CONSTRUCTION EQUIPMENT



Sample No: LH0278986

Oil Type: PETRO CANADA 10W40



SAMPLE INFORMATION Sample Number LH0278986 LH0265756 LH0185895 Sample Date 02 Nov 2023 19 Jun 2023 10 Dec 2020 Machine Hours 23162 22441 19061 Oil Hours 0 Oil Changed Changed Not Changd Not Changd Sample Status **NORMAL ABNORMAL ABNORMAL**

OIL CONDITION Visc @ 100°C cSt **12.9** 0 10.8 11.6 Oxidation (PA) 57

- 1 Table 1 Ta								
CONTAMINATION								
Soot %	%	0 0	O 0	O 0				
Nitration (PA)	%	58	68	80				
Sulfation (PA)	%	50	52	56				
Glycol	%	0.0	NEG	NEG				
Fuel	%	<1.0	O 1.8	1				
Silicon	ppm	4	4	6				
Sodium	ppm	28	6	6				
Potassium	ppm	0	O <1	O 2				

WEA	R METAL	S			
Iron	ppm	2	5	6	
Copper	ppm	○ <1	O 2	O 2	
Lead	ppm	1	O 2	1	
Tin	ppm	0	O 0	0	
Aluminum	ppm	 <1	O <1	O 2	
Chromium	ppm	0	O <1	<1	
Molybdenum	ppm	50	47	1 2	
Nickel	ppm	○ <1	O <1	<1	
Titanium	ppm	0	1	<1	
Silver	ppm	○ <1	O 0	0	
Manganese	ppm	0	O <1	<1	
Vanadium	ppm	0	0	<1	

ADDITIVES							
Calcium	ppm	1108	898	1357			
Magnesium	ppm	755	785	O 657			
Zinc	ppm	1121	1084	791			
Phosphorus	ppm	947	967	O 653			
Barium	ppm	0 <1	O 0	O <1			
Boron	ppm	5	6	O 112			

LIEBHERR CANADA LTD.

1015 SUTTON DRIVE BURLINGTON, ON CA L7L 5Z8

Contact: Steve Lehto steve.lehto@liebherr.com

T: (905)319-9222 F: (905)319-6617

Diagnosis

Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

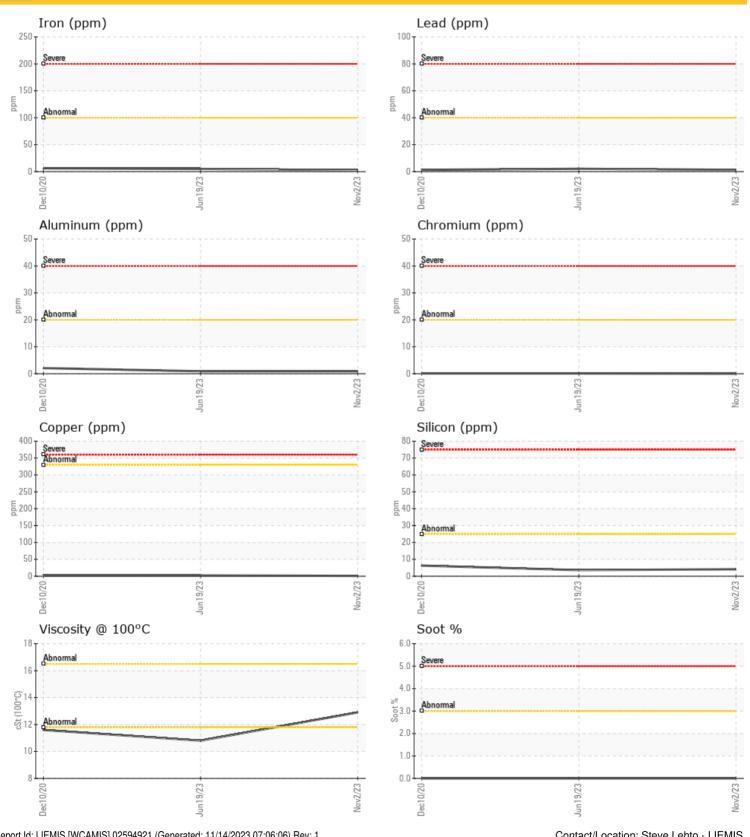
Depot: **LIEMIS** Unique No: 5672000 Signed: Kevin Marson **Report Date:** 08 Nov 2023

Contact/Location: Steve Lehto - LIEMIS





GRAPHS



Report Id: LIEMIS [WCAMIS] 02594921 (Generated: 11/14/2023 07:06:06) Rev: 1

Contact/Location: Steve Lehto - LIEMIS