

# Daily Morning Report

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

Report #: 19  
Report Date: 2/19/2016  
Final Job Status:  
Final Report? No

### WELL HEADER INFORMATION

Country CANADA	State/Province N.W.T.	Region / Division WCBU	District NEW VENTURES	Field Name Mirror Lake	Field Code
Surface Legal Location N20 65-00 126-45		API / UWI 300/N20 65-00 126-45/0		License No. EL 470 WID 2079	
Orig KB/RT (m) 286.50	Ground Elevation (m) 281.30	KB-Grd (m) 5.20	KB-CF (m) 4.87	KB-TF (m) 4.32	Total Depth (mKB) 2,146.00
					PBTD (All) (mKB) Original Hole - 2,127.00

### JOB INFORMATION

Job Category ABANDONMENT	Primary Job Type ABANDONMENT P&A	Secondary Job Type SURFACE CASING VENT	Total Field Estimate (Cost) 889,701.35
Objective Abandon Cut and Cap			
Actual Start Date 1/16/2016 14:00	End Date	Abandon Date	Responsible Grp 1 coved
		Responsible Grp 2 lborbel	Responsible Grp 3 Michael Short

### AFE COST SUMMARY

AFE / RFE / Maint.# 10385949	Total AFE Amount (Cost) 1,310,000.00	Total AFE + Supp Amount (Cost) 1,310,000.00	Total Field Estimate (Cost) 889,701.35	AFE-Field Estimate (Cost) 420,298.65
AFE / RFE / Maint.# 10385945	Total AFE Amount (Cost) 946,350.00	Total AFE + Supp Amount (Cost) 946,350.00	Total Field Estimate (Cost)	AFE-Field Estimate (Cost) 946,350.00

### DAILY INFORMATION

Report Start Date 2/19/2016 06:00	Report End Date 2/20/2016 06:00	Daily Cost Total (Cost) 125,478.39	Cumulative Cost (Cost) 889,701.35	Personnel Regular Hours (hr) 271.00
Daily Contacts WS Superintendent, Derrick Cove, 780-831-1314; Abandonment Engineer, Louis Borbely, 403-650-3939; WS Supervisor, Michael Short, 403-348-7127; WS Supervisor, Marty Dushanek, 403-358-8911				Rig C&J Energy Services, 217
Tubing Pressure (kPa) 0	Casing Pressure (kPa) 0	Weather Clear	Temperature (°C) -38	Lease Condition good

### Last 24hr Summary

Perform retainer cement squeeze on Imperial Sand interval 1906 - 1908.0mKB. Final squeeze pressure- 18,500kPa, 4.7m³ slurry under retainer. Pull out of hole 60.3mm tubing. Crew Change; Filled Hole with Potable Fresh Water, Installed Wireline Flange above Rig's BOP Stack, Fired Boiler + Heated BOPs & Water.

### 24hr Forecast

Perform RBL/VDL/GR/CCL log from cement retainer (1901mKB) to surface. Static and pressure pass.

### PROCESS SAFETY REPORTING

Start Date		End Date		Process Safety Event	Activity at Time of Event
Start Time	End Time	Dur (hr)	Time P-T-X	Operation	
06:00	07:30	1.50	P	Tarped in & Heated TBG Stump + BOPs. <> CREW CHANGE. <>	
07:30	08:00	0.50	P	Held pre-job safety and operations meeting with all services. Review CPC PJHA, Cement squeeze hazards/ chemicals/ slippery lease conditions and use of traction control/ overhead loads/ hammering/wrenching/cold weather operations. -35°C discuss work and break times. use buddy system/ pinch points on floor/ pressure testing/ high pressure lines/ overhead loads/tag lines. Review transportation plan and muster areas with all workers. All workers safety certificates checked.	
08:00	10:15	2.25	P	<p>Perform daily walk around inspections and checks. Inspect all equipment for leaks/spills. None found. Sweep for LEL's, no LEL's</p> <p>Check well pressures: SICP- 0 SITP -0 Surface casing- vent nanny installed. Not uploading at this time. Roke will be on site to repair today.</p> <p>Spot and rig in SLB batch mixer and tank truck. Install treating line to tubing swivel. Treating line ran through flameless heater hose to keep warm.</p> <p>Discuss job scope and pumping volumes with supervisor.</p>	

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Start Time	End Time	Dur (hr)	Time P-T-X	Operation
10:15	15:45	5.50	P	<p>Perform 3.9m<sup>3</sup> squeezeCRETE and 1.0m<sup>3</sup> G and Gas Block retainer squeeze on Imperial Sand interval 1906.0-1908.0mKB as follows:</p> <p>Prime pump and heat lines with warm fluid. (24°C clean potable water containing &lt;4000mg/L TDS) Shut in and pressure test treating line to 32MPa (good test).</p> <p>Pump 4m<sup>3</sup> potable water to cool wellbore. Test slow rates while pumping. Able to achieve stable 12L/min rate in low range.</p> <p>Shut down pump.</p> <p>11:22hrs- Begin mixing chemicals for 4m<sup>3</sup> squeezeCRETE slurry. (actual 3.9m<sup>3</sup>) 12:35hrs- Slurry mixed, check density with pressurized scale - 1690kg/m<sup>3</sup></p> <p>12:39hrs- Begin pumping 3.9m<sup>3</sup> squeezeCRETE slurry 200L/min @16,400kPa 12:58hrs- End of 200L/min stage pressure at 4349kPa 100L cement under retainer</p> <p>12:59- Start mixing 1.0m<sup>3</sup> G &amp; gas block cement 1890kg/m<sup>3</sup> 13:10- Done mixing cement</p> <p>13:10hrs-Begin pumping 1.0m<sup>3</sup> G and gas block. Start pressure 3,600kPa 13:20hrs- End of 100L/min stage pressure at 6,800kPa 1.1m<sup>3</sup> under retainer</p> <p>13:20hrs- Start pumping water, Slow rate to 50L/min, pump 0.6m<sup>3</sup> water @ 6,800kPa starting pressure 13:30hrs- End of 50L/min stage pressure at 7726kPa 1.7m<sup>3</sup> under retainer</p> <p>13:30hrs- Slow rate to 30L/min, Pump 2.0m<sup>3</sup> water at 30L/min starting pressure @ 6700kPa 14:00hrs- 2.7m<sup>3</sup> under retainer 30L/min @11,260kPa 14:33hrs- End of 30L/min stage pressure at14,291kPa 3.7m<sup>3</sup> under retainer</p> <p>14:33hrs- Slow rate to 13L/min. Pump 1.0m<sup>3</sup> water at 13L/min starting pressure 12,800kPa 15:08hrs- 4.2m<sup>3</sup> under retainer 12L/min @ 17,200kPa 15:41hrs- Final Squeeze pressure 18,500kPa. 4.7m<sup>3</sup> slurry under retainer.</p>
15:45	16:45	1.00	P	<p>Sting out of retainer. J-latch stinger. Pick up to neutral, set down 1000daN, turn tubing to right/pull up and sting out. Rig off SLB treating iron. Rig on circulating equipment to backwash. Back wash with tubing bottom at top of retainer until clean. No cement on retainer. Returned 150-200L of slurry, capture with vac truck and offload into cement bin.</p> <p>Rig off circulating equipment.</p>
16:45	19:30	2.75	P	<p>Pull out of hole and lay down 32 joints of 60.3mm tubing. Stand 166 joints of 60.3mm tubing in derrick. Inspect J-latch stinger, all parts in place and in good condition. SLB take back to shop to re-dress tool. NOTE: Pins were Sheared on J Latch Stinger; New J Latch Stinger to be Flown up A.S.A.P.</p>
19:30	20:00	0.50	P	<p>Held PJHA Meeting with All Night Shift Personnel. (7 Total) Discussed Days Objectives, Procedures &amp; Potential Hazards, Discussed Cold Temperatures, Footing, LSR's 1, 3, 4 &amp; 8, Pre-Heat Pump Line, Filling the Hole with Potable Water from Clean Tank, Hammering = Stand Clear + Watch Swing Paths, Steam/Boiler Safety, Good Communication, Proper Lighting, Zero Spillage = Take Extra Time + Utilize Drip Trays, Installing Wireline Flange c/w E-Line BOPs above 178mm BOP Stack, Extreme Cold = Don't Overdo it, Take Extra Breaks + Lookout for Each Other, LSR # 3: Fall Arrest, LSR # 4: Overhead Equipment + LSR # 8: Safe Driving. Reviewed Transportation Plan, Emergency Phone Numbers, EMT + MTV. &gt; All Hands had 2016 Conoco Orientation + Valid Oilfield Tickets. &lt;</p>
20:00	20:15	0.25	P	<p>Held Cross-Over Meeting with Day Crew. Performed Daily Walk Around Lease Inspection.</p>
20:15	23:00	2.75	P	<p>- Filled CSG with 1.50 m<sup>3</sup> of Potable Fresh Water. - Installed Wireline Flange c/w E-Line BOPs above Rig's 178mm BOP Stack. - Repaired Tank Gauge on 63 m<sup>3</sup> Potable Water Tank.</p>
23:00	06:00	7.00	P	<p>Drained Pump &amp; Lines. Tarped in &amp; Heated Wireline BOPs + Rig's BOP Stack. Fired Boiler and Continued to Heat Water Tanks + BOPs through the Night.</p>

### FLUID 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	0.00	28.00	12.10	0.00	59.70

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### DAILY COST

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	24,000.00
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	2,290.00
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	1,500.00
Surface Completion Equipment Rental	CENTRAL MACKENZIE ENVIRONMENTAL LTD	Q300	40.00
Surface Completion Equipment Rental	CENTRAL MACKENZIE ENVIRONMENTAL LTD	Q300	60.00
Wellsite Supervision & Engineering	FOCUS WELLSITE SUPERVISION LTD	T130	1,620.00
Surface Completion Equipment Rental	HRN CONTRACTING LTD	Q300	175.00
Completion Fluids & Other Chem	HRN CONTRACTING LTD	G300	1,900.00
Wellsite Supervision & Engineering	MKH SHORT CONSULTING 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	325.00
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	PBN ENERGY SERVICES LTD	Q300	75.00
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	125.00
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	1,205.00
Completion Fluids & Other Chem	PBN ENERGY SERVICES LTD	G300	1,500.00
Surface Completion Equipment Rental	RIGSAT COMMUNICATIONS INC	Q300	15.00
Surface Completion Equipment Rental	RIGSAT COMMUNICATIONS INC	Q300	15.00
Surface Completion Equipment Rental	RIGSAT COMMUNICATIONS INC	Q300	15.00
Cementing Services & Materials	SCHLUMBERGER CANADA LIMITED	J200	82,338.39
Downhole Completion Equipment	SCHLUMBERGER CANADA LIMITED	C100	1,735.00
Wellsite Supervision & Engineering	TECTONIC ENERGY CONSULTING INC	T130	1,620.00
Completion Fluids & Other Chem	TERVITA CORP	G300	1,200.00
Surface Completion Equipment Rental	TRUMPETER CAMP COMPANY PARTNERSHIP LTD	Q300	450.00
Surface Completion Equipment Rental	TRUMPETER CAMP COMPANY PARTNERSHIP LTD	Q300	350.00
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
2/8/2016	Basal Lower Canol, Ori...	2,068.00	2,070.00	17.5	Squeezed
2/8/2016	Basal Lower Canol, Ori...	2,068.00	2,070.00	17.5	
3/27/2013	Basal Lower Canol, Ori...	2,059.00	2,060.00	20.0	Squeezed
3/28/2013	Middle Lower Canol, O...	2,023.00	2,024.00	20.0	Squeezed
2/8/2016	Basal Lower Canol, Ori...	2,015.00	2,017.00	17.5	
2/8/2016	Basal Lower Canol, Ori...	2,015.00	2,017.00	17.5	Squeezed
3/28/2013	Upper Lower Canol, Or...	1,993.00	1,994.00	20.0	Squeezed
2/14/2016	Upper Lower Canol, Or...	1,938.00	1,940.00	17.5	Squeezed
2/14/2016	Upper Lower Canol, Or...	1,938.00	1,940.00	17.5	Squeezed
2/17/2016	Imperial , Original Hole	1,906.00	1,908.00	17.5	Squeezed
2/17/2016	Imperial , Original Hole	1,906.00	1,908.00	17.5	Squeezed