFTY	P			1,784.00	1,784.00	Safety meeting with NOV core hands an Schlumberger wire line
16:45	17:00	0.25	PROD1	CORING	TRIP	P			1,784.00	1,784.00	Pull 4 STDS up to
17:00	00:00	7.00	PROD1	CORING	RECR	P			1,784.00	1,784.00	Rig in Schlumberger wire line to retrieve core #6
00:00	00:15	0.25	PROD1	RIGMNT	SVRG	P			1,784.00	1,784.00	Rig service function test crown saver
00:15	05:00	4.75	PROD1	CORING	RECR	P			1,784.00	1,784.00	Retrieve core # 6 with schlumberger wire line
05:00	05:15	0.25	PROD1	CORING	SFTY	P			1,784.00	1,784.00	Safety meeting with core hand laying down core # 6
05:15	06:15	1.00	PROD1	CORING	RECR	P			1,784.00	1,784.00	Lay down core # 6 with nov core hand, recover 27m & make up inner core bbl
5	06:45	0.50	PROD1	CORING	TRIP	P			1,784.00	1,784.00	Run in 4 stds d.p
5	07:45	1.00	PROD1	CORING	CIRC	P			1,784.00	1,784.00	Circulate & condition hole/pump core barrels down to do run #7
07:45	08:00	0.25	PROD1	CORING	SFTY	P			1,784.00	1,784.00	Crew hand meeting
08:00	08:15	0.25	PROD1	RIGMNT	SVRG	P			1,784.00	1,784.00	Rig service function hydrill 13 sec crown saver operating ok

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COPRC LOON CREEK O-06 65-10 127-00

API / UWI	District	Field Name	KB-Grd (m)	License No.
300/O-06 6510 127000	NEW VENTURES	Loon	5.20	470

KB-Grd (m)	Orig KB/RT (m)	Well Configuration Type	Well Type
5.20	257.60	VERTICAL	Exploration

Time Log

Start Time	End Time	Dur (hrs)	Phase	Op Code	Activity Code	Tl... P-...	Trbl Code	Trbl Class.	Depth Start (mKB)	Depth End (mKB)	Operation
08:15	11:45	3.50	PROD1	CORING	CORE	P			1,784.00	1,811.00	Cut 89mm core #7 from 1784m to 1811n 27m with National Oilwell Varco with bit #1C PR513 pumping @ 1.2m3/min rop 7.7m/hr wob 5 daN
11:45	12:45	1.00	PROD1	CORING	CIRC	P			1,811.00	1,811.00	Circulate bottoms up to retreve core #7
12:45	13:00	0.25	PROD1	CORING	SFTY	P			1,811.00	1,811.00	BOP drill crew in position well secure in 90 sec
13:00	13:15	0.25	PROD1	CORING	SFTY	P			1,811.00	1,811.00	Safety meeting with NOV core hands an schlumberger wire line
13:15	13:30	0.25	PROD1	CORING	TRIP	P			1,811.00	1,811.00	Pull 4 stds of drill pipe up to to retreve core #7
13:30	16:00	2.50	PROD1	CORING	RECR	P			1,811.00	1,811.00	Rig to and retreve core #7 with NOV cor hands and Sclumberger wire line
16:00	16:30	0.50	PROD1	CORING	RECR	P			1,811.00	1,811.00	Rig to and retreve core #7 with NOV cor hands and Sclumberger wire line
16:30	16:45	0.25	PROD1	RIGMNT	SVRG	P			1,811.00	1,811.00	Rig service function test motor kills
16:45	17:00	0.25	PROD1	CORING	SFTY	P			1,811.00	1,811.00	B.O.P drill go through crew positions
17:00	00:00	7.00	PROD1	CORING	RECR	P			1,811.00	1,811.00	Rig to and retreve core #7 with NOV cor hands and Sclumberger wire line
00:00	01:00	1.00	PROD1	CORING	RECR	P			1,811.00	1,811.00	Pull core #7 with NOV core hands and Schlumberger wire line
`0	01:15	0.25	PROD1	CORING	SFTY	P			1,811.00	1,811.00	Safety meeting with NOV core hands an Schlumberger wire line
5	02:30	1.25	PROD1	CORING	RECR	P			1,811.00	1,811.00	Lay down core #7 with NOV core hands full 27 m recovery
02:30	02:45	0.25	PROD1	CORING	TRIP	P			1,811.00	1,811.00	Trip in the hole 4 stds to 1800m
02:45	03:30	0.75	PROD1	CORING	CIRC	P			1,811.00	1,811.00	Circulate and work string @1810m
03:30	03:45	0.25	PROD1	RIGMNT	SVRG	P			1,811.00	1,811.00	Rig service function pipe rams 3 sec crown saver operating properly
03:45	04:15	0.50	PROD1	CORING	RECR	P			1,811.00	1,811.00	Make up core barrels for run #8 with NO core hands
04:15	04:30	0.25	PROD1	CORING	CIRC	P			1,811.00	1,811.00	Circulate and pump core barrels down pumping@ .80 m3/min
04:30	07:45	3.25	PROD1	CORING	CORE	P			1,811.00	1,824.00	Cut 89mm core #8 from 1811m to 1824n with National Oilwell Varco with bit #1C PR513 pumping @ 1.2m3/min rop 4.5m/hr wob 5 daN
07:45	08:00	0.25	PROD1	CORING	SFTY	P			1,824.00	1,824.00	Crew change safety meeting
08:00	09:30	1.50	PROD1	CORING	CORE	P			1,824.00	1,830.00	Cut 89mm core #8 from 1824m to 1830n with National Oilwell Varco with bit #1C PR513 pumping @ 1.2m3/min rop 4.5m/hr wob 5 daN
09:30	10:30	1.00	PROD1	CORING	REAM	P			1,830.00	1,830.00	Ream core from 1824m to 1830m
10:30	12:30	2.00	PROD1	CORING	CORE	P			1,830.00	1,838.00	Cut 89mm core #8 from 1830m to 1838n with National Oilwell Varco with bit #1C PR513 pumping @ 1.2m3/min rop 4.5m/hr wob 5 daN
12:30	12:45	0.25	PROD1	RIGMNT	SVRG	P			1,838.00	1,838.00	Rig service function test annular 13 seconds to close function test crown sav
12:45	14:00	1.25	PROD1	CORING	CIRC	P			1,838.00	1,838.00	Circulate and work string at 1838m
:00	14:45	0.75	PROD1	CORING	TRIP	P			1,838.00	1,838.00	Pull out 5 stds of drill pipe
45	16:00	1.25	PROD1	CORING	RECR	P			1,838.00	1,838.00	Rig up to recover core #8 with nov core hands and schlumberger wireline
)0	16:30	0.50	PROD1	CORING	RECR	P			1,838.00	1,838.00	Rig up to recover core #8 with nov core hands and schlumberger wireline
16:30	16:45	0.25	PROD1	RIGMNT	SVRG	P			1,838.00	1,838.00	Rig service function test pipe rams close in 3 sec function test crown saver

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COPRC LOON CREEK O-06 65-10 127-00

API / UWI	District	Field Name	KB-Grd (m)	License No.
300/O-06 6510 127000	NEW VENTURES	Loon	5.20	470

KB-Grd (m)	Orig KB/RT (m)	Well Configuration Type	Well Type
5.20	257.60	VERTICAL	Exploration

Time Log

Start Time	End Time	Dur (hrs)	Phase	Op Code	Activity Code	Ti.. P-...	Trbl Code	Trbl Class.	Depth Start (mKB)	Depth End (mKB)	Operation
16:45	20:15	3.50	PROD1	CORING	RECR	P			1,838.00	1,838.00	Rig up to recover core #8 with nov core hands and schlumberger wireline
20:15	20:30	0.25	PROD1	CORING	SFTY	P			1,838.00	1,838.00	Safety meeting with NOV core hands an Schlumberger wireline
20:30	21:30	1.00	PROD1	CORING	RECR	P			1,838.00	1,838.00	Lay down core #8 with NOV core hands full 27m recovery
21:30	22:00	0.50	PROD1	CORING	TRIP	P			1,838.00	1,838.00	Trip drill pipe in the hole to 1815m
22:00	23:30	1.50	PROD1	CORING	CIRC	P			1,838.00	1,838.00	Wash to bottom to 1838m circulate out t gas and work string
23:30	00:00	0.50	PROD1	CORING	RECR	P			1,838.00	1,838.00	Make up core barrels for run #9
00:00	00:15	0.25	PROD1	RIGMNT	SVRG	P			1,838.00	1,838.00	Rig service function pipe rams 3 sec crown saver operating properly
00:15	00:30	0.25	PROD1	CORING	CIRC	P			1,838.00	1,838.00	Circulate and pump core barrels down@ .80m3/min
00:30	02:30	2.00	PROD1	CORING	CORE	P			1,838.00	1,847.00	Cut 89mm core #9 from 1838m to 1847n with National Oilwell Varco with bit #1C PR513 pumping @ 1.2m3/min rop 4.5m/hr wob 7 daN
02:30	04:15	1.75	PROD1	CORING	CIRC	P			1,847.00	1,847.00	Work tight hole @1842m and circulate
04:15	06:45	2.50	PROD1	CORING	CORE	P			1,847.00	1,856.00	Cut 89mm core #9 from 1847m to1856m with National Oilwell Varco with bit #1C PR513 pumping @ 1.2m3/min rop 4.5m/hr wob 7 daN
5	07:45	1.00	PROD1	CORING	CIRC	P			1,856.00	1,856.00	Circulate bottoms up
07:45	08:00	0.25	PROD1	CORING	SFTY	P			1,856.00	1,856.00	Crew change safety meeting
08:00	08:45	0.75	PROD1	CORING	TRIP	P			1,856.00	1,856.00	Trip out five stds
08:45	09:15	0.50	PROD1	CORING	RECR	P			1,856.00	1,856.00	rig up to retrieve core #9 with nov core hands and schlumberger wireline
09:15	09:30	0.25	PROD1	RIGMNT	SVRG	P			1,856.00	1,856.00	Rig service function test hydrill 13 seconds to close function test crown sav
09:30	15:00	5.50	PROD1	CORING	RECR	P			1,856.00	1,856.00	rig up to retrieve core #9 with nov core hands and schlumberger wireline
15:00	15:15	0.25	PROD1	CORING	SFTY	P			1,856.00	1,856.00	Safety meeting with nov on laying down cores
15:15	16:00	0.75	PROD1	CORING	RECR	P			1,856.00	1,856.00	Lay down cores #9 with nov core hands
16:00	16:15	0.25	PROD2	EVALFM	CIRC	P			1,856.00	1,856.00	Circulate
16:15	16:30	0.25	PROD2	EVALFM	SFTY	P			1,856.00	1,856.00	Safety meeting on running nov drill rods
16:30	16:45	0.25	PROD2	RIGMNT	SVRG	P			1,856.00	1,856.00	Rig service function test pipe rams function test crown saver
16:45	20:15	3.50	PROD2	EVALFM	RECR	P			1,856.00	1,856.00	Run down nov drill rods with nov core hands and sclumberger/pull wire line
20:15	20:30	0.25	PROD2	EVALFM	CIRC	P			1,856.00	1,856.00	Circulate and pump pill
20:30	00:00	3.50	PROD2	EVALFM	WPRT	P			1,856.00	1,856.00	Wiper trip out of hole up to 600m flow check@1741m/1647m/1080m/609m
00:00	00:15	0.25	PROD2	RIGMNT	SVRG	P			1,856.00	1,856.00	Rig service function hydrill 13 sec crown saver operating properly
00:15	01:00	0.75	PROD2	RIGMNT	SLPC	P			1,856.00	1,856.00	Slip and cut drill line @9377MJ Cut 16r
01:00	05:00	4.00	PROD2	EVALFM	WPRT	P			1,856.00	1,856.00	Trip in the hole to 1836m fill pipe flow check@1203m
05:00	07:00	2.00	PROD2	EVALFM	CIRC	P			1,856.00	1,856.00	Wash to bottom from 1836m to 1856m Circulate bottoms up work pipe
0	07:15	0.25	PROD2	EVALFM	SFTY	P			1,856.00	1,856.00	Crew change safety meeting
5	08:00	0.75	PROD2	EVALFM	TRIP	P			1,856.00	1,856.00	Trip out of hole flow check@1845
00	08:15	0.25	PROD2	RIGMNT	SVRG	P			1,856.00	1,856.00	Rig service function test annular 13 seconds to close function test crown sav
08:15	13:30	5.25	PROD2	EVALFM	TRIP	P			1,856.00	1,856.00	Trip out of hole to lay down core tools an log flow checks @ 1749m 955m 578m 113m ooh

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COPRC LOON CREEK O-06 65-10 127-00

API / UWI	District	Field Name	KB-Grd (m)	License No.
300/O-06 6510 127000	NEW VENTURES	Loon	5.20	470

KB-Grd (m)	Orig KB/RT (m)	Well Configuration Type	Well Type
5.20	257.60	VERTICAL	Exploration

Time Log

Start Time	End Time	Dur (hrs)	Phase	Op Code	Activity Code	Ti... P-...	Trbl Code	Trbl Class.	Depth Start (mKB)	Depth End (mKB)	Operation
13:30	15:00	1.50	PROD2	EVALFM	PULD	P			1,856.00	1,856.00	Lay down drill collars and core tools with nov core hands break bit function test blind rams
15:00	15:45	0.75	PROD2	EVALFM	ELOG	P			1,856.00	1,856.00	Clean floor get logging tools ready to go
15:45	16:00	0.25	PROD2	EVALFM	ELOG	P			1,856.00	1,856.00	Safety meeting with schlumberger wire line
16:00	00:00	8.00	PROD2	EVALFM	ELOG	P			1,856.00	1,856.00	Run log number #1 with schlumberger Tl 1858.15m Time on bottom 18:00 hrs toc ran AIT,NEXT,TLD,HGNS,TLD2
00:00	00:15	0.25	PROD2	RIGMNT	SVRG	P			1,856.00	1,856.00	Rig service function blind rams 3 sec
00:15	07:45	7.50	PROD2	EVALFM	ELOG	P			1,856.00	1,856.00	Logging with Sclumberger run #2 tools ra UBI,OBMI,OBMI2,PPC,MSIP,GPIT
07:45	08:00	0.25	PROD2	EVALFM	SFTY	P			1,856.00	1,856.00	Crew change safety meeting
08:00	08:15	0.25	PROD2	EVALFM	ELOG	P			1,856.00	1,856.00	Logging with Sclumberger run #2 tools ra UBI,OBMI,OBMI2,PPC,MSIP,GPIT
08:15	08:30	0.25	PROD2	RIGMNT	SVRG	P			1,856.00	1,856.00	Rig service function test H.C.R
08:30	16:00	7.50	PROD2	EVALFM	ELOG	P			1,856.00	1,856.00	Logging with Sclumberger run #2 tools ra UBI,OBMI,OBMI2,PPC,MSIP,GPIT
16:00	16:15	0.25	PROD2	RIGMNT	SVRG	P			1,856.00	1,856.00	Rig service
16:15	22:30	6.25	PROD2	EVALFM	ELOG	P			1,856.00	1,856.00	Logging with Sclumberger run #2 tools ra UBI,OBMI,OBMI2,PPC,MSIP,GPIT
	00:00	1.50	PROD2	EVALFM	ELOG	P			1,856.00	1,856.00	Logging with Sclumberger run #3 tools ra ADT,HNGS,CMR,(NRTA)
0	00:15	0.25	PROD2	RIGMNT	SVRG	P			1,856.00	1,856.00	Rig service
00:15	07:45	7.50	PROD2	EVALFM	ELOG	P			1,856.00	1,856.00	Run #3 with schlumberger Tools ADT HNGS CMR (NTR)
07:45	08:00	0.25	PROD2	EVALFM	SFTY	P			1,856.00	1,856.00	Crew change safety meeting
08:00	08:30	0.50	PROD2	EVALFM	ELOG	P			1,856.00	1,856.00	Run #3 with schlumberger Tools ADT HNGS CMR (NTR)
08:30	08:45	0.25	PROD2	RIGMNT	SVRG	P			1,856.00	1,856.00	Rig service function test blind rams 3 seconds to close
08:45	16:00	7.25	PROD2	EVALFM	ELOG	P			1,856.00	1,856.00	Wire line with schlumberger Run # 4 tool RST
16:00	16:15	0.25	PROD2	EVALFM	ELOG	P			1,856.00	1,856.00	Wire line with schlumberger Run # 4 tool RST
16:15	16:30	0.25	PROD2	RIGMNT	SVRG	P			1,856.00	1,856.00	Rig service function test H.C.R
16:30	00:00	7.50	PROD2	EVALFM	ELOG	P			1,856.00	1,856.00	Wire line with schlumberger Run # 4 tool RST
00:00	00:15	0.25	PROD2	RIGMNT	SVRG	P			1,856.00	1,856.00	Rig service
00:15	07:45	7.50	PROD2	EVALFM	ELOG	P			1,856.00	1,856.00	Wire line logs with Schlumberger run#4 tools ran RST
07:45	08:00	0.25	PROD2	EVALFM	SFTY	P			1,856.00	1,856.00	Crew change safety meeting
08:00	08:30	0.50	PROD2	EVALFM	ELOG	P			1,856.00	1,856.00	Wire line logs with Schlumberger run#4 tools ran RST
08:30	08:45	0.25	PROD2	RIGMNT	SVRG	P			1,856.00	1,856.00	Rig service function test H.C.R
08:45	13:30	4.75	PROD2	EVALFM	ELOG	P			1,856.00	1,856.00	Wire line logs with Schlumberger run#4 tools ran RST
13:30	13:45	0.25	PROD2	RIGMNT	SVRG	P			1,856.00	1,856.00	Function test blind rams loggers out of hole
13:45	16:00	2.25	PROD2	EVALFM	ELOG	P			1,856.00	1,856.00	Wire line logs with schlumberger run#5 tools ran USIT-CBL
[redacted]0	16:30	0.50	PROD2	EVALFM	ELOG	P			1,856.00	1,856.00	Wire line logs with schlumberger run#5 tools ran USIT-CBL
30	16:45	0.25	PROD2	EVALFM	SVRG	P			1,856.00	1,856.00	Rig service function test H.C.R
16:45	17:45	1.00	PROD2	DRILL	ELOG	P			1,856.00	1,856.00	Rig out schlumbger wire line
17:45	23:00	5.25	PROD2	DRILL	TRIP	P			1,856.00	1,856.00	Make up bit and run in hole fill to1618m pipe flow check@619m/1213m/1618m
23:00	23:15	0.25	PROD2	DRILL	CIRC	P			1,856.00	1,856.00	Circulate

Well Header

COPRC LOON CREEK O-06 65-10 127-00

API / UWI	District	Field Name	KB-Grd (m)	License No.
300/O-06 6510 127000	NEW VENTURES	Loon	5.20	470

KB-Grd (m)	Orig KB/RT (m)	Well Configuration Type	Well Type
5.20	257.60	VERTICAL	Exploration

Time Log

Start Time	End Time	Dur (hrs)	Phase	Op Code	Activity Code	Ti... P-...	Trbl Code	Trbl Class.	Depth Start (mKB)	Depth End (mKB)	Operation
23:15	00:00	0.75	PROD2	DRILL	TRIP	P			1,856.00	1,856.00	Trip in the hole from 1618m to 1838m
00:00	00:15	0.25	PROD2	DRILL	TRIP	P			1,856.00	1,856.00	Trip in the hole to 1838m
00:15	00:30	0.25	PROD2	DRILL	WASH	P			1,856.00	1,856.00	Wash to bottom from 1838m to 1856m
00:30	00:45	0.25	PROD2	RIGMNT	SVRG	P			1,856.00	1,856.00	Rig service function pipe rams 3 sec crown saver operating properly
00:45	02:45	2.00	PROD2	DRILL	CIRC	P			1,856.00	1,856.00	Circulate and work pipe @1855m/Rig up lay down truck from 1:45 to 3:00
02:45	03:00	0.25	PROD2	DRILL	SFTY	P			1,856.00	1,856.00	Safety meeting with Trottier pipe handler reviewed jsa#157 lay down dp with lay down truck
03:00	06:30	3.50	PROD2	DRILL	PULD	P			1,856.00	1,856.00	Lay down drill pipe Flow check@1847m/1735m/
06:30	06:45	0.25	PROD2	DRILL	SFTY	P			1,856.00	1,856.00	Crew hand over meeting
06:45	07:00	0.25	PROD2	DRILL	SFTY	P			1,856.00	1,856.00	Safety meeting with laydown truck trottie pipe handlers reviewed JSA 157
07:00	08:00	1.00	PROD2	DRILL	PULD	P			1,856.00	1,856.00	Lay down drill pipe with trottier pipe handlers
08:00	08:45	0.75	PROD2	DRILL	PULD	P			1,856.00	1,856.00	Lay down drill pipe with trottier pipe handlers flow checks @ 908m,608m
08:45	09:00	0.25	PROD2	RIGMNT	SVRG	P			1,856.00	1,856.00	Rig service function test hydrill closed in 13 seconds function test motor kills
1	09:15	0.25	PROD2	DRILL	SFTY	P			1,856.00	1,856.00	B.O.P drill crew in positions well secure i 90 seconds
5	11:45	2.50	PROD2	DRILL	PULD	P			1,856.00	1,856.00	Break down kelly continue laying down drill pipe Flow checks Out of hole
11:45	13:30	1.75	PROD2	DRILL	PULD	P			1,856.00	1,856.00	Clean up floor and rig up tong hand
13:30	13:45	0.25	PROD2	CASING	SFTY	P			1,856.00	1,856.00	Saftey meeting with hallmark powertongs and trottier pipe handlers crew reveiwed JSA # 97 and # 95
13:45	16:00	2.25	PROD2	CASING	RNCS	P			1,856.00	1,856.00	Run 177.8mm casing- Ran 177.8mm 38.69kg/m P-110 casing as follows, Floa shoe, 1 joint casing, Float Collar,146 join casing, Total 1857.74m, Landed at
16:00	16:15	0.25	PROD2	CASING	SFTY	P			1,856.00	1,856.00	Safety meeting with Hallmark powertong and Trottier Pipe Handlers
16:15	16:30	0.25	PROD2	RIGMNT	SVRG	P			1,856.00	1,856.00	Rig Service function test crown saver
16:30	16:45	0.25	PROD2	CASING	SFTY	P			1,856.00	1,856.00	B.O.P drill, well secure in 85 seconds
16:45	23:00	6.25	PROD2	CASING	RNCS	P			1,856.00	1,856.00	Ran 177.8mm 38.69kg/m P-110 casing a follows, Float shoe, 1 joint casing, Float Collar,146 joints casing, Total 1857.74m Landed at 1856m
23:00	23:15	0.25	PROD2	CASING	SFTY	P			1,856.00	1,856.00	Crew hand over meeting
23:15	23:30	0.25	PROD2	CASING	SFTY	P			1,856.00	1,856.00	Rig out tong hand and laydown safety meeting
23:30	00:00	0.50	PROD2	CEMENT	CIRC	P			1,856.00	1,856.00	Circulate casing condition hole prior to cementing casing.
00:00	01:30	1.50	PROD2	DRILL	CIRC	P			1,856.00	1,856.00	Circulate casing condition hole prior to cementing production casing.
01:30	01:45	0.25	PROD2	CEMENT	SFTY	P			1,856.00	1,856.00	Safety meeting with Schlumberger
01:45	04:15	2.50	PROD2	CEMENT	CMNT	P			1,856.00	1,856.00	Cemented 177.8mm casing from surface to 1382m with 21.64 Tonne HiLite Lead cement (23.55m3)with1.2%FLAC B348,0.3%retarder and 0.2% antifoam @ 1400 KGM3, from 1382 to 1856m,12 Tonne Class"G" (9.12m3) with 0.4% fluic loss, 0.5%dispersant,0.2%antifoam and 0.3%r
04:15	07:45	3.50	PROD2	CEMENT	CMNT	P			1,856.00	1,856.00	Wait on cement

Well Header

COPRC LOON CREEK O-06 65-10 127-00

API / UWI	District	Field Name	KB-Grd (m)	License No.
300/O-06 6510 127000	NEW VENTURES	Loon	5.20	470

KB-Grd (m)	Orig KB/RT (m)	Well Configuration Type	Well Type
5.20	257.60	VERTICAL	Exploration

Time Log

Start Time	End Time	Dur (hrs)	Phase	Op Code	Activity Code	Ti... P-...	Trbl Code	Trbl Class	Depth Start (mKB)	Depth End (mKB)	Operation
07:45	08:00	0.25	PROD2	MOVE	SFTY	P			1,856.00	1,856.00	Crew change safety meeting
08:00	08:15	0.25	DEMOB	RIGMNT	SVRG	P			1,856.00	1,856.00	Rig service function test crown saver
08:15	08:30	0.25	DEMOB	MOVE	SFTY	P			1,856.00	1,856.00	Safety meeting tear out b.o.p
08:30	12:00	3.50	DEMOB	WHDBOP	NUND	P			1,856.00	1,856.00	Nipple down b.o.p set slips with 50dan tension, cut casing and lay down b.o.p
12:00	16:00	4.00	DEMOB	MOVE	DMOB	P			1,856.00	1,856.00	Tear out rig, clean mud tanks
16:00	16:15	0.25	DEMOB	RIGMNT	SVRG	P			1,856.00	1,856.00	Rig Service
16:15	00:00	7.75	DEMOB	MOVE	DMOB	P			1,856.00	1,856.00	Tear out rig, clean mud tanks

FRONT PAGE SUMMARY

Tour Sheet Serial Number: BEAV2_20130124_2A	Vendor Software Version: RMS 2012.11.15.25129	Year: 2013	Month: 01	Day: 24	DAILY CHECKS	DP	PM
					(1.) Daily Well Around Inspection	DF	RY
					(2.) Detailed Inspection - Monthly (Using Check List)		
					(3.) H2S Signs Posted if Sustained		
					(4.) Well License & Blast Diagram Posted	DF	RY
					(5.) Flare Lines Staked		
					(6.) BOP Drills Performed		
					(7.) Visually Inspected BOPs-Flow Lines & Degasser Lines		
					(1.) Rig Rls Health & Safety Meeting (once/crew/month)		
					(2.) CAODC Rig Safety Inspection Checklist (once/month)		
					(3.) Hoist Inspection before Raising or Lowering		
					(4.) Crown Saver Checked		
					(5.) Motor Kills Checked		

License No	Well Name	Surface Location	Prov	Lic Type	Unique Well Id
1211	COPRC LOON CREEK 300-C-006-L-094-P-16	65:05:51.05N/127:00:30.07W	NT	LatLong	300-C-006-L-094-P-16

Operator	Contractor	Rig No	Well Type	Re-Entry
Conoco Canada	Beaver Drilling Ltd.	2	VERT	☐

Operator's AFE	Contractor's Job No	Spud Date Time
10342919	149	

Signature Of Operator's Representative	Signature Of Contractor's Rig Manager	Rig Release Date Time
DAVE FORSBERG	RICK YAVIS	

CAODC

MD Totco

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	8.00																									8.00
Tour 2							0.25														0.25				7.50	8.00
Tour 3							0.25							7.50							0.25					8.00
TOTAL	8.00						0.50							7.50							0.50				7.50	24.00

FUEL @ 08:00 HRS

Rig	Boiler
200	200

WEATHER: Time 05:45 | Temp -35 | Current Conditions: OVERCAST | Wind Direction: N | Wind Strength: UP TO 29 KM/H | Road Conditions: FAIR

TOUR 1 | SIGNATURE OF DRILLER: MARCUS HALLOWES | 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 | Out | TD | Dull | MDC | Reason Pulled | LOC | Total Rotating | BRG

METRES DRILLED

From	To	D-R-C	RPM	WOB

DRILLING ASSEMBLY

No	Component	OD	ID	Length

Drill Pipe: Blends | 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	500
2	8.00	11	500

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequence & Remarks
0:00	8:00	8.00	1	General rig to spud,Rig in Flare lines and Diverter booy line.(Beg up damaged liner)

Remarks

SAFETY

Safety Topic	MEHL	MACP

TOUR 2 | SIGNATURE OF DRILLER: BRIAN BERGSETH | START TIME: 8:00 | END TIME: 16:00

BITS / DRILLING ASSEMBLY / MUD RECORD / DEVIATION SURVEYS / SOLIDS CONTROL / MUD MATERIALS ADDED / BOILER / CUTTING STRUCTURE / METRES DRILLED / HOLE CONDITION / REDUCED PUMP SPEED — same layout as Tour 1

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	10:00	1.75	25	Continue general rig to spud
10:00	10:15	0.25	21	Safety meeting on working with welder
10:15	16:00	5.75	25	Cut and weld on flange for diverter system

Remarks
Blow down boiler 100 l

SAFETY

Safety Topic	MEHL	MACP
working with welder		

TOUR 3 | SIGNATURE OF DRILLER: MARCUS HALLOWES | START TIME: 16:00 | END TIME: 24:00

BITS / DRILLING ASSEMBLY / MUD RECORD / DEVIATION SURVEYS / SOLIDS CONTROL / MUD MATERIALS ADDED / BOILER / CUTTING STRUCTURE / METRES DRILLED / HOLE CONDITION / REDUCED PUMP SPEED — same layout as Tour 1

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequence & Remarks
16:00	16:15	0.25	7	Rig service and function test crown saver
16:15	19:00	2.75	14C	Weld on flange for diverter system ,Strap and caliper BHA
19:00	19:15	0.25	21	Crew hand over meeting
19:15	24:00	4.75	14C	Weld on flange for diverter system and nipple up

Remarks

SAFETY

Safety Topic	MEHL	MACP
Nipple up diverter system		

FRONT PAGE SUMMARY

Tour Sheet Serial Number: BEAV2_20130125_1A | Vendor Software Version: RMS 2012.11.15.25129 | Year: 2013 | Month: 01 | Day: 25

Licence No	Well Name	Surface Location	Prov	Lat Type	Unique Well Id
1211	COPRC LOON CREEK 300-C-006-L-094-P-16	65:05:51.05N/127:00:30.07W	NT	LatLong	300-C-006-L-094-P-16

Operator	Contractor	Rig No	Mud Type	Re-Entry
Conoco Canada	Beaver Drilling Ltd.	2	VERT	☐

Operator's AFE	Contractor's Job No	Spud Date Time
10342818	149	

Signature Of Operator's Representative	Signature Of Contractor's Rig Manager	Rig Release Date Time
DAVE FORSBERG	RICK YAVIS	

DAILY CHECKS (DF / RY)

- (1.) Daily Work Around Inspection
- (2.) Derrick/Mast Inspection - Monthly (Using Check List)
- (3.) H2S Signs Posted if Required
- (4.) Well Licence & Blast Diagram Posted
- (5.) Flare Lines Staked
- (6.) BOP Drills Performed
- (7.) Visually Inspected BOPs-Flare Lines & Degasser Lines
- (1.) Rig Site Health & Safety Meeting (conducted/month)
- (2.) CAODC Rig Safety Inspection Checklist (analog/month)
- (3.) Mast Inspection before Raising or Lowering
- (4.) Comm Saver Checked
- (5.) Motor Kills Checked

CAODC

MD Totco

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														7.75							0.25					8.00
Tour 2							0.25																		7.75	8.00
Tour 3							0.25																		7.75	8.00
TOTAL							0.50							7.75							0.25				15.50	24.00

FUEL @ 08:00 HRS: Top 180 | Used 160

WEATHER: Time 06:30 | Temp -35 | General Conditions: OVERCAST | Wind Direction: N | Wind Strength: UP TO 19 KM/H | Road Conditions: FAIR

TOUR 1 | SIGNATURE OF DRILLER: MARCUS HALLOWES | 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 | Gauge | TO | OC | MDC | Reason Pulled | LOC | Total Rotating Hrs | BRG

METRES 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 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	7:45	7.75	14C	Nipple up diverter weld up flow T/rig up flare tank and clean rig
7:45	8:00	0.25	21	crew change safety meeting

Remarks

SAFETY

Safety Topic	MEHL	MACP

TOUR 2 | SIGNATURE OF DRILLER: BRIAN BERGSETH | START TIME: 8:00 | END TIME: 16:00

BITS

Bit Number	1A
Size	311
IADC Code	
Manufacturer	REED
Type	S11G
Serial No	D146225
Jets	15.9 15.9 15.9
Depth Out (m)	
Depth In (m)	0.00
Total Drilled (m)	
Hrs Run Today	
Cumulative Hrs Run	
Entry Date	

CUTTING STRUCTURE: In | Gauge | TO | OC | MDC | Reason Pulled | LOC | Total Rotating Hrs | BRG

METRES 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 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	430

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	16:00	7.75	25	Rig up evaporator, get 5" pipe and x/o ready, & surface equipment

Remarks

Level 1 inspection on blocks swivel bails elevators derrick & sub . Blow down boiler 100 l

SAFETY

Safety Topic	MEHL	MACP
I.R.S		

TOUR 3 | SIGNATURE OF 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: In | Gauge | TO | OC | MDC | Reason Pulled | LOC | Total Rotating Hrs | BRG

METRES 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 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	430

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequence & Remarks
16:00	16:15	0.25	7	Rig service
16:15	24:00	7.75	25	Rig up evaporator, get 5" pipe and x/o ready,weld pump suction line modify pop valve lines and bleed off lines on pump house with welder/put water in tanks circulate threw hopper

Remarks

SAFETY

Safety Topic	MEHL	MACP

FRONT PAGE SUMMARY

Tour Sheet Serial Number: BEAV2_20130126_1A | Vendor Software Version: RMS 2012.11.15.25129 | Year: 2013 | Month: 01 | Day: 26

License No	Well Name	Surface Location	Prov	Lic Type	Unique Well Id
1211	COPRC LOON CREEK 300-C-006-L-094-P-16	65:05:51.05N/127:00:30.07W	NT	LatLong	300-C-006-L-094-P-16

Operator	Contractor	Rig No	Well Type	Re-Entry
Conoco Canada	Beaver Drilling Ltd.	2	VERT	☐

Operator's AFE	Contractor's Job No	Spud Date Time
10342918	149	26-Jan-2013 12:00

Signature Of Operator's Representative	Signature Of Contractor's Rig Manager	Rig Release Date Time
DAVE FORSBERG	RICK YAVIS	

DAILY CHECKS — DP / PM

	DP	PM
(1.) Daily Walk Around Inspection	DF	RY
(2.) Derailed Inspection - Weekly (Derrick Check List)	DF	RY
(3.) H2S Signs Posted if Required		
(4.) Well Libertas & Stack Diagram Posted	DF	RY
(5.) Floor Lines Stabbed	DF	RY
(6.) BOP Drills Performed	DF	RY
(7.) Visually Inspected BOPs-Flare Lines & Degasser Lines	DF	RY
(1.) Rig Site Health & Safety Meeting (once/week/crew)		RY
(2.) CAODC Rig Safety Inspection Checklist (once/month)		RY
(3.) Hard Inspection before Raising or Lowering		RY
(4.) Comm Saver Checked		RY
(5.) Motor Kills Checked		RY

CAODC — NOV MD Totco

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							0.25														1.00				6.75	8.00
Tour 2	1.50	3.50					0.25			0.50											2.25					8.00
Tour 3		4.75					0.25														0.75				2.25	8.00
TOTAL	1.50	8.25					0.75			0.50											4.00				9.00	24.00

Daily Footage: 0 | Cum Footage: 0

FUEL @ 08:00 HRS

Rig	Camp
143	133

WEATHER

Time	Temp
05:00	-34

Current Conditions: LIGHT SNOW

Wind Direction	Wind Strength
N	UP TO 15 KM/H

Road Conditions: FAIR

TOUR 1

SIGNATURE OF DRILLER: MARCUS HALLOWES

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: I / O / D / L / B / G; Length; ODC; Bearing Pulled; Total Run (hrs)

METRES 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 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
Bentonite	15	sks

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	430

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequence & Remarks
0:00	0:15	0.25	7	Rig servise
0:15	1:00	0.75	25	Weld pop valve lines
1:00	7:00	6.00	25	weld flow t and install
7:00	7:45	0.75	21F	CAODC rig inspection/Function tested motor kills operating properly
7:45	8:00	0.25	21	Crew change safety meeting

Remarks: boiler fuel#1 133 #2 150

SAFETY

Safety Topic	MEHL	MACP

TOUR 2

SIGNATURE OF DRILLER: BRIAN BERGSETH

START TIME: 8:00 END TIME: 16:00

BITS

Bit Number	1A
Size	311
IADC Code	
Manufacturer	REED
Type	S11G
Serial No	D146225
Jets	15,9 15,9 15,9
Depth Out (m)	
Depth In (m)	0.00
Total Drilled (m)	70.00
Hrs Run Today	3.50
Cumulative Hrs Run	3.50
Entry Date	

CUTTING STRUCTURE: Length 20.00

METRES DRILLED

From	To	D-R-C	RPM	WOB
0.00	70.00	DRILL	120	3

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	311mm BIT	311	72	0.32
1	Bit sub	232	70	0.84
2	9" D.C	233	71	18.90
1	BELL SUB	130	59	0.66
1	X/O 4" H-90	162	62	0.31
4	6" D.C	160	60	37.41
0	Drill Pipe	Stands		0.00
0	Drill Pipe	Singles		0.00

Kelly Down 12.37 | Total 70.71 | Weight of DC | Weight of String 21.00

HOLE CONDITION: Hole Drag Up / Down; Torque At Bottom; Fill On Bottom

MUD RECORD

Mud Type: Water ☑ Oil ☐ Other

Time	13:00
Density	1000
Funnel Viscosity	33
Fluid Loss	
pH	
Location Of Sample	shaker
Depth	43.00
PVT	35

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	PARALLEL	140	135	5700	3.00
2	PARALLEL	140	135	5700	3.00

Remarks

REDUCED PUMP SPEED

Pump #	Pressure	Strokes/min	@	Depth

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type
	29.00	0.50	0	WIRELINE
	58.00	0.50	0	WIRELINE

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	430
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	9:45	1.50	1	Rig up to spud
9:45	10:00	0.25	21A	Diverter b.o.p drill
10:00	11:30	1.50	21D	Pre spud safety meeting with Consultant and Geologist
11:30	12:00	0.50	21	Man down drill
12:00	15:30	3.50	2	Drill 311mm hole from 0m to 70m with Reed S11G bit and slick rotary assembly
15:30	16:00	0.50	10	Accumulated survey time

Remarks: level 1 inspection on blocks swivel bails elevators derrick & sub

SAFETY

Safety Topic	MEHL	MACP
B.O.P DRILL		

TOUR 3

SIGNATURE OF DRILLER: MARCUS HALLOWES

START TIME: 16:00 END TIME: 24:00

BITS

Bit Number	1A
Size	311
IADC Code	
Manufacturer	REED
Type	S11G
Serial No	D146225
Jets	15,9 15,9 15,9
Depth Out (m)	
Depth In (m)	0.00
Total Drilled (m)	126.00
Hrs Run Today	4.75
Cumulative Hrs Run	8.25
Entry Date	

CUTTING STRUCTURE: Length 15.27

METRES DRILLED

From	To	D-R-C	RPM	WOB
70.00	126.00	DRILL	120	7

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	311mm BIT	311	72	0.32
1	Bit sub	232	70	0.94
2	9" D.C	233	71	18.90
1	BELL SUB	130	59	0.66
1	X/O 4" H-90	162	62	0.31
11	6" D.C	160	60	83.81
0	Drill Pipe	Stands		0.00
0	Drill Pipe	Singles		0.00

Kelly Down 12.35 | Total 126.59 | Weight of DC | Weight of String 30.00

HOLE CONDITION: Hole Drag Up 0 / Down 0; Torque At Bottom; Fill On Bottom

MUD RECORD

Mud Type: Water ☑ Oil ☐ Other

Time	17:30	20:30
Density	1070	1090
Funnel Viscosity	39	43
Fluid Loss		
pH	12	10.5
Location Of Sample	shaker	Shaker
Depth	70.00	86.00
PVT	35	35

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	PARALLEL	140	135	6700	7.00
2	PARALLEL	140	135	6700	7.00

Remarks

REDUCED PUMP SPEED

Pump #	Pressure	Strokes/min	@	Depth

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type
21:00	86.00	0.20	0	WIRELINE
23:15	114.00	0.80	0	WIRELINE

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density

MUD MATERIALS ADDED

Product	Amount	Type
Bentonite	30	sks
Sulfamic Acid	1	sks
Fed Pac	1	sks
FedZan	2	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
16:00	17:15	1.25	25	Work pipe & clean out mud ring @ 70 m
17:15	17:30	0.25	7	Rig service function test hydril 52 sec
17:30	19:00	1.50	2	Drill 311mm hole from 70m to 89m with Reed S11G bit and slick rotary assembly
19:00	19:15	0.25	21	Crew handover meeting
19:15	20:30	1.25	2	Drill 311mm hole from 89m to 98m with Reed S11G bit and slick rotary assembly
20:30	21:00	0.50	21	Man down drill and diverter drill crew in position well secure in 90 sec
21:00	23:00	2.00	2	Drill 311mm hole from 98m to 126m with Reed S11G Mill tooth bit and slick rotary assembly
23:00	23:30	0.50	25	Accumulated work tight hole time
23:30	24:00	0.50	25	Accumulated survey time

Remarks: Level one inspection on tongs and all overhead equitment mh
Blow down boiler 100L

SAFETY

Safety Topic	MEHL	MACP
Man down drill BOP drill with diverter		

FRONT PAGE SUMMARY

Tour Sheet Serial Number: BEAV2_20130127_1A | Vendor Software Version: RMS 2012.11.15.25129 | Year: 2013 | Month: 01 | Day: 27

License No: 1211 | Well Name: COPRC LOON CREEK 300-C-006-L-094-P-16 | Surface Location: 65:05:51.05N/127:00:30.07W | Prov: NT | Loc Type: LatLong | Unique Well Id: 300-C-006-L-094-P-16

Operator: Conoco Canada | Contractor: Beaver Drilling Ltd. | Rig No: 2 | Well Type: VERT | Re-Entry: ☐

Operator's AFE: 10342919 | Contractor's Job No: 149 | Spud Date Time: 26-Jan-2013 12:00

Signature Of Operator's Representative: DAVE FORSBERG | Signature Of Contractor's Rig Manager: RICK YAVIS | Rig Release Date Time:

DAILY CHECKS — DP / RM

(1.) Daily Walk Around Inspection — DP RY
(2.) Detailed Inspection - Weekly (Using Check List) — DP RY
(3.) H2S Signs Posted if Required — DP RY
(4.) Well Licence & Blow Diagram Posted — DP RY
(5.) Flare Lines Secured — DP RY
(6.) BOP Drills Performed — DP RY
(7.) Weekly Inspected BOPs-Flare Lines & Degasser Lines — DP RY
(1.) Rig Site Health & Safety Meeting (once/month) — RY
(2.) CADDC Rig Safety Inspection Checklist (once/month) — RY
(3.) Mast Inspection before Raising or Lowering — RY
(4.) Crown Saver Checked
(5.) Motor Kills Checked

CADDC | MD Totco

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		7.25					0.25														0.25				0.25	8.00
Tour 2		5.50					0.25	1.50		0.75																8.00
Tour 3		5.25					0.25	0.50		1.00											1.00					8.00
TOTAL		18.00					0.75	2.00		1.75											1.25				0.25	24.00

FUEL @ 08:00 HRS: Rig 198 | Meter 200

WEATHER: Time 05:00 | Temp -36 | General Conditions: OVERCAST | Wind Direction: N | Wind Strength: UP TO 19 KM/H | Road Conditions: FAIR

TOUR 1

SIGNATURE OF DRILLER: MARCUS HALLOWES | START TIME: 0:00 | END TIME: 8:00

BITS

Bit Number	1A
Size	311
IADC Code	
Manufacturer	REED
Type	S11G
Serial No	D146225
Jets	15.9 15.9 15.9
Depth Out (m)	
Depth In (m)	0.00
Total Drilled (m)	221.00
Hrs Run Today	7.25
Cumulative Hrs Run	15.50
Entry Date	

CUTTING STRUCTURE: I | Logs | TO | ODC | MDC | Reason Pulled | LOC | Total Run Hours 14.28 | BRG

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	311mm BIT	311	72	0.32
1	Bit sub	232	70	0.94
2	9" D.C	233	71	18.56
1	BELL SUB	130	59	0.86
1	X/O 4" H-90	162	62	0.31
12	6" D.C	160	60	113.27
2	XO	159	58	1.06
1	HWDP	162	108	8.38

0	Drill Pipe Stands	0.00
0	Drill Pipe Singles	0.00
	Kelly Down	0.00
	Total	143.44
	Weight of DC	
	Weight of String	32.00

MUD RECORD

Mud Type: Water ☑ Oil ☐ Other

Time	00:30	02:30
Density	1115	1115
Funnel Viscosity	62	64
Fluid Loss		
pH	9.5	9.5
Location Of Sample	Shaker	Shaker
Depth	133.00	148.00
PVT	35	35

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	PARALLEL	140	135	8400	7.00
2	PARALLEL	140	135	8400	7.00

Remarks:

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
	@		@		
	@		@		
	@		@		

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type
	142.00	0.10	0	WIRELINE
	171.00	0.60	0	WIRELINE

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density

MUD MATERIALS ADDED

Product	Amount	Type
Bentonite	10	sks
FedZan	2	sks
Sawdust	8	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 Sequance & Remarks
0:00	1:00	1.00	2	Drill 311mm hole from 126m to 135m with Reed S11G Mill tooth bit and slick rotary assembly
1:00	1:15	0.25	7	Rig service function test crown saver
1:15	7:30	6.25	2	Drill 311mm hole from 135m to211m with Reed S11G Mill tooth bit and slick rotary assembly
7:30	7:45	0.25	21	Crew handover meeting
7:45	8:00	0.25	25	Accumulated survey time

Remarks: Boiler 1 fuel 200cm boiler 2 184cm

METRES DRILLED

From	To	D-R-C	RPM	WOB
126.00	221.00	DRILL	120	7

HOLE CONDITION

Hole Drag: Up 0 Down 0 | Torque At Bottom | Fill On Bottom

SAFETY

Safety Topic	MEHL	MACP

TOUR 2

SIGNATURE OF DRILLER: BRIAN BERGSETH | START TIME: 8:00 | END TIME: 16:00

BITS

Bit Number	1A
Size	311
IADC Code	
Manufacturer	REED
Type	S11G
Serial No	D146225
Jets	15.9 15.9 15.9
Depth Out (m)	
Depth In (m)	0.00
Total Drilled (m)	279.00
Hrs Run Today	5.50
Cumulative Hrs Run	21.00
Entry Date	

CUTTING STRUCTURE: I | Logs | TO | ODC | MDC | Reason Pulled | LOC | Total Run Hours 13.29 | BRG

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	311mm BIT	311	72	0.32
1	Bit sub	232	70	0.94
2	9" D.C	233	71	18.56
1	BELL SUB	130	59	0.86
12	6" D.C	160	60	113.27
2	XO	162	60	1.06
10	HWDP	162	108	93.85
1	4 1/2 IF X/O XT54	167	109	0.31
4	5" D.P	165	108	34.78

0	Drill Pipe Stands	0.00
0	Drill Pipe Singles	0.00
	Kelly Down	0.00
	Total	266.39
	Weight of DC	
	Weight of String	39.00

MUD RECORD

Mud Type: Water ☑ Oil ☐ Other

Time	08:00	11:30
Density	1150	1160
Funnel Viscosity	51	55
Fluid Loss		
pH	9.5	9.5
Location Of Sample	shaker	shaker
Depth	219.00	243.00
PVT	32.5	33

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	PARALLEL	140	135	10000	6.00
2	PARALLEL	140	135	10000	6.00

Remarks:

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
	@		@		
	@		@		
	@		@		

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type
	199.00	0.70	0	WIRELINE
	228.00	1.20	0	WIRELINE
	257.00	0.90	0	WIRELINE

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density

MUD MATERIALS ADDED

Product	Amount	Type
Bentonite	10	sks
FedZan	1	sks

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	430
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 crown saver & hydril 54 sec to close
8:15	13:45	5.50	2	Drill 311mm hole from 211m to 279 m with Reed S11G Mill tooth bit and slick rotary assembly
13:45	14:30	0.75	10	Accumulated time for surveys
14:30	16:00	1.50	8G	Work on shaker

Remarks: level 1 inspection on blocks swivel bails elevators derrick & sub . Blow down boiler 100 l

METRES DRILLED

From	To	D-R-C	RPM	WOB
211.00	279.00	DRILL	120	10

HOLE CONDITION

Hole Drag: Up Down | Torque At Bottom | Fill On Bottom

SAFETY

Safety Topic	MEHL	MACP
making connections		

TOUR 3

SIGNATURE OF DRILLER: MARCUS HALLOWES | START TIME: 16:00 | END TIME: 24:00

BITS

Bit Number	1A
Size	311
IADC Code	
Manufacturer	REED
Type	S11G
Serial No	D146225
Jets	15.9 15.9 15.9
Depth Out (m)	
Depth In (m)	0.00
Total Drilled (m)	370.00
Hrs Run Today	5.25
Cumulative Hrs Run	26.25
Entry Date	

CUTTING STRUCTURE: I | Logs | TO | ODC | MDC | Reason Pulled | LOC | Total Run Hours 14.10 | BRG

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	311mm BIT	311	72	0.32
1	Bit sub	232	70	0.94
2	9" D.C	233	71	18.56
1	BELL SUB	130	59	0.86
12	6" D.C	160	60	113.27
2	XO	159	59	1.06
10	HWDP	162	108	93.85
1	4 1/2 IF X/O XT54	167	109	0.31

7	Drill Pipe Stands	134.91
0	Drill Pipe Singles	0.00
	Kelly Down	8.00
	Total	370.54
	Weight of DC	
	Weight of String	41.00

MUD RECORD

Mud Type: Water ☑ Oil ☐ Other

Time	17:00	20:00
Density	1170	1200
Funnel Viscosity	55	65
Fluid Loss		
pH		
Location Of Sample	shaker	Shaker
Depth	294.00	320.00
PVT	34	35

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	PARALLEL	140	135	10600	6.50
2	PARALLEL	140	135	10600	6.50

Remarks:

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
	@		@		
	@		@		
	@		@		

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type
	287.00	0.20	0	WIRELINE
	314.00	1.00	0	WIRELINE
	354.00	0.90	0	WIRELINE

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density

MUD MATERIALS ADDED

Product	Amount	Type
Bentonite	10	sks
FedZan	1	sks

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	430
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 rest hydril 50 sec & crown saver
16:15	17:30	1.25	2	Drill 311mm hole from 279m to 298 m with Reed S11G Mill tooth bit and slick rotary assembly
17:30	18:00	0.50	8C	Tighten up belts on pump # two
18:00	18:30	0.50	2	Drill 311mm hole from 298m to317 m with Reed S11G Mill tooth bit and slick rotary assembly
18:30	19:30	1.00	21	Crew handover meeting weekly meeting
19:30	23:00	3.50	2	Drill 311mm hole from 317m to 370m with Reed S11G Mill tooth bit and slick rotary assembly
23:00	24:00	1.00	10A	Accumulated wire line surveys

Remarks: level one inspection on tongs,sub and overhead equipment d.s.
blew down boilers 2 times 100 litres

METRES DRILLED

From	To	D-R-C	RPM	WOB
279.00	370.00	DRILL	120	12

HOLE CONDITION

Hole Drag: Up Down | Torque At Bottom | Fill On Bottom

SAFETY

Safety Topic	MEHL	MACP
steam use		

FRONT PAGE SUMMARY

Tour Sheet Saved Number: BEAV2_20130128_1A | Version Software Version: RMS 2012.11.15.25129 | Year: 2013 | Month: 01 | Day: 28

Licence No	Well Name	Surface Location	Prov	Lic Type	Unique Well Id
1211	COPRC LOON CREEK 300-C-006-L-094-P-16	65:05:51.05N/127:00:30.07W	NT	LatLong	300-C-006-L-094-P-16

Operator	Contractor	Rig No	Well Type	Re-Entry
Conoco Canada	Beaver Drilling Ltd.	2	VERT	☐

Operator's AFE	Contractor's Job No	Spud Date Time
10342919	149	26-Jan-2013 12:00

Signature Of Operator's Representative	Signature Of Contractor's Rig Manager	Rig Release Date Time
DAVE FORSBERG	RICK YAVIS	

DAILY CHECKS (DF / RY)
(1.) Daily Walk Around Inspection
(2.) Detailed Inspection - Monthly (Using Check List)
(3.) H2S Signs Posted & Readout
(4.) Well Licence & Blank Diagram Posted
(5.) Flare Lines Baited
(6.) BOP Drills Performed
(7.) Visually Inspected BOPs-Flow Lines & Degasser Lines
(1.) Rig Site Health & Safety Meeting (weekly/monthly)
(2.) CAODC Rig Safety Inspection Checklist (pre-spud/spud)
(3.) Mast Inspection before Raising or Lowering
(4.) Crown Saver Checked
(5.) Motor Kills Checked

CAODC | NOV | MD Totco

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 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
Tour 1		6.50					0.75			0.50											0.25					8.00
Tour 2	0.25	6.00					0.25	1.00		0.50																8.00
Tour 3		6.75			1.00		0.25																			8.00
TOTAL	0.25	19.25			1.00		1.25	1.00		1.00											0.25					24.00

FUEL @ 08:00 HRS: Tour 1.2 | Meter 1.5 | Time 06:00 | Temp -37

WEATHER: Current Conditions: CLEAR | Wind Direction: N | Wind Strength: UP TO 18 KM/H | Road Conditions: FAIR

TOUR 1

SIGNATURE OF DRILLER: MARCUS HALLOWES | START TIME: 0:00 | END TIME: 8:00

BITS

Bit Number	1A
Size	311
IADC Code	
Manufacturer	REED
Type	S11G
Serial No	D146225
Jets	15.9 15.9 15.9
Depth Out (m)	
Depth In (m)	0.00
Total Drilled (m)	452.00
Hrs Run Today	6.50
Cumulative Hrs Run	32.75
Entry Date	

CUTTING STRUCTURE: In | Out | Gauge | TD | ODC | BDC | Reason Pulled | LOC | Tool Run Jarring 13.80 | BRG

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	311mm BIT	311	72	0.32
1	Bit sub	232	70	0.94
2	9" D.C	233	71	18.59
1	BELL SUB	130	59	0.66
12	6" D.C	160	60	110.97
2	XO	160	60	1.08
10	HWDP	162	109	89.89
1	4 1/2 IF X/O XT54	167	109	0.31
11	Drill Pipe	Stands		221.43
0	Drill Pipe	Singles		0.00
	Kelly Down			2.94
	Total			452.00
	Weight of DC			
	Weight of String			41.00

MUD RECORD

Mud Type: Water ☑ Oil ☐ Other

Time	01:30	04:00
Density	1160	1150
Funnel Viscosity	61	55
Fluid Loss		
pH		8
Location Of Sample	Shaker	Shaker
Depth	387.00	413.00
PVT	35	43

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	PARALLEL	140	135	10500	6.50
2	PARALLEL	140	135	10500	6.50

Remarks:

REDUCED PUMP SPEED

Pump #	Pressure	Strokes/min	Depth
	@	@	
	@	@	
	@	@	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type
	390.00	1.10	0	WIRELINE

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density

MUD MATERIALS ADDED

Product	Amount	Type
Bentonite	35	sks
FedZan	4	sks

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	500
2	8.00	11	500

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequence & Remarks
0:00	0:15	0.25	2	Drill 311mm hole from 370M to 375m with Reed S11G Mill tooth bit and slick rotary assembly
0:15	0:30	0.25	7	Rig service function hydrill 50 sec crown saver operating properly
0:30	5:15	4.75	2	Drill 311mm hole from 375M to 427m with Reed S11G Mill tooth bit and slick rotary assembly
5:15	5:45	0.50	7A	Clean out shaker
5:45	7:00	1.25	2	Drill 311mm hole from 427M to 442m with Reed S11G Mill tooth bit and slick rotary assembly
7:00	7:15	0.25	21	Crew handover meeting
7:15	7:30	0.25	2	Drill 311mm hole from 442M to 452m with Reed S11G Mill tooth bit and slick rotary assembly
7:30	8:00	0.50	10A	Accumilated wireline survey

Remarks:

METRES DRILLED

From	To	D-R-C	RPM	WOB
370.00	452.00	DRILL	120	12

HOLE CONDITION

Hole Drag: Up | Down
Torque At Bottom
Fill On Bottom

SAFETY

Safety Topic	MEHL	MACP

TOUR 2

SIGNATURE OF DRILLER: BRIAN BERGSETH | START TIME: 8:00 | END TIME: 16:00

BITS

Bit Number	1A
Size	311
IADC Code	
Manufacturer	REED
Type	S11G
Serial No	D146225
Jets	15.9 15.9 15.9
Depth Out (m)	
Depth In (m)	0.00
Total Drilled (m)	519.00
Hrs Run Today	6.00
Cumulative Hrs Run	38.75
Entry Date	

CUTTING STRUCTURE: In | Out | Gauge | TD | ODC | BDC | Reason Pulled | LOC | Tool Run Jarring 13.39 | BRG

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	311mm BIT	311	72	0.32
1	Bit sub	232	70	0.94
2	9" D.C	233	71	18.59
1	BELL SUB	130	59	0.66
12	6" D.C	160	60	110.97
2	XO	160	60	1.08
10	HWDP	162	61	89.89
1	4 1/2 IF X/O XT54	167	109	0.31
14	Drill Pipe	Stands		269.65
1	Drill Pipe	Singles		9.66
	Kelly Down			12.52
	Total			519.46
	Weight of DC			
	Weight of String			43.00

MUD RECORD

Mud Type: Water ☑ Oil ☐ Other

Time	08:00	12:30
Density	1130	1130
Funnel Viscosity	55	52
Fluid Loss		
pH		
Location Of Sample	shaker	shaker
Depth	452.00	490.00
PVT	45	44

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	PARALLEL	140	135	11200	6.00
2	PARALLEL	140	135	11200	6.00

Remarks:

REDUCED PUMP SPEED

Pump #	Pressure	Strokes/min	Depth
	@	@	
	@	@	
	@	@	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type
	439.00	1.10	0	WIRELINE
	478.00	1.30	0	WIRELINE

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	430
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 hydril 53 sec & crown saver
8:15	10:30	2.25	2	Drill 311mm hole from 452m to 471m with Reed S11G Mill tooth bit and slick rotary assembly
10:30	11:30	1.00	8F	Changed out break out line on drawworks
11:30	13:45	2.25	2	Drill 311mm hole from 471m to 500 m with Reed S11G Mill tooth bit and slick rotary assembly
13:45	14:00	0.25	1D	Level rig
14:00	15:30	1.50	2	Drill 311mm hole from 471m to 519 m with Reed S11G Mill tooth bit and slick rotary assembly
15:30	16:00	0.50	10	Accumulated time for surveys

Remarks:
level 1 inspection on blocks swivel bails elevators derrick & sub . Blow down boiler 100 l

METRES DRILLED

From	To	D-R-C	RPM	WOB
452.00	519.00	DRILL	120	14

HOLE CONDITION

Hole Drag: Up | Down
Torque At Bottom
Fill On Bottom

SAFETY

Safety Topic	MEHL	MACP
Working with stream		

TOUR 3

SIGNATURE OF DRILLER: MARCUS HALLOWES | START TIME: 16:00 | END TIME: 24:00

BITS

Bit Number	1A
Size	311
IADC Code	
Manufacturer	REED
Type	S11G
Serial No	D146225
Jets	15.9 15.9 15.9
Depth Out (m)	
Depth In (m)	0.00
Total Drilled (m)	587.00
Hrs Run Today	6.75
Cumulative Hrs Run	45.50
Entry Date	

CUTTING STRUCTURE: In | Out | Gauge | TD | ODC | BDC | Reason Pulled | LOC | Tool Run Jarring 12.80 | BRG

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	311mm BIT	311	72	0.32
1	Bit sub	232	70	0.94
2	9" D.C	233	71	18.59
1	BELL SUB	130	59	0.66
12	6" D.C	160	60	110.97
2	XO	160	60	1.08
10	HWDP	162	109	89.89
1	4 1/2 IF X/O XT54	167	109	0.31
18	Drill Pipe	Stands		346.97
0	Drill Pipe	Singles		0.00
	Kelly Down			12.52
	Total			587.12
	Weight of DC			
	Weight of String			

MUD RECORD

Mud Type: Water ☑ Oil ☐ Other

Time	16:15	18:30
Density	1130	1160
Funnel Viscosity	50	75
Fluid Loss		
pH		
Location Of Sample	shaker	shaker
Depth	525.00	548.00
PVT	40	38

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	PARALLEL	140	135	11000	7.75
2	PARALLEL	140	135	11000	7.75

Remarks:

REDUCED PUMP SPEED

Pump #	Pressure	Strokes/min	Depth
	@	@	
	@	@	
	@	@	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type
	516.00	0.30	0	WIRELINE
	555.00	1.20	0	WIRELINE

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density
Centrifuge #1	8.00	1160	1150	1600

MUD MATERIALS ADDED

Product	Amount	Type
Bentonite	30	sks
FedZan	3	sks
Barite	20	sks

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	500
2	8.00	11	500

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequence & Remarks
16:00	16:15	0.25	7	Rig service function test h.c.r 2 sec & crown saver
16:15	23:00	6.75	2	Drill 311mm hole from 519m to 587 m with Reed S11G Mill tooth bit and slick rotary assembly
23:00	24:00	1.00	5	Circulate and clean well for wiper trip

Remarks:
Level one inspection on tongs and all overhead equitment mh
Blew down boiler 100L

METRES DRILLED

From	To	D-R-C	RPM	WOB
519.00	587.00	DRILL	120	14

HOLE CONDITION

Hole Drag: Up | Down
Torque At Bottom
Fill On Bottom

SAFETY

Safety Topic	MEHL	MACP

FRONT PAGE SUMMARY

Tour Sheet Serial Number: BEAV2_20130129_1A | Version Software Version: RMS 2012.11.15.25129 | Year: 2013 | Month: 01 | Day: 29

Licence No	Well Name	Surface Location	Prov	Lic Type	Unique Well Id
1211	COPRC LOON CREEK 300-C-006-L-094-P-16	65:05:51.05N/127:00:30.07W	NT	LatLong	300-C-006-L-094-P-16

Operator	Contractor	Rig No	Well Type	Re-Entry
Conoco Canada	Beaver Drilling Ltd.	2	VERT	☐

Operator's AFE	Contractor's Job No	Spud Date Time	
10342919	149	26-Jan-2013	12:00

Signature Of Operator's Representative	Signature Of Contractor's Rig Manager	Rig Release Date Time
DAVE FORSBERG	RICK YAVIS	

DAILY CHECKS

	OP	PM
(1.) Daily Walk Around Inspection	DF	RY
(2.) Derrick Inspection - Monthly (Using Check List)		RY
(3.) H2S Signs Posted if Required		
(4.) Well Licence & Stack Diagram Posted	DF	RY
(5.) Flare Lines Staked	DF	RY
(6.) BOP Drills Performed		
(7.) Visually Inspected BOPs+Flare Lines & Degasser Lines	DF	RY
(1.) Rig Site Health & Safety Meeting (enter comments)		RY
(2.) CADOC Rig Safety Inspection Checklist (enter highlights)		
(3.) Mast Inspection before Raising or Lowering		RY
(4.) Crown Saver Checked		
(5.) Motor Kills Checked		

CADOC · ROY · MD Totco

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	Drillstem Test	Plug Back	Squeeze Cement	Fishing	Dir Work	Safety Meeting	Tour Down	Waiting On	Rig Watch	Other	
Tour 1			1.75			5.75	0.25														0.25					8.00
Tour 2			4.75			3.00	0.25																			8.00
Tour 3		1.25	2.25		2.25	2.00	0.25																			8.00
TOTAL		1.25	8.75		2.25	10.75	0.75														0.25					24.00

FUEL @ 08:00 HRS: Up 210 | Down 210

WEATHER: Time 06:15 | Temp -37 | General Conditions: PARTLY CLOUDY | Wind Direction: N | Wind Strength: UP TO 29 KM/H | Road Conditions: FAIR

TOUR 1 | SIGNATURE OF DRILLER: MARCUS HALLOWES | START TIME: 0:00 | END TIME: 8:00

BITS

Bit Number	1A
Size	311
IADC Code	
Manufacturer	REED
Type	S11G
Serial No	D146225
Jets	15.9 15.9 15.9
Depth Out (m)	
Depth In (m)	0.00
Total Drilled (m)	519.00
Hrs Run Today	
Cumulative Hrs Run	38.75
Entry Date	

CUTTING STRUCTURE: I | TO | MDC | LOC | BRG | Gauge | ODC | Reason Pulled | Total Run Hours: 13.39

METRES DRILLED

From	To	D-R-C	RPM	WOB

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	311mm BIT	311	72	0.32
1	Bit sub	232	70	0.94
2	9" D.C	233	71	18.50
1	BELL SUB	130	59	0.86
12	6" D.C	160	60	115.27
2	XO	160	60	1.06
10	HWDP	162	109	93.83
1	4 1/2 IF X/O XT54	167	109	0.31
17	Drill Pipe — Stands			327.57
1	Drill Pipe — Singles			9.71

Kelly Down: 12.52 | Total: 564.91 | 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	03:30
Density	1140
Funnel Viscosity	78
Fluid Loss	
pH	
Location Of Sample	Shaker
Depth	
PVT	37

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1		140	130	9000	2.00
2		140	130	9000	2.00

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	500
2	8.00	11	500

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
0:00	0:15	0.25	7	Rig service function test annular and crown saver
0:15	3:15	3.00	6B	Trip out of hole from 573 to 400m flow check@573m,503m
3:15	3:45	0.50	3A	Pick up kelly and ream mud ring @400m
3:45	4:15	0.50	6B	Trip out of hole @ 400m to 350m
4:15	5:30	1.25	3	Pick up kelly and ream mud ring @ 350m
5:30	7:45	2.25	6B	Trip out of hole
7:45	8:00	0.25	21D	Crew change safety meeting

Remarks
Level one inspection on tongs and overhead equitment M.H
Blew down boiler 100L

SAFETY

Safety Topic	MEHL	MACP
tripping		

TOUR 2 | SIGNATURE OF DRILLER: BRIAN BERGSETH | 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: I | TO | MDC | LOC | BRG | Gauge | ODC | Reason Pulled | Total Run Hours:

METRES 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 DC | Weight of String

HOLE CONDITION: Hole Drag Up / Down | Torque At Bottom | Fill On Bottom

MUD RECORD

Mud Type: Water ☑ Oil ☐ Other

Time	16:00
Density	1160
Funnel Viscosity	63
Fluid Loss	
pH	
Location Of Sample	shaker
Depth	587.00
PVT	29

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	PARALLEL	140	135	9400	4.00
2	PARALLEL	140	135	9400	4.00

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	430
2	8.00	11	450

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
8:00	9:30	1.50	6B	Pull out of hole flow checks @ 218 m & out of hole
9:30	9:45	0.25	7	Rig service function test crown saver
9:45	11:15	1.50	6A	Run in hole flow check @ 290 m
11:15	16:00	4.75	3A	Circ & condition & ream & clean from @ 290 m to 460 m

Remarks
level 1 inspection on blocks swivel bails elevators derrick & sub . Inspected escape buggy. CD. Blow down boiler 100 l strap 586.78 tally 587.12 diff _ .34

SAFETY

Safety Topic	MEHL	MACP

TOUR 3 | SIGNATURE OF DRILLER: MARCUS HALLOWES | START TIME: 16:00 | END TIME: 24:00

BITS

Bit Number	1A
Size	311
IADC Code	
Manufacturer	REED
Type	S11G
Serial No	D146225
Jets	15.9 15.9 15.9
Depth Out (m)	
Depth In (m)	0.00
Total Drilled (m)	600.00
Hrs Run Today	
Cumulative Hrs Run	46.75
Entry Date	

CUTTING STRUCTURE: I | TO | MDC | LOC | BRG | Gauge | ODC | Reason Pulled | Total Run Hours: 12.83

METRES DRILLED

From	To	D-R-C	RPM	WOB
587.00	600.00	DRILL	120	13

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	311mm BIT	311	72	0.32
1	Bit sub	232	70	0.94
2	9" D.C	233	71	18.50
1	BELL SUB	130	59	0.86
12	6" D.C	160	60	115.27
2	XO	160	60	1.06
10	HWDP	162	109	93.83
1	4 1/2 IF X/O XT54	167	109	0.31
19	Drill Pipe — Stands			366.31
0	Drill Pipe — Singles			0.00

Kelly Down: 6.52 | Total: 600.46 | 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	21:00
Density	1155
Funnel Viscosity	86
Fluid Loss	
pH	
Location Of Sample	Shaker
Depth	606.00
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
	592.00	0.60	0	WIRELINE

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density

MUD MATERIALS ADDED

Product	Amount	Type
Bentonite	20	sks
FedZan	2	sks
Barite	20	sks

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	500
2	8.00	11	500

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
16:00	18:15	2.25	3A	Ream & clean from 460 m to 587 m
18:15	18:30	0.25	7	Rig service function test hydril 52 sec & crown saver
18:30	19:45	1.25	2	Drill 311mm hole from 587m to 600 m with Reed S11G Mill tooth bit and slick rotary assembly
19:45	22:00	2.25	5	Build volume raise viscosity circulate hole clean
22:00	24:00	2.00	6B	Trip out of hole flow checks @ on bottom 571m 307m

Remarks
Level one inspection on tongs and all overhead equitment mh
Blew down boiler 100l
trip sheet calc 3.78m3 meas 3.89m3 diff .11m3

SAFETY

Safety Topic	MEHL	MACP
Tripping		

FRONT PAGE SUMMARY

Tour Sheet Saved Number: BEAV2_20130130_1A	Version Software Version: RMS 2012.11.15.25129	Year: 2013	Month: 01	Day: 30			
Licence No: 1211	Well Name: COPRC LOON CREEK 300-C-006-L-094-P-16	Surface Location: 65:05:51.05N/127:00:30.07W	Prov: NT	Lat Type: Lat/Long	Unique Well Id: 300-C-006-L-094-P-15		
Operator: Conoco Canada	Contractor: Beaver Drilling Ltd.	Rig No: 2	Well Type: VERT	Re-Entry: ☐			
Operator's AFE: 10342919	Contractor's Job No: 149	Spud Date Time: 26-Jan-2013	12:00				
Signature Of Operator's Representative: DAVE FORSBERG	Signature Of Contractor's Rig Manager: RICK YAVIS	Rig Release Date Time					

DAILY CHECKS

	DF	RY
(1) Daily Walk Around Inspection		
(2) Detailed Inspection - Monthly (Using Check List)	DF	RY
(3) H2S Signs Posted if Required	DF	RY
(4) Well Licences & Block Diagram Posted	DF	RY
(5) Flare Lines Staked	DF	RY
(6) BOP Drills Performed	DF	RY
(7) Visually Inspected BOPs/Flare Lines & Equipment Lines	DF	RY
(1) Rig Site Health & Safety Meeting (crew/contractor)		RY
(2) CAODC Rig Safety Inspection Checklist completed/posted		
(3) Hoist Inspection before Raising or Lowering		RY
(4) Crown Saver Checked		RY
(5) Motor Kills Checked		

CAODC NOV MD Totco

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 Welch	Other	
HOURS Tour 1					0.75	6.50	0.25														0.50					8.00
Tour 2							0.25				7.50										0.25					8.00
Tour 3							0.25				2.00	5.50									0.25					8.00
TOTAL					0.75	6.50	0.75				9.50	5.50									1.00					24.00

FUEL @ 08:00 HRS: Rig 155 | Camp 165 | Time 05:00 | Temp -40

WEATHER: Temp Conditions: CLEAR | Wind Direction: N | Wind Strength: CALM | Road Conditions: FAIR

TOUR 1

SIGNATURE OF DRILLER: MARCUS HALLOWES

START TIME: 0:00 END TIME: 8:00

BITS

Bit Number	1A
Size	311
IADC Code	
Manufacturer	REED
Type	S11G
Serial No	D146225
Jets	15.9 / 15.9 / 15.9
Depth Out (m)	
Depth In (m)	0.00
Total Drilled (m)	600.00
Hrs Run Today	
Cumulative Hrs Run	38.75
Entry Date	

CUTTING STRUCTURE: T1 | Depth | TO | ODC | MDC | Reason Pulled | LOC | Tooth/Gage Reduction 15.48 | BRG

METRES DRILLED

From	To	D-R-C	RPM	WOB

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	311mm BIT	311	72	0.32
1	Bit sub	232	70	0.94
2	9" D.C	233	71	18.89
1	BELL SUB	139	59	0.66
12	6" D.C	169	60	110.27
2	XO	162	60	1.06
10	HWDP	165	110	93.95
1	4 1/2 IF X/O XT54	167	109	0.31

19	Drill Pipe	Stands	365.23
0	Drill Pipe	Singles	0.00
	Kelly Down		12.52
	Total		593.86
	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	TRIPLEX	140	135	11300	1.25
2	TRIPLEX	140	135	11300	1.25

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
Barite	20	sks

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	500
2	8.00	11	500

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
0:00	2:00	2.00	6A	Trip in hole flow checks @ 363m
2:00	2:15	0.25	7	Rig service function test hydrill closed in 53 sec
2:15	3:00	0.75	5	Circulate bottoms up
3:00	6:15	3.25	6B	Trip out of hole flow checks @ 592.38m, 570.38m, 285.70m, 132.69m
6:15	6:30	0.25	21B	Safety meeting prior to laying down 9"dcs
6:30	7:45	1.25	6D	Lay down 9"dcs & bha
7:45	8:00	0.25	21D	Crew change safety meeting

Remarks
Level one inspection on tong and all overhead equitment mh
Blew down boiler 100l
boiler #1 fuel 180cm
Trip sheet calc 6.36m3 measured6.55m3 diff 0.19m3

SAFETY

Safety Topic	MEHL	MACP
Lay down drill collars reviewed JSA 158		

TOUR 2

SIGNATURE OF DRILLER: BRIAN BERGSETH

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: T1 | TO | ODC | MDC | LOC | BRG

METRES 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 DC		
	Weight of String		

HOLE CONDITION: Hole Drag Up | Down | Torque At Bottom | Fill On Bottom

MUD RECORD

Mud Type: | Water: ☑ | Oil: ☐ | Other:

Time	09:30	12:15
Density	1140	1140
Funnel Viscosity	80	80
Fluid Loss		
pH		
Location Of Sample	shaker	shaker
Depth	600.00	600.00
PVT	30	30

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	1150	1140	1600

MUD MATERIALS ADDED

Product	Amount	Type

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	430
2	8.00	11	480

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
8:00	8:15	0.25	7	Rig service function test crown saver
8:15	8:30	0.25	21	Safety meeting
8:30	16:00	7.50	11	Rig to & log with schlumberger,ran Resistivity,Dual Density,Neutron,Total GR,Sonic and GPIT

Remarks
level 1 inspection on blocks swivel bails elevators derrick & sub . Blow down boiler 100 l

SAFETY

Safety Topic	MEHL	MACP
logging j.s.a # 151		

TOUR 3

SIGNATURE OF 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: T1 | TO | ODC | MDC | LOC | BRG

METRES 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 DC		
	Weight of String		

HOLE CONDITION: Hole Drag Up | Down | Torque At Bottom | Fill On Bottom

MUD RECORD

Mud Type: | Water: ☑ | Oil: ☐ | Other:

Time	16:45
Density	1140
Funnel Viscosity	80
Fluid Loss	
pH	
Location Of Sample	shaker
Depth	600.00
PVT	30

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	500
2	8.00	11	500

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
16:00	18:00	2.00	11	Continue to log with schlumberger,ran Resistivity,Dual Density,Neutron,Total GR,Sonic and GPIT
18:00	18:15	0.25	7	Rig service function test crown saver
18:15	18:30	0.25	21	Safety meeting rig to & run casing
18:30	24:00	5.50	12B	Rig in Power Tongs Make up 244.5mm Guide Shoe,Float Collar 1 jt. 244.5mmX 53.57kg/m J55 casing,1 244.5mm Float collar Followed by 44jts 244.5mmX53.57kg/m J55 casing, 1 244.5mmX53.57kg/m J55 Landing joint,Total 598.78m, Set at 596.78m

Remarks
Level one inspection on tongs and all overhead equitment mh
certifications for the elevators ser HTHE06 inspection H-23081

SAFETY

Safety Topic	MEHL	MACP
run casing reviewed jsa 97		

FRONT PAGE SUMMARY

Your Sheet Serial Number: BEAV2_20130131_1A | Version Software Version: RMS 2012.11.15.25129 | Year: 2013 | Month: 01 | Day: 31

DAILY CHECKS — AM / PM

(1.) Daily Meeting Around Presentation — DF / RY
(2.) Detailed Inspection - Weekly / Using Check. Lists — DF / RY
(3.) H2S Signs Posted if Required — DF / RY
(4.) Well Licensee & Block Diagram Posted — DF / RY
(5.) Flow Lines Staked — DF / RY
(6.) BOP Drills Performed — DF / RY
(7.) Visually Inspected BOPs-Flare Lines & Degasser Lines — DF / RY
(1.) Rig Site Health & Safety Meeting (crew/contractors) — RY
(2.) CAODC Rig Safety Inspection Checklist (crew/contractors) — RY
(3.) Mast Inspection before Raising or Lowering — RY
(4.) Crown Saver Checked — RY
(5.) Motor Kills Checked — RY

License No	Well Name	Surface Location	Prov	Lat Type	Unique Well Id
1211	COPRC LOON CREEK 300-C-006-L-094-P-16	65:05:51.05N/127:00:30.07W	NT	LatLong	300-C-006-L-094-P-15

Operator	Contractor	Rig No	Well Type	Rig Copy
Conoco Canada	Beaver Drilling Ltd.	2	VERT	☐

Operator's AFE	Contractor's Job No	Spud Date Time	
10342919	149	26-Jan-2013	12:00

Signature Of Operator's Representative	Signature Of Contractor's Rig Manager	Rig Released Date Time
DAVE FORSBERG	RICK YAVIS	

CAODC — MD Totco

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 Deliberate 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					2.75		0.25					4.75									0.25					8.00
Tour 2					3.25		0.25					2.75	1.50								0.25					8.00
Tour 3							0.25						2.50	5.25												8.00
TOTAL					6.00		0.75					7.50	4.00	5.25							0.50					24.00

FUEL @ 08:00 HRS: Rig 210 | Used 200 | Received 05:30 | Transfer -25

WEATHER: Current Conditions: PARTLY CLOUDY | Wind Direction: W | Wind Strength: CALM | Road Conditions: FAIR

TOUR 1

SIGNATURE OF DRILLER: MARCUS HALLOWES

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, To, IADC, LOC, BRG, Depth, ROP, Pump Pressure, Tooth Wear

METRES 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 BC, Weight of String

HOLE CONDITION: Hole Drag: Up / Down; Torque At Bottom; Fill On Bottom

MUD RECORD

Mud Type: Water ☑ Oil ☐ Other

Time	06:00	06:30
Density	1140	1140
Funnel Viscosity	68	56
Fluid Loss		
pH		
Location Of Sample	Shaker	Shaker
Depth	606.00	606.00
PVT	44	44

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
2	SINGLE	140	120	2300	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

MUD MATERIALS ADDED

Product	Amount	Type
Desco	1	sks

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	420
2	8.00	10.5	400

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	Rig in Power Tongs Make up 244.5mm Guide Shoe,Float Collar 1 jt. 244.5mmX 53.57kg/m J55 casing,1 244.5mm Float collar Followed by 44jts 244.5mmX53.57kg/m J55 casing, 1 244.5mmX53.57kg/m J55 Landing joint,Total 598.78m. Set at 597m
5:00	7:45	2.75	5	Rig up and circulate casing
7:45	8:00	0.25	21	Crew handover meeting

Remarks
Level one inspection on tongs and all overhead equitment mh
Boiler 1 200cm boiler 2 165cm

SAFETY

Safety Topic	MEHL	MACP
run casing		

TOUR 2

SIGNATURE OF DRILLER: BRIAN BERGSETH

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, To, IADC, LOC, BRG, Depth, ROP, Pump Pressure, Tooth Wear

METRES DRILLED

From	To	D-R-C	RPM	WOB

DRILLING ASSEMBLY

No	Component	OD	ID	Length
D	Drill Pipe	Stands		0.00
D	Drill Pipe	Singles		0.00

Kelly Down 0.00; Total; Weight of BC; Weight of String 35.00

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
2	SINGLE	140	130	2200	4.00

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	430
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 crown saver
8:15	11:30	3.25	5D	Circ casing
11:30	11:45	0.25	21	Safety meeting cementing
11:45	14:30	2.75	12	Rig to & cement casing with schlumberger plug down @ 1430 hrs Cemented 244.5mm surface casing from 597m to 6m with 26.1m3 (28.0 Tonne) Thixotropic D604A-P + 2%CaCl2 +0.2% Antifoam, displaced with drilling mud,Plug bumped,Pressure tested casing to 11,500 kpa for 10 minutes, Good test, Recieved 6.5m3 good cement slurry returns at surface.Annulus remained static after job complete
14:30	16:00	1.50	13	Wait on cement

Remarks
level 1 inspection on blocks swivel bails elevators derrick & sub . Blow down boiler 100 l

SAFETY

Safety Topic	MEHL	MACP
cementing		

TOUR 3

SIGNATURE OF 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: In, To, IADC, LOC, BRG, Depth, ROP, Pump Pressure, Tooth Wear

METRES 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 BC, 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	430
2	8.00	11	450

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
16:00	18:30	2.50	13	Wait on cement
18:30	18:45	0.25	7	Rig service function test crown saver
18:45	23:30	4.75	14C	Nipple down diverter system spot BOP
23:30	24:00	0.50	14A	Install casing bowl and torque to 7000ft/lbl

Remarks
Level one inspection on overhead equitment mh
Blew down boilers 100L

SAFETY

Safety Topic	MEHL	MACP
nipple down diverter		

FRONT PAGE SUMMARY

Tour Sheet Serial Number: BEAV2_20130201_1A	Version Software Version: RMS 2012.11.15.25129	Year: 2013	Month: 02	Day: 01	DAILY CHECKS	DP	RM
Location No: 1211	Well Name: COPRC LOON CREEK 300-C-006-L-094-P-16	Surface Location: 65:05:51.05N/127:00:30.07W	Prov: NT	Lat Type: Lat/Long	Unique Well Id: 300-C-006-L-094-P-16		
Operator: Conoco Canada	Contractor: Beaver Drilling Ltd.	Rig No: 2	Well Type: VERT	Re-Entry: ☐			
Operator's AFE: 10342919	Contractor's Job No: 149	Spud Date Time: 26-Jan-2013 12:00					
Signature Of Operator's Representative: DAVE FORSBERG	Signature Of Contractor's Rig Manager: RICK YAVIS	Rig Released Date Time:					

DAILY CHECKS

	DP	RM
(1.) Daily Walk Around Inspection	DP	RV
(2.) Detailed Inspection - Weekly (Using Check List)	DP	RV
(3.) H2S Signs Posted If Required		
(4.) Well License & Sour Diagram Posted	DP	RV
(5.) Flare Lines Staked	DP	RV
(6.) BOP Drills Performed	DP	RV
(7.) Visually Inspected BOPs-Flare Lines & Degasser Lines	DP	RV
(1.) Rig Site Health & Safety Meeting (conspicuous/hands		RV
(2.) CAODC Rig Safety Inspection Checklist (completed/posted)		
(3.) Weil Inspection before Rigging or Lowering		RV
(4.) Crown Saver Checked		
(5.) Motor Kills Checked		

CAODC

MD Totco

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 Sidetrack Casing	19 Fishing	20 Dir Work	21 Safety Meeting	22 Tear Down	23 Waiting On	24 Rig Walch	25 Other	TOTAL
HOURS Tour 1							0.25							7.25							0.50					8.00
Tour 2							0.25							7.75												8.00
Tour 3							0.25								7.50						0.25					8.00
TOTAL							0.75							15.00	7.50						0.75					24.00

FUEL @ 08:00 HRS: Fuel 172, Used 155, Bbls 05:00, Temp -22

WEATHER: Forecast Conditions: LIGHT SNOW; Wind Direction: W; Wind Speed: CALM; Road Condition: FAIR

TOUR 1

SIGNATURE OF DRILLER: MARCUS HALLOWES

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: Grade; TO; ODC; BDC; Reason Pulled; LOC; Tooth/Journal; BRG

METRES 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 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	500
2	8.00	11	500

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	14A	Install casing bowl and torque to 7000ft/lbl
1:15	1:30	0.25	21D	Safety meeting
1:30	7:45	6.25	14A	Nipple up BOPs
7:45	8:00	0.25	21D	Crew change safety meeting

Remarks
Level one inspection on all overhead equitment
Fuel meas boiler 1 155 boiler 2 155

SAFETY

Safety Topic	MEHL	MACP

TOUR 2

SIGNATURE OF DRILLER: BRIAN BERGSETH

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: Grade; TO; ODC; BDC; Reason Pulled; LOC; Tooth/Journal; BRG

METRES 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 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
8:00	8:15	0.25	7	Rig servive
8:15	16:00	7.75	14A	Nipple up b.o.p & make up & weld flow tee & modified & install catch can & rig up flare lines NEB Representatives Rick Turner and Lori Croal inspected base camp and the drilling operation

Remarks
level 1 inspection on blocks swivel bails elevators derrick & sub . Blow down boiler 100 l

SAFETY

Safety Topic	MEHL	MACP

TOUR 3

SIGNATURE OF 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: Grade; TO; ODC; BDC; Reason Pulled; LOC; Tooth/Journal; BRG

METRES 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 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
Lime	20	sks
calcium chloride	20	sks
Versamul	2	bbl

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	500
2	8.00	11	500

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
16:30	24:00	7.50	15A	Test BOPs with schlumberger as follows,Pressure test Annular 1400kpa low and 17500kpa high 10 min. each,test Blind rams all Manifold valves,Kill line valves with Check valve and Choke line valves with HCR valve 1400kpa low and 20,000kpa high 10 min. each

Remarks
Level one inspection on all overhead equitment mh
Blew down boilers 100l

SAFETY

Safety Topic	MEHL	MACP
Pressure test b.o.p		

FRONT PAGE SUMMARY

Tour Sheet Serial Number: BEAV2_20130202_1B | Vendor Software Version: RMS 2012.11.15.25129 | Year: 2013 | Month: 02 | Day: 02

Licence No: 1211	Well Name: COPRC LOON CREEK 300-C-006-L-094-P-16	Surface Location: 65:05:51.05N/127:00:30.07W	Prov: NT	Loc Type: LatLong	Unique Well Id: 300-C-006-L-094-P-16		
Operator: Conoco Canada	Contractor: Beaver Drilling Ltd.	Rig No: 2	Well Type: VERT	Rig Entry: ☐			
Operator's AFE: 10342818	Contractor's Job No: 149	Spud Date Time: 26-Jan-2013	12:00				
Signature Of Operator's Representative: DAVE FORSBERG	Signature Of Contractor's Rig Manager: RICK YAVIS	Rig Release Date Time					

DAILY CHECKS — DP / RM

(1.) Daily Walk Around Inspection — DP ☑ RM ☑
(2.) Detailed Inspection - Weekly (Using Check List) — DP ☑ RM ☑
(3.) H2S Signs Posted if Required — DP RM
(4.) Well License & Block Diagram Posted — DP RM
(5.) Flare Lines Staked — DP RM
(6.) BOP Drills Performed — DP ☑ RM ☑
(7.) Visually Inspected BOPs, Flare Lines & Degasser Lines — DP ☑ RM ☑
(1.) Rig Site Health & Safety Meeting (or attendance) — RM ☑
(2.) CAODC Rig Safety Inspection Checklist (emphasized) — RM ☑
(3.) Weil Inspection before Raising or Lowering — RM ☑
(4.) Crown Saver Checked — RM ☑
(5.) Motor Kills Checked — RM ☑

CAODC — NOV MD Totco

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 Wiring On	24 Rig Walkn	25 Other	TOTAL
HOURS Tour 1															7.75						0.25					8.00
Tour 2					0.75	3.75	0.25													3.00	0.25					8.00
Tour 3		2.00			2.75		0.25								2.50						0.50					8.00
TOTAL		2.00			3.50	3.75	0.50								10.25					3.00	1.00					24.00

FUEL @ 08:00 HRS: Tank 208 | Dipstick 148

WEATHER: Time 05:45 | Temp -25 | Weather Conditions: PARTLY CLOUDY | Wind Direction: N | Wind Strength: CALM | Road Conditions: FAIR

TOUR 1

SIGNATURE OF DRILLER: MARCUS HALLOWES | 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: T1 | T2 | ODC | BDC | LOC | BRG | Weight | Reason Pulled | Total Hours

METRES DRILLED

From	To	D-R-C	RPM	WOB

DRILLING ASSEMBLY

No	Component	OD	ID	Length

Drill Pipe: Stands | 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	500
2	8.00	11	500

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
0:00	7:45	7.75	15A	Continue to pressure test with Schlumberg, pressure test Kelly Cock ,Stabbing Valve and in side BOP, 1400kpa low and 20,000kpa high 10 min. each.
7:45	8:00	0.25	21D	Crew change safety meeting

Remarks
Level one inspection on all overhead equitment
boiler #1 fuel 187cm
boiler #2 fuel 148cm

SAFETY

Safety Topic	MEHL	MACP

TOUR 2

SIGNATURE OF DRILLER: BRIAN BERGSETH | START TIME: 8:00 | END TIME: 16:00

BITS

Bit Number	1
Size	222
IADC Code	
Manufacturer	Reed
Type	MSR616M
Serial No	A141416
Jets	11,1 11,1 11,1 11,1 11,1 11,1
Depth Out (m)	
Depth In (m)	
Total Drilled (m)	
Hrs Run Today	
Cumulative Hrs Run	
Entry Date	

CUTTING STRUCTURE: T1 | T2 | ODC | BDC | LOC | BRG | Weight | Reason Pulled | Total Hours

METRES DRILLED

From	To	D-R-C	RPM	WOB

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	Reed pdc bit	222	59	0.25
1	Mud Motor	192	62	8.21
1	Monel	170	73	9.48
1	Landing Sub	184	86	0.55
2	N.M. DC	168	72	18.88
1	Jar	157	76	9.77
1	X/O	165	75	0.85
12	6" D.C	160	60	110.27
2	XO	161	61	1.05
10	HWDP	165	108	93.35
1	4 1/2 IF X/O XT54	167	108	0.31
2	5" D.P	165	108	7.06
19	Drill Pipe: Stands			356.23
0	Drill Pipe: Singles			0.00

Kelly Down: 11.61
Total: 640.27
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

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
8:00	8:15	0.25	7	Rig service function test crown saver
8:15	8:30	0.25	21	Safety meeting function test motor kills
8:30	11:30	3.00	20D	Pick up & make up dir tools
11:30	15:15	3.75	6A	Run in hole to 573m
15:15	16:00	0.75	5B	Displace hole to inverte mud @ 573 m

Remarks
level 1 inspection on blocks swivel bails elevators derrick & sub . Blow down boiler 100 l

SAFETY

Safety Topic	MEHL	MACP
pick up dir tools		

TOUR 3

SIGNATURE OF DRILLER: MARCUS HALLOWES | START TIME: 16:00 | END TIME: 24:00

BITS

Bit Number	1
Size	222
IADC Code	
Manufacturer	Reed
Type	MSR616M
Serial No	A141416
Jets	11,1 11,1 11,1 11,1 11,1 11,1
Depth Out (m)	
Depth In (m)	600.00
Total Drilled (m)	5.00
Hrs Run Today	1.00
Cumulative Hrs Run	1.00
Entry Date	

CUTTING STRUCTURE: T1 | T2 | ODC | BDC | LOC 5,00 | BRG | Weight | Reason Pulled | Total Hours

METRES DRILLED

From	To	D-R-C	RPM	WOB
600.00	605.00	DRILL	50	4

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	Reed pdc bit	222	59	0.25
1	Mud Motor	192	62	8.21
1	Monel	170	73	9.48
1	Landing Sub	184	86	0.55
2	N.M. DC	168	72	18.88
1	Jar	157	76	9.77
1	X/O	165	75	0.85
12	6" D.C	160	60	110.27
2	XO	161	61	1.05
10	HWDP	167	108	93.35
1	4 1/2 IF X/O XT54	167	108	0.31
17	Drill Pipe: Stands			327.57
1	Drill Pipe: Singles			9.69

Kelly Down: 12.41
Total: 605.02
Weight of DC
Weight of String: 43,00

HOLE CONDITION: Hole Drag: Up: 0 | Down: 0 | 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	135	5300	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

MUD MATERIALS ADDED

Product	Amount	Type

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	500
2	8.00	11	500

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
16:00	16:45	0.75	5B	Displace hole to inverte @ 573 m
16:45	17:00	0.25	7	Rig service function test pipe ram's 3 sec & crown saver
17:00	19:30	2.50	15A	Pressure test Pipe ram's and upper Kelly cock 1400kpa low and 19500kpa high 10 min.each,Accumulater function test as follows Precharge pressure 7200kpa, Starting pressure 20,000kpa close Annular, open HCR and close Pipe rams and pressure of 10,500kpa ,Recharge time 3min 5sec.
19:30	21:30	2.00	5B	Displace hole to invert
21:30	21:45	0.25	21	Man down drill
21:45	22:00	0.25	21A	BOP drill well secure in 90 sec crew in positions
22:00	23:00	1.00	2C	Drill out cement and two floats one at 585m and 595m
23:00	24:00	1.00	2	Drill 222mm hole from 600m to 605m with Reed MSR616M bit Schlumberger 7/8 5stage motor set at 1.15° and directional BHA with Gama, pumping 1.4m3/min

Remarks
Level one inspection on tongs and all overhead equitment mh
Blew down boiler 100l

SAFETY

Safety Topic	MEHL	MACP
b.o.p drill Man down drill		

FRONT PAGE SUMMARY

Tour Sheet Serial Number: BEAV2_20130203_18 | Vendor Software Version: RMS 2012.11.15.25129 | Year: 2013 | Month: 02 | Day: 03

Licence No: 1211	Well Name: COPRC LOON CREEK 300-C-006-L-094-P-16	Surface Location: 65:05:51.05N/127:00:30.07W	Prov: NT	Lat Type: LatLong	Unique Well Id: 300-C-006-L-094-P-16		
Operator: Conoco Canada	Contractor: Beaver Drilling Ltd.	Rig No: 2	Well Type: VERT	Re-Entry: ☐			
Operator's AFE: 10342919	Contractor's Job No: 149	Spud Date Time: 26-Jan-2013	12:00				
Signature Of Operator's Representative: DAVE FORSBERG	Signature Of Contractor's Rig Manager: RICK YAVIS	Rig Release Date Time					

DAILY CHECKS — OP / PM

(1) Daily Visual Around Inspection — OP ☐ PM ☐
(2) Detailed Inspection - Weekly (Using Check List) — OP ☐ PM ☐
(3) H2S Signs Posted if Required — OP ☐ PM ☐
(4) Well Licence & BOP Diagram Posted — OP ☐ PM ☐
(5) Flare Lines Staked — OP ☐ PM ☐
(6) BOP Drills Performed — OP ☐ PM ☐
(7) Visually Inspected BOPs, Flare Lines & Degasser Lines — OP ☐ PM ☐
(1) Rig Site Health & Safety Meeting (once/week/month) — PM ☐
(2) CAODC Rig Safety Inspection Checklist (once/fortnight/month) — PM ☐
(3) Visual Inspection before Rotating or Lowering — PM ☐
(4) Crown Saver Checked — PM ☐
(5) Under Rig Checked — PM ☐

CAODC NOV MD Totco

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 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		6.25					0.25									1.25					0.25					8.00
Tour 2		6.25					0.25			1.00											0.50					8.00
Tour 3		6.75					0.25			1.00																8.00
TOTAL		19.25					0.75			2.00						1.25					0.75					24.00

FUEL @ 06:00 HRS: Tank 165 | Used 80 | Time 05:00 | Level -32

WEATHER: Conditions OVERCAST | Wind Direction W | Wind Strength UP TO 19 KMH | Visibility FAIR

TOUR 1

SIGNATURE OF DRILLER: MARCUS HALLOWES — START TIME: 0:00 — END TIME: 8:00

BITS

Bit Number	1
Size	222
IADC Code	
Manufacturer	Reed
Type	MSR616M
Serial No	A141416
Jets	11,1 / 11,1 / 11,1 / 11,1 / 11,1 / 11,1
Depth Out (m)	
Depth In (m)	600.00
Total Drilled (m)	91.00
Hrs Run Today	
Cumulative Hrs Run	1.00
Entry Date	

CUTTING STRUCTURE: Length | I | O | ODC | B | G | Reason Pulled | Total Rotating Hrs | LOC | BRG | 91.00

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	Reed pdc bit	222	59	0.28
1	Mud Motor	192	60	8.21
1	Monel	170	73	9.48
1	Landing Sub	164	86	0.55
2	N.M. DC	168	72	18.96
1	Jar	157	76	8.77
1	X/O	165	75	0.89
12	6" D.C	160	60	115.27
2	XO	160	59	1.06
10	HWDP	162	108	93.85
1	4 1/2 IF X/O XT54	167	109	0.31
20	Drill Pipe — Stands			433.79
0	Drill Pipe — Singles			0.00

Kelly Down: 1.86 | Total: 691.00 | Weight of DC | Weight of String: 43.00

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other

Time	02:30	05:15
Density	870	870
Funnel Viscosity	45	49
Fluid Loss		
pH		
Location Of Sample	Shaker	Shaker
Depth	613.00	643.00
PVT	50	49

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	SINGLE	140	140	5200	

Remarks

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type
03:15	600.62	1.01	110.09	DIRECTIONAL
03:00	619.94	1.01	122.48	DIRECTIONAL
04:30	639.13	1.10	125.10	DIRECTIONAL
05:45	652.00	1.10	125.12	DIRECTIONAL
06:00	671.00	1.49	123.41	DIRECTIONAL
07:45	715.36	1.71	126.48	DIRECTIONAL

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density

MUD MATERIALS ADDED

Product	Amount	Type
Lime	15	sks
Versamul	2	bbl

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
0:00	0:30	0.50	2	Drill 222mm hole from 605m to 613m with Reed MSR616M bit Schlumberger 7/8 5stage motor set at 1.15° and directional BHA with Gama, pumping 1.4m3/min
0:30	0:45	0.25	7	Rig service function test annular 13sec to close test crown saver
0:45	2:00	1.25	16C	formation gradient test at 613m
2:00	7:45	5.75	2	Drill 222mm hole from 613m to 791m with Reed MSR616M bit Schlumberger 7/8 5stage motor set at 1.15° and directional BHA with Gama, pumping 1.4m3/min
7:45	8:00	0.25	21	Crew handover meeting

Remarks
Level one inspection on tongs and all overhead equitment mh
Blew down boilers 100l
Boiler 1 fuel 90cm 2fuel 178cm

METRES DRILLED

From	To	D-R-C	RPM	WOB
605.00	691.00	DRILL	50	5

HOLE CONDITION

Hole Drag — Up: 0 — Down: 0
Torque At Bottom
Fill On Bottom

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
1	2403	@	86	@	691.00
		@		@	
		@		@	

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	500
2	8.00	11	500

SAFETY

Safety Topic	MEHL	MACP
making connections		5245

TOUR 2

SIGNATURE OF DRILLER: BRIAN BERGSETH — START TIME: 8:00 — END TIME: 16:00

BITS

Bit Number	1
Size	222
IADC Code	
Manufacturer	Reed
Type	MSR616M
Serial No	A141416
Jets	11,1 / 11,1 / 11,1 / 11,1 / 11,1 / 11,1
Depth Out (m)	
Depth In (m)	600.00
Total Drilled (m)	227.00
Hrs Run Today	6.25
Cumulative Hrs Run	7.25
Entry Date	

CUTTING STRUCTURE: Length | I | O | ODC | B | G | Reason Pulled | Total Rotating Hrs | LOC | BRG | 31.31

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	Reed pdc bit	222	59	0.28
1	Mud Motor	192	60	8.21
1	Monel	170	73	9.48
1	Landing Sub	164	86	0.55
2	N.M. DC	168	72	18.96
1	Jar	157	76	8.77
1	X/O	165	75	0.89
12	6" D.C	160	60	113.47
2	XO	161	61	1.06
10	HWDP	167	109	93.85
1	4 1/2 IF X/O XT54	167	109	0.31
29	Drill Pipe — Stands			559.22
0	Drill Pipe — Singles			0.00

Kelly Down: 12.43 | Total: 827.00 | Weight of DC | Weight of String: 48.00

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other

Time	10:15	13:45
Density	870	890
Funnel Viscosity	49	53
Fluid Loss		
pH		
Location Of Sample	shaker	shaker
Depth	730.00	778.00
PVT	44	41

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	PARALLEL	140	93	9300	7.00
2	PARALLEL	140	93	9300	7.00

Remarks

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type
09:00	726.00	1.41	120.59	DIRECTIONAL
09:30	735.65	1.01	128.42	DIRECTIONAL
10:00	754.85	1.32	119.5	DIRECTIONAL
10:30	764.71	1.10	112.99	DIRECTIONAL
11:00	784.15	1.32	111.59	DIRECTIONAL
11:30	793.85	1.19	81.31	DIRECTIONAL

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density

MUD MATERIALS ADDED

Product	Amount	Type
calcium chloride	30	sxs
Versamul	1	drum

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
8:00	8:15	0.25	21A	Held BOP drill well secure in 85 sec
8:15	8:30	0.25	21	Man down drill
8:30	8:45	0.25	7	Rig service function test pipe ram's 3 sec & crown saver
8:45	15:00	6.25	2	Drill 222mm hole from 691m to 827m with Reed MSR616M bit Schlumberger 7/8 5stage motor set at 1.15° and directional BHA with Gamma, pumping 1.8m3/min
15:00	16:00	1.00	10	Accumulated time for surveys

Remarks
level 1 inspection on blocks swivel bails elevators derrick & sub . Blow down boiler 100 l

METRES DRILLED

From	To	D-R-C	RPM	WOB
691.00	827.00	DRILL	50	5

HOLE CONDITION

Hole Drag — Up: 0 — Down: 0
Torque At Bottom
Fill On Bottom

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
2	2265	@	80	@	786.00
		@		@	
		@		@	

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	450

SAFETY

Safety Topic	MEHL	MACP
b.o.p drill		5245

TOUR 3

SIGNATURE OF DRILLER: MARCUS HALLOWES — START TIME: 16:00 — END TIME: 24:00

BITS

Bit Number	1
Size	222
IADC Code	
Manufacturer	Reed
Type	MSR616M
Serial No	A141416
Jets	11,1 / 11,1 / 11,1 / 11,1 / 11,1 / 11,1
Depth Out (m)	
Depth In (m)	600.00
Total Drilled (m)	358.00
Hrs Run Today	6.75
Cumulative Hrs Run	15.00
Entry Date	

CUTTING STRUCTURE: Length | I | O | ODC | B | G | Reason Pulled | Total Rotating Hrs | LOC | BRG | 23.87

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	Reed pdc bit	222	59	0.28
1	Mud Motor	192	61	8.21
1	Monel	170	73	9.48
1	Landing Sub	164	86	0.55
2	N.M. DC	168	72	18.96
1	Jar	157	76	8.77
1	X/O	165	75	0.89
12	6" D.C	160	60	113.27
2	XO	160	60	1.06
10	HWDP	162	108	93.85
1	4 1/2 IF X/O XT54	167	109	0.31
35	Drill Pipe — Stands			693.35
0	Drill Pipe — Singles			0.00

Kelly Down: 10.00 | Total: 958.71 | Weight of DC | Weight of String: 49.00

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other

Time	17:30	20:00
Density	900	900
Funnel Viscosity	53	50
Fluid Loss		
pH		
Location Of Sample	shaker	Shaker
Depth	855.00	885.00
PVT	36	41

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	PARALLEL	140	94	10000	7.00
2	PARALLEL	140	94	10000	7.00

Remarks

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type
18:15	831.00	1.58	49.01	DIRECTIONAL
19:45	860.00	2.02	64.70	DIRECTIONAL
20:30	879.00	1.89	64.74	DIRECTIONAL
21:30	898.00	1.19	23.61	DIRECTIONAL
22:45	926.00	1.32	19.08	DIRECTIONAL

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density

MUD MATERIALS ADDED

Product	Amount	Type
calcium chloride	5	sks
Optiseal4	3	sks
MIX II (fine)	5	sks
MIX II (medium)	5	sks

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
15:00	16:15	0.25	7	Rig service function test hydril 14 sec & crown saver
16:15	23:00	6.75	2	Drill 222mm hole from 827m to 858m with Reed MSR616M bit Schlumberger 7/8 5stage motor set at 1.15° and directional BHA with Gamma, pumping 1.8m3/min
23:00	24:00	1.00	10	Accumulated time for surveys

Remarks
Level one inspection on tongs and all overhead equitment mh
blew down boilers 100l

METRES DRILLED

From	To	D-R-C	RPM	WOB
827.00	858.00	DRILL	50	5

HOLE CONDITION

Hole Drag — Up: 0 — Down: 0
Torque At Bottom
Fill On Bottom

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
1	2770	@	86	@	828.00
		@		@	
		@		@	

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	430

SAFETY

Safety Topic	MEHL	MACP
		5245

FRONT PAGE SUMMARY

Tour Sheet Serial Number: BEAV2_20130203_18 | Vendor Software Version: RMS 2012.11.15.25129 | Year: 2013 | Month: 02 | Day: 03

Location No: 1211	Well Name: COPRC LOON CREEK 300-C-006-L-094-P-15	Surface Location: 65:05:51.05N/127:00:30.07W	Pad: NT	Lat Type: LatLong	Unique Well Id: 300-C-006-L-094-P-15		
Operator: Conoco Canada		Contractor: Beaver Drilling Ltd.	Rig No: 2	Well Type: VERT	Re-Entry: ☐		
Operator's AFE: 10342819		Contractor's Job No: 149	Spud Date Time: 26-Jan-2013	12:00			
Signature Of Operator's Representative: DAVE FORSBERG		Signature Of Contractor's Rig Manager: RICK YAVIS	Rig Released Date Time:				

DAILY CHECKS (DP / RM)

(1A) Daily Walk Around Inspection
(2J) Detailed Inspection - Weekly (Using Check List)
(2K) H2S Signs Posted if Required
(4J) Well Licenses & BOPE Diagram Posted
(5J) Flare Lines Staked
(6J) BOP Drills Performed
(7J) Visually Inspected BOPs+Flare Lines & Diagram Lines
(1J) Rig Site Health & Safety Meeting (once monthly)
(3J) CAODC Rig Safety Inspection Checklist (once/month)
(2L) Mast Inspection before Raising or Lowering
(4L) Crown Saver Checked
(5J) Motor Kills Checked

CAODC | NOV MD Totco

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 Surveys	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		6.25					0.25									1.25					0.25					8.00
Tour 2		6.25					0.25			1.00											0.50					8.00
Tour 3		6.75					0.25			1.00																8.00
TOTAL		19.25					0.75			2.00						1.25					0.75					24.00

FUEL @ 08:00 HRS: Rig 166 | Fuel 90 | Time 05:00 | T Bay -32 | Current Conditions: OVERCAST | Wind Direction W | Wind Strength UP TO 15 KM/H | Road Conditions FAIR

TOUR 1

SIGNATURE OF DRILLER: MARCUS HALLOWES

START TIME: 0:00 END TIME: 8:00

BITS

Bit Number	1
Size	222
IADC Code	
Manufacturer	Reed
Type	MSR616M
Serial No	A141416
Jets	11.1 11.1 11.1 11.1 11.1 11.1
Depth Out (m)	
Depth In (m)	600.00
Total Drilled (m)	91.00
Hrs Run Today	
Cumulative Hrs Run	1.00
Entry Date	

CUTTING STRUCTURE: TI | Wear | TD | BDC | Recon Rate | BDC | LOC | Tooth/Bear | LOC 91.00 | BRG

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	Reed pdc bit	222	59	0.28
1	Mud Motor	192	60	8.21
1	Monel	170	73	9.45
1	Landing Sub	164	86	0.55
2	N.M. DC	158	72	18.88
1	Jar	157	76	9.77
1	X/O	165	75	0.89
12	6" D.C	160	60	113.27
2	XO	160	59	1.06
10	HWDP	162	108	93.59
1	4 1/2 IF X/D XT54	167	109	0.31
20	Drill Pipe	Stands		433.79
0	Drill Pipe	Singles		0.00

Kelly Down 1.86 | Total 691.00 | Weight of DC | Weight of String 43.00

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	5200	

Remarks

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
1	2403	@	86	@	691.00
		@		@	
		@		@	

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 Sequance & Remarks

Remarks
Level one inspection on tongs and all overhead equitment mh
Blew down boilers 100l
Boiler 1 fuel 90cm 2fuel 178cm

METRES DRILLED

From	To	D-R-C	RPM	WOB

HOLE CONDITION

Hole Drag: Up 0 Down 0 | Torque At Bottom | Fill On Bottom

SAFETY

Safety Topic	MEHL	MACP
making connections		5245

TOUR 2

SIGNATURE OF DRILLER: BRIAN BERGSETH

START TIME: 8:00 END TIME: 16:00

BITS

Bit Number	1
Size	222
IADC Code	
Manufacturer	Reed
Type	MSR616M
Serial No	A141416
Jets	11.1 11.1 11.1 11.1 11.1 11.1
Depth Out (m)	
Depth In (m)	600.00
Total Drilled (m)	227.00
Hrs Run Today	6.25
Cumulative Hrs Run	7.25
Entry Date	

CUTTING STRUCTURE: TI | Wear | TD | BDC | Recon Rate | BDC | LOC | Tooth/Bear | LOC 31.31 | BRG

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	Reed pdc bit	222	59	0.28
1	Mud Motor	192	60	8.21
1	Monel	170	73	9.45
1	Landing Sub	164	86	0.55
2	N.M. DC	158	72	18.88
1	Jar	157	76	9.77
1	X/O	165	75	0.89
12	6" D.C	160	60	113.27
2	XO	161	61	1.06
10	HWDP	167	108	93.85
1	4 1/2 IF X/D XT54	167	109	0.31
29	Drill Pipe	Stands		559.22
0	Drill Pipe	Singles		0.00

Kelly Down 12.43 | Total 827.00 | Weight of DC | Weight of String 48.00

MUD RECORD

Mud Type: Water ☑ Oil ☐ Other

Time	15:45
Density	900
Funnel Viscosity	53
Fluid Loss	
pH	
Location Of Sample	shaker
Depth	825.00
PVT	36

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	PARALLEL	140	93	9300	7.00
2	PARALLEL	140	93	9300	7.00

Remarks

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
2	2265	@	80	@	709.00
		@		@	
		@		@	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type
13:00	812.15	1.41	51.12	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 Sequance & Remarks

Remarks
level 1 inspection on blocks swivel bails elevators derrick & sub . Blow down boiler 100 l

METRES DRILLED

From	To	D-R-C	RPM	WOB

HOLE CONDITION

Hole Drag: Up 0 Down 0 | Torque At Bottom | Fill On Bottom

SAFETY

Safety Topic	MEHL	MACP
b.o.p drill		5245

TOUR 3

SIGNATURE OF DRILLER: MARCUS HALLOWES

START TIME: 16:00 END TIME: 24:00

BITS

Bit Number	1
Size	222
IADC Code	
Manufacturer	Reed
Type	MSR616M
Serial No	A141416
Jets	11.1 11.1 11.1 11.1 11.1 11.1
Depth Out (m)	
Depth In (m)	600.00
Total Drilled (m)	358.00
Hrs Run Today	6.75
Cumulative Hrs Run	15.00
Entry Date	

CUTTING STRUCTURE: TI | Wear | TD | BDC | Recon Rate | BDC | LOC | Tooth/Bear | LOC 21.87 | BRG

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	Reed pdc bit	222	59	0.28
1	Mud Motor	192	61	8.21
1	Monel	170	73	9.45
1	Landing Sub	164	86	0.55
2	N.M. DC	158	72	18.88
1	Jar	157	76	9.77
1	X/O	165	75	0.89
12	6" D.C	160	60	113.27
2	XO	160	60	1.06
10	HWDP	162	108	93.85
1	4 1/2 IF X/D XT54	167	109	0.31
36	Drill Pipe	Stands		593.36
0	Drill Pipe	Singles		0.00

Kelly Down 10.00 | Total 958.71 | Weight of DC | Weight of String 49.00

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other

Time	23:30
Density	900
Funnel Viscosity	51
Fluid Loss	
pH	
Location Of Sample	Shaker
Depth	951.00
PVT	42

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	PARALLEL	140	94	10000	7.00
2	PARALLEL	140	94	10000	7.00

Remarks

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
1	2770	@	86	@	829.00
		@		@	
		@		@	

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 Sequance & Remarks

Remarks
Level one inspection on tongs and all overhead equitment mh
blew dowm boilers 100l

METRES DRILLED

From	To	D-R-C	RPM	WOB

HOLE CONDITION

Hole Drag: Up 0 Down 0 | Torque At Bottom | Fill On Bottom

SAFETY

Safety Topic	MEHL	MACP
		5245

FRONT PAGE SUMMARY

Tour Sheet Serial Number: BEAV2_20130204_18 | Vendor Software Version: RMS 2012.11.15.25129 | Year: 2013 | Month: 02 | Day: 04

Licensee No	Well Name	Surface Location	Area	Lsd Type	Unique Well Id
1211	COPRC LOON CREEK 300-C-006-L-094-P-16	65:05:51.05N/127:00:30.07W	NT	Lat/Long	300-C-006-L-094-P-16

Operator	Contractor	Rig No	Well Type	Re-Entry
Conoco Canada	Beaver Drilling Ltd.	2	VERT	☐

Operator's AFE	Contractor's Job No	Spud Date Time
10342919	149	26-Jan-2013 12:00

Signature Of Operator's Representative	Signature Of Contractor's Rig Manager	Rig Release Date Time
DAVE FORSBERG	RICK YAVIS	

DAILY CHECKS — DP RM

(1) Daily Walk Around Inspection — DP RV
(2) Safehat Inspection - Monthly (Visiting Check Link) — DP RV
(3) H2S Signs Posted If Required — DP RV
(4) Well Licence & Well Diagram Posted — DP RV
(5) Flare Lines Staked — DP RV
(6) BOP Drills Performed — DP RV
(7) Visually Inspected BOPs, Flare Lines & Separator Lines — DP RV
(1) Rig Site Health & Safety Meeting (emphasis/comments) — RV
(2) CADDC Rig Safety Inspection Checklist (emphasis/comments) — RV
(3) Hoist Inspection before Raising or Lowering — RV
(4) Crown Saver Checked — RV
(5) Master Bits Checked — RV

CADDC — MD Totco

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		6.50					0.25			1.00											0.25					8.00
Tour 2		6.75					0.25			1.00																8.00
Tour 3		6.75					0.25			1.00																8.00
TOTAL		20.00					0.75			3.00											0.25					24.00

FUEL @ 08:00 HRS: Rig 198 | Date 212 | Time 05:00 | Today -28 | Weather Conditions: LIGHT SNOW | Wind Direction N | Wind Strength UP TO 19 KM/H | Road Conditions FAIR

TOUR 1

SIGNATURE OF DRILLER: MARCUS HALLOWES — START TIME: 0:00 — END TIME: 8:00

BITS

Bit Number	1
Size	222
IADC Code	
Manufacturer	Reed
Type	MSR616M
Serial No	A141416
Jets	11.1 11.1 11.1 11.1 / 11.1 11.1
Depth Out (m)	
Depth In (m)	600.00
Total Drilled (m)	495.00
Hrs Run Today	6.50
Cumulative Hrs Run	21.50
Entry Date	

CUTTING STRUCTURE: TI — Grade — TO — ODC — BDC — Reason Pulled — LOC — Tooth Height — BRG — 23.02

METRES DRILLED

From	To	D-R-C	RPM	WOB
958.00	1045.00	DRILL	60	6.5

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	Reed pdc bit	222	59	0.28
1	Mud Motor	192	59	8.21
1	Monel	170	73	9.48
1	Landing Sub	164	86	0.55
2	N.M. DC	158	72	18.86
1	Jar	157	76	9.77
1	X/O	165	75	0.89
12	6" D.C	160	60	113.27
2	XO	160	60	1.06
10	HWDP	162	108	93.86
1	4 1/2 IF X/O XT54	167	109	0.31
43	Drill Pipe	Stands		827.76
0	Drill Pipe	Singles		0.00
	Kelly Down			12.41
	Total			1095.52
	Weight of BC			
	Weight of String			

HOLE CONDITION: Hole Drag Up 0 Down 0 — Torque At Bottom — Fill On Bottom

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other

Time	01:30	04:00
Density	910	910
Funnel Viscosity	50	50
Fluid Loss		
pH		
Location Of Sample	Shaker	Shaker
Depth	980.00	1042.00
PVT	44	43

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	PARALLEL	140	95	10000	7.50
2	PARALLEL	140	95	10000	7.50

Remarks

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
1	2384	@	79	@	1095.00
		@		@	
		@		@	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type
01:00	955.60	1.71	32.88	DIRECTIONAL
02:30	985.10	1.58	42.42	DIRECTIONAL
04:00	1014.95	1.89	51.51	DIRECTIONAL
05:30	1043.60	2.11	57.62	DIRECTIONAL
07:00	1071.58	2.42	62.41	DIRECTIONAL

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density

MUD MATERIALS ADDED

Product	Amount	Type
calcium chloride	5	sks
Optiseal4	2	sks
MIX II (fine)	5	sks
MIX II (medium)	5	sks

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	500
2	8.00	10.5	500

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
0:00	0:15	0.25	2	Drill 222mm hole from 958m to 961m with Reed MSR616M bit Schlumberger 7/8 5stage motor set at 1.15° and directional BHA with Gamma, pumping 1.8m3/min
0:15	0:30	0.25	7	Rig service function test annular 13 sec to close function test crown saver
0:30	6:45	6.25	2	Drill 222mm hole from 961m to1095 m with Reed MSR616M bit Schlumberger 7/8 5stage motor set at 1.15° and directional BHA with Gamma, pumping 1.8m3/min
6:45	7:45	1.00	10	Accumulated time for surveys
7:45	8:00	0.25	21	Crew handover meeting

Remarks
Level one inspection on tongs and all overhead equitment mh
blew down boilers 100L
fuel boiler 1 212cm boiler 2 180cm

SAFETY

Safety Topic	MEHL	MACP
IRS		5245

TOUR 2

SIGNATURE OF DRILLER: BRIAN BERGSETH — START TIME: 8:00 — END TIME: 16:00

BITS

Bit Number	1
Size	222
IADC Code	
Manufacturer	Reed
Type	MSR616M
Serial No	A141416
Jets	11.1 11.1 11.1 11.1 / 11.1 11.1
Depth Out (m)	
Depth In (m)	600.00
Total Drilled (m)	591.00
Hrs Run Today	6.75
Cumulative Hrs Run	28.25
Entry Date	

CUTTING STRUCTURE: TI — Grade — TO — ODC — BDC — Reason Pulled — LOC — Tooth Height — BRG — 20.92

METRES DRILLED

From	To	D-R-C	RPM	WOB
1095.00	1191.66	DRILL	60	6.5

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	Reed pdc bit	222	59	0.28
1	Mud Motor	192	61	8.21
1	Monel	170	73	9.48
1	Landing Sub	164	86	0.55
2	N.M. DC	158	72	18.86
1	Jar	157	76	9.77
1	X/O	165	75	0.89
12	6" D.C	160	60	113.27
2	XO	160	61	1.06
10	HWDP	162	108	93.86
1	4 1/2 IF X/O XT54	157	109	0.31
48	Drill Pipe	Stands		923.90
0	Drill Pipe	Singles		0.00
	Kelly Down			12.41
	Total			1191.66
	Weight of BC			
	Weight of String			58.00

HOLE CONDITION: Hole Drag Up 0 Down 0 — Torque At Bottom — Fill On Bottom

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other

Time	08:00	10:15
Density	910	910
Funnel Viscosity	52	52
Fluid Loss		
pH		
Location Of Sample	shaker	shaker
Depth	1095.00	1110.00
PVT	46	45

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	DUPLEX	140	93	10300	7.00
2	DUPLEX	140	93	10300	7.00

Remarks

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
1	2590	@	82	@	1182.00
		@		@	
		@		@	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type
09:45	1090.66	2.11	51.6	DIRECTIONAL
10:45	1101.16	2.29	55.2	DIRECTIONAL
12:30	1119.52	1.19	24.4	DIRECTIONAL
13:45	1138.74	1.32	299.98	DIRECTIONAL
16:00	1177.53	1.19	321.29	DIRECTIONAL

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density

MUD MATERIALS ADDED

Product	Amount	Type
Lime	5	sks
calcium chloride	5	sks
Optiseal4	5	sks
Versatrol	5	sks
Versamul	1	DM

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	430
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 pipe ram's 3 sec & crown saver
8:15	15:00	6.75	2	Drill 222mm hole from 1095m to1191 m with Reed MSR616M bit Schlumberger 7/8 5stage motor set at 1.15° and directional BHA with Gamma, pumping 1.8m3/min
15:00	16:00	1.00	10	Accumulated time for surveys

Remarks
level 1 inspection on blocks swivel bails elevators derrick & sub . Blow down boiler 100 l

SAFETY

Safety Topic	MEHL	MACP
10 STEPS TO A SAFER WORK SITE		5245

TOUR 3

SIGNATURE OF DRILLER: MARCUS HALLOWES — START TIME: 16:00 — END TIME: 24:00

BITS

Bit Number	1
Size	222
IADC Code	
Manufacturer	Reed
Type	MSR616M
Serial No	A141416
Jets	11.1 11.1 11.1 11.1 / 11.1 11.1
Depth Out (m)	
Depth In (m)	600.00
Total Drilled (m)	725.00
Hrs Run Today	6.75
Cumulative Hrs Run	35.00
Entry Date	

CUTTING STRUCTURE: TI — Grade — TO — ODC — BDC — Reason Pulled — LOC — Tooth Height — BRG — 20.71

METRES DRILLED

From	To	D-R-C	RPM	WOB
1191.00	1325.00	DRILL	60	6.5

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	Reed pdc bit	222	59	0.28
1	Mud Motor	192	59	8.21
1	Monel	170	73	9.48
1	Landing Sub	164	86	0.55
2	N.M. DC	158	72	18.86
1	Jar	157	76	9.77
1	X/O	165	75	0.89
12	6" D.C	160	60	113.27
2	XO	165	71	1.06
10	HWDP	162	109	93.86
1	4 1/2 IF X/O XT54	167	109	0.31
55	Drill Pipe	Stands		1067.82
0	Drill Pipe	Singles		0.00
	Kelly Down			12.41
	Total			1325.28
	Weight of BC			
	Weight of String			59.00

HOLE CONDITION: Hole Drag Up 0 Down 0 — Torque At Bottom — Fill On Bottom

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other

Time	17:30	20:00
Density	920	910
Funnel Viscosity	55	47
Fluid Loss		
pH		
Location Of Sample	shaker	Shaker
Depth	1211.00	1258.00
PVT	43	45

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	PARALLEL	140	95	10300	7.50
2	PARALLEL	140	95	10300	7.50

Remarks

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
1	2728	@	84	@	1291.00
		@		@	
		@		@	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type
17:15	1196.83	1.01	337.6	DIRECTIONAL
18:15	1216.03	1.58	351.22	DIRECTIONAL
20:00	1235.60	1.01	6.29	DIRECTIONAL
21:00	1264.35	1.58	321.29	DIRECTIONAL
21:45	1274.14	1.89	325.5	DIRECTIONAL
23:30	1301.36	0.70	320.72	DIRECTIONAL

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density

MUD MATERIALS ADDED

Product	Amount	Type
Optiseal4	3	sks
Versatrol	3	sks
truvis	3	sks
Versamod	1	Bbl

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	500
2	8.00	11	500

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
16:00	16:15	0.25	7	Rig service function test hydril 14 sec
16:15	23:00	6.75	2	Drill 222mm hole from 1191m to1325m with Reed MSR616M bit Schlumberger 7/8 5stage motor set at 1.15° and directional BHA with Gamma, pumping 1.8m3/min
23:00	24:00	1.00	10	Accumulated time for surveys

Remarks
Level one inspection on tongs and all overhead equitment mh
Blew down boiler 100l

SAFETY

Safety Topic	MEHL	MACP
Steam use		5245

FRONT PAGE SUMMARY

Tour Sheet Serial Number: BEAV2_20130204_18 | Vendor Software Version: RMS 2012.11.15.25129 | Year: 2013 | Month: 02 | Day: 04

Licensee No: 1211	Well Name: COPRC LOON CREEK 300-C-006-L-094-P-16	Surface Location: 65:05:51.05N/127:00:30.07W	Prov: NT	Lic Type: LaLong	Unique Well Id: 300-C-006-L-094-P-16		
Operator: Conoco Canada	Contractor: Beaver Drilling Ltd.		Rig No: 2	Well Type: VERT	Sub-Sea: ☐		
Operator's API#: 10342919	Contractor's Job No: 149		Spud Date Time: 26-Jan-2013	12:00			
Signature Of Operator's Representative: DAVE FORSBERG	Signature Of Contractor's Rig Manager: RICK YAVIS		Rig Released Date Time:				

DAILY CHECKS

	OP	PM
(1) Daily Well Around Inspection	DP	PV
(2) Detailed Inspection - Weekly (Using Check List)	DP	PV
(3) H2S Signs Posted if Required	DP	PV
(4) Well Licence & Slick Diagram Posted	DP	PV
(5) Flare Lines Staked	DP	PV
(6) BOP Drills Performed	DP	PV
(7) Visually Inspected BOPs-Flare Lines & Degasser Lines	DP	PV
(1) Rig Site Health & Safety Meeting (minimum/month)		PV
(2) CAODC Rig Safety Inspection Checklist (minimum/month)		
(3) Hard Hard/Work Boots Required or Labouring		
(4) Derrick Board Completed		PV
(5) Motor Kills Checked		

CAODC

MD Totco

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	Mech BOP	Test BOP	Diff/Stem Test	Plug Back	Squeeze Cement	Fishing	Dir Work	Safety Meeting	Tour Comm	Waiting On	Rig Watch	Other	
Tour 1		6.50					0.25			1.00											0.25					8.00
Tour 2		6.75					0.25			1.00																8.00
Tour 3		6.75					0.25			1.00																8.00
TOTAL		20.00					0.75			3.00											0.25					24.00

FUEL @ 08:00 HRS: Rig 198 | Rate 212 | Loss 05:00 | Rate -28

WEATHER: Current Conditions: LIGHT SNOW | Wind Direction: N | Wind Strength: UP TO 18 KM/H | Road Conditions: FAIR

TOUR 1

SIGNATURE OF DRILLER: MARCUS HALLOWES | START TIME: 0:00 | END TIME: 8:00

BITS

Bit Number	1
Size	222
IADC Code	
Manufacturer	Reed
Type	MSR616M
Serial No	A141416
Jets	11.1 11.1 11.1 11.1 11.1 11.1
Depth Out (m)	
Depth In (m)	600.00
Total Drilled (m)	495.00
Hrs Run Today	6.50
Cumulative Hrs Run	21.50
Entry Date	

CUTTING STRUCTURE: TI | Grade | TO | ODC | IADC | Reason Pulled | LOC | Tool Run/Drilled 23.02 | BRG

METRES DRILLED

From	To	D-R-C	RPM	WOB

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	Reed pdc bit	222	59	0.25
1	Mud Motor	192	59	8.21
1	Monel	170	73	9.45
1	Landing Sub	164	86	0.55
2	N.M. DC	168	72	18.86
1	Jar	157	76	9.77
1	X/O	165	75	0.89
12	6" D.C	150	60	115.27
2	XO	159	60	1.06
10	HWDP	152	109	93.88
1	4 1/2 IF X/O XT54	167	109	0.31
43	Drill Pipe	Stands		827.76
0	Drill Pipe	Singles		0.00
	Kelly Down			12.41
	Total			1095.52
	Weight of DC			
	Weight of String			

HOLE CONDITION: Hole Drag: Up 0 Down 0 | Torque At Bottom | Fill On Bottom

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other

Time	06:00	
Density	910	
Funnel Viscosity	50	
Fluid Loss		
pH		
Location Of Sample	Shaker	
Depth	1066.00	
PVT	45	

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	PARALLEL	140	95	10000	7.50
2	PARALLEL	140	95	10000	7.50

Remarks

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
1	2384	@	79	@	880.00
		@		@	
		@		@	

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 one inspection on tongs and all overhead equitment mh
blew down boilers 100L
fuel boiler 1 212cm boiler 2 180cm

SAFETY

Safety Topic	MEHL	MACP
IRS		5245

TOUR 2

SIGNATURE OF DRILLER: BRIAN BERGSETH | START TIME: 8:00 | END TIME: 16:00

BITS

Bit Number	1
Size	222
IADC Code	
Manufacturer	Reed
Type	MSR616M
Serial No	A141416
Jets	11.1 11.1 11.1 11.1 11.1 11.1
Depth Out (m)	
Depth In (m)	600.00
Total Drilled (m)	591.00
Hrs Run Today	6.75
Cumulative Hrs Run	28.25
Entry Date	

CUTTING STRUCTURE: TI | Grade | TO | ODC | IADC | Reason Pulled | LOC | Tool Run/Drilled 20.92 | BRG

METRES DRILLED

From	To	D-R-C	RPM	WOB

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	Reed pdc bit	222	59	0.25
1	Mud Motor	192	61	8.21
1	Monel	170	73	9.46
1	Landing Sub	164	86	0.55
2	N.M. DC	168	72	18.86
1	Jar	157	76	9.77
1	X/O	165	75	0.89
12	6" D.C	150	60	115.27
2	XO	151	61	1.06
10	HWDP	152	109	93.88
1	4 1/2 IF X/O XT54	167	109	0.31
48	Drill Pipe	Stands		923.90
0	Drill Pipe	Singles		0.00
	Kelly Down			12.41
	Total			1191.66
	Weight of DC			
	Weight of String			58.00

HOLE CONDITION: Hole Drag: Up 0 Down 0 | Torque At Bottom | Fill On Bottom

MUD RECORD

Mud Type: Water ☑ Oil ☐ Other

Time	14:15	14:30
Density	910	920
Funnel Viscosity	52	55
Fluid Loss		
pH		
Location Of Sample	shaker	shaker
Depth	1120.00	1167.00
PVT	44	42

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1		140	93	10300	7.00
2		140	93	10300	7.00

Remarks

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
1	2590	@	82	@	1102.00
		@		@	
		@		@	

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 blocks swivel bails elevators derrick & sub . Blow down boiler 100 l

SAFETY

Safety Topic	MEHL	MACP
10 STEPS TO A SAFER WORK SITE		5245

TOUR 3

SIGNATURE OF DRILLER: MARCUS HALLOWES | START TIME: 16:00 | END TIME: 24:00

BITS

Bit Number	1
Size	222
IADC Code	
Manufacturer	Reed
Type	MSR616M
Serial No	A141416
Jets	11.1 11.1 11.1 11.1 11.1 11.1
Depth Out (m)	
Depth In (m)	600.00
Total Drilled (m)	725.00
Hrs Run Today	6.75
Cumulative Hrs Run	35.00
Entry Date	

CUTTING STRUCTURE: TI | Grade | TO | ODC | IADC | Reason Pulled | LOC | Tool Run/Drilled 20.71 | BRG

METRES DRILLED

From	To	D-R-C	RPM	WOB

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	Reed pdc bit	222	59	0.25
1	Mud Motor	192	59	8.21
1	Monel	170	73	9.46
1	Landing Sub	164	86	0.55
2	N.M. DC	168	72	18.86
1	Jar	157	76	9.77
1	X/O	165	75	0.89
12	6" D.C	150	60	115.27
2	XO	165	71	1.06
10	HWDP	152	109	93.88
1	4 1/2 IF X/O XT54	167	109	0.31
55	Drill Pipe	Stands		1057.52
0	Drill Pipe	Singles		0.00
	Kelly Down			12.41
	Total			1325.28
	Weight of DC			
	Weight of String			59.00

HOLE CONDITION: Hole Drag: Up 0 Down 0 | Torque At Bottom | Fill On Bottom

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other

Time	22:30	
Density	920	
Funnel Viscosity	51	
Fluid Loss		
pH		
Location Of Sample	Shaker	
Depth	1297.00	
PVT	46	

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	PARALLEL	140	95	10300	7.50
2	PARALLEL	140	95	10300	7.50

Remarks

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
1	2728	@	84	@	1201.00
		@		@	
		@		@	

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 one inspection on tongs and all overhead equitment mh
Blew down boiler 100l

SAFETY

Safety Topic	MEHL	MACP
Steam use		5245

FRONT PAGE SUMMARY

Tour Sheet Serial Number: BEAV2_20130205_1A | Vendor Software Version: RMS 2012.11.15.25129 | Year: 2013 | Month: 02 | Day: 05

Licensee No: 1211	Well Name: COPRC LOON CREEK 300-C-006-L-094-P-16	Surface Location: 65:05:51.05N/127:00:30.07W	Perm: NT	Lat Type: Lat/Long	Unique Well Id: 300-C-006-L-094-P-16
Operator: Conoco Canada	Contractor: Beaver Drilling Ltd.		Rig No: 2	Rig Type: VERT	Pre-Spud: ☐
Operator's AFE: 10342819	Contractor's Job No: 149		Spud Date Time: 26-Jan-2013	12:00	
Signature Of Operator's Representative: DAVE FORSBERG	Signature Of Contractor's Rig Manager: RICK YAVIS		Rig Release Date/ Time:		

DAILY CHECKS — OP RM

	OP	RM
(1) Daily Walk Around Inspection	DF	RV
(2.) Derrick/ Inspection - Monthly (Using Check List)	DF	RV
(3.) H2S Signs Posted if Required	DF	RV
(4.) Well Design & Slick Diagram Posted	DF	RV
(5.) Flare Lines Staked	DF	RV
(6.) BOP Drills Performed	DF	PV
(7.) Visually Inspected BOPs-Flare Lines & Degasser Lines		
(1.) Rig Site Health & Safety Meeting (monthly/monthly)		RV
(2.) CAODC Rig Safety Inspection Checklist (monthly/monthly)		
(3.) Hoist Inspection before Raising or Lowering		RV
(4.) Crown Saver Checked		
(5.) Motor Oils Checked		RV

CAODC — NOV MD Totco

HOURS

	Code 1 Rig Up	2 Drill Actual	3 Re-aming	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 Walch	25 Other	TOTAL
Tour 1		6.50					0.25			1.00											0.25					8.00
Tour 2		6.75					0.25			0.75											0.25					8.00
Tour 3		0.75			0.50	6.50	0.25																			8.00
TOTAL		14.00			0.50	6.50	0.75			1.75											0.50					24.00

FUEL @ 08:00 HRS: Rig 142 | Meter 178 | Time 05:15 | Temp -24

WEATHER: Conditions OVERCAST | Wind Direction W | Wind Strength CALM | Road Conditions FAIR

TOUR 1

SIGNATURE OF DRILLER: MARCUS HALLOWES | START TIME: 0:00 | END TIME: 8:00

BITS

Bit Number	1
Size	222
IADC Code	
Manufacturer	Reed
Type	MSR616M
Serial No	A141416
Jets	11.1 | 11.1 | 11.1 | 11.1 | 11.1 | 11.1
Depth Out (m)	
Depth In (m)	600.00
Total Drilled (m)	859.00
Hrs Run Today	6.50
Cumulative Hrs Run	41.50
Entry Date	

CUTTING STRUCTURE: In | Outer | TD | DC | Dull Char | MDC | Loc | Bearing/Seal | Gauge | BRG | 20.70

METRES DRILLED

From	To	D-R-C	RPM	WOB
1325.00	1459.00	DRILL	60	5.5

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	Reed pdc bit	222	59	0.28
1	Mud Motor	192	61	8.21
1	Monel	170	73	9.48
1	Landing Sub	164	86	0.55
2	N.M. DC	158	72	18.66
1	Jar	157	76	9.77
1	X/O	165	75	0.89
12	6" D.C	160	60	115.27
2	XO	161	61	1.06
10	HWDP	162	109	93.89
1	4 1/2 IF X/O XT54	167	109	0.31
63	Drill Pipe	Stands		1192.20
0	Drill Pipe	Singles		0.00

Kelly Down 12.41 | Total 1459.96 | Weight of DC | Weight of String 62.00

HOLE CONDITION: Hole Drag Up 0 Down 0 | Torque At Bottom | Fill On Bottom

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other

Time	00:30	02:30
Density	910	910
Funnel Viscosity	53	54
Fluid Loss		
pH		
Location Of Sample	Shaker	Shaker
Depth	1300.00	1373.00
PVT	46	46

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	PARALLEL	140	94	11000	7.50
2	PARALLEL	1410	94	11000	7.50

Remarks

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
2	2733	@	82	@	1334.00
		@		@	
		@		@	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type
01:00	1321.64	0.62	328.98	DIRECTIONAL
02:15	1349.45	0.48	352.8	DIRECTIONAL
03:15	1368.89	0.48	345.11	DIRECTIONAL
04:15	1388.05	0.79	33.41	DIRECTIONAL
05:15	1407.23	1.01	41.58	DIRECTIONAL
06:15	1426.40	1.32	63.11	DIRECTIONAL

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density

MUD MATERIALS ADDED

Product	Amount	Type
truvis	2	sks
Optiseal4	2	sks
Versatrol	2	sks
Versamul	1	bbl

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	500
2	8.00	11.5	500

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
0:00	0:15	0.25	2	Drill 222mm hole from 1325m to1335m with Reed MSR616M bit Schlumberger 7/8 5stage motor set at 1.15° and directional BHA with Gamma, pumping 1.8m3/min
0:15	0:30	0.25	7	Rig service function test pipe rams closed in 4 sec function test crown saver
0:30	6:45	6.25	2	Drill 222mm hole from 1335m to 1459m with Reed MSR616M bit Schlumberger 7/8 5stage motor set at 1.15° and directional BHA with Gamma, pumping 1.8m3/min
6:45	7:45	1.00	10	Accumulated time for surveys
7:45	8:00	0.25	21	Crew handover meeting

Remarks
Level one inspection on tongs and all overhead equitment mh
Blew down boilers 100l
Fuel in boiler 1 178cm boiler 2 165cm

SAFETY

Safety Topic	MEHL	MACP
Hazards of winter driving		5245

TOUR 2

SIGNATURE OF DRILLER: BRIAN BERGSETH | START TIME: 8:00 | END TIME: 16:00

BITS

Bit Number	1
Size	222
IADC Code	
Manufacturer	Reed
Type	MSR616M
Serial No	A141416
Jets	11.1 | 11.1 | 11.1 | 11.1 | 11.1 | 11.1
Depth Out (m)	
Depth In (m)	600.00
Total Drilled (m)	1016.00
Hrs Run Today	6.75
Cumulative Hrs Run	48.25
Entry Date	

CUTTING STRUCTURE: In | Outer | TD | DC | Dull Char | MDC | Loc | Bearing/Seal | Gauge | BRG | 21.06

METRES DRILLED

From	To	D-R-C	RPM	WOB
1459.00	1616.00	DRILL	60	5

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	Reed pdc bit	222	59	0.28
1	Mud Motor	192	61	8.21
1	Monel	170	73	9.48
1	Landing Sub	164	86	0.55
2	N.M. DC	158	72	18.66
1	Jar	157	76	9.77
1	X/O	165	75	0.89
12	6" D.C	160	60	115.27
2	XO	161	61	1.06
10	HWDP	162	109	93.89
1	4 1/2 IF X/O XT54	167	109	0.31
70	Drill Pipe	Stands		1346.30
1	Drill Pipe	Singles		9.68

Kelly Down 5.00 | Total 1616.33 | Weight of DC | Weight of String 69.00

HOLE CONDITION: Hole Drag Up 0 Down 0 | Torque At Bottom | Fill On Bottom

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other

Time	09:30	11:00
Density	925	925
Funnel Viscosity	62	62
Fluid Loss		
pH		
Location Of Sample		
Depth	1498.00	1537.00
PVT	41	39

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	PARALLEL	140	93	12300	7.00
2	PARALLEL	140	93	12300	7.00

Remarks

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
1	2890	@	80	@	1478.00
		@		@	
		@		@	

DEVIATION SURVEYS

Time	Depth	Deviation	Direction	Type
08:30	1465.03	2.59	65.18	DIRECTIONAL
09:45	1484.30	1.41	68.39	DIRECTIONAL
10:30	1503.96	0.22	67.29	DIRECTIONAL
11:30	1522.79	0.70	78.01	DIRECTIONAL
12:15	1541.84	2.02	72.61	DIRECTIONAL
14:15	1580.88	0.79	107.28	DIRECTIONAL

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density	Over Flow Density	Under Flow Density

MUD MATERIALS ADDED

Product	Amount	Type
truvis	5	SKS
Versamod	1	DM
Versamul	2	DM
Optiseal4	5	SKS
Versatrol	5	SKS

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	430
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 hydril 14 sec & crown saver
8:15	15:00	6.75	2	Drill 222mm hole from 1459m to 1616mm with Reed MSR616M bit Schlumberger 7/8 5stage motor set at 1.15° and directional BHA with Gamma, pumping 1.8m3/min
15:00	15:45	0.75	10	Accumulated time for surveys
15:45	16:00	0.25	21	Crew hand over meeting

Remarks
level 1 inspection on blocks swivel bails elevators derrick & sub . Blow down boiler 100 l

SAFETY

Safety Topic	MEHL	MACP
		5245

TOUR 3

SIGNATURE OF DRILLER: DEVAN SCHLITTER | START TIME: 16:00 | END TIME: 24:00

BITS

Bit Number	1
Size	222
IADC Code	
Manufacturer	Reed
Type	MSR616M
Serial No	A141416
Jets	11.1 | 11.1 | 11.1 | 11.1 | 11.1 | 11.1
Depth Out (m)	1622.00
Depth In (m)	600.00
Total Drilled (m)	1022.00
Hrs Run Today	0.75
Cumulative Hrs Run	49.00
Entry Date	

CUTTING STRUCTURE: In 2 | Outer 0 | TD 2 | DC FC | Dull Char CT | MDC CP | Loc M | Bearing/Seal 20.85 | Gauge | BRG X

METRES DRILLED

From	To	D-R-C	RPM	WOB
1616.00	1622.00	DRILL	60	5

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	Reed pdc bit	222	59	0.28
1	Mud Motor	192	60	8.21
1	Monel	170	73	9.48
1	Landing Sub	164	86	0.55
2	N.M. DC	158	72	18.66
1	Jar	157	76	9.77
1	X/O	165	75	0.89
12	6" D.C	160	60	115.27
2	XO	161	61	1.06
10	HWDP	162	109	93.89
1	4 1/2 IF X/O XT54	167	109	0.31
70	Drill Pipe	Stands		1346.30
1	Drill Pipe	Singles		9.68

Kelly Down 10.67 | Total 1622.00 | Weight of DC | Weight of String 69.00

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	93	9800	2.00
2	PARALLEL	140	93	9800	2.00

Remarks

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
1	2467	@	73	@	1621.00
		@		@	
		@		@	

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
Barite	50	sks
Lime	5	sks
calcium chloride	5	sks

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	430
2	8.00	10.5	450

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
16:00	16:45	0.75	2	Drill 222mm hole from 1616m to 1622mm with Reed MSR616M bit Schlumberger 7/8 5stage motor set at 1.15° and directional BHA with Gamma, pumping 1.8m3/min
16:45	17:00	0.25	7	Rig service function pipe rams 3 sec crown saver operating properly
17:00	17:30	0.50	5	Circulate hole clean@1622m
17:30	24:00	6.50	6B	Trip out of hole flow check@1610m/1534m/856m

Remarks

SAFETY

Safety Topic	MEHL	MACP
training green hands		5245

FRONT PAGE SUMMARY

Your Flood Serial Number: BEAV2_20130205_1A | Version Software Version: RMS 2012.11.15.25129 | Year: 2013 | Month: 02 | Day: 05

DAILY CHECKS — DP / RM

- (1.) Daily Visit Around Inspection — DP / RV
- (2.) Detailed Inspection - Weekly (Using Check List) — DP / RV
- (3.) H2S Signs Posted if Required — DP / RV
- (4.) Well Licence & Blow Diagram Posted — DP / RV
- (5.) Flare Lines Staked — DP / RV
- (6.) BOP Drills Performed — DP / RV
- (7.) Visually Inspected BOPs, Flare Lines & Degasser Lines — DP / RV
- (1.) Rig Site Health & Safety Meeting (minimum/month) — RV
- (2.) CAODC Rig Safety Inspection Checklist completed(/month) — RV
- (3.) Weil Inspection before Rigging in or Lowering — RV
- (4.) Crown Saver Checked — RV
- (5.) Motor Kills Checked — RV

License No	Well Name	Surface Location	Pool	Lsd Type	Unique Well Id
1211	COPRC LOON CREEK 300-C-006-L-094-P-16	65:05:51.05N/127:00:30.07W	NT	LatLong	300-C-006-L-094-P-16

Operator	Contractor	Rig No	Well Type	Rig Entry
Conoco Canada	Beaver Drilling Ltd.	2	VERT	

Operator's AFE	Contractor's Job No	Spud Date Time	
10342919	149	26-Jan-2013	12:00

Signature Of Operation's Representative	Signature Of Contractor's Rig Manager	Rig Release Date Time
DAVE FORSBERG	RICK YAVIS	

CAODC — NOV MD Totco

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	Rig Up 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		6.50					0.25			1.00											0.25					8.00
Tour 2		6.75					0.25			0.75											0.25					8.00
Tour 3		0.75			0.50	6.50	0.25																			8.00
TOTAL		14.00			0.50	6.50	0.75			1.75											0.50					24.00

FUEL @ 08:00 HRS: 142 / 178 | 05:15 / -24

WEATHER: OVERCAST | W | CALM | FAIR

TOUR 1

SIGNATURE OF DRILLER: MARCUS HALLOWES — START TIME: 0:00 — END TIME: 8:00

BITS

Bit Number	1
Size	222
IADC Code	
Manufacturer	Reed
Type	MSR616M
Serial No	A141416
Jets	11,1 / 11,1 / 11,1 / 11,1 / 11,1
Depth Out (m)	
Depth In (m)	600.00
Total Drilled (m)	859.00
Hrs Run Today	6.50
Cumulative Hrs Run	41.50
Entry Date	

CUTTING STRUCTURE: Inner / Outer / TD / ODC / MDC / Pulled Out / LOC: 20.70 / BRG

METRES DRILLED

From	To	D-R-C	RPM	WOB

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	Reed pdc bit	222	59	0.28
1	Mud Motor	192	61	8.21
1	Monel	179	73	8.48
1	Landing Sub	164	86	0.55
2	N.M. DC	168	72	18.86
1	Jar	157	76	9.77
1	X/O	165	75	0.89
12	6" D.C	160	60	112.67
2	XO	161	61	1.06
10	HWDP	162	108	93.88
1	4 1/2 IF X/O XT54	167	108	0.31
63	Drill Pipe	Stands		1192.20
0	Drill Pipe	Singles		0.00

Kelly Drops: 12.41 | Total: 1459.96 | Weight of BC | Weight of String: 62.00

HOLE CONDITION: Hole Drag Up: 0 Down: 0 | Torque At Bottom | Fill On Bottom

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other

Time	04:30	06:00
Density	915	920
Funnel Viscosity	53	51
Fluid Loss		
pH		
Location Of Sample	Shaker	Shaker
Depth	1400.00	1440.00
PVT	46	46

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	PARALLEL	140	94	11000	7.50
2	PARALLEL	1410	94	11000	7.50

Remarks

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
2	2733	@	82	@	1334.00
		@		@	
		@		@	

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 Sequance & Remarks

Remarks

Level one inspection on tongs and all overhead equitment mh
Blew down boilers 100l
Fuel in boiler 1 178cm boiler 2 165cm

SAFETY

Safety Topic	MEHL	MACP
Hazards of winter driving		5245

TOUR 2

SIGNATURE OF DRILLER: BRIAN BERGSETH — START TIME: 8:00 — END TIME: 16:00

BITS

Bit Number	1
Size	222
IADC Code	
Manufacturer	Reed
Type	MSR616M
Serial No	A141416
Jets	11,1 / 11,1 / 11,1 / 11,1 / 11,1
Depth Out (m)	
Depth In (m)	600.00
Total Drilled (m)	1016.00
Hrs Run Today	6.75
Cumulative Hrs Run	48.25
Entry Date	

CUTTING STRUCTURE: Inner / Outer / TD / ODC / MDC / Pulled Out / LOC: 21.06 / BRG

METRES DRILLED

From	To	D-R-C	RPM	WOB

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	Reed pdc bit	222	59	0.28
1	Mud Motor	192	61	8.21
1	Monel	179	73	8.48
1	Landing Sub	164	86	0.55
2	N.M. DC	168	72	18.86
1	Jar	157	76	9.77
1	X/O	165	75	0.89
12	6" D.C	160	60	112.67
2	XO	161	61	1.06
10	HWDP	162	108	93.88
1	4 1/2 IF X/O XT54	167	108	0.31
70	Drill Pipe	Stands		1346.30
1	Drill Pipe	Singles		9.68

Kelly Drops: 5.00 | Total: 1616.33 | Weight of BC | Weight of String: 69.00

HOLE CONDITION: Hole Drag Up: 0 Down: 0 | Torque At Bottom | Fill On Bottom

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other

Time	13:15	14:45
Density	925	925
Funnel Viscosity	62	61
Fluid Loss		
pH		
Location Of Sample		
Depth	1581.00	1604.00
PVT	38	40

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	PARALLEL	140	93	12300	7.00
2	PARALLEL	140	93	12300	7.00

Remarks

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
1	2890	@	80	@	1479.28
		@		@	
		@		@	

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 1 inspection on blocks swivel bails elevators derrick & sub . Blow down boiler 100 l

SAFETY

Safety Topic	MEHL	MACP
		5245

TOUR 3

SIGNATURE OF DRILLER: DEVAN SCHLITTER — START TIME: 16:00 — END TIME: 24:00

BITS

Bit Number	1
Size	222
IADC Code	
Manufacturer	Reed
Type	MSR616M
Serial No	A141416
Jets	11,1 / 11,1 / 11,1 / 11,1 / 11,1
Depth Out (m)	1622.00
Depth In (m)	600.00
Total Drilled (m)	1022.00
Hrs Run Today	0.75
Cumulative Hrs Run	49.00
Entry Date	

CUTTING STRUCTURE: Inner 2 / Outer 2 / TD CT / ODC FC / MDC CP / LOC M / BRG X / Pulled Out 20.86

METRES DRILLED

From	To	D-R-C	RPM	WOB

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	Reed pdc bit	222	59	0.28
1	Mud Motor	192	60	8.21
1	Monel	179	73	8.48
1	Landing Sub	164	86	0.55
2	N.M. DC	168	72	18.86
1	Jar	157	76	9.77
1	X/O	165	75	0.89
12	6" D.C	160	60	112.67
2	XO	161	61	1.06
10	HWDP	162	108	93.88
1	4 1/2 IF X/O XT54	167	108	0.31
70	Drill Pipe	Stands		1346.30
1	Drill Pipe	Singles		9.68

Kelly Drops: 10.67 | Total: 1622.00 | Weight of BC | Weight of String: 69.00

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	93	9800	2.00
2	PARALLEL	140	93	9800	2.00

Remarks

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
1	2467	@	73	@	1621.89
		@		@	
		@		@	

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

SAFETY

Safety Topic	MEHL	MACP
training green hands		5245

FRONT PAGE SUMMARY

Your Sheet Serial Number: BEAV2_20130206_1A | Vendor Software Version: PMS 2012.11.15.25129 | Year: 2013 | Month: 02 | Day: 06

Licence No: 1211	Well Name: COPRC LOON CREEK 300-C-006-L-094-P-16	Surface Location: 65:05:51.05N/127:00:30.07W	Prov: NT	Lat Type: Lat/Long	Unique Well Id: 300-C-006-L-094-P-16
Operator: Conoco Canada	Contractor: Beaver Drilling Ltd.		Rig No: 2	Well Type: VERT	Re-Entry: ☐
Operator's AFE: 10342919	Contractor's Job No: 149	Spud Date Time: 26-Jan-2013	12:00		
Signature Of Operator's Representative: MIKE HOBMAIER	Signature Of Contractor's Rig Manager: RICK YAVIS	Rig Release Date Time:			

DAILY CHECKS — DP / PM

(1.) Daily Mash Around Inspection — MH / RY
(2.) Detailed Inspection - Weekly (Rotary Chain Link) — MH / RY
(3.) H2S Signs Posted if Required — MH / RY
(4.) Well Licence & Block Diagram Posted — MH / RY
(5.) Flare Lines Staked — MH / RY
(6.) BOP Drills Performed — MH / RY
(7.) Visually Inspected BOPs-Flare Lines & Degasser Lines — MH / RY
(1.) Rig Site Health & Safety Meeting (enter number/month) — RY
(2.) CAODC Rig Safety Inspection Checklist (enter letter/month) — RY
(3.) Most Important Items Rosing or Lowering — RY
(4.) Crown Saver Checked — RY
(5.) Motor Kits Checked — RY

CAODC — NOV MD Totco

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	Waiting On	Rig Maint	Other	
Tour 1						4.75	0.25													2.00	1.00					8.00
Tour 2						7.75	0.25																			8.00
Tour 3					1.00	5.50	0.25				0.25										1.00					8.00
TOTAL					1.00	18.00	0.75				0.25									2.00	2.00					24.00

FUEL @ 08:00 HRS: Rig 93 | Bank 135 | Rig Time 05:45 | Temp -25 | Weather Conditions: OVERCAST | Wind Direction: N | Wind Strength: UP TO 19 KM/H | Road Conditions: FAIR

TOUR 1

SIGNATURE OF DRILLER: BRIAN BERGSETH — START TIME: 0:00 — END TIME: 8:00

BITS

Bit Number	1
Size	222
IADC Code	
Manufacturer	Reed
Type	MSR616M
Serial No	A141416
Jets	11.1 / 11.1 / 11.1 / 11.1 / 11.1
Depth Out (m)	1622.00
Depth In (m)	600.00
Total Drilled (m)	1022.00
Hrs Run Today	
Cumulative Hrs Run	49.00
Entry Date	

CUTTING STRUCTURE: T1 / Depth; T0 / ODC; MDC / Rows Full; LOC / Teeth Missing 20,35; BRG

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	Reed pdc bit	222	59	0.28
1	Mud Motor	192	61	8.21
1	Monel	170	73	8.49
1	Landing Sub	164	86	0.55
2	N.M. DC	158	72	18.86
1	Jar	157	76	9.77
1	X/O	155	75	0.89
12	6" D.C	150	60	113.27
2	XO	151	61	1.08
10	HWDP	152	108	93.50
1	4 1/2 IF X/O XT54	157	109	0.31
70	Drill Pipe	Stands		1345.30
1	Drill Pipe	Singles		9.68

Kelly Down: 10.67 | Total: 1622.00 | Weight of DC | Weight of String: 69.00

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

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	430
2	8.00	11	450

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequence & Remarks
0:00	1:15	1.25	6B	Pull out of hole & strap out flow check out of hole
1:15	1:30	0.25	7	Rig service function test pipe ram's 3 sec & crown saver
1:30	1:45	0.25	21	Safety meeting lay down d.p
1:45	4:00	2.25	6F	Lay down 10 h.w & 12 d.c
4:00	4:15	0.25	21	Safety meeting handle dir tools
4:15	6:15	2.00	20D	Handle directional tools & lay down tools
6:15	6:30	0.25	21D	Safety meeting picking up core tools
6:30	7:45	1.25	6G	Pick up coring tools
7:45	8:00	0.25	21D	Crew change safety meeting

Remarks
Blow down boiler 100 l fuel 135cm d.p strap 1356.13 tally 1355.98 diff + .15

METRES DRILLED

From	To	D-R-C	RPM	WOB

HOLE CONDITION: Hole Drag: Up / Down; Torque At Bottom; Fill On Bottom

SAFETY

Safety Topic	MEHL	MACP
lay down d.p & d.c & handel dir tools	5245	

TOUR 2

SIGNATURE OF DRILLER: DEVAN SCHLITTER — START TIME: 8:00 — END TIME: 16:00

BITS

Bit Number	1C
Size	222
IADC Code	
Manufacturer	NOV
Type	PR 513
Serial No	E140308
Jets	15 / 15 / 15 / 15 / 15
Depth Out (m)	
Depth In (m)	1622.00
Total Drilled (m)	
Hrs Run Today	
Cumulative Hrs Run	
Entry Date	

CUTTING STRUCTURE: T1 / Depth; T0 / ODC; MDC / Rows Full; LOC / Teeth Missing; BRG

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	Core bit	222	60	0.58
1	Core Barrel	165	108	7.82
1	Stabilizer	165	108	1.23
1	Core Barrel	165	108	7.83
1	Stabilizer	165	108	1.23
1	Core Barrel	165	108	9.57
1	Seat sub	165	108	0.49
1	Stabilizer	165	108	0.83
8	Core Collers	165	108	76.62
1	XO	162	109	0.77
70	Drill Pipe	Stands		1345.30
1	Drill Pipe	Singles		9.68

Kelly Down: 12.41 | Total: 1474.76 | 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	140	100	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	430
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 blind rams & crown saver operating properly
8:15	15:15	7.00	5G	Make up core tools pick up 8 core collars
15:15	16:00	0.75	6A	Trip in the hole with drill pipe

Remarks
Blow down boilers 100 L

METRES DRILLED

From	To	D-R-C	RPM	WOB

HOLE CONDITION: Hole Drag: Up / Down; Torque At Bottom; Fill On Bottom

SAFETY

Safety Topic	MEHL	MACP
making up core tools	5245	

TOUR 3

SIGNATURE OF DRILLER: BRIAN BERGSETH — START TIME: 16:00 — END TIME: 24:00

BITS

Bit Number	1C
Size	222
IADC Code	
Manufacturer	NOV
Type	PR 513
Serial No	E140308
Jets	11.9 / 11.9 / 11.9 / 11.9 / 11.9
Depth Out (m)	
Depth In (m)	1622.00
Total Drilled (m)	
Hrs Run Today	
Cumulative Hrs Run	
Entry Date	

CUTTING STRUCTURE: T1 / Depth; T0 / ODC; MDC / Rows Full; LOC / Teeth Missing; BRG

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	Core bit	222	60	0.58
1	Core Barrel	165	108	7.82
1	Stabilizer	165	108	1.23
1	Core Barrel	165	108	7.83
1	Stabilizer	165	108	1.23
1	Core Barrel	165	108	9.57
1	Seat sub	165	108	0.49
1	Stabilizer	165	108	0.83
8	Core Collers	165	108	76.62
1	XO	162	109	0.77
70	Drill Pipe	Stands		1345.30
1	Drill Pipe	Singles		9.68

Kelly Down: 12.41 | Total: 1474.76 | 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	140	140	4100	2.00

Remarks

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
1	890	@	54	@	916.00
		@		@	
		@		@	

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
1	8.00	11	430
2	8.00	11	450

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequence & Remarks
16:00	17:00	1.00	6A	Trip in the hole with drill pipe fill pipe,flow check@607m
17:00	17:15	0.25	21A	BOP drill while runing in the hole crew in position well secure in 90 sec with day lights crew
17:15	17:30	0.25	21A	man down drill with day lights crew reviewed lease search pattern
17:30	17:45	0.25	7	Rig service function hydrill 13 sec crown saver operating properly,function test motor kills operating properly
17:45	19:15	1.50	6A	Trip in the hole fill pipe flow check@ 973 m
19:15	19:30	0.25	21A	Held b.o.p drill well secure in 85 sec with night crew
19:30	22:30	3.00	6A	Run in hole & pick up 17 D.P
22:30	23:30	1.00	5D	Circulate bottoms up
23:30	23:45	0.25	21	Safety meeting retrieving drill rod
23:45	24:00	0.25	11	Retrieving drill rod with schlumberger

Remarks
Blow down boiler 100 l

METRES DRILLED

From	To	D-R-C	RPM	WOB

HOLE CONDITION: Hole Drag: Up / Down; Torque At Bottom; Fill On Bottom

SAFETY

Safety Topic	MEHL	MACP
		5245

FRONT PAGE SUMMARY

Tour Sheet Serial Number: BEAV2_20130207_1A | Vendor Software Version: RMS 2012.11.15.25129 | Year: 2013 | Month: 02 | Day: 07

Licensee No: 1211 | Well Name: COPRC LOON CREEK 300-C-006-L-094-P-16 | Surface Location: 65:05:51.05N/127:00:30.07W | Prov: NT | Lat Type: Lat/Long | Unique Well Id: 300-C-006-L-094-P-16

Operator: Conoco Canada | Contractor: Beaver Drilling Ltd. | Rig No: 2 | Well Type: VERT | Re-Entry: ☐

Operator's AFE: 10342918 | Contractor's Job No: 149 | Spud Date Time: 26-Jan-2013 12:00

Supervisor Of Operator's Representative: MIKE HOBMAJER | Signature Of Contractor's Rig Manager: RICK YAVIS | Rig Released Date Time:

DAILY CHECKS — OP RM

(1.) Daily Visit Around Inspection — MH PV
(2.) Derailed Protection - Woody (Only Crown Unit) — MH PV
(3.) H2S Signs Posted if Required — MH PV
(4.) Well Location & Block Diagram Posted — MH PV
(5.) Flare Lines Staked — MH PV
(6.) BOP Drills Performed — MH PV
(7.) Visually Inspected BOPs,Flare Lines & Diagnostic Lines — MH PV
(1.) Rig Site Health & Safety Meeting (minutes attached) — PV
(2.) CAODC Rig Safety Inspection Checklist (when applicable) — PV
(3.) Hoist Inspection before Raising or Lowering — PV
(4.) Crown Saver Checked — PV
(5.) Motor Kills Checked — PV

CAODC — NOV MD Totco

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 Tour Down	23 Waiting On	24 Rig Watch	25 Other	TOTAL
Tour 1				3.00			0.25				4.50										0.25					8.00
Tour 2		2.50		4.00	1.00																0.50					8.00
Tour 3							0.25																		7.75	8.00
TOTAL		2.50		7.00	1.00		0.50				4.50										0.75				7.75	24.00

FUEL @ 08:00 HRS: Rig 198 | Sales 180 | Time 05:45 | Temp -32 | Ground Conditions: OVERCAST | Wind Direction: N | Wind Strength: CALM | Road Conditions: FAIR

TOUR 1

SIGNATURE OF DRILLER: BRIAN BERGSETH | START TIME: 0:00 | END TIME: 8:00

BITS

Bit Number	1C
Size	222
IADC Code	
Manufacturer	NOV
Type	PR 513
Serial No	E140308
Jets	11.9 11.9 11.9
	11.9 11.9
Depth Out (m)	
Depth In (m)	1622.00
Total Drilled (m)	9.00
Hrs Run Today	2.00
Cumulative Hrs Run	2.00
Entry Date	

CUTTING STRUCTURE: TI | Gage | TD | ODC | BDC | Nozzle/Ports | LOC | Inner/Outer | SHD | 4.50

METRES DRILLED

From	To	D-R-C	RPM	WOB
1622.00	1631.00	CORE	55	2.3

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	Core bit	222	60	0.58
1	Core Barrel	165	108	7.92
1	Stablizer	165	108	1.23
1	Core Barrel	165	108	7.93
1	Stabilizer	165	108	1.23
1	Core Barrel	165	108	9.57
1	Seat sub	165	108	0.49
1	Stablizer	165	108	0.83
8	Core Collers	165	108	78.62
1	XO	165	108	0.77
78	Drill Pipe	Stands		1500.15
1	Drill Pipe	Singles		12.73
	Kelly Down			11.74
	Total			1631.00
	Weight of DC			
	Weight of String			60.00

HOLE CONDITION: Hole Drag Up / Down | Torque At Bottom | Fill On Bottom

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other

Time	06:30	
Density	950	
Funnel Viscosity	67	
Fluid Loss		
pH		
Location Of Sample	shaker	
Depth	1628.00	
PVT	36	

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	SINGLE	140	124	4800	2.00

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	500

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
0:00	4:30	4.50	11	Retrieving drill rod with schlumberger
4:30	4:45	0.25	7	Rig service function test hydril 14 sec & crown saver
4:45	5:45	1.00	4A	Handle & rig up inner core bbl
5:45	7:45	2.00	4	Cut 89 mm core from 1622 m to 1631 m with national oilwell varco with bit # 1c nov PR513 pumping @ 1.2 m3 /min
7:45	8:00	0.25	21D	Crew change safety meeting

Remarks: Blow down boiler 200 l fuel in boiler #2 171cm

SAFETY

Safety Topic	MEHL	MACP
LR.5		5245

TOUR 2

SIGNATURE OF DRILLER: DEVAN SCHLITTER | START TIME: 8:00 | END TIME: 16:00

BITS

Bit Number	1C
Size	222
IADC Code	
Manufacturer	NOV
Type	PR 513
Serial No	E140308
Jets	11.9 11.9 11.9
	11.9 11.9
Depth Out (m)	
Depth In (m)	1622.00
Total Drilled (m)	9.00
Hrs Run Today	
Cumulative Hrs Run	2.00
Entry Date	

CUTTING STRUCTURE: TI | Gage | TD | ODC | BDC | Nozzle/Ports | LOC | Inner/Outer | SHD | 4.50

METRES DRILLED

From	To	D-R-C	RPM	WOB
1631.00	1649.00	CORE	55	4.5

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	Core bit	222	60	0.58
1	Core Barrel	165	108	7.92
1	Stablizer	165	108	1.23
1	Core Barrel	165	108	7.93
1	Stabilizer	165	108	1.23
1	Core Barrel	165	108	9.57
1	Seat sub	165	108	0.49
1	Stablizer	165	108	0.83
8	Core Collers	165	108	78.62
1	XO	165	108	0.77
80	Drill Pipe	Stands		1518.46
1	Drill Pipe	Singles		9.69
	Kelly Down			13.48
	Total			1649.00
	Weight of DC			
	Weight of String			60.00

HOLE CONDITION: Hole Drag Up / Down | Torque At Bottom | Fill On Bottom

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other

Time	08:30	10:30
Density	940	940
Funnel Viscosity	55	56
Fluid Loss		
pH		
Location Of Sample		
Depth	1635.00	1649.00
PVT	35	35

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	SINGLE	140	127	5700	4.50

Remarks

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
1	1017	@	51	@	1647.00
		@		@	
		@		@	

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
Lime	5	sks
calcium chloride	5	sks
Versamod	1	barrel
Versamul	1	barrel

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	430
2	8.00	11	450

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
8:00	10:30	2.50	2	Cut 89 mm core from 1631m to 1649m with national oilwell varco with bit # 1c nov PR513 pumping @ 1.2 m3 /min WOB 4.5,ROP 7M/HR 5000 KPA Pump pressure
10:30	11:30	1.00	5	Circulate bottoms up
11:30	11:45	0.25	21	Safety meeting with MI SWACO on invert reviewed MSDS and invert exposoure
11:45	12:00	0.25	21	Safety meeting with NOV core hands and Schlumberger wire line hands
12:00	16:00	4.00	4A	Rig to and recover core #1 @1616m

Remarks: Level 1 inspection on tongs,sub and overhead equipment D.S
blew down boilers 2 times 100 litres each

SAFETY

Safety Topic	MEHL	MACP
		5245

TOUR 3

SIGNATURE OF DRILLER: BRIAN BERGSETH | START TIME: 16:00 | END TIME: 24:00

BITS

Bit Number	1C
Size	222
IADC Code	
Manufacturer	NOV
Type	PR 513
Serial No	E140308
Jets	11.9 11.9 11.9
	11.9 11.9
Depth Out (m)	
Depth In (m)	1622.00
Total Drilled (m)	9.00
Hrs Run Today	
Cumulative Hrs Run	2.00
Entry Date	

CUTTING STRUCTURE: TI | Gage | TD | ODC | BDC | Nozzle/Ports | LOC | Inner/Outer | SHD | 4.50

METRES DRILLED

From	To	D-R-C	RPM	WOB

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	Core bit	222	60	0.58
1	Core Barrel	165	108	7.92
1	Stablizer	165	108	1.23
1	Core Barrel	165	108	7.93
1	Stablizer	165	108	1.23
1	Core Barrel	165	108	9.57
1	Seat sub	165	108	0.49
1	Stablizer	165	108	0.83
8	Core Collers	165	108	78.62
1	XO	165	108	0.77
79	Drill Pipe	Stands		1513.46
1	Drill Pipe	Singles		9.69
	Kelly Down			12.41
	Total			1647.93
	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	430
2	8.00	11	450

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
16:00	19:15	3.25	25	Recover core #1
19:15	19:30	0.25	7	Rig service function test crown saver
19:30	24:00	4.50	25	Pull out core # 1 with schlumberger wire line

Remarks: Blow down boiler 100 l

SAFETY

Safety Topic	MEHL	MACP
		5245

FRONT PAGE SUMMARY

Your Direct Serial Number: BEAV2_20130208_1A	Vendor Software Version: RMS 2012.11.15.25128	Year: 2013	Month: 02	Day: 08	DAILY CHECKS	DP	RM
Licence No: 1211	Well Name: COPRC LOON CREEK 300-C-006-L-094-P-16	Surface Location: 65:05:51.05N/127:00:30.07W	Prov: NT	Lic Type: Lat/Long	Unique Well Id: 300-C-006-L-094-P-16		
Operator: Conoco Canada	Contractor: Beaver Drilling Ltd.	Rig No: 2	Well Type: VERT	R=Entry: ☐			
Operator's AFE: 10342818	Contractor's Job No: 149	Spud Date/ Time: 25-Jan-2013	12:00				
Supervisor Of Operator's Representative: MIKE HOBMAJER	Signature Of Contractor's Rig Manager: RICK YAVIS	Rig Released Date/ Time:					

CADC — NOV MD Totco

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 Drl 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 Comm.	Waiting On	Rig Watch	Other	TOTAL
Tour 1		3.75		3.00	0.75		0.25														0.25					8.00
Tour 2				5.75	1.50	0.25	0.25														0.25					8.00
Tour 3				6.50	0.75	0.25	0.25														0.25					8.00
TOTAL		3.75		15.25	3.00	0.50	0.75														0.75					24.00

FUEL @ 08:00 HRS: Rig 157 / Camp 150 / Time 05:45 / Temp -27

WEATHER: Conditions OVERCAST; Wind Direction W; Wind Velocity UP TO 10 KM/H; Weather Comments FAIR

TOUR 1

SIGNATURE OF DRILLER: BRIAN BERGSETH

START TIME: 0:00 END TIME: 8:00

BITS

Bit Number	1C
Size	222
IADC Code	
Manufacturer	NOV
Type	PR 513
Serial No	E140308
Jets	11.9 / 11.9 / 11.9 / 11.9 / 11.9
Depth Out (m)	
Depth In (m)	1622.00
Total Drilled (m)	54.00
Hrs Run Today	3.75
Cumulative Hrs Run	5.75
Entry Date	

CUTTING STRUCTURE: TI / Gauge / TD / ODC / MDC / Bearing/Seal / LOC / Lubrication / BRG: 9.35

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	Core bit	222	60	0.58
1	Core Barrel	165	108	7.82
1	Stabilizer	165	108	1.23
1	Core Barrel	165	108	7.83
1	Stabilizer	165	108	1.23
1	Core Barrel	165	108	9.57
1	Seat sub	165	108	0.49
1	Stabilizer	165	108	0.83
8	Core Collers	165	108	75.62
1	XO	165	108	0.77
81	Drill Pipe		Stands	1568.19
0	Drill Pipe		Singles	0.00

Kelly Down: 11.44 / Total: 1676.00 / Weight of DC / Weight of String: 61.00

METRES DRILLED

From	To	D-R-C	RPM	WOB
1648.00	1676.00	CORE	65	4

HOLE CONDITION

Hole Drag: Up / Down / Torque At Bottom / Fill On Bottom

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other

Time	04:45
Density	950
Funnel Viscosity	66
Fluid Loss	
pH	
Location Of Sample	shaker
Depth	1651.00
PVT	31

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	SINGLE	140	127	5000	3.00

Remarks:

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
1	1600	@	84	@	1648.00
		@		@	
		@		@	

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
1	8.00	11	450
2	8.00	11	525

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequence & Remarks
0:00	0:15	0.25	7	Rig service function test hydril 14 sec & crown saver
0:15	0:30	0.25	21	Safety meeting recover core # 1
0:30	2:30	2.00	4A	recover core # 1 & lay down recover 27 m core
2:30	3:15	0.75	5D	Circulate bottoms up & flow check @ 1635 m
3:15	4:15	1.00	4A	Rig up inner core bbl & set drill rod
4:15	8:00	3.75	2	Cut 89 mm core # 2 from 1649 m to 1676 m (full 27m) with National Oilwell Varco with bit # 1c nov PR513 pumping @ 1.2 m3 /min ROP 10M/HR WOB 4dan

Remarks: Blow down boiler 200 l boiler #2 178 cm

SAFETY

Safety Topic	MEHL	MACP
recover core		5245

TOUR 2

SIGNATURE OF DRILLER: DEVAN SCHLITTER

START TIME: 8:00 END TIME: 16:00

BITS

Bit Number	1C
Size	222
IADC Code	
Manufacturer	NOV
Type	PR 513
Serial No	E140308
Jets	11.9 / 11.9 / 11.9 / 11.9 / 11.9
Depth Out (m)	
Depth In (m)	1622.00
Total Drilled (m)	50.00
Hrs Run Today	
Cumulative Hrs Run	5.75
Entry Date	

CUTTING STRUCTURE: TI / Gauge / TD / ODC / MDC / Bearing/Seal / LOC / Lubrication / BRG: 8.70

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	Core bit	222	60	0.58
1	Core Barrel	165	108	7.82
1	Stabilizer	165	108	1.23
1	Core Barrel	165	108	7.83
1	Stabilizer	165	108	1.23
1	Core Barrel	165	108	9.57
1	Seat sub	165	108	0.49
1	Stabilizer	165	108	0.83
8	Core Collers	165	108	75.62
1	XO	165	108	0.77
81	Drill Pipe		Stands	1558.19
0	Drill Pipe		Singles	0.00

Kelly Down: 11.44 / Total: 1676.00 / Weight of DC / Weight of String:

METRES DRILLED

From	To	D-R-C	RPM	WOB

HOLE CONDITION

Hole Drag: Up / Down / Torque At Bottom / Fill On Bottom

MUD RECORD

Mud Type: Water ☑ Oil ☐ Other

Time	08:30
Density	940
Funnel Viscosity	55
Fluid Loss	
pH	
Location Of Sample	
Depth	1675.00
PVT	0

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	SINGLE	140	106	4500	1.50

Remarks:

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
1	1481	@	68	@	1674.00
		@		@	
		@		@	

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
Versamul	1	BARREL
Lime	3	sks
calcium chloride	1	sks
Versatrol	1	sks
truvis	2	sks

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	480

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequence & Remarks
8:00	9:30	1.50	5	Circulate bottoms up clean hole prior to pulling core #2
9:30	9:45	0.25	7	Rig service function pipe rams 3 sec crown saver operating properly
9:45	10:00	0.25	6B	Pull 3 stds up to 1607M to recover core #2 with Schlumberger wire line
10:00	10:15	0.25	21	Safety meeting with Schlumberger wire line and NOV core hands
10:15	16:00	5.75	4A	Rig to and recover core #2 with Schumberger wire line and NOV core hands

Remarks: Level 1 inspection on tongs,sub and overhead equipment D.S
Blew down boilers 2 times 100 litres each

SAFETY

Safety Topic	MEHL	MACP
rig to and recover core #2		5245

TOUR 3

SIGNATURE OF DRILLER: BRIAN BERGSETH

START TIME: 16:00 END TIME: 24:00

BITS

Bit Number	1C
Size	222
IADC Code	
Manufacturer	NOV
Type	PR 513
Serial No	E140308
Jets	11.9 / 11.9 / 11.9 / 11.9 / 11.9
Depth Out (m)	
Depth In (m)	1622.00
Total Drilled (m)	64.00
Hrs Run Today	1.00
Cumulative Hrs Run	6.75
Entry Date	

CUTTING STRUCTURE: TI / Gauge / TD / ODC / MDC / Bearing/Seal / LOC / Lubrication / BRG: 9.48

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	Core bit	222	60	0.58
1	Core Barrel	165	108	7.82
1	Stabilizer	165	108	1.23
1	Core Barrel	165	108	7.83
1	Stabilizer	165	108	1.23
1	Core Barrel	165	108	9.57
1	Seat sub	165	108	0.49
1	Stabilizer	165	108	0.83
8	Core Collers	165	108	75.62
1	XO	165	108	0.77
81	Drill Pipe		Stands	1558.19
1	Drill Pipe		Singles	9.77

Kelly Down: 12.41 / Total: 1686.74 / Weight of DC / Weight of String: 62.00

METRES DRILLED

From	To	D-R-C	RPM	WOB
1676.00	1686.00	CORE	65	5

HOLE CONDITION

Hole Drag: Up 0 / Down 0 / Torque At Bottom / Fill On Bottom

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other

Time	22:30
Density	960
Funnel Viscosity	80
Fluid Loss	
pH	
Location Of Sample	shaker
Depth	1676.00
PVT	37

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	SINGLE	140	127	5300	1.00

Remarks:

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
1	1105	@	61	@	1675.00
		@		@	
		@		@	

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
Versamul	1	DM
Lime	7	SXS
Versatrol	1	SXS
truvis	1	SXS
calcium chloride	1	SXS

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	500

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequence & Remarks
16:00	19:15	3.25	4	Recover core #2
19:15	19:30	0.25	7	Rig service function test hydril 14 sec & crown saver
19:30	19:45	0.25	21	Safety meeting on laying down core # 2
19:45	20:45	1.00	4A	recover core # 2 & lay down core # 2
20:45	21:00	0.25	6A	Run in 3 stds d.p
21:00	21:45	0.75	5D	Circulate bottoms up
21:45	23:00	1.25	4A	Rig up inner core bbl & set drill rod
23:00	24:00	1.00	4	Cut 89 mm core # 3 from 1676 m to 1686 m with National Oilwell Varco with bit # 1c nov PR513 pumping @ 1.2 m3 /min ROP 10M/HR WOB 5dan

Remarks: blow down boiler 200 l

SAFETY

Safety Topic	MEHL	MACP
recover core # 2 & lay down		5245

FRONT PAGE SUMMARY

Tour Sheet Serial Number: BEAV2_20130209_1B	Version Software Version: RMS 2012.11.15.25129	Year: 2013	Month: 02	Day: 09	DAILY CHECKS	OP	RM
Licence No: 1211	Well Name: COPRC LOON CREEK 300-C-006-L-094-P-16	Surface Location: 65:05:51.05N/127:00:30.07W	Pipe: NT	Lat Type: Lat/Long	Longitude: 300-C-006-L-094-P-16	(1.) Daily Walk Around Inspection	MH	RY
Operator: Conoco Canada	Contractor: Beaver Drilling Ltd.	Rig No: 2	Well Type: VERT	Re-Entry: ☐		(2.) Detailed Inspection - Weekly (Using Check List)		RY
Operator's AFE: 10342919	Contractor's Job No: 149	Spud Date Time: 26-Jan-2013	12:00			(3.) H2S Signs Posted (if Required)		RY
Supervisor Of Operator's Representative: MIKE HOBMAIER	Supervisor Of Contractor's Rig Manager: RICK YAVIS	Rig Released Mud Time:				(4.) Well Licence & Block Diagram Posted	MH	RY
						(5.) Flare Lines Signed	MH	RY
						(6.) BOP Drills Performed	MH	RY
						(7.) Visually Inspected BOPs-Flare Lines & Degasser Lines	MH	RY
						(7.) Rig Site Health & Safety Meeting (once/month/crew)		RY
						(8.) CAODC Rig Safety Inspection Checklist (once/month/rig)		
						(9.) Mast Inspection (before Raising or Lowering)		
						(A.) Crown Saver Checked		RY
						(B.) Motor Kills Checked		

CAODC

NOV MD Totco

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	Wash/ BOP	Test BOP	Drillstem Test	Plug Back	Squeeze Cement	Fishing	Dir Work	Safety Meeting	Tear Down	Waiting On	Rig Watch	Other	
Tour 1				2.50	1.00	0.25	0.25				3.75										0.25					8.00
Tour 2				7.50			0.25														0.25					8.00
Tour 3				4.75	1.75	1.25	0.25																			8.00
TOTAL				14.75	2.75	1.50	0.75				3.75										0.50					24.00

FUEL @ 08:00 HRS: Rig 114, Boiler 100, Light 05:00, Temp -22

WEATHER: Condition SNOW; Wind Direction N; Wind Strength UP TO 19 KM/H; Road Conditions FAIR

TOUR 1

SIGNATURE OF DRILLER: BRIAN BERGSETH

START TIME: 0:00 END TIME: 8:00

BITS

Bit Number	1C
Size	222
IADC Code	
Manufacturer	NOV
Type	PR 513
Serial No	E140308
Jets	11.9 11.9 11.9 11.9 11.9
Depth Out (m)	
Depth In (m)	1622.00
Total Drilled (m)	81.00
Hrs Run Today	2.50
Cumulative Hrs Run	9.25
Entry Date	

CUTTING STRUCTURE: I, Gage, TO, ODC, BDC, Reason Pulled, LOC, Tooth/Bearing 8.75, BRG

METRES DRILLED

From	To	D-R-C	RPM	WOB
1668.00	1703.94	CORE	60	4

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	Core bit	222	60	0.58
1	Core Barrel	165	108	7.92
1	Stabilizer	165	108	1.23
1	Core Barrel	165	108	7.83
1	Stabilizer	165	108	1.23
1	Core Barrel	165	108	9.57
1	Seat sub	165	108	0.48
1	Stabilizer	165	108	0.83
8	Core Collers	165	108	75.62
1	XO	165	108	0.77
82	Drill Pipe	Stands		1577.42
1	Drill Pipe	Singles		9.33
	Kelly Down			9.88
	Total			1703.00
	Weight of DC			
	Weight of String			62.00

HOLE CONDITION: Hole Drag Up 0 Down 0; Torque At Bottom; Fill On Bottom

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other

Time	00:45	04:00
Density	960	960
Funnel Viscosity	67	67
Fluid Loss		
pH		
Location Of Sample	shaker	tanks
Depth	1691.00	1705.00
PVT	41	31

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	SINGLE	140	127	5700	4.00

Remarks

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
1	1858	@	79	@	1701.00
		@		@	
		@		@	

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
Versatrol	1	SXS
calcium chloride	1	SXS
Lime	2	SXS
truvis	1	SXS

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	10.5	450
2	8.00	11	500

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
0:00	2:30	2.50	4	Cut 89 mm core # 3 from 1686 m to 1703 m (full 27 m) with National Oilwell Varco with bit # 1C NOV PR513 pumping @ 1.2 m3 /min ROP 10M/HR WOB 4 daN
2:30	3:30	1.00	5D	Circulate and Condition well @ 1704m
3:30	3:45	0.25	7	Rig service function test pipe ram's 3 sec & crown saver
3:45	4:00	0.25	6B	Flow check 10 min. and pull out 4 stands
4:00	4:15	0.25	21	Safety meeting wire line to pull out core # 3
4:15	8:00	3.75	11	Rig up schlumberger to retrieve core # 3 & pull out core

Remarks: blow down boiler 200 l fuel 152 cm beaver drilling crew van start rental today RY

SAFETY

Safety Topic	MEHL	MACP
Working in Cold Weather and Rigging up Wire Line to Retrieve Core		5245

TOUR 2

SIGNATURE OF DRILLER: DEVAN SCHLITTER

START TIME: 8:00 END TIME: 16:00

BITS

Bit Number	1C
Size	222
IADC Code	
Manufacturer	NOV
Type	PR 513
Serial No	E140308
Jets	11.9 11.9 11.9 11.9 11.9
Depth Out (m)	
Depth In (m)	1622.00
Total Drilled (m)	81.00
Hrs Run Today	
Cumulative Hrs Run	9.25
Entry Date	

CUTTING STRUCTURE: I, Gage, TO, ODC, BDC, Reason Pulled, LOC 8.75, BRG

METRES DRILLED

From	To	D-R-C	RPM	WOB

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	Core bit	222	60	0.58
1	Core Barrel	165	108	7.92
1	Stabilizer	165	108	1.23
1	Core Barrel	165	108	7.83
1	Stabilizer	165	108	1.23
1	Core Barrel	165	108	9.57
1	Seat sub	165	108	0.48
1	Stabilizer	165	108	0.83
8	Core Collers	165	108	75.62
1	XO	165	108	0.77
82	Drill Pipe	Stands		1577.42
1	Drill Pipe	Singles		9.33
	Kelly Down			9.88
	Total			1703.00
	Weight of DC			
	Weight of String			62.00

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

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	500

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
8:00	8:15	0.25	7	Rig service function test hcr
8:15	14:30	6.25	4A	Pull core #3 out of hole with schlumberger wire line and NOV core hands
14:30	14:45	0.25	21	Safety meeting with NOV core hands and Schlumberger wire line
14:45	16:00	1.25	4A	Rig out wire line and lay down core #3 recover full 27 meters

Remarks: Level 1 inspection on tongs,sub and overhead equipment D.S.
Blew down boilers 2 times 100 litres

SAFETY

Safety Topic	MEHL	MACP
		5245

TOUR 3

SIGNATURE OF DRILLER: BRIAN BERGSETH

START TIME: 16:00 END TIME: 24:00

BITS

Bit Number	1C
Size	222
IADC Code	
Manufacturer	NOV
Type	PR 513
Serial No	E140308
Jets	11.9 11.9 11.9 11.9 11.9
Depth Out (m)	
Depth In (m)	1622.00
Total Drilled (m)	108.00
Hrs Run Today	3.75
Cumulative Hrs Run	13.00
Entry Date	

CUTTING STRUCTURE: I, Gage, TO, ODC, BDC, Reason Pulled, LOC 8.31, BRG

METRES DRILLED

From	To	D-R-C	RPM	WOB
1703.00	1730.16	CORE	60	5.5

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	Core bit	222	60	0.58
1	Core Barrel	165	108	7.92
1	Stabilizer	165	108	1.23
1	Core Barrel	165	108	7.83
1	Stabilizer	165	108	1.23
1	Core Barrel	165	108	9.57
1	Seat sub	165	108	0.48
1	Stabilizer	165	108	0.83
8	Core Collers	165	108	75.62
1	XO	165	108	0.77
83	Drill Pipe	Stands		1596.35
1	Drill Pipe	Singles		9.54
	Kelly Down			17.74
	Total			1730.00
	Weight of DC			
	Weight of String			62.00

HOLE CONDITION: Hole Drag Up 0 Down 0; Torque At Bottom; Fill On Bottom

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other

Time	19:45	22:45
Density	940	940
Funnel Viscosity	67	73
Fluid Loss		
pH		
Location Of Sample	shaker	Shaker
Depth	1713.00	1730.00
PVT	42	42

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	SINGLE	140	125	5300	6.00

Remarks

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
1	997	@	108	@	1694.00
		@		@	
		@		@	

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
Lime	10	SXS
truvis	8	SXS
Versamod	1	DM
Versacoat	1	DM

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	500

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
16:00	16:30	0.50	6A	Trip in the hole 3 STDS from 1616m to 1690m
16:30	17:15	0.75	5	Circulate and work string@1690m
17:15	17:30	0.25	7	Rig service function hydrill 13 sec crown saver operating properly
17:30	18:30	1.00	4A	Make up core barrels for run #4 with NOV core hands
18:30	18:45	0.25	5	Circulate and pump core barrels down
18:45	22:30	3.75	4	Cut 89 mm core # 3 from 1703m to 1730m (full 27 m) with National Oilwell Varco with bit # 1C NOV PR513 pumping @ 1.2 m3 /min ROP 10M/HR WOB 5 daN
22:30	23:15	0.75	5D	Circulate bottoms up
23:15	24:00	0.75	6B	Flow check 1711 m 10 min and pull 5 stands

Remarks: blow down boiler 200 l

SAFETY

Safety Topic	MEHL	MACP
		5245

FRONT PAGE SUMMARY

Your Event Lesson Number: BEAV2_20130210_18	Version Software Version: RMS 2012.11.15.25129	Year: 2013	Month: 02	Day: 10	DAILY CHECKS	OP	PU
Licence no: 1211	Well Name: COPRC LOON CREEK 300-C-006-L-094-P-15	Surface Location: 65:05:51.05N/127:00:30.07W	Prov: NT	Lic Type: LatLong	Datum Well Id: 300-C-006-L-094-P-15	(1.) Daily Walk Around Inspection	MH	BV
Operator: Conoco Canada	Contractor: Beaver Drilling Ltd.	Rig No: 2	Well Type: VERT	Re-Entry: ☐		(2.) Datafast Instruction - Hourly (Using Check List)	MH	
Operator's AFE: 10342919	Contractor's Job No: 149	Spud Date Time: 26-Jan-2013 12:00				(3.) H2S Signs Posted if Required	MH	
Signature Of Operator's Representative: MIKE HOBMAIER	Signature Of Contractor's Rig Manager: RICK YAVIS	Rig Released Date Time				(4.) Well Lessons & Stack Diagram Posted	MH	BV
						(5.) Flare Lines Staked	MH	BV
						(6.) BOP Drills Performed	MH	BV
						(7.) Visually Inspected BOPs, Flare Lines & Diagnostic Lines	MH	BV
						(1.) Rig Site Health & Safety Meeting (emp/contractor/visitor)		BV
						(2.) CAODC Rig Safety Inspection Checklist (emp/contractor)		
						(3.) Hard Inspection before Raising or Lowering		
						(4.) Crown Saver Checked		BV
						(5.) Motor Kills Checked		

CAODC

NOV MD Totco

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	
	Rig Up	Drill Ahead	Reaming	Coring	Cond Mud & Circ	Trips	Rig Service	Repair Rig	Cut Off Drlg Line	Dev Survey	Weather 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	TOTAL
Tour 1				7.50			0.25														0.25					8.00
Tour 2				5.50	1.50	0.50	0.25														0.25					8.00
Tour 3				5.00	1.00	0.50	0.25														1.25					8.00
TOTAL				18.00	2.50	1.00	0.75														1.75					24.00

HOURS

FUEL @ 08:00 HRS: Rig 188, Boiler 152

WEATHER: Time 05:45, Temp -15, OVERCAST, W, UP TO 19 KM/H, FAIR

TOUR 1 — SIGNATURE OF DRILLER: BRIAN BERGSETH — START TIME: 0:00 — END TIME: 8:00

BITS

Bit Number	1C
Size	222
IADC Code	
Manufacturer	NOV
Type	PR 513
Serial No	E140308
Jets	11.9 11.9 11.9 11.9 11.9
Depth Out (m)	
Depth In (m)	1622.00
Total Drilled (m)	108.00
Hrs Run Today	
Cumulative Hrs Run	13.00
Entry Date	

CUTTING STRUCTURE: TI, TO, MDC, LOC, BRG, Gauge, ODC, Reason Pulled, Tooth/Bearing 8.31

METRES DRILLED

From	To	D-R-C	RPM	WOB

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	Core bit	222	60	0.58
1	Core Barrel	165	108	7.92
1	Stabilizer	165	108	1.23
1	Core Barrel	165	108	7.92
1	Stabilizer	165	108	1.23
1	Core Barrel	165	108	9.57
1	Seat sub	165	108	0.49
1	Stabilizer	165	108	0.83
8	Core Collers	165	108	75.62
1	XO	165	108	0.77
83	Drill Pipe	Stands		1596.35
1	Drill Pipe	Singles		9.54
	Kelly Down			17.74
	Total			1730.00
	Weight of DC			
	Weight of String			62.00

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

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
truvis	2	SXS
Versatrol	2	SXS
calcium chloride	2	SXS
Lime	3	SXS

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	10.5	450
2	8.00	11	500

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
0:00	0:15	0.25	7	Rig service function test pipe ram's 3 sec & crown saver
0:15	0:30	0.25	21	Safety meeting with schlumberger & core hand
0:30	8:00	7.50	4A	Rig up schlumberger wire line to retrieve core # 4 & pull out core

Remarks
blow down boiler 200 l
boiler #2 200

SAFETY

Safety Topic	MEHL	MACP
GOOD WORK OBSERVATIONS		5245

TOUR 2 — SIGNATURE OF DRILLER: DEVAN SCHLITTER — START TIME: 8:00 — END TIME: 16:00

BITS

Bit Number	1C
Size	222
IADC Code	
Manufacturer	NOV
Type	PR 513
Serial No	E140308
Jets	11.9 11.9 11.9 11.9 11.9
Depth Out (m)	
Depth In (m)	1622.00
Total Drilled (m)	108.00
Hrs Run Today	
Cumulative Hrs Run	13.00
Entry Date	

CUTTING STRUCTURE: TI, TO, MDC, LOC, BRG, Gauge, ODC, Reason Pulled, Tooth/Bearing 8.31

METRES DRILLED

From	To	D-R-C	RPM	WOB

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	Core bit	222	60	0.58
1	Core Barrel	165	108	7.92
1	Stabilizer	165	108	1.23
1	Core Barrel	165	108	7.93
1	Stabilizer	165	108	1.23
1	Core Barrel	165	108	9.57
1	Seat sub	165	108	0.49
1	Stabilizer	165	108	0.83
8	Core Collers	165	108	75.62
1	XO	165	108	0.77
83	Drill Pipe	Stands		1596.35
1	Drill Pipe	Singles		9.54
	Kelly Down			17.74
	Total			1730.00
	Weight of DC			
	Weight of String			62.00

HOLE CONDITION: Hole Drag Up / Down; Torque At Bottom; Fill On Bottom

MUD RECORD

Mud Type: Water ☑ Oil ☐ Other

Time	14:30
Density	945
Funnel Viscosity	54
Fluid Loss	
pH	
Location Of Sample	shaker
Depth	1729.00
PVT	43

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
2	SINGLE	140	135	1600	1.50

Remarks:

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
2	357	@	60	@	1729.00
		@		@	
		@		@	

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
1	8.00	11	450
2	8.00	11	500

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
8:00	10:45	2.75	4A	Pull core #4 with Schlumberger wire line and NOV core hands
10:45	11:00	0.25	21	Safety meeting with Schlumberger wire line and NOV core hands reviewed NOV jss#14 laying down express core
11:00	12:45	1.75	4A	Lay down core #4 with NOV Core hands full 27m recovery
12:45	13:15	0.50	6A	Trip in the hole 5 STDS 1618m to 1724m
13:15	14:30	1.25	5	Circulate and work string@1724m
14:30	14:45	0.25	7	Rig service function hydrill 13 sec crown saver operating properly
14:45	15:45	1.00	4A	Make up core barrels for run #5
15:45	16:00	0.25	5	Circulate and pump down core barrels @.80m3/min

Remarks
Level 1 inspection on tongs,sub and overhead equipment D.S
Blew down boilers 2 times 100 litres each boiler 2 fuel level 183 cm

SAFETY

Safety Topic	MEHL	MACP
laying down cores		5245

TOUR 3 — SIGNATURE OF DRILLER: BRIAN BERGSETH — START TIME: 16:00 — END TIME: 24:00

BITS

Bit Number	1C
Size	222
IADC Code	
Manufacturer	NOV
Type	PR 513
Serial No	E140308
Jets	11.9 11.9 11.9 11.9 11.9
Depth Out (m)	
Depth In (m)	1622.00
Total Drilled (m)	135.00
Hrs Run Today	2.50
Cumulative Hrs Run	15.50
Entry Date	

CUTTING STRUCTURE: TI, TO, MDC, LOC, BRG, Gauge, ODC, Reason Pulled, Tooth/Bearing 8.71

METRES DRILLED

From	To	D-R-C	RPM	WOB
1730.00	1757.00	CORE	60	6

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	Core bit	222	60	0.58
1	Core Barrel	165	108	7.92
1	Stabilizer	165	108	1.23
1	Core Barrel	165	108	7.93
1	Stabilizer	165	108	1.23
1	Core Barrel	165	108	9.57
1	Seat sub	165	108	0.49
1	Stabilizer	165	108	0.83
8	Core Collers	165	108	75.62
1	XO	165	108	0.77
84	Drill Pipe	Stands		1625.18
1	Drill Pipe	Singles		9.67
	Kelly Down			15.76
	Total			1757.00
	Weight of DC			
	Weight of String			62.00

HOLE CONDITION: Hole Drag Up 0 / Down 0; Torque At Bottom; Fill On Bottom

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other

Time	17:00	18:45
Density	945	945
Funnel Viscosity	68	68
Fluid Loss		
pH		
Location Of Sample	shaker	shaker
Depth	1748.00	1758.00
PVT	43	46

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
2	SINGLE	140	126	5300	4.00

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
truvis	7	sks

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	500

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
15:00	18:30	2.50	4	Cut 89mm core #5 from 1730m to 1757m with National Oilwell Varco with bit #1C PR513 pumping @ 1.2m3/min rop 10m/hr wob 5 daN
18:30	19:00	0.50	21G	MEETINGS - SAFETY STAND-DOWN with day crew ,guy goodine,brian krausert,jeff mccuaig
19:00	20:00	1.00	5D	Circulate & condition
20:00	20:30	0.50	21G	MEETINGS - SAFETY STAND-DOWN with nite crew,guy goodine,brian krausert,jeff mccuaig
20:30	20:45	0.25	7	Rig service function test pipe ram's 3 sec & crown saver
20:45	21:15	0.50	6B	10 min flow check & Pull out 4 stds d.p
21:15	21:30	0.25	21	Safety meeting with schlumberger & core hand
21:30	24:00	2.50	4A	Rig up schlumberger wire line to retrieve core # 5

Remarks
Blow down boiler 200 l

SAFETY

Safety Topic	MEHL	MACP
Safety stand-down		5245

FRONT PAGE SUMMARY

Tour Sheet Serial Number: BEAV2_20130211_1A | Version Software Version: RMS 2012.11.15.25129 | Year: 2013 | Month: 02 | Day: 11

Licensee No: 1211	Well Name: COPRC LOON CREEK 300-C-006-L-094-P-16	Surface Location: 65:05:51.05N/127:00:30.07W	Prov: NT	Loc Type: LatLong	Unique Well Id: 300-C-006-L-094-P-16
Operator: Conoco Canada	Contractor: Beaver Drilling Ltd.		Rig No: 2	Well Type: VERT	Re-Entry: ☐
Operator's AFE: 10342919	Contractor's Job No: 149		Spud/Down Time: 25-Jan-2013	12:00	
Signature Of Operator's Representative: MIKE HOBMAIER	Signature Of Contractor's Rig Manager: RICK YAVIS		Rig Release Date/ Time:		

DAILY CHECKS — DP RIG

(1) Daily Walk Around Inspection	LBH	RV
(2.) Detailed Inspection - Monthly (Using Check List)		
(3.) H2S Signs Posted if Required	LBH	RV
(4.) Well Licence & Stack Diagram Posted	LBH	RV
(5.) Flare Lines Staked	LBH	RV
(6.) BOP Drills Performed	LBH	RV
(7.) Visually Inspected BOPs-Flare Lines & Degasser Lines	LBH	RV
(1.) Rig Site Health & Safety Meeting (crew/contractor)		RV
(2.) CAODC Rig Safety Inspection Checklist (crew/equipment)		
(3.) Mast Inspection before Raising or Lowering		RV
(4.) Crown Saver Checked		
(5.) Water Tks Checked		

CAODC | NOV MD Totco

HOURS

Code	1 Rig Up	2 Drill Ahead	3 Running	4 Casing	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 Tour Down	23 Waiting On	24 Rig Maint	25 Other	TOTAL
Tour 1				7.50			0.25														0.25					8.00
Tour 2				5.50	1.50	0.75	0.25																			8.00
Tour 3				7.00	0.50	0.25															0.25					8.00
TOTAL				20.00	2.00	1.00	0.50														0.50					24.00

FUEL @ 08:00 HRS: Top 188 | Bottom 152

WEATHER HRS: Time 05:00 | Temp -16 | Current Conditions: OVERCAST | Wind Direction: W | Wind Strength: CALM | Road Conditions: FAIR

TOUR 1

SIGNATURE OF DRILLER: BRIAN BERGSETH

START TIME: 0:00 | END TIME: 8:00

BITS

Bit Number	1C
Size	222
IADC Code	
Manufacturer	NOV
Type	PR 513
Serial No	E140308
Jets	11.9 / 11.9 / 11.9 / 11.9 / 11.9
Depth Out (m)	
Depth In (m)	1622.00
Total Drilled (m)	135.00
Hrs Run Today	
Cumulative Hrs Run	15.50
Entry Date	

CUTTING STRUCTURE: Depth | TB | ODC | IADC | Inner Rows | LOC | Total Rows | BRG | 8.71

METRES DRILLED

From	To	D-R-C	RPM	WOB

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	Core bit	222	60	0.58
1	Core Barrel	165	108	7.92
1	Stabilizer	165	108	1.23
1	Core Barrel	165	108	7.93
1	Stabilizer	165	108	1.23
1	Core Barrel	165	108	9.57
1	Seat sub	165	108	0.48
1	Stabilizer	165	108	0.83
8	Core Collers	165	108	75.62
1	XO	165	108	0.77
84	Drill Pipe		Stands	1625.18
1	Drill Pipe		Singles	9.67

Kelly Down: 15.78 | Total: 1757.00 | Weight of DC | Weight of String: 62.00

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

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	500

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
0:00	0:15	0.25	7	Rig service f.i crown saver
0:15	7:45	7.50	4A	Rig up schlumberger wire line to retrieve core # 5
7:45	8:00	0.25	21D	Crew change safety meating/safety with NOV core hands

Remarks
Blow down boiler 200 l
boiler #2 fuel 183

SAFETY

Safety Topic	MEHL	MACP
		5245

TOUR 2

SIGNATURE OF DRILLER: DEVAN SCHLITTER

START TIME: 8:00 | END TIME: 16:00

BITS

Bit Number	1C
Size	222
IADC Code	
Manufacturer	NOV
Type	PR 513
Serial No	E140308
Jets	11.9 / 11.9 / 11.9 / 11.9 / 11.9
Depth Out (m)	
Depth In (m)	1622.00
Total Drilled (m)	162.00
Hrs Run Today	3.50
Cumulative Hrs Run	19.00
Entry Date	

CUTTING STRUCTURE: Depth | TB | ODC | IADC | Inner Rows | LOC | Total Rows | BRG | 8.53

METRES DRILLED

From	To	D-R-C	RPM	WOB
1757.00	1784.00	CORE	65	6.5

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	Core bit	222	60	0.58
1	Core Barrel	165	108	7.92
1	Stabilizer	165	108	1.23
1	Core Barrel	165	108	7.93
1	Stabilizer	165	108	1.23
1	Core Barrel	165	108	9.57
1	Seat sub	165	108	0.48
1	Stabilizer	165	108	0.83
8	Core Collers	165	108	75.62
1	XO	165	108	0.77
86	Drill Pipe		Stands	1653.89
1	Drill Pipe		Singles	9.63

Kelly Down: 14.11 | Total: 1784.00 | Weight of DC | Weight of String: 62.00

HOLE CONDITION: Hole Drag Up | Down | Torque At Bottom | Fill On Bottom

MUD RECORD

Mud Type: Water ☑ Oil ☐ Other

Time	10:45	14:30
Density	940	940
Funnel Viscosity	69	85
Fluid Loss		
pH		
Location Of Sample	shaker	shaker
Depth	1753.00	1775.00
PVT	44	44

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	SINGLE	140	125	5500	5.00

Remarks

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
1	671	@	85	@	1753.00
		@		@	
		@		@	

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
VERSAMOD - 20BLT	1	bbl
SUFAMIC ACID - 25KG	1	sks
SODIUM BICARBONATE 50LB	1	sks
LIME - 20KG	15	sks

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	490

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
8:00	9:00	1.00	4A	Laydown core #5 with NOV core hands and Schlumberger wire line recover 27m
9:00	9:45	0.75	6A	Trip in the hole from 1664m to 1753m
9:45	10:45	1.00	5	Circulate and work string @1753m
10:45	11:00	0.25	7	Rig service function pipe rams 3sec crown saver operating properly
11:00	12:00	1.00	4A	Make up core barrels for run #6 with NOV core hands
12:00	12:15	0.25	5	Circulate and pump down core barrels pumping @.80m3/min
12:15	15:45	3.50	4	Cut 89mm core #6 from 1757m to 1784m 27m with National Oilwell Varco with bit #1C PR513 pumping @ 1.2m3/min rop 7.7m/hr wob 5 daN
15:45	16:00	0.25	5	Circulate bottoms up to retrieve core #6

Remarks
Level 1 inspection on tongs,sub and overhead equipment D.S
Blew down boilers 2 times 100 litres

SAFETY

Safety Topic	MEHL	MACP
		5245

TOUR 3

SIGNATURE OF DRILLER: BRIAN BERGSETH

START TIME: 16:00 | END TIME: 24:00

BITS

Bit Number	1C
Size	222
IADC Code	
Manufacturer	NOV
Type	PR 513
Serial No	E140308
Jets	11.9 / 11.9 / 11.9 / 11.9 / 11.9
Depth Out (m)	
Depth In (m)	1622.00
Total Drilled (m)	135.00
Hrs Run Today	
Cumulative Hrs Run	19.00
Entry Date	

CUTTING STRUCTURE: Depth | TB | ODC | IADC | Inner Rows | LOC | Total Rows | BRG | 7.11

METRES DRILLED

From	To	D-R-C	RPM	WOB

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	Core bit	222	60	0.58
1	Core Barrel	165	108	7.92
1	Stabilizer	165	108	1.23
1	Core Barrel	165	108	7.93
1	Stabilizer	165	108	1.23
1	Core Barrel	165	108	9.57
1	Seat sub	165	108	0.48
1	Stabilizer	165	108	0.83
8	Core Collers	165	108	75.62
1	XO	165	108	0.77
86	Drill Pipe		Stands	1653.89
1	Drill Pipe		Singles	9.63

Kelly Down: 14.11 | Total: 1784.00 | Weight of DC | Weight of String: 62.00

HOLE CONDITION: Hole Drag Up | Down | Torque At Bottom | Fill On Bottom

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other

Time	16:15
Density	940
Funnel Viscosity	74
Fluid Loss	
pH	
Location Of Sample	shaker
Depth	1785.00
PVT	47

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	SINGLE	140	102	4300	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	10.5	450
2	8.00	11	500

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
16:00	16:30	0.50	5	Circulate hole clean to retrieve core #6
16:30	16:45	0.25	21	Safety meeting with NOV core hands and Schlumberger wire line
16:45	17:00	0.25	6B	Pull 4 STDS up to
17:00	24:00	7.00	4A	Rig in Schlumberger wire line to retrieve core #6

Remarks
Blow down boiler 200 l

SAFETY

Safety Topic	MEHL	MACP
		5245

FRONT PAGE SUMMARY

Tour Sheet Serial Number: BEAV2_20130212_1A | Vendor Software Version: PMS 2012.11.15.25129 | Year: 2013 | Month: 02 | Day: 12

Licensee No: 1211	Well Name: COPRC LOON CREEK 300-C-006-L-094-P-15	Surface Location: 65:05:51.05N/127:00:30.07W	Prov: NT	Lic Type: LatLong	Unique Well Id: 300-C-006-L-094-P-15
Operator: Conoco Canada	Contractor: Beaver Drilling Ltd.	Rig No: 2	Well Type: VERT	Al-Lobby: ☐
Operator's AFE: 10342919	Contractor's Job No: 149	Spud Date Time: 26-Jan-2013	12:00
Signature Of Operator's Representative: DAVE FORSBERG	Signature Of Contractor's Rig Manager: RICK YAVIS	Rig Release Date Time:	

DAILY CHECKS — DP / RM

- (1L) Daily Walk Around Inspection — DP ☐ RM ☐
- (2L) Detailed Inspection - Weekly (Young Creek Lite) — DP ☐ RM ☐
- (3L) H2S Signs Posted & Designed — DP ☐ RM ☐
- (4L) Well Licence & Block Diagram Posted — DP ☐ RM ☐
- (5L) Flare Lines Staked — DP ☐ RM ☐
- (6L) BOP Drills Performed — DP ☐ RM ☐
- (7L) Visually Inspected BOPs, Flare Lines & Degasser Lines — DP ☐ RM ☐
- (1) Rig Site Health & Safety Meeting (enter month) — RM ☐
- (2) CAODC Rig Safety Inspection Checklist (enter month) — RM ☐
- (3) Most Inspection before Rigging or Lowering — RM ☐
- (4) Crown Saver Checked — RM ☐
- (5) Motor Rite Checked — RM ☐

CAODC | NOV MD Totco

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	
	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 Maint	Other	TOTAL
Tour 1				5.75	1.00	0.50	0.25														0.50					8.00
Tour 2				6.00	1.00	0.25	0.25														0.50					8.00
Tour 3				7.50			0.25														0.25					8.00
TOTAL				19.25	2.00	0.75	0.75														1.25					24.00

HOURS

FUEL @ 08:00 HRS: Rig 190 | Auto 203 | Time 05:00 | Temp -15

WEATHER: Current Conditions: CLEAR | Wind Direction: W | Wind Strength: CALM | Road Conditions: FAIR

TOUR 1

SIGNATURE OF DRILLER: BRIAN BERGSETH | START TIME: 0:00 | END TIME: 8:00

BITS

Bit Number	1C
Size	222
IADC Code	
Manufacturer	NOV
Type	PR 513
Serial No	E140308
Jets	11.9 / 11.9 / 11.9 / 11.9 / 11.9
Depth Out (m)	
Depth In (m)	1622.00
Total Drilled (m)	135.00
Hrs Run Today	
Cumulative Hrs Run	19.00
Entry Date	

CUTTING STRUCTURE: T1 | Gage | TO | ODC | BDC | Reason Pulled | LOC | Instrument | 7.11 | BRG

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	Core bit	222	60	0.58
1	Core Barrel	165	108	7.92
1	Stabilizer	165	108	1.23
1	Core Barrel	165	108	7.93
1	Stabilizer	165	108	1.23
1	Core Barrel	165	108	9.57
1	Seat sub	165	108	0.48
1	Stabilizer	165	108	0.83
8	Core Collers	165	108	75.62
1	XO	165	108	0.77
86	Drill Pipe		Stands	1653.89
1	Drill Pipe		Singles	9.63
	Kelly Down			12.41
	Total			1769.89
	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	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	500

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	4A	Retrieve core # 6 with schlumberger wire line
5:00	5:15	0.25	21	Safety meeting with core hand laying down core # 6
5:15	6:15	1.00	4A	Lay down core # 6 with nov core hand & schlumberger & make up inner core bbl
6:15	6:45	0.50	6A	Run in 4 stds d.p
6:45	7:45	1.00	5D	Circulate & condition hole/pump core barrels down to do run #7
7:45	8:00	0.25	21	Crew hand meeting

Remarks
Blow down boiler 200 l
boiler #2 193

METRES DRILLED

From	To	D-R-C	RPM	WOB

HOLE CONDITION

Hole Drag: Up | Down
Torque At Bottom
Fill On Bottom

SAFETY

Safety Topic	MEHL	MACP
LR.S		5245

TOUR 2

SIGNATURE OF DRILLER: DEVAN SCHLITTER | START TIME: 8:00 | END TIME: 16:00

BITS

Bit Number	1C
Size	222
IADC Code	
Manufacturer	NOV
Type	PR 513
Serial No	E140308
Jets	11.9 / 11.9 / 11.9 / 11.9 / 11.9
Depth Out (m)	
Depth In (m)	1622.00
Total Drilled (m)	189.00
Hrs Run Today	3.50
Cumulative Hrs Run	22.50
Entry Date	

CUTTING STRUCTURE: T1 | Gage | TO | ODC | BDC | Reason Pulled | LOC | Instrument | 8.40 | BRG

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	Core bit	222	60	0.58
1	Core Barrel	165	108	7.92
1	Stabilizer	165	108	1.23
1	Core Barrel	165	108	7.93
1	Stabilizer	165	108	1.23
1	Core Barrel	165	108	9.57
1	Seat sub	165	108	0.48
1	Stabilizer	165	108	0.83
8	Core Collers	165	108	75.62
1	XO	165	108	0.77
86	Drill Pipe		Stands	1653.89
1	Drill Pipe		Singles	9.63
	Kelly Down			12.41
	Total			1782.30
	Weight of DC			
	Weight of String			

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other ☐

Time	08:15	10:30
Density	945	945
Funnel Viscosity	83	75
Fluid Loss		
pH		
Location Of Sample	shaker	shaker
Depth	1793.00	1812.00
PVT	47	47

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	SINGLE	140	125	5500	5.50

Remarks

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
1	1733	@	75	@	1726.00
		@		@	
		@		@	

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
1	8.00	11	450
2	8.00	11	500

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
8:00	8:15	0.25	7	Rig service function hydrill 13 sec crown saver operating ok
8:15	11:45	3.50	4	Cut 89mm core #7 from 1784m to 1811m 27m with National Oilwell Varco with bit #1C PR513 pumping @ 1.2m3/min rop 7.7m/hr wob 5 daN
11:45	12:45	1.00	5	Circulate bottoms up to retreve core #7
12:45	13:00	0.25	21A	BOP drill crew in position well secure in 80 sec
13:00	13:15	0.25	21	Safety meeting with NOV core hands and schlumberger wire line
13:15	13:30	0.25	6B	Pull 4 stds of drill pipe up to to retreve core #7
13:30	16:00	2.50	4A	Rig to and retreve core #7 with NOV core hands and Sclumberger wire line

Remarks
Level 1 inspection on tongs,sub and overhead equipment D.S
Blew down boilers 2 times 100 litres

METRES DRILLED

From	To	D-R-C	RPM	WOB
1784.00	1811.00	CORE	55	5.5

HOLE CONDITION

Hole Drag: Up | Down
Torque At Bottom
Fill On Bottom

SAFETY

Safety Topic	MEHL	MACP
BOP drill		5245

TOUR 3

SIGNATURE OF DRILLER: MARCUS HALLOWES | START TIME: 16:00 | END TIME: 24:00

BITS

Bit Number	1C
Size	222
IADC Code	
Manufacturer	NOV
Type	PR 513
Serial No	E140308
Jets	11.9 / 11.9 / 11.9 / 11.9 / 11.9
Depth Out (m)	
Depth In (m)	1622.00
Total Drilled (m)	189.00
Hrs Run Today	
Cumulative Hrs Run	22.50
Entry Date	

CUTTING STRUCTURE: T1 | Gage | TO | ODC | BDC | Reason Pulled | LOC | Instrument | 8.40 | BRG

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	Core bit	222	60	0.58
1	Core Barrel	165	108	7.92
1	Stabilizer	165	108	1.23
1	Core Barrel	165	108	7.93
1	Stabilizer	165	108	1.23
1	Core Barrel	165	108	9.57
1	Seat sub	165	108	0.48
1	Stabilizer	165	108	0.83
8	Core Collers	165	108	75.62
1	XO	165	108	0.77
88	Drill Pipe		Stands	1892.38
0	Drill Pipe		Singles	0.00
	Kelly Down			12.41
	Total			1811.16
	Weight of DC			
	Weight of String			

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other ☐

Time	20:30	22:30
Density	945	945
Funnel Viscosity	64	65
Fluid Loss		
pH		
Location Of Sample	Shaker	Shaker
Depth	1811.00	1811.00
PVT	46	46

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	500
2	8.00	11	500

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
16:00	16:30	0.50	4A	Rig to and retreve core #7 with NOV core hands and Sclumberger wire line
16:30	16:45	0.25	7	Rig service function test motor kills
16:45	17:00	0.25	21	B.O.P drill go through crew positions
17:00	24:00	7.00	4A	Rig to and retreve core #7 with NOV core hands and Sclumberger wire line

Remarks
Level one inspection on tongs and all overhead equitment mh
Blew down boilers 1001

METRES DRILLED

From	To	D-R-C	RPM	WOB

HOLE CONDITION

Hole Drag: Up | Down
Torque At Bottom
Fill On Bottom

SAFETY

Safety Topic	MEHL	MACP
b.o.p drill		5245

FRONT PAGE SUMMARY

Your Short Serial Number: BEAV2_20130212_1A	Vendor Software Version: RMS 2012.11.15.25129	Year: 2013	Month: 02	Day: 12			
License No: 1211	Well Name: COPRC LOON CREEK 300-C-006-L-094-P-16	Surface Location: 65:05:51.05N/127:00:30.07W	Prov: NT	Lat_Long	Unique Well Id: 300-C-006-L-094-P-15		
Operator: Conoco Canada	Contractor: Beaver Drilling Ltd.	Rig No: 2	Well Type: VERT		R + D req: ☐		
Operator's AFE: 10342919	Contractor's Job No: 149	Spud Date/ Time: 26-Jan-2013	12:00				
Signature Of Operator's Representative: DAVE FORSBERG	Signature Of Contractor's Rig Manager: RICK YAVIS	Rig Released Date/ Time:					

DAILY CHECKS — DP / RM

- (1.) Daily Well Around Inspection — DP ☑ RM ☑
- (2.) Detailed Inspection - Weekly (Using Check List) — DP ☑ RM ☑
- (3.) H2S Signs Posted If Required — DP ☐ RM ☐
- (4.) Well Licence & Stick Diagram Posted — DP ☑ RM ☑
- (5.) Flare Lines Staked — DP ☑ RM ☑
- (6.) BOP Drills Performed — DP ☑ RM ☑
- (7.) Visually Inspected BOPs,Flare Lines & Degasser Lines — DP ☑ RM ☑
- (1.) Rig Site Meeting & Safety Meeting (minimum/month) — RM ☑
- (2.) CAODC Rig Safety Inspection Checklist (once/month) — RM ☐
- (3.) Hoist Inspection before Raising or Lowering — RM ☐
- (4.) Crown Saver Checked — RM ☑
- (5.) Motor Vibe Checked — RM ☑

CAODC

NOV MD Totco

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	Waiting On	Rig Watch	Other	
Tour 1				5.75	1.00	0.50	0.25														0.50					8.00
Tour 2				6.00	1.00	0.25	0.25														0.50					8.00
Tour 3				7.50			0.25														0.25					8.00
TOTAL				19.25	2.00	0.75	0.75														1.25					24.00

FUEL @ 08:00 HRS: Fuel 190 — Used 203 — Time 05:00 — Time -15

WEATHER: General Conditions: CLEAR — Wind Direction: W — Wind Velocity: CALM — Road Conditions: FAIR

TOUR 1

SIGNATURE OF DRILLER: BRIAN BERGSETH — START TIME: 0:00 — END TIME: 8:00

BITS

Bit Number	1C
Size	222
IADC Code	
Manufacturer	NOV
Type	PR 513
Serial No	E140308
Jets	11.9 11.9 11.9 11.9 11.9
Depth Out (m)	
Depth In (m)	1622.00
Total Drilled (m)	135.00
Hrs Run Today	
Cumulative Hrs Run	19.00
Entry Date	

CUTTING STRUCTURE: In — Out — TD — ODC — BDC — Reason Pull — LOC — Tooth/Bearing 7.11 — BRG

METRES DRILLED

From	To	D-R-C	RPM	WOB

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	Core bit	222	60	0.58
1	Core Barrel	165	108	7.82
1	Stabilizer	165	108	1.23
1	Core Barrel	165	108	7.83
1	Stabilizer	165	108	1.23
1	Core Barrel	165	108	9.57
1	Seat sub	165	108	0.49
1	Stabilizer	165	108	0.83
8	Core Collers	165	108	76.92
1	XO	165	108	0.77
86	Drill Pipe		Stands	1653.89
1	Drill Pipe		Singles	9.63
	Kelly Down			12.41
	Total			1769.89
	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

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks

Remarks: Blow down boiler 200 l
boiler #2 193

SAFETY

Safety Topic	MEHL	MACP
LP.S		5245

TOUR 2

SIGNATURE OF DRILLER: DEVAN SCHLITTER — START TIME: 8:00 — END TIME: 16:00

BITS

Bit Number	1C
Size	222
IADC Code	
Manufacturer	NOV
Type	PR 513
Serial No	E140308
Jets	11.9 11.9 11.9 11.9 11.9
Depth Out (m)	
Depth In (m)	1622.00
Total Drilled (m)	189.00
Hrs Run Today	3.50
Cumulative Hrs Run	22.50
Entry Date	

CUTTING STRUCTURE: In — Out — TD — ODC — BDC — Reason Pull — LOC — Tooth/Bearing 8.40 — BRG

METRES DRILLED

From	To	D-R-C	RPM	WOB

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	Core bit	222	60	0.58
1	Core Barrel	165	108	7.82
1	Stabilizer	165	108	1.23
1	Core Barrel	165	108	7.83
1	Stabilizer	165	108	1.23
1	Core Barrel	165	108	9.57
1	Seat sub	165	108	0.49
1	Stabilizer	165	108	0.83
8	Core Collers	165	108	76.92
1	XO	165	108	0.77
86	Drill Pipe		Stands	1653.89
1	Drill Pipe		Singles	9.63
	Kelly Down			12.41
	Total			1782.30
	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	12:00	14:45
Density	945	945
Funnel Viscosity	74	60
Fluid Loss		
pH		
Location Of Sample	shaker	shaker
Depth	1812.00	1811.00
PVT	44	45

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	SINGLE	140	125	5500	5.50

Remarks

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
1	1733	@	75	@	1782.30
		@		@	
		@		@	

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 1 inspection on tongs,sub and overhead equipment D.S
Blew down boilers 2 times 100 litres

SAFETY

Safety Topic	MEHL	MACP
BOP drill		5245

TOUR 3

SIGNATURE OF DRILLER: MARCUS HALLOWES — START TIME: 16:00 — END TIME: 24:00

BITS

Bit Number	1C
Size	222
IADC Code	
Manufacturer	NOV
Type	PR 513
Serial No	E140308
Jets	11.9 11.9 11.9 11.9 11.9
Depth Out (m)	
Depth In (m)	1622.00
Total Drilled (m)	189.00
Hrs Run Today	
Cumulative Hrs Run	22.50
Entry Date	

CUTTING STRUCTURE: In — Out — TD — ODC — BDC — Reason Pull — LOC — Tooth/Bearing 8.40 — BRG

METRES DRILLED

From	To	D-R-C	RPM	WOB

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	Core bit	222	60	0.58
1	Core Barrel	165	108	7.82
1	Stabilizer	165	108	1.23
1	Core Barrel	165	108	7.83
1	Stabilizer	165	108	1.23
1	Core Barrel	165	108	9.57
1	Seat sub	165	108	0.49
1	Stabilizer	165	108	0.83
8	Core Collers	165	108	76.92
1	XO	165	108	0.77
88	Drill Pipe		Stands	1692.38
0	Drill Pipe		Singles	0.00
	Kelly Down			12.41
	Total			1811.16
	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

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks

Remarks: Level one inspection on tongs and all overhead equitment mh
Blew down boilers 100l

SAFETY

Safety Topic	MEHL	MACP
b.o.p drill		5245

FRONT PAGE SUMMARY

Tour Sheet Serial Number: BEAV2_20130213_1A | Vendor Software Version: RMS 2012.11.15.25129 | Year: 2013 | Month: 02 | Day: 13

Licence No: 1211 | Well Name: COPRC LOON CREEK 300-C-006-L-094-P-16 | Surface Location: 65:05:51.05N/127:00:30.07W | Area: NT | Lsd: 2 | Lat Type: LatLong | Unique Well Id: 300-C-006-L-094-P-16 | Rig No: 2 | Well Type: VERT | Rig Move: ☐

Operator: Conoco Canada | Contractor: Beaver Drilling Ltd.

Operator's AFE: 10342919 | Contractor's Job No: 149 | Spud Date Time: 26-Jan-2013 12:00

Signature Of Operator's Representative: DAVE FORSBERG | Signature Of Contractor's Rig Manager: RICK YAVIS | Rig Released Date Time:

DAILY CHECKS — OP / RM

- (1.) Daily Walk Around Inspection — OP RY
- (2.) Unlatched Inspection - Weekly (Using Check List) — OP RY
- (3.) H2S Signs Posted If Required — OP RY
- (4.) Well Licence & Slack Diagram Posted — OP RY
- (5.) Flare Lines Staked — OP RY
- (6.) BOP Drills Performed — OP RY
- (7.) Visually Inspected BOPs, Flare Lines & Degasser Lines — OP RY
- (1.) Rig Site Health & Safety Meeting (once/month) — RY
- (2.) CAODC Rig Safety Inspection Checklist (once/month) — RY
- (3.) Most Inspection before Raising or Lowering — RY
- (4.) Crown Saver Checked — RY
- (5.) Motor Kills Checked — RY

CAODC | NOV MD Totco

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				6.00	1.00	0.25	0.25														0.50					8.00
Tour 2			1.00	4.75	1.25	0.75	0.25																			8.00
Tour 3				5.50	1.50	0.50	0.25														0.25					8.00
TOTAL			1.00	16.25	3.75	1.50	0.75														0.75					24.00

HOURS

FUEL @ 08:00 HRS: Rig 185 | Camp 150

WEATHER: Time 05:45 | Temp -20 | Current Conditions: LIGHT SNOW | Wind Strength: W | Wind Direction: CALM | Road Conditions: FAIR

TOUR 1

SIGNATURE OF DRILLER: DEVAN SCHLITTER | START TIME: 0:00 | END TIME: 8:00

BITS

Bit Number	1C
Size	222
IADC Code	
Manufacturer	NOV
Type	PR 513
Serial No	E140308
Jets	11.9 / 11.9 / 11.9 / 11.9 / 11.9
Depth Out (m)	
Depth In (m)	1622.00
Total Drilled (m)	202.00
Hrs Run Today	3.25
Cumulative Hrs Run	25.75
Entry Date	

CUTTING STRUCTURE: TI | Gauge | TO | ODC | BDC | Inner Rows | LOC | Bearing/Seals | 7.84 | GRD

METRES DRILLED

From	To	D-R-C	RPM	WOB
1811.00	1824.34	CORE	45	7

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	Core bit	222	60	0.58
1	Core Barrel	165	108	7.82
1	Stabilizer	165	108	1.23
1	Core Barrel	165	108	7.83
1	Stabilizer	165	108	1.23
1	Core Barrel	165	108	9.57
1	Seat sub	165	108	0.48
1	Stabilizer	165	108	0.83
8	Core Collers	165	108	76.62
1	XO	165	108	0.77
89	Drill Pipe	Stands		1711.49
0	Drill Pipe	Singles		0.00

Kelly Down: 6.50 | Total: 1824.36 | 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

	03:00	05:00
Time		
Density	945	945
Funnel Viscosity	76	73
Fluid Loss		
pH		
Location Of Sample	shaker	shaker
Depth	1811.00	1820.00
PVT	46	46

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	SINGLE	140	125	5500	5.50

Remarks

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
1	618	@	84	@	1830.00
		@		@	
		@		@	

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
1	8.00	11	470
2	8.00	11	500

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
0:00	1:00	1.00	4A	Pull core #7 with NOV core hands and Schlumberger wire line
1:00	1:15	0.25	21	Safety meeting with NOV core hands and Schlumberger wire line
1:15	2:30	1.25	4A	Lay down core #7 with NOV core hands full 27 m recovery
2:30	2:45	0.25	6A	Trip in the hole 4 stds to 1800m
2:45	3:30	0.75	5	Circulate and work string @1810m
3:30	3:45	0.25	7	Rig service function pipe rams 3 sec crown saver operating properly
3:45	4:15	0.50	4A	Make up core barrels for run #8 with NOV core hands
4:15	4:30	0.25	5	Circulate and pump core barrels down pumping@ .80 m3/min
4:30	7:45	3.25	4	Cut 89mm core #8 from 1811m to 1824m with National Oilwell Varco with bit #1C PR513 pumping @ 1.2m3/min rop 4.5m/hr wob 5 daN
7:45	8:00	0.25	21	Crew change safety meeting

Remarks
Level 1 inspection on tongs,sub and overhead equipment D.S
Blew down boilers 2 times 100 litres
New boiler fuel 185

SAFETY

Safety Topic	MEHL	MACP
Laying down cores		5245

TOUR 2

SIGNATURE OF DRILLER: MARCUS HALLOWES | START TIME: 8:00 | END TIME: 16:00

BITS

Bit Number	1C
Size	222
IADC Code	
Manufacturer	NOV
Type	PR 513
Serial No	E140308
Jets	11.9 / 11.9 / 11.9 / 11.9 / 11.9
Depth Out (m)	
Depth In (m)	1622.00
Total Drilled (m)	216.00
Hrs Run Today	3.50
Cumulative Hrs Run	29.25
Entry Date	

CUTTING STRUCTURE: TI | Gauge | TO | ODC | BDC | Inner Rows | LOC | Bearing/Seals | 7.38 | GRD

METRES DRILLED

From	To	D-R-C	RPM	WOB
1824.00	1838.00	CORE	45	6

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	Core bit	222	60	0.58
1	Core Barrel	165	108	7.82
1	Stabilizer	165	108	1.23
1	Core Barrel	165	108	7.83
1	Stabilizer	165	108	1.23
1	Core Barrel	165	108	9.57
1	Seat sub	165	108	0.48
1	Stabilizer	165	108	0.83
8	Core Collers	165	108	76.62
1	XO	165	108	0.77
89	Drill Pipe	Stands		1711.49
1	Drill Pipe	Singles		9.65

Kelly Down: 11.41 | Total: 1838.92 | Weight of DC | Weight of String: 64.00

HOLE CONDITION: Hole Drag Up 1 / Down 1 | Torque At Bottom | Fill On Bottom

MUD RECORD

Mud Type: Water ☐ Oil ☑ Other

	10:00	12:00
Time		
Density	945	945
Funnel Viscosity	75	74
Fluid Loss		
pH		
Location Of Sample	Shaker	Shaker
Depth	1830.00	1836.00
PVT	45	46

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	SINGLE	140	110	4200	5.00

Remarks

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
1	1047	@	43	@	1838.00
		@		@	
		@		@	

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
LIME - 20KG	15	sks

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	500
2	8.00	11	500

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
8:00	9:30	1.50	4	Cut 89mm core #8 from 1824m to 1830m with National Oilwell Varco with bit #1C PR513 pumping @ 1.2m3/min rop 4.5m/hr wob 5 daN
9:30	10:30	1.00	3A	Ream core from 1824m to 1830m
10:30	12:30	2.00	4	Cut 89mm core #8 from 1824m to 1838m with National Oilwell Varco with bit #1C PR513 pumping @ 1.2m3/min rop 4.5m/hr wob 5 daN
12:30	12:45	0.25	7	Rig service function test annular 13 seconds to close function test crown saver
12:45	14:00	1.25	5	Circulate and work string at 1838m
14:00	14:45	0.75	6B	Pull out 5 stds of drill pipe
14:45	16:00	1.25	4A	Rig up to recover core #8 with nov core hands and schlumberger wireline

Remarks
Level one isnspection on tongs and all overhead equitment mh
Blew down boilers 100L each

SAFETY

Safety Topic	MEHL	MACP
wire lining for cores		5245

TOUR 3

SIGNATURE OF DRILLER: DEVAN SCHLITTER | START TIME: 16:00 | END TIME: 24:00

BITS

Bit Number	1C
Size	222
IADC Code	
Manufacturer	NOV
Type	PR 513
Serial No	E140308
Jets	11.9 / 11.9 / 11.9 / 11.9 / 11.9
Depth Out (m)	
Depth In (m)	1622.00
Total Drilled (m)	216.00
Hrs Run Today	
Cumulative Hrs Run	29.25
Entry Date	

CUTTING STRUCTURE: TI | Gauge | TO | ODC | BDC | Inner Rows | LOC | Bearing/Seals | 7.38 | GRD

METRES DRILLED

From	To	D-R-C	RPM	WOB

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	Core bit	222	60	0.58
1	Core Barrel	165	108	7.82
1	Stabilizer	165	108	1.23
1	Core Barrel	165	108	7.83
1	Stabilizer	165	108	1.23
1	Core Barrel	165	108	9.57
1	Seat sub	165	108	0.48
1	Stabilizer	165	108	0.83
8	Core Collers	165	108	76.62
1	XO	165	108	0.77
89	Drill Pipe	Stands		1711.49
1	Drill Pipe	Singles		9.65

Kelly Down: 12.41 | Total: 1839.92 | 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

	16:15	16:15
Time		
Density	945	945
Funnel Viscosity	75	75
Fluid Loss		
pH		
Location Of Sample	Shaker	Shaker
Depth	1836.00	1836.00
PVT	45	44

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	SINGLE	140	135	1800	2.00

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
LIME - 20KG	10	sks

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	500
2	8.00	11	500

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
16:00	16:30	0.50	4A	Rig up to recover core #8 with nov core hands and schlumberger wireline
16:30	16:45	0.25	7	Rig service function test pipe rams closed in 3 sec function test crown saver
16:45	20:15	3.50	4A	Rig up to recover core #8 with nov core hands and schlumberger wireline
20:15	20:30	0.25	21	Safety meeting with NOV core hands and Schlumberger wireline
20:30	21:30	1.00	4A	Lay down core #8 with NOV core hands full 27m recovery
21:30	22:00	0.50	5A	Trip drill pipe in the hole to 1815m
22:00	23:30	1.50	5	Wash to bottom to 1838m circulate out trip gas and work string
23:30	24:00	0.50	4A	Make up core barrels for run #8

Remarks
Blew down boilers 2 times 100 litres

SAFETY

Safety Topic	MEHL	MACP
lay down core		5245

FRONT PAGE SUMMARY

Your Sheet Serial Number: BEAV2_20130214_1A | Version Software Version: RMS 2012.11.15.25128 | Year: 2013 | Month: 02 | Day: 14

Licence No: 1211	Well Name: COPRC LOON CREEK 300-C-006-L-094-P-16	Surface Location: 65:05:51.05N/127:00:30.07W	Prov: NT	Lat Type: Lat/Long	Unique Well Id: 300-C-006-L-094-P-16
Operator: Conoco Canada	Contractor: Beaver Drilling Ltd.	Rig No: 2	Well Type: VERT	Re-Entry: ☐	
Operator's AFE: 10342918	Contractor's Job No: 149	Spud Date Time: 26-Jan-2013	12:00		
Signature Of Operator's Representative: DAVE FORSBERG	Signature Of Contractor's Rig Manager: RICK YAVIS	Rig Release Date Time			

DAILY CHECKS — OP RM

(1.) Daily Work Around Inspection — DP / RV
(2.) Detailed Inspection - Weekly (Using Check List) — DP / RV
(3.) H2S Signs Posted if Required — DP / RV
(4.) Well Licence & Sign Diagram Posted — DP / RV
(5.) Flow Lines Tested — DP / RV
(6.) BOP Drills Performed — DP / RV
(7.) Visually Inspected BOPs-Flare Lines & Diagram Lines — RV
(1.) Rig Site Health & Safety Meeting (emphasis/month) — RV
(2.) CAODC Rig Safety Inspection Checklist (emphasis/month) — RV
(3.) Most Inspection points Posting or Laminating — RV
(4.) Crown Saver Checked — RV
(5.) Motor Hills Checked — RV

CAODC | NOV | MD Totco

HOURS

Code	1 Rig Up	2 Drill Actual	3 Reaming	4 Casing	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 Walch	25 Other	TOTAL
Tour 1				4.50	3.00		0.25														0.25					8.00
Tour 2				6.75		0.75	0.25														0.25					8.00
Tour 3				3.50	0.50	3.50	0.25														0.25					8.00
TOTAL				14.75	3.50	4.25	0.75														0.75					24.00

FUEL @ 08:00 HRS: Rig 195 | Camp 135

WEATHER: Time 05:45 | Temp -24 | Weather Conditions: OVERCAST | Wind Direction: W | Wind Strength: UP TO 10 KM/H | Visibility: FAIR

TOUR 1 — SIGNATURE OF DRILLER: DEVAN SCHLITTER — START TIME: 0:00 — END TIME: 8:00

BITS

Bit Number	1C
Size	222
IADC Code	
Manufacturer	NOV
Type	PR 513
Serial No	E140308
Jets	11.9 11.9 11.9 11.9 11.9
Depth Out (m)	1856.00
Depth In (m)	1622.00
Total Drilled (m)	234.00
Hrs Run Today	4.50
Cumulative Hrs Run	33.75
Entry Date	

CUTTING STRUCTURE: In | Grade | TO | ODC | MDC | Nozzle Pcs | LOC | Tot Flow Area 6.93 | BRG

METRES DRILLED

From	To	D-R-C	RPM	WOB
1838.00	1856.00	CORE	50	7

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	Core bit	222	60	0.58
1	Core Barrel	165	108	7.92
1	Stabilizer	165	108	1.23
1	Core Barrel	165	108	7.93
1	Stabilizer	165	108	1.23
1	Core Barrel	165	108	9.57
1	Seat sub	165	108	0.49
1	Stabilizer	165	108	0.83
8	Core Collers	165	108	75.62
1	XO	165	108	0.77
90	Drill Pipe		Stands	1730.64
0	Drill Pipe		Singles	0.00
	Kelly Down			18.99
	Total			1856.00
	Weight of BC			
	Weight of String			

HOLE CONDITION: Hole Drag Up | Down | Torque At Bottom | Fill On Bottom

MUD RECORD

Mud Type	Water ☐	Oil ☑
Other		
Time	02:00	03:45
Density	945	945
Funnel Viscosity	74	74
Fluid Loss		
pH		
Location Of Sample	shaker	shaker
Depth	1847.00	1847.00
PVT	42	42

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	SWOLE	140	125	6600	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

MUD MATERIALS ADDED

Product	Amount	Type

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	450
2	8.00	11	500

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
0:00	0:15	0.25	7	Rig service function pipe rams 3 sec crown saver operating properly
0:15	0:30	0.25	5	Circulate and pump core barrels down@ .80m3/min
0:30	2:30	2.00	4	Cut 89mm core #9 from 1838m to 1847m with National Oilwell Varco with bit #1C PR513 pumping @ 1.2m3/min rop 4.5m/hr wob 7 daN
2:30	4:15	1.75	5	Work tight hole @1842m and circulate
4:15	6:45	2.50	4	Cut 89mm core #9 from 1847m to1856m with National Oilwell Varco with bit #1C PR513 pumping @ 1.2m3/min rop 4.5m/hr wob 7 daN
6:45	7:45	1.00	5	Circulate bottoms up
7:45	8:00	0.25	21D	Crew change safety meeting

Remarks
blew down boilers 2 times 100 litres

SAFETY

Safety Topic	MEHL	MACP
RIG SERVICE		5245

TOUR 2 — SIGNATURE OF DRILLER: MARCUS HALLOWES — START TIME: 8:00 — END TIME: 16:00

BITS

Bit Number	1C
Size	222
IADC Code	
Manufacturer	NOV
Type	PR 513
Serial No	E140308
Jets	11.9 11.9 11.9 11.9 11.9
Depth Out (m)	1856.00
Depth In (m)	1622.00
Total Drilled (m)	234.00
Hrs Run Today	
Cumulative Hrs Run	33.75
Entry Date	

CUTTING STRUCTURE: In | Grade | TO | ODC | MDC | Nozzle Pcs | LOC | Tot Flow Area 6.93 | BRG

METRES DRILLED

From	To	D-R-C	RPM	WOB

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	Core bit	222	60	0.58
1	Core Barrel	165	108	7.92
1	Stabilizer	165	108	1.23
1	Core Barrel	165	108	7.93
1	Stabilizer	165	108	1.23
1	Core Barrel	165	108	9.57
1	Seat sub	165	108	0.49
1	Stabilizer	165	108	0.83
8	Core Collers	165	108	75.62
1	XO	165	108	0.77
90	Drill Pipe		Stands	1730.64
0	Drill Pipe		Singles	0.00
	Kelly Down			20.06
	Total			1857.07
	Weight of BC			
	Weight of String			

HOLE CONDITION: Hole Drag Up | Down | Torque At Bottom | Fill On Bottom

MUD RECORD

Mud Type	Water ☐	Oil ☑
Other		
Time	10:00	12:00
Density	945	945
Funnel Viscosity	77	77
Fluid Loss		
pH		
Location Of Sample	Shaker	Shaker
Depth	1857.00	1857.00
PVT	42	41

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
BARITE-40KG	25	sks

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	500
2	8.00	11	500

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
8:00	8:45	0.75	5	Trip out five stds
8:45	9:15	0.50	4A	rig up to retrieve core #9 with nov core hands and schlumberger wireline
9:15	9:30	0.25	7	Rig service function test hydrill 13 seconds to close function test crown saver
9:30	15:00	5.50	4A	rig up to retrieve core #9 with nov core hands and schlumberger wireline
15:00	15:15	0.25	21	Safety meeting with nov on laying down cores
15:15	15:00	0.75	4A	Lay down cores #9 with nov core hands

Remarks
Level one inspection on tongs and all overhead equitment mh
blew down boilers 2 times 100 litres

SAFETY

Safety Topic	MEHL	MACP
Lay down core barrels		5245

TOUR 3 — SIGNATURE OF DRILLER: DEVAN SCHLITTER — START TIME: 16:00 — END TIME: 24:00

BITS

Bit Number	1C
Size	222
IADC Code	
Manufacturer	NOV
Type	PR 513
Serial No	E140308
Jets	11.9 11.9 11.9 11.9 11.9
Depth Out (m)	1856.00
Depth In (m)	1622.00
Total Drilled (m)	234.00
Hrs Run Today	
Cumulative Hrs Run	33.75
Entry Date	

CUTTING STRUCTURE: In | Grade | TO | ODC | MDC | Nozzle Pcs | LOC | Tot Flow Area 6.93 | BRG

METRES DRILLED

From	To	D-R-C	RPM	WOB

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	Core bit	222	60	0.58
1	Core Barrel	165	108	7.92
1	Stabilizer	165	108	1.23
1	Core Barrel	165	108	7.93
1	Stabilizer	165	108	1.23
1	Core Barrel	165	108	9.57
1	Seat sub	165	108	0.49
1	Stabilizer	165	108	0.83
8	Core Collers	165	108	75.62
1	XO	165	108	0.77
90	Drill Pipe		Stands	1730.64
0	Drill Pipe		Singles	0.00
	Kelly Down			20.06
	Total			1857.07
	Weight of BC			
	Weight of String			

HOLE CONDITION: Hole Drag Up | Down | Torque At Bottom | Fill On Bottom

MUD RECORD

Mud Type	Water ☐	Oil ☑
Other		
Time	18:00	
Density	945	
Funnel Viscosity	77	
Fluid Loss		
pH		
Location Of Sample	Shaker	
Depth	1857.00	
PVT	39	

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	SWOLE	140	100	4100	1.00

Remarks

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
1	419	@	62	@	1753.00
1	807	@	43	@	1741.00
		@		@	

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
1	8.00	11	500
2	8.00	11	500

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
15:00	15:15	0.25	5	Circulate
15:15	15:30	0.25	21	Safety meeting on running nov drill rods
15:30	15:45	0.25	7	Rig service function test pipe rams function test crown saver
15:45	20:15	3.50	4A	Run down nov drill rods with nov core hands and schlumberger/pull wire line
20:15	20:30	0.25	5	Circulate and pump pill
20:30	24:00	3.50	6M	Wiper trip out of hole up to 600m flow check@1741m/1647m/1080m/609m

Remarks
Blew down boilers 2 times 100 litres
wiper trip calc 4.92m3 meas 5.14m3 diff 0.22m3

SAFETY

Safety Topic	MEHL	MACP
Tripping		5245

FRONT PAGE SUMMARY

Tour Sheet Serial Number: BEAV2_20130214_1A | Version Software Version: RMS 2012.11.15.25129 | Year: 2013 | Month: 02 | Day: 14

Location No: 1211	Well Name: COPRC LOON CREEK 300-C-006-L-094-P-16	Surface Location: 65:05:51.05N/127:00:30.07W	Pool: NT
Lic Type: LatLong	Unique Well Id: 300-C-006-L-094-P-16		
Operator: Conoco Canada	Contractor: Beaver Drilling Ltd.	Rig No: 2	Well Type: VERT
Re-Entry: ☐			
Operator's AFE: 10342919	Contractor's Job No: 149	Spud Date Time: 26-Jan-2013 12:00	
Signature Of Operator's Representative: DAVE FORSBERG	Signature Of Contractor's Rig Manager: RICK YAVIS	Rig Release Date Time:	

DAILY CHECKS (DP / RV)

(1c) Daily Visit Around Inspection
(2c) Detailed Inspection - Weekly Visiting Check List
(3c) H2S Signs Posted if Required
(4c) Well Licence & Well Diagram Posted
(5c) Flare Lines Staked
(6c) BOP Drills Performed
(7c) Visually Inspected BOPs, Flare Lines & Diverter Lines
(1) Rig Site Health & Safety Meeting (once/month)
(2) CAODC Rig Safety Inspection Checklist (once/month)
(3) Well Inspection before Running or Lowering
(4) Crown Saver Checked
(5) Motor Kills Checked

CAODC | MD Totco

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	
	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	Pressure Test	Plug Back	Squeeze Cement	Fishing	Dir Work	Safety Meeting	Tour Down	Waiting On	Rig Watch	Other	TOTAL
Tour 1				4.50	3.00		0.25														0.25					8.00
Tour 2				6.75		0.75	0.25														0.25					8.00
Tour 3				3.50	0.50	3.50	0.25														0.25					8.00
TOTAL				14.75	3.50	4.25	0.75														0.75					24.00

HOURS

FUEL @ 08:00 HRS: 195 | 135 | 05:45 | -24

WEATHER: OVERCAST | W | UP TO 18 KM/H | FAIR

TOUR 1

SIGNATURE OF DRILLER: DEVAN SCHLITTER

START TIME: 0:00 END TIME: 8:00

BITS

Bit Number	1C
Size	222
IADC Code	
Manufacturer	NOV
Type	PR 513
Serial No	E140308
Jets	11.9 11.9 11.9 11.9 11.9
Depth Out (m)	1856.00
Depth In (m)	1622.00
Total Drilled (m)	234.00
Hrs Run Today	4.50
Cumulative Hrs Run	33.75
Entry Data	

CUTTING STRUCTURE: TI | TD | BDC | LDC | BRD | Depth | ODC | Inner Rows | Outer Rows | 6.93

METRES DRILLED: From | To | D-R-C | RPM | WOB

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	Core bit	222	60	0.58
1	Core Barrel	165	108	7.62
1	Stabilizer	165	108	1.23
1	Core Barrel	165	108	7.63
1	Stabilizer	165	108	1.23
1	Core Barrel	165	108	9.57
1	Seat sub	165	108	0.49
1	Stabilizer	165	108	0.83
8	Core Collers	165	108	75.62
1	XO	165	106	0.77
90	Drill Pipe	Stands		1730.54
0	Drill Pipe	Singles		0.00
	Kelly Down			18.99
	Total			1856.00
	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	06:00	08:00
Density	945	945
Funnel Viscosity	74	77
Fluid Loss		
pH		
Location Of Sample	shaker	Shaker
Depth	1857.00	1857.00
PVT	42	42

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	SINGLE	140	125	6600	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

MUD MATERIALS ADDED

Product	Amount	Type

BOILER

BoilerNo	HoursRun	pH	StackTemp

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks

Remarks: blew down boilers 2 times 100 litres

SAFETY

Safety Topic	MEHL	MACP
RIG SERVICE		5245

TOUR 2

SIGNATURE OF DRILLER: MARCUS HALLOWES

START TIME: 8:00 END TIME: 16:00

BITS

Bit Number	1C
Size	222
IADC Code	
Manufacturer	NOV
Type	PR 513
Serial No	E140308
Jets	11.9 11.9 11.9 11.9 11.9
Depth Out (m)	1856.00
Depth In (m)	1622.00
Total Drilled (m)	234.00
Hrs Run Today	
Cumulative Hrs Run	33.75
Entry Data	

CUTTING STRUCTURE: TI | TD | BDC | LDC | BRD | Depth | ODC | Inner Rows | Outer Rows | 6.93

METRES DRILLED: From | To | D-R-C | RPM | WOB

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	Core bit	222	60	0.58
1	Core Barrel	165	108	7.62
1	Stabilizer	165	108	1.23
1	Core Barrel	165	108	7.63
1	Stabilizer	165	108	1.23
1	Core Barrel	165	108	9.57
1	Seat sub	165	108	0.49
1	Stabilizer	165	108	0.83
8	Core Collers	165	108	75.62
1	XO	165	106	0.77
90	Drill Pipe	Stands		1730.54
0	Drill Pipe	Singles		0.00
	Kelly Down			20.06
	Total			1857.07
	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	14:00	16:00
Density	945	945
Funnel Viscosity	76	77
Fluid Loss		
pH		
Location Of Sample	Shaker	Shaker
Depth	1857.00	1857.00
PVT	40	39

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

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks

Remarks: Level one inspection on tongs and all overhead equitment mh
blew down boilers 2 times 100 litres

SAFETY

Safety Topic	MEHL	MACP
Lay down core barrels		5245

TOUR 3

SIGNATURE OF DRILLER: DEVAN SCHLITTER

START TIME: 16:00 END TIME: 24:00

BITS

Bit Number	1C
Size	222
IADC Code	
Manufacturer	NOV
Type	PR 513
Serial No	E140308
Jets	11.9 11.9 11.9 11.9 11.9
Depth Out (m)	1856.00
Depth In (m)	1622.00
Total Drilled (m)	234.00
Hrs Run Today	
Cumulative Hrs Run	33.75
Entry Data	

CUTTING STRUCTURE: TI | TD | BDC | LDC | BRD | Depth | ODC | Inner Rows | Outer Rows | 6.93

METRES DRILLED: From | To | D-R-C | RPM | WOB

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	Core bit	222	60	0.58
1	Core Barrel	165	108	7.62
1	Stabilizer	165	108	1.23
1	Core Barrel	165	108	7.63
1	Stabilizer	165	108	1.23
1	Core Barrel	165	108	9.57
1	Seat sub	165	108	0.49
1	Stabilizer	165	108	0.83
8	Core Collers	165	108	75.62
1	XO	165	108	0.77
90	Drill Pipe	Stands		1730.54
0	Drill Pipe	Singles		0.00
	Kelly Down			20.06
	Total			1857.07
	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	140	100	4100	1.00

Remarks

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
1	419	@	62	@	1793.88
1	807	@	43	@	1761.88
		@		@	

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
Blew down boilers 2 times 100 litres
wiper trip calc 4.92m3 meas 5.14m3 diff 0.22m3

SAFETY

Safety Topic	MEHL	MACP
Tripping		5245

FRONT PAGE SUMMARY

Tour Sheet Serial Number: BEAV2_20130215_1A | Vendor Software Version: RMS 2012.11.15.25129 | Year: 2013 | Month: 02 | Day: 15

Licence No	Well Name	Surface Location	Prov	Lat Type	Unique Well Id
1211	COPRC LOON CREEK 300-C-006-L-094-P-16	65:05:51.05N/127:00:30.07W	NT	LatLong	300-C-006-L-094-P-16

Operator	Contractor	Rig No	Well Type	Re-Entry
Conoco Canada	Beaver Drilling Ltd.	2	VERT	☐

Operator's AFE	Contractor's Job No	Spud Date Time
10342919	149	26-Jan-2013 12:00

Signature Of Operator's Representative	Signature Of Contractor's Rig Manager	Rig Release Date Time
DAVE FORSBERG	RICK YAVIS	

DAILY CHECKS — OP RIG

(1.) Daily Visual Accident Inspection — DF RY
(2.) Scheduled Inspection - Weekly (Using Check List) — DF RY
(3.) H2S Signs Posted if Required — DF RY
(4.) Well Licence & Block Diagram Posted — DF RY
(5.) Flare Lines Signed — DF RY
(6.) BOP Drills Performed — DF RY
(7.) Visually Inspected BOPs, Flare Lines & Degasser Lines — DF RY
(1.) Rig Site Health & Safety Meeting (environmental) — RY
(2.) CAODC Rig Safety Inspection Checklist (weekly/monthly) — RY
(3.) Hoist Inspection before Raising or Lowering — RY
(4.) Comm Sonar Checked — RY
(5.) Motor Kills Checked — RY

CAODC — NOV MD Totco

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	Wash BOP	Test BOP	Drillstem Test	Plug Back	Squeeze Cement	Fishing	Dir Work	Safety Meeting	Tear Down	Waiting On	Rig Watch	Other	
Tour 1					2.00	4.75	0.25		0.75												0.25					8.00
Tour 2						6.75	0.25				0.25														0.75	8.00
Tour 3											8.00															8.00
TOTAL					2.00	11.50	0.50		0.75		8.25										0.25				0.75	24.00

FUEL @ 08:00 HRS: 190 | 115 | 05:15 | -16

WEATHER: OVERCAST | N | CALM | FAIR

TOUR 1

SIGNATURE OF DRILLER: DEVAN SCHLITTER — START TIME: 0:00 — END TIME: 8:00

BITS

Bit Number	1C
Size	222
IADC Code	
Manufacturer	NOV
Type	PR 513
Serial No	E140308
Jets	11.9 11.9 11.9 11.9 11.9
Depth Out (m)	1856.00
Depth In (m)	1622.00
Total Drilled (m)	234.00
Hrs Run Today	
Cumulative Hrs Run	33.75
Entry Date	

CUTTING STRUCTURE: Inner 1 | Outer 1 | Dull Char. D | ODC | BT | Reason Pulled | TD | Total Bearing Hrs | 5.53 | BRG X

METRES DRILLED

From	To	D-R-C	RPM	WOB

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	Core bit	222	60	0.58
1	Core Barrel	165	108	7.82
1	Stabilizer	165	108	1.23
1	Core Barrel	165	108	7.83
1	Stabilizer	165	108	1.23
1	Core Barrel	165	108	9.57
1	Seat sub	165	108	0.49
1	Stabilizer	165	108	0.83
8	Core Collars	165	108	76.62
1	XO	165	108	0.77

Drill Pipe: 90 — Length: 1730.64
Drill Pipe: 0 — Length: 0.00
Kelly Down: 20.06
Total: 1857.07
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	07:45
Density	945
Funnel Viscosity	84
Fluid Loss	
pH	
Location Of Sample	Shaker
Depth	1858.00
PVT	35

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	SINGLE	140	136	6100	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

MUD MATERIALS ADDED

Product	Amount	Type

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	500
2	8.00	11	500

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
0:00	0:15	0.25	7	Rig service function hydrill 13 sec crown saver operating properly
0:15	1:00	0.75	8A	Slip and cut drill line @9377MJ Cut 16m
1:00	5:00	4.00	6M	Trip in the hole to 1835m fill pipe flow check@1203m
5:00	7:00	2.00	5	Wash to bottom from 1835m to 1856m Circulate bottoms up work pipe
7:00	7:15	0.25	21	Crew change safety meeting
7:15	8:00	0.75	6B	Trip out of hole flow check@1845

Remarks
Blew down boilers 2 times 100 litres
New boiler fuel 160

SAFETY

Safety Topic	MEHL	MACP
Wiper trip		5245

TOUR 2

SIGNATURE OF 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

METRES DRILLED

From	To	D-R-C	RPM	WOB

DRILLING ASSEMBLY

Drill Pipe: Length
Drill Pipe: Length
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	16:00
Density	945
Funnel Viscosity	84
Fluid Loss	
pH	
Location Of Sample	Shaker
Depth	1858.00
PVT	33

Circulation

Pump #	Type	Liner Size	SPM	Pressure	Hrs Run
1	SINGLE	140	135	6100	0.50

Remarks

REDUCED PUMP SPEED

Pump #	Pressure	@	Strokes/min	@	Depth
1	1863	@	72	@	1846.00
		@		@	
		@		@	

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
BARITE-40KG	23	sks

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	500
2	8.00	11	500

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
8:00	8:15	0.25	7	Rig service function test annular 13 seconds to close function test crown saver
8:15	13:30	5.25	6B	Trip out of hole to lay down core tools and log flow checks @ 1749m 955m 578m 113m ooh
13:30	15:00	1.50	6D	Lay down drill collars and core tools with nov core hands break bit function test blind rams
15:00	15:45	0.75	25	Clean floor get logging tools ready to go
15:45	16:00	0.25	11A	Safety meeting with schlumberger wire line

Remarks
Level one inspection on tongs and all overhead equitment mh
Blew down boiler 100L 2 times
Trip sheet calc 8.55m3 meas 9.20m3 diff 0.65m3

SAFETY

Safety Topic	MEHL	MACP
triping out of hole		5245

TOUR 3

SIGNATURE OF DRILLER: DEVAN SCHLITTER — 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

METRES DRILLED

From	To	D-R-C	RPM	WOB

DRILLING ASSEMBLY

Drill Pipe: Length
Drill Pipe: Length
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	500
2	8.00	11	500

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
16:00	24:00	8.00	11A	Run log number #1 with schlumberger TD 1858.15m Time on bottom 18:00 hrs tools ran AIT,NEXT,TLD,HGNS,TLD2

Remarks
Level 1 inspection on tongs,sub and overhead equipment D.S
Blew down boilers 2 times 100 litres

SAFETY

Safety Topic	MEHL	MACP
Wire line logs		5245

FRONT PAGE SUMMARY

Tour Sheet Serial Number	BEAV2_20130216_18	Version Software Version	RMS 2012.11.15.25129	Year	2013	Month	02	Day	16
License No	1211	Well Name	COPRC LOON CREEK 300-C-006-L-094-P-16	Surface Location	65:05:51.05N/127:00:30.07W	Prov	NT	Lat Type	LatLong	Unique Well Id	300-C-006-L-094-P-15
Operator	Conoco Canada	Contractor	Beaver Drilling Ltd.	Rig No	2	Well Type	VERT	Rig Entry
Operator's AFE	10342919	Contractor's Job No	149	Spud Date Time	26-Jan-2013		12:00	
Signature Of Operator's Representative	DAVE FORSBERG	Signature Of Contractor's Rig Manager	RICK YAVIS	Rig Released Date Time			

DAILY CHECKS (DP / RIG)

(1.) Daily Walk Around Inspection — DP RV
(2.) Detailed Inspection - Weekly (Using Check List) — DP RV
(3.) H2S Signs Posted at Required — DP RV
(4.) Well License & Sour Diagram Posted — DP RV
(5.) Flare Lines Staked — DP RV
(6.) BOP Drills Performed — DP RV
(7.) Visually Inspected BOPs, Flare Lines & Degasser Lines — DP RV
(1.) Rig Site Weekly & Safety Meeting (enter month) — RV
(2.) CADDC Rig Safety Inspection Checklist (enter month) — RV
(3.) Mud Inspection before Raising or Lowering — RV
(4.) Crown Saver Checked — RV
(5.) Motor Kills Checked — RV

CADDC — MD Totco

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	
	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	Perfing	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				7.75															8.00
Tour 3							0.25				7.75															8.00
TOTAL							0.75				23.00										0.25					24.00

HOURS

FUEL @ 08:00 HRS: Fuel 155 — Used 100 — Time 05:00 — Temp -20

WEATHER: Current Conditions: LIGHT SNOW — Road Conditions: N — Road Restrictions: UP TO 19 KM/H — Road Conditions: FAIR

TOUR 1

SIGNATURE OF DRILLER: DEVAN SCHLITTER — 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: T / Length; TD / ODC; MDC / Pack Off; LOC / Tooth Wear; BRG

METRES 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 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	500
2	8.00	11	500

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequence & Remarks
0:00	0:15	0.25	7	Rig service function blind rams 3 sec
0:15	7:45	7.50	11A	Logging with Schlumberger run #2 tools ran UBI,OBMI,OBMI2,PPC,MSIP,GPIT
7:45	8:00	0.25	21	Crew change safety meeting

Remarks
Blew down boilers 2 times 100 litres
New boiler fuel 190

SAFETY

Safety Topic	MEHL	MACP
WIRE LINE LOGS		5245

TOUR 2

SIGNATURE OF 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: T / Length; TD / ODC; MDC / Pack Off; LOC / Tooth Wear; BRG

METRES 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 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	500
2	8.00	11	500

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequence & Remarks
8:00	8:15	0.25	11A	Logging with Schlumberger run #2 tools ran UBI,OBMI,OBMI2,PPC,MSIP,GPIT
8:15	8:30	0.25	7	Rig service function test H.C.R
8:30	16:00	7.50	11A	Logging with Schlumberger run #2 tools ran UBI,OBMI,OBMI2,PPC,MSIP,GPIT

Remarks
Level one inspection on tong and all overhead equitment mh
Blew down boilers 100L two times

SAFETY

Safety Topic	MEHL	MACP
wire line		5245

TOUR 3

SIGNATURE OF DRILLER: DEVAN SCHLITTER — 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: T / Length; TD / ODC; MDC / Pack Off; LOC / Tooth Wear; BRG

METRES 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 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	500
2	8.00	11	500

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequence & Remarks
16:00	16:15	0.25	7	Rig service/ function test blind rams @22:30 hrs
16:15	22:30	6.25	11A	Logging with Schlumberger run #2 tools ran UBI,OBMI,OBMI2,PPC,MSIP,GPIT
22:30	24:00	1.50	11A	Logging with Schlumberger run #3 tools ran ADT,HNGS,CMR,(NRTA)

Remarks
Level one inspection on tongs and all overhead equitment D.S
Blew down boilers 100L 2 times

SAFETY

Safety Topic	MEHL	MACP
WIRE LINE LOGS		5245

FRONT PAGE SUMMARY

Your Sheet Serial Number: BEAV2_20130217_1A | Vendor Software Version: RMS 2012.11.15.25128 | Year: 2013 | Month: 02 | Day: 17

License No	Well Name	Surface Location	Prov	Lic Type	Unique Well Id
1211	COPRC LOON CREEK 300-C-006-L-094-P-16	65:05:51.05N/127:00:30.07W	NT	LatLong	300-C-006-L-094-P-16

Operator	Contractor	Rig No	Well Type	Re-Entry
Conoco Canada	Beaver Drilling Ltd.	2	VERT	☐

Operator's AFE	Contractor's Job No	Spud Date Time
10342919	149	26-Jan-2013 12:00

Signature Of Operator's Representative	Signature Of Contractor's Rig Manager	Rig Released Date Time
DAVE FORSBERG	RICK YAVIS	

DAILY CHECKS — DP PM

- (1.) Daily Walk Around Inspection — DP RY
- (2.) Detailed Inspection - Monthly Hiring Check List —
- (3.) H2S Signs Posted if Required —
- (4.) Well License & Rig Diagram Posted — DP RY
- (5.) Flare Lines Staked — DP RY
- (6.) BOP Drills Performed — DP RY
- (7.) Visually Inspected BOPs-Flare Lines & Degasser Lines — DP RY
- (1.) Rig Site Health & Safety Meeting (documented) — RY
- (2.) CAODC Rig Safety Inspection Checklist (completed) —
- (3.) Hard Hardcopy before Reading or Learning — RY
- (4.) Crown Saver Checked — RY
- (5.) Motor Kills Checked —

CAODC — NDV — MD Totco

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	Mech 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				7.50										0.25					8.00
Tour 2							0.25				7.75															8.00
Tour 3							0.25				7.75															8.00
TOTAL							0.75				23.00										0.25					24.00

HOURS

FUEL @ 08:00 HRS: Rig 120 | Camp 90 | Vehicle | Other

WEATHER: Time 06:00 | Temp -30 | Conditions OVERCAST | Wind Direction N | Wind Strength CALM | Road Conditions FAIR

TOUR 1

SIGNATURE OF DRILLER: DEVAN SCHLITTER

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: TI | Gauge | TD | ODC | MDC | Reason Pulled | LOC | Total Rotating Hrs | BRG

METRES 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 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	11.5	500
2	8.00	11	500

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
0:00	0:15	0.25	7	Rig service
0:15	7:45	7.50	11A	Run #3 with schlumberger Tools ADT HNGS CMR (NTR)
7:45	8:00	0.25	21	Crew change safety meeting

Remarks
Level 1 inspection on tongs,sub and overhead equipment D.S
Blew down boiler2 2 times 100 litres
new boiler: 150

SAFETY

Safety Topic	MEHL	MACP
Steam Use		5245

TOUR 2

SIGNATURE OF 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: TI | Gauge | TD | ODC | MDC | Reason Pulled | LOC | Total Rotating Hrs | BRG

METRES 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 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	11.5	500
2	8.00	11.5	500

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
8:00	8:30	0.50	11A	Run #3 with schlumberger Tools ADT HNGS CMR (NTR)
8:30	8:45	0.25	7	Rig service function test blind rams 3 seconds to close
8:45	16:00	7.25	11A	Wire line with schlumberger Run # 4 tools RST

Remarks
Level one inspection on tongs sub and overhead equitment mh
Blew down boilers 100L 2 times

SAFETY

Safety Topic	MEHL	MACP
		5245

TOUR 3

SIGNATURE OF DRILLER: DEVAN SCHLITTER

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: TI | Gauge | TD | ODC | MDC | Reason Pulled | LOC | Total Rotating Hrs | BRG

METRES 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 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

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
16:00	16:15	0.25	11A	Wire line with schlumberger Run # 4 tools RST
16:15	16:30	0.25	7	Rig service function test H.C.R
16:30	24:00	7.50	11A	Wire line with schlumberger Run # 4 tools RST

Remarks
Level one inspection on tongs sub and overhead equitment D.S
Blew down boilers 100L

SAFETY

Safety Topic	MEHL	MACP
		5245

FRONT PAGE SUMMARY

Tour Sheet Serial Number: BEAV2_20130218_1A	Vendor Software Version: RMS 2012.11.15.25129	Year: 2013	Month: 02	Day: 18	DAILY CHECKS	DP	RM
Licence No: 1211	Well Name: COPRC LOON CREEK 300-C-006-L-094-P-15	Surface Location: 65:05:51.05N/127:00:30.07W	Pool: NT	Lsd Type: LatLong	Unique Well Id: 300-C-006-L-094-P-15		
Operator: Conoco Canada	Contractor: Beaver Drilling Ltd.	Rig No: 2	Well Type: VERT	Re-Entry: ☐			
Operator's AFE: 10342919	Contractor's Job No: 149	Spud Date Time: 26-Jan-2013 12:00					
Signature Of Operator's Representative: DAVE FORSBERG	Signature Of Contractor's Rig Manager: RICK YAVIS	Rig Release Date Time					

(1.) Daily Walk Around Inspection
(2.) Detailed Inspection - Weekly (Using Check List)
(3.) H2S Signs Posted if Required
(4.) Well Licence & Blow Diagram Posted
(5.) Flare Lines Signed
(6.) BOP Drills Performed
(7.) Weekly Inspected BOPs-Flare Lines & Degasser Lines
(1.) Rig Site Health & Safety Meeting (once/month)
(2.) CAODC Rig Safety Inspection Checklist (once/month)
(3.) Mud Inspection before Running or Lowering
(4.) Crown Saver Checked
(5.) Motor Kills Checked

CAODC

MD Totco

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	
	Rig Up	Drill Actual	Reaming	Coring	Cond Mud & Circ	Trips	Rig Service	Repair Rig	Cut Off Drlg Line	Dwn 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							0.25				7.50										0.25					8.00
Tour 2							0.50				7.50															8.00
Tour 3					0.25	6.00	0.25				1.50															8.00
Tour 4					0.25	6.00	1.00				16.50										0.25					24.00

FUEL @ 08:00 HRS: 85 / 90

WEATHER: Time 05:00 / Temp -27 / General Conditions: LIGHT SNOW / Wind Direction: N / Wind Strength: UP TO 29 KM/H / Road Conditions: FAIR

TOUR 1

SIGNATURE OF DRILLER: DEVAN SCHLITTER — 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: T1; T2; T3; Gage; TD; ODC; IADC; Reason Pulled; LOC; Tooth Wear; BRG

METRES 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 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	500
2	8.00	11	500

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequence & Remarks
0:00	0:15	0.25	7	Rig service
0:15	7:45	7.50	11A	Wire line logs with Schlumberger run#4 tools ran RST
7:45	8:00	0.25	21	Crew change safety meeting

Remarks
Level 1 inspection on tongs,sub and overhead equipment D.S
Blew down boilers 2 times 100 litres
New boiler fuel 180

SAFETY

Safety Topic	MEHL	MACP
		5245

TOUR 2

SIGNATURE OF DRILLER: MARCUS HALLOWES — START TIME: 8:00 — END TIME: 16:00

BITS: Bit Number: 3; Size: 222; IADC Code; Manufacturer: GNL; Type: TRI CONE; Serial No: RR05654; Jets: 19 19 19; Depth Out (m); Depth In (m); Total Drilled (m); Hrs Run Today; Cumulative Hrs Run; Entry Date

CUTTING STRUCTURE: T1; T2; T3; Gage; TD; ODC; IADC; Reason Pulled; LOC; Tooth Wear; BRG

METRES 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 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	500
2	8.00	11	500

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequence & Remarks
8:00	8:30	0.50	11A	Wire line logs with Schlumberger run#4 tools ran RST
8:30	8:45	0.25	7	Rig service function test H,C,R
8:45	13:30	4.75	11A	Wire line logs with Schlumberger run#4 tools ran RST
13:30	13:45	0.25	7	Function test blind rams loggers out of hole
13:45	16:00	2.25	11A	Wire line logs with schlumberger run#5 tools ran USIT-CBL

Remarks
Level one inspection on tongs sub and all overhead equitmen mh
Blew down boiler 100L two times

SAFETY

Safety Topic	MEHL	MACP
Working on pumps		5245

TOUR 3

SIGNATURE OF DRILLER: DEVAN SCHLITTER — 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: T1; T2; T3; Gage; TD; ODC; IADC; Reason Pulled; LOC; Tooth Wear; BRG

METRES DRILLED

From	To	D-R-C	RPM	WOB

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	DRILL BIT	158	60	0.28
1	bit sub	152	108	0.84
2	XO	158	108	0.57
1	4 1/2 IF X/O XT54	167	108	0.30

Drill Pipe: 96 joints, 1846.37; Drill Pipe: 0 singles, 0.00; Kelly Down: 9.56; Total: 1858.00; 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	TRIPLEX	140	110	1500	2.00

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	500
2	8.00	11	500

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequence & Remarks
16:00	16:30	0.50	11A	Wire line logs with schlumberger run#5 tools ran USIT-CBL
16:30	16:45	0.25	7	Rig service function test H,C,R
16:45	17:45	1.00	11	Rig out schlumberger wire line
17:45	23:00	5.25	6A	Make up bit and run in hole fill to1618m pipe flow check@619m/1213m/1616m
23:00	23:15	0.25	5	Circulate
23:15	24:00	0.75	6A	Trip in the hole from 1618m to 1838m

Remarks
Level 1 inspection on tong,sub and overhead equipment D.S
Blew down boiler 2 times 100 litres

SAFETY

Safety Topic	MEHL	MACP
Triping in the hole		5245

FRONT PAGE SUMMARY

Tour Sheet Serial Number: BEAV2_20130219_1A	Version Software Version: RMS 2012.11.15.25129	Year: 2013	Month: 02	Day: 19	DAILY CHECKS	OP.	RIG
Licence No: 1211	Well Name: COPRC LOON CREEK 300-C-006-L-094-P-16	Surface Location: 65:05:51.05N/127:00:30.07W	Prov: NT	Lat Type: Lat/Long	Unique Well Id: 300-C-006-L-094-P-15		
Operator: Conoco Canada	Contractor: Beaver Drilling Ltd.	Rig No: 2	Well Type: VERT	Re-Entry: ☐			
Operator's AFE: 10342919	Contractor's Job No: 149	Spud Date Time: 26-Jan-2013	12:00				
Signature Of Operator's Representative: DAVE FORSBERG	Signature Of Contractor's Rig Manager: RICK YAVIS	Rig Released Date Time:					

CAODC — ROY MD Totco

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 Drl 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		2.00	4.75	0.25					4.00									0.75					8.00
Tour 2						3.25	0.25					6.25									0.50					8.00
Tour 3					0.50		0.25					10.25									1.00					8.00
TOTAL			0.25		2.50	8.00	0.75														2.25					24.00

FUEL @ 08:00 HRS: 50 / 72

WEATHER: Time 05:45 / -30; General Conditions: OVERCAST; Wind Direction: N; Wind Strength: UP TO 29 KM/H; Road Conditions: FAIR

TOUR 1

SIGNATURE OF DRILLER: DEVAN SCHLITTER — 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: T0 / TD / MDC / LDC / BRG; Gauge / ODC / Reason Pulled / Last Run Loss

METRES DRILLED

From	To	D-R-C	RPM	WOB

DRILLING ASSEMBLY

No	Component	OD	ID	Length
1	DRILL BIT	156	60	0.26
1	bit sub	152	108	0.84
2	XO	156	108	0.57
1	4 1/2 IF XID XT54	167	109	0.30

96	Drill Pipe	Stands	1846.37
0	Drill Pipe	Singles	0.00
	Kelly Down		7.56
	Total		1856.00
	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	140	125	2500	2.50

Remarks

REDUCED PUMP SPEED

Pump #	Pressure		Strokes/min		Depth
1	686	@	59	@	1833.00
		@		@	
		@		@	

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
BARITE - 40KG	42	sks

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	500
2	8.00	11	500

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
0:00	0:15	0.25	5A	Trip in the hole to 1838m
0:15	0:30	0.25	3A	Wash to bottom from 1838m to 1856m
0:30	0:45	0.25	7	Rig service function pipe rams 3 sec crown saver operating properly
0:45	2:45	2.00	5	Circulate and work pipe @1855m/Rig up lay down truck from 1:45 to 3:00
2:45	3:00	0.25	21	Safety meeting with Trottier pipe handlers reviewed jsa#157 lay down dp with lay down truck
3:00	6:30	3.50	6F	Lay down drill pipe Flow check@1847m/1735m/
6:30	6:45	0.25	21	SAFETY MEETING
6:45	7:00	0.25	21	Safety meeting with laydown truck trottier pipe handlers reviewed JSA 157
7:00	8:00	1.00	6F	Lay down drill pipe with trottier pipe handlers

Remarks
Level 1 inspection on tongs,sub and overhead equipment D.S
Blew down boilers 2 times 100 litres
Boiler #2: 120 Use pipe spinner & install protecters on both ends while laying down dp

SAFETY

Safety Topic	MEHL	MACP
Lay down drill pipe with lay down truck		5245

TOUR 2

SIGNATURE OF 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: T0 / TD / MDC / LDC / BRG; Gauge / ODC / Reason Pulled / Last Run Loss

METRES 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 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	400
2	8.00	11.5	420

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
8:00	8:45	0.75	6F	Lay down drill pipe with trottier pipe handlers flow checks @ 908m,608m
8:45	9:00	0.25	7	Rig service function test hydrill closed in 13 seconds function test motor kills
9:00	9:15	0.25	21A	B.O.P drill crew in positions well secure in 90 seconds
9:15	11:45	2.50	6F	Break down kelly continue laying down drill pipe Flow checks Out of hole
11:45	13:30	1.75	12A	Clean up floor and rig up tong hand
13:30	13:45	0.25	21	Saftey meeting with hallmark powertongs and trottier pipe handlers crew reviewed JSA # 97 and # 95
13:45	16:00	2.25	12B	Run 177.8mm casing- Ran 177.8mm 38.69kg/m P-110 casing as follows, Float shoe, 1 joint casing, Float Collar,146 joints casing, Total 1857.74m, Landed at

Remarks
Level one inspection on tongs sub and overhead equitment mh
Blew down boilers 100L 2 times
trip sheet calc 7.89m3 meas 7.86m3 Diff .03m3

SAFETY

Safety Topic	MEHL	MACP
Lay down drill pipe reviewed JSA 157		5245

TOUR 3

SIGNATURE OF 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: T0 / TD / MDC / LDC / BRG; Gauge / ODC / Reason Pulled / Last Run Loss

METRES 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 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	430
2	8.00	11	450

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
16:00	16:15	0.25	21	Safety meeting with Hallmark powertongs and Trottier Pipe Handlers
16:15	16:30	0.25	7	Rig Service function test crown saver
16:30	16:45	0.25	21A	B.O.P drill, well secure in 85 seconds
16:45	23:00	6.25	12B	Ran 177.8mm 38.69kg/m P-110 casing as follows, Float shoe, 1 joint casing, Float Collar,146 joints casing, Total 1857.74m, Landed at 1856m
23:00	23:15	0.25	21	Crew hand over meeting
23:15	23:30	0.25	21	Rig out tong hand and laydown safety meeting
23:30	24:00	0.50	5D	Circulate casing condition hole prior to cementing casing.

Remarks
blow down boiler 200 l

SAFETY

Safety Topic	MEHL	MACP
run casing		5245

FRONT PAGE SUMMARY

Tour Report Serial Number: BEAV2_20130220_1A | Version Software Version: RMS 2012.11.15.25129 | Year: 2013 | Month: 02 | Day: 20

DAILY CHECKS — OP / RM

(1.) Daily Well Ground Inspection — OP / RV
(2.) Detailed Inspection - Weekly (Using Check List) — OP / RV
(3.) H2S Signs Posted if Required — OP / RV
(4.) Hall Licence & Block Diagram Posted — OP / RV
(5.) Flare Lines Staked — OP / RV
(6.) BOP Drills Performed — OP / RV
(7.) Visually Inspected BOPs/Flare Lines & Degasser Lines — OP / RV
(1.) Rig Site Health & Safety Meeting (employee/rework) — RV
(2.) CAODC Rig Safety Inspection Checklist (employee/rework) — RV
(3.) Meet Inspection before Running or Lowering — RV
(4.) Crown Saver Checked — RV
(5.) Motor Kills Checked — RV

CAODC

MD Totco

Location No	Well Name
1211	COPRC LOON CREEK 300-C-006-L-094-P-16

Surface Location: 65:05:51.05N/127:00:30.07W | Prov: NT | Lat Type: LatLong | Unique Well Id: 300-C-006-L-094-P-16

Operator	Contractor	Rig No	Well Type	Re-Entry
Conoco Canada	Beaver Drilling Ltd.	2	VERT	☐

Operator's AFE	Contractor's Job No	Spud Date Time
10342919	149	26-Jan-2013 12:00

Signature Of Operator's Representative	Signature Of Contractor's Rig Manager	Rig Release Date Time
DAVE FORSBERG	RICK YAVIS	

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	
	Rig Up	Drill Actual	Reaming	Coring	Cond Mud & Circ	Trips	Rig Service	Rep or 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	Tear Down	Waiting On	Rig Watch	Other	TOTAL
Tour 1					1.50							6.00									0.50					8.00
Tour 2							0.25							3.50							0.25	4.00				8.00
Tour 3							0.25														0.25	7.50				8.00
TOTAL					1.50		0.50					6.00		3.50							1.00	11.50				24.00

FUEL @ 08:00 HRS

Kelly Bushing	Up Hole
Up: 85	Down: 140
Time: 06:30	Time: -35

WEATHER

Current Conditions: OVERCAST
Wind Direction: W | Wind Strength: UP TO 29 KM/H
Visibility: FAIR

TOUR 1

SIGNATURE OF DRILLER: MARCUS HALLOWES

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 | Length | TD | ODC | BDC | Reason Pulled | LOC | Tooth/Bearing/Gauge | BRG

METRES DRILLED

From	To	D-R-C	RPM	WOB

DRILLING ASSEMBLY

No	Component	OD	ID	Length

Drill Pipe: Stands | Drill Pipe: Singles

Kelly Bushing | 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	TRIPLEX	140	115	3500	1.50

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

MUD MATERIALS ADDED

Product	Amount	Type

BOILER

BoilerNo	HoursRun	pH	StackTemp
1	8.00	11	500
2	8.00	11	500

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
0:00	1:30	1.50	5	Circulate casing
1:30	1:45	0.25	21	Safety meeting with Schlumberger
1:45	4:15	2.50	12	Cemented 177.8mm casing from 500m t0 1382m with 21.64 Tonne HiLite Lead cement (23.55m3)with1.2%FLAC B348,0.3%retarder and 0.2% antifoam @ 1400 KG/M3, from 1382 to 1856m,12 Tonne Class"G" (9.12m3) with 0.4% fluid loss, 0.5%dispersant,0.2%antifoam and 0.3%retarder, displaced with 36m3 fresh water,At 10m3 left to displace lost total circulation estimated cement top at 500m, Plug bumped, Pressure tested casing to 17,500 KPA for 10 minutes, Good test, Lost returns while cementing with 10m3 left to displace
4:15	7:45	3.50	12	Wait on cement
7:45	8:00	0.25	21D	Crew change safety meeting

Remarks
Level one inspection on overhead equitment mh
Blow down boilers 100L 2 times
Fuel meas boiler 1 140cm boiler 2 115cm

SAFETY

Safety Topic	MEHL	MACP
cement casing		5245

TOUR 2

SIGNATURE OF DRILLER: BRIAN BERGSETH

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 | Length | TD | ODC | BDC | Reason Pulled | LOC | Tooth/Bearing/Gauge | BRG

METRES DRILLED

From	To	D-R-C	RPM	WOB

DRILLING ASSEMBLY

No	Component	OD	ID	Length

Drill Pipe: Stands | Drill Pipe: Singles

Kelly Bushing | 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	10.5	450
2	8.00	11	480

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
8:00	8:15	0.25	7	Rig service function test crown saver
8:15	8:30	0.25	21	Safety meeting tear out b.o.p
8:30	12:00	3.50	14B	Nipple down b.o.p set slips & cut casing & lay down b.o.p
12:00	16:00	4.00	22	Tear out rig, clean mud tanks

Remarks
Level 1 inspection on blocks, swivel, balls, elevators, sub and derrick
Blow down boilers 200 l

SAFETY

Safety Topic	MEHL	MACP

TOUR 3

SIGNATURE OF 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: In | Length | TD | ODC | BDC | Reason Pulled | LOC | Tooth/Bearing/Gauge | BRG

METRES DRILLED

From	To	D-R-C	RPM	WOB

DRILLING ASSEMBLY

No	Component	OD	ID	Length

Drill Pipe: Stands | Drill Pipe: Singles

Kelly Bushing | 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	500
2	8.00	11	500

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
15:00	15:15	0.25	7	Rig Service
15:15	18:00	2.75	22	Tear out rig, clean mud tanks
18:00	19:15	0.25	21D	Crew change safety meeting
19:15	24:00	4.75	22	Tear out rig,clean mud tanks

Remarks

SAFETY

Safety Topic	MEHL	MACP
Rig out		

FRONT PAGE SUMMARY

Tour Sheet Serial Number: BEAV2_20130221_1A	Vantage Software Version: RMS 2012.11.15.25129	Year: 2013	Month: 02	Day: 21	DAILY CHECKS	OP	RM
Licence No: 1211	Well Name: COPRC LOON CREEK 300-C-006-L-094-P-16	Surface Location: 65:05:51.05N/127:00:30.07W	Prov: NT	Lat Type: Lat/Long	Unique Well Id: 300-C-006-L-094-P-16		
Operator: Conoco Canada	Contractor: Beaver Drilling Ltd.	Rig No: 2	Well Type: VERT	Re-Entry: ☐			
Operator's AFE: 10342919	Contractor's Job No: 149	Spud Date Time: 26-Jan-2013 12:00					
Signature Of Operator's Representative: DAVE FORSBERG	Signature Of Contractor's Rig Manager: RICK YAVIS	Rig Release Date Time: 20-Feb-2013 23:59					

(1.) Daily Walk Around Inspection
(2.) Detailed Inspection - Weekly (Using Check List)
(3.) H2S Signs Posted if Required
(4.) Well Licence & Blow Diagram Posted
(5.) Flare Lines Staked
(6.) BOP Drills Performed
(7.) Visually Inspected BOPs, Flare Lines & Degasser Lines
(1.) Rig Site Health & Safety Meeting (emphasis/month)
(2.) CAODC Rig Safety Inspection Checklist (emphasis/month)
(3.) Weld Inspection before Raising or Lowering
(4.) Comm Equip Checked
(5.) Motor Kills Checked

CAODC

NOV MD Totco

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	Waiting On	Rig Maint	Other	
Tour 1																					1.00	7.00				8.00
Tour 2							0.25															7.75				8.00
Tour 3																						4.00	4.00			8.00
TOTAL							0.25														1.00	18.75	4.00			24.00

FUEL @ 08:00 HRS: 50 / 85

WEATHER: Time 05:45; Temp -30; Current Conditions: OVERCAST; Wind Direction: N; Wind Strength: UP TO 15 KM/H; Road Conditions: FAIR

TOUR 1

SIGNATURE OF DRILLER: MARCUS HALLOWES

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: T / Gauge; TO / ODC; MDC / Abrasion Rating; LOC / Bearing/Seal; BRG

METRES 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 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	500
2	8.00	11	500

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
0:00	7:00	7.00	22	Tear out rig Bridle up lay down pre fabs
7:00	7:15	0.25	21D	Crew change safety meeting
7:15	8:00	0.75	21F	Pre job inspection & safety meeting prior to laying down derrick BB,CD,NA,RY

Remarks: Boiler 1 fuel 85cm boiler 2 fuel 105

SAFETY

Safety Topic	MEHL	MACP
Bridle up derrick		

TOUR 2

SIGNATURE OF DRILLER: BRIAN BERGSETH

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: T / Gauge; TO / ODC; MDC / Abrasion Rating; LOC / Bearing/Seal; BRG

METRES 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 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	500
2	8.00	11	500

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
8:00	8:15	0.25	7	RIG SERVICE
8:15	16:00	7.75	22	TEAR DOWN LAY DOWN DERRICK & TEAR OUT RIG,LOAD OUT RENTALS

Remarks

SAFETY

Safety Topic	MEHL	MACP

TOUR 3

SIGNATURE OF 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: T / Gauge; TO / ODC; MDC / Abrasion Rating; LOC / Bearing/Seal; BRG

METRES 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 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	500
2	8.00	11	500

TIME LOG

From	To	Elapsed	Code	Details Of Operations In Sequance & Remarks
16:00	20:00	4.00	22	TEAR DOWN RIG & LOAD OUT RENYALS
20:00	24:00	4.00	23B	W/O DAYLIGHT AND WATCH BOILERS

Remarks

SAFETY

Safety Topic	MEHL	MACP

ConocoPhillips Canada

Bit Summary

COPRC LOON CREEK O-06 65-10 127-00

API / UWI	Surface Legal Location	District	Field Name	License No.	Program	Well Type	Well Config	Orig KB/RT (m)	KB-Grd (m)
300/O-06 6510 127000	O-6 65-10 127-00	NEW VENTURES	Loon	470		Exploration	VERTICAL	257.60	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 (hrs)	BHA ROP (m/hr)	WOB (max) (daN)	WOB (min) (daN)	RPM (max) (rpm)	RPM (min) (rpm)	Bit Dull
1	1A	311.0	REED	S11G	D146225	___	596	15.9/15.9/15.9	0.00	600.00	610.00	49.00	12.4	14,000	3,000	120	120	------
2	1	222.0	Reed	MSR616M	A141416	___	581	11.1/11.1/11.1/11.1/11.1/...	600.00	1,622.00	1,178....	55.25	21.3	6,500	4,000	190	180	2-2-CT-S-X-0-NO-TD
3	1 C	222.0	NOV	PR 513	E140308	___	667	11.9/11.9/11.9/11.9/11.9/...	1,622.00	1,856.00	234.10	37.75	6.2	7,000	2,300	65	45	------
4	CL...	222.0	GML		RR05654	___	179	15.1										------

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Directional Survey
LOON O-06 65-10 127-00

API / UWI	Surface Legal Location	District	Field Name	License No.
[illegible]-06 6510 127000	O-6 65-10 127-00	NEW VENTURES	Loon	470
[illegible]	**Well Type**	**Well Configuration Type**	**Original KB/RT Elevation (m)**	**KB-Ground Distance (m)**
	Exploration	VERTICAL	257.60	5.20

Parent Wellbore	Wellbore Name	Kick Off Date	Kick Off Method	KO MD (mKB)	KO (TVD) (mKB)	VS Dir (°)
	Original Hole					

Date	Description	As Ran	Proposed?
1/26/2013	Ets Dir. survey for Original Hole	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
1/26/2013	29.00	0.50	110.00	29.00	0.13	0.10	-0.04	0.12	0.52	WIRELINE	
1/26/2013	58.00	0.50	110.00	58.00	0.38	0.31	-0.13	0.36	0.00	WIRELINE	
1/26/2013	86.00	0.20	110.00	86.00	0.55	0.45	-0.19	0.52	0.32	WIRELINE	
1/26/2013	114.00	0.80	110.00	114.00	0.79	0.64	-0.27	0.75	0.64	WIRELINE	
1/27/2013	142.00	0.10	110.00	142.00	1.01	0.82	-0.35	0.95	0.75	WIRELINE	
1/27/2013	171.00	0.60	110.00	171.00	1.19	0.97	-0.41	1.12	0.52	WIRELINE	
1/27/2013	199.00	0.70	110.00	198.99	1.51	1.22	-0.52	1.42	0.11	WIRELINE	
1/27/2013	228.00	1.20	110.00	227.99	1.99	1.61	-0.68	1.87	0.52	WIRELINE	
1/27/2013	257.00	0.90	110.00	256.98	2.52	2.04	-0.86	2.37	0.31	WIRELINE	
1/27/2013	287.00	0.20	110.00	286.98	2.81	2.28	-0.96	2.64	0.70	WIRELINE	
1/27/2013	314.00	1.00	110.00	313.98	3.09	2.51	-1.06	2.91	0.89	WIRELINE	
1/27/2013	354.00	0.90	110.00	353.98	3.76	3.04	-1.28	3.53	0.08	WIRELINE	
1/28/2013	390.00	1.10	110.00	389.97	4.38	3.55	-1.50	4.12	0.17	WIRELINE	
1/28/2013	439.00	1.10	110.00	438.96	5.32	4.31	-1.82	5.00	0.00	WIRELINE	
1/28/2013	478.00	1.30	110.00	477.95	6.14	4.97	-2.10	5.77	0.15	WIRELINE	
1/28/2013	516.00	0.30	110.00	515.95	6.67	5.40	-2.28	6.27	0.79	WIRELINE	
1/28/2013	555.00	1.20	110.00	554.94	7.18	5.82	-2.46	6.75	0.69	WIRELINE	
1/29/2013	592.00	0.60	110.00	591.94	7.76	6.29	-2.66	7.30	0.49	WIRELINE	
2/3/2013	600.62	1.01	110.09	600.56	7.88	6.39	-2.70	7.41	1.43	MWD	
2/3/2013	619.94	1.01	122.48	619.88	8.22	6.64	-2.85	7.71	0.34	MWD	
[illegible]3	639.13	1.10	125.10	639.06	8.57	6.87	-3.04	8.01	0.16	MWD	
[illegible]3	652.00	1.10	125.12	651.93	8.80	7.02	-3.19	8.21	0.00	MWD	
2/3/2013	671.00	1.49	123.41	670.93	9.22	7.30	-3.43	8.56	0.62	MWD	
2/3/2013	715.36	1.71	126.48	715.27	10.43	8.08	-4.14	9.58	0.16	MWD	
2/3/2013	726.00	1.41	120.59	725.90	10.72	8.26	-4.30	9.82	0.96	MWD	
2/3/2013	735.65	1.01	128.42	735.55	10.92	8.40	-4.41	9.99	1.34	MWD	
2/3/2013	754.85	1.32	119.50	754.75	11.30	8.65	-4.63	10.31	0.56	MWD	
2/3/2013	764.71	1.10	112.99	764.61	11.51	8.80	-4.72	10.50	0.79	MWD	
2/3/2013	784.15	1.32	111.59	784.04	11.92	9.13	-4.87	10.88	0.34	MWD	
2/3/2013	793.85	1.19	81.31	793.74	12.12	9.31	-4.90	11.08	2.06	MWD	
2/3/2013	812.15	1.41	51.12	812.03	12.38	9.71	-4.73	11.44	1.16	MWD	
2/3/2013	831.00	1.58	49.01	830.88	12.62	10.16	-4.41	11.82	0.28	MWD	
2/3/2013	860.00	2.02	64.70	859.86	13.19	11.03	-3.93	12.58	0.68	MWD	
2/3/2013	879.00	1.89	64.74	878.85	13.67	11.66	-3.66	13.17	0.21	MWD	
2/3/2013	898.00	1.19	23.61	897.85	13.94	12.10	-3.34	13.53	2.00	MWD	
2/3/2013	926.00	1.32	19.08	925.84	14.03	12.47	-2.77	13.76	0.18	MWD	
2/4/2013	955.60	1.71	32.88	955.43	14.26	13.00	-2.08	14.11	0.54	MWD	
2/4/2013	985.10	1.58	42.42	984.92	14.69	13.67	-1.41	14.62	0.31	MWD	
2/4/2013	1,014.95	1.89	51.51	1,014.75	15.30	14.48	-0.80	15.28	0.42	MWD	
2/4/2013	1,043.60	2.11	57.62	1,043.39	16.10	15.42	-0.22	16.10	0.32	MWD	
2/4/2013	1,071.58	2.42	62.41	1,071.34	17.06	16.49	0.33	17.06	0.39	MWD	
2/4/2013	1,090.66	2.11	51.60	1,090.41	17.70	17.21	0.73	17.69	0.83	MWD	
2/4/2013	1,101.16	2.29	55.20	1,100.90	18.04	17.59	0.97	18.01	0.65	MWD	
2/4/2013	1,119.52	1.19	24.40	1,119.25	18.44	18.06	1.36	18.39	2.30	MWD	
2/4/2013	1,138.74	1.32	299.98	1,138.47	18.36	18.03	1.65	18.28	2.64	MWD	
2/4/2013	1,177.53	1.19	321.29	1,177.25	17.78	17.57	2.19	17.64	0.37	MWD	
2/4/2013	1,196.83	1.01	337.60	1,196.55	17.63	17.47	2.50	17.45	0.56	MWD	
2/4/2013	1,216.03	1.58	351.22	1,215.74	17.59	17.48	2.92	17.35	1.01	MWD	
2/4/2013	1,235.60	1.01	6.29	1,235.31	17.65	17.58	3.36	17.33	1.01	MWD	
[illegible]13	1,264.35	1.58	321.29	1,264.05	17.55	17.52	3.92	17.11	1.17	MWD	
[illegible]3	1,274.14	1.89	325.50	1,273.84	17.43	17.42	4.16	16.93	1.03	MWD	
[illegible]13	1,301.38	0.70	320.72	1,301.07	17.21	17.21	4.65	16.57	1.31	MWD	
2/5/2013	1,321.64	0.62	328.98	1,321.33	17.13	17.13	4.84	16.44	0.18	MWD	
2/5/2013	1,349.45	0.48	352.80	1,349.14	17.12	17.11	5.09	16.34	0.29	MWD	
2/5/2013	1,368.89	0.48	345.11	1,368.58	17.14	17.13	5.25	16.31	0.10	MWD	

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Directional Survey
LOON O-06 65-10 127-00

API / UWI	Surface Legal Location	District	Field Name	License No.
-06 6510 127000	O-6 65-10 127-00	NEW VENTURES	Loon	470
	Well Type	**Well Configuration Type**	**Original KB/RT Elevation (m)**	**KB-Ground Distance (m)**
	Exploration	VERTICAL	257.60	5.20

Survey Data

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	Depart (m)	VS (m)	NS (m)	EW (m)	DLS (°/30m)	Method	Survey Company
2/5/2013	1,388.05	0.79	33.41	1,387.74	17.24	17.23	5.44	16.36	0.93	MWD	
2/5/2013	1,407.23	1.01	41.58	1,406.91	17.50	17.47	5.67	16.55	0.40	MWD	
2/5/2013	1,426.40	1.32	63.11	1,426.08	17.86	17.83	5.90	16.86	0.83	MWD	
2/5/2013	1,465.03	2.59	65.18	1,464.69	19.17	19.13	6.47	18.05	0.99	MWD	
2/5/2013	1,484.30	1.41	68.39	1,483.94	19.84	19.80	6.74	18.66	1.84	MWD	
2/5/2013	1,503.96	0.22	67.29	1,503.60	20.12	20.07	6.84	18.92	1.82	MWD	
2/5/2013	1,522.79	0.70	78.01	1,522.43	20.27	20.22	6.88	19.07	0.77	MWD	
2/5/2013	1,541.84	2.02	72.61	1,541.47	20.72	20.68	7.00	19.50	2.09	MWD	
2/5/2013	1,580.88	0.79	107.28	1,580.50	21.63	21.59	7.13	20.42	1.11	MWD	
2/5/2013	1,599.91	1.10	93.61	1,599.53	21.90	21.87	7.08	20.72	0.60	MWD	
2/5/2013	1,607.85	1.10	88.69	1,607.47	22.04	22.02	7.07	20.88	0.36	MWD	
2/18/2013	1,856.00	1.00	89.00	1,855.58	26.41	26.41	7.17	25.42	0.01	WIRELINE	

ConocoPhillips Canada

Daily Morning Report
COPRC LOON CREEK O-06 65-10 127-00

Report #: 1
Report Date: 2/22/2013
Final Job Status: SUSPENDED
Final Report? Yes

Job Cat: COMPLETIONS Job Typ: INITIAL COMPLETION Sub Typ:

District	API / UWI	License No.	KB-Ground Distance (m)	KB-Casing Flange Distance (m)
NEW VENTURES	300/O-06 6510 127000	470	5.20	4.87

JOB INFORMATION

Actual Start Date	End Date	Abandon Date	MaxWell Job Number	Responsible Grp 1
2/22/2013 08:00	3/25/2013 22:30		JOB01@2006	coved

Objective
New Completion

Rig	Cum Rig Time (hrs)	Personnel Regular Hours (hrs)	Cum Personnel Total Hours (hrs)
Nabors, 414		416.00	416.00

Daily Contacts
Completions Engineer, Kyle Metzgar, 403-971-8424; Sr Res Engineer, Kim Clarke, 403-540-9081; WS Foreman, Myles Hahn, 780-402-0500; WS Superintendent, Derrick Cove, 780-831-1314

Report Start Date	Report End Date	Rig Time (hrs)	P(tub) (kPa)	P (cas) (kPa)	Weather	Temperature (°C)	Lease Condition
2/22/2013 08:00	2/22/2013 17:00				Clear	-28	

Last 24hr Summary
Off loaded equipment at KM 27 rack site. Tested seismic geophones. All 126 geophones were working and communicating properly.

24hr Forecast
Continue to test and ready Reservoir Imaging and Nabors rig equipment at rack site.

TIME LOG

Start Time	Dur (hrs)	Time P-T-X	Operation
08:00	0.50	P	Tuesday Feb. 19, 2013 CPC WS Supervisor and 3 Nabors hands flew into Norman Wells and drove to CPA Base camp at KM 33.5. Wednesday Feb. 20, 2013 6 Reservoir Imaging hands + Stream Flo hand Flew into NW. Reservoir Imaging personnel travelled to CPC Base Camp. Thursday Feb 21, 2013. Waited for equipment to arrive on trucks from southern Alberta. Friday Feb. 22, 2013 All hands tickets were checked when they arrived at camp. Arctic orientation was done on hands who did not have it as well as area specific Aboriginal training and general CPC orientation. Held a daily safety and operations meeting with all Nabors, Reservoir Imaging and Stream Flo personnel. Reviewed and discussed CPC PJHA #745961 regarding daily activities and all associated hazards.
08:30	8.50	P	Unloaded equipment off trucks at KM 27 rack site (Nabors boiler, doghouse, pump and tank, WS shack, 4 Light towers and seismic tools). Checked equipment to ensure everything was accounted for. Walked Seismic thumpers from NW to rack site. Connected Geophones and tested. All 126 geophones were communicating properly with line truck. Secured equipment for the night. Drilling rig is planning to be off Loon Creek location Sunday morning. Construction will then clean lease and completion operations are planned to start on location Monday Feb. 25.

FLUID SUMMARY

Fluid	To lease (m³)	From lease (m³)	To well (m³)	From well (m³)	Left to recover (m³)

CUMULATIVE JOB FLARED GAS BY ZONE

Zone	Volume Gas Total (E3m³)

PERFORATIONS

Date	Zone	Top (mKB)	Btm (mKB)	Shot Dens (shots/m)	Current Status
3/2/2013 03:00	Basal Lower Canol, Origi...	1,769.00	1,770.00	20.0	Suspended
3/3/2013 16:00	Upper Lower Canol, Origi...	1,692.00	1,693.00	20.0	Suspended
3/3/2013 23:59	Middle Lower Canol, Origi...	1,727.00	1,728.00	20.0	Suspended

ConocoPhillips Canada

Daily Morning Report
COPRC LOON CREEK O-06 65-10 127-00

Report #: 2
Report Date: 2/23/2013
Final Job Status: SUSPENDED
Final Report? Yes

Job Cat: COMPLETIONS Job Typ: INITIAL COMPLETION Sub Typ:

District	API / UWI	License No.	KB-Ground Distance (m)	KB-Casing Flange Distance (m)
NEW VENTURES	300/O-06 6510 127000	470	5.20	4.87

JOB INFORMATION

Actual Start Date	End Date	Abandon Date	MaxWell Job Number	Responsible Grp 1
2/22/2013 08:00	3/25/2013 22:30		JOB01@2006	coved

Objective
New Completion

Rig	Cum Rig Time (hrs)	Personnel Regular Hours (hrs)	Cum Personnel Total Hours (hrs)
Nabors, 414		159.00	575.00

Daily Contacts
WS Foreman, Myles Hahn, 780-402-0500; Sr Res Engineer, Kim Clarke, 403-540-9081; WS Superintendent, Derrick Cove, 780-831-1314; Completions Engineer, Kyle Metzgar, 403-971-8424

Report Start Date	Report End Date	Rig Time (hrs)	P(tub) (kPa)	P (cas) (kPa)	Weather	Temperature (°C)	Lease Condition
2/23/2013 08:00	2/23/2013 17:30				Slight overcast	-28	

Last 24hr Summary
Contiued to test and ready seismic equipment for VSP operations. Started light towers and rig equipment at rack site.

24hr Forecast
Move equipment onto Loon Creek O6 location when drilling rig is moved off.

TIME LOG

Start Time	Dur (hrs)	Time P-T-X	Operation
08:00	0.50	P	Held a daily safety and operations meeting with Nabors, Reservoir Imaging and Stream Flow. Reviewed and discussed CPC PJHA #745962 regarding daily activities and all associated hazards.
08:30	9.00	P	Serviced and started light towers and Nabors rig pump at rack site. Performed routine maintenance and readied rig equipment to be moved to location. Reservoir Imaging checked survey points around location and continued to test ready their equipment.

FLUID SUMMARY

Fluid	To lease (m³)	From lease (m³)	To well (m³)	From well (m³)	Left to recover (m³)

CUMULATIVE JOB FLARED GAS BY ZONE

Zone	Volume Gas Total (E3m³)

PERFORATIONS

Date	Zone	Top (mKB)	Btm (mKB)	Shot Dens (shots/m)	Current Status
3/2/2013 03:00	Basal Lower Canol, Origi...	1,769.00	1,770.00	20.0	Suspended
3/3/2013 16:00	Upper Lower Canol, Origi...	1,692.00	1,693.00	20.0	Suspended
3/3/2013 23:59	Middle Lower Canol, Origi...	1,727.00	1,728.00	20.0	Suspended

ConocoPhillips Canada

Daily Morning Report
COPRC LOON CREEK O-06 65-10 127-00

Report #: 3
Report Date: 2/24/2013
Final Job Status: SUSPENDED
Final Report? Yes

Job Cat: COMPLETIONS Job Typ: INITIAL COMPLETION Sub Typ:

District	API / UWI	License No.	KB-Ground Distance (m)	KB-Casing Flange Distance (m)
NEW VENTURES	300/O-06 6510 127000	470	5.20	4.87

JOB INFORMATION

Actual Start Date	End Date	Abandon Date	MaxWell Job Number	Responsible Grp 1
2/22/2013 08:00	3/25/2013 22:30		JOB01@2008	coved

Objective
New Completion

Rig	Cum Rig Time (hrs)	Personnel Regular Hours (hrs)	Cum Personnel Total Hours (hrs)
Nabors, 414		195.00	770.00

Daily Contacts
Sr Res Engineer, Kim Clarke, 403-540-9081; Completions Engineer, Kyle Metzgar, 403-971-8424; WS Superintendent, Derrick Cove, 780-831-1314; WS Foreman, Myles Hahn, 780-402-0500

Report Start Date	Report End Date	Rig Time (hrs)	P(tub) (kPa)	P (cas) (kPa)	Weather	Temperature (°C)	Lease Condition
2/24/2013 08:00	2/24/2013 19:30				Clear	-26	

Last 24hr Summary
Moved equipment from CPC rack site to Loon Creek O6 location and spotted as much equipment as possible (some drilling equipment still being cleaned up and moved off location).

24hr Forecast
Fire boiler and rig in equipment. Install Wellhead and test. Rig in SLB, run GR and perform GR/CBL log.

TIME LOG

Start Time	Dur (hrs)	Time P-T-X	Operation
08:00	0.50	P	Held a daily safety and operations meeting with Nabors and Reservoir Imaging. Reviewed and discussed CPC PJHA #745962 regarding daily activities and all associated hazards.
08:30	6.50	P	Continued to perform maintenance on equipment at rack site while waiting for drilling equipment to be moved off site. Construction built cribbing around tow wellhead cellar ring and froze in leveling off area to ground level for completion operations.
15:00	0.50	P	Picker and bed truck arrived at rack site. Reviewed and discussed CPC PJHA regarding rig move, picker operations, spotting and all associated hazards.
15:30	4.00	P	Moved most equipment for completion operations from rack site onto location. Spotted WS shack, dog house and boiler (boiler and dog house spotted on liner). Filled boiler with diesel. Off loaded 2 light towers (one stood - both on top of liners). Pump and tank were off loaded at back of location. Pump and tank will be spotted tomorrow after 8x40 mats are hauled in and 400bbl tank stood. Off loaded work platform, seismic equipment, tubing spool and McClellands equipment. No equipment could be spotted by wellhead as construction was still working on cleaning up drilling equipment. Secured equipment for the night.

FLUID SUMMARY

Fluid	To lease (m³)	From lease (m³)	To well (m³)	From well (m³)	Left to recover (m³)

CUMULATIVE JOB FLARED GAS BY ZONE

Zone	Volume Gas Total (E3m³)

PERFORATIONS

Date	Zone	Top (mKB)	Btm (mKB)	Shot Dens (shots/m)	Current Status
3/2/2013 03:00	Basal Lower Canol, Origi...	1,769.00	1,770.00	20.0	Suspended
3/3/2013 16:00	Upper Lower Canol, Origi...	1,692.00	1,693.00	20.0	Suspended
3/3/2013 23:59	Middle Lower Canol, Origi...	1,727.00	1,728.00	20.0	Suspended

ConocoPhillips Canada

Daily Morning Report
COPRC LOON CREEK O-06 65-10 127-00

Report #: 4
Report Date: 2/25/2013
Final Job Status: SUSPENDED
Final Report? Yes

Job Cat: COMPLETIONS Job Typ: INITIAL COMPLETION Sub Typ:

District	API / UWI	License No.	KB-Ground Distance (m)	KB-Casing Flange Distance (m)
NEW VENTURES	300/O-06 6510 127000	470	5.20	4.87

JOB INFORMATION

Actual Start Date	End Date	Abandon Date	MaxWell Job Number	Responsible Grp 1
2/22/2013 08:00	3/25/2013 22:30		JOB01@2006	coved

Objective
New Completion

Rig	Cum Rig Time (hrs)	Personnel Regular Hours (hrs)	Cum Personnel Total Hours (hrs)
Nabors, 414		221.00	991.00

Daily Contacts
WS Superintendent, Derrick Cove, 780-831-1314; WS Foreman, Myles Hahn, 780-402-0500; Sr Res Engineer, Kim Clarke, 403-540-9081; Completions Engineer, Kyle Metzgar, 403-971-8424; WS Supervisor, Doug Smith, 780-518-6273

Report Start Date	Report End Date	Rig Time (hrs)	P(tub) (kPa)	P (cas) (kPa)	Weather	Temperature (°C)	Lease Condition
2/25/2013 07:30	2/26/2013 06:00				Clear	-25	

Last 24hr Summary
Fired Boiler. Installed 279mm 35MPa x 179mm 69MPa tubing spool and tested. Installed 179mm x 69MPa master valve and 69MPa work spool. Spotted 400bbl tank, rig tank and pump. Rigged in remaining rig equipment. Spotted and rigged in work platform.

24hr Forecast
Rig in Schlumberger wireline. Run GR and perform GR/CBL log.

TIME LOG

Start Time	Dur (hrs)	Time P-T-X	Operation
07:30	1.00	P	Held a daily safety and operations meeting with Nabors, Aurora communications, Canol and Reservoir Imaging. Reviewed and discussed CPC PJHA #022513 regarding daily activities and all associated hazards. Reviewed ERP plan and emergency procedures. Discussed tight hole operations and crew expectations.
08:30	5.00	P	Performed a walk around inspection of location and equipment. Finished putting planks under liners around doghouse and boiler. Rigged boiler line to wellhead c/w return. Utilized picker to move 2 more light towers onto location. Spotted one light tower on liner and the other one off to the side of location (drilling still has not removed sawdust bin and pile 15m from wellhead on west side of location - Reservoir Imaging was not able to lay out and ready their geophones due to drilling equipment and traffic). Water truck was supposed to arrive with at 08:30 and did not arrive till 11:00 (water for shack, boiler and 400bbl tank - water truck went and filled up another camp first and only arrived with 6.0m³ - enough to get boiler going). Filled Boiler vessel and 3m³ into boiler water tank. Fired boiler. 400bbl tank and 2 8x40 mats were supposed to arrive at 08:30 on location. Bed truck arrived at 10:00 with 400bbl tank. Mats to spot 400bbl tank had not even left town yet. Called dispatch and mats were supposed to be on the way ASAP. Mats were dropped off at CPC rack site at 13:45. Pump, tank and 400bbl tank could not be spotted until mats were on location. Cut and dressed 177.8mm casing stub.
13:30	6.00	P	Heated 279mm 35MPa x 179mm 69MPa tubing spool and installed. Pressure tested primary seals to 34000 kPa for 10 minutes. Pressure held solid. Good test. Installed 179mm 69MPa full bore master valve and 69MPa work spool. Torqued all connections with hydraulic torque wrench. Bed truck hauled mats from rack site to location. Spotted 2 8x40 mats on plastic liner. Stood 400 bbl tank. Spotted rig tank and pump (400bbl and rig tank on mats with liner underneath - pump spotted on top of liner). Off loaded junk box and BOPs. Off loaded 20m³ of 70% Propylene glycol / 30% water mix into 400bbl tank. Rolled tank to ensure it was mixed well.
19:30	0.50	P	Crew change. Reviewed and discussed CPC PJHA #022513 with night shift personnel (Canol picker and Nabors) regading night time activities and all associated hazards.
20:00	3.50	P	Installed dual 50.8mm 69MPa casing valves onto each side of tubing spool. Installed 179mm x 69MPa work spool onto top of gate valve (torqued with hydraulic wrench). Rigged steam to rig pump c/w return line.
23:30	8.00	P	Spotted HD safe work platform. Stood platform and rigged in work floor. Tarped in Wellhead. Positioned Geo-phone crates. Wait on Schlumberger E-line unit.

FLUID SUMMARY

Fluid	To lease (m³)	From lease (m³)	To well (m³)	From well (m³)	Left to recover (m³)
FRESH WATER	20.00	0.00			

CUMULATIVE JOB FLARED GAS BY ZONE

Zone	Volume Gas Total (E3m³)

PERFORATIONS

Date	Zone	Top (mKB)	Btm (mKB)	Shot Dens (shots/m)	Current Status
3/2/2013 03:00	Basal Lower Canol, Origi...	1,769.00	1,770.00	20.0	Suspended
3/3/2013 16:00	Upper Lower Canol, Origi...	1,692.00	1,693.00	20.0	Suspended
3/3/2013 23:59	Middle Lower Canol, Origi...	1,727.00	1,728.00	20.0	Suspended

ConocoPhillips Canada

Daily Morning Report
COPRC LOON CREEK O-06 65-10 127-00

Report #: 5
Report Date: 2/26/2013
Final Job Status: SUSPENDED
Final Report? Yes

Job Cat: COMPLETIONS Job Typ: INITIAL COMPLETION Sub Typ:

District	API / UWI	License No.	KB-Ground Distance (m)	KB-Casing Flange Distance (m)
NEW VENTURES	300/O-06 6510 127000	470	5.20	4.87

JOB INFORMATION

Actual Start Date	End Date	Abandon Date	MaxWell Job Number	Responsible Grp 1
2/22/2013 08:00	3/25/2013 22:30		JOB01@2006	coved

Objective
New Completion

Rig	Cum Rig Time (hrs)	Personnel Regular Hours (hrs)	Cum Personnel Total Hours (hrs)
Nabors, 414		226.00	1,217.00

Daily Contacts
Sr Res Engineer, Kim Clarke, 403-540-9081; Completions Engineer, Kyle Metzgar, 403-971-8424; WS Supervisor, Doug Smith, 780-518-6273; WS Foreman, Myles Hahn, 780-402-0500; WS Superintendent, Derrick Cove, 780-831-1314

Report Start Date	Report End Date	Rig Time (hrs)	P(tub) (kPa)	P (cas) (kPa)	Weather	Temperature (°C)	Lease Condition
2/26/2013 06:00	2/27/2013 06:00			0	Clear	-23	

Last 24hr Summary
Rigged in SLB wireline. Ran in hole with a 154.94mm gauge ring and tagged at 1841.5mKB. Ran in hole and performed a GR/CBL log from surface to 1837mKB and back to surface. Ran in hole/w 100 geophones.

24hr Forecast
RIH/w remaining phones. Attach to casing. Perform seismic VSP operations

TIME LOG

Start Time	Dur (hrs)	Time P-T-X	Operation
06:00	1.00	P	Rigged pump line onto work spool and readied to suck back.
07:00	0.50	P	Crew shift change. Held a daily safety and operations meeting with Nabors, Schlumberger, Canol and Reservoir Imaging regarding daily activities and all associated hazards. Discussed light hole operations and crew expectations. Reviewed and discussed ERP plan and emergency procedures.
07:30	3.00	P	Performed a walk around inspection. Spotted Schlumberger wireline equipment. Rigged R-46 wireline spool onto well and readied all wireline equipment to run in hole. Heated pump line and readied to suck back. While SLB was readying their equipment Reservoir Imaging laid out 126 geophones onto the ground that were all tied together in 15m sections. Tested Geophones. All 126 geophones were communicating properly. 09:30 Performed a ten minute SCVF test as per ERCB directive 20. Zero flow (no bubbles) in ten minute test. Good test.
10:30	3.25	P	Started to run in hole with a 154.94mm gauge ring / junk basket combo and hung up at casing flange. Pulled out of hole. Gauge ring had small amount of ice on it that was not cleaned off before it was ran. Cleaned up GR. Ran back in hole and hung up again at casing flange. Rocked tool string and gauge ring fell though and smoothly continued in hole (displacment sucked back to rig tank). Ran in hole and tagged at 1841.5mKB (re-tagged to confirm - depth correlated to Schlumberger open hole log dated Feb. 15, 2013). Pulled out of the hole and laid down tools. No tight spots seen running gauge ring.
13:45	1.00	P	Built and readied logging tools.
14:45	4.00	P	Picked up and ran in hole with logging tools. Performed GR/CBL log from surface to 1837mKB. Pulled a 70m repeat pass and then logged up from 1837 to surface. Log to be emailed to Kyle Metzgar and Derrick Cove by Schlumberger wireline. Started to rig out Schlumberger equipment.
18:45	1.25	P	Crew change. Reviewed and discussed CPC PJHA #022813 with night shift personnel (Canol picker, Reservoir Imaging and Nabors) regading night time activities and all associated hazards. Finished rig out of Schlumberger wireline equipment.
20:00	0.50	P	Re-positioned rig floor to accommodate Reservoir Imaging E-line unit.
20:30	4.50	P	RIH/w Geo-phone BHA assembly. 68 phones in wellbore. Problem with tool string. System checks identified problem.
01:00	1.00	P	POOH and remove 5 questionable geo-phones from string. Reattached at top of string.
02:00	4.00	P	Continue to RIH/w Geo-phone BHA. 100 phones in Wellbore.

FLUID SUMMARY

Fluid	To lease (m³)	From lease (m³)	To well (m³)	From well (m³)	Left to recover (m³)
FRESH WATER			0.00	0.70	-0.70

CUMULATIVE JOB FLARED GAS BY ZONE

Zone	Volume Gas Total (E3m³)

PERFORATIONS

Date	Zone	Top (mKB)	Btm (mKB)	Shot Dens (shots/m)	Current Status
3/2/2013 03:00	Basal Lower Canol, Origi...	1,769.00	1,770.00	20.0	Suspended
3/3/2013 16:00	Upper Lower Canol, Origi...	1,692.00	1,693.00	20.0	Suspended
3/3/2013 23:59	Middle Lower Canol, Origi...	1,727.00	1,728.00	20.0	Suspended

ConocoPhillips Canada

Daily Morning Report
COPRC LOON CREEK O-06 65-10 127-00

Report #: 6
Report Date: 2/27/2013
Final Job Status: SUSPENDED
Final Report? Yes

Job Cat: COMPLETIONS Job Typ: INITIAL COMPLETION Sub Typ:

District	API / UWI	License No.	KB-Ground Distance (m)	KB-Casing Flange Distance (m)
NEW VENTURES	300/O-06 6510 127000	470	5.20	4.87

JOB INFORMATION

Actual Start Date	End Date	Abandon Date	MaxWell Job Number	Responsible Grp 1
2/22/2013 08:00	3/25/2013 22:30		JOB01@2006	coved

Objective
New Completion

Rig	Cum Rig Time (hrs)	Personnel Regular Hours (hrs)	Cum Personnel Total Hours (hrs)
Nabors, 414		226.00	1,443.00

Daily Contacts
WS Foreman, Myles Hahn, 780-402-0500; Completions Engineer, Kyle Metzgar, 403-971-8424; Sr Res Engineer, Kim Clarke, 403-540-9081; WS Superintendent, Derrick Cove, 780-831-1314; WS Supervisor, Doug Smith, 780-518-6273

Report Start Date	Report End Date	Rig Time (hrs)	P(tub) (kPa)	P (cas) (kPa)	Weather	Temperature (°C)	Lease Condition
2/27/2013 06:00	2/28/2013 06:00			0	Clear	-25	

Last 24hr Summary
Finished running in hole Geophones (122 total - bottom geophone at 1820.5m). Started seismic VSP operations using vibrators at previously surveyed designated points. VSP operations complete. POOH/w geo-phone BHA.

24hr Forecast
Pressure test wellbore. RIH with BP through wellhead to confirm able to RIH. RIH/w perf gun. Perforate proposed interval

TIME LOG

Start Time	Dur (hrs)	Time P-T-X	Operation
06:00	1.00	P	Continued to run in hole geophones.
07:00	0.50	P	Crew shift change. Held a daily safety and operations meeting. Reviewed and discussed CPC PJHA #022713 with Nabors, Canol and Reservoir Imaging regarding daily activities and all associated hazards. Discussed tight hole operations and crew expectations. Reviewed and discussed ERP plan and emergency procedures.
07:30	1.50	P	Ran a total of 122 Geophones into wellbore spaced 15m apart. Bottom geophone at 1820m with sinker bar bottom at 1832m. Clamped wireline at surface. Sucked fluid out of wellhead and blew out line with steam.
09:00	10.00	P	Performed test with vibrators to see how geophones responded. Tests were good. Started seismic VSP operations with vibrators pushing specified frequencies into ground at set surveyed points while recording geophone activity. While performing VSP ops: Picker went to Norman wells and returned with Genie boom for wireline operations. Rig crew drained pump, performed routine maintenance and cleaned up location (drilling left lots of broken planks and small pieces of garbage on location).
19:00	0.50	P	Crew shift change. Reviewed and discussed CPC PJHA #022713 with Nabors, Canol and Reservoir Imaging regarding daily activities and all associated hazards. Discussed tight hole operations and crew expectations. Reviewed and discussed ERP plan and emergency procedures.
19:30	2.00	P	Continued with seismic VSP operations.
21:30	8.00	P	VSP operations are completed. POOH/w and lay down geo-phones.
05:30	0.50	P	Remove 5k x 10k adapter flange.

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	-0.70

CUMULATIVE JOB FLARED GAS BY ZONE

Zone	Volume Gas Total (E3m³)

PERFORATIONS

Date	Zone	Top (mKB)	Btm (mKB)	Shot Dens (shots/m)	Current Status
3/2/2013 03:00	Basal Lower Canol, Origi...	1,769.00	1,770.00	20.0	Suspended
3/3/2013 16:00	Upper Lower Canol, Origi...	1,692.00	1,693.00	20.0	Suspended
3/3/2013 23:59	Middle Lower Canol, Origi...	1,727.00	1,728.00	20.0	Suspended

ConocoPhillips Canada

Daily Morning Report
COPRC LOON CREEK O-06 65-10 127-00

Report #: 7
Report Date: 2/28/2013
Final Job Status: SUSPENDED
Final Report? Yes

Job Cat: COMPLETIONS Job Typ: INITIAL COMPLETION Sub Typ:

District	API / UWI	License No.	KB-Ground Distance (m)	KB-Casing Flange Distance (m)
NEW VENTURES	300/O-06 6510 127000	470	5.20	4.87

JOB INFORMATION

Actual Start Date	End Date	Abandon Date	MaxWell Job Number	Responsible Grp 1
2/22/2013 08:00	3/25/2013 22:30		JOB01@2006	coved

Objective
New Completion

Rig	Cum Rig Time (hrs)	Personnel Regular Hours (hrs)	Cum Personnel Total Hours (hrs)
Nabors, 414		354.00	1,797.00

Daily Contacts
WS Supervisor, Doug Smith, 780-518-6273; WS Superintendent, Derrick Cove, 780-831-1314; Completions Engineer, Kyle Metzgar, 403-971-8424; Sr Res Engineer, Kim Clarke, 403-540-9081; WS Foreman, Myles Hahn, 780-402-0500

Report Start Date	Report End Date	Rig Time (hrs)	P(tub) (kPa)	P (cas) (kPa)	Weather	Temperature (°C)	Lease Condition
2/28/2013 06:00	3/1/2013 06:00			0	Clear	-24	

Last 24hr Summary
Pressure tested wellbore to 61.8 MPA for 15 minutes. Good test. Rigged in SLB wireline 69MPa equipment. RIH/w BP to 25 m with no apparent obstructions. Retrieved tool string to surface. Problem with E-line unit drum. Trouble shoot and rectify.

24hr Forecast
Pressure Test E-line Lubricator, RIH and Perforate Proposed Interval, RIH/w BP c/w 16 k recorders, Perform DFIT in lower interval

TIME LOG

Start Time	Dur (hrs)	Time P-T-X	Operation
06:00	0.50	P	Rigged out Reservoir Imaging equipment.
06:30	1.00	P	Crew shift change. Held a daily safety and operations meeting. Reviewed and discussed CPC PJHA #022813 with Nabors, Canol Reservoir Imaging regarding daily activities and all associated hazards. Discussed tight hole operations and crew expectations. Reviewed and discussed ERP plan and emergency procedures.
07:30	1.00	P	Moved Reservoir Imaging equipment to rack site. Utilized picker to move Schlumberger 69MPa wireline equipment into position close to wellhead.
08:30	0.50	P	Schlumberger wireline arrived on location. Reviewed and discussed CPC PJHA #032813 with Nabors, Canol Reservoir Imaging regarding daily activities and all associated hazards. Discussed tight hole operations, job scope and crew expectations. Reviewed and discussed ERP plan and emergency procedures.
09:00	9.50	P	Spotted Schlumberger line truck and started to rig in their 69MPa wireline equipment. Filled and pressure tested wellbore to 61.8MPa (0.60m³ to fill) with 70% propylene glycol / 30% water mix. Pressure held solid for 15 minutes. Good test. Installed 69MPa wireline flange and torqued down with hydraulic torque wrench. Wireline equipment was time consuming to build and ready as equipment was covered in ice and snow from drive up on back of truck. Rigged out work floor. Hoisted work floor and rigged back in at its max height of 20 feet (Genie boom utilized to install floor pins).
18:30	0.50	P	Crew shift change. Reviewed and discussed CPC PJHA #022813 with Nabors, Canol and Schlumberger regarding 2daily activities and all associated hazards. Discussed tight hole operations and crew expectations.
19:00	3.25	P	Continued to rig in Schlumberger 69MPa wireline equipment. All bowen connections had to be heated with steam.
22:15	1.00	T	After last piece of 7" (Quick disconnect) was installed onto well Schlumberger noticed that they did not have the correct cross over (7" to 5 1/16") to perform job. They had a 7" to 4 1/16" crossover but their lubricator and packoff on site were 5 1/16". Called Steve Csikos (SLB NW 780-518-7383) and discussed alternative plans. A plan was put in to place to get 4 1/16" gear of another location.
23:15	1.00	T	Recieved call from SLB manager, 4-1/16" Equipment unable to be loaded from Husky location till 06:30 approx 6 hrs away. Arranged for 5-1/16" adapter flange to be delivered to Nisku and put on flight to norman wells @ 05:40, to arrive @ 11:40.
00:15	1.00	T	Assembled the Smith CW bridge plug with no charges or oil in running gear. Rigged onto E-line and lowered BP through wellhead down to 25 m with no apparent obstructions. Pulled tool string to surface. Stopped drum to winch up pack off. The Drum on the E-line unit picked up 25 cm on one side as though something was broken on drum. Stopped operations. Conducted operational meeting with all personnel. Decision made to utilize boom on crane holding shiv to recover last 1.0 m of line needed to install c-plate. Installed C-plate. Removed cable head. Laid down Smith CW bridge plug with Crane.
01:15	0.75	T	Locked out and secured winch on E-line truck. Attempted to trouble shoot why drum appears to be loose in E-line unit. Slick cable drum installed in unit on previous day by SLB personnel in Norman Wells. No obvious reason for drum to lift up as it did. All bolts appeared to be present. Possibly drum tray bolts broken on 1 side. Contacted SLB management. Decision made to rig out unit and crane, travel 25 km to shop in normanwells, Remove drum and inspect drum tray.
02:00	4.00	T	Operations suspended untill further notice. Received call from nightshift senior operator, Discovered that a securement bolt was in installed but not through the securement bracket designed to hold drum in position. Drum to be positioned properly. Bolted into position, Inspected again to ensure that drum is secure in unit. Then to be brought back to location by day crew.

FLUID SUMMARY

Fluid	To lease (m³)	From lease (m³)	To well (m³)	From well (m³)	Left to recover (m³)
FRESH WATER			0.70	0.00	0.00

CUMULATIVE JOB FLARED GAS BY ZONE

Zone	Volume Gas Total (E3m³)

ConocoPhillips Canada

Daily Morning Report
COPRC LOON CREEK O-06 65-10 127-00

Report #: 7
Report Date: 2/28/2013
Final Job Status: SUSPENDED
Final Report? Yes

Job Cat: COMPLETIONS Job Typ: INITIAL COMPLETION Sub Typ:

PERFORATIONS

Date	Zone	Top (mKB)	Btm (mKB)	Shot Dens (shots/m)	Current Status
3/2/2013 03:00	Basal Lower Canol, Origi...	1,769.00	1,770.00	20.0	Suspended
3/3/2013 16:00	Upper Lower Canol, Origi...	1,692.00	1,693.00	20.0	Suspended
3/3/2013 23:59	Middle Lower Canol, Origi...	1,727.00	1,728.00	20.0	Suspended

Report Printed: 4/10/2013

ConocoPhillips Canada

Daily Morning Report
COPRC LOON CREEK O-06 65-10 127-00

Report #: 8
Report Date: 3/1/2013
Final Job Status: SUSPENDED
Final Report? Yes

Job Cat: COMPLETIONS Job Typ: INITIAL COMPLETION Sub Typ:

District	API / UWI	License No.	KB-Ground Distance (m)	KB-Casing Flange Distance (m)
NEW VENTURES	300/O-06 6510 127000	470	5.20	4.87

JOB INFORMATION

Actual Start Date	End Date	Abandon Date	MaxWell Job Number	Responsible Grp 1
2/22/2013 08:00	3/25/2013 22:30		JOB01@2006	coved

Objective
New Completion

Rig	Cum Rig Time (hrs)	Personnel Regular Hours (hrs)	Cum Personnel Total Hours (hrs)
Nabors, 414		428.00	2,225.00

Daily Contacts
Sr Res Engineer, Kim Clarke, 403-540-9081; WS Supervisor, Doug Smith, 780-518-6273; Completions Engineer, Kyle Metzgar, 403-971-8424; WS Superintendent, Derrick Cove, 780-831-1314; WS Foreman, Mylee Hahn, 780-402-0500

Report Start Date	Report End Date	Rig Time (hrs)	P(tub) (kPa)	P (cas) (kPa)	Weather	Temperature (°C)	Lease Condition
3/1/2013 06:00	3/2/2013 06:00			0	Clear	-25	

Last 24hr Summary
Schlumberger wireline did not have proper equipment to perform rig in and perform job. Waited on wireline equipment. Spotted and rigged in Schlumberger pumper and data van. Pressure tested lines to 69MPa. Finished rig in of 69MPa wireline equipment. Pressure test lubricator 65.0 MPa, Test good. RIH and perforate the "Basal" Lower Canol formation over the interval from 1769.0-1770.0 mKB. Minimal Wellbore response @ surface, RIH/w Smith CW Retrievable BP c/w Tandem recorders installed.

24hr Forecast
Positon BP 2 m above interval. Perform DFIT as per program, Set BP, Set second BP, Pressure test. Dump Bail Sand, Perforate,RIH/w BP c/w recorders, DFIT second interval.

TIME LOG

Start Time	Dur (hrs)	Time P-T-X	Operation
06:00	0.50	T	Waited for correct Schlumberger wireline equipment to arrive on location.
06:30	0.50	T	Crew shift change. Held a daily safety and operations meeting. Reviewed and discussed CPC PJHA #030113 with Nabors, Smith and Lonkar regarding daily activities and all associated hazards. Discussed tight hole operations and crew expectations. Reviewed and discussed ERP plan and emergency procedures.
07:00	2.00	T	Continued to wait for correct Schlumberger wireline equipment and line truck to arrive on location.
09:00	4.00	T	Schlumberger wireline truck arrived on locaiton. Reviewed and discussed CPC PJHA #030113 with all personel regarding daily activities and all associated hazards. Readied Schlumberger 69MPa wireline equipment while waiting for correct bowen crossover (7" x 5 1/8") flange to arrive. Schlumberger charted a flight from Nisku to Norman wells, expecting crossover to arrive at around 18:30. Continued to ready wireline equipment.
13:00	5.50	P	Schlumberger pump crew and equipment arrived on location. They all recieved CPC Artic training and area specific Aboriginal training. Checked all other training certificates. Performed CPC orientation on 4 hands. All other tickets were valid. Spotted and rigged in pumping equipment c/w data van with sattelite link. Primed pumps and filled lines with 70% Propylene Glycol / 30% water mix. Pressure tested treating lines to 65 MPa. Good test. CPC Engineers Dave Cramer and Theron Legarde arrived on location and reviewed D-fit operations.
18:30	0.50	P	Crew shift change. Reviewed and discussed CPC PJHA #010313 with Nabors, Smith, Schlumberger and Lonkar regarding night shift activities and all associated hazards. Discussed tight hole operations and crew expectations. Reviewed and discussed ERP plan and emergency procedures.
19:00	2.50	P	Schlumberger wireline crossover arrived on location. Assembled E-line lubricator complete with Bop's and quick disconnect sub.
21:30	3.50	P	Pressure tested the E-line lubricator to 65,000 kPa for 10 min. Max presure for Job 61,800 kPa. Pressure test held with no leak off. Bled back lubricator. Had trouble releasing disconnect sub. Pulling 8000 lb to pick up, Reviewed Lifting bridal certifications, Rated for 14,000 lb. Centered crane and removed Lubricator, Lube and Bop's weighing 6500 lbs. Laid down cable head.
01:00	4.00	P	Conducted operational meeting with all personnel, Armed a 3m ERHSC carrier c/w 1m of 23 gr Owen SDP 3375-311 MT charges @ 20 spm 60 degree phasing. RIH and correlate on depth to Schlumberger GR/CCL CBL log dated Feb.26/13. Short Marker jts @ 1568.7 mKB and 1580.80 mKB. Perforated the "Basal" Lower Canol formation over the interval from 1769.0-1770.0 mKB. Minimal wellbore response @ surface. Retrieved spent gun to surface and inspected. All shots fired ands centered in scallops. Slight Vac on casing when pulling out of hole, Slight blow when at surface.
05:00	1.00	P	Armed a Smith CW retrievable BP for 177.8 mm, 38.69kg/m casing c/w Tandem Lonkar 16K Recorders installed below in a bullnosed 60.3 mm Perforated pup jt, programmed as follows : 2 second picks for the first 12 hrs 10 second picks for the next 24 hrs 1 min picks for remainder of Test. Up to 200 days Top Gauge #1, SN # 9579 - Battery SN # PPS0108CC Battery on @ 05:48 hrs. Bottom Gauge #2, SN # 9672 - Battery SN # PPS0106CC Battery on @ 05:48 hrs.

FLUID SUMMARY

Fluid	To lease (m³)	From lease (m³)	To well (m³)	From well (m³)	Left to recover (m³)
FRESH WATER			0.00	0.30	-0.30

CUMULATIVE JOB FLARED GAS BY ZONE

Zone	Volume Gas Total (E3m³)

ConocoPhillips Canada

Daily Morning Report
COPRC LOON CREEK O-06 65-10 127-00

Report #: 8
Report Date: 3/1/2013
Final Job Status: SUSPENDED
Final Report? Yes

Job Cat: COMPLETIONS Job Typ: INITIAL COMPLETION Sub Typ:

PERFORATIONS

Date	Zone	Top (mKB)	Btm (mKB)	Shot Dens (shots/m)	Current Status
3/2/2013 03:00	Basal Lower Canol, Origi...	1,769.00	1,770.00	20.0	Suspended
3/3/2013 16:00	Upper Lower Canol, Origi...	1,692.00	1,693.00	20.0	Suspended
3/3/2013 23:59	Middle Lower Canol, Origi...	1,727.00	1,728.00	20.0	Suspended

Report Printed: 4/10/2013

ConocoPhillips Canada

Daily Morning Report
COPRC LOON CREEK O-06 65-10 127-00

Report #: 9
Report Date: 3/2/2013
Final Job Status: SUSPENDED
Final Report? Yes

Job Cat: COMPLETIONS Job Typ: INITIAL COMPLETION Sub Typ:

District	API / UWI	License No.	KB-Ground Distance (m)	KB-Casing Flange Distance (m)
NEW VENTURES	300/O-06 6510 127000	470	5.20	4.87

JOB INFORMATION

Actual Start Date	End Date	Abandon Date	MaxWell Job Number	Responsible Grp 1
2/22/2013 08:00	3/25/2013 22:30		JOB01@2006	coved

Objective
New Completion

Rig	Cum Rig Time (hrs)	Personnel Regular Hours (hrs)	Cum Personnel Total Hours (hrs)
Nabors, 414		348.00	2,573.00

Daily Contacts
WS Foreman, Myles Hahn, 780-402-0500; Sr Res Engineer, Kim Clarke, 403-540-9081; WS Supervisor, Doug Smith, 780-518-6273; Completions Engineer, Kyle Metzgar, 403-971-8424; WS Superintendent, Derrick Cove, 780-831-1314

Report Start Date	Report End Date	Rig Time (hrs)	P(tub) (kPa)	P (cas) (kPa)	Weather	Temperature (°C)	Lease Condition
3/2/2013 06:00	3/3/2013 06:00			0	Overcast	-21	

Last 24hr Summary
Performed D-fit test on "Basal" Lower Canol (perforations 1769.0 mKB- 1770mKB). Set Ret. BP (CE at 1767mKB - 16K recorders below) above perforations immediately after pump was shut down. Ran second BP and set (CE at 1761.3mKB). Pressure tested BP to 61MPa. RIH and perforate the "Middle" Lower Canol formation over the interval from 1727.0-1728.0 mKB. RIH/w Smith CW Retrievable BP c/w Tandem recorders installed. Performed D-fit test on "Middle" Lower Canol (perforations 1727.0 mKB- 1728.0 mKB). Set Ret. BP (CE at 1723mKB - 16K recorders below) above perforations immediately after pump was shut down.

24hr Forecast
RIH/w Second BP, Pressure Test, Dump Sand, Perforate, RIH/w BP c/w recorders, Perform DFIT on third interval, Set BP.

TIME LOG

Start Time	Dur (hrs)	Time P-T-X	Operation
06:00	0.50	P	Picked up Smith BP and stabbed lubricator onto the well. Opened master valve and started in hole.
08:30	0.50	P	Crew shift change. Held a daily safety and operations meeting. Reviewed and discussed CPC PJHA #030213 with Nabors, Smith, Schlumberger and Lonkar regarding daily activities and all associated hazards. Discussed tight hole operations and crew expectations. Reviewed and discussed ERP plan and emergency procedures.
07:00	2.50	P	Continued to RIH with Bridge plug. Correlated bridge plug on depth to Schlumberger GR/CCL log dated Feb. 26, 2013. BP CE sitting at 1767.0mKB (2.0m above perforations with bottom of pup joint at 1770.15mMKB).
09:30	2.75	P	Held a tailgate meeting with all personel regarding pumping operations, crew responsibilities and all associated hazards. Circulated SLB pump and and applied 17MPa pressure against closed hamer valves at wellhead. Opened hamer valves and started to pump down well. Achieved breakdown at 18.1MPa. Pressure dropped down to 7500 kpa and a steady injection rate of 0.19m³/min at 7500kPa was achieved. Pumped for 60 seconds at this rate and shut down pumper (40-60 lbs added line tension on wireline was seen when pumping). ISIP: 6.4 MPa. 10:11 Bridge plug was set 50 seconds after pump was shut down. Good setting indication was seen in line truck and 450lbs of weight was lost. Pulled up and off bridge plug freely. Re-tagged bridge plug to confirm it was set. Pulled out of the hole with wireline. BP top at 1766.29mKB / CE at 1767.00 mKB / BP bottom at 1767.68mKB / Bull nose on end of perforated pup at 1770.15 mKB. Basal Lower Canol Top gauge S/N 9579 - Sensor port 1769.03mKB. Bottom gauge S/N 9672 - Sensor port 1769.78mKB.
12:15	2.25	P	Laid down Baker 20 setting tool and re-built. Held tailgate meeting on arming BP and explosives. Armed BP and picked up. Stabbed lubricator back onto the well and readied to run in hole. Checked SICP: 1200 kPa. Filled and pressured lubricator up to 1250 kPa.
14:30	3.25	P	Opended master valve and started to run in hole. Tagged BP top at 1766.29MKB. Correlated plug on depth to Schlumberger GR CCL Log dated Feb. 26, 2013. 15:54 Bridge plug was set. Good setting indication was seen in line truck and 240 lbs of weight was lost. Pulled up and off bridge plug freely. Re-tagged bridge plug to confirm it was set. Pulled out of the hole with wireline. BP top at 1760.59 mKB / CE at 1761.30 mKB / BP bottom at 1761.98 mKB.
17:45	3.25	P	18:30 Crew shift change. Held a daily safety and operations meeting. Reviewed and discussed CPC PJHA #030213 with Nabors, Smith, Schlumberger and Lonkar regarding daily activities and all associated hazards. Discussed tight hole operations and crew expectations. Reviewed and discussed ERP plan and emergency procedures. Pressure tested BP to 61MPa for 10 minutes. Good test. Readied bailer, picked up and ran into wellhead. Loaded bailer with 98 kg, 32.3 kg/m for 177.8 mm casing coarse sand and ran in hole. Tagged BP top at 1760.59mKB and dumped sand. Pulled out of the hole. Sand top @ 1757.59 mKB.

ConocoPhillips Canada

Daily Morning Report
COPRC LOON CREEK O-06 65-10 127-00

Report #: 9
Report Date: 3/2/2013
Final Job Status: SUSPENDED
Final Report? Yes

Job Cat: COMPLETIONS Job Typ: INITIAL COMPLETION Sub Typ:

TIME LOG

Start Time	Dur (hrs)	Time P-T-X	Operation
21:00	4.00	P	Conducted operational meeting with all personnel, Armed a 3m ERHSC carrier c/w 1m of 23 gr Owen SDP 3375-311 MT charges @ 20 spm 60 degree phasing. RIH to 1500 mKB. Pressure up to 18,200 kPa, RIH and correlate on depth to Schlumberger GR/CCL CBL log dated Feb.26/13. Short Marker jts @ 1568.7 mKB and 1580.80 mKB. Perforated the " Middle" Lower Canol formation over the interval from 1727.0-1728.0 mKB. ISIP= 18,200 kPa 1 min = 12,400 kPa 2 min = 7800 kPa 3 min = 6400 kPa 4 min = 6200 kPa 5 min = 6000 kPa Retrieved spent gun to surface and inspected. SICP= 2500 kPa. All shots fired ands centered in scallops.
01:00	2.00	P	Armed a Smith CW retrievable BP for 177.8 mm, 38.69kg/m casing c/w Tandem Lonkar 16K Recorders installed below in a bullnosed 60.3 mm Perforated pup jt, programmed as follows : 2 second picks for the first 12 hrs 10 second picks for the next 24 hrs 1 min picks for remainder of Test. Up to 200 days Top Gauge #1, SN # 90065 - Battery SN # PPS0109CC Battery on @ 00:47 hrs. Bottom Gauge #2, SN # 90027 - Battery SN # PPS0107CC Battery on @ 00:47 hrs. SICP= 1500 kPa, Equalized to lubricator, SICP= 150 kPa. Correlated bridge plug on depth to Schlumberger GR/CCL log dated Feb. 26, 2013. BP CE sitting at 1723.0 mKB (4.0m above perforations, collar 2m above perfs, with bottom of pup joint at 1726.15 mKB).
03:00	2.00	P	Held a tailgate meeting with all personel regarding pumping operations, crew responsibilities and all associated hazards. Circulated SLB pump and and applied 17 MPa pressure against closed hamer valves at wellhead. Opened hamer valves and Filled lubricator. Achieved breakdown at 14,100 kPa. Pressure dropped down to 9,600 kpa and a steady injection rate of 0.18 m³/min at 9,600 kPa was achieved. Pumped for 3 min at this rate and shut down pumper (40-60 lbs added line tension on wireline was seen when pumping). ISIP: 9600 kPa. Bridge plug was set 34 seconds after pump was shut down. Good setting indication was seen in line truck and 400 lbs of weight was lost. Monitored pressure response, Straight lined at 6300 kPa. Plug holding. Retrieved Tool string to Surface. BP top at 1722.29 mKB / CE at 1723.00 mKB / BP bottom at 1723.68mKB. / Bull nose on end of perforated pup at 1726.15 mKB. Middle Lower Canol Top gauge S/N 90065 - Sensor port 1725.03mKB. Bottom gauge S/N 90027 - Sensor port 1725.78mKB.
05:00	1.00	P	Laid down Baker 20 setting tool and re-built. Make up BP and readied to RIH.

FLUID SUMMARY

Fluid	To lease (m³)	From lease (m³)	To well (m³)	From well (m³)	Left to recover (m³)
FRESH WATER			2.32	0.00	2.02

CUMULATIVE JOB FLARED GAS BY ZONE

Zone	Volume Gas Total (E3m³)

PERFORATIONS

Date	Zone	Top (mKB)	Btm (mKB)	Shot Dens (shots/m)	Current Status
3/2/2013 03:00	Basal Lower Canol, Origi...	1,769.00	1,770.00	20.0	Suspended
3/3/2013 16:00	Upper Lower Canol, Origi...	1,692.00	1,693.00	20.0	Suspended
3/3/2013 23:59	Middle Lower Canol, Origi...	1,727.00	1,728.00	20.0	Suspended

ConocoPhillips Canada

Daily Morning Report
COPRC LOON CREEK O-06 65-10 127-00

Report #: 10
Report Date: 3/3/2013
Final Job Status: SUSPENDED
Final Report? Yes

Job Cat: COMPLETIONS Job Typ: INITIAL COMPLETION Sub Typ:

District	API / UWI	License No.	KB-Ground Distance (m)	KB-Casing Flange Distance (m)
NEW VENTURES	300/O-06 6510 127000	470	5.20	4.87

JOB INFORMATION

Actual Start Date	End Date	Abandon Date	MaxWell Job Number	Responsible Grp 1
2/22/2013 08:00	3/25/2013 22:30		JOB01@2006	coved

Objective
New Completion

Rig	Cum Rig Time (hrs)	Personnel Regular Hours (hrs)	Cum Personnel Total Hours (hrs)
Nabors, 414		354.00	2,927.00

Daily Contacts
WS Superintendent, Derrick Cove, 780-831-1314; WS Supervisor, Doug Smith, 780-518-6273; Sr Res Engineer, Kim Clarke, 403-540-9081; Completions Engineer, Kyle Metzger, 403-971-8424; WS Foreman, Myles Hahn, 780-402-0500

Report Start Date	Report End Date	Rig Time (hrs)	P(tub) (kPa)	P (cas) (kPa)	Weather	Temperature (°C)	Lease Condition
3/3/2013 06:00	3/4/2013 06:00			0	Slight Overcast	-20	

Last 24hr Summary
Set BP with CE at 1718.5mKB. Pressure tested BP to 61MPa. Dump bailed 3.0m of sand on top of BP. Perforated the "Upper" Lower Canol formation from 1692.0 MKB to 1693.0 mKB. Performed D-fit test on "Upper" Lower Canol (perforations 1692.0 mKB- 1693.0 mKB). Set Ret. BP (CE at 1689.0 mKB - 16K recorders below) above perforations before pump was shut down. Pressure test to 10,000 kPa. Retrieved tool string to surface. SICP= 5000 kPa. Rigged out SLB treatment iron and 10 K E-line equipment. Rigged out work floor, Nippled down wellhead. Secured and winterized wellhead.

24hr Forecast
Clean and Tidy location, Prepare equipment for Shut down.

TIME LOG

Start Time	Dur (hrs)	Time P-T-X	Operation
06:00	0.50	P	Started in hole with Schlumberger 69MPa retrievable bridge plug.
06:30	0.50	P	Crew shift change. Held a daily safety and operations meeting. Reviewed and discussed CPC PJHA #030313 with Nabors, Smith, Schlumberger and Lonkar regarding daily activities and all associated hazards. Discussed tight hole operations and crew expectations. Reviewed and discussed ERP plan and emergency procedures.
07:00	3.50	P	Continued in hole with Schlumberger M-CW 69MPa retrievable bridge plug. Correlated plug on depth to Schlumberger GR/CCL log dated Feb. 26, 2013. 08:01 Bridge plug was set. Good setting indication was seen in line truck and 195lbs of weight was lost. Pulled up and off bridge plug freely. Re-tagged bridge plug to confirm it was set. Pulled out of the hole with wireline and laid down tool string. BP top at 1717.79mKB / CE at 1718.50 mKB / BP bottom at 1719.18 mKB.
10:30	1.00	P	Pressure tested bridge plug to 61MPa for 10 minutes. Good test.
11:30	2.50	P	Readied sand bailer and picked up. Filled bailer with coarse sand and ran in hole. Tagged BP at 1717.79mKB and dumped 3 linear meters of coarse sand on top of it. Pulled out of the hole and laid down bailer.
14:00	3.50	P	Held tailgate meeting and discussed arming perforating gun. Armed a 3m ERHSC carrier c/w 1m of 23 gr Owen SDP 3375-311 MT charges @ 20 spm 60 degree phasing. RIH to 1600 mKB. Pressure up casing to 10200 kPa, RIH and correlate on depth to Schlumberger GR/CCL log dated Feb.26/13. Short Marker jts @ 1568.7 mKB and 1580.80 mKB. Perforated the "Upper" Lower Canol formation over the interval from 1692.0 mKB to 1693.0 mKB. ISIP= 10 270 kPa 1 min = 8400 kPa — 6 min = 7690 kPa — 11 min = 7158 kPa — 16 min = 6730 kPa 2 min = 8300 kPa — 7 min = 7575 kPa — 12 min = 7067 kPa — 17 min = 6661 kPa 3 min = 8140 kPa — 8 min = 7450 kPa — 13 min = 6985 kPa — 18 min = 6585 kPa 4 min = 7970 kPa — 9 min = 7344 kPa — 14 min = 6895 kPa — 19 min = 6510 kPa 5 min = 7820 kPa — 10 min = 7247 kPa — 15 min = 6821 kPa — 20 min = 6452 kPa Pulled out of the hole and retrieved spent gun to surface and inspected. All shots fired and centered in scallops.
17:30	1.00	P	Armed a Smith CW retrievable BP for 177.8 mm, 38.69kg/m casing c/w Tandem Lonkar 16K Recorders installed below in a bullnosed 73mm Perforated pup jt, programmed as follows : 2 second picks for the first 12 hrs 10 second picks for the next 24 hrs 1 min picks for remainder of Test. Up to 200 days Top Gauge #1, SN # 90052 - Battery SN # PPS0096CC Battery on @ 17:23 hrs. Bottom Gauge #2, SN # 90053 - Battery SN # PPS0097CC Battery on @ 17:23 hrs. SICP= 1600 kPa, Equalized to lubricator and opened master. Started in hole with bridge plug.
18:30	0.50	P	Crew shift change. Held a daily safety and operations meeting. Reviewed and discussed CPC PJHA #030313 with Nabors, Smith, Schlumberger and Lonkar regarding daily activities and all associated hazards. Discussed tight hole operations and crew expectations. Reviewed and discussed ERP plan and emergency procedures.
19:00	1.00	P	Correlated bridge plug on depth to Schlumberger GR/CCL log dated Feb. 26, 2013. BP CE sitting at 1689.0 mKB (3.0m above perforations, with bottom of pup joint at 1691.73 mKB).

ConocoPhillips Canada

Daily Morning Report
COPRC LOON CREEK O-06 65-10 127-00

Report #: 10
Report Date: 3/3/2013
Final Job Status: SUSPENDED
Final Report? Yes

Job Cat: COMPLETIONS Job Typ: INITIAL COMPLETION Sub Typ:

TIME LOG

Start Time	Dur (hrs)	Time P-T-X	Operation
20:00	1.00	P	Held a tailgate meeting with all personel regarding pumping operations, crew responsibilities and all associated hazards. Circulated SLB pump and and applied 17 MPa pressure against closed hamer valves at wellhead. Opened hamer valves and Filled lubricator. Achieved breakdown at 15,100 kPa. Pressure dropped down to 10,300 kpa and a steady injection rate of 0.18 m³/min at 10,300 kPa was achieved. Pumped for 3 min at this rate, Set BP while pumping,(dynamic shut down) ISIP: 10,300 kPa. Bridge plug was set 30 seconds. Good setting indication was seen in line truck and 400 lbs of weight was lost. Monitored pressure response, Straight lined at 10,300 kPa. Plug holding. Retrieved Tool string to Surface. SICP = 5000 kPa. Total fluid pumped for DFIT= 1.17 m3. BP top at 1688.29 mKB / CE at 1689.0 mKB / BP bottom at 1689.68mKB / Bull nose on end of perforated pup at 1691.73 mKB. Upper Lower Canol Top gauge S/N 90052 - Sensor port 1690.61mKB. Bottom gauge S/N 90053 - Sensor port 1691.36mKB.
21:00	2.50	P	Shut in wellhead, Bled off lubricator. Laid down Tool string. Rigged out SLB Treatment Iron and related equipment. Rigged out SLB 10 K E-line gear.
23:30	2.00	P	Rigged out HD safe work platform. Racked on side of lease. Removed rental work spool. Winterized wellhead, Installed a 177.8 mm top section c/w 73.0 mm Gate valve. Secured all wellhead ports.
01:30	4.50	P	Loaded out and hauled to Norman wells the SLB 10 k E-line equipment.

FLUID SUMMARY

Fluid	To lease (m³)	From lease (m³)	To well (m³)	From well (m³)	Left to recover (m³)
FRESH WATER			1.47	0.00	3.49

CUMULATIVE JOB FLARED GAS BY ZONE

Zone	Volume Gas Total (E3m³)

PERFORATIONS

Date	Zone	Top (mKB)	Btm (mKB)	Shot Dens (shots/m)	Current Status
3/2/2013 03:00	Basal Lower Canol, Origi...	1,769.00	1,770.00	20.0	Suspended
3/3/2013 16:00	Upper Lower Canol, Origi...	1,692.00	1,693.00	20.0	Suspended
3/3/2013 23:59	Middle Lower Canol, Origi...	1,727.00	1,728.00	20.0	Suspended

ConocoPhillips Canada

Daily Morning Report
COPRC LOON CREEK O-06 65-10 127-00

Report #: 11
Report Date: 3/4/2013
Final Job Status: SUSPENDED
Final Report? Yes

Job Cat: COMPLETIONS Job Typ: INITIAL COMPLETION Sub Typ:

District	API / UWI	License No.	KB-Ground Distance (m)	KB-Casing Flange Distance (m)
NEW VENTURES	300/O-06 6510 127000	470	5.20	4.87

JOB INFORMATION

Actual Start Date	End Date	Abandon Date	MaxWell Job Number	Responsible Grp 1
2/22/2013 08:00	3/25/2013 22:30		JOB01@2006	coved

Objective
New Completion

Rig	Cum Rig Time (hrs)	Personnel Regular Hours (hrs)	Cum Personnel Total Hours (hrs)
Nabors, 414		244.00	3,171.00

Daily Contacts
Sr Res Engineer, Kim Clarke, 403-540-9081; WS Foreman, Myles Hahn, 780-402-0500; WS Supervisor, Doug Smith, 780-518-6273; WS Superintendent, Derrick Cove, 780-831-1314; Completions Engineer, Kyle Metzger, 403-971-8424

Report Start Date	Report End Date	Rig Time (hrs)	P(tub) (kPa)	P (cas) (kPa)	Weather	Temperature (°C)	Lease Condition
3/4/2013 06:00	3/5/2013 06:00				Slight Overcast	-18	

Last 24hr Summary
Moved non essential equipment to side of location. Drained boiler lines and sucked all water out of boiler. Chained and locked wellhead. Shut down rig equipment and secured.

24hr Forecast
Lease watch - Operations suspended until further notice

TIME LOG

Start Time	Dur (hrs)	Time P-T-X	Operation
06:00	0.50	P	Cleaned up location from wireline operations (picker in town dropping off load of Schlumberger wireline equipment).
06:30	0.50	P	Held a daily safety and operations meeting with Nabors and Canol. Reviewed and discussed CPC PJHA # 020313 regarding daily operations and all associated hazards.
07:00	11.50	P	Utilized picker to move work platform and McClellands rental equipment to side of location. Placed class 3 rig BOPs on stand by wellhead for upcoming rig work. Removed 2 new 50.8mm 69MPa BX152 valves off Mirror Lake tubing spool that was dressed for 114.3mm casing. Loaded 2 new Stream Flo 279mm 35MPa x 179mm 69MPa tubing spools dressed for 114.3mm casing into box and onto picker deck (#1 SN:204862-07 / #2 SN: 204862-03). Spools will be back hauled to Stream Flow GP. Shut down rig light plant and locked up all equipment.
18:30	11.50	P	CPC WS Supervisor on location performing lease watch. Operations suspended until further notice

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	3.49

CUMULATIVE JOB FLARED GAS BY ZONE

Zone	Volume Gas Total (E3m³)

PERFORATIONS

Date	Zone	Top (mKB)	Btm (mKB)	Shot Dens (shots/m)	Current Status
3/2/2013 03:00	Basal Lower Canol, Origi...	1,769.00	1,770.00	20.0	Suspended
3/3/2013 16:00	Upper Lower Canol, Origi...	1,692.00	1,693.00	20.0	Suspended
3/3/2013 23:59	Middle Lower Canol, Origi...	1,727.00	1,728.00	20.0	Suspended

ConocoPhillips Canada

Daily Morning Report
COPRC LOON CREEK O-06 65-10 127-00

Report #: 20
Report Date: 3/13/2013
Final Job Status: SUSPENDED
Final Report? Yes

Job Cat: COMPLETIONS Job Typ: INITIAL COMPLETION Sub Typ:

District	API / UWI	License No.	KB-Ground Distance (m)	KB-Casing Flange Distance (m)
NEW VENTURES	300/O-06 6510 127000	470	5.20	4.87

JOB INFORMATION

Actual Start Date	End Date	Abandon Date	MaxWell Job Number	Responsible Grp 1
2/22/2013 08:00	3/25/2013 22:30		JOB01@2006	coved

Objective
New Completion

Rig	Cum Rig Time (hrs)	Personnel Regular Hours (hrs)	Cum Personnel Total Hours (hrs)
Nabors, 414		48.50	3,436.50

Daily Contacts
WS Foreman, Myles Hahn, 780-402-0500; Sr Res Engineer, Kim Clarke, 403-540-9081; WS Superintendent, Derrick Cove, 780-831-1314; Completions Engineer, Kyle Metzgar, 403-971-8424

Report Start Date	Report End Date	Rig Time (hrs)	P(tub) (kPa)	P (cas) (kPa)	Weather	Temperature (°C)	Lease Condition
3/13/2013 06:00	3/14/2013 06:00				Clear	-26	ice

Last 24hr Summary
Lease watch. Operations suspended until further notice.

24hr Forecast
Lease watch. Fire Boiler + ready Nabors equipment.

TIME LOG

Start Time	Dur (hrs)	Time P-T-X	Operation
06:00	24.00	P	Monitor Wellbore. 3 Nabors rig hands arrived in NW and checked into CPC base camp. 17:00 Serviced and started light plant.

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	3.49

CUMULATIVE JOB FLARED GAS BY ZONE

Zone	Volume Gas Total (E3m³)

PERFORATIONS

Date	Zone	Top (mKB)	Btm (mKB)	Shot Dens (shots/m)	Current Status
3/2/2013 03:00	Basal Lower Canol, Origi...	1,769.00	1,770.00	20.0	Suspended
3/3/2013 16:00	Upper Lower Canol, Origi...	1,692.00	1,693.00	20.0	Suspended
3/3/2013 23:59	Middle Lower Canol, Origi...	1,727.00	1,728.00	20.0	Suspended

ConocoPhillips Canada

Daily Morning Report
COPRC LOON CREEK O-06 65-10 127-00

Report #: 22
Report Date: 3/15/2013
Final Job Status: SUSPENDED
Final Report? Yes

Job Cat: COMPLETIONS Job Typ: INITIAL COMPLETION Sub Typ:

District	API / UWI	License No.	KB-Ground Distance (m)	KB-Casing Flange Distance (m)
NEW VENTURES	300/O-06 6510 127000	470	5.20	4.87

JOB INFORMATION

Actual Start Date	End Date	Abandon Date	MaxWell Job Number	Responsible Grp 1
2/22/2013 08:00	3/25/2013 22:30		JOB01@2006	coved

Objective
New Completion

Rig	Cum Rig Time (hrs)	Personnel Regular Hours (hrs)	Cum Personnel Total Hours (hrs)
Nabors, 414		114.50	3,629.00

Daily Contacts
WS Supervisor, Doug Smith, 780-518-6273; Completions Engineer, Kyle Metzgar, 403-971-8424; Sr Res Engineer, Kim Clarke, 403-540-9081; WS Foreman, Myles Hahn, 780-402-0500; WS Superintendent, Derrick Cove, 780-831-1314

Report Start Date	Report End Date	Rig Time (hrs)	P(tub) (kPa)	P (cas) (kPa)	Weather	Temperature (°C)	Lease Condition
3/15/2013 06:00	3/16/2013 06:00				Clear	-34	Ice

Last 24hr Summary
Moved Nabors service rig from NW to location. Spotted rig on matting and readied to be stood.

24hr Forecast
Stand and secure rig. Rig in accumulator and stump test BOPs. Spot/rig in catwalk. Load tubing onto racks.

TIME LOG

Start Time	Dur (hrs)	Time P-T-X	Operation
06:00	1.00	P	Monitor wellbore.
07:00	6.00	P	Nabors rig crew traveled from CPC Base camp to NW. Continued to finish installing derrick onto service rig and ready for move. Moved Service rig to location (very slow - chains needed - towed up 6.5km hill). Off loaded 2 8 x 40 mats and 2 Hodgsons light towers. Moved 3 Pheonix light towers to side of location ready to load and haul out. Laid down lease liner and spotted 2 8x40 rig mats on top. Off loaded Mud can, profile nipples, 69MPa x 35Mpa X-over spool and scraper. Off loaded Mirror lake tubing spool and Smith bridge plugs on side of location.
13:00	1.00	P	Rig arrived on location. Reviewed and discussed CPC PJHA #031513 with all crew members regarding rig in of service rig and all associated hazards. Reviewed ERP plan and emergency procedures. Discussed super light hole expectations of crew members. Checked 2 new rig hands training certificates. Provided hands with CPC Arctic orientation and Sahtu Cultural Awareness.
14:00	6.00	P	Spotted junk box. Thawed and heated rig tank. Backed rig onto matting. Plugged hydraulic hose ends going to brand new winch line that blew a seal in NW. Kicked in hydraulics and levelled rig on jacks. Pulled all drill line off carrier that was not spooled back onto main drum yet. Secured blocks in derrick. Performed a level 2 inspection of all overhead equipment. Stood derrick but did not scope up. Rigged drill line onto dead line anchor and secured. Spooled drill line back onto main drum. Rig crew was close to being houred out (13 hours work time + 1 hour travel = 14 hours max for Nabors). Not enough time was left to finish scoping derrick up and secure. Laid rig back over and secured for the night. Note: Nabors service rig was fresh out of a free standing retrofit and this is the first time the rig has been stood and worked in the field. All crew members have never worked on this rig before and this slowed rig in time considerably. Loaded 3 Pheonix light towers onto trucks to be back hauled to GP.
20:00	10.00	P	Monitor Wellbore.

FLUID SUMMARY

Fluid	To lease (m³)	From lease (m³)	To well (m³)	From well (m³)	Left to recover (m³)
FRESH WATER	3.00	0.00			3.49

CUMULATIVE JOB FLARED GAS BY ZONE

Zone	Volume Gas Total (E3m³)

PERFORATIONS

Date	Zone	Top (mKB)	Btm (mKB)	Shot Dens (shots/m)	Current Status
3/2/2013 03:00	Basal Lower Canol, Origi...	1,769.00	1,770.00	20.0	Suspended
3/3/2013 16:00	Upper Lower Canol, Origi...	1,692.00	1,693.00	20.0	Suspended
3/3/2013 23:59	Middle Lower Canol, Origi...	1,727.00	1,728.00	20.0	Suspended

ConocoPhillips Canada

Daily Morning Report
COPRC LOON CREEK O-06 65-10 127-00

Report #: 21
Report Date: 3/14/2013
Final Job Status: SUSPENDED
Final Report? Yes

Job Cat: COMPLETIONS Job Typ: INITIAL COMPLETION Sub Typ:

District	API / UWI	License No.	KB-Ground Distance (m)	KB-Casing Flange Distance (m)
NEW VENTURES	300/O-06 6510 127000	470	5.20	4.87

JOB INFORMATION

Actual Start Date	End Date	Abandon Date	MaxWell Job Number	Responsible Grp 1
2/22/2013 08:00	3/25/2013 22:30		JOB01@2006	coved

Objective
New Completion

Rig	Cum Rig Time (hrs)	Personnel Regular Hours (hrs)	Cum Personnel Total Hours (hrs)
Nabors, 414		78.00	3,514.50

Daily Contacts
Completions Engineer, Kyle Metzgar, 403-971-8424; Sr Res Engineer, Kim Clarke, 403-540-9081; WS Superintendent, Derrick Cove, 780-831-1314; WS Foreman, Myles Hahn, 780-402-0500

Report Start Date	Report End Date	Rig Time (hrs)	P(tub) (kPa)	P (cas) (kPa)	Weather	Temperature (°C)	Lease Condition
3/14/2013 06:00	3/15/2013 06:00				Clear	-39	Ice

Last 24hr Summary
Fired boiler. Nabors rig + derrick arrived in NW. Offloaded rig and pinned derrick back onto carrier in Hodgsons yard NW.

24hr Forecast
Finish installing derrick onto carrier. Drive rig to site and rig in.

TIME LOG

Start Time	Dur (hrs)	Time P-T-X	Operation
06:00	1.50	P	Monitor Wellbore.
07:30	0.50	P	Held a daily safety and operations meeting with Nabors Personnel. Reviewed and discussed CPC PJHA #745965 regarding daily activities and all associated hazards. Discussed extreme cold weather (-40°c) and set the maximum allowable time for hands to be working outside at 30 minutes with a mandatory 10 minute warm up after. Reviewed ERP plan and emergency procedures.
08:00	7.00	P	Performed a walk around inspection of equipment. Shoveled off walkways and entrances to equipment. Heated boiler shack and readied for water. Filled boiler with water. Fired boiler and made a head of steam. Heated water tank. Nabors rig arrived in NW. Loaded Nabors truck with tools needed to install derrick. Banked boiler. 14:45 Nabors crew left location to offload rig and install derrick in Hodgsons yard NW.
15:00	4.50	P	Rigged out 2 Phoenix light towers and readied them for transport. Monitored wellbore. Nabors rig crew pinned derrick back onto service rig carrier in Hodgsons yard NW. 19:30 Rig crew travelled back to CPC Base camp. More work is needed to be done on service rig before it is ready to travel to location. Crew will be in Hodgsons yard at 07:30 tomorrow to continue with this and hoping to arrive on location before 12:00 with rig.
19:30	10.50	P	Monitor Wellbore.

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	3.49

CUMULATIVE JOB FLARED GAS BY ZONE

Zone	Volume Gas Total (E3m³)

PERFORATIONS

Date	Zone	Top (mKB)	Btm (mKB)	Shot Dens (shots/m)	Current Status
3/2/2013 03:00	Basal Lower Canol, Origi...	1,769.00	1,770.00	20.0	Suspended
3/3/2013 16:00	Upper Lower Canol, Origi...	1,692.00	1,693.00	20.0	Suspended
3/3/2013 23:59	Middle Lower Canol, Origi...	1,727.00	1,728.00	20.0	Suspended

ConocoPhillips Canada

Daily Morning Report
COPRC LOON CREEK O-06 65-10 127-00

Report #: 23
Report Date: 3/16/2013
Final Job Status: SUSPENDED
Final Report? Yes

Job Cat: COMPLETIONS Job Typ: INITIAL COMPLETION Sub Typ:

District	API / UWI	License No.	KB-Ground Distance (m)	KB-Casing Flange Distance (m)
NEW VENTURES	300/O-06 6510 127000	470	5.20	4.87

JOB INFORMATION

Actual Start Date	End Date	Abandon Date	MaxWell Job Number	Responsible Grp 1
2/22/2013 08:00	3/25/2013 22:30		JOB01@2006	coved

Objective
New Completion

Rig	Cum Rig Time (hrs)	Personnel Regular Hours (hrs)	Cum Personnel Total Hours (hrs)
Nabors, 414		160.50	3,789.50

Daily Contacts
WS Superintendent, Derrick Cove, 780-831-1314; Completions Engineer, Kyle Metzgar, 403-971-8424; WS Foreman, Myles Hahn, 780-402-0500; Sr Res Engineer, Kim Clarke, 403-540-9081; WS Supervisor, Doug Smith, 780-518-6273

Report Start Date	Report End Date	Rig Time (hrs)	P(tub) (kPa)	P (cas) (kPa)	Weather	Temperature (°C)	Lease Condition
3/16/2013 06:00	3/17/2013 06:00				Clear	-34	Ice

Last 24hr Summary
Stood service rig and centered over the well. Off loaded and rigged in catwalk and pipe racks. Loaded tubing onto racks. Stump tested blinds, pipes and annular preventer.

24hr Forecast
Finish CAODC rig insp. Remove 179mm master valve. Install BOPs. Rig in work floor and equipment. RIH tubing . Start 24 hour operations.

TIME LOG

Start Time	Dur (hrs)	Time P-T-X	Operation
06:00	1.00	P	Monitor Wellbore
07:00	0.75	P	Held a daily safety and operations meeting with all personnel (CPC Safety Coach Clancy Liss in attendance). Reviewed and discussed CPC PJHA #031613 regarding daily activities and all associated hazards. Reviewed 3 recent industry alerts.
07:45	5.25	P	Performed a walk around inspection. Fired boiler and circulated steam. Rigged in accumulator lines to BOPs. Stood service rig. Centered rig over well and secured. Off loaded 20.0m³ of fresh water into rig tank. Catwalk arrived on location with no pipe racks. Spotted catwalk. Hodgson's trucking said that there was no pipe racks in Nabors yard NW. I spoke with Greg Swinamer yesterday and he said that there was a catwalk and racks in yard ready to go for us. Talked with Greg again and he talked to his RM on another rig in NW and found out that the racks were still on Imperials location. Dispatched truck to go get racks.
13:00	2.00	T	Worked on fixing rig winches. One winch had a blown seal and the other had a cork screwed cable. When finished the rig had one working winch with a good cable. Poured new sandline rope socket while fixing winches. Wind picked up to 20km/h creating a -36°c wind chill slowing down opertions.
15:00	4.50	P	Off loaded casing patches. Heated BOPs with steam. 16:00 pipe racks arrived on location. Set up racks and transferred 261 Joints of 73mm tubing from the ground onto the racks. Function tested BOP system. Good test (16500 kPa remaning after 3 functions / 56 second recharge time). Stump tested blind rams: low 1400 kPa / High 34000 kPa - Both tests held solid for 10 minutes each - Good test. Installed pup joint into BOPs. Stump tested Pipe rams: low 1400 kPa / High 34000 kPa - Both tests held solid for 10 minutes each - Good test Stump tested Annular Preventer: low 1400 kPa / High 34000 kPa - Both tests held solid for 10 minutes each - Good test. Started CAODC rig inspection.
19:30	0.50	P	Banked boiler and drained lines. 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	20.00	0.00			3.49

CUMULATIVE JOB FLARED GAS BY ZONE

Zone	Volume Gas Total (E3m³)

PERFORATIONS

Date	Zone	Top (mKB)	Btm (mKB)	Shot Dens (shots/m)	Current Status
3/2/2013 03:00	Basal Lower Canol, Origi...	1,769.00	1,770.00	20.0	Suspended
3/3/2013 16:00	Upper Lower Canol, Origi...	1,692.00	1,693.00	20.0	Suspended
3/3/2013 23:59	Middle Lower Canol, Origi...	1,727.00	1,728.00	20.0	Suspended

ConocoPhillips Canada

Daily Morning Report
COPRC LOON CREEK O-06 65-10 127-00

Report #: 24
Report Date: 3/17/2013
Final Job Status: SUSPENDED
Final Report? Yes

Job Cat: COMPLETIONS Job Typ: INITIAL COMPLETION Sub Typ:

District	API / UWI	License No.	KB-Ground Distance (m)	KB-Casing Flange Distance (m)
NEW VENTURES	300/O-06 6510 127000	470	5.20	4.87

JOB INFORMATION

Actual Start Date	End Date	Abandon Date	MaxWell Job Number	Responsible Grp 1
2/22/2013 08:00	3/25/2013 22:30		JOB01@2006	coved

Objective
New Completion

Rig	Cum Rig Time (hrs)	Personnel Regular Hours (hrs)	Cum Personnel Total Hours (hrs)
Nabors, 414		241.00	4,030.50

Daily Contacts
WS Supervisor, Doug Smith, 780-518-6273; Sr Res Engineer, Kim Clarke, 403-540-9081; WS Foreman, Myles Hahn, 780-402-0500; WS Superintendent, Derrick Cove, 780-831-1314; Completions Engineer, Kyle Metzgar, 403-971-8424

Report Start Date	Report End Date	Rig Time (hrs)	P(tub) (kPa)	P (cas) (kPa)	Weather	Temperature (°C)	Lease Condition
3/17/2013 06:00	3/18/2013 06:00			5,200	Slight Overcast	-24	Ice

Last 24hr Summary
Removed 179mm master valve and installed BOPs. Tested ring seal and rigged in work floor. Finished CAODC rig inspection. RIH/w CW retrieving skirt for 177.8 mm BP. c/w grapple installed. RIH/w 145 jts 73 mm tbg.

24hr Forecast
RIH to BP, Circulate onto BP, Unset and POOH to mast. Lay out BP, RIH/w gutless retrieving skirt, Clean out to top of Second BP. POOH to mast.

TIME LOG

Start Time	Dur (hrs)	Time P-T-X	Operation
06:00	0.50	P	Monitor wellbore
06:30	0.75	P	Held a daily safety and operations meeting with all personnel. Reviewed and discussed CPC PJHA #031713 regarding daily activities and all associated hazards. Reviewed EPR plan and emergency procedures.
07:15	2.50	P	Performed a walk around inspection. Fired boiler and circulated steam. Installed bails and 73mm elevators onto blocks. 08:15 Unlocked wellhead and removed chain. Checked pressure: SICP: 5200 kPa. Rigged line onto the casing and bled off to the rig tank. Bled off immediately to 0 kPa and recovered TSTM amount of fluid. 15-20km/hr winds created a -33°c wind chill slowing operations.
09:45	4.25	P	Unbolted and removed wellhead top section. Landed bull plugged tubing hanger. Used Hydraulic wrench to unbolt 179mm master valve. Hoisted and removed 179mm master valve from well. Installed 69MPa BX 156 x 35 MPA R-46 crossover spool. Hoisted 35MPa class 3 BOPs and installed onto well. Torqued all connections (hydraulic wrench used for BX156 connection). Removed all box end protectors off pipe.
14:00	4.50	P	Rigged in work floor and related equipment. Tarped in BOPs. Ran pup joint into tubing hanger. Closed pipe rams. Pressure tested pipe rams and wellhead ring seals to a low of 1400 kPa and a high of 34000 kPa. Both tests held solid for 10 minutes each. Tallied top tier of pipe.
18:30	1.50	P	Crew shift change. Reviewed and discussed CPC PJHA #170313 with all personnel. Identified potential hazards associated with "RIH/w tbg, Circulating, Unset BP operations". All safety concerns were noted and documented in CPC PJHA. Dicussed ERP plan and emergency procedures in case of incident. Performed Sahtu Culture awareness training and Checked all valid tickets. Function tested Crown saver, Ram saver and Checked all ESD's. Performed CAODC service rig inspection with Night Shift Rig manager.
20:00	2.00	P	Repaired Derrick lights, Rigged in steam line to wellhead to inject steam into fluid being displaced out of wellbore. Assembled BHA.
22:00	8.00	P	Tallied, Drifted and RIH/w the following BHA. 73.0 mm tbg Torqued to 1600 ft/lb. 1- 177.8 mm x 73 mm Smith CW retrieving skirt c/w grapple installed. Visually inspected. 1- 73 mm x 2.45m, 9.67 kg/m, J-55, EUE, Tbg pup. 1- 73 mm Smith "XN" profile nipple c/w 58.75 mm "X" profile and 56.0 mm NOGO 1- 73 mm, 9.67 kg/m, J-55, EUE, tbg joint 1- 73 mm Smith "X" profile nipple c/w 58.75 mm "X" profile. 145 - 73 mm, 9.67 kg/m, J-55, EUE tbg joints to surface. Slow going due to Cold weather and wind, new crew to rig that has not worked together before.

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	3.49

CUMULATIVE JOB FLARED GAS BY ZONE

Zone	Volume Gas Total (E3m³)

PERFORATIONS

Date	Zone	Top (mKB)	Btm (mKB)	Shot Dens (shots/m)	Current Status
3/2/2013 03:00	Basal Lower Canol, Origi...	1,769.00	1,770.00	20.0	Suspended
3/3/2013 16:00	Upper Lower Canol, Origi...	1,692.00	1,693.00	20.0	Suspended
3/3/2013 23:59	Middle Lower Canol, Origi...	1,727.00	1,728.00	20.0	Suspended

ConocoPhillips Canada

Daily Morning Report
COPRC LOON CREEK O-06 65-10 127-00

Report #: 25
Report Date: 3/18/2013
Final Job Status: SUSPENDED
Final Report? Yes

Job Cat: COMPLETIONS Job Typ: INITIAL COMPLETION Sub Typ:

District	API / UWI	License No.	KB-Ground Distance (m)	KB-Casing Flange Distance (m)
NEW VENTURES	300/O-06 6510 127000	470	5.20	4.87

JOB INFORMATION

Actual Start Date	End Date	Abandon Date	MaxWell Job Number	Responsible Grp 1
2/22/2013 08:00	3/25/2013 22:30		JOB01@2006	coved

Objective
New Completion

Rig	Cum Rig Time (hrs)	Personnel Regular Hours (hrs)	Cum Personnel Total Hours (hrs)
Nabors, 414		241.00	4,271.50

Daily Contacts
Completions Engineer, Kyle Metzgar, 403-971-8424; Sr Res Engineer, Kim Clarke, 403-540-9081; WS Supervisor, Doug Smith, 780-518-6273; WS Foreman, Myles Hahn, 780-402-0500; WS Superintendent, Derrick Cove, 780-831-1314

Report Start Date	Report End Date	Rig Time (hrs)	P(tub) (kPa)	P (cas) (kPa)	Weather	Temperature (°C)	Lease Condition
3/18/2013 06:00	3/19/2013 06:00			0	Slight Overcast	-14	Ice

Last 24hr Summary
Latched onto and unset bridge plug at 1688.29mKB. Pulled out of the hole with BP and downhole recorders. RIH/w with Gutless Retrieving skirt, Circulated sand off of BP @ 1717.79 mKB. POOH/w Tbg to mast.

24hr Forecast
RIH to BP, Circulate down onto BP, Unset and POOH to mast, RIH/w Retrieving skirt c/w grapple. Circulate onto, Unset BP. POOH to mast. Recover the "Middle" Lower Canol recorders to surface.

TIME LOG

Start Time	Dur (hrs)	Time P-T-X	Operation
06:00	0.50	P	Continued to run in hole tubing off pipe racks.
06:30	0.75	P	Held a daily safety and operations meeting with all day shift personnel. Reviewed and discussed CPC PJHA #031813 regarding daily activities and all associated hazards. Performed cross shift with night crew.
07:15	2.25	P	Continued to run in hole 73mm tubing off pipe racks with a Smith CW retrieving skirt on bottom. 08:45 174 Joints total in hole. Held a BOP drill. Crew secured well in 50 seconds. Good drill. CPC Safety coach Clancy Liss on location. Held a man down drill. Two rig crew members donned SCBAs and rescued a sign (mock victim) from wellhead area. Good drill.
09:30	1.50	P	Readied packoff (changed rubber to 73mm) and second pump line. Installed packoff.
11:00	2.75	P	Broke reverse circulation with a rate of 0.5m³/min at 2000 kPa. Ran down joint 176 and tagged top of bridge plug at 1688.79mKB (BP was wireline set with top at 1688.29mKB / -0.5m tubing tally correction). Set down 1000 daN on BP and reverse circulated 1.5 times tubing volume with returns at tank clean throughout. Shut down pump. Set down 4500daN on BP and equalized. Set down down 7000daN on BP. Pulled up and did not see any over pull. Ran down 0.5m past where BP was set without any tag. Casing now on vacuum. 12:25 BP is unset. Pulled tag joint and removed tubing circulating line. Pulled 2 joints and removed packoff.
13:45	4.00	P	Rigged in escape buggy and readied monkey board for standing pipe. Pulled out of the hole standing 174 joints in the derrick. Performed hole fill when pulling by pumping metal displacement every 25 joints (total of 2.0m³ pumped). Laid down BHA with BP and recorders. Recorders were broken off bottom of BP with Lonkar hand present and went straight into Lonkars possession. Downloaded recorder data. Data Forwarded to Al Kassam and Derrick Cove by CPC Onsite rep Doug Smith Top Gauge serial # 90052-LKR Bottom Gauge Serial # 90053-LKR Gauges off Bottom @ Mar.18/13 @ 12:25 Battery off gauges @ Mar.18/13 @ 18:13
17:45	0.75	P	Ran in hole with the following BHA: 1- 177.8 mm x 73 mm Smith CW retrieving skirt c/w NO grapple installed. Visually inspected. 1- 73 mm x 2.45m, 9.67 kg/m, J-55, EUE, Tbg pup. 1- 73 mm Smith "XN" profile nipple c/w 58.75 mm "X" profile and 56.0 mm NOGO 1- 73 mm, 9.67 kg/m, J-55, EUE, tbg joint 1- 73 mm Smith "X" profile nipple c/w 58.75 mm "X" profile. Followed BHA in hole with 73mm tubing from the derrick.
18:30	0.50	P	Crew shift change. Reviewed and discussed CPC PJHA #180313 with all personnel. Identified potential hazards associated with "RIH/w tbg, Circulating, POOH/w tbg". All safety concerns were noted and documented in CPC PJHA. Dicussed ERP plan and emergency procedures in case of incident. Checked all valid tickets. Function tested Crown saver, Ram saver and Checked all ESD's.
19:00	1.00	P	Conducted Safety meeting with Safety Coach Clancey Liss. Performed and documnented Man Down drill with all personnel on location. Good crew response.
20:00	2.00	T	Continue to RIH/w tbg. Hydraulic line under carrier rubbed through and started misting onto carrier, Operations suspended to repair line. Mist was contained to carrier and Drip tray. Soaker pads utilized to contain drippings. Remove and repair hydraulic line.
22:00	3.00	P	Continue to RIH/w tbg to sand top @ 1714.79 mKB. Recovered 2.2 m3 to tank While RIH.

ConocoPhillips Canada

Daily Morning Report
COPRC LOON CREEK O-06 65-10 127-00

Report #: 25
Report Date: 3/18/2013
Final Job Status: SUSPENDED
Final Report? Yes

Job Cat: COMPLETIONS Job Typ: INITIAL COMPLETION Sub Typ:

TIME LOG

Start Time	Dur (hrs)	Time P-T-X	Operation
01:00	2.50	P	Rigged in Circulating equipment. Tagged sand cap @ 1714.29 mKB. Achieved reverse circulation with a rate of 0.5m³/min at 2000 kPa. Lowered joint # 179 and tagged top of sand cap at 1714.29 mKB. (-0.5m tubing tally correction). Circulated down to top of BP @ 1717.79 mKB. Set down 1000 daN on BP. Marked tbg and reciprocated several times to top of BP. Same tag. Reverse circulated 2 times tubing volume untill returns were clean. Recovered sand and trace oil @ tank.
03:30	0.50	P	Rigged out circulating equipment. Laid down 3 joints 73.0 mm tbg.
04:00	2.00	P	POOH and stood in mast 100 jts 73.0 mm tbg. Filled casing with 1.2 m3 While hoisting tubulars to mast.

FLUID SUMMARY

Fluid	To lease (m³)	From lease (m³)	To well (m³)	From well (m³)	Left to recover (m³)
FRESH WATER	0.05	0.00			3.49

CUMULATIVE JOB FLARED GAS BY ZONE

Zone	Volume Gas Total (E3m³)

PERFORATIONS

Date	Zone	Top (mKB)	Btm (mKB)	Shot Dens (shots/m)	Current Status
3/2/2013 03:00	Basal Lower Canol, Origi...	1,769.00	1,770.00	20.0	Suspended
3/3/2013 16:00	Upper Lower Canol, Origi...	1,692.00	1,693.00	20.0	Suspended
3/3/2013 23:59	Middle Lower Canol, Origi...	1,727.00	1,728.00	20.0	Suspended

ConocoPhillips Canada

Daily Morning Report
COPRC LOON CREEK O-06 65-10 127-00

Report #: 26
Report Date: 3/19/2013
Final Job Status: SUSPENDED
Final Report? Yes

Job Cat: COMPLETIONS Job Typ: INITIAL COMPLETION Sub Typ:

District	API / UWI	License No.	KB-Ground Distance (m)	KB-Casing Flange Distance (m)
NEW VENTURES	300/O-06 6510 127000	470	5.20	4.87

JOB INFORMATION

Actual Start Date	End Date	Abandon Date	MaxWell Job Number	Responsible Grp 1
2/22/2013 08:00	3/25/2013 22:30		JOB01@2006	coved

Objective
New Completion

Rig	Cum Rig Time (hrs)	Personnel Regular Hours (hrs)	Cum Personnel Total Hours (hrs)
Nabors, 414		254.00	4,525.50

Daily Contacts
WS Superintendent, Derrick Cove, 780-831-1314; WS Supervisor, Doug Smith, 780-518-6273; WS Foreman, Myles Hahn, 780-402-0500; Sr Res Engineer, Kim Clarke, 403-540-9081; Completions Engineer, Kyle Metzgar, 403-971-8424

Report Start Date	Report End Date	Rig Time (hrs)	P(tub) (kPa)	P (cas) (kPa)	Weather	Temperature (°C)	Lease Condition
3/19/2013 06:00	3/20/2013 06:00			0	Clear	-30	Ice

Last 24hr Summary
Latched onto and unset BP at 1717.79mKB. Pulled out of hole/w tubing and BP. Laid down BP, RIH/w retrieving skirt for BP. Circulated onto and unset BP c/w recorders @ 1722.29 mKB. BP unset @ 03:10. POOH and stood in mast 75 jts 73.0 mm tbg

24hr Forecast
POOH/w remainder of tbg string. Down load recorder data. RIH/w gutless retrieving skirt. Clean out to top of BP @ 1760.59. POOH/w tbg. RIH with Retrieving skirt. Circulate onto and unset BP @ 1760.59. POOH/w tbg and BP.

TIME LOG

Start Time	Dur (hrs)	Time P-T-X	Operation
06:00	0.50	P	Continued to pull out of hole 73mm tubing.
06:30	0.50	P	Crew shift change. Held a daily safety and operations meeting with all personnel. Reviewed and discussed CPC PJHA #031913 regarding daily activities and all associated hazards. Performed cross shift. Nabors 6th hand arrived this morning. Checked training certificates. Provided hand with CPC Arctic orientation and CPC general orientation. All other tickets were valid.
07:00	1.50	P	Functioned tested crown saver and E-kills. Continued to pull out of the hole 73mm tubing standing it in the derrick. Stood 176 joints of tubing. Removed cleanout skirt off bottom of BHA.
08:30	3.75	P	Ran in hole with the following BHA: 1- 177.8 mm x 73 mm Smith CW retrieving skirt c/w grapple installed. Visually inspected. 1- 73 mm x 2.45m, 9.67 kg/m, J-55, EUE, Tbg pup. 1- 73 mm Smith "XN" profile nipple c/w 58.75 mm "X" profile and 56.0 mm NOGO 1- 73 mm, 9.67 kg/m, J-55, EUE, tbg joint 1- 73 mm Smith "X" profile nipple c/w 58.75 mm "X" profile. Followed BHA in hole with 177 joints of 73mm tubing out of the derrick.
12:15	2.25	P	Rigged in packoff and circulating equipment. Broke reverse circulation with a rate of 0.5m³/min at 2000 kPa. Circulated down joint 179 and set down 1000daN on top of Bridge plug at 1717.79mKB. Circulated 1.5 times tubing volume. Returns were clean thoughout circulation. Slowed pump rate to 250L/min. Set down weight on Bridge plug. Equalization was seen after 4000daN was set down. Set down total of 7000daN and pulled up to 15,000 daN unsetting BP (static string weight = 13500daN). Ran down 1.0m past setting depth to confirm BP was unset. Let elements relax for 20 minutes after unsetting.
14:30	3.25	P	Started to pull out of the hole and BP was pulling 2-3000daN over string weight skidding up hole. Tried to go down and took weight immediately. Pull out of hole (skidding up) and hung up in casing collar at 1685.5mKB. Worked string with no luck. Held PJHA regarding rig in of circulating equipment at monkey board. Rigged in tubing circulating equipment. Broke reverse circulation and worked string until BP pulled through casing collar. Continued to pullout with BP skidding up hole. Caught in second casing collar at 1672.0mKB. Broke reverse circulation and worked string (pulled up to 30000daN max). After 45 minutes of working string BP came free. Pulled 2 more joints and did not see any over pull.
17:45	0.75	P	Pulled out of the hole 73mm tubing standing it in the derrick.
18:30	0.50	P	Crew shift change. Reviewed and discussed CPC PJHA #190313 with all personnel. Identified potential hazards associated with "POOH/w tbg, RIH" operations. All safety concerns were noted and documented in CPC PJHA. Dicussed ERP plan and emergency procedures in case of incident. Checked all valid tickets. Function tested Crown saver, Ram saver and Checked all ESD's.
19:00	2.50	P	POOH and stood in mast 172 jts 73.0 mm tbg. Laid down BP. All elements recovered at surface. No major scarring on gauge ring.
21:30	2.50	P	Tallied drifted and RIH/w the following BHA.. 1- 177.8 mm x 73 mm Smith CW retrieving skirt c/w grapple installed. Visually inspected. 1- 73 mm x 2.45m, 9.67 kg/m, J-55, EUE, Tbg pup. 1- 73 mm Smith "XN" profile nipple c/w 58.75 mm "X" profile and 56.0 mm NOGO 1- 73 mm, 9.67 kg/m, J-55, EUE, tbg joint 1- 73 mm Smith "X" profile nipple c/w 58.75 mm "X" profile. 172 joints of 73mm tubing out of mast. Picked up 8 jts off of catwalk.

ConocoPhillips Canada

Daily Morning Report
COPRC LOON CREEK O-06 65-10 127-00

Report #: 26
Report Date: 3/19/2013
Final Job Status: SUSPENDED
Final Report? Yes

Job Cat: COMPLETIONS Job Typ: INITIAL COMPLETION Sub Typ:

TIME LOG

Start Time	Dur (hrs)	Time P-T-X	Operation
00:00	3.50	P	Rigged in Circulating equipment. Achieved reverse circulation @ 0.50m³/min @ 3000 kPa. Lowered joint # 180 and tagged top of BP @ 1722.29 mKB. (-0.5m tubing tally correction). Circulated down on top of BP. Set down 1000 daN on BP. Reciprocated to top of BP several times. Same tag. Reverse circulated 1.5 times tbg vol at 500 L/min, Decreased pump rate to 250 L/min. Set down 4000 daN and opened equalization port. Equalized @ 03:05. Pulled up and unset BP, pulled 500 daN over string, Unset BP @ 03:10. Lowered tbg 1.0 m down past where BP was set. Picked up 1.0 m above where BP was set. Continued to Circulate @ 250 L/min. Allowed 30 min for elements to relax. Lowered tbg down 1.0 m past where BP was set. Pulled tag joint above packoff. Shut down pump and laid down tag jt.
03:30	1.50	P	Pulled and laid down 4 jts 73.0 mm tbg. Pulled past upper perfs with no apparent restrictions. Rigged out and laid down pack off.
05:00	1.00	P	POOH and stood in mast 75 jts 73.0 mm tbg. Filled casing with 1.0 m3 while hoisting to mast.

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	3.49

CUMULATIVE JOB FLARED GAS BY ZONE

Zone	Volume Gas Total (E3m³)

PERFORATIONS

Date	Zone	Top (mKB)	Btm (mKB)	Shot Dens (shots/m)	Current Status
3/2/2013 03:00	Basal Lower Canol, Origi...	1,769.00	1,770.00	20.0	Suspended
3/3/2013 16:00	Upper Lower Canol, Origi...	1,692.00	1,693.00	20.0	Suspended
3/3/2013 23:59	Middle Lower Canol, Origi...	1,727.00	1,728.00	20.0	Suspended

ConocoPhillips Canada

Daily Morning Report
COPRC LOON CREEK O-06 65-10 127-00

Report #: 27
Report Date: 3/20/2013
Final Job Status: SUSPENDED
Final Report? Yes

Job Cat: COMPLETIONS Job Typ: INITIAL COMPLETION Sub Typ:

District	API / UWI	License No.	KB-Ground Distance (m)	KB-Casing Flange Distance (m)
NEW VENTURES	300/O-06 6510 127000	470	5.20	4.87

JOB INFORMATION

Actual Start Date	End Date	Abandon Date	MaxWell Job Number	Responsible Grp 1
2/22/2013 08:00	3/25/2013 22:30		JOB01@2006	coved

Objective
New Completion

Rig	Cum Rig Time (hrs)	Personnel Regular Hours (hrs)	Cum Personnel Total Hours (hrs)
Nabors, 414		266.00	4,791.50

Daily Contacts
WS Foreman, Myles Hahn, 780-402-0500; WS Supervisor, Doug Smith, 780-518-6273; Completions Engineer, Kyle Metzger, 403-971-8424; Sr Res Engineer, Kim Clarke, 403-540-9081; WS Superintendent, Derrick Cove, 780-831-1314

Report Start Date	Report End Date	Rig Time (hrs)	P(tub) (kPa)	P (cas) (kPa)	Weather	Temperature (°C)	Lease Condition
3/20/2013 06:00	3/21/2013 06:00			0	Clear	-30	Ice

Last 24hr Summary
Pulled out of hole tubing with BP and recorders on bottom. Retrieved recorders and downloaded data. Ran in hole with a gutless retrieving skirt. Circulated sand off of BP at 1764.62mKB (BP was tagged 4.03m deeper than expected). Pulled out of the hole standing pipe in the derrick. RIH to top of BP @ 1764.62 mKB. Circulated onto and unset BP. POOH and stood in mast 100 jts 73.0 mm tbg.

24hr Forecast
POOH/w remainder of tbg string. Lay down BP. RIH/w retrieving skirt c/w Grapple, Circulate onto BP, Unset and POOH to mast. Down load recorder data. RIH/w Bit and scraper to PBTD. Reciprocate scraper over all Canol intervals, Circulate, POOH to racks.

TIME LOG

Start Time	Dur (hrs)	Time P-T-X	Operation
06:00	0.50	P	Continued to pull out of the hole tubing.
06:30	0.50	P	Crew shift change. Held a daily safety and operations meeting with all personnel. Reviewed and discussed CPC PJHA #032013 regarding daily activities and all associated hazards. Reviewed ERP plan and emergency procedures. Performed cross shift.
07:00	2.00	P	Functioned E-kills and crown saver. Continued to pull out of the hole with 73mm tubing c/w bridge plug and recorders on bottom. Stood 175 joints in the derrick (performed hole fill by pumping metal displacement when pulling). Broke pup joint off bottom of BP with Lonkar hand present. Recorders were removed and went into Lonkar's possesion immediately. Downloaded recorder data. All data emailed to Al Kassam and Derrick Cove.
09:00	2.00	P	Slip and cut drill line
11:00	3.50	P	Ran in hole with the following BHA: 1- 177.8 mm x 73 mm Smith CW retrieving skirt c/w NO grapple installed. Visually inspected. 1- 73 mm x 2.45m, 9.67 kg/m, J-55, EUE, Tbg pup. 1- 73 mm Smith "XN" profile nipple c/w 58.75 mm "X" profile and 56.0 mm NOGO 1- 73 mm, 9.67 kg/m, J-55, EUE, tbg joint 1- 73 mm Smith "X" profile nipple c/w 58.75 mm "X" profile. Followed BHA in hole with 175 joints of 73mm tubing from the derrick. Picked up and ran joints 176-182 off catwalk.
14:30	3.00	P	Rigged in pack off and tubing circulating equipment. Tagged sand top at 1761.37mKB (sand top was tagged +/- 4.0m deeper than expected). Broke reverse circulation with a rate of 0.5m³/min at 2000 kPa. Circulated down and tagged top of bridge plug at 1764.62mKB (BP top should have been at 1760.59 mKB - 4.03m deeper than expected putting it right on top of BP top at 1766.29mKB). Re-tagged bridge plug 6 times in the same spot to confirm tag depth while circulating. Good amount of sand was seen in returns at rig tank. After sand cleaned up another 2 tubing volumes were circulated with clean returns throughout. Shut down pump and rigged off tubing circulating equipment. Pulled and laid down 2 joints. Rigged out packoff.
17:30	1.00	P	Pulled out of hole 73mm tubing standing it in the derrick.
18:30	0.50	P	Crew shift change. Reviewed and discussed CPC PJHA #200313 with all personnel. Identified potential hazards associated with "POOH/w tbg, RIH" operations. All safety concerns were noted and documented in CPC PJHA. Dicussed ERP plan and emergency procedures in case of incident. Checked all valid tickets. Function tested Crown saver, Ram saver and Checked all ESD's.
19:00	2.50	P	POOH and stood in mast 182 jts 73.0 mm tbg
21:30	3.50	P	Tallied drifted and RIH/w the following BHA. 1- 177.8 mm x 73 mm Smith CW retrieving skirt c/w grapple installed. Visually inspected. 1- 73 mm x 2.45m, 9.67 kg/m, J-55, EUE, Tbg pup. 1- 73 mm Smith "XN" profile nipple c/w 58.75 mm "X" profile and 56.0 mm NOGO 1- 73 mm, 9.67 kg/m, J-55, EUE, tbg joint 1- 73 mm Smith "X" profile nipple c/w 58.75 mm "X" profile. 182 joints of 73mm tubing out of mast. Picked up 2 jts off of catwalk.

ConocoPhillips Canada

Daily Morning Report
COPRC LOON CREEK O-06 65-10 127-00

Report #: 27
Report Date: 3/20/2013
Final Job Status: SUSPENDED
Final Report? Yes

Job Cat: COMPLETIONS Job Typ: INITIAL COMPLETION Sub Typ:

TIME LOG

Start Time	Dur (hrs)	Time P-T-X	Operation
01:00	3.00	P	Rigged in Circulating equipment. Achieved reverse circulation @ 0.50m³/min @ 3000 kPa. Lowered joint # 184 and tagged top of BP @ 1764.62 mKB. (-0.5m tubing tally correction). Circulated down on top of BP. Set down 1000 daN on BP. Reciprocated to top of BP several times. Same tag. Reverse circulated 1.5 times tbg vol at 500 L/min, Decreased pump rate to 250 L/min. Set down 7000 daN and opened equalization port. No shift of Equalization sleeve noted. Pulled up and unset BP, pulled 500 daN over string. Continued to Circulate @ 250 L/min. Allowed 30 min for elements to relax. Pulled tag joint above pack off. Shut down pump and laid down tag jt. String would not go down. Pulled 8 jts sideways to with valve in position untill past perfs. Rigged out Pack off. 9 joints laid down.
04:00	2.00	P	POOH and stood in mast 100 jts 73.0 mm tbg. 10th joint from bottom hung up momentarily, pulled 3000 daN over string but pulled free before string was stopped. Continued to hoist tubulars to mast. Filled casing with 2.0 m3 while hoisting to mast. No fluid losses to formation during circulating activities.

FLUID SUMMARY

Fluid	To lease (m³)	From lease (m³)	To well (m³)	From well (m³)	Left to recover (m³)
FRESH WATER	0.05	0.00			3.49

CUMULATIVE JOB FLARED GAS BY ZONE

Zone	Volume Gas Total (E3m³)

PERFORATIONS

Date	Zone	Top (mKB)	Btm (mKB)	Shot Dens (shots/m)	Current Status
3/2/2013 03:00	Basal Lower Canol, Origi...	1,769.00	1,770.00	20.0	Suspended
3/3/2013 16:00	Upper Lower Canol, Origi...	1,692.00	1,693.00	20.0	Suspended
3/3/2013 23:59	Middle Lower Canol, Origi...	1,727.00	1,728.00	20.0	Suspended

ConocoPhillips Canada

Daily Morning Report
COPRC LOON CREEK O-06 65-10 127-00

Report #: 28
Report Date: 3/21/2013
Final Job Status: SUSPENDED
Final Report? Yes

Job Cat: COMPLETIONS Job Typ: INITIAL COMPLETION Sub Typ:

District	API / UWI	License No.	KB-Ground Distance (m)	KB-Casing Flange Distance (m)
NEW VENTURES	300/O-06 6510 127000	470	5.20	4.87

JOB INFORMATION

Actual Start Date	End Date	Abandon Date	MaxWell Job Number	Responsible Grp 1
2/22/2013 08:00	3/25/2013 22:30		JOB01@2006	coved

Objective
New Completion

Rig	Cum Rig Time (hrs)	Personnel Regular Hours (hrs)	Cum Personnel Total Hours (hrs)
Nabors, 414		266.00	5,057.50

Daily Contacts
WS Supervisor, Doug Smith, 780-518-6273; Completions Engineer, Kyle Metzgar, 403-971-8424; WS Superintendent, Derrick Cove, 780-831-1314; WS Foreman, Myles Hahn, 780-402-0500; Sr Res Engineer, Kim Clarke, 403-540-9081

Report Start Date	Report End Date	Rig Time (hrs)	P(tub) (kPa)	P (cas) (kPa)	Weather	Temperature (°C)	Lease Condition
3/21/2013 06:00	3/22/2013 06:00			0	Clear	-30	Ice

Last 24hr Summary
Retrieved BP to surface on bottom of tubing. RIH and circulated onto top of BP at 1766.29mKB. Unset BP. POOH tubing c/w bridge plug and recorders on bottom. Ran in hole with a bit and 177.8mm casing scraper on 73mm tubing to 1792.5 mKB. Reciprocated scraper 5 times over all Canol intervals. Reverse circulated with Fresh water containing TDS<4000 ppm up to clean up wellbore. POOH and stood in mast 63 jts 73.0 mm tbg. POOH sideways with 124 jts 73.0 mm tbg. Rigged in SLB 5K E-line Equipment.

24hr Forecast
RIH/w Owen Simulation Tool. RIH/w Owen Casing patches. Set and pressure test casing patches.

TIME LOG

Start Time	Dur (hrs)	Time P-T-X	Operation
06:00	0.50	P	Continued to pull out of the hole tubing.
06:30	0.50	P	Crew shift change. Held a daily safety and operations meeting with all personnel. Reviewed and discussed CPC PJHA #032113 regarding daily activities and all associated hazards. Reviewed ERP plan and emergency procedures. Performed cross shift.
07:00	1.00	P	Functioned E-kills and crown saver. Continued to pull out of the hole with 73mm tubing. Stood 175 joints in the derrick and came out with bridge plug on bottom. Removed BP from retrieval skirt and inspected. It appears that the BP mandrel did not stroke all the way causing it to half set. Readied to run back in hole.
08:00	4.00	P	Ran in hole with the following BHA: 1- 177.8 mm x 73 mm Smith CW retrieving skirt c/w NEW grapple installed. Visually inspected. 1- 73 mm x 2.45m, 9.67 kg/m, J-55, EUE, Tbg pup. 1- 73 mm Smith "XN" profile nipple c/w 58.75 mm "X" profile and 56.0 mm NOGO 1- 73 mm, 9.67 kg/m, J-55, EUE, tbg joint 1- 73 mm Smith "X" profile nipple c/w 58.75 mm "X" profile. Followed BHA in hole with 175 joints of 73mm tubing from the derrick. Picked up and ran joints 176-182 off catwalk.
12:00	2.75	P	Rigged in packoff and tubing circulating equipment. Broke reverse circulation with a rate of 0.5m³/min at 2500 kPa. Circulated down and tagged top of bridge plug at 1766.29mKB. Re-tagged BP 3 times to confirm no hole was being made. Very small amount of sand was seen in returns at tank. Circulated another tubing volume after sand cleaned up. Reduced pump rate to 0.3m³/min and set weight down on BP. After 4000daN (12:56) was set down equalization was seen. Set a total of 7000daN onto BP and then pulled up. Pulled 2000daN over sting weight and BP unset (12:58). Shut down pump and let elements relax for 25 minutes. Ran down 0.5m past tag depth with no weight loss. Pulled out the hole slowly and laid down joints 184-175 (BP now above perforations). Rigged out packoff.
14:45	2.75	P	Pulled out of the hole standing 174 joints in the derrick. Performed hole fill by pumping metal displacement every 25 joints when pulling. Broke pup joint off bottom of BP with Lonkar hand present. Recorders were removed and went into Lonkar's possesion immediately (SN# 9672 + SN# 9579). Readied bit and scraper. Downloaded recorder data. All data emailed to Al Kassam and Derrick Cove.
17:30	1.00	P	Ran in hole with the following BHA: 1- 155.6mm (6 1/8") used bit 1- 177.8mm Casing scraper 1- 88.9mm REG x 73mm EUE crossover sub 1- 73 mm x 2.45m, 9.67 kg/m, J-55, EUE, Tbg pup. 1- 73 mm Smith "XN" profile nipple c/w 58.75 mm "X" profile and 56.0 mm NOGO 1- 73 mm, 9.67 kg/m, J-55, EUE, tbg joint 1- 73 mm Smith "X" profile nipple c/w 58.75 mm "X" profile. Followed BHA in hole with joints of 73mm tubing from the derrick.
18:30	0.50	P	Crew shift change. Reviewed and discussed CPC PJHA #210313 with all personnel. Identified potential hazards associated with "RIH/w tbg, Circulate wellbore, POOH/w tbg" operations. All safety concerns were noted and documented in CPC PJHA. Dicussed ERP plan and emergency procedures in case of incident. Checked all valid tickets. Function tested Crown saver, Ram saver and Checked all ESD's.

ConocoPhillips Canada

Daily Morning Report
COPRC LOON CREEK O-06 65-10 127-00

Report #: 28
Report Date: 3/21/2013
Final Job Status: SUSPENDED
Final Report? Yes

Job Cat: COMPLETIONS Job Typ: INITIAL COMPLETION Sub Typ:

TIME LOG

Start Time	Dur (hrs)	Time P-T-X	Operation
19:00	3.00	P	RIH/w Scraper, Reciprocated 5 times over each Interval @ 1692.0-1693.0 mKB, 1727.0-1728.0 mKB, and 1769.0-1770.0 mKB. Rotated 1/4 turn each time. No apparent obstructions noted. Lowered tbg to 1792.5 mKB.
22:00	2.00	P	Reverse circulated well over to Freshwater containing TDS<4000 ppm. Rigged out Circulating equipment.
00:00	1.50	P	POOH and stood in mast 63 jts 73.0 mm tbg.
01:30	3.50	P	POOH sideways with 124 jts 73.0 mm tbg applied storage compound and protectors on Both ends. Broke apart and Laid down BHA.
05:00	1.00	P	Started rigging in SLB 5 K E-line gear and related equipment.

FLUID SUMMARY

Fluid	To lease (m³)	From lease (m³)	To well (m³)	From well (m³)	Left to recover (m³)
FRESH WATER	0.05	0.00			3.49

CUMULATIVE JOB FLARED GAS BY ZONE

Zone	Volume Gas Total (E3m³)

PERFORATIONS

Date	Zone	Top (mKB)	Btm (mKB)	Shot Dens (shots/m)	Current Status
3/2/2013 03:00	Basal Lower Canol, Origi...	1,769.00	1,770.00	20.0	Suspended
3/3/2013 16:00	Upper Lower Canol, Origi...	1,692.00	1,693.00	20.0	Suspended
3/3/2013 23:59	Middle Lower Canol, Origi...	1,727.00	1,728.00	20.0	Suspended

ConocoPhillips Canada

Daily Morning Report
COPRC LOON CREEK O-06 65-10 127-00

Report #: 29
Report Date: 3/22/2013
Final Job Status: SUSPENDED
Final Report? Yes

Job Cat: COMPLETIONS Job Typ: INITIAL COMPLETION Sub Typ:

District	API / UWI	License No.	KB-Ground Distance (m)	KB-Casing Flange Distance (m)
NEW VENTURES	300/O-06 6510 127000	470	5.20	4.87

JOB INFORMATION

Actual Start Date	End Date	Abandon Date	MaxWell Job Number	Responsible Grp 1
2/22/2013 08:00	3/25/2013 22:30		JOB01@2006	coved

Objective
New Completion

Rig	Cum Rig Time (hrs)	Personnel Regular Hours (hrs)	Cum Personnel Total Hours (hrs)
Nabors, 414		267.00	5,324.50

Daily Contacts
Completions Engineer, Kyle Metzgar, 403-971-8424; WS Foreman, Myles Hahn, 780-402-0500; WS Supervisor, Doug Smith, 780-518-6273; Sr Res Engineer, Kim Clarke, 403-540-9081; WS Superintendent, Derrick Cove, 780-831-1314

Report Start Date	Report End Date	Rig Time (hrs)	P(tub) (kPa)	P (cas) (kPa)	Weather	Temperature (°C)	Lease Condition
3/22/2013 06:00	3/23/2013 06:00			0	Clear	-25	Ice

Last 24hr Summary
RIH to 1800mKB with Core-Lab 155.2mm casing patch simulation drift tool on wireline. RIH with 3m Core-Lab X-Span casing patch. Set patch isolating "Basal" Lower Canol perforations from 1769-1770mKB. RIH with 3m Core-Lab X-Span casing patch. Set patch isolating "Middle" Lower Canol perforations from 1727-1728mKB. RIH with 3m Core-Lab X-Span casing patch. Set patch isolating "Upper" Lower Canol perforations from 1692-1693mKB. Filled hole and pressure tested casing patches and wellbore to 17000 kPa for 15 minutes. Good test. Rig out and E-line unit. RIH/w 63 jts tbg, POOH sideways/w 63 jts 73.0 mm tbg. Removed BOP's, Installed 179.4 mm Gate Valve. Pressure test Wellhead connections to 34.5 MPa. Secured wellhead with lock and Chain. *Note: Lock combination # 8127.

24hr Forecast
Rig out Nabors # 414 and related equipment.

TIME LOG

Start Time	Dur (hrs)	Time P-T-X	Operation
06:00	0.50	P	Continued with rig in of Schlumberger wireline equipment. Readied Core-lab 155.2mm casing patch simulation tool. Picked up tool into lubricator and stabbed onto the well.
06:30	0.50	P	Crew shift change. Held a daily safety and operations meeting with all personnel. Reviewed and discussed CPC PJHA #032213 regarding daily activities and all associated hazards. Reviewed ERP plan and emergency procedures. Performed cross shift.
07:00	2.50	P	Performed a walk around inspection. Filled lubricator with Propylene Glycol and pressure tested all seals to 5000kPa. Good test. Bled off pressure on lubricator and opened blind rams. Pumped 0.3m³ Propylene glycol down wellbore. Ran in hole with Core-lab 155.2mm x 3m casing patch simulation/drift tool. Ran down to 1800mKb and pulled out of the hole. No tight spots were seen running out pulling tool. Laid down tool at surface and broke apart.
09:30	3.50	P	Held tailgate meeting and discussed arming explosives. Armed setting tool and picked up casing patch into lubricator. Ran in hole with a Core-lab X-Span 177.8mm x 3m casing patch on wire line. Correlated patch on depth to Schlumberger GR/CCL/CBL log dated Feb. 26, 2013. Set patch over top of "Basal" Lower Canol perforations from 1769.0mKB to 1770.0mKB (top of patch at 1767.56mKB / Bottom of patch at 1771.43mKB). Good setting indication was seen in line truck (360lbs line tension lost - 90 seconds to shear). Waited 10 minutes. Pulled up with no overpull and then went down and tagged patch to to confirm it was set. Pulled out of the hole with setting tool.
13:00	2.75	P	Held tailgate meeting and discussed arming explosives. Armed setting tool and picked up casing patch into lubricator. Ran in hole with a Core-lab X-Span 177.8mm x 3m casing patch on wire line. Correlated patch on depth to Schlumberger GR/CCL/CBL log dated Feb. 26, 2013. Set patch over top of "Middle" Lower Canol perforations from 1727.0mKB to 1728.0mKB (top of patch at 1725.96mKB / Bottom of patch at 1729.83mKB - casing collar at 1725.0mKB). Good setting indication was seen in line truck (260lbs line tension lost - 80 seconds to shear). Waited 10 minutes. Pulled up with no overpull and then went down and tagged patch to to confirm it was set. Pulled out of the hole with setting tool.
15:45	2.25	P	Held tailgate meeting and discussed arming explosives. Armed setting tool and picked up casing patch into lubricator. Ran in hole with a Core-lab X-Span 177.8mm x 3m casing patch on wire line. Correlated patch on depth to Schlumberger GR/CCL/CBL log dated Feb. 26, 2013. Set patch over top of "Upper" Lower Canol perforations from 1692.0mKB to 1693.0mKB (top of patch at 1690.56mKB / Bottom of patch at 1694.43mKB). Good setting indication was seen in line truck (370lbs line tension lost - 2min 7seconds to shear). Waited 10 minutes. Pulled up with no overpull and then went down and tagged patch to to confirm it was set. Pulled out of the hole with setting tool.
18:00	0.50	P	Filled hole with water (2.5m³ to fill) and pressure tested casing patches to 17000 kPa for 15 minutes. Pressure held solid. Good test.
18:30	0.50	P	Crew shift change. Reviewed and discussed CPC PJHA #220313 with all personnel. Identified potential hazards associated with "Rig out E-line, RIH, POOH sideways. Rig out BOP`e" operations. All safety concerns were noted and documented in CPC PJHA. Dicussed ERP plan and emergency procedures in case of incident. Checked all valid tickets. Function tested Crown saver, Ram saver and Checked all ESD's.
19:00	1.00	P	Rigged out SLB 5K E-line unit and related equiopment.
20:00	1.00	P	RIH/w 63 jts 73.0 mm tbg c/w blow plugged end. Displaced 2.5 m3 back to rig tank.
21:00	1.00	P	POOH sideways with 63 jts 73.0 mm tbg applied storage compound and protectors on Both ends.
22:00	0.50	P	Pumped 0.5 m3 glycol into wellbore to winterize, leaving fluid level 100 m from surface.
22:30	4.00	P	Rigged out Work floor, Landed tbg hanger, Removed Bop's and installed 179.4 mm 10K Gate Valve. Torqued wellhead connection with Hydraulic wrench. Installed single mastered 10 K top section.

ConocoPhillips Canada

Daily Morning Report
COPRC LOON CREEK O-06 65-10 127-00

Report #: 29
Report Date: 3/22/2013
Final Job Status: SUSPENDED
Final Report? Yes

Job Cat: COMPLETIONS Job Typ: INITIAL COMPLETION Sub Typ:

TIME LOG

Start Time	Dur (hrs)	Time P-T-X	Operation
02:30	2.50	P	Pressure tested with Glycol the wellhead connections to 1.4 MPa (low) and 34.5 MPa (high) for 10 min each. Pressure test held with no leak off. Bled off pressure test. Removed top section, Removed tbg hanger from wellbore. Installed single mastered wellhead. Pressure tested wellhead connection to 1.4 MPa (low) and 34.5 MPa (high) for 10 min each. Pressure test held with no leak off. Bled off pressure test. Left Glycol in above master valve for winterization. Removed outside annulus valves, Plugged all wellhead ports. Secured wellhead with lock and chain. *Note: Combination # 6127
05:00	1.00	P	Proceeded to Rig out Nabors # 414 and related equipment.

FLUID SUMMARY

Fluid	To lease (m³)	From lease (m³)	To well (m³)	From well (m³)	Left to recover (m³)
FRESH WATER	0.00	9.00	3.00	2.50	3.99

CUMULATIVE JOB FLARED GAS BY ZONE

Zone	Volume Gas Total (E3m³)

PERFORATIONS

Date	Zone	Top (mKB)	Btm (mKB)	Shot Dens (shots/m)	Current Status
3/2/2013 03:00	Basal Lower Canol, Origi...	1,769.00	1,770.00	20.0	Suspended
3/3/2013 16:00	Upper Lower Canol, Origi...	1,692.00	1,693.00	20.0	Suspended
3/3/2013 23:59	Middle Lower Canol, Origi...	1,727.00	1,728.00	20.0	Suspended

ConocoPhillips Canada

Daily Morning Report
COPRC LOON CREEK O-06 65-10 127-00

Report #: 30
Report Date: 3/23/2013
Final Job Status: SUSPENDED
Final Report? Yes

Job Cat: COMPLETIONS Job Typ: INITIAL COMPLETION Sub Typ:

District	API / UWI	License No.	KB-Ground Distance (m)	KB-Casing Flange Distance (m)
NEW VENTURES	300/O-06 6510 127000	470	5.20	4.87

JOB INFORMATION

Actual Start Date	End Date	Abandon Date	MaxWell Job Number	Responsible Grp 1
2/22/2013 08:00	3/25/2013 22:30		JOB01@2006	coved

Objective
New Completion

Rig	Cum Rig Time (hrs)	Personnel Regular Hours (hrs)	Cum Personnel Total Hours (hrs)
Nabors, 414		255.00	5,579.50

Daily Contacts
WS Superintendent, Derrick Cove, 780-831-1314; WS Supervisor, Doug Smith, 780-518-6273; WS Foreman, Myles Hahn, 780-402-0500; Sr Res Engineer, Kim Clarke, 403-540-9081; Completions Engineer, Kyle Metzgar, 403-971-8424

Report Start Date	Report End Date	Rig Time (hrs)	P(tub) (kPa)	P (cas) (kPa)	Weather	Temperature (°C)	Lease Condition
3/23/2013 06:00	3/24/2013 06:00			0	Clear	-22	Ice

Last 24hr Summary
Laid over service rig and rigged out equipment.

24hr Forecast
Clean rig tank and suck out boiler. Move pipe to rack site. Haul picker load to NW (catwalk, racks, light towers)

TIME LOG

Start Time	Dur (hrs)	Time P-T-X	Operation
06:00	0.50	P	Rigged out and racked pump lines.
06:30	0.50	P	Crew shift change. Held a daily safety and operations meeting with all personnel. Reviewed and discussed CPC PJHA #032313 regarding daily activities and all associated hazards. Reviewed ERP plan and emergency procedures. Performed cross shift.
07:00	3.00	P	Performed a walk around inspection. Finished rig out of pump and lines. Wrapped up power cords and grounds.
10:00	8.50	P	Reviewed and discussed PJHA regarding laying over service rig. HSE Larry Kuhn discussed CPC safety with crew. Laid over service rig and readied for transport. Picked up all planks around location. Organized all rental equipment and equipment that is going to be needed on Mirror lake location. Peregrine loaded Propylene Glycol into their pressure truck emptying 400bbl tank. Hauled 400bbl tank to rack site and stood (will be used to store disposal fluid until tankers are available). Cleaned wellhead. Rigged out all boiler lines. Rigged out 1 light tower. Cleaned up location.
18:30	11.50	P	Crew shift change. Released Night shift. Monitor location.

FLUID SUMMARY

Fluid	To lease (m³)	From lease (m³)	To well (m³)	From well (m³)	Left to recover (m³)
FRESH WATER	0.00	18.50			3.99

CUMULATIVE JOB FLARED GAS BY ZONE

Zone	Volume Gas Total (E3m³)

PERFORATIONS

Date	Zone	Top (mKB)	Btm (mKB)	Shot Dens (shots/m)	Current Status
3/2/2013 03:00	Basal Lower Canol, Origi...	1,769.00	1,770.00	20.0	Suspended
3/3/2013 16:00	Upper Lower Canol, Origi...	1,692.00	1,693.00	20.0	Suspended
3/3/2013 23:59	Middle Lower Canol, Origi...	1,727.00	1,728.00	20.0	Suspended

ConocoPhillips Canada

Daily Morning Report
COPRC LOON CREEK O-06 65-10 127-00

Report #: 31
Report Date: 3/24/2013
Final Job Status: SUSPENDED
Final Report? Yes

Job Cat: COMPLETIONS Job Typ: INITIAL COMPLETION Sub Typ:

District	API / UWI	License No.	KB-Ground Distance (m)	KB-Casing Flange Distance (m)
NEW VENTURES	300/O-06 6510 127000	470	5.20	4.87

JOB INFORMATION

Actual Start Date	End Date	Abandon Date	MaxWell Job Number	Responsible Grp 1
2/22/2013 08:00	3/25/2013 22:30		JOB01@2006	coved

Objective
New Completion

Rig	Cum Rig Time (hrs)	Personnel Regular Hours (hrs)	Cum Personnel Total Hours (hrs)
Nabors, 414		187.00	5,766.50

Daily Contacts
WS Foreman, Myles Hahn, 780-402-0500; WS Superintendent, Derrick Cove, 780-831-1314; Sr Res Engineer, Kim Clarke, 403-540-9081; Completions Engineer, Kyle Metzgar, 403-971-8424; WS Supervisor, Doug Smith, 780-518-6273

Report Start Date	Report End Date	Rig Time (hrs)	P(tub) (kPa)	P (cas) (kPa)	Weather	Temperature (°C)	Lease Condition
3/24/2013 06:00	3/24/2013 22:30				Clear	-18	Ice

Last 24hr Summary
Moved Nabors rig equipment to NW. Transferred 73mm tubing string to rack site at km 7. Hauled out rentals going down south to Alberta. Wellhead secured with lock and Chain. *Note: Lock combination # 6127.

24hr Forecast
Move remaining equipment off site when trucks are available.

TIME LOG

Start Time	Dur (hrs)	Time P-T-X	Operation
06:00	0.50	P	No activity on location.
06:30	0.50	P	Held a daily safety and operations meeting with all personnel. Reviewed and discussed CPC PJHA #032413 regarding daily activities and all associated hazards. Reviewed ERP plan and emergency procedures.
07:00	5.50	P	Performed a walk around inspection. Sucked all water from boiler. Sucked out and cleaned rig tank. Hodgsons picker arived with no deck pins or pipe slings to load pipe. Loaded safe workplatform and rental equipment for Mirror lake onto picker. Hauled equipment to Km 46.9 and off loaded. Rigged out wellsite shack and readied for transport. 12:00 Performed a 10 minute SCVF test. After 45 seconds SCV started to bubble. SCV bubbled for 9 seconds and then stopped for 9 seconds in a repeating pattern (too many bubbles to count when bubbling). 13:30 Shut in SCV line to monitor pressure.
12:30	6.50	P	Loaded 2 light towers, 4 8x40 matts, Nabors catwalk, Boiler and rig tank. Hauled equipment to Hodgsons yard NW. Loaded half of 73mm tubing string onto picker deck and transferred to rack site at km 7 for storage. Picked up planks and lease liners. Readied Nabors doghouse, pump and junk box for transport.
19:00	3.50	P	Picker returned. Loaded Phoenix light tower, Core-Lab tools and Precision WS shack and back hauled. Loaded remaining 73mm tubing and pipe racks. Hauled tubing to km 7 rack site (261 joints total) and pipe racks to NW. Nabors junk box, doghouse and pump left on side of location ready to be hauled out when trucks are available. Initial completion of well is finished (all perforations suspended). Completions Equipment at KM 7 rack site - 261 Joints of 73mm Tubing - 73mm XN Profile Nipple - 73mm X Profile Nipple - Full set of 73mm pup joints - 1 pallet of Arctic lease liner (black 20mm) Wellhead Secured with lock and Chain. *Note: Lock combination # 6127.

FLUID SUMMARY

Fluid	To lease (m³)	From lease (m³)	To well (m³)	From well (m³)	Left to recover (m³)
FRESH WATER	0.00	11.66			3.99

CUMULATIVE JOB FLARED GAS BY ZONE

Zone	Volume Gas Total (E3m³)

PERFORATIONS

Date	Zone	Top (mKB)	Btm (mKB)	Shot Dens (shots/m)	Current Status
3/2/2013 03:00	Basal Lower Canol, Origi...	1,769.00	1,770.00	20.0	Suspended
3/3/2013 16:00	Upper Lower Canol, Origi...	1,692.00	1,693.00	20.0	Suspended
3/3/2013 23:59	Middle Lower Canol, Origi...	1,727.00	1,728.00	20.0	Suspended

ConocoPhillips Canada

Daily Morning Report
COPRC LOON CREEK O-06 65-10 127-00

Report #: 32
Report Date: 3/31/2013
Final Job Status: SUSPENDED
Final Report? Yes

Job Cat: COMPLETIONS Job Typ: INITIAL COMPLETION Sub Typ:

District	API / UWI	License No.	KB-Ground Distance (m)	KB-Casing Flange Distance (m)
NEW VENTURES	300/O-06 6510 127000	470	5.20	4.87

JOB INFORMATION

Actual Start Date	End Date	Abandon Date	MaxWell Job Number	Responsible Grp 1
2/22/2013 08:00	3/25/2013 22:30		JOB01@2006	coved

Objective
New Completion

Rig	Cum Rig Time (hrs)	Personnel Regular Hours (hrs)	Cum Personnel Total Hours (hrs)
		14.00	5,760.50

Daily Contacts
Sr Res Engineer, Kim Clarke, 403-540-9081; WS Supervisor, Doug Smith, 780-518-6273; WS Superintendent, Derrick Cove, 780-831-1314; Completions Engineer, Kyle Metzgar, 403-971-8424

Report Start Date	Report End Date	Rig Time (hrs)	P(tub) (kPa)	P (cas) (kPa)	Weather	Temperature (°C)	Lease Condition
3/31/2013 07:30	4/1/2013 07:30				Clear	-11	Ice

Last 24hr Summary
Monitor SISCV every 12 hrs, Document in SCV folder.

24hr Forecast
Continue to monitor. Perform 24 hr flow test after stabilized Shut In

TIME LOG

Start Time	Dur (hrs)	Time P-T-X	Operation
07:30	24.00	P	Mar.29/13 @ 19:30 = 830.46 kPa (126 hrs shut in) Mar.30/13 @ 07:30 = 862.33 kPa = 31.87 kPa in 12hrs, Average 2.65 kPa/hr. (138 hrs shut in) Mar.30/13 @ 19:30 = 898.18 kPa = 35.85 kPa in 12 hrs, 67.72 kPa last 24 hrs. Average 2.82 kPa/hr. (150 hrs shut in) Mar.31/13 @ 07:30 = 933.89 kPa = 35.71 kPa in 12 hrs, 71.56 kPa last 24 hrs. Average 2.98 kPa/hr. (162 hrs shut in) Mar.31/13 @ 19:30 = 972.94 kPa = 39.05 kPa in 12 hrs, 74.76 kPa last 24 hrs. Average 3.11 kPa/hr. (174 hrs shut in) Apr.1/13 @ 07:30 = 1008.9 kPa = 35.96 kPa in 12 hrs, 75.01 kPa last 24 hrs. Average 3.12 kPa/hr. (186 hrs shut in)

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	3.99

CUMULATIVE JOB FLARED GAS BY ZONE

Zone	Volume Gas Total (E3m³)

PERFORATIONS

Date	Zone	Top (mKB)	Btm (mKB)	Shot Dens (shots/m)	Current Status
3/2/2013 03:00	Basal Lower Canol, Origi...	1,769.00	1,770.00	20.0	Suspended
3/3/2013 16:00	Upper Lower Canol, Origi...	1,692.00	1,693.00	20.0	Suspended
3/3/2013 23:59	Middle Lower Canol, Origi...	1,727.00	1,728.00	20.0	Suspended

ConocoPhillips Canada

Daily Morning Report
COPRC LOON CREEK O-06 65-10 127-00

Report #: 33
Report Date: 4/1/2013
Final Job Status: SUSPENDED
Final Report? Yes

Job Cat: COMPLETIONS Job Typ: INITIAL COMPLETION Sub Typ:

District	API / UWI	License No.	KB-Ground Distance (m)	KB-Casing Flange Distance (m)
NEW VENTURES	300/O-06 6510 127000	470	5.20	4.87

JOB INFORMATION

Actual Start Date	End Date	Abandon Date	MaxWell Job Number	Responsible Grp 1
2/22/2013 08:00	3/25/2013 22:30		JOB01@2006	coved

Objective
New Completion

Rig	Cum Rig Time (hrs)	Personnel Regular Hours (hrs)	Cum Personnel Total Hours (hrs)
		14.00	5,784.50

Daily Contacts
Completions Engineer, Kyle Metzgar, 403-971-8424; Sr Res Engineer, Kim Clarke, 403-540-9081; WS Supervisor, Doug Smith, 780-518-6273; WS Superintendent, Derrick Cove, 780-831-1314

Report Start Date	Report End Date	Rig Time (hrs)	P(tub) (kPa)	P (cas) (kPa)	Weather	Temperature (°C)	Lease Condition
4/1/2013 07:30	4/2/2013 07:30				Clear	-12	Ice

Last 24hr Summary
Monitor SISCV every 12 hrs, Document in SCV folder.

24hr Forecast
Continue to monitor. Perform 24 hr flow test after stabilized Shut in

TIME LOG

Start Time	Dur (hrs)	Time P-T-X	Operation
07:30	24.00	P	Mar.29/13 @ 19:30 = 830.46 kPa (126 hrs shut in) Mar.30/13 @ 07:30 = 862.33 kPa = 31.87 kPa in 12hrs, Average 2.65 kPa/hr. (138 hrs shut in) Mar.30/13 @ 19:30 = 898.18 kPa = 35.85 kPa in 12 hrs, 67.72 kPa last 24 hrs. Average 2.82 kPa/hr. (150 hrs shut in) Mar.31/13 @ 07:30 = 933.89 kPa = 35.71 kPa in 12 hrs, 71.56 kPa last 24 hrs. Average 2.98 kPa/hr. (162 hrs shut in) Mar.31/13 @ 19:30 = 972.94 kPa = 39.05 kPa in 12 hrs, 74.76 kPa last 24 hrs. Average 3.11 kPa/hr. (174 hrs shut in) Apr.1/13 @ 07:30 = 1008.9 kPa = 35.96 kPa in 12 hrs, 75.01 kPa last 24 hrs. Average 3.12 kPa/hr. (186 hrs shut in) Apr.1/13 @ 19:30 = 1039.7 kPa = 30.8 kPa in 12 hrs, 66.76 kPa last 24 hrs. Average 2.78 kPa/hr. (198 hrs shut in) Apr.2/13 @ 07:30 = 1067.5 kPa = 27.8 kPa in 12 hrs, 58.6 kPa last 24 hrs. Average 2.44 kPa/hr. (210 hrs shut in) Note: Over 1000 kPa recorder only displays to 1 decimal point.

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	3.99

CUMULATIVE JOB FLARED GAS BY ZONE

Zone	Volume Gas Total (E3m³)

PERFORATIONS

Date	Zone	Top (mKB)	Btm (mKB)	Shot Dens (shots/m)	Current Status
3/2/2013 03:00	Basal Lower Canol, Origi...	1,769.00	1,770.00	20.0	Suspended
3/3/2013 16:00	Upper Lower Canol, Origi...	1,692.00	1,693.00	20.0	Suspended
3/3/2013 23:59	Middle Lower Canol, Origi...	1,727.00	1,728.00	20.0	Suspended

ConocoPhillips Canada

Daily Morning Report
COPRC LOON CREEK O-06 65-10 127-00

Report #: 34
Report Date: 4/2/2013
Final Job Status: SUSPENDED
Final Report? Yes

Job Cat: COMPLETIONS Job Typ: INITIAL COMPLETION Sub Typ:

District	API / UWI	License No.	KB-Ground Distance (m)	KB-Casing Flange Distance (m)
NEW VENTURES	300/O-06 6510 127000	470	5.20	4.87

JOB INFORMATION

Actual Start Date	End Date	Abandon Date	MaxWell Job Number	Responsible Grp 1
2/22/2013 08:00	3/25/2013 22:30		JOB01@2006	coved

Objective
New Completion

Rig	Cum Rig Time (hrs)	Personnel Regular Hours (hrs)	Cum Personnel Total Hours (hrs)
		14.00	5,808.50

Daily Contacts
WS Superintendent, Derrick Cove, 780-831-1314; WS Supervisor, Doug Smith, 780-518-6273; Completions Engineer, Kyle Metzgar, 403-971-8424; Sr Res Engineer, Kim Clarke, 403-540-9081

Report Start Date	Report End Date	Rig Time (hrs)	P(tub) (kPa)	P (cas) (kPa)	Weather	Temperature (°C)	Lease Condition
4/2/2013 07:30	4/3/2013 07:30				Snowing	-18	Ice

Last 24hr Summary
Monitor SISCV every 12 hrs, Document in SCV folder. 16:30- SISCV= 1086.9 kPa, Bled off SCV through Needle Valve. Bled to 0.0 kPa in 30 min. Monitored for 1 hr.

24hr Forecast
Install PD meter and perform 24 hr flow test on SCV

TIME LOG

Start Time	Dur (hrs)	Time P-T-X	Operation
07:30	24.00	P	Mar.29/13 @ 19:30 = 830.46 kPa (126 hrs shut in) Mar.30/13 @ 07:30 = 862.33 kPa = 31.87 kPa in 12hrs, Average 2.65 kPa/hr. (138 hrs shut in) Mar.30/13 @ 19:30 = 898.18 kPa = 35.85 kPa in 12 hrs, 67.72 kPa last 24 hrs. Average 2.82 kPa/hr. (150 hrs shut in) Mar.31/13 @ 07:30 = 933.89 kPa = 35.71 kPa in 12 hrs, 71.56 kPa last 24 hrs. Average 2.98 kPa/hr. (162 hrs shut in) Mar.31/13 @ 19:30 = 972.94 kPa = 39.05 kPa in 12 hrs, 74.76 kPa last 24 hrs. Average 3.11 kPa/hr. (174 hrs shut in) Apr.1/13 @ 07:30 = 1008.9 kPa = 35.96 kPa in 12 hrs, 75.01 kPa last 24 hrs. Average 3.12 kPa/hr. (186 hrs shut in) Apr.1/13 @ 19:30 = 1039.7 kPa = 30.8 kPa in 12 hrs, 66.76 kPa last 24 hrs. Average 2.78 kPa/hr. (198 hrs shut in) Apr.2/13 @ 07:30 = 1067.5 kPa = 27.8 kPa in 12 hrs, 58.6 kPa last 24 hrs. Average 2.44 kPa/hr. (210 hrs shut in) Apr.2/13 @ 16:30 = 1086.9 kPa = 19.4 kPa in 9 hrs, 47.2 kPa last 21 hrs. Average 2.24 kPa/hr. (219 hrs shut in) Apr.2/13 @ 16:30 Bled off SCV to 0.0 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	3.99

CUMULATIVE JOB FLARED GAS BY ZONE

Zone	Volume Gas Total (E3m³)

PERFORATIONS

Date	Zone	Top (mKB)	Btm (mKB)	Shot Dens (shots/m)	Current Status
3/2/2013 03:00	Basal Lower Canol, Origi...	1,769.00	1,770.00	20.0	Suspended
3/3/2013 16:00	Upper Lower Canol, Origi...	1,692.00	1,693.00	20.0	Suspended
3/3/2013 23:59	Middle Lower Canol, Origi...	1,727.00	1,728.00	20.0	Suspended

ConocoPhillips Canada

Daily Morning Report
COPRC LOON CREEK O-06 65-10 127-00

Report #: 35
Report Date: 4/3/2013
Final Job Status: SUSPENDED
Final Report? Yes

Job Cat: COMPLETIONS Job Typ: INITIAL COMPLETION Sub Typ:

District	API / UWI	License No.	KB-Ground Distance (m)	KB-Casing Flange Distance (m)
NEW VENTURES	300/O-06 6510 127000	470	5.20	4.87

JOB INFORMATION

Actual Start Date	End Date	Abandon Date	MaxWell Job Number	Responsible Grp 1
2/22/2013 08:00	3/25/2013 22:30		JOB01@2006	coved

Objective
New Completion

Rig	Cum Rig Time (hrs)	Personnel Regular Hours (hrs)	Cum Personnel Total Hours (hrs)
		14.00	5,822.50

Daily Contacts
WS Supervisor, Doug Smith, 780-518-6273; Sr Res Engineer, Kim Clarke, 403-540-9081; WS Superintendent, Derrick Cove, 780-831-1314; Completions Engineer, Kyle Metzgar, 403-971-8424

Report Start Date	Report End Date	Rig Time (hrs)	P(tub) (kPa)	P (cas) (kPa)	Weather	Temperature (°C)	Lease Condition
4/3/2013 07:30	4/4/2013 07:30				Clear	-22	Ice

Last 24hr Summary
Installed PD meter on SCV for 24 hr flow test. Assembled Real Time recorder equipment.

24hr Forecast
Remove PD Meter, Install and Initialize Real Time Surface recorders to be monitored Via satellite

TIME LOG

Start Time	Dur (hrs)	Time P-T-X	Operation
07:30	24.00	P	Installed PD meter onto SCV for 24 hr flow test. On @ 08:00 hrs: Unable to document in exisitng SCV folder. Wellview will not allow more data due to page size??? Started new SCV folder in order to continue documentation. Assembled Real Time recorder equipment. Attained pictures and forwarded to Superintendent. Assembled but did not install SCV riser so 6000 kPa pop valve is approx 2.14 m (7') above ground level. All Recorder data equipment supported by wellhead. Lock Combination # 6127 Note: Mcclelland rental equipment shipped to GP via MXL Expeditors Smith Completions equipment shipped to GP via MXL Expeditors HD Retract-a-lock Shipped to Smith Completions in GP Via MXL Expeditors. Completions equipment Left at km 7 rack site 261 jts 73mm J-55 tubing 1 complete string of 73 mm pup jts 1 set of Smith profile nipples "X" and "XN" 1 pail kendex storage compound 1 CPC Lease access sign. 2- 21 MPa pressure gauges 2- ½ npt needle valves 4- ½ plugs Assorted ring gaskets and studs 2- 3000 psi stream flow valves left over from drilling. HD Equipment left @ km 7 rack site. 1-dual tiered work platform c/w long and short stairs

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	3.99

CUMULATIVE JOB FLARED GAS BY ZONE

Zone	Volume Gas Total (E3m³)

PERFORATIONS

Date	Zone	Top (mKB)	Btm (mKB)	Shot Dens (shots/m)	Current Status
3/2/2013 03:00	Basal Lower Canol, Origi...	1,769.00	1,770.00	20.0	Suspended
3/3/2013 16:00	Upper Lower Canol, Origi...	1,692.00	1,693.00	20.0	Suspended
3/3/2013 23:59	Middle Lower Canol, Origi...	1,727.00	1,728.00	20.0	Suspended

Completions schematic Loon Creek O-06

Wednesday, April 10, 2013
10:22 AM

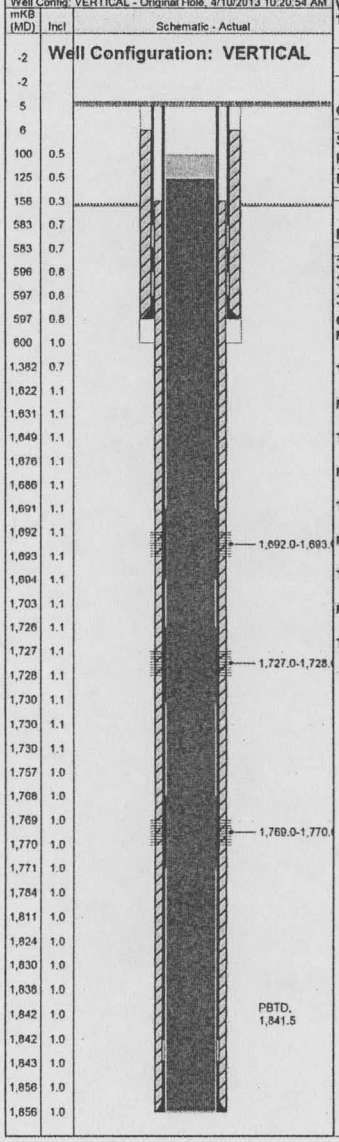
ConocoPhillips Canada

Downhole Well Profile for COPRC LOON CREEK O-06 65-10 127-00

API / UWI	Surface Legal Location	Field Name	License No.	Well Configuration Type
300/O-06 6510 127000	O-6 65-10 127-00	Loon	470	VERTICAL

Ground Elevation (m)	Orig KB/RT (m)	KB-Grd (m)	KB-CF (m)	KB-TF (m)	Other Elevation Type	Other Elevation (m)
252.40	257.60	5.20	4.87	4.22	BGW	

Well Config: VERTICAL - Original Hole, 4/10/2013 10:20:54 AM



WELLHEADS

Type	Install Date

Description	Make	Model	WP (kPa)	Top Ring Gasket	Min Bore (mm)

CASING STRINGS

Casing Description	String OD (mm)	String Wt (kg/m)	String Grade	String Top Thrd	Set Depth (mKB)
Surface	244.5	53.574	K-55	LTC	597.00
Production	177.8	38.692	P-110	LTC	1,856.00

PBTDs

Depth (mKB)	KO MD (mKB)	TD (max) (mKB)
1,841.50		1,856.00

PERFORATIONS

Date	Top (mKB)	Btm (mKB)	Zone	Current Status
3/3/2013	1,692.00	1,693.00	Upper Lower Canol, Original ...	Suspended
3/3/2013	1,727.00	1,728.00	Middle Lower Canol, Original ...	Suspended
3/2/2013	1,769.00	1,770.00	Basal Lower Canol, Original H...	Suspended

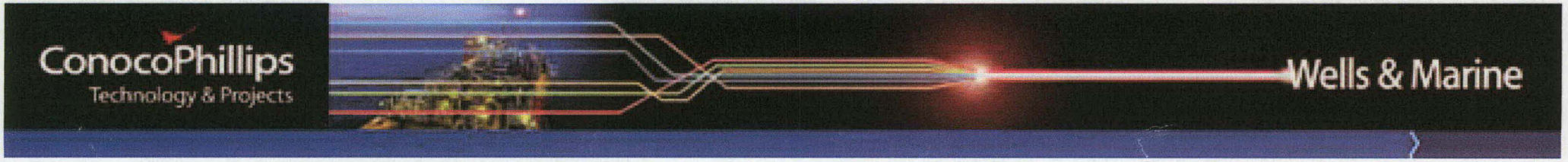
OTHER IN HOLE

Run Date	Description	OD (mm)	ID (mm)
3/22/2013	Casing Patch	155.2	139.7
Top (mKB)	**Bottom (mKB)**	**Make**	**Model**
1,767.56	1,771.43	Core-lab	X-Span
Run Date	**Description**	**OD (mm)**	**ID (mm)**
3/22/2013	Casing Patch	155.2	139.7
Top (mKB)	**Bottom (mKB)**	**Make**	**Model**
1,725.96	1,729.83	Core-lab	X-Span
Run Date	**Description**	**OD (mm)**	**ID (mm)**
3/22/2013	Casing Patch	155.2	139.7
Top (mKB)	**Bottom (mKB)**	**Make**	**Model**
1,690.56	1,694.43	Core-lab	X-Span
Run Date	**Description**	**OD (mm)**	**ID (mm)**
3/22/2013	Barrier - Fluid	155.2	
Top (mKB)	**Bottom (mKB)**	**Make**	**Model**
125.00	1,856.00	Fresh water	TDS<4000 ppm
Run Date	**Description**	**OD (mm)**	**ID (mm)**
3/22/2013	Barrier - Fluid	155.2	
Top (mKB)	**Bottom (mKB)**	**Make**	**Model**
100.00	125.00	Propylene Glycol	Mixed with 30 % H20

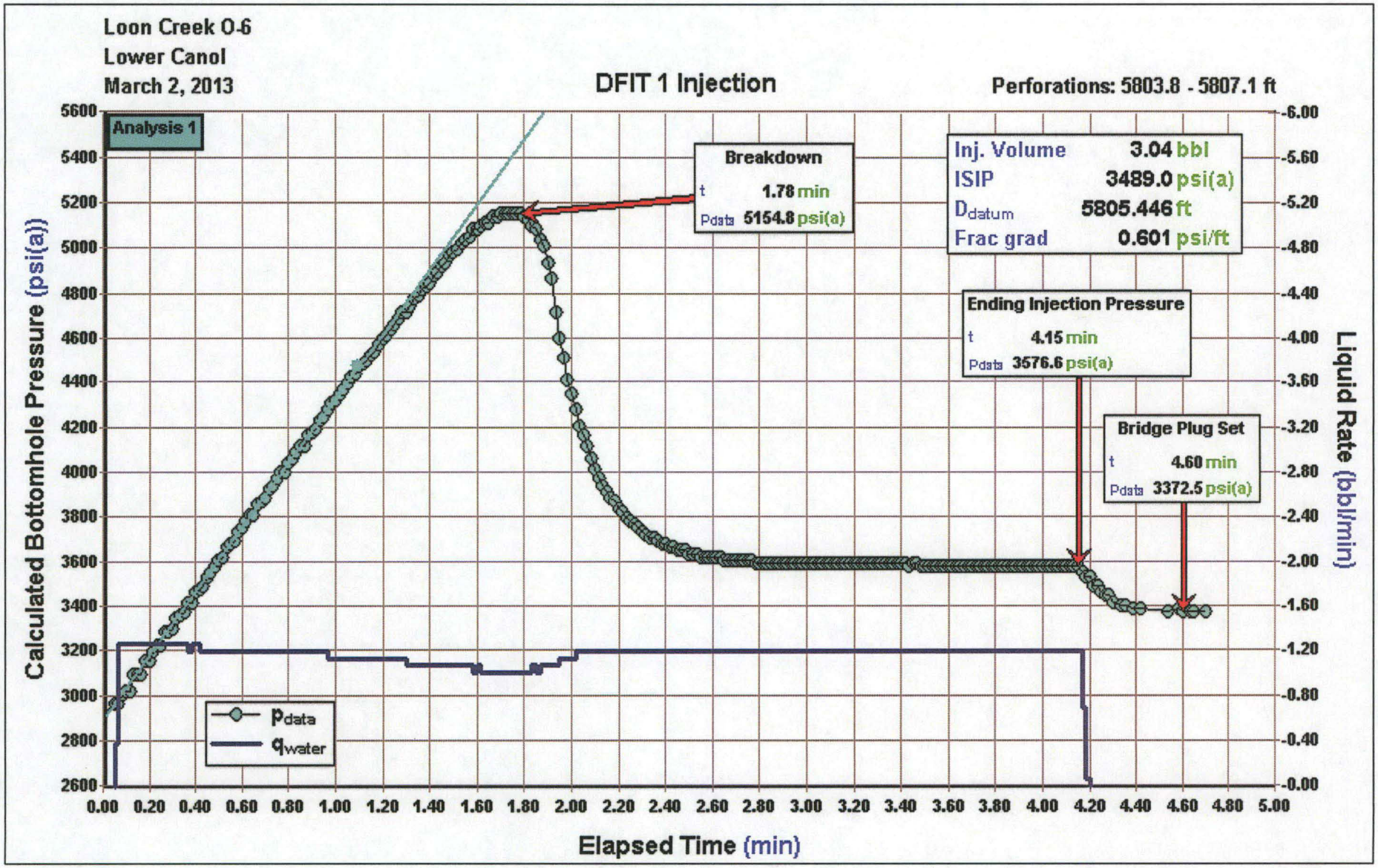
Loon Creek O-6 DFIT Plots
"Basal","Middle" & "Upper" Lower Canol
1769-1770 m, 1727-1728 m & 1692-1693 m

Prepared by Dave Cramer

March 3, 2013



DFIT 1, Oil Field Units



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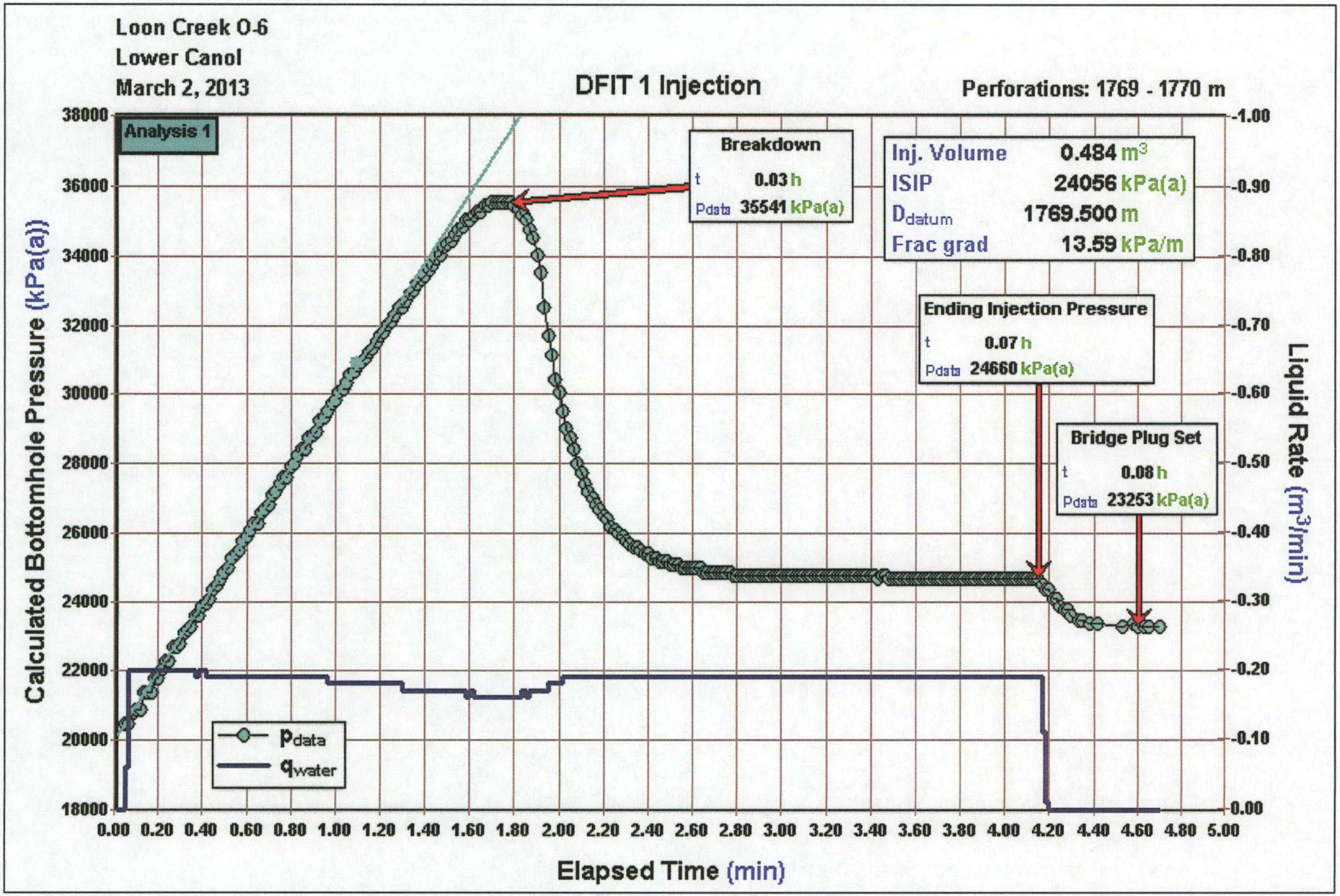

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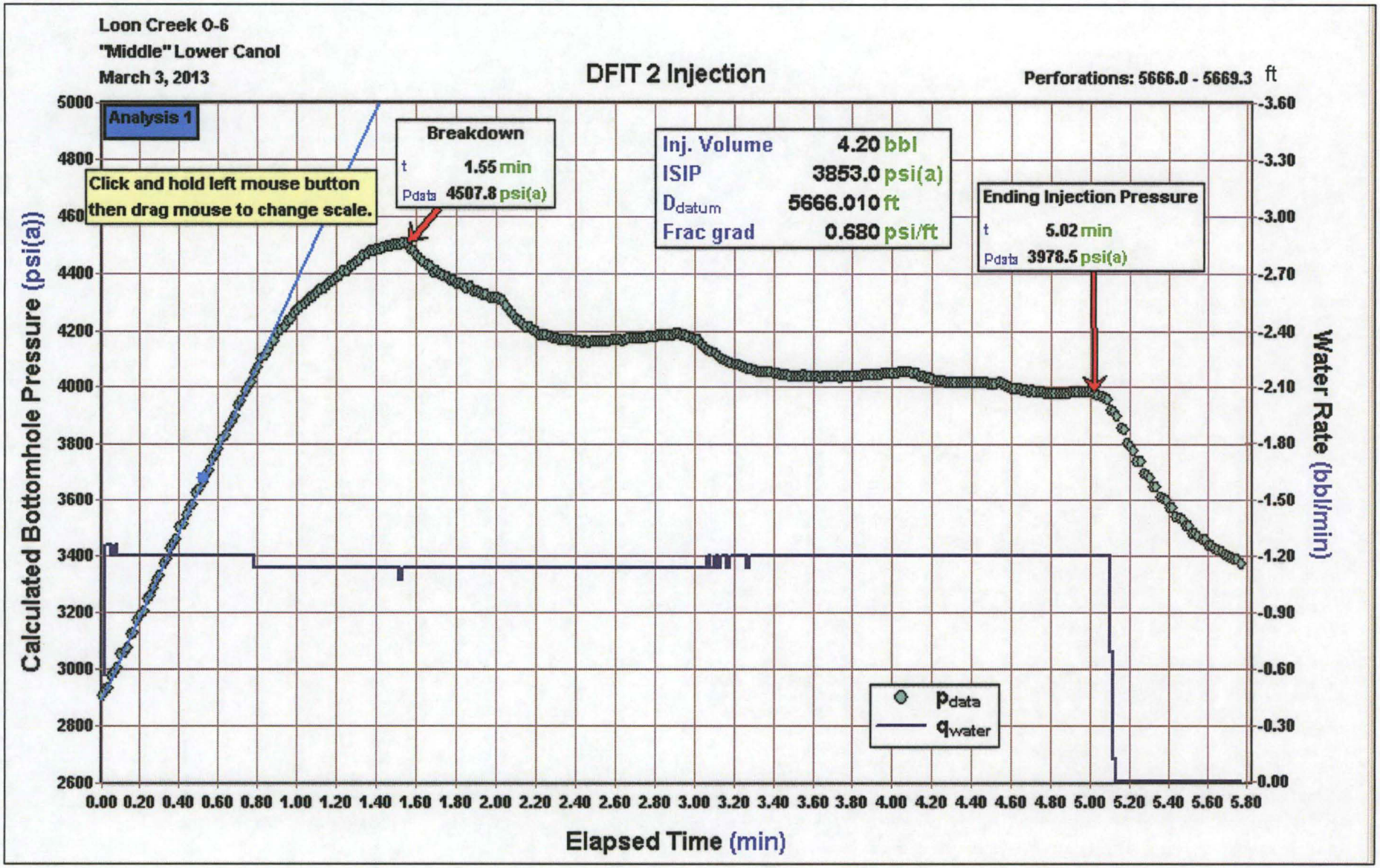
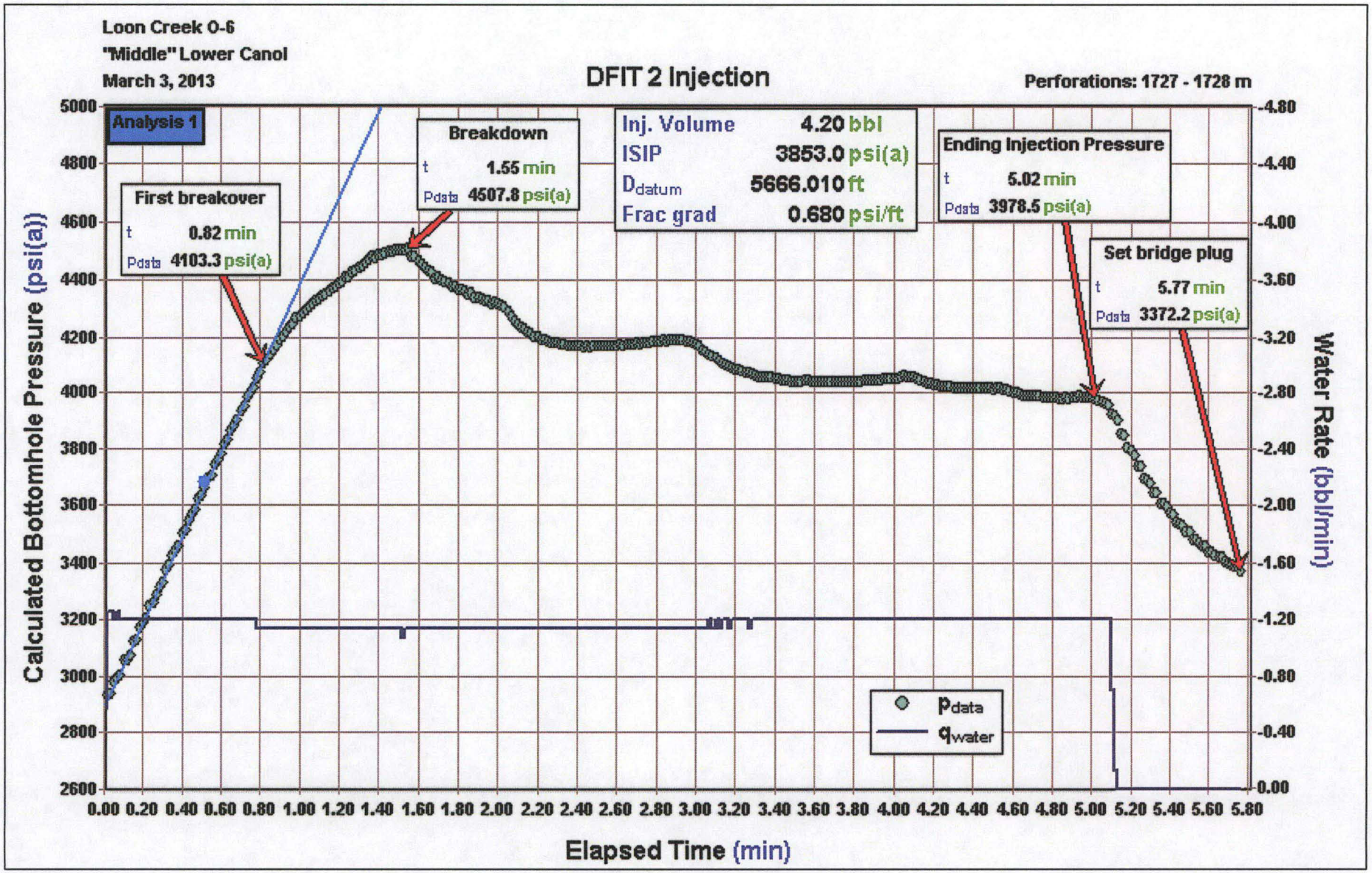
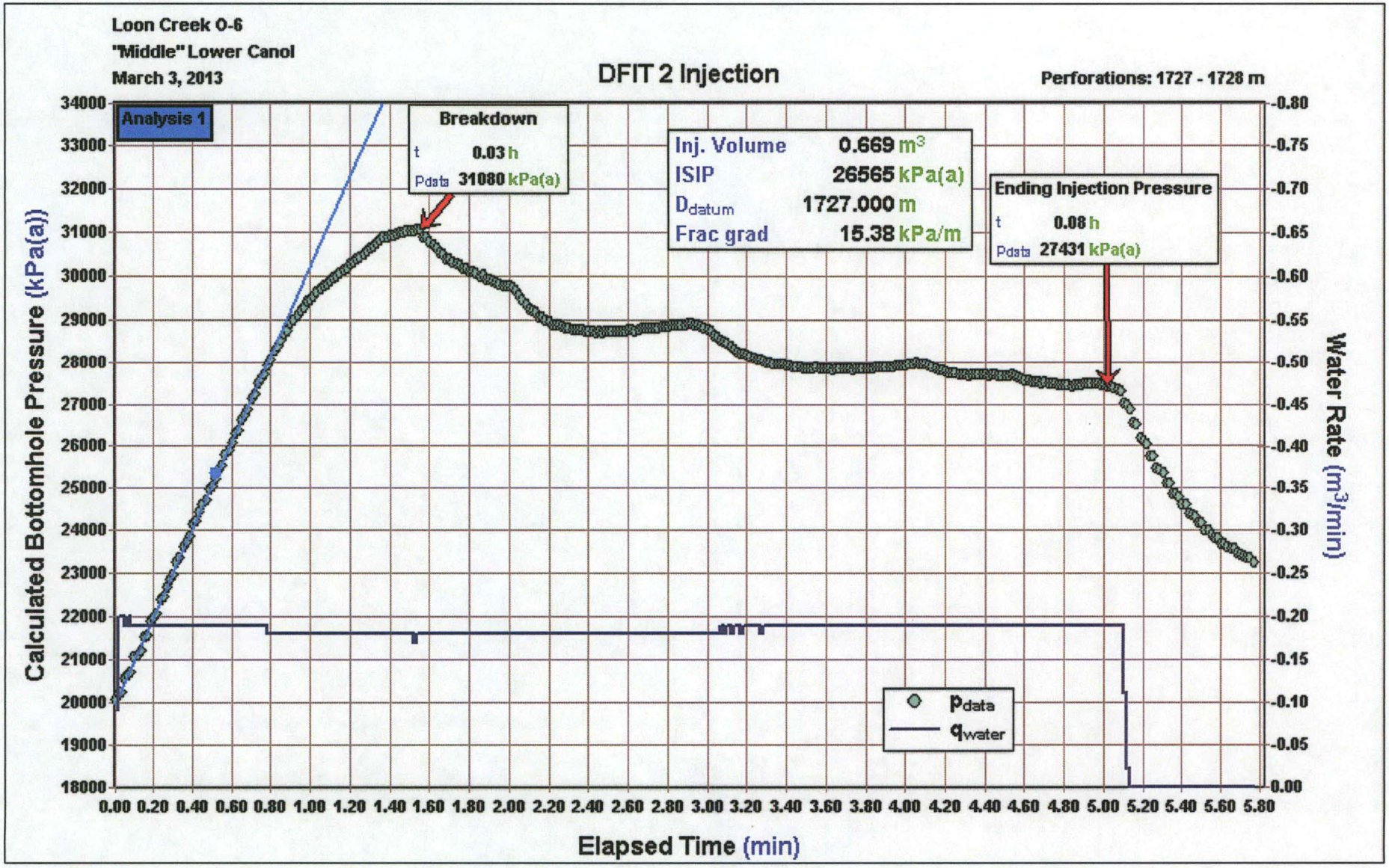


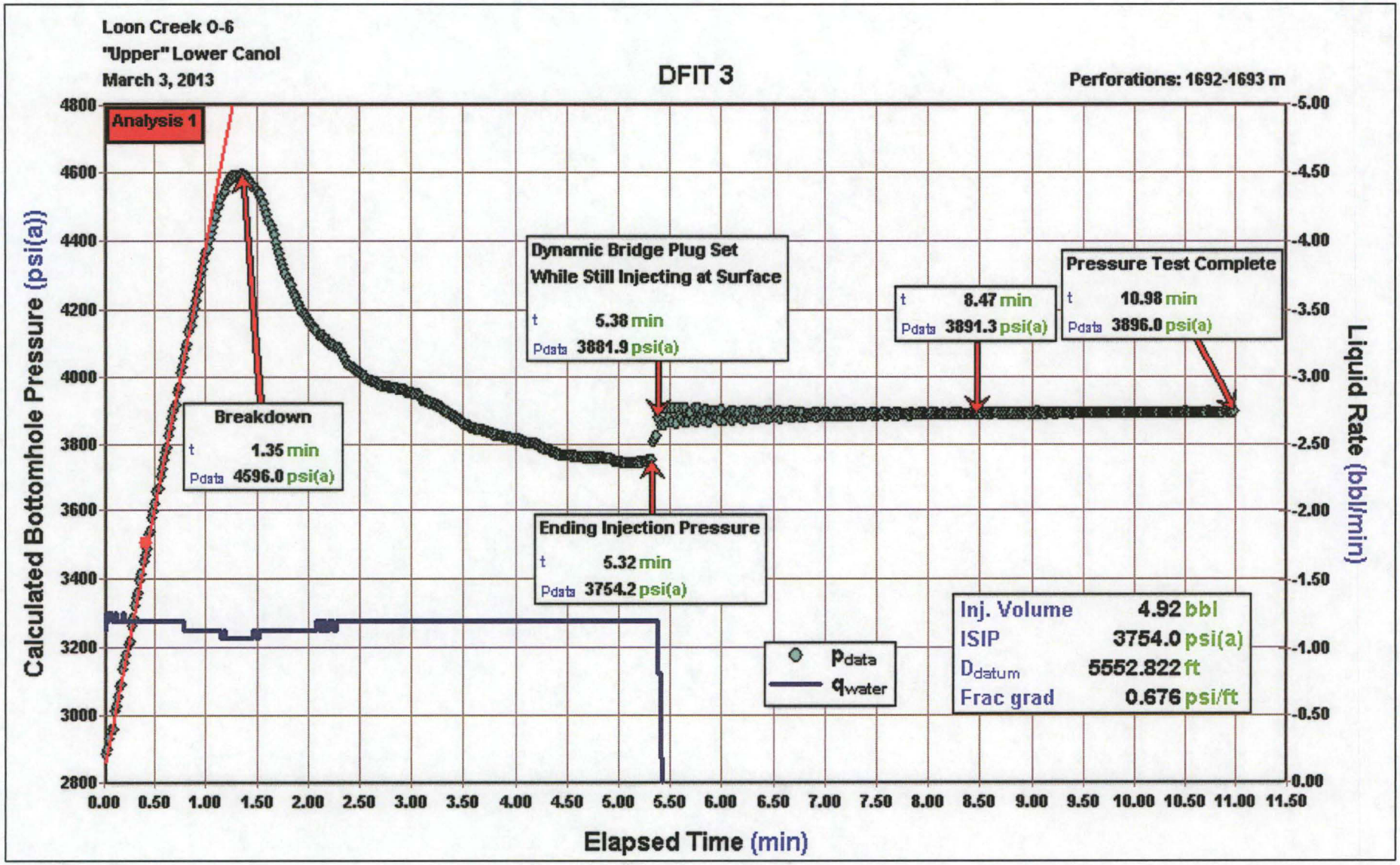
DFIT 2, Oil Field Units



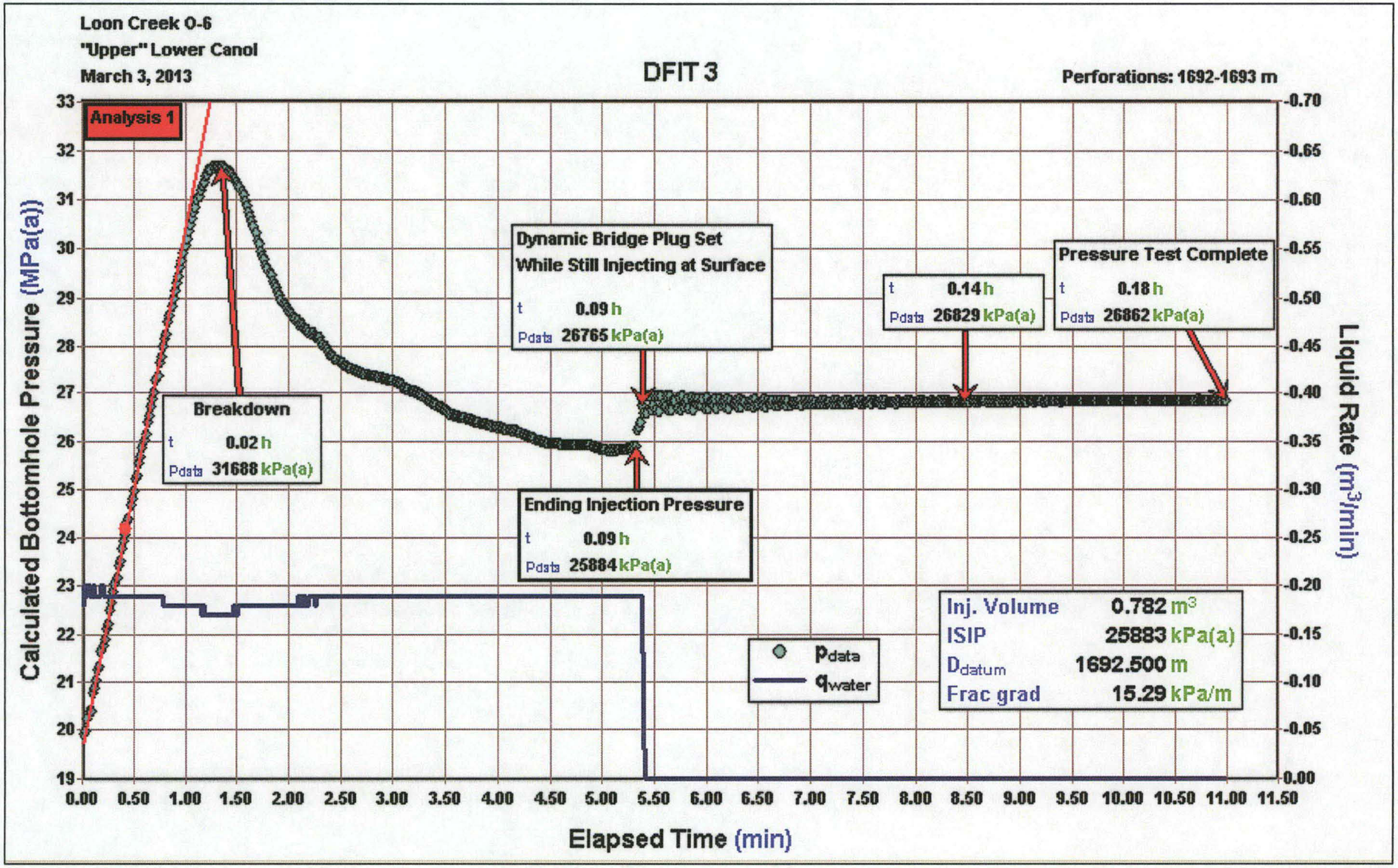
DFIT 2, Metric Units



DFIT 3, Oil Field Units



DFIT 3, Metric Units



STRICTLY CONFIDENTIAL

OIL MINI-FRAC ANALYSIS

WELL NAME: **COPRC Loon Creek**
WELL LOCATION:
Bottomhole Location: **300/O-06 65-10 127-00**
Surface.Location: 300/O-06 65-10 127-00
Well License #: **470**

ZONE: **"BASAL" LOWER CANOL**

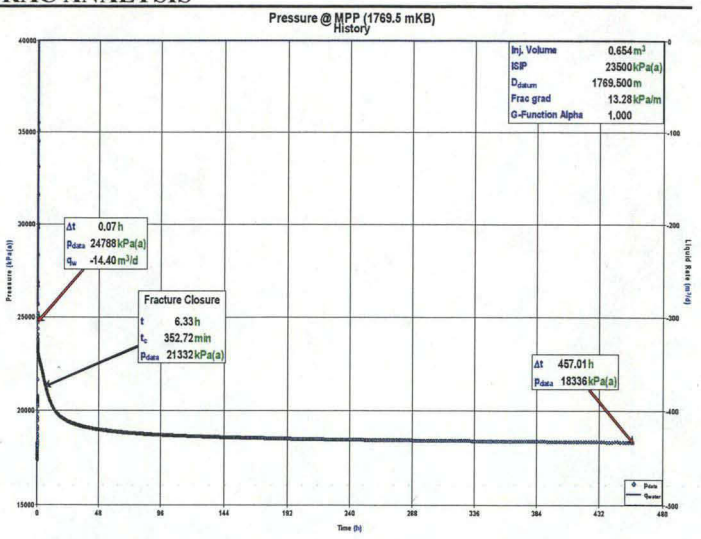
COST CENTRE: **10345055**

TEST DATE: **Mar 2 – 21, 2013**

STAGE OF WELL TEST: **Post-Perf Inj-Falloff**

ORIENTATION: **Vertical**

TYPE/SIZE OF STIMULATION: **N/A**



Reservoir Properties

Injection Interval: 1769 – 1770 mKB		
Frac Height (h): 5 m (Estimate)	Porosity (ϕ): 15 %	Water Saturation (Sw): 13 %
Oil Gravity: 50 °API (Estimate)	H_2S Content: 0 %	BHT: 79.2 °C

Injection Data

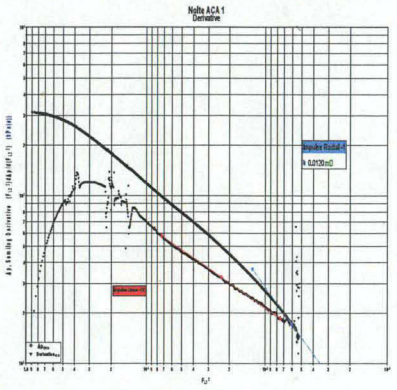
Test	Time	Final Rates				Final Pressures		
		Gas	New Oil	New H_2O	Load	Tubing	Casing	BHP
	Hours	e^3m^3/d	m^3/d	m^3/d	m^3/d	kPag	kPag	kPaa
Injection	0.1	---	---	---	14.4	N/A	0	24788
Shut-In	457.0	---	---	---	0	N/A	0	18336

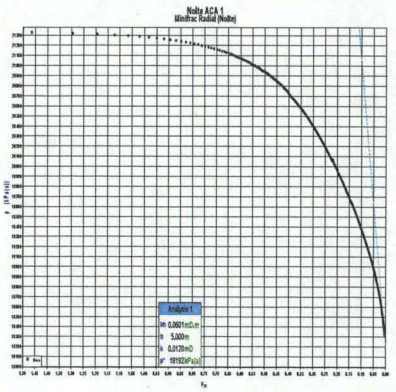
Injection Summary

New Fluid (m^3)				Load Fluid (m^3)		Remaining Load (m^3)	
Gas (E^3M^3)	Gas (MSCF)	Cond (m^3)	Water (m^3)	Oil (m^3)	Water (m^3)	Oil (m^3)	Water (m^3)
---	---	---	---	0	0.65	0	0.65

Pressure Transient Analysis Results Summary

Analysis Results	
P*	18192 kPaa
$(kh/\mu)_o$	0.21 mD·m/mPa·s
$(kh)_o$	0.06 mD·m
k_o	0.01 mD





Discussion

Test Procedure:
The "Basal" LOWER CANOL interval was perforated on Mar 1st, 2013. The following day, a retrievable bridge plug, with tandem electronic recorders hung below, was run in hole (center element at 1767 mKB). Water injection was initiated to achieve formation breakdown. Injection continued for several more minutes after breakdown, including for a brief period after the bridge plug setting mechanism was activated (dynamic shut-in). The final water injection rate prior to shut-in was reported to be 14.4 m^3/d (0.01 m^3/min). The subsequent falloff was monitored for almost 19 days (~457 hrs). Another bridge plug was run in hole shortly thereafter. Completion and test operations were then carried out on the "Middle" and "Upper" intervals of the Lower Canol formation while the "Basal" interval falloff was in progress. After recovering the respective bridge plugs & recorders for each of the upper intervals, the bridge plugs immediately above the "Basal" interval were unset and recovered (including the recorders) on Mar 21st. The primary objectives of the mini-frac test were to obtain frac design and reservoir flow parameters. The analyses / results for the "Middle" and "Upper" intervals have been provided in separate reports.

The test data (injection & falloff) from the subject test was corrected to the mid-point of the perforations (MPP=1769.5 mKB) using an estimated water gradient of 9.8 kP/m.

Analysis:
The mini-frac test data was analyzed using traditional techniques. Diagnostic plots, such as the G-Function & Sqrt (t) plots, were utilized first to confirm the occurrence of fracture closure. For the subject zone, the diagnostic plots indicated closure after almost 6 hrs (or ~353 minutes) of shut-in. However, there wasn't any evidence of pseudo-radial flow on the derivative plot prior to the end of the test. Regardless, after-closure analysis, via Nolte & Soliman / Craig techniques, was then conducted in an attempt to obtain estimates for reservoir parameters. It is also noted that the terminal portion of the data indicated the presence of non-reservoir effects, most likely as a result of uphole operations. Therefore, this portion of the falloff data was not used in the analysis. The corresponding results / plots have been presented in this report.

Conclusions / Recommendations:
The test was only partially successful in satisfying the primary objectives set forth at the onset of the test program. Although closure was achieved, pseudo-radial flow was not reached prior to the end of the test. Therefore, the reported reservoir flow parameters (k_o = 0.01 mD, P* = 18.2 MPaa) are considered maximum estimates and should be used with ***caution***. Consequently, the overall confidence of the test results is considered to be poor. It is also noted that the oil permeability was calculated based on estimated values for frac height (5 m) & oil viscosity (50 °API oil with a viscosity of 0.28 mPa·s).

Analyzed by: **Al Kassam** **Report Date: May 3rd, 2013**

Copy: **Kim Clarke** **Alex Novgorodova** **Well File**

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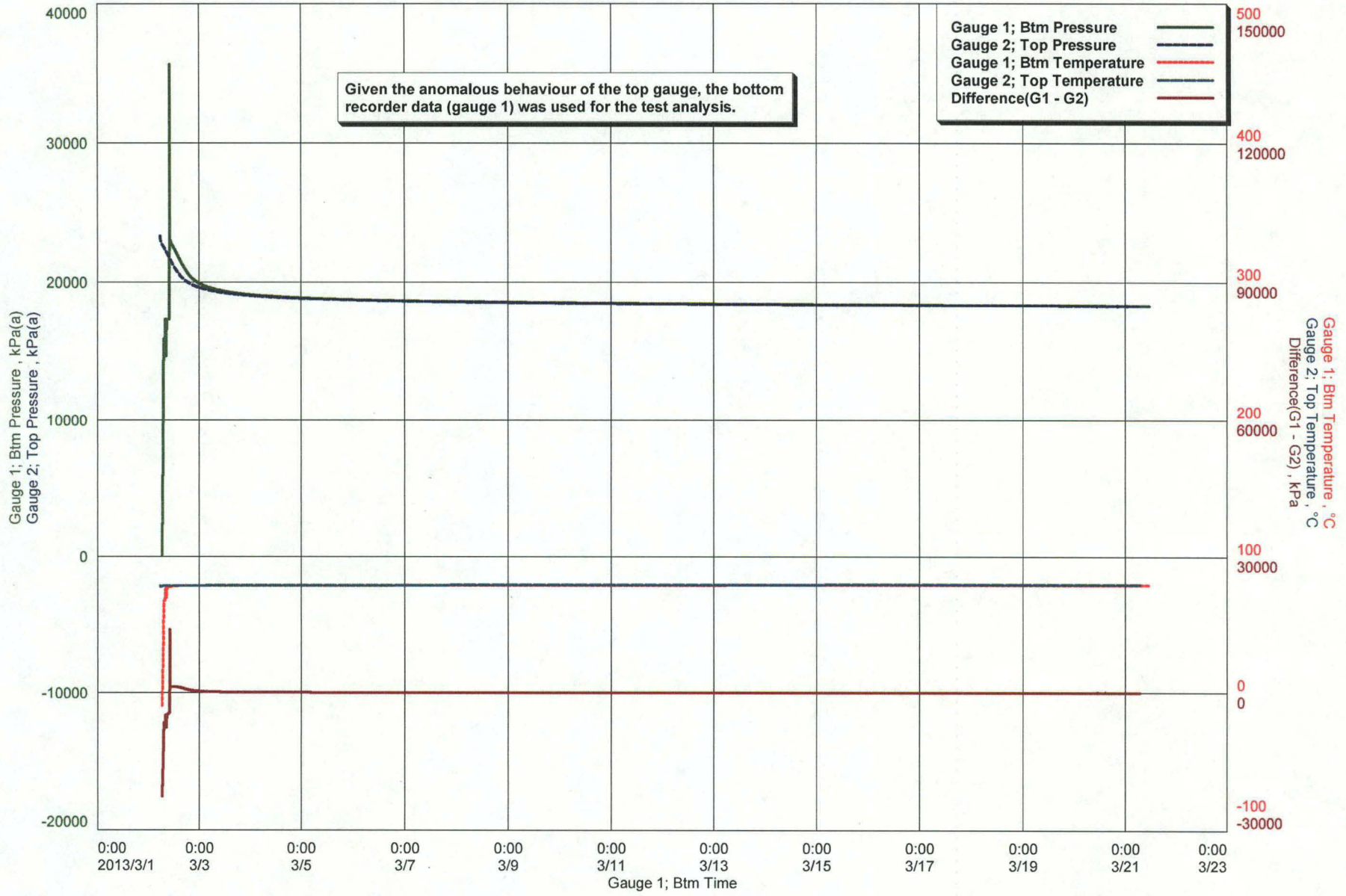
O-06 65-10 127-00

Recorder Validation Plot

Formation: "Basal" Lower Canol



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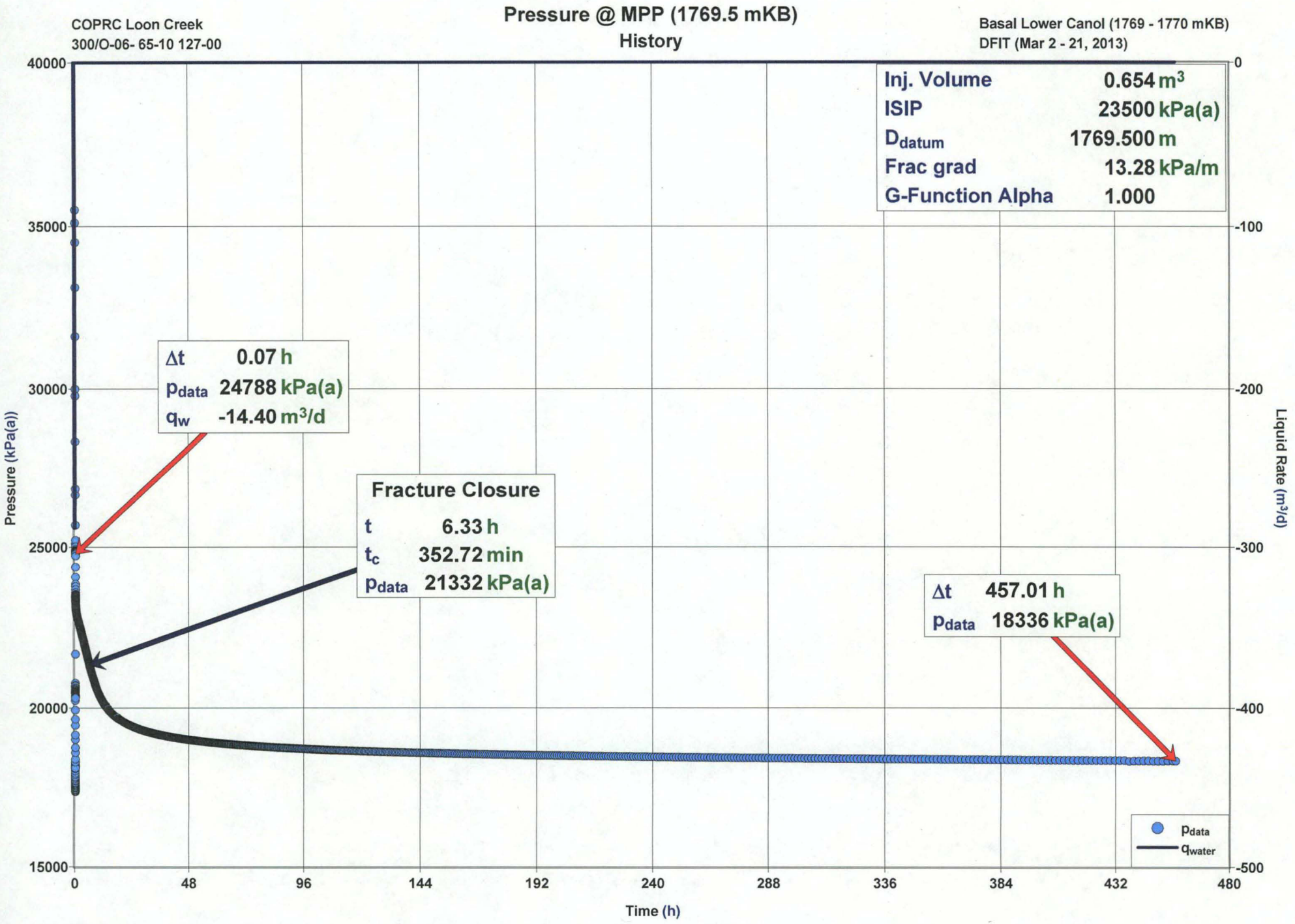

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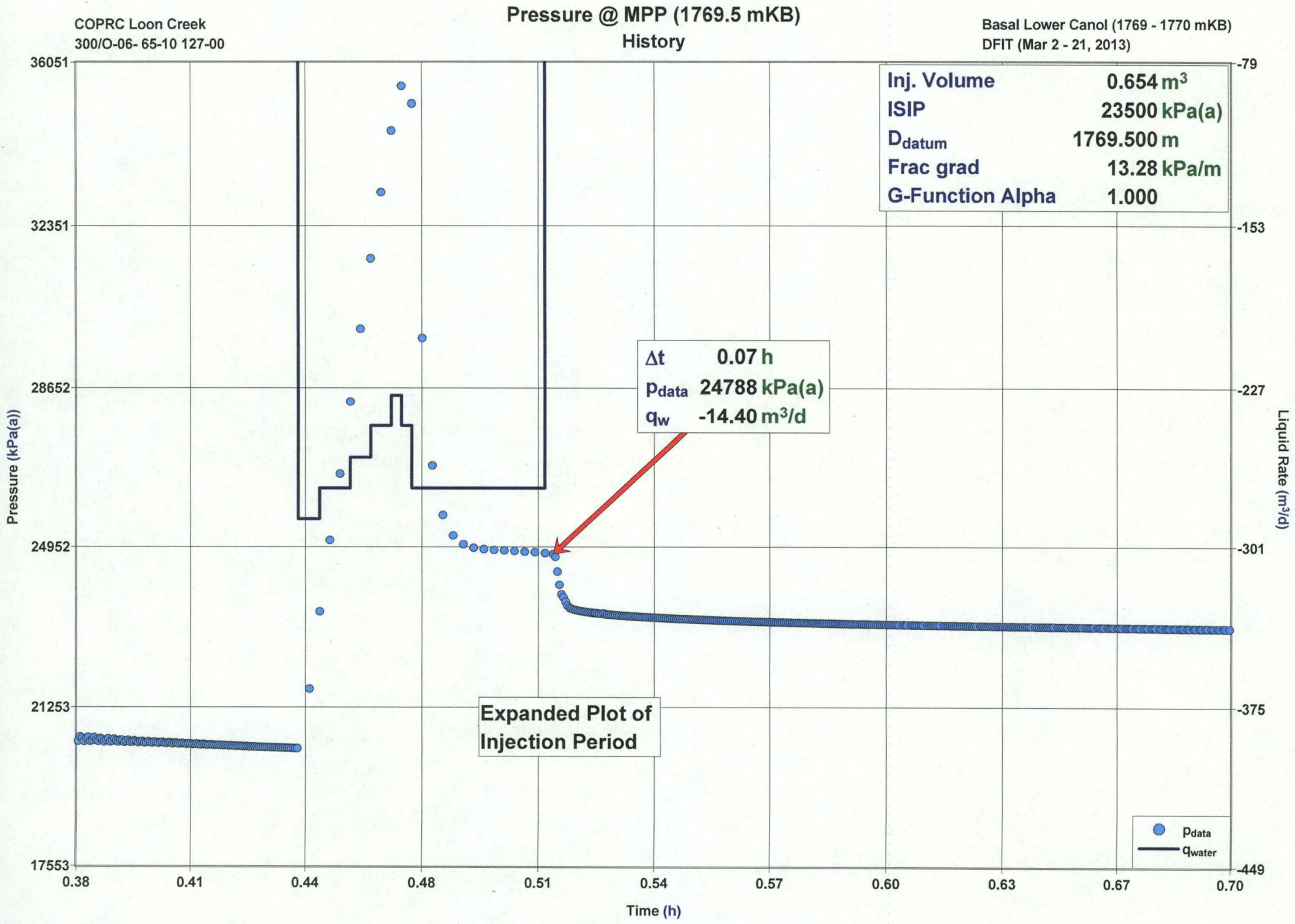

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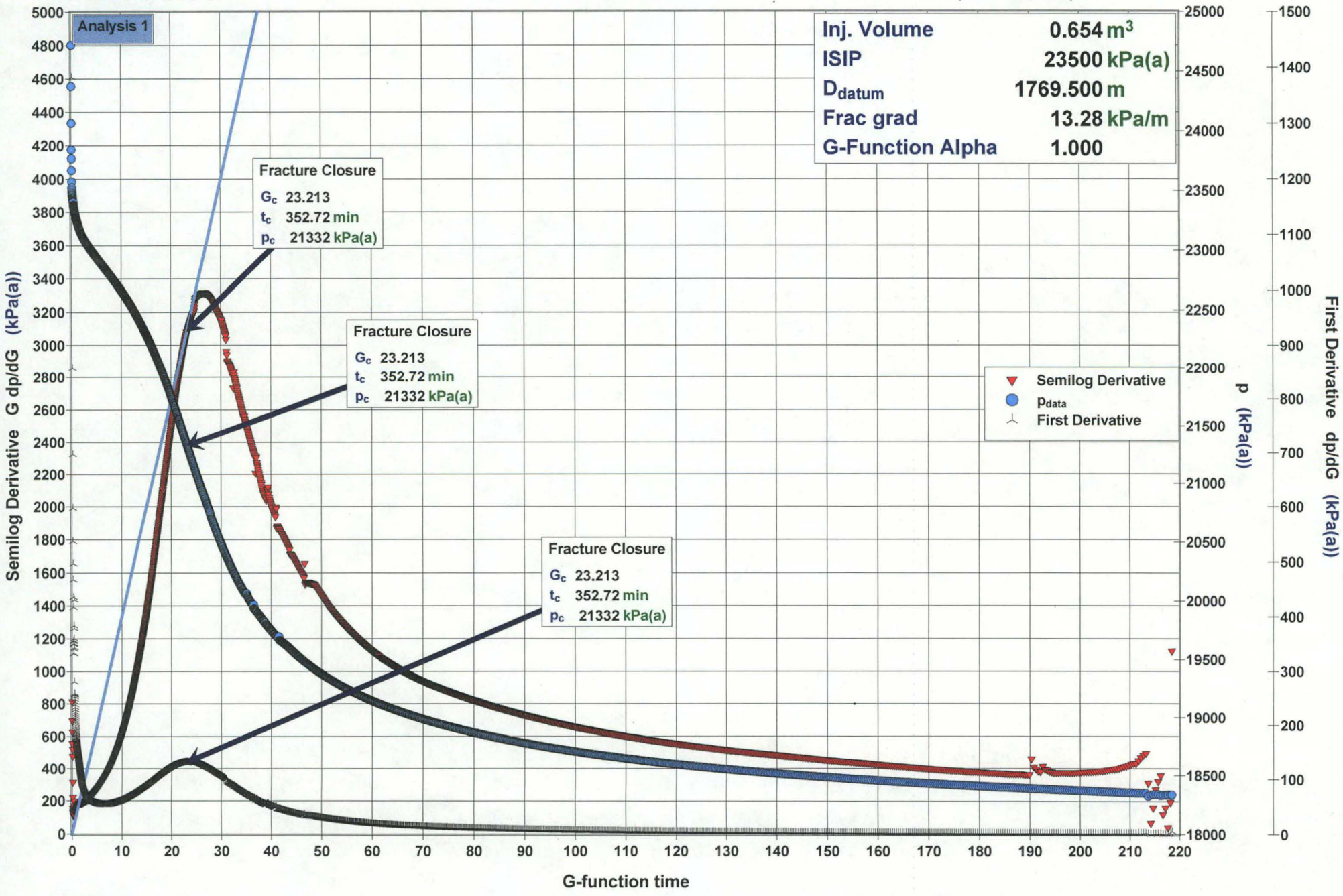
PCA Diagnostic 1
G-Function

COPRC Loon Creek
300/O-06- 65-10 127-00

Basal Lower Canol (1769 - 1770 mKB)
DFIT (Mar 2 - 21, 2013)



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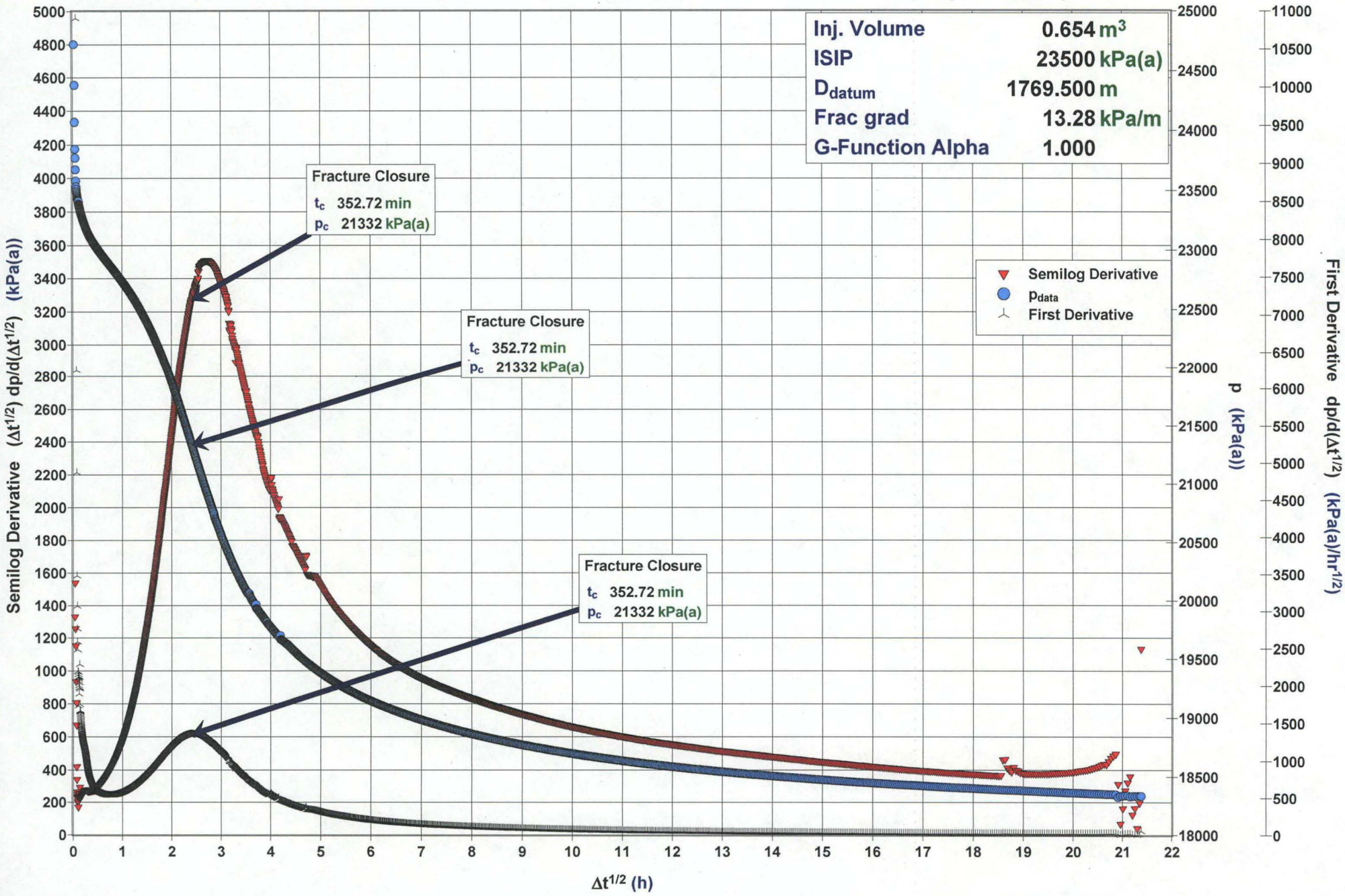
COPRC Loon Creek
300/O-06- 65-10 127-00

PCA Diagnostic 1
MiniFrac Sqrt(t)

Basal Lower Canol (1769 - 1770 mKB)
DFIT (Mar 2 - 21, 2013)



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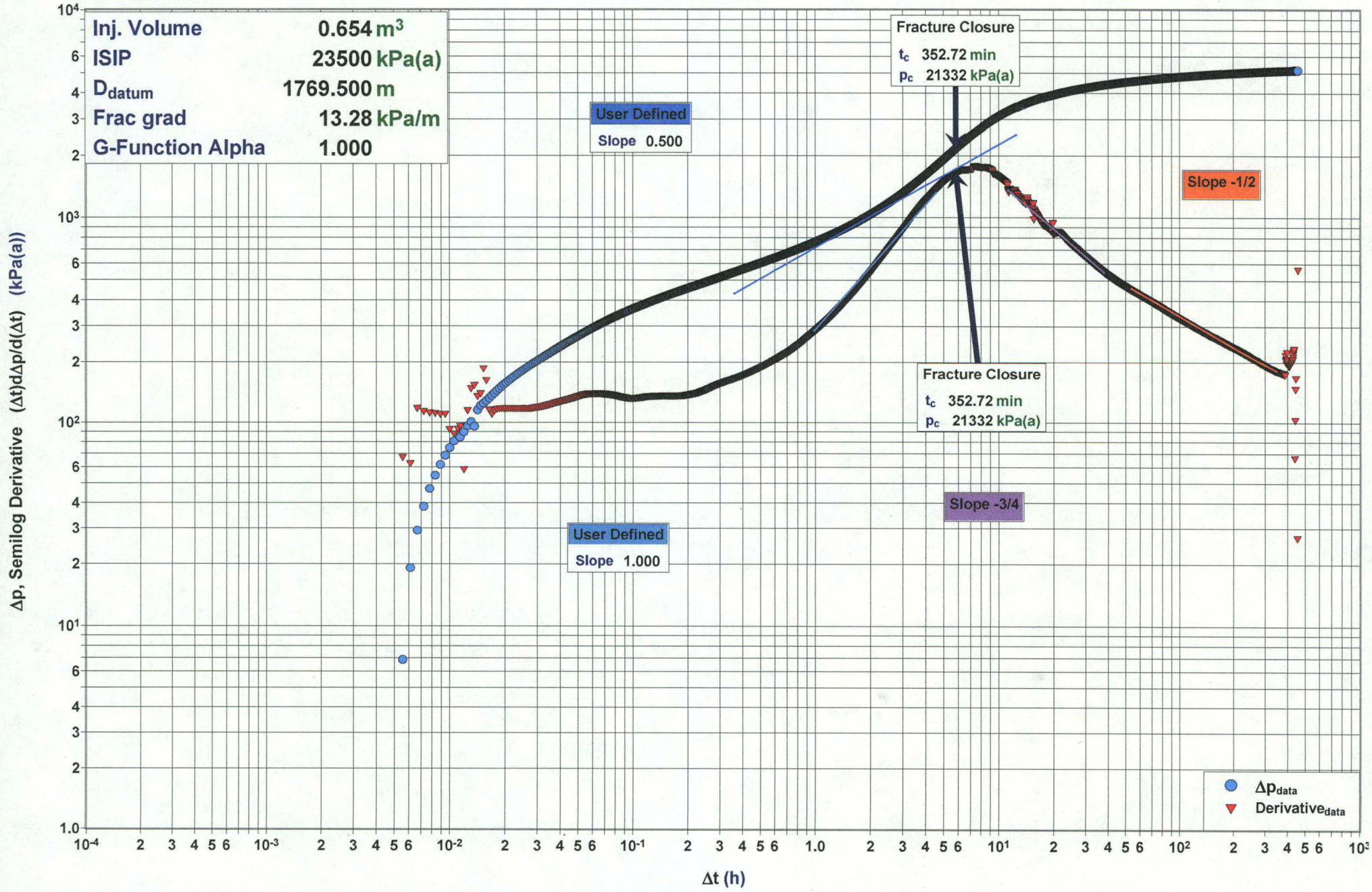
300/O-06- 65-10 127-00

PCA Diagnostic 1
Derivative

Basal Lower Canol (1769 - 1770 mKB)
DFIT (Mar 2 - 21, 2013)



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PCA Diagnostic 1

Input Data

Injected Volume	0.654 m^3
Datum Depth	1769.500 m

Results

ISIP	23500 kPa(a)
Fracture Gradient	13.28 kPa/m

Closure Marker 1

Closure time (t_c)	5.8786 h
Closure pressure (p_c)	21332 kPa(a)
Net Frac Press (Δp_{net})	2168 kPa
G-Function at Closure (G_c)	23.213
Fluid Efficiency (η)	92.07 %

Closure Marker 2

Closure time (t_c)	5.8786 h
Closure pressure (p_c)	21332 kPa(a)
Net Frac Press (Δp_{net})	2168 kPa
G-Function at Closure (G_c)	23.213
Fluid Efficiency (η)	92.07 %

Fluid Properties

Oil Gravity (γ_o)	50.0 °API
Bubble Point Pressure (p_{bp})	17488 kPa(a)
Oil Formation Volume Factor (B_o)	1.498
Oil Viscosity (μ_o)	0.2839 mPa.s
Oil Compressibility (c_o)	3.2157e-06 1/kPa
Solution Gas Ratio (R_s)	148.61 m^3/m^3

Reservoir Properties

Reservoir Temperature (T_{resv})	79.2 °C
Reservoir Pressure (p_{resv})	17495 kPa(a)

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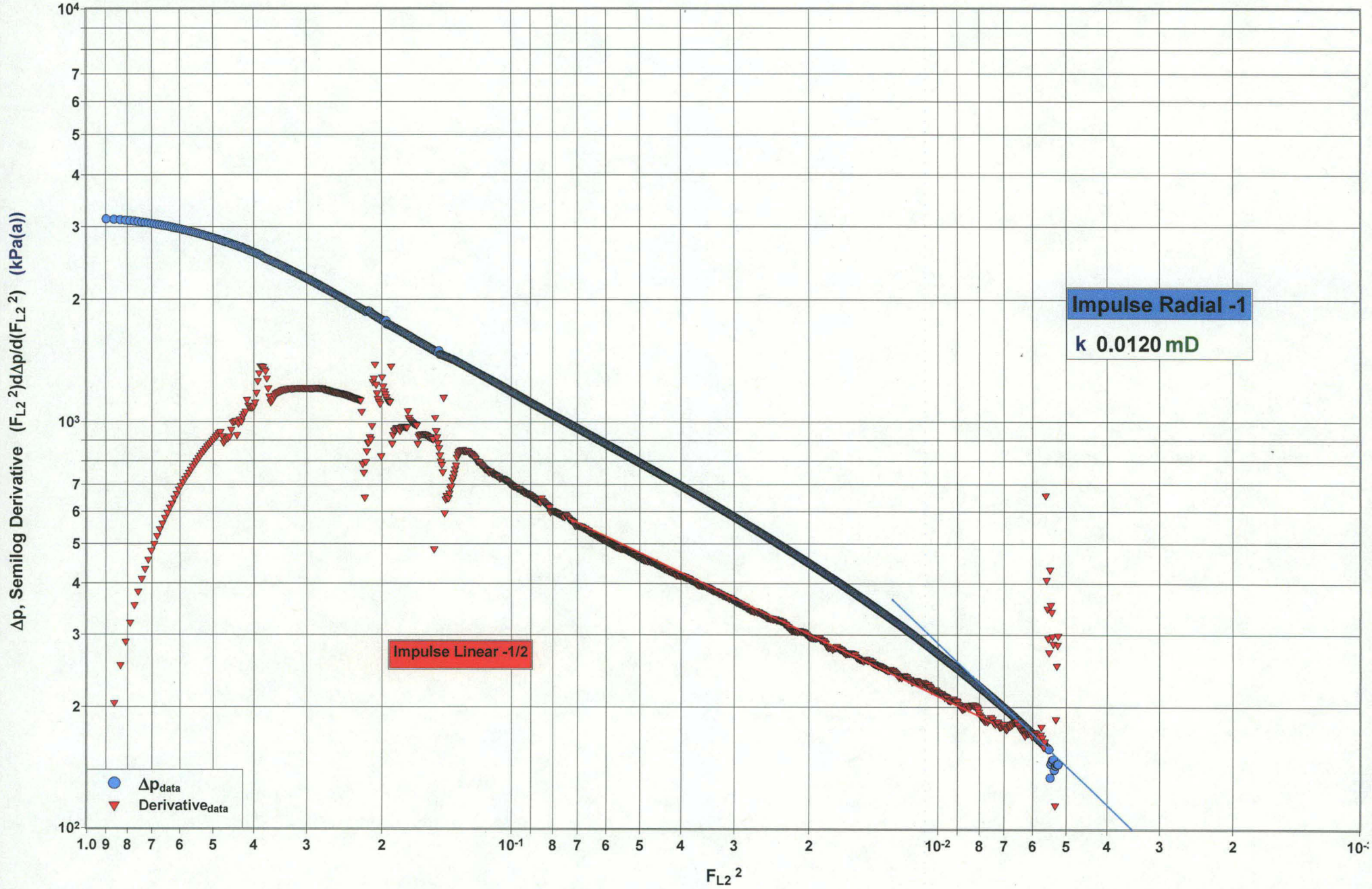
300/O-06- 65-10 127-00

Nolte ACA 1
Derivative

Basal Lower Canol (1769 - 1770 mKB)
DFIT (Mar 2 - 21, 2013)



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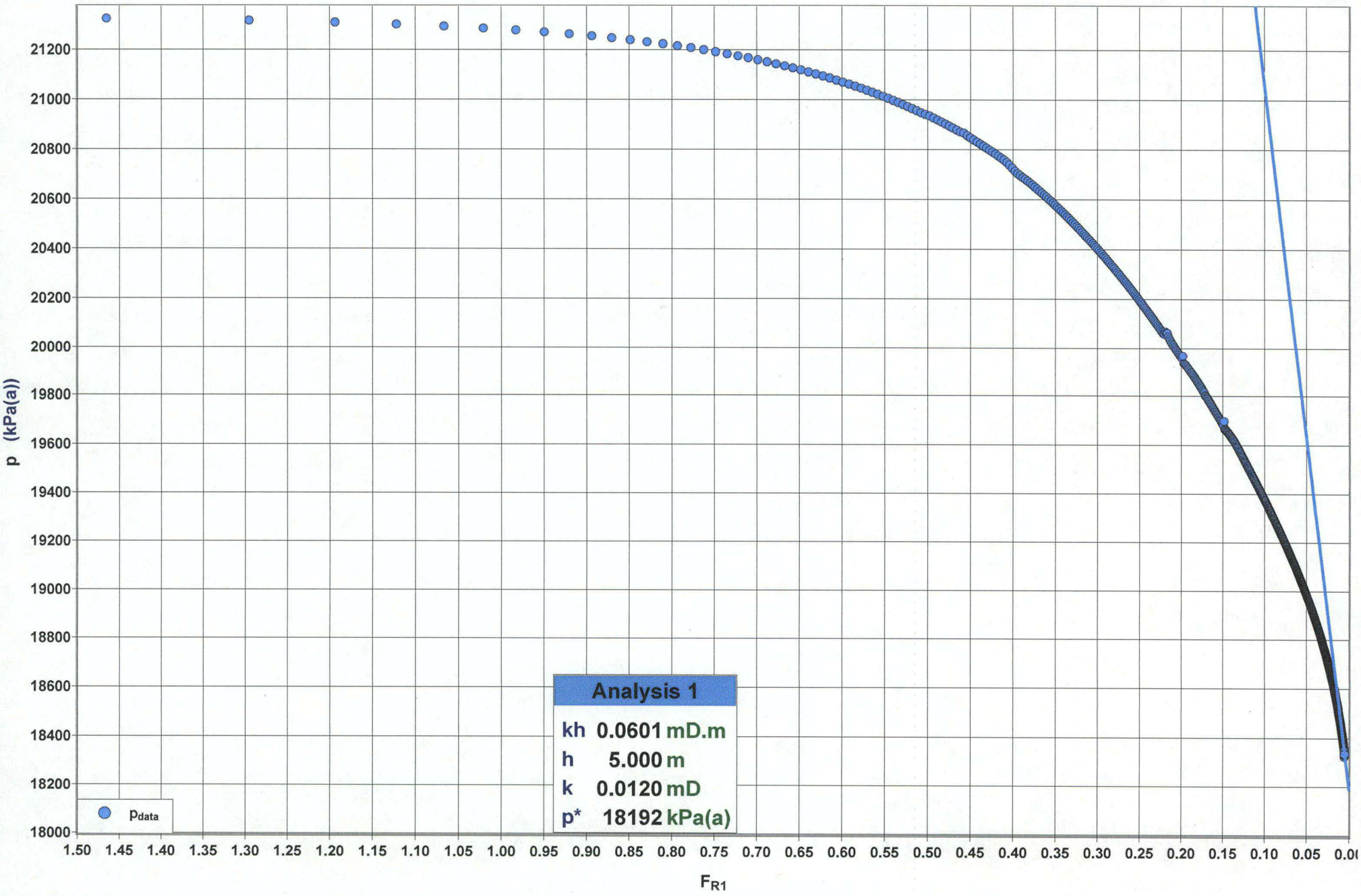
COPRC Loon Creek
300/O-06- 65-10 127-00

Nolte ACA 1
Minifrac Radial (Nolte)

Basal Lower Canol (1769 - 1770 mKB)
DFIT (Mar 2 - 21, 2013)



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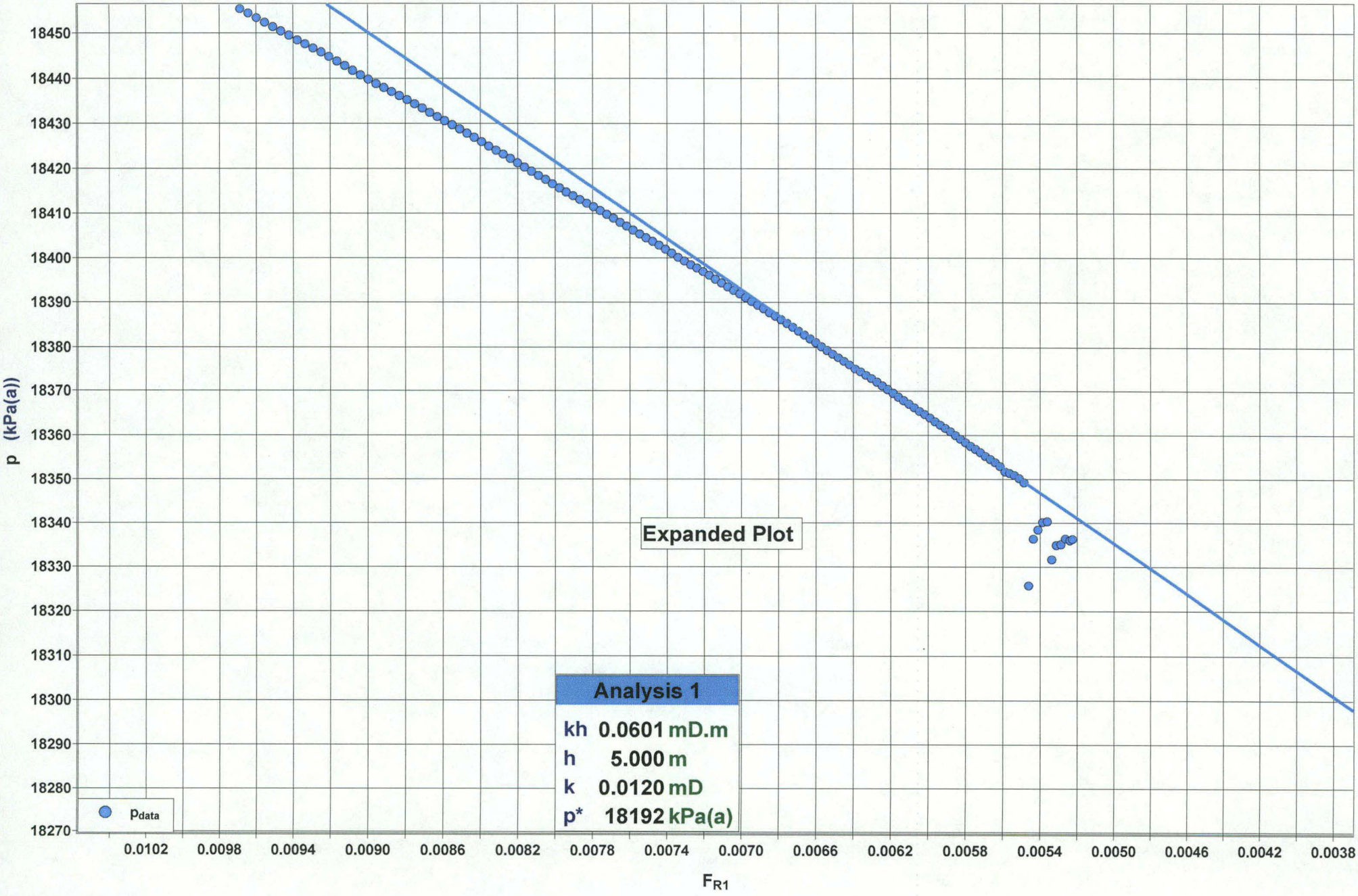
COPRC Loon Creek
300/O-06- 65-10 127-00

Nolte ACA 1
Minifrac Radial (Nolte)

Basal Lower Canol (1769 - 1770 mKB)
DFIT (Mar 2 - 21, 2013)



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Nolte ACA 1

Linear Analysis (FL)

Flow Capacity (kh)	mD.m
Effective Permeability (k)	mD
Extrapolated Pressure (p*)	18036 kPa(a)
Closure Pressure (pc)	kPa(a)
Reservoir Leakoff Coefficient (CR)	$m/min^{1/2}$
Total Leakoff Coefficient (CT)	$m/min^{1/2}$

Radial Analysis (FR)

Flow Capacity (kh)	0.06008 mD.m
Effective Permeability (k)	0.0120 mD
Extrapolated Pressure (p*)	18192 kPa(a)

Input Parameters

Estimated Initial Pressure (p_i)	18192 kPa(a)
Closure time (t_c)	352.72 min

Fluid Properties

Oil Gravity (γ_o)	50.0 °API
Bubble Point Pressure (p_{bp})	17488 kPa(a)
Oil Formation Volume Factor (B_o)	1.498
Oil Viscosity (μ_o)	0.2839 mPa.s
Oil Compressibility (c_o)	3.2157e-06 1/kPa
Solution Gas Ratio (R_s)	148.61 m^3/m^3

Reservoir Properties

Reservoir Temperature (T_{resv})	79.2 °C
Reservoir Pressure (p_{resv})	17495 kPa(a)
Net Pay (h)	5.000 m
Total Porosity (ϕ_t)	15.00 %
Gas Saturation (S_g)	0.00 %
Oil Saturation (S_o)	87.00 %
Water Saturation (S_w)	13.00 %
Formation Compressibility (c_f)	5.9600e-07 1/kPa
Total Compressibility (c_t)	3.4506e-06 1/kPa

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OIL MINI-FRAC ANALYSIS

WELL NAME: **COPRC Loon Creek**
WELL LOCATION:
Bottomhole Location: **300/O-06 65-10 127-00**
Surface.Location: 300/O-06 65-10 127-00
Well License #: **470**

ZONE: **"MIDDLE" LOWER CANOL**

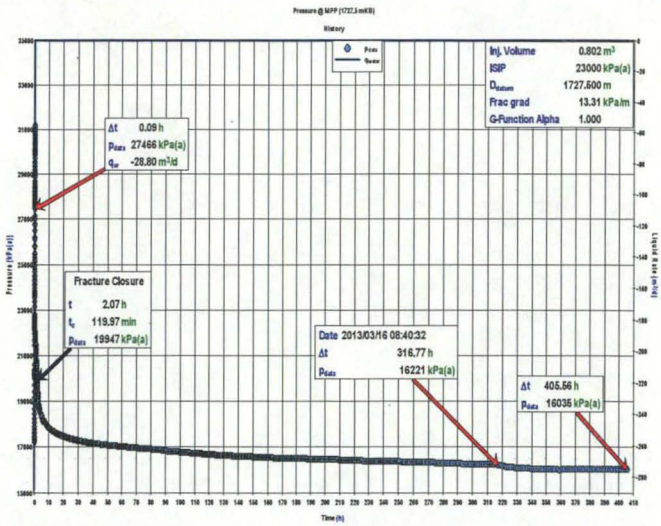
COST CENTRE: **10345055**

TEST DATE: **Mar 3 – 20, 2013**

STAGE OF WELL TEST: **Post-Perf Inj-Falloff**

ORIENTATION: **Vertical**

TYPE/SIZE OF STIMULATION: **N/A**



Reservoir Properties

Injection Interval: 1727 – 1728 mKB		
Frac Height (h): 5 m (Estimate)	Porosity (ϕ): 11 %	Water Saturation (Sw): 22 %
Oil Gravity: 50 °API (Estimate)	H_2S Content: 0 %	BHT: 77.3 °C

Injection Data

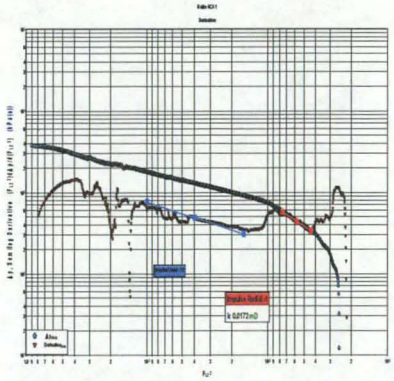
Test	Time	Final Rates				Final Pressures		
		Gas	New Oil	New H_2O	Load	Tubing	Casing	BHP
	Hours	e^3m^3/d	m^3/d	m^3/d	m^3/d	kPag	kPag	kPaa
Injection	0.1	---	---	---	28.8	N/A	0	27466
Shut-In	405.6	---	---	---	0	N/A	0	16035

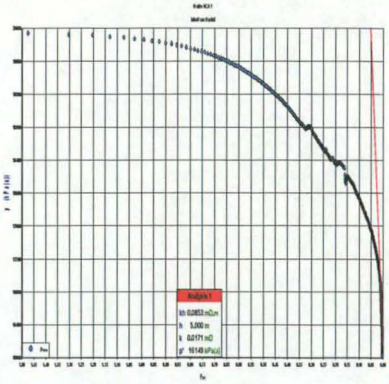
Injection Summary

New Fluid (m^3)				Load Fluid (m^3)		Remaining Load (m^3)	
Gas (E^3M^3)	Gas (MSCF)	Cond (m^3)	Water (m^3)	Oil (m^3)	Water (m^3)	Oil (m^3)	Water (m^3)
---	---	---	---	0	0.8	0	0.8

Pressure Transient Analysis Results Summary

Analysis Results	
P*	**16149 kPaa**
$(kh/\mu)_o$	**0.28 mD·m/mPa·s**
$(kh)_o$	**0.09 mD·m**
k_o	**0.02 mD**





Discussion

Test Procedure:
A segregated post-perf mini-frac test was conducted on the "Basal" Lower Canol interval. This interval was subsequently isolated below bridge plugs. On Mar 3rd, 2013, the "Middle" LOWER CANOL interval was perforated. A retrievable bridge plug, with tandem electronic recorders hung below, was run in hole (center element at 1723 mKB). Water injection was initiated to achieve formation breakdown. Injection continued for several more minutes after breakdown, including for a brief period after the bridge plug setting mechanism was activated (dynamic shut-in). The final water injection rate prior to shut-in was reported to be 28.8 m^3/d (0.02 m^3/min). The subsequent falloff was monitored for almost 17 days (~406 hrs). On Mar 20th, the bridge plug (including the recorders) was unset and recovered. The primary objectives of the mini-frac test were to obtain frac design and reservoir flow parameters. It is noted that upon isolating this interval, operations were conducted to carry out a mini-frac test on the "Upper" Lower Canol. The analyses / results for each of the zones have been provided in separate reports.

The test data (injection & falloff) from the subject test was corrected to the mid-point of the perforations (MPP=1727.5 mKB) using an estimated water gradient of 9.8 kP/m.

Analysis:
The mini-frac test data was analyzed using traditional techniques. Diagnostic plots, such as the G-Function & Sqrt (t) plots, were utilized first to confirm the occurrence of fracture closure. For the subject zone, the diagnostic plots indicated closure after about 120 minutes of shut-in. After-closure analysis, via Nolte & Soliman / Craig techniques, was then conducted to obtain estimates for reservoir parameters. It is noted that although the derivative data was relatively noisy, the late-time data suggested evidence of pseudo-radial flow. However, the final almost 4 days of the falloff data was deemed unusable as a result of non-reservoir effects (uphole operations). It is also noted that one of the plugs (Basal interval top plug) was tagged at a depth lower (~4m) than it was set at. Therefore, it is speculated that this movement may have caused and / or contributed to the pressure anomaly observed starting on Mar 16th @ ~9AM. Consequently, the terminal portion of the falloff data was not analyzed. The corresponding results / plots have been presented in this report.

Conclusions / Recommendations:
The test was successful in satisfying the primary objectives set forth at the onset of the test program. The test results suggested an effective permeability to oil of 0.02 mD. However, it is noted that this oil permeability was calculated based on estimated values for frac height (5 m) & oil viscosity (50 °API oil with a viscosity of 0.30 mPa·s).

The corresponding extrapolated reservoir pressure was determined to be about 16.1 MPaa.

The overall confidence of the test results is considered to be fair.

Analyzed by: **Al Kassam** **Report Date: May 3rd, 2013**

Copy: **Kim Clarke** **Alex Novgorodova** **Well File**

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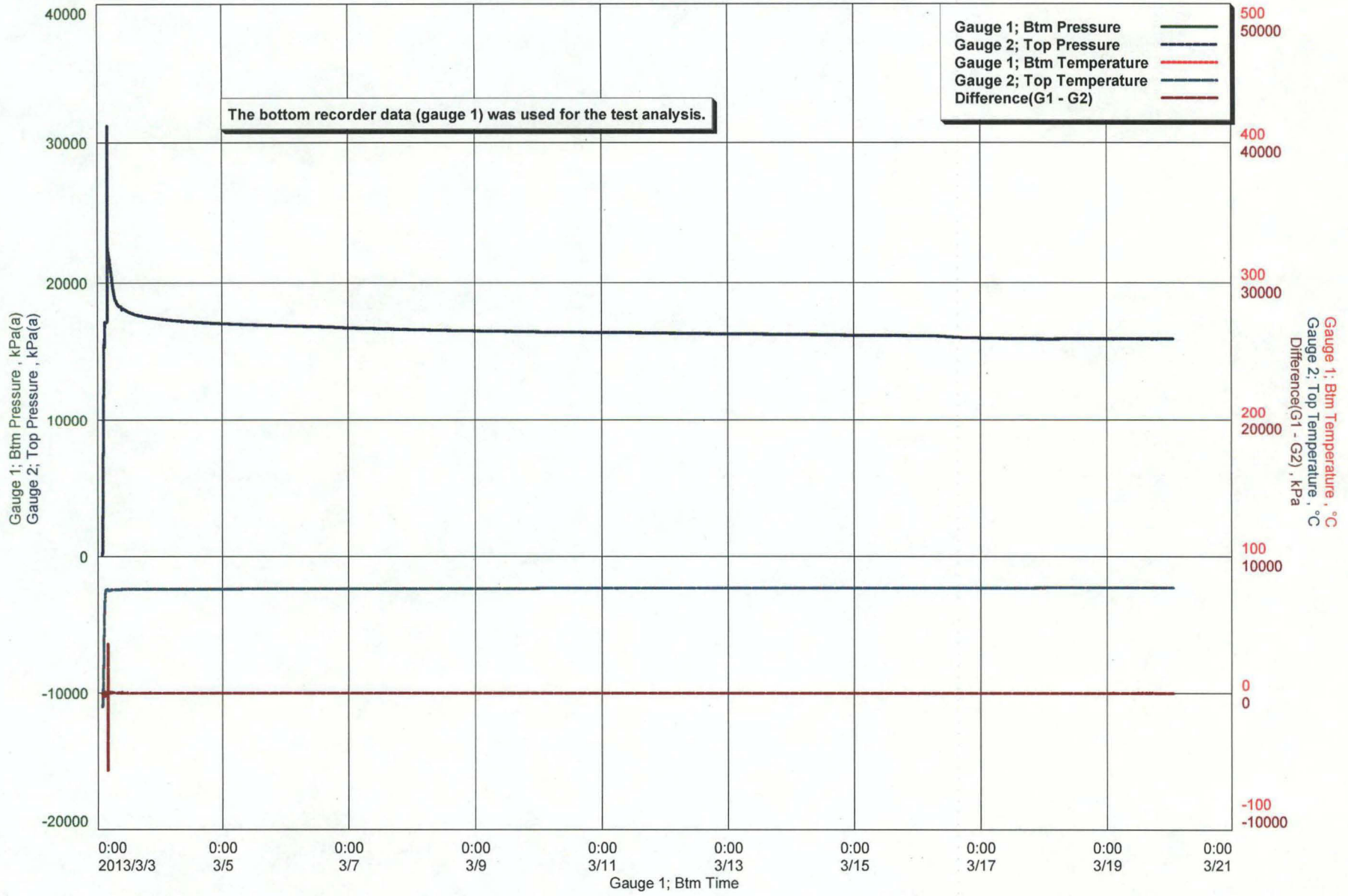
Recorder Validation Plot

Formation: "Middle" Lower Canol



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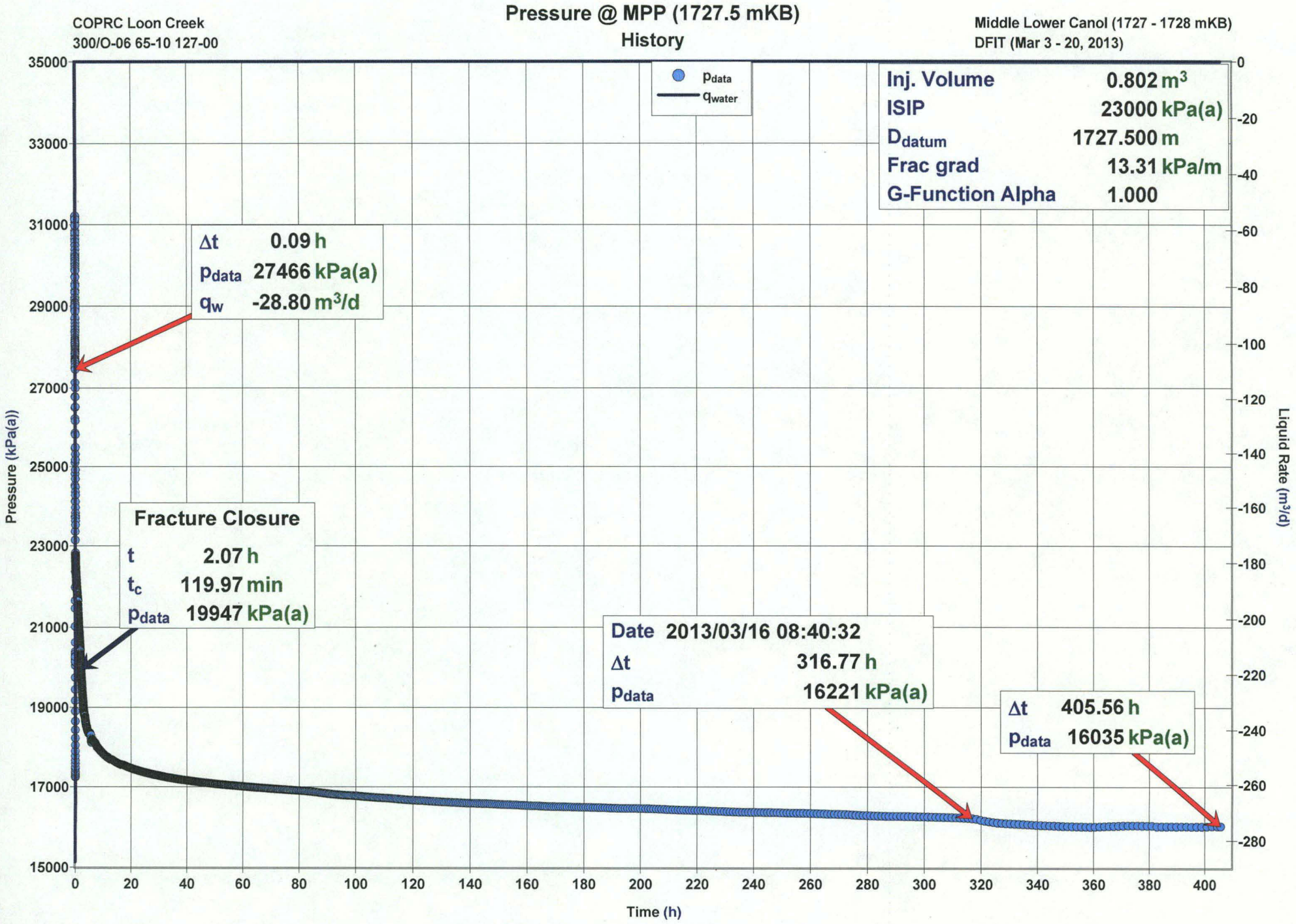

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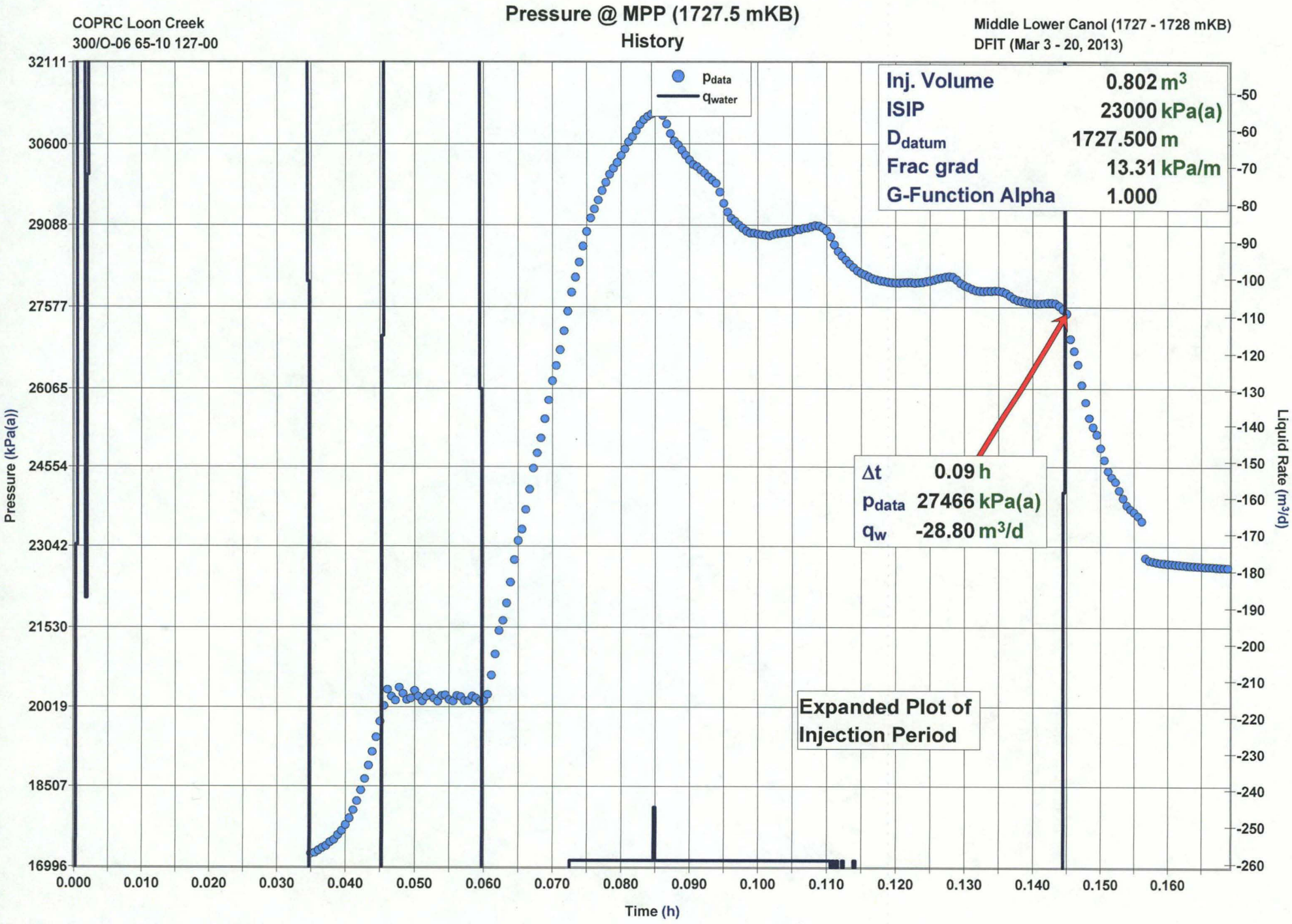

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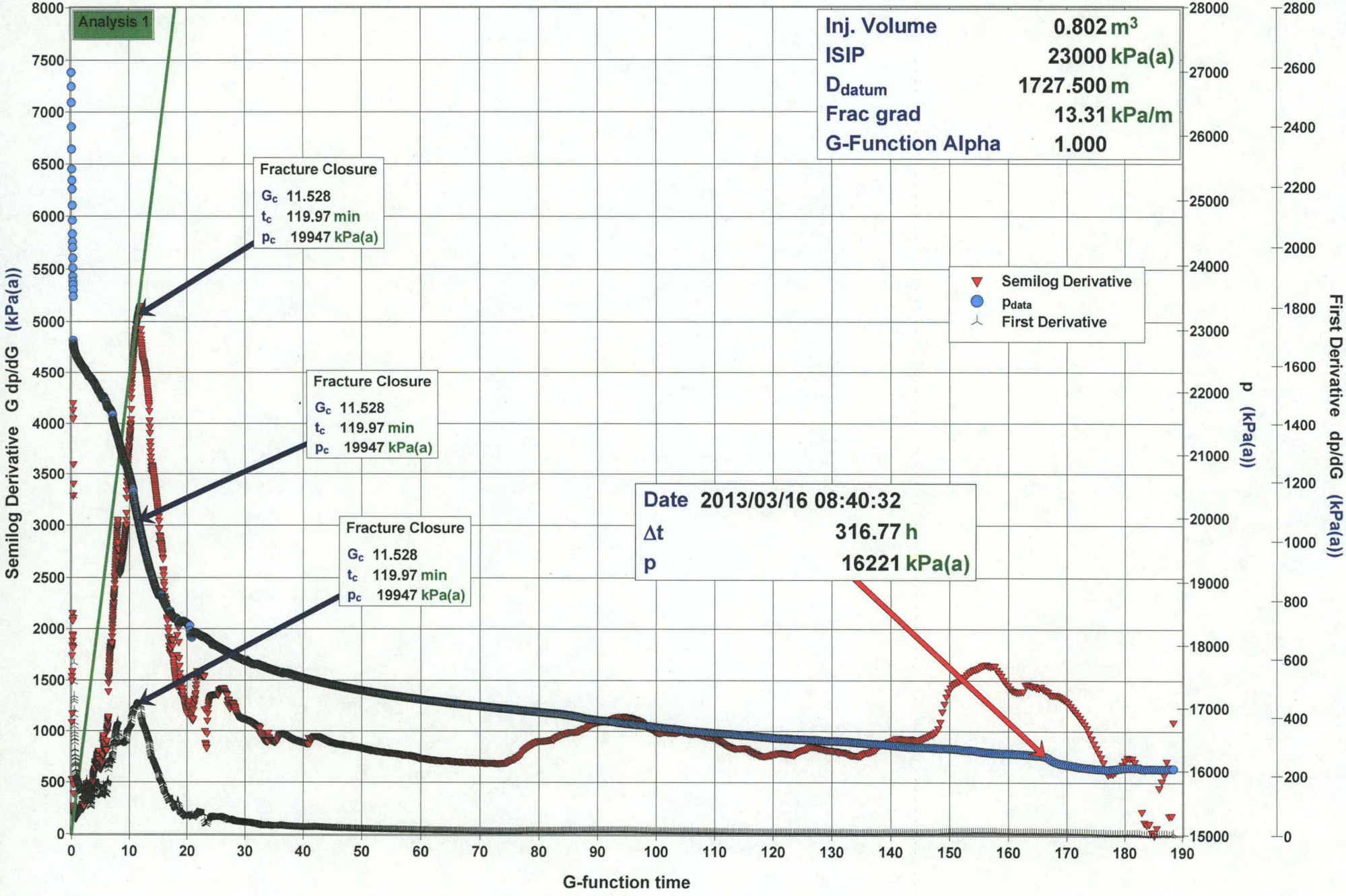
PCA Diagnostic 1
G-Function

COPRC Loon Creek
300/O-06 65-10 127-00

Middle Lower Canol (1727 - 1728 mKB)
DFIT (Mar 3 - 20, 2013)



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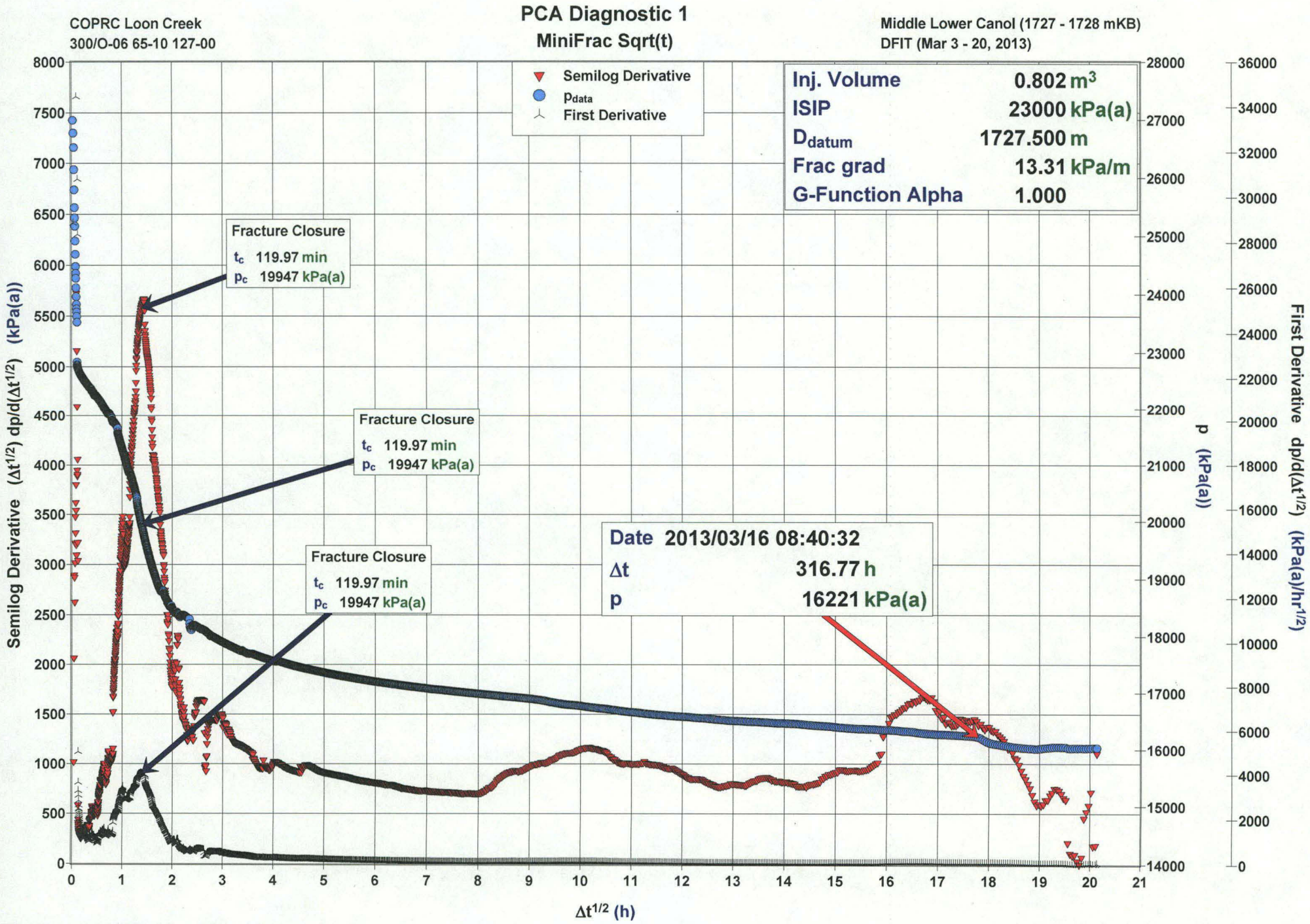

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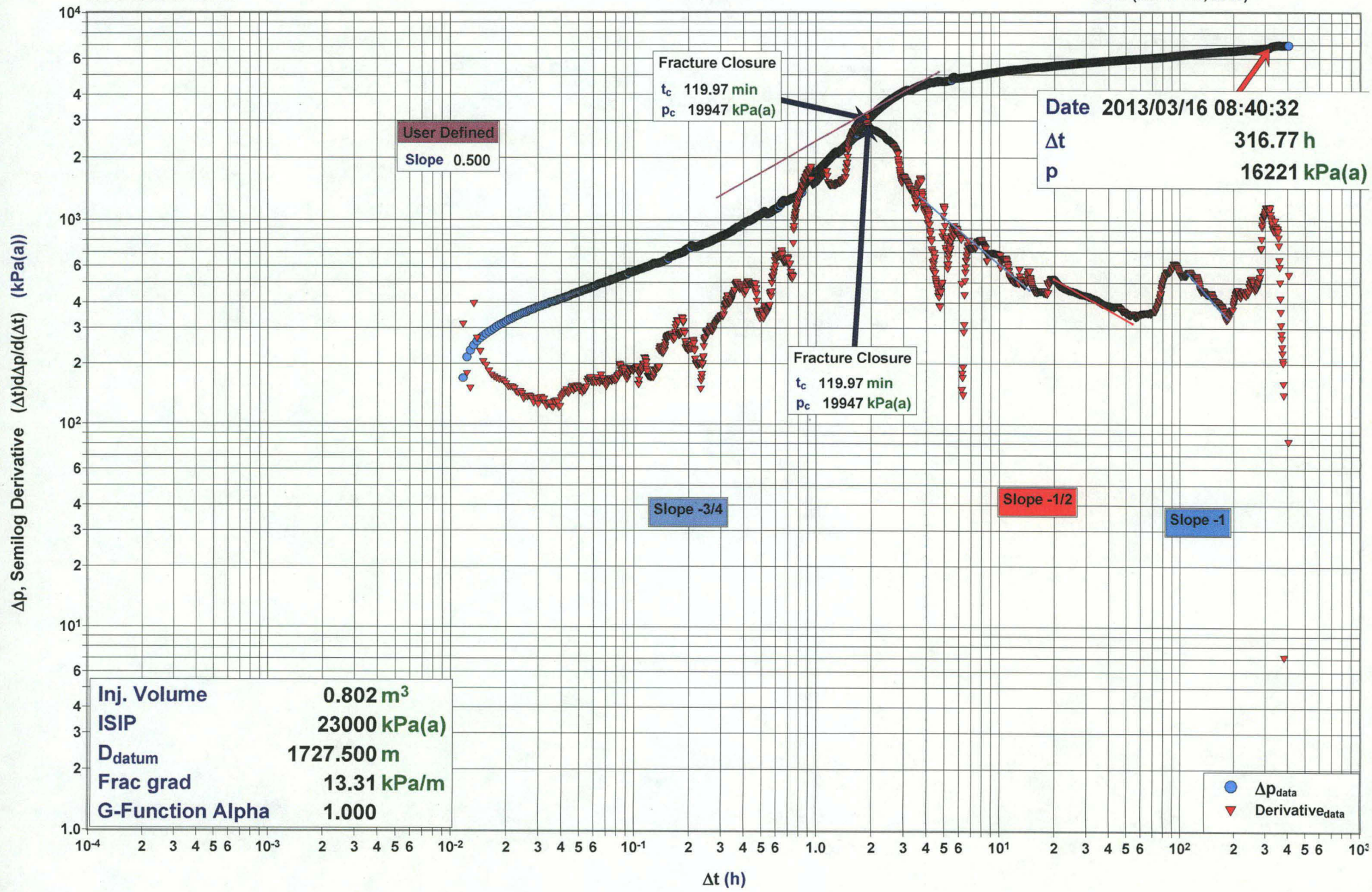
300/O-06 65-10 127-00

PCA Diagnostic 1
Derivative

Middle Lower Canol (1727 - 1728 mKB)
DFIT (Mar 3 - 20, 2013)



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PCA Diagnostic 1

Input Data

Injected Volume	0.802 m^3
Datum Depth	1727.500 m

Results

ISIP	23000 kPa(a)
Fracture Gradient	13.31 kPa/m

Closure Marker 1

Closure time (t_c)	1.9994 h
Closure pressure (p_c)	19947 kPa(a)
Net Frac Press (Δp_{net})	3053 kPa
G-Function at Closure (G_c)	11.528
Fluid Efficiency (η)	85.22 %

Closure Marker 2

Closure time (t_c)	1.9994 h
Closure pressure (p_c)	19947 kPa(a)
Net Frac Press (Δp_{net})	3053 kPa
G-Function at Closure (G_c)	11.528
Fluid Efficiency (η)	85.22 %

Fluid Properties

Oil Gravity (γ_o)	50.0 °API
Bubble Point Pressure (p_{bp})	16028 kPa(a)
Oil Formation Volume Factor (B_o)	1.460
Oil Viscosity (μ_o)	0.3004 mPa.s
Oil Compressibility (c_o)	3.2390e-06 1/kPa
Solution Gas Ratio (R_s)	135.38 m^3/m^3

Reservoir Properties

Reservoir Temperature (T_{resv})	77.3 °C
Reservoir Pressure (p_{resv})	16035 kPa(a)

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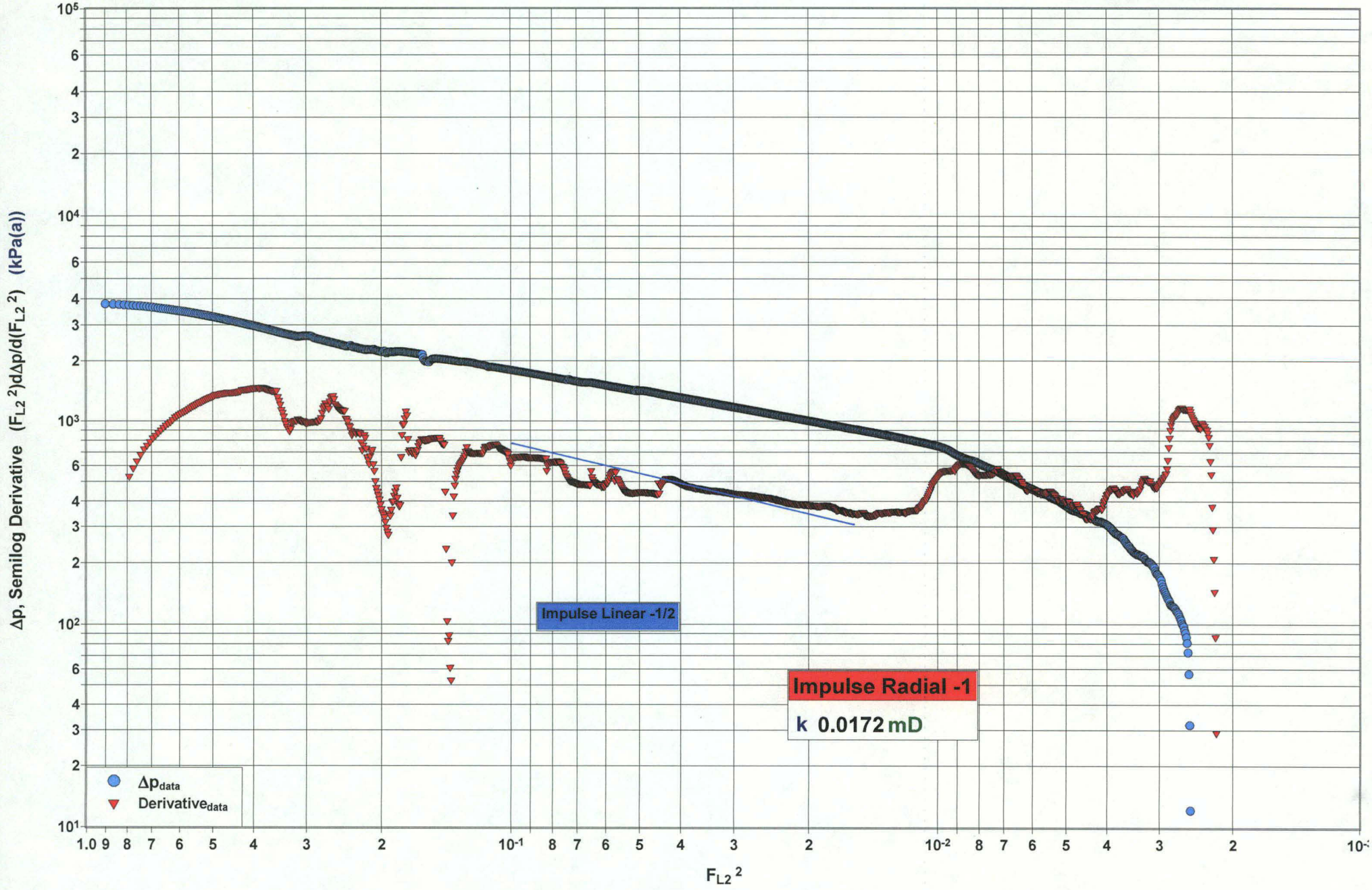
COPRC Loon Creek
300/O-06 65-10 127-00

Nolte ACA 1
Derivative

Middle Lower Canol (1727 - 1728 mKB)
DFIT (Mar 3 - 20, 2013)



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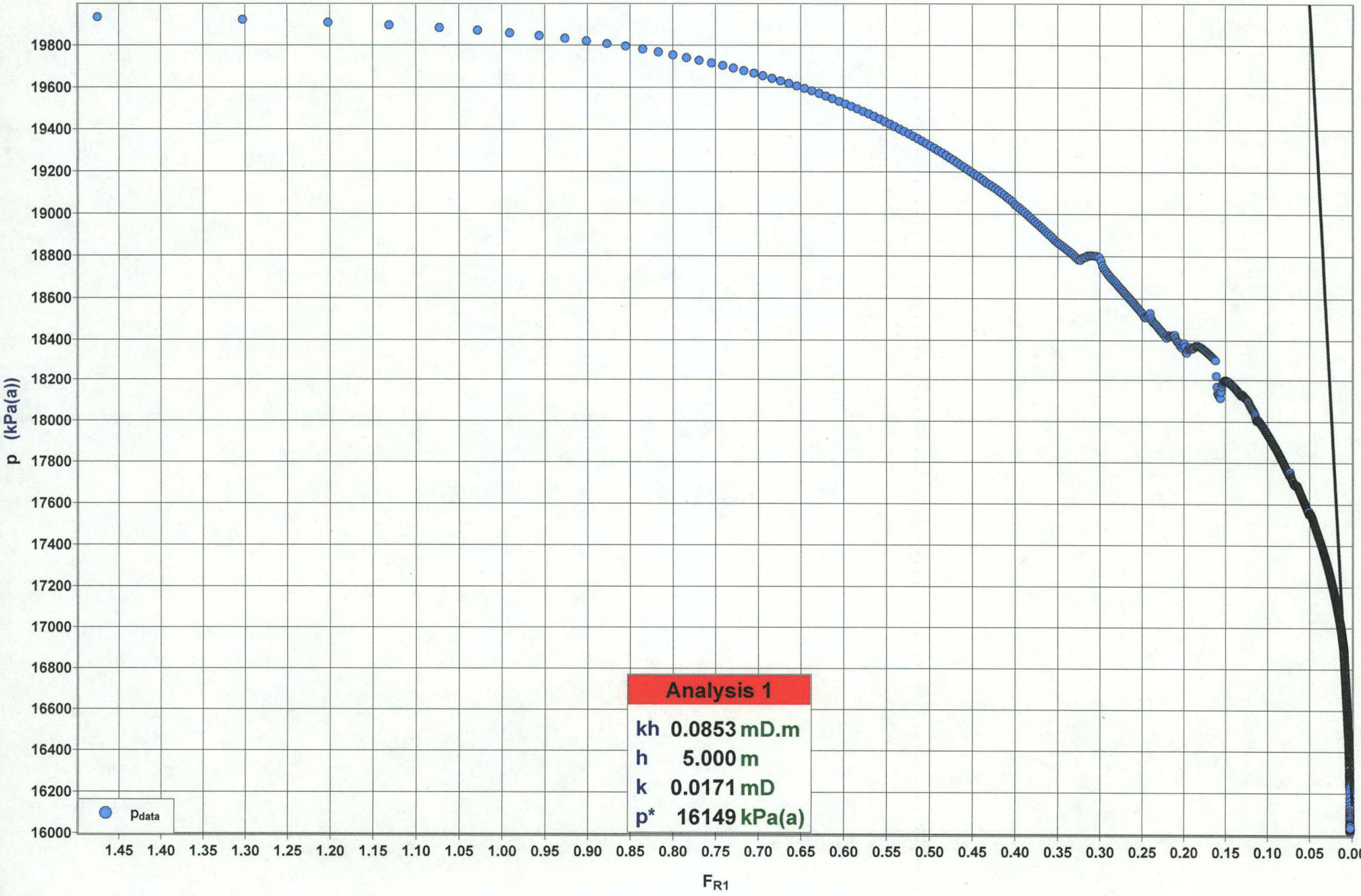
COPRC Loon Creek
300/O-06 65-10 127-00

Nolte ACA 1
MiniFrac Radial

Middle Lower Canol (1727 - 1728 mKB)
DFIT (Mar 3 - 20, 2013)



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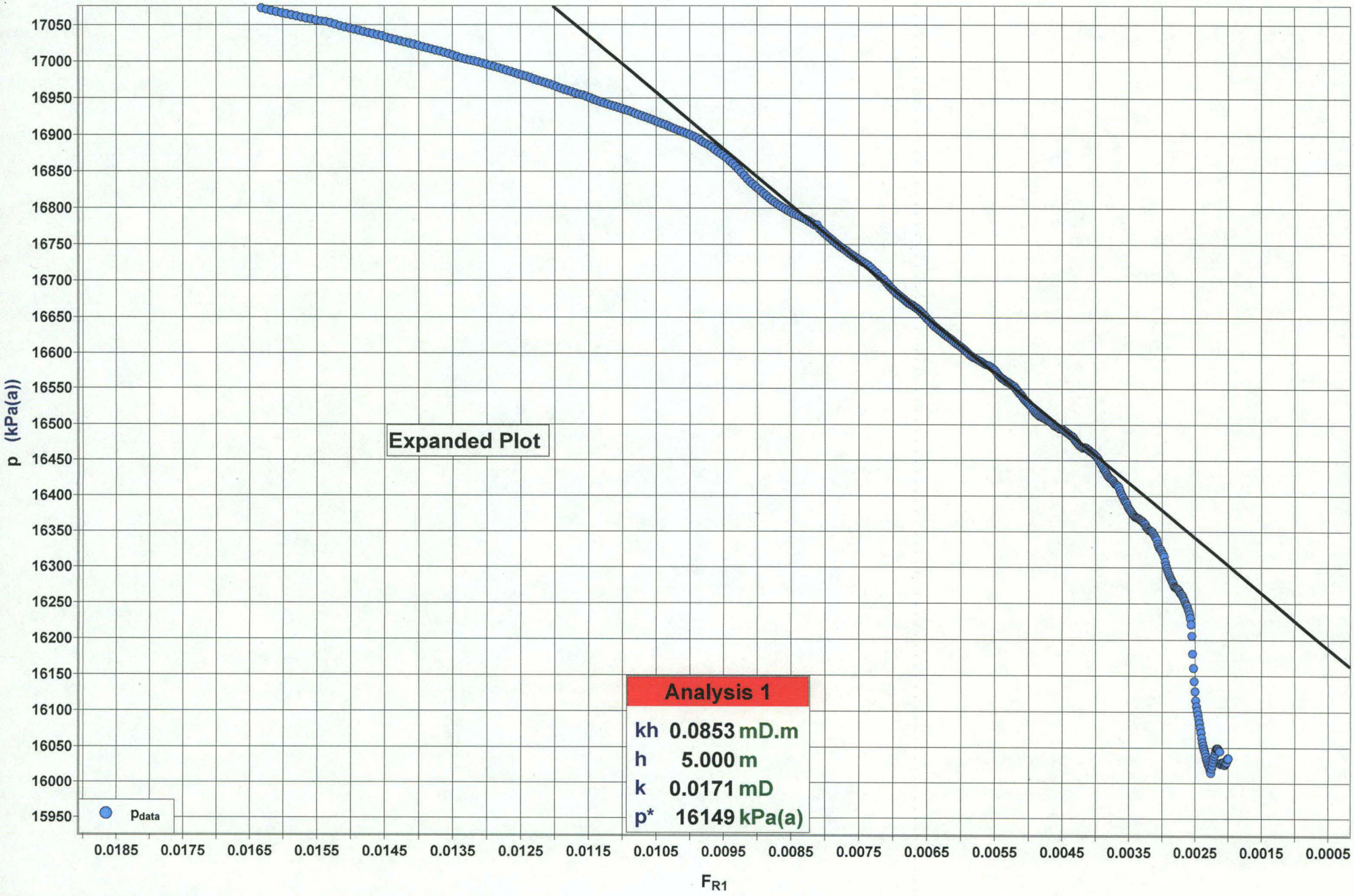
COPRC Loon Creek
300/O-06 65-10 127-00

Nolte ACA 1
MiniFrac Radial

Middle Lower Canol (1727 - 1728 mKB)
DFIT (Mar 3 - 20, 2013)



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Nolte ACA 1

Linear Analysis (FL)

Flow Capacity (kh)	mD.m
Effective Permeability (k)	mD
Extrapolated Pressure (p*)	16460 kPa(a)
Closure Pressure (pc)	kPa(a)
Reservoir Leakoff Coefficient (CR)	$m/min^{1/2}$
Total Leakoff Coefficient (CT)	$m/min^{1/2}$

Radial Analysis (FR)

Flow Capacity (kh)	0.08529 mD.m
Effective Permeability (k)	0.0171 mD
Extrapolated Pressure (p*)	16149 kPa(a)

Input Parameters

Estimated Initial Pressure (p_i)	16149 kPa(a)
Closure time (t_c)	119.97 min

Fluid Properties

Oil Gravity (γ_o)	50.0 °API
Bubble Point Pressure (p_{bp})	16028 kPa(a)
Oil Formation Volume Factor (B_o)	1.460
Oil Viscosity (μ_o)	0.3004 mPa.s
Oil Compressibility (c_o)	3.2390e-06 1/kPa
Solution Gas Ratio (R_s)	135.38 m^3/m^3

Reservoir Properties

Reservoir Temperature (T_{resv})	77.3 °C
Reservoir Pressure (p_{resv})	16035 kPa(a)
Net Pay (h)	5.000 m
Total Porosity (ϕ_t)	11.00 %
Gas Saturation (S_g)	0.00 %
Oil Saturation (S_o)	78.00 %
Water Saturation (S_w)	22.00 %
Formation Compressibility (c_f)	6.7787e-07 1/kPa
Total Compressibility (c_t)	3.3008e-06 1/kPa

OIL MINI-FRAC ANALYSIS

WELL NAME: **COPRC Loon Creek**
WELL LOCATION:
Bottomhole Location: **300/O-06 65-10 127-00**
Surface.Location: 300/O-06 65-10 127-00
Well License #: **470**

ZONE: **"UPPER" LOWER CANOL**

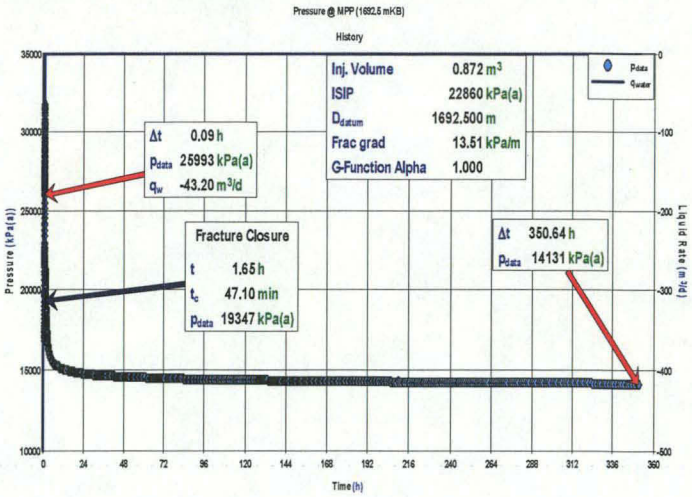
COST CENTRE: **10345055**

TEST DATE: **Mar 3 – 18, 2013**

STAGE OF WELL TEST: **Post-Perf Inj-Falloff**

ORIENTATION: **Vertical**

TYPE/SIZE OF STIMULATION: **N/A**



Reservoir Properties

Injection Interval: 1692 – 1693 mKB		
Frac Height (h): 5 m (Estimate)	Porosity (ϕ): 13 %	Water Saturation (Sw): 13 %
Oil Gravity: 50 °API (Estimate)	H_2S Content: 0 %	BHT: 76.1 °C

Injection Data

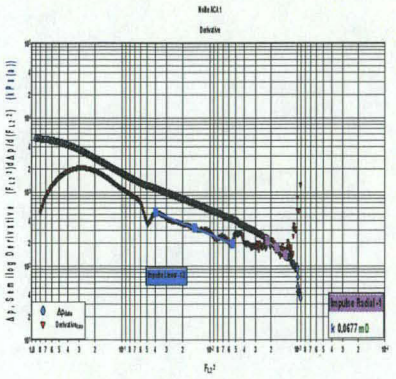
Test	Time	Final Rates				Final Pressures		
		Gas	New Oil	New H_2O	Load	Tubing	Casing	BHP
	Hours	e^3m^3/d	m^3/d	m^3/d	m^3/d	kPag	kPag	kPaa
Injection	0.1	---	---	---	43.2	N/A	0	25993
Shut-In	350.6	---	---	---	0	N/A	0	14131

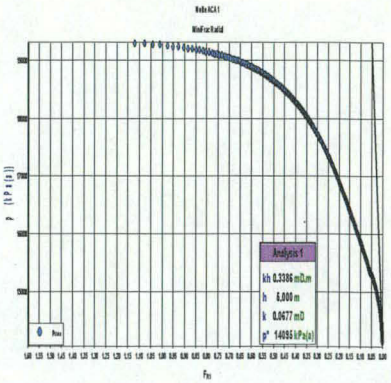
Injection Summary

New Fluid (m^3)				Load Fluid (m^3)		Remaining Load (m^3)	
Gas (E^3M^3)	Gas (MSCF)	Cond (m^3)	Water (m^3)	Oil (m^3)	Water (m^3)	Oil (m^3)	Water (m^3)
---	---	---	---	0	0.9	0	0.9

Pressure Transient Analysis Results Summary

Analysis Results	
P*	14095 kPaa
$(kh/\mu)_o$	0.59 mD·m/mPa·s
$(kh)_o$	0.19 mD·m
k_o	0.04 mD





Discussion

Test Procedure:
Segregated post-perf mini-frac tests were conducted on the "Basal" and "Middle" LOWER CANOL intervals. The mini-frac tests were conducted concurrently and as such, each interval was isolated below bridge plugs. On Mar 3rd, 2013, the "Upper" LOWER CANOL interval was perforated. A retrievable bridge plug, with tandem electronic recorders hung below, was run in hole (center element at 1689 mKB). Water injection was initiated to achieve formation breakdown. Injection continued for several more minutes after breakdown, including for a brief period after the bridge plug setting mechanism was activated (dynamic shut-in). The final water injection rate prior to shut-in was reported to be 43.2 m^3/d (0.03 m^3/min). The subsequent falloff was monitored for almost 15 days (~351 hrs). On Mar 18th, the bridge plug (including the recorders) was unset and recovered. The primary objectives of the mini-frac test were to obtain frac design and reservoir flow parameters.

The test data (injection & falloff) was corrected to the mid-point of the perforations (MPP=1692.5 mKB) using an estimated water gradient of 9.8 kP/m.

Analysis:
The mini-frac test data was analyzed using traditional techniques. Diagnostic plots, such as the G-Function & Sqrt (t) plots, were utilized first to confirm the occurrence of fracture closure. For the subject zone, the diagnostic plots indicated closure after about 47 minutes of shut-in. After-closure analysis, via Nolte & Soliman / Craig techniques, was then conducted to obtain estimates for reservoir parameters. Although the derivative data was relatively noisy, the late-time data suggested evidence of pseudo-radial flow. The terminal portion of the falloff data was not analyzed since it was most likely being affected by uphole operations in preparation for unsetting & pulling the bridge plug (well was also bled off prior to unsetting the plug). The corresponding results / plots have been presented in this report.

Conclusions / Recommendations:
The test was successful in satisfying the primary objectives set forth at the onset of the test program. The test results suggested an effective permeability to oil of 0.04 mD. However, it is noted that this oil permeability was calculated based on estimated values for frac height (5 m) & oil viscosity (50 °API oil with a viscosity of 0.32 mPa·s).

The corresponding extrapolated reservoir pressure was determined to be about 14.1 MPaa.

The overall confidence of the test results is considered to be fair.

Analyzed by: **Al Kassam** **Report Date: May 3rd, 2013**

Copy: **Kim Clarke** **Alex Novgorodova** **Well File**

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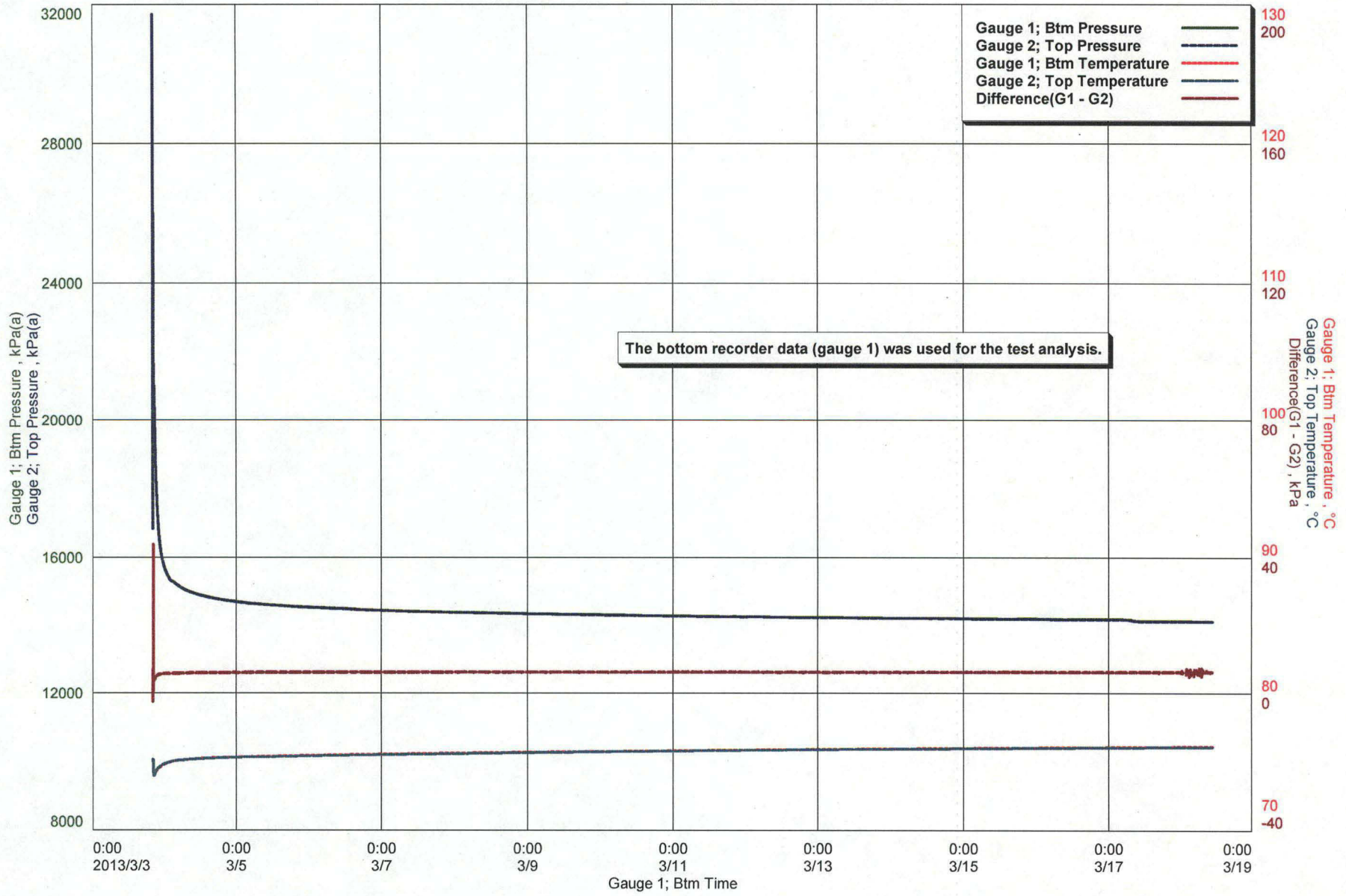
O-06 65-10 127-00

Recorder Validation Plot

Formation: "Upper" Lower Canol



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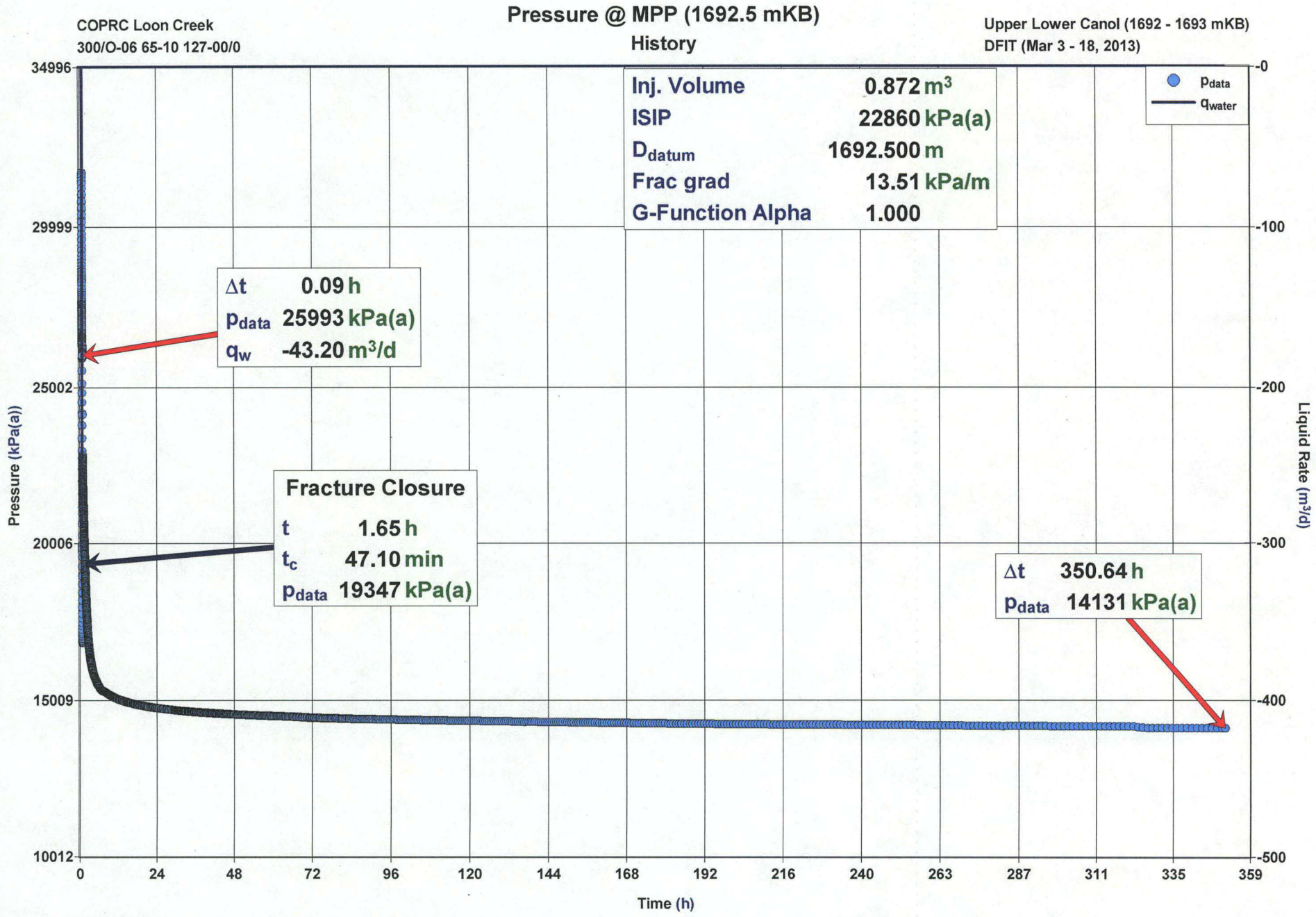

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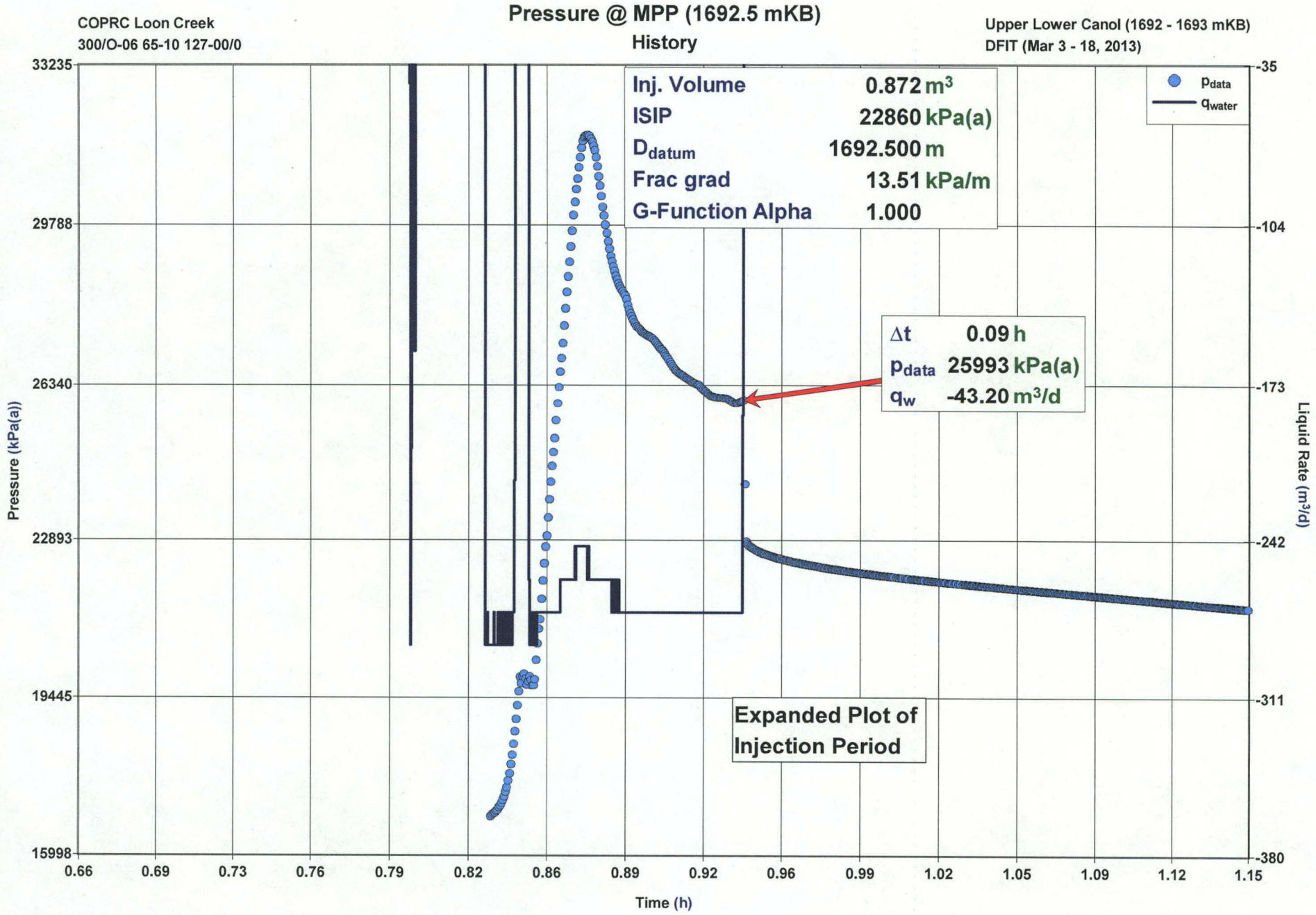

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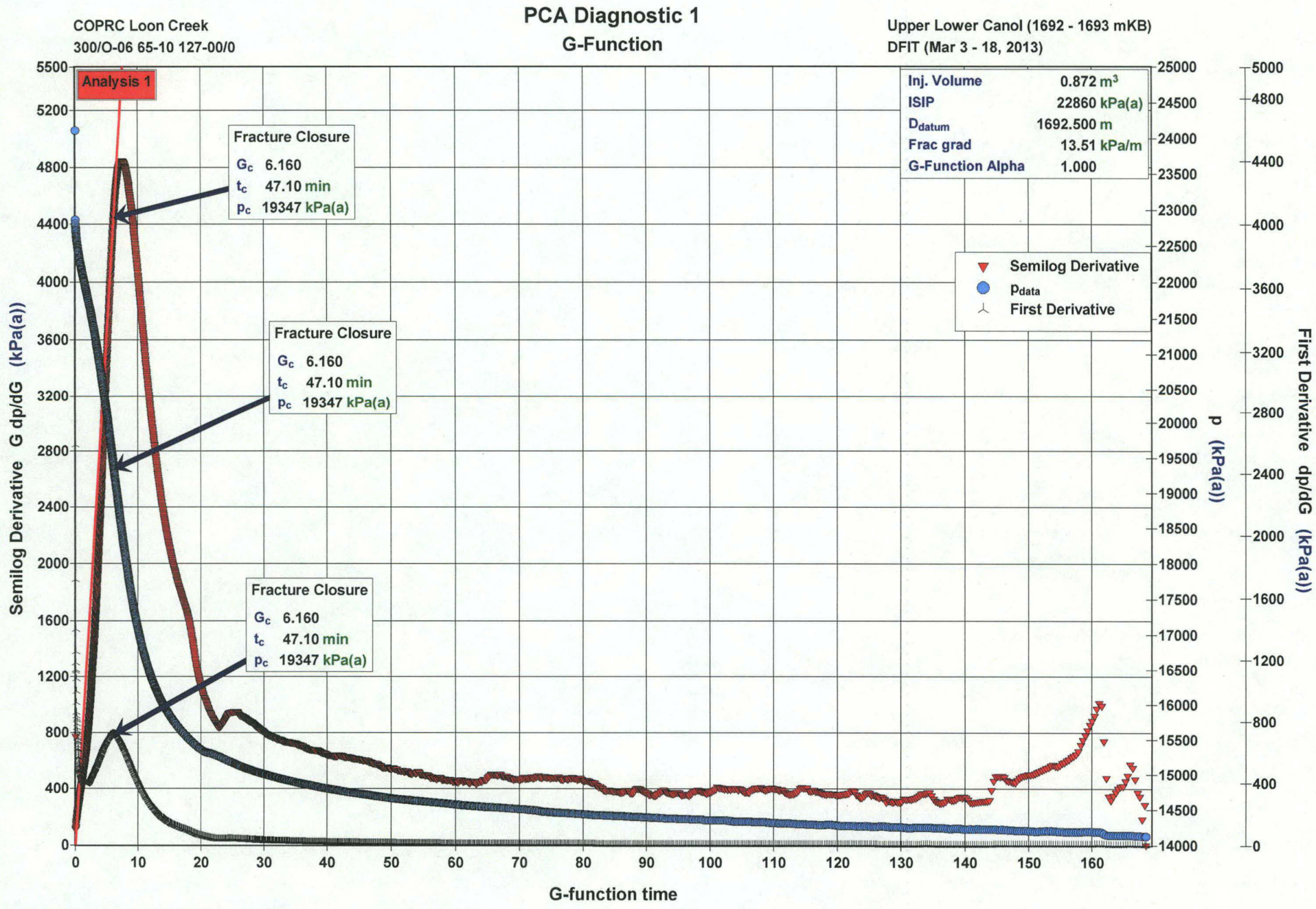

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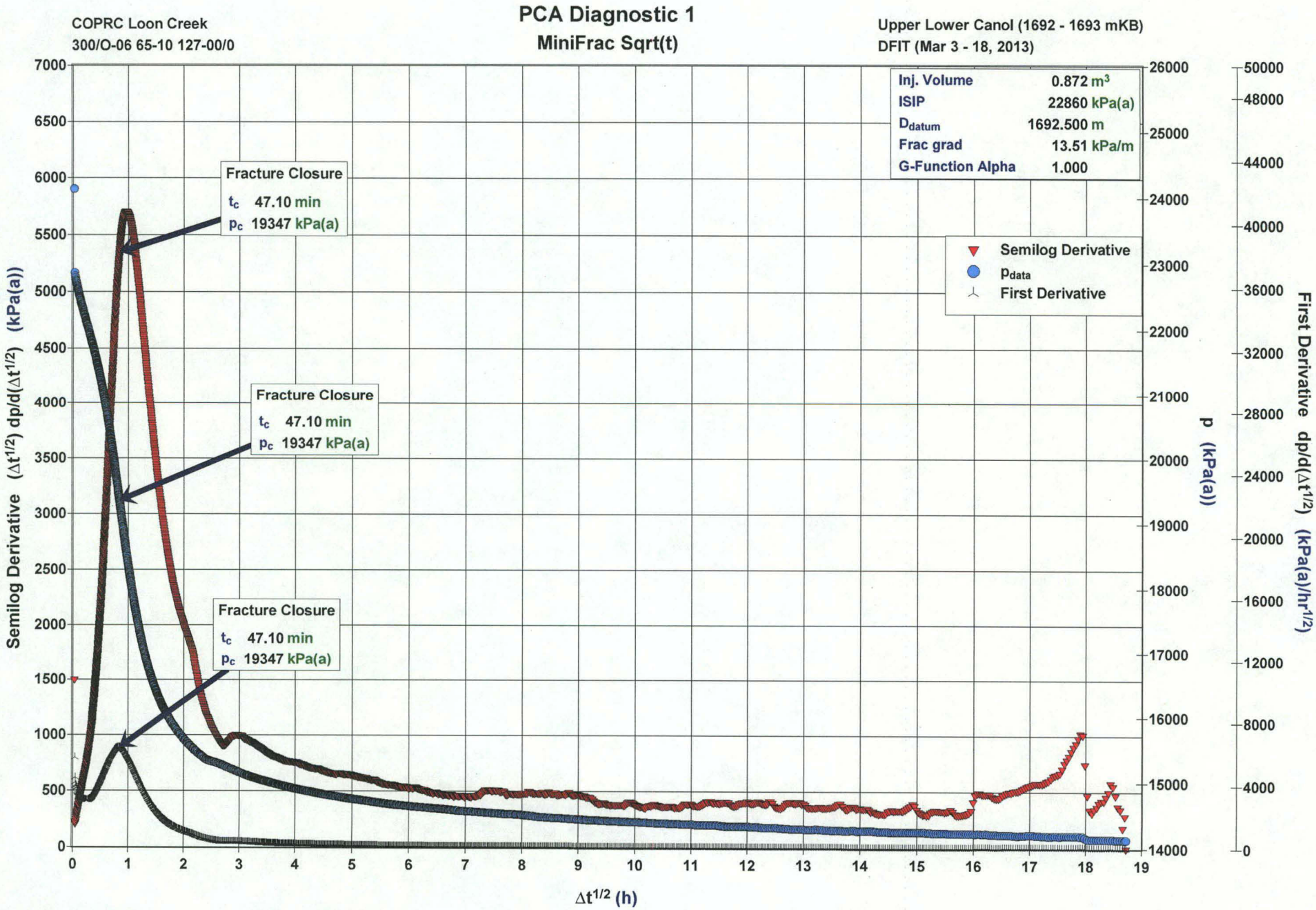

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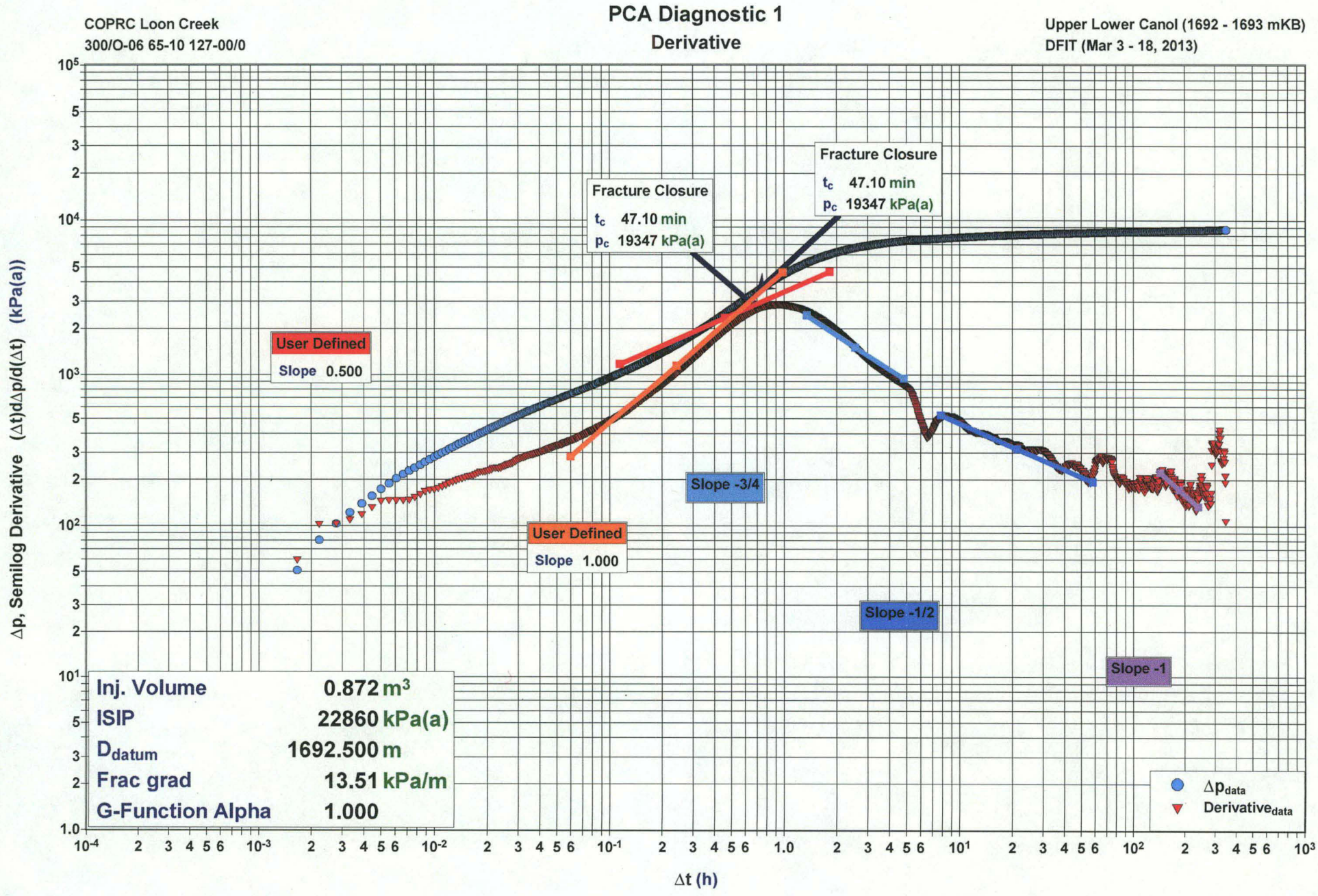

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PCA Diagnostic 1

Input Data

Injected Volume	0.872 m^3
Datum Depth	1692.500 m

Results

ISIP	22860 kPa(a)
Fracture Gradient	13.51 kPa/m

Closure Marker 1

Closure time (t_c)	0.7850 h
Closure pressure (p_c)	19347 kPa(a)
Net Frac Press (Δp_{net})	3513 kPa
G-Function at Closure (G_c)	6.160
Fluid Efficiency (η)	75.49 %

Closure Marker 2

Closure time (t_c)	0.7850 h
Closure pressure (p_c)	19347 kPa(a)
Net Frac Press (Δp_{net})	3513 kPa
G-Function at Closure (G_c)	6.160
Fluid Efficiency (η)	75.49 %

Fluid Properties

Oil Gravity (γ_o)	50.0 °API
Bubble Point Pressure (p_{bp})	14124 kPa(a)
Oil Formation Volume Factor (B_o)	1.409
Oil Viscosity (μ_o)	0.3229 mPa.s
Oil Compressibility (c_o)	3.2876e-06 1/kPa
Solution Gas Ratio (R_s)	117.27 m^3/m^3

Reservoir Properties

Reservoir Temperature (T_{resv})	76.1 °C
Reservoir Pressure (p_{resv})	14131 kPa(a)

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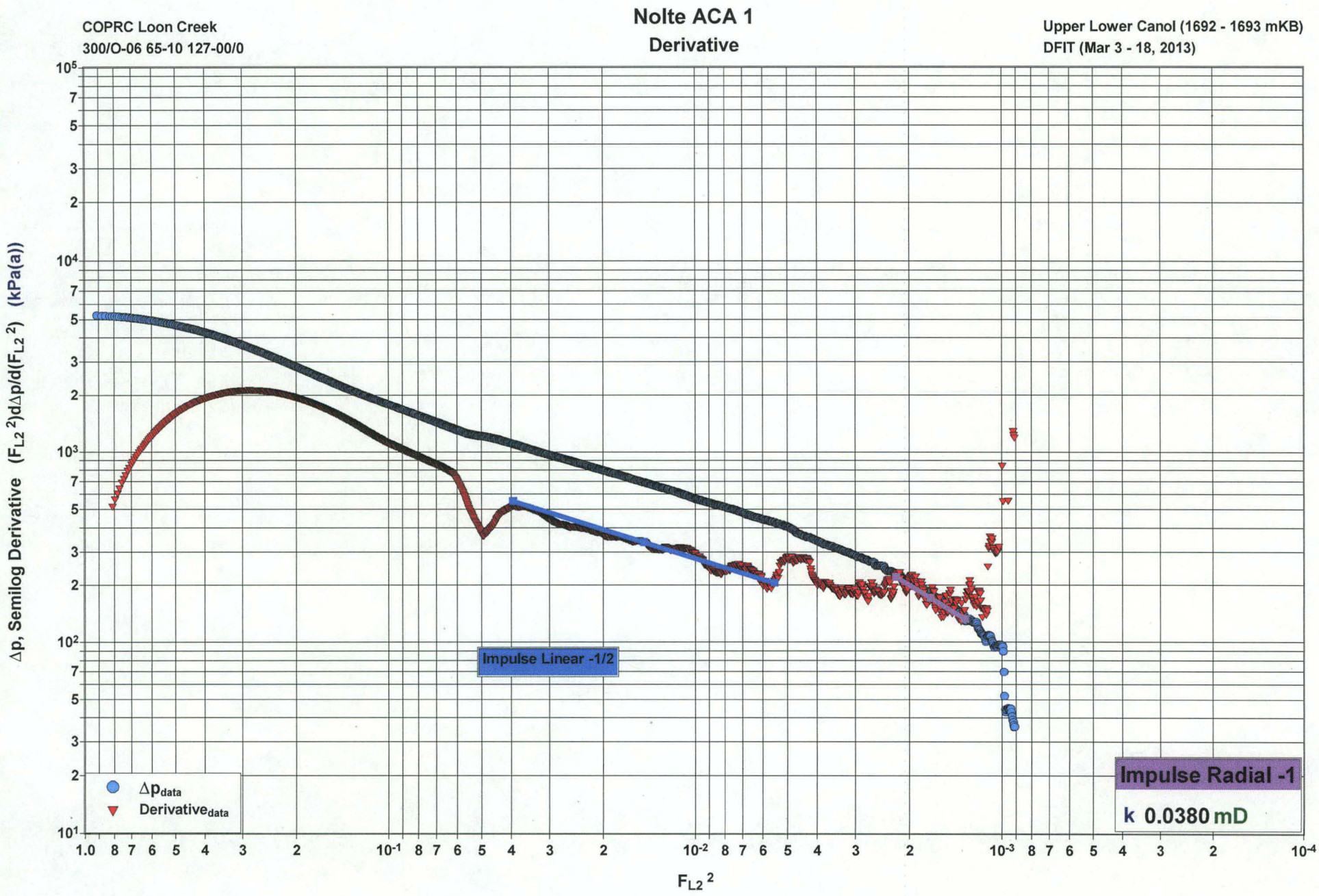

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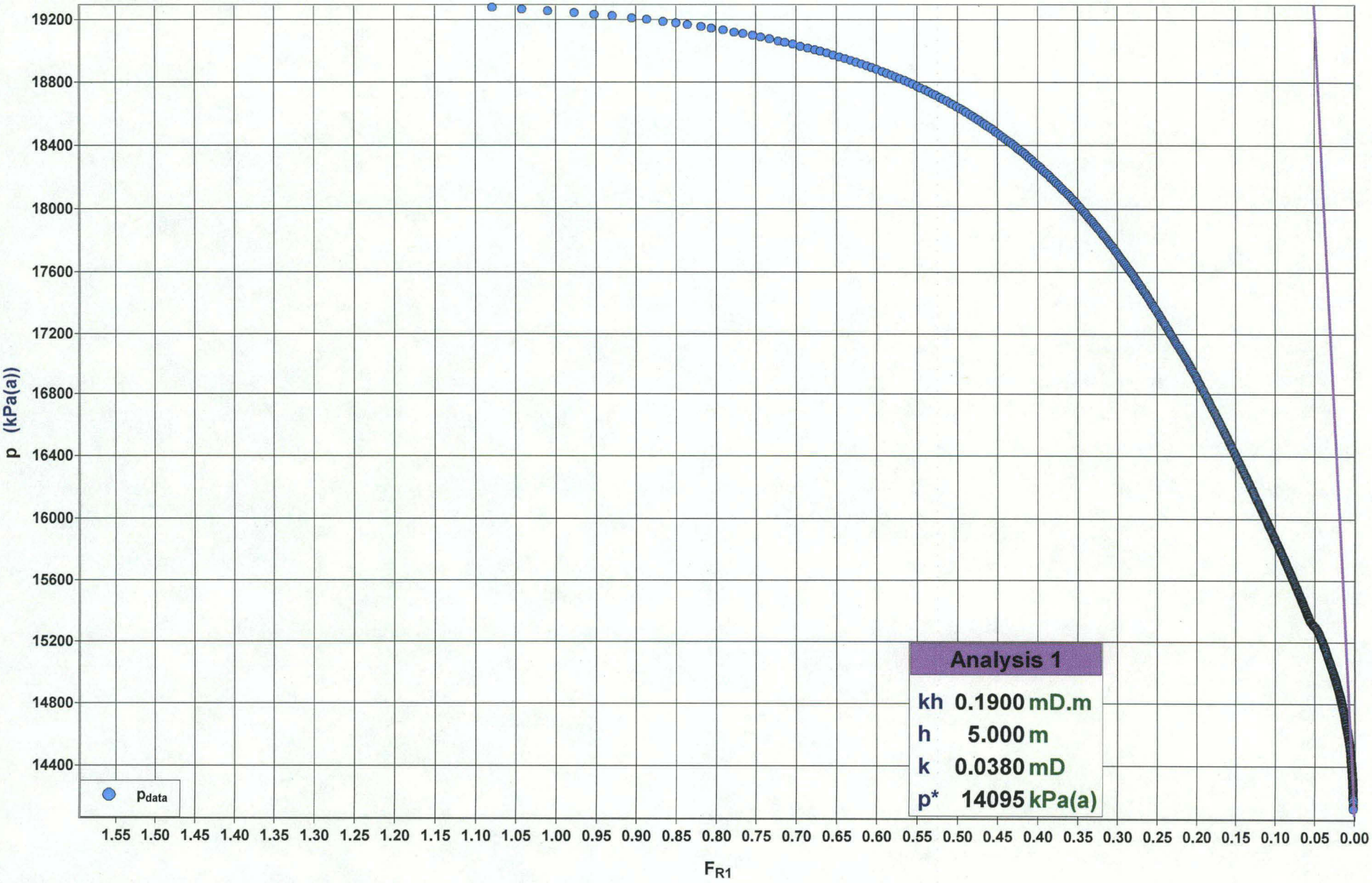
COPRC Loon Creek
300/O-06 65-10 127-00/0

Nolte ACA 1
MiniFrac Radial

Upper Lower Canol (1692 - 1693 mKB)
DFIT (Mar 3 - 18, 2013)



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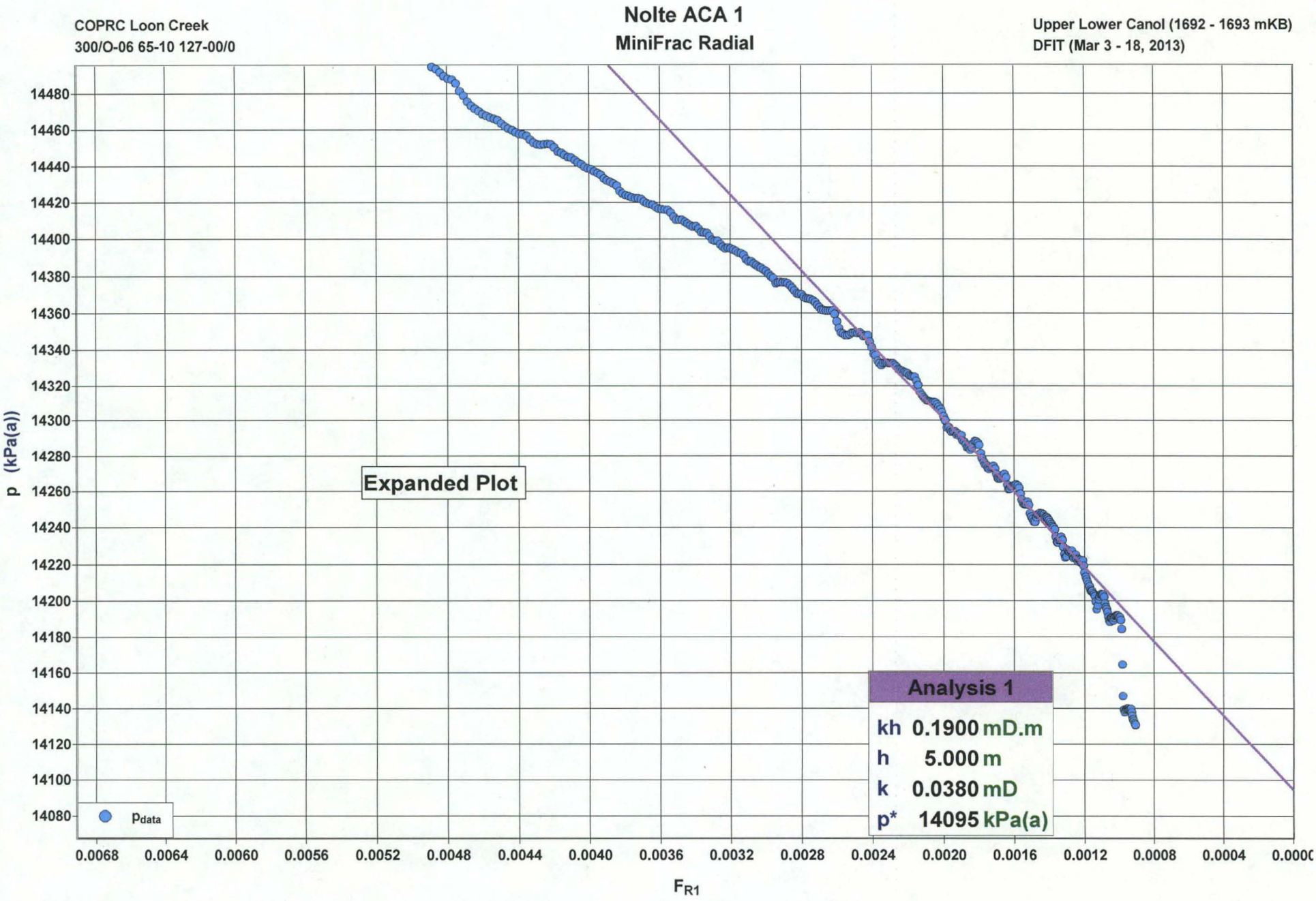

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Nolte ACA 1

Linear Analysis (FL)

Flow Capacity (kh)	mD.m
Effective Permeability (k)	mD
Extrapolated Pressure (p*)	14152 kPa(a)
Closure Pressure (pc)	kPa(a)
Reservoir Leakoff Coefficient (CR)	$m/min^{1/2}$
Total Leakoff Coefficient (CT)	$m/min^{1/2}$

Radial Analysis (FR)

Flow Capacity (kh)	0.19 mD.m
Effective Permeability (k)	0.0380 mD
Extrapolated Pressure (p*)	14095 kPa(a)

Input Parameters

Estimated Initial Pressure (p_i)	14152 kPa(a)
Closure time (t_c)	47.10 min

Fluid Properties

Oil Gravity (γ_o)	50.0 °API
Bubble Point Pressure (p_{bp})	14124 kPa(a)
Oil Formation Volume Factor (B_o)	1.409
Oil Viscosity (μ_o)	0.3229 mPa.s
Oil Compressibility (c_o)	3.2876e-06 1/kPa
Solution Gas Ratio (R_s)	117.27 m^3/m^3

Reservoir Properties

Reservoir Temperature (T_{resv})	76.1 °C
Reservoir Pressure (p_{resv})	14131 kPa(a)
Net Pay (h)	5.000 m
Total Porosity (ϕ_t)	13.00 %
Gas Saturation (S_g)	0.00 %
Oil Saturation (S_o)	87.00 %
Water Saturation (S_w)	13.00 %
Formation Compressibility (c_f)	6.3246e-07 1/kPa
Total Compressibility (c_t)	3.5500e-06 1/kPa

FIELD TICKET

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Job Header

SHEHTAH NABORS LP
3000
500 - 4TH AVENUE SW
CALGARY,AB T2P 2V6
Ticket # P0414000646105

Customer	CONOCO PHILLIPS CANADA LIMITED	**Rig #**	P0414
Cust Address	2100, 250 - 6TH AVENUE SW CALGARY,AB,T2P 3H7,CANADA	**Date**	02/19/2013
Well/Lease	**O-06/COPRC LDON CREEK**	**Day**	1
State/County	NT/NPS - NT County		
Customer Rep	**MYLES HAHN**		

GL:702000 NALN CA36 E120
NETWORK:10345055 IMPERT
PO:4600026584 ATTN:DEREK COVE

Details of Operations

Ticket From Time : 07:00 (HHMM) **Ticket To Time :** 19:00 (HHMM)

From	To	Time	Code	Description
07:00	19:00	12 hrs 0 mins	D.01	Chargeable Downtime W/O/O Services - Reviewed Conoco Phillips camp rules. Check into camp. Waiting on drilling rig to move & rig equipment to arrive. Reviewed Conoco Phillips Ice Road Safety Awareness, Conoco Phillips Northern Exposure Awareness & Conoco Phillips Arctic HSE Orientation. SDFN.
Operation Hours : 12 hrs 0 mins ***Other Hours :** 0 hrs 0 mins **Total Hours :** 12 hrs 0 mins				***Examples: Travel,Safety Meeting, etc.**

CheckList

☐ Crown/Ram Saver Test	☐ Escape buggy Installed	☐ Fire Extinguisher
☐ Anchor Test Charts	☐ Equipment Grounded	☐ All Signs In Place
☐ Rig Motor Emerg. Air Kill	☐ Pump Motor Emerg. Air Kill	☐ Pump Relief Valve Proper Setting Wing Flags
☐ Crown	☐ Main Drum Brake Linkage Chkd.	☐ Guylines
☐ Tanks	☐ Truck Motor Emerg. Air Kill	☐ Equipment Proper Spacing
☐ Kill Line Connected	☐ Air Packs	☐ Emergency No.'s Posted
☐ H_2S %		

Type of Operation

COMPLETION

Safety Meeting

From Time	To Time	Meeting Topic	Notes
13:00	13:30	OTHER-Other	Reviewed Conoco Phillips camp rules.

B.O.P. Function

B.O.P. Function Test : ☐ **Annular :** ☐ **Pipe :** ☐ **Blind :** ☐ **N/A :** ☐

Accum. Pressure : **Recharge Time :** mins secs

Precharge KPA #1 : **#2 :** **#3 :** **#4 :** **#5 :** **#6 :** **#7 :** **#8 :**

Drill Time Start(HHMM) : **Drill Time Stop :**

Weather

Temp	Wind
-31 °C	5MPH

Weather Conditions : Icy Conditions

Vehicles - Total Kms Travelled

Ticket Services

Service Id	Service Description	Billing Qty	UOM	Price	Amount	EDI1	EDI2	EDI3
EL3	EXTRA LABOR - RIG MAN/DRILL	16.00	Hours	$75.00	$1,200.00			
ELOT3	EXTRA LABOR - RIG MAN/DRILL OT	8.00	Hours	$95.00	$760.00			
EL4	EXTRA LABOR - DERRICK/FLOOR	8.00	Hours	$65.00	$520.00			
ELOT4	EXTRA LABOR - DERRICK/FLOOR OT	4.00	Hours	$80.00	$320.00			
TTBC	TRAVEL TIME	12.00	Man Hour	$19.00	$228.00			
MISC	FLIGHTS	1.00	Each	$2,565.72	$2,565.72			
RMZ1	RIG MANAGER VEHICLE	200.00	Kilometers	$1.25	$250.00			
				Daily Estimated Total :	**$5,843.72**			

Payroll Information

☐ Clothing Allowance ☐ Northern Job

Emp ID	Employee Name	Job Code	Income Code	Hours	Mileage	Cost Center	Province	Inj. Free	Sign Off
100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	BASE PAY	12		P0414	NT	☐	☐
100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	MILE 1 DIESEL		100	P0414	NT	☐	☐
100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	TRAVEL PAY	4		P0414	NT	☐	☐
100063873	STAPLE, ROBERT L	RIG SUPERVISOR	BASE PAY	12		P0414	NT	☐	☐
100063873	STAPLE, ROBERT L	RIG SUPERVISOR	MILE 1 DIESEL		100	P0414	NT	☐	☐
100063873	STAPLE, ROBERT L	RIG SUPERVISOR	TRAVEL PAY	4		P0414	NT	☐	☐
100254531	KERTESZ, SIMON S	FLOORHAND	BASE PAY	12		P0414	NT	☐	☐
100254531	KERTESZ, SIMON S	FLOORHAND	TRAVEL PAY	4		P0414	NT	☐	☐

Comments **Travel time for crew to fly to Norman Wells.**

☐ **[I Acknowledge] Confirmation that all goods and services listed on ticket were received.**

FIELD TICKET

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Job Header

SHEHTAH NABORS LP
3000
500 - 4TH AVENUE SW
CALGARY,AB T2P 2V6
Ticket # P0414000646105

Customer	CONOCO PHILLIPS CANADA LIMITED	**Rig #**	P0414
Cust Address	2100, 250 - 6TH AVENUE SW CALGARY,AB,T2P 3H7,CANADA	**Date**	02/19/2013
Well/Lease	**O-06/COPRC LOON CREEK**	**Day**	1
State/County	NT/NPS - NT County		
Customer Rep	**MYLES HAHN**		

GL:702000 NALN CA36 E120
NETWORK:10345055 IMPERT
PO:4600026584 ATTN:DEREK COVE

(Leslie Cummings) 2/21/2013 5:05:32 PM	(Myles Hahn) 2/25/2013 4:53:42 PM
Nabors Representative	**Customer Representative**

FIELD TICKET

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Job Header

SHEHTAH NABORS LP
3000
500 - 4TH AVENUE SW
CALGARY,AB T2P 2V6
Ticket # P0414000646106

Customer	CONOCO PHILLIPS CANADA LIMITED	**Rig #**	P0414
Cust Address	2100, 250 - 6TH AVENUE SW CALGARY,AB,T2P 3H7,CANADA	**Date**	02/20/2013
Well/Lease	**0-06/COPRC LOON CREEK**	**Day**	2
State/County	NT/NPS - NT County		
Customer Rep	**MYLES HAHN**		

GL:702000 NALN CA36 E120
NETWORK:10345055 IMPERT
PO:4600026584 ATTN:DEREK COVE

Details of Operations

Ticket From Time : 07:00 (HHMM) **Ticket To Time :** 19:00 (HHMM)

From	To	Time	Code	Description
07:00	19:00	12 hrs 0 mins	D.01	Chargeable Downtime W/O/O Services - Waitng on drilling rig to move & rig equipment to arrive. Reviewed Conoco Phillips Oreintation, Working Safely Together Oreintation & Zero Spill Policy. SDFN.

Operation Hours : 12 hrs 0 mins
***Other Hours :** 0 hrs 0 mins
Total Hours : 12 hrs 0 mins

***Examples: Travel,Safety Meeting, etc.**

CheckList

☐ Crown/Ram Saver Test	☐ Escape buggy Installed	☐ Fire Extinguisher
☐ Anchor Test Charts	☐ Equipment Grounded	☐ All Signs In Place
☐ Rig Motor Emerg. Air Kill	☐ Pump Motor Emerg. Air Kill	☐ Pump Relief Valve Proper Setting Wing Flags
☐ Crown	☐ Main Drum Brake Linkage Chkd.	☐ Guylines
☐ Tanks	☐ Truck Motor Emerg. Air Kill	☐ Equipment Proper Spacing
☐ Kill Line Connected	☐ Air Packs	☐ Emergency No.'s Posted
☐ H_2S %		

Type of Operation

COMPLETION

Safety Meeting

From Time	To Time	Meeting Topic	Notes
08:00	08:30	OTHER-Other	Reviewed Conoco Oreintation & Zero Spill Policies.

B.O.P. Function

B.O.P. Function Test : ☐ **Annular :** ☐ **Pipe :** ☐ **Blind :** ☐ **N/A :** ☐

Accum. Pressure : **Recharge Time :** mins secs

Precharge KPA #1 :	#2 :	#3 :	#4 :	#5 :	#6 :	#7 :	#8 :

Drill Time Start(HHMM) : **Drill Time Stop :**

Weather

Temp	Wind
-28 °C	5MPH

Weather Conditions : Normal

Vehicles - Total Kms Travelled

Ticket Services

Service Id	Service Description	Billing Qty	UOM	Price	Amount	EDI1	EDI2	EDI3
EL3	EXTRA LABOR - RIG MAN/DRILL	16.00	Hours	$75.00	$1,200.00			
ELOT3	EXTRA LABOR - RIG MAN/DRILL OT	8.00	Hours	$95.00	$760.00			
EL4	EXTRA LABOR - DERRICK/FLOOR	8.00	Hours	$65.00	$520.00			
ELOT4	EXTRA LABOR - DERRICK/FLOOR OT	4.00	Hours	$80.00	$320.00			
RMZ1	RIG MANAGER VEHICLE	200.00	Kilometers	$1.25	$250.00			
			Daily Estimated Total :		**$3,050.00**			

Payroll Information

☐ Clothing Allowance ☐ Northern Job

Emp ID	Employee Name	Job Code	Income Code	Hours	Mileage	Cost Center	Province	Inj. Free	Sign Off
100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	BASE PAY	12		P0414	NT	☐	☐
100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	MILE 1 DIESEL		100	P0414	NT	☐	☐
100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	TRAVEL PAY	1		P0414	NT	☐	☐
100063873	STAPLE, ROBERT L	RIG SUPERVISOR	BASE PAY	12		P0414	NT	☐	☐
100063873	STAPLE, ROBERT L	RIG SUPERVISOR	MILE 1 DIESEL		100	P0414	NT	☐	☐
100063873	STAPLE, ROBERT L	RIG SUPERVISOR	TRAVEL PAY	1		P0414	NT	☐	☐
100254531	KERTESZ, SIMON S	FLOORHAND	BASE PAY	12		P0414	NT	☐	☐
100254531	KERTESZ, SIMON S	FLOORHAND	TRAVEL PAY	1		P0414	NT	☐	☐

Comments Crew did not travel to lease.

☐ **[I Acknowledge] Confirmation that all goods and services listed on ticket were received.**

(Leslie Cummings)
2/21/2013 5:10:41 PM

(Myles Hahn)
2/25/2013 4:57:34 PM

FIELD TICKET

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Job Header

SHEHTAH NABORS LP
3000
500 - 4TH AVENUE SW
CALGARY,AB T2P 2V6
Ticket # P0414000646106

Customer	CONOCO PHILLIPS CANADA LIMITED	**Rig #**	P0414
Cust Address	2100, 250 - 6TH AVENUE SW CALGARY,AB,T2P 3H7,CANADA	**Date**	02/20/2013
Well/Lease	**O-06/COPRC LOON CREEK**	**Day**	2
State/County	NT/NPS - NT County		
Customer Rep	**MYLES HAHN**		

GL:702000 NALN CA36 E120
NETWORK:10345055 IMPERT
PO:4600026584 ATTN:DEREK COVE

Nabors Representative	Customer Representative

FIELD TICKET

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Job Header

SHEHTAH NABORS LP
3000
500 - 4TH AVENUE SW
CALGARY,AB T2P 2V6
Ticket # P0414000646107

Customer	CONOCO PHILLIPS CANADA LIMITED	**Rig #**	P0414
Cust Address	2100, 250 - 6TH AVENUE SW CALGARY,AB,T2P 3H7,CANADA	**Date**	02/21/2013
Well/Lease	0-06/COPRC LOON CREEK	**Day**	3
State/County	NT/NPS - NT County		
Customer Rep	MYLES HAHN		

GL:702000 NALN CA36 E120
NETWORK:10345055 IMPERT
PO:4600026584 ATTN:DEREK COVE

Details of Operations

Ticket From Time : 07:00 (HHMM) **Ticket To Time :** 19:00 (HHMM)

From	To	Time	Code	Description
07:00	19:00	12 hrs 0 mins	D.01	Chargeable Downtime W/O/O Services - Waiting on drilling rig to move & rig equipment to arrive. Reviewed Jouney Mangaement Policy & road rules. SDFN.
Operation Hours : 12 hrs 0 mins ***Other Hours :** 0 hrs 0 mins **Total Hours :** 12 hrs 0 mins				***Examples: Travel,Safety Meeting, etc.**

CheckList

☐ Crown/Ram Saver Test	☐ Escape buggy Installed	☐ Fire Extinguisher
☐ Anchor Test Charts	☐ Equipment Grounded	☐ All Signs in Place
☐ Rig Motor Emerg. Air Kill	☐ Pump Motor Emerg. Air Kill	☐ Pump Relief Valve Proper Setting Wing Flags
☐ Crown	☐ Main Drum Brake Linkage Chkd.	☐ Guylines
☐ Tanks	☐ Truck Motor Emerg. Air Kill	☐ Equipment Proper Spacing
☐ Kill Line Connected	☐ Air Packs	☐ Emergency No.'s Posted
☐ H_2S %		

Type of Operation

COMPLETION

Safety Meeting

From Time	To Time	Meeting Topic	Notes
08:00	08:30	DRIVE-Driving	Reviewed road rules. Use road radio's. Drive defensively. Journey management.

B.O.P. Function

B.O.P. Function Test : ☐ **Annular :** ☐ **Pipe :** ☐ **Blind :** ☐ **N/A :** ☐

Accum. Pressure : **Recharge Time :** mins secs

Precharge KPA #1 : **#2 :** **#3 :** **#4 :** **#5 :** **#6 :** **#7 :** **#8 :**

Drill Time Start(HHMM) : **Drill Time Stop :**

Weather

Temp	Wind
-29 °C	3MPH

Weather Conditions : Normal

Vehicles - Total Kms Travelled

Ticket Services

Service Id	Service Description	Billing Qty	UOM	Price	Amount	EDI1	EDI2	EDI3
EL3	EXTRA LABOR - RIG MAN/DRILL	16.00	Hours	$75.00	$1,200.00			
ELOT3	EXTRA LABOR - RIG MAN/DRILL OT	8.00	Hours	$95.00	$760.00			
EL4	EXTRA LABOR - DERRICK/FLOOR	8.00	Hours	$65.00	$520.00			
ELOT4	EXTRA LABOR - DERRICK/FLOOR OT	4.00	Hours	$80.00	$320.00			
RMZ1	RIG MANAGER VEHICLE	200.00	Kilometers	$1.25	$250.00			
			Daily Estimated Total :		**$3,050.00**			

Payroll Information

☐ Clothing Allowance ☐ Northern Job

Emp ID	Employee Name	Job Code	Income Code	Hours	Mileage	Cost Center	Province	Inj Free	Sign Off
100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	BASE PAY	12		P0414	NT	☑	☑
100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	MILE 1 DIESEL		100	P0414	NT	☑	☑
100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	TRAVEL PAY	1		P0414	NT	☑	☑
100063873	STAPLE, ROBERT L	RIG SUPERVISOR	BASE PAY	12		P0414	NT	☑	☑
100063873	STAPLE, ROBERT L	RIG SUPERVISOR	MILE 1 DIESEL		100	P0414	NT	☑	☑
100063873	STAPLE, ROBERT L	RIG SUPERVISOR	TRAVEL PAY	1		P0414	NT	☑	☑
100254531	KERTESZ, SIMON S	FLOORHAND	BASE PAY	12		P0414	NT	☑	☑
100254531	KERTESZ, SIMON S	FLOORHAND	TRAVEL PAY	1		P0414	NT	☑	☑

Comments Crew did not travel to lease.

☑ **[I Acknowledge] Confirmation that all goods and services listed on ticket were received.**

(Leslie Cummings)
2/21/2013 11:07:00 PM

(Myles Hahn)
2/25/2013 5:00:12 PM

FIELD TICKET

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Job Header

SHEHTAH NABORS LP
3000
500 - 4TH AVENUE SW
CALGARY,AB T2P 2V6
Ticket # P0414000646107

Customer	CONOCO PHILLIPS CANADA LIMITED	**Rig #**	P0414
Cust Address	2100, 250 - 6TH AVENUE SW CALGARY,AB,T2P 3H7,CANADA	**Date**	02/21/2013
Well/Lease	**O-06/COPRC LOON CREEK**	**Day**	3
State/County	NT/NPS - NT County		**GL:702000 NALN CA36 E120**
Customer Rep	**MYLES HAHN**		**NETWORK:10345055 IMPERT**
			PO:4600026584 ATTN:DEREK COVE

Nabors Representative | **Customer Representative**

FIELD TICKET

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Job Header

SHEHTAH NABORS LP
3000
500 - 4TH AVENUE SW
CALGARY,AB T2P 2V6
Ticket # P0414000646108

Customer	CONOCO PHILLIPS CANADA LIMITED	**Rig #**	P0414
Cust Address	2100, 250 - 6TH AVENUE SW CALGARY,AB,T2P 3H7,CANADA	**Date**	02/22/2013
Well/Lease	O-06/COPRC LOON CREEK	**Day**	4
State/County	NT/NPS - NT County		
Customer Rep	MYLES HAHN		

GL:702000 NALN CA36 E120
NETWORK:10345055 IMPERT
PO:4600026584 ATTN:DEREK COVE

Details of Operations

Ticket From Time : 07:00 (HHMM) **Ticket To Time :** 19:00 (HHMM)

From	To	Time	Code	Description
07:00	14:00	7 hrs 0 mins	D.01	Chargeable Downtime W/O/O Services - Wait on drilling rig to move & rig equipment to arrive.
14:00	14:30	0 hrs 30 mins	E.01	Safety Meeting - Held safety meeting with all personnel. Pre-risk assessment. Daily walk around inspection completed.
14:30	19:00	4 hrs 30 mins	F.99	Other - Unload equipment at rack site. Heat up light plant building. Start light plant. Check & organize equipment. SDFN.
Operation Hours : 12 hrs 0 mins ***Other Hours :** 0 hrs 0 mins **Total Hours :** 12 hrs 0 mins				***Examples: Travel,Safety Meeting, etc.**

CheckList

☑ Crown/Ram Saver Test	☑ Escape buggy Installed	☑ Fire Extinguisher
☑ Anchor Test Charts	☑ Equipment Grounded	☑ All Signs in Place
☑ Rig Motor Emerg. Air Kill	☑ Pump Motor Emerg. Air Kill	☑ Pump Relief Valve Proper Setting Wing Flags
☑ Crown	☑ Main Drum Brake Linkage Chkd.	☑ Guylines
☑ Tanks	☑ Truck Motor Emerg. Air Kill	☑ Equipment Proper Spacing
☑ Kill Line Connected	☑ Air Packs	☑ Emergency No.'s Posted
☑ H_2S %		

Type of Operation

COMPLETION

Safety Meeting

From Time	To Time	Meeting Topic	Notes
		BP-Body Placement and Position for Tasks	Unloading equipment. Stay clear & in view of driver. Use spotter. Good communication.

B.O.P. Function

B.O.P. Function Test : ☑ **Annular :** ☑ **Pipe :** ☑ **Blind :** ☑ **N/A :** ☑

Accum. Pressure : **Recharge Time :** mins secs

Precharge KPA #1 : **#2 :** **#3 :** **#4 :** **#5 :** **#6 :** **#7 :** **#8 :**

Drill Time Start(HHMM) : **Drill Time Stop :**

Weather

Temp	Wind
-32 °C	12MPH

Weather Conditions : Icy Conditions

Vehicles - Total Kms Travelled

Ticket Services

Service Id	Service Description	Billing Qty	UOM	Price	Amount	EDI1	EDI2	EDI3
EL3	EXTRA LABOR - RIG MAN/DRILL	16.00	Hours	$75.00	$1,200.00			
ELOT3	EXTRA LABOR - RIG MAN/DRILL OT	8.00	Hours	$95.00	$760.00			
EL4	EXTRA LABOR - DERRICK/FLOOR	16.00	Hours	$65.00	$1,040.00			
ELOT4	EXTRA LABOR - DERRICK/FLOOR OT	8.00	Hours	$80.00	$640.00			
RMZ1	RIG MANAGER VEHICLE	200.00	Kilometers	$1.25	$250.00			
MISC	Flights	1.00	Each	$855.24	$855.24			
TTBC	TRAVEL TIME	7.00	Man Hour	$19.00	$133.00			
LP25	LIGHTPLANT OVER 25KW	1.00	Day	$220.00	$220.00			
PPE	PERSONAL PROTECTIVE EQUIPMENT	4.00	Man Per Day	$16.50	$66.00			
			Daily Estimated Total :		**$5,164.24**			

Payroll Information

☑ Clothing Allowance ☑ Northern Job

Emp ID	Employee Name	Job Code	Income Code	Hours	Mileage	Cost Center	Province	Inj. Free	Sign Off
100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	BASE PAY	12		P0414	NT	☑	☑
100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	MILE 1 DIESEL		100	P0414	NT	☑	☑
100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	TRAVEL PAY	1		P0414	NT	☑	☑
100063873	STAPLE, ROBERT L	RIG SUPERVISOR	BASE PAY	12		P0414	NT	☑	☑
100063873	STAPLE, ROBERT L	RIG SUPERVISOR	MILE 1 DIESEL		100	P0414	NT	☑	☑
100063873	STAPLE, ROBERT L	RIG SUPERVISOR	TRAVEL PAY	1		P0414	NT	☑	☑
100254531	KERTESZ, SIMON S	FLOORHAND	BASE PAY	12		P0414	NT	☑	☑

FIELD TICKET

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Job Header

SHEHTAH NABORS LP
3000
500 - 4TH AVENUE SW
CALGARY,AB T2P 2V6
Ticket # P0414000646108

Customer	CONOCO PHILLIPS CANADA LIMITED	**Rig #**	P0414
Cust Address	2100, 250 - 6TH AVENUE SW CALGARY,AB,T2P 3H7,CANADA	**Date**	02/22/2013
Well/Lease	**O-06/COPRC LOON CREEK**	**Day**	4
State/County	NT/NPS - NT County		
Customer Rep	**MYLES HAHN**		

GL:702000 NALN CA36 E120
NETWORK:10345055 IMPERT
PO:4600026584 ATTN:DEREK COVE

100254531	KERTESZ, SIMON S	FLOORHAND	TRAVEL PAY	1		P0414	NT	☐	☐
100252232	BARGEN, JARED R	FLOORHAND	BASE PAY	12		P0414	NT	☐	☐
100252232	BARGEN, JARED R	FLOORHAND	TRAVEL PAY	4		P0414	NT	☐	☐

Comments Travel time for Jared Bargen to fly to Norman Wells. Crew travelled to rig equipment at the rack site.

☐ **[I Acknowledge] Confirmation that all goods and services listed on ticket were received.**

Nabors Representative **Customer Representative**

FIELD TICKET

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Job Header

SHEHTAH NABORS LP
3000
500 - 4TH AVENUE SW
CALGARY,AB T2P 2V6
Ticket # P0414000646109

Customer	CONOCO PHILLIPS CANADA LIMITED	**Rig #**	P0414
Cust Address	2100, 250 - 6TH AVENUE SW CALGARY,AB,T2P 3H7,CANADA	**Date**	02/23/2013
Well/Lease	O-06/COPRC LOON CREEK	**Day**	5
State/County	NT/NPS - NT County		
Customer Rep	MYLES HAHN		

GL:702000 NALN CA36 E120
NETWORK:10345055 IMPERT
PO:4600026584 ATTN:DEREK COVE

Details of Operations

Ticket From Time : 07:00 (HHMM) **Ticket To Time :** 19:00 (HHMM)

From	To	Time	Code	Description
07:00	07:30	0 hrs 30 mins	E.01	Safety Meeting - Held safety meeting with all personnel. Pre-risk assessment. Service equipment. Daily walk around inspection completed.
07:30	19:00	11 hrs 30 mins	F.99	Other - Wait on drilling rig to move. Plug in equipment. Check & organize equipment. Check certifications. Start equipment & warm up. SDFN.
Operation Hours : 12 hrs 0 mins ***Other Hours :** 0 hrs 0 mins **Total Hours :** 12 hrs 0 mins			***Examples: Travel,Safety Meeting, etc.**	

CheckList

☑ Crown/Ram Saver Test	☑ Escape buggy Installed	☑ Fire Extinguisher
☑ Anchor Test Charts	☑ Equipment Grounded	☑ All Signs in Place
☑ Rig Motor Emerg. Air Kill	☑ Pump Motor Emerg. Air Kill	☑ Pump Relief Valve Proper Setting Wing Flags
☑ Crown	☑ Main Drum Brake Linkage Chkd.	☑ Guylines
☑ Tanks	☑ Truck Motor Emerg. Air Kill	☑ Equipment Proper Spacing
☑ Kill Line Connected	☑ Air Packs	☑ Emergency No.'s Posted
☑ H_2S %		

Type of Operation

COMPLETION

Safety Meeting

From Time	To Time	Meeting Topic	Notes
07:30	08:00	OTHER-Other	Reviewed Conoco Phillips no spill policy. Working along main road. Use barricades. Be alert. Wear PPE. Cold weather operation.

B.O.P. Function

B.O.P. Function Test : ☑ **Annular :** ☑ **Pipe :** ☑ **Blind :** ☑ **N/A :** ☑

Accum. Pressure : **Recharge Time :** mins secs

Precharge KPA #1 : **#2 :** **#3 :** **#4 :** **#5 :** **#6 :** **#7 :** **#8 :**

Drill Time Start(HHMM) : **Drill Time Stop :**

Weather

Temp	Wind
-29 °C	5MPH

Weather Conditions : Normal

Vehicles - Total Kms Travelled

Ticket Services

Service Id	Service Description	Billing Qty	UOM	Price	Amount	EDI1	EDI2	EDI3
EL3	EXTRA LABOR - RIG MAN/DRILL	16.00	Hours	$75.00	$1,200.00			
ELOT3	EXTRA LABOR - RIG MAN/DRILL OT	8.00	Hours	$95.00	$760.00			
EL4	EXTRA LABOR - DERRICK/FLOOR	16.00	Hours	$65.00	$1,040.00			
ELOT4	EXTRA LABOR - DERRICK/FLOOR OT	8.00	Hours	$80.00	$640.00			
RMZ1	RIG MANAGER VEHICLE	200.00	Kilometers	$1.25	$250.00			
PPE	PERSONAL PROTECTIVE EQUIPMENT	4.00	Man Per Day	$16.50	$66.00			
LP25	LIGHTPLANT OVER 25KW	1.00	Day	$220.00	$220.00			
TTBC	TRAVEL TIME	4.00	Man Hour	$19.00	$76.00			
			Daily Estimated Total :		**$4,252.00**			

Payroll Information

☑ Clothing Allowance ☑ Northern Job

Emp ID	Employee Name	Job Code	Income Code	Hours	Mileage	Cost Center	Province	Inj. Free	Sign Off
100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	BASE PAY	12		P0414	NT	☑	☑
100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	MILE 1 DIESEL		100	P0414	NT	☑	☑
100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	TRAVEL PAY	1		P0414	NT	☑	☑
100063873	STAPLE, ROBERT L	RIG SUPERVISOR	BASE PAY	12		P0414	NT	☑	☑
100063873	STAPLE, ROBERT L	RIG SUPERVISOR	MILE 1 DIESEL		100	P0414	NT	☑	☑
100063873	STAPLE, ROBERT L	RIG SUPERVISOR	TRAVEL PAY	1		P0414	NT	☑	☑
100254531	KERTESZ, SIMON S	FLOORHAND	BASE PAY	12		P0414	NT	☑	☑
100254531	KERTESZ, SIMON S	FLOORHAND	TRAVEL PAY	1		P0414	NT	☑	☑

FIELD TICKET

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Job Header

SHEHTAH NABORS LP
3000
500 - 4TH AVENUE SW
CALGARY,AB T2P 2V6
Ticket # P0414000646109

Customer	CONOCO PHILLIPS CANADA LIMITED	**Rig #**	P0414
Cust Address	2100, 250 - 6TH AVENUE SW CALGARY,AB,T2P 3H7,CANADA	**Date**	02/23/2013
Well/Lease	**O-06/COPRC LOON CREEK**	**Day**	5
State/County	NT/NPS - NT County		
Customer Rep	**MYLES HAHN**		

GL:702000 NALN CA36 E120
NETWORK:10345055 IMPERT
PO:4600026584 ATTN:DEREK COVE

100252232	BARGEN, JARED R	FLOORHAND	BASE PAY	12		P0414	NT		
100252232	BARGEN, JARED R	FLOORHAND	TRAVEL PAY	1		P0414	NT		

Comments Crew travelled to rig equipment at the rack site.

[I Acknowledge] Confirmation that all goods and services listed on ticket were received.

(Leslie Cummings)	**(Myles Hahn)**
2/25/2013 5:04:14 PM	**2/25/2013 5:07:03 PM**
Nabors Representative	**Customer Representative**

FIELD TICKET

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Job Header

SHEHTAH NABORS LP
3000
500 - 4TH AVENUE SW
CALGARY,AB T2P 2V6
Ticket # P0414000646110

Customer	CONOCO PHILLIPS CANADA LIMITED	**Rig #**	P0414
Cust Address	2100, 250 - 6TH AVENUE SW CALGARY,AB,T2P 3H7,CANADA	**Date**	02/24/2013
Well/Lease	O-06/COPRC LOON CREEK	**Day**	6
State/County	NT/NPS - NT County		
Customer Rep	MYLES HAHN		

GL:702000 NALN CA36 E120
NETWORK:10345055 IMPERT
PO:4600026584 ATTN:DEREK COVE

Details of Operations

Ticket From Time : 07:00 (HHMM) **Ticket To Time :** 19:00 (HHMM)

From	To	Time	Code	Description
07:00	07:30	0 hrs 30 mins	E.01	Safety Meeting - Held safety meeting with all personnel. Pre-Risk assessment. Service light plant. Daily walk around inspection completed.
07:30	14:00	6 hrs 30 mins	D.01	Chargeable Downtime W/O/O Services - Wait on construction to clean lease. Start equipment & warm up. Perform rig general maintenance. Clean & organize equipment. Prepare to move.
14:00	19:00	5 hrs 0 mins	A.01	Move Rig / Equipment - Held safety meeting with all personnel. Load equipment. Move equipment to lease. Lel sweep of lease. Spot Conoco Phillips representatives shack. Spot light towers. Lay out plastic liner. Spot doghouse. Start light plant. Lay out plastic liner. Spot boiler. Make burm with liner & planks. Fuel up boiler. Plug in equipment. SDFN.
Operation Hours : 12 hrs 0 mins ***Other Hours :** 0 hrs 0 mins **Total Hours :** 12 hrs 0 mins				***Examples: Travel,Safety Meeting, etc.**

CheckList

- ☑ Crown/Ram Saver Test
- ☑ Anchor Test Charts
- ☑ Rig Motor Emerg. Air Kill
- ☑ Crown
- ☑ Tanks
- ☑ Kill Line Connected
- ☐ H_2S %
- ☑ Escape buggy Installed
- ☑ Equipment Grounded
- ☑ Pump Motor Emerg. Air Kill
- ☑ Main Drum Brake Linkage Chkd.
- ☑ Truck Motor Emerg. Air Kill
- ☑ Air Packs
- ☑ Fire Extinguisher
- ☑ All Signs in Place
- ☑ Pump Relief Valve Proper Setting Wing Flags
- ☑ Guylines
- ☑ Equipment Proper Spacing
- ☑ Emergency No.'s Posted

Type of Operation

COMPLETION

Safety Meeting

From Time	To Time	Meeting Topic	Notes
07:00	07:30	SLIPS-Slips/Trips/Falls	Slippery conditions. Watch your footing. Take your time. Plan your route. Stay off plastic liner.

B.O.P. Function

B.O.P. Function Test : ☑ **Annular :** ☑ **Pipe :** ☑ **Blind :** ☑ **N/A :** ☑

Accum. Pressure : **Recharge Time :** mins secs

Precharge KPA #1 : **#2 :** **#3 :** **#4 :** **#5 :** **#6 :** **#7 :** **#8 :**

Drill Time Start(HHMM) : **Drill Time Stop :**

Weather

Temp	Wind
-30 °C	4MPH

Weather Conditions : Normal

Vehicles - Total Kms Travelled

Ticket Services

Service Id	Service Description	Billing Qty	UOM	Price	Amount	EDI1	EDI2	EDI3
EL3	EXTRA LABOR - RIG MAN/DRILL	16.00	Hours	$75.00	$1,200.00			
ELOT3	EXTRA LABOR - RIG MAN/DRILL OT	8.00	Hours	$95.00	$760.00			
EL4	EXTRA LABOR - DERRICK/FLOOR	16.00	Hours	$65.00	$1,040.00			
ELOT4	EXTRA LABOR - DERRICK/FLOOR OT	8.00	Hours	$80.00	$640.00			
RMZ1	RIG MANAGER VEHICLE	200.00	Kilometers	$1.25	$250.00			
PPE	PERSONAL PROTECTIVE EQUIPMENT	4.00	Man Per Day	$16.50	$66.00			
LP25	LIGHTPLANT OVER 25KW	1.00	Day	$220.00	$220.00			
TTBC	TRAVEL TIME	4.00	Man Hour	$19.00	$76.00			
LEL	LEL MONITOR	1.00	Day	$40.00	$40.00			
				Daily Estimated Total :	**$4,292.00**			

Payroll Information

☑ Clothing Allowance ☑ Northern Job

Emp ID	Employee Name	Job Code	Income Code	Hours	Mileage	Cost Center	Province	Inj Free	Sign Off
100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	BASE PAY	12		P0414	NT	☑	☑
100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	MILE 1 DIESEL		100	P0414	NT	☑	☑
100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	TRAVEL PAY	1		P0414	NT	☑	☑
100063873	STAPLE, ROBERT L	RIG SUPERVISOR	BASE PAY	12		P0414	NT	☑	☑
100063873	STAPLE, ROBERT L	RIG SUPERVISOR	MILE 1 DIESEL		100	P0414	NT	☑	☑

FIELD TICKET

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Job Header

SHEHTAH NABORS LP
3000
500 - 4TH AVENUE SW
CALGARY,AB T2P 2V6
Ticket # P0414000646110

Customer	CONOCO PHILLIPS CANADA LIMITED
Cust Address	2100, 250 - 6TH AVENUE SW CALGARY,AB,T2P 3H7,CANADA
Well/Lease	**O-06/COPRC LOON CREEK**
State/County	NT/NPS - NT County
Customer Rep	**MYLES HAHN**

Rig # P0414
Date 02/24/2013
Day 6

GL:702000 NALN CA36 E120
NETWORK:10345055 IMPERT
PO:4600026584 ATTN:DEREK COVE

100063873	STAPLE, ROBERT L	RIG SUPERVISOR	TRAVEL PAY	1		P0414	NT	☑	☑
100254531	KERTESZ, SIMON S	FLOORHAND	BASE PAY	12		P0414	NT	☑	☑
100254531	KERTESZ, SIMON S	FLOORHAND	TRAVEL PAY	1		P0414	NT	☑	☑
100252232	BARGEN, JARED R	FLOORHAND	BASE PAY	12		P0414	NT	☑	☑
100252232	BARGEN, JARED R	FLOORHAND	TRAVEL PAY	1		P0414	NT	☑	☑

Comments Crew travelled to rig equipment at the rack site. Move & spotted equipment onto location.

☑ **[I Acknowledge] Confirmation that all goods and services listed on ticket were received.**

(Leslie Cummings)
2/25/2013 5:06:08 PM
Nabors Representative

(Myles Hahn)
2/25/2013 5:09:24 PM
Customer Representative

FIELD TICKET

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Job Header

SHEHTAH NABORS LP
3000
500 - 4TH AVENUE SW
CALGARY,AB T2P 2V6
Ticket # P0414000646111

Customer	CONOCO PHILLIPS CANADA LIMITED	**Rig #**	P0414
Cust Address	2100, 250 - 6TH AVENUE SW CALGARY,AB,T2P 3H7,CANADA	**Date**	02/25/2013
Well/Lease	O-06/COPRC LOON CREEK	**Day**	7
State/County	NT/NPS - NT County		
Customer Rep	MYLES HAHN		

GL:702000 NALN CA36 E120
NETWORK:10345055 IMPERT
PO:4600026584 ATTN:DEREK COVE

Details of Operations

Ticket From Time : 07:00 (HHMM) **Ticket To Time :** 24:00 (HHMM)

From	To	Time	Code	Description
07:00	07:30	0 hrs 30 mins	E.01	Safety Meeting - Held safety meeting with all personnel. Pre-risk assessment. Lel sweep of lease. Service & start equipment. Daily walk around inspection completed.
07:30	11:00	3 hrs 30 mins	A.04	Rig / Equipment Up - Warm up boiler building. Fill boiler with H2O & fuel. Fire boiler. Rig up steam lines to well head & back to boiler.
11:00	16:00	5 hrs 0 mins	F.04	Assist other providers - Assist well head crew. Heat well head & seal with steam as required. Install well head. Unload & spot Junk box & BOP stack.
16:00	19:00	3 hrs 0 mins	A.02	Spot Rig / Equipment - Lay out plastic liner. Spot matting with picker. Spot 64 m3 work tank. Spot tank. Lay out plastic liner. Spot pump. Build burm with plastic liner & planks. Haul in 20.0 m3 of propylene glycol. Plug in equipment. Shift change. Hand over notes from day shift to night shift.
19:00	19:30	0 hrs 30 mins	E.01	Safety Meeting - Held safety meeting with all personnel. Pre-risk assessment. Service equipment. Daily walk around inspection completed.
19:30	23:00	3 hrs 30 mins	F.04	Assist other providers - Assist well head crew to install 10K casing valves & surface casing vent. Tighten down well head.
23:00	24:00	1 hrs 0 mins	A.04	Continue to rig equipment. Rig in steam lines to pump & tank.
Operation Hours :		**17 hrs 0 mins**		***Examples: Travel,Safety Meeting, etc.**
***Other Hours :**		**0 hrs 0 mins**		
Total Hours :		**17 hrs 0 mins**		

CheckList

☑ Crown/Ram Saver Test	☑ Escape buggy Installed	☑ Fire Extinguisher
☑ Anchor Test Charts	☑ Equipment Grounded	☑ All Signs In Place
☑ Rig Motor Emerg. Air Kill	☑ Pump Motor Emerg. Air Kill	☑ Pump Relief Valve Proper Setting Wing Flags
☑ Crown	☑ Main Drum Brake Linkage Chkd.	☑ Guylines
☑ Tanks	☑ Truck Motor Emerg. Air Kill	☑ Equipment Proper Spacing
☑ Kill Line Connected	☑ Air Packs	☑ Emergency No.'s Posted
☑ H_2S %		

Type of Operation

COMPLETION

Safety Meeting

From Time	To Time	Meeting Topic
07:00	07:30	OTHER-Other

Notes

Heavy lifting. Two men per joint. Use proper lifting tecnique. Watch your footing. Stay off plastic liners. Hot steam & lines. Stay clear. Working with third party. Good communication with all personnel.

B.O.P. Function

B.O.P. Function Test : ☑ **Annular :** ☑ **Pipe :** ☑ **Blind :** ☑ **N/A :** ☐

Accum. Pressure : **Recharge Time :** mins secs

Precharge KPA #1 : **#2 :** **#3 :** **#4 :** **#5 :** **#6 :** **#7 :** **#8 :**

Drill Time Start(HHMM) : **Drill Time Stop :**

Weather

Temp	Wind
-27 °C	6MPH

Weather Conditions : Normal

Vehicles - Total Kms Travelled

Ticket Services

Service Id	Service Description	Billing Qty	UOM	Price	Amount	EDI1	EDI2	EDI3
EL3	EXTRA LABOR - RIG MAN/DRILL	13.00	Hours	$75.00	$975.00			
ELOT3	EXTRA LABOR - RIG MAN/DRILL OT	4.00	Hours	$95.00	$380.00			
EL4	EXTRA LABOR - DERRICK/FLOOR	13.00	Hours	$65.00	$845.00			
ELOT4	EXTRA LABOR - DERRICK/FLOOR OT	4.00	Hours	$80.00	$320.00			
RMZ1	RIG MANAGER VEHICLE	200.00	Kilometers	$1.25	$250.00			
PPE	PERSONAL PROTECTIVE EQUIPMENT	4.00	Man Per Day	$16.50	$66.00			
LP25	LIGHTPLANT OVER 25KW	1.00	Day	$220.00	$220.00			
TTBC	TRAVEL TIME	4.00	Man Hour	$19.00	$76.00			
PUMPT1	PUMP & TANK	1.00	Day	$1,025.00	$1,025.00			
LEL	LEL MONITOR	1.00	Day	$40.00	$40.00			
BOIL	BOILER RENTAL	1.00	Day	$1,200.00	$1,200.00			
			Daily Estimated Total :		**$5,397.00**			

Payroll Information

☑ Clothing Allowance ☑ Northern Job

Emp ID	Employee Name	Job Code	Income Code	Hours	Mileage	Cost	Province	Inj.	Sign

FIELD TICKET

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Job Header

SHEHTAH NABORS LP
3000
500 - 4TH AVENUE SW
CALGARY,AB T2P 2V6
Ticket # P0414000646111

Customer	CONOCO PHILLIPS CANADA LIMITED	**Rig #**	P0414
Cust Address	2100, 250 - 6TH AVENUE SW CALGARY,AB,T2P 3H7,CANADA	**Date**	02/25/2013
Well/Lease	**O-06/COPRC LOON CREEK**	**Day**	7
State/County	NT/NPS - NT County		
Customer Rep	**MYLES HAHN**		

GL:702000 NALN CA36 E120
NETWORK:10345055 IMPERT
PO:4600026584 ATTN:DEREK COVE

						Center		Free	Off
100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	BASE PAY	12		P0414	NT		
100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	MILE 1 DIESEL		100	P0414	NT		
100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	TRAVEL PAY	1		P0414	NT		
100063873	STAPLE, ROBERT L	RIG SUPERVISOR	BASE PAY	12		P0414	NT		
100063873	STAPLE, ROBERT L	RIG SUPERVISOR	MILE 1 DIESEL		100	P0414	NT		
100063873	STAPLE, ROBERT L	RIG SUPERVISOR	TRAVEL PAY	1		P0414	NT		
100254531	KERTESZ, SIMON S	FLOORHAND	BASE PAY	12		P0414	NT		
100254531	KERTESZ, SIMON S	FLOORHAND	TRAVEL PAY	1		P0414	NT		
100252232	BARGEN, JARED R	FLOORHAND	BASE PAY	12		P0414	NT		
100252232	BARGEN, JARED R	FLOORHAND	TRAVEL PAY	1		P0414	NT		

Comments Split crew Les & Jared on days. Rob & Simon on nights.

[I Acknowledge] Confirmation that all goods and services listed on ticket were received.

(Leslie Cummings)	**(Myles Hahn)**
2/26/2013 1:15:18 PM	**2/26/2013 1:15:36 PM**
Nabors Representative	**Customer Representative**

FIELD TICKET

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Job Header

SHEHTAH NABORS LP
3000
500 - 4TH AVENUE SW
CALGARY,AB T2P 2V6
Ticket # P0414000646112

Customer	CONOCO PHILLIPS CANADA LIMITED	**Rig #**	P0414
Cust Address	2100, 250 - 6TH AVENUE SW CALGARY,AB,T2P 3H7,CANADA	**Date**	02/26/2013
Well/Lease	**O-06/COPRC LOON CREEK**	**Day**	8
State/County	NT/NPS - NT County		
Customer Rep	**MYLES HAHN**		

GL:702000 NALN CA36 E120
NETWORK:10345055 IMPERT
PO:4600026584 ATTN:DEREK COVE

Details of Operations

Ticket From Time : 00:00 (HHMM) **Ticket To Time :** 24:00 (HHMM)

From	To	Time	Code	Description
00:00	07:00	7 hrs 0 mins	A.04	Rig / Equipment Up - Continue to rig up steam lines back to boiler. Rig up scaffolding. Tarp in scaffolding & steam heater. Heat well head. Rig in pump line. Hook pump line to casing. Shift change. Hand over notes from night shift to day shift.
07:00	07:30	0 hrs 30 mins	E.01	Safety Meeting - Held safety meeting with all personnel. Pre-risk assessment. Lel sweep of lease. Service & start equipment. Daily walk around inspection completed.
07:30	19:00	11 hrs 30 mins	C.21	Wireline Logging/Perforating/Hydrotesting - Detailed inspection completed. Rig up Schlumberger wireline. Run Gauge ring c/w CCl tools. Tagged. POOH. Run Gamma-ray & CBL logging tools. Log. POOH. Shift change. Hand over notes from day shift to night shift.
19:00	19:30	0 hrs 30 mins	E.01	HELD CREW CHANGE CROSS OVER MEETING/COMPLEATED RIG &EQUIPMENT SERVICE /HELD PRE JOB SAFETY & RISK ASSESMENT MEETING WITH ALL SERVICES/REVIEWED POLICYS, JOB PROCEDURES,REQUIRED JSA,S
19:30	20:00	0 hrs 30 mins	C.21	RIG OUT SCHLUMBERGER TOOLS & RIG OFF WIRE LINE BOPS
20:00	24:00	4 hrs 0 mins	C.21	RIG IN RESERVIOR IMAGEING TOOLS &RELATED EQUIPMENT /PREPARE RIG PUMP & EQUIPMENT FOR SUCKING BACK/MONITOR 400 BBL GLYCOL TANK TEMPS /WARM 400 TO +/- 25 C /MONITOR PUMP WHILE SUCKING BACK &MAKE &BREAK FITTINGS NEED FOR NEXT STEP OF JOB
Operation Hours :	**24 hrs 0 mins**	***Examples: Travel,Safety Meeting, etc.**		
***Other Hours :**	**0 hrs 0 mins**			
Total Hours :	**24 hrs 0 mins**			

CheckList

☐ Crown/Ram Saver Test	☐ Escape buggy Installed	☑ Fire Extinguisher
☐ Anchor Test Charts	☑ Equipment Grounded	☑ All Signs in Place
☐ Rig Motor Emerg. Air Kill	☑ Pump Motor Emerg. Air Kill	☑ Pump Relief Valve Proper Setting Wing Flags
☐ Crown	☐ Main Drum Brake Linkage Chkd.	☐ Guylines
☑ Tanks	☐ Truck Motor Emerg. Air Kill	☑ Equipment Proper Spacing
☑ Kill Line Connected	☑ Air Packs	☑ Emergency No.'s Posted
☐ H_2S %		

Type of Operation

COMPLETION

Safety Meeting

From Time	To Time	Meeting Topic	Notes
07:00	07:30	DRIVE-Driving	Drive to road conditions. Use road radio's at all times. 40 km/hr max speed. Have proper survival gear.

B.O.P. Function

B.O.P. Function Test : ☐ **Annular :** ☐ **Pipe :** ☐ **Blind :** ☑ **N/A :** ☐

Accum. Pressure : **Recharge Time :** mins secs

Precharge KPA #1 : **#2 :** **#3 :** **#4 :** **#5 :** **#6 :** **#7 :** **#8 :**

Drill Time Start(HHMM) : **Drill Time Stop :**

Weather

Temp	Wind
-25 ºC	5MPH

Weather Conditions : Normal

Vehicles - Total Kms Travelled

Ticket Services

Service Id	Service Description	Billing Qty	UOM	Price	Amount	EDI1	EDI2	EDI3
EL3	EXTRA LABOR - RIG MAN/DRILL	16.00	Hours	$75.00	$1,200.00			
ELOT3	EXTRA LABOR - RIG MAN/DRILL OT	8.00	Hours	$95.00	$760.00			
EL4	EXTRA LABOR - DERRICK/FLOOR	16.00	Hours	$65.00	$1,040.00			
ELOT4	EXTRA LABOR - DERRICK/FLOOR OT	8.00	Hours	$80.00	$640.00			
RMZ1	RIG MANAGER VEHICLE	200.00	Kilometers	$1.25	$250.00			
PPE	PERSONAL PROTECTIVE EQUIPMENT	4.00	Man Per Day	$16.50	$66.00			
LP25	LIGHTPLANT OVER 25KW	1.00	Day	$220.00	$220.00			
TTBC	TRAVEL TIME	4.00	Man Hour	$19.00	$76.00			
PUMPT1	PUMP & TANK	1.00	Day	$1,025.00	$1,025.00			
LEL	LEL MONITOR	1.00	Day	$40.00	$40.00			
BOIL	BOILER RENTAL	1.00	Day	$1,200.00	$1,200.00			
				Daily Estimated Total :	**$6,517.00**			

Payroll Information

☐ Clothing Allowance ☐ Northern Job

FIELD TICKET

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SHEHTAH NABORS LP
3000
500 - 4TH AVENUE SW
CALGARY,AB T2P 2V6
Ticket # P0414000646112

Job Header

Customer	CONOCO PHILLIPS CANADA LIMITED	**Rig #**	P0414
Cust Address	2100, 250 - 6TH AVENUE SW CALGARY,AB,T2P 3H7,CANADA	**Date**	02/26/2013
Well/Lease	**O-06/COPRC LOON CREEK**	**Day**	8
State/County	NT/NPS - NT County		
Customer Rep	**MYLES HAHN**		

GL:702000 NALN CA36 E120
NETWORK:10345055 IMPERT
PO:4600026584
ATTN:DEREK COVE

Emp ID	Employee Name	Job Code	Income Code	Hours	Mileage	Cost Center	Province	Inj. Free	Sign Off
100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	BASE PAY	12		P0414	NT	☑	☑
100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	MILE 1 DIESEL		100	P0414	NT	☑	☑
100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	TRAVEL PAY	1		P0414	NT	☑	☑
100063873	STAPLE, ROBERT L	RIG SUPERVISOR	BASE PAY	12		P0414	NT	☑	☑
100063873	STAPLE, ROBERT L	RIG SUPERVISOR	MILE 1 DIESEL		100	P0414	NT	☑	☑
100063873	STAPLE, ROBERT L	RIG SUPERVISOR	TRAVEL PAY	1		P0414	NT	☑	☑
100254531	KERTESZ, SIMON S	FLOORHAND	BASE PAY	12		P0414	NT	☑	☑
100254531	KERTESZ, SIMON S	FLOORHAND	TRAVEL PAY	1		P0414	NT	☑	☑
100252232	BARGEN, JARED R	FLOORHAND	BASE PAY	12		P0414	NT	☑	☑
100252232	BARGEN, JARED R	FLOORHAND	TRAVEL PAY	1		P0414	NT	☑	☑

Comments

☑ **[I Acknowledge] Confirmation that all goods and services listed on ticket were received.**

(Leslie Cummings)	**(Myles Hahn)**
2/27/2013 3:48:38 PM	**2/27/2013 3:50:39 PM**
Nabors Representative	**Customer Representative**

FIELD TICKET

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Job Header

SHEHTAH NABORS LP
3000
500 - 4TH AVENUE SW
CALGARY,AB T2P 2V6
Ticket # P0414000646113

Customer	CONOCO PHILLIPS CANADA LIMITED	**Rig #**	P0414
Cust Address	2100, 250 - 6TH AVENUE SW CALGARY,AB,T2P 3H7,CANADA	**Date**	02/27/2013
Well/Lease	**O-06/COPRC LOON CREEK**	**Day**	9
State/County	NT/NPS - NT County		
Customer Rep	**MYLES HAHN**		

GL:702000 NALN CA36 E120
NETWORK:10345055 IMPERT
PO:4600026584
ATTN:DEREK COVE

Details of Operations

Ticket From Time : 00:00 (HHMM) **Ticket To Time :** 24:00 (HHMM)

From	To	Time	Code	Description
00:00	07:00	7 hrs 0 mins	C.21	Wireline Logging/Perforating/Hydrotesting - Continue sucking back on casing while Reservoir Imaging runs geo phones in hole. Shift change. Hand over notes from night shift to day shift.
07:00	07:30	0 hrs 30 mins	E.01	Safety Meeting - Held safety meeting with all personnel. Pre-risk assessment. Lel sweep of lease. Service & start equipment. Daily walk around inspection completed.
07:30	19:00	11 hrs 30 mins	C.21	Wireline Logging/Perforating/Hydrotesting - Continue sucking back on casing while Reservoir imaging runs geo phones in hole. Blow out lines. Drain pump. Continue heating rig tank & propylene glycol tank. Fill boiler with H2O. Clean up lease. Shift change. Hand over notes from day shift to night shift.
19:00	19:30	0 hrs 30 mins	E.01	HELD CREW CHANGE MEETING WITH DAY CREW / WENT OVER OPERATIONS REQUIRED TO BE COMPLEATED ON RIG CREW PART/HELD PRE JOB SAFETY/POLICY&PROCEDURE MEETING WITH ALL SERVICES/REVIEWED REQUIRED JSA,S
19:30	21:00	1 hrs 30 mins	C.99	WITH GEO PHONES IN WELL NO WORK TO BE DONE IN WELL HEAD AREA/NITE CREW CLEANED UP LOCATION & SPREAD SAW DUST IN HIGH TRAFFIC AREAS/
21:00	21:20	0 hrs 20 mins	E.01	WITH SISMIC OPERATIONS COMPLEATED /TAIL GATE SAFETY MEETING HELD WITH ALL SERVICES/
21:20	24:00	2 hrs 40 mins	C.21	RESERVIOR IMAGING STARTED TO POOH LOADING CABLE &GEO PHONES IN SHIPPING BOXES/RIG CREW CONTINUED TO CLEAN UP LOCATION
Operation Hours :	**24 hrs 0 mins**	***Examples: Travel,Safety Meeting, etc.**		
***Other Hours :**	**0 hrs 0 mins**			
Total Hours :	**24 hrs 0 mins**			

CheckList

- Crown/Ram Saver Test
- Anchor Test Charts
- Rig Motor Emerg. Air Kill
- Crown
- Tanks
- Kill Line Connected
- H_2S %
- Escape buggy Installed
- Equipment Grounded
- Pump Motor Emerg. Air Kill
- Main Drum Brake Linkage Chkd.
- Truck Motor Emerg. Air Kill
- Air Packs
- Fire Extinguisher
- All Signs in Place
- Pump Relief Vaive Proper Setting Wing Flags
- Guylines
- Equipment Proper Spacing
- Emergency No.'s Posted

Type of Operation

COMPLETION

Safety Meeting

From Time	To Time	Meeting Topic	Notes
07:00	07:30	OTHER-Other	Working with third party. Inspect all equipment. Ask before doing anything. Good communication with all personnel.

B.O.P. Function

B.O.P. Function Test : **Annular :** **Pipe :** **Blind :** **N/A :**

Accum. Pressure : **Recharge Time :** mins secs

Precharge KPA #1 : **#2 :** **#3 :** **#4 :** **#5 :** **#6 :** **#7 :** **#8 :**

Drill Time Start(HHMM) : **Drill Time Stop :**

Weather

Temp	Wind
-28 °C	8MPH

Weather Conditions : Normal

Vehicles - Total Kms Travelled

Ticket Services

Service Id	Service Description	Billing Qty	UOM	Price	Amount	EDI1	EDI2	EDI3
EL3	EXTRA LABOR - RIG MAN/DRILL	16.00	Hours	$75.00	$1,200.00			
ELOT3	EXTRA LABOR - RIG MAN/DRILL OT	8.00	Hours	$95.00	$760.00			
EL4	EXTRA LABOR - DERRICK/FLOOR	16.00	Hours	$65.00	$1,040.00			
ELOT4	EXTRA LABOR - DERRICK/FLOOR OT	8.00	Hours	$80.00	$640.00			
RMZ1	RIG MANAGER VEHICLE	200.00	Kilometers	$1.25	$250.00			
PPE	PERSONAL PROTECTIVE EQUIPMENT	4.00	Man Per Day	$16.50	$66.00			
LP25	LIGHTPLANT OVER 25KW	1.00	Day	$220.00	$220.00			
TTBC	TRAVEL TIME	4.00	Man Hour	$19.00	$76.00			
PUMPT1	PUMP & TANK	1.00	Day	$1,025.00	$1,025.00			
LEL	LEL MONITOR	1.00	Day	$40.00	$40.00			
BOIL	BOILER RENTAL	1.00	Day	$1,200.00	$1,200.00			
			Daily Estimated Total :		**$6,517.00**			

Payroll Information

- Clothing Allowance
- Northern Job

FIELD TICKET

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Job Header

SHEHTAH NABORS LP
3000
500 - 4TH AVENUE SW
CALGARY,AB T2P 2V6
Ticket # P0414000646113

Customer	CONOCO PHILLIPS CANADA LIMITED	**Rig #**	P0414
Cust Address	2100, 250 - 6TH AVENUE SW CALGARY,AB,T2P 3H7,CANADA	**Date**	02/27/2013
Well/Lease	**O-06/COPRC LOON CREEK**	**Day**	9
State/County	NT/NPS - NT County		
Customer Rep	**MYLES HAHN**		

GL:702000 NALN CA36 E120
NETWORK:10345055 IMPERT
PO:4600026584 ATTN:DEREK COVE

Emp ID	Employee Name	Job Code	Income Code	Hours	Mileage	Cost Center	Province	Inj. Free	Sign Off
100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	BASE PAY	12		P0414	NT	☑	☑
100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	MILE 1 DIESEL		100	P0414	NT	☑	☑
100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	TRAVEL PAY	1		P0414	NT	☑	☑
100063873	STAPLE, ROBERT L	RIG SUPERVISOR	BASE PAY	12		P0414	NT	☑	☑
100063873	STAPLE, ROBERT L	RIG SUPERVISOR	MILE 1 DIESEL		100	P0414	NT	☑	☑
100063873	STAPLE, ROBERT L	RIG SUPERVISOR	TRAVEL PAY	1		P0414	NT	☑	☑
100254531	KERTESZ, SIMON S	FLOORHAND	BASE PAY	12		P0414	NT	☑	☑
100254531	KERTESZ, SIMON S	FLOORHAND	TRAVEL PAY	1		P0414	NT	☑	☑
100252232	BARGEN, JARED R	FLOORHAND	BASE PAY	12		P0414	NT	☑	☑
100252232	BARGEN, JARED R	FLOORHAND	TRAVEL PAY	1		P0414	NT	☑	☑

Comments

☑ **[I Acknowledge] Confirmation that all goods and services listed on ticket were received.**

(Leslie Cummings)	**(Myles Hahn)**
2/28/2013 12:44:45 PM	**2/28/2013 12:46:15 PM**
Nabors Representative	**Customer Representative**

FIELD TICKET

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Job Header

SHEHTAH NABORS LP
3000
500 - 4TH AVENUE SW
CALGARY,AB T2P 2V6
Ticket # P0414000646114

Customer	CONOCO PHILLIPS CANADA LIMITED	**Rig #**	P0414
Cust Address	2100, 250 - 6TH AVENUE SW CALGARY,AB,T2P 3H7,CANADA	**Date**	02/28/2013
Well/Lease	0-06/COPRC LOON CREEK	**Day**	10
State/County	NT/NPS - NT County		
Customer Rep	MYLES HAHN		

GL:702000 NALN CA36 E120
NETWORK:10345055 IMPERT
PO:4600026584 ATTN:DEREK COVE

Details of Operations

Ticket From Time : 00:00 (HHMM) **Ticket To Time :** 24:00 (HHMM)

From	To	Time	Code	Description
00:00	04:00	4 hrs 0 mins	C.21	Wireline Logging/Perforating/Hydrotesting - Shift change. Reservoir Imaging continued pulling geo phones out of hole. Rig out Reservoir Imaging.
04:00	06:30	2 hrs 30 mins	C.99	Other - Remove 10K x 5K adapter flange. Continue to clean up lease. Shift change. Hand over notes from Night shift to day shift.
06:30	07:00	0 hrs 30 mins	E.01	Safety Meeting - Held safety meeting with all personnel. Pre-risk assessment. Lel sweep of lease. Service equipment. Daily walk around inspection completed.
07:00	13:00	6 hrs 0 mins	C.02	Pressure Test - Rig up pressure truck. Pressure test casing with pressure truck. Rig out pressure truck.
13:00	18:30	5 hrs 30 mins	C.21	Wireline Logging/Perforating/Hydrotesting - Raise scoffolding with picker. Rig up Schlumberger wireline. Shift change. Hand over notes from day shift to night shift.
18:30	19:00	0 hrs 30 mins	E.01	HELD CREW CHANGE CROSS OVER WITH DAY SHIFT / HELD SAFETY POLICY & PROCEDURE MEETING WITH ALL SERVICES/REVIEWED ALL SAFETY CONCERNS FOR NITES OPERATION
19:00	21:00	2 hrs 0 mins	C.21	RIG IN RIG KILL LINE TO 10K CHOKE SIDE OF WLL HEAD/INSTALL BLANK FLANGE TO OTHER SIDE/INSTALL NEEDLE VALVE /COMPLEATLY TARP IN WELL HEAD &SCAFFOLDING/
21:00	24:00	3 hrs 0 mins	C.21	RIG IN SCHLUMBERGER WIRE LINE SURFACE EQUIPMENT WITH TRIUMPH PICKER SERVICES/MISSING 1 CROSS OVER FLANGE/WHILE SOURCEING CROSS OVER /RAN IN HOLE WITH UN ARMED BRIDGE PLUG/TO CONFIRM NO RESTRICKTIONS IN WELL HEAD /
Operation Hours :		**24 hrs 0 mins**		***Examples: Travel,Safety Meeting, etc.**
***Other Hours :**		**0 hrs 0 mins**		
Total Hours :		**24 hrs 0 mins**		

CheckList

☐ Crown/Ram Saver Test	☐ Escape buggy Installed	☑ Fire Extinguisher
☐ Anchor Test Charts	☑ Equipment Grounded	☐ All Signs In Place
☐ Rig Motor Emerg. Air Kill	☑ Pump Motor Emerg. Air Kill	☑ Pump Relief Valve Proper Setting Wing Flags
☐ Crown	☐ Main Drum Brake Linkage Chkd.	☐ Guylines
☐ Tanks	☐ Truck Motor Emerg. Air Kill	☑ Equipment Proper Spacing
☑ Kill Line Connected	☑ Air Packs	☑ Emergency No.'s Posted
☐ H_2S %		

Type of Operation

COMPLETION

Safety Meeting

From Time	To Time	Meeting Topic	Notes
06:30	07:00	TOOLS-Working with Tools/Snipes	Inspect all tools before & after use. Use proper tool for the job. Use pins in snipes. Proper body position & hand placement.

B.O.P. Function

B.O.P. Function Test : ☑ **Annular :** ☑ **Pipe :** ☑ **Blind :** ☐ **N/A :** ☐

Accum. Pressure : **Recharge Time :** mins secs

Precharge KPA #1 : **#2 :** **#3 :** **#4 :** **#5 :** **#6 :** **#7 :** **#8 :**

Drill Time Start(HHMM) : **Drill Time Stop :**

Weather

Temp	Wind
-28 °C	6MPH

Weather Conditions : Normal

Vehicles - Total Kms Travelled

Ticket Services

Service Id	Service Description	Billing Qty	UOM	Price	Amount	EDI1	EDI2	EDI3
EL3	EXTRA LABOR - RIG MAN/DRILL	16.50	Hours	$75.00	$1,237.50			
ELOT3	EXTRA LABOR - RIG MAN/DRILL OT	8.00	Hours	$95.00	$760.00			
EL4	EXTRA LABOR - DERRICK/FLOOR	16.50	Hours	$65.00	$1,072.50			
ELOT4	EXTRA LABOR - DERRICK/FLOOR OT	8.00	Hours	$80.00	$640.00			
RMZ1	RIG MANAGER VEHICLE	200.00	Kilometers	$1.25	$250.00			
PPE	PERSONAL PROTECTIVE EQUIPMENT	4.00	Man Per Day	$16.50	$66.00			
LP25	LIGHTPLANT OVER 25KW	1.00	Day	$220.00	$220.00			
TTBC	TRAVEL TIME	4.00	Man Hour	$19.00	$76.00			
PUMPT1	PUMP & TANK	1.00	Day	$1,025.00	$1,025.00			
LEL	LEL MONITOR	1.00	Day	$40.00	$40.00			
BOIL	BOILER RENTAL	1.00	Day	$1,200.00	$1,200.00			
				Daily Estimated Total :	**$6,587.00**			

Payroll Information

FIELD TICKET

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Job Header

SHEHTAH NABORS LP
3000
500 - 4TH AVENUE SW
CALGARY,AB T2P 2V6
Ticket # P0414000646114

Customer	CONOCO PHILLIPS CANADA LIMITED	**Rig #**	P0414
Cust Address	2100, 250 - 6TH AVENUE SW CALGARY,AB,T2P 3H7,CANADA	**Date**	02/28/2013
Well/Lease	**O-06/COPRC LOON CREEK**	**Day**	10
State/County	NT/NPS - NT County		
Customer Rep	**MYLES HAHN**		

GL:702000 NALN CA36 E120
NETWORK:10345055 IMPERT
PO:4600026584
ATTN:DEREK COVE

☐ Clothing Allowance ☐ Northern Job

Emp ID	Employee Name	Job Code	Income Code	Hours	Mileage	Cost Center	Province	Inj. Free	Sign Off
100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	BASE PAY	12		P0414	NT	☐	☐
100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	MILE 1 DIESEL		100	P0414	NT	☐	☐
100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	TRAVEL PAY	1		P0414	NT	☐	☐
100063873	STAPLE, ROBERT L	RIG SUPERVISOR	BASE PAY	12		P0414	NT	☐	☐
100063873	STAPLE, ROBERT L	RIG SUPERVISOR	MILE 1 DIESEL		100	P0414	NT	☐	☐
100063873	STAPLE, ROBERT L	RIG SUPERVISOR	TRAVEL PAY	1		P0414	NT	☐	☐
100254531	KERTESZ, SIMON S	FLOORHAND	BASE PAY	12		P0414	NT	☐	☐
100254531	KERTESZ, SIMON S	FLOORHAND	TRAVEL PAY	1		P0414	NT	☐	☐
100252232	BARGEN, JARED R	FLOORHAND	BASE PAY	12		P0414	NT	☐	☐
100252232	BARGEN, JARED R	FLOORHAND	TRAVEL PAY	1		P0414	NT	☐	☐

Comments

☐ **[I Acknowledge] Confirmation that all goods and services listed on ticket were received.**

(Leslie Cummings)
3/1/2013 7:43:19 AM

Nabors Representative

(Myles Hahn)
3/1/2013 7:44:30 AM

Customer Representative

FIELD TICKET

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Job Header

SHEHTAH NABORS LP
3000
500 - 4TH AVENUE SW
CALGARY,AB T2P 2V6
Ticket # P0414000646115

Customer	CONOCO PHILLIPS CANADA LIMITED	**Rig #**	P0414
Cust Address	2100, 250 - 6TH AVENUE SW CALGARY,AB,T2P 3H7,CANADA	**Date**	03/01/2013
Well/Lease	**O-06/COPRC LOON CREEK**	**Day**	11
State/County	NT/NPS - NT County		**GL:702000 NALN CA36 E120**
Customer Rep	**MYLES HAHN**		**NETWORK:10345055 IMPERT**
			PO:4600026584 ATTN:DEREK COVE

Details of Operations

Ticket From Time : 00:00 (HHMM) **Ticket To Time :** 24:00 (HHMM)

From	To	Time	Code	Description
00:00	02:00	2 hrs 0 mins	C.21	WITH TEST RUN COMPLEATED/STARTED TO POOH WITH WIRE LINE/ PROBLEMS WITH DRUM/POOH & LAYED OUT TOOL STRING & CLEANED TOOLS/CHECKED OVER WIRE LINE UNIT /UNABLE TO REPAIR ON LOCATION/TOTAL RIG OUT OF LINE TRUCK/RIG OUT PICKER UNIT /PICKER &WIRE LINE UNIT TRAVELED TO NORMAN WELLS TO REPAIR DRUM /POSIBLE DRUM REMOVEAL &CHANGE REQUIRED/
02:00	06:30	4 hrs 30 mins	C.99	NITE CREW WORKED ON NPS EQUIPMENT TILL CREW CHANGE/SHIFT CHANGE HAND OVER NOTES FROM NIGHT SHIFT TO DAY SHIFT
06:30	07:00	0 hrs 30 mins	E.01	Safety Meeting - Held safety meeting with all personnel. Pre-risk assessment. Lel sweep of lease. Service equipment. Daily walk around inspection completed.
07:00	18:30	11 hrs 30 mins	F.04	Assist other providers - Rig up second steam heater under scaffolding. Assist Schlumberger wireline. Roll propylene glycol tank with rig pump. Assist Schlumberger pumper to rig up. Schlumberger pressure tested line. Bled off line to rig tank. Shift change. Hand over notes from day shift to night shift.
18:30	19:00	0 hrs 30 mins	E.01	HELD CROSS SHIFT WITH DAY CREW /HELD PRE JOB RISK ASSESMENT SAFETY MEETING WITH ALL SERVICES/REVIEWED POLICYS &PROCEDURES/REQUIRED JSA,S
19:00	20:00	1 hrs 0 mins	C.99	WHILE WAITING FOR PROPER CROSS OVER FLANGE TO ARRIVE /GENERAL MAINTANCE &LOCATION CLEAN UP PERFORMED
20:00	22:00	2 hrs 0 mins	C.21	RIG IN SCHLUMBERGER WIRE LINE LUBRICATOR, BOPS ,&SURFACE EQUIPMENT
22:00	24:00	2 hrs 0 mins	C.02	PRESSURE TEST LUBRICATOR WITH PEREGRINE PRESSURE TESTING/LOW & HIGH TESTS COMPLEATED/ONE SMALL LEAK REPAIRED & RETESTED TESTED GOOD AS PER PROGRAM/BLEED OFF PRESSURE TEST TO PERIGRIN /SUCK BACK WITH RIG PUMP TO EMPTY LUBRICATOR /POP LUBE &HANG OFF SIDE/LAY OUT TOOLS/ HELDTAIL GATE SAFETY MEETING/
Operation Hours : 24 hrs 0 mins ***Other Hours :** 0 hrs 0 mins **Total Hours :** 24 hrs 0 mins				***Examples: Travel,Safety Meeting, etc.**

CheckList

☑ Crown/Ram Saver Test	☑ Escape buggy Installed	☑ Fire Extinguisher
☑ Anchor Test Charts	☑ Equipment Grounded	☑ All Signs In Place
☑ Rig Motor Emerg. Air Kill	☑ Pump Motor Emerg. Air Kill	☑ Pump Relief Valve Proper Setting Wing Flags
☑ Crown	☑ Main Drum Brake Linkage Chkd.	☑ Guylines
☑ Tanks	☑ Truck Motor Emerg. Air Kill	☑ Equipment Proper Spacing
☑ Kill Line Connected	☑ Air Packs	☑ Emergency No.'s Posted
☑ H_2S %		

Type of Operation

COMPLETION

Safety Meeting

From Time	To Time	Meeting Topic	Notes
07:30	08:00	HP-Hand Placement	Be aware of all pinch point. Keep hands clear. Stay clear of moving equipment. Good communication with all personnel. Use spotter to direct picker operator.

B.O.P. Function

B.O.P. Function Test : ☑ **Annular :** ☑ **Pipe :** ☑ **Blind :** ☑ **N/A :** ☑

Accum. Pressure : **Recharge Time :** mins secs

Precharge KPA #1 : **#2 :** **#3 :** **#4 :** **#5 :** **#6 :** **#7 :** **#8 :**

Drill Time Start(HHMM) : **Drill Time Stop :**

Weather

Temp	Wind
-25 °C	4MPH

Weather Conditions : Normal

Vehicles - Total Kms Travelled

Ticket Services

Service Id	Service Description	Billing Qty	UOM	Price	Amount	EDI1	EDI2	EDI3
EL3	EXTRA LABOR - RIG MAN/DRILL	16.00	Hours	$75.00	$1,200.00			
ELOT3	EXTRA LABOR - RIG MAN/DRILL OT	8.00	Hours	$95.00	$760.00			
EL4	EXTRA LABOR - DERRICK/FLOOR	16.00	Hours	$65.00	$1,040.00			
ELOT4	EXTRA LABOR - DERRICK/FLOOR OT	8.00	Hours	$80.00	$640.00			
RMZ1	RIG MANAGER VEHICLE	200.00	Kilometers	$1.25	$250.00			
PPE	PERSONAL PROTECTIVE EQUIPMENT	4.00	Man Per Day	$16.50	$66.00			
LP25	LIGHTPLANT OVER 25KW	1.00	Day	$220.00	$220.00			
TTBC	TRAVEL TIME	4.00	Man Hour	$19.00	$76.00			
PUMPT1	PUMP & TANK	1.00	Day	$1,025.00	$1,025.00			
LEL	LEL MONITOR	1.00	Day	$40.00	$40.00			
BOIL	BOILER RENTAL	1.00	Day	$1,200.00	$1,200.00			

FIELD TICKET

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Job Header

SHEHTAH NABORS LP
3000
500 - 4TH AVENUE SW
CALGARY,AB T2P 2V6
Ticket # P0414000646115

Customer	CONOCO PHILLIPS CANADA LIMITED	**Rig #**	P0414
Cust Address	2100, 250 - 6TH AVENUE SW CALGARY,AB,T2P 3H7,CANADA	**Date**	03/01/2013
Well/Lease	O-06/COPRC LOON CREEK	**Day**	11
State/County	NT/NPS - NT County		
Customer Rep	MYLES HAHN		

GL:702000 NALN CA36 E120
NETWORK:10345055 IMPERT
PO:4600026584 ATTN:DEREK COVE

Daily Estimated Total : $6,517.00

Payroll Information

☐ Clothing Allowance ☐ Northern Job

Emp ID	Employee Name	Job Code	Income Code	Hours	Mileage	Cost Center	Province	Inj. Free	Sign Off
100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	BASE PAY	12		P0414	NT	☐	☐
100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	MILE 1 DIESEL		100	P0414	NT	☐	☐
100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	TRAVEL PAY	1		P0414	NT	☐	☐
100063873	STAPLE, ROBERT L	RIG SUPERVISOR	BASE PAY	12		P0414	NT	☐	☐
100063873	STAPLE, ROBERT L	RIG SUPERVISOR	MILE 1 DIESEL		100	P0414	NT	☐	☐
100063873	STAPLE, ROBERT L	RIG SUPERVISOR	TRAVEL PAY	1		P0414	NT	☐	☐
100254531	KERTESZ, SIMON S	FLOORHAND	BASE PAY	12		P0414	NT	☐	☐
100254531	KERTESZ, SIMON S	FLOORHAND	TRAVEL PAY	1		P0414	NT	☐	☐
100252232	BARGEN, JARED R	FLOORHAND	BASE PAY	12		P0414	NT	☐	☐
100252232	BARGEN, JARED R	FLOORHAND	TRAVEL PAY	1		P0414	NT	☐	☐

Comments

☐ **[I Acknowledge] Confirmation that all goods and services listed on ticket were received.**

(Leslie Cummings)	(Myles Hanh)
3/2/2013 6:07:17 PM	3/2/2013 6:13:05 PM
Nabors Representative	**Customer Representative**

FIELD TICKET

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Job Header

SHEHTAH NABORS LP
3000
500 - 4TH AVENUE SW
CALGARY,AB T2P 2V6
Ticket # P0414000646116

Customer	CONOCO PHILLIPS CANADA LIMITED	**Rig #**	P0414
Cust Address	2100, 250 - 6TH AVENUE SW CALGARY,AB,T2P 3H7,CANADA	**Date**	03/02/2013
Well/Lease	O-06/COPRC LOON CREEK	**Day**	12
State/County	NT/NPS - NT County		
Customer Rep	MYLES HAHN		

GL:702000 NALN CA36 E120
NETWORK:10345055 IMPERT
PO:4600026584 ATTN:DEREK COVE

Details of Operations

Ticket From Time : 00:00 (HHMM) **Ticket To Time :** 24:00 (HHMM)

From	To	Time	Code	Description
00:00	03:45	3 hrs 45 mins	C.21	ARM GUN & PICK UP IN TO LUBRICATOR /LAND ON TO WIRE LINE BOPS USEING TRIUMPH PICKER FOR SUPPORT/RIH WITH GUN &LOG ON TO DEPTH /PERFORATE ZONE OF INTREST/MINIMAL PRESSURE AT SURFACE T. S .T .M /
03:45	05:00	1 hrs 15 mins	C.21	POOH WITH PERF GUN /HEAT LUBRICATOR CONNECTION /BREAK & HANG LUBE & BOP/LOWER GUN TO GROUND
05:00	06:30	1 hrs 30 mins	C.21	RIG DOWN PERF GUN & MAKE UP BRIDGE PLUG ASSEMBLY/INSTALL TANDEM RECORDERS/
06:30	07:00	0 hrs 30 mins	E.01	Safety Meeting - Held safety meeting with all personel. Pre-risk assessment. Lel sweep of lease. Service equipment. Daily walk around inspection completed.
07:00	18:30	11 hrs 30 mins	C.21	Wireline Logging/Perforating/Hydrotesting - Run recorders & bridge plug assembly. Perform D-fit test. Set bridge plug. POOH. Pressure test bridge plug. Run bridge plug. Set bridge plug. POOH. Pressure test bridge plug. Pick up sand bailer. Shift change. Hand over notes from day shift to night shift.
18:30	19:00	0 hrs 30 mins	E.01	HELD CREW CHANGE CROSS OVER MEETING / HELD PRE JOB RISK ASSESMENT & SAFETY MEETING WITH ALL SERVICES/REVIEWED POLICYS PROCEDURES/CONOCO PJHA ON BOILER & STEAM OPERATIONS & ALL REQUIRED JSA,S
19:00	22:00	3 hrs 0 mins	C.21	RIH & DUMP BAIL SAND /POOH WITH BAILER & LAY OUT BAILER ASSEMBLE
22:00	24:00	2 hrs 0 mins	C.21	HELD TAIL GATE SAFETY /ARM PERF GUN & RUN IN HOLE/FILL & APPLY PRESSURE TO WELL AS REQUESTED /CONTINUE TO RIH
Operation Hours :		**24 hrs 0 mins**		***Examples: Travel,Safety Meeting, etc.**
***Other Hours :**		**0 hrs 0 mins**		
Total Hours :		**24 hrs 0 mins**		

CheckList

☐ Crown/Ram Saver Test	☑ Escape buggy Installed	☑ Fire Extinguisher
☑ Anchor Test Charts	☑ Equipment Grounded	☑ All Signs in Place
☐ Rig Motor Emerg. Air Kill	☑ Pump Motor Emerg. Air Kill	☑ Pump Relief Valve Proper Setting Wing Flags
☐ Crown	☐ Main Drum Brake Linkage Chkd.	☑ Guylines
☑ Tanks	☐ Truck Motor Emerg. Air Kill	☑ Equipment Proper Spacing
☑ Kill Line Connected	☑ Air Packs	☑ Emergency No.'s Posted
☐ H_2S %		

Type of Operation

COMPLETION

Safety Meeting

From Time	To Time	Meeting Topic	Notes
06:30	07:00	FP-Working at Heights/Fall Protection	Inspect & wear fall protection. Secure all tools when working at heights. Stay out from under overhead worker.

B.O.P. Function

B.O.P. Function Test : ☐ **Annular :** ☐ **Pipe :** ☐ **Blind :** ☐ **N/A :** ☐

Accum. Pressure : **Recharge Time :** mins secs

Precharge KPA #1 : **#2 :** **#3 :** **#4 :** **#5 :** **#6 :** **#7 :** **#8 :**

Drill Time Start(HHMM) : **Drill Time Stop :**

Weather

Temp	Wind
-26 °C	4MPH

Weather Conditions : Normal

Vehicles - Total Kms Travelled

Ticket Services

Service Id	Service Description	Billing Qty	UOM	Price	Amount	EDI1	EDI2	EDI3
EL3	EXTRA LABOR - RIG MAN/DRILL	16.00	Hours	$75.00	$1,200.00			
ELOT3	EXTRA LABOR - RIG MAN/DRILL OT	8.00	Hours	$95.00	$760.00			
EL4	EXTRA LABOR - DERRICK/FLOOR	16.00	Hours	$65.00	$1,040.00			
ELOT4	EXTRA LABOR - DERRICK/FLOOR OT	8.00	Hours	$80.00	$640.00			
RMZ1	RIG MANAGER VEHICLE	200.00	Kilometers	$1.25	$250.00			
PPE	PERSONAL PROTECTIVE EQUIPMENT	4.00	Man Per Day	$16.50	$66.00			
LP25	LIGHTPLANT OVER 25KW	1.00	Day	$220.00	$220.00			
TTBC	TRAVEL TIME	4.00	Man Hour	$19.00	$76.00			
PUMPT1	PUMP & TANK	1.00	Day	$1,025.00	$1,025.00			
LEL	LEL MONITOR	1.00	Day	$40.00	$40.00			
BOIL	BOILER RENTAL	1.00	Day	$1,200.00	$1,200.00			
				Daily Estimated Total :	**$6,517.00**			

Payroll Information

☑ Clothing Allowance ☑ Northern Job

FIELD TICKET

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Job Header

SHEHTAH NABORS LP
3000
500 - 4TH AVENUE SW
CALGARY,AB T2P 2V6
Ticket # P0414000646116

Customer	CONOCO PHILLIPS CANADA LIMITED	**Rig #**	P0414
Cust Address	2100, 250 - 6TH AVENUE SW CALGARY,AB,T2P 3H7,CANADA	**Date**	03/02/2013
Well/Lease	**O-06/COPRC LOON CREEK**	**Day**	12
State/County	NT/NPS - NT County		
Customer Rep	**MYLES HAHN**		

GL:702000 NALN CA36 E120
NETWORK:10345055 IMPERT
PO:4600026584 ATTN:DEREK COVE

Emp ID	Employee Name	Job Code	Income Code	Hours	Mileage	Cost Center	Province	Inj. Free	Sign Off
100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	BASE PAY	12		P0414	NT		
100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	MILE 1 DIESEL		100	P0414	NT		
100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	TRAVEL PAY	1		P0414	NT		
100063873	STAPLE, ROBERT L	RIG SUPERVISOR	BASE PAY	12		P0414	NT		
100063873	STAPLE, ROBERT L	RIG SUPERVISOR	MILE 1 DIESEL		100	P0414	NT		
100063873	STAPLE, ROBERT L	RIG SUPERVISOR	TRAVEL PAY	1		P0414	NT		
100254531	KERTESZ, SIMON S	FLOORHAND	BASE PAY	12		P0414	NT		
100254531	KERTESZ, SIMON S	FLOORHAND	TRAVEL PAY	1		P0414	NT		
100252232	BARGEN, JARED R	FLOORHAND	BASE PAY	12		P0414	NT		
100252232	BARGEN, JARED R	FLOORHAND	TRAVEL PAY	1		P0414	NT		

Comments

[I Acknowledge] Confirmation that all goods and services listed on ticket were received.

(Leslie Cummings)	**(Myles Hahn)**
3/3/2013 12:20:57 PM	**3/3/2013 12:29:59 PM**
Nabors Representative	**Customer Representative**

FIELD TICKET

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Job Header

SHEHTAH NABORS LP
3000
500 - 4TH AVENUE SW
CALGARY,AB T2P 2V6
Ticket # P0414000646117

Customer	CONOCO PHILLIPS CANADA LIMITED	**Rig #**	P0414
Cust Address	2100, 250 - 6TH AVENUE SW CALGARY,AB,T2P 3H7,CANADA	**Date**	03/03/2013
Well/Lease	0-06/COPRC LOON CREEK	**Day**	13
State/County	NT/NPS - NT County		GL:702000 NALN CA36 E120
Customer Rep	MYLES HAHN		NETWORK:10345055 IMPERT
			PO:4600026584 ATTN:DEREK COVE

Details of Operations

Ticket From Time : 00:00 (HHMM) **Ticket To Time :** 24:00 (HHMM)

From	To	Time	Code	Description
00:00	02:00	2 hrs 0 mins	C.21	CONTINUE TO R I H WITH PERF GUN/LOG ON DEPTH /PERFORATE ZONE OF INTREST/MONITOR WELL BORE PRESSURE /POOH &SECURE /MASTER &WING VALVES/BLEED OFF & LAY OUT PERF GUN ASSEMBLY
02:00	03:30	1 hrs 30 mins	C.21	RIH WITH WR BRIDGE PLUGE C/W RECORDERS/LOG ON DEPTH
03:30	03:45	0 hrs 15 mins	E.01	HELD TAIL GATE SAFETY MEETING WITH ALL SERVICES REVIEWED PUMPING PROCEDURES
03:45	05:00	1 hrs 15 mins	C.21	PROCEDE WITH PUMPING OPERATIONS AS PER PROGRAM/SETTING W/R BRIDGE PLUG WHILE PUMPING/ONCE PLUG SET STAY AT SETTING DEPTH /MOITOR WELL BORE PRESSURES/WITH PRESSURE STABILIZED POOH WITH PLUG SETTING TOOLS
05:00	06:30	1 hrs 30 mins	C.21	LAY OUT PLUG SETTING TOOLS/REBUILD PLUG SETTING TOOL & ASSEMBLE BRIDGE PLUG /PICK UP & LAND & RIH
06:30	07:00	0 hrs 30 mins	E.01	Safety Meeting - Held safety meeting with all personnel. Pre-risk assessment. Lel sweep of lease. Service & start equipment. Daily walk around inspection completed.
07:00	18:30	11 hrs 30 mins	C.21	Wireline Logging/Perforating/Hydrotesting - Run bridge plug. Set bridge plug. POOH. Pressure test bridge plug. Pick up sand baller. Run in & dump bail sand on top of bridge plug. POOH. Held safety meeting with all personnel. Run perforating gun. Pressure up on casing to 100 Mpa. Perforate interval of interest. POOH. Run packer. Shift change. Hand over otes from day shift o night shift.
18:30	19:00	0 hrs 30 mins	E.01	HELD CREW CHANGE CROSS OVER MEETING /HELD PRE JOB RISK ASSESMENT SAFETY MEETING WITH ALL SERVICES/REVIEWED POLICYS &PROCEDURES /REQUIRED JSA,S /CONOCO PJHA,S
19:00	20:00	1 hrs 0 mins	C.21	CONTINUE TO RIH WITH BRIDGE PLUG /LOG PLUG ON DEPTH /HELD TAIL GATE SAFETY MEETING PROYOR TO PRIMEING FRAC PUMPS /WENT OVER PUMPING JOB RATES PRESSURES/
20:00	22:00	2 hrs 0 mins	C.21	COMPLEAT PUMPING PORTIONOF WELL PROGRAM/SET BRIDGE PLUG ALLOW PRESSURES TO STRAIGHT LINE /POOH WITH ELINE /SPOT IN VAC TRUCK &VAC OUT FRAC &RIG SUCTION , PUMPING , RETURN LINES/RIG OUT FRAC EQUIPMENT /
22:00	24:00	2 hrs 0 mins	C.21	BREAK DOWN ALL 10 K WIRE LINE EQUIPMENT FROM WELL HEAD/
Operation Hours : 24 hrs 0 mins ***Other Hours :** 0 hrs 0 mins **Total Hours :** 24 hrs 0 mins				***Examples: Travel,Safety Meeting, etc.**

CheckList

☐ Crown/Ram Saver Test	☐ Escape buggy Installed	☐ Fire Extinguisher
☐ Anchor Test Charts	☐ Equipment Grounded	☐ All Signs In Place
☐ Rig Motor Emerg. Air Kill	☐ Pump Motor Emerg. Air Kill	☐ Pump Relief Valve Proper Setting Wing Flags
☐ Crown	☐ Main Drum Brake Linkage Chkd.	☐ Guylines
☐ Tanks	☐ Truck Motor Emerg. Air Kill	☐ Equipment Proper Spacing
☐ Kill Line Connected	☐ Air Packs	☐ Emergency No.'s Posted
☐ H_2S %		

Type of Operation

COMPLETION

Safety Meeting

From Time	To Time	Meeting Topic	Notes
06:30	07:00	OTHER-Other	Shift change. Have good cross shift with night crew. Ensure to inspect all tools & equipment before use.

B.O.P. Function

B.O.P. Function Test : ☐ **Annular :** ☐ **Pipe :** ☐ **Blind :** ☐ **N/A :** ☐

Accum. Pressure : **Recharge Time :** mins secs

Precharge KPA #1 : **#2 :** **#3 :** **#4 :** **#5 :** **#6 :** **#7 :** **#8 :**

Drill Time Start(HHMM) : **Drill Time Stop :**

Weather

Temp	Wind
-25 °C	4MPH

Weather Conditions : Normal

Vehicles - Total Kms Travelled

Ticket Services

Service Id	Service Description	Billing Qty	UOM	Price	Amount	EDI1	EDI2	EDI3
EL3	EXTRA LABOR - RIG MAN/DRILL	16.00	Hours	$75.00	$1,200.00			
ELOT3	EXTRA LABOR - RIG MAN/DRILL OT	8.00	Hours	$95.00	$760.00			
EL4	EXTRA LABOR - DERRICK/FLOOR	16.00	Hours	$65.00	$1,040.00			
ELOT4	EXTRA LABOR - DERRICK/FLOOR OT	8.00	Hours	$80.00	$640.00			
RMZ1	RIG MANAGER VEHICLE	200.00	Kilometers	$1.25	$250.00			
PPE	PERSONAL PROTECTIVE EQUIPMENT	4.00	Man Per Day	$16.50	$66.00			

FIELD TICKET

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Job Header

SHEHTAH NABORS LP
3000
500 - 4TH AVENUE SW
CALGARY,AB T2P 2V6
Ticket # P0414000646117

Customer	CONOCO PHILLIPS CANADA LIMITED
Cust Address	2100, 250 - 6TH AVENUE SW CALGARY,AB,T2P 3H7,CANADA
Well/Lease	O-06/COPRC LOON CREEK
State/County	NT/NPS - NT County
Customer Rep	MYLES HAHN

Rig # P0414
Date 03/03/2013
Day 13

GL:702000 NALN CA36 E120
NETWORK:10345055 IMPERT
PO:4600026584 ATTN:DEREK COVE

LP25	LIGHTPLANT OVER 25KW	1.00	Day	$220.00	$220.00				
TTBC	TRAVEL TIME	4.00	Man Hour	$19.00	$76.00				
PUMPT1	PUMP & TANK	1.00	Day	$1,025.00	$1,025.00				
LEL	LEL MONITOR	1.00	Day	$40.00	$40.00				
BOIL	BOILER RENTAL	1.00	Day	$1,200.00	$1,200.00				
				Daily Estimated Total :	**$6,517.00**				

Payroll Information

☐ Clothing Allowance ☐ Northern Job

Emp ID	Employee Name	Job Code	Income Code	Hours	Mileage	Cost Center	Province	Inj. Free	Sign Off
100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	BASE PAY	12		P0414	NT	☐	☐
100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	MILE 1 DIESEL		100	P0414	NT	☐	☐
100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	TRAVEL PAY	1		P0414	NT	☐	☐
100063873	STAPLE, ROBERT L	RIG SUPERVISOR	BASE PAY	12		P0414	NT	☐	☐
100063873	STAPLE, ROBERT L	RIG SUPERVISOR	MILE 1 DIESEL		100	P0414	NT	☐	☐
100063873	STAPLE, ROBERT L	RIG SUPERVISOR	TRAVEL PAY	1		P0414	NT	☐	☐
100254531	KERTESZ, SIMON S	FLOORHAND	BASE PAY	12		P0414	NT	☐	☐
100254531	KERTESZ, SIMON S	FLOORHAND	TRAVEL PAY	1		P0414	NT	☐	☐
100252232	BARGEN, JARED R	FLOORHAND	BASE PAY	12		P0414	NT	☐	☐
100252232	BARGEN, JARED R	FLOORHAND	TRAVEL PAY	1		P0414	NT	☐	☐

Comments

☐ **[I Acknowledge] Confirmation that all goods and services listed on ticket were received.**

(Leslie Cummings)
3/4/2013 6:42:24 AM
Nabors Representative

(Myles Hahn)
3/4/2013 6:44:40 AM
Customer Representative

FIELD TICKET

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Job Header

SHEHTAH NABORS LP
3000
500 - 4TH AVENUE SW
CALGARY,AB T2P 2V6
Ticket # P0414000646118

Customer	CONOCO PHILLIPS CANADA LIMITED	**Rig #**	P0414
Cust Address	2100, 250 - 6TH AVENUE SW CALGARY,AB,T2P 3H7,CANADA	**Date**	03/04/2013
Well/Lease	**O-06/COPRC LOON CREEK**	**Day**	14
State/County	NT/NPS - NT County		**GL:702000 NALN CA36 E120**
Customer Rep	**MYLES HAHN**		**NETWORK:10345055 IMPERT**
			PO:4600026584 ATTN:DEREK COVE

Details of Operations

Ticket From Time : 00:00 (HHMM) **Ticket To Time :** 18:30 (HHMM)

From	To	Time	Code	Description
00:00	02:00	2 hrs 0 mins	C.21	DROP ALL WELL HEAD TARPS/PULL OUT &LAY OUT FLAT / RIG OUT WORK SAFE PLATFORM /REMOVE 10 -K SPOOL&INSTALL UPPER WELL HEAD ASSEMBLY/
02:00	06:30	4 hrs 30 mins	A.03	CONTINUE TO RIG OUT EQUIPMENT / NEATLY PLACE ALL REQUIRED NPS WELL HEAD RELATED RIG EQUIPMENT ON A PALLET /BOTH PUMP LINES WERE VAC OUT & CAPPED, SUCTION ROLLED&CAPPED//SHIFT CHANGE. HAND OVER NOTES FROM NIGHT SHIFT TO DAY SHIFT.
06:30	07:00	0 hrs 30 mins	E.01	Safety Meeting - Held safety meeting with all personnel. Pre-risk assessment. Lel sweep of lease. Service equipment. Daily walk around inspection completed.
07:00	18:30	11 hrs 30 mins	C.99	Other - Cool down boiler. Drain steam lines. Hook steam lines back up. Drain boiler. Clean up lease. Assist picker to load equipment. SDFN.
Operation Hours :		**18 hrs 30 mins**	***Examples: Travel,Safety Meeting, etc.**	
***Other Hours :**		**0 hrs 0 mins**		
Total Hours :		**18 hrs 30 mins**		

CheckList

☐ Crown/Ram Saver Test	☐ Escape buggy Installed	☐ Fire Extinguisher
☐ Anchor Test Charts	☐ Equipment Grounded	☐ All Signs In Place
☐ Rig Motor Emerg. Air Kill	☐ Pump Motor Emerg. Air Kill	☐ Pump Relief Valve Proper Setting Wing Flags
☐ Crown	☐ Main Drum Brake Linkage Chkd.	☐ Guylines
☐ Tanks	☐ Truck Motor Emerg. Air Kill	☐ Equipment Proper Spacing
☐ Kill Line Connected	☐ Air Packs	☐ Emergency No.'s Posted
☐ H_2S %		

Type of Operation

COMPLETION

Safety Meeting

From Time	To Time	Meeting Topic	Notes
06:30	07:00	3PE-3rd Party Equipment	Good communication. Use spoters & tag lines. Stay clear of suspended loads.

B.O.P. Function

B.O.P. Function Test : ☐ **Annular :** ☐ **Pipe :** ☐ **Blind :** ☐ **N/A :** ☐

Accum. Pressure : **Recharge Time :** mins secs

Precharge KPA #1 : **#2 :** **#3 :** **#4 :** **#5 :** **#6 :** **#7 :** **#8 :**

Drill Time Start(HHMM) : **Drill Time Stop :**

Weather

Temp	Wind
-25 °C	5MPH

Weather Conditions : Normal

Vehicles - Total Kms Travelled

Ticket Services

Service Id	Service Description	Billing Qty	UOM	Price	Amount	EDI1	EDI2	EDI3
EL3	EXTRA LABOR - RIG MAN/DRILL	10.50	Hours	$75.00	$787.50			
ELOT3	EXTRA LABOR - RIG MAN/DRILL OT	8.00	Hours	$95.00	$760.00			
EL4	EXTRA LABOR - DERRICK/FLOOR	10.50	Hours	$65.00	$682.50			
ELOT4	EXTRA LABOR - DERRICK/FLOOR OT	8.00	Hours	$80.00	$640.00			
RMZ1	RIG MANAGER VEHICLE	300.00	Kilometers	$1.25	$375.00			
PPE	PERSONAL PROTECTIVE EQUIPMENT	2.00	Man Per Day	$16.50	$33.00			
LP25	LIGHTPLANT OVER 25KW	1.00	Day	$220.00	$220.00			
TTBC	TRAVEL TIME	22.00	Man Hour	$19.00	$418.00			
PUMPT1	PUMP & TANK	1.00	Day	$1,025.00	$1,025.00			
LEL	LEL MONITOR	1.00	Day	$40.00	$40.00			
BOIL	BOILER RENTAL	1.00	Day	$1,200.00	$1,200.00			
MISC	FLIGHTS	1.00	Each	$1,695.84	$1,695.84			
				Daily Estimated Total :	**$7,876.84**			

Payroll Information

☐ Clothing Allowance ☐ Northern Job

Emp ID	Employee Name	Job Code	Income Code	Hours	Mileage	Cost Center	Province	Inj. Free	Sign Off
100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	BASE PAY	12		P0414	NT	☐	☐
100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	MILE 1 DIESEL		200	P0414	NT	☐	☐
100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	TRAVEL PAY	6		P0414	NT	☐	☐
100063873	STAPLE, ROBERT L	RIG SUPERVISOR	MILE 1 DIESEL		100	P0414	NT		

FIELD TICKET

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Job Header

SHEHTAH NABORS LP
3000
500 - 4TH AVENUE SW
CALGARY,AB T2P 2V6
Ticket # P0414000646118

Customer	CONOCO PHILLIPS CANADA LIMITED	**Rig #**	P0414
Cust Address	2100, 250 - 6TH AVENUE SW CALGARY,AB,T2P 3H7,CANADA	**Date**	03/04/2013
Well/Lease	**O-06/COPRC LOON CREEK**	**Day**	14
State/County	NT/NPS - NT County		
Customer Rep	**MYLES HAHN**		

GL:702000 NALN CA36 E120
NETWORK:10345055 IMPERT
PO:4600026584 ATTN:DEREK COVE

100063873	STAPLE, ROBERT L	RIG SUPERVISOR	TRAVEL PAY	5		P0414	NT		
100254531	KERTESZ, SIMON S	FLOORHAND	TRAVEL PAY	5		P0414	NT		
100252232	BARGEN, JARED R	FLOORHAND	BASE PAY	12		P0414	NT		
100252232	BARGEN, JARED R	FLOORHAND	TRAVEL PAY	6		P0414	NT		

Comments **Bob & Simon flew home today extra travel time. Les & Jared flying home in the morning extra travel & kms. Last ticket. Going for days off. Les & Jared flying on Conoco flight no charge for flights.**

[I Acknowledge] Confirmation that all goods and services listed on ticket were received.

(Leslie Cummings)	**(Myles Hanh)**
3/4/2013 5:37:38 PM	**3/4/2013 5:38:06 PM**
Nabors Representative	**Customer Representative**

FIELD TICKET

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Job Header

SHEHTAH NABORS LP
3000
500 - 4TH AVENUE SW
CALGARY,AB T2P 2V6
Ticket # P0414000646123

Customer	CONOCO PHILLIPS CANADA LIMITED	**Rig #**	P0414
Cust Address	2100, 250 - 6TH AVENUE SW CALGARY,AB,T2P 3H7,CANADA	**Date**	03/13/2013
Well/Lease	0-06/COPRC LOON CREEK	**Day**	1
State/County	NT/NPS - NT County		
Customer Rep	MYLES HAHN		

GL:702000 NALN CA36
NETWORK:10345055 E120 IMPERT
PO:4600026584

Details of Operations

Ticket From Time : 07:00 (HHMM) **Ticket To Time :** 19:00 (HHMM)

From	To	Time	Code	Description
07:00	19:00	12 hrs 0 mins	D.01	Chargeable Downtime W/O/O Services - Check into camp. Held safety meeting with all personnel. Pre-risk assessment. Start & service light plant. Plug in equipment. Clear snow from equipment & lines. SDFN.
Operation Hours : 12 hrs 0 mins ***Other Hours :** 0 hrs 0 mins **Total Hours :** 12 hrs 0 mins				***Examples: Travel,Safety Meeting, etc.**

CheckList

☑ Crown/Ram Saver Test	☑ Escape buggy Installed	☑ Fire Extinguisher
☑ Anchor Test Charts	☑ Equipment Grounded	☑ All Signs in Place
☑ Rig Motor Emerg. Air Kill	☑ Pump Motor Emerg. Air Kill	☑ Pump Relief Valve Proper Setting Wing Flags
☑ Crown	☑ Main Drum Brake Linkage Chkd.	☑ Guylines
☑ Tanks	☑ Truck Motor Emerg. Air Kill	☑ Equipment Proper Spacing
☑ Kill Line Connected	☑ Air Packs	☑ Emergency No.'s Posted
☑ H_2S %		

Type of Operation

COMPLETION

Safety Meeting

From Time	To Time	Meeting Topic	Notes
07:00	07:30	SLIPS-Slips/Trips/Falls	Snow covered lease. Snow drifts. Clear snow around equipment. Watch your footing.

B.O.P. Function

B.O.P. Function Test : ☑ **Annular :** ☑ **Pipe :** ☑ **Blind :** ☑ **N/A :** ☑

Accum. Pressure : **Recharge Time :** mins secs

Precharge KPA #1 : **#2 :** **#3 :** **#4 :** **#5 :** **#6 :** **#7 :** **#8 :**

Drill Time Start(HHMM) : **Drill Time Stop :**

Weather

Temp	Wind
-38 °C	5MPH

Weather Conditions : Normal

Vehicles - Total Kms Travelled

Ticket Services

Service Id	Service Description	Billing Qty	UOM	Price	Amount	EDI1	EDI2	EDI3
MISC	FLIGHTS	1.00	Each	$2,633.76	$2,633.76			
EL4	EXTRA LABOR - DERRICK/FLOOR	16.00	Hours	$65.00	$1,040.00			
LEL	LEL MONITOR	1.00	Day	$40.00	$40.00			
EL3	EXTRA LABOR - RIG MAN/DRILL	8.00	Hours	$75.00	$600.00			
ELOT3	EXTRA LABOR - RIG MAN/DRILL OT	4.00	Hours	$95.00	$380.00			
ELOT4	EXTRA LABOR - DERRICK/FLOOR OT	8.00	Hours	$80.00	$640.00			
LP25	LIGHTPLANT OVER 25KW	1.00	Day	$220.00	$220.00			
PPE	PERSONAL PROTECTIVE EQUIPMENT	3.00	Man Per Day	$16.50	$49.50			
				Daily Estimated Total :	$5,603.26			

Payroll Information

☑ Clothing Allowance ☑ Northern Job

Emp ID	Employee Name	Job Code	Income Code	Hours	Mileage	Cost Center	Province	Inj. Free	Sign Off
100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	BASE PAY	12		P0414	NT	☑	☑
100252232	BARGEN, JARED R	FLOORHAND	BASE PAY	12		P0414	NT	☑	☑
100254531	KERTESZ, SIMON S	FLOORHAND	BASE PAY	12		P0414	NT	☑	☑
100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	MILE 1 DIESEL		100	P0414	NT	☑	☑

Comments Les, Jared & Simon flew to Norman Wells.

☑ **[I Acknowledge] Confirmation that all goods and services listed on ticket were received.**

(Leslie Cummings)
3/18/2013 3:43:03 PM
Nabors Representative

(Myles Hahn)
3/18/2013 3:43:24 PM
Customer Representative

FIELD TICKET

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Job Header

SHEHTAH NABORS LP
3000
500 - 4TH AVENUE SW
CALGARY,AB T2P 2V6
Ticket # P0414000646124

Customer	CONOCO PHILLIPS CANADA LIMITED
Cust Address	2100, 250 - 6TH AVENUE SW CALGARY,AB,T2P 3H7,CANADA
Well/Lease	O-06/COPRC LOON CREEK
State/County	NT/NPS - NT County
Customer Rep	MYLES HAHN

Rig # P0414
Date 03/14/2013
Day 2
GL:702000 NALN CA36
NETWORK:10345055 E120 IMPERT
PO:4600026584

Details of Operations

Ticket From Time : 07:30 (HHMM) **Ticket To Time :** 19:30 (HHMM)

From	To	Time	Code	Description
07:30	08:00	0 hrs 30 mins	E.01	Safety Meeting - Held safety meeting with all personnel. Pre-risk assessment. Lel sweep of lease. Service equipment. Daily walk around inspection completed.
08:00	14:00	6 hrs 0 mins	C.99	Other - Heat boiler building. Fill boiler with H2O. Fire boiler. Heat rig tank. Load equipment into junk skid. Make up landing jt. & safety valves for pressure testing BOP stack. Bank boiler.
14:00	19:30	5 hrs 30 mins	A.04	Rig / Equipment Up - Travel to Norman Wells. Start & service rig. Unload rig. Respool drill line onto spool. Install drill line spool on carrier & secure. Install derrick on carrier & secure. Travel back to camp. SDFN.
Operation Hours : 12 hrs 0 mins ***Other Hours :** 0 hrs 0 mins **Total Hours :** 12 hrs 0 mins				***Examples: Travel,Safety Meeting, etc.**

CheckList

- ☑ Crown/Ram Saver Test
- ☑ Anchor Test Charts
- ☑ Rig Motor Emerg. Air Kill
- ☑ Crown
- ☑ Tanks
- ☑ Kill Line Connected
- ☑ H_2S %
- ☑ Escape buggy Installed
- ☑ Equipment Grounded
- ☑ Pump Motor Emerg. Air Kill
- ☑ Main Drum Brake Linkage Chkd.
- ☑ Truck Motor Emerg. Air Kill
- ☑ Air Packs
- ☑ Fire Extinguisher
- ☑ All Signs In Place
- ☑ Pump Relief Valve Proper Setting Wing Flags
- ☑ Guylines
- ☑ Equipment Proper Spacing
- ☑ Emergency No.'s Posted

Type of Operation

COMPLETION

Safety Meeting

From Time	To Time	Meeting Topic	Notes
07:30	08:00	OTHER-Other	Firing boiler. Follow procedures. Monitor pressure. Test all controls. Working with steam. Stay clear of steam. Good communication.

B.O.P. Function

B.O.P. Function Test : ☑ **Annular :** ☑ **Pipe :** ☑ **Blind :** ☑ **N/A :** ☑

Accum. Pressure : **Recharge Time :** mins secs

Precharge KPA #1 : **#2 :** **#3 :** **#4 :** **#5 :** **#6 :** **#7 :** **#8 :**

Drill Time Start(HHMM) : **Drill Time Stop :**

Weather

Temp	Wind
-40 °C	5MPH

Weather Conditions : Normal

Vehicles - Total Kms Travelled

Ticket Services

Service Id	Service Description	Billing Qty	UOM	Price	Amount	EDI1	EDI2	EDI3
MISC	FLIGHTS	1.00	Each	$1,755.84	$1,755.84			
EL3	EXTRA LABOR - RIG MAN/DRILL	5.00	Hours	$75.00	$375.00			
EL4	EXTRA LABOR - DERRICK/FLOOR	7.50	Hours	$65.00	$487.50			
LEL	LEL MONITOR	1.00	Day	$40.00	$40.00			
BOIL	BOILER RENTAL	1.00	Day	$1,200.00	$1,200.00			
RIGOP	RIG HOURS-REGULAR	5.50	Hours	$719.00	$3,954.50			
ELOT3	EXTRA LABOR - RIG MAN/DRILL OT	8.00	Hours	$95.00	$760.00			
ELOT4	EXTRA LABOR - DERRICK/FLOOR OT	12.00	Hours	$80.00	$960.00			
				Daily Estimated Total :	**$9,532.84**			

Payroll Information

☑ Clothing Allowance ☑ Northern Job

Emp ID	Employee Name	Job Code	Income Code	Hours	Mileage	Cost Center	Province	Inj-Free	Sign Off
100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	BASE PAY	12		P0414	NT	☑	☑
100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	MILE 1 DIESEL		100	P0414	NT	☑	☑
100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	TRAVEL PAY	1		P0414	NT	☑	☑
100063862	RAMSEY, STUART L	DRILLER	BASE PAY	12		P0414	NT	☑	☑
100063862	RAMSEY, STUART L	DRILLER	MILE 1 DIESEL		100	P0414	NT	☑	☑
100203551	VALLIS, LEE C	DERRICKHAND	BASE PAY	12		P0414	NT	☑	☑
100252232	BARGEN, JARED R	FLOORHAND	BASE PAY	12		P0414	NT	☑	☑

FIELD TICKET

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Job Header

SHEHTAH NABORS LP
3000
500 - 4TH AVENUE SW
CALGARY,AB T2P 2V6
Ticket # P0414000646124

Customer	CONOCO PHILLIPS CANADA LIMITED	**Rig #**	P0414
Cust Address	2100, 250 - 6TH AVENUE SW CALGARY,AB,T2P 3H7,CANADA	**Date**	03/14/2013
Well/Lease	**O-06/COPRC LOON CREEK**	**Day**	2
State/County	NT/NPS - NT County		
Customer Rep	**MYLES HAHN**		

GL:702000 NALN CA36
NETWORK:10345055 E120 IMPERT
PO:4600026584

100252232	BARGEN, JARED R	FLOORHAND	TRAVEL PAY	1		P0414	NT		
100254531	KERTESZ, SIMON S	FLOORHAND	BASE PAY	12		P0414	NT		
100254531	KERTESZ, SIMON S	FLOORHAND	TRAVEL PAY	1		P0414	NT		

Comments **Stuart & Lee flew to Norman Wells.**

[I Acknowledge] Confirmation that all goods and services listed on ticket were received.

(Leslie Cummings)	**(Myles Hahn)**
3/18/2013 3:54:51 PM	**3/18/2013 3:55:06 PM**
Nabors Representative	**Customer Representative**

FIELD TICKET

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Job Header

SHEHTAH NABORS LP
3000
500 - 4TH AVENUE SW
CALGARY,AB T2P 2V6
Ticket # P0414000646125

Customer	CONOCO PHILLIPS CANADA LIMITED	Rig #	P0414
Cust Address	2100, 250 - 6TH AVENUE SW CALGARY,AB,T2P 3H7,CANADA	Date	03/15/2013
Well/Lease	O-06/COPRC LOON CREEK	Day	3
State/County	NT/NPS - NT County		GL:702000 NALN CA36
Customer Rep	MYLES HAHN		NETWORK:10345055 E120 IMPERT
			PO:4600026584

Details of Operations

Ticket From Time : 07:00 (HHMM) Ticket To Time : 20:00 (HHMM)

From	To	Time	Code	Description
07:00	07:30	0 hrs 30 mins	E.01	Safety Meeting - Held safety meeting with all personnel. Pre-risk assessment. Lel sweep of lease. Service equipment. Daily walk around inspection completed.
07:30	13:00	5 hrs 30 mins	A.01	Move Rig / Equipment - Travel to Norman Wells. Daily walk around inspection completed. Service rig. Install sandline & winch lines. Load planks, beam, stairs & hand rails. Secure equipment. Prepare to move rig. Perform pre-trip inspection. Move rig to security gate. Chain up rig. Move rig to location. Spot on side of lease.
13:00	14:00	1 hrs 0 mins	E.01	Safety Meeting - Held safety meeting with all personnel. Review job procedures. Pre-risk assessment. Review Conoco orientations & no spill policy with new crew members.
14:00	16:00	2 hrs 0 mins	A.02	Spot Rig / Equipment - Spot rig on matting. Perform derrick inspection. Grease blocks & crown. Unwrap lines.
16:00	20:00	4 hrs 0 mins	A.04	Rig / Equipment Up - Unload equipment off rig. Level rig. Fire boiler. Heat rig tank. Unwrap drill line & guy lines. Stand bottom section. Install drill line on drum & deadman. Secure drill line. Lay down bottom section. Drain steam lines. Bank boiler. SDFN.
Operation Hours :	13 hrs 0 mins	*Examples: Travel,Safety Meeting, etc.		
*Other Hours :	0 hrs 0 mins			
Total Hours :	13 hrs 0 mins			

CheckList

- ☑ Crown/Ram Saver Test
- ☑ Anchor Test Charts
- ☑ Rig Motor Emerg. Air Kill
- ☑ Crown
- ☑ Tanks
- ☑ Kill Line Connected
- ☑ H_2S %
- ☑ Escape buggy Installed
- ☑ Equipment Grounded
- ☑ Pump Motor Emerg. Air Kill
- ☑ Main Drum Brake Linkage Chkd.
- ☑ Truck Motor Emerg. Air Kill
- ☑ Air Packs
- ☑ Fire Extinguisher
- ☑ All Signs in Place
- ☑ Pump Relief Valve Proper Setting Wing Flags
- ☑ Guylines
- ☑ Equipment Proper Spacing
- ☑ Emergency No.'s Posted

Type of Operation

COMPLETION

Safety Meeting

From Time	To Time	Meeting Topic	Notes
13:00	13:30	OTHER-Other	Review job procedures & Conoco orientations. Cold weather. Dress properly. Good communication.

B.O.P. Function

B.O.P. Function Test : ☐ Annular : ☐ Pipe : ☑ Blind : ☐ N/A : ☐

Accum. Pressure : Recharge Time : mins secs

Precharge KPA #1 : #2 : #3 : #4 : #5 : #6 : #7 : #8 :

Drill Time Start(HHMM) : Drill Time Stop :

Weather

Temp	Wind
-38 °C	4MPH

Weather Conditions : Normal

Vehicles - Total Kms Travelled

Ticket Services

Service Id	Service Description	Billing Qty	UOM	Price	Amount	EDI1	EDI2	EDI3
LEL	LEL MONITOR	1.00	Day	$40.00	$40.00			
BOIL	BOILER RENTAL	1.00	Day	$1,200.00	$1,200.00			
RIGOP	RIG HOURS-REGULAR	13.00	Hours	$719.00	$9,347.00			
				Daily Estimated Total :	$10,587.00			

Payroll Information

☑ Clothing Allowance ☑ Northern Job

Emp ID	Employee Name	Job Code	Income Code	Hours	Mileage	Cost Center	Province	Inj. Free	Sign Off
100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	BASE PAY	13		P0414	NT	☑	☑
100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	MILE 1 DIESEL		100	P0414	NT	☑	☑
100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	TRAVEL PAY	1		P0414	NT	☑	☑
100063862	RAMSEY, STUART L	DRILLER	BASE PAY	13		P0414	NT	☑	☑
100063862	RAMSEY, STUART L	DRILLER	MILE 1 DIESEL		100	P0414	NT	☑	☑
100063862	RAMSEY, STUART L	DRILLER	TRAVEL PAY	1		P0414	NT	☑	☑
100203551	VALLIS, LEE C	DERRICKHAND	BASE PAY	13		P0414	NT	☑	☑

FIELD TICKET

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Job Header

SHEHTAH NABORS LP
3000
500 - 4TH AVENUE SW
CALGARY,AB T2P 2V6
Ticket # P0414000646125

Customer	CONOCO PHILLIPS CANADA LIMITED	**Rig #**	P0414
Cust Address	2100, 250 - 6TH AVENUE SW CALGARY,AB,T2P 3H7,CANADA	**Date**	03/15/2013
Well/Lease	**0-06/COPRC LOON CREEK**	**Day**	3
State/County	NT/NPS - NT County		**GL:702000 NALN CA36**
Customer Rep	**MYLES HAHN**		**NETWORK:10345055 E120 IMPERT**
			PO:4600026584

100203551	VALLIS, LEE C	DERRICKHAND	TRAVEL PAY	1		P0414	NT		
100252232	BARGEN, JARED R	FLOORHAND	BASE PAY	13		P0414	NT		
100252232	BARGEN, JARED R	FLOORHAND	TRAVEL PAY	1		P0414	NT		
100254531	KERTESZ, SIMON S	FLOORHAND	BASE PAY	13		P0414	NT		
100254531	KERTESZ, SIMON S	FLOORHAND	TRAVEL PAY	1		P0414	NT		

Comments

[I Acknowledge] Confirmation that all goods and services listed on ticket were received.

(Leslie Cummings)	**(Myles Hahn)**
3/18/2013 3:58:38 PM	**3/18/2013 3:58:50 PM**
Nabors Representative	**Customer Representative**

FIELD TICKET

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Job Header

SHEHTAH NABORS LP
3000
500 - 4TH AVENUE SW
CALGARY,AB T2P 2V6
Ticket # P0414000646126

Customer	CONOCO PHILLIPS CANADA LIMITED	**Rig #**	P0414
Cust Address	2100, 250 - 6TH AVENUE SW CALGARY,AB,T2P 3H7,CANADA	**Date**	03/16/2013
Well/Lease	**O-06/COPRC LOON CREEK**	**Day**	4
State/County	NT/NPS - NT County		**GL:702000 NALN CA36**
Customer Rep	**MYLES HAHN**		**NETWORK:10345055 E120 IMPERT**
			PO:4600026584

Details of Operations

Ticket From Time : 07:00 (HHMM) **Ticket To Time :** 20:00 (HHMM)

From	To	Time	Code	Description
07:00	07:30	0 hrs 30 mins	E.01	Safety Meeting - Held safety meeting with all personnel. Pre-risk assessment. Lel sweep of lease. Daily walk around inspection completed.
07:30	12:00	4 hrs 30 mins	A.04	Rig / Equipment Up - Fire boiler. Hook up steam lines. Haul in 12.0 m3 of H2O into rig tank. Heat rig tank & propylene glycol tank. Tarp in BOP stack & steam heater. Heat BOP stack. Rig up accumulator lines. Change out winch. Pour rope socket. Install weight indicator. Fuel up boiler, equipment & light towers.
12:00	14:00	2 hrs 0 mins	A.04	Rig / Equipment Up - Prepare to stand derrick. Perform derrick inspection. Repair electrical boot on top section plug in. Rig up rig as per NEB, Conoco Phillips & Nabors specs. Top section locking pins inspected by derrickman & rig manager. All good.
14:00	17:00	3 hrs 0 mins	A.02	Spot Rig / Equipment - Unhook & pull back accummulator lines to spot catwalk & pipe racks. Spot catwalk & pipe racks with loader. Unload 261 jts. of 73.0 mm. J-55 tubing onto pipe racks. Hook up accumulator lines.
17:00	20:00	3 hrs 0 mins	C.02	Pressure Test - Function test accumulator. Stump test all rams & safety valves. Low 1.4 Mpa. High 34 Mpa. & annular. Low 1.4 Mpa. High 7 Mpa. each for 10 mins. Good test. Bled off pressure. Drain steam lines. Bank boiler. Fuel up light towers. SDFN.
Operation Hours :		**13 hrs 0 mins**	***Examples: Travel,Safety Meeting, etc.**	
***Other Hours :**		**0 hrs 0 mins**		
Total Hours :		**13 hrs 0 mins**		

CheckList

- ☑ Crown/Ram Saver Test
- ☐ Anchor Test Charts
- ☑ Rig Motor Emerg. Air Kill
- ☑ Crown
- ☑ Tanks
- ☐ Kill Line Connected
- ☐ H_2S %
- ☐ Escape buggy Installed
- ☑ Equipment Grounded
- ☑ Pump Motor Emerg. Air Kill
- ☑ Main Drum Brake Linkage Chkd.
- ☐ Truck Motor Emerg. Air Kill
- ☑ Air Packs
- ☑ Fire Extinguisher
- ☑ All Signs in Place
- ☑ Pump Relief Valve Proper Setting Wing Flags
- ☑ Guylines
- ☑ Equipment Proper Spacing
- ☑ Emergency No.'s Posted

Type of Operation

COMPLETION

Safety Meeting

From Time	To Time	Meeting Topic
07:00	07:30	OH-Overhead Hazards

Notes

Stay off rig carrier while standing derrick. Watch for snags. Ensure top section is secured. Good communication with all personnel.

B.O.P. Function

B.O.P. Function Test : ☑ **Annular :** ☑ **Pipe :** ☑ **Blind :** ☑ **N/A :** ☐

Accum. Pressure : 20,800 **Recharge Time :** 0 mins 56 secs

Precharge KPA #1 : 7700 **#2 :** 7700 **#3 :** 7700 **#4 :** 7700 **#5 :** **#6 :** **#7 :** **#8 :**

Drill Time Start(HHMM) : **Drill Time Stop :**

Weather

Temp	Wind
-34 °C	10MPH

Weather Conditions : Normal

Vehicles - Total Kms Travelled

Ticket Services

Service Id	Service Description	Billing Qty	UOM	Price	Amount	EDI1	EDI2	EDI3
LEL	LEL MONITOR	1.00	Day	$40.00	$40.00			
KMZ1	CREW VEHICLE	100.00	Kilometers	$1.25	$125.00			
BOIL	BOILER RENTAL	1.00	Day	$1,200.00	$1,200.00			
RIGOP	RIG HOURS-REGULAR	13.00	Hours	$719.00	$9,347.00			
MISC	FLIGHTS	1.00	Each	$3,511.68	$3,511.68			
RMZ1	RIG MANAGER VEHICLE	100.00	Kilometers	$1.25	$125.00			
CREW5BC	CREW STANDBY RIGMAN+4 CREW	12.00	Hours	$380.00	$4,560.00			
				Daily Estimated Total :	**$18,908.68**			

Payroll Information

☐ Clothing Allowance ☐ Northern Job

Emp ID	Employee Name	Job Code	Income Code	Hours	Mileage	Cost Center	Province	Inj. Free	Sign Off
100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	BASE PAY	13		P0414	NT	☐	☑
100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	MILE 1 DIESEL		100	P0414	NT	☐	☑
100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	TRAVEL PAY	1		P0414	NT	☐	☑

FIELD TICKET

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Job Header

SHEHTAH NABORS LP
3000
500 - 4TH AVENUE SW
CALGARY,AB T2P 2V6
Ticket # P0414000646126

Customer CONOCO PHILLIPS CANADA LIMITED
Cust Address 2100, 250 - 6TH AVENUE SW CALGARY,AB,T2P 3H7,CANADA
Well/Lease O-06/COPRC LOON CREEK
State/County NT/NPS - NT County
Customer Rep MYLES HAHN

Rig # P0414
Date 03/16/2013
Day 4

GL:702000 NALN CA36
NETWORK:10345055 E120 IMPERT
PO:4600026584

100063862	RAMSEY, STUART L	DRILLER	BASE PAY	13		P0414	NT		
100063862	RAMSEY, STUART L	DRILLER	MILE 1 DIESEL		100	P0414	NT		
100063862	RAMSEY, STUART L	DRILLER	TRAVEL PAY	1		P0414	NT		
100203551	VALLIS, LEE C	DERRICKHAND	BASE PAY	13		P0414	NT		
100203551	VALLIS, LEE C	DERRICKHAND	TRAVEL PAY	1		P0414	NT		
100252232	BARGEN, JARED R	FLOORHAND	BASE PAY	13		P0414	NT		
100252232	BARGEN, JARED R	FLOORHAND	TRAVEL PAY	1		P0414	NT		
100254531	KERTESZ, SIMON S	FLOORHAND	BASE PAY	13		P0414	NT		
100254531	KERTESZ, SIMON S	FLOORHAND	TRAVEL PAY	1		P0414	NT		
100064049	FOURNEL, LEO	RIG SUPERVISOR	BASE PAY	12		P0414	NT		
100064049	FOURNEL, LEO	RIG SUPERVISOR	MILE 1 DIESEL		100	P0414	NT		
100221733	HOULE, JOSEPH B	DRILLER-TECH	BASE PAY	12		P0414	NT		
100221733	HOULE, JOSEPH B	DRILLER-TECH	MILE 1 DIESEL		100	P0414	NT		
100244232	SMITH, JARROD T	DERRICKHAND	BASE PAY	12		P0414	NT		
100234943	RAMOS, ROBERT	FLOORHAND	BASE PAY	12		P0414	NT		
100253069	YOUNG, KARL R	FLOORHAND	BASE PAY	12		P0414	NT		

Comments Night crew flew to Norman Wells.

[I Acknowledge] Confirmation that all goods and services listed on ticket were received.

(Leslie Cummings)	(Myles Hahn)
3/18/2013 4:05:58 PM	3/18/2013 4:06:11 PM
Nabors Representative	**Customer Representative**

FIELD TICKET

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Job Header

SHEHTAH NABORS LP
3000
500 - 4TH AVENUE SW
CALGARY,AB T2P 2V6
Ticket # P0414000646127

Customer	CONOCO PHILLIPS CANADA LIMITED	**Rig #**	P0414
Cust Address	2100, 250 - 6TH AVENUE SW CALGARY,AB,T2P 3H7,CANADA	**Date**	03/17/2013
Well/Lease	0-06/COPRC LOON CREEK	**Day**	5
State/County	NT/NPS - NT County		GL:702000 NALN CA36
Customer Rep	MYLES HAHN		NETWORK:10345055 E120 IMPERT
			PO:4600026584

Details of Operations

Ticket From Time : 06:30 (HHMM) **Ticket To Time :** 24:00 (HHMM)

From	To	Time	Code	Description
06:30	07:00	0 hrs 30 mins	E.01	Safety Meeting - Held safety meeting with all personnel. Pre-risk assessment. Lel sweep of lease. Service equipment. Daily walk around inspection completed.
07:00	10:00	3 hrs 0 mins	C.99	Other - Fire boiler. Heat BOP stack & rig tank. Record pressures. SICP = 5200 Kpa. Install adapter flange. Hook up pump line. Bled off casing to rig tank. Casing dead.
10:00	16:30	6 hrs 30 mins	C.06	Nipple up B.O.P.S. - All well head bolts & flanges frozen. Heat well head. Remove tubing bonnet. Land blow plugged tubing hanger & secure. Remove landing pup jt. Remove 179.4 mm. 10K valve. Install adapter flange & BOP stack. Rig up floor & tubing equipment. Change fittings & slip dies. Hook up steam heaters. Tarp in floor & steam heaters. Detailed inspection completed.
16:30	18:30	2 hrs 0 mins	C.02	Pressure Test - Install landing pup jt. Pressure test ring gasket. Low 1.4 Mpa. High 34 Mpa. each for 10 mins. Good test. Bled off pressure. Electrician repaired derrick lights. Changed derrick light bulbs. Shift change. Hand over notes from day shift to night shift.
18:30	20:30	2 hrs 0 mins	E.01	Safety Meeting, reviewed CPC HSE orientation and Sahtu aboriginal awareness handout. Held pre risk assessment with all personnel on location. Serviced and inspected equipment.
20:30	22:30	2 hrs 0 mins	A.04	Rig / Equipment Up, finished installing light bulbs in derrick. Adjusted light tower lights. Ready pump to suck back on casing. Set up tubing board to pick up tubing up from driller's side.
22:30	24:00	1 hrs 30 mins	B.04	Picked up BHA and checked connections with power tongs and RIH. with 73mm joints of tubing, picked up off catwalk.
Operation Hours : 17 hrs 30 mins ***Other Hours :** 0 hrs 0 mins **Total Hours :** 17 hrs 30 mins				***Examples: Travel,Safety Meeting,** etc.

CheckList

- ☑ Crown/Ram Saver Test
- ☑ Anchor Test Charts
- ☑ Rig Motor Emerg. Air Kill
- ☑ Crown
- ☑ Tanks
- ☑ Kill Line Connected
- ☑ H_2S %
- ☑ Escape buggy Installed
- ☑ Equipment Grounded
- ☑ Pump Motor Emerg. Air Kill
- ☑ Main Drum Brake Linkage Chkd.
- ☑ Truck Motor Emerg. Air Kill
- ☑ Air Packs
- ☑ Fire Extinguisher
- ☑ All Signs in Place
- ☑ Pump Relief Valve Proper Setting Wing Flags
- ☑ Guylines
- ☑ Equipment Proper Spacing
- ☑ Emergency No.'s Posted

Type of Operation

COMPLETION

Safety Meeting

From Time	To Time	Meeting Topic	Notes
06:30	07:00	FP-Working at Heights/Fall Protection	Inspect & use fall protection. Good communication with driller & derrickman. Don't move blocks, winch or sand line while derrickman climbing.

B.O.P. Function

B.O.P. Function Test : ☑ **Annular :** ☑ **Pipe :** ☑ **Blind :** ☑ **N/A :** ☐

Accum. Pressure : 20,800 **Recharge Time :** 0 mins 56 secs

Precharge KPA #1 : 7700 **#2 :** 7700 **#3 :** 7700 **#4 :** 7700 **#5 :** 0 **#6 :** **#7 :** **#8 :**

Drill Time Start(HHMM) : **Drill Time Stop :**

Weather

Temp	Wind
-26 °C	15MPH

Weather Conditions : Normal

Vehicles - Total Kms Travelled

Ticket Services

Service Id	Service Description	Billing Qty	UOM	Price	Amount	EDI1	EDI2	EDI3
LEL	LEL MONITOR	1.00	Day	$40.00	$40.00			
BOIL	BOILER RENTAL	1.00	Day	$1,200.00	$1,200.00			
RIGOP	RIG HOURS-REGULAR	17.50	Hours	$719.00	$12,582.50			
ELOT3	EXTRA LABOR - RIG MAN/DRILL OT	2.00	Hours	$95.00	$190.00			
ELOT4	EXTRA LABOR - DERRICK/FLOOR OT	3.00	Hours	$80.00	$240.00			
			Daily Estimated Total :		$14,252.50			

Payroll Information

☑ Clothing Allowance ☑ Northern Job

Emp ID	Employee Name	Job Code	Income Code	Hours	Mileage	Cost Center	Province	Inj. Free	Sign Off
100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	BASE PAY	12.50		P0414	NT	☑	☑
100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	MILE 1 DIESEL		100	P0414	NT	☑	☑

FIELD TICKET

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Job Header

SHEHTAH NABORS LP
3000
500 - 4TH AVENUE SW
CALGARY,AB T2P 2V6
Ticket # P0414000646127

Customer	CONOCO PHILLIPS CANADA LIMITED	**Rig #**	P0414
Cust Address	2100, 250 - 6TH AVENUE SW CALGARY,AB,T2P 3H7,CANADA	**Date**	03/17/2013
Well/Lease	**O-06/COPRC LOON CREEK**	**Day**	5
State/County	NT/NPS - NT County		**GL:702000 NALN CA36**
Customer Rep	**MYLES HAHN**		**NETWORK:10345055 E120 IMPERT**
			PO:4600026584

100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	TRAVEL PAY	1		P0414	NT	☐	☐
100063862	RAMSEY, STUART L	DRILLER	BASE PAY	12.50		P0414	NT	☐	☐
100063862	RAMSEY, STUART L	DRILLER	MILE 1 DIESEL		100	P0414	NT	☐	☐
100063862	RAMSEY, STUART L	DRILLER	TRAVEL PAY	1		P0414	NT	☐	☐
100203551	VALLIS, LEE C	DERRICKHAND	BASE PAY	12.50		P0414	NT	☐	☐
100203551	VALLIS, LEE C	DERRICKHAND	TRAVEL PAY	1		P0414	NT	☐	☐
100252232	BARGEN, JARED R	FLOORHAND	BASE PAY	12.50		P0414	NT	☐	☐
100252232	BARGEN, JARED R	FLOORHAND	TRAVEL PAY	1		P0414	NT	☐	☐
100254531	KERTESZ, SIMON S	FLOORHAND	BASE PAY	12.50		P0414	NT	☐	☐
100254531	KERTESZ, SIMON S	FLOORHAND	TRAVEL PAY	1		P0414	NT	☐	☐
100064049	FOURNEL, LEO	RIG SUPERVISOR	BASE PAY	12.50		P0414	NT	☐	☐
100064049	FOURNEL, LEO	RIG SUPERVISOR	TRAVEL PAY	1		P0414	NT	☐	☐
100221733	HOULE, JOSEPH B	DRILLER-TECH	BASE PAY	12.50		P0414	NT	☐	☐
100221733	HOULE, JOSEPH B	DRILLER-TECH	MILE 1 DIESEL		100	P0414	NT	☐	☐
100221733	HOULE, JOSEPH B	DRILLER-TECH	TRAVEL PAY	1		P0414	NT	☐	☐
100244232	SMITH, JARROD T	DERRICKHAND	BASE PAY	12.50		P0414	NT	☐	☐
100244232	SMITH, JARROD T	DERRICKHAND	TRAVEL PAY	1		P0414	NT	☐	☐
100234943	RAMOS, ROBERT	FLOORHAND	BASE PAY	12.50		P0414	NT	☐	☐
100234943	RAMOS, ROBERT	FLOORHAND	TRAVEL PAY	1		P0414	NT	☐	☐
100253069	YOUNG, KARL R	FLOORHAND	BASE PAY	12.50		P0414	NT	☐	☐
100253069	YOUNG, KARL R	FLOORHAND	TRAVEL PAY	1		P0414	NT	☐	☐

Comments **Extra labor for cross shift 1/2 hour per man.**

☐ **[I Acknowledge] Confirmation that all goods and services listed on ticket were received.**

(Leslie Cummings)	**(Myles Hahn)**
3/18/2013 4:12:36 PM	**3/18/2013 4:12:47 PM**
Nabors Representative	**Customer Representative**

FIELD TICKET

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Job Header

SHEHTAH NABORS LP
3000
500 - 4TH AVENUE SW
CALGARY,AB T2P 2V6
Ticket # P0414000646129

Customer	CONOCO PHILLIPS CANADA LIMITED
Cust Address	2100, 250 - 6TH AVENUE SW CALGARY,AB,T2P 3H7,CANADA
Well/Lease	0-06/COPRC LOON CREEK
State/County	NT/NPS - NT County
Customer Rep	MYLES HAHN
Rig #	P0414
Date	03/18/2013
Day	6

GL:702000 NALN CA36

NETWORK:10345055 E120 IMPERT

PO:4600026584

Details of Operations

Ticket From Time : 00:00 (HHMM) **Ticket To Time :** 24:00 (HHMM)

From	To	Time	Code	Description
00:00	05:00	5 hrs 0 mins	B.04	Continued to pick up and drift 73mm tubing. Had ice issues with some joints in drifting them.
05:00	06:30	1 hrs 30 mins	B.04	Tallied second tier of pipe and continued to RIH with 73mm tubing. Exchanged notes with day shift. Crew change.
06:30	07:00	0 hrs 30 mins	E.01	Safety Meeting - Held safety meeting with all personnel. Pre-risk assessment. Lel sweep of lease. Service equipment. Daily walk around inspection completed.
07:00	11:00	4 hrs 0 mins	B.04	Pick up / lay down tubing (new) - Pick up, tally & drift tubing = 50 jts. of 73.0 m. J-55 tubing. Had ice issues when drifting some jts. Held BOP drill while running tubing. Held man down drill.
11:00	14:00	3 hrs 0 mins	C.08	Circulate - Install pack-off on jt. # 173. Pick up, tally & drift tubing = 3 jts. of 73.0 mm. J-55 tubing. Rig up circulating equipment on jt. # 176. Reverse circulate with 7.5 m3 of H2O on top of bridge plug set at 1689.00 Mkb. C.E.
14:00	18:00	4 hrs 0 mins	B.01	Pull well - Rod/tubing (POH) - Pull & lay down 2 jts. of 73.0 mm. J-55 tubing. Pull & stand 173 jts. of 73.0 mm. tubing, "X" nipple & 1 jt. of 73.0 mm. J-55 tubing. Pull & lay down = "XN" nipple, 2.45 m. pup jt. 73.0 mm. J-55., On-off connector, bridge plug, Perforated pup jt. Filled hole with H2O every 20 jts. Total hole fill was 2.25 m3.
18:00	18:30	0 hrs 30 mins	B.07	RIH Tubing (new) - Make up BHA. Run tubing = Skirt, 2.45 m. pup jt. 73.0 mm. J-55, "XN" nipple, 1 jt. of 73.0 mm. J-55 tubing, "X" nipple & 30 jts. Suck back on casing running in hole. Shift change. Hand over notes from day shift to night shift.
18:30	19:30	1 hrs 0 mins	E.01	Held pre job risk assessment with all personnel on location. Bump tested LEL monitor. Inspected equipment and noticed hydraulic. Shut off hydraulic pump and contained leak.
19:30	20:00	0 hrs 30 mins	E.99	Held man down drill with crew and CPC safety representative. Held discussion concerning man down drill.
20:00	21:30	1 hrs 30 mins	D.01	Chargeable Downtime, repaired hydraulic hose.
21:30	24:00	2 hrs 30 mins	B.07	RIH with 73mm tubing and overshot. Suck back on tubing displacement.
Operation Hours :		**24 hrs 0 mins**	***Examples: Travel,Safety Meeting, etc.**	
***Other Hours :**		**0 hrs 0 mins**		
Total Hours :		**24 hrs 0 mins**		

CheckList

- ☑ Crown/Ram Saver Test
- ☑ Anchor Test Charts
- ☑ Rig Motor Emerg. Air Kill
- ☑ Crown
- ☑ Tanks
- ☑ Kill Line Connected
- ☑ H_2S %
- ☑ Escape buggy Installed
- ☑ Equipment Grounded
- ☑ Pump Motor Emerg. Air Kill
- ☑ Main Drum Brake Linkage Chkd.
- ☑ Truck Motor Emerg. Air Kill
- ☑ Air Packs
- ☑ Fire Extinguisher
- ☑ All Signs in Place
- ☑ Pump Relief Valve Proper Setting Wing Flags
- ☑ Guylines
- ☑ Equipment Proper Spacing
- ☑ Emergency No.'s Posted

Type of Operation

COMPLETION

Safety Meeting

From Time	To Time	Meeting Topic	Notes
06:30	07:00	HP-Hand Placement	Watch for all pinch points. Keep hand clear of moving equipment. Good commuication with all personnel. Be alert.

B.O.P. Function

B.O.P. Function Test : ☑ **Annular :** ☑ **Pipe :** ☑ **Blind :** ☑ **N/A :** ☐

Accum. Pressure : 20,800 **Recharge Time :** 0 mins 56 secs

Precharge KPA #1 : 7700 **#2 :** 7700 **#3 :** 7700 **#4 :** 7700 **#5 :** **#6 :** **#7 :** **#8 :**

Drill Time Start(HHMM) : 10:06 **Drill Time Stop :** 10:07

Weather

Temp	Wind
-24 °C	20MPH

Weather Conditions : Normal

Vehicles - Total Kms Travelled

Ticket Services

Service Id	Service Description	Billing Qty	UOM	Price	Amount	EDI1	EDI2	EDI3
LEL	LEL MONITOR	1.00	Day	$40.00	$40.00			
BOIL	BOILER RENTAL	1.00	Day	$1,200.00	$1,200.00			
ELOT3	EXTRA LABOR - RIG MAN/DRILL OT	2.00	Hours	$95.00	$190.00			
ELOT4	EXTRA LABOR - DERRICK/FLOOR OT	7.50	Hours	$80.00	$600.00			
PIPEW	PIPE WIPERS	1.00	Each	$60.00	$60.00			
EL4	EXTRA LABOR - DERRICK/FLOOR	8.00	Hours	$65.00	$520.00			
POR	PACK OFF RUBBER	1.00	Each	$130.00	$130.00			
RIGDAY	RIG HOURS - DAY RATE	1.00	Day	$17,250.00	$17,250.00			
POH	PACK OFF HEAD	1.00	Day	$110.00	$110.00			
PPE	PERSONAL PROTECTIVE EQUIPMENT	1.00	Man Per Day	$16.50	$16.50			
				Daily Estimated Total :	**$20,116.50**			

FIELD TICKET

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Job Header

SHEHTAH NABORS LP
3000
500 - 4TH AVENUE SW
CALGARY,AB T2P 2V6
Ticket # P0414000646129

Customer	CONOCO PHILLIPS CANADA LIMITED	**Rig #**	P0414
Cust Address	2100, 250 - 6TH AVENUE SW CALGARY,AB,T2P 3H7,CANADA	**Date**	03/18/2013
Well/Lease	O-06/COPRC LOON CREEK	**Day**	6
State/County	NT/NPS - NT County		
Customer Rep	MYLES HAHN		

GL:702000 NALN CA36
NETWORK:10345055 E120 IMPERT
PO:4600026584

Payroll Information

☐ Clothing Allowance ☐ Northern Job

Emp ID	Employee Name	Job Code	Income Code	Hours	Mileage	Cost Center	Province	Inj. Free	Sign Off
100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	BASE PAY	12.50		P0414	NT	☐	☐
100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	MILE 1 DIESEL		100	P0414	NT	☐	☐
100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	TRAVEL PAY	1		P0414	NT	☐	☐
100063862	RAMSEY, STUART L	DRILLER	BASE PAY	12.50		P0414	NT	☐	☐
100063862	RAMSEY, STUART L	DRILLER	MILE 1 DIESEL		100	P0414	NT	☐	☐
100063862	RAMSEY, STUART L	DRILLER	TRAVEL PAY	1		P0414	NT	☐	☐
100203551	VALLIS, LEE C	DERRICKHAND	BASE PAY	12.50		P0414	NT	☐	☐
100203551	VALLIS, LEE C	DERRICKHAND	TRAVEL PAY	1		P0414	NT	☐	☐
100252232	BARGEN, JARED R	FLOORHAND	BASE PAY	12.50		P0414	NT	☐	☐
100252232	BARGEN, JARED R	FLOORHAND	TRAVEL PAY	1		P0414	NT	☐	☐
100254531	KERTESZ, SIMON S	FLOORHAND	BASE PAY	12.50		P0414	NT	☐	☐
100254531	KERTESZ, SIMON S	FLOORHAND	TRAVEL PAY	1		P0414	NT	☐	☐
100064049	FOURNEL, LEO	RIG SUPERVISOR	BASE PAY	12.50		P0414	NT	☐	☐
100064049	FOURNEL, LEO	RIG SUPERVISOR	TRAVEL PAY	1		P0414	NT	☐	☐
100221733	HOULE, JOSEPH B	DRILLER-TECH	BASE PAY	12.50		P0414	NT	☐	☐
100221733	HOULE, JOSEPH B	DRILLER-TECH	MILE 1 DIESEL		100	P0414	NT	☐	☐
100221733	HOULE, JOSEPH B	DRILLER-TECH	TRAVEL PAY	1		P0414	NT	☐	☐
100244232	SMITH, JARROD T	DERRICKHAND	BASE PAY	12.50		P0414	NT	☐	☐
100244232	SMITH, JARROD T	DERRICKHAND	TRAVEL PAY	1		P0414	NT	☐	☐
100234943	RAMOS, ROBERT	FLOORHAND	BASE PAY	12.50		P0414	NT	☐	☐
100234943	RAMOS, ROBERT	FLOORHAND	TRAVEL PAY	1		P0414	NT	☐	☐
100253069	YOUNG, KARL R	FLOORHAND	BASE PAY	12.50		P0414	NT	☐	☐
100253069	YOUNG, KARL R	FLOORHAND	TRAVEL PAY	1		P0414	NT	☐	☐
100255508	LENNIE, JOEY M	FLOORHAND	BASE PAY	12.50		P0414	NT	☐	☐
100255508	LENNIE, JOEY M	FLOORHAND	TRAVEL PAY	1		P0414	NT	☐	☐

Comments Joey Lennie trainee 12.5 hrs. base pay & 1 hr. travel pay.

☐ **[I Acknowledge] Confirmation that all goods and services listed on ticket were received.**

Nabors Representative **Customer Representative**

FIELD TICKET

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Job Header

SHEHTAH NABORS LP
3000
500 - 4TH AVENUE SW
CALGARY,AB T2P 2V6
Ticket # P0414000646130

Customer	CONOCO PHILLIPS CANADA LIMITED	**Rig #**	P0414
Cust Address	2100, 250 - 6TH AVENUE SW CALGARY,AB,T2P 3H7,CANADA	**Date**	03/19/2013
Well/Lease	O-06/COPRC LOON CREEK	**Day**	7
State/County	NT/NPS - NT County		GL:702000 NALN CA36
Customer Rep	MYLES HAHN		NETWORK:10345055 E120 IMPERT
			PO:4600026584

Details of Operations

Ticket From Time : 00:00 (HHMM) **Ticket To Time :** 24:00 (HHMM)

From	To	Time	Code	Description
00:00	01:30	1 hrs 30 mins	B.07	Continued to RIH with 73mm tubing and overshot. Total of 174 jts. from derrick. Picked up, drifted and installed safety valve and RIH with 4 jts. of 73mm tbg.
01:30	02:15	0 hrs 45 mins	A.04	Rigged in packoff head.
02:15	03:30	1 hrs 15 mins	C.09	Picked up jt. of 73mm tbg. and installed safety valve, circulating chic san and kelly hose and made jt. onto stump. RIH and gently tag sand top. Reverse circulated out sand from atop bridge plug. Circulate hole clean and latched onto bridge plug.
03:30	04:30	1 hrs 0 mins	A.03	Pulled up on first jt. and broked connection and layed down on catwalk. removed circulating chic san and kelly hose. Removed packoff head from atop BOP.
04:30	06:30	2 hrs 0 mins	B.01	Pulled and layed down 3 jts. of 73mm tbg. Pulled and racked 135 jts. of 73mm tbg. Filled hole every 50 jts. pulled. Exchanged notes with day shift. Crew change.
06:30	07:00	0 hrs 30 mins	E.01	Safety Meeting - Held safety meeting with all personnel. Pre-risk assessment. Lel sweep of lease. Service equipment. Daily walk around inspection completed.
07:00	08:30	1 hrs 30 mins	B.01	Pull well - Rod/tubing (POH) - Pull tubing = 40 jts. of 73.0 mm. J-55 tubing, "X" nipple, 1 jt. of 73.0 mm. J-55 tubing, "XN" nipple, 2.45 m. pup jt. 73.0 mm. J-55 & skirt. Filled hole with H2O every 20 jts. Total hole fill was 1.0 m3
08:30	12:00	3 hrs 30 mins	B.07	RIH Tubing (new) - Make up BHA. Run tubing = On-off, 2.45 m. pup jt. 73.0 mm. J-55, "XN" nipple 1 jt. of 73.0 mm. J-55 tubing, "X" nipple & 175 jts. of 73.0 mm. J-55 tubing. Pick up & run tubing = 2 jts. of 73.0 mm. tubing.
12:00	13:30	1 hrs 30 mins	C.08	Circulate - Install pack-off head. Rig up & pick up circulating equipment on jt. # 179. Reverse circulate with 7.5 m3 H2O on top of bridge plug set at 1718.50 Mkb. Return to rig tank.
13:30	18:00	4 hrs 30 mins	C.13	Packers/Scraper/Liners/Patches - Latch onto bridge plug. Release bridge plug. Let well equalize. Rig out circulating equipment. Pulled tubing = 3 jts. of 73.0 m. J-55 tubing. Bridge plug dragging. Jt. # 176 bridge plug hung up. Rig up circulating equipment. Reverse circulate with H2O. Return to rig tank. Work tubing free. Pulled 3 jts. of 73.0 mm. J-55 tubing. Jt. 174 bridge plug hung up again. Reverse circulate with H2O. Return to rig tank. Worked tubing free. Bridge plug pulling free. Remove pack-off head.
18:00	18:30	0 hrs 30 mins	B.01	Pull well - Rod/tubing (POH) - Pull tubing = 45 jts. of 73.0 mm. J-55 tubing. Filled hole every 20 jts. Total hole fill was 0.5 m3. Shift change. Hand over notes from day shift to night shift.
18:30	19:00	0 hrs 30 mins	E.01	Held pre job risk assessment with all night shift personnel. Did walk around and inspected rig and support equipment. Checked emergency shutoffs.
19:00	21:00	2 hrs 0 mins	B.01	Pull well - Rod/tubing (POH), continued to pull out of and stand 73mm tubing string.
21:00	24:00	3 hrs 0 mins	B.07	RIH Tubing, picked up overshot assembly and checked connections for tightness and RIH. RIH with 100 jts. of 73mm tubing from derrick.
Operation Hours :	**24 hrs 0 mins**			***Examples: Travel,Safety Meeting, etc.**
***Other Hours :**	**0 hrs 0 mins**			
Total Hours :	**24 hrs 0 mins**			

CheckList

☑ Crown/Ram Saver Test	☑ Escape buggy Installed	☑ Fire Extinguisher
☐ Anchor Test Charts	☑ Equipment Grounded	☑ All Signs In Place
☑ Rig Motor Emerg. Air Kill	☑ Pump Motor Emerg. Air Kill	☑ Pump Relief Valve Proper Setting Wing Flags
☑ Crown	☑ Main Drum Brake Linkage Chkd.	☑ Guylines
☑ Tanks	☐ Truck Motor Emerg. Air Kill	☑ Equipment Proper Spacing
☑ Kill Line Connected	☑ Air Packs	☑ Emergency No.'s Posted
☐ H_2S %		

Type of Operation

COMPLETION

Safety Meeting

From Time	To Time	Meeting Topic	Notes
06:30	07:00	3PE-3rd Party Equipment	Follow third party procedures. Third party representative to be on floor while tools are broke apart. Good communication.

B.O.P. Function

B.O.P. Function Test : ☑ **Annular :** ☑ **Pipe :** ☑ **Blind :** ☑ **N/A :** ☐

Accum. Pressure : 20,800 **Recharge Time :** 0 mins 56 secs

Precharge KPA #1 : 7700 **#2 :** 7700 **#3 :** 7700 **#4 :** 7700 **#5 :** **#6 :** **#7 :** **#8 :**

Drill Time Start(HHMM) : 11:31 **Drill Time Stop :** 11:32

Weather

Temp	Wind
-28 °C	4MPH

Weather Conditions : Normal

Vehicles - Total Kms Travelled

Ticket Services

Service Id	Service Description	Billing Qty	UOM	Price	Amount	EDI1	EDI2	EDI3
LEL	LEL MONITOR	1.00	Day	$40.00	$40.00			
BOIL	BOILER RENTAL	1.00	Day	$1,200.00	$1,200.00			
ELOT3	EXTRA LABOR - RIG MAN/DRILL OT	2.00	Hours	$95.00	$190.00			

FIELD TICKET

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Job Header

SHEHTAH NABORS LP
3000
500 - 4TH AVENUE SW
CALGARY,AB T2P 2V6
Ticket # P0414000646130

Customer	CONOCO PHILLIPS CANADA LIMITED	**Rig #**	P0414
Cust Address	2100, 250 - 6TH AVENUE SW CALGARY,AB,T2P 3H7,CANADA	**Date**	03/19/2013
Well/Lease	0-06/COPRC LOON CREEK	**Day**	7
State/County	NT/NPS - NT County		
Customer Rep	MYLES HAHN		

GL:702000 NALN CA36
NETWORK:10345055 E120 IMPERT
PO:4600026584

ELOT4	EXTRA LABOR - DERRICK/FLOOR OT	7.50	Hours	$80.00	$600.00			
POH	PACK OFF HEAD	1.00	Day	$110.00	$110.00			
RIGDAY	RIG HOURS - DAY RATE	1.00	Day	$17,250.00	$17,250.00			
EL4	EXTRA LABOR - DERRICK/FLOOR	8.00	Hours	$65.00	$520.00			
PPE	PERSONAL PROTECTIVE EQUIPMENT	1.00	Man Per Day	$16.50	$16.50			
				Daily Estimated Total :	**$19,926.50**			

Payroll Information

☐ Clothing Allowance ☐ Northern Job

Emp ID	Employee Name	Job Code	Income Code	Hours	Mileage	Cost Center	Province	Inj. Free	Sign Off
100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	BASE PAY	12.50		P0414	NT	☐	☐
100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	MILE 1 DIESEL		100	P0414	NT	☐	☐
100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	TRAVEL PAY	1		P0414	NT	☐	☐
100063862	RAMSEY, STUART L	DRILLER	BASE PAY	12.50		P0414	NT	☐	☐
100063862	RAMSEY, STUART L	DRILLER	MILE 1 DIESEL		100	P0414	NT	☐	☐
100063862	RAMSEY, STUART L	DRILLER	TRAVEL PAY	1		P0414	NT	☐	☐
100203551	VALLIS, LEE C	DERRICKHAND	BASE PAY	12.50		P0414	NT	☐	☐
100203551	VALLIS, LEE C	DERRICKHAND	TRAVEL PAY	1		P0414	NT	☐	☐
100252232	BARGEN, JARED R	FLOORHAND	BASE PAY	12.50		P0414	NT	☐	☐
100252232	BARGEN, JARED R	FLOORHAND	TRAVEL PAY	1		P0414	NT	☐	☐
100254531	KERTESZ, SIMON S	FLOORHAND	BASE PAY	12.50		P0414	NT	☐	☐
100254531	KERTESZ, SIMON S	FLOORHAND	TRAVEL PAY	1		P0414	NT	☐	☐
100064049	FOURNEL, LEO	RIG SUPERVISOR	BASE PAY	12.50		P0414	NT	☐	☐
100064049	FOURNEL, LEO	RIG SUPERVISOR	TRAVEL PAY	1		P0414	NT	☐	☐
100221733	HOULE, JOSEPH B	DRILLER-TECH	BASE PAY	12.50		P0414	NT	☐	☐
100221733	HOULE, JOSEPH B	DRILLER-TECH	MILE 1 DIESEL		100	P0414	NT	☐	☐
100221733	HOULE, JOSEPH B	DRILLER-TECH	TRAVEL PAY	1		P0414	NT	☐	☐
100244232	SMITH, JARROD T	DERRICKHAND	BASE PAY	12.50		P0414	NT	☐	☐
100244232	SMITH, JARROD T	DERRICKHAND	TRAVEL PAY	1		P0414	NT	☐	☐
100234943	RAMOS, ROBERT	FLOORHAND	BASE PAY	12.50		P0414	NT	☐	☐
100234943	RAMOS, ROBERT	FLOORHAND	TRAVEL PAY	1		P0414	NT	☐	☐
100253069	YOUNG, KARL R	FLOORHAND	BASE PAY	12.50		P0414	NT	☐	☐
100253069	YOUNG, KARL R	FLOORHAND	TRAVEL PAY	1		P0414	NT	☐	☐
100255508	LENNIE, JOEY M	FLOORHAND	BASE PAY	12.50		P0414	NT	☐	☐
100255508	LENNIE, JOEY M	FLOORHAND	TRAVEL PAY	1		P0414	NT	☐	☐

Comments Joey Lennie Trainee 12.5 hrs. & 1 hr. travel pay.

☐ **[I Acknowledge] Confirmation that all goods and services listed on ticket were received.**

(Leslie Cummings)
3/20/2013 1:42:42 PM
Nabors Representative

(Myles Hahn)
3/20/2013 1:45:21 PM
Customer Representative

FIELD TICKET

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Job Header

SHEHTAH NABORS LP
3000
500 - 4TH AVENUE SW
CALGARY,AB T2P 2V6
Ticket # P0414000646131

Customer	CONOCO PHILLIPS CANADA LIMITED	Rig #	P0414
Cust Address	2100, 250 - 6TH AVENUE SW CALGARY,AB,T2P 3H7,CANADA	Date	03/20/2013
Well/Lease	0-06/COPRC LOON CREEK	Day	8
State/County	NT/NPS - NT County		GL:702000 NALN CA36
Customer Rep	MYLES HAHN		NETWORK:10345055 E120 IMPERT
			PO:4600026584

Details of Operations

Ticket From Time : 00:00 (HHMM) Ticket To Time : 24:00 (HHMM)

From	To	Time	Code	Description
00:00	01:30	1 hrs 30 mins	B.99	RIH with remaining 72 jts. of 73mm tubing from derrick. Picked up and RIH with 6 jts. of 73mm tubing.
01:30	02:00	0 hrs 30 mins	A.04	Rig / Equipment Up, picked up and installed packoff head.
02:00	02:30	0 hrs 30 mins	B.04	Picked up 2 more jts. of 73mm tubing. Installed safety valve, circulating chic san and kelly hose on last joint.
02:30	04:30	2 hrs 0 mins	C.08	RIH and circulated hole clean, latched onto bridge plug and unset while continuing to circulate at a lower rate. Pulled up jt. until collar above slips. Stopped pumping and sucked back on pump lines. Pulled and layed down 5 jts.
04:30	05:00	0 hrs 30 mins	A.03	Rigged out packoff head.
05:00	06:30	1 hrs 30 mins	B.01	Pull well - Rod/tubing (POH), Pull out of hole and stand 73mm tubing. Exchanged notes with day shift. Crew change.
06:30	07:00	0 hrs 30 mins	E.01	Safety Meeting - Held safety meeting with all personnel. Pre-risk assessment. Lel sweep of lease. Service equipment. Daily walk around inspection completed.
07:00	09:00	2 hrs 0 mins	B.01	Pull well - Rod/tubing (POH) - pull tubing = 80 jts. of 73.0 mm. J-55 tubing, "X" nipple, 1 jt. of 73.0 mm. J-55 tubing, "XN" nipple, 2.45 m. pup jt. 73.0 mm. J-55. Pull & lay down = on-off c/w bridge plug & perfoated pup jt. c/w recorders. Filled hole with H2O every 20 jts. Total hole fill was 1.0 m3.
09:00	10:30	1 hrs 30 mins	B.99	Other - Slip & cut 12.0 m. of drill line.
10:30	14:00	3 hrs 30 mins	B.07	RIH Tubing (new) - Make up BHA. Run tubing = skirt, 2.45 m. pup jt. 73.0 mm. J-55, "XN" nipple, 1 jt. of 73.0 mm. J-55 tubing, "X" nipple & 174 jts. of 73.0 mm. J-55 tubing. Pick up & run tubing = 8 jts. of 73.0 mm. J-55 tubing.
14:00	17:30	3 hrs 30 mins	C.08	Circulate - Install pack-off head. Pick up & rig up circulating equipment on jt. # 184. Reverse circulate and clean out sand with 15.0 m3 of H2O on top of bridge plug set at 1761.30 Mkb. C.E. Return to rig tank. Bridge plug appears to have move down hole. Remove pack-off.
17:30	18:30	1 hrs 0 mins	B.01	Pull well - Rod/tubing (POH) - Pull & lay down 2 jts. of 73.0 mm. J-55 tubing. Pull tubing = 75 jts. of 73.0 mm. J-55 tubing. Shift change. Hand over notes from day shift to night shift.
18:30	19:00	0 hrs 30 mins	E.01	Safety Meeting, held pre job risk assessment with all night shift personnel. Inspected rig and support equipment. Function emergency shut offs.
19:00	21:00	2 hrs 0 mins	B.01	Pull well - Rod/tubing (POH), continued to POOH and stand 182 jts. of 73mm tubing.
21:00	24:00	3 hrs 0 mins	B.99	Other, make up BHA-skirt and pup jt., picked up and RIH with 182 jts. of 73mm tubing from derrick.
Operation Hours : 24 hrs 0 mins *Other Hours : 0 hrs 0 mins Total Hours : 24 hrs 0 mins			*Examples: Travel,Safety Meeting, etc.	

CheckList

☑ Crown/Ram Saver Test	☑ Escape buggy Installed	☑ Fire Extinguisher
☑ Anchor Test Charts	☑ Equipment Grounded	☑ All Signs in Place
☑ Rig Motor Emerg. Air Kill	☑ Pump Motor Emerg. Air Kill	☑ Pump Relief Valve Proper Setting Wing Flags
☑ Crown	☑ Main Drum Brake Linkage Chkd.	☑ Guylines
☑ Tanks	☑ Truck Motor Emerg. Air Kill	☑ Equipment Proper Spacing
☑ Kill Line Connected	☑ Air Packs	☑ Emergency No.'s Posted
☑ H_2S %		

Type of Operation

COMPLETION

Safety Meeting

From Time	To Time	Meeting Topic	Notes
06:30	07:00	HP-Hand Placement	Don't get complacent. Be alert & ready for each task. Be aware of all pinch point while tripping tubing. Good communication with all personnel.

B.O.P. Function

B.O.P. Function Test : ☑ Annular : ☑ Pipe : ☑ Blind : ☑ N/A : ☐

Accum. Pressure : 20,800 Recharge Time : 0 mins 56 secs

Precharge KPA #1 : 7700 #2 : 7700 #3 : 7700 #4 : 7700 #5 : #6 : #7 : #8 :

Drill Time Start(HHMM) : Drill Time Stop :

Weather

Temp -40 °C Wind 7MPH

Weather Conditions : Normal

Vehicles - Total Kms Travelled

Ticket Services

Service Id	Service Description	Billing Qty	UOM	Price	Amount	EDI1	EDI2	EDI3
LEL	LEL MONITOR	1.00	Day	$40.00	$40.00			
BOIL	BOILER RENTAL	1.00	Day	$1,200.00	$1,200.00			
ELOT3	EXTRA LABOR - RIG MAN/DRILL OT	2.00	Hours	$95.00	$190.00			
ELOT4	EXTRA LABOR - DERRICK/FLOOR OT	7.50	Hours	$80.00	$600.00			
POH	PACK OFF HEAD	1.00	Day	$110.00	$110.00			

FIELD TICKET

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Job Header

SHEHTAH NABORS LP
3000
500 - 4TH AVENUE SW
CALGARY,AB T2P 2V6
Ticket # P0414000646131

Customer	CONOCO PHILLIPS CANADA LIMITED	**Rig #**	P0414
Cust Address	2100, 250 - 6TH AVENUE SW CALGARY,AB,T2P 3H7,CANADA	**Date**	03/20/2013
Well/Lease	0-06/COPRC LOON CREEK	**Day**	8
State/County	NT/NPS - NT County		GL:702000 NALN CA36
Customer Rep	MYLES HAHN		NETWORK:10345055 E120 IMPERT
			PO:4600026584

RIGDAY	RIG HOURS - DAY RATE	1.00	Day	$17,250.00	$17,250.00			
EL4	EXTRA LABOR - DERRICK/FLOOR	8.00	Hours	$65.00	$520.00			
PIPEW	PIPE WIPERS	1.00	Each	$60.00	$60.00			
PPE	PERSONAL PROTECTIVE EQUIPMENT	1.00	Man Per Day	$16.50	$16.50			
				Daily Estimated Total :	$19,986.50			

Payroll Information

☐ Clothing Allowance ☐ Northern Job

Emp ID	Employee Name	Job Code	Income Code	Hours	Mileage	Cost Center	Province	Inj. Free	Sign Off
100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	BASE PAY	12.50		P0414	NT	☐	☐
100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	MILE 1 DIESEL		100	P0414	NT	☐	☐
100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	TRAVEL PAY	1		P0414	NT	☐	☐
100063862	RAMSEY, STUART L	DRILLER	BASE PAY	12.50		P0414	NT	☐	☐
100063862	RAMSEY, STUART L	DRILLER	MILE 1 DIESEL		100	P0414	NT	☐	☐
100063862	RAMSEY, STUART L	DRILLER	TRAVEL PAY	1		P0414	NT	☐	☐
100203551	VALLIS, LEE C	DERRICKHAND	BASE PAY	12.50		P0414	NT	☐	☐
100203551	VALLIS, LEE C	DERRICKHAND	TRAVEL PAY	1		P0414	NT	☐	☐
100252232	BARGEN, JARED R	FLOORHAND	BASE PAY	12.50		P0414	NT	☐	☐
100252232	BARGEN, JARED R	FLOORHAND	TRAVEL PAY	1		P0414	NT	☐	☐
100254531	KERTESZ, SIMON S	FLOORHAND	BASE PAY	12.50		P0414	NT	☐	☐
100254531	KERTESZ, SIMON S	FLOORHAND	TRAVEL PAY	1		P0414	NT	☐	☐
100064049	FOURNEL, LEO	RIG SUPERVISOR	BASE PAY	12.50		P0414	NT	☐	☐
100064049	FOURNEL, LEO	RIG SUPERVISOR	TRAVEL PAY	1		P0414	NT	☐	☐
100221733	HOULE, JOSEPH B	DRILLER-TECH	BASE PAY	12.50		P0414	NT	☐	☐
100221733	HOULE, JOSEPH B	DRILLER-TECH	MILE 1 DIESEL		100	P0414	NT	☐	☐
100221733	HOULE, JOSEPH B	DRILLER-TECH	TRAVEL PAY	1		P0414	NT	☐	☐
100244232	SMITH, JARROD T	DERRICKHAND	BASE PAY	12.50		P0414	NT	☐	☐
100244232	SMITH, JARROD T	DERRICKHAND	TRAVEL PAY	1		P0414	NT	☐	☐
100234943	RAMOS, ROBERT	FLOORHAND	BASE PAY	12.50		P0414	NT	☐	☐
100234943	RAMOS, ROBERT	FLOORHAND	TRAVEL PAY	1		P0414	NT	☐	☐
100253069	YOUNG, KARL R	FLOORHAND	BASE PAY	12.50		P0414	NT	☐	☐
100253069	YOUNG, KARL R	FLOORHAND	TRAVEL PAY	1		P0414	NT	☐	☐
100255508	LENNIE, JOEY M	FLOORHAND	BASE PAY	12.50		P0414	NT	☐	☐
100255508	LENNIE, JOEY M	FLOORHAND	TRAVEL PAY	1		P0414	NT	☐	☐

Comments

☐ **[I Acknowledge] Confirmation that all goods and services listed on ticket were received.**

(Leslie Cummings)	**(Myles Hahn)**
3/21/2013 10:14:41 AM	**3/21/2013 10:15:53 AM**
Nabors Representative	**Customer Representative**

FIELD TICKET

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Job Header

SHEHTAH NABORS LP
3000
500 - 4TH AVENUE SW
CALGARY,AB T2P 2V6
Ticket # P0414000646132

Customer	CONOCO PHILLIPS CANADA LIMITED	**Rig #**	P0414
Cust Address	2100, 250 - 6TH AVENUE SW CALGARY,AB,T2P 3H7,CANADA	**Date**	03/21/2013
Well/Lease	O-06/COPRC LOON CREEK	**Day**	9
State/County	NT/NPS - NT County		GL:702000 NALN CA36
Customer Rep	MYLES HAHN		NETWORK:10345055 E120 IMPERT
			PO:4600026584

Details of Operations

Ticket From Time : 00:00 (HHMM) **Ticket To Time :** 24:00 (HHMM)

From	To	Time	Code	Description
00:00	00:45	0 hrs 45 mins	A.04	Rig / Equipment Up, picked and installed packoff head.
00:45	03:00	2 hrs 15 mins	C.09	Clean Out, picked up 3 jts. of 73mm tubing. Installed safety valve, circulating chic san and kelly hose on last jt. Lower tubing string and reverse circulated hole clean. Released bridge plug and circulated at .25m3/min. for 20 mins.
03:00	06:30	3 hrs 30 mins	B.01	Pull well - Rod/tubing (POH), pulled and layed down 9 jts. Removed packoff head. POOH and stand 156 jts. in derrick. Exchanged notes with day shift. Crew change.
06:30	07:00	0 hrs 30 mins	E.01	Safety Meeting - Held safety meeting with all personnel. Pre-risk assessment. Lel sweep of lease. Service equipment. Daily walk around inspection completed.
07:00	07:30	0 hrs 30 mins	B.01	Pull well - Rod/tubing (POH) - Pull tubing = 18 jts. of 73.0 mm. J-55 tubing, "X" nipple, 1 jt. of 73.0 mm. J-55 tubing, "XN" nipple, 2.45 m. pup jt. 73.0 mm. J-55 & skirt.
07:30	11:30	4 hrs 0 mins	B.07	RIH Tubing (new) - Make up BHA. Run tubing = On-off, 2.45 m. pup jt. 73.0 mm. J-55, "XN" nipple, 1 jt. of 73.0 mm. J-55 tubing, "X" nipple & 174 jts. of 73.0 mm. J-55 tubing. Held BOP drill while running tubing. Pick up, tally, drift & run tubing = 8 jts. of 73.0 mm. J-55 tubing.
11:30	13:30	2 hrs 0 mins	C.08	Circulate - Install pack-off. Rig up & pick up circulating equipment on jt. # 184. Reverse circulate with 15.0 m3 of H2O & clean out sand on top of bridge plug set at 1767.0 Mkb. C.E. Return to rig tank. Rig out circulating equipment.
13:30	14:30	1 hrs 0 mins	C.13	Packers/Scraper/Liners/Patches - Latch onto bridge plug. Release bridge plug. Let well equalize. Remove pack-off.
14:30	17:30	3 hrs 0 mins	B.01	Pull well - Rod/tubing (POH) - Pull & lay down tubing = 10 jts. of 73.0 mm. J-55 tubing. Pull tubing = 173 jts. of 73.0 mm. J-55 tubing, "X" nipple, 1 jt. of 73.0 mm. J-55 tubing, "XN" nipple, 2.45 m. pup jt. 73.0 mm. J-55, on-off c/w bridge plug & perfated pup jt. c/w recorders. Filled hole every 20 jts. Total hole fill was 2.0 m3.
17:30	18:30	1 hrs 0 mins	B.07	RIH Tubing (new) - Make up BHA. Run tubing = 15.56 mm. bit, 177.8 mm. casing scraper, sub, 2.45 m. pup jt. 73.0 mm. J-55, "XN" nipple, 1jt. of 73.0 mm. J-55 tubing, "X" nipple & 60 jts. of 73.0 mm. tubing. Shift change. Hand over notes from day shift to night shift.
18:30	19:00	0 hrs 30 mins	E.01	Safety Meeting, held pre job risk assessment with all night shift personnel. Inspected rig and support equipment. Function tested emergency shut offs.
19:00	22:00	3 hrs 0 mins	B.07	RIH Tubing (new), continued to RIH with scraper and 73mm tubing, (174 jts. from derrick), picked up 9 jts. off catwalk and RIH, reciprocated scraper by perforations. Rigged in to circulate well clean.
22:00	23:00	1 hrs 0 mins	C.08	Reverse circulated 3 tubing volumes.
23:00	24:00	1 hrs 0 mins	B.01	Pull well - Rod/tubing (POH), pulled and stood jts. of 73mm tbg. in derrick.
Operation Hours :	**24 hrs 0 mins**			***Examples: Travel,Safety Meeting, etc.**
***Other Hours :**	**0 hrs 0 mins**			
Total Hours :	**24 hrs 0 mins**			

CheckList

- ☑ Crown/Ram Saver Test
- ☑ Anchor Test Charts
- ☑ Rig Motor Emerg. Air Kill
- ☑ Crown
- ☑ Tanks
- ☑ Kill Line Connected
- ☑ H_2S %
- ☑ Escape buggy Installed
- ☑ Equipment Grounded
- ☑ Pump Motor Emerg. Air Kill
- ☑ Main Drum Brake Linkage Chkd.
- ☑ Truck Motor Emerg. Air Kill
- ☑ Air Packs
- ☑ Fire Extinguisher
- ☑ All Signs In Place
- ☑ Pump Relief Valve Proper Setting Wing Flags
- ☑ Guylines
- ☑ Equipment Proper Spacing
- ☑ Emergency No.'s Posted

Type of Operation

COMPLETION

Safety Meeting

From Time	To Time	Meeting Topic	Notes
06:30	07:00	SLIPS-Slips/Trips/Falls	Watch your footing. Keep work area. Clean & clear of trip hazards. Take your time walking around equipment.

B.O.P. Function

B.O.P. Function Test : ☑ **Annular :** ☑ **Pipe :** ☑ **Blind :** ☑ **N/A :** ☐

Accum. Pressure : 20,800 **Recharge Time :** 0 mins 56 secs

Precharge KPA #1 : 7700 **#2 :** 7700 **#3 :** 7700 **#4 :** 7700 **#5 :** **#6 :** **#7 :** **#8 :**

Drill Time Start(HHMM) : 09:47 **Drill Time Stop :** 09:48

Weather

Temp	Wind
-37 °C	8MPH

Weather Conditions : Normal

Vehicles - Total Kms Travelled

Ticket Services

Service Id	Service Description	Billing Qty	UOM	Price	Amount	EDI1	EDI2	EDI3
LEL	LEL MONITOR	1.00	Day	$40.00	$40.00			
BOIL	BOILER RENTAL	1.00	Day	$1,200.00	$1,200.00			
ELOT3	EXTRA LABOR - RIG MAN/DRILL OT	2.00	Hours	$95.00	$190.00			

FIELD TICKET

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Job Header

SHEHTAH NABORS LP
3000
500 - 4TH AVENUE SW
CALGARY,AB T2P 2V6
Ticket # P0414000646132

Customer	CONOCO PHILLIPS CANADA LIMITED
Cust Address	2100, 250 - 6TH AVENUE SW CALGARY,AB,T2P 3H7,CANADA
Well/Lease	O-06/COPRC LOON CREEK
State/County	NT/NPS - NT County
Customer Rep	MYLES HAHN

Rig # P0414
Date 03/21/2013
Day 9

GL:702000 NALN CA36
NETWORK:10345055 E120 IMPERT
PO:4600026584

ELOT4	EXTRA LABOR - DERRICK/FLOOR OT	7.50	Hours	$80.00	$600.00			
POH	PACK OFF HEAD	1.00	Day	$110.00	$110.00			
RIGDAY	RIG HOURS - DAY RATE	1.00	Day	$17,250.00	$17,250.00			
EL4	EXTRA LABOR - DERRICK/FLOOR	8.00	Hours	$65.00	$520.00			
PPE	PERSONAL PROTECTIVE EQUIPMENT	1.00	Man Per Day	$16.50	$16.50			
				Daily Estimated Total :	**$19,926.50**			

Payroll Information

☐ Clothing Allowance ☑ Northern Job

Emp ID	Employee Name	Job Code	Income Code	Hours	Mileage	Cost Center	Province	Inj. Free	Sign Off
100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	BASE PAY	12.50		P0414	NT	☑	☑
100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	MILE 1 DIESEL		100	P0414	NT	☑	☑
100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	TRAVEL PAY	1		P0414	NT	☑	☑
100063862	RAMSEY, STUART L	DRILLER	BASE PAY	12.50		P0414	NT	☑	☑
100063862	RAMSEY, STUART L	DRILLER	MILE 1 DIESEL		100	P0414	NT	☑	☑
100063862	RAMSEY, STUART L	DRILLER	TRAVEL PAY	1		P0414	NT	☑	☑
100203551	VALLIS, LEE C	DERRICKHAND	BASE PAY	12.50		P0414	NT	☑	☑
100203551	VALLIS, LEE C	DERRICKHAND	TRAVEL PAY	1		P0414	NT	☑	☑
100252232	BARGEN, JARED R	FLOORHAND	BASE PAY	12.50		P0414	NT	☑	☑
100252232	BARGEN, JARED R	FLOORHAND	TRAVEL PAY	1		P0414	NT	☑	☑
100254531	KERTESZ, SIMON S	FLOORHAND	BASE PAY	12.50		P0414	NT	☑	☑
100254531	KERTESZ, SIMON S	FLOORHAND	TRAVEL PAY	1		P0414	NT	☑	☑
100064049	FOURNEL, LEO	RIG SUPERVISOR	BASE PAY	12.50		P0414	NT	☑	☑
100064049	FOURNEL, LEO	RIG SUPERVISOR	TRAVEL PAY	1		P0414	NT	☑	☑
100221733	HOULE, JOSEPH B	DRILLER-TECH	BASE PAY	12.50		P0414	NT	☑	☑
100221733	HOULE, JOSEPH B	DRILLER-TECH	MILE 1 DIESEL		100	P0414	NT	☑	☑
100221733	HOULE, JOSEPH B	DRILLER-TECH	TRAVEL PAY	1		P0414	NT	☑	☑
100244232	SMITH, JARROD T	DERRICKHAND	BASE PAY	12.50		P0414	NT	☑	☑
100244232	SMITH, JARROD T	DERRICKHAND	TRAVEL PAY	1		P0414	NT	☑	☑
100234943	RAMOS, ROBERT	FLOORHAND	BASE PAY	12.50		P0414	NT	☑	☑
100234943	RAMOS, ROBERT	FLOORHAND	TRAVEL PAY	1		P0414	NT	☑	☑
100253069	YOUNG, KARL R	FLOORHAND	BASE PAY	12.50		P0414	NT	☑	☑
100253069	YOUNG, KARL R	FLOORHAND	TRAVEL PAY	1		P0414	NT	☑	☑
100255508	LENNIE, JOEY M	FLOORHAND	BASE PAY	12.50		P0414	NT	☑	☑
100255508	LENNIE, JOEY M	FLOORHAND	TRAVEL PAY	1		P0414	NT	☑	☑

Comments

☑ **[I Acknowledge] Confirmation that all goods and services listed on ticket were received.**

(Leslie Cummings)	**(Myles Hanh)**
3/22/2013 10:13:58 AM	**3/22/2013 10:15:22 AM**
Nabors Representative	**Customer Representative**

FIELD TICKET

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Job Header

SHEHTAH NABORS LP
3000
500 - 4TH AVENUE SW
CALGARY,AB T2P 2V6
Ticket # P0414000646133

Customer	CONOCO PHILLIPS CANADA LIMITED	**Rig #**	P0414
Cust Address	2100, 250 - 6TH AVENUE SW CALGARY,AB,T2P 3H7,CANADA	**Date**	03/22/2013
Well/Lease	O-06/COPRC LOON CREEK	**Day**	10
State/County	NT/NPS - NT County		**GL:702000 NALN CA36**
Customer Rep	MYLES HAHN		**NETWORK:10345055 E120 IMPERT**
			PO:4600026584

Details of Operations

Ticket From Time : 00:00 (HHMM) **Ticket To Time :** 24:00 (HHMM)

From	To	Time	Code	Description
00:00	03:30	3 hrs 30 mins	B.04	Pulled and layed down 124 jts. of 73mm tubing.
03:30	06:30	3 hrs 0 mins	C.21	Wireline, removed bails off travelling blocks. Rig up wireline. Exchange notes with day shift. Crew change.
06:30	07:00	0 hrs 30 mins	E.01	Safety Meeting - Held safety meeting with all personnel. Pre-risk assessment. Lel Sweep of lease. Service equipment. Daily walk around inspection completed.
07:00	18:30	11 hrs 30 mins	C.21	Wireline Logging/Perforating/Hydrotesting - Pressure test lubricator to 5 Mpa. Good test. Bled off pressure. Run patch simulation. POOH. Run patch. Set across perforations. POOH. Run patch. Set across middle perforations. POOH. Run patch. Set across top perforations. Fill hole with 2.0 m3 of H2O. Pressure test casing & patches to 17 Mpa. for 10 mins. Good test. Bled off pressure. Shift change. Hand over notes from day shift to night shift.
18:30	19:00	0 hrs 30 mins	E.01	Safety Meeting, held pre job risk assessment with all night shift personnel. Inspected rig and support equipment.
19:00	20:00	1 hrs 0 mins	A.05	Rig / Equipment Down, rigged out wireline lubricator and related equipment. Installed bails on blocks and ready tongs to run tubing.
20:00	21:30	1 hrs 30 mins	B.07	RIH Tubing, RIH 63 jts. of 73mm tubing with plugged end to displace wellbore fluid.
21:30	22:30	1 hrs 0 mins	B.04	Pick up / lay down tubing, pulled and layed down 63 jts. of 73mm tubing, kendex threads and installed protectors. Land tubing hanger with plug on bottom.
22:30	24:00	1 hrs 30 mins	A.05	Rig / Equipment Down, rigged out work floor equipment and lowered work floor in transit position. Cleared equipment from well area.
Operation Hours : 24 hrs 0 mins ***Other Hours :** 0 hrs 0 mins **Total Hours :** 24 hrs 0 mins				***Examples: Travel,Safety Meeting, etc.**

CheckList

- ☑ Crown/Ram Saver Test
- ☑ Anchor Test Charts
- ☑ Rig Motor Emerg. Air Kill
- ☑ Crown
- ☑ Tanks
- ☑ Kill Line Connected
- ☑ H_2S %
- ☑ Escape buggy Installed
- ☑ Equipment Grounded
- ☑ Pump Motor Emerg. Air Kill
- ☑ Main Drum Brake Linkage Chkd.
- ☑ Truck Motor Emerg. Air Kill
- ☑ Air Packs
- ☑ Fire Extinguisher
- ☑ All Signs in Place
- ☑ Pump Relief Valve Proper Setting Wing Flags
- ☑ Guylines
- ☑ Equipment Proper Spacing
- ☑ Emergency No.'s Posted

Type of Operation

COMPLETION

Safety Meeting

From Time	To Time	Meeting Topic	Notes
06:30	07:00	3PE-3rd Party Equipment	Check all lifting equipment before each lift. Check all equipment before use. Good communication.

B.O.P. Function

B.O.P. Function Test : ☑ **Annular :** ☑ **Pipe :** ☑ **Blind :** ☑ **N/A :** ☐

Accum. Pressure : 20,800 **Recharge Time :** 0 mins 56 secs

Precharge KPA #1 : 7700 **#2 :** 7700 **#3 :** 7700 **#4 :** 7700 **#5 :** **#6 :** **#7 :** **#8 :**

Drill Time Start(HHMM) : **Drill Time Stop :**

Weather

Temp	Wind
-34 °C	12MPH

Weather Conditions : Normal

Vehicles - Total Kms Travelled

Ticket Services

Service Id	Service Description	Billing Qty	UOM	Price	Amount	EDI1	EDI2	EDI3
LEL	LEL MONITOR	1.00	Day	$40.00	$40.00			
BOIL	BOILER RENTAL	1.00	Day	$1,200.00	$1,200.00			
ELOT3	EXTRA LABOR - RIG MAN/DRILL OT	2.00	Hours	$95.00	$190.00			
ELOT4	EXTRA LABOR - DERRICK/FLOOR OT	7.50	Hours	$80.00	$600.00			
RIGDAY	RIG HOURS - DAY RATE	1.00	Day	$17,250.00	$17,250.00			
EL4	EXTRA LABOR - DERRICK/FLOOR	8.00	Hours	$65.00	$520.00			
PPE	PERSONAL PROTECTIVE EQUIPMENT	1.00	Man Per Day	$16.50	$16.50			
				Daily Estimated Total :	**$19,816.50**			

Payroll Information

☑ Clothing Allowance ☑ Northern Job

Emp ID	Employee Name	Job Code	Income Code	Hours	Mileage	Cost Center	Province	Inj. Free	Sign Off
100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	BASE PAY	12.50		P0414	NT	☑	☑

FIELD TICKET

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Job Header

SHEHTAH NABORS LP
3000
500 - 4TH AVENUE SW
CALGARY,AB T2P 2V6
Ticket # P0414000646133

Customer	CONOCO PHILLIPS CANADA LIMITED	**Rig #**	P0414
Cust Address	2100, 250 - 6TH AVENUE SW CALGARY,AB,T2P 3H7,CANADA	**Date**	03/22/2013
Well/Lease	**O-06/COPRC LOON CREEK**	**Day**	10
State/County	NT/NPS - NT County		**GL:702000 NALN CA36**
Customer Rep	**MYLES HAHN**		**NETWORK:10345055 E120 IMPERT**
			PO:4600026584

100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	MILE 1 DIESEL		100	P0414	NT		
100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	TRAVEL PAY	1		P0414	NT		
100063862	RAMSEY, STUART L	DRILLER	BASE PAY	12.50		P0414	NT		
100063862	RAMSEY, STUART L	DRILLER	MILE 1 DIESEL		100	P0414	NT		
100063862	RAMSEY, STUART L	DRILLER	TRAVEL PAY	1		P0414	NT		
100203551	VALLIS, LEE C	DERRICKHAND	BASE PAY	12.50		P0414	NT		
100203551	VALLIS, LEE C	DERRICKHAND	TRAVEL PAY	1		P0414	NT		
100252232	BARGEN, JARED R	FLOORHAND	BASE PAY	12.50		P0414	NT		
100252232	BARGEN, JARED R	FLOORHAND	TRAVEL PAY	1		P0414	NT		
100254531	KERTESZ, SIMON S	FLOORHAND	BASE PAY	12.50		P0414	NT		
100254531	KERTESZ, SIMON S	FLOORHAND	TRAVEL PAY	1		P0414	NT		
100064049	FOURNEL, LEO	RIG SUPERVISOR	BASE PAY	12.50		P0414	NT		
100064049	FOURNEL, LEO	RIG SUPERVISOR	TRAVEL PAY	1		P0414	NT		
100221733	HOULE, JOSEPH B	DRILLER-TECH	BASE PAY	12.50		P0414	NT		
100221733	HOULE, JOSEPH B	DRILLER-TECH	MILE 1 DIESEL		100	P0414	NT		
100221733	HOULE, JOSEPH B	DRILLER-TECH	TRAVEL PAY	1		P0414	NT		
100244232	SMITH, JARROD T	DERRICKHAND	BASE PAY	12.50		P0414	NT		
100244232	SMITH, JARROD T	DERRICKHAND	TRAVEL PAY	1		P0414	NT		
100234943	RAMOS, ROBERT	FLOORHAND	BASE PAY	12.50		P0414	NT		
100234943	RAMOS, ROBERT	FLOORHAND	TRAVEL PAY	1		P0414	NT		
100253069	YOUNG, KARL R	FLOORHAND	BASE PAY	12.50		P0414	NT		
100253069	YOUNG, KARL R	FLOORHAND	TRAVEL PAY	1		P0414	NT		
100255508	LENNIE, JOEY M	FLOORHAND	BASE PAY	12.50		P0414	NT		
100255508	LENNIE, JOEY M	FLOORHAND	TRAVEL PAY	1		P0414	NT		

Comments **Joey Lennie trainee 12 hrs. base pay & 1 hr. travel pay.**

[I Acknowledge] Confirmation that all goods and services listed on ticket were received.

(Leslie Cummings)	**(Myles Hahn)**
3/23/2013 9:03:01 AM	**3/23/2013 9:03:25 AM**
Nabors Representative	**Customer Representative**

FIELD TICKET

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Job Header

SHEHTAH NABORS LP
3000
500 - 4TH AVENUE SW
CALGARY,AB T2P 2V6
Ticket # P0414000646134

Customer	CONOCO PHILLIPS CANADA LIMITED	**Rig #**	P0414
Cust Address	2100, 250 - 6TH AVENUE SW CALGARY,AB,T2P 3H7,CANADA	**Date**	03/23/2013
Well/Lease	O-06/COPRC LOON CREEK	**Day**	11
State/County	NT/NPS - NT County		GL:702000 NALN CA36
Customer Rep	MYLES HAHN		NETWORK:10345055 E120 IMPERT
			PO:4600026584

Details of Operations

Ticket From Time : 00:00 (HHMM) **Ticket To Time :** 24:00 (HHMM)

From	To	Time	Code	Description
00:00	03:30	3 hrs 30 mins	A.05	Rig / Equipment Down, nipple down BOP. Picked up and installed 10K valve on well and cap.
03:30	04:00	0 hrs 30 mins	C.02	Pressure Test, pressure test 10K valve and well flange connection to a low of 1.5 mpa and a high of 34 mpa and held each test for 10 mins. each. Good tests. Bled off pressure, removed cap and pulled tubing hanger and reinstalled cap. Pressure test cap and 10K valve connections to a low of 1.5 mpa and a high of 34 mpa and held for 10 mins. each.
04:00	06:30	2 hrs 30 mins	A.03	Rig / Equipment Out, rigged out support equipment. Exchanged notes with day shift. Crew change.
06:30	07:00	0 hrs 30 mins	E.01	Safety Meeting - Held safety meeting with all personnel. Pre-risk assessment. Lel sweep of lease. Service equipment. Daily walk around inspection completed.
07:00	18:30	11 hrs 30 mins	A.03	Rig / Equipment Out - Rig out rig & equipment. Clean lease & well head. Heat rig tank. Stack all planks. Secure HD platform & equipment. Prepare to move rig to Norman Wells. Bank boiler. Shift change. Hand over notes from day shift to night shift.
18:30	19:00	0 hrs 30 mins	E.01	Safety Meeting, held pre job risk assessment. Discussed job scope for day and related hazards.
19:00	24:00	5 hrs 0 mins	A.99	Other, checked equipment and ready for move. Cleaned site of any debris and gargbage.
Operation Hours :		**24 hrs 0 mins**		***Examples: Travel,Safety Meeting, etc.**
***Other Hours :**		**0 hrs 0 mins**		
Total Hours :		**24 hrs 0 mins**		

CheckList

- ☒ Crown/Ram Saver Test
- ☒ Anchor Test Charts
- ☒ Rig Motor Emerg. Air Kill
- ☒ Crown
- ☒ Tanks
- ☒ Kill Line Connected
- ☐ H_2S %
- ☒ Escape buggy Installed
- ☒ Equipment Grounded
- ☒ Pump Motor Emerg. Air Kill
- ☒ Main Drum Brake Linkage Chkd.
- ☒ Truck Motor Emerg. Air Kill
- ☒ Air Packs
- ☒ Fire Extinguisher
- ☒ All Signs in Place
- ☒ Pump Relief Valve Proper Setting Wing Flags
- ☒ Guylines
- ☒ Equipment Proper Spacing
- ☒ Emergency No.'s Posted

Type of Operation

COMPLETION

Safety Meeting

From Time	To Time	Meeting Topic	Notes
06:30	07:00	OTHER-Other	Heavy lifting. Use winch or get help. Overhead loads. Stay out from under derrick while lowering. Good communication.

B.O.P. Function

B.O.P. Function Test : ☒ **Annular :** ☒ **Pipe :** ☒ **Blind :** ☒ **N/A :** ☐

Accum. Pressure : 20,800 **Recharge Time :** 0 mins 56 secs

Precharge KPA #1 : 7700 **#2 :** 7700 **#3 :** 7700 **#4 :** 7700 **#5 :** **#6 :** **#7 :** **#8 :**

Drill Time Start(HHMM) : **Drill Time Stop :**

Weather

Temp	Wind
-33 °C	12MPH

Weather Conditions : Normal

Vehicles - Total Kms Travelled

Ticket Services

Service Id	Service Description	Billing Qty	UOM	Price	Amount	EDI1	EDI2	EDI3
LEL	LEL MONITOR	1.00	Day	$40.00	$40.00			
BOIL	BOILER RENTAL	1.00	Day	$1,200.00	$1,200.00			
ELOT3	EXTRA LABOR - RIG MAN/DRILL OT	2.00	Hours	$95.00	$190.00			
ELOT4	EXTRA LABOR - DERRICK/FLOOR OT	7.50	Hours	$80.00	$600.00			
EL4	EXTRA LABOR - DERRICK/FLOOR	24.50	Hours	$65.00	$1,592.50			
RIGOP	RIG HOURS-REGULAR	18.50	Hours	$719.00	$13,301.50			
EL3	EXTRA LABOR - RIG MAN/DRILL	11.00	Hours	$75.00	$825.00			
PPE	PERSONAL PROTECTIVE EQUIPMENT	6.00	Man Per Day	$16.50	$99.00			
TTBC	TRAVEL TIME	5.00	Man Hour	$19.00	$95.00			
				Daily Estimated Total :	**$17,943.00**			

Payroll Information

☒ Clothing Allowance ☒ Northern Job

Emp ID	Employee Name	Job Code	Income Code	Hours	Mileage	Cost Center	Province	Inj. Free	Sign Off
100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	BASE PAY	12.50		P0414	NT	☒	☒

FIELD TICKET

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Job Header

SHEHTAH NABORS LP
3000
500 - 4TH AVENUE SW
CALGARY,AB T2P 2V6
Ticket # P0414000646134

Customer	CONOCO PHILLIPS CANADA LIMITED	**Rig #**	P0414
Cust Address	2100, 250 - 6TH AVENUE SW CALGARY,AB,T2P 3H7,CANADA	**Date**	03/23/2013
Well/Lease	**O-06/COPRC LOON CREEK**	**Day**	11
State/County	NT/NPS - NT County		**GL:702000 NALN CA36**
Customer Rep	**MYLES HAHN**		**NETWORK:10345055 E120 IMPERT**
			PO:4600026584

100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	MILE 1 DIESEL		100	P0414	NT		
100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	TRAVEL PAY	1		P0414	NT		
100063862	RAMSEY, STUART L	DRILLER	BASE PAY	12.50		P0414	NT		
100063862	RAMSEY, STUART L	DRILLER	MILE 1 DIESEL		100	P0414	NT		
100063862	RAMSEY, STUART L	DRILLER	TRAVEL PAY	1		P0414	NT		
100203551	VALLIS, LEE C	DERRICKHAND	BASE PAY	12.50		P0414	NT		
100203551	VALLIS, LEE C	DERRICKHAND	TRAVEL PAY	1		P0414	NT		
100252232	BARGEN, JARED R	FLOORHAND	BASE PAY	12.50		P0414	NT		
100252232	BARGEN, JARED R	FLOORHAND	TRAVEL PAY	1		P0414	NT		
100254531	KERTESZ, SIMON S	FLOORHAND	BASE PAY	12.50		P0414	NT		
100254531	KERTESZ, SIMON S	FLOORHAND	TRAVEL PAY	1		P0414	NT		
100064049	FOURNEL, LEO	RIG SUPERVISOR	BASE PAY	12.50		P0414	NT		
100064049	FOURNEL, LEO	RIG SUPERVISOR	TRAVEL PAY	1		P0414	NT		
100221733	HOULE, JOSEPH B	DRILLER-TECH	BASE PAY	12.50		P0414	NT		
100221733	HOULE, JOSEPH B	DRILLER-TECH	MILE 1 DIESEL		100	P0414	NT		
100221733	HOULE, JOSEPH B	DRILLER-TECH	TRAVEL PAY	1		P0414	NT		
100244232	SMITH, JARROD T	DERRICKHAND	BASE PAY	12.50		P0414	NT		
100244232	SMITH, JARROD T	DERRICKHAND	TRAVEL PAY	1		P0414	NT		
100234943	RAMOS, ROBERT	FLOORHAND	BASE PAY	12.50		P0414	NT		
100234943	RAMOS, ROBERT	FLOORHAND	TRAVEL PAY	1		P0414	NT		
100253069	YOUNG, KARL R	FLOORHAND	BASE PAY	12.50		P0414	NT		
100253069	YOUNG, KARL R	FLOORHAND	TRAVEL PAY	1		P0414	NT		
100255508	LENNIE, JOEY M	FLOORHAND	BASE PAY	12.50		P0414	NT		
100255508	LENNIE, JOEY M	FLOORHAND	TRAVEL PAY	1		P0414	NT		

Comments Joey Lennie Trainee 12.5 hrs. base pay & 1 hr. travel pay.

☐ **[I Acknowledge] Confirmation that all goods and services listed on ticket were received.**

(Leslie Cummings)
3/24/2013 6:14:38 PM

Nabors Representative

(Myles Hahn)
3/24/2013 6:14:50 PM

Customer Representative

FIELD TICKET

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Job Header

SHEHTAH NABORS LP
3000
500 - 4TH AVENUE SW
CALGARY,AB T2P 2V6
Ticket # P0414000646135

Customer	CONOCO PHILLIPS CANADA LIMITED	**Rig #**	P0414
Cust Address	2100, 250 - 6TH AVENUE SW CALGARY,AB,T2P 3H7,CANADA	**Date**	03/24/2013
Well/Lease	**0-06/COPRC LOON CREEK**	**Day**	12
State/County	NT/NPS - NT County		**GL:702000 NALN CA36**
Customer Rep	**MYLES HAHN**		**NETWORK:10345055 E120 IMPERT**
			PO:4600026584

Details of Operations

Ticket From Time : 00:00 (HHMM) **Ticket To Time :** 18:30 (HHMM)

From	To	Time	Code	Description
00:00	06:30	6 hrs 30 mins	F.99	Other - Clean up lease. Lay down light towers. Shift change. Exchange notes with day shift. Crew change.
06:30	07:00	0 hrs 30 mins	E.01	Safety Meeting - Held safety meeting with all personnel. Pre-risk assessment. Lel sweep of lease. Service equipment. Daily walk around inspection completed.
07:00	13:00	6 hrs 0 mins	F.99	Other - Drain boiler. Assist vacuum truck to clean rig tank. Load tubing onto trailer. Rig out pipe racks. Spot equipment on side of lease. Stack planks. Assist trucker to load equipment.
13:00	15:00	2 hrs 0 mins	A.01	Move Rig / Equipment - Move rig to Hodgson's yard in Norman wells.
15:00	18:30	3 hrs 30 mins	F.99	Other - Clean up plastic liners. Clean up lease of all garbage. Assist loader to move equipment for picker loads. SDFN.
Operation Hours :	**18 hrs 30 mins**			***Examples: Travel,Safety Meeting, etc.**
***Other Hours :**	**0 hrs 0 mins**			
Total Hours :	**18 hrs 30 mins**			

CheckList

- ☐ Crown/Ram Saver Test
- ☐ Anchor Test Charts
- ☑ Rig Motor Emerg. Air Kill
- ☐ Crown
- ☐ Tanks
- ☐ Kill Line Connected
- ☐ H_2S %
- ☐ Escape buggy Installed
- ☑ Equipment Grounded
- ☐ Pump Motor Emerg. Air Kill
- ☐ Main Drum Brake Linkage Chkd.
- ☐ Truck Motor Emerg. Air Kill
- ☐ Air Packs
- ☐ Fire Extinguisher
- ☑ All Signs In Place
- ☐ Pump Relief Valve Proper Setting Wing Flags
- ☐ Guylines
- ☐ Equipment Proper Spacing
- ☐ Emergency No.'s Posted

Type of Operation

COMPLETION

Safety Meeting

From Time	To Time	Meeting Topic	Notes
06:30	07:00	DRIVE-Driving	Rig move. Use radio's. Chain up equipment. Take your time. Use tow cat.

B.O.P. Function

B.O.P. Function Test : ☐ **Annular :** ☐ **Pipe :** ☐ **Blind :** ☑ **N/A :** ☐

Accum. Pressure : **Recharge Time :** mins secs

Precharge KPA #1 : **#2 :** **#3 :** **#4 :** **#5 :** **#6 :** **#7 :** **#8 :**

Drill Time Start(HHMM) : **Drill Time Stop :**

Weather

Temp	Wind
-18 °C	8MPH

Weather Conditions : Normal

Vehicles - Total Kms Travelled

Ticket Services

Service Id	Service Description	Billing Qty	UOM	Price	Amount	EDI1	EDI2	EDI3
LEL	LEL MONITOR	1.00	Day	$40.00	$40.00			
ELOT3	EXTRA LABOR - RIG MAN/DRILL OT	16.00	Hours	$95.00	$1,520.00			
ELOT4	EXTRA LABOR - DERRICK/FLOOR OT	28.00	Hours	$80.00	$2,240.00			
EL4	EXTRA LABOR - DERRICK/FLOOR	33.50	Hours	$65.00	$2,177.50			
EL3	EXTRA LABOR - RIG MAN/DRILL	17.00	Hours	$75.00	$1,275.00			
RIGOP	RIG HOURS-REGULAR	2.00	Hours	$719.00	$1,438.00			
TTBC	TRAVEL TIME	25.00	Man Hour	$19.00	$475.00			
LP25	LIGHTPLANT OVER 25KW	1.00	Day	$220.00	$220.00			
PPE	PERSONAL PROTECTIVE EQUIPMENT	1.00	Man Per Day	$16.50	$16.50			
			Daily Estimated Total :		**$9,402.00**			

Payroll Information

☐ Clothing Allowance ☐ Northern Job

Emp ID	Employee Name	Job Code	Income Code	Hours	Mileage	Cost Center	Province	Inj. Free	Sign Off
100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	BASE PAY	12		P0414	NT	☐	☐
100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	MILE 1 DIESEL		100	P0414	NT	☐	☐
100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	TRAVEL PAY	1		P0414	NT	☐	☐
100063862	RAMSEY, STUART L	DRILLER	BASE PAY	12		P0414	NT	☐	☐
100063862	RAMSEY, STUART L	DRILLER	MILE 1 DIESEL		100	P0414	NT	☐	☐
100063862	RAMSEY, STUART L	DRILLER	TRAVEL PAY	1		P0414	NT	☑	☐

FIELD TICKET

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Job Header

SHEHTAH NABORS LP
3000
500 - 4TH AVENUE SW
CALGARY,AB T2P 2V6
Ticket # P0414000646135

Customer CONOCO PHILLIPS CANADA LIMITED
Cust Address 2100, 250 - 6TH AVENUE SW CALGARY,AB,T2P 3H7,CANADA
Well/Lease O-06/COPRC LOON CREEK
State/County NT/NPS - NT County
Customer Rep MYLES HAHN

Rig # P0414
Date 03/24/2013
Day 12

GL:702000 NALN CA36
NETWORK:10345055 E120 IMPERT
PO:4600026584

100203551	VALLIS, LEE C	DERRICKHAND	BASE PAY	12		P0414	NT		
100203551	VALLIS, LEE C	DERRICKHAND	TRAVEL PAY	1		P0414	NT		
100252232	BARGEN, JARED R	FLOORHAND	BASE PAY	12		P0414	NT		
100252232	BARGEN, JARED R	FLOORHAND	TRAVEL PAY	1		P0414	NT		
100254531	KERTESZ, SIMON S	FLOORHAND	BASE PAY	12		P0414	NT		
100254531	KERTESZ, SIMON S	FLOORHAND	TRAVEL PAY	1		P0414	NT		
100064049	FOURNEL, LEO	RIG SUPERVISOR	TRAVEL PAY	5		P0414	NT		
100221733	HOULE, JOSEPH B	DRILLER-TECH	MILE 1 DIESEL		100	P0414	NT		
100221733	HOULE, JOSEPH B	DRILLER-TECH	TRAVEL PAY	5		P0414	NT		
100244232	SMITH, JARROD T	DERRICKHAND	TRAVEL PAY	5		P0414	NT		
100234943	RAMOS, ROBERT	FLOORHAND	TRAVEL PAY	5		P0414	NT		
100253069	YOUNG, KARL R	FLOORHAND	TRAVEL PAY	5		P0414	NT		
100255508	LENNIE, JOEY M	FLOORHAND	BASE PAY	12		P0414	NT		
100255508	LENNIE, JOEY M	FLOORHAND	TRAVEL PAY	1		P0414	NT		

Comments Joey Lennie Trainee 12 hrs. base pay & 1 hr. travel pay. Night crew flew home. 2 hrs. rig time to move rig to Norman wells. Extra labor for the rest of day.

[I Acknowledge] Confirmation that all goods and services listed on ticket were received.

(Lesile Cummings) 3/24/2013 6:32:00 PM	(Myles Hahn) 3/24/2013 8:22:50 PM
Nabors Representative	Customer Representative

FIELD TICKET

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Job Header

SHEHTAH NABORS LP
3000
500 - 4TH AVENUE SW
CALGARY,AB T2P 2V6
Ticket # P0414000646136

Customer	CONOCO PHILLIPS CANADA LIMITED	Rig #	P0414
Cust Address	2100, 250 - 6TH AVENUE SW CALGARY,AB,T2P 3H7,CANADA	Date	03/25/2013
Well/Lease	0-06/COPRC LOON CREEK	Day	13
State/County	NT/NPS - NT County		GL:702000 NALN CA36
Customer Rep	MYLES HAHN		NETWORK:10345055 E120 IMPERT
			PO:4600026584

Details of Operations

Ticket From Time : 06:30 (HHMM) Ticket To Time : 14:30 (HHMM)

From	To	Time	Code	Description
06:30	07:00	0 hrs 30 mins	E.01	Safety Meeting - Held safety with all personnel. Pre-risk assessment. Daily walk around inspection completed.
07:00	14:30	7 hrs 30 mins	F.99	Other - Clean up & inspect lease. Prepare equipment to be move to Norman Wells. Wait for afternoon flight home. SDFN.
Operation Hours :	8 hrs 0 mins			*Examples: Travel,Safety Meeting, etc.
*Other Hours :	0 hrs 0 mins			
Total Hours :	8 hrs 0 mins			

CheckList

- ☐ Crown/Ram Saver Test
- ☐ Anchor Test Charts
- ☐ Rig Motor Emerg. Air Kill
- ☐ Crown
- ☐ Tanks
- ☐ Kill Line Connected
- ☐ H_2S %
- ☐ Escape buggy Installed
- ☐ Equipment Grounded
- ☐ Pump Motor Emerg. Air Kill
- ☐ Main Drum Brake Linkage Chkd.
- ☐ Truck Motor Emerg. Air Kill
- ☐ Air Packs
- ☐ Fire Extinguisher
- ☐ All Signs in Place
- ☐ Pump Relief Valve Proper Setting Wing Flags
- ☐ Guylines
- ☐ Equipment Proper Spacing
- ☐ Emergency No.'s Posted

Type of Operation

COMPLETION

Safety Meeting

From Time	To Time	Meeting Topic	Notes
06:30	07:00	DRIVE-Driving	Use road radio's. Be alert. Slow down for oncoming traffic. Watch for wildlife.

B.O.P. Function

B.O.P. Function Test : ☐ Annular : ☐ Pipe : ☐ Blind : ☐ N/A : ☐

Accum. Pressure : Recharge Time : mins secs

Precharge KPA #1 : #2 : #3 : #4 : #5 : #6 : #7 : #8 :

Drill Time Start(HHMM) : Drill Time Stop :

Weather

Temp -18 °C Wind 8MPH
Weather Conditions : Normal

Vehicles - Total Kms Travelled

Ticket Services

Service Id	Service Description	Billing Qty	UOM	Price	Amount	EDI1	EDI2	EDI3
EL4	EXTRA LABOR - DERRICK/FLOOR	32.00	Hours	$65.00	$2,080.00			
EL3	EXTRA LABOR - RIG MAN/DRILL	16.00	Hours	$75.00	$1,200.00			
TTBC	TRAVEL TIME	28.00	Man Hour	$19.00	$532.00			
RMZ1	RIG MANAGER VEHICLE	100.00	Kilometers	$1.25	$125.00			
KMZ1	CREW VEHICLE	100.00	Kilometers	$1.25	$125.00			
PPE	PERSONAL PROTECTIVE EQUIPMENT	6.00	Man Per Day	$16.50	$99.00			
MISC	FLIGHTS	1.00	Each	$5,087.52	$5,087.52			
				Daily Estimated Total :	$9,248.52			

Payroll Information

☐ Clothing Allowance ☐ Northern Job

Emp ID	Employee Name	Job Code	Income Code	Hours	Mileage	Cost Center	Province	Inj. Free	Sign Off
100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	BASE PAY	8		P0414	NT	☐	☐
100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	MILE 1 DIESEL		100	P0414	NT	☐	☐
100066388	CUMMINGS, LESLIE D	RIG SUPERVISOR	TRAVEL PAY	5		P0414	NT	☐	☐
100063862	RAMSEY, STUART L	DRILLER	BASE PAY	8		P0414	NT	☐	☐
100063862	RAMSEY, STUART L	DRILLER	MILE 1 DIESEL		100	P0414	NT	☐	☐
100063862	RAMSEY, STUART L	DRILLER	TRAVEL PAY	5		P0414	NT	☐	☐
100203551	VALLIS, LEE C	DERRICKHAND	BASE PAY	8		P0414	NT	☐	☐
100203551	VALLIS, LEE C	DERRICKHAND	TRAVEL PAY	5		P0414	NT	☐	☐
100252232	BARGEN, JARED R	FLOORHAND	BASE PAY	8		P0414	NT	☐	☐
100252232	BARGEN, JARED R	FLOORHAND	TRAVEL PAY	5		P0414	NT	☐	☐

FIELD TICKET

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Job Header

SHEHTAH NABORS LP
3000
500 - 4TH AVENUE SW
CALGARY,AB T2P 2V6
Ticket # P0414000646136

Customer	CONOCO PHILLIPS CANADA LIMITED	**Rig #**	P0414
Cust Address	2100, 250 - 6TH AVENUE SW CALGARY,AB,T2P 3H7,CANADA	**Date**	03/25/2013
Well/Lease	**O-06/COPRC LOON CREEK**	**Day**	13
State/County	NT/NPS - NT County		**GL:702000 NALN CA36**
Customer Rep	**MYLES HAHN**		**NETWORK:10345055 E120 IMPERT**
			PO:4600026584

100254531	KERTESZ, SIMON S	FLOORHAND	BASE PAY	8		P0414	NT		
100254531	KERTESZ, SIMON S	FLOORHAND	TRAVEL PAY	5		P0414	NT		

Comments Joey Lennie Trainee 8 hrs. base pay & 3 hrs. travel pay. Day crew flew home.

[I Acknowledge] Confirmation that all goods and services listed on ticket were received.

(Leslie Cummings)	(Myles Hahn)
3/24/2013 9:16:15 PM	3/24/2013 9:16:29 PM
Nabors Representative	**Customer Representative**

Schlumberger

Company: CONOCOPHILLIPS CANADA RESOURCES CORP.

Well: COPRC LOON CREEK O-6

Field: LOON CREEK

Province: Northwest Territories *Vertical Well*

RESERVOIR SATURATION LOG
SIGMA / CARBON OXYGEN

DM 9144/4

Province: Northwest Territories
Field: LOON CREEK
Location: UNIT O SECTION 6
Well: COPRC LOON CREEK O-6
Company: CONOCOPHILLIPS CANADA RESOURCES CORP.

LOCATION

UNIT O SECTION 6
300O066510127000
NORTHING: 7220618.3 EASTING: 593560.14

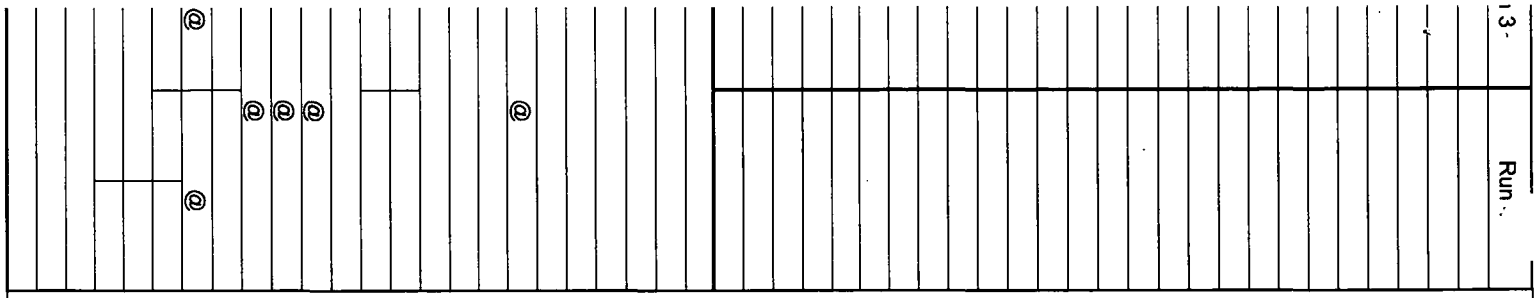
Elev.: K.B. 257.60 m
G.L. 252.40 m
D.F. 257.30 m

Permanent Datum: Ground Level — Elev.: 252.40 m
Log Measured From: Kelly Bushing — 5.20 m above Perm. Datum
Drilling Measured From: Kelly Bushiing

API Serial No.		Latitude	Longitude
EL470		127d 0' 30.7	65d 5' 51.5

	Run 1	Run 2	Run 3
Logging Date	17-Feb-2013		
Run Number	2.4		
Depth Driller	1856 m		
Schlumberger Depth	1857.6 m		
Bottom Log Interval	1832 m		
Top Log Interval	870 m		
Casing Driller Size @ Depth	244.500 mm @ 597.8 m	@	@
Casing Schlumberger	597.8 m		
Bit Size	222.000 mm		
Type Fluid In Hole	INVERT		
MUD Density / Viscosity	945 kg/m3 / 84 s	/	/
MUD Fluid Loss / PH	/	/	/
MUD Source Of Sample	N/A		
RM @ Measured Temperature	@	@	@
RMF @ Measured Temperature	@	@	@
RMC @ Measured Temperature	@	@	@
Source RMF / RMC	N/A / N/A	/	/
RM @ MRT / RMF @ MRT	@ 85 / @ 85	@ / @	@ / @
Maximum Recorded Temperatures	85 degC / 84	/	/
Circulation Stopped / Time	15-Feb-2013 / 7:30	/	/
Logger On Bottom / Time	17-Feb-2013 / 20:00	/	/
Unit Number / Location	2187 / GRANDE PRAIRIE	/	/
Recorded By	JEFFREY TATLOCK		
Witnessed By	DAVID LAWRENCE		

	Run 1	Run 2	Run 3
Logging Date			
Run Number			
Depth Driller			
Schlumberger Depth			
Bottom Log Interval			
Top Log Interval			
Casing Driller Size @ Depth		@	
Casing Schlumberger			
Bit Size			
Type Fluid In Hole			
MUD Density / Viscosity		/	
MUD Fluid Loss / PH		/	
MUD Source Of Sample			
RM @ Measured Temperature		@	
RMF @ Measured Temperature		@	
RMC @ Measured Temperature		@	
Source RMF / RMC		/	
RM @ MRT / RMF @ MRT	@	@	
Maximum Recorded Temperatures		/	
Circulation Stopped / Time		/	
Logger On Bottom / Time		/	
Unit Number / Location	/		
Recorded By			
Witnessed By			



DEPTH SUMMARY LISTING

Date Created: 17-FEB-2013 20:28:39

Depth System Equipment

Depth Measuring Device		Tension Device		Logging Cable	
Type:	IDW-B	Type:	CMTD-B/A	Type:	7-46P XS
Serial Number:	1734	Serial Number:	1223	Serial Number:	6075
Calibration Date:	13-NOV-2013	Calibration Date:	17-JAN-2013	Length:	4500 M
Calibrator Serial Number:	4	Calibrator Serial Number:	1142		
Calibration Cable Type:	7-46P XS	Number of Calibration Points:	10	Conveyance Method:	Wireline
Wheel Correction 1:	-5	Calibration RMS:	26	Rig Type:	LAND
Wheel Correction 2:	-4	Calibration Peak Error:	45		

Depth Control Parameters

Log Sequence:	Subsequent Log In the Well
Reference Log Name:	PLATFORM EXPRESS COMPENSATED NEUTRON DUAL LITHOLOGY DENSITY LOG
Reference Log Run Number:	1.1
Reference Log Date:	30-JAN-2013

Depth Control Remarks

1. SCHLUMBERGER DEPTH CONTROL PROCEDURES FOLLOWED
2. IDW USED AS PRIMARY DEPTH CONTROL
3. Z-CHART USED AS SECONDARY DEPTH CONTROL
4. ALL LOGS CORRELATED TO REFERENCE LOG
5.
6.

DISCLAIMER

THE USE OF AND RELIANCE UPON THIS RECORDED-DATA BY THE HEREIN NAMED COMPANY (AND ANY OF ITS AFFILIATES, PARTNERS, REPRESENTATIVES, AGENTS, CONSULTANTS AND EMPLOYEES) IS SUBJECT TO THE TERMS AND CONDITIONS AGREED UPON BETWEEN SCHLUMBERGER AND THE COMPANY, INCLUDING: (a) RESTRICTIONS ON USE OF THE RECORDED-DATA; (b) DISCLAIMERS AND WAIVERS OF WARRANTIES AND REPRESENTATIONS REGARDING COMPANY'S USE OF AND RELIANCE UPON THE RECORDED-DATA; AND (c) CUSTOMER'S FULL AND SOLE RESPONSIBILITY FOR ANY INFERENCE DRAWN OR DECISION MADE IN CONNECTION WITH THE USE OF THIS RECORDED-DATA.

OTHER SERVICES1		OTHER SERVICES2	
OS1:	AIT-ILE-NEXT-PEX-TLD	OS1:	
OS2:	UBI-OBMI-OBMI2-PPC-	OS2:	
OS3:	-MSIP	OS3:	
OS4:	ADT-HNGS-CMR	OS4:	
OS5:		OS5:	

REMARKS: RUN NUMBER 1	REMARKS: RUN NUMBER 2
ALL PRESENTATIONS AND INTERVALS AS PER CLIENT REQUEST	
SLB CREW: GREG BOYD, BASIL MARTIN	
RIG: BEAVER 2	
LOGGER ARRIVED AT: 12:00 15-FEB-2013	
RIG READY AT : 15:00 15-FEB-2013	
RST EXHIBITED HIGH VOLTAGE LEAKAGES, PUTTING STRAIN ON THE MINITRON	
TOOL LOGGED WITH A REDUCED SET POINT TO REDUCE THE LOAD ON THE MINITRON	

TO REDUCE RISK OF MINITRON FAILURE DURING POWER UP / POWER DOWN SEQUENCE, MINITRON WAS LEFT ON BETWEEN PASSES

RUN 1			RUN 2		
SERVICE ORDER #:		CA5M-00021	SERVICE ORDER #:		
PROGRAM VERSION:		19C0-187	PROGRAM VERSION:		
FLUID LEVEL:			FLUID LEVEL:		
LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP

EQUIPMENT DESCRIPTION

RUN 1

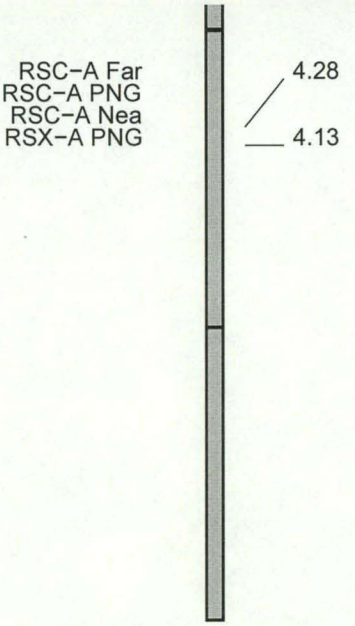
SURFACE EQUIPMENT

WITM-A
PSC_16MHZ

DOWNHOLE EQUIPMENT

LEH-QT LEH-QT			13.17
ILE-F ILE-F			12.28
AH-83			9.84
	Detail MT		
EQF-43	TelStatus		9.68
	CTEM	9.58	
PSPT			9.58
PSC-A PSPT-A PSTC-A PBMS-A 10k_Sapphire_Mano RTD_Thermometer GR CCL PBMS	GR	8.45	
	Well_Temp	7.51	
	Manometer	7.47	
	CCL	7.29	
	PBMS PSTC	7.06	
RST-C RSCH-A RSC-E RSS-A RSXH-A RSX-E			7.06

RUN 2



BNS-CCS

0.04

MAXIMUM STRING DIAMETER 92 MM
MEASUREMENTS RELATIVE TO TOOL ZERO
ALL LENGTHS IN METERS

Company: CONOCOPHILLIPS CANADA RESOURCES CORP. **Well: COPRC LOON CREEK O-6**

Input DLIS Files

DEFAULT	RST_PSP_034LUP	FN:49	PRODUCER	18-Feb-2013 12:18	989.4 M	854.5 M

Output DLIS Files

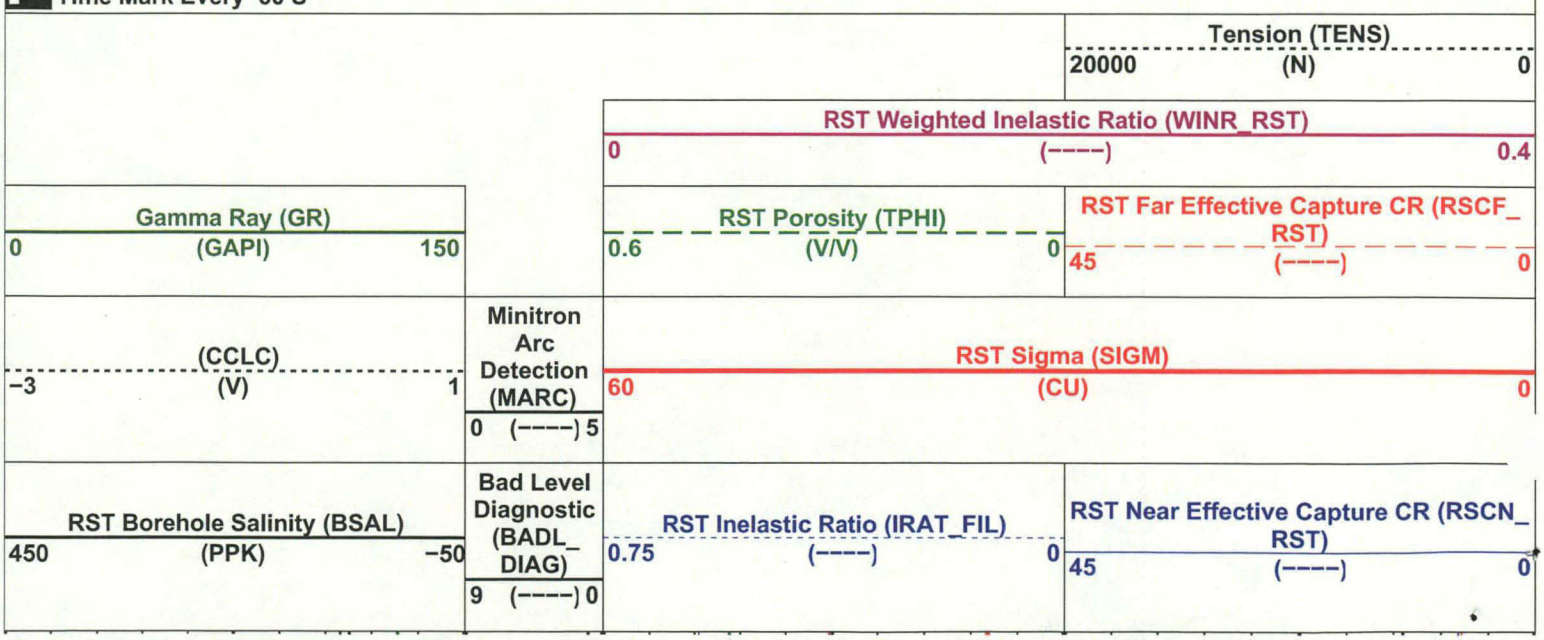
DEFAULT	RST_PSP_037PUP	FN:55	PRODUCER	18-Feb-2013 12:52	989.2 M	849.0 M
RTB	RST_PSP_037PUP	FN:56	PRODUCER	18-Feb-2013 12:54	989.2 M	849.0 M

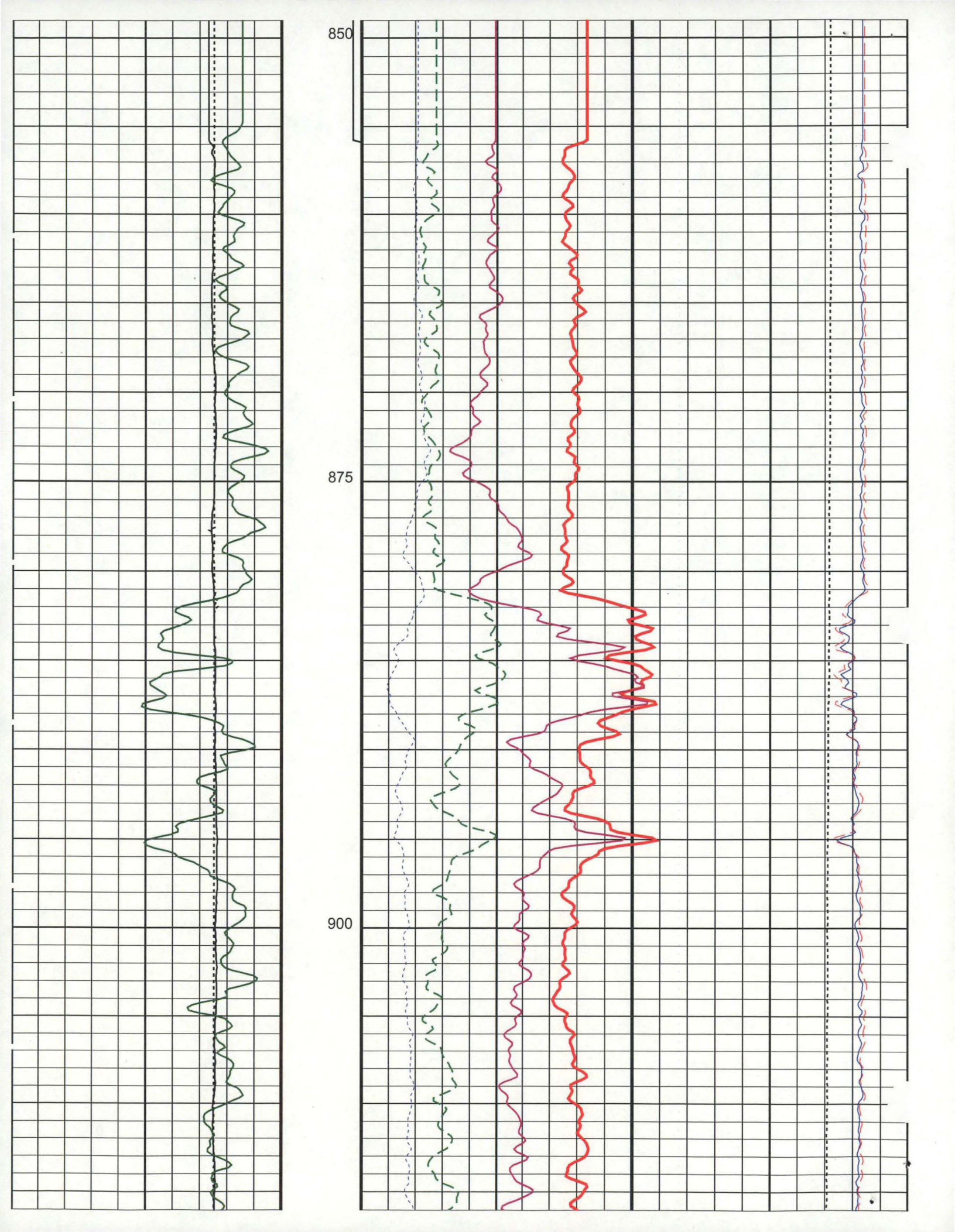
OP System Version: 19C0-187

RST-C	SRPC-5047-H1-2011-OP19	PSPT	19C0-187

PIP SUMMARY

Time Mark Every 60 S

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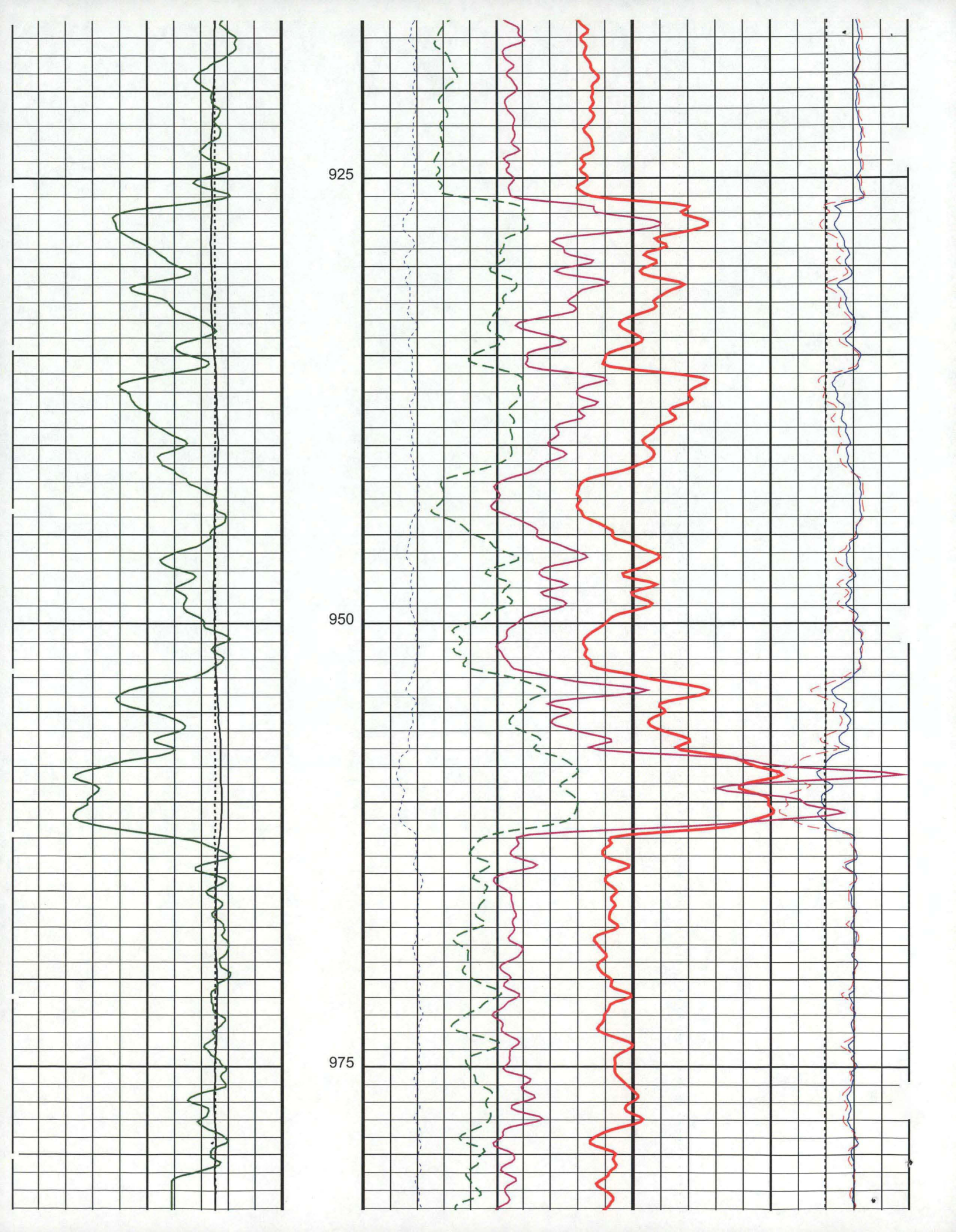
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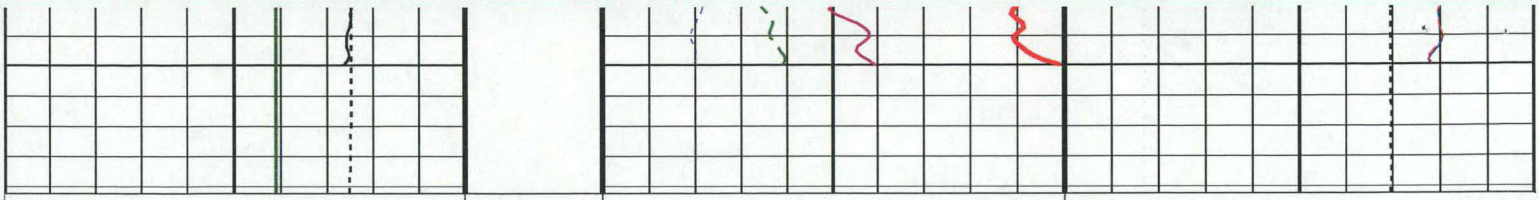


RST Borehole Salinity (BSAL)	Bad Level Diagnostic (BADL_DIAG)	RST Inelastic Ratio (IRAT_FIL)	RST Near Effective Capture CR (RSCN_RST)
450 (PPK) −50	9 (----) 0	0.75 (----) 0	45 (----) 0
(CCLC)	Minitron Arc Detection (MARC)	RST Sigma (SIGM)	
−3 (V) 1	0 (----) 5	60 (CU) 0	
Gamma Ray (GR)		RST Porosity (TPHI)	RST Far Effective Capture CR (RSCF_RST)
0 (GAPI) 150		0.6 (V/V) 0	45 (----) 0
		RST Weighted Inelastic Ratio (WINR_RST)	
		0 (----) 0.4	
			Tension (TENS)
			20000 (N) 0

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value	
	RST-C: Reservoir Saturation Pro Tool C		
AIRB	RST Air Borehole	No	
BHS	Borehole Status	OPEN	
BSALOPT	RST Borehole Salinity Option	Unknown	
BSFL	RST Borehole Salinity Filter Length	51	
DFPC	RST Depth Filter Processing Constant	One	
DFPC_TDTL	RST Depth Filter Processing Constant (TDT-like)	Two	
MATR	Rock Matrix for Neutron Porosity Corrections	SANDSTONE	
NORM_IRAT_RST	RST Normalized Inelastic Ratio	0.48	
NORM_SIGM_RST	RST Normalized Sigma	3	M-1
RGAI	Near/Far Gain Calibration Ratio	1	
TIER_IC	RST IC Acquisition Mode	0_CO_Yield_and_Spectrolith	
TIER_SIGM	RST Sigma Acquisition Mode	0_RST_Sigma	
	PSPT: Production Services Logging Platform		
BHS	Borehole Status	OPEN	
MATR	Rock Matrix for Neutron Porosity Corrections	SANDSTONE	
	System and Miscellaneous		
BS	Bit Size	222.000	MM
BSAL	Borehole Salinity	−50000.00	PPM
CSIZ	Current Casing Size	244.500	MM
CWEI	Casing Weight	53.57	KG/M
DO	Depth Offset for Playback	−0.2	M
PP	Playback Processing	NORMAL	

Format: RST_SIG_ANSW Vertical Scale: 1:240 Graphics File Created: 18-Feb-2013 12:52

OP System Version: 19C0-187

RST-C	SRPC-5047-H1-2011-OP19	PSPT	19C0-187

Input DLIS Files

DEFAULT	RST_PSP_034LUP	FN:49	PRODUCER	18-Feb-2013 12:18	989.4 M	854.5 M

Output DLIS Files

DEFAULT	RST_PSP_037PUP	FN:55	PRODUCER	18-Feb-2013 12:52
RTB	RST_PSP_037PUP	FN:56	PRODUCER	18-Feb-2013 12:54

Company: CONOCOPHILLIPS CANADA RESOURCES CORP. Well: COPRC LOON CREEK O-6

Input DLIS Files

DEFAULT	RST_PSP_009PUP	FN:13	PRODUCER	17-Feb-2013 18:40	1839.5 M	1489.3 M

Output DLIS Files

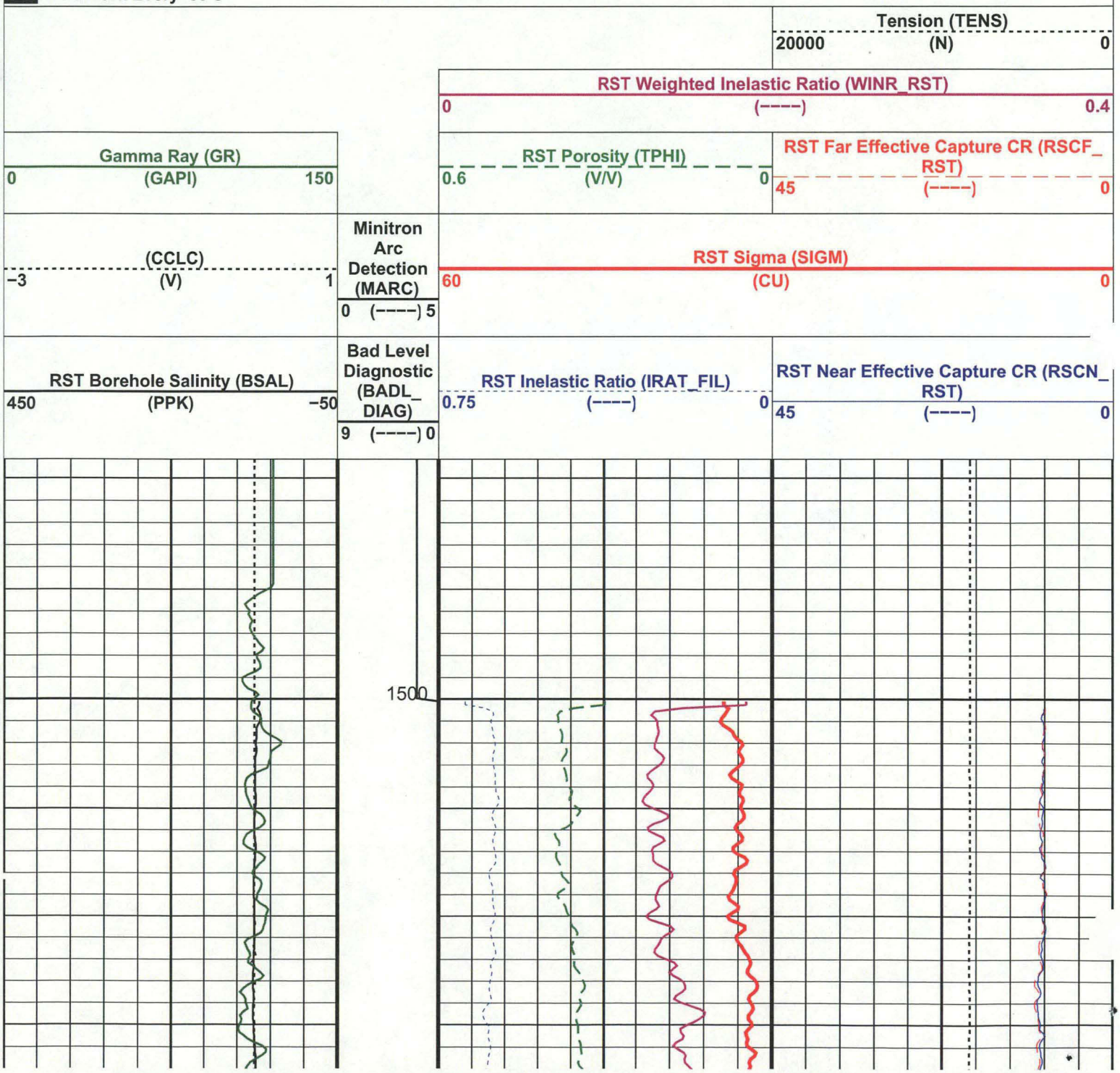
DEFAULT	RST_PSP_041PUP	FN:58	PRODUCER	05-Mar-2013 10:20	1839.3 M	1489.1 M

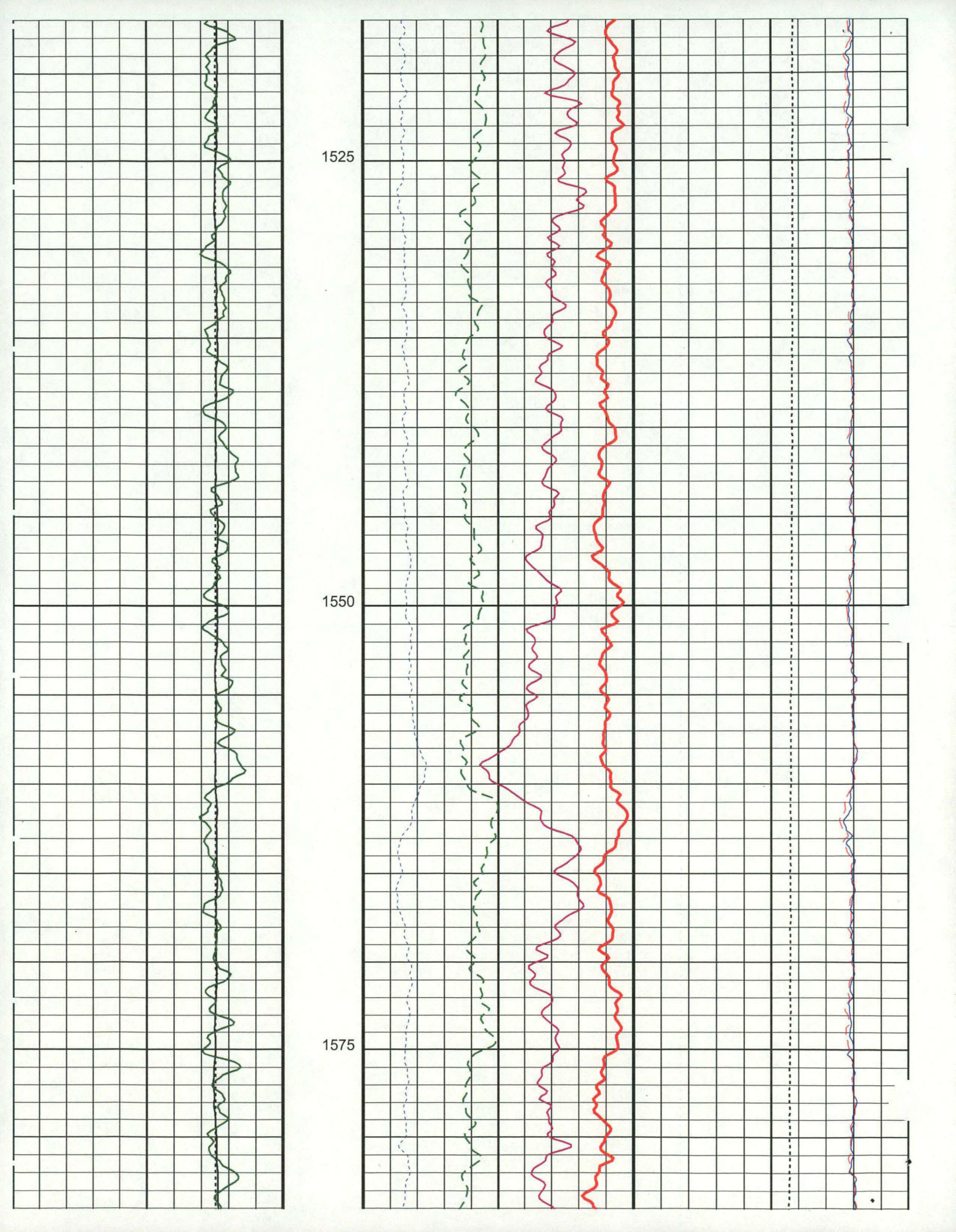
OP System Version: 19C0-187

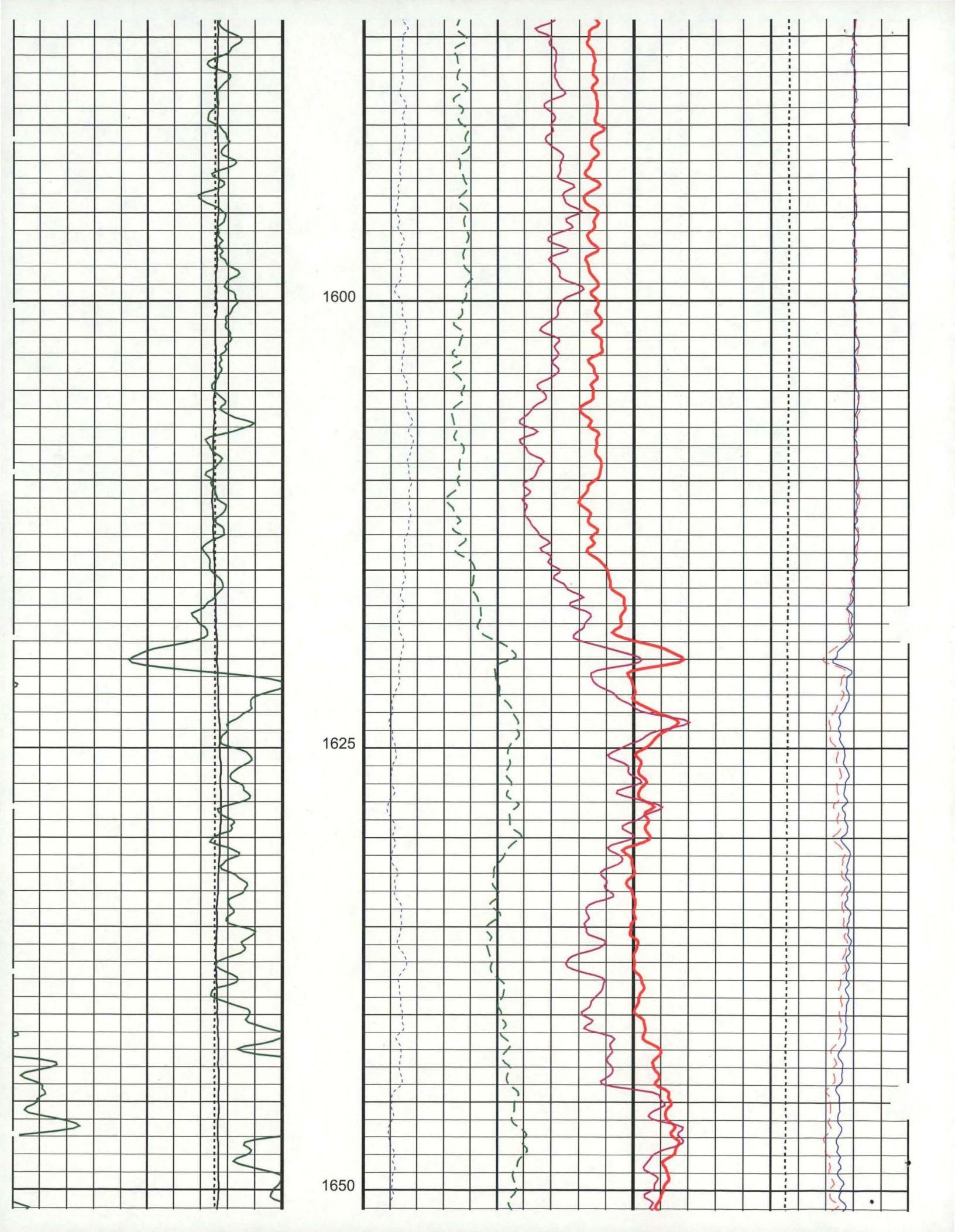
RST-C	SRPC-5047-H1-2011-OP19	PSPT	19C0-187

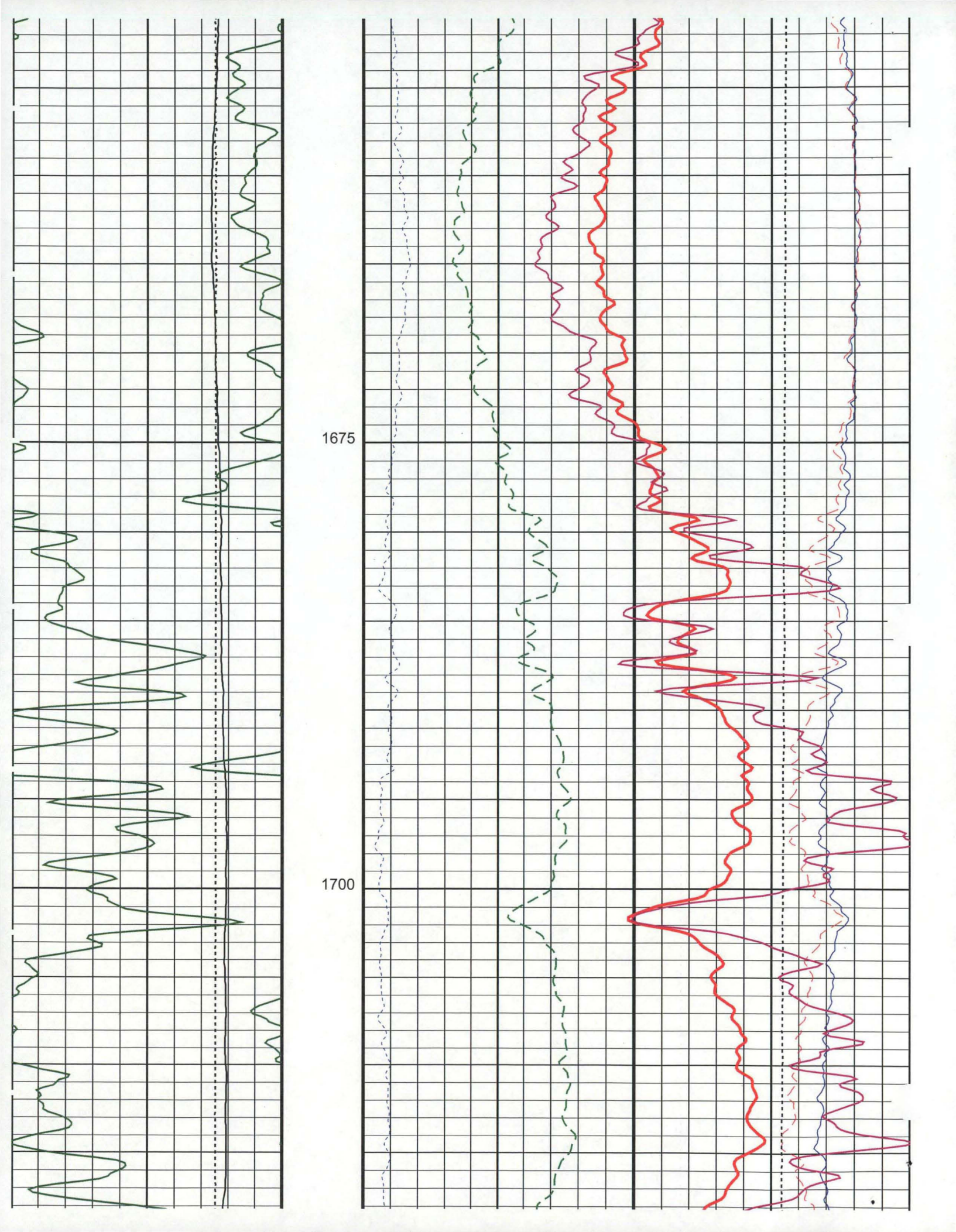
PIP SUMMARY

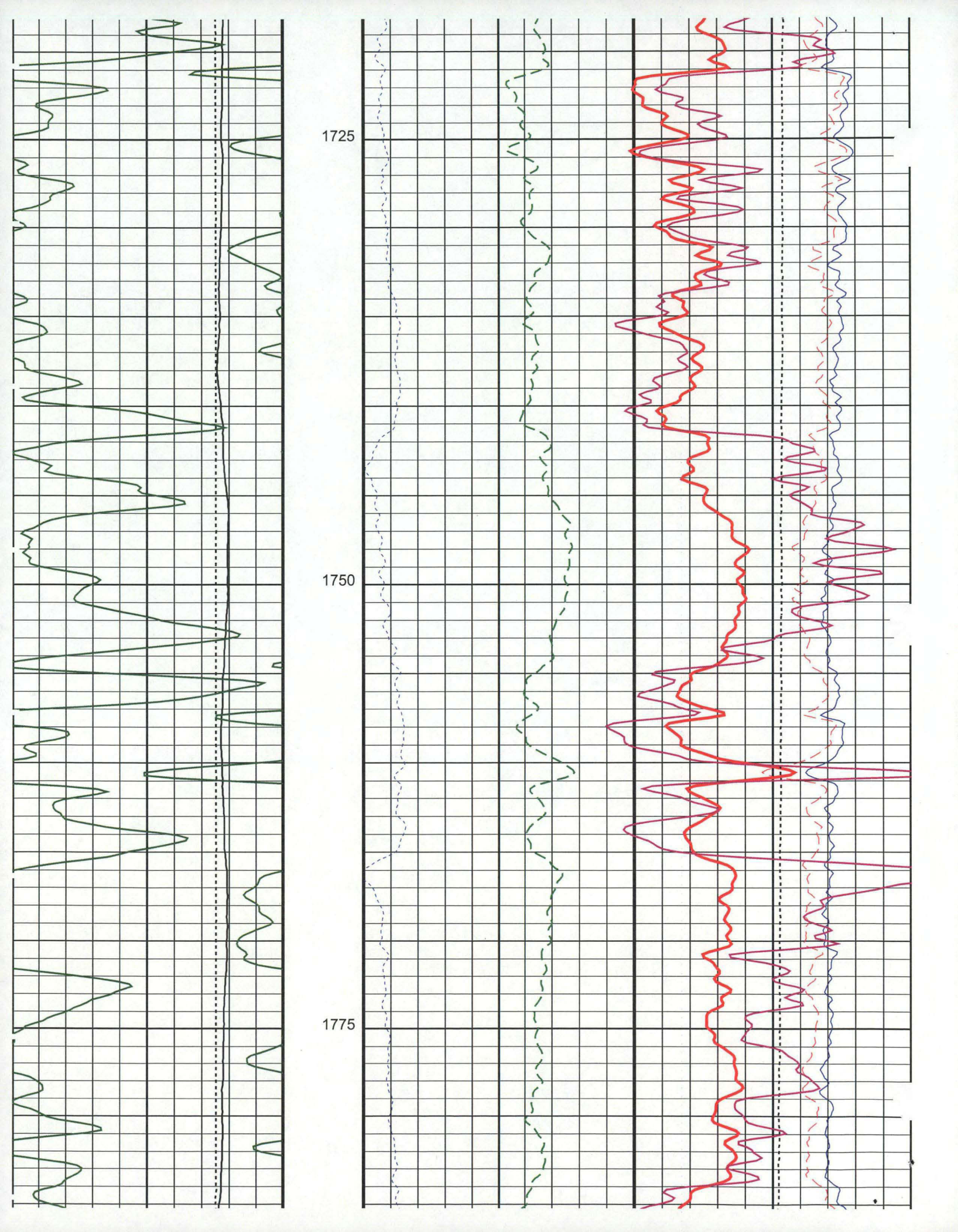
Time Mark Every 60 S

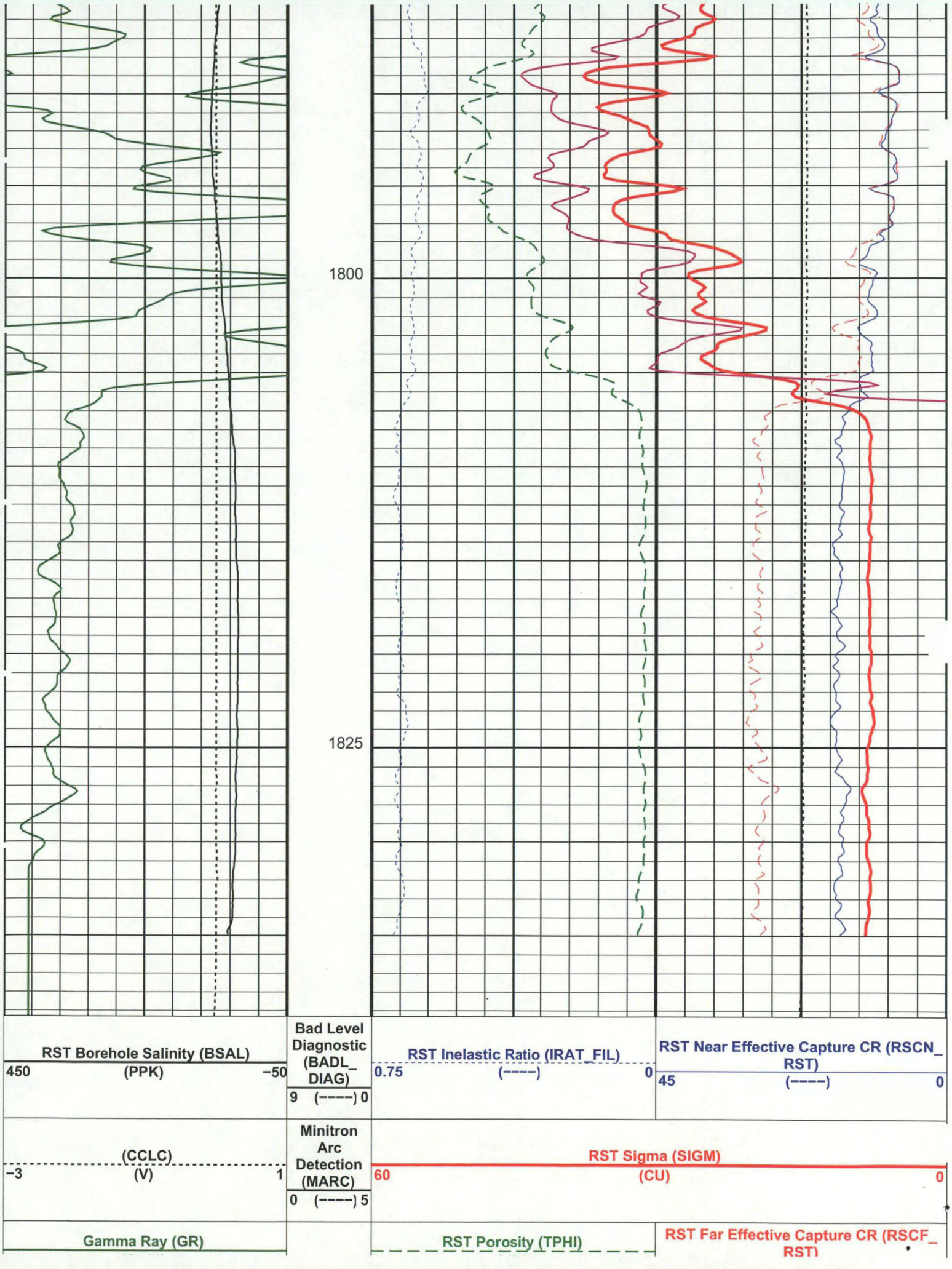



1525
1550
1575


1600
1625
1650


1675
1700


1725
1750
1775


1800
1825
RST Borehole Salinity (BSAL)
450 (PPK) −50
Bad Level Diagnostic (BADL_ DIAG)
9 (----) 0
RST Inelastic Ratio (IRAT_FIL)
0.75 (----) 0
RST Near Effective Capture CR (RSCN_ RST)
45 (----) 0
(CCLC)
−3 (V) 1
Minitron Arc Detection (MARC)
0 (----) 5
RST Sigma (SIGM)
60 (CU) 0
Gamma Ray (GR)
RST Porosity (TPHI)
RST Far Effective Capture CR (RSCF_ RST)

0	(GAPI)	150	0.6	(V/V)	0	45 (----)	0

RST Weighted Inelastic Ratio (WINR_RST)

0 (----) 0.4

Tension (TENS)

20000 (N)

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value	
	RST-C: Reservoir Saturation Pro Tool C		
AIRB	RST Air Borehole	No	
BHS	Borehole Status	OPEN	
BSALOPT	RST Borehole Salinity Option	Unknown	
BSFL	RST Borehole Salinity Filter Length	51	
DFPC	RST Depth Filter Processing Constant	One	
DFPC_TDTL	RST Depth Filter Processing Constant (TDT-like)	Two	
MATR	Rock Matrix for Neutron Porosity Corrections	SANDSTONE	
NORM_IRAT_RST	RST Normalized Inelastic Ratio	0.48	
NORM_SIGM_RST	RST Normalized Sigma	3	M-1
RGAI	Near/Far Gain Calibration Ratio	1	
TIER_IC	RST IC Acquisition Mode	0_CO_Yield_and_Spectrolith	
TIER_SIGM	RST Sigma Acquisition Mode	0_RST_Sigma	
	PSPT: Production Services Logging Platform		
BHS	Borehole Status	OPEN	
MATR	Rock Matrix for Neutron Porosity Corrections	SANDSTONE	
	System and Miscellaneous		
BS	Bit Size	222.000	MM
BSAL	Borehole Salinity	-50000.00	PPM
CSIZ	Current Casing Size	244.500	MM
DO	Depth Offset for Playback	-0.2	M
PP	Playback Processing	NORMAL	

Format: RST_SIG_ANSW Vertical Scale: 1:240 Graphics File Created: 05-Mar-2013 10:20

OP System Version: 19C0-187

RST-C	SRPC-5047-H1-2011-OP19	PSPT	19C0-187

Input DLIS Files

DEFAULT	RST_PSP_009PUP	FN:13	PRODUCER	17-Feb-2013 18:40	1839.5 M	1489.3 M

Output DLIS Files

DEFAULT	RST_PSP_041PUP	FN:58	PRODUCER	05-Mar-2013 10:20		

Company: CONOCOPHILLIPS CANADA RESOURCES CORP. Well: COPRC LOON CREEK O-6

Input DLIS Files

DEFAULT	RST_PSP_010LUP	FN:15	PRODUCER	17-Feb-2013 19:03	1844.6 M	1479.7 M

Output DLIS Files

DEFAULT	RST_PSP_016PUP	FN:27	PRODUCER	17-Feb-2013 20:06	1842.4 M	1509.4 M
RTB	RST_PSP_016PUP	FN:28	PRODUCER	17-Feb-2013 20:06	1842.4 M	1509.4 M

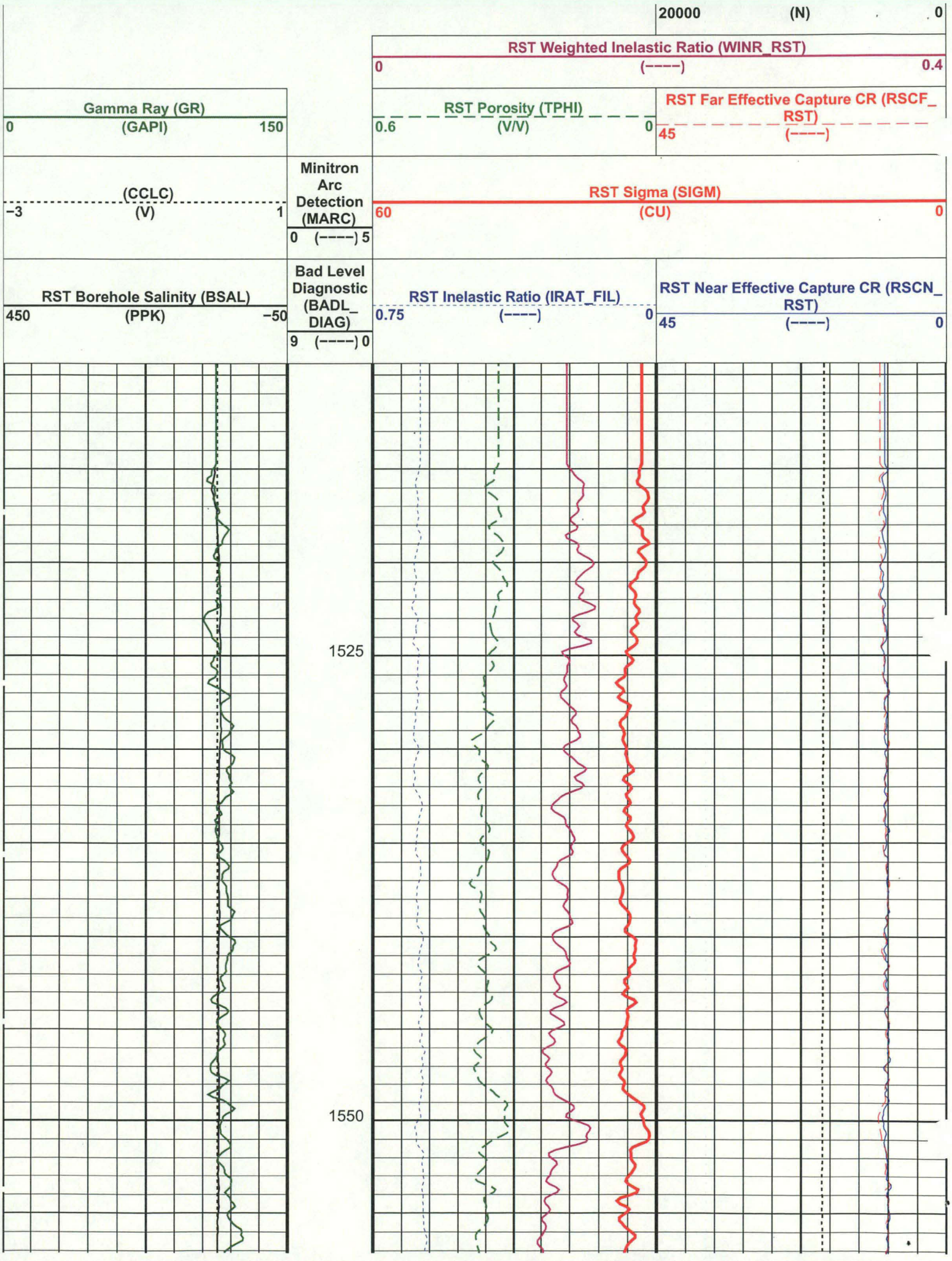
OP System Version: 19C0-187

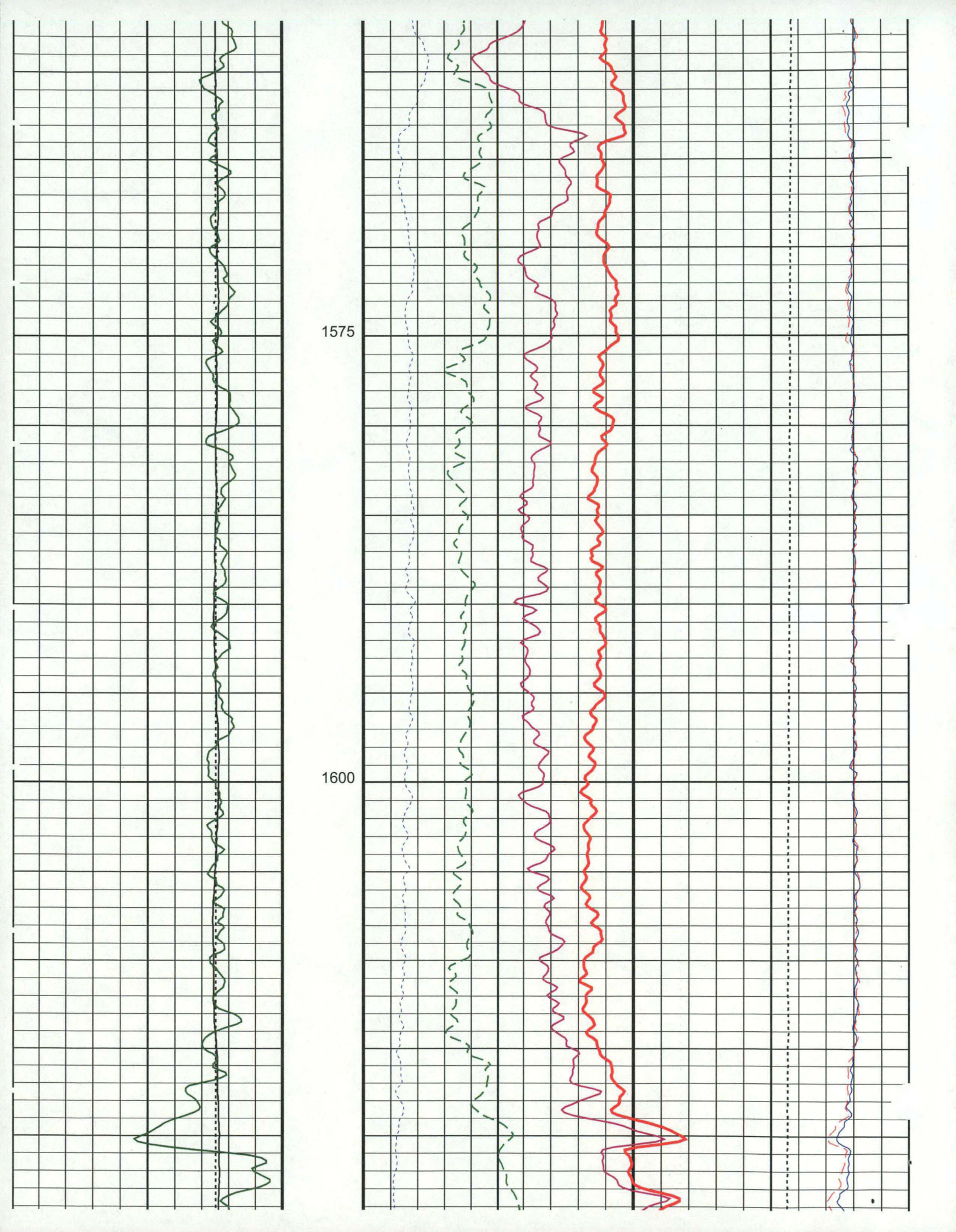
RST-C	SRPC-5047-H1-2011-OP19	PSPT	19C0-187

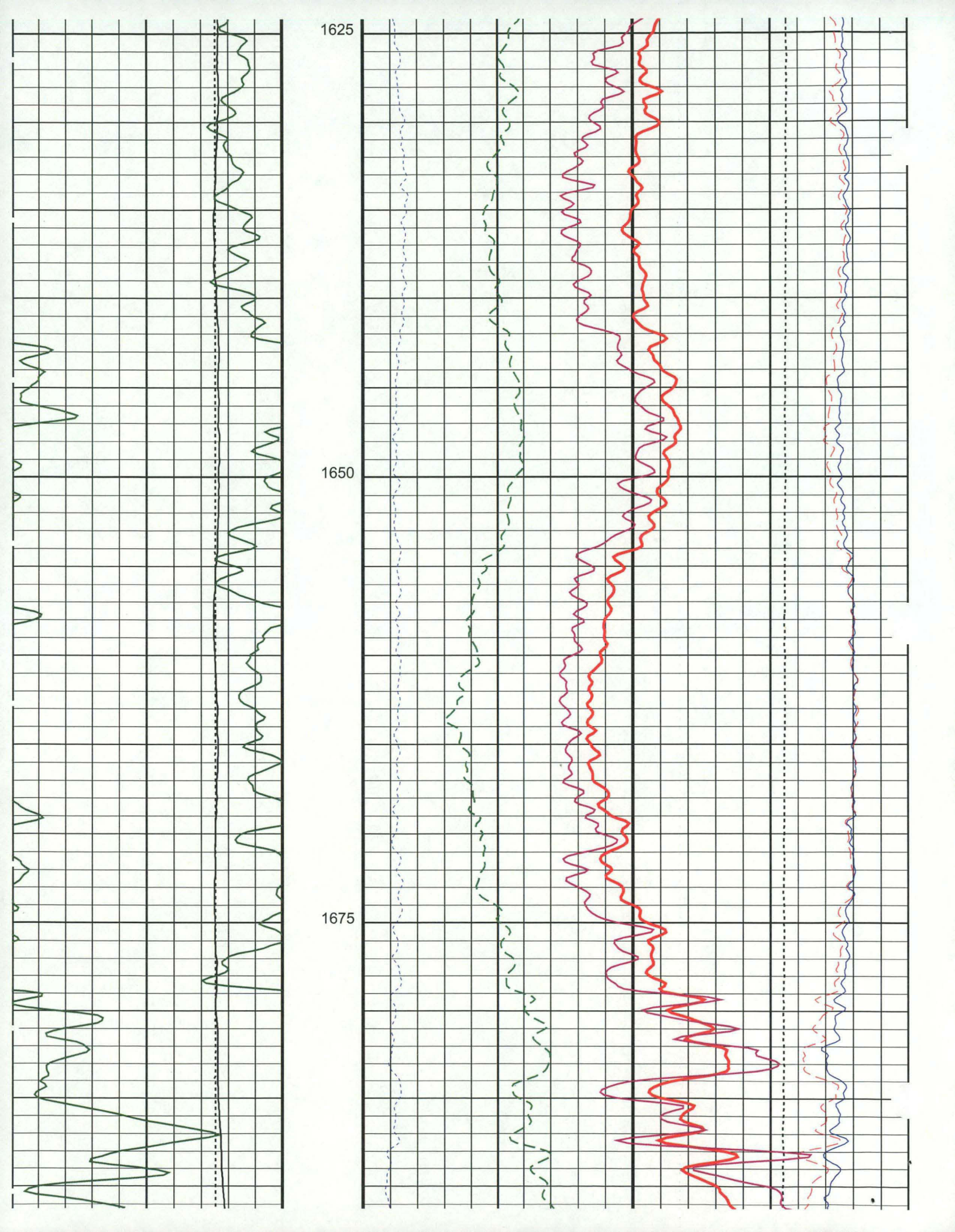
PIP SUMMARY

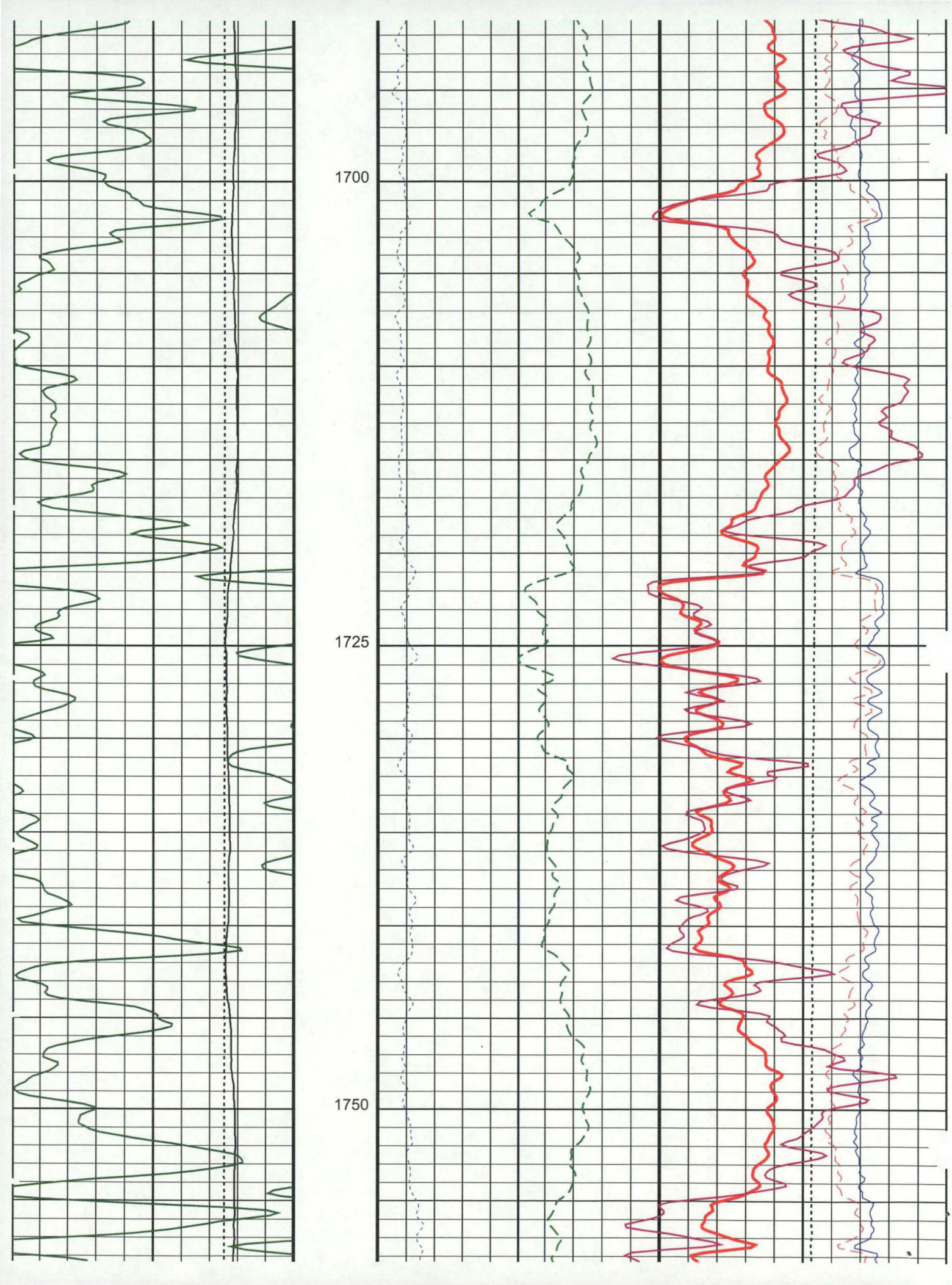
Time Mark Every 60 S

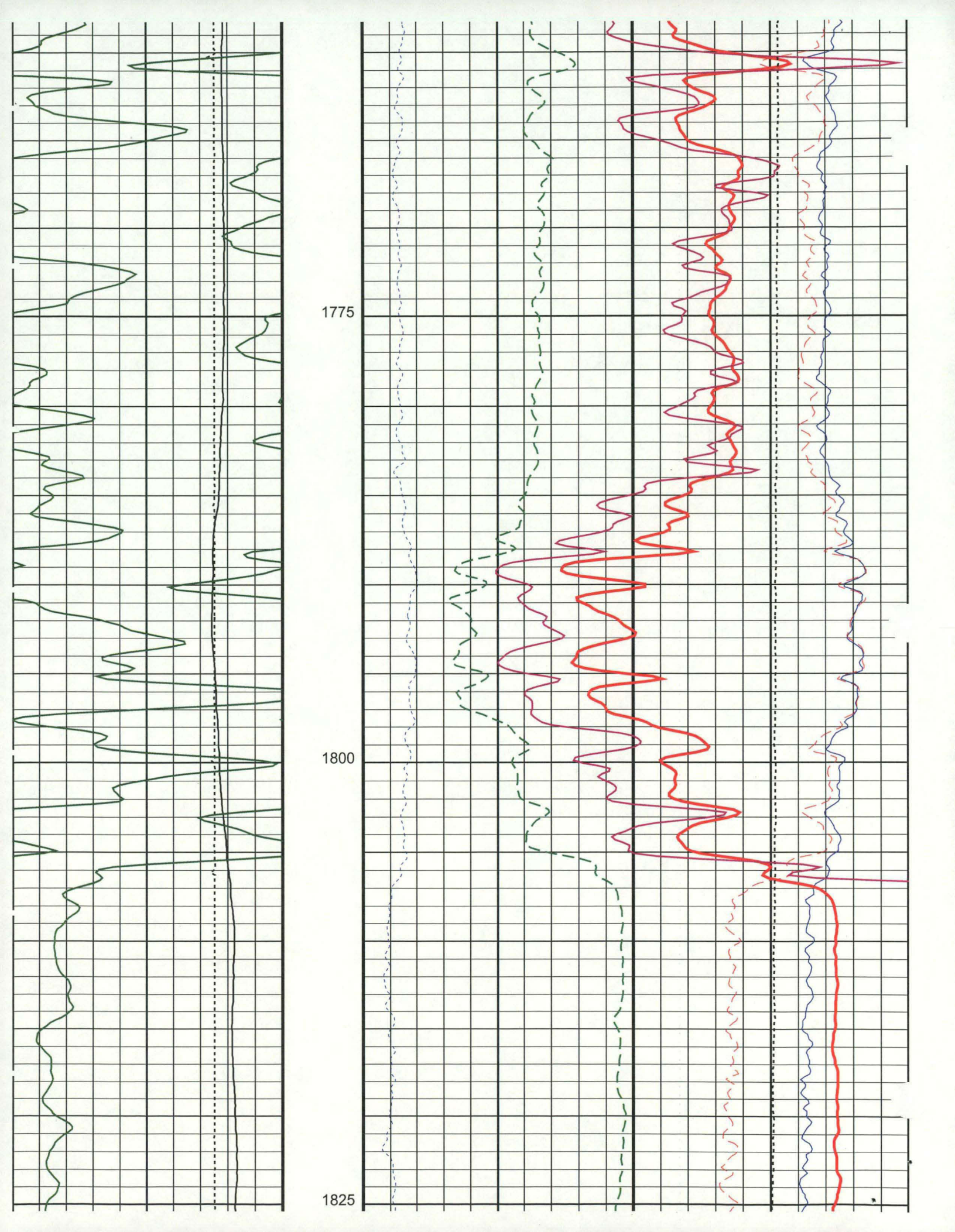
Tension (TENS)

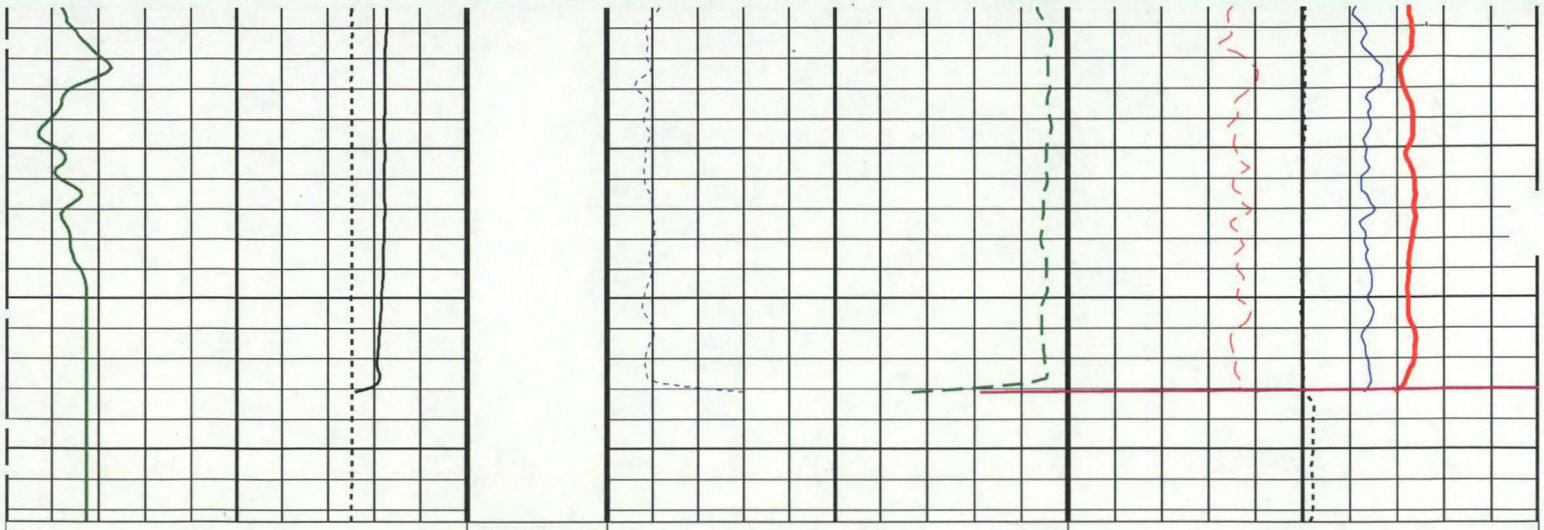

20000 (N) 0
RST Weighted Inelastic Ratio (WINR_RST)
0 (----) 0.4
Gamma Ray (GR)
0 (GAPI) 150
RST Porosity (TPHI)
0.6 (V/V) 0
RST Far Effective Capture CR (RSCF_RST)
45 (----)
(CCLC)
−3 (V) 1
Minitron Arc Detection (MARC)
0 (----) 5
RST Sigma (SIGM)
60 (CU) 0
RST Borehole Salinity (BSAL)
450 (PPK) −50
Bad Level Diagnostic (BADL_DIAG)
9 (----) 0
RST Inelastic Ratio (IRAT_FIL)
0.75 (----) 0
RST Near Effective Capture CR (RSCN_RST)
45 (----) 0
1525
1550


1575
1600


1625
1650
1675


1700
1725
1750


1775
1800
1825



RST Borehole Salinity (BSAL)
450 (PPK) −50

Bad Level Diagnostic (BADL_DIAG)
9 (----) 0

RST Inelastic Ratio (IRAT_FIL)
0.75 (----) 0

RST Near Effective Capture CR (RSCN_RST)
45 (----) 0

(CCLC)
−3 (V) 1

Minitron Arc Detection (MARC)
0 (----) 5

RST Sigma (SIGM)
60 (CU) 0

Gamma Ray (GR)
0 (GAPI) 150

RST Porosity (TPHI)
0.6 (V/V) 0

RST Far Effective Capture CR (RSCF_RST)
45 (----) 0

RST Weighted Inelastic Ratio (WINR_RST)
0 (----)

Tension (TENS)
20000 (N) 0

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value	
	RST-C: Reservoir Saturation Pro Tool C		
AIRB	RST Air Borehole	No	
BHS	Borehole Status	OPEN	
BSALOPT	RST Borehole Salinity Option	Unknown	
BSFL	RST Borehole Salinity Filter Length	51	
DFPC	RST Depth Filter Processing Constant	One	
DFPC_TDTL	RST Depth Filter Processing Constant (TDT-like)	Two	
MATR	Rock Matrix for Neutron Porosity Corrections	SANDSTONE	
NORM_IRAT_RST	RST Normalized Inelastic Ratio	0.48	
NORM_SIGM_RST	RST Normalized Sigma	3	M-1
RGAI	Near/Far Gain Calibration Ratio	1	
TIER_IC	RST IC Acquisition Mode	0_CO_Yield_and_Spectrolith	
TIER_SIGM	RST Sigma Acquisition Mode	0_RST_Sigma	
	PSPT: Production Services Logging Platform		
BHS	Borehole Status	OPEN	
MATR	Rock Matrix for Neutron Porosity Corrections	SANDSTONE	
	System and Miscellaneous		
BS	Bit Size	222.000	MM
BSAL	Borehole Salinity	−50000.00	PPM
CSIZ	Current Casing Size	244.500	MM
CWEI	Casing Weight	53.57	KG/M
DO	Depth Offset for Playback	−2.3	M
DORL	Depth Offset for Repeat Analysis	0.0	M
PP	Playback Processing	NORMAL	

Format: RST_SIG_ANSW Vertical Scale: 1:240 Graphics File Created: 17-Feb-2013 20:06

OP System Version: 19C0-187

RST-C	SRPC-5047-H1-2011-OP19	PSPT	19C0-187

Input DLIS Files

DEFAULT	RST_PSP_010LUP	FN:15	PRODUCER	17-Feb-2013 19:03	1844.6 M	1479.7 M

Output DLIS Files

DEFAULT	RST_PSP_016PUP	FN:27	PRODUCER	17-Feb-2013 20:06		
RTB	RST_PSP_016PUP	FN:28	PRODUCER	17-Feb-2013 20:06		

Company: CONOCOPHILLIPS CANADA RESOURCES CORP. Well: COPRC LOON CREEK O-6

Output DLIS Files

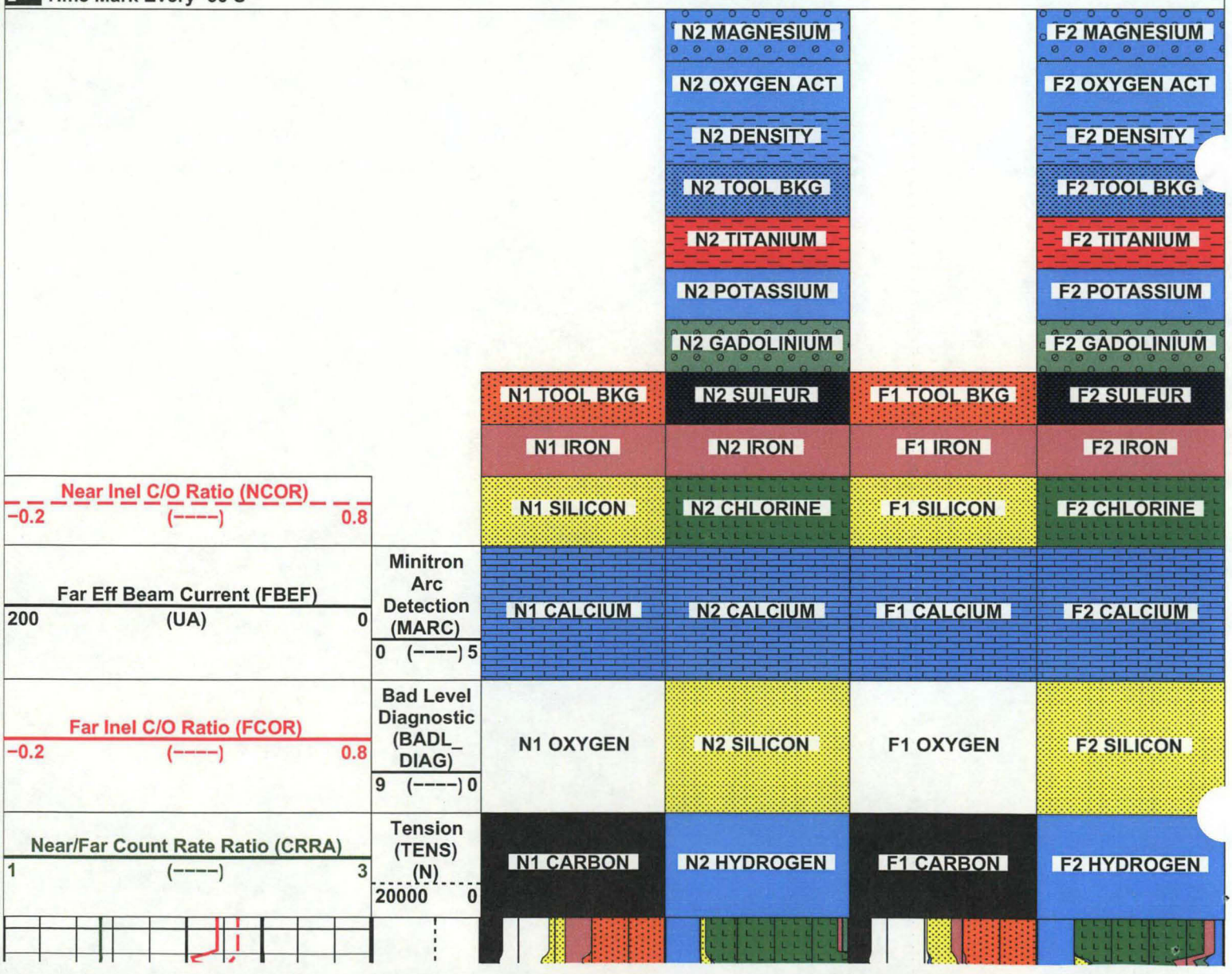
DEFAULT	RST_PSP_026LUP	FN:42	PRODUCER	17-Feb-2013 23:07	1752.3 M	0.0 M
RTB	RST_PSP_026LUP	FN:43	PRODUCER	17-Feb-2013 23:09		

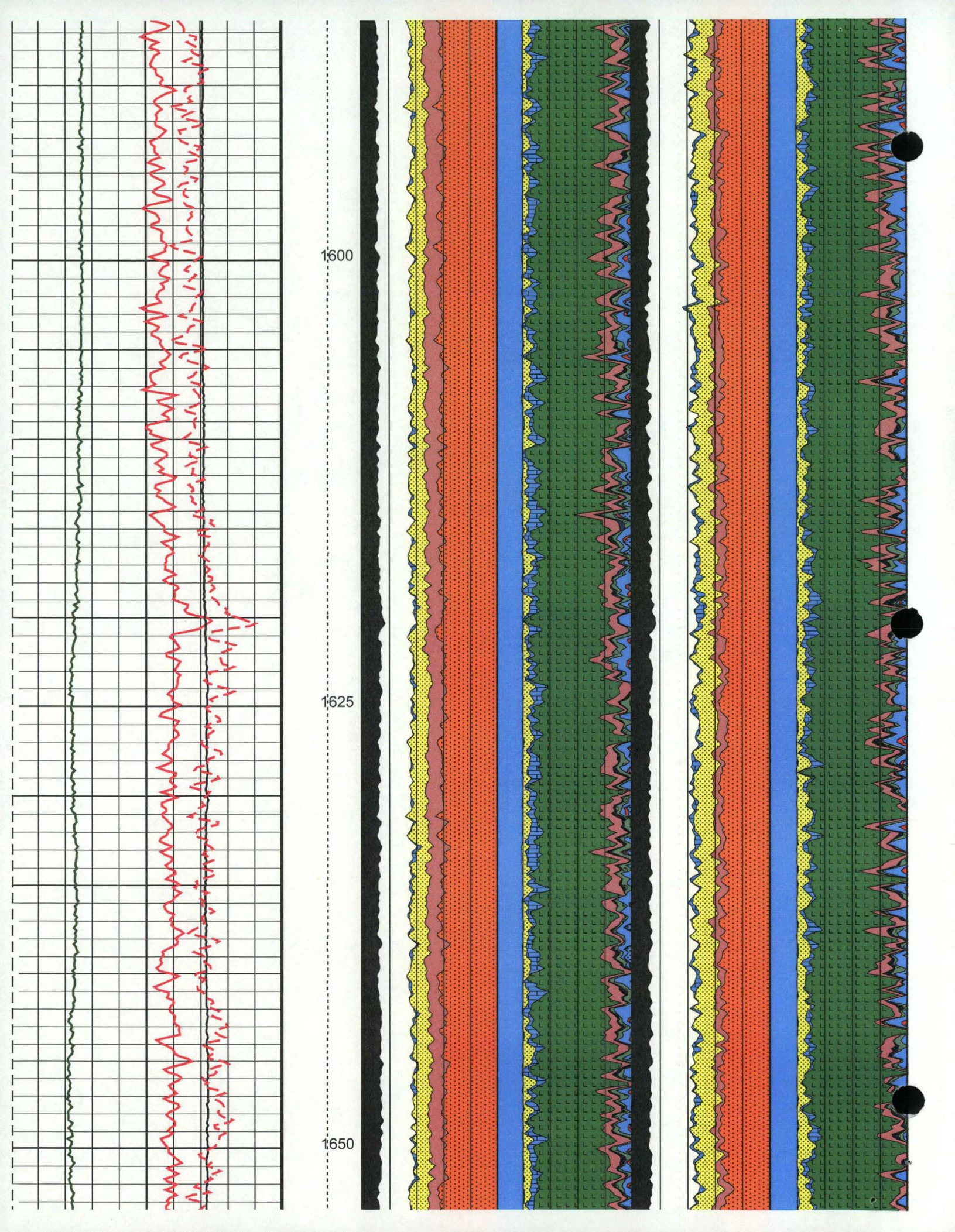
OP System Version: 19C0-187

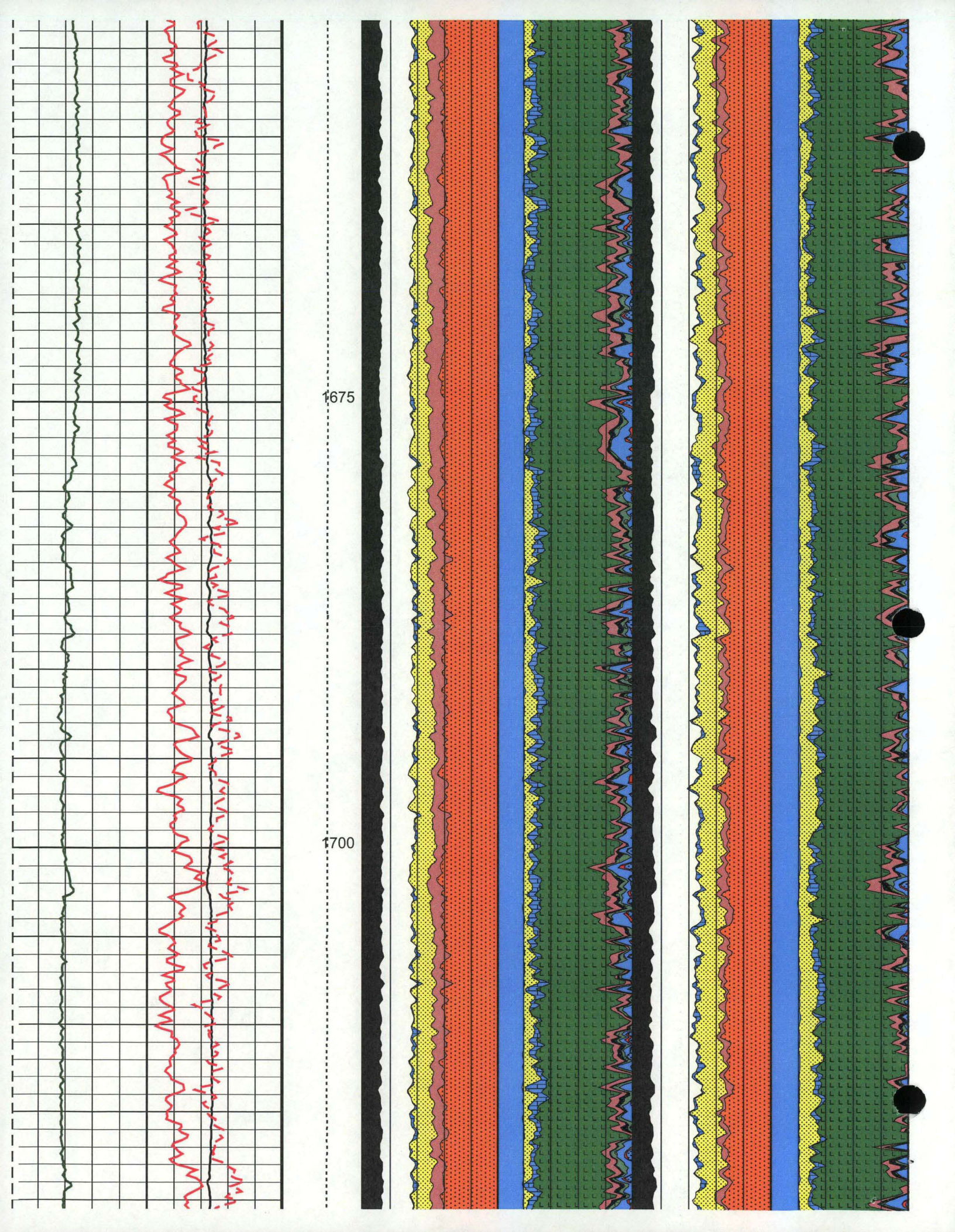
RST-C	SRPC-5047-H1-2011-OP19	PSPT	19C0-187

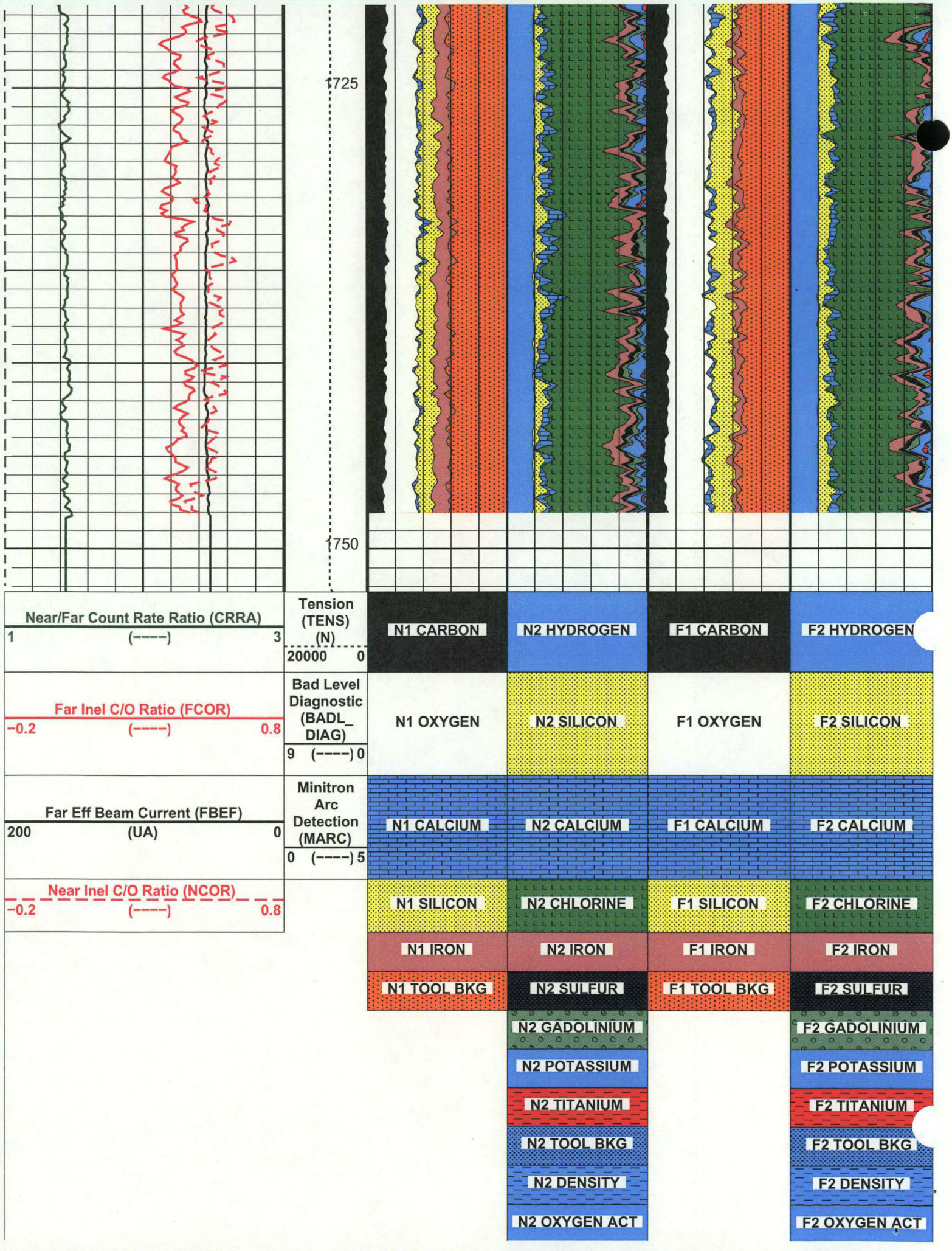
PIP SUMMARY

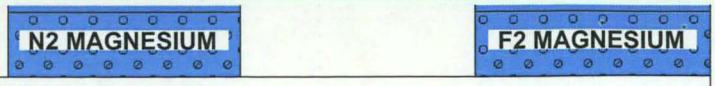
Time Mark Every 60 S




1600
1625
1650


1675
1700


1725
1750
Near/Far Count Rate Ratio (CRRA)
1 (----) 3
Far Inel C/O Ratio (FCOR)
-0.2 (----) 0.8
Far Eff Beam Current (FBEF)
200 (UA) 0
Near Inel C/O Ratio (NCOR)
-0.2 (----) 0.8
Tension (TENS) (N)
20000 0
Bad Level Diagnostic (BADL_ DIAG)
9 (----) 0
Minitron Arc Detection (MARC)
0 (----) 5
N1 CARBON
N2 HYDROGEN
F1 CARBON
F2 HYDROGEN
N1 OXYGEN
N2 SILICON
F1 OXYGEN
F2 SILICON
N1 CALCIUM
N2 CALCIUM
F1 CALCIUM
F2 CALCIUM
N1 SILICON
N2 CHLORINE
F1 SILICON
F2 CHLORINE
N1 IRON
N2 IRON
F1 IRON
F2 IRON
N1 TOOL BKG
N2 SULFUR
F1 TOOL BKG
F2 SULFUR
N2 GADOLINIUM
F2 GADOLINIUM
N2 POTASSIUM
F2 POTASSIUM
N2 TITANIUM
F2 TITANIUM
N2 TOOL BKG
F2 TOOL BKG
N2 DENSITY
F2 DENSITY
N2 OXYGEN ACT
F2 OXYGEN ACT



PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
TIER_IC	RST-C: Reservoir Saturation Pro Tool C RST IC Acquisition Mode	0_CO_Yield_and_Spectrolith

Format: RST_YIELDS Vertical Scale: 1:240 Graphics File Created: 17-Feb-2013 23:07

OP System Version: 19C0-187

RST-C	SRPC-5047-H1-2011-OP19	PSPT	19C0-187

Output DLIS Files

DEFAULT	RST_PSP_026LUP	FN:42	PRODUCER	17-Feb-2013 23:07
RTB	RST_PSP_026LUP	FN:43	PRODUCER	17-Feb-2013 23:09

Company: CONOCOPHILLIPS CANADA RESOURCES CORP. Well: COPRC LOON CREEK O-6

Output DLIS Files

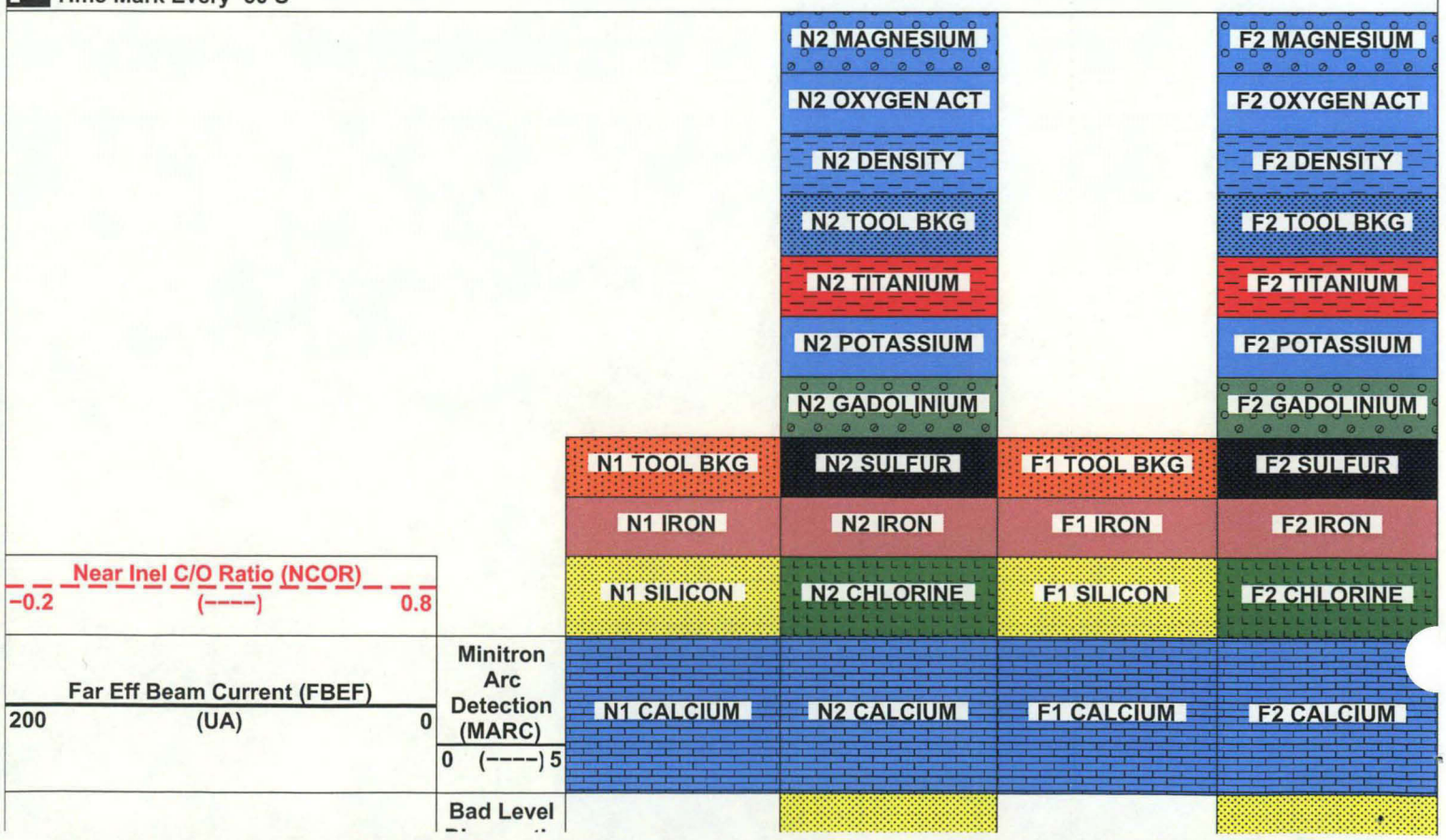
DEFAULT	RST_PSP_021LUP	FN:35	PRODUCER	17-Feb-2013 20:31
RTB	RST_PSP_021LUP	FN:36	PRODUCER	17-Feb-2013 20:31

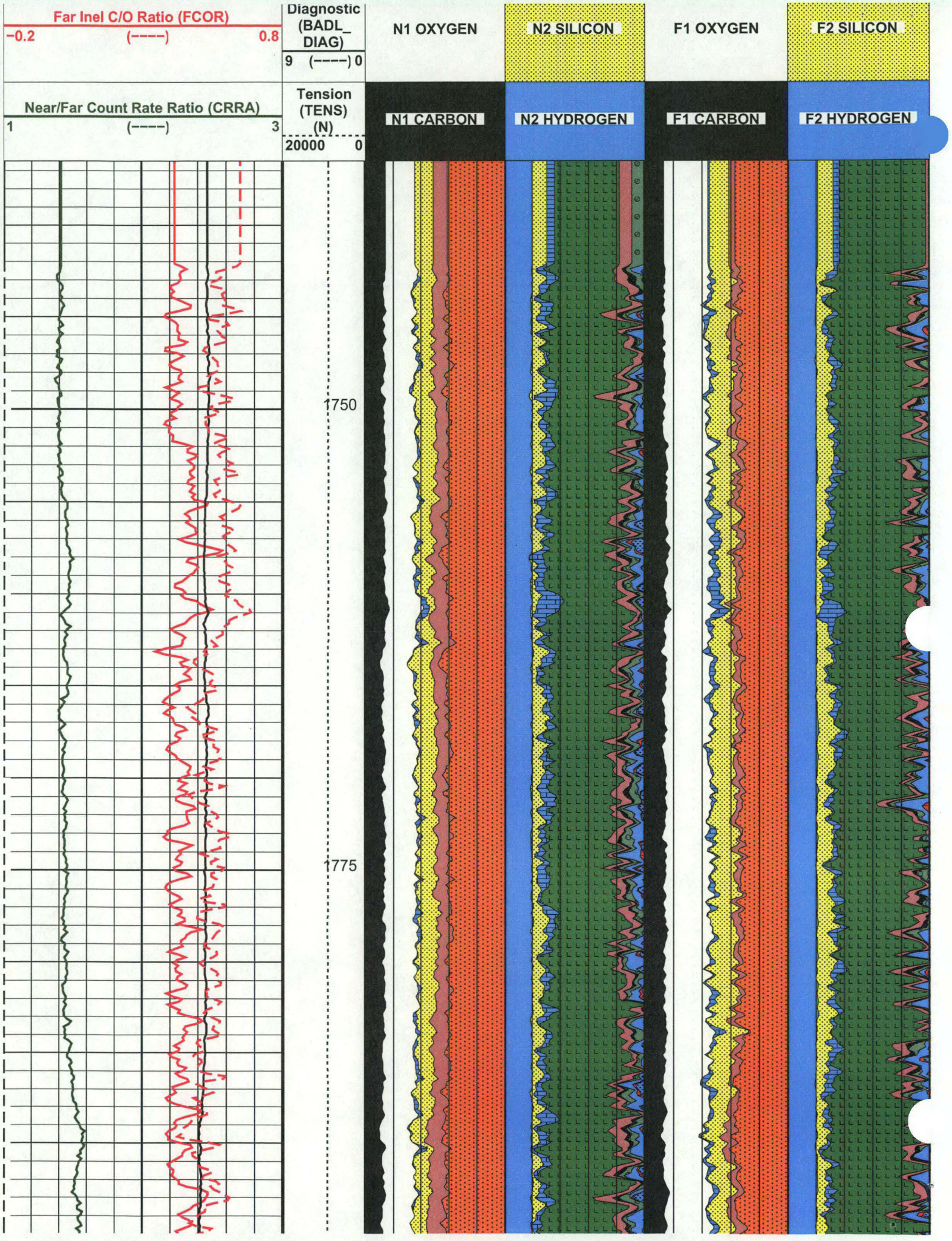
OP System Version: 19C0-187

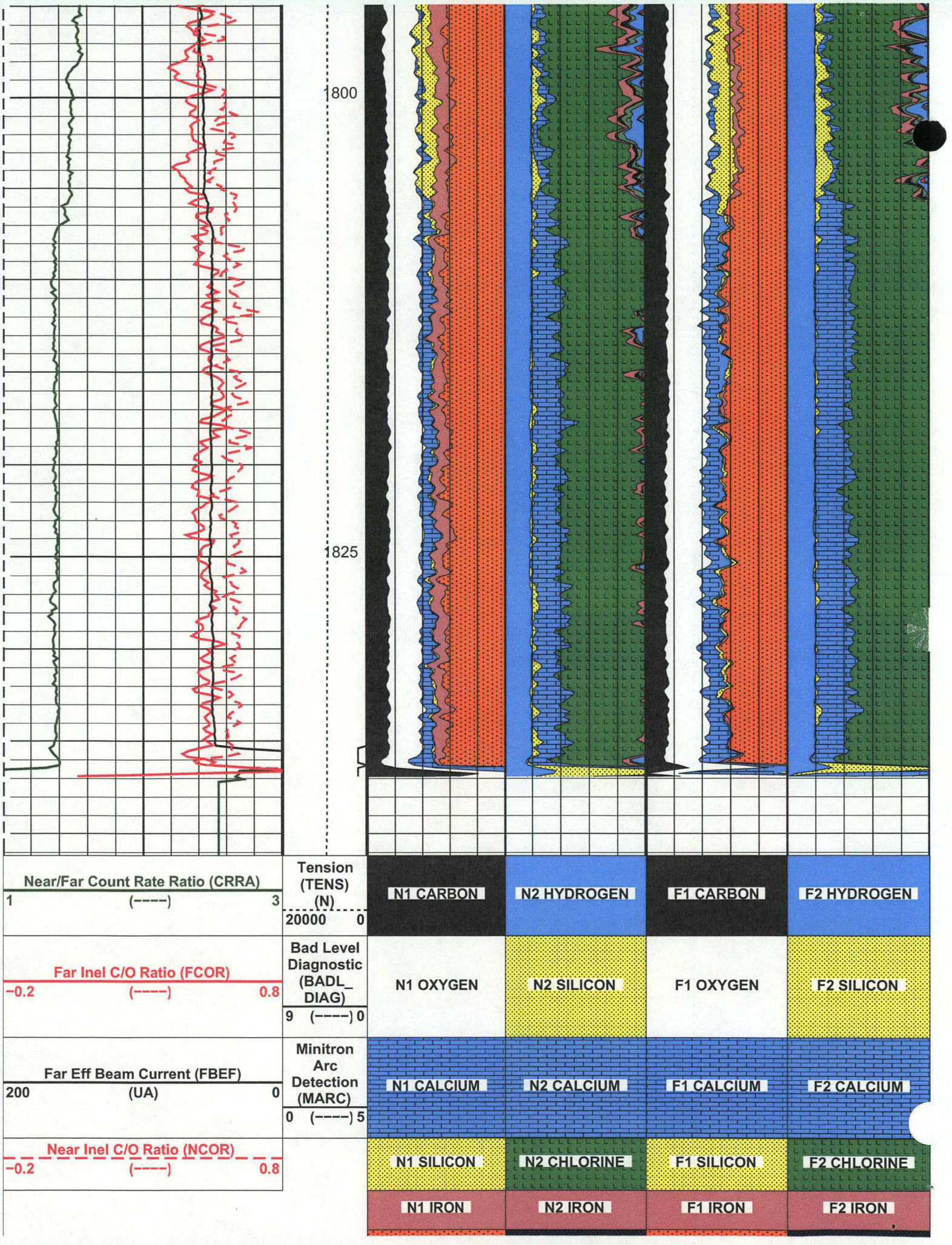
RST-C	SRPC-5047-H1-2011-OP19	PSPT	19C0-187

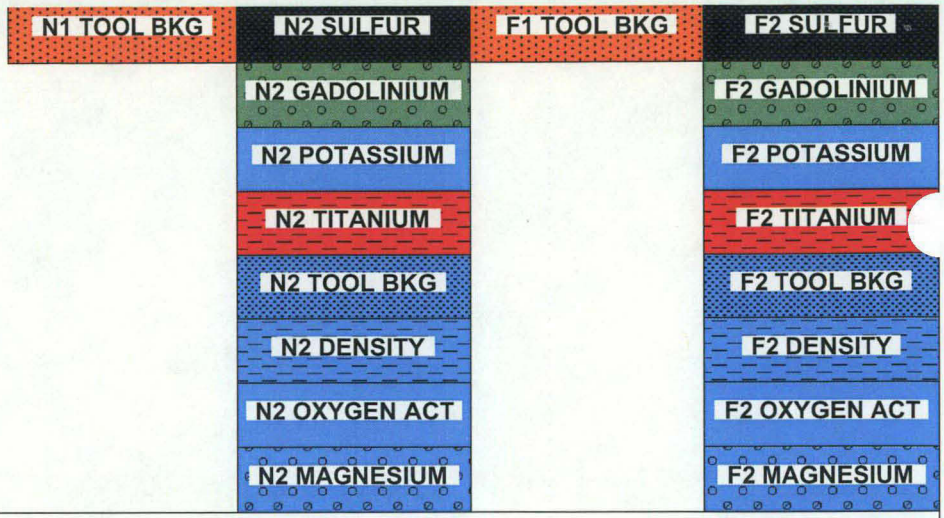
PIP SUMMARY

Time Mark Every 60 S




Far Inel C/O Ratio (FCOR)
-0.2
(----)
0.8
Near/Far Count Rate Ratio (CRRA)
1
(----)
3
Diagnostic (BADL_ DIAG)
9 (----) 0
Tension (TENS) (N)
20000 0
1750
1775
N1 OXYGEN
N2 SILICON
F1 OXYGEN
F2 SILICON
N1 CARBON
N2 HYDROGEN
F1 CARBON
F2 HYDROGEN


1800
1825
Near/Far Count Rate Ratio (CRRA)
1 (----) 3
Far Inel C/O Ratio (FCOR)
-0.2 (----) 0.8
Far Eff Beam Current (FBEF)
200 (UA) 0
Near Inel C/O Ratio (NCOR)
-0.2 (----) 0.8
Tension (TENS) (N)
20000 0
Bad Level Diagnostic (BADL_ DIAG)
9 (----) 0
Minitron Arc Detection (MARC)
0 (----) 5
N1 CARBON
N2 HYDROGEN
F1 CARBON
F2 HYDROGEN
N1 OXYGEN
N2 SILICON
F1 OXYGEN
F2 SILICON
N1 CALCIUM
N2 CALCIUM
F1 CALCIUM
F2 CALCIUM
N1 SILICON
N2 CHLORINE
F1 SILICON
F2 CHLORINE
N1 IRON
N2 IRON
F1 IRON
F2 IRON



PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
TIER_IC	RST-C: Reservoir Saturation Pro Tool C RST IC Acquisition Mode	0_CO_Yield_and_Spectrolith

Format: RST_YIELDS Vertical Scale: 1:240 Graphics File Created: 17-Feb-2013 20:31

OP System Version: 19C0-187

RST-C	SRPC-5047-H1-2011-OP19	PSPT	19C0-187

Output DLIS Files

DEFAULT	RST_PSP_021LUP	FN:35	PRODUCER	17-Feb-2013 20:31
RTB	RST_PSP_021LUP	FN:36	PRODUCER	17-Feb-2013 20:31

Company: CONOCOPHILLIPS CANADA RESOURCES CORP. Well: COPRC LOON CREEK O-6

Input DLIS Files

DEFAULT	RST_PSP_029LUP	FN:44	PRODUCER	18-Feb-2013 02:35	1829.3 M	1584.8 M

Output DLIS Files

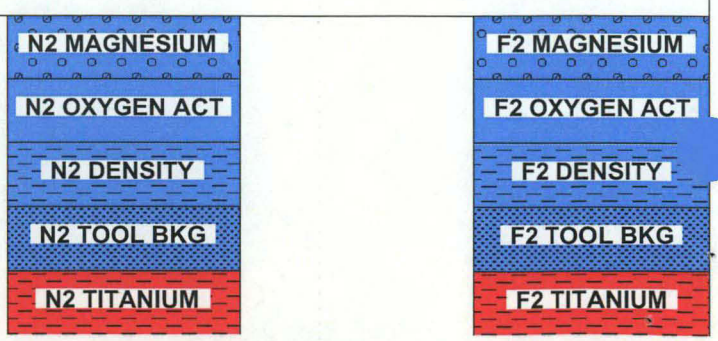
DEFAULT	RST_PSP_035PUP	FN:51	PRODUCER	18-Feb-2013 12:49	1829.1 M	1579.2 M
RTB	RST_PSP_035PUP	FN:52	PRODUCER	18-Feb-2013 12:51	1829.1 M	1579.2 M

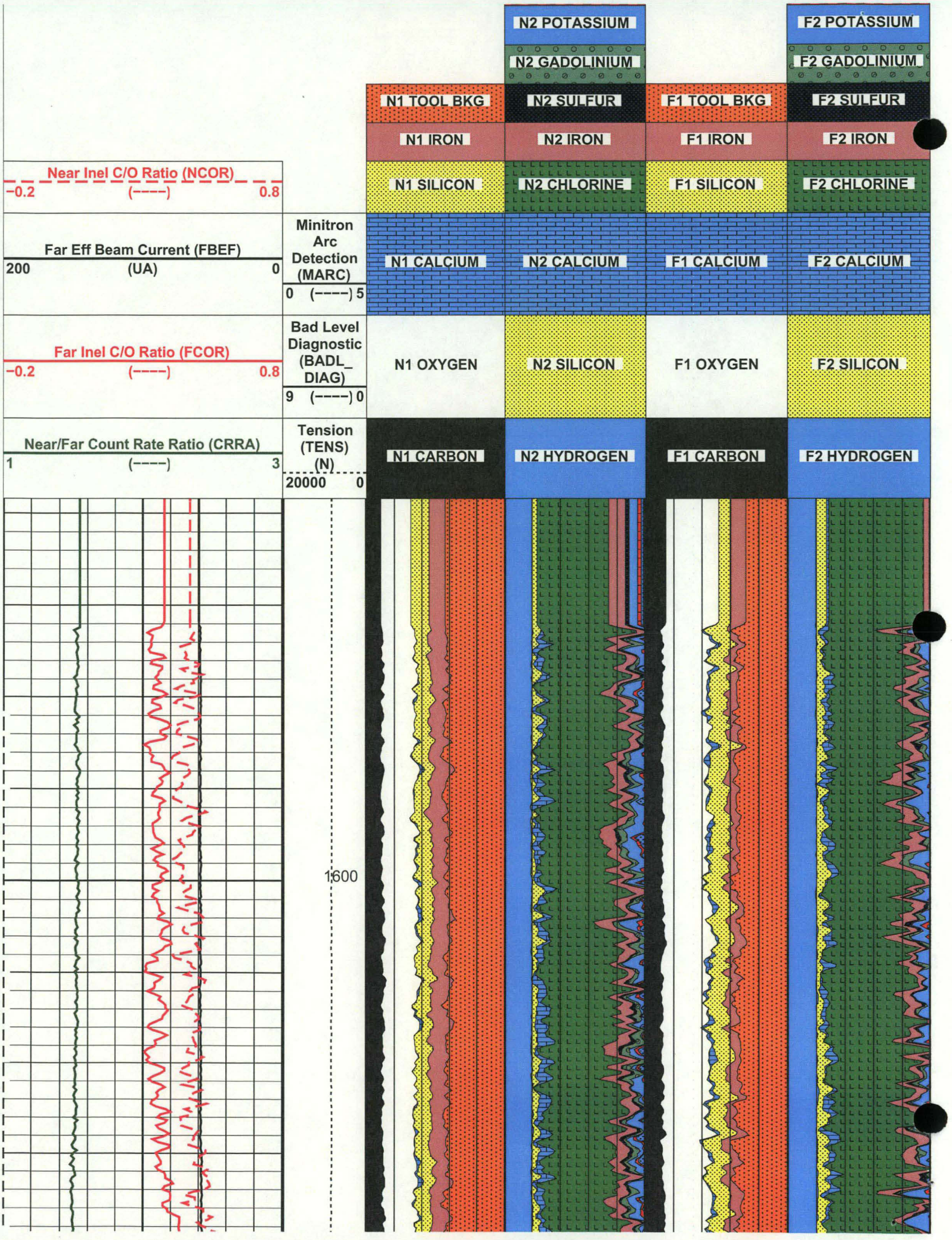
OP System Version: 19C0-187

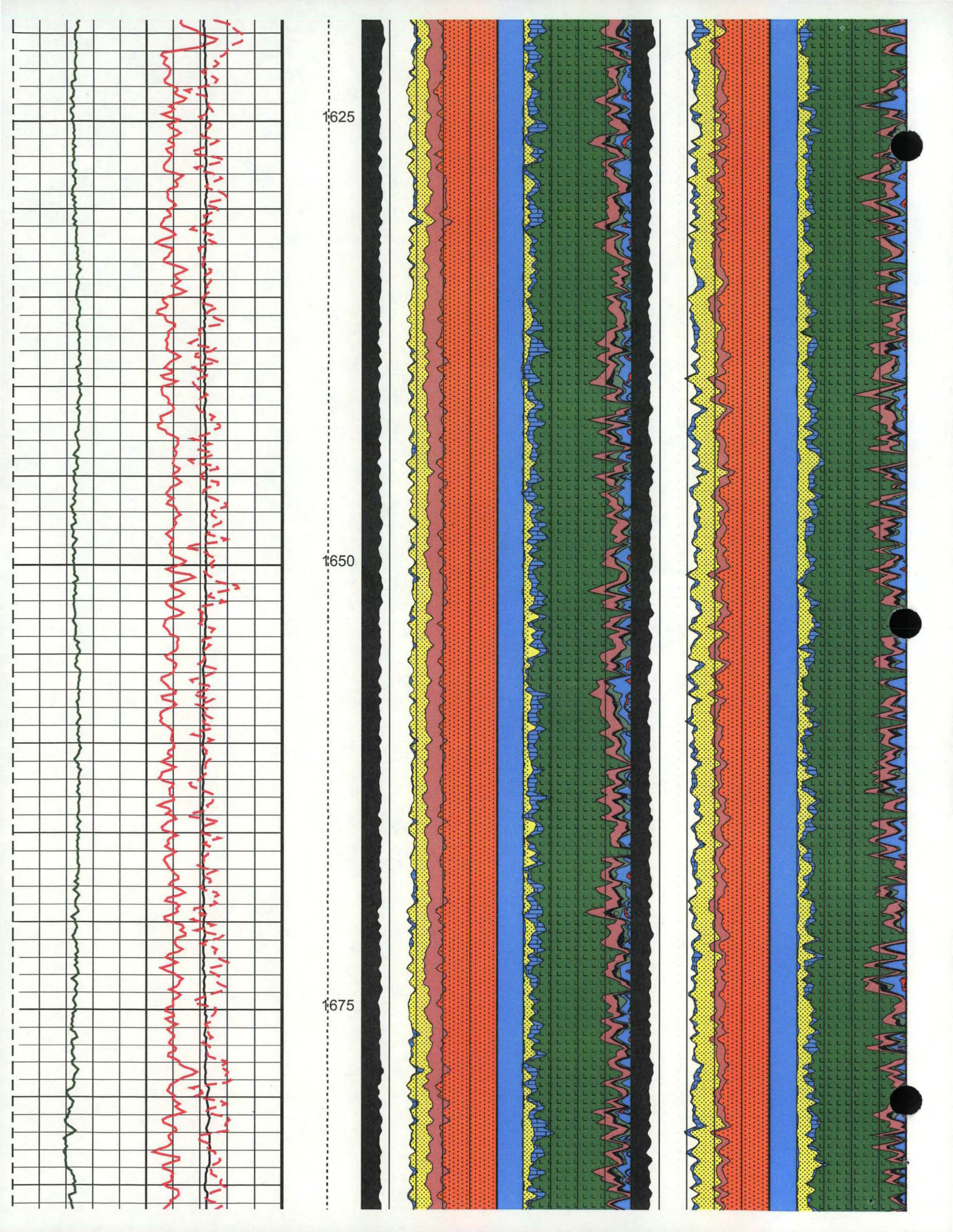
RST-C	SRPC-5047-H1-2011-OP19	PSPT	19C0-187

PIP SUMMARY

Time Mark Every 60 S




Near Inel C/O Ratio (NCOR)
-0.2 (----) 0.8
Far Eff Beam Current (FBEF)
200 (UA) 0
Far Inel C/O Ratio (FCOR)
-0.2 (----) 0.8
Near/Far Count Rate Ratio (CRRA)
1 (----) 3
Minitron Arc Detection (MARC)
0 (----) 5
Bad Level Diagnostic (BADL_DIAG)
9 (----) 0
Tension (TENS) (N)
20000 0
1600
N1 TOOL BKG
N1 IRON
N1 SILICON
N1 CALCIUM
N1 OXYGEN
N1 CARBON
N2 POTASSIUM
N2 GADOLINIUM
N2 SULFUR
N2 IRON
N2 CHLORINE
N2 CALCIUM
N2 SILICON
N2 HYDROGEN
F1 TOOL BKG
F1 IRON
F1 SILICON
F1 CALCIUM
F1 OXYGEN
F1 CARBON
F2 POTASSIUM
F2 GADOLINIUM
F2 SULFUR
F2 IRON
F2 CHLORINE
F2 CALCIUM
F2 SILICON
F2 HYDROGEN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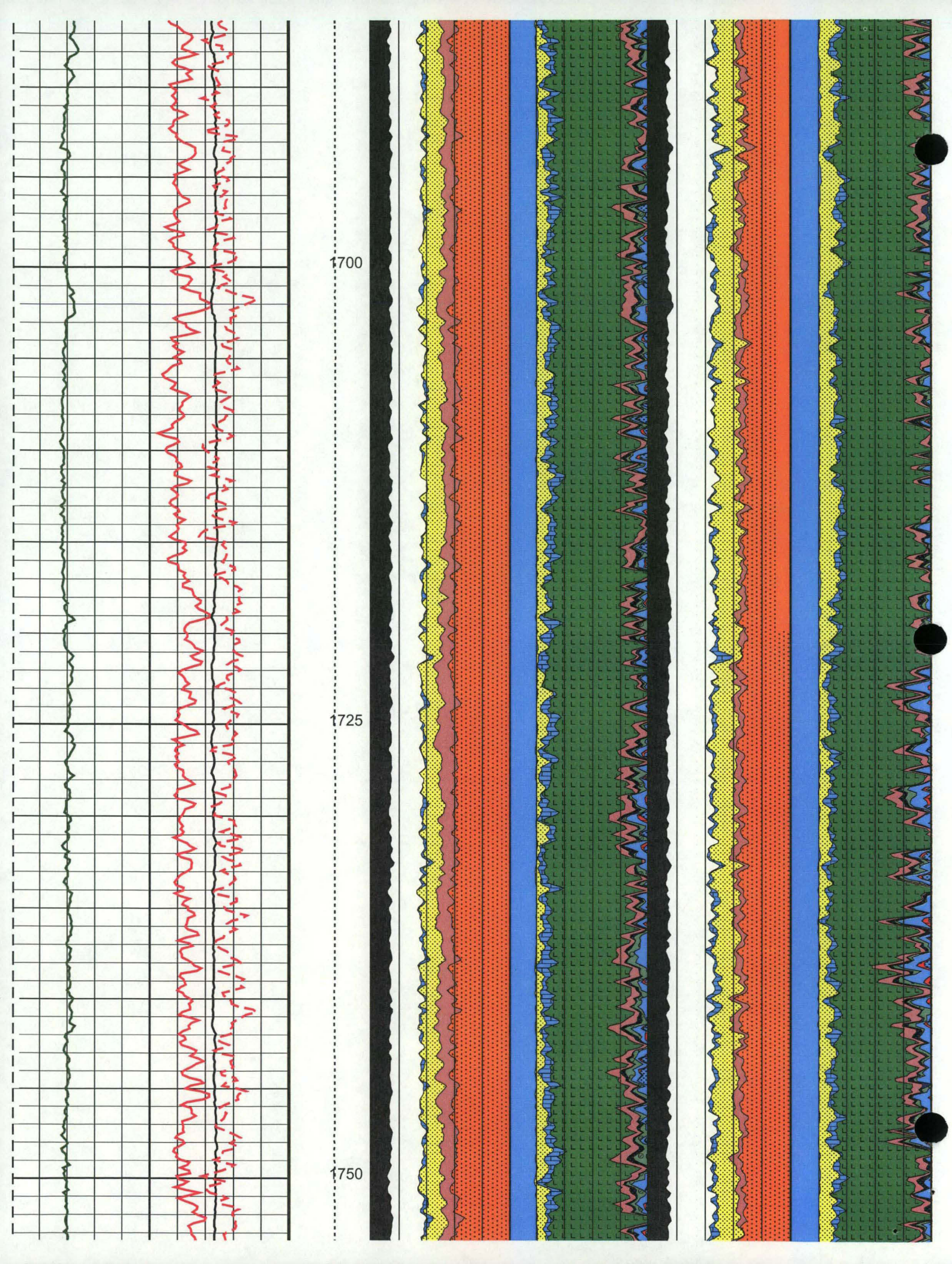
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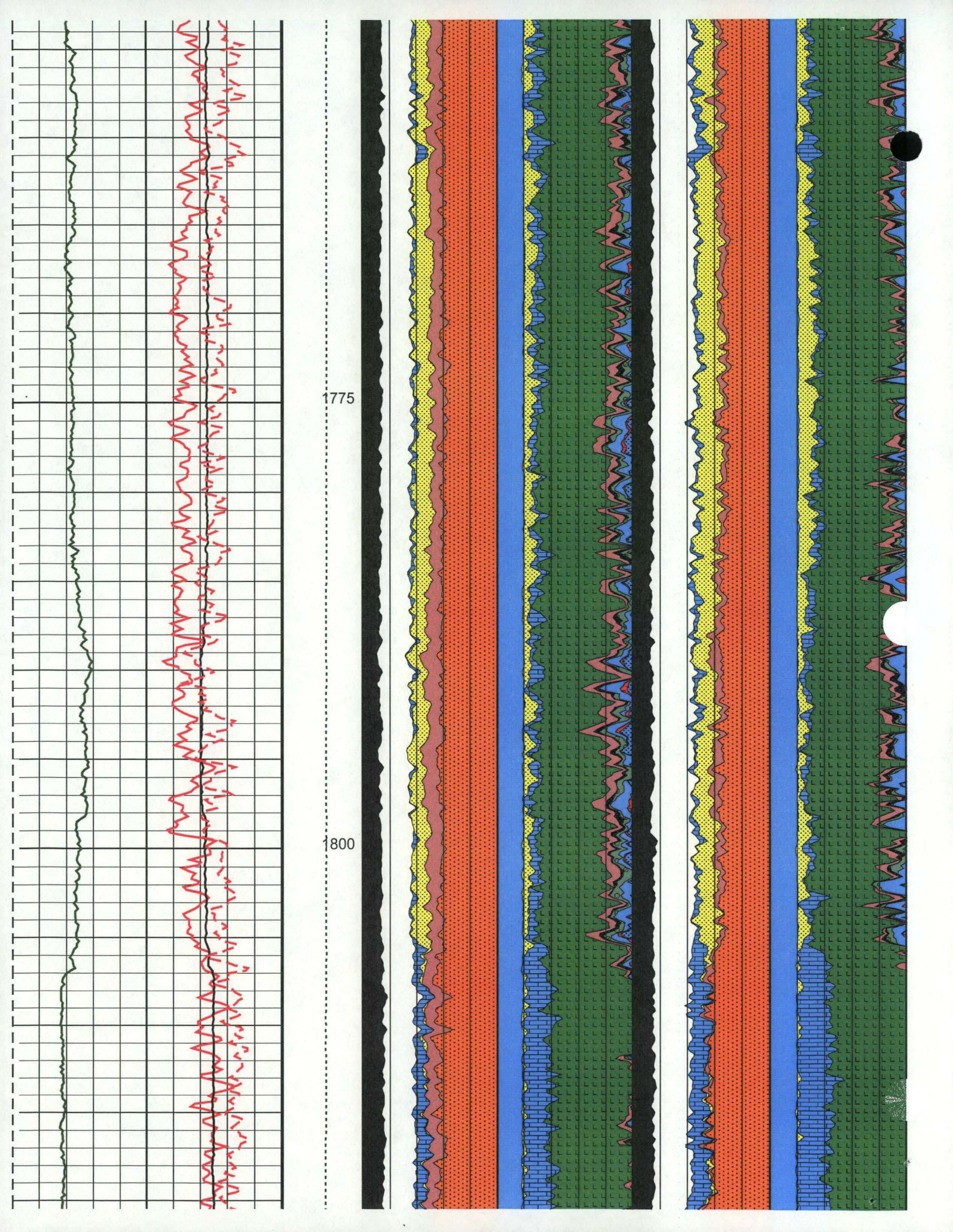
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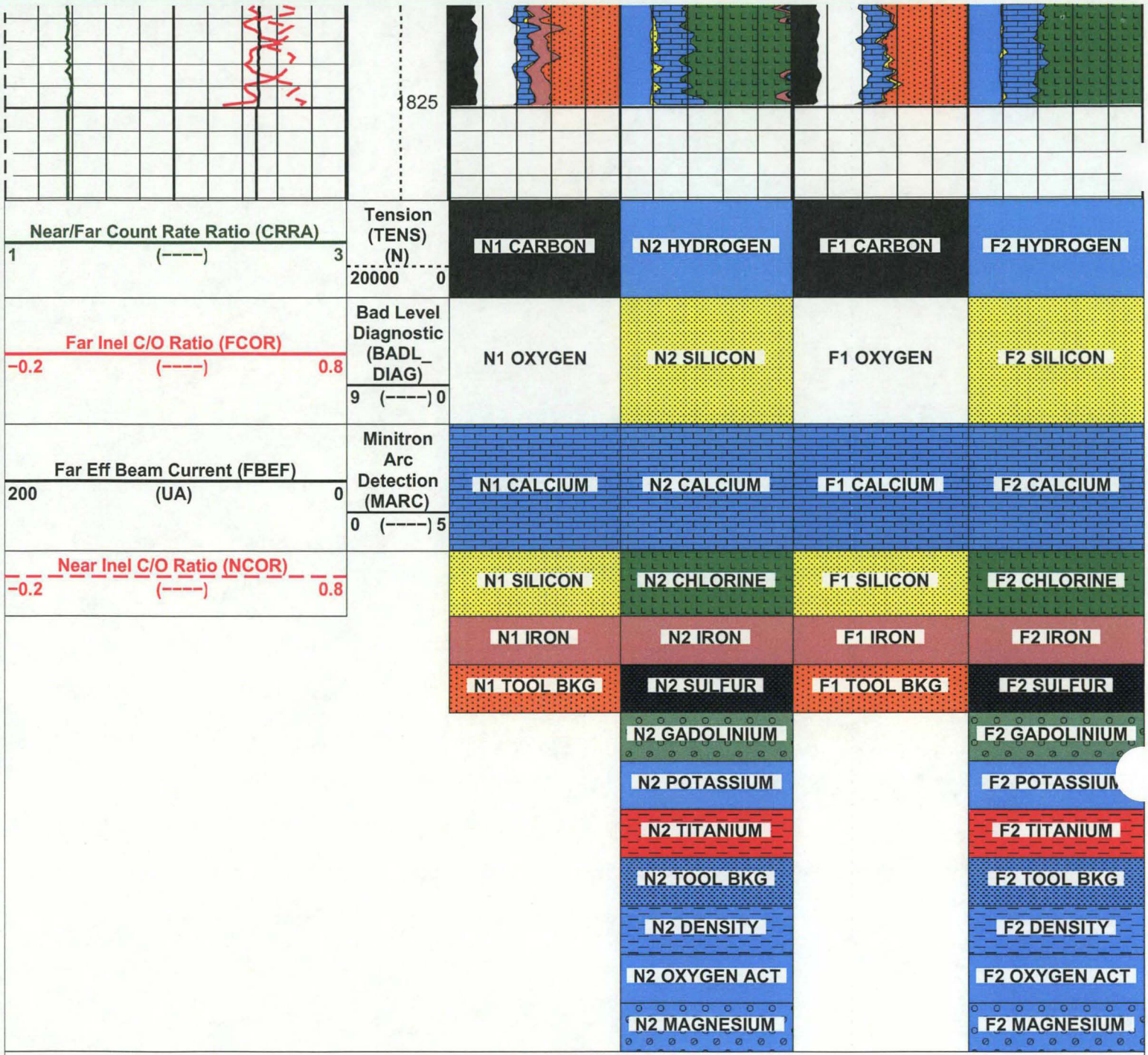


PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
	RST-C: Reservoir Saturation Pro Tool C	
TIER_IC	RST IC Acquisition Mode	0_CO_Yield_and_Spectrolith
	System and Miscellaneous	
DO	Depth Offset for Playback	-0.1 M
PP	Playback Processing	NORMAL

Format: RST_YIELDS Vertical Scale: 1:240 Graphics File Created: 18-Feb-2013 12:49

OP System Version: 19C0-187

RST-C	SRPC-5047-H1-2011-OP19	PSPT	19C0-187

Input DLIS Files

DEFAULT	RST PSP 029LUP	FN:44	PRODUCER	18-Feb-2013 02:35	1829.3 M	1584.8 M*

Output DLIS Files

DEFAULT	RST_PSP_035PUP	FN:51	PRODUCER	18-Feb-2013 12:49		
RTB	RST_PSP_035PUP	FN:52	PRODUCER	18-Feb-2013 12:51		

Company: CONOCOPHILLIPS CANADA RESOURCES CORP. Well: COPRC LOON CREEK O

Input DLIS Files

DEFAULT	RST_PSP_031LUP	FN:46	PRODUCER	18-Feb-2013 07:04	1843.1 M	1584.0 M

Output DLIS Files

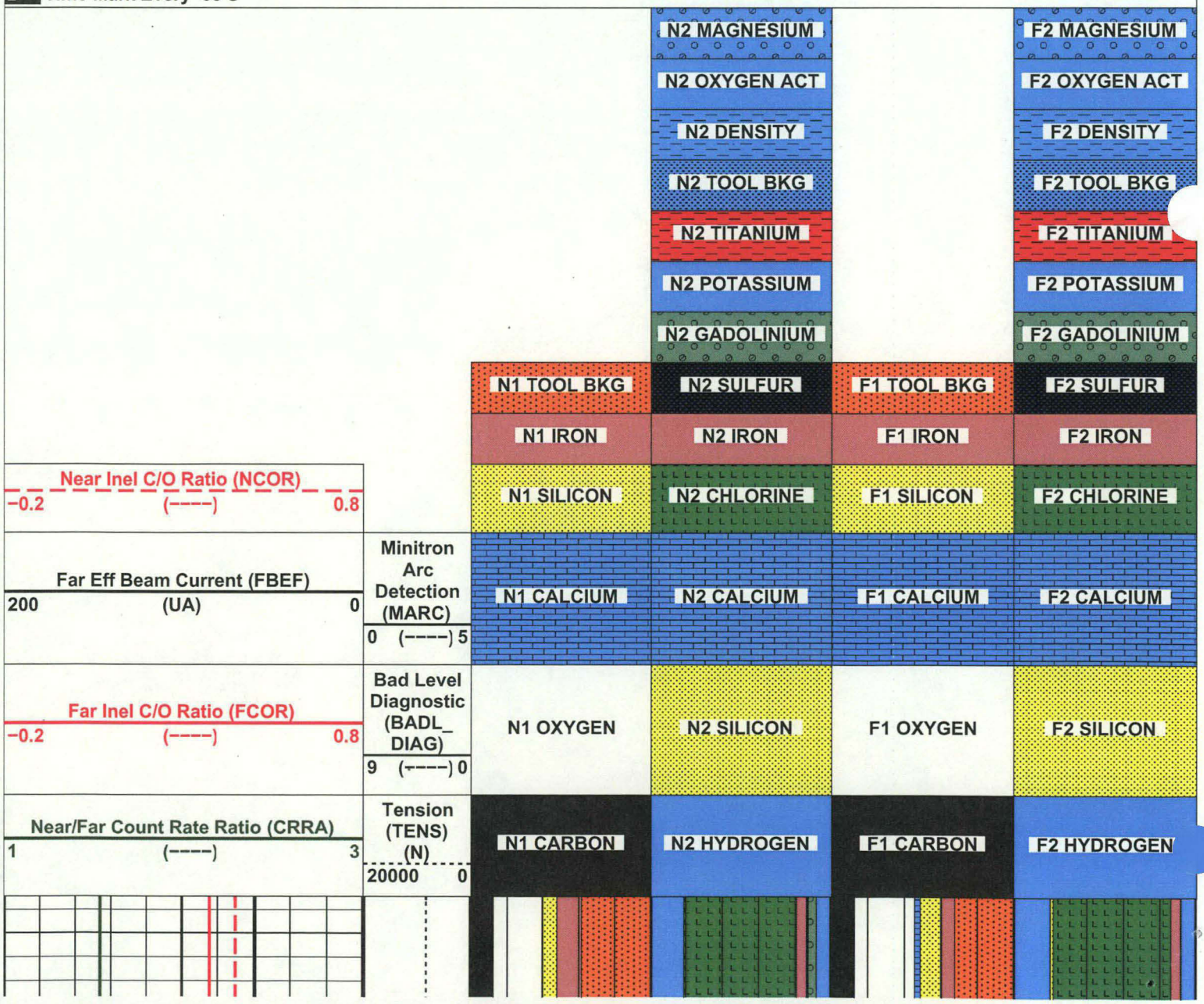
DEFAULT	RST_PSP_036PUP	FN:53	PRODUCER	18-Feb-2013 12:50	1843.0 M	1578.4 M
RTB	RST_PSP_036PUP	FN:54	PRODUCER	18-Feb-2013 12:52	1843.0 M	1578.4 M

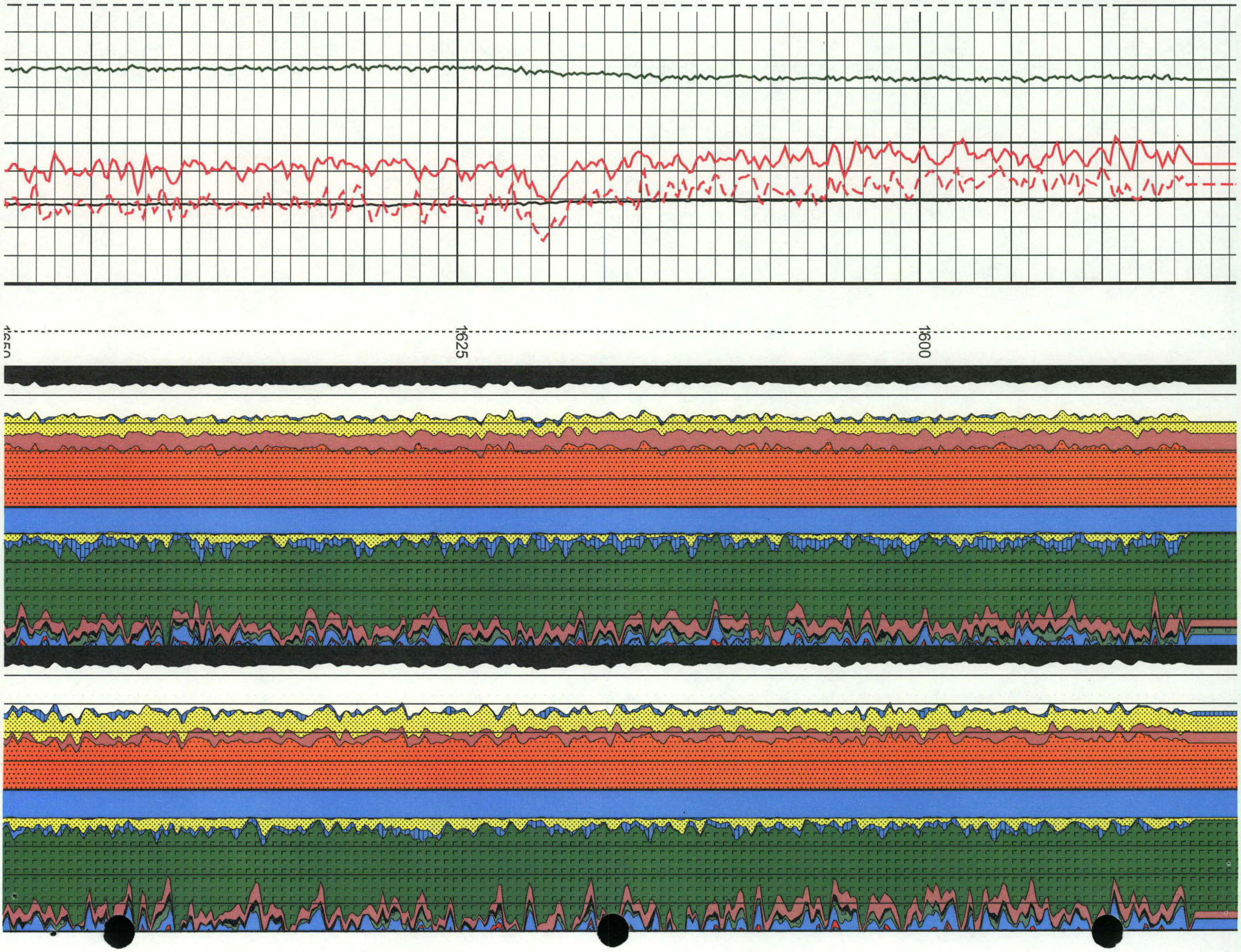
OP System Version: 19C0-187

RST-C	SRPC-5047-H1-2011-OP19	PSPT	19C0-187

PIP SUMMARY

Time Mark Every 60 S

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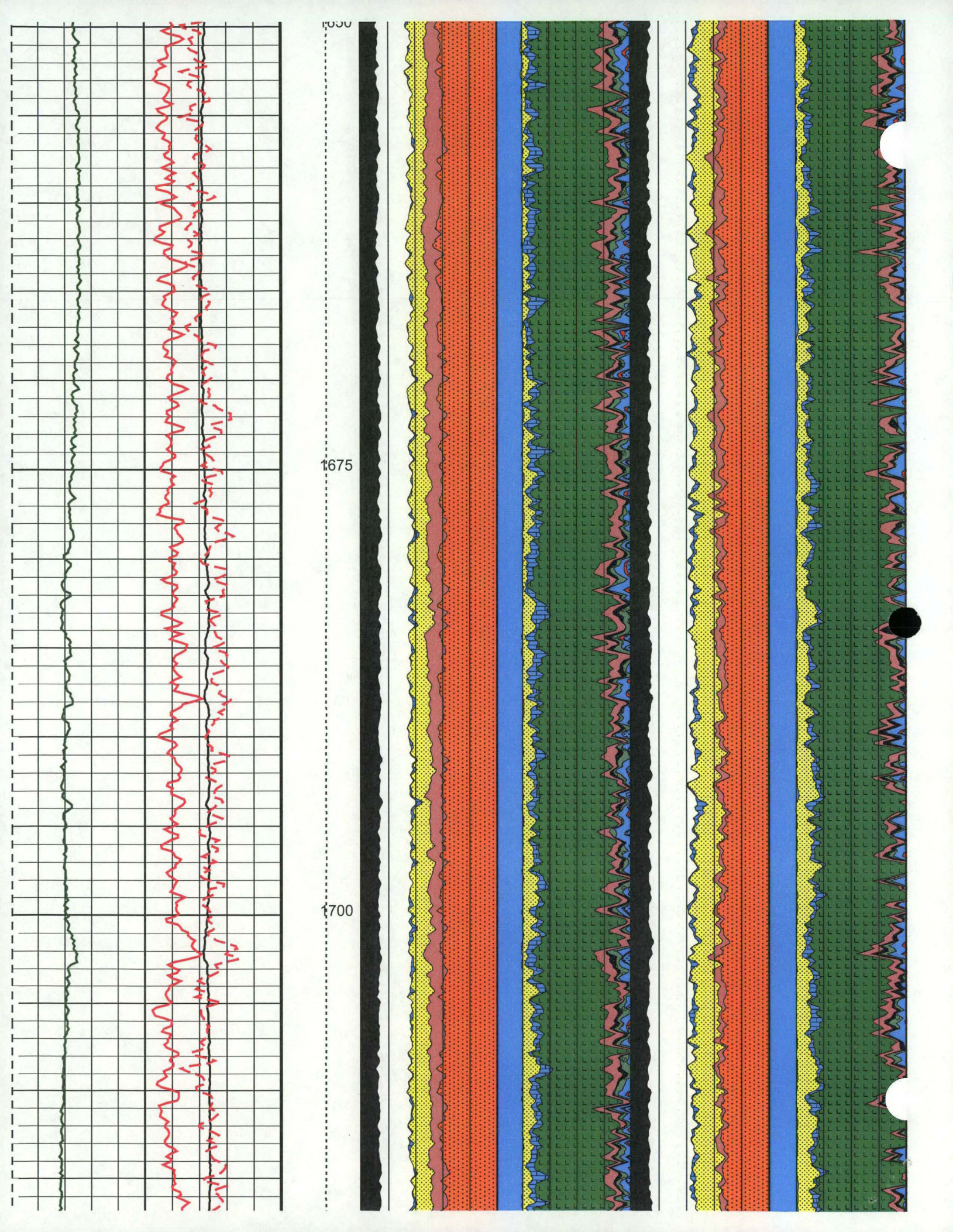
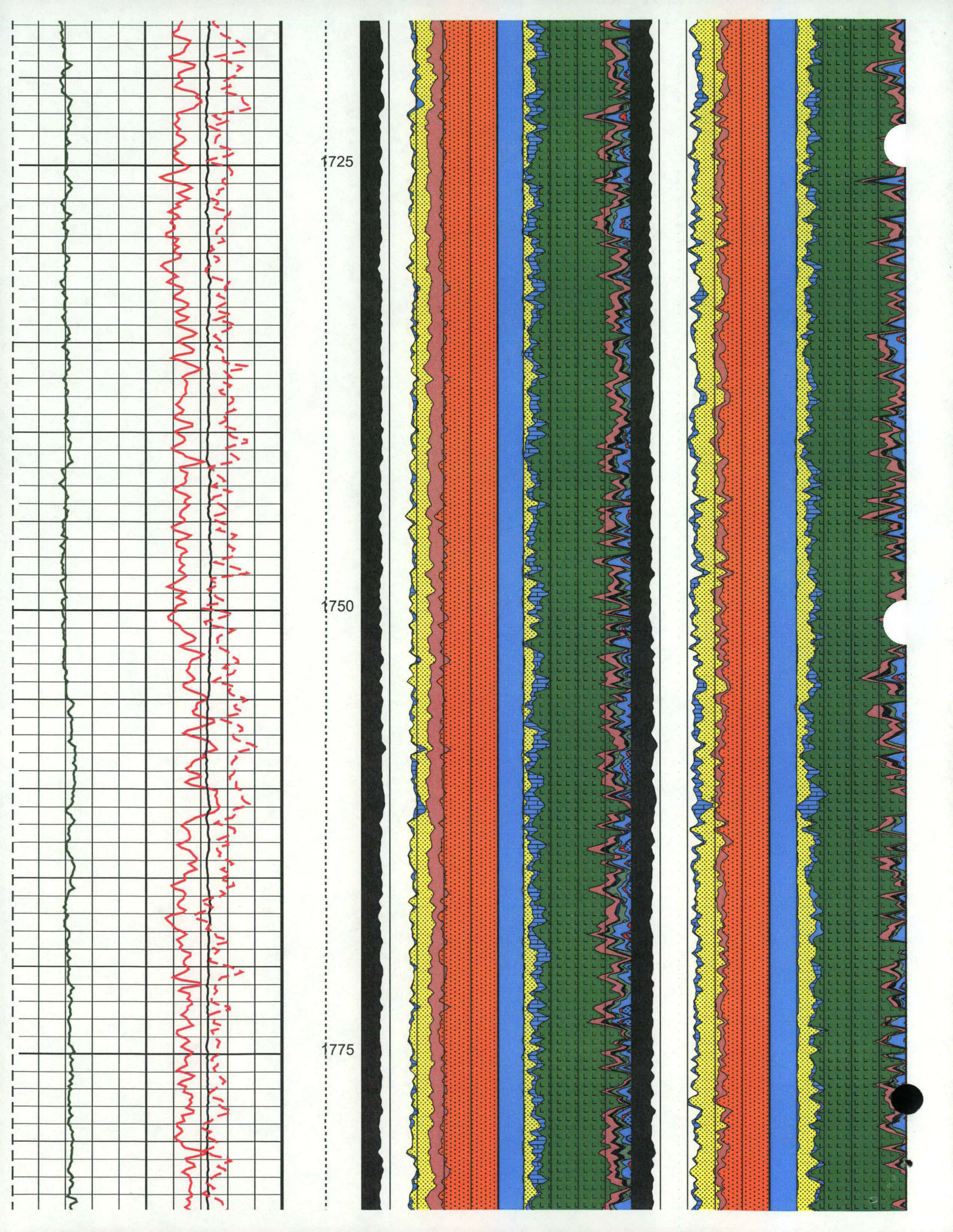
1600


1650
1675
1700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1750
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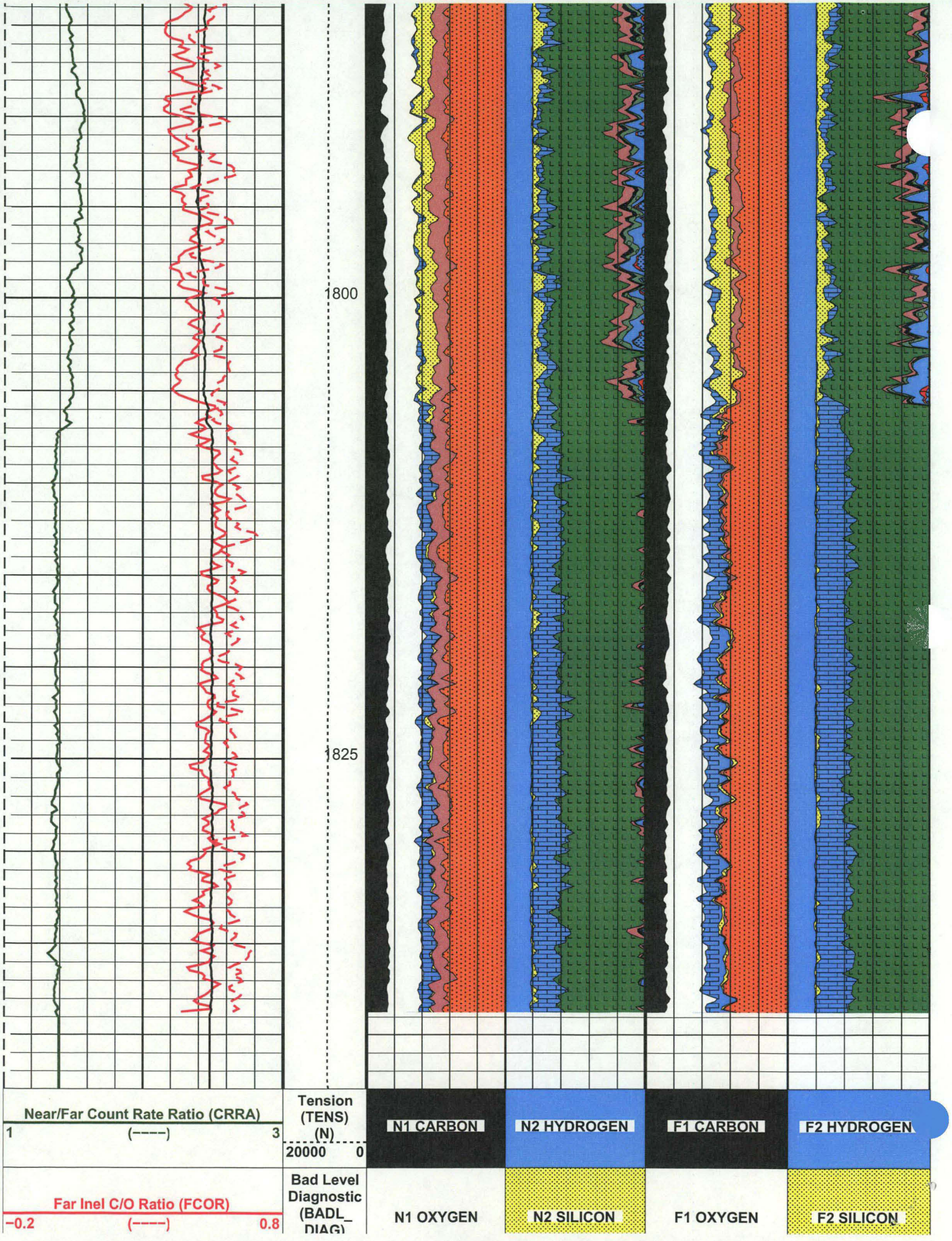
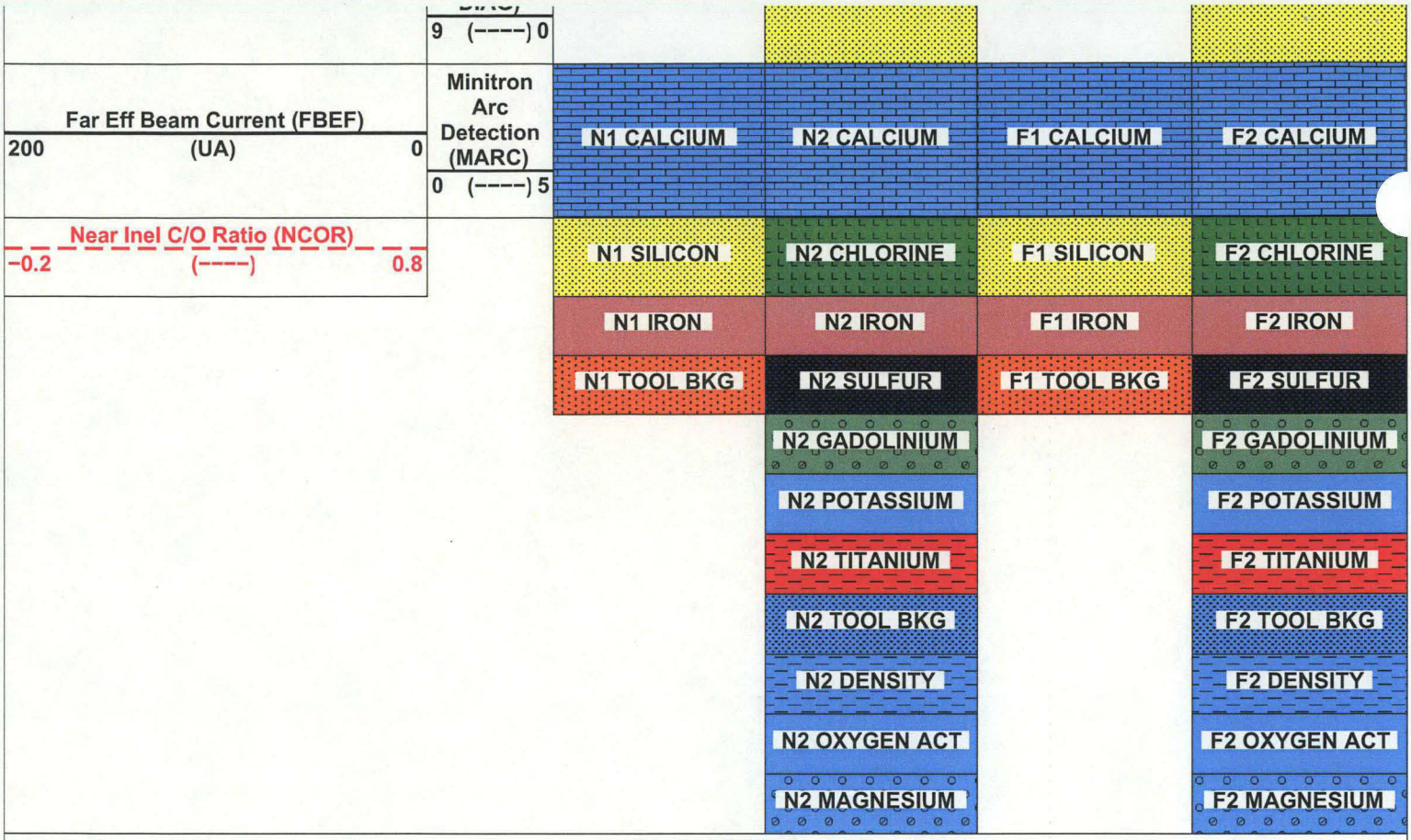

1800
1825
Near/Far Count Rate Ratio (CRRA)
1
(----)
3
Tension (TENS) (N)
20000
0
N1 CARBON
N2 HYDROGEN
F1 CARBON
F2 HYDROGEN
Far Inel C/O Ratio (FCOR)
-0.2
(----)
0.8
Bad Level Diagnostic (BADL_DIAG)
N1 OXYGEN
N2 SILICON
F1 OXYGEN
F2 SILICON



PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
	RST-C: Reservoir Saturation Pro Tool C	
TIER_IC	RST IC Acquisition Mode	0_CO_Yield_and_Spectrolith
	System and Miscellaneous	
DO	Depth Offset for Playback	-0.2 M
PP	Playback Processing	NORMAL

Format: RST_YIELDS Vertical Scale: 1:240 Graphics File Created: 18-Feb-2013 12:50

OP System Version: 19C0-187

RST-C	SRPC-5047-H1-2011-OP19	PSPT	19C0-187

Input DLIS Files

DEFAULT	RST_PSP_031LUP	FN:46	PRODUCER	18-Feb-2013 07:04	1843.1 M	1584.0 M

Output DLIS Files

DEFAULT	RST_PSP_036PUP	FN:53	PRODUCER	18-Feb-2013 12:50
RTB	RST_PSP_036PUP	FN:54	PRODUCER	18-Feb-2013 12:52

Company: CONOCOPHILLIPS CANADA RESOURCES CORP.

Schlumberger

Well: COPRC LOON CREEK O-6

Field: LOON CREEK

Province: Northwest Territories

Vertical Well

RESERVOIR SATURATION LOG
SIGMA / CARBON OXYGEN

Schlumberger

GEOFRAME
PROCESSED
INTERPRETATION

Analysis Behind Casing

RST-C Spectrolith

*A Mark of Schlumberger

Using the following logs:

COMPANY:	CONOCOPHILLIPS CANADA RESOURCES CORP.
WELL:	COPRC LOON CREEK O-6
FIELD:	LOON CREEK
Province:	NORTHWEST TERRITORIES
COUNTRY:	CANADA
Date Logged:	17-Feb-2013 Date Processed: 5-March-2013
Well Location:	UNIT 0 SECTION 6
	300O0665101270O0
Elevations:	KB: 257.6m DF: 257.3m GL: 252.4m
API Number:	EL470 Job Number: CA5M-00021

FOLD HERE

The well name, location and borehole reference data were furnished by the customer.

Any interpretation, research, analysis, data, results, estimates, or recommendation furnished with the services or otherwise communicated by Schlumberger to the customer at any time in connection with the services are opinions based on inferences from measurements, empirical relationships, and/or assumptions; which, inferences, empirical relationships and/or assumptions are not infallible and with respect to which professionals in the industry may differ. Accordingly, Schlumberger cannot and does not warrant the accuracy, correctness, or completeness of any such interpretation, research, analysis, data, results, estimates, or recommendation. The customer acknowledges that it is accepting the services
of any kind or description in respect thereto, and that such services are delivered with the explicit understanding and agreement that any action taken based on the services received shall be at its own risk and responsibility, and no claim shall be made against Schlumberger as a consequence thereof.

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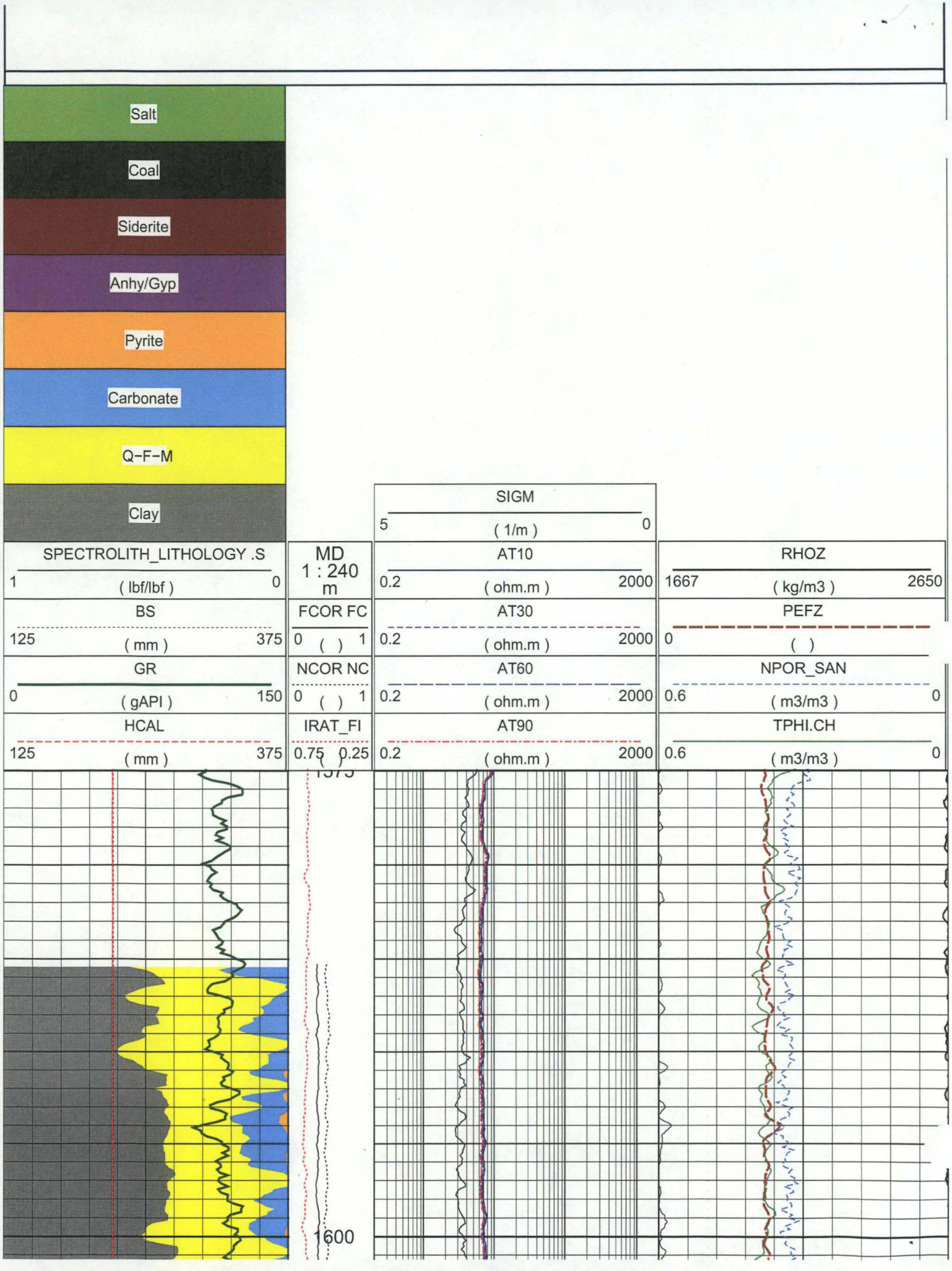
Field Recording:	Location: GRANDE PRAIRIE	Software Version: 20C0-999	Engineer: JEFFREY TATLOCK
Office Recording:	ICS Center: DCS Calgary	Baseline: GF 4.5	Log Analyst: Mirhasanov

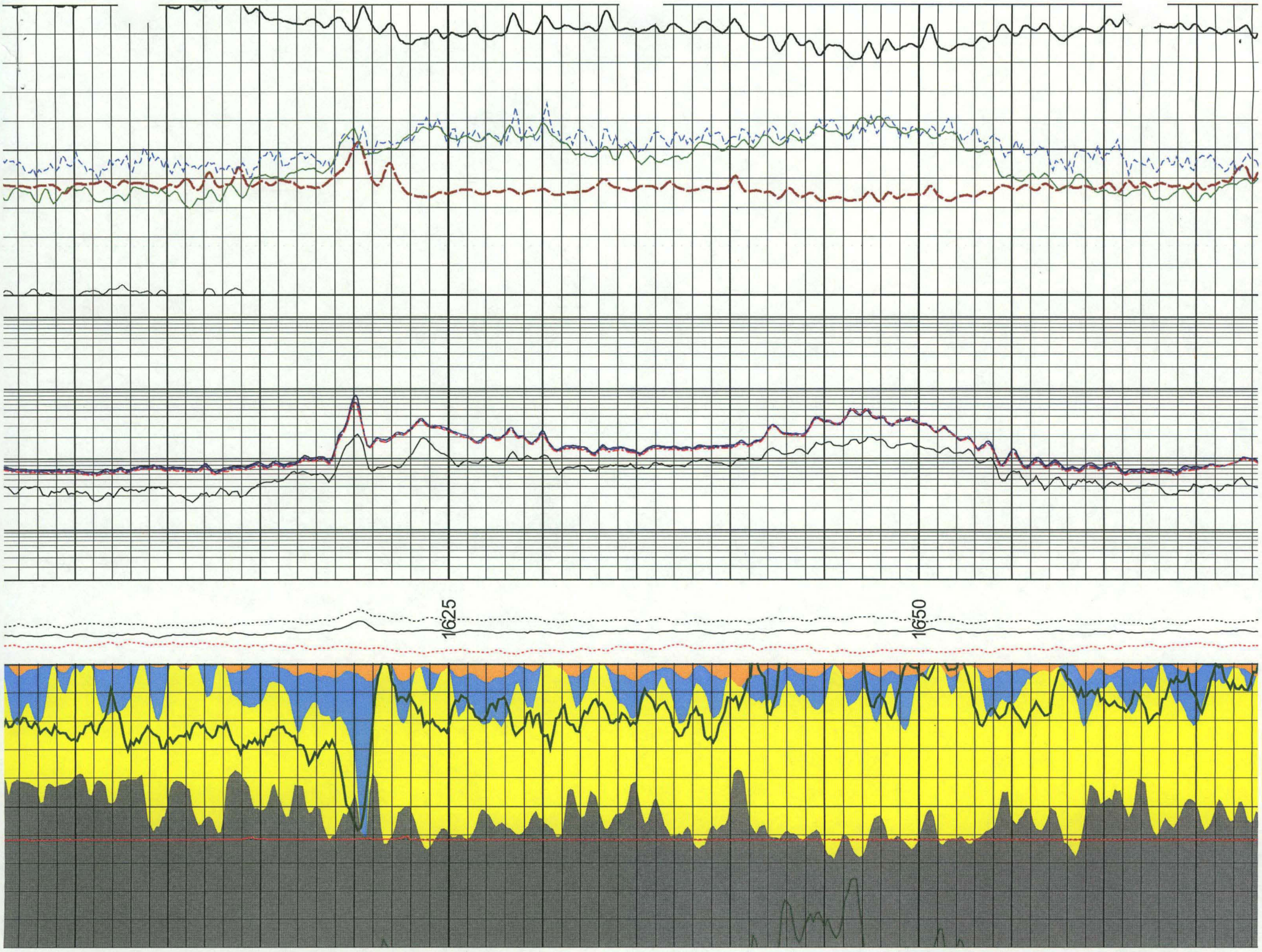
Mud and Borehole Measurements:

Rm @ Measured Temperature: 500ohm.m @ 20degC	BHT: 66.2degC	Bitsize: 222mm
Rmf @ Measured Temperature: 375ohm.m @ 20degC	Type Fluid in Hole:	INVERT
Rmc @ Measured Temperature: @ 20degC	Mud Density: 945kg/m3	

Remarks:

DM 9145


Salt
Coal
Siderite
Anhy/Gyp
Pyrite
Carbonate
Q-F-M
Clay
SPECTROLITH_LITHOLOGY .S
1
(lbf/lbf)
0
BS
125
(mm)
375
GR
0
(gAPI)
150
HCAL
125
(mm)
375
MD
1 : 240
m
FCOR FC
0
( )
1
NCOR NC
0
( )
1
IRAT_FI
0.75
0.25
1575
1600
SIGM
5
(1/m)
0
AT10
0.2
(ohm.m)
2000
AT30
0.2
(ohm.m)
2000
AT60
0.2
(ohm.m)
2000
AT90
0.2
(ohm.m)
2000
RHOZ
1667
(kg/m3)
2650
PEFZ
0
( )
NPOR_SAN
0.6
(m3/m3)
0
TPHI.CH
0.6
(m3/m3)
0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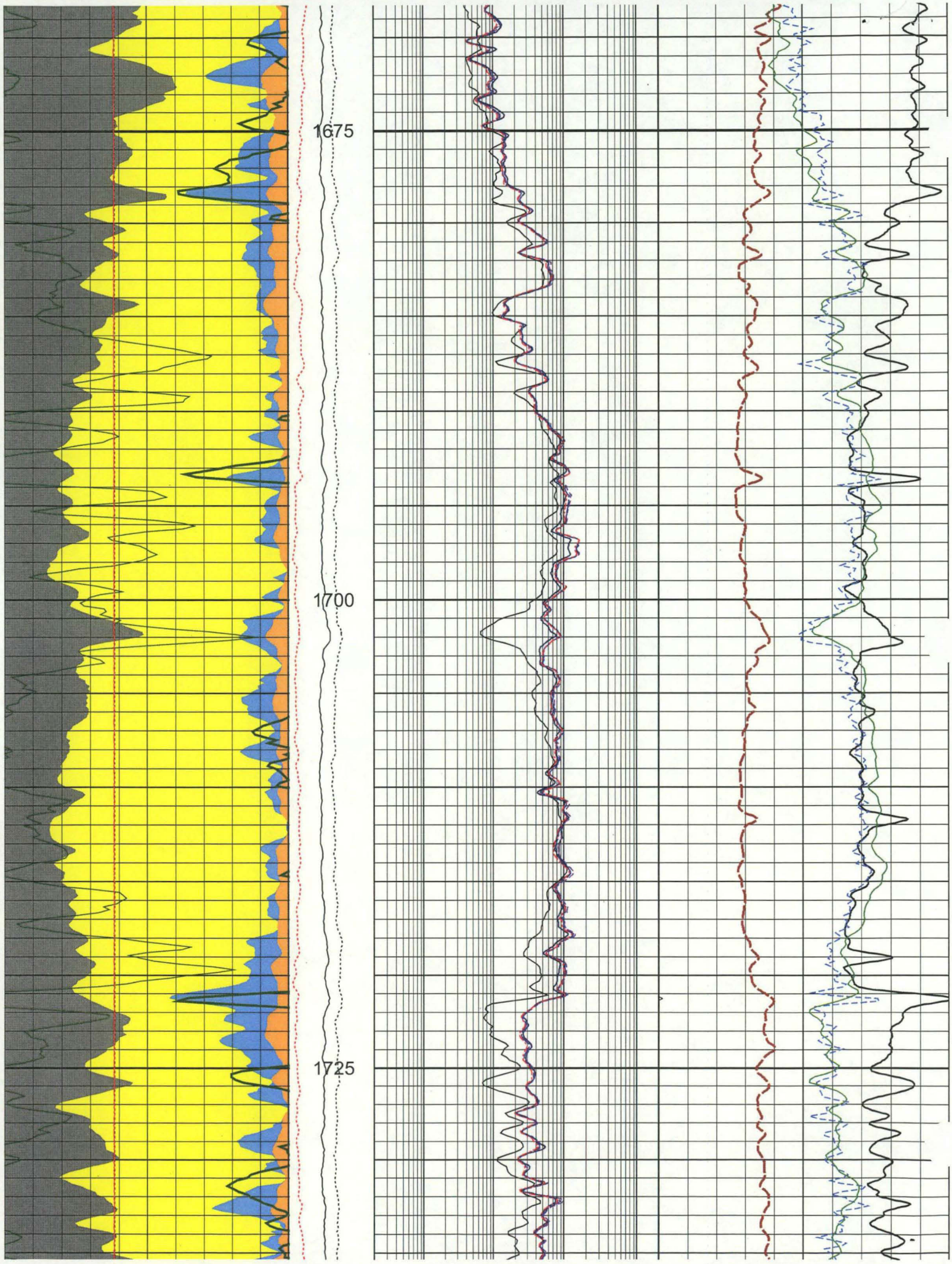
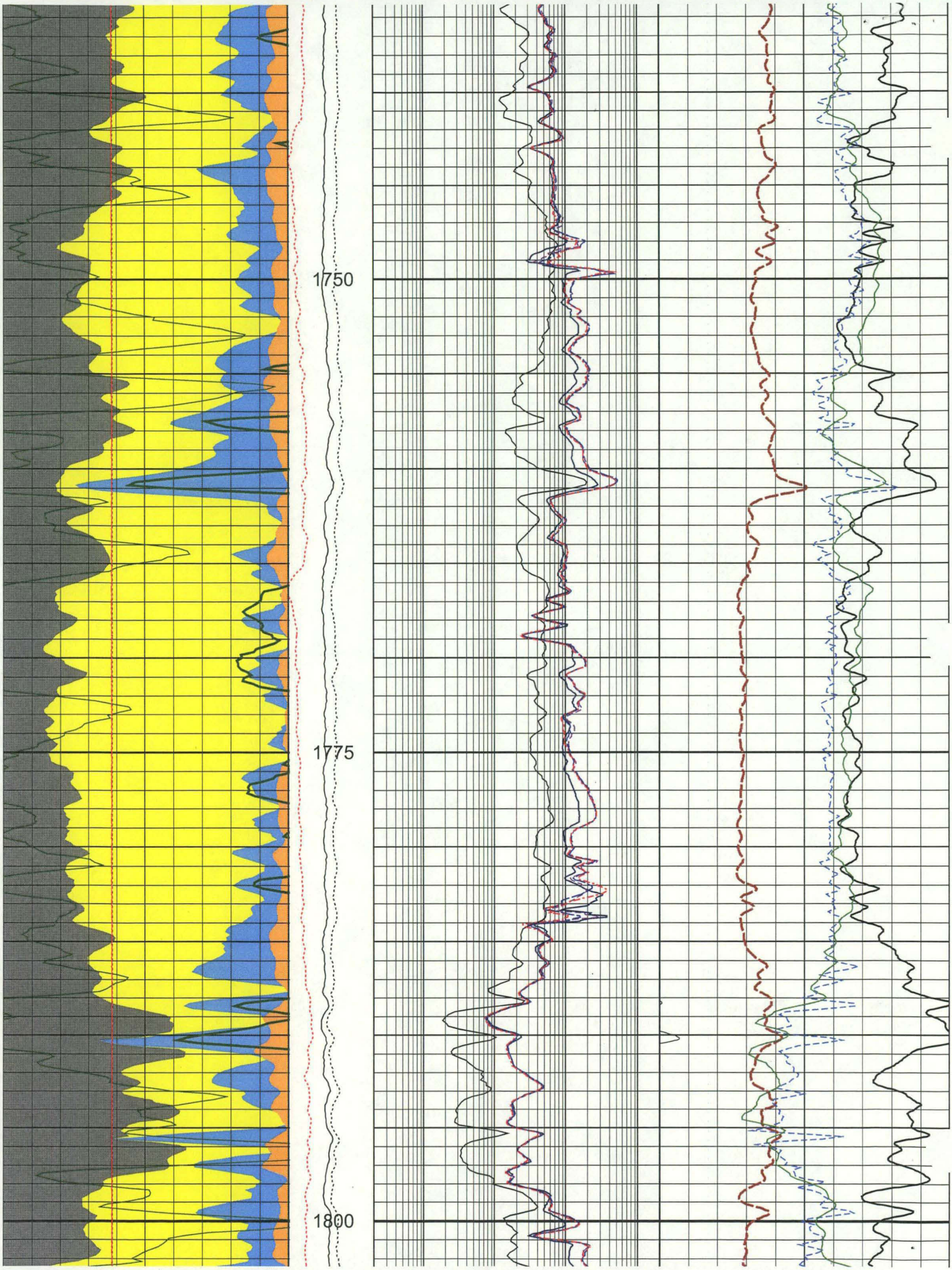

1675
1700
1725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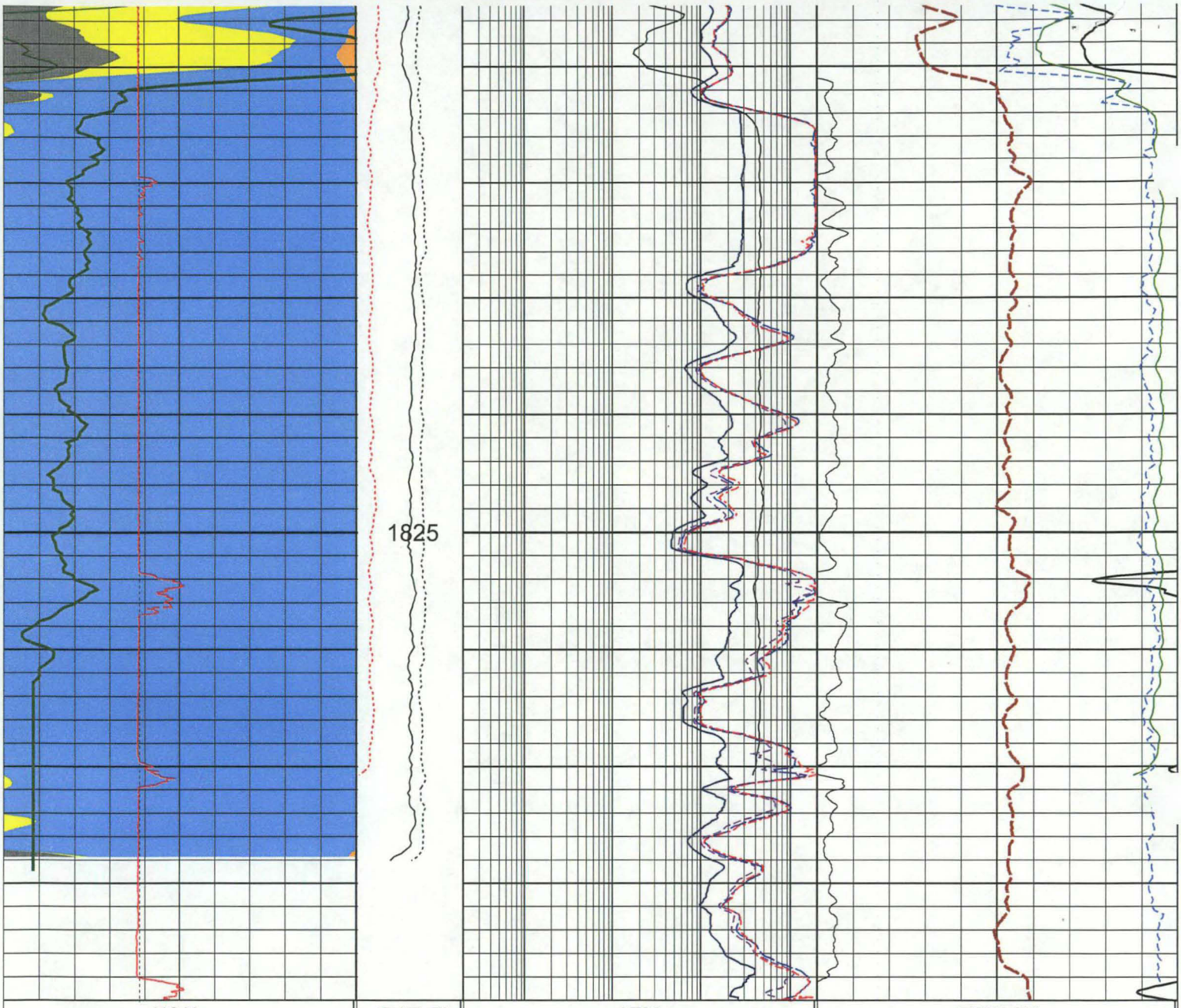
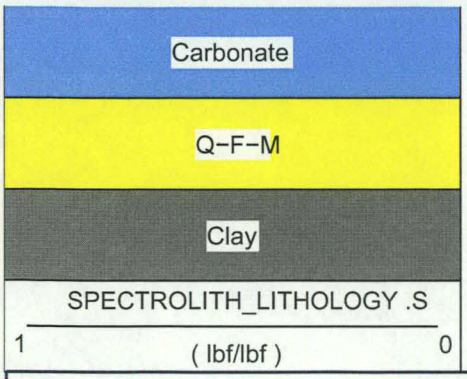


HCAL	IRAT_FI	AT90	TPHI.CH
125 (mm) 375	0.75 ( ) 0.25	0.2 (ohm.m) 2000	0.6 (m3/m3) 0
GR	NCOR NC	AT60	NPOR_SAN
0 (gAPI) 150	0 ( ) 1	0.2 (ohm.m) 2000	0.6 (m3/m3) 0
BS	FCOR FC	AT30	PEFZ
125 (mm) 375	0 ( ) 1	0.2 (ohm.m) 2000	0 ( ) 10
Salt	MD 1 : 240 m	AT10	RHOZ
Coal		0.2 (ohm.m) 2000	1667 (kg/m3) 2650
Siderite		SIGM	
Anhy/Gyp		5 (1/m) 0	
Pyrite			



Company:	CONOCOPHILLIPS CANADA RESOURCES CORP.		
Well:	COPRC LOON CREEK O-6		
FIELD:	LOON CREEK		
Province:	NORTHWEST TERRITORIES		
Date Logged:	17-Feb-2013	Date Processed:	5-March-2013
Well Location:	UNIT 0 SECTION 6 300O066510127000		
Elevations:	KB: 257.6m	DF: 257.3m	GL: 252.4m
API Number:	EL470	Job Number:	CA5M-00021

Schlumberger

Box 2 of 4	
Hydrocarbon Well Log - COPRC Loon Creek O-06 Logging Interval 23.9m 18/01/12 to 15/02/1013	2/15/2013
Hydrocarbon Well Log - COPRC Loon Creek O-06 18/01/13 DM #: 691607	1/18/2013
Geological Strip Log Drilling Progress and Lithology Description from the Conductor Hole Log DM #: 691606	1/26/2013
Tadpole Plot Log	2/16/2013
DUALOBMI-UBI IMAGE PLOT LOG	2/16/2013
Box 3 of 4	
VERTICAL WELL-DIPOLE SHEAR, SONIC IMAGER LOG	1/30/2013
CEMENT EVALUATION, CEMENT BOND LOG	2/26/2013
CEMENT EVALUATION, CEMENT BOND LOG -CORRECTED LOG	2/26/2013
VERTICAL WELL-PLATFORM EXPRESS, HALF SCALE LOG	2/15/2013
VERTICAL WELL-PLATFORM EXPRESS, COMPENSATED NEUTRON, DUAL LITHOLOGY DENSITY LOG	1/30/2013
VERTICAL WELL-PLATFORM EXPRESS, COMPENSATED NEUTRON, DUAL LITHOLOGY DENSITY LOG	2/15/2013
SHEAR ANISOTROPY (Shear Dispersion and Split Analysis)	2/16/2013
VERTICAL WELL-SONIC SCANNER LOG	2/15/2013
ANALYSIS BEHIND CASING, RST-C SPECTROLITH LOG	2/17/2013
VERTICAL WELL-COMBINABLE MAGNETIC, RESONANCE LOG	2/15/2013
VERTICAL WELL-DIPOLE SHEAR ANISOTROPHY	6/30/2013
DIELECTRIC SCANNER INTERPRETATION RESULTS	3/16/2013
VERTICAL WELL-GEOFRAME PROCESSED INTERPRETATION- STONELEY FRACTURE ANALYSIS	2/10/2013
VERTICAL WELL-GEOFRAME PROCESSED INTERPRETATION-MECHANICAL PROPERTIES	2/12/2013
LITHO SCANNER PROCESSED DATA	2/15/2013
VERTICAL WELL-CEMENT EVALUATION, ULTRASONIC IMAGING/CEMENT BOND LOG	2/18/2013
VERTICAL WELL-HOSTILE ENVIRONMENT, NATURAL GAMMA RAY, SPECTROMETRY LOG	2/16/2013
Box 4 DVD 1/ DM 709696	
COPRC LOON CREEK O-06 LAS Files	3/17/2013
VERTICAL WELL-RESERVOIR SATURATION LOG, SIGMA/CARBON OXYGEN LOG	2/17/2013
VERTICAL WELL-SONIC SCANNER, FIELD LOG	2/16/2013
VERTICAL WELL-DUAL OIL BASE MUD,IMAGER LOG	2/16/2013
VERTICAL WELL-ULTRASONIC BOREHOLE, IMAGER LOG	2/16/2013
VERTICAL WELL-DIELECTRIC SCANNER, FIELD LQC LOG	2/15/2013
VERTICAL WELL-COMBINABLE MAGNETIC, RESONANCE LOG	2/15/2013
VERTICAL WELL-HOSTILE ENVIRONMENT, NATURAL GAMA RAY, SPECTROMETRY LOG	2/16/2013
VERTICAL WELL-PLATEFORM EXPRESS, ARRAY INDUCTION LOGS	2/15/2013
VERTICAL WELL-CEMENT VOLUME LOG	2/15/2013
VERTICAL WELL-PLATEFORM EXPRESS, HALF SCALE LOG	2/15/2013
VERTICAL WELL-LOG QUALITY CONTROL LOG	2/15/2013

VERTICAL WELL-PLATEFORM EXPRESS, COMPENSATED NEUTRON, DUAL LITHOLOGY DENSITY LOG	2/15/2013
VERTICAL WELL-CEMENT EVALUATION ULTRASONIC IMAGING /CEMENT BOND LOG	2/18/2013
Box 4 DVD 2/ DM 709691	
COPRC_LOON_CREEK_O-06_rst_spectrolith13.las	3/7/2013
ANALYSIS BEHIND CASING, RST-C SPECTROLITH LOG	2/17/2013
ANALYSIS BEHIND CASING, RST-C SPECTROLITH LOG	2/17/2013
VERTIACAL WELL-RESERVOIR SATYRATION LOG, SIGMA/CARBON OXYGEN LOGS	2/17/2013
RST IC PASS #1 (1752-1595M)	3/7/2013
RST IC PASS #1 (1825-1750M)	3/7/2013
RUN 2.4 - RST IC PASS #2 (1825-1595M)	3/7/2013
RUN 2.4 - RST IC PASS #3 (1825-1595M)	3/7/2013
Box 4 DVD 3 Folder 1	
VERTICAL WELL-Interpretation Results Log	2/16/2013
CEMENT EVALUATION, CEMENT BOND LOG	2/26/2013
VERTICAL WELL-PLATEFORM EXPRESS, ARRAY INDUCTION LOGS	1/30/2013
VERTICAL WELL-CEMENT VOLUME LOG	1/30/2013
VERTICAL WELL-DIPOLE SHEAR, SONIC IMAGER LOG	1/30/2013
VERTICAL WELL-GENERAL PURPOSE , INCLENOMETRY LOG	1/30/2013
VERTICAL WELL-PLATEFORM EXPRESS, HALF SCALE LOG	1/30/2013
VERTICAL WELL-LOG QUALITY CONTROL LOG	1/30/2013
VERTICAL WELL-PLATFORM EXPRESS, COMPENSATED NEUTRON, DUAL LITHOLOGY DENSITY LOG	1/30/2013
VERTICAL WELL-LITHO SCANNER PROCESSED DATA LOG	2/15/2013
VERTICAL WELL-SONIC SCANNER, FIELD LQC LOG	2/16/2013
VERTICAL WELL-DUEL OIL BASED MUD, IMAGER LOG	2/16/2013
VERTICAL WELL-ULTRASONIC BOREHOLE, IMAGER LOG	2/16/2013
STEREONET ANALYSIS	3/26/2013
TADPOLE Final	4/5/2013
TADPOLE PLOT	2/16/2013
DIELECTRIC SCANNER, FIELD LOG	2/15/2013
VERTICAL WELL-COMBINABLE MAGNETIC, RESONANCE LOG	2/15/2013
VERTICAL WELL-HOSTILE ENVIRONMENT, NATURAL GAMA RAY, SPECTROMETRY LOG	2/16/2013
VERTICAL WELL-PLATEFORM EXPRESS, ARRAY INDUCTION LOGS	2/15/2013
VERTICAL WELL-CEMENT VOLUME LOG	2/15/2013
VERTICAL WELL-PLATFORM EXPRESS, HALF SCALE LOG	2/15/2013
VERTICAL WELL-LOG QUALITY CONTOL	2/15/2013
VERTICAL WELL-PLATFORM EXPRESS, COMPENSATED NEUTRON, DUAL LITHOLOGY DENSITY LOG	2/15/2013
VERTICAL WELL-CEMENT EVALUATION, ULTRASONIC IMAGING/CEMENT BOND LOG	2/18/2013
VERTICAL WELL-DIPOLE SHEAR, SONIC IMAGER LOG (CALGARY PROCESSED DATA)	1/30/2013
HYDROCARBON RATIO PLOT	2/15/2013

Box 4 DVD 4 DM 714693	
Cover Letter Re: Submission of COPRC Loon Creek O-06 Well Testing Report	5/17/2013
Oil Mini Frac Analysis "Basal" Lower Canol	3/2/2013
Oil Mini Frac Analysis "Basal" Middle Canol	3/3/2013
Oil Mini Frac Analysis "Basal" Upper Canol	
Box 4 DVD 5 DM 709637	
Final Report and Striplog -Geological Report on COPRC Loon Creek O-06	2/14/2013
Box 4 DVD 6 DM 709260	
Hydrocarbon Well Log	1/18/2013
HYDROCARBON RATIO PLOT	
Box 4 DVD 8 DM 709754	
PTS_CORP_Loon Creek O-06	2/12/2013
VERTICAL WELL-DIPOLE SHEAR, SONIC IMAGER LOG	1/30/2013
Box 4 DVD 9 DM 709651	
CORP_Loon Creek O-06_Litho_Scanner_Processed_Main	2/27/2013
VERTICAL WELL-Processed Data	2/15/2013
Box 4 DVD 10 DM 709640	
COPRC-LOON CREEK-O-06_605-870_OBMI-Image Final	4/3/2013
COPRC-LOON CREEK-O-06_870-1000_OBMI-UBI-Image Final	4/3/2013
COPRC-LOON CREEK-O-06_1000-1625_OBMI-Image Final	4/3/2013
COPRC-LOON CREEK-O-06_1625-TD_OBMI-UBI-Image Final	4/3/2013
COPRC-LOON CREEK-O-06_stereonet	3/26/2013
COPRC-LOON CREEK-O-06_tadpole_btm_Final	4/5/2013
COPRC-LOON CREEK-O-06_tadpole_top_Final log	2/16/2013
Box 4 DVD 11 DM 709645	
COPRC-LOON CREEK-O-06_Main lower_rev1	3/28/2013
VERTICAL WELL-Interpretation Results	3/16/2013
Box 4 DVD 12 DM 709767	
PST_COPRC_LOON CREEK_O6_SonicScanner_Relabel	3/18/2013
PST_COPRC_LOON CREEK_O6_SonicScanner_CompletionPlus	3/18/2013
PST_COPRC_LOON CREEK_O6_SonicScanner_Anisotropy	3/18/2013
Box 4 DVD 13 DM 714771	
Shale Gas/Oil Advisor Processed Data Log- Revised	2/16/2013
COP_LOON CREEK_06-LAS	
Box 4 DVD 14 DM 709819	
CEMENT EVALUATION, CEMENT BOND LOG	2/26/2013
COPRC_LOON_CREEK_O-6_MAIN Pass ZCMT=3.2	3/22/2013
COPRC_LOON_CREEK_O-6_MAIN Pass ZCMT=5.8	3/22/2013
COPRC_LOON_CREEK_O-6_Repeat Pass	3/22/2013
Box 4 DVD 14 DM 709816	
COPRC_LOON_CREEK_O-6_MAIN Pass	2/17/2013
VERTICAL WELL-PLATFORM EXPRESS, ARRAY INDUCTION LOG	1/30/2013
VERTICAL WELL-CEMENT VOLUME LOG	1/30/2013
VERTICAL WELL-DIPOLE SHEAR, SONIC IMAGER LOG	1/30/2013
VERTICAL WELL-GENERAL PURPOSE, INCLINOMETRY LOG	1/30/2013
VERTICAL WELL-PLATFORM EXPRESS, HALF SCALE LOG	1/30/2013

VERTICAL WELL-LOG QUALITY CONTROL	1/30/2013
VERTICAL WELL-PLATFORM EXPRESS, COMPENSATED NEUTRON, DUEL LITHOLOGY DENSITY LOG	1/30/2013