

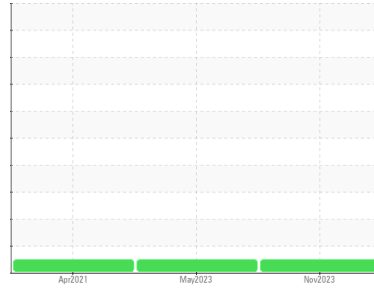
OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
Scoop 6 Yard
Machine Id
LHD6102
Component
Diesel Engine
Fluid
PETRO CANADA DURON HP 15W40 (18 LTR)



DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	PC0075102	PC0066830	PC0046613
Sample Date	Client Info	02 Nov 2023	11 May 2023	27 Apr 2021
Machine Age	hrs Client Info	3868	2662	0
Oil Age	hrs Client Info	0	0	0
Oil Changed	Client Info	N/A	N/A	N/A
Sample Status		NORMAL	NORMAL	NORMAL

CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >5	<1.0	<1.0	<1.0
Glycol	WC Method	NEG	NEG	NEG

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185(m) >100	66	52	37
Chromium	ppm ASTM D5185(m) >20	2	2	2
Nickel	ppm ASTM D5185(m) >4	<1	0	<1
Titanium	ppm ASTM D5185(m)	0	<1	<1
Silver	ppm ASTM D5185(m) >3	<1	<1	<1
Aluminum	ppm ASTM D5185(m) >20	6	2	3
Lead	ppm ASTM D5185(m) >40	0	<1	4
Copper	ppm ASTM D5185(m) >330	9	4	3
Tin	ppm ASTM D5185(m) >15	<1	<1	<1
Antimony	ppm ASTM D5185(m)	0	0	<1
Vanadium	ppm ASTM D5185(m)	0	0	0
Beryllium	ppm ASTM D5185(m)	0	0	0
Cadmium	ppm ASTM D5185(m)	0	0	0

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185(m) 0	2	1	5
Barium	ppm ASTM D5185(m) 0	<1	0	<1
Molybdenum	ppm ASTM D5185(m) 60	68	65	61
Manganese	ppm ASTM D5185(m) 0	<1	<1	<1
Magnesium	ppm ASTM D5185(m) 1010	1106	1084	1028
Calcium	ppm ASTM D5185(m) 1070	1189	1149	1349
Phosphorus	ppm ASTM D5185(m) 1150	1053	1095	1091
Zinc	ppm ASTM D5185(m) 1270	1325	1283	1418
Sulfur	ppm ASTM D5185(m) 2060	2437	2460	2767
Lithium	ppm ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m) >25	15	5	8
Sodium	ppm ASTM D5185(m)	6	3	5
Potassium	ppm ASTM D5185(m) >20	2	<1	<1

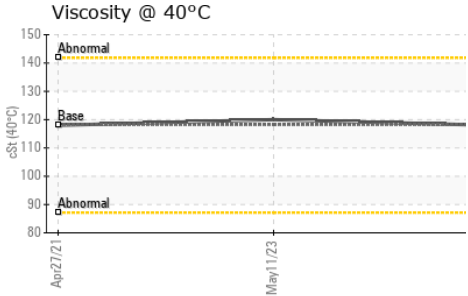
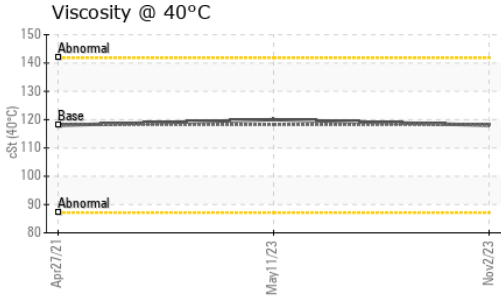
INFRA-RED

method	limit/base	current	history1	history2
Soot %	% ASTM D7844* >3	1	0.7	0.6
Nitration	Abs/cm ASTM D7624* >20	12.9	12.2	12.1
Sulfation	Abs/.1mm ASTM D7415* >30	27.4	24.9	25.9

FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm ASTM D7414* >25	26.0	23.1	23.7

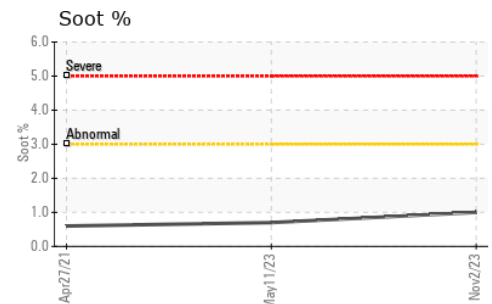
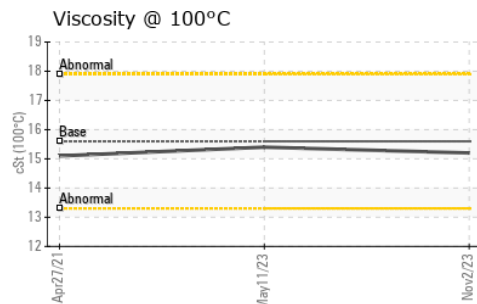
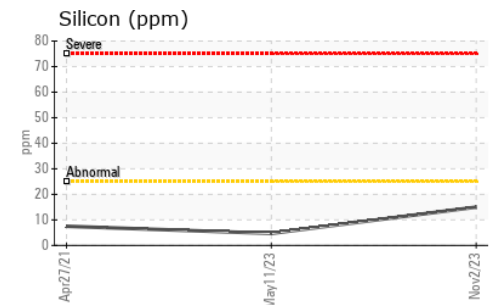
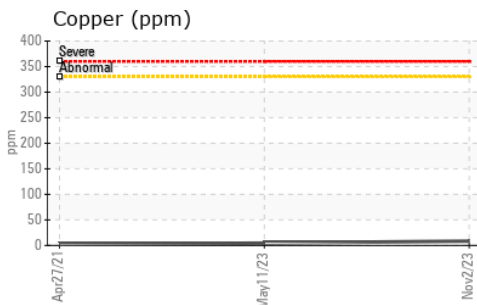
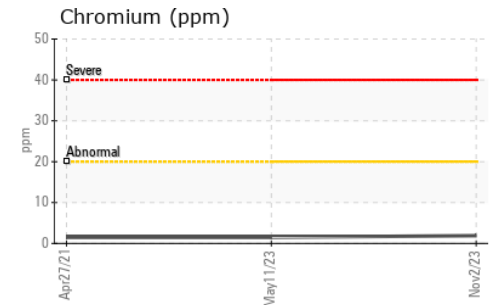
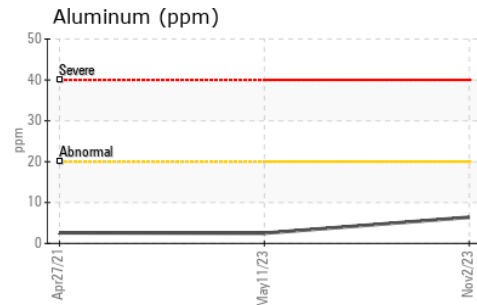
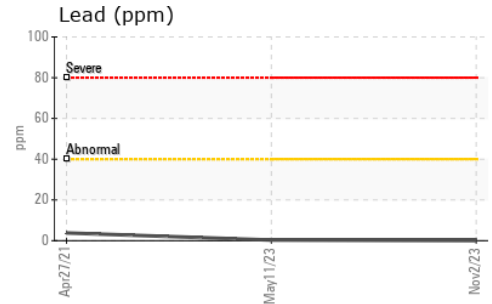
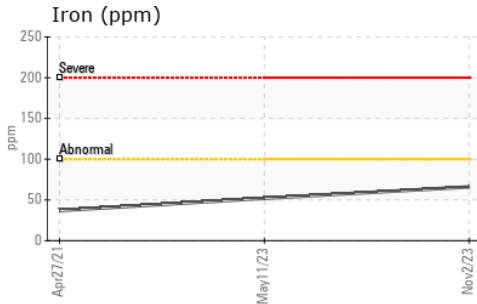
OIL ANALYSIS REPORT



VISUAL		method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	118.2	118	120	118
Visc @ 100°C	cSt	ASTM D7279(m)	15.6	15.2	15.4	15.1
Viscosity Index (VI)	Scale	ASTM D2270*	139	134	134	132

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0075102 **Received** : 14 Nov 2023
Lab Number : **02596077** **Diagnosed** : 14 Nov 2023
Unique Number : 5681157 **Diagnostician** : Kevin Marson
Test Package : MOB 1 (Additional Tests: KV40, VI)

Lakeshore Gold Timmins West
 Timmins, ON
 CA
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 T:
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To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.