

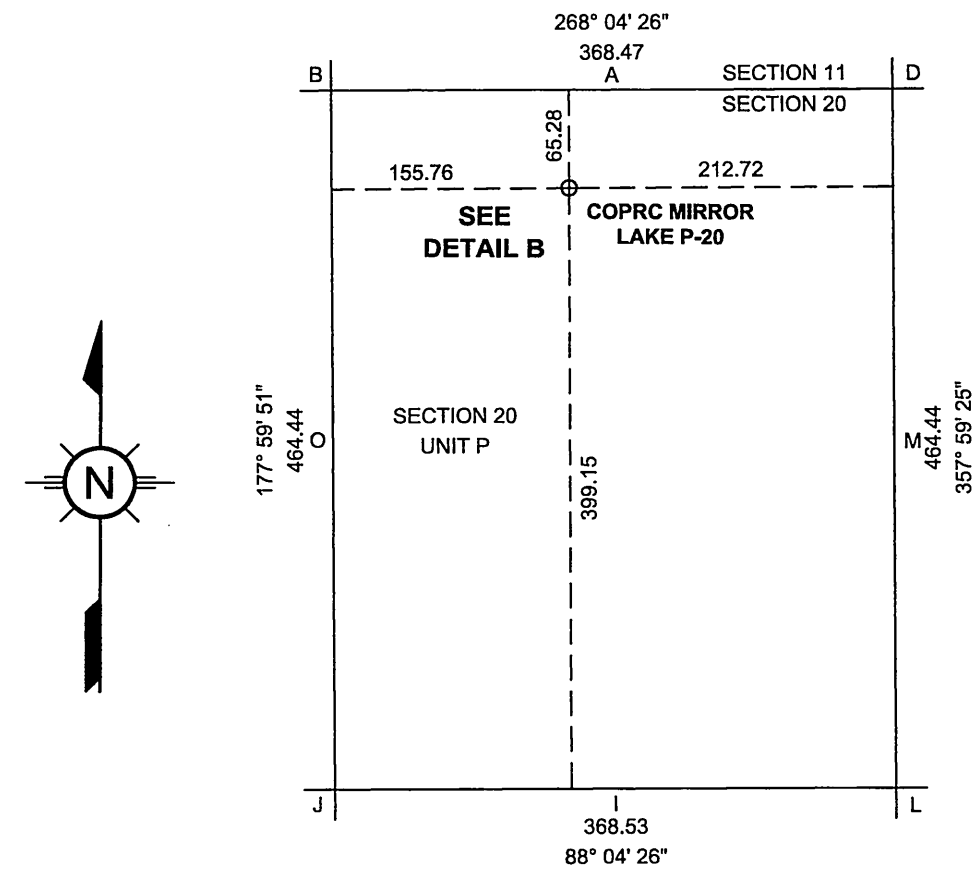
# COPRC Mirror Lake P-20

## APPENDICES

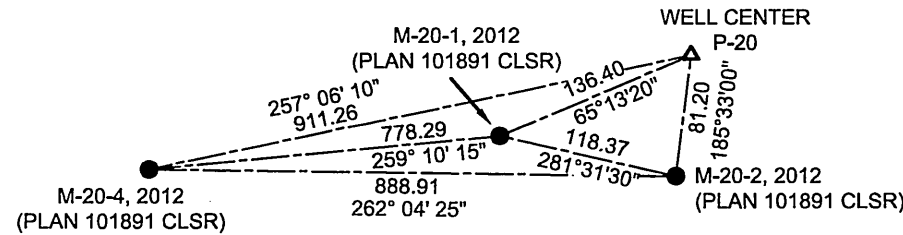
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<b>Appendix 1</b>	<b>Legal Survey Plan</b>
<b>Appendix 2</b>	<b>Daily Activity and Cost Summary</b>
<b>Appendix 3</b>	<b>Daily Reports</b>
<b>Appendix 4</b>	<b>Fluid Summary</b>
<b>Appendix 5</b>	<b>SCVF Test Summary</b>
<b>Appendix 6</b>	<b>Final Wellbore Schematic</b>
<b>Appendix 7</b>	<b>Gas Analyses – Jan 22, 2016</b>
<b>Appendix 8</b>	<b>Static Gradient – Jan 23, 2016</b>
<b>Appendix 9</b>	<b>Cut and Cap Photos</b>

## **Appendix 1      Legal Survey Plan**

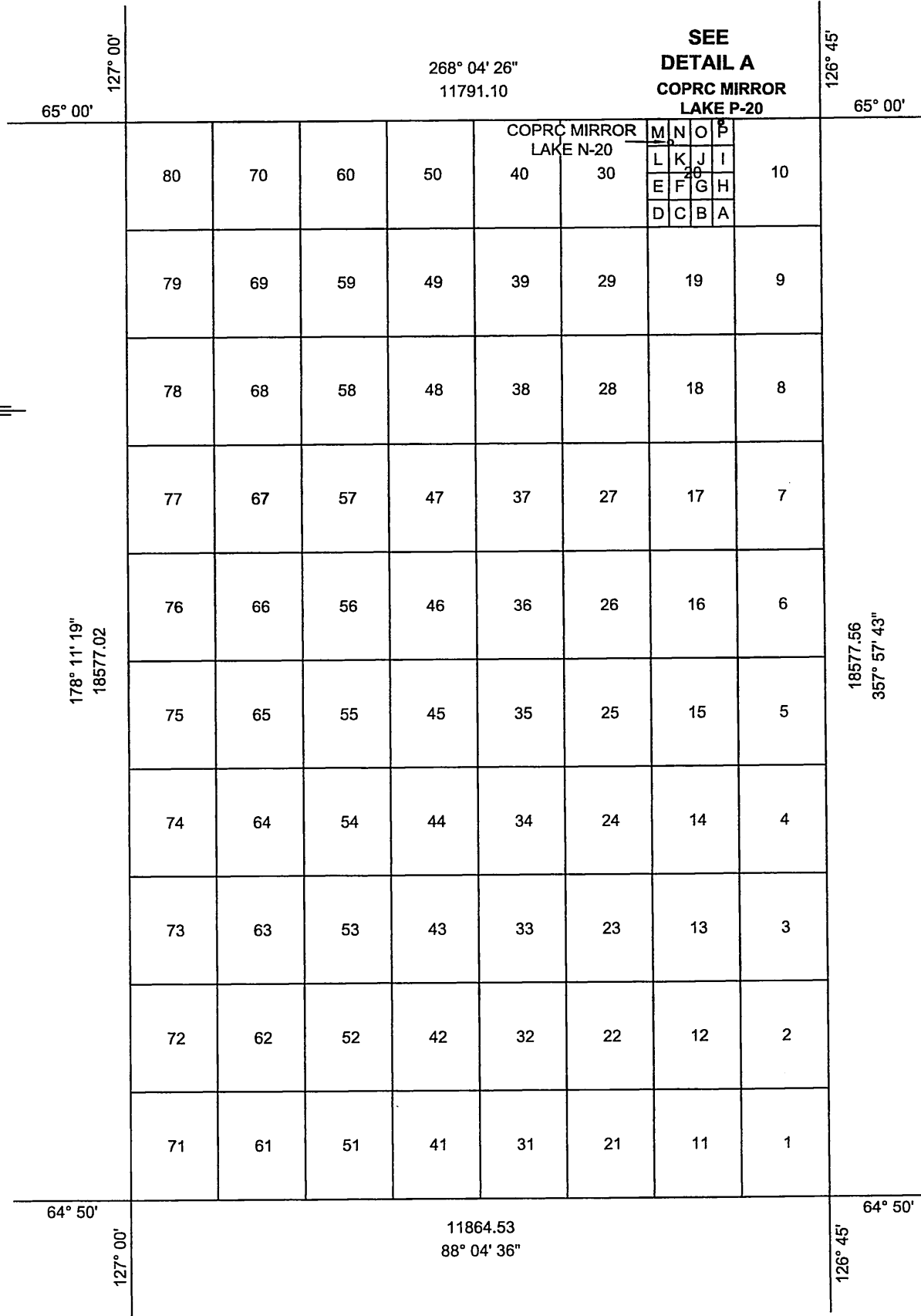


Bearing and distances are UTM NAD 27, Zone 9.  
**DETAIL A: SURFACE UNIT**  
SCALE 1 : 5000



**DETAIL B: GNSS SURVEY**  
NOT TO SCALE

-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° 00', 126° 45'**  
SCALE 1 : 100 000

TABLE OF CO-ORDINATES						
STATION	U.T.M. ZONE 9, C.M. 129 (NAD83)		U.T.M. ZONE 9, C.M. 129 (NAD27)		GEOGRAPHIC CO-ORDINATES (NAD27)	
	NORTHING	EASTING	NORTHING	EASTING	LATITUDE	LONGITUDE
<b>PUBLISHED CO-ORDINATES</b>						
Fd. 77 Post M-20-1, 2012 (Plan 101891 CLSR)	7210167.75	604191.67	7209970.63	604282.20		
Fd. 77 Post M-20-2, 2012 (Plan 101891 CLSR)	7210144.12	604307.62	7209946.99	604398.16		
Fd. 77 Post M-20-4, 2012 (Plan 101891 CLSR)	7210021.52	603427.46	7209824.45	603518.02		
<b>GRID AREA</b>						
N.E.			7210149.71	606089.37	65°00'	126°45'
N.W.			7209753.42	594304.93	65°00'	127°00'
S.E.			7191583.91	606750.03	64°50'	126°45'
S.W.			7191185.69	594892.18	64°50'	127°00'
P-20 N.E.			7210100.18	604616.31	65°00'00.08"	126°46'52.50"
P-20 N.W.			7210087.79	604248.05	65°00'00.10"	126°47'20.62"
P-20 S.E.			7209636.03	604632.60	64°59'45.08"	126°46'52.50"
P-20 S.W.			7209623.64	604264.28	64°59'45.10"	126°47'20.62"
<b>WELL CENTRE</b>						
P-20	7210224.91	604315.48	7210027.78	604406.01	64°59'57.98"	126°47'08.73"

CANADA LANDS SURVEYS RECORDS  
103493  
Date: NOVEMBER 28, 2014

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

NORTHWEST TERRITORIES  
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.  
2014

-NAD 83 UTM COORDINATES ARE COMPUTED FOR ZONE 9, CENTRAL MERIDIAN 129°W.  
-BEARINGS WERE DERIVED FROM GNSS OBSERVATIONS.  
-DISTANCES ARE EXPRESSED IN METRES AND DECIMALS THEREOF.  
-DISTANCES SHOWN IN GNSS 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.

Certified Correct and completed on the  
3rd day of June, 2014  
  
RON ROBINSON C.L.S.  
June 3rd, 2014



-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 8") .... △

REFER TO FB 40458 CLSR FOR THE SURVEY REPORT PERTAINING TO THIS SURVEY.

GROUND ELEVATION AT WELL CENTRE IS **283.27 metres**.  
ELEVATIONS WERE DERIVED FROM GNSS OBSERVATIONS.

THIS SURVEY WAS EXECUTED DURING THE PERIOD  
JULY 16th, 2012 TO JULY 21th, 2012 BY RON ROBINSON, C.L.S.

CONOCOPHILLIPS CANADA RESOURCES CORPORATION

(SIGNATURE, TITLE) CMV FIELD LEAD .....

(SIGNATURE) .....

WITNESS  
Oct 27, 2014  
DATE

## **Appendix 2     Daily Activity and Cost Summary**

# Daily Activity and Cost Summary

## COPRC MIRROR LAKE P-20 65-00 126-45

<b>Job Category</b> ABANDONMENT	<b>Primary Job Type</b> ABANDONMENT P&A	<b>Secondary Job Type</b>	<b>Actual Start Date</b> 1/29/2016 07:30	<b>End Date</b> 2/28/2016 14:00
<b>AFE / RFE / Maint.#</b> 10385950;10385945	<b>Total Job AFE Amount (Cost)</b> 1,328,300.00	<b>AFE+Supp Amt (Cost)</b> 1,328,300.00	<b>Total Field Estimate (Cost)</b> 445,180.61	<b>AFE-Field Estimate (Cost)</b> 883,119.39

### Objective

Abandon Cut and Cap

<b>Contractor</b> Nabors Production Services	<b>Rig Name/No</b> 414	<b>Rig Type</b> SERVICE RIG
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### DAILY ACTIVITY & COST SUMMARY

Report No.	Start Date	Daily Cost Total (Cost)	Cum Cost (Cost)	Last 24hr Sum
1	1/30/2016 07:30	20,998.00	20,998.00	MIRU Lonkar slickline run gauge ring/ pull downhole gauges /perform static gradient.
2	2/1/2016 11:00	11,909.00	32,907.00	Started setting up the secondary containment.
3	2/2/2016 08:00	5,629.39	38,536.39	Finished rigging in the secondary containment.
4	2/12/2016 11:30	50,369.00	88,905.39	Move/spot C&J service rig and equipment on location
5	2/13/2016 07:30	41,402.33	130,307.72	Rig in C & J service rig #414, Ensign portable testing unit and associated equipment. Apply heat to equipment and fluids over night.
6	2/14/2016 07:30	40,747.25	171,054.97	Kill Well, MIRU Slickline, RIH 48.3mm GR, 2" Nipple Brush + set PX plug and prong in X profile @ 2025.13 mKB (On/Off Slick Jt).
7	2/15/2016 07:30	36,535.58	207,590.55	Pressure test PX plug set in on/off slick jt to 10 mPa - good test, Circulate wellbore with fresh water, Shift sliding sleeve closed, Remove wellhead + Nipple up Bop's, spot fresh water c/w 0.5% corrosion inhibitor from packer top @ 2025.30 mKB to 1745.0 mKB.
8	2/16/2016 07:30	28,462.49	236,053.04	POOH 39 Jts of tbq placing EOT @ 1745.0 mKB, Circulate wellbore over to fresh water containing < 4000ppm TDS, pull remaining 60.3mm tbq string c/w dual 6.35mm TEC cables.
9	2/17/2016 07:30	35,463.36	271,516.40	MIRU DSL Slickline, RIH GR/CCL c/w 93.5mm Guage Ring, Set 114.3mm 10K PBP @ 2015.0mKB and pressure test to 14.0 mPa for 10min good test, Dump Bail 82.5 Liters (10.17 lineal meters) of Warm Plug Cement on top of PBP.
10	2/18/2016 07:30	75,343.09	346,859.49	Rig in Slickline, RIH 93.5mm guage ring - push squib + wire to bottom, MIRU E-line, dump bail 82.5 liters bringing cement top to 2003.76 mKB, Set WFT 10K PBP @ 1729.0 mKB - pressure test to 14.0 mPa, dump bail 82.5 liters cement for 10.17 lineal meters of cement cap leaving cement top @ 1728.83 mKB, RIH 20 Jts bull plugged 60.3mm tbq jts to displace 540 Liters fresh water out of well bore for winter protection leaving fluid level 66.6m from surface.
11	2/19/2016 07:30	40,659.22	387,518.71	Rig out service rig and auxiliary equipment, install wellhead, tidy up location and move all equipment to 300/C-11 65-10 126-45.
12	2/25/2016 07:30	7,343.00	394,861.71	MIRU Cascade steamer and Clean Harbors semi vac, Hydro vaced around the conductor barrel on the wellhead down 0.7m from ground level. The cellar was full of frozen water, saw dust/wood chips and full bags of saw dust and wood chips.
13	2/27/2016 07:30	3,675.00	398,536.71	Performed a SCVF on surface casing vent, (no bubbles in 10 minutes no LEL's). Checked well for pressures (none present). NuWave had mechanical issues with the electrical pumping unit, diagnosed the problem and repaired.
14	2/28/2016 07:30	9,210.00	407,746.71	NuWave cut and capped well. See Cut & Cap pictures in Attachments.
15	3/4/2016 07:30	37,433.90	445,180.61	MIRU Cascade steamer and Clean Harbors semi vac, HRN track hoe. Hydro vaced/Steamed the mouse hole csg jt, rat hole csg jt. TOTC (Mac Watson) and he removed the mouse hole csg jt, could not pull the rat hole csg jt, cut it off 2 m below ground level. removed the cement from the cellar and filled in the mouse hole, rat hole and the cellar area.

## **Appendix 3     Daily Reports**

# Daily Morning Report

## COPRC MIRROR LAKE P-20 65-00 126-45

Report #: 1  
Report Date: 1/30/2016  
Final Job Status: ABANDONED  
Final Report? Yes

Country CANADA		State/Province N.W.T.		Region / Division WCBU		District NEW VENTURES		Field Name Mirror Lake		Field Code	
Surface Legal Location P-20 65-00 126-45				API / UWI 300/P20 65-00 126-45/0				License No. EL 470 WID 2081			
<b>Job Information</b>											
Job Category ABANDONMENT			Primary Job Type ABANDONMENT P&A			Secondary Job Type			Total Field Estimate (Cost) 445,180.61		
<b>Objective</b> Abandon Cut and Cap											
Actual Start Date 1/29/2016 07:30		End Date 2/28/2016 14:00		Abandon Date (C&C) 2/28/2016 14:00		Responsible Grp 1 coved		Responsible Grp 2 lborbel		Responsible Grp 3 Justin Minault	
AFE / RFE / Maint.# 10385950		Total AFE Amount (Cost) 740,000.00		Total AFE + Supp Amount (Cost) 740,000.00		Total Field Estimate (Cost) 445,180.61		AFE-Field Estimate (Cost) 294,819.39			
AFE / RFE / Maint.# 10385945		Total AFE Amount (Cost) 588,300.00		Total AFE + Supp Amount (Cost) 588,300.00		Total Field Estimate (Cost)		AFE-Field Estimate (Cost) 588,300.00			
<b>Daily Operations</b>											
Report Start Date 1/30/2016 07:30		Report End Date 1/30/2016 19:30		Daily Cost Total (Cost) 20,998.00		Cumulative Cost (Cost) 20,998.00		Personnel Regular Hours (hr) 88.00			
<b>Daily Contacts</b> WS Superintendent, Derrick Cove, 780-831-1314; Abandonment Engineer, Louis Borbely, 403-650-3939; Manager Comp & WS, Peter Meier, 403-807-2885; WS Supervisor, Mike Flett, 780-933-4595											
Tubing Pressure (kPa) 13,552		Casing Pressure (kPa) 13,350		Weather Overcast/Blowing snow		Temperature (°C) -17		Lease Condition lcy/Snow covered			
<b>Last 24hr Summary</b> MIRU Lonkar slickline run gauge ring/ pull downhole gauges /perform static gradient.											
<b>24hr Forecast</b> Finish rigging out Rental equipment and move off of location.											
Start Time	End Time	Dur (hr)	Op Code	Activity Code	Time P-T-X	Trbl Code	Operation				
07:30	08:00	0.50	WELLPR	SFTY	P		Held a PJHA # 01302016, # 01302016-B with Lonkar slickline crew, Cascade steamer crew, Canol Transport, HRN crew. Frontier medic. Discussed spotting/rigging in equipment, slickline operations, steamer operations, high pressure lines, Purging and pressure testing as per directive 33, Fire and explosion prevention plan, picker operations bleeding off lube to testers, lease conditions, muster area and the associated hazards. Reviewed the Site ERP and Injured Worker Transportation Plan with crew members. Safety tickets, orientations checked and valid.				
08:00	13:00	5.00	WELLPR	RURD	P		SITP- 13,552 kPa, SICP- 13,350 kPa, SIICP- 0 kPa. Disassembled the Weatherford real time surface recording equipment from the wellhead and moved the skid to the side of the lease. Spotted/ rigged in Lonkar slickline unit, steamer unit, N <sup>2</sup> trailer, Picker & HD workflow.				

# Daily Morning Report

## COPRC MIRROR LAKE P-20 65-00 126-45

Report #: 1  
Report Date: 1/30/2016  
Final Job Status: ABANDONED  
Final Report? Yes

Start Time	End Time	Dur (hr)	Op Code	Activity Code	Time P-T-X	Trbl Code	Operation
13:00	19:30	6.50	RPEQPT	SLKL	P		<p>Rigged in slickline unit c/w full lube/ bop's (function tested), N2 trailer for purging and pressure testing.</p> <p>Fill from top master valve to just below purge port on lubricator with methanol prior to every run. Purge and pressure test slickline lube/bops/testers flow line and manifold to 21MPa, test good. SITP-13,552 kPa</p> <p>Bled down lube to 14,000 kPa and opened master valve.</p> <p>Purge/pressure tested with N<sup>2</sup> and filled with methanol prior to every run.</p> <p>Performed slickline runs as follows: Toolstring as follows: 42.86mm OD rope socket 42.86mm OD cross over 42.86mm OD BMC 42.86mm OD DPG 42.86mm OD DCC 42.86mm OD cross over 38.1mm OD weight bar 38.1mm OD knuckle 38.1mm OD hydraulic jar 38.1mm OD spangs</p> <p>Run 1- RIH with above toolstring and 48.3 mm gauge ring down to top of sliding sleeve @ 2001.66 mKB (slickline depth 1995.2 mKB) No issues running in or out of hole. Fluid level at 1850 mKB, no oil seen on tools at surface.</p> <p>Run 2- RIH with same toolstring with 2" GS pulling tool to recover downhole gauges set in X profile @ 2014.29 mKB Latch onto gauges 3rd latch good. (slickline depth 2019.00 mKB). Spang up 6 times and gauges came free. Pull out of hole with gauges. Time off bottom - 15:04 Hrs. Gauges at surface 15:30 Hrs. Top gauge battery off @ 15:50 Hrs / Bottom gauge battery off @ 15:50 Hrs.</p> <p>Lonkar not able to download gauges due to different cable connection on gauges.</p> <p>No oil seen on tools at surface.</p> <p>Run 3- perform static gradient. Make up and RIH tandem 6K Boss gauges. Gauges on at 15:34 Hrs</p> <p>perform 5 min stops at surface/ 380 mKB / 760 mKB/1140 mKB/1520 mKB/1900 mKB/1930 mKB/1960 mKB/1990 mKB and a 30min stop at 2020 mKB. Pull out of hole with gauges. Gauges off at 18:09 Hrs. Download gauges BHP-18,320 kPa BHT- 87°C @ 2020 mKB</p> <p>Rigged down slickline. Winterized the wellhead with methanol on top of the master valve. Shut in and secured the wellhead.</p> <p>Rigged out the HD workflow, rigged out all services.</p> <p>SDFN.</p>

### Report Fluids Summary

Fluid	To lease (m³)	From lease (m³)	To well (m³)	From well (m³)	Left to recover (m³)

### Daily Costs

BU Desc	Vendor	Activity Code	Amount (Cost)
Trucking/Hauling/ Hot Shot Services	CANOL OILFIELD SERVICES INC	P100	4,380.00
Pressure Truck/Hot Oiler	CANOL OILFIELD SERVICES INC	S990	3,908.00
Trucking/Hauling/ Hot Shot Services	CANOL OILFIELD SERVICES INC	P100	1,370.00
Trucking/Hauling/ Hot Shot Services	CANOL OILFIELD SERVICES INC	P100	450.00
Slickline Services	LONKAR SERVICES A/D/O SCHLUMBERGER CANAD...	U200	7,000.00
Wellsite Supervision & Engineering	MJ'S WELLSITE SUPERVISION LTD	T130	1,620.00
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	325.00
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	185.00
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	125.00
Completion Fluids & Other Chem	PBN ENERGY SERVICES LTD	G300	915.00
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	705.00
Surface Completion Equipment Rental	RIGSAT COMMUNICATIONS INC	Q300	15.00

### Cumulative Job Flared Gas By Zone

Zone	Volume Gas Total (E3m³)



# Daily Morning Report

## COPRC MIRROR LAKE P-20 65-00 126-45

Report #: 1  
Report Date: 1/30/2016  
Final Job Status: ABANDONED  
Final Report? Yes

Perforations					
Date	Zone	Top (mKB)	Btm (mKB)	Shot Dens (shots/m)	Current Status
3/4/2014	CANOL, Original Hole	3,118.00	3,119.00	6.0	Open - Flowing
3/4/2014	CANOL, Original Hole	3,098.00	3,099.00	6.0	Open - Flowing
3/4/2014	CANOL, Original Hole	3,079.00	3,080.00	6.0	Open - Flowing
3/4/2014	CANOL, Original Hole	3,059.00	3,060.00	6.0	Open - Flowing
3/4/2014	CANOL, Original Hole	3,040.00	3,041.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	2,943.00	2,944.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	2,962.00	2,963.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	2,982.00	2,983.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	3,001.00	3,002.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	3,021.00	3,022.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	2,924.00	2,925.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,904.00	2,905.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,885.00	2,886.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,866.00	2,867.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,846.00	2,847.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,827.00	2,828.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,807.00	2,808.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,788.00	2,789.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,769.00	2,770.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,749.00	2,750.00	6.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,730.00	2,731.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,710.00	2,711.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,691.00	2,692.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,633.00	2,634.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,652.00	2,653.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,672.00	2,673.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,613.00	2,614.00	6.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,555.00	2,556.00	6.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,594.00	2,595.00	6.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,536.00	2,537.00	6.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,575.00	2,576.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,516.00	2,517.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,497.00	2,498.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,478.00	2,479.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,458.00	2,459.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,439.00	2,440.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,419.00	2,420.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,400.00	2,401.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,381.00	2,382.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,361.00	2,362.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,342.00	2,343.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,303.00	2,304.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,284.00	2,285.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,264.00	2,265.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,245.00	2,246.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,322.00	2,323.00	6.0	Open - Flowing

# Daily Morning Report

## COPRC MIRROR LAKE P-20 65-00 126-45

Report #: 2  
Report Date: 2/1/2016  
Final Job Status: ABANDONED  
Final Report? Yes

Country CANADA	State/Province N.W.T.	Region / Division WCBU	District NEW VENTURES	Field Name Mirror Lake	Field Code
Surface Legal Location P-20 65-00 126-45		API / UWI 300/P20 65-00 126-45/0		License No. EL 470 WID 2081	

<b>Job Information</b>					
Job Category ABANDONMENT	Primary Job Type ABANDONMENT P&A	Secondary Job Type	Total Field Estimate (Cost) 445,180.61		

<b>Objective</b> Abandon Cut and Cap					
Actual Start Date 1/29/2016 07:30	End Date 2/28/2016 14:00	Abandon Date (C&C) 2/28/2016 14:00	Responsible Grp 1 coved	Responsible Grp 2 lborbel	Responsible Grp 3 Justin Minault
AFE / RFE / Maint.# 10385950	Total AFE Amount (Cost) 740,000.00	Total AFE + Supp Amount (Cost) 740,000.00	Total Field Estimate (Cost) 445,180.61	AFE-Field Estimate (Cost) 294,819.39	
AFE / RFE / Maint.# 10385945	Total AFE Amount (Cost) 588,300.00	Total AFE + Supp Amount (Cost) 588,300.00	Total Field Estimate (Cost)	AFE-Field Estimate (Cost) 588,300.00	

<b>Daily Operations</b>					
Report Start Date 2/1/2016 11:00	Report End Date 2/1/2016 18:00	Daily Cost Total (Cost) 11,909.00	Cumulative Cost (Cost) 32,907.00	Personnel Regular Hours (hr) 73.00	
<b>Daily Contacts</b> WS Superintendent, Derrick Cove, 780-831-1314; Abandonment Engineer, Louis Borbely, 403-650-3939; Manager Comp & WS, Peter Meier, 403-807-2885; WS Supervisor, Mike Flett, 780-933-4595					Rig
Tubing Pressure (kPa)	Casing Pressure (kPa)	Weather Overcast/Blowing	Temperature (°C) -16	Lease Condition lcy/Snow covered	

<b>Last 24hr Summary</b> Started setting up the secondary containment.					
<b>24hr Forecast</b> Finish rigging in the secondary containment.					

Start Time	End Time	Dur (hr)	Op Code	Activity Code	Time P-T-X	Trbl Code	Operation
11:00	11:30	0.50	WELLPR	SFTY	P		Held a PJHA # 02012016 with Willow Lake Crew, Canol Transport. Discussed installing containment hazards and procedures, slippery liner, cold weather conditions, cutting liner, heavy lifting. Review transportation plan/medic location, lease conditions, muster area and the associated hazards. Reviewed the Site ERP and Injured Worker Transportation Plan with crew members. Safety tickets, orientations checked and valid.
11:30	18:00	6.50	WELLPR	RURD	P		Moved 2- Sea cans from E-76 well to location. Spotted 5 - 8 x 40 pieces of matting on location with Picker and Bed truck for secondary containment. Inspected the matting and found 2 matts that were too damaged to use. A call was made to Canol and 2 pieces of matting were sent out to replace the damaged ones.  Laid out geo on top of 2 - 8 X 40 matts Unfolded and trimmed the liner. Partially set up the 40 X 24 containment walls, Rolled up the cut liner piece for containment, covered with tarp to heat overnight with the flameless heater so it is more pliable in the morning.

<b>Report Fluids Summary</b>					
Fluid	To lease (m³)	From lease (m³)	To well (m³)	From well (m³)	Left to recover (m³)

<b>Daily Costs</b>			
BU Desc	Vendor	Activity Code	Amount (Cost)
Trucking/Hauling/ Hot Shot Services	CANOL OILFIELD SERVICES INC	P100	4,110.00
Trucking/Hauling/ Hot Shot Services	CANOL OILFIELD SERVICES INC	P100	2,280.00
Trucking/Hauling/ Hot Shot Services	CANOL OILFIELD SERVICES INC	P100	344.00
Surface Completion Equipment Rental	CORNERSTONE OILFIELD SERVICES LTD	Q300	175.00
Surface Completion Equipment Rental	HRN CONTRACTING LTD	Q300	1,225.00
Wellsite Supervision & Engineering	MJ'S WELLSITE SUPERVISION LTD	T130	1,620.00
Surface Completion Equipment Rental	RIGSAT COMMUNICATIONS INC	Q300	15.00
Maintain Road & Location	WILLOWLAKE ENVIRONMENTAL LTD	D230	2,140.00

<b>Cumulative Job Flared Gas By Zone</b>	
Zone	Volume Gas Total (E3m³)

<b>Perforations</b>					
Date	Zone	Top (mKB)	Btm (mKB)	Shot Dens (shots/m)	Current Status
3/4/2014	CANOL, Original Hole	3,118.00	3,119.00	6.0	Open - Flowing
3/4/2014	CANOL, Original Hole	3,098.00	3,099.00	6.0	Open - Flowing
3/4/2014	CANOL, Original Hole	3,079.00	3,080.00	6.0	Open - Flowing
3/4/2014	CANOL, Original Hole	3,059.00	3,060.00	6.0	Open - Flowing

# Daily Morning Report

## COPRC MIRROR LAKE P-20 65-00 126-45

Report #: 2  
Report Date: 2/1/2016  
Final Job Status: ABANDONED  
Final Report? Yes

Perforations					
Date	Zone	Top (mKB)	Btm (mKB)	Shot Dens (shots/m)	Current Status
3/4/2014	CANOL, Original Hole	3,040.00	3,041.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	2,943.00	2,944.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	2,962.00	2,963.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	2,982.00	2,983.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	3,001.00	3,002.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	3,021.00	3,022.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	2,924.00	2,925.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,904.00	2,905.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,885.00	2,886.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,866.00	2,867.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,846.00	2,847.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,827.00	2,828.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,807.00	2,808.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,788.00	2,789.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,769.00	2,770.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,749.00	2,750.00	6.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,730.00	2,731.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,710.00	2,711.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,691.00	2,692.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,633.00	2,634.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,652.00	2,653.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,672.00	2,673.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,613.00	2,614.00	6.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,555.00	2,556.00	6.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,594.00	2,595.00	6.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,536.00	2,537.00	6.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,575.00	2,576.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,516.00	2,517.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,497.00	2,498.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,478.00	2,479.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,458.00	2,459.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,439.00	2,440.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,419.00	2,420.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,400.00	2,401.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,381.00	2,382.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,361.00	2,362.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,342.00	2,343.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,303.00	2,304.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,284.00	2,285.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,264.00	2,265.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,245.00	2,246.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,322.00	2,323.00	6.0	Open - Flowing

# Daily Morning Report

## COPRC MIRROR LAKE P-20 65-00 126-45

Report #: 3  
Report Date: 2/2/2016  
Final Job Status: ABANDONED  
Final Report? Yes

Country CANADA	State/Province N.W.T.	Region / Division WCBU	District NEW VENTURES	Field Name Mirror Lake	Field Code
Surface Legal Location P-20 65-00 126-45		API / UWI 300/P20 65-00 126-45/0		License No. EL 470 WID 2081	

Job Information			
Job Category	Primary Job Type	Secondary Job Type	Total Field Estimate (Cost)
ABANDONMENT	ABANDONMENT P&A		445,180.61

<b>Objective</b> Abandon Cut and Cap					
Actual Start Date 1/29/2016 07:30	End Date 2/28/2016 14:00	Abandon Date (C&C) 2/28/2016 14:00	Responsible Grp 1 coved	Responsible Grp 2 lborbel	Responsible Grp 3 Justin Minault
AFE / RFE / Maint.# 10385950	Total AFE Amount (Cost) 740,000.00	Total AFE + Supp Amount (Cost) 740,000.00	Total Field Estimate (Cost) 445,180.61	AFE-Field Estimate (Cost) 294,819.39	
AFE / RFE / Maint.# 10385945	Total AFE Amount (Cost) 588,300.00	Total AFE + Supp Amount (Cost) 588,300.00	Total Field Estimate (Cost)	AFE-Field Estimate (Cost) 588,300.00	

<b>Daily Operations</b>					
Report Start Date 2/2/2016 18:00	Report End Date 2/2/2016 18:00	Daily Cost Total (Cost) 5,629.39	Cumulative Cost (Cost) 38,536.39	Personnel Regular Hours (hr) 57.00	
<b>Daily Contacts</b> WS Superintendent, Derrick Cove, 780-831-1314; Abandonment Engineer, Louis Borbely, 403-650-3939; Manager Comp & WS, Peter Meier, 403-807-2885; WS Supervisor, Mike Flett, 780-933-4595					Rig
Tubing Pressure (kPa)	Casing Pressure (kPa)	Weather Overcast	Temperature (°C) -17	Lease Condition lcy/Snow covered	

**Last 24hr Summary**  
Finished rigging in the secondary containment.

**24hr Forecast**  
Ready to move in Service rig and supporting equipment.

Start Time	End Time	Dur (hr)	Op Code	Activity Code	Time P-T-X	Trbl Code	Operation
08:00	08:30	0.50	WELLPR	SFTY	P		Held a PJHA # 02012016 with Willow Lake Crew, Canol Transport forklift operator. Discussed installing the containment liner hazards and procedures, slippery liner, cold weather conditions, cutting liner, heavy lifting. Reviewed transportation plan/medic location, lease conditions, muster area and the associated hazards. Reviewed the Site ERP and Injured Worker Transportation Plan with crew members. Safety tickets, orientations checked and valid.
08:30	16:45	8.25	WELLPR	RURD	P		Finished setting up secondary containment for 400's and cement bin. Put extra containment parts in Sea can and cut scrap pieces up and stored in back of the seacan. Dropped off extra cut pieces of liner at E-76 to put under the boiler lines to prevent melting.  Note: Workfloor still on P-20 in place by the wellhead (Not rigged up).

<b>Report Fluids Summary</b>					
Fluid	To lease (m³)	From lease (m³)	To well (m³)	From well (m³)	Left to recover (m³)

<b>Daily Costs</b>			
BU Desc	Vendor	Activity Code	Amount (Cost)
Surface Completion Equipment Rental	BP PUMP LTD	Q300	240.00
Maintain Road & Location	CANOL OILFIELD SERVICES INC	D230	1,182.00
Surface Completion Equipment Rental	CORNERSTONE OILFIELD SERVICES LTD	Q300	244.39
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	325.00
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	943.00
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	705.00
Maintain Road & Location	WILLOWLAKE ENVIRONMENTAL LTD	D230	1,990.00

<b>Cumulative Job Flared Gas By Zone</b>	
Zone	Volume Gas Total (E3m³)

<b>Perforations</b>					
Date	Zone	Top (mKB)	Btm (mKB)	Shot Dens (shots/m)	Current Status
3/4/2014	CANOL, Original Hole	3,118.00	3,119.00	6.0	Open - Flowing
3/4/2014	CANOL, Original Hole	3,098.00	3,099.00	6.0	Open - Flowing
3/4/2014	CANOL, Original Hole	3,079.00	3,080.00	6.0	Open - Flowing
3/4/2014	CANOL, Original Hole	3,059.00	3,060.00	6.0	Open - Flowing
3/4/2014	CANOL, Original Hole	3,040.00	3,041.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	2,943.00	2,944.00	6.0	Open - Flowing

# Daily Morning Report

## COPRC MIRROR LAKE P-20 65-00 126-45

Report #: 3  
Report Date: 2/2/2016  
Final Job Status: ABANDONED  
Final Report? Yes

Perforations					
Date	Zone	Top (mKB)	Btm (mKB)	Shot Dens (shots/m)	Current Status
3/7/2014	CANOL, Original Hole	2,962.00	2,963.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	2,982.00	2,983.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	3,001.00	3,002.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	3,021.00	3,022.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	2,924.00	2,925.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,904.00	2,905.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,885.00	2,886.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,866.00	2,867.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,846.00	2,847.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,827.00	2,828.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,807.00	2,808.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,788.00	2,789.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,769.00	2,770.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,749.00	2,750.00	6.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,730.00	2,731.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,710.00	2,711.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,691.00	2,692.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,633.00	2,634.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,652.00	2,653.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,672.00	2,673.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,613.00	2,614.00	6.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,555.00	2,556.00	6.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,594.00	2,595.00	6.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,536.00	2,537.00	6.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,575.00	2,576.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,516.00	2,517.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,497.00	2,498.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,478.00	2,479.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,458.00	2,459.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,439.00	2,440.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,419.00	2,420.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,400.00	2,401.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,381.00	2,382.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,361.00	2,362.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,342.00	2,343.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,303.00	2,304.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,284.00	2,285.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,264.00	2,265.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,245.00	2,246.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,322.00	2,323.00	6.0	Open - Flowing

# Daily Morning Report

## COPRC MIRROR LAKE P-20 65-00 126-45

Report #: 4  
Report Date: 2/12/2016  
Final Job Status: ABANDONED  
Final Report? Yes

Country CANADA	State/Province N.W.T.	Region / Division WCBU	District NEW VENTURES	Field Name Mirror Lake	Field Code
Surface Legal Location P-20 65-00 126-45		API / UWI 300/P20 65-00 126-45/0		License No. EL 470 WID 2081	

Job Information			
Job Category	Primary Job Type	Secondary Job Type	Total Field Estimate (Cost)
ABANDONMENT	ABANDONMENT P&A		445,180.61

<b>Objective</b> Abandon Cut and Cap					
Actual Start Date 1/29/2016 07:30	End Date 2/28/2016 14:00	Abandon Date (C&C) 2/28/2016 14:00	Responsible Grp 1 coved	Responsible Grp 2 lborbel	Responsible Grp 3 Justin Minault
AFE / RFE / Maint.# 10385950	Total AFE Amount (Cost) 740,000.00	Total AFE + Supp Amount (Cost) 740,000.00	Total Field Estimate (Cost) 445,180.61	AFE-Field Estimate (Cost) 294,819.39	
AFE / RFE / Maint.# 10385945	Total AFE Amount (Cost) 588,300.00	Total AFE + Supp Amount (Cost) 588,300.00	Total Field Estimate (Cost)	AFE-Field Estimate (Cost) 588,300.00	

<b>Daily Operations</b>					
Report Start Date 2/12/2016 11:30	Report End Date 2/12/2016 19:30	Daily Cost Total (Cost) 50,369.00	Cumulative Cost (Cost) 88,905.39	Personnel Regular Hours (hr) 112.00	
<b>Daily Contacts</b> WS Superintendent, Derrick Cove, 780-831-1314; Abandonment Engineer, Louis Borbely, 403-650-3939; WS Supervisor, Mike Short, 403-348-7127; WS Supervisor, Justin Minault, 403-391-0714					Rig Nabors Production Services, 414
Tubing Pressure (kPa)	Casing Pressure (kPa)	Weather Clear	Temperature (°C) -16	Lease Condition Icy/Snow covered	

**Last 24hr Summary**  
Move/spot C&J service rig and equipment on location

**24hr Forecast**  
Move Ensign P-tank to location. Rig up service rig and test package. Spot tanks, haul and heat potable water.

Start Time	End Time	Dur (hr)	Op Code	Activity Code	Time P-T-X	Trbl Code	Operation
11:30	12:00	0.50	WELLPR	SFTY	P		Held pre-job safety and operations meeting with all services. Review CPC PJHA, Load and move equipment hazards / slippery lease conditions and use of traction control/ overhead loads/ pinch and crush points/ hammering/wrenching/cold weather operations/ heavy lifting/driving. Review transportation plan and muster areas with all workers. All workers safety certificates checked.
12:00	19:30	7.50	WELLPR	RURD	P		Perform walk around inspection of lease prior to spotting equipment. Lease very slippery/icy. Mouse and rat holes noted around wellhead.  Begin spotting equipment on location.  Light towers Spot 2 x boilers, fill with water and fire boilers. Spot Rig tank and transfer fluid into tank from O-06 location. Spot and rig in doghouse Spot 50/50wellsite shack, rig in septic tank Spot and rig in Generator for wellsite shack Spot 8 x 40 rig matting and back service rig up to well. Spot rig pump Spot Ensign flare stack and office trailer  Ground/bond equipment. Run power cords for equipment.
19:30	07:30	12.00	WELLPR	RURD	P		Review CPC Boiler PJHA with night boiler hand.  Boiler hand rig in misc. boiler equipment for night.

<b>Report Fluids Summary</b>					
Fluid	To lease (m³)	From lease (m³)	To well (m³)	From well (m³)	Left to recover (m³)
FRESH WATER	36.91	13.00			

<b>Daily Costs</b>			
BU Desc	Vendor	Activity Code	Amount (Cost)
Surface Completion Equipment Rental	BP PUMP LTD	Q300	240.00
Service Rig	C&J ENERGY PRODUCTION SERVICES CANADA LTD	E120	12,932.00
Trucking/Hauling/ Hot Shot Services	CANOL OILFIELD SERVICES INC	P100	3,120.00
Trucking/Hauling/ Hot Shot Services	CANOL OILFIELD SERVICES INC	P100	3,120.00
Trucking/Hauling/ Hot Shot Services	CANOL OILFIELD SERVICES INC	P100	3,450.00
Trucking/Hauling/ Hot Shot Services	CANOL OILFIELD SERVICES INC	P100	5,260.00
Trucking/Hauling/ Hot Shot Services	CANOL OILFIELD SERVICES INC	P100	5,850.00
Trucking/Hauling/ Hot Shot Services	CANOL OILFIELD SERVICES INC	P100	1,990.00
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	1,950.00
Surface Completion Equipment Rental	CENTRAL MACKENZIE ENVIRONMENTAL LTD	Q300	40.00



# Daily Morning Report

## COPRC MIRROR LAKE P-20 65-00 126-45

Report #: 4  
Report Date: 2/12/2016  
Final Job Status: ABANDONED  
Final Report? Yes

Daily Costs			
BU Desc	Vendor	Activity Code	Amount (Cost)
Surface Completion Equipment Rental	CENTRAL MACKENZIE ENVIRONMENTAL LTD	Q300	60.00
Welltesting (Eqpmt,Srvcs,PTA,Gov't Subs)	ENSIGN TESTING SERVICES INC	M220	2,841.00
Surface Completion Equipment Rental	HRN CONTRACTING LTD	Q300	875.00
Wellsite Supervision & Engineering	MINAULT ENERGY SERVICES LTD	T130	1,620.00
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	1,205.00
Completion Fluids & Other Chem	PBN ENERGY SERVICES LTD	G300	1,476.00
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	125.00
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	325.00
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	185.00
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	185.00
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	185.00
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	185.00
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	75.00
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	75.00
Surface Completion Equipment Rental	RIGSAT COMMUNICATIONS INC	Q300	15.00
Surface Completion Equipment Rental	TRUMPETER CAMP COMPANY PARTNERSHIP LTD	Q300	350.00
Surface Completion Equipment Rental	TRUMPETER CAMP COMPANY PARTNERSHIP LTD	Q300	450.00
Surface Completion Equipment Rental	TRUMPETER CAMP COMPANY PARTNERSHIP LTD	Q300	50.00
Surface Completion Equipment Rental	TRUMPETER CAMP COMPANY PARTNERSHIP LTD	Q300	1,950.00

### Cumulative Job Flared Gas By Zone

Zone	Volume Gas Total (E3m³)
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### Perforations

Date	Zone	Top (mKB)	Btm (mKB)	Shot Dens (shots/m)	Current Status
3/4/2014	CANOL, Original Hole	3,118.00	3,119.00	6.0	Open - Flowing
3/4/2014	CANOL, Original Hole	3,098.00	3,099.00	6.0	Open - Flowing
3/4/2014	CANOL, Original Hole	3,079.00	3,080.00	6.0	Open - Flowing
3/4/2014	CANOL, Original Hole	3,059.00	3,060.00	6.0	Open - Flowing
3/4/2014	CANOL, Original Hole	3,040.00	3,041.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	2,943.00	2,944.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	2,962.00	2,963.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	2,982.00	2,983.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	3,001.00	3,002.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	3,021.00	3,022.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	2,924.00	2,925.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,904.00	2,905.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,885.00	2,886.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,866.00	2,867.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,846.00	2,847.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,827.00	2,828.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,807.00	2,808.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,788.00	2,789.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,769.00	2,770.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,749.00	2,750.00	6.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,730.00	2,731.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,710.00	2,711.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,691.00	2,692.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,633.00	2,634.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,652.00	2,653.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,672.00	2,673.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,613.00	2,614.00	6.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,555.00	2,556.00	6.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,594.00	2,595.00	6.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,536.00	2,537.00	6.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,575.00	2,576.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,516.00	2,517.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,497.00	2,498.00	6.0	Open - Flowing

# Daily Morning Report

## COPRC MIRROR LAKE P-20 65-00 126-45

Report #: 4  
 Report Date: 2/12/2016  
 Final Job Status: ABANDONED  
 Final Report? Yes

Perforations					
Date	Zone	Top (mKB)	Btm (mKB)	Shot Dens (shots/m)	Current Status
3/10/2014	CANOL, Original Hole	2,478.00	2,479.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,458.00	2,459.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,439.00	2,440.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,419.00	2,420.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,400.00	2,401.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,381.00	2,382.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,361.00	2,362.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,342.00	2,343.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,303.00	2,304.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,284.00	2,285.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,264.00	2,265.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,245.00	2,246.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,322.00	2,323.00	6.0	Open - Flowing



# Daily Morning Report

## COPRC MIRROR LAKE P-20 65-00 126-45

Report #: 5  
Report Date: 2/13/2016  
Final Job Status: ABANDONED  
Final Report? Yes

Country CANADA	State/Province N.W.T.	Region / Division WCBU	District NEW VENTURES	Field Name Mirror Lake	Field Code
Surface Legal Location P-20 65-00 126-45		API / UWI 300/P20 65-00 126-45/0		License No. EL 470 WID 2081	

Job Information			
Job Category	Primary Job Type	Secondary Job Type	Total Field Estimate (Cost)
ABANDONMENT	ABANDONMENT P&A		445,180.61

<b>Objective</b> Abandon Cut and Cap					
Actual Start Date 1/29/2016 07:30	End Date 2/28/2016 14:00	Abandon Date (C&C) 2/28/2016 14:00	Responsible Grp 1 coved	Responsible Grp 2 lborbel	Responsible Grp 3 Justin Minault
AFE / RFE / Maint.# 10385950	Total AFE Amount (Cost) 740,000.00	Total AFE + Supp Amount (Cost) 740,000.00	Total Field Estimate (Cost) 445,180.61	AFE-Field Estimate (Cost) 294,819.39	
AFE / RFE / Maint.# 10385945	Total AFE Amount (Cost) 588,300.00	Total AFE + Supp Amount (Cost) 588,300.00	Total Field Estimate (Cost)	AFE-Field Estimate (Cost) 588,300.00	

Daily Operations				
Report Start Date 2/13/2016 07:30	Report End Date 2/14/2016 07:30	Daily Cost Total (Cost) 41,402.33	Cumulative Cost (Cost) 130,307.72	Personnel Regular Hours (hr) 201.00
Daily Contacts WS Superintendent, Derrick Cove, 780-831-1314; Abandonment Engineer, Louis Borbely, 403-650-3939; WS Supervisor, Justin Minault, 403-391-0714				Rig Nabors Production Services, 414
Tubing Pressure (kPa) 13,255	Casing Pressure (kPa) 13,275	Weather Clear	Temperature (°C) -16	Lease Condition lcy/Snow covered

**Last 24hr Summary**  
Rig in C & J service rig #414, Ensign portable testing unit and associated equipment. Apply heat to equipment and fluids over night.

**24hr Forecast**  
Kill Well, MIRU Slickline + set PX plug in on/off, pressure test packer + plug, close sliding sleeve.

Start Time	End Time	Dur (hr)	Op Code	Activity Code	Time P-T-X	Trbl Code	Operation
07:30	08:00	0.50	WELLPR	SFTY	P		Hold Pre-job meeting with all personnel, document and discuss all hazards associated with moving on and spotting equipment, Rigging in Boiler and working with steam, rigging in service rig and auxiliary equipment. Review PJHA, JSA's and ERP. Check all personnel's tickets and CPC Orientations - all valid.
08:00	09:00	1.00	WELLPR	RURD	P		<ul style="list-style-type: none"> <li>- Fire up equipment, conduct walk around inspection - no spills or leaks identified on wellhead or equipment.</li> <li>- Check Well pressures = SITP - 13,255 kPa / SICP - 13,275 kPa.</li> <li>- Walk through and inspect liner in secondary containment, Wind appears to have lifted liner and bunched it up on one side of containment. Stretch out liner, shovel out accumulated snow and inspect - no rips or tears in the liner.</li> <li>- Measure out spacing for flare stack and p-tank.</li> <li>- Rig in Boiler lines to wellhead, pump and tank farm.</li> </ul>
09:00	12:30	3.50	WELLPR	RURD	P		<ul style="list-style-type: none"> <li>- Canol trucking arrived on location with P-tank, 2x 400bbl tanks + C&amp;J Junk Skid.</li> <li>- Hold safety meeting with all Canol personnel, conduct walk-around inspection and discuss spot plan for respective equipment.</li> <li>- Spot Ensign portable p-tank</li> <li>- Spot C &amp; J junk skid</li> <li>- Unload 2x 400 bbl tanks, Place cement bin and 400bbl tank in secondary containment.</li> <li>- Stand Potable water tank.</li> <li>- Spot office trailer and light tower for medic.</li> <li>- Install stairs on secondary containment.</li> <li>- Stand Flare Stack.</li> <li>- With Boiler lines rigged in start circulating steam around location applying heat to wellhead, bop's + rig tank.</li> <li>- Haul in 30.0m³ fresh water from O-06 65-10 127-00 location, off load fluid in 400bbl in secondary containment - apply heat.</li> <li>- Haul in 40.0m³ fresh water from N-20 65-10 127-45.</li> <li>- Haul in 14.0m³ potable water containing &lt;4000 TDS in prep to circulate well bore over.</li> </ul>
12:30	15:30	3.00	WELLPR	RURD	P		<ul style="list-style-type: none"> <li>- Rig in Pump lines, suction lines and auxiliary pumping equipment.</li> <li>- Rig in Flow Line, flare and pop valve lines to flare stack.</li> <li>- Spot Catwalk + pipe racks with loader.</li> <li>- Spot office trailer for WFT + Rigid personnel.</li> <li>- Load and back haul HD work floor #4 to CPC yard in Norman Wells.</li> </ul>
15:30	16:00	0.50	WELLPR	RURD	P		Hold tailgate meeting with personnel regarding standing service rig mast, review PJHA + C & J JSA.

# Daily Morning Report

## COPRC MIRROR LAKE P-20 65-00 126-45

Report #: 5  
 Report Date: 2/13/2016  
 Final Job Status: ABANDONED  
 Final Report? Yes

Start Time	End Time	Dur (hr)	Op Code	Activity Code	Time P-T-X	Trbl Code	Operation
16:00	18:30	2.50	WELLPR	RURD	P		<ul style="list-style-type: none"> <li>- Conduct derrick inspection with C &amp; J Rig Manager.</li> <li>- Sweep off matting and install pads for belly jacks, un-wrap load lines and prep carrier to stand mast.</li> <li>- Position Beam and rig in stabilizing legs for freestanding mast.</li> <li>- Stand, raise and secure mast.</li> <li>- Center blocks over wellhead.</li> <li>- Secure rig and equipment.</li> <li>- SDFN.</li> </ul>
18:30	07:30	13.00	WELLPR	OTHR	P		- Boiler hand on location maintaining heat on wellhead, bop's and fluid in rig tank and 400bbl tanks.

### Report Fluids Summary

Fluid	To lease (m³)	From lease (m³)	To well (m³)	From well (m³)	Left to recover (m³)
FRESH WATER	14.00	0.00			

### Daily Costs

BU Desc	Vendor	Activity Code	Amount (Cost)
Surface Completion Equipment Rental	BP PUMP LTD	Q300	40.00
Service Rig	C&J ENERGY PRODUCTION SERVICES CANADA LTD	E120	11,996.00
Trucking/Hauling/ Hot Shot Services	CANOL OILFIELD SERVICES INC	P100	3,420.00
Trucking/Hauling/ Hot Shot Services	CANOL OILFIELD SERVICES INC	P100	2,830.00
Trucking/Hauling/ Hot Shot Services	CANOL OILFIELD SERVICES INC	P100	2,090.00
Trucking/Hauling/ Hot Shot Services	CANOL OILFIELD SERVICES INC	P100	840.00
Trucking/Hauling/ Hot Shot Services	CANOL OILFIELD SERVICES INC	P100	688.00
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	1,050.00
Surface Completion Equipment Rental	CENTRAL MACKENZIE ENVIRONMENTAL LTD	Q300	40.00
Surface Completion Equipment Rental	CENTRAL MACKENZIE ENVIRONMENTAL LTD	Q300	60.00
Welltesting (Eqpmt,Srvcs,PTA,Gov't Subs)	ENSIGN TESTING SERVICES INC	M220	2,755.00
Surface Completion Equipment Rental	HRN CONTRACTING LTD	Q300	280.00
Surface Completion Equipment Rental	HRN CONTRACTING LTD	Q300	1,395.00
Completion Fluids & Other Chem	IMPERIAL OIL PRODUCTS & CHEMICALS DIVISION	G300	4,212.00
Completion Fluids & Other Chem	IMPERIAL OIL PRODUCTS & CHEMICALS DIVISION	G300	2,043.60
Wellsite Supervision & Engineering	MINAULT ENERGY SERVICES LTD	T130	1,620.00
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	1,205.00
Completion Fluids & Other Chem	PBN ENERGY SERVICES LTD	G300	1,353.00
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	125.00
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	325.00
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	185.00
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	185.00
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	185.00
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	185.00
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	75.00
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	75.00
Surface Completion Equipment Rental	RIGSAT COMMUNICATIONS INC	Q300	15.00
Completion Fluids & Other Chem	SRP NORTH VENTURES LTD	G300	737.10
Completion Fluids & Other Chem	SRP NORTH VENTURES LTD	G300	357.63
Surface Completion Equipment Rental	TRUMPETER CAMP COMPANY PARTNERSHIP LTD	Q300	350.00
Surface Completion Equipment Rental	TRUMPETER CAMP COMPANY PARTNERSHIP LTD	Q300	450.00
Surface Completion Equipment Rental	TRUMPETER CAMP COMPANY PARTNERSHIP LTD	Q300	50.00

### Cumulative Job Flared Gas By Zone

Zone	Volume Gas Total (E3m³)

### Perforations

Date	Zone	Top (mKB)	Btm (mKB)	Shot Dens (shots/m)	Current Status
3/4/2014	CANOL, Original Hole	3,118.00	3,119.00	6.0	Open - Flowing
3/4/2014	CANOL, Original Hole	3,098.00	3,099.00	6.0	Open - Flowing
3/4/2014	CANOL, Original Hole	3,079.00	3,080.00	6.0	Open - Flowing
3/4/2014	CANOL, Original Hole	3,059.00	3,060.00	6.0	Open - Flowing
3/4/2014	CANOL, Original Hole	3,040.00	3,041.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	2,943.00	2,944.00	6.0	Open - Flowing

# Daily Morning Report

## COPRC MIRROR LAKE P-20 65-00 126-45

Report #: 5  
Report Date: 2/13/2016  
Final Job Status: ABANDONED  
Final Report? Yes

Perforations					
Date	Zone	Top (mKB)	Btm (mKB)	Shot Dens (shots/m)	Current Status
3/7/2014	CANOL, Original Hole	2,962.00	2,963.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	2,982.00	2,983.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	3,001.00	3,002.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	3,021.00	3,022.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	2,924.00	2,925.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,904.00	2,905.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,885.00	2,886.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,866.00	2,867.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,846.00	2,847.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,827.00	2,828.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,807.00	2,808.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,788.00	2,789.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,769.00	2,770.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,749.00	2,750.00	6.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,730.00	2,731.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,710.00	2,711.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,691.00	2,692.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,633.00	2,634.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,652.00	2,653.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,672.00	2,673.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,613.00	2,614.00	6.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,555.00	2,556.00	6.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,594.00	2,595.00	6.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,536.00	2,537.00	6.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,575.00	2,576.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,516.00	2,517.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,497.00	2,498.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,478.00	2,479.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,458.00	2,459.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,439.00	2,440.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,419.00	2,420.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,400.00	2,401.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,381.00	2,382.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,361.00	2,362.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,342.00	2,343.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,303.00	2,304.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,284.00	2,285.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,264.00	2,265.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,245.00	2,246.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,322.00	2,323.00	6.0	Open - Flowing

# Daily Morning Report

## COPRC MIRROR LAKE P-20 65-00 126-45

Report #: 6  
Report Date: 2/14/2016  
Final Job Status: ABANDONED  
Final Report? Yes

Country CANADA	State/Province N.W.T.	Region / Division WCBU	District NEW VENTURES	Field Name Mirror Lake	Field Code
Surface Legal Location P-20 65-00 126-45		API / UWI 300/P20 65-00 126-45/0		License No. EL 470 WID 2081	

Job Information			
Job Category	Primary Job Type	Secondary Job Type	Total Field Estimate (Cost)
ABANDONMENT	ABANDONMENT P&A		445,180.61

<b>Objective</b> Abandon Cut and Cap					
Actual Start Date 1/29/2016 07:30	End Date 2/28/2016 14:00	Abandon Date (C&C) 2/28/2016 14:00	Responsible Grp 1 coved	Responsible Grp 2 lborbel	Responsible Grp 3 Justin Minault
AFE / RFE / Maint.# 10385950	Total AFE Amount (Cost) 740,000.00	Total AFE + Supp Amount (Cost) 740,000.00	Total Field Estimate (Cost) 445,180.61	AFE-Field Estimate (Cost) 294,819.39	
AFE / RFE / Maint.# 10385945	Total AFE Amount (Cost) 588,300.00	Total AFE + Supp Amount (Cost) 588,300.00	Total Field Estimate (Cost)	AFE-Field Estimate (Cost) 588,300.00	

<b>Daily Operations</b>					
Report Start Date 2/14/2016 07:30	Report End Date 2/15/2016 07:30	Daily Cost Total (Cost) 40,747.25	Cumulative Cost (Cost) 171,054.97	Personnel Regular Hours (hr) 194.00	
<b>Daily Contacts</b> WS Superintendent, Derrick Cove, 780-831-1314; Abandonment Engineer, Louis Borbely, 403-650-3939; WS Supervisor, Justin Minault, 403-391-0714					<b>Rig</b> Nabors Production Services, 414
Tubing Pressure (kPa) 13,253	Casing Pressure (kPa) 13,270	Weather Snowing	Temperature (°C) -17	Lease Condition lcy/Snow covered	

**Last 24hr Summary**  
Kill Well, MIRU Slickline, RIH 48.3mm GR, 2" Nipple Brush + set PX plug and prong in X profile @ 2025.13 mKB (On/Off Slick Jt).

**24hr Forecast**  
Pressure Test Tbg Plug, Circulate well over to fresh water, close sliding sleeve, nipple up bop's and rig in auxiliary equipment to pooh 60.3mm tbg c/w data cable.

Start Time	End Time	Dur (hr)	Op Code	Activity Code	Time P-T-X	Trbl Code	Operation
07:30	08:00	0.50	WELLPR	SFTY	P		Hold Pre-job meeting with all personnel, document and discuss all hazards associated with Pumping fluid and pressure testing, conducting multiple slick line runs and working with steam. Review PJHA, JSA's and ERP. Check all personnel's tickets and CPC Orientations - all valid.
08:00	09:00	1.00	WELLPR	RURD	P		<ul style="list-style-type: none"> <li>- Fire up equipment, conduct walk around inspection - no spills or leaks identified on wellhead or equipment.</li> <li>- Check Well pressures = SITP - 13,253 kPa / SICP - 13,270 kPa.</li> <li>- Warm up equipment, Rig in pump and suction lines. Roll pump to rig tank to warm up pump.</li> <li>- Move in 25m³ from N-20 65-10 127-45 and offload into rig tank.</li> <li>- Move in 28m³ potable water and off load in clean 400bbl tank.</li> <li>- Conduct Bubble test on SCV for 10min with no flow.</li> </ul>
09:00	12:00	3.00	WELLPR	KLWL	P		<ul style="list-style-type: none"> <li>- Pre-heat pump line (csg), fill and pressure test to 28.0 mPa.</li> <li>- Bullhead 25m³ down the casing - starting pressure = 13,270 kPa / Final pump pressure = casing on vac.</li> <li>- Switch lines over to tbg, Pre-heat pump line (csg), fill and pressure test to 28.0 mPa.</li> <li>- Bullhead 15m³ down tbg - starting pump pressure = 13,253 kPa / Final Pump pressure = Tbg on vac.</li> <li>- Bullhead remainder of fluid (45.71m³) down casing @ 0.70m³/min - 3,000 kPa.</li> <li>- With fluid pumped away and pump out both sides on vacuum.</li> <li>- While fluid being pumped make up slickline lubricator and tool string.</li> <li>- Install 2 1/16"-10K (BX152) flange to accommodate testers line. Rig in tester's flow line and secure.</li> <li>- Change out isolation valve on accumulator (valve seized).</li> <li>- Rig in accumulator lines and function test accumulator + Bop's - no deficiencies identified.</li> <li>- Rig in rig floor c/w hand rails + stairs.</li> <li>- Rig in slickline, purge with nitrogen and pressure test to 21.0 mPa with nitrogen.</li> </ul>
12:00	12:30	0.50	WELLPR	SFTY	P		Hold safety meeting with all personnel regarding slickline operations, document and discuss associated hazards, Roles and responsibilities of personnel, Establish red zones and key personnel in charge of respective areas.

# Daily Morning Report

## COPRC MIRROR LAKE P-20 65-00 126-45

Report #: 6  
Report Date: 2/14/2016  
Final Job Status: ABANDONED  
Final Report? Yes

Start Time	End Time	Dur (hr)	Op Code	Activity Code	Time P-T-X	Trbl Code	Operation
12:30	16:30	4.00	WELLPR	SLKL	P		<p>Complete multiple slick runs as follows:</p> <p>- 12:15 Hrs: Run in the hole with 48.3mm guage ring and tag sliding sleeve @ 2001.66mKB (1994 slickline depth). No obstructions or hang ups identified. POOH.</p> <p>- 13:00 Hrs: Run in the hole with 2" nipple brush, make multiple passes through profiles X profiles @ 2014.29mKB + 2025.13 mKB as well as XN @ 2029.14 mKB. POOH.</p> <p>- 14:00 Hrs: Run in the hole selective with 1.87" PX Lock to set in X profile in On/Off Slick Jt @ 2025.13 mKB, Run lock through sliding sleeve, X Profile @ 2014.29 mKB and X Profile @ 2025.13 mKB (took couple light taps at each profile to pass through), pull back up through X profile @ 2025.13 mKB to cock setting tool from selective to positive. Attempt to seat lock in profile with no success - jarred down on lock with 30+ hits with out being able to locate profile. POOH. With tools recovered to surface inspect lock - pins not sheared with no signs of wear, Selective tool shifted to positive, caliper packing = 1.87" OD.</p> <p>- 15:30 Hrs: Re-dress PX lock, shave down packing to 1.865", make up on tool string and run in the hole selective to set in X profile in On/Off Slick Jt @ 2025.13 mKB, Run lock through sliding sleeve, X Profile @ 2014.29 mKB and X Profile @ 2025.13 mKB (lock passed through each profile with minimal resistance), pull back up through X profile @ 2025.13 mKB to cock setting tool from selective to positive. Attempt to seat lock in profile, jarred down on lock with 25 hits, pull up slowly and lock positively seated in profile (750lbs over pull), shear off of lock and pull up to X profile @ 2014.29 mKB - pull over indicating lock still on tool string. Jar lock back into profile @ 2025.13 mKB with 25 hits - pull up to see if lock seated and popped out of profile. POOH with lock. With tools recovered to surface inspect lock - pins not sheared with no signs of wear, Selective tool shifted to positive,</p>
16:30	18:30	2.00	WELLPR	SLKL	P		<p>- 16:30 Hrs: Re-dress PX lock, shave down packing to 1.865" (pin with half brass shear stock), make up on tool string and run in the hole selective to set in X profile in On/Off Slick Jt @ 2025.13 mKB, Run lock through sliding sleeve, X Profile @ 2014.29 mKB and X Profile @ 2025.13 mKB (lock passed through each profile with minimal resistance), pull back up through X profile @ 2025.13 mKB to cock setting tool from selective to positive. Seat lock in profile, jarred down on lock with 25 hits, pull up slowly and lock positively seated in profile (750lbs over pull), Jar down on lock with 10 more hits to ensure lock seated, shear off of lock and pull up to X profile @ 2014.29 mKB - no over pull identified indicating lock set. POOH.</p> <p>- 17:30 Hrs: Run in the hole with PX Prong and set in lock set @ 2025.13 mKB (On/Off Slick jt), shear off prong and POOH.</p>
18:30	19:00	0.50	WELLPR	SISW	P		<p>- Rig out slickline lubricator and pressure control equipment.</p> <p>- Drain pump and lines.</p> <p>- Secure well and winterize equipment.</p> <p>- SDFN</p>
19:00	07:30	12.50	WELLPR	OTHR	P		- Boiler hand on location maintaining heat on wellhead, bop's and fluid in rig tank and 400bbl tanks.

### Report Fluids Summary

Fluid	To lease (m³)	From lease (m³)	To well (m³)	From well (m³)	Left to recover (m³)
FRESH WATER	93.00	0.00	85.71	0.00	85.71

### Daily Costs

BU Desc	Vendor	Activity Code	Amount (Cost)
Surface Completion Equipment Rental	BP PUMP LTD	Q300	40.00
Service Rig	C&J ENERGY PRODUCTION SERVICES CANADA LTD	E120	13,273.50
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	1,900.00
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	2,320.00
Surface Completion Equipment Rental	CENTRAL MACKENZIE ENVIRONMENTAL LTD	Q300	40.00
Surface Completion Equipment Rental	CENTRAL MACKENZIE ENVIRONMENTAL LTD	Q300	60.00
Welltesting (Eqpmt,Srvcs,PTA,Gov't Subs)	ENSIGN TESTING SERVICES INC	M220	2,755.00
Surface Completion Equipment Rental	HRN CONTRACTING LTD	Q300	280.00
Slickline Services	LONKAR SERVICES A/D/O SCHLUMBERGER CANAD...	U200	13,633.75
Wellsite Supervision & Engineering	MINAULT ENERGY SERVICES LTD	T130	1,620.00
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	1,205.00
Completion Fluids & Other Chem	PBN ENERGY SERVICES LTD	G300	1,230.00
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	125.00
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	325.00
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	185.00
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	185.00
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	185.00



# Daily Morning Report

## COPRC MIRROR LAKE P-20 65-00 126-45

Report #: 6  
Report Date: 2/14/2016  
Final Job Status: ABANDONED  
Final Report? Yes

Daily Costs			
BU Desc	Vendor	Activity Code	Amount (Cost)
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	185.00
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	185.00
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	75.00
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	75.00
Surface Completion Equipment Rental	RIGSAT COMMUNICATIONS INC	Q300	15.00
Surface Completion Equipment Rental	TRUMPETER CAMP COMPANY PARTNERSHIP LTD	Q300	350.00
Surface Completion Equipment Rental	TRUMPETER CAMP COMPANY PARTNERSHIP LTD	Q300	450.00
Surface Completion Equipment Rental	TRUMPETER CAMP COMPANY PARTNERSHIP LTD	Q300	50.00

### Cumulative Job Flared Gas By Zone

Zone	Volume Gas Total (E3m <sup>3</sup> )
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### Perforations

Date	Zone	Top (mKB)	Btm (mKB)	Shot Dens (shots/m)	Current Status
3/4/2014	CANOL, Original Hole	3,118.00	3,119.00	6.0	Open - Flowing
3/4/2014	CANOL, Original Hole	3,098.00	3,099.00	6.0	Open - Flowing
3/4/2014	CANOL, Original Hole	3,079.00	3,080.00	6.0	Open - Flowing
3/4/2014	CANOL, Original Hole	3,059.00	3,060.00	6.0	Open - Flowing
3/4/2014	CANOL, Original Hole	3,040.00	3,041.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	2,943.00	2,944.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	2,962.00	2,963.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	2,982.00	2,983.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	3,001.00	3,002.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	3,021.00	3,022.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	2,924.00	2,925.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,904.00	2,905.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,885.00	2,886.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,866.00	2,867.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,846.00	2,847.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,827.00	2,828.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,807.00	2,808.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,788.00	2,789.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,769.00	2,770.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,749.00	2,750.00	6.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,730.00	2,731.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,710.00	2,711.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,691.00	2,692.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,633.00	2,634.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,652.00	2,653.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,672.00	2,673.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,613.00	2,614.00	6.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,555.00	2,556.00	6.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,594.00	2,595.00	6.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,536.00	2,537.00	6.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,575.00	2,576.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,516.00	2,517.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,497.00	2,498.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,478.00	2,479.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,458.00	2,459.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,439.00	2,440.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,419.00	2,420.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,400.00	2,401.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,381.00	2,382.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,361.00	2,362.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,342.00	2,343.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,303.00	2,304.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,284.00	2,285.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,264.00	2,265.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,245.00	2,246.00	6.0	Open - Flowing



# Daily Morning Report

## COPRC MIRROR LAKE P-20 65-00 126-45

Report #: 6  
Report Date: 2/14/2016  
Final Job Status: ABANDONED  
Final Report? Yes

### Perforations

Date	Zone	Top (mKB)	Btm (mKB)	Shot Dens (shots/m)	Current Status
3/10/2014	CANOL, Original Hole	2,322.00	2,323.00	6.0	Open - Flowing

# Daily Morning Report

## COPRC MIRROR LAKE P-20 65-00 126-45

Report #: 7  
Report Date: 2/15/2016  
Final Job Status: ABANDONED  
Final Report? Yes

Country CANADA	State/Province N.W.T.	Region / Division WCBU	District NEW VENTURES	Field Name Mirror Lake	Field Code
Surface Legal Location P-20 65-00 126-45		API / UWI 300/P20 65-00 126-45/0		License No. EL 470 WID 2081	

Job Information			
Job Category	Primary Job Type	Secondary Job Type	Total Field Estimate (Cost)
ABANDONMENT	ABANDONMENT P&A		445,180.61

<b>Objective</b> Abandon Cut and Cap					
Actual Start Date 1/29/2016 07:30	End Date 2/28/2016 14:00	Abandon Date (C&C) 2/28/2016 14:00	Responsible Grp 1 coved	Responsible Grp 2 lborbel	Responsible Grp 3 Justin Minault
AFE / RFE / Maint.# 10385950	Total AFE Amount (Cost) 740,000.00	Total AFE + Supp Amount (Cost) 740,000.00	Total Field Estimate (Cost) 445,180.61	AFE-Field Estimate (Cost) 294,819.39	
AFE / RFE / Maint.# 10385945	Total AFE Amount (Cost) 588,300.00	Total AFE + Supp Amount (Cost) 588,300.00	Total Field Estimate (Cost)	AFE-Field Estimate (Cost) 588,300.00	

<b>Daily Operations</b>					
Report Start Date 2/15/2016 07:30	Report End Date 2/16/2016 07:30	Daily Cost Total (Cost) 36,535.58	Cumulative Cost (Cost) 207,590.55	Personnel Regular Hours (hr) 196.00	

<b>Daily Contacts</b> WS Superintendent, Derrick Cove, 780-831-1314; Abandonment Engineer, Louis Borbely, 403-650-3939; WS Supervisor, Justin Minault, 403-391-0714					Rig Nabors Production Services, 414
Tubing Pressure (kPa) 0	Casing Pressure (kPa) 0	Weather Clear	Temperature (°C) -17	Lease Condition lcy/Snow covered	

**Last 24hr Summary**  
Pressure test PX plug set in on/off slick jt to 10 mPa - good test, Circulate wellbore with fresh water, Shift sliding sleeve closed, Remove wellhead + Nipple up Bop's, spot fresh water c/w 0.5% corrosion inhibitor from packer top @ 2025.30 mKB to 1745.0 mKB.

**24hr Forecast**  
Pull out of the hole with 60.3mm tbq string c/w 6.35mm TEC cables.

Start Time	End Time	Dur (hr)	Op Code	Activity Code	Time P-T-X	Trbl Code	Operation
07:30	08:00	0.50	WELLPR	SFTY	P		Hold Pre-job meeting with all personnel, document and discuss all hazards associated with Pressure testing / Circulating, slickline operations and working with steam, Review PJHA, JSA's and ERP. Check all personnel's tickets and CPC Orientations - all valid.
08:00	10:00	2.00	WELLPR	CIRC	P		- Fire up equipment, conduct walk around inspection - no spills or leaks identified on wellhead or equipment. - Check Well pressures = SITP - 0 kPa / SICP - 0 kPa. - Warm up equipment, Rig in pump and suction lines. Roll pump to rig tank to warm up pump. - Pre-heat pump line, fill casing and tbq (1.0m³), pressure test tbq plug to 10.0 mPa - solid test. - Reverse circulate 21.0m³ through tester's @ 0.60m³/min - 8.0 mPa. Note: no gas or hydrocarbons recovered at surface through out circulation. - Blow lines dry and winterize.
10:00	11:30	1.50	WELLPR	SLKL	P		- Rig in slickline pressure control equipment. Purge and pressure test lubricator to 21.0 mPa with nitrogen. - Bleed off applied pressure and run in the hole with 2" SB shifting tool. - Locate Sliding Sleeve @ 2001.66 mKB, jar down 8 times and fall through sliding sleeve. Pull back up through and lower tool slowly through sleeve with no hang ups indicating sleeve closed. Pooh with shifting tool - inspect at surface, tool not sheared. - With circulating completed ship P-tank empty to 400bbl tanks and blow down all lines with nitrogen. Rig out P-tank and associated equipment.
11:30	13:30	2.00	WELLPR	BOPE	P		- Rig out slickline lubricator and associated equipment. - Stump test 60.3mm pipe rams to 1.4 + 35 mPa for 10min, Annular to 1.4 + 7.0 mPa. Note: Blind rams stump tested previous day to 1.4 + 35 mPa. All tests held for 10min and charted with digital recorder. - Rig out stairs, hand rails and rig floor in preparation for Bop installation. - Conduct flow check on casing and tubing while stump testing.



# Daily Morning Report

## COPRC MIRROR LAKE P-20 65-00 126-45

Report #: 7  
Report Date: 2/15/2016  
Final Job Status: ABANDONED  
Final Report? Yes

Start Time	End Time	Dur (hr)	Op Code	Activity Code	Time P-T-X	Trbl Code	Operation
13:30	17:00	3.50	WELLPR	BOPE	P		<ul style="list-style-type: none"> <li>- Remove High pressure TEC cable ferrules for from tubing bonnet.</li> <li>- Remove top section from wellhead.</li> <li>- Cut TEC cable close to tbh hanger and install caps on lines.</li> <li>- Install 60.3mm Landing jt c/w full opening safety valve.</li> <li>- Strip on 7 1/16 - 5-10K DSA</li> <li>- Strip on class III Bop Stack, torque down all flanges.</li> <li>- Tie in accumulator lines and function test bop's.</li> <li>- Pressure test ring seals to 1.4 + 35 mPa against pipe rams - good test.</li> <li>- Rig in rig floor, v-door, stairs and hand rails.</li> <li>- Install tarps and apply heat to wellhead / bop's.</li> <li>- Load 13 L of Baker RE9206CRO inhibitor and 2.5m³ hot fresh water onto clean tank truck for 0.5% blend by volume, Roll tank and mix inhibitor.</li> <li>- Tie tank truck onto rig pump.</li> <li>- Rig in circulating equipment on tbh and return line on csg.</li> </ul>
17:00	17:30	0.50	WELLPR	SFTY	P		Hold tailgate meeting with all personnel, discuss hazards associated with circulating, pumping corrosion inhibitor and multiple services involved with fluid transfer. Review PJHA, MSDS for inhibitor and JSA for circulating.
17:30	19:00	1.50	WELLPR	CIRC	P		<ul style="list-style-type: none"> <li>- Disengage hanger lock down screws, elevate tbh string until tbh hanger clear of annular (1.0m³ +/- off of packer).</li> <li>- Close annular and prep equipment to forward circulate.</li> <li>- Spot 2.5m³ fresh water c/w Baker RE9206CRO corrosion inhibitor mixed to 0.5% blend by volume in tbh.</li> <li>- Displace inhibited water with 3.4m³ fresh water balancing inhibited water from packer top @ 2025.30mKB up to 1745.0 mKB.</li> <li>- Re-land tbh hanger, engage tbh hanger lock down screws.</li> <li>- Close pipe rams and secure well.</li> <li>- Drain, blow down and winterize wellhead and pumping equipment.</li> <li>- Secure Well and SDFN.</li> </ul>
19:00	07:30	12.50	WELLPR	OTHR	P		- Boiler hand on location maintaining heat on wellhead, bop's and fluid in rig tank and 400bbl tanks.

### Report Fluids 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	85.71

### Daily Costs

BU Desc	Vendor	Activity Code	Amount (Cost)
Surface Completion Equipment Rental	BP PUMP LTD	Q300	40.00
Service Rig	C&J ENERGY PRODUCTION SERVICES CANADA LTD	E120	12,518.50
Surface Completion Equipment Rental	CENTRAL MACKENZIE ENVIRONMENTAL LTD	Q300	40.00
Surface Completion Equipment Rental	CENTRAL MACKENZIE ENVIRONMENTAL LTD	Q300	60.00
Welltesting (Eqpmt,Srvcs,PTA,Gov't Subs)	ENSIGN TESTING SERVICES INC	M220	3,305.00
Surface Completion Equipment Rental	HRN CONTRACTING LTD	Q300	175.00
Completion Fluids & Other Chem	IMPERIAL OIL PRODUCTS & CHEMICALS DIVISION	G300	3,405.60
Slickline Services	LONKAR SERVICES A/D/O SCHLUMBERGER CANAD...	U200	6,069.13
Wellsite Supervision & Engineering	MINAULT ENERGY SERVICES LTD	T130	1,620.00
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	1,055.00
Completion Fluids & Other Chem	PBN ENERGY SERVICES LTD	G300	1,291.50
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	125.00
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	325.00
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	185.00
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	185.00
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	185.00
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	185.00
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	75.00
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	75.00
Surface Completion Equipment Rental	RIGSAT COMMUNICATIONS INC	Q300	15.00
Completion Fluids & Other Chem	SRP NORTH VENTURES LTD	G300	567.60
Surface Completion Equipment Rental	STRAD OILFIELD RENTALS	Q300	340.00
Surface Completion Equipment Rental	TRUMPETER CAMP COMPANY PARTNERSHIP LTD	Q300	350.00
Surface Completion Equipment Rental	TRUMPETER CAMP COMPANY PARTNERSHIP LTD	Q300	450.00
Surface Completion Equipment Rental	TRUMPETER CAMP COMPANY PARTNERSHIP LTD	Q300	50.00
Downhole Completion Equipment	WEATHERFORD CANADA PARTNERSHIP	C100	3,658.25

# Daily Morning Report

## COPRC MIRROR LAKE P-20 65-00 126-45

Report #: 7  
Report Date: 2/15/2016  
Final Job Status: ABANDONED  
Final Report? Yes

Cumulative Job Flared Gas By Zone	
Zone	Volume Gas Total (E3m <sup>3</sup> )

Perforations					
Date	Zone	Top (mKB)	Btm (mKB)	Shot Dens (shots/m)	Current Status
3/4/2014	CANOL, Original Hole	3,118.00	3,119.00	6.0	Open - Flowing
3/4/2014	CANOL, Original Hole	3,098.00	3,099.00	6.0	Open - Flowing
3/4/2014	CANOL, Original Hole	3,079.00	3,080.00	6.0	Open - Flowing
3/4/2014	CANOL, Original Hole	3,059.00	3,060.00	6.0	Open - Flowing
3/4/2014	CANOL, Original Hole	3,040.00	3,041.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	2,943.00	2,944.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	2,962.00	2,963.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	2,982.00	2,983.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	3,001.00	3,002.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	3,021.00	3,022.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	2,924.00	2,925.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,904.00	2,905.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,885.00	2,886.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,866.00	2,867.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,846.00	2,847.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,827.00	2,828.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,807.00	2,808.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,788.00	2,789.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,769.00	2,770.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,749.00	2,750.00	6.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,730.00	2,731.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,710.00	2,711.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,691.00	2,692.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,633.00	2,634.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,652.00	2,653.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,672.00	2,673.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,613.00	2,614.00	6.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,555.00	2,556.00	6.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,594.00	2,595.00	6.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,536.00	2,537.00	6.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,575.00	2,576.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,516.00	2,517.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,497.00	2,498.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,478.00	2,479.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,458.00	2,459.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,439.00	2,440.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,419.00	2,420.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,400.00	2,401.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,381.00	2,382.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,361.00	2,362.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,342.00	2,343.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,303.00	2,304.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,284.00	2,285.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,264.00	2,265.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,245.00	2,246.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,322.00	2,323.00	6.0	Open - Flowing

# Daily Morning Report

## COPRC MIRROR LAKE P-20 65-00 126-45

Report #: 8  
Report Date: 2/16/2016  
Final Job Status: ABANDONED  
Final Report? Yes

Country CANADA	State/Province N.W.T.	Region / Division WCBU	District NEW VENTURES	Field Name Mirror Lake	Field Code
Surface Legal Location P-20 65-00 126-45		API / UWI 300/P20 65-00 126-45/0		License No. EL 470 WID 2081	

Job Information			
Job Category	Primary Job Type	Secondary Job Type	Total Field Estimate (Cost)
ABANDONMENT	ABANDONMENT P&A		445,180.61

<b>Objective</b> Abandon Cut and Cap					
Actual Start Date 1/29/2016 07:30	End Date 2/28/2016 14:00	Abandon Date (C&C) 2/28/2016 14:00	Responsible Grp 1 coved	Responsible Grp 2 lborbel	Responsible Grp 3 Justin Minault
AFE / RFE / Maint.# 10385950	Total AFE Amount (Cost) 740,000.00	Total AFE + Supp Amount (Cost) 740,000.00	Total Field Estimate (Cost) 445,180.61	AFE-Field Estimate (Cost) 294,819.39	
AFE / RFE / Maint.# 10385945	Total AFE Amount (Cost) 588,300.00	Total AFE + Supp Amount (Cost) 588,300.00	Total Field Estimate (Cost)	AFE-Field Estimate (Cost) 588,300.00	

<b>Daily Operations</b>					
Report Start Date 2/16/2016 07:30	Report End Date 2/17/2016 07:30	Daily Cost Total (Cost) 28,462.49	Cumulative Cost (Cost) 236,053.04	Personnel Regular Hours (hr) 182.00	
<b>Daily Contacts</b> WS Superintendent, Derrick Cove, 780-831-1314; Abandonment Engineer, Louis Borbely, 403-650-3939; WS Supervisor, Justin Minault, 403-391-0714					<b>Rig</b> Nabors Production Services, 414
Tubing Pressure (kPa) 0	Casing Pressure (kPa) 0	Weather Overcast	Temperature (°C) -19	Lease Condition Icy/Snow covered	

**Last 24hr Summary**  
POOH 39 Jts of tbq placing EOT @ 1745.0 mKB, Circulate wellbore over to fresh water containing < 4000ppm TDS, pull remaining 60.3mm tbq string c/w dual 6.35mm TEC cables.

**24hr Forecast**  
MIRU Lonkar dsl unit, Run GR/CCL log from packer top (2025.30 mKB) up to 1700 mKB, run guage ring to 2020 mKB, Set 10K Permanent Bridge Plug @ 2015 mKB, Pressure test to 14.0 mPa, Dump Bail 20 lineal meters of cement, set 2nd 10K Permanent Bridge Plug @ 1739.0 mKB, pressure test to 14.0 mPa, dump bail 8 lineal meters of cement.

Start Time	End Time	Dur (hr)	Op Code	Activity Code	Time P-T-X	Trbl Code	Operation
07:30	08:00	0.50	WELLPR	SFTY	P		Hold Pre-job meeting with all personnel, document and discuss all hazards associated with pulling tbq c/w 6.35mm TEC cable, removing canon guards and spooling cable, circulating and working with steam. Review PJHA, JSA's and ERP. Check all personnel's tickets and CPC Orientations - all valid.
08:00	09:00	1.00	WELLPR	TRIP	P		- Fire up equipment, conduct walk around inspection - no spills or leaks identified on wellhead or equipment. - Check Well pressures = SITP - 0 kPa / SICP - 0 kPa / SIICP - 0 kPa. - Warm up equipment, Rig in pump and suction lines. Roll pump to rig tank to warm up pump. - Prep equipment to pull out of the hole with 60.3mm tbq c/w dual 6.35mm TEC cables.
09:00	10:30	1.50	RPEQPT	TRIP	P		- Disengage tbq hanger lock down screws - Strip out tbq hanger and disconnect 6.35mm tec cables from bottom of tbq hanger. - Remove Tbg Hanger and pull and lay down following tbq components while spooling dual TEC cables with Rigid Dual Spooler: 2x - 60.3mm J-55 spacer nipples 1 - 60.3mm J-55 Tbg Jt 1 - 1.24m 60.3mm J-55 Pup Jt 4x - 60.3mm J-55 Tbg Jts.  - With 5 Jts tbq pulled from the well conduct Bop drill with all personnel (simulate closing bop's due to TEC cable), discuss drill with all personnel, shut in procedures, roles and responsibilities of auxiliary services in the event of loss of well control. - Hang sheaves to accommodate spooling dual 6.35mm TEC cables. - Pull and lay down additional 34 Jts of 60.3mm J-55 Tbg placing EOT @ 1742.20 mKB.
10:30	12:00	1.50	RPEQPT	CIRC	P		- With EOT of tbq placed @ 1745.0 mKB rig in circulating equipment. - Pre-heat lines and pressure test lines to 21.0 mPa. - Attempt to reverse circulate - annular leaking slightly due to TEC cables, switch over and forward circulate 22.0 m³ potable fresh water containing < 4000ppm TDS @ 0.70m³/min - 8.0 mPa - With 22.0m³ circulated returns clean, kick out pump and bleed off circulating pressure. - Drain, blow down lines and winterize lines and equipment.

# Daily Morning Report

## COPRC MIRROR LAKE P-20 65-00 126-45

Report #: 8  
Report Date: 2/16/2016  
Final Job Status: ABANDONED  
Final Report? Yes

Start Time	End Time	Dur (hr)	Op Code	Activity Code	Time P-T-X	Trbl Code	Operation
12:00	17:00	5.00	RPEQPT	TRIP	P		- Continue out of the hole laying down 60.3mm tbg as follows:  169 - 60.3mm J-55 Tbg Jts. 1 - Sliding Sleeve 1 - 3.11m 60.3mm J-55 Pup Jt 1 - WFT Pressure / Temperature Sensor - with Pressure / Temp sensor at surface Cut TEC cable and remove sensor once broke out of the string. 1 - 3.07m 60.3mm J-55 Pup Jt 1 - WFT Guage Carrier - with guage carrier at surface cut TEC cable and remove sensor once broke out of the string. 1 - 47.63mm X Profile Nipple 1 - 60.3mm J-55 Tbg Jt 1 - Extended Neck no-jay NFT on/off tool.  - Close and lock blind rams, secure well.
17:00	18:00	1.00	RPEQPT	TRIP	P		- Rig out Rigid dual sheave from monkey board. - Break down Bha components. - Drain and winterize pump and wellhead, wrap up with tarps for the night. - SDFN.  Note: Sliding sleeve, profile nipple and On/Off packed in WFT crates to be transported back to WFT shop.
18:00	07:30	13.50	WELLPR	OTHR	P		- Boiler hand on location maintaining heat on wellhead, bop's and fluid in rig tank and 400bbl tanks.

### Report Fluids Summary

Fluid	To lease (m³)	From lease (m³)	To well (m³)	From well (m³)	Left to recover (m³)
FRESH WATER	0.00	26.00			85.71

### Daily Costs

BU Desc	Vendor	Activity Code	Amount (Cost)
Surface Completion Equipment Rental	BP PUMP LTD	Q300	40.00
Service Rig	C&J ENERGY PRODUCTION SERVICES CANADA LTD	E120	11,823.50
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	1,900.00
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	1,550.00
Surface Completion Equipment Rental	CENTRAL MACKENZIE ENVIRONMENTAL LTD	Q300	40.00
Surface Completion Equipment Rental	CENTRAL MACKENZIE ENVIRONMENTAL LTD	Q300	60.00
Welltesting (Eqpmt,Srvcs,PTA,Gov't Subs)	ENSIGN TESTING SERVICES INC	M220	1,585.00
Surface Completion Equipment Rental	HRN CONTRACTING LTD	Q300	280.00
Wellsite Supervision & Engineering	MINAULT ENERGY SERVICES LTD	T130	1,620.00
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	1,055.00
Completion Fluids & Other Chem	PBN ENERGY SERVICES LTD	G300	1,008.00
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	125.00
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	325.00
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	185.00
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	185.00
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	185.00
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	185.00
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	75.00
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	75.00
Surface Completion Equipment Rental	RIGSAT COMMUNICATIONS INC	Q300	15.00
Surface Completion Equipment Rental	TRUMPETER CAMP COMPANY PARTNERSHIP LTD	Q300	350.00
Surface Completion Equipment Rental	TRUMPETER CAMP COMPANY PARTNERSHIP LTD	Q300	450.00
Surface Completion Equipment Rental	TRUMPETER CAMP COMPANY PARTNERSHIP LTD	Q300	50.00
Downhole Completion Equipment	WEATHERFORD CANADA PARTNERSHIP	C100	5,110.99

### Cumulative Job Flared Gas By Zone

Zone	Volume Gas Total (E3m³)

### Perforations

Date	Zone	Top (mKB)	Btm (mKB)	Shot Dens (shots/m)	Current Status
3/4/2014	CANOL, Original Hole	3,118.00	3,119.00	6.0	Open - Flowing
3/4/2014	CANOL, Original Hole	3,098.00	3,099.00	6.0	Open - Flowing

# Daily Morning Report

## COPRC MIRROR LAKE P-20 65-00 126-45

Report #: 8  
Report Date: 2/16/2016  
Final Job Status: ABANDONED  
Final Report? Yes

Perforations					
Date	Zone	Top (mKB)	Btm (mKB)	Shot Dens (shots/m)	Current Status
3/4/2014	CANOL, Original Hole	3,079.00	3,080.00	6.0	Open - Flowing
3/4/2014	CANOL, Original Hole	3,059.00	3,060.00	6.0	Open - Flowing
3/4/2014	CANOL, Original Hole	3,040.00	3,041.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	2,943.00	2,944.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	2,962.00	2,963.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	2,982.00	2,983.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	3,001.00	3,002.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	3,021.00	3,022.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	2,924.00	2,925.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,904.00	2,905.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,885.00	2,886.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,866.00	2,867.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,846.00	2,847.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,827.00	2,828.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,807.00	2,808.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,788.00	2,789.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,769.00	2,770.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,749.00	2,750.00	6.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,730.00	2,731.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,710.00	2,711.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,691.00	2,692.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,633.00	2,634.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,652.00	2,653.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,672.00	2,673.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,613.00	2,614.00	6.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,555.00	2,556.00	6.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,594.00	2,595.00	6.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,536.00	2,537.00	6.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,575.00	2,576.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,516.00	2,517.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,497.00	2,498.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,478.00	2,479.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,458.00	2,459.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,439.00	2,440.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,419.00	2,420.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,400.00	2,401.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,381.00	2,382.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,361.00	2,362.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,342.00	2,343.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,303.00	2,304.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,284.00	2,285.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,264.00	2,265.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,245.00	2,246.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,322.00	2,323.00	6.0	Open - Flowing

# Daily Morning Report

## COPRC MIRROR LAKE P-20 65-00 126-45

Report #: 9  
Report Date: 2/17/2016  
Final Job Status: ABANDONED  
Final Report? Yes

Country CANADA	State/Province N.W.T.	Region / Division WCBU	District NEW VENTURES	Field Name Mirror Lake	Field Code
Surface Legal Location P-20 65-00 126-45		API / UWI 300/P20 65-00 126-45/0		License No. EL 470 WID 2081	

Job Information			
Job Category	Primary Job Type	Secondary Job Type	Total Field Estimate (Cost)
ABANDONMENT	ABANDONMENT P&A		445,180.61

<b>Objective</b> Abandon Cut and Cap					
Actual Start Date 1/29/2016 07:30	End Date 2/28/2016 14:00	Abandon Date (C&C) 2/28/2016 14:00	Responsible Grp 1 coved	Responsible Grp 2 lborbel	Responsible Grp 3 Justin Minault
AFE / RFE / Maint.# 10385950	Total AFE Amount (Cost) 740,000.00	Total AFE + Supp Amount (Cost) 740,000.00	Total Field Estimate (Cost) 445,180.61	AFE-Field Estimate (Cost) 294,819.39	
AFE / RFE / Maint.# 10385945	Total AFE Amount (Cost) 588,300.00	Total AFE + Supp Amount (Cost) 588,300.00	Total Field Estimate (Cost)	AFE-Field Estimate (Cost) 588,300.00	

Daily Operations				
Report Start Date 2/17/2016 07:30	Report End Date 2/18/2016 07:30	Daily Cost Total (Cost) 35,463.36	Cumulative Cost (Cost) 271,516.40	Personnel Regular Hours (hr) 144.00
Daily Contacts WS Superintendent, Derrick Cove, 780-831-1314; WS Supervisor, Justin Minault, 403-391-0714; Abandonment Engineer, Louis Borbely, 403-650-3939				Rig Nabors Production Services, 414
Tubing Pressure (kPa) 0	Casing Pressure (kPa) 0	Weather Clear	Temperature (°C) -34	Lease Condition lcy/Snow covered

**Last 24hr Summary**  
MIRU DSL Slickline, RIH GR/CCL c/w 93.5mm Guage Ring, Set 114.3mm 10K PBP @ 2015.0mKB and pressure test to 14.0 mPa for 10min good test, Dump Bail 82.5 Liters (10.17 lineal meters) of Warm Plug Cement on top of PBP.

**24hr Forecast**  
RIH c/w 93.5mm Guage Ring, Dump Bail 82.5 Liters (10.17 lineal meters) of Warm Plug Cement on top of PBP. Set 114.3mm 10K PBP @ 1739.0 mKB - pressure test to 14.0 mPa, Dump Bail 82.5 Liters (10.17 lineal meters) of Warm Plug Cement on top of PBP.

Start Time	End Time	Dur (hr)	Op Code	Activity Code	Time P-T-X	Trbl Code	Operation
07:30	08:00	0.50	RPEQPT	SFTY	P		Hold Pre-job meeting with all personnel, document and discuss all hazards associated with Rigging in slickline, conducting multiple slickline runs, purging and pressure testing and working with steam. Review PJHA, JSA's and ERP. Check all personnel's tickets and CPC Orientations - all valid.
08:00	13:00	5.00	RPEQPT	ELOG	P		<ul style="list-style-type: none"> <li>- Fire up equipment, conduct walk around inspection - no spills or leaks identified on wellhead or equipment.</li> <li>- Check Well pressures = SITP - 0 kPa / SICP - 0 kPa / SIICP - 0 kPa.</li> <li>- Warm up equipment, and Spot DSL Slickline unit.</li> <li>- Make up lubricator and tool string.</li> <li>- Stab on lubricator, purge and pressure test to 21.0 mPa with nitrogen.</li> <li>- Run in the hole with GR/CCL tool c/w 93.5mm Guage ring, run down and tag top of slick jt @ 2025.10 mKB - no obstructions or hang ups seen on way in. Log up to 1935.0 mKB, correlate on depth to CNL/LDT/GR log dated Feb 14, 2014. Run back down 2025.10 mKB and pull repeat pass up to 1640.0 mKB. POOH with logging tools.</li> <li>- Once at surface break down logging tools and make up CCL and firing head to accommodate Permanent Bridge Plug.</li> </ul>
13:00	13:30	0.50	RPEQPT	SFTY	P		Hold safety meeting with all personnel regarding arming explosives, document and discuss all hazards, ensure all non intrinsically equipment turned off and identify red zone and key personnel to conduct operations inside red zone.



# Daily Morning Report

## COPRC MIRROR LAKE P-20 65-00 126-45

Report #: 9  
Report Date: 2/17/2016  
Final Job Status: ABANDONED  
Final Report? Yes

Start Time	End Time	Dur (hr)	Op Code	Activity Code	Time P-T-X	Trbl Code	Operation
13:30	19:30	6.00	RPEQPT	ELOG	P		<p>- Make up 114.3mm 10K Permanent Bridge Plug on tool string, stab on lubricator, purge with nitrogen and run in the hole. Run down to top of packer @ 2025.10 mKB, log up to 1950.0 mKB, correlate on depth, run back down to 2020.0 mKB and pull into position = 2010.40 (CCL Depth) / 2014.85 mKB (C.E.) / 2015.0 mKB (Top of PBP). Set Permanent Bridge Plug (14:51 Hrs) and POOH with setting tools.</p> <p>- 15:15 Hrs: Out of the hole with setting tools, close and lock blind lines, pre-heat and pressure test pump line to 21.0 mPa, open up casing and fill (1.6m³), pressure test Permanent Bridge Plug to 14.0 mPa for 10min - Solid Test. Bleed off applied pressure, blow down and winterize pump line.</p> <p>- Make up 7 lengths of 88.9mm bailer c/w squib and plunger style release for redundancy. Mix up 5 pails of "Warm Plug" type cement - 82.5 liters = 10.17 lineal meters. Run bailer in the hole to 2010.0 mKB, fire squib and monitor for weight loss, 100lbs of weight loss seen - cement weight = 153 lbs, run down and tap packer top 3x to ensure disc ruptured and cement was placed. Pull out of the hole - pull weight 850 lbs - no change from before cement placed. Pull up to 1650 mKB (Vertical), run down 100m to compare run in weight before and after cement placed - able to rih hole faster with less buoyancy indicating disc ruptured and bailer empty. Pull up 20m and begin to pull over, reciprocate tool string multiple times and weight began to fall off indicating wires from squib had passed bailer when running in hole. Bailer pulled freely rest of the way out of the hole. 18:45 Hrs: Bailer at surface, break down and inspect - Bailer empty, wires and detonator left down hole.</p> <p>- Lay down slickline lubricator, install night cap.</p>
19:30	20:00	0.50	RPEQPT	SISW	P		<p>- Secure well and equipment.</p> <p>- SDFN.</p>
20:00	07:30	11.50	WELLPR	OTHR	P		- Boiler hand on location maintaining heat on wellhead, bop's and fluid in rig tank and 400bbl tanks.

### Report Fluids Summary

Fluid	To lease (m³)	From lease (m³)	To well (m³)	From well (m³)	Left to recover (m³)
FRESH WATER	11.50	0.00	1.60	0.00	87.31

### Daily Costs

BU Desc	Vendor	Activity Code	Amount (Cost)
Surface Completion Equipment Rental	BP PUMP LTD	Q300	40.00
Service Rig	C&J ENERGY PRODUCTION SERVICES CANADA LTD	E120	13,273.50
Trucking/Hauling/ Hot Shot Services	CANOL OILFIELD SERVICES INC	P100	1,320.00
Trucking/Hauling/ Hot Shot Services	CANOL OILFIELD SERVICES INC	P100	688.00
Surface Completion Equipment Rental	CENTRAL MACKENZIE ENVIRONMENTAL LTD	Q300	40.00
Surface Completion Equipment Rental	CENTRAL MACKENZIE ENVIRONMENTAL LTD	Q300	60.00
Surface Completion Equipment Rental	HRN CONTRACTING LTD	Q300	280.00
Slickline Services	LONKAR SERVICES A/D/O SCHLUMBERGER CANAD...	U200	12,309.36
Wellsite Supervision & Engineering	MINAULT ENERGY SERVICES LTD	T130	1,620.00
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	1,055.00
Completion Fluids & Other Chem	PBN ENERGY SERVICES LTD	G300	1,323.00
Completion Fluids & Other Chem	PBN ENERGY SERVICES LTD	G300	1,064.50
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	125.00
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	325.00
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	185.00
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	185.00
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	185.00
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	185.00
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	185.00
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	75.00
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	75.00
Surface Completion Equipment Rental	RIGSAT COMMUNICATIONS INC	Q300	15.00
Surface Completion Equipment Rental	TRUMPETER CAMP COMPANY PARTNERSHIP LTD	Q300	350.00
Surface Completion Equipment Rental	TRUMPETER CAMP COMPANY PARTNERSHIP LTD	Q300	450.00
Surface Completion Equipment Rental	TRUMPETER CAMP COMPANY PARTNERSHIP LTD	Q300	50.00

### Cumulative Job Flared Gas By Zone

Zone	Volume Gas Total (E3m³)

# Daily Morning Report

## COPRC MIRROR LAKE P-20 65-00 126-45

Report #: 9  
Report Date: 2/17/2016  
Final Job Status: ABANDONED  
Final Report? Yes

Perforations					
Date	Zone	Top (mKB)	Btm (mKB)	Shot Dens (shots/m)	Current Status
3/4/2014	CANOL, Original Hole	3,118.00	3,119.00	6.0	Open - Flowing
3/4/2014	CANOL, Original Hole	3,098.00	3,099.00	6.0	Open - Flowing
3/4/2014	CANOL, Original Hole	3,079.00	3,080.00	6.0	Open - Flowing
3/4/2014	CANOL, Original Hole	3,059.00	3,060.00	6.0	Open - Flowing
3/4/2014	CANOL, Original Hole	3,040.00	3,041.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	2,943.00	2,944.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	2,962.00	2,963.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	2,982.00	2,983.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	3,001.00	3,002.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	3,021.00	3,022.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	2,924.00	2,925.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,904.00	2,905.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,885.00	2,886.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,866.00	2,867.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,846.00	2,847.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,827.00	2,828.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,807.00	2,808.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,788.00	2,789.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,769.00	2,770.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,749.00	2,750.00	6.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,730.00	2,731.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,710.00	2,711.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,691.00	2,692.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,633.00	2,634.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,652.00	2,653.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,672.00	2,673.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,613.00	2,614.00	6.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,555.00	2,556.00	6.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,594.00	2,595.00	6.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,536.00	2,537.00	6.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,575.00	2,576.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,516.00	2,517.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,497.00	2,498.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,478.00	2,479.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,458.00	2,459.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,439.00	2,440.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,419.00	2,420.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,400.00	2,401.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,381.00	2,382.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,361.00	2,362.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,342.00	2,343.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,303.00	2,304.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,284.00	2,285.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,264.00	2,265.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,245.00	2,246.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,322.00	2,323.00	6.0	Open - Flowing



# Daily Morning Report

## COPRC MIRROR LAKE P-20 65-00 126-45

Report #: 10  
Report Date: 2/18/2016  
Final Job Status: ABANDONED  
Final Report? Yes

Country CANADA	State/Province N.W.T.	Region / Division WCBU	District NEW VENTURES	Field Name Mirror Lake	Field Code		
Surface Legal Location P-20 65-00 126-45		API / UWI 300/P20 65-00 126-45/0		License No. EL 470 WID 2081			
<b>Job Information</b>							
Job Category ABANDONMENT		Primary Job Type ABANDONMENT P&A		Secondary Job Type			
				Total Field Estimate (Cost) 445,180.61			
<b>Objective</b> Abandon Cut and Cap							
Actual Start Date 1/29/2016 07:30		End Date 2/28/2016 14:00		Abandon Date (C&C) 2/28/2016 14:00			
		Responsible Grp 1 coved		Responsible Grp 2 lborbel			
				Responsible Grp 3 Justin Minault			
AFE / RFE / Maint.# 10385950		Total AFE Amount (Cost) 740,000.00		Total AFE + Supp Amount (Cost) 740,000.00			
				Total Field Estimate (Cost) 445,180.61			
				AFE-Field Estimate (Cost) 294,819.39			
AFE / RFE / Maint.# 10385945		Total AFE Amount (Cost) 588,300.00		Total AFE + Supp Amount (Cost) 588,300.00			
				Total Field Estimate (Cost)			
				AFE-Field Estimate (Cost) 588,300.00			
<b>Daily Operations</b>							
Report Start Date 2/18/2016 07:30		Report End Date 2/19/2016 07:30		Daily Cost Total (Cost) 75,343.09			
				Cumulative Cost (Cost) 346,859.49			
				Personnel Regular Hours (hr) 154.00			
<b>Daily Contacts</b> WS Superintendent, Derrick Cove, 780-831-1314; WS Supervisor, Justin Minault, 403-391-0714; Abandonment Engineer, Louis Borbely, 403-650-3939							
Rig Nabors Production Services, 414							
Tubing Pressure (kPa) 0		Casing Pressure (kPa) 0		Weather Sunny			
				Temperature (°C) -36			
				Lease Condition Icy/Snow covered			
<b>Last 24hr Summary</b> Rig in Slickline, RIH 93.5mm guage ring - push squib + wire to bottom, MIRU E-line, dump bail 82.5 liters bringing cement top to 2003.76 mKB, Set WFT 10K PBP @ 1729.0 mKB - pressure test to 14.0 mPa, dump bail 82.5 liters cement for 10.17 lineal meters of cement cap leaving cement top @ 1728.83 mKB, RIH 20 Jts bull plugged 60.3mm tbj to displace 540 Liters fresh water out of well bore for winter protection leaving fluid level 66.6m from surface.							
<b>24hr Forecast</b> Rig out Service Rig and associated equipment, load and move equipment to C-11 WW02-A.							
Start Time	End Time	Dur (hr)	Op Code	Activity Code	Time P-T-X	Trbl Code	Operation
07:30	08:00	0.50	RPEQPT	SFTY	P		Hold Pre-job meeting with all personnel, document and discuss all hazards associated with Riggering in slickline, Running in with Guage Ring, purging and pressure testing and working with steam. Review PJHA, JSA's and ERP. Check all personnel's tickets and CPC Orientations - all valid.
08:00	10:00	2.00	RPEQPT	SLKL	P		<ul style="list-style-type: none"> <li>- Fire up equipment, conduct walk around inspection - no spills or leaks identified on wellhead or equipment.</li> <li>- Check Well pressures = SITP - 0 kPa / SICP - 0 kPa / SIICP - 0 kPa.</li> <li>- Warm up equipment.</li> <li>- Make up lubricator and tool string.</li> <li>- Stab on lubricator, purge and pressure test to 21.0 mPa with nitrogen.</li> <li>- Run in the hole with 93.5mm Guage ring to ensure Squib and wire pushed to bottom from previous cement bailer run as follows:</li> <li>- Run in the hole and lose string weight @ 1736.0 mKB (tagged wire and detonator)</li> <li>- Pull up to 1723mKB before regaining full string weight, Continue up to 1675.0 mKB with no over-pull.</li> <li>- Run in the hole to 1800.0 mKB with no weight loss, pull up to 1750.0 mKB with no over-pull.</li> <li>- Run in to 1860.0 mKB and lose string weight, pull up to 1850.0 mKB and regain full string weight, continue up to 1825.0 mKB with no over-pull.</li> <li>- Run in to 1900.0 mKB with no weight loss, cycle up to 1875.0 mKB with no over-pull.</li> <li>- Run in to 1944.0 mKB and lose string weight, pull up and regain string weight immediately, continue up to 1900.0 mKB with no over-pull</li> <li>- Run in to 1975.0 mKB and lose string weight, sit and monitor string weight - regaining string weight while sitting, slowly chase wire to bottom and tag cement stringers @ 2002.0 mKB. Pick up to 1980.0 mKB with no over-pull, re-tag for confirmation @ 2002.0 mKB.</li> <li>- Pull out of the hole with no over-pull on way out.</li> <li>- 09:30 Hrs: Out of the hole, rig out slickline unit, MIRU Lonkar E-line to complete upcoming bailer runs and setting PBP.</li> <li>- Haul in 30.0 m³ potable water and heat in preperation for upcoming water well abandonments.</li> </ul>
10:00	10:30	0.50	RPEQPT	SFTY	P		Hold safety meeting with all personnel regarding rigging in E-line equipment, conducting bailer + explosive runs, purging and pressure testing.

# Daily Morning Report

## COPRC MIRROR LAKE P-20 65-00 126-45

Report #: 10  
Report Date: 2/18/2016  
Final Job Status: ABANDONED  
Final Report? Yes

Start Time	End Time	Dur (hr)	Op Code	Activity Code	Time P-T-X	Trbl Code	Operation
10:30	17:00	6.50	RPEQPT	ELOG	P		<ul style="list-style-type: none"> <li>- Rig in E-line sheaves, make up tool string and pack-off head.</li> <li>- Make up 7x jts of 88.9mm bailer c/w squib + plunger style dump for redundancy and place in stack.</li> <li>- Mix 5 Pails of Dicorp 1830 kg/m<sup>3</sup> Warm Plug cement = 82.5 liters / 10.17m.</li> <li>- Fill bailer with cement, lower bailer and make up pack-off head.</li> <li>- 11:00 Hrs: Run in the hole and lightly tag cement top @ 2002.0 mKB.</li> <li>- 12:00 Hrs: Fire squib and dump cement - minimal weight loss seen.</li> <li>- Pull up to 1980.0 mKB and reciprocate bailer to ensure bailer empty.</li> <li>- POOH with bailer.</li> <li>- 12:30 Hrs: Bailer @ surface - Bailer empty.</li> <li>- Break down bailer sections, make up WFT 114.3mm 10K Permanent Bridge Plug assembly.</li> <li>- 12:45 Hrs: RIH with PBP to 1800.0 mKB, log up to 1677.0 mKB and corrolate on depth.</li> <li>- Run back in to 1748.0 mKB, pull up into position and set PBP(13:44 Hrs) @ 1739.15 mKB C.E. / 1739.0 mKB TOP / 1739.30 mKB BOTTOM.</li> <li>- Pick up 5m with no over-pull, run back down and tag PBP on depth.</li> <li>- POOH with setting tool.</li> <li>- 14:15 Hrs: Fill Casing (100 Liters) and pressure test PBP to 14.0 mPa for 10min - solid test.</li> <li>- Bleed off applied pressure and prep equipment to dump bail cement.</li> <li>- Make up 7x jts of 88.9mm bailer c/w plunger style dump place in stack.</li> <li>- Mix 5 Pails of Dicorp 1830 kg/m<sup>3</sup> Warm Plug cement = 82.5 liters / 10.17m.</li> <li>- Fill bailer with cement, lower bailer and make up pack-off head.</li> <li>- Run in the hole and tag PBP @ 1739.0 mKB.</li> <li>- Disc Burst and cement placed - loss of 250 lbs identified.</li> <li>- Pull up to 1700.0 mKB and reciprocate bailer to ensure bailer empty.</li> <li>- POOH with bailer.</li> <li>- 16:35 Hrs: Bailer @ surface - Bailer empty.</li> <li>- Break down bailer sections, Rig out E-line equipment.</li> </ul> <p>Note: Cement top @ 1728.83 mKB</p>
17:00	18:00	1.00	RPEQPT	TRIP	P		<ul style="list-style-type: none"> <li>- Make up 60.3mm Bull plug on bottom of 60.3mm J-55 Tbg Jt.</li> <li>- Prep Rig floor to RIH with 60.3mm Tbg to displace fresh water out of wellbore dropping fluid level for winterization.</li> <li>- Run in the hole with 20 Jts of 60.3mm J-55 bull plugged tbg, displace 0.54m<sup>3</sup> fresh water out of wellbore leaving Fluid level @ 66 m from surface.</li> <li>- Pull and lay down 20 Jts 60.3mm J-55 Tbg.</li> </ul>
18:00	18:30	0.50	RPEQPT	SISW	P		<ul style="list-style-type: none"> <li>- Drain and blow down pump and pump lines.</li> <li>- Secure and winterize wellhead and equipment.</li> <li>- SDFN.</li> </ul>
18:30	07:30	13.00	WELLPR	OTHR	P		- Boiler hand on location maintaining heat on wellhead, bop's and fluid in rig tank and 400bbl tanks.

### Report Fluids Summary

Fluid	To lease (m <sup>3</sup> )	From lease (m <sup>3</sup> )	To well (m <sup>3</sup> )	From well (m <sup>3</sup> )	Left to recover (m <sup>3</sup> )
FRESH WATER	30.00	0.00			87.31

### Daily Costs

BU Desc	Vendor	Activity Code	Amount (Cost)
Surface Completion Equipment Rental	BP PUMP LTD	Q300	40.00
Service Rig	C&J ENERGY PRODUCTION SERVICES CANADA LTD	E120	13,806.00
Surface Completion Equipment Rental	CENTRAL MACKENZIE ENVIRONMENTAL LTD	Q300	40.00
Surface Completion Equipment Rental	CENTRAL MACKENZIE ENVIRONMENTAL LTD	Q300	60.00
Surface Completion Equipment Rental	HRN CONTRACTING LTD	Q300	280.00
Electric Line Servs on Drilling Ops.	LONKAR SERVICES A/D/O SCHLUMBERGER CANAD...	K100	9,121.59
Slickline Services	LONKAR SERVICES A/D/O SCHLUMBERGER CANAD...	U200	41,665.00
Wellsite Supervision & Engineering	MINAULT ENERGY SERVICES LTD	T130	1,620.00
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	1,055.00
Completion Fluids & Other Chem	PBN ENERGY SERVICES LTD	G300	1,386.00
Completion Fluids & Other Chem	PBN ENERGY SERVICES LTD	G300	2,815.00
Completion Fluids & Other Chem	PBN ENERGY SERVICES LTD	G300	1,064.50
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	125.00
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	325.00
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	185.00
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	185.00
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	185.00
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	185.00
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	185.00

# Daily Morning Report

## COPRC MIRROR LAKE P-20 65-00 126-45

Report #: 10  
Report Date: 2/18/2016  
Final Job Status: ABANDONED  
Final Report? Yes

Daily Costs			
BU Desc	Vendor	Activity Code	Amount (Cost)
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	75.00
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	75.00
Surface Completion Equipment Rental	RIGSAT COMMUNICATIONS INC	Q300	15.00
Surface Completion Equipment Rental	TRUMPETER CAMP COMPANY PARTNERSHIP LTD	Q300	350.00
Surface Completion Equipment Rental	TRUMPETER CAMP COMPANY PARTNERSHIP LTD	Q300	450.00
Surface Completion Equipment Rental	TRUMPETER CAMP COMPANY PARTNERSHIP LTD	Q300	50.00

### Cumulative Job Flared Gas By Zone

Zone	Volume Gas Total (E3m³)
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### Perforations

Date	Zone	Top (mKB)	Btm (mKB)	Shot Dens (shots/m)	Current Status
3/4/2014	CANOL, Original Hole	3,118.00	3,119.00	6.0	Open - Flowing
3/4/2014	CANOL, Original Hole	3,098.00	3,099.00	6.0	Open - Flowing
3/4/2014	CANOL, Original Hole	3,079.00	3,080.00	6.0	Open - Flowing
3/4/2014	CANOL, Original Hole	3,059.00	3,060.00	6.0	Open - Flowing
3/4/2014	CANOL, Original Hole	3,040.00	3,041.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	2,943.00	2,944.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	2,962.00	2,963.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	2,982.00	2,983.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	3,001.00	3,002.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	3,021.00	3,022.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	2,924.00	2,925.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,904.00	2,905.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,885.00	2,886.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,866.00	2,867.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,846.00	2,847.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,827.00	2,828.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,807.00	2,808.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,788.00	2,789.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,769.00	2,770.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,749.00	2,750.00	6.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,730.00	2,731.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,710.00	2,711.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,691.00	2,692.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,633.00	2,634.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,652.00	2,653.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,672.00	2,673.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,613.00	2,614.00	6.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,555.00	2,556.00	6.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,594.00	2,595.00	6.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,536.00	2,537.00	6.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,575.00	2,576.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,516.00	2,517.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,497.00	2,498.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,478.00	2,479.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,458.00	2,459.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,439.00	2,440.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,419.00	2,420.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,400.00	2,401.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,381.00	2,382.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,361.00	2,362.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,342.00	2,343.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,303.00	2,304.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,284.00	2,285.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,264.00	2,265.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,245.00	2,246.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,322.00	2,323.00	6.0	Open - Flowing

# Daily Morning Report

## COPRC MIRROR LAKE P-20 65-00 126-45

Report #: 11  
Report Date: 2/19/2016  
Final Job Status: ABANDONED  
Final Report? Yes

Country CANADA	State/Province N.W.T.	Region / Division WCBU	District NEW VENTURES	Field Name Mirror Lake	Field Code
Surface Legal Location P-20 65-00 126-45		API / UWI 300/P20 65-00 126-45/0		License No. EL 470 WID 2081	

Job Information			
Job Category	Primary Job Type	Secondary Job Type	Total Field Estimate (Cost)
ABANDONMENT	ABANDONMENT P&A		445,180.61

<b>Objective</b> Abandon Cut and Cap					
Actual Start Date 1/29/2016 07:30	End Date 2/28/2016 14:00	Abandon Date (C&C) 2/28/2016 14:00	Responsible Grp 1 coved	Responsible Grp 2 lborbel	Responsible Grp 3 Justin Minault
AFE / RFE / Maint.# 10385950	Total AFE Amount (Cost) 740,000.00	Total AFE + Supp Amount (Cost) 740,000.00	Total Field Estimate (Cost) 445,180.61	AFE-Field Estimate (Cost) 294,819.39	
AFE / RFE / Maint.# 10385945	Total AFE Amount (Cost) 588,300.00	Total AFE + Supp Amount (Cost) 588,300.00	Total Field Estimate (Cost)	AFE-Field Estimate (Cost) 588,300.00	

<b>Daily Operations</b>					
Report Start Date 2/19/2016 07:30	Report End Date 2/19/2016 15:00	Daily Cost Total (Cost) 40,659.22	Cumulative Cost (Cost) 387,518.71	Personnel Regular Hours (hr) 152.00	
<b>Daily Contacts</b> WS Superintendent, Derrick Cove, 780-831-1314; WS Supervisor, Justin Minault, 403-391-0714; Abandonment Engineer, Louis Borbely, 403-650-3939					<b>Rig</b> Nabors Production Services, 414
Tubing Pressure (kPa) 0	Casing Pressure (kPa) 0	Weather Sunny	Temperature (°C) -28	Lease Condition lcy/Snow covered	

**Last 24hr Summary**  
Rig out service rig and auxiliary equipment, install wellhead, tidy up location and move all equipment to 300/C-11 65-10 126-45.

**24hr Forecast**  
Ready for cut and cap.

Start Time	End Time	Dur (hr)	Op Code	Activity Code	Time P-T-X	Trbl Code	Operation
07:30	08:00	0.50	RPCOMP	SFTY	P		Hold Pre-job meeting with all personnel, document and discuss all hazards associated with Rigging out service rig and auxiliary equipment and working with steam. Review PJHA, JSA's and ERP. Check all personnel's tickets and CPC Orientations - all valid.
08:00	11:00	3.00	RPCOMP	RURD	P		<ul style="list-style-type: none"> <li>- Fire up equipment, conduct walk around inspection - no spills or leaks identified on wellhead or equipment.</li> <li>- Check Well pressures = SITP - 0 kPa / SICP - 0 kPa / SIICP - 0 kPa.</li> <li>- Warm up equipment.</li> <li>- Cool down, flood and rig out boilers.</li> <li>- Rig out pump, pump lines and tank.</li> <li>- Wrap up accumulator and power lines.</li> <li>- Drain potable water in well site shack, drain septic tanks and prep shack for rig move.</li> <li>- Rig out doghouse + medic shack, secure all loads and prep for transport.</li> <li>- Remove Bop's and secure on transport stump.</li> <li>- Install Wellhead top section - Tbg hanger left with wellhead.</li> <li>- Lower mast and rig out service rig, wrap up load lines, rig out beam and prep for transport.</li> </ul>
11:00	11:30	0.50	RPCOMP	SFTY	P		- Canol, PBN + Trumpeter camp services arrived on location, hold pre-move safety meeting with all personnel, document and discuss hazards associated with loading, securing and transporting equipment to new location, Review PJHA, JSA's and ERP with all personnel, check tickets and CPC orientation cards - all valid.
11:30	15:00	3.50	RPCOMP	DMOB	P		<ul style="list-style-type: none"> <li>- Load up and transport the following equipment from P-20 65-00 126-45 to 300/ C-11 65-10 126-45:</li> <li>- 2x Boilers</li> <li>- Well Site Office Shack</li> <li>- C&amp;J Skid doghouse</li> <li>- Clean insulated 400bbl tank (hauled from O-06 location).</li> <li>- C&amp;J Skid pump and tank</li> <li>- C&amp;J catwalk</li> <li>- Move spare racks from N-20 location (219 Jts 60.3mm Tbg left on racks on location).</li> <li>- 4x 20kv light towers.</li> <li>- Service Rig.</li> <li>- Class III Bop's c/w stand</li> <li>- Beam and all planking for rig.</li> <li>- Tidy up location, scrape up stained snow and collect in contaminated snow bags.</li> <li>- Conduct walk around inspection - no spills or stains identified.</li> <li>- Well is ready for cut and cap.</li> </ul>

<b>Report Fluids Summary</b>					
Fluid	To lease (m³)	From lease (m³)	To well (m³)	From well (m³)	Left to recover (m³)
FRESH WATER	0.00	54.10			87.31

# Daily Morning Report

## COPRC MIRROR LAKE P-20 65-00 126-45

Report #: 11  
Report Date: 2/19/2016  
Final Job Status: ABANDONED  
Final Report? Yes

Daily Costs			
BU Desc	Vendor	Activity Code	Amount (Cost)
Surface Completion Equipment Rental	BP PUMP LTD	Q300	80.00
Service Rig	C&J ENERGY PRODUCTION SERVICES CANADA LTD	E120	13,651.00
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	1,800.00
Trucking/Hauling/ Hot Shot Services	CANOL OILFIELD SERVICES INC	P100	3,245.00
Trucking/Hauling/ Hot Shot Services	CANOL OILFIELD SERVICES INC	P100	1,950.00
Trucking/Hauling/ Hot Shot Services	CANOL OILFIELD SERVICES INC	P100	2,920.00
Trucking/Hauling/ Hot Shot Services	CANOL OILFIELD SERVICES INC	P100	2,127.50
Trucking/Hauling/ Hot Shot Services	CANOL OILFIELD SERVICES INC	P100	3,420.00
Surface Completion Equipment Rental	CENTRAL MACKENZIE ENVIRONMENTAL LTD	Q300	40.00
Surface Completion Equipment Rental	CENTRAL MACKENZIE ENVIRONMENTAL LTD	Q300	60.00
Surface Completion Equipment Rental	HRN CONTRACTING LTD	Q300	455.00
Surface Completion Equipment Rental	HRN CONTRACTING LTD	Q300	280.00
Wellsite Supervision & Engineering	MINAULT ENERGY SERVICES LTD	T130	1,620.00
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	1,055.00
Completion Fluids & Other Chem	PBN ENERGY SERVICES LTD	G300	1,323.00
Completion Fluids & Other Chem	PBN ENERGY SERVICES LTD	G300	1,064.50
Completion Fluids & Other Chem	PBN ENERGY SERVICES LTD	G300	1,408.60
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	125.00
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	325.00
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	185.00
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	185.00
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	185.00
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	185.00
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	75.00
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	75.00
Surface Completion Equipment Rental	RIGSAT COMMUNICATIONS INC	Q300	15.00
Completion Fluids & Other Chem	TERVITA CORP	G300	569.62
Surface Completion Equipment Rental	TRUMPETER CAMP COMPANY PARTNERSHIP LTD	Q300	350.00
Surface Completion Equipment Rental	TRUMPETER CAMP COMPANY PARTNERSHIP LTD	Q300	450.00
Surface Completion Equipment Rental	TRUMPETER CAMP COMPANY PARTNERSHIP LTD	Q300	50.00
Surface Completion Equipment Rental	TRUMPETER CAMP COMPANY PARTNERSHIP LTD	Q300	1,200.00

### Cumulative Job Flared Gas By Zone

Zone	Volume Gas Total (E3m³)
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### Perforations

Date	Zone	Top (mKB)	Btm (mKB)	Shot Dens (shots/m)	Current Status
3/4/2014	CANOL, Original Hole	3,118.00	3,119.00	6.0	Open - Flowing
3/4/2014	CANOL, Original Hole	3,098.00	3,099.00	6.0	Open - Flowing
3/4/2014	CANOL, Original Hole	3,079.00	3,080.00	6.0	Open - Flowing
3/4/2014	CANOL, Original Hole	3,059.00	3,060.00	6.0	Open - Flowing
3/4/2014	CANOL, Original Hole	3,040.00	3,041.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	2,943.00	2,944.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	2,962.00	2,963.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	2,982.00	2,983.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	3,001.00	3,002.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	3,021.00	3,022.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	2,924.00	2,925.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,904.00	2,905.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,885.00	2,886.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,866.00	2,867.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,846.00	2,847.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,827.00	2,828.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,807.00	2,808.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,788.00	2,789.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,769.00	2,770.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,749.00	2,750.00	6.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,730.00	2,731.00	10.0	Open - Flowing



# Daily Morning Report

## COPRC MIRROR LAKE P-20 65-00 126-45

Report #: 11  
 Report Date: 2/19/2016  
 Final Job Status: ABANDONED  
 Final Report? Yes

Perforations					
Date	Zone	Top (mKB)	Btm (mKB)	Shot Dens (shots/m)	Current Status
3/9/2014	CANOL, Original Hole	2,710.00	2,711.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,691.00	2,692.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,633.00	2,634.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,652.00	2,653.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,672.00	2,673.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,613.00	2,614.00	6.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,555.00	2,556.00	6.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,594.00	2,595.00	6.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,536.00	2,537.00	6.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,575.00	2,576.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,516.00	2,517.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,497.00	2,498.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,478.00	2,479.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,458.00	2,459.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,439.00	2,440.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,419.00	2,420.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,400.00	2,401.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,381.00	2,382.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,361.00	2,362.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,342.00	2,343.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,303.00	2,304.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,284.00	2,285.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,264.00	2,265.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,245.00	2,246.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,322.00	2,323.00	6.0	Open - Flowing

# Daily Morning Report

## COPRC MIRROR LAKE P-20 65-00 126-45

Report #: 12  
Report Date: 2/25/2016  
Final Job Status: ABANDONED  
Final Report? Yes

Country CANADA	State/Province N.W.T.	Region / Division WCBU	District NEW VENTURES	Field Name Mirror Lake	Field Code
Surface Legal Location P-20 65-00 126-45		API / UWI 300/P20 65-00 126-45/0		License No. EL 470 WID 2081	

Job Information			
Job Category	Primary Job Type	Secondary Job Type	Total Field Estimate (Cost)
ABANDONMENT	ABANDONMENT P&A		445,180.61

<b>Objective</b> Abandon Cut and Cap					
Actual Start Date 1/29/2016 07:30	End Date 2/28/2016 14:00	Abandon Date (C&C) 2/28/2016 14:00	Responsible Grp 1 coved	Responsible Grp 2 lborbel	Responsible Grp 3 Justin Minault
AFE / RFE / Maint.# 10385950	Total AFE Amount (Cost) 740,000.00	Total AFE + Supp Amount (Cost) 740,000.00	Total Field Estimate (Cost) 445,180.61	AFE-Field Estimate (Cost) 294,819.39	
AFE / RFE / Maint.# 10385945	Total AFE Amount (Cost) 588,300.00	Total AFE + Supp Amount (Cost) 588,300.00	Total Field Estimate (Cost)	AFE-Field Estimate (Cost) 588,300.00	

<b>Daily Operations</b>					
Report Start Date 2/25/2016 07:30	Report End Date 2/25/2016 17:45	Daily Cost Total (Cost) 7,343.00	Cumulative Cost (Cost) 394,861.71	Personnel Regular Hours (hr) 41.00	
<b>Daily Contacts</b> WS Superintendent, Derrick Cove, 780-831-1314; WS Supervisor, Mike Flett, 780-933-4595; Abandonment Engineer, Louis Borbely, 403-650-3939					Rig
Tubing Pressure (kPa) 0	Casing Pressure (kPa) 0	Weather Clear	Temperature (°C) -12	Lease Condition lcy/Snow covered	

**Last 24hr Summary**  
MIRU Cascade steamer and Clean Harbors semi vac, Hydro vaced around the conductor barrel on the wellhead down 0.7m from ground level. The cellar was full of frozen water, saw dust/wood chips and full bags of saw dust and wood chips.

**24hr Forecast**  
Ready for cut and cap.

Start Time	End Time	Dur (hr)	Op Code	Activity Code	Time P-T-X	Trbl Code	Operation
07:30	08:00	0.50	RPCOMP	SFTY	P		Held a PJHA # 02252016 with Cascade steamer crew, Clean Harbors vac crew member. Discussed Hydro vac operations, cold weather, reviewed transportation plan/medic location, lease conditions, muster area and the associated hazards. Reviewed the Site ERP and Injured Worker Transportation Plan with crew members. Safety tickets, orientations checked and valid.
08:00	17:45	9.75	RPCOMP	RTWH	P		Rigged in the vac truck and the steamer unit. Hydro vaced the down around the outside of the conductor barrel to a depth of 0.7 m from ground level. The cellar was full of frozen water, loose saw dust/wood chips and full bags of saw dust and wood chips. Rigged out the steamer and the vac truck, cleaned up tools and equipment. SDFN.

<b>Report Fluids Summary</b>					
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	87.31

<b>Daily Costs</b>		BU Desc	Vendor	Activity Code	Amount (Cost)
		Pressure Truck/Hot Oilier	CANOL OILFIELD SERVICES INC	S990	3,908.00
		Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	1,800.00
		Wellsite Supervision & Engineering	MJ'S WELLSITE SUPERVISION LTD	T130	1,620.00
		Surface Completion Equipment Rental	RIGSAT COMMUNICATIONS INC	Q300	15.00

<b>Cumulative Job Flared Gas By Zone</b>		Zone	Volume Gas Total (E3m³)

<b>Perforations</b>					
Date	Zone	Top (mKB)	Btm (mKB)	Shot Dens (shots/m)	Current Status
3/4/2014	CANOL, Original Hole	3,118.00	3,119.00	6.0	Open - Flowing
3/4/2014	CANOL, Original Hole	3,098.00	3,099.00	6.0	Open - Flowing
3/4/2014	CANOL, Original Hole	3,079.00	3,080.00	6.0	Open - Flowing
3/4/2014	CANOL, Original Hole	3,059.00	3,060.00	6.0	Open - Flowing
3/4/2014	CANOL, Original Hole	3,040.00	3,041.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	2,943.00	2,944.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	2,962.00	2,963.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	2,982.00	2,983.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	3,001.00	3,002.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	3,021.00	3,022.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	2,924.00	2,925.00	6.0	Open - Flowing

# Daily Morning Report

## COPRC MIRROR LAKE P-20 65-00 126-45

Report #: 12  
Report Date: 2/25/2016  
Final Job Status: ABANDONED  
Final Report? Yes

Perforations					
Date	Zone	Top (mKB)	Btm (mKB)	Shot Dens (shots/m)	Current Status
3/8/2014	CANOL, Original Hole	2,904.00	2,905.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,885.00	2,886.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,866.00	2,867.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,846.00	2,847.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,827.00	2,828.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,807.00	2,808.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,788.00	2,789.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,769.00	2,770.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,749.00	2,750.00	6.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,730.00	2,731.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,710.00	2,711.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,691.00	2,692.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,633.00	2,634.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,652.00	2,653.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,672.00	2,673.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,613.00	2,614.00	6.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,555.00	2,556.00	6.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,594.00	2,595.00	6.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,536.00	2,537.00	6.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,575.00	2,576.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,516.00	2,517.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,497.00	2,498.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,478.00	2,479.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,458.00	2,459.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,439.00	2,440.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,419.00	2,420.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,400.00	2,401.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,381.00	2,382.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,361.00	2,362.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,342.00	2,343.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,303.00	2,304.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,284.00	2,285.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,264.00	2,265.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,245.00	2,246.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,322.00	2,323.00	6.0	Open - Flowing



# Daily Morning Report

## COPRC MIRROR LAKE P-20 65-00 126-45

Report #: 13  
Report Date: 2/27/2016  
Final Job Status: ABANDONED  
Final Report? Yes

Country CANADA		State/Province N.W.T.		Region / Division WCBU		District NEW VENTURES		Field Name Mirror Lake		Field Code	
Surface Legal Location P-20 65-00 126-45				API / UWI 300/P20 65-00 126-45/0				License No. EL 470 WID 2081			
<b>Job Information</b>											
Job Category ABANDONMENT			Primary Job Type ABANDONMENT P&A			Secondary Job Type			Total Field Estimate (Cost) 445,180.61		
<b>Objective</b> Abandon Cut and Cap											
Actual Start Date 1/29/2016 07:30		End Date 2/28/2016 14:00		Abandon Date (C&C) 2/28/2016 14:00		Responsible Grp 1 coved		Responsible Grp 2 lborbel		Responsible Grp 3 Justin Minault	
AFE / RFE / Maint.# 10385950		Total AFE Amount (Cost) 740,000.00		Total AFE + Supp Amount (Cost) 740,000.00		Total Field Estimate (Cost) 445,180.61		AFE-Field Estimate (Cost) 294,819.39			
AFE / RFE / Maint.# 10385945		Total AFE Amount (Cost) 588,300.00		Total AFE + Supp Amount (Cost) 588,300.00		Total Field Estimate (Cost)		AFE-Field Estimate (Cost) 588,300.00			
<b>Daily Operations</b>											
Report Start Date 2/27/2016 07:30		Report End Date 2/26/2016 15:00		Daily Cost Total (Cost) 3,675.00		Cumulative Cost (Cost) 398,536.71		Personnel Regular Hours (hr) 35.00			
<b>Daily Contacts</b> WS Superintendent, Derrick Cove, 780-831-1314; WS Supervisor, Mike Flett, 780-933-4595; Abandonment Engineer, Louis Borely, 403-650-3939											<b>Rig</b>
Tubing Pressure (kPa)		Casing Pressure (kPa) 0		Weather Overcast		Temperature (°C) -21		Lease Condition Icy/Snow covered			
<b>Last 24hr Summary</b> Performed a SCVF on surface casing vent, (no bubbles in 10 minutes no LEL's). Checked well for pressures (none present). NuWave had mechanical issues with the electrical pumping unit, diagnosed the problem and repaired.											
<b>24hr Forecast</b> Continue to perform the cut and cap.											
Start Time	End Time	Dur (hr)	Op Code	Activity Code	Time P-T-X	Trbl Code	Operation				
07:30	08:00	0.50	RPCOMP	SFTY	P		Held a PJHA # 02272016 with NuWave Industries, HRN track hoe operator on cutting and capping the well. Discussed removing the wellhead components, spotting/rigging up, NuWave's Ultra High Pressure Jet Cutter Procedure, cold weather and the associated hazards. Reviewed the site ERP and Injured Worker Transportation Plan with crew members. Crew members safety tickets and orientations checked and valid.				
08:00	11:00	3.00	RPCOMP	RTWH	P		Performed a 10 min SCVF test on surface casing vent, (no bubbles in 10 minutes, Checked for LEL's - None present). Checked wellhead for pressures and LEL'S, none present. Checked for any hydrocarbons on top of fluid in production casing using a plumb bob and Kolor cut, ( no fluid present). Spotted the track hoe and installed the rated lifting slings, removed the upper wellhead assembly, tbg head spool, intermediate spool. Spotted NuWave truck. Set casing cutting tool for 2.69 meters which places the vented cap at 1.5 meters below ground level. Rigged in cutting tool and performed the cut. 11:00 HRS the Electrical motor for the pump was surging and shutting down the power to the pumping unit. Rigged out the cutting tool.				
11:00	15:00	4.00	RPCOMP	RTWH	T	Non-rig Surface Eqp	The operator of the NuWave unit made calls to his office and trouble shot the problem. (There was a sensor for the water feed line that was reading low water, changed the water supply filter and tested the pumping system). The unit and will be ready for morning.				
<b>Report Fluids Summary</b>											
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		87.31	
<b>Daily Costs</b>											
BU Desc			Vendor			Activity Code			Amount (Cost)		
Surface Completion Equipment Rental			BP PUMP LTD			Q300			280.00		
Completion Fluids & Other Chem			HRN CONTRACTING LTD			G300			760.00		
Wellsite Supervision & Engineering			MJ'S WELLSITE SUPERVISION LTD			T130			1,620.00		
Pressure Truck/Hot Oiler			NUWAVE INDUSTRIES INC			S990			1,000.00		
Surface Completion Equipment Rental			RIGSAT COMMUNICATIONS INC			Q300			15.00		
<b>Cumulative Job Flared Gas By Zone</b>											
Zone						Volume Gas Total (E3m³)					
<b>Perforations</b>											
Date		Zone		Top (mKB)		Btm (mKB)		Shot Dens (shots/m)		Current Status	
3/4/2014		CANOL, Original Hole		3,118.00		3,119.00		6.0		Open - Flowing	

# Daily Morning Report

## COPRC MIRROR LAKE P-20 65-00 126-45

Report #: 13  
 Report Date: 2/27/2016  
 Final Job Status: ABANDONED  
 Final Report? Yes

Perforations					
Date	Zone	Top (mKB)	Btm (mKB)	Shot Dens (shots/m)	Current Status
3/4/2014	CANOL, Original Hole	3,098.00	3,099.00	6.0	Open - Flowing
3/4/2014	CANOL, Original Hole	3,079.00	3,080.00	6.0	Open - Flowing
3/4/2014	CANOL, Original Hole	3,059.00	3,060.00	6.0	Open - Flowing
3/4/2014	CANOL, Original Hole	3,040.00	3,041.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	2,943.00	2,944.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	2,962.00	2,963.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	2,982.00	2,983.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	3,001.00	3,002.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	3,021.00	3,022.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	2,924.00	2,925.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,904.00	2,905.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,885.00	2,886.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,866.00	2,867.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,846.00	2,847.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,827.00	2,828.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,807.00	2,808.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,788.00	2,789.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,769.00	2,770.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,749.00	2,750.00	6.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,730.00	2,731.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,710.00	2,711.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,691.00	2,692.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,633.00	2,634.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,652.00	2,653.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,672.00	2,673.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,613.00	2,614.00	6.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,555.00	2,556.00	6.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,594.00	2,595.00	6.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,536.00	2,537.00	6.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,575.00	2,576.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,516.00	2,517.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,497.00	2,498.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,478.00	2,479.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,458.00	2,459.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,439.00	2,440.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,419.00	2,420.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,400.00	2,401.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,381.00	2,382.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,361.00	2,362.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,342.00	2,343.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,303.00	2,304.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,284.00	2,285.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,264.00	2,265.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,245.00	2,246.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,322.00	2,323.00	6.0	Open - Flowing

# Daily Morning Report

## COPRC MIRROR LAKE P-20 65-00 126-45

Report #: 14  
Report Date: 2/28/2016  
Final Job Status: ABANDONED  
Final Report? Yes

Country CANADA	State/Province N.W.T.	Region / Division WCBU	District NEW VENTURES	Field Name Mirror Lake	Field Code
Surface Legal Location P-20 65-00 126-45		API / UWI 300/P20 65-00 126-45/0		License No. EL 470 WID 2081	

Job Information			
Job Category	Primary Job Type	Secondary Job Type	Total Field Estimate (Cost)
ABANDONMENT	ABANDONMENT P&A		445,180.61

<b>Objective</b> Abandon Cut and Cap					
Actual Start Date 1/29/2016 07:30	End Date 2/28/2016 14:00	Abandon Date (C&C) 2/28/2016 14:00	Responsible Grp 1 coved	Responsible Grp 2 lborbel	Responsible Grp 3 Justin Minault
AFE / RFE / Maint.# 10385950	Total AFE Amount (Cost) 740,000.00	Total AFE + Supp Amount (Cost) 740,000.00	Total Field Estimate (Cost) 445,180.61	AFE-Field Estimate (Cost) 294,819.39	
AFE / RFE / Maint.# 10385945	Total AFE Amount (Cost) 588,300.00	Total AFE + Supp Amount (Cost) 588,300.00	Total Field Estimate (Cost)	AFE-Field Estimate (Cost) 588,300.00	

<b>Daily Operations</b>					
Report Start Date 2/28/2016 07:30	Report End Date 2/28/2016 14:00	Daily Cost Total (Cost) 9,210.00	Cumulative Cost (Cost) 407,746.71	Personnel Regular Hours (hr) 28.00	
<b>Daily Contacts</b> WS Superintendent, Derrick Cove, 780-831-1314; WS Supervisor, Mike Flett, 780-933-4595; Abandonment Engineer, Louis Borbely, 403-650-3939					Rig
Tubing Pressure (kPa)	Casing Pressure (kPa) 0	Weather Overcast	Temperature (°C) -20	Lease Condition lcy/Snow covered	

**Last 24hr Summary**  
NuWave cut and capped well. See Cut & Cap pictures in Attachments.

**24hr Forecast**  
Ready for reclamation TOTC (Mac Watson 780-865-6368).

Start Time	End Time	Dur (hr)	Op Code	Activity Code	Time P-T-X	Trbl Code	Operation
07:30	08:00	0.50	RPCOMP	SFTY	P		Held a PJHA # 02282016 with NuWave Industries, HRN track hoe operator on cutting and capping the well. Discussed removing the wellhead components, spotting/rigging up, NuWave's Ultra High Pressure Jet Cutter Procedure, cold weather and the associated hazards. Reviewed the site ERP and Injured Worker Transportation Plan with crew members. Crew members safety tickets and orientations checked and valid.
08:00	14:00	6.00	RPCOMP	RTWH	P		Spotted NuWave truck. Set casing cutting tool for 2.69 meters which places the vented cap at 1.5 meters below ground level. Rigged in cutting tool and performed the cut. Rigged out cutting tool. Pulled the Intermediate csg flange and csg out and conductor barrel of the cellar with the track hoe. There may have been a few small pieces of cement that had fell down in to the production csg when the assembly was pulled from the cellar. (Note: measured the depth of the production csg it had dropped 7" after being cut and the intermediate csg dropped 14" after being cut.) Welded the UWI and date on the vented casing camp w/centrilizer and installed it in the 114.3 mm production casing. Cleaned up all tools and equipment, put a fence around the cellar area and flagged. Released contractors. See Cut & Cap pictures in Attachments. Cut off pipe segment measurements:  Production casing: 2.69 meters Intermediate casing: 2.0 meters Surface: 1.44 meters Conductor: 1.04 meters  The wellhead assembly will sent to Stream Flo, Edmonton AB. SDFN.

<b>Report Fluids Summary</b>					
Fluid	To lease (m³)	From lease (m³)	To well (m³)	From well (m³)	Left to recover (m³)
FRESH WATER	54.00	59.00			87.31

<b>Daily Costs</b>			
BU Desc	Vendor	Activity Code	Amount (Cost)
Trucking/Hauling/ Hot Shot Services	CANOL OILFIELD SERVICES INC	P100	730.00
Completion Fluids & Other Chem	HRN CONTRACTING LTD	G300	1,950.00
Surface Completion Equipment Rental	HRN CONTRACTING LTD	Q300	1,225.00
Wellsite Supervision & Engineering	MJ'S WELLSITE SUPERVISION LTD	T130	1,620.00
Pressure Truck/Hot Oiler	NUWAVE INDUSTRIES INC	S990	3,670.00
Surface Completion Equipment Rental	RIGSAT COMMUNICATIONS INC	Q300	15.00

# Daily Morning Report

## COPRC MIRROR LAKE P-20 65-00 126-45

Report #: 14  
 Report Date: 2/28/2016  
 Final Job Status: ABANDONED  
 Final Report? Yes

### Cumulative Job Flared Gas By Zone

Zone	Volume Gas Total (E3m <sup>3</sup> )
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### Perforations

Date	Zone	Top (mKB)	Btm (mKB)	Shot Dens (shots/m)	Current Status
3/4/2014	CANOL, Original Hole	3,118.00	3,119.00	6.0	Open - Flowing
3/4/2014	CANOL, Original Hole	3,098.00	3,099.00	6.0	Open - Flowing
3/4/2014	CANOL, Original Hole	3,079.00	3,080.00	6.0	Open - Flowing
3/4/2014	CANOL, Original Hole	3,059.00	3,060.00	6.0	Open - Flowing
3/4/2014	CANOL, Original Hole	3,040.00	3,041.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	2,943.00	2,944.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	2,962.00	2,963.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	2,982.00	2,983.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	3,001.00	3,002.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	3,021.00	3,022.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	2,924.00	2,925.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,904.00	2,905.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,885.00	2,886.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,866.00	2,867.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,846.00	2,847.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,827.00	2,828.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,807.00	2,808.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,788.00	2,789.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,769.00	2,770.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,749.00	2,750.00	6.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,730.00	2,731.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,710.00	2,711.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,691.00	2,692.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,633.00	2,634.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,652.00	2,653.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,672.00	2,673.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,613.00	2,614.00	6.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,555.00	2,556.00	6.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,594.00	2,595.00	6.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,536.00	2,537.00	6.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,575.00	2,576.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,516.00	2,517.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,497.00	2,498.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,478.00	2,479.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,458.00	2,459.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,439.00	2,440.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,419.00	2,420.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,400.00	2,401.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,381.00	2,382.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,361.00	2,362.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,342.00	2,343.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,303.00	2,304.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,284.00	2,285.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,264.00	2,265.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,245.00	2,246.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,322.00	2,323.00	6.0	Open - Flowing

# Daily Morning Report

## COPRC MIRROR LAKE P-20 65-00 126-45

Report #: 15  
Report Date: 3/4/2016  
Final Job Status: ABANDONED  
Final Report? Yes

Country CANADA	State/Province N.W.T.	Region / Division WCBU	District NEW VENTURES	Field Name Mirror Lake	Field Code
Surface Legal Location P-20 65-00 126-45		API / UWI 300/P20 65-00 126-45/0		License No. EL 470 WID 2081	

<b>Job Information</b>					
Job Category ABANDONMENT	Primary Job Type ABANDONMENT P&A	Secondary Job Type	Total Field Estimate (Cost) 445,180.61		

<b>Objective</b> Abandon Cut and Cap					
Actual Start Date 1/29/2016 07:30	End Date 2/28/2016 14:00	Abandon Date (C&C) 2/28/2016 14:00	Responsible Grp 1 coved	Responsible Grp 2 lborbel	Responsible Grp 3 Justin Minault
AFE / RFE / Maint.# 10385950	Total AFE Amount (Cost) 740,000.00	Total AFE + Supp Amount (Cost) 740,000.00	Total Field Estimate (Cost) 445,180.61	AFE-Field Estimate (Cost) 294,819.39	
AFE / RFE / Maint.# 10385945	Total AFE Amount (Cost) 588,300.00	Total AFE + Supp Amount (Cost) 588,300.00	Total Field Estimate (Cost)	AFE-Field Estimate (Cost) 588,300.00	

<b>Daily Operations</b>					
Report Start Date 3/4/2016 07:30	Report End Date 3/4/2016 15:30	Daily Cost Total (Cost) 37,433.90	Cumulative Cost (Cost) 445,180.61	Personnel Regular Hours (hr) 40.00	
<b>Daily Contacts</b> WS Superintendent, Derrick Cove, 780-831-1314; WS Supervisor, Mike Flett, 780-933-4595; Abandonment Engineer, Louis Borbely, 403-650-3939					Rig
Tubing Pressure (kPa)	Casing Pressure (kPa)	Weather Overcast	Temperature (°C) -20	Lease Condition Icy/Snow covered	

**Last 24hr Summary**  
MIRU Cascade steamer and Clean Harbors semi vac, HRN track hoe. Hydro vaced/Steamed the mouse hole csg jt, rat hole csg jt. TOTC (Mac Watson) and he removed the mouse hole csg jt, could not pull the rat hole csg jt, cut it off 2 m below ground level. removed the cement from the cellar and filled in the mouse hole, rat hole and the cellar area.

**24hr Forecast**  
Ready for reclamation TOTC (Mac Watson 780-865-6368).

Start Time	End Time	Dur (hr)	Op Code	Activity Code	Time P-T-X	Trbl Code	Operation
07:30	08:00	0.50	RPCOMP	SFTY	P		Held a PJHA # 03042016 with Cascade steamer crew, Clean Harbors vac crew, HRN track hoe operator. Discussed Hydro vac/steaming operations, Filling the mouse hole csg jt and rat hole csg jt with hot water and removing the mouse hole csg jt and the rat hole csg, heavy lifting, cold weather, Reviewed transportation plan/medic location, lease conditions, muster area and the associated hazards. Reviewed the Site ERP and Injured Worker Transportation Plan with crew members. Safety tickets, orientations checked and valid.
08:00	15:30	7.50	RPCOMP	RTWH	P		Spotted the vac truck and the steamer unit. Cleared the mouse hole csg jt and rat hole of ice, filled with 150°C water and heated with a 1" steam hose. Rigged out the steamer and vac truck. Turned over to (Mac Watson 780-865-6368) with construction, They spotted the track hoe, hooked up the rated sling. Pulled and removed the jt of csg from the mouse hole and put it off to the side of the lease. Worked at pulling the rat hole csg jt, but could not pull out the rat hole csg jt, cut it off 2 m below ground level. They removed the cement from the cellar area, hauled in fill and filled in the rat hole, mouse hole and the cellar area. SDFN.

<b>Report Fluids Summary</b>					
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	87.31

<b>Daily Costs</b>			
BU Desc	Vendor	Activity Code	Amount (Cost)
Surface Completion Equipment Rental	BP PUMP LTD	Q300	240.00
Completion Fluids & Other Chem	BP PUMP LTD	G300	600.00
Pressure Truck/Hot Oiler	CANOL OILFIELD SERVICES INC	S990	3,708.00
Trucking/Hauling/ Hot Shot Services	CANOL OILFIELD SERVICES INC	P100	2,064.00
Trucking/Hauling/ Hot Shot Services	CANOL OILFIELD SERVICES INC	P100	2,064.00
Trucking/Hauling/ Hot Shot Services	CANOL OILFIELD SERVICES INC	P100	2,640.00
Trucking/Hauling/ Hot Shot Services	CANOL OILFIELD SERVICES INC	P100	2,250.00
Wellsite Supervision & Engineering	MJ'S WELLSITE SUPERVISION LTD	T130	1,620.00
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	1,405.00
Completion Fluids & Other Chem	PBN ENERGY SERVICES LTD	G300	2,620.00
Completion Fluids & Other Chem	PBN ENERGY SERVICES LTD	G300	2,759.40
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	1,050.00
Surface Completion Equipment Rental	RIGSAT COMMUNICATIONS INC	Q300	15.00
Completion Fluids & Other Chem	TERVITA CORP	G300	12,408.50



# Daily Morning Report

## COPRC MIRROR LAKE P-20 65-00 126-45

Report #: 15  
Report Date: 3/4/2016  
Final Job Status: ABANDONED  
Final Report? Yes

Daily Costs			
BU Desc	Vendor	Activity Code	Amount (Cost)
Maintain Road & Location	WILLOWLAKE ENVIRONMENTAL LTD	D230	1,990.00

### Cumulative Job Flared Gas By Zone

Zone	Volume Gas Total (E3m <sup>3</sup> )

### Perforations

Date	Zone	Top (mKB)	Btm (mKB)	Shot Dens (shots/m)	Current Status
3/4/2014	CANOL, Original Hole	3,118.00	3,119.00	6.0	Open - Flowing
3/4/2014	CANOL, Original Hole	3,098.00	3,099.00	6.0	Open - Flowing
3/4/2014	CANOL, Original Hole	3,079.00	3,080.00	6.0	Open - Flowing
3/4/2014	CANOL, Original Hole	3,059.00	3,060.00	6.0	Open - Flowing
3/4/2014	CANOL, Original Hole	3,040.00	3,041.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	2,943.00	2,944.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	2,962.00	2,963.00	6.0	Open - Flowing
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3/7/2014	CANOL, Original Hole	3,001.00	3,002.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	3,021.00	3,022.00	6.0	Open - Flowing
3/7/2014	CANOL, Original Hole	2,924.00	2,925.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,904.00	2,905.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,885.00	2,886.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,866.00	2,867.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,846.00	2,847.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,827.00	2,828.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,807.00	2,808.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,788.00	2,789.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,769.00	2,770.00	6.0	Open - Flowing
3/8/2014	CANOL, Original Hole	2,749.00	2,750.00	6.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,730.00	2,731.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,710.00	2,711.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,691.00	2,692.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,633.00	2,634.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,652.00	2,653.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,672.00	2,673.00	10.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,613.00	2,614.00	6.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,555.00	2,556.00	6.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,594.00	2,595.00	6.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,536.00	2,537.00	6.0	Open - Flowing
3/9/2014	CANOL, Original Hole	2,575.00	2,576.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,516.00	2,517.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,497.00	2,498.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,478.00	2,479.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,458.00	2,459.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,439.00	2,440.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,419.00	2,420.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,400.00	2,401.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,381.00	2,382.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,361.00	2,362.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,342.00	2,343.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,303.00	2,304.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,284.00	2,285.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,264.00	2,265.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,245.00	2,246.00	6.0	Open - Flowing
3/10/2014	CANOL, Original Hole	2,322.00	2,323.00	6.0	Open - Flowing

## **Appendix 4     Fluid Summary**



# Fluids Summary

## COPRC MIRROR LAKE P-20 65-00 126-45

### LEASE FLUID NOTE

- 1) If FRESH WATER has been selected as your FLUID TYPE please make sure the SOURCE library pick list is populated with one of the following (Mandatory)
  - CREEK
  - DUGOUT
  - LAKE
  - MUNICIPAL
  - RIVER
- 2) Continue to populate the NOTE section with additional SOURCE location details

### LEASE FLUIDS

Start Date	Fluid	To Lease (m³)	Source	From Lease (m³)	Dest	Manifest Number	Permit Number / TDL	Vendor	Note
2/12/2016	FRESH WATER		O-06 65-10 127-...	13.00	Boiler			CANOL OILFIELD...	fresh water into boiler
2/12/2016	FRESH WATER	36.91	O-06 65-10 127-...		rig tank and boiler	3172		CANOL OILFIELD...	lease transfer from O-06 65-10 127-00
2/13/2016	FRESH WATER	14.00	MUNICIPAL		400bbl	20-0001		HRN CONTRACTI...	14m³ potable water cotaining < 4000 TDS to flush...
2/14/2016	FRESH WATER	65.00	LAKE		400bbl + Rig tank	3173		CANOL OILFIELD...	Fresh water transferred
2/14/2016	FRESH WATER	28.00	MUNICIPAL		400bbl			HRN CONTRACTI...	Potable water
2/16/2016	FRESH WATER		WELL	26.00	OTHER LOCATIO...	3175		CANOL OILFIELD...	Transfer 28m³ fresh water to N-20 65-00 126-45
2/17/2016	FRESH WATER	11.50	MUNICIPAL		400bbl	5271		PBN ENERGY SE...	Potable Fresh Water
2/18/2016	FRESH WATER	30.00	MUNICIPAL		400bbl Tank	5101		PBN ENERGY SE...	30.0m³ potable water.
2/19/2016	FRESH WATER			28.00	DISPOSAL			CANOL OILFIELD...	(Cascade) - Haul 28m³ to Tervita 103 for disposal
2/19/2016	FRESH WATER			26.10	OTHER LOCATIO...	5102		PBN ENERGY SE...	Transfer Fresh Water to WW02-A (300 / C-11 65-1...
2/28/2016	FRESH WATER		WELL	22.00	DISPOSAL	537805 BOL		CANOL OILFIELD...	Fluid hauled to disposal Tervita 103 d-96-K / 94-A-12
2/28/2016	FRESH WATER		WELL	21.00	DISPOSAL	537804 BOL		CANOL OILFIELD...	Fluid hauled to disposal Tervita 103 d-96-K / 94-A-12
2/28/2016	FRESH WATER			16.00	O-06 65-00 127-0			CANOL OILFIELD...	Sent to O-06 65-10 127-00 lease for storage in 40...
2/28/2016	FRESH WATER	21.00	MUNICIPAL		OTHER LOCATIO...			CANOL OILFIELD...	Fluid transferred to dirty 400bbl from 300/I-06 65-1...
2/28/2016	FRESH WATER	12.00	MUNICIPAL		OTHER LOCATIO...			CANOL OILFIELD...	Fluid transferred to dirty 400bbl from 300/D-04 65-...
2/28/2016	FRESH WATER	10.00	MUNICIPAL					HRN CONTRACTI...	Hot water to fill liner
2/28/2016	FRESH WATER	6.00	MUNICIPAL					CANOL OILFIELD...	Water for steamer on liners
2/28/2016	FRESH WATER	5.00	N-20 65-00 126-45		400bbl			CANOL OILFIELD...	Fluid Transferred from N-20 65-00 126-45

### WELL FLUIDS

Start Date	Fluid	To (m³)	From (m³)	Dens (kg/m³)	Non-recov (m³)	Zone	Note
2/14/2016	FRESH WATER	85.71		1,000.00		CANOL, Original Hole	Fresh Water bullheaded down well.
2/17/2016	FRESH WATER	1.60		1,000.00		CANOL, Original Hole	Fresh water containing <4000ppm TDS to top up Csg.

### JOB FLUID SUMMARY

Fluid	To lease (m³)	From lease (m³)	Lease Bal (m³)	To well (m³)	From well (m³)	Left to recover (m³)
FRESH WATER	239.41	152.10	0.00	87.31	0.00	87.31

## **Appendix 5     SCVF Test Summary**

# COPRC MIRROR LAKE P-20 65-00 126-45

## Well Header

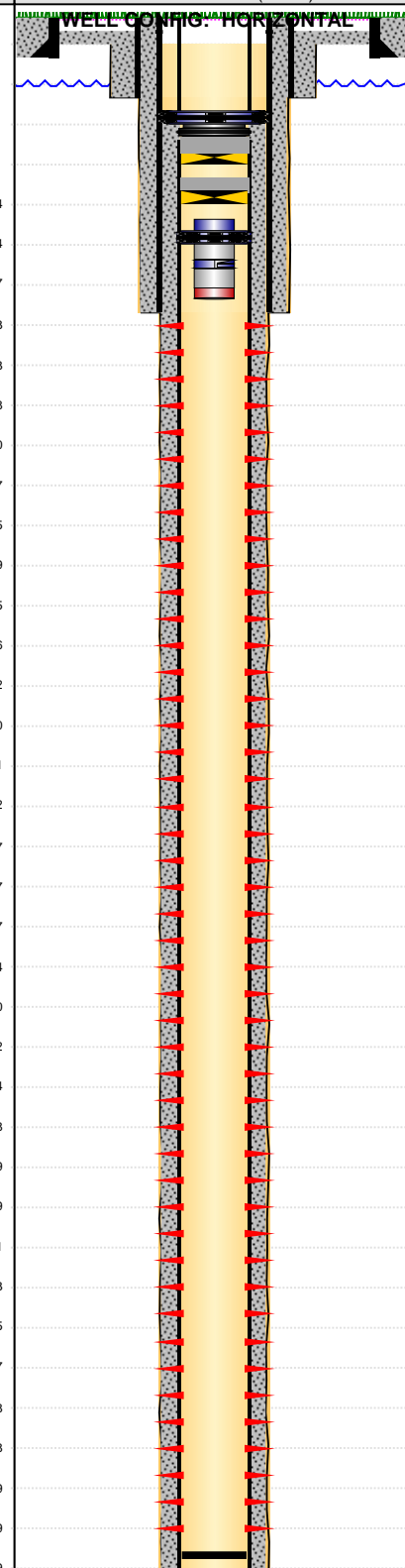
Legal WellName	API / UWI	Operator	License No.
COPRC MIRROR LAKE P-20 65-00 126-45	300/P20 65-00 126-45/0	CONOCOPHILLIPS	EL 470 WID 2081

## SCVF TESTS

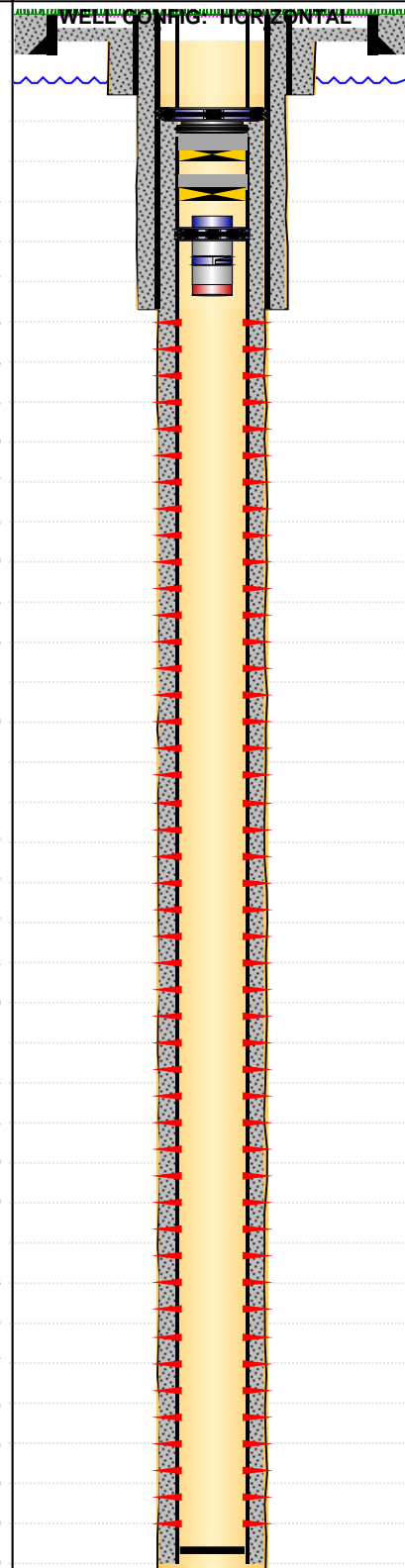
Type	Date	Operator	Detection	Com
SCVF	3/2/2014 18:00	Don Williams	No	March 02,2014 Installed on SCVF adaptor with 1 inch of enviromentally friendly fluid (seen NO bubbles in 10 min)
SCVF	3/14/2014 19:15	Mike Flett	No	Performed S.C.V.F. as per directive 20 , No flow detected in 10 min.
SCVF	1/28/2016 12:15	Mike Flett	No	Performed a 10 min SCVF as per Directive 20 , No bubbles - No LEL's present.
SCVF	2/14/2016 09:00	Justin Minault	No	Performed bubble test on SCV for 10min with no flow.
SCVF	2/27/2016 08:15	Mike Flett	No	Performed a 10 min SCVF as per Directive 20 - No bubbles, Checked for LEL's - None present.

## **Appendix 6      Final Wellbore Schematic**

Report Printed: 3/10/2016

HORIZONTAL - Original Hole, 3/4/2016 3:30:00 PM			PERFORATIONS					
MD (mKB )	Incl (°)	Vertical schematic (actual)	Date	Top (mKB)	Btm (mKB)	Type	Zone	Current Status
			3/10/2014	2,516.00	2,517.00	Perforated	CANOL, Original Hole	Open - Flowing
			3/9/2014	2,536.00	2,537.00	Perforated	CANOL, Original Hole	Open - Flowing
			3/9/2014	2,555.00	2,556.00	Perforated	CANOL, Original Hole	Open - Flowing
18.0	0.5		3/9/2014	2,575.00	2,576.00	Perforated	CANOL, Original Hole	Open - Flowing
256.0	0.2		3/9/2014	2,594.00	2,595.00	Perforated	CANOL, Original Hole	Open - Flowing
1,728.8	1.6		3/9/2014	2,613.00	2,614.00	Perforated	CANOL, Original Hole	Open - Flowing
1,739.3	2.3		3/9/2014	2,633.00	2,634.00	Perforated	CANOL, Original Hole	Open - Flowing
2,015.3	57.4		3/9/2014	2,652.00	2,653.00	Perforated	CANOL, Original Hole	Open - Flowing
2,026.7	61.4		3/9/2014	2,672.00	2,673.00	Perforated	CANOL, Original Hole	Open - Flowing
2,030.1	62.7		3/9/2014	2,691.00	2,692.00	Perforated	CANOL, Original Hole	Open - Flowing
2,245.0	89.3		3/9/2014	2,710.00	2,711.00	Perforated	CANOL, Original Hole	Open - Flowing
2,265.0	88.3		3/8/2014	2,730.00	2,731.00	Perforated	CANOL, Original Hole	Open - Flowing
2,303.0	89.8		3/8/2014	2,749.00	2,750.00	Perforated	CANOL, Original Hole	Open - Flowing
2,323.0	90.0		3/8/2014	2,769.00	2,770.00	Perforated	CANOL, Original Hole	Open - Flowing
2,361.0	90.7		3/8/2014	2,788.00	2,789.00	Perforated	CANOL, Original Hole	Open - Flowing
2,382.0	90.5		3/8/2014	2,807.00	2,808.00	Perforated	CANOL, Original Hole	Open - Flowing
2,419.0	89.9		3/8/2014	2,827.00	2,828.00	Perforated	CANOL, Original Hole	Open - Flowing
2,440.0	89.5		3/8/2014	2,846.00	2,847.00	Perforated	CANOL, Original Hole	Open - Flowing
2,478.0	88.6		3/8/2014	2,866.00	2,867.00	Perforated	CANOL, Original Hole	Open - Flowing
2,498.0	88.2		3/8/2014	2,885.00	2,886.00	Perforated	CANOL, Original Hole	Open - Flowing
2,536.0	88.0		3/8/2014	2,904.00	2,905.00	Perforated	CANOL, Original Hole	Open - Flowing
2,556.0	88.1		3/7/2014	2,924.00	2,925.00	Perforated	CANOL, Original Hole	Open - Flowing
2,594.0	89.2		3/7/2014	2,943.00	2,944.00	Perforated	CANOL, Original Hole	Open - Flowing
2,614.0	89.7		3/7/2014	2,962.00	2,963.00	Perforated	CANOL, Original Hole	Open - Flowing
2,652.0	89.7		3/7/2014	2,982.00	2,983.00	Perforated	CANOL, Original Hole	Open - Flowing
2,673.0	89.7		3/7/2014	3,001.00	3,002.00	Perforated	CANOL, Original Hole	Open - Flowing
2,710.0	89.4		3/7/2014	3,021.00	3,022.00	Perforated	CANOL, Original Hole	Open - Flowing
2,731.0	89.0		3/4/2014	3,040.00	3,041.00	Perforated	CANOL, Original Hole	Open - Flowing
2,769.0	89.2		3/4/2014	3,059.00	3,060.00	Perforated	CANOL, Original Hole	Open - Flowing
2,789.0	89.4		3/4/2014	3,079.00	3,080.00	Perforated	CANOL, Original Hole	Open - Flowing
2,827.0	89.8		3/4/2014	3,098.00	3,099.00	Perforated	CANOL, Original Hole	Open - Flowing
2,847.0	89.9		3/4/2014	3,118.00	3,119.00	Perforated	CANOL, Original Hole	Open - Flowing
STIMULATION & TREATMENTS								
			Date	Zone	Type	Proppant Design (kg)	Proppant Frm (kg)	
			3/10/2014	CANOL, Original Hole		100,000.0	108,526.0	
			3/10/2014	CANOL, Original Hole	X-Link	100,000.0	102,853.0	
			3/10/2014	CANOL, Original Hole	X-Link	100,000.0	106,505.0	
			3/10/2014	CANOL, Original Hole	X-Link	100,000.0	106,992.0	
			3/9/2014	CANOL, Original Hole	X-Link	100,000.0	104,701.0	
			3/9/2014	CANOL, Original Hole	X-Link	100,000.0	113,824.0	
			3/8/2014	CANOL, Original Hole	X-Link	100,000.0	107,699.0	
			3/8/2014	CANOL, Original Hole	X-Link	100,000.0	100,000.0	
			3/7/2014	CANOL, Original Hole	X-Link	100,000.0	101,046.0	
			3/7/2014	CANOL, Original Hole	X-Link	100,000.0	92,100.0	
			3/6/2014	CANOL, Original Hole	X-Link	100,000.0	7,840.0	



HORIZONTAL - Original Hole, 3/4/2016 3:30:00 PM			OTHER IN HOLE			
MD (mKB)	Incl (°)	Vertical schematic (actual)	Run Date	Description	Top Depth (mKB)	Bottom Depth (mKB)
			2/21/2014	Barrier - Packer	1,727.49	1,728.60
			OD (mm)	ID (mm)	Make	Model
			153.7	120.7	Weatherford	'NTD' Liner Top Packer
18.0	0.5		<b>Comment</b>			
256.0	0.2		Rig up Hallmark power tongs, make up 1-114.3mm float shoe, 1-joint of 114.3mm, 17.26kg/m, P-110, LTC production liner and 1-114.3mm float collar and then run 100-joints of 114.3mm, 17.26kg/m, P-110, LTC production liner from 3148.70m to 1727.49m. Run 101 x Volant Hydroform centralizers from 1729m to 3148m, fill every 20 joints and break circulation every 600m, tag bottom at 3152mMD, circulate bottoms up and clean hole, rig up cementers, cement liner at 3148.70mMD up to liner top, drop dart and displace with fresh water, bump plug 3,500kPA over final circulating pressure, bleed off, check floats, pressure up to 28,000kPA and set liner with liner top packer at 1727.49, circulate out pre-flush and 2m3 of excess cement out, displace hole with fresh water, rig out cementers, flowcheck, rig up laydown truck, laydown drill pipe and heavy weight drill pipe, run in the rest of the drill pipe in the derrick, laydown drill pipe, rig up and run USIT log and pressure pass USIT log, rig up power tongs, run 114.3mm tie-back liner, space out, land liner hanger seal assembly with 19,000dan compression and tie into top of liner top packer, remove landing joint, pressure test packoff seal assembly, pressure test 114.3mm x 177.8mm annulus to 15,000kPA with Schlumberger cementers.			
1,728.8	1.6		Run Date	Description	Top Depth (mKB)	Bottom Depth (mKB)
1,739.3	2.3		1/28/2016	Cement Plug	2,003.76	2,015.00
2,015.3	57.4		OD (mm)	ID (mm)	Make	Model
2,026.7	61.4		101.6		Dimark	1830 Kg/m³ Warm Plug
2,030.1	62.7		<b>Comment</b>			
2,245.0	89.3		Dicorp Warm Plug			
2,265.0	88.3		Run Date	Description	Top Depth (mKB)	Bottom Depth (mKB)
2,303.0	89.8		1/28/2016	Bridge Plug - Permanent	2,015.00	2,015.30
2,323.0	90.0		OD (mm)	ID (mm)	Make	Model
2,361.0	90.7		101.6		Weatherford	
2,382.0	90.5		<b>Comment</b>			
2,419.0	89.9		Weatherford 10K Permanent Bridge Plug			
2,440.0	89.5		Run Date	Description	Top Depth (mKB)	Bottom Depth (mKB)
2,478.0	88.6		1/29/2016	Bridge Plug - Permanent	1,739.00	1,739.30
2,498.0	88.2		OD (mm)	ID (mm)	Make	Model
2,536.0	88.0		101.6		Weatherford	
2,556.0	88.1		<b>Comment</b>			
2,594.0	89.2		Weatherford 10K Permanent Bridge Plug			
2,614.0	89.7		Run Date	Description	Top Depth (mKB)	Bottom Depth (mKB)
2,652.0	89.7		1/29/2016	Cement Plug	1,728.83	1,739.00
2,673.0	89.7		OD (mm)	ID (mm)	Make	Model
2,710.0	89.4		101.6		Dimark	1830 Kg/m³ Warm Plug
2,731.0	89.0		<b>Comment</b>			
2,769.0	89.2		Dicorp Warm Plug			
2,789.0	89.4					
2,827.0	89.8					
2,847.0	89.9					
2,885.0	88.9					
2,905.0	89.1					
2,943.0	89.3					
2,963.0	89.5					
3,001.0	89.7					
3,022.0	89.8					
3,069.0	89.8					
3,080.0	89.9					
3,118.0	89.9					
3,148.7	89.9					

## **Appendix 7      Gas Analyses – Jan 22, 2016**

07000809D	TLG				16G066709D
<small>Container Identification</small>	<small>Sample Point Code</small>	<small>Meter Code</small>	<small>AGAT WDMS Number</small>	<small>Previous Number</small>	<small>Laboratory Number</small>
CONOCOPHILLIPS CANADA RES. CORP.			WELLHEAD TUBING		300/P20 65-00 126-45/0
<small>Operator Name</small>			<small>Sampling Point</small>		<small>Unique Well Identifier</small>
COPRC MIRROR LAKE P20-65-00 126-45		EL 470			
<small>Well Name</small>		<small>Well License</small>	<small>Well Status</small>	<small>Well Fluid Status</small>	<small>LSD</small>
MIRROR LAKE		CONOCOPHILLIPS CANADA RES. CORP.		MIKE FLETT	
<small>Field or Area</small>		<small>Pool or Zone</small>		<small>Sampler's Company</small>	<small>Name of Sampler</small>
<div style="border: 1px solid black; padding: 2px;"> <div style="display: flex; justify-content: space-between;"> <span><small>Test Interval (mKB)</small></span> <span><small>From</small>      <small>To</small></span> </div> <div style="display: flex; justify-content: space-between;"> <span>2245.0-3119.0 mKB</span> </div> </div>		<div style="border: 1px solid black; padding: 2px;"> <div style="display: flex; justify-content: space-between;"> <span><small>Elevation (m)</small></span> <span><small>KB</small>      <small>GRD</small></span> </div> <div style="display: flex; justify-content: space-between;"> <span>289.35</span> <span>284.15</span> </div> </div>		<div style="border: 1px solid black; padding: 2px;"> <div style="display: flex; justify-content: space-between;"> <span><small>Pressure (kPa)</small></span> <span><small>Source</small>      <small>Received</small></span> </div> <div style="display: flex; justify-content: space-between;"> <span>7300</span> <span>8300</span> </div> </div>	
				<div style="border: 1px solid black; padding: 2px;"> <div style="display: flex; justify-content: space-between;"> <span><small>Temperature (°C)</small></span> <span><small>Source</small>      <small>Received</small></span> </div> <div style="display: flex; justify-content: space-between;"> <span>-14</span> <span>23</span> </div> </div>	
Jan 28, 2016	Feb 08, 2016	Feb 26, 2016	Feb 26, 2016	Calgary - Liming Zhao - Reporter	
<small>Date Sampled</small>	<small>Date Received</small>	<small>Date Analyzed</small>	<small>Date Reported</small>	<small>Location - Approved By - Title</small>	
<small>Other Information</small> TUBING PRESSURE = 13,389 kPa, FIELD H2S: NA, POOL: CANOL.					

### COMPOSITION

Component	Mole Fraction		Liquid Volume mL / m <sup>3</sup>	Mole Fraction of Previous Analysis
	Air Free As Received	Air & Acid Gas Free As Received		
H <sub>2</sub>	0.0005	0.0005		
He	0.0001	0.0001		
N <sub>2</sub>	0.0046	0.0047		
CO <sub>2</sub>	0.0132	0.0000		
H <sub>2</sub> S	0.0000	0.0000		
C <sub>1</sub>	0.8138	0.8247		
C <sub>2</sub>	0.1031	0.1045	366.4	
C <sub>3</sub>	0.0311	0.0315	114.3	
iC <sub>4</sub>	0.0063	0.0064	27.5	
nC <sub>4</sub>	0.0092	0.0093	38.7	
iC <sub>5</sub>	0.0033	0.0033	16.1	
nC <sub>5</sub>	0.0031	0.0031	15.0	
C <sub>6</sub>	0.0047	0.0048	25.8	
C <sub>7+</sub>	0.0070	0.0071	44.3	
TOTAL	1.0000	1.0000	648.1	

### PROPERTIES

Calculated Heating Value @15 °C & 101.325 kPa (MJ/m<sup>3</sup>)

Gross			Net	
45.74	46.34	1.48	41.32	41.87
Air Free as Received	Moisture & Acid Gas Free	C <sub>7+</sub> Moisture Free	Air Free as Received	Moisture & Acid Gas Free

Calculated Density

Relative			Absolute	
0.716	0.705	3.570	692.6	0.877
Moisture Free As Received	Moisture & Acid Gas Free	C <sub>7+</sub> Moisture Free	C <sub>7+</sub> Density (kg/m <sup>3</sup> )	Total Sample Density (kg/m <sup>3</sup> )

Calculated Pseudo Critical Properties

As Sampled		Acid Gas Free	
4603.2	218.3	4566.1	217.2
pPc (kPa)	pTc (K)	pPc (kPa)	pTc (K)

Hydrogen Sulfide (H<sub>2</sub>S) (ppm)

Field Value		Laboratory Value		g/m <sup>3</sup>
Stain Tube	Tutweiler	Other	GC-SCD	0.00

Calculated Molecular Weight (Moisture Free as Received) (g/mol)

20.7	103.4
Total Sample	C <sub>7+</sub> Fraction

Calculated Vapour Pressure

56.66  
C<sub>5+</sub> (kPa)

Gas Compressibility

0.9944  
@ 15 °C & 101.325 kPa

WDMS Data Verification Check



Results relate only to items tested. Analysis and associated calculations are based on GPA 2261, GPA 2286, GPA 2145, AGA #5, and TP-17.

View or download your data online at [webfluids.agatlabs.com](http://webfluids.agatlabs.com)

07001068E				16G066709E	
Container Identification	Sample Point Code	Meter Code	AGAT WDMS Number	Previous Number	Laboratory Number
CONOCOPHILLIPS CANADA RES. CORP.			WELLHEAD		300/P20 65-00 126-45/0
Operator Name			Sampling Point		Unique Well Identifier
COPRC MIRROR LAKE P20-65-00 126-45		EL 470			
Well Name	Well License	Well Status	Well Fluid Status	LSD	
MIRROR LAKE			CONOCOPHILLIPS CANADA RES. CORP.		MIKE FLETT
Field or Area	Pool or Zone	Sampler's Company		Name of Sampler	
<div>Test Interval (mKB)</div> <div>2245.0-3119.0 mKB</div> <div>From To</div>		<div>Elevation (m)</div> <div>289.35 284.15</div> <div>KB GRD</div>		<div>Pressure (kPa)</div> <div>6000 3100</div> <div>Source Received</div>	
				<div>Temperature (°C)</div> <div>-14 23</div> <div>Source Received</div>	
Jan 28, 2016	Feb 08, 2016	Feb 16, 2016	Feb 16, 2016	Calgary - Liming Zhao - Reporter	
Date Sampled	Date Received	Date Analyzed	Date Reported	Location - Approved By - Title	
Other Information: PRODUCTION CASING PRESSURE = 13,268 kPa, H2S: FIELD = NA/LAB = ND, WELLHEAD - PRODUCTION CASING GAS, FORMATION: CANOL					

### COMPOSITION

Component	Mole Fraction		Liquid Volume mL / m³	Mole Fraction of Previous Analysis
	Air Free As Received	Air & Acid Gas Free As Received		
H <sub>2</sub>	0.0007	0.0007		
He	0.0001	0.0001		
N <sub>2</sub>	0.0061	0.0061		
CO <sub>2</sub>	TRACE	0.0000		
H <sub>2</sub> S	0.0000	0.0000		
C <sub>1</sub>	0.8234	0.8234		
C <sub>2</sub>	0.1079	0.1079	383.4	
C <sub>3</sub>	0.0355	0.0355	130.5	
iC <sub>4</sub>	0.0078	0.0078	34.1	
nC <sub>4</sub>	0.0093	0.0093	39.1	
iC <sub>5</sub>	0.0032	0.0032	15.6	
nC <sub>5</sub>	0.0024	0.0024	11.6	
C <sub>6</sub>	0.0022	0.0022	12.1	
C <sub>7+</sub>	0.0014	0.0014	9.1	
TOTAL	1.0000	1.0000	635.5	

### PROPERTIES

Calculated Heating Value @15 °C & 101.325 kPa (MJ/m³)				
<b>Gross</b>		<b>Net</b>		
<b>45.28</b>	<b>45.28</b>	<b>0.30</b>	<b>40.88</b>	<b>40.88</b>
Air Free as Received	Moisture & Acid Gas Free	C <sub>7+</sub> Moisture Free	Air Free as Received	Moisture & Acid Gas Free
Calculated Density				
<b>Relative</b>		<b>Absolute</b>		
<b>0.688</b>	<b>0.688</b>	<b>3.632</b>	<b>695.1</b>	<b>0.843</b>
Moisture Free As Received	Moisture & Acid Gas Free	C <sub>7+</sub> Moisture Free	C <sub>7+</sub> Density (kg/m³)	Total Sample Density (kg/m³)
Calculated Pseudo Critical Properties				
<b>As Sampled</b>		<b>Acid Gas Free</b>		
<b>4577.9</b>	<b>215.4</b>	<b>4577.9</b>	<b>215.4</b>	
pPc (kPa)	pTc (K)	pPc (kPa)	pTc (K)	
Hydrogen Sulfide (H <sub>2</sub> S) (ppm)				
<b>Field Value</b>		<b>Laboratory Value</b>		<b>g/m³</b>
				<b>0.00</b>
Stain Tube	Tutweiler	Other	GC-SCD	
Calculated Molecular Weight (Moisture Free as Received) (g/mol)				
<b>19.9</b>		<b>105.2</b>		
Total Sample		C <sub>7+</sub> Fraction		
Calculated Vapour Pressure			Gas Compressibility	
<b>86.57</b>			<b>0.9954</b>	
C <sub>5+</sub> (kPa)			@ 15 °C & 101.325 kPa	

WDMS Data Verification Check



Results relate only to items tested. Analysis and associated calculations are based on GPA 2261, GPA 2286, GPA 2145, AGA #5, and TP-17.

View or download your data online at [webfluids.agatlabs.com](http://webfluids.agatlabs.com)

## **Appendix 8     Static Gradient – Jan 23, 2016**

# Pressure Survey Report

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## LONKAR SERVICES

8080 Edgar Industrial Crescent  
Red Deer, Alberta  
T4P 3R3

RED DEER 403.347.9727  
CALGARY 403.269.9477

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CONOCOPHILLIPS CANADA RESOURCES CORP.

COPRC MIRROR LAKE P-20 65-00 126-45  
300/P20 65-00 126-45/0

CANOL

JAN 30, 2016

Static Gradient

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Report Prepared by

E.S. KYLE INSTRUMENT LTD.

Red Deer, AB  
PH 403.309.0980

Scott Brilz  
Ref #: RD16-0031

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## Well Information

CONOCOPHILLIPS CANADA RESOURCES CORP.  
COPRC MIRROR LAKE P-20 65-00 126-45  
300/P20 65-00 126-45/0

JAN 30, 2016

### Static Gradient

EUB Well License Number: 2081  
Test Purpose: Other  
Field: MIRROR LAKE  
Formation Name: CANOL  
Well Fluid Status: (06) Water H2S: N  
Well Type: Horizontal  
KB Elevation: 289.35 Open Hole: N  
CF Elevation: 283.95

Production Interval:	2015.90 - 2025.32	2245.00 - 3119.00
Mid Point Perfs.:	2020.61 MKB-TVD	2682.00 MKB-LOG

Producing Through: Tubing  
60.30 MM Tbg. 2025.30 M KB  
114.30 MM Csg. 3148.70 M KB  
PBTD: 3129.60 M KB

## Test Summary

Start of Test: 2016 01 30 1534  
Well Shut-In: 2014 04 07 0800 15921.6 Hrs  
Final Test Time: 2016 01 30 1809

Initial Tubing Pressure: 13440.0 Final Tubing Pressure: 13429.0 KPAA  
Initial Casing Pressure: 13380.0 Final Casing Pressure: 13380.0

Representative Depth: 1981.41 M KB-TVD 2020.00 MKB-LOG

Primary Gauge (1): Final Pressure: 18320.16 KPAA  
Final Temperature: 87.14 Deg. C

Gradient at Representative Depth: 10.452 KPAA / M  
Calculated Pressure at MPP: 18729.88 KPAA

Gauge Program: 10 SEC

Report Prepared by:

E.S. KYLE INSTRUMENT LTD.

Ref. #: RD16-0031



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Perforations

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CONOCOPHILLIPS CANADA RESOURCES CORP.  
COPRC MIRROR LAKE P-20 65-00 126-45  
300/P20 65-00 126-45/0

JAN 30, 2016

Static Gradient

FORMATION

PERF: ( MKB )

PERF: ( TVD )

CANOL

2245.00 - 3119.00

2015.90 - 2025.32

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Mid Point Perfs:

2682.00 MKB-LOG

2020.61 MKB-TVD

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# LONKAR SERVICES

## Gradient Test Data

**Jan 30 - 2016**

CONOCOPHILLIPS CANADA RESOURCES CORP.  
300/P20 65-00 126-45/0

COPRC MIRROR LAKE P-20 65-00 126-45  
Formation: CANOL

Initial Tubing Pressure: 13440.0 KPA  
Initial Casing Pressure: 13380.0 KPA

Final Tubing Pressure: 13429.0 KPA  
Final Casing Pressure: 13380.0 KPA

### Top Gauge

160343  
% Acc. 0.05 KPA 41369  
% Res. 0.0003 05/28/2015  
Boss Recorder - Strain

Gauge Serial # 160496  
Range 41369 KPA  
Calibration Date 05/28/2015  
Gauge Type Boss Recorder - Strain

### Bottom Gauge

160496  
41369 KPA 0.05 % Acc.  
05/28/2015 0.0003 % Res.  
Boss Recorder - Strain

01/30/16 15:34:17

Gauge Start Time

01/30/16 15:34:17

Depth MKB-LOG	Depth MKB-TVD	Temp Deg. C	Pressure KPA	Gradient KPA / M	Depth MKB-LOG	Depth MKB-TVD	Temp Deg. C	Pressure KPA	Gradient KPA / M
0.00	0.00	19.94	13439.64	0.000	0.00	0.00	9.36	13436.85	0.000
379.70	379.68	11.07	14265.84	2.176	380.00	379.98	11.21	14270.02	2.193
759.70	759.23	27.31	14990.41	1.909	760.00	759.53	27.47	14998.92	1.920
1139.70	1139.18	47.64	15634.95	1.696	1140.00	1139.48	47.86	15643.59	1.697
1519.70	1519.13	63.78	16215.43	1.528	1520.00	1519.43	63.96	16223.98	1.528
1899.70	1893.49	82.82	17419.92	3.217	1900.00	1893.79	82.84	17428.84	3.218
1929.70	1919.41	84.37	17678.53	9.977	1930.00	1919.71	84.39	17687.84	9.992
1959.70	1942.64	85.59	17915.77	10.213	1960.00	1942.94	85.61	17925.10	10.214
1989.70	1963.48	86.34	18126.77	10.125	1990.00	1963.78	86.35	18135.89	10.115
2019.70	1981.11	87.14	18311.72	10.491	2020.00	1981.41	87.14	18320.16	10.452
0.00	0.00	1.79	13425.10	0.000	0.00	0.00	1.75	13422.29	0.000

M KB-TVD 1981.11

Representative Depth

1981.41 M KB-TVD

On Bottom 87.06 18311.77  
Off Bottom 87.14 18311.72

01/30/16 17:08:00  
01/30/16 17:34:30

26.5 Mins. 87.08 18320.43  
87.14 18320.16

KPA / M 10.491

Gradient

10.452 KPA / M

### Calculated Pressure at MPP

KPA 18726.10 2020.61 18729.88 KPA

### Pressure Corrected to Run Depth

KPA 18314.87 1981.41 18320.16 KPA

16673.00 KPA M KB-TVD 1818.63 Calculated Fluid Level 1819.01 M KB-TVD KPA 16681.60

Remarks:

## Top Gauge

## Bottom Gauge

##	Real Time ( yyyy mm dd hh:mm:ss )	Time ( Hrs )	Pressure ( Kpa )	Temp ( C )	Time ( Hrs )	Pressure ( Kpa )	Temp ( C )
12	2016 01 30 15:34:22	0.0014	98.62	13.28	0.0014	98.59	14.39
24	2016 01 30 15:34:34	0.0047	98.59	13.37	0.0047	98.60	15.07
36	2016 01 30 15:34:46	0.0081	98.59	13.34	0.0081	98.59	15.98
48	2016 01 30 15:36:30	0.0369	98.60	14.25	0.0369	98.59	17.65
60	2016 01 30 15:38:30	0.0703	98.60	14.23	0.0703	98.60	16.71
72	2016 01 30 15:40:30	0.1036	98.69	17.99	0.1036	98.64	15.82
84	2016 01 30 15:42:30	0.1369	3103.01	18.73	0.1369	2788.16	13.81
96	2016 01 30 15:44:30	0.1703	13548.32	24.33	0.1703	13559.29	19.29
108	2016 01 30 15:46:30	0.2036	13438.21	22.67	0.2036	13436.97	15.20
120	2016 01 30 15:48:30	0.2369	13439.08	20.85	0.2369	13436.81	11.20
127	2016 01 30 15:49:40	0.2564	13439.64	19.94	0.2564	13436.85	9.36
0.00 MKB-TVD - Initial Surface							
132	2016 01 30 15:50:30	0.2703	13452.31	19.29	0.2703	13441.90	8.28
144	2016 01 30 15:52:30	0.3036	13730.45	0.69	0.3036	13710.53	0.38
156	2016 01 30 15:54:30	0.3369	14095.04	5.28	0.3369	14073.68	5.23
168	2016 01 30 15:56:30	0.3703	14266.63	10.38	0.3703	14271.03	10.56
180	2016 01 30 15:58:30	0.4036	14265.30	10.91	0.4036	14270.10	11.07
192	2016 01 30 16:00:30	0.4369	14265.84	11.07	0.4369	14270.02	11.21
379.98 MKB-TVD -							
204	2016 01 30 16:02:30	0.4703	14409.76	12.82	0.4703	14396.06	12.87
216	2016 01 30 16:04:30	0.5036	14687.56	18.70	0.5036	14674.22	18.78
228	2016 01 30 16:06:30	0.5369	14962.15	25.12	0.5369	14956.85	25.21
240	2016 01 30 16:08:30	0.5703	14992.05	27.10	0.5703	14998.82	27.32
252	2016 01 30 16:10:30	0.6036	14990.71	27.26	0.6036	14998.93	27.44
258	2016 01 30 16:11:30	0.6203	14990.41	27.31	0.6203	14998.92	27.47
759.53 MKB-TVD -							
264	2016 01 30 16:12:30	0.6369	14990.55	27.35	0.6369	14999.20	27.50
276	2016 01 30 16:14:30	0.6703	15279.63	33.02	0.6703	15266.39	33.03
288	2016 01 30 16:16:30	0.7036	15587.33	43.56	0.7036	15575.80	43.63
300	2016 01 30 16:18:30	0.7369	15636.41	47.40	0.7369	15642.82	47.66
312	2016 01 30 16:20:30	0.7703	15635.13	47.59	0.7703	15643.38	47.82
319	2016 01 30 16:21:40	0.7897	15634.95	47.64	0.7897	15643.59	47.86
1139.48 MKB-TVD -							
324	2016 01 30 16:22:30	0.8036	15635.19	47.67	0.8036	15643.99	47.88
336	2016 01 30 16:24:30	0.8369	15808.22	51.60	0.8369	15802.63	51.70
348	2016 01 30 16:26:30	0.8703	16003.49	57.47	0.8703	15996.70	57.58
360	2016 01 30 16:28:30	0.9036	16194.93	62.35	0.9036	16190.21	62.49
372	2016 01 30 16:30:30	0.9369	16215.43	63.68	0.9369	16223.08	63.88
384	2016 01 30 16:32:30	0.9703	16215.36	63.76	0.9703	16223.64	63.94

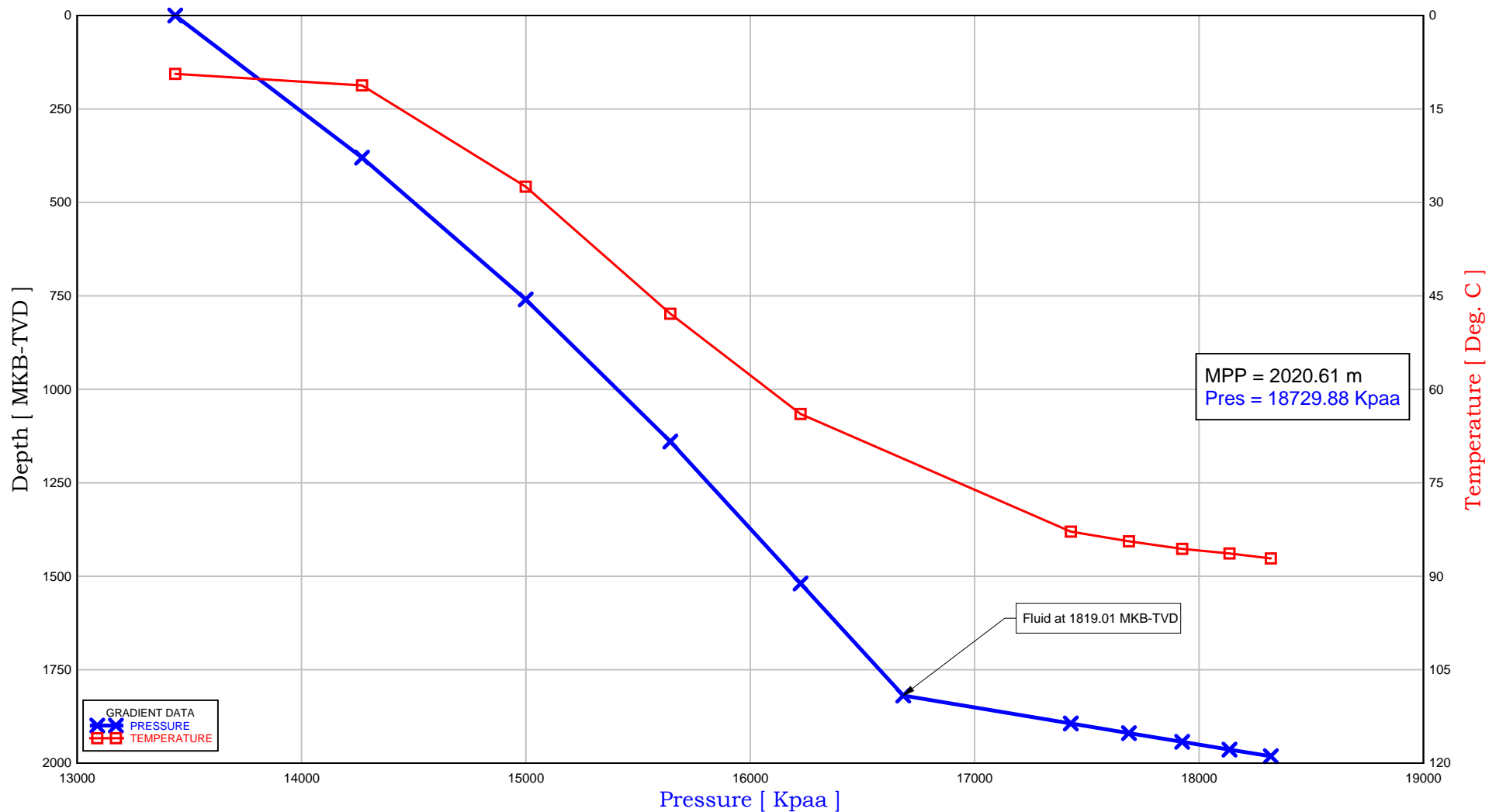
##	Real Time ( yyyy mm dd hh:mm:ss )	Time ( Hrs )	Pressure ( Kpaa )	Temp ( C )	Time ( Hrs )	Pressure ( Kpaa )	Temp ( C )
391	2016 01 30 16:33:40	0.9897	16215.43	63.78	0.9897	16223.98	63.96
						1519.43 MKB-TVD -	
396	2016 01 30 16:34:30	1.0036	16216.02	63.80	1.0036	16224.38	63.98
408	2016 01 30 16:36:30	1.0369	16465.36	67.88	1.0369	16454.70	67.90
420	2016 01 30 16:38:30	1.0703	17029.84	77.49	1.0703	16931.84	77.49
432	2016 01 30 16:40:30	1.1036	17420.42	82.61	1.1036	17428.47	82.79
444	2016 01 30 16:42:30	1.1369	17419.09	82.72	1.1369	17428.86	82.83
456	2016 01 30 16:44:30	1.1703	17419.89	82.81	1.1703	17428.81	82.84
458	2016 01 30 16:44:50	1.1758	17419.92	82.82	1.1758	17428.84	82.84
						1893.79 MKB-TVD -	
468	2016 01 30 16:46:30	1.2036	17606.92	83.07	1.2036	17567.20	83.01
480	2016 01 30 16:48:30	1.2369	17679.39	84.28	1.2369	17687.92	84.33
492	2016 01 30 16:50:30	1.2703	17678.62	84.36	1.2703	17687.77	84.38
496	2016 01 30 16:51:10	1.2814	17678.53	84.37	1.2814	17687.84	84.39
						1919.71 MKB-TVD -	
504	2016 01 30 16:52:30	1.3036	17834.19	84.62	1.3036	17807.32	84.57
516	2016 01 30 16:54:30	1.3369	17916.51	85.54	1.3369	17925.25	85.57
528	2016 01 30 16:56:30	1.3703	17915.78	85.59	1.3703	17925.12	85.61
530	2016 01 30 16:56:50	1.3758	17915.77	85.59	1.3758	17925.10	85.61
						1942.94 MKB-TVD -	
540	2016 01 30 16:58:30	1.4036	18042.02	85.71	1.4036	18014.96	85.68
552	2016 01 30 17:00:30	1.4369	18127.06	86.30	1.4369	18136.07	86.32
564	2016 01 30 17:02:30	1.4703	18126.72	86.34	1.4703	18135.90	86.35
568	2016 01 30 17:03:10	1.4814	18126.77	86.34	1.4814	18135.89	86.35
						1963.78 MKB-TVD -	
576	2016 01 30 17:04:30	1.5036	18131.32	86.35	1.5036	18136.60	86.36
588	2016 01 30 17:06:30	1.5369	18312.24	87.00	1.5369	18319.90	87.02
597	2016 01 30 17:08:00	1.5619	18311.77	87.06	1.5619	18320.43	87.08
						On Bottom	
600	2016 01 30 17:08:30	1.5703	18311.65	87.07	1.5703	18320.41	87.08
612	2016 01 30 17:10:30	1.6036	18311.51	87.09	1.6036	18320.31	87.10
624	2016 01 30 17:12:30	1.6369	18311.47	87.11	1.6369	18320.30	87.10
636	2016 01 30 17:14:30	1.6703	18311.45	87.11	1.6703	18320.30	87.11
648	2016 01 30 17:16:30	1.7036	18311.44	87.12	1.7036	18320.24	87.11
660	2016 01 30 17:18:30	1.7369	18311.47	87.12	1.7369	18320.24	87.12
672	2016 01 30 17:20:30	1.7703	18311.50	87.12	1.7703	18320.22	87.12
684	2016 01 30 17:22:30	1.8036	18311.58	87.13	1.8036	18320.16	87.12
696	2016 01 30 17:24:30	1.8369	18311.64	87.13	1.8369	18320.16	87.13
708	2016 01 30 17:26:30	1.8703	18311.62	87.13	1.8703	18320.15	87.13
720	2016 01 30 17:28:30	1.9036	18311.66	87.14	1.9036	18320.18	87.13
732	2016 01 30 17:30:30	1.9369	18311.66	87.14	1.9369	18320.17	87.13
744	2016 01 30 17:32:30	1.9703	18311.66	87.14	1.9703	18320.17	87.13

<b>##</b>	<b>Real Time</b> ( yyyy mm dd hh:mm:ss )	<b>Time</b> ( Hrs )	<b>Pressure</b> ( Kpa )	<b>Temp</b> ( C )	<b>Time</b> ( Hrs )	<b>Pressure</b> ( Kpa )	<b>Temp</b> ( C )
756	2016 01 30 17:34:30	2.0036	18311.72	87.14	2.0036	18320.16	87.14
					1981.41 MKB-TVD - Off Bottom		
768	2016 01 30 17:36:30	2.0369	18168.68	86.94	2.0369	18208.30	86.97
780	2016 01 30 17:38:30	2.0703	16911.33	82.78	2.0703	17022.64	82.97
792	2016 01 30 17:40:30	2.1036	16409.25	73.55	2.1036	16432.30	73.77
804	2016 01 30 17:42:30	2.1369	16099.42	64.94	2.1369	16128.14	65.06
816	2016 01 30 17:44:30	2.1703	15779.17	57.31	2.1703	15805.29	57.50
828	2016 01 30 17:46:30	2.2036	15436.93	47.18	2.2036	15466.18	47.43
840	2016 01 30 17:48:30	2.2369	15062.76	34.89	2.2369	15096.03	35.14
852	2016 01 30 17:50:30	2.2703	14657.09	24.33	2.2703	14695.06	24.51
864	2016 01 30 17:52:30	2.3036	14228.41	14.84	2.3036	14264.59	15.08
876	2016 01 30 17:54:30	2.3369	13772.19	4.96	2.3369	13803.66	5.08
888	2016 01 30 17:56:30	2.3703	13443.57	-0.45	2.3703	13447.18	-0.45
900	2016 01 30 17:58:30	2.4036	13423.57	1.11	2.4036	13422.32	1.00
901	2016 01 30 17:58:40	2.4064	13425.10	1.79	2.4064	13422.29	1.75
					0.00 MKB-TVD - Final Surface		
912	2016 01 30 18:00:30	2.4369	3213.60	3.64	2.4369	3865.05	4.28
924	2016 01 30 18:02:30	2.4703	98.76	2.52	2.4703	98.84	3.76
936	2016 01 30 18:04:30	2.5036	98.59	1.81	2.5036	98.59	3.22
948	2016 01 30 18:06:30	2.5369	98.60	-0.58	2.5369	98.59	0.06
960	2016 01 30 18:08:30	2.5703	98.62	-2.50	2.5703	98.60	-2.78

# **CONOCOPHILLIPS CANADA RESOURCES CORP.**

COPRC MIRROR LAKE P-20 65-00 126-45 { 300/P20 65-00 126-45/0 }

Jan 30 - 2016 { CANOL }

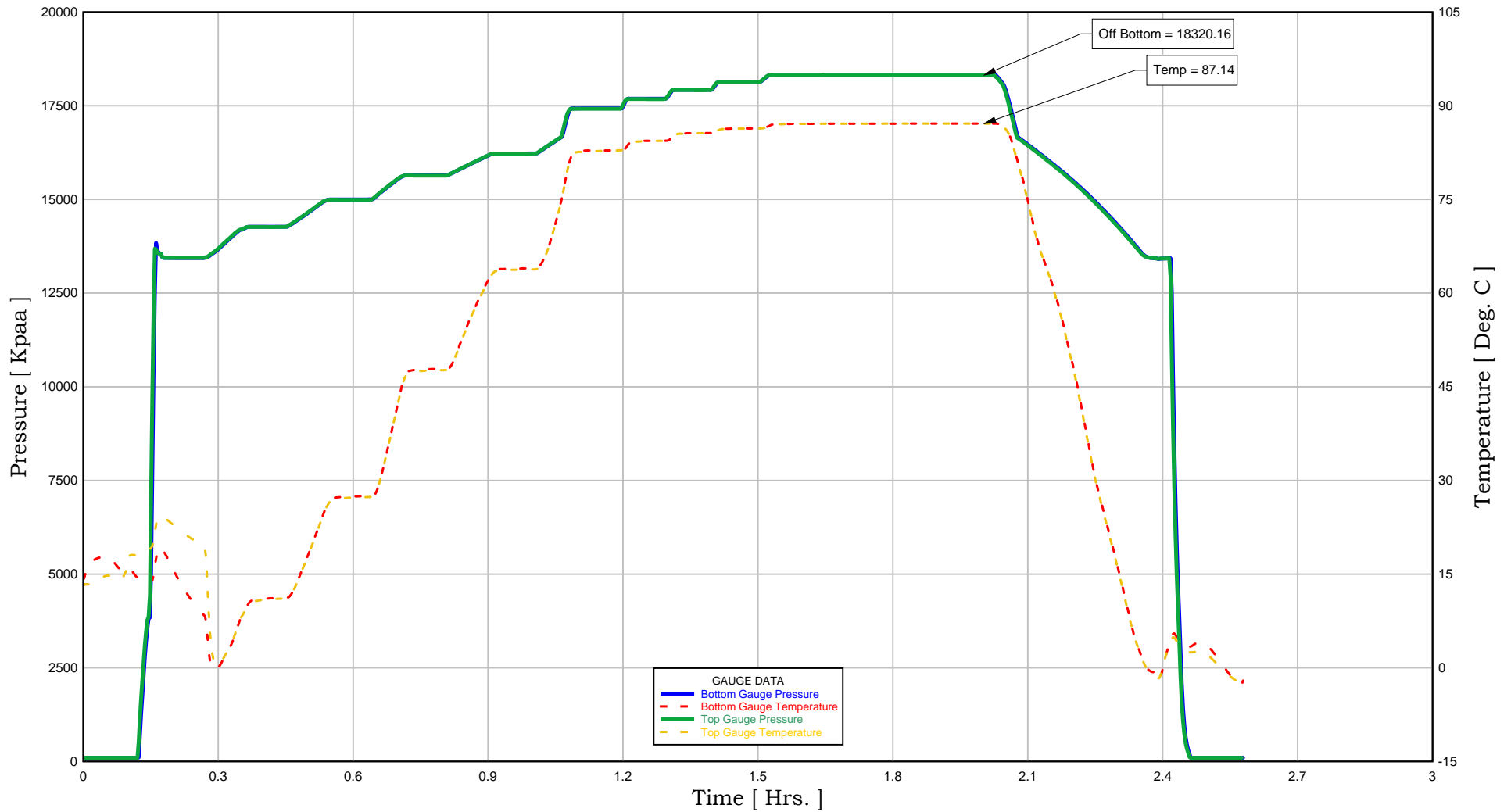




# **CONOCOPHILLIPS CANADA RESOURCES CORP.**

COPRC MIRROR LAKE P-20 65-00 126-45 { 300/P20 65-00 126-45/0 }

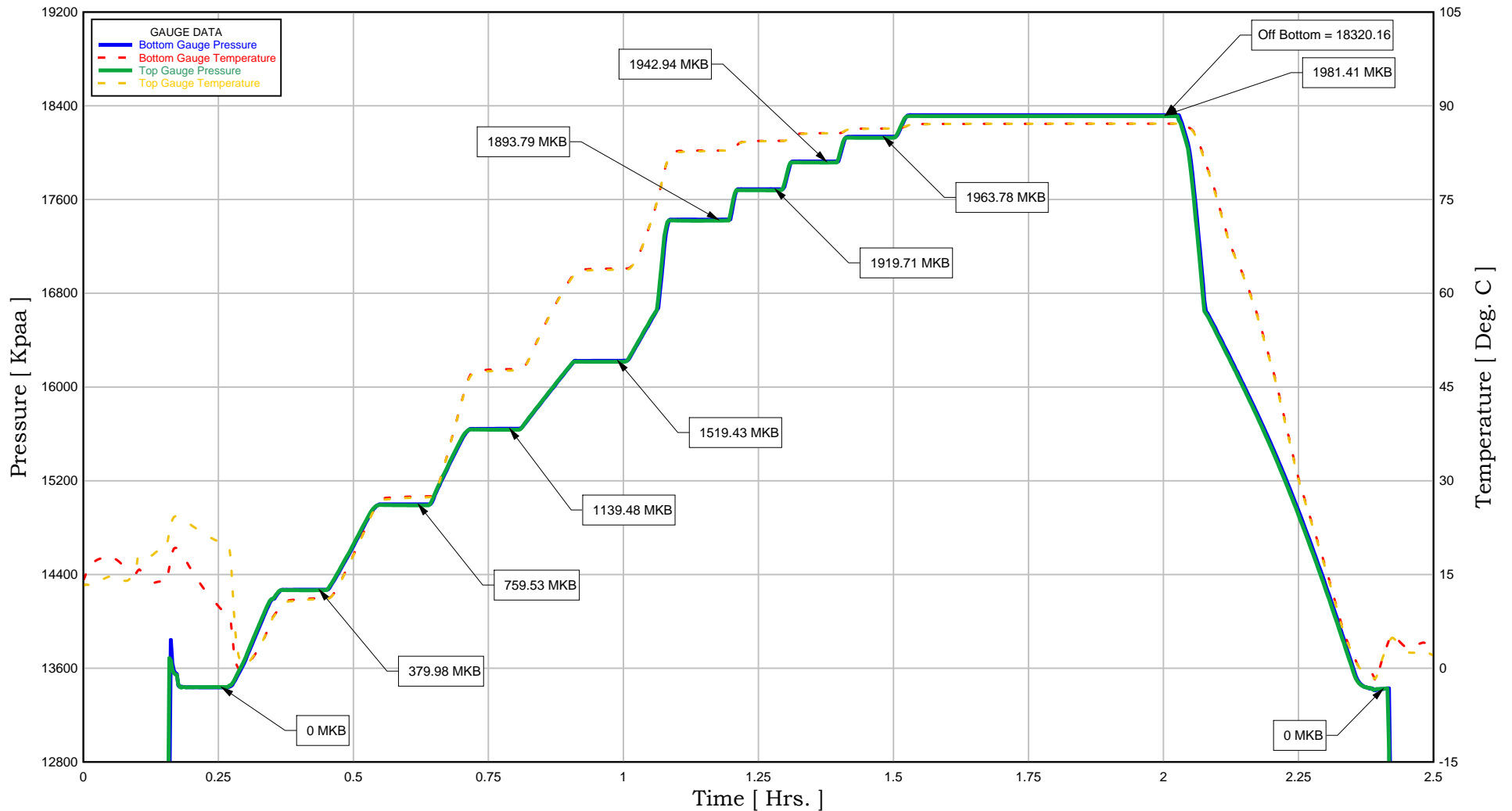
JAN 30, 2016 { CANOL }



# **CONOCOPHILLIPS CANADA RESOURCES CORP.**

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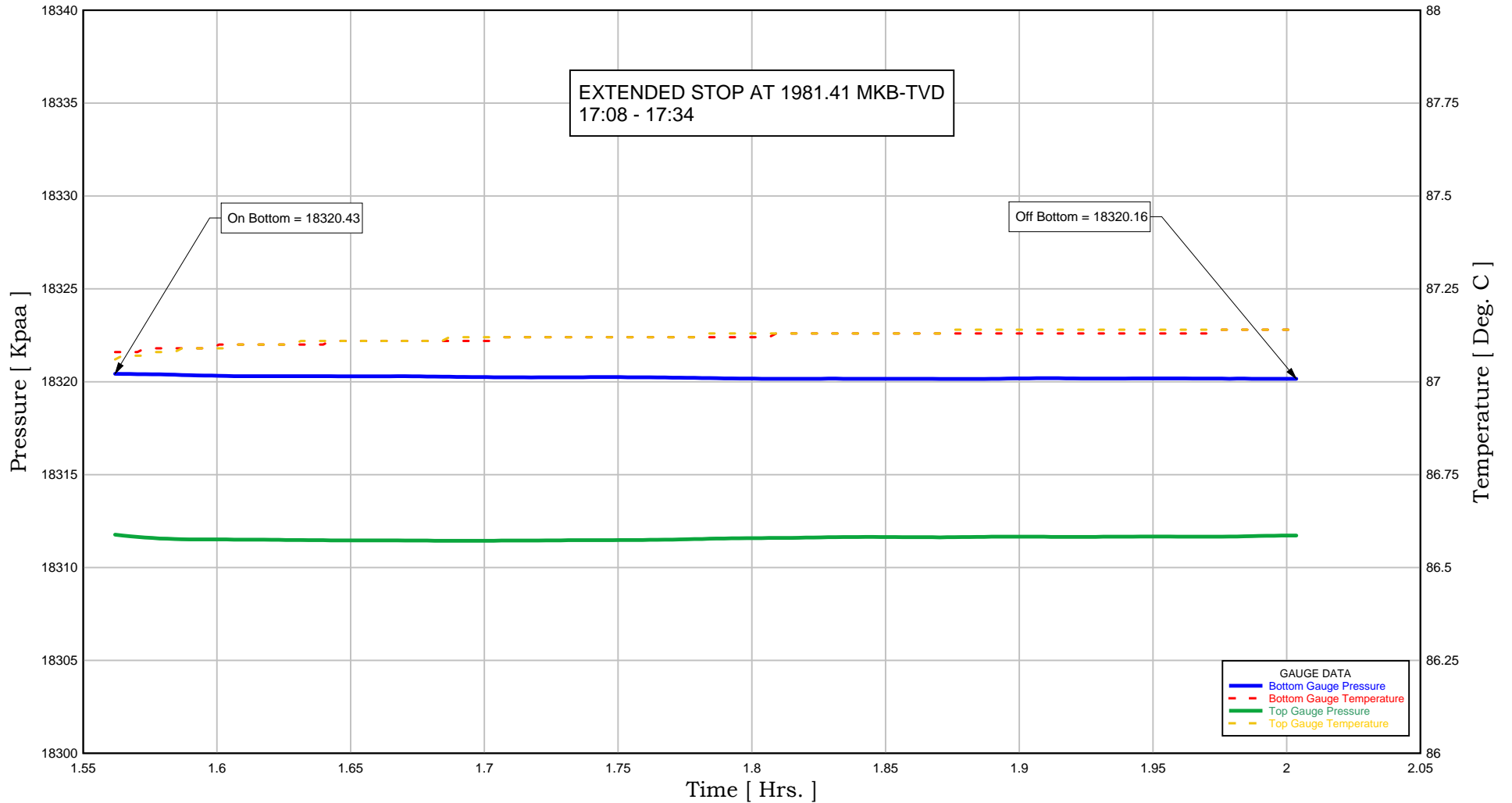
JAN 30, 2016 { CANOL }



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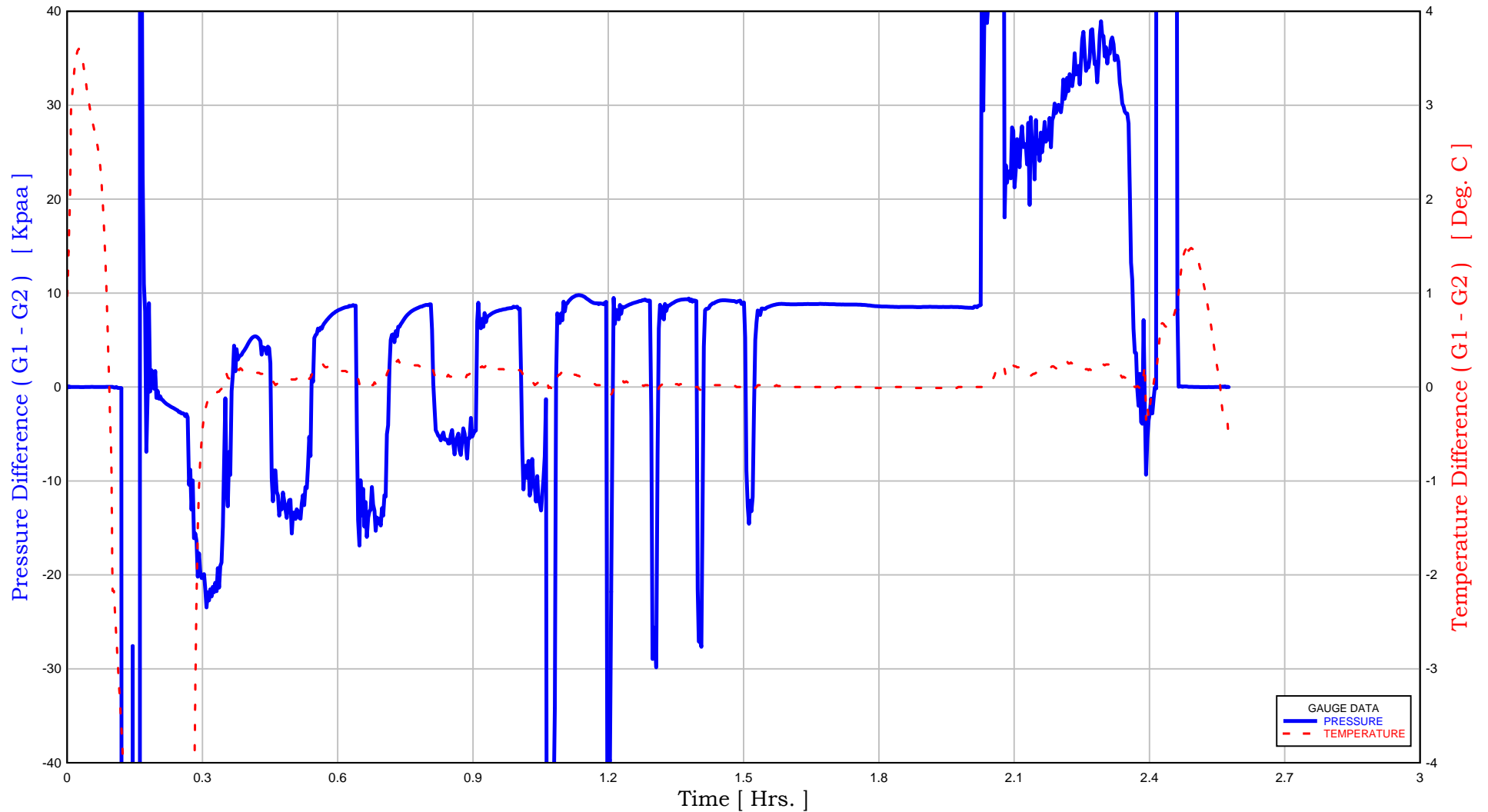
JAN 30, 2016 { CANOL }



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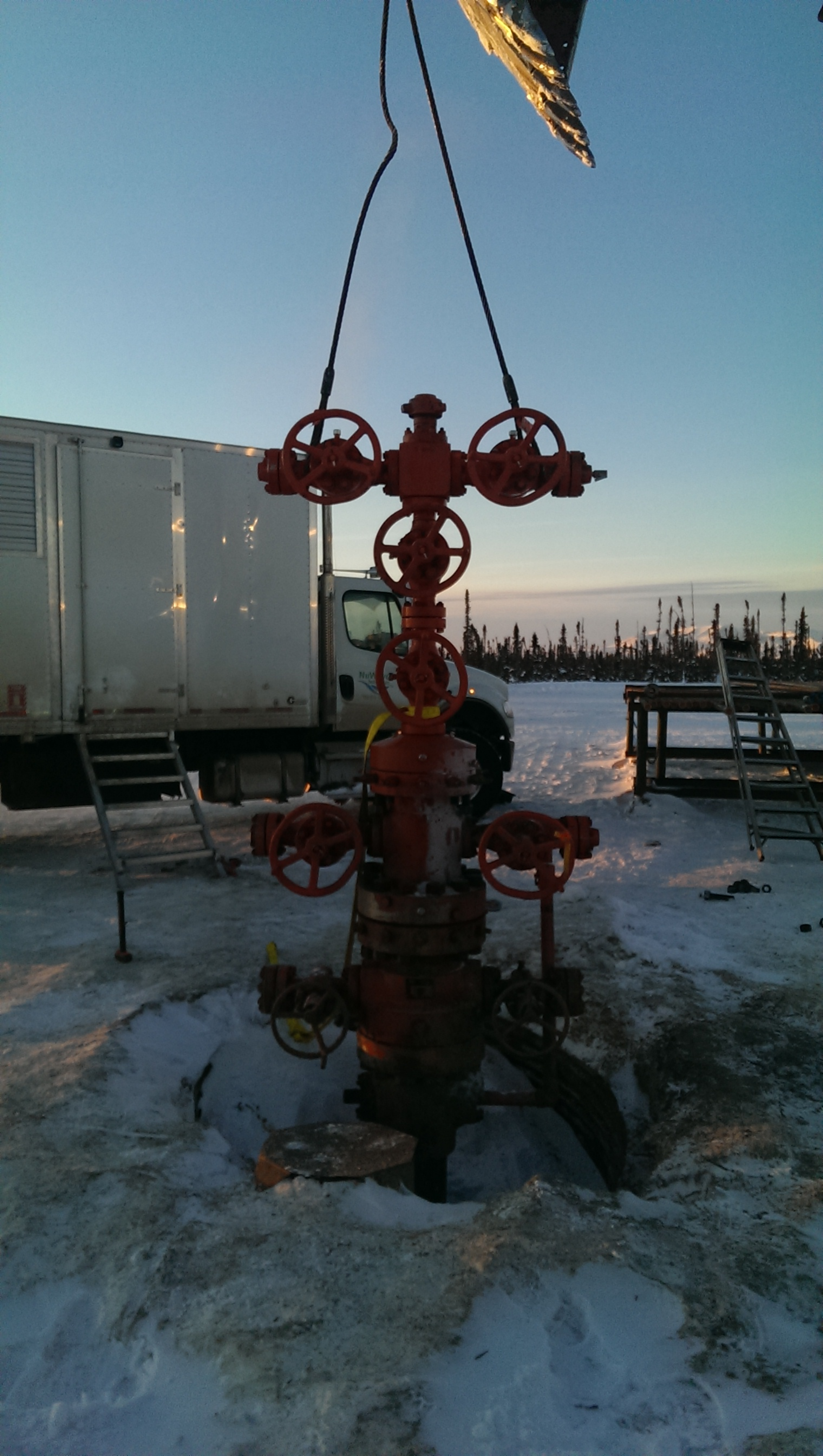
COPRC MIRROR LAKE P-20 65-00 126-45 { 300/P20 65-00 126-45/0 }

JAN 30, 2016 { CANOL }



## **Appendix 9      Cut and Cap Photos**









3000  
P-20-65-00  
126-45  
FEB 2016



3000

P-20-65-00

126-45

FEB 2016









300  
P-20-65-10  
126-30  
FEB 2016



