

Daily Morning Report

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

Report #: 22
Report Date: 2/22/2016
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) 1,130,384.04
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) 1,130,384.04	AFE-Field Estimate (Cost) 179,615.96
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 2/22/2016 06:00	Report End Date 2/23/2016 06:00	Daily Cost Total (Cost) 131,153.51	Cumulative Cost (Cost) 1,130,384.04	Personnel Regular Hours (hr) 321.00
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) 8,500	Casing Pressure (kPa) 0	Weather Clear	Temperature (°C) -30	Lease Condition good

Last 24hr Summary

Perform retainer cement squeeze on Imperial Sand interval 1623.0-1625.0mKB as per program. Final squeeze pressure-11,577kPa. POH 60.3mm tubing. Installed Wireline Flange. Crew Change: Rig in E-Line, Perforated Twice from 1,170.5 - 1,173.5 mKB, POH, Take Feedrate of 0.35 m³/min @ 18,000 kPa, RIH & Set Retainer ce @ 1,160.0 mKB, P Tested above Retainer to 21,000 kPa, RO&R E-Line, RIH with J Latch Stinger on 60.3mm TBG, Spaced out, Function Tested Retainer, P Tested TBG + Annulus, Established Feedrate through Retainer, Shut in Well, Heated TBG Stump, Water Tanks + BOPs.

24hr Forecast

Confer with Calgary on possible Acid squeeze on Imperial sand interval 1170.5 - 1173.5mKB

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	Cont'd to Fire Boiler & Jet Heater to Heat TBG Stump, BOPs & Fresh Water. CREW CHANGE.	
07:30	08:00	0.50	P	Held pre-job safety and operations meeting with all services. Review CPC PJHA, Discuss cementing hazards/ pressure testing/ chemicals/ slippery lease conditions and use of traction control/ overhead loads/ hammering/wrenching/cold weather operations. -25°C discuss work and break times. use buddy system/ pinch points / high pressure lines/ overhead loads/tag lines/working at heights. Review transportation plan and muster areas with all workers. All workers safety certificates checked.	
08:00	09:30	1.50	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 -8500kPa (stung into retainer) Surface casing- vent meter installed.</p> <p>Spot and rig in SLB C&A pumper, batch mixers and tank truck. Install treating line onto tubing swivel. Treating line ran through flameless heater hose to keep warm. Tarp in and heat block and manifold on pumping unit.</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
09:30	15:45	6.25	P	<p>Perform 3.2m³ squeezeCRETE and 1.0m³ G and Gas Block retainer squeeze on Imperial Sand interval 1623.0-1625.0mKB as follows:</p> <p>09:30 Prime pump and heat lines with warm fluid. (24°C clean potable water containing <4000mg/L TDS) Shut in and pressure test treating line to 33MPa. Line was freezing off at transducer and not reading accurate pressures. Re-adjusted flameless heater hose to apply heat to section of plumbing. Re- test to 33MPa, test was good.</p> <p>10:30- Pump 3.5m³ potable water 100L/min to cool wellbore. Test slow rate while pumping. Able to achieve stable 12L/min @ 8600kPa in low range.</p> <p>Shut down pump.</p> <p>11:10hrs- Begin mixing chemicals for 3m³ squeezeCRETE slurry. (actual 3.2m³) 11:55hrs- Slurry mixed, check density with pressurized scale - 1670kg/m³</p> <p>11:57hrs- Begin pumping 3.2m³ squeezeCRETE slurry 75L/min @ 11,200kPa 12:42hrs- End of 75L/min stage pressure at 530kPa</p> <p>12:42- Start mixing 1.0m³ G & gas block cement 1920kg/m³ 12:50- Done mixing cement</p> <p>12:50hrs-Begin pumping 1.0m³ G and gas block at 30L/min Start pressure 499kPa Triplex pump not engaged feeding with C-pump 13:16hrs- End of 50L/min stage pressure at 1730kPa 0.94m³ under retainer</p> <p>13:16hrs- Start pumping water, Slow rate to 28L/min, pump 1.5m³ water @ 850kPa starting pressure 14:11hrs- End of 28L/min stage pressure at 7500kPa 2.44m³ under retainer</p> <p>14:11hrs- Slow rate to 18L/min, Pump 0.5m³ water at 18L/min starting pressure @ 7474kPa 14:38hrs-End of 18L/min stage pressure at 10,000kPa 2.94m³ under retainer</p> <p>14:38hrs- Slow rate to 12-15L/min, Pump 1.0m³ water at 12-15L/min starting pressure @ 10,000kPa 15:46hrs-End of 12-15L/min stage pressure at 11,577kPa 3.94m³ under retainer</p> <p>NOTE: attempted to get rate lower than 12-15L/min but not able to achieve a stable rate. Max pressure seen during slow rate 12,400kPa</p> <p>260L slurry left in tubing. 13 lineal meters of cement left on top of retainer. Estimated cement top @ 1601.8mKB</p>
15:45	16:45	1.00	P	<p>Sting out of retainer (snap latch stinger), no issues. Tubing went on vac. Rig off SLB treating iron. Pull and lay down 20 joints slowly. Tubing pulling dry indicating cement falling out of tubing. Rig on circulating equipment to backwash tubing. End of tubing at 1423.83mKB. Backwash tubing until clean. No cement in returns. Rig off circulating equipment.</p>
16:45	18:15	1.50	P	<p>Continue to pull out of hole 60.3mm tubing and snap latch stinger. Layed down a total of 48 joints. Stood 120 joints in derrick for next interval. Inspect snap latch stinger. All parts recovered and in good condition.</p>
18:15	19:30	1.25	P	<p>Rig in Lonkar wireline. Install wireline function tested 7" Bop's c/w 7 1/16"-5K Flange, torque down flange. Rig in sheaves. Lubricator wrapped with steam line and tarped to avoid freezing. CREW CHANGE.</p>
19:30	20:00	0.50	P	<p>Held PJHA Meeting with All Night Shift Personnel. (10 Total) Discussed Days Objectives, Procedures & Potential Hazards, Discussed Cold Temperatures, Footing, LSR's 1, 3, 4 & 8, E-Line Ops, Picking up Lub, Making up Perf Gun, P Testing Lub, Perforating (2 Gun Runs), Feedrate down CSG + Setting Retainer, Pre-Heat Pump Line, P Testing Retainer, Removing Wireline Flange, Rigging out E-Line, Sucking Back Displacement, RIH TBG & J Latch Stinger, Function Testing Retainer, P Testing TBG + CSG, Establishing Feedrate through the Retainer, Other Hazards; Hammering = Stand Clear + Watch Swing Paths, Steam/Boiler Safety, Good Communication, Proper Lighting, Zero Spillage = Take Extra Time + Utilize Drip Trays, LSR # 3: Fall Arrest, LSR # 4: Overhead Equipment + LSR # 8: Safe Driving + Road Radios. Reviewed Transportation Plan, Emergency Phone Numbers, EMT + MTV. > All Hands had 2016 Conoco Orientation + Valid Oilfield Tickets. <</p>

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Start Time	End Time	Dur (hr)	Time P-T-X	Operation
20:00	20:15	0.25	P	Held Cross-Over Meeting with Day Crew. Performed Daily Walk Around Lease Inspection.
20:15	23:00	2.75	P	Picked up Wireline Lubricator. Made up & RIH 2 x 127mm x 3 meter Owen Reverse Phased Perf Guns, Loaded with 39 gram SDP-4500-411NT3 Charges @ 50 degree Phasing @ 17.5 spm. Pressure Tested Wireline Lubricator Low 1,400 kPa + High 14,000 kPa. (All Good) Correlated on Depth to Schlumberger's CBL Log Dated March 27, 2013. Perforated Twice from 1,170.5 to 1,173.5 mKB (3.0 meters) POH & Laid Down Perf Guns. All Shots had Fired 100% on Both Guns.
23:00	23:45	0.75	P	Pre-Heated Pump Line. Established a Feedrate into Squeeze Perfs @ 0.35 m³/min @ 18,000 kPa. Pumped a Total of 2.0 m³ of Fresh Water. Bled CSG Pressure to Zero. Rec'd 1.70 m³ Fresh Water to Rig Tank.
23:45	01:45	2.00	P	Made up & RIH with Schlumberger's 178mm Cement Retainer on Wireline. Correlated on Depth to Schlumberger's CBL Log Dated March 27, 2013. Set Cement Retainer ce @ 1,160.0 mKB. (Top of Retainer @ 1,159.80 mKB) POH & Laid Down Running Tools.
01:45	02:03	0.30	P	Pre-Heated Pump Line. Pressure Tested above Cement Retainer to 21,000 kPa. Pressure Test Held 100% for 10 mins. RO&R Schlumberger Wireline.
02:03	03:39	1.60	P	RIH with J Latch Stinger on 120 Jts of 60.3mm TBG. Tagged Retainer. Spaced out TBG String. (Buried 3.10m + 1.25m Pup Jts) Installed 73mm Master Valve + TBG Swivel.
03:39	04:39	1.00	P	Stung into Cement Retainer. Applied 1/4 Turn to the Left. <> Pull Tested 4,000 daN into J Latch. Set down 1,000 daN below String Weight, Applied 1/4 turn to the Right. <> Pulled J Latch Stinger out of the Retainer. Stung back into Retainer, Applied 1/4 Turn to the Left. <> Pulled 1,000 daN Over String Weight. (Neutral Position in Retainer) > Pressure Tested Annulus to 21.0 MPa. > Pressure Tested TBG to 14 MPa. <> BOTH PRESSURE TESTS HELD 100% FOR 10 MINS. <> Lowered TBG, Stung in & Opened Retainer. <> Pumped a Total of 3.0 m³ Potable Fresh Water through the Retainer. - Kept Pump Rate Steady at 0.35 m³/min. - Pump Pressure was Steady @ 19,500 kPa. - Decreased Pump Rate to 0.085 m³/min. (Slowest we could Pump) - Pumped for 10 mins. Pump Pressure was steady @ 15,000 kPa. <> Shut down Pump: ISIP = 15,000 kPa. 5 min: SITP = 13,000 kPa.
04:39	06:00	1.35	P	Shut in Master Valve. Drained Pump Line. Tarped in & Heated TBG Stump. Continued to Fire Boiler & Jet Heater to Heat Water Tanks, SCV, TBG Stump + BOPs. (Jet Heater heating the SCV Broke down. Riggged in the Other Jet Heater to the SCV)

FLUID SUMMARY

Fluid	To lease (m³)	From lease (m³)	To well (m³)	From well (m³)	Left to recover (m³)
FRESH WATER	15.00	0.00	9.50	0.00	84.70

DAILY COST

BU Desc	Vendor	Activity Code	Amount (Cost)
Surface Completion Equipment Rental	BP PUMP LTD	Q300	40.00
Cementing Services & Materials	C&J ENERGY PRODUCTION SERVICES CANADA LTD	J200	12,500.00
Completion Fluids & Other Chem	CANOL OILFIELD SERVICES INC	G300	1,900.00
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
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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	125.00
Surface Completion Equipment Rental	PBN ENERGY SERVICES LTD	Q300	1,055.00
Completion Fluids & Other Chem	PBN ENERGY SERVICES LTD	G300	1,638.00
Completion Fluids & Other Chem	PBN ENERGY SERVICES LTD	G300	1,510.00
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	78,113.51
Electric Line Servs on Drilling Ops.	SCHLUMBERGER CANADA LIMITED	K100	21,645.00
Downhole Completion Equipment	SCHLUMBERGER CANADA LIMITED	C100	4,702.00
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	Squeezed
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	Squeezed
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
2/20/2016	Imperial , Original Hole	1,623.00	1,625.00	17.5	Squeezed
2/20/2016	Imperial , Original Hole	1,623.00	1,625.00	17.5	Squeezed
2/22/2016	Basal Lower Canol, Ori...	1,170.50	1,173.50	17.5	Open - Not Flowing