ConocoPhillips Resources Canada

COPRC Mirror Lake N-20 Final Well Report

Grid # 65°00', 126°45'

2013/05/13

COPRC Mirror Lake N-20

Table of Contents

1.0 Introduction

1.1 Summary

The COPRC Mirror Lake N-20 well was spudded on February 25, 2013 and the rig was released on March 25 2013 after reaching a total depth of 2146 m KB with a total of 27 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 Mirror Lake N-20 location was completed by February 21 2013.

Beaver Drilling Rig # 2 was mobilized from the Loon Creek O-06 location to the Mirror Lake site starting on February 21 2013 and all rig loads were on location by February 23 2013. Rig up took approximately 3 days due to the extremely cold weather and short days.

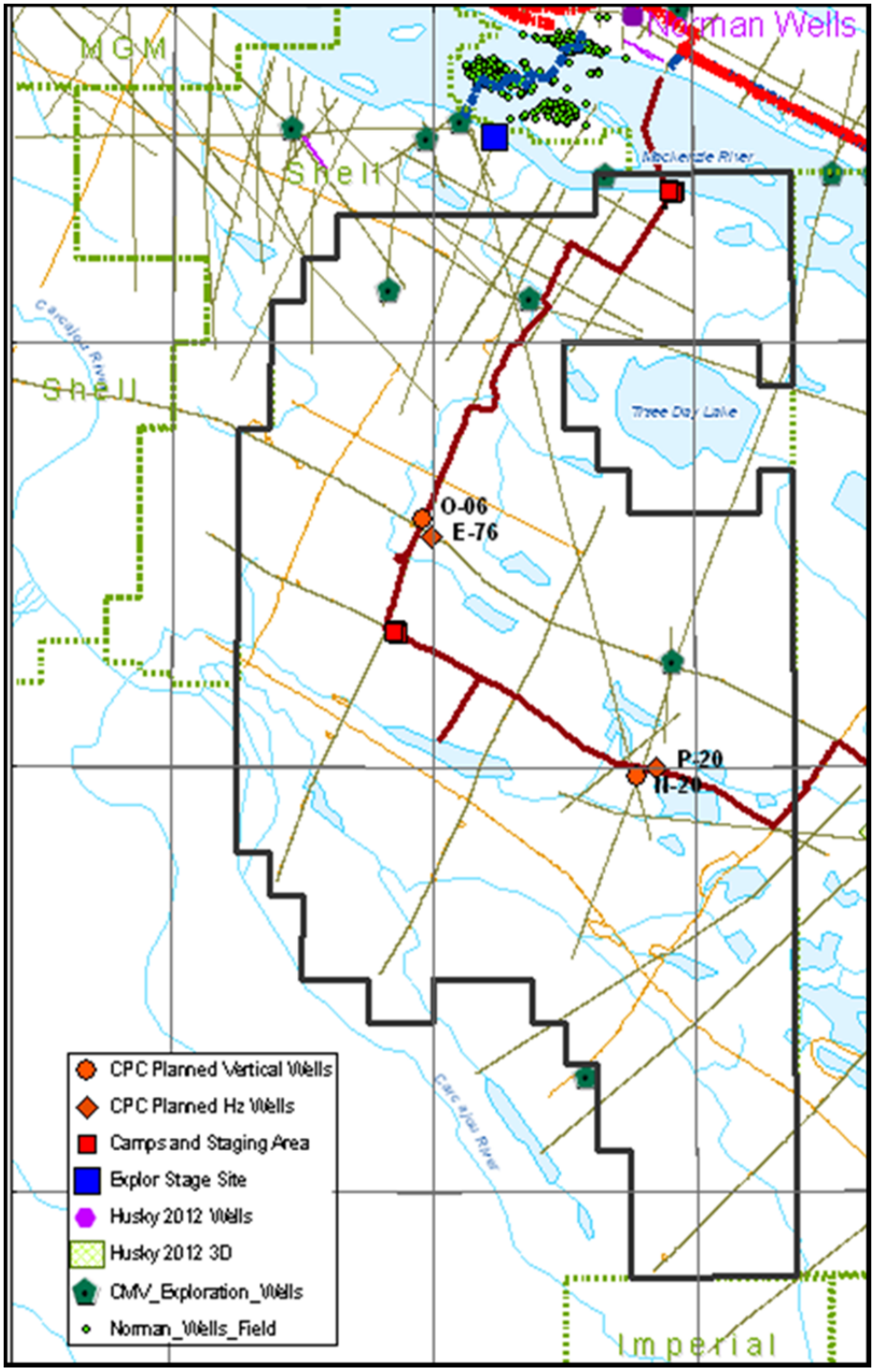
Drilling operations were conducted with no major issues and no safety incidents occurred. The Canol target zone was encountered at 1931 m KB and the secondary target, the Bluefish member, came in at approximately 2073 m KB. Wire line retrievable coring techniques were used to core a total of 248 meters from 1890 m KB to 2138 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 1600 m KB and Oilwell 'G' cement from 1600 m to 2146 m KB.

Completion operations commenced March 26 and were finished by March 30 2013; having conducted 3 DFIT's on the Canol formation. The intervals for the DFIT's were 2059 – 2060 m KB, 2023 – 2024 m KB and 1993 – 1994 m KB. Each interval was suspended by setting two wire line retrievable bridge plugs with recorders installed beneath the bottom WRBP's.

The bridge plugs and recorders will be recovered in the 2013/2014 winter drilling season

All equipment required for the DFIT's was rigged out by March 30 2013 and the Mirror Lake N-20 well is suspended with wellhead installed and the valves locked.

1.2 Locality Map



2.0 General Data

2.1 Well Name

COPRC Mirror Lake N-20

2.2 Unique Well Identifier

300N206500126450

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: 281.30 m

Kelly Bushing: 286.50 m

KB – Ground Level: 5.20 m

3.2 Total depth

2146 m KB

3.3 Spud Date and Time

February 25 2013 @ 0500 Hours

3.4 Date Drilling Completed

Drilling completed 3/20/2103

3.5 Rig Release Date and Time

Rig Released 03/25/13 @00:00 Hrs.

3.6 Well Status

Suspended

3.7 Hole sizes and depths

Surface Hole: 311 mm to 601 m KB

Main Hole: 222 mm to 2146 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 598.0 m KB

3.8.3 Main Hole

177.8 mm, 38.69 kg/m P-110 LTC set at 2146.0 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 Mirror Lake N-20 on February 3, 2013 after drilling out the surface casing shoe at 598 m KB and making 10 metres of new hole. The FIT at 611 m KB was conducted with 960.0 kg/m^3 OBM in the hole and was taken to a pressure of 7530 kPa with no leak off. This equates to an equivalent fracture pressure of 11484 kPa or an equivalent fracture gradient equivalent to 18.80 kPa/m.

3.11 Time Distribution

Casing: 25.0 hrs.

Cementing:25.75 hrs.

Coring: 229.00 hrs.

Drilling: 268.25 hrs.

Formation Evaluation: 52.0 hrs.

Rig Move: 135.50 hrs.

Rig Maintenance: 24.25 hrs.

Wellhead/BOP testing: 30.25 hrs.

Trouble Time: 69.25 hrs.

3.12 Deviation Survey

The maximum deviation encountered on this well was 2.90^0 at 1875.0 m KB

3.13 Suspension Status

CPORC Mirror Lake N020 is suspended. A StreamFlo 34.5 MPa wellhead with two master valves is installed and chained and locked.

3.14 Composite Well Record

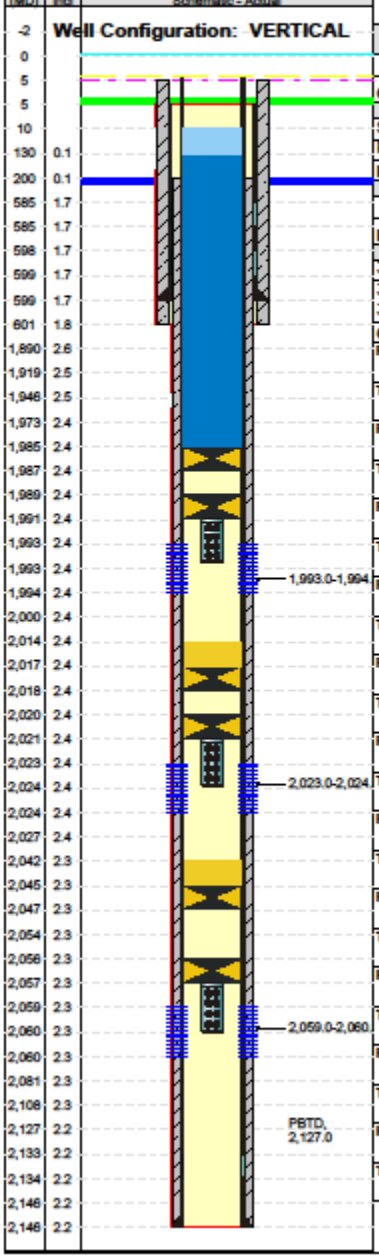
ConocoPhillips Canada

Downhole Well Profile
COPRC MIRROR LAKE N-20 65-00 126-45

API / UWI	Surface Legal Location	Field Name	License No.	Well Configuration Type
200/C-011-L/094-P-16/99	C-011-L/94-P-16	MIRROR LAKE	EL470	VERTICAL

Ground Elevation (m)	Orig KB/RT (m)	KB-Grd (m)	KB-CF (m)	KB-TF (m)	Other Elevation Type	Other Elevation (m)
281.30	286.50	5.20	4.87	4.32	BGW	

Well Config: VERTICAL - Original Hole, 5/8/2013 10:34:49 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	59.527	J-55	LT&C	599.00
Production	177.8	38.692	P-110	LT&C	2,146.00

PBTDs

Depth (mKB)	KO MD (mKB)	TD (max) (mKB)
2,127.00		2,146.00

PERFORATIONS

Date	Top (mKB)	Btm (mKB)	Zone	Current Status
3/28/2013	1,993.00	1,994.00	Upper Lower Canol, Original H...	Plugged
3/28/2013	2,023.00	2,024.00	Middle Lower Canol, Original ...	Plugged
3/27/2013	2,059.00	2,060.00	Basal Lower Canol, Original H...	Plugged

OTHER IN HOLE

Run Date	Description	OD (mm)	ID (mm)
Top (mKB)	**Bottom (mKB)**	**Make**	**Model**
3/27/2013	Pup Joint Assembly un...	60.3	
2,057.18	2,059.62		
3/27/2013	Barrier - Retrievable Br...	159.0	
2,055.79	2,057.18	Schlumberger	M-CW Retrievable
3/27/2013	Barrier - Retrievable Br...	159.0	
2,045.29	2,046.77	Schlumberger	M-CW Retrievable
3/28/2013	Sand Cap	159.0	
2,042.29	2,045.29		
3/28/2013	Barrier - Retrievable Br...	159.0	
2,019.79	2,021.18	Schlumberger	M-CW Retrievable
3/28/2013	Pup Joint Assembly un...	60.3	
2,021.18	2,023.58		
3/28/2013	Barrier - Retrievable Br...	159.0	
2,016.79	2,018.26	Schlumberger	M-CW Retrievable
3/28/2013	Sand Cap	159.0	
2,013.79	2,016.79		
3/28/2013	Barrier - Retrievable Br...	159.0	
1,989.29	1,990.68	Schlumberger	M-CW Retrievable
3/28/2013	Pup Joint Assembly un...	60.3	
1,990.68	1,993.08		

Template Revised 8/1/2007 Page 1/2 Report Printed: 5/8/2013

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Drilling Summary

MIRROR LAKE N-20 65-00 126-45

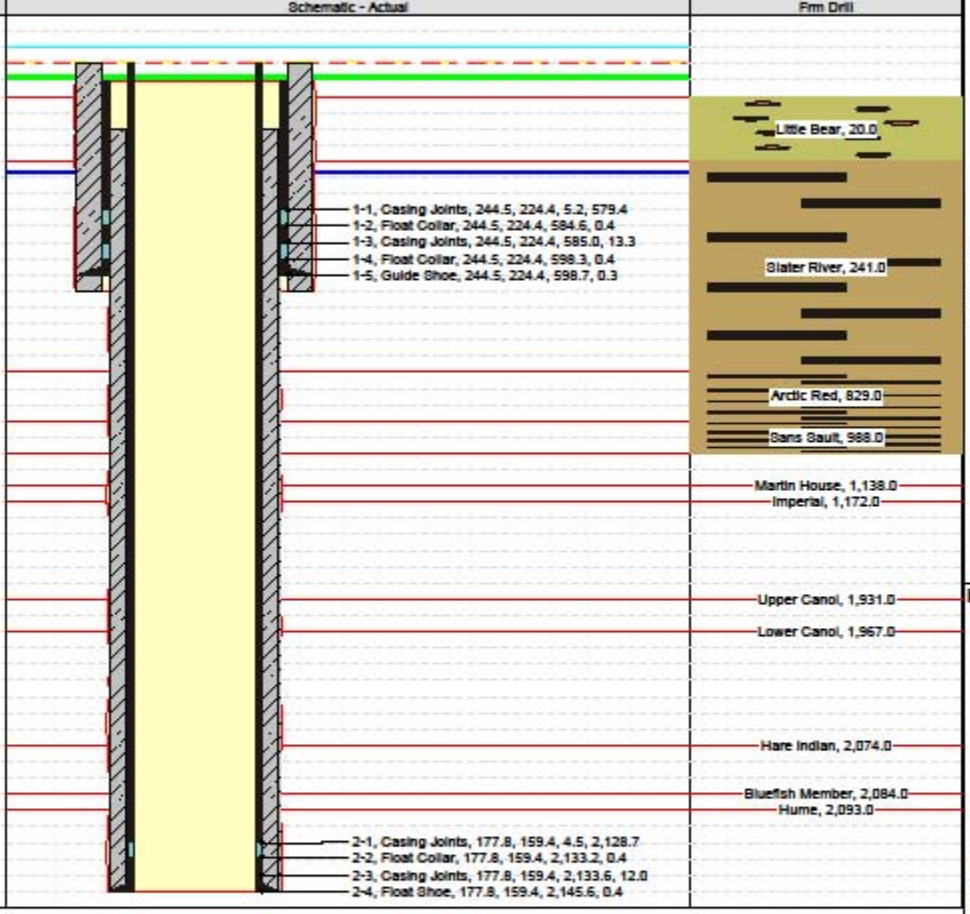
API / UWI	Field Name	Area	Operator	County
200/C-011-L/094-P-16/99	MIRROR LAKE		CONOCOPHILLIPS	

Ground Elevation (m)	Casing Flange Elevation (m)	KB-Ground Distance (m)	KB-Casing Flange Distance (m)	Original Spud Date
281.30	281.63	5.20	4.87	2/25/2013

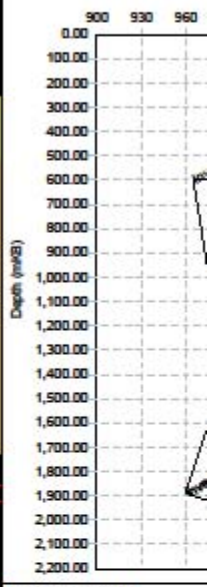
Schematic

Well Config: VERTICAL - Original Hole, 3/25/2013 12:00:00 PM

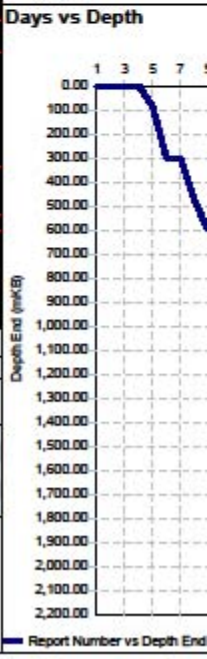
mKB (MD)	mKB (TVD)	Incl
-2		
0		
5		
5		
20		
22		
200	200	0.1
217	217	0.4
241	241	0.4
300	300	0.5
532	532	1.5
585	585	1.7
585	585	1.7
598	598	1.7
599	599	1.7
599	599	1.7
601	601	1.8
611	611	1.8
616	616	1.9
643	643	1.5
792	792	2.1
829	829	1.1
915	915	1.5
962	962	1.8
988	988	2.2
1,037	1,037	2.4
1,103	1,103	1.3
1,112	1,112	1.4
1,138	1,138	1.6
1,172	1,172	1.0
1,741	1,740	1.5
1,890	1,889	2.6
1,892	1,891	2.6
1,919	1,918	2.5
1,927	1,926	2.5
1,931	1,930	2.5
1,946	1,945	2.5
1,967	1,966	2.5
1,973	1,972	2.4
2,000	1,999	2.4
2,027	2,026	2.4
2,037	2,036	2.4
2,054	2,053	2.3
2,062	2,061	2.3
2,074	2,073	2.3
2,081	2,080	2.3
2,082	2,081	2.3
2,084	2,083	2.3
2,093	2,092	2.3
2,108	2,107	2.3
2,133	2,132	2.2
2,134	2,133	2.2
2,146	2,145	2.2
2,146	2,145	2.2



Mud WT vs Depth



Days vs Depth



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, VAREL, HE04JMRSV, 1...	2-3-WT-A-E-3-NO-TD	0.00	601.00	601.00	55.25	10.9	17,000	5,000	120	120
1	222.0mm, REED, MSR516M-A2C, ...	1-1-CT-S-X-0-NO-CP	601.00	2,146.00	1,293.00	85.50	15.1	10,000	3,000	197	75
1C	222.0mm, NOV, PR513, E140308	1-1-BT-M-X-0-NO-DTF	1,891.00	2,027.00	136.00	16.00	8.5	5,000	4,000	65	55
2C	222.0mm, NOV, CEPR5135, A1/E1...	2-2-CT-M-X-0-NO-DTF	2,027.00	2,108.00	81.00	12.00	6.8	5,500	5,000	65	60
RR1	222.0mm, REED, MSR516M-A2C, ...	1-3-WT-A-X-0-NO-TD	2,108.00	2,146.00	38.00	12.25	3.1	9,000	8,000	80	70

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Page 1

4. Geology

4.1 Drill Cuttings

Drill cuttings were collected at 5 metre intervals from spud to TD (2146 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 1890.0 m to 2108.0 m KB was wire line cored in the Mirror Lake N-20 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**
Little Bear	21.5	265	20.0	20.0	266
Slater River	217	70	241.0	241.0	46
Arctic Red	792	-505	829.0	829.0	-542
Sans Sault	962	-675	988.0	988.0	-699
Martin House	1037	-750.0	1138.0	1138.0	-851
Imperial	1112	-825.0	1172.0	1172.0	-885
Upper Canol	1892	-1605.0	1931.0	1931.0	-1644
Lower Canol	1927	-1640.0	1967.0	1967.0	-1680
Hare Indian	2037	-1750.0	2074.0	2074.0	-1787
Bluefish Member	2062	-1775.0	2084.0	2084.0	-1797
Hume	2132	-1845.0	2093.0	2093.0	-1806
TD	2146	-1859.0	2146.0	2146.0	-1859.0

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/PEX/TLD2	2148	600
	2	UBI/OBMI/OBMI2/PPC/MSIP/PBC/EDTC	2148	600
	3	UBI rerun	2148	600
	4	RST /ADT/HNGS/CMR (NTR)	2148	600
	5	CBL	600	0

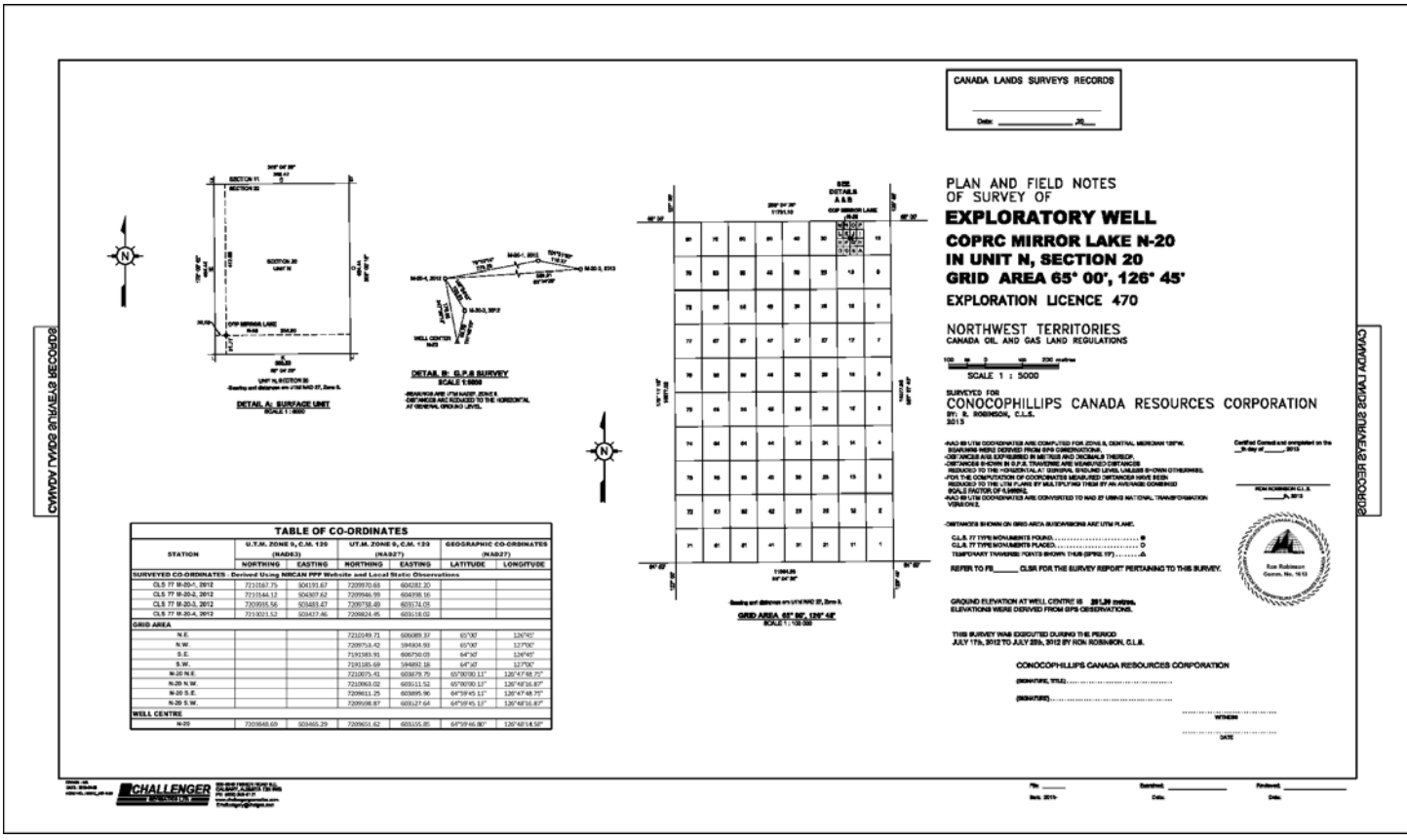
5.2 DFIT Results

Completion operations commenced March 26 and were finished by March 30, 2013, 3 DFIT's having been conducted on the Canol formation. The intervals for the DFIT's were 1993 – 1994 m KB, 2023 - 2024 m KB and 2059 - 2060 m KB. Each interval was suspended by setting two wire line retrievable bridge plugs with dual pressure recorders installed beneath the bottom WRBP.

The wire line retrievable bridge plugs were left in place and the well suspended in order to allow sufficient time for pressure bleed off. The bridge plugs and recorders will be retrieved as part of the overall winter exploration program in 2013-2014.

Appendices to Well History Report

I. Final Survey Plot of COPRC Mirror Lake N-20



CANADA LANDS SURVEYS RECORDS

PLAN AND FIELD NOTES
OF SURVEY OF
EXPLORATORY WELL
COPRC MIRROR LAKE N-20
IN UNIT N, SECTION 20
GRID AREA 65° 00', 126° 45'
EXPLORATION LICENCE 470

NORTHWEST TERRITORIES
CANADA OIL AND GAS LAND REGULATIONS

SCALE 1 : 5000

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

DETAIL A: SURFACE UNIT
SCALE 1:5000

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

GRID AREA 65° 00', 126° 45'
SCALE 1:100 000

TABLE OF CO-ORDINATES

STATION	U.T.M. ZONE 9, C.M. 135 (NAD83)		U.T.M. ZONE 9, C.M. 135 (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 M-20-1, 2012	7210167.75	506191.67	7209970.68	604282.20		
CLS 77 M-20-2, 2012	7210144.12	504307.62	7209946.99	604298.16		
CLS 77 M-20-3, 2012	7209915.56	503483.47	7209738.69	603574.05		
CLS 77 M-20-4, 2012	7210021.52	503427.46	7209824.45	603518.02		
GRID AREA						
N.E.			7210149.71	606089.37	65°00'	126°45'
N.W.			7209753.42	584804.93	65°00'	127°00'
S.E.			7191583.91	606750.03	64°50'	126°45'
S.W.			7191185.69	584892.16	64°50'	127°00'
N-20 N.E.			7210075.41	603679.75	65°00'00.11"	126°47'48.72"
N-20 N.W.			7210063.02	603511.52	65°00'00.11"	126°48'16.87"
N-20 S.E.			7209611.25	603895.96	64°59'45.11"	126°47'48.75"
N-20 S.W.			7209598.87	603127.64	64°59'45.11"	126°48'16.87"
WELL CENTRE						
N-20	7209648.69	503465.29	7209651.62	603155.85	64°59'46.80"	126°48'14.58"

CHALLENGER GEOMATICS LTD.

II. Casing and Cementing Report

ConocoPhillips Canada

Casing Summary

MIRROR LAKE N-20 65-00 126-45

API / UWI	Surface Legal Location	District	Field Name	License No.
200/C-011-L/094-P-16/99	C-011-L/94-P-16	NEW VENTURES	MIRROR LAKE	EL470
Program	**Well Type**	**Well Configuration Type**	**Original KB/RT Elevation (m)**	**KB-Ground Distance (m)**
	Exploration	VERTICAL	286.50	5.20

Surface, 599.00mKB

Set Depth (mKB)	Set Tension (daN)	String Nominal OD (mm)	Minimum Drift (mm)	Centralizers Count	Scratchers Count
599.00	25,000.0	244.5		20	

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	224.4	59.527	J-55	LT&C	0.14	584.56	584.42		17,720
1	Float Collar	244.5	224.4	59.527	J-55	LT&C	584.56	584.98	0.42		17,720
1	Casing Joints	244.5	224.4	59.527	J-55	LT&C	584.98	598.29	13.31		17,720
1	Float Collar	244.5	224.4	59.527	J-55	LT&C	598.29	598.71	0.42		17,720
1	Guide Shoe	244.5	224.4	59.527	J-55	LT&C	598.71	599.00	0.29		17,720

Production, 2,146.00mKB

Set Depth (mKB)	Set Tension (daN)	String Nominal OD (mm)	Minimum Drift (mm)	Centralizers Count	Scratchers Count
2,146.00	55,000.0	177.8		100	

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)
178	Casing Joints	177.8	159.4	38.692	P-110	LT&C	-1.87	2,133.16	2,135.03		42,954
1	Float Collar	177.8	159.4	38.692	P-110	LT&C	2,133.16	2,133.56	0.40		42,954
1	Casing Joints	177.8	159.4	38.692	P-110	LT&C	2,133.56	2,145.60	12.04		42,954
1	Float Shoe	177.8	159.4	38.692	P-110	LT&C	2,145.60	2,146.00	0.40		42,954

Template Revised 8/1/2007 Page 1/1 Report Printed: 4/9/2013

ConocoPhillips Canada

Cement Summary

MIRROR LAKE N-20 65-00 126-45

Production

API / UWI	Surface Legal Location	District	Field Name	License No.
200/C-011-L/094-P-16/99	C-011-L/94-P-16	NEW VENTURES	MIRROR LAKE	EL470
Program	**Well Type**	**Well Configuration Type**	**Original KB/RT Elevation (m)**	**KB-Ground Distance (m)**
	Exploration	VERTICAL	286.50	5.20

Original Hole

Wellbore Name	Profile Type	Kick Off Depth (mKB)	Vertical Section Direction (°)
Original Hole	Vertical		0.00

Section	Size (mm)	Act Top (mKB)	Act Btm (mKB)
SURFAC	311.0	5.20	601.00
PROD1	222.0	601.00	2,146.00

Casing Bowl, Streamflo on 3/3/2013 3:00:00 PM

Type	Install Date
Casing Bowl	3/3/2013

Description	Make	Model	WP (kPa)	Service	SN
Casing Bowl	Streamflo	CUM-API115X115SVC...	34,500	Sweet	

Top Section, <Make?> on 3/27/2013

Type	Install Date
Top Section	3/27/2013

Description	Make	Model	WP (kPa)	Service	SN
#2 Casing Valve (east)	Stream Flo	Gate 52.4mm 69MPa	69,000	Sweet	214101-82
WH Adapter Flange	Stream Flo	179mm 69 MPa x 65mm 35MPa	34,500	Sweet	202617-06
Master Valve	Stream Flo	Gate 65mm 35MPa	34,500	Sweet	151439
Casing Valve (west)	Stream Flo	Gate 52.4mm 69MPa	69,000	Sweet	214110-83
Top Cap Flange	Stream Flo	R-27 35MPa x 73mm EUE up	34,500	Sweet	213994-099
Casing Valve (east)	Stream Flo	Gate 52.4mm 69MPa	69,000	Sweet	214101-76
#2 Casing Valve (west)	Stream Flo	Gate 52.4mm 69MPa	69,000	Sweet	214110-88
Tubing Spool	Stream Flo	279mm 35MPa x 179mm 69MPa	69,000	Sweet	215259-04
179mm Master Valve	Stream Flo	179mm Full Bore	69,000	Sweet	142793

Surface, 599.00mKB

Casing Description	Wellbore	Run Date	Set Depth (mKB)	Stick Up (mKB)	Set Tension (daN)
Surface	Original Hole	3/2/2013	599.00	-0.14	25,000.0
Centralizers Count			**Scratchers Count**		
20					

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	224.4	59.527	J-55		LT&C	584.42	0.14	584.56
1	Float Collar	244.5	224.4	59.527	J-55		LT&C	0.42	584.56	584.98
1	Casing Joints	244.5	224.4	59.527	J-55		LT&C	13.31	584.98	598.29
1	Float Collar	244.5	224.4	59.527	J-55		LT&C	0.42	598.29	598.71
1	Guide Shoe	244.5	224.4	59.527	J-55		LT&C	0.29	598.71	599.00

Production, 2,146.00mKB

Casing Description	Wellbore	Run Date	Set Depth (mKB)	Stick Up (mKB)	Set Tension (daN)
Production	Original Hole	3/23/2013	2,146.00	1.87	55,000.0
Centralizers Count			**Scratchers Count**		
100					

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)
178	Casing Joints	177.8	159.4	38.692	P-110		LT&C	2,135.03	-1.87	2,133.16
1	Float Collar	177.8	159.4	38.692	P-110		LT&C	0.40	2,133.16	2,133.56
1	Casing Joints	177.8	159.4	38.692	P-110		LT&C	12.04	2,133.56	2,145.60
1	Float Shoe	177.8	159.4	38.692	P-110		LT&C	0.40	2,145.60	2,146.00

Production, casing, 3/23/2013 18:00

Cementing Start Date	Cementing End Date	Wellbore
3/23/2013	3/23/2013	Original Hole

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

Comment

Cemented 177.8mm casing from 200m to 1600m with 27 tonne HiLite Lead cement 30.6m3 slurry with 1.2% FLAC B348, 0.3% retarder and 0.2% antifoam at 1400kg/m3. From 1600m to 2146m 12 tonne ClassG 11.5m3 slurry with 0.4% fluid loss,0.5% dispersant,0.2% antifoam and 0.3% retarder, displaced with 43m3 water ,Total lost of returns while displacing the last 10m3 prior to bumping plug estimated cement top at 200m. Bumped plug bled back Floats held, Pump up to 18200kpa pressure test casing good.

Template Revised 8/1/2007 Page 1/2 Report Printed: 4/3/2013

III. Coring Report

ConocoPhillips Canada

Coring

COPRC MIRROR LAKE N-20 65-00 126-45

API/UWI	Surface Legal Location	District	Field Name	License No.	Program	Well Type	Well Config	Orig KB/RT (m)
200/C-011-L/094-P-16/99	C-011-L/94-P-16	NEW VENTURES	MIRROR LAKE	EL470		Exploration	VERTICAL	286.50

Bottom Hole Cores

Date	Core No.	Type	Top (mKB)	Btm (mKB)	Recov (m)	Coring Company	Comment
3/9/2013 9:30:00 PM	1	WL Coring	1,890.00	1,919.00	27.0	NOV	
3/10/2013 5:00:00 PM	2	WL Coring	1,919.00	1,946.00	27.0	NOV	
3/10/2013 7:30:00 PM	3	WL Coring	1,946.00	1,973.00	27.0	NOV	
3/12/2013 1:15:00 PM	4	WL Coring	1,973.00	2,000.00	27.0	NOV	
3/13/2013 11:45:00 AM	5	WL Coring	2,000.00	2,027.00	27.0	NOV	
3/15/2013 11:30:00 PM	6	WL Coring	2,027.00	2,054.00	27.0	NOV	
3/16/2013 9:00:00 PM	7	WL Coring	2,054.00	2,081.00	27.0	NOV	
3/17/2013 8:00:00 PM	8	WL Coring	2,081.00	2,108.00	27.0	NOV	

Template Revised 8/1/2007 Page 1/1 Report Pri

IV. Drilling Fluid Summary

ConocoPhillips Canada

Mud Properties Summary (legal size)

COPRC MIRROR LAKE N-20 65-00 126-45

API / UWI	Surface Legal Location	License No.	Well Configuration Type	Ground Elevation (m)	Casing Flange Elevation (m)
200/C-011-L/094-P-16/99	C-011-L/94-P-16	EL470	VERTICAL	281.30	281.63

Rigs

AFE / RFE	Type	Sub-type	Plan TMD (mKB)	Plan Form	Contractor	Rig Name#	
10343209	DRILLING ORIGINAL		2,156.00		Beaver Drilling Ltd.	2	DRIL

Fluid / 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)
2/25/2013	20.00	20.00	Gel-Chem	1020.0	44	8.0	5.0	3.5	6.0	18.0	8.5				60	600	26.8...	MI Swaco		2.4	
2/26/2013	172.00	172.00	Gel-Chem	1045.0	42	7.0	7.0	4.0	5.0	17.0	8.0				120	600	21.3...	MI Swaco		3.4	
2/27/2013	300.00	300.00	Gel-Chem	1050.0	53	6.0	6.0	3.0	4.0	12.0	8.0				100	550	13.3...	MI Swaco		2.2	
2/28/2013	444.00	443.98	Gel-Chem	1100.0	66	15.0	9.5	5.5	7.0	7.0	8.0				80	600	34.6...	MI Swaco		4.7	
3/1/2013	591.00	590.93	Gel-Chem	1150.0	110	30.0	17.5	9.0	11.5	7.0	9.0				60	320	58.3...	MI Swaco		4.4	
3/2/2013	591.00	590.93	Gel-Chem	1150.0	110	30.0	17.5	9.0	11.5	7.0	9.0				60	320	58.3...	MI Swaco		4.4	
3/4/2013	598.00	597.93	Invert	965.0	64	14.0	4.0	6.0	9.0			6.000	7.0		33,000	171,410	32.6...	MI Swaco	22	5.7	
3/5/2013	965.00	964.78	Invert	975.0	62	13.0	5.0	6.5	12.5				9.5		40,000	227,135	0.065	MI Swaco	19	7.7	
3/6/2013	1,164.00	1,163.69	Invert	990.0	68	15.0	5.0	6.5	13.0				10.0		45,000	252,039	0.062	MI Swaco	21	7.6	
3/7/2013	1,618.00	1,617.51	Invert	975.0	75	17.0	4.0	7.0	13.5				11.0		43,500	251,555	0.038	MI Swaco	22	9.1	
3/8/2013	1,890.00	1,889.39	Invert	960.0	67	16.0	5.5	6.0	12.0				10.0		40,250	241,833	0.69...	MI Swaco	17	8.4	
3/9/2013	1,890.00	1,889.39	Invert	960.0		16.0	5.0	6.0	12.0				10.0		40,250	241,833	22.2...	MI Swaco	17	8.3	
3/10/2013	1,919.00	1,918.36	Invert	975.0	90	16.0	5.0	6.0	12.0				11.0		38,500	219,515	0.077	MI Swaco	15	9.4	
3/11/2013	1,967.00	1,966.32	Invert	980.0	82	17.0	4.5	6.0	13.0				10.5		36,000	212,656	0.077	MI Swaco	14	8.8	
3/11/2013	1,967.00	1,966.32	Invert	975.0	87	17.0	4.5	6.0	13.0				10.5		36,000	212,656	0.077	MI Swaco	14	8.8	
3/13/2013	2,000.00	1,999.29	Invert	985.0	85	17.0	4.0	6.5	14.5				12.0		35,500	204,064	0.272	MI Swaco	14	11.6	
3/14/2013	2,000.00		Invert	985.0	85	17.0	4.0	6.5	14.5						35,500	204,064		MI Swaco	14	11.6	
3/15/2013	2,030.00		Invert	985.0	85	17.0	4.0	6.5	14.5						36,000	206,659	0.294	MI Swaco	11	11.6	
3/16/2013	2,054.00		Invert	980.0	85	17.0	4.5	4.5	13.0						36,000	229,827	0.351	MI Swaco	12	10.0	
3/17/2013	2,085.00		Invert	985.0	71	14.0	4.5	4.5	12.5				12.0		37,500	227,135	0.351	MI Swaco	13	10.0	

Template Revised 8/1/2007 Page 1/2

V. Leak Off Test Charts

ConocoPhillips Canada

LOT & Fit with Graph

COPRC MIRROR LAKE N-20 65-00 126-45

Spud Date: 2/25/2013

RR: 3/24/2013 11:59:00 PM

Leak Off and Formation Integrity Tests

FIT,3/4/2013 3:00:00 PM

Last Casing String Run	Test Date	Test Type	Leak off?	Formation Tested	P (Surf) (k...	Depth (mKB)	TVD (mKB)
Surface, 599.00mKB	3/4/2013	FIT		Slater River	7,530	611.00	610.92

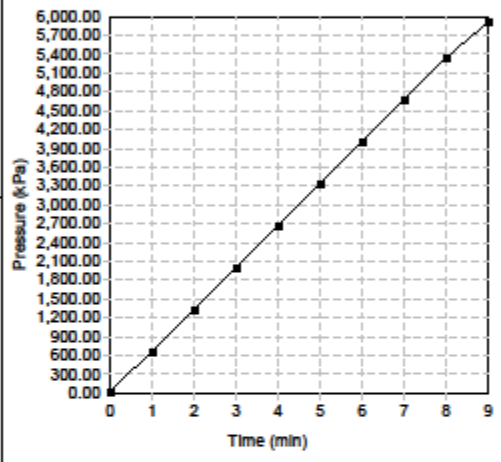
Fluid Density (kg/m³)	Fluid Type	LO Eq Fluid Den (k...	Leak Off Pressure (kPa)	Volume Pumped (m³)
960.0	OBM	2216.9	13,281	

Comment

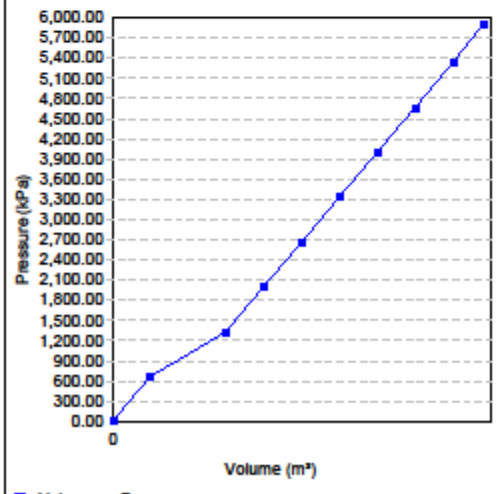
Test Data

Time (min)	Pres (kPa)	Vol (m³)	Note
0.00	0	0.00	
1.00	660	0.01	
2.00	1,330	0.03	
3.00	2,000	0.04	
4.00	2,660	0.05	
5.00	3,330	0.06	
6.00	4,000	0.07	
7.00	4,660	0.08	
8.00	5,330	0.09	
9.00	5,900	0.10	

Pressure vs. Time Graph



Pressure vs. Volume Graph



Template Revised 8/1/2007 Page 1/1 Report Printed: 4/3/2013

VI. Geological Strip log

Power*Suite V11.0 developed by TriVision Geosystems Ltd. (403) 777-9454 (Canada) www.powerlogger.com

Well Information

Operator:	ConocoPhillips Canada Resources Corp.
Well Name:	COPRC Mirror Lake N-20
Location:	Unit:N Section:20, Grid: 65-00 126-45
UWI:	300N206500126450
Pool / Field:	Undefined / Mirror Lake
Well License #:	470
Province / State:	Northwest Territories
Country:	Canada

Elevations

Reference:	Ground	Ground:	281.3 m
Cut(-) / Fill(+):		Kelly Bushing:	286.5 m
K.B. to Ground:	5.2 m	Casing Flange:	281.63 m

Total Depth

Measurement Type	Measured Depth	True Vertical Depth
Drillers TD (Tally)	2146 m	2146 m
Drillers TD (Strap or SLM)	m	m
Loggers TD	m	m

Well Co - Ordinates

	Longitude	Latitude	Well Type: Vertical
Surface Co-Ordinates:	126 48' 14.6" W	64 59' 46.8" N	NS: EW:
Int. Casing Co-Ordinates:			NS: EW:
Bottom Hole Co-Ordinates:			NS: EW:
UTM Surface Co-Ordinates:	Northing: 7209651.62		Easting: 603555.85

Drilling Fluid Summary

Fluid Type	From	To
Gel Chem	0 m	601 m
Invert (Versaclean)	601 m	2146 m

Casing Summary

Type	Hole Size	Casing Size	Landed At
Surface	311 mm	244.5 mm	598 m

Well Summary

Spud Date:	Feb 25, 2013 @ 17:00hrs	Contractor:	Beaver Drilling Ltd.
TD Date:	Mar 20, 2013 @ 01:00hrs	Rig Release Date:	

Work Schedule

Contractor	Geologist	Log Interval	Dates Logged
Black Gold Geotechnical	Dave Lawrence	0 m - 2146 m	Feb 25, 2013 - Mar 20, 2013

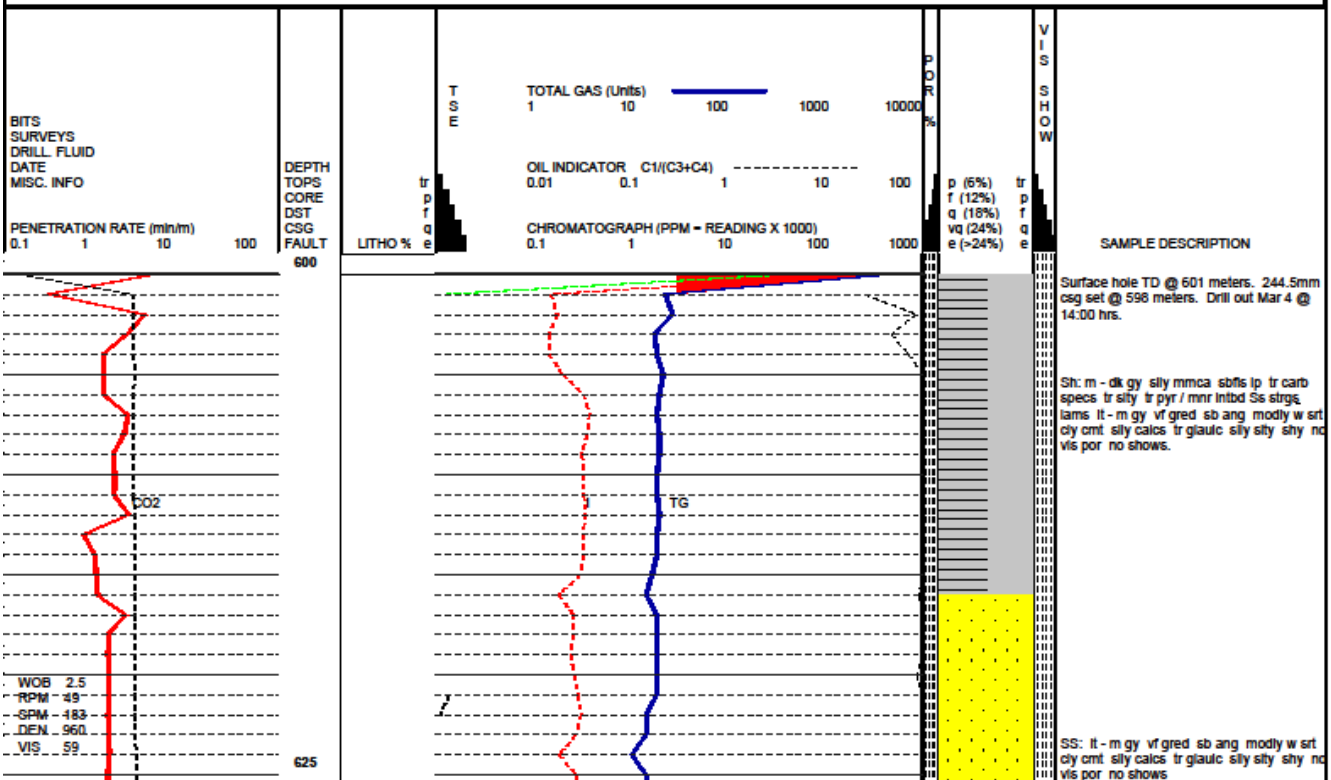
Remarks

VII. Mud Gas log

Continental Laboratories Ltd. — Hydrocarbon Well Log

WELL NAME:	COPRC MIRROR LAKE N-20		
LOCATION:	64° 59' 46.80" N / 126° 48' 46.80" W		
COMPANY:	Conocophillips Canada Resources Ltd.		
PROVINCE:	Northwest Territories	FILE:	19342 AN
ELEVATION K.B.:	286.50 m	HOLE SIZE:	222 mm from 601 m to 1890 m
			222 mm from 1890 m to 2146 m
ELEVATION G.L.:	281.30 m		
LOGGING INTERVAL:	601 m to 2146 m		
LOGGING DATES:	26/ 2/2013 to 21/ 3/2013	MUD SYSTEM:	Invert from: 601 m to: 1890 m
			Invert from: 1890 m to: 2146 m
PERSONNEL:	R. Kiani, F. Rehman		
INSTRUMENTATION:	MP 2300 Chromat		

ALL LITHOLOGIC SYMBOLS ARE CANSTRAT COMPATIBLE



VIII. Daily Activity and Cost Summary Report

ConocoPhillips Canada

Daily Activity and Cost Summary
MIRROR LAKE N-20 65-00 126-45

API / UWI	Surface Legal Location	District	Field Name	License No.
200/C-011-L/094-P-16/99	C-011-L/94-P-16	NEW VENTURES	MIRROR LAKE	EL470
Program	**Well Type**	**Well Configuration Type**	**Original KB/RT Elevation (m)**	**KB-Ground Distance (m)**
	Exploration	VERTICAL	286.50	5.20

Job Category	Primary Job Type	Secondary Job Type
DRILLING	DRILLING ORIGINAL	

Actual Start Date	End Date	AFE / RFE / MaintL#	Total Job AFE Amount
2/21/2013	3/24/2013	10343209	10,274,600.00

Objective

Summary

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	2/21/2013	2/22/2013	0.00	0.00	64,438.09	64,438.09	No accidents or incidents 4 Hazard ID's: 2 Job obersvations : General tear out of rig ,Lay down Derrick ,move Drill pipe and other tubulars to Mirror Lake location.
2	2/22/2013	2/23/2013	0.00	0.00	63,486.50	127,924.59	No accidents or incidents 4 Hazard ID's: 2 Job obersvations :Tear out rig components and Matting move to Mirror Lake location ,Lay rig foot print liner,Spot Matting and Sub.
3	2/23/2013	2/24/2013	0.00	0.00	57,611.50	185,536.09	No accidents or incidents 5 Hazard ID's: 0 Job obersvations :Spot Sub. Move and pin derrick,and draw works, Move wellsite trailers and support equipment, Mud dry products
4	2/24/2013	2/25/2013	0.00	0.00	291,165.99	476,702.08	No accidents or incidents 5 Hazard ID's: 0 Job obersvations : Continue to move tubulars,Drilling tools and support equipment, Spot remaining rig components,Prepare to and raise derrick, Rig to spud, weld on Diverter Flange.
5	2/25/2013	2/26/2013	0.00	84.00	767,561.95	1,244,264.03	No accidents or incidents 4 Hazard ID's: 2 Job obersvations :Nipple up diverter, Fill mud tanks,Prepare BHA, Rig to spud, Move invert and tank farm, Perform pre-spud inspection and hold diverter drills and safety meeting. Spud well @ 17:00 hours and drill 311mm surface hole F/0- 84m with Varel Tri cone insert bit and slick rotary assembly.
6	2/26/2013	2/27/2013	84.00	300.00	71,847.11	1,316,111.14	No accidents or incidents 4 Hazard ID's: 0 Job obersvations :Drill 311mm surface hole F/84- 300m with Varel Tri cone insert bit and slick rotary assembly. Minor losses @ 146m (7m3) with accumulated wire line surveys and rig services.
7	2/27/2013	2/28/2013	300.00	300.00	77,244.36	1,393,355.50	No accidents or incidents 4 Hazard ID's: 0 Job obersvations :Wiper trip condition hole encounter tight hole from 260m to 153m,Work tight hole and stuck pipe at 153m, Pull loose ,pull to 112m work tight hole ,stick pipe with Surface Jars came loose back ream to 60m ,pull out check bit ,Build volume run in hole to 150m wash and ream to 300m.
8	2/28/2013	3/1/2013	300.00	474.00	94,144.79	1,487,500.29	No accidents or incidents 4 Hazard ID's: 0 Job obersvations :Drill 311mm surface hole F/300- 444m with Varel Tri cone insert bit and slick rotary assembly.Pumping at 2.6m3/min. WOB 10-12dan,RPM 50 -120,Average ROP 13m/hr. Minor loss (15m3 24hrs.) with accumulated wire line surveys and rig services. Wiper trip to bit, Hole in better condition
9	3/1/2013	3/2/2013	474.00	601.00	278,350.77	1,765,851.06	No accidents or incidents 4 Hazard ID's: 1 Job obersvations :Drill 311mm surface hole F/474- 601m with Varel Tri cone insert bit and slick rotary assembly.Pumping at 2.3m3/min. WOB 10-18dan,RPM 50 -120,Average ROP 10.5m/hr. Drilled into a fracture @ 504m, began losing circulation (30m3) Mixed and pumped LCM pill and continue raising viscosity/ mixing LCM, Drill ahead with minor losses, Circulate hole clean,Build volume ,mixed and pumped LCM pill, Wiper trip to 130m with accumulated wire line surveys and rig services.
10	3/2/2013	3/3/2013	601.00	601.00	73,104.80	1,838,955.86	No accidents or incidents 3 Hazard ID's: 2 Job oberservations: Wiper trip,circulate condition hole to Log, pull out of hole to log,lay down 8" DCs, Rig in Schlumberger and run open hole logs. Rig to and run 244.5mm surface casing,circulate condition hole prior to cementing casing, NEB regulatory and environmental inspectors toured location and followed up on initial inspection,
11	3/3/2013	3/4/2013	601.00	601.00	95,533.45	1,934,489.31	No accidents or incidents 4 Hazard ID's: 1 Job oberservations:Circulate and condition mud, Rig to and cement surface casing, Recieved 10m3 good cement slurry returns, Nipple down diverter, Install casing bowl, Nipple up BOP's and pressure test as per program.

Template Revised 8/1/2007 Page 1/3 Report Printed: 4/9/2013

IX. Daily Drilling Reports

Well Header
COPRC MIRROR LAKE N-20 65-00 126-45

API / UWI	District	Field Name	KB-Grd (m)	Licence No.
200/C-011-L/094-P-16/99	NEW VENTURES	MIRROR LAKE	5.20	EL470

KB-Grd (m)	Orig KB/RT (m)	Well Configuration Type	Well Type
5.20	286.50	VERTICAL	Exploration

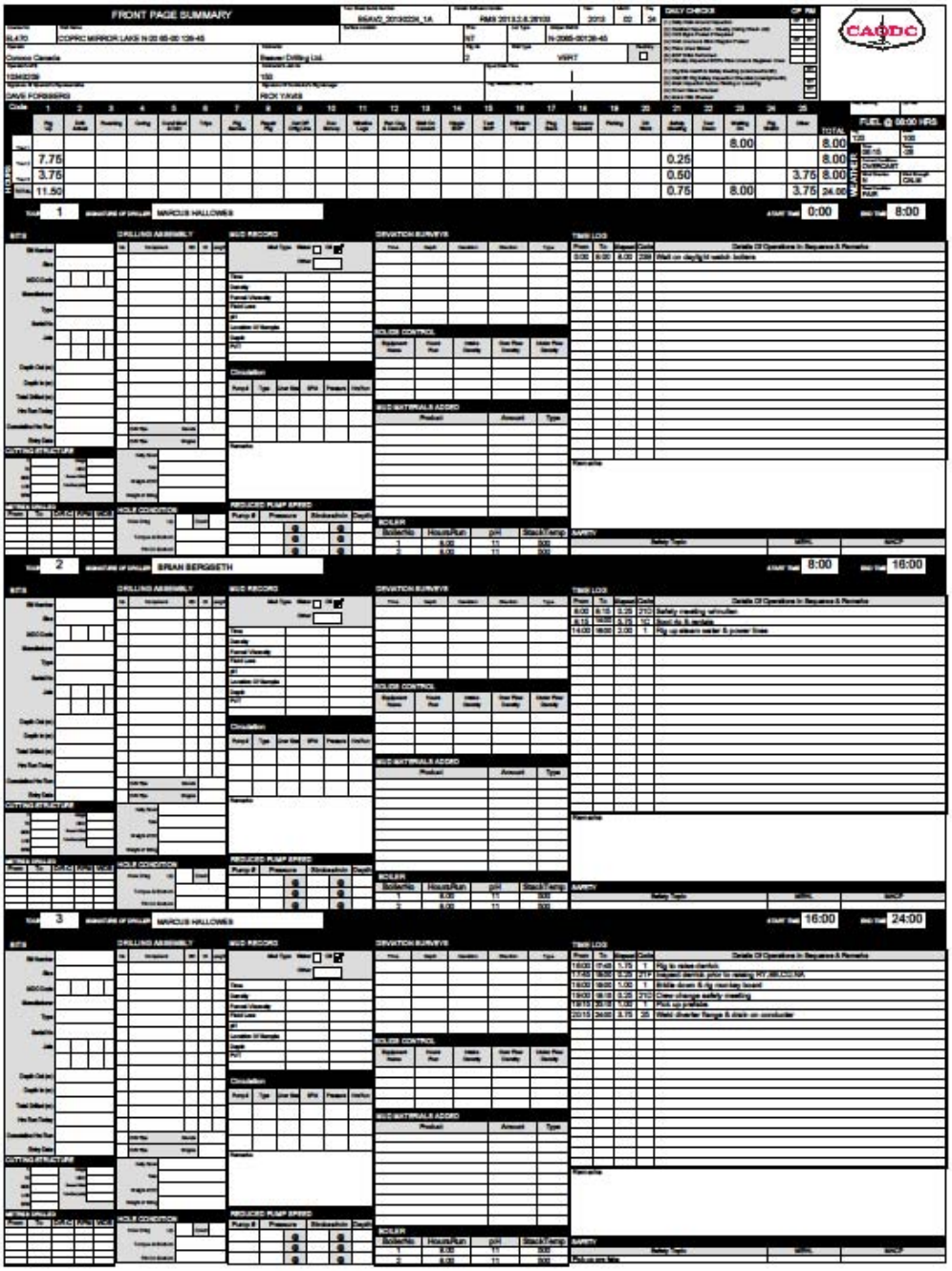
Jobs
DRILLING ORIGINAL, 2/21/2013 00:00

AFE / RFE / MainL#	Estimated Days	Actual Start Date	End Date
10343209	36.29	2/21/2013	3/24/2013

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	07:00	7.00	MIRU	MOVE	DMOB	P			0.00	0.00	Tear out rig, Lay down pre fabs, Bridle up to lay down Derrick.
07:00	07:15	0.25	MIRU	MOVE	DMOB	P			0.00	0.00	Crew change hand over meeting.
07:15	08:00	0.75	MIRU	MOVE	DMOB	P			0.00	0.00	Pre job inspection and safety meeting prior to laying down Derriuck.
08:00	00:00	16.00	MIRU	MOVE	DMOB	P			0.00	0.00	Lay down Derrick ,General tear out of rig. Move Drill pipe and third party rentals to Mirror Lake location.
00:00	08:00	8.00	MIRU	MOVE	DMOB	P			0.00	0.00	Rest Crews and Wait on daylight
08:00	00:00	16.00	MIRU	MOVE	DMOB	P			0.00	0.00	Tear out rig components and Matting move to Mirror Lake location ,Lay rig foot print liner,Spot Matting and Sub.
00:00	08:00	8.00	MIRU	MOVE	DMOB	P			0.00	0.00	Rest Crews and Wait on daylight
08:00	00:00	16.00	MIRU	MOVE	DMOB	P			0.00	0.00	Move to Mirror Lake location N-20 ,Spot Draw Works, Derrick,Mud tank,water tank. Spot and rig up well site shacks.
00:00	08:00	8.00	MIRU	MOVE	WODL	P			0.00	0.00	Wait on daylight watch boilers
08:00	08:15	0.25	MIRU	MOVE	SFTY	P			0.00	0.00	Safety meeting with Beaver Crews,Mullens trucking and Conoco Reps.
08:15	14:00	5.75	MIRU	MOVE	RURD	P			0.00	0.00	Spot rig & rentals
14:00	16:00	2.00	MIRU	MOVE	RURD	P			0.00	0.00	Rig up steam water & power lines
16:00	17:45	1.75	MIRU	MOVE	RURD	P			0.00	0.00	Rig to raise derrick
17:45	18:00	0.25	MIRU	MOVE	SFTY	P			0.00	0.00	Inspect derrick prior to raising RY,BB,CD,NA
18:00	19:00	1.00	MIRU	MOVE	RURD	P			0.00	0.00	Bridle down & rig monkey board
19:00	19:15	0.25	MIRU	MOVE	SFTY	P			0.00	0.00	Crew change safety meeting
19:15	21:15	2.00	MIRU	MOVE	RURD	P			0.00	0.00	Pick up prefabs
21:15	00:00	2.75	MIRU	WHDBOP	NUND	P			0.00	0.00	Weld diverter flange & drain on conducter Nipple up diverter
00:00	05:00	5.00	MIRU	WHDBOP	NUND	P			0.00	0.00	Nipple up diverter, rig up flare lines
05:00	08:00	3.00	MIRU	MOVE	RURD	P			0.00	0.00	Rig up swivel and floor
08:00	08:15	0.25	MIRU	RIGMNT	SVRG	P			0.00	0.00	Rig service function test crown saver/ function test diverter
08:15	14:15	6.00	MIRU	MOVE	RURD	P			0.00	0.00	Rig to spud
14:15	14:45	0.50	MIRU	MOVE	SFTY	P			0.00	0.00	Pre spud rig inspection
14:45	16:00	1.25	MIRU	MOVE	PULD	P			0.00	0.00	Pick up and make up BHA
16:00	16:15	0.25	MIRU	RIGMNT	SVRG	P			0.00	0.00	Rig Service function test hydril 48 seconds check & motor kills
16:15	17:00	0.75	MIRU	MOVE	SFTY	P			0.00	0.00	Pre spud safety meeting & diverter drill with consultant and toolpush
17:00	22:00	5.00	SURFAC	DRILL	DRLG	P			0.00	70.00	Drill 311 mm hole from 20m to70m with Varel tri cone insert bit and slick rotary asseembly.
22:00	22:15	0.25	SURFAC	DRILL	SFTY	P			70.00	70.00	Diverter drill crews in positions
22:15	00:00	1.75	SURFAC	DRILL	DRLG	P			70.00	84.00	Drill 311 mm hole from 70m to 84m with Varel tri cone insert bit and slick rotary asseembly.
00:00	01:00	1.00	SURFAC	DRILL	DRLG	P			84.00	89.00	Drill 311 mm hole from 84m to 89m with Varel tri cone insert bit and slick rotary asseembly.
01:00	01:15	0.25	SURFAC	RIGMNT	SVRG	P			89.00	89.00	Rig service function test annular 19 seconds to close function test crown saver
01:15	07:45	6.50	SURFAC	DRILL	DRLG	P			89.00	145.00	Drill 311 mm hole from 89m to145m with Varel tri cone insert bit and slick rotary asseembly.
07:45	08:00	0.25	SURFAC	DRILL	SFTY	P			145.00	145.00	Crew handover meeting

X. Tour sheets – Drilling Rig



XI. Bit record

ConocoPhillips Canada

Bit Summary

COPRC MIRROR LAKE N-20 65-00 126-45

API / UWI	Surface Legal Location	District	Field Name	License No.	Program	Well Type	Well Config	Orig KB/RT (m)	KB-Grd (m)
200/C-011-L/094-P-16/99	C-011-L/94-P-16	NEW VENTURES	MIRROR LAKE	EL470		Exploration	VERTICAL	286.50	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	VAREL	HE04JMR...	1264043	417	892	12.7/15.9/19.0/19.0	0.00	601.00	601.00	55.25	10.9	17,000	5,000	120	120	2-3-WT-A-E-3-NO-TD
2	1	222.0	REED	MSR616M...	A141415	___	581	11.1/11.1/11.1/11.1/11.1/...	601.00	2,146.00	1,293....	85.50	15.1	10,000	3,000	197	75	1-1-CT-S-X-0-NO-CP
3	1C	222.0	NOV	PR513	E140308	___	770	14.0/14.0/14.0/14.0/14.0	1,891.00	2,027.00	136.00	16.00	8.5	5,000	4,000	65	55	1-1-BT-M-X-0-NO-DTF
4	2C	222.0	NOV	CEPR5135	A1/E14...	___	484	11.1/11.1/11.1/11.1/11.1	2,027.00	2,108.00	81.00	12.00	6.8	5,500	5,000	65	60	2-2-CT-M-X-0-NO-DTF
5	RR1	222.0	REED	MSR616M...	A141415	___	581	11.1/11.1/11.1/11.1/11.1/...	2,108.00	2,146.00	38.00	12.25	3.1	9,000	8,000	80	70	1-3-WT-A-X-0-NO-TD

Template Revised 8/1/2007 Page 1/1 Report Printed: 4/9/2013

XII. Directional Summary

ConocoPhillips Canada

Directional Survey

MIRROR LAKE N-20 65-00 126-45

API / UWI	Surface Legal Location	District	Field Name	License No.
200/C-011-L/094-P-16/99	C-011-L/94-P-16	NEW VENTURES	MIRROR LAKE	EL470
Program	**Well Type**	**Well Configuration Type**	**Original KB/RT Elevation (m)**	**KB-Ground Distance (m)**
	Exploration	VERTICAL	286.50	5.20

Parent Wellbore	Wellbore Name	Kick Off Date	Kick Off Method	KO MD (mKB)	KO (TVD) (mKB)	VS Dir (°)
Original Hole	Original Hole					0.00

Date	Description	As Ran	Proposed?
2/25/2013	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
3/8/2013	40.00	0.25	28.29	40.00	0.09	0.08	0.08	0.04	0.19	MWD	
3/8/2013	50.00	0.23	31.74	50.00	0.13	0.11	0.11	0.06	0.07	MWD	
3/8/2013	60.00	0.12	75.78	60.00	0.16	0.13	0.13	0.08	0.51	MWD	
3/8/2013	70.00	0.21	313.52	70.00	0.17	0.15	0.15	0.08	0.87	MWD	
3/8/2013	80.00	0.35	335.66	80.00	0.20	0.19	0.19	0.05	0.52	MWD	
3/8/2013	90.00	0.18	69.05	90.00	0.23	0.22	0.22	0.06	1.20	MWD	
3/8/2013	100.00	0.18	80.40	100.00	0.25	0.23	0.23	0.09	0.11	MWD	
3/8/2013	110.00	0.20	9.13	110.00	0.27	0.25	0.25	0.11	0.67	MWD	
3/8/2013	120.00	0.24	28.32	120.00	0.31	0.29	0.29	0.12	0.25	MWD	
3/8/2013	130.00	0.08	16.16	130.00	0.34	0.31	0.31	0.13	0.50	MWD	
3/8/2013	140.00	0.16	353.07	140.00	0.36	0.33	0.33	0.13	0.29	MWD	
3/8/2013	150.00	0.15	30.36	150.00	0.38	0.36	0.36	0.13	0.30	MWD	
3/8/2013	160.00	0.09	90.27	160.00	0.40	0.37	0.37	0.15	0.39	MWD	
3/8/2013	170.00	0.04	310.57	170.00	0.40	0.37	0.37	0.16	0.37	MWD	
3/8/2013	180.00	0.20	102.31	180.00	0.41	0.37	0.37	0.17	0.69	MWD	
3/8/2013	190.00	0.29	54.90	190.00	0.43	0.38	0.38	0.21	0.63	MWD	
3/8/2013	200.00	0.15	38.48	200.00	0.47	0.40	0.40	0.24	0.46	MWD	
3/8/2013	210.00	0.26	56.06	210.00	0.50	0.43	0.43	0.26	0.38	MWD	
3/8/2013	220.00	0.50	350.81	220.00	0.55	0.48	0.48	0.27	1.37	MWD	
3/8/2013	230.00	0.40	0.68	230.00	0.62	0.56	0.56	0.27	0.37	MWD	
3/8/2013	240.00	0.38	5.13	240.00	0.68	0.63	0.63	0.27	0.12	MWD	
3/8/2013	250.00	0.46	357.72	250.00	0.75	0.70	0.70	0.27	0.30	MWD	
3/8/2013	260.00	0.42	359.19	260.00	0.82	0.78	0.78	0.27	0.14	MWD	
3/8/2013	270.00	0.49	1.85	270.00	0.90	0.86	0.86	0.27	0.22	MWD	
3/8/2013	280.00	0.51	349.03	280.00	0.98	0.94	0.94	0.26	0.34	MWD	
3/8/2013	290.00	0.43	355.75	290.00	1.06	1.03	1.03	0.25	0.29	MWD	
3/8/2013	300.00	0.53	349.42	300.00	1.13	1.11	1.11	0.24	0.34	MWD	
3/8/2013	310.00	0.59	350.93	310.00	1.23	1.21	1.21	0.22	0.19	MWD	
3/8/2013	320.00	0.56	351.07	320.00	1.32	1.30	1.30	0.21	0.09	MWD	
3/8/2013	330.00	0.61	352.92	329.99	1.42	1.41	1.41	0.19	0.16	MWD	
3/8/2013	340.00	0.69	347.51	339.99	1.53	1.52	1.52	0.18	0.30	MWD	
3/8/2013	350.00	0.72	349.69	349.99	1.64	1.64	1.64	0.15	0.12	MWD	
3/8/2013	360.00	0.77	351.75	359.99	1.77	1.77	1.77	0.13	0.17	MWD	
3/8/2013	370.00	0.92	354.12	369.99	1.92	1.91	1.91	0.11	0.46	MWD	
3/8/2013	380.00	0.91	354.18	379.99	2.07	2.07	2.07	0.10	0.03	MWD	
3/8/2013	390.00	1.03	354.31	389.99	2.24	2.24	2.24	0.08	0.36	MWD	
3/8/2013	400.00	1.00	356.99	399.99	2.42	2.42	2.42	0.07	0.17	MWD	
3/8/2013	410.00	0.97	3.85	409.99	2.59	2.59	2.59	0.07	0.36	MWD	
3/8/2013	420.00	1.11	3.02	419.98	2.77	2.77	2.77	0.08	0.42	MWD	
3/8/2013	430.00	1.09	6.62	429.98	2.96	2.96	2.96	0.09	0.22	MWD	
3/8/2013	440.00	1.12	6.00	439.98	3.15	3.15	3.15	0.11	0.10	MWD	
3/8/2013	450.00	1.06	13.19	449.98	3.34	3.34	3.34	0.15	0.45	MWD	
3/8/2013	460.00	1.17	12.47	459.98	3.53	3.53	3.53	0.19	0.33	MWD	
3/8/2013	470.00	1.33	12.19	469.97	3.75	3.74	3.74	0.24	0.48	MWD	
3/8/2013	480.00	1.46	12.58	479.97	3.99	3.98	3.98	0.29	0.39	MWD	
3/8/2013	490.00	1.44	14.76	489.97	4.24	4.23	4.23	0.35	0.18	MWD	
3/8/2013	500.00	1.41	11.07	499.97	4.49	4.47	4.47	0.40	0.29	MWD	
3/8/2013	510.00	1.47	12.17	509.96	4.74	4.71	4.71	0.45	0.20	MWD	
3/8/2013	520.00	1.43	14.65	519.96	4.99	4.96	4.96	0.51	0.22	MWD	
3/8/2013	530.00	1.51	17.81	529.96	5.24	5.21	5.21	0.58	0.34	MWD	
3/8/2013	540.00	1.40	16.93	539.95	5.49	5.45	5.45	0.66	0.34	MWD	
3/8/2013	550.00	1.48	19.12	549.95	5.74	5.69	5.69	0.74	0.29	MWD	
3/8/2013	560.00	1.50	17.22	559.95	5.99	5.93	5.93	0.82	0.16	MWD	
3/8/2013	570.00	1.56	18.20	569.94	6.25	6.19	6.19	0.90	0.20	MWD	
3/4/2013	621.34	1.89	26.41	621.26	7.76	7.61	7.61	1.50	0.24	MWD	

Template Revised 8/1/2007 Page 1/3 Report Printed: 4/5/2013

XIII. Completions Daily Reports

ConocoPhillips Canada

Daily Morning Report
COPRC MIRROR LAKE N-20 65-00 126-45

Report #: 1
Report Date: 3/26/2013
Final Job Status: HOLD
Final Report? Yes

Job Cat: COMPLETIONS Job Typ: INITIAL COMPLETION Sub Typ:

District	API / UWI	Licence No.	KB-Ground Distance (m)	KB-Casing Flange Distance (m)
NEW VENTURES	200/C-011-L/094-P-16/99	EL470	5.20	4.87

JOB INFORMATION

Actual Start Date	End Date	Abandon Date	MaxWell Job Number	Responsible Grp 1
3/26/2013 09:00	3/30/2013 16:00		JOB1@2012	coved

Objective
ORGINAL COMPLETION

Rig	Cum Rig Time (hrs)	Personnel Regular Hours (hrs)	Cum Personnel Total Hours (hrs)
		280.00	280.00

Daily Contacts
Completions Engineer, Kyle Metzgar, 403-971-8424; Completions Engineer, Theron LeGarde, 403-710-9753; WS Foreman, Myles Hahn, 780-402-0500; 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 (oac) (kPa)	Weather	Temperature (°C)	Lease Condition
3/26/2013 09:00	3/27/2013 06:00			0	Clear	-15	Icy

Last 24hr Summary
Installed tubing spool and tested. Installed master valve and work spool. Performed 10 minute SCVF test. Good test. Rigged in Schlumberger wireline. Ran in hole154mm gauge ring junk basket combo and tagged PBTD at 2127mKB. Ran in hole Gamma Ray CBL logging tools. Logged well from 2127mKB to surface.

24hr Forecast
Finish POOH with logging tools. RIH and perforate. RIH with BP c/w recorders and perform D-fit test.

TIME LOG

Start Time	Dur (hrs)	Time P-T-X	Operation
09:00	2.50	P	Arrived on site. Drilling equipment was still moving off location.
11:30	2.00	P	Drilling equipment was now all moved clear from wellhead. Loaded picker load at KM 46.9 and moved onto location. Reviewed and discussed CPC PJHA with all personnel (SLB, Stream Flo, Canol and Peregrine) regarding daily activities and all associated hazards.
13:30	4.00	P	Removed surface casing valves. Cut and dressed casing. Installed 279mm 34.5MPa x 179mm 69MPa tubing spool. Pressure tested primary seals to 34000 kPa for 10 minutes. Good test. Installed 179mm 69MPa master valve (torqued with hydraulic wrench). Installed McClellands 69MPa work spool and Schlumberger 35MPa spool. Performed a ten minute SCVF test. Zero bubble (no flow) detected in ten minutes. Good test.
17:30	1.00	P	Rigged in HD safe work platform. Installed Schlumberger tool trap and BOPs.
18:30	0.50	P	Crew shift change. Reviewed and discussed CPC PJHA #260303 with all personnel regarding night time activities and all associated hazards. Performed cross shift.
19:00	1.00	P	Tarped in wellhead and rigged in Connely Max dry heat unit. Finished rig in of all Schlumberger wireline equipment.
20:00	2.50	P	Ran in hole with a 154mm gauge ring. Displacing wellbore fluid to Vac. Soft Tagged PBTD @ 2127.0 mKB. Pumped 80 L of Glycol into wellbore to prevent freezing. Retrieved Tool string to surface.
22:30	2.00	P	Assembled SLB 42.86 mm Gamma ray/ Casing collar locator, Cement bond log/ Variable Density Log tool.
00:30	5.50	P	RIH/w logging tool to PBTD @ 2127.0 mKB. High speed down identified Cement top @ 195.0 mKB. Tagged PBTD @ 2127.0 mKB. Performed 150 m repeat pass. Performed Log from PBTD to surface @ 10 m/min.

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 (ESm³)

PERFORATIONS

Date	Zone	Top (mKB)	Btm (mKB)	Shot Dens (shots/m)	Current Status
3/27/2013 12:26	Basal Lower Canol, Origin...	2,059.00	2,060.00	20.0	Plugged
3/28/2013 04:00	Middle Lower Canol, Origi...	2,023.00	2,024.00	20.0	Plugged
3/28/2013 18:23	Upper Lower Canol, Origi...	1,993.00	1,994.00	20.0	Plugged

Page 1/1 Report Printed: 5/8/2013

ConocoPhillips Canada

Daily Morning Report
COPRC MIRROR LAKE N-20 65-00 126-45

Report #: 2
Report Date: 3/27/2013
Final Job Status: HOLD
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	200/C-011-L/094-P-16/99	EL470	5.20	4.87

JOB INFORMATION

Actual Start Date	End Date	Abandon Date	MaxWell Job Number	Responsible Grp 1
3/26/2013 09:00	3/30/2013 16:00		JOB1@2012	coved

Objective
ORGINAL COMPLETION

Rig	Cum Rig Time (hrs)	Personnel Regular Hours (hrs)	Cum Personnel Total Hours (hrs)
		279.00	559.00

Daily Contacts
Completions Engineer, Kyle Metzgar, 403-971-8424; Completions Engineer, Theron LeGarde, 403-710-9753; WS Superintendent, Derrick Cove, 780-831-1314; WS Foreman, Myles Hahn, 780-402-0500; WS Supervisor, Doug Smith, 780-518-6273

Report Start Date	Report End Date	Rig Time (hrs)	P(tub) (kPa)	P (oas) (kPa)	Weather	Temperature (°C)	Lease Condition
3/27/2013 06:00	3/28/2013 06:00			0	Clear	-10	Icy

Last 24hr Summary
Finished POOH with logging tools. Perforated "Basal" Lower Canol from 2059.0mKB to 2060.0mKB. Performed D-fit test on "Basal" Lower canol interval with BP in hole c/w recorders on bottom. Dynamically set BP when pumping D-fit. BP CE set at 2056.5mKB. Set back up BP w c/e @ 2046.0 mKB. Pressure tested to 40,000 kPa for 10 min. Dump bailed 3 Linear meters of sand on top of BP. Perforated the "Middle" Lower Canol from 2023.0 - 2024.0 mKB.

24hr Forecast
Perform D-fit on the "Middle" Lower Canol. Set BP, RIH/w back up BP, Pressure test to 40.0 MPa. Dump sand. Perforate the "Upper " Lower Canol, Perform D-Fit, Set Back up BP. Pressure test to 40.0 MPa.

TIME LOG

Start Time	Dur (hrs)	Time P-T-X	Operation
06:00	0.50	P	Continued to log well to surface (Gamma ray/cement bond log).
06:30	0.50	P	Crew shift change. Held a daily safety and operations meeting with all personnel. Reviewed and discussed CPC PJHA #032703 regarding daily activities and all associated hazards. Discussed ERP plan and emergency procedures.
07:00	0.75	P	Finished logging to surface. Pulled and laid down logging tools. Correlated on depth to Platform Express Compensated Neutron Dual Lithology Density Log dated Mar.20/13.
07:45	1.00	P	Filled wellbore (0.1m³ to fill) and pressure tested casing to 61.5MPa. Pressure held solid for 15 minutes. Good test.
08:45	5.25	P	Rigged in Schlumberger 177.8mm lubricator. Held tailgate meeting and discussed arming perforating gun. Armed gun and stabbed lubricator onto the well. Filled lubricator with and pressure tested it to 33MPa. Good test. Ran in hole with a 3m x 127mm ERHSC carrier c/w 1m of 23 gr Owen SDP 3375-311 NT charges @ 20 spm 60 degree phasing. Correlated gun on depth to Schlumberger Platform Express dual Lithology density log dated March 20, 2013 (Gun Gamma tool ran to correlate to open hole log). Pressured casing up to 4500 kPa and perforated the "Basal" Lower Canol interval from 2059.0mKB to 2060.0mKB. Pressure immediately after shooting = 3959 kPa 1 minute = 3209 kPa / 2 minutes = 3109 kPa / 3 minutes = 3063 / 4 minutes = 3069 kPa / 5 minutes = 3079 kPa Pulled out of the hole maintaining minimum of 2500kPa on casing. All shots fired with correct orientation. Carrier was in good shape.
14:00	4.00	P	Armed a Smith CW retrievable BP for 177.8 mm, 38.69kg/m casing c/w Tandem Lonkar 10K 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 356 days Top Gauge #1, SN # 9730 - Battery on @ 14:03 hrs. Bottom Gauge #2, SN # 9731 - Battery on @ 14:03 hrs. Stabbed lubricator onto the well and pressure tested it to 33MPa. Bled down to well pressure (2600 kPa). Opened master and ran in hole with BP. Correlated it on depth to Schlumberger Gamma ray log dated March 27, 2012. Started to pump D-fit. Brought pump rate up to 0.15m³ pumping 70% Propylene Glycol / 30% water. Seen first break at 18MPa and 3 more breaks after. D-fit was called on location by Theron Lagarde. Performed a dynamic set of bridge plug while pumping (total of 1.0m³ pumped). BP was set at 16:41 with CE at 2056.5mKB. Good setting indication was seen in line truck and 420lbs weight was lost. Sat and monitored well for 10 minutes. BP leaked off 2000 kPa in ten minutes and appeared to be leaking. Pulled out of the hole with wireline. Laid down setting tool BP top at 2055.79mKB / CE at 2056.50mKB / BP bottom at 2057.18mKB (bull nose bottom at 2059.62mKB). Basal Lower Canol Top gauge S/N 9730 - Sensor port 2058.50mKB. Bottom gauge S/N 9731 - Sensor port 2059.25mKB.
18:00	0.50	P	Armed a Smith CW retrievable BP for 177.8 mm, 38.69kg/m casing. RIH/w Bridge plug
18:30	0.50	P	Crew shift change. Reviewed and discussed CPC PJHA #270313 with all personnel. Identified potential hazards associated with "E-line, D-FIT" 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.

Page 1/2 Report Printed: 5/8/2013

ConocoPhillips Canada

Daily Morning Report
COPRC MIRROR LAKE N-20 65-00 126-45

Report #: 3
Report Date: 3/28/2013
Final Job Status: HOLD
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	200/C-011-L/094-P-16/99	EL470	5.20	4.87

JOB INFORMATION

Actual Start Date	End Date	Abandon Date	MaxWell Job Number	Responsible Grp 1
3/26/2013 09:00	3/30/2013 16:00		JOB1@2012	coved

Objective
ORGINAL COMPLETION

Rig	Cum Rig Time (hrs)	Personnel Regular Hours (hrs)	Cum Personnel Total Hours (hrs)
		279.00	838.00

Daily Contacts
WS Supervisor, Doug Smith, 780-518-6273; Completions Engineer, Theron LeGarde, 403-710-9753; WS Foreman, Myles Hahn, 780-402-0500; 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 (oas) (kPa)	Weather	Temperature (°C)	Lease Condition
3/28/2013 06:00	3/29/2013 06:00			0	Slight Overcast	-26	Icy

Last 24hr Summary
RIH with Smith CW BP c/w 69MPa recorders below. Performed D-fit test on "Middle" Lower Canol formation from 2023.0 to 2024.0mKB. Performed a dynamic set of BP with CE at 2020.5mKB. Set a second BP above with CE at 2017.5mKB. Pressure tested BP to 40MPa. Dumped bailed 3 linear meters of sand on top of bridge plug. Perforated "Upper" Lower Canol formation from 1993.0 to 1994.0mKB. Performed D-fit test on "Upper" Lower Canol formation from 1993.0 to 1994.0 mKB. Performed a dynamic set of BP with CE at 1990.0 mKB. Set a second BP above with CE at 1986.0 mKB. Rigged out E-line unit and related equipment.

24hr Forecast
Rig out remaining equipment on location. Secure wellhead with lock and Chain.

TIME LOG

Start Time	Dur (hrs)	Time P-T-X	Operation
06:00	0.50	P	Armed a Smith CW retrievable BP for 177.8 mm, 38.69kg/m casing c/w Tandem Lonkar 10K 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 356 days Top Gauge #1, SN # 9732 - Battery on @ 06:31 hrs. Bottom Gauge #2, SN # 9733 - Battery on @ 06:31 hrs.
06:30	0.50	P	Crew shift change. Held a daily safety and operations meeting with all personnel. Reviewed and discussed CPC PJHA #032803 regarding daily activities and all associated hazards. Discussed ERP plan and emergency procedures.
07:00	4.00	P	Stabbed lubricator onto the well and pressure tested it to 33MPa. Bled down to well pressure (SICP: 3400kPa). Opened master and ran in hole with BP. Correlated BP on depth to Schlumberger Gamma ray log dated March 27, 2012. Started to pump D-fit. Brought pump rate up to 0.15m³ pumping 70% Propylene Glycol / 30% water. Broke formation at 18MPa. Theron Legarde was on location calling D-fit. Performed a dynamic set of bridge plug while pumping (total of 0.72m³ pumped). BP was set at 09:42 with CE at 2020.5mKB. Good setting indication was seen in line truck and 650lbs weight was lost. Sat and monitored well for 10 minutes. BP appears to be holding. Pulled out of the hole with wireline. BP top at 2019.79mKB / CE at 2020.50mKB / BP bottom at 2021.18mKB (Bull nose bottom at 2023.58mKB). Middle Lower Canol Top gauge S/N 9732 - Sensor port 2022.46mKB. Bottom gauge S/N 9733 - Sensor port 2023.21mKB.
11:00	3.00	P	Armed a Smith CW retrievable BP for 177.8 mm, 38.69kg/m casing. SICP: 11000 kPa. Pressured lubricator up to 11MPa. Opened master and ran in hole. Correlated BP on depth to Schlumberger Gamma ray log dated March 27, 2012. Set BP with CE at 2017.5mKB. Good setting indication was seen in line truck and 280lbs weight was lost. Pulled out of the hole and laid down setting tool. BP top at 2016.79mKB / CE at 2017.50mKB / BP bottom at 2018.26mKB.
14:00	0.75	P	SICP: 10670 kPa. Pressure tested bridge plug to 40MPa for 10 minutes. Pressure held solid. Good test.
14:45	2.00	P	Filled bailer with 98 kg, 32.3 kg/m for 177.8 mm casing coarse sand and ran in hole. Tagged BP top at 2016.79mKB Spotted 3.0 Linear meters on top of BP. Pulled out of the hole. Laid down bailer. Sand top @ 2013.79mKB.
16:45	1.75	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. Hoisted gun into lubricator and stabbed onto well. Filled lubricator and tested it to 10MPa. Opened master and ran in hole. Correlated gun on depth to Schlumberger GR/CCL log dated Mar.27/13. Pressured casing up to 4500kPa. 18:23 Perforated the " Upper" Lower Canol formation over the interval from 1993.0mKB to 1994.0mKB. SICP prior to shooting = 4548 kPa ISIP= 3425 kPa 1 min = 3641 kPa (pressure bouncing) / 2 min = 3121 kPa / 3 min = 3310 kPa / 4 min = 3273 kPa / 5 min = 3263 kPa
18:30	0.50	P	Crew shift change. Reviewed and discussed CPC PJHA #280313 with all personnel. Identified potential hazards associated with "E-line, D-FIT" 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.

Page 1/2 Report Printed: 5/8/2013

ConocoPhillips Canada

Daily Morning Report
COPRC MIRROR LAKE N-20 65-00 126-45

Report #: 4
Report Date: 3/29/2013
Final Job Status: HOLD
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	200/C-011-L/094-P-16/99	EL470	5.20	4.87

JOB INFORMATION

Actual Start Date	End Date	Abandon Date	MaxWell Job Number	Responsible Grp 1
3/26/2013 09:00	3/30/2013 16:00		JOB1@2012	coved

Objective
ORGINAL COMPLETION

Rig	Cum Rig Time (hrs)	Personnel Regular Hours (hrs)	Cum Personnel Total Hours (hrs)
		289.00	1,127.00

Daily Contacts
WS Foreman, Myles Hahn, 780-402-0500; WS Supervisor, Doug Smith, 780-518-6273; WS Superintendent, Derrick Cove, 780-831-1314; Completions Engineer, Kyle Metzgar, 403-971-8424; Completions Engineer, Theron LeGarde, 403-710-9753

Report Start Date	Report End Date	Rig Time (hrs)	P(tub) (kPa)	P (cas) (kPa)	Weather	Temperature (°C)	Lease Condition
3/29/2013 06:00	3/29/2013 20:30			0	Clear	-25	Icy

Last 24hr Summary
Rig out remaining equipment on location. Washed wellhead and cleaned up debris. Readied equipment to be moved in AM.

24hr Forecast
Move all equipment off location.

TIME LOG

Start Time	Dur (hrs)	Time P-T-X	Operation
06:00	14.50	P	Sent picker to town to grab a trailer. Loaded picker load (HD work platform, McClellands spool + Basket, garbage box, lift of planks) and moved to KM 7 rack site. Rigged out light towers and dry heat exchanger. Moved second picker load off location. Connely max dry heat unit was moved to KM 7 rack site and the 4 light towers were moved to CPC rack site in NW. Washed wellhead and sucked out cellar. Cleaned wellsite command center. Chained and locked wellhead (combination 6127). Completions equipment at rack site: - HD Work platform (dual tier) - McClellands 69MPa work spool (one side has dual valves c/w 10k choke / other side has single valve) - McClellands 179mm 69MPa x 179mm 34.5MPa adapter spool c/w studs - McClellands Hammer wrenches ** Leftover Propylene glycol was off loaded into a 400bbl tank in CPC rack site (Hodgsons yard NW) - glycol was transferred to town in a dirty vac truck **

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	2.51

CUMULATIVE JOB FLARED GAS BY ZONE

Zone	Volume Gas Total (E3m³)

PERFORATIONS

Date	Zone	Top (mKB)	Btm (mKB)	Shot Dens (shots/m)	Current Status
3/27/2013 12:26	Basal Lower Canol, Origin...	2,059.00	2,060.00	20.0	Plugged
3/28/2013 04:00	Middle Lower Canol, Origi...	2,023.00	2,024.00	20.0	Plugged
3/28/2013 18:23	Upper Lower Canol, Origi...	1,993.00	1,994.00	20.0	Plugged

Page 1/1 Report Printed: 5/8/2013

ConocoPhillips Canada

Daily Morning Report
COPRC MIRROR LAKE N-20 65-00 126-45

Report #: 5
Report Date: 3/30/2013
Final Job Status: HOLD
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	200/C-011-L/094-P-16/99	EL470	5.20	4.87

JOB INFORMATION

Actual Start Date	End Date	Abandon Date	MaxWell Job Number	Responsible Grp 1
3/26/2013 09:00	3/30/2013 16:00		JOB1@2012	coved

Objective
ORGINAL COMPLETION

Rig	Cum Rig Time (hrs)	Personnel Regular Hours (hrs)	Cum Personnel Total Hours (hrs)
		55.00	1,182.00

Daily Contacts
WS Foreman, Myles Hahn, 780-402-0500; Completions Engineer, Kyle Metzgar, 403-971-8424; WS Supervisor, Doug Smith, 780-518-6273; WS Superintendent, Derrick Cove, 780-831-1314; Completions Engineer, Theron LeGarde, 403-710-9753

Report Start Date	Report End Date	Rig Time (hrs)	P(tub) (kPa)	P (cas) (kPa)	Weather	Temperature (°C)	Lease Condition
3/30/2013 07:00	3/30/2013 16:00			0	Clear	-22	Icy

Last 24hr Summary
Loaded out remaining equipment, Hauled to km 7 rack site. Cleaned up location. Turn site over to construction operations

24hr Forecast
Final report

TIME LOG

Start Time	Dur (hrs)	Time P-T-X	Operation
07:00	0.50	P	Conducted Pre-job hazard assesment with all personnel, identified potential hazards associated with "Move out" 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.
07:30	8.00	P	Loaded out and moved out Remaining wellsite equipment. Wellhead secured with lock and chain. Combination # 6127. Tbg hanger chained to wellhead. 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 Turn wellsite over to construction operations. Final Report.

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	2.51

CUMULATIVE JOB FLARED GAS BY ZONE

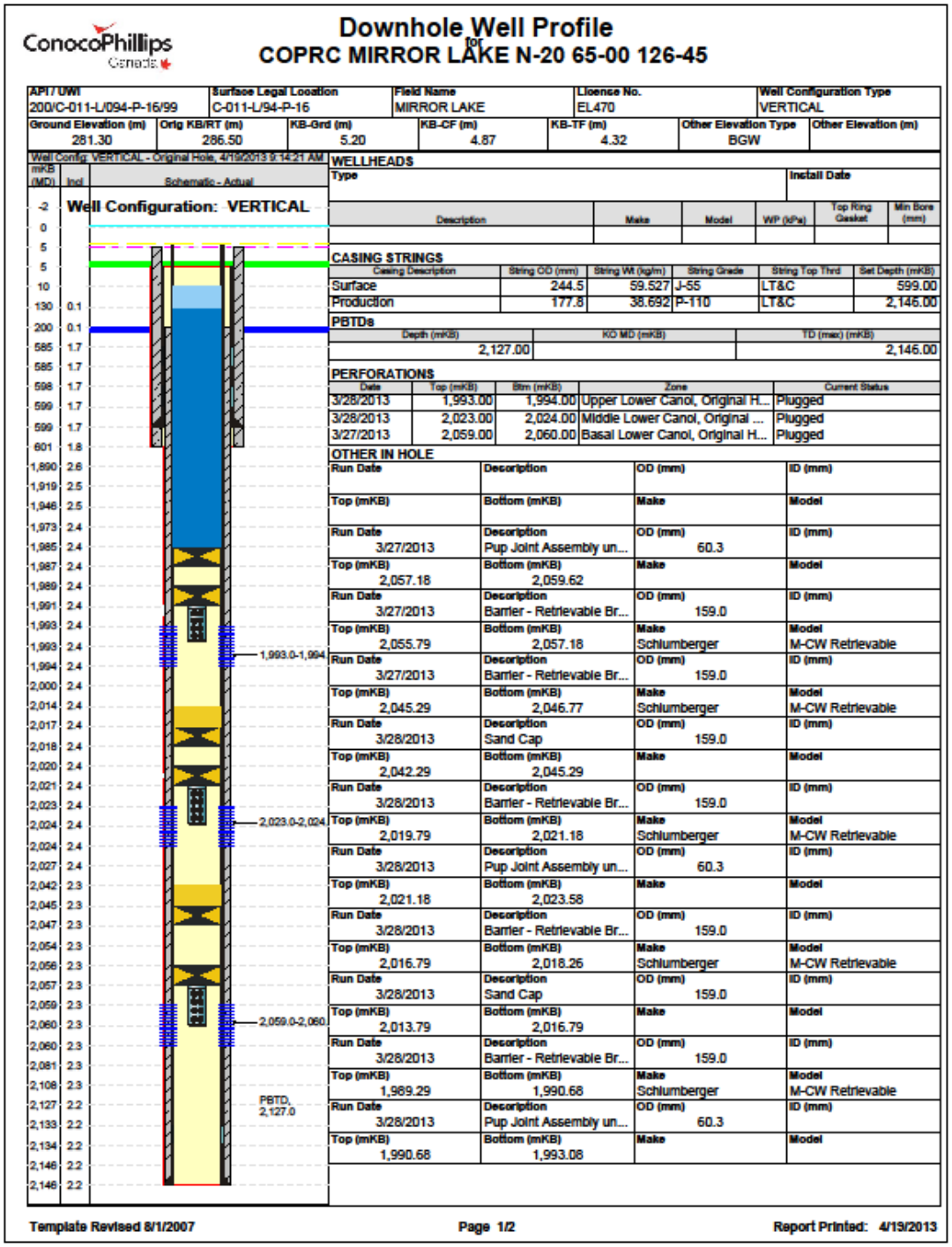
Zone	Volume Gas Total (E3m³)

PERFORATIONS

Date	Zone	Top (mKB)	Btm (mKB)	Shot Dens (shots/m)	Current Status
3/27/2013 12:26	Basal Lower Canol, Origin...	2,059.00	2,060.00	20.0	Plugged
3/28/2013 04:00	Middle Lower Canol, Origi...	2,023.00	2,024.00	20.0	Plugged
3/28/2013 18:23	Upper Lower Canol, Origi...	1,993.00	1,994.00	20.0	Plugged

Page 1/1 Report Printed: 5/8/2013

XIV. Final Completion Schematic



ConocoPhillips Canada

Downhole Well Profile for COPRC MIRROR LAKE N-20 65-00 126-45

API / UWI	Surface Legal Location	Field Name	License No.	Well Configuration Type
200/C-011-L/094-P-16/99	C-011-L/94-P-16	MIRROR LAKE	EL470	VERTICAL

Ground Elevation (m)	Orig KB/RT (m)	KB-Grd (m)	KB-CF (m)	KB-TF (m)	Other Elevation Type	Other Elevation (m)
281.30	286.50	5.20	4.87	4.32	BGW	

Well Config: VERTICAL - Original Hole, 4/19/2013 9:14:21 AM

mKB (MD) | Incl | Schematic - Actual

Well Configuration: VERTICAL

-2, 0, 5, 5, 10, 130 (0.1), 200 (0.1), 585 (1.7), 585 (1.7), 598 (1.7), 599 (1.7), 599 (1.7), 601 (1.8), 1,890 (2.6), 1,919 (2.5), 1,946 (2.5), 1,973 (2.4), 1,985 (2.4), 1,987 (2.4), 1,989 (2.4), 1,991 (2.4), 1,993 (2.4), 1,993 (2.4), 1,994 (2.4), 2,000 (2.4), 2,014 (2.4), 2,017 (2.4), 2,018 (2.4), 2,020 (2.4), 2,021 (2.4), 2,023 (2.4), 2,024 (2.4), 2,024 (2.4), 2,027 (2.4), 2,042 (2.3), 2,045 (2.3), 2,047 (2.3), 2,054 (2.3), 2,056 (2.3), 2,057 (2.3), 2,059 (2.3), 2,060 (2.3), 2,060 (2.3), 2,081 (2.3), 2,108 (2.3), 2,127 (2.2), 2,133 (2.2), 2,134 (2.2), 2,146 (2.2), 2,146 (2.2)

1,993.0-1,994.0
2,023.0-2,024.0
2,059.0-2,060.0
PBTD, 2,127.0

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	59.527	J-55	LT&C	599.00
Production	177.8	38.692	P-110	LT&C	2,146.00

PBTDs

Depth (mKB)	KO MD (mKB)	TD (max) (mKB)
2,127.00		2,146.00

PERFORATIONS

Date	Top (mKB)	Btm (mKB)	Zone	Current Status
3/28/2013	1,993.00	1,994.00	Upper Lower Canol, Original H...	Plugged
3/28/2013	2,023.00	2,024.00	Middle Lower Canol, Original ...	Plugged
3/27/2013	2,059.00	2,060.00	Basal Lower Canol, Original H...	Plugged

OTHER IN HOLE

Run Date	Description	OD (mm)	ID (mm)
Top (mKB)	**Bottom (mKB)**	**Make**	**Model**
3/27/2013	Pup Joint Assembly un...	60.3	
2,057.18	2,059.62		
3/27/2013	Barrier - Retrievable Br...	159.0	
2,055.79	2,057.18	Schlumberger	M-CW Retrievable
3/27/2013	Barrier - Retrievable Br...	159.0	
2,045.29	2,046.77	Schlumberger	M-CW Retrievable
3/28/2013	Sand Cap	159.0	
2,042.29	2,045.29		
3/28/2013	Barrier - Retrievable Br...	159.0	
2,019.79	2,021.18	Schlumberger	M-CW Retrievable
3/28/2013	Pup Joint Assembly un...	60.3	
2,021.18	2,023.58		
3/28/2013	Barrier - Retrievable Br...	159.0	
2,016.79	2,018.26	Schlumberger	M-CW Retrievable
3/28/2013	Sand Cap	159.0	
2,013.79	2,016.79		
3/28/2013	Barrier - Retrievable Br...	159.0	
1,989.29	1,990.68	Schlumberger	M-CW Retrievable
3/28/2013	Pup Joint Assembly un...	60.3	
1,990.68	1,993.08		

Template Revised 8/1/2007 Page 1/2 Report Printed: 4/19/2013

XV. Electric Logs