



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL



Machine Id  
**MACK 15518**  
Component  
**Diesel Engine**  
Fluid  
**{not provided} (--- GAL)**

## RECOMMENDATION

Check for low coolant level. No corrective action is recommended at this time. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. Please specify the brand, type, and viscosity of the oil on your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0899273	---	---
Sample Date		Client Info		13 Apr 2024	---	---
Machine Age	kms	Client Info		66761	---	---
Oil Age	kms	Client Info		0	---	---
Filter Age	kms	Client Info		0	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				ABNORMAL	---	---

## WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>120	37	---	---
Chromium	ppm	ASTM D5185(m)	>20	<1	---	---
Nickel	ppm	ASTM D5185(m)	>5	4	---	---
Titanium	ppm	ASTM D5185(m)	>2	<1	---	---
Silver	ppm	ASTM D5185(m)	>2	0	---	---
Aluminum	ppm	ASTM D5185(m)	>20	17	---	---
Lead	ppm	ASTM D5185(m)	>40	<1	---	---
Copper	ppm	ASTM D5185(m)	>330	24	---	---
Tin	ppm	ASTM D5185(m)	>15	2	---	---
Vanadium	ppm	ASTM D5185(m)		0	---	---

## CONTAMINATION

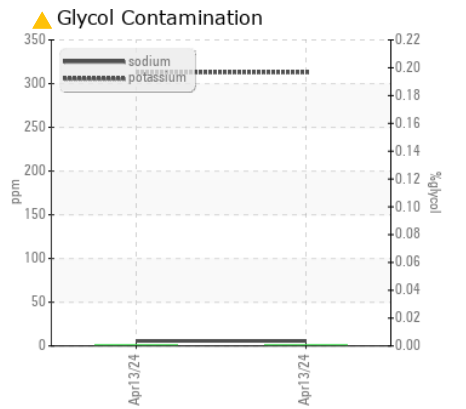
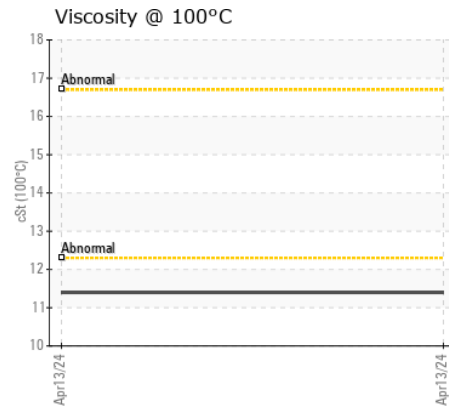
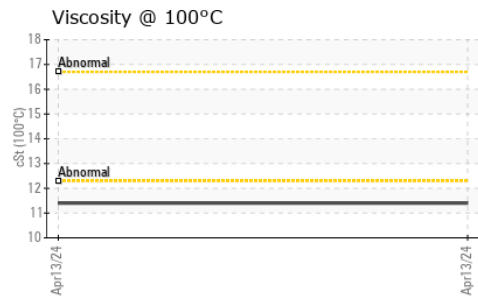
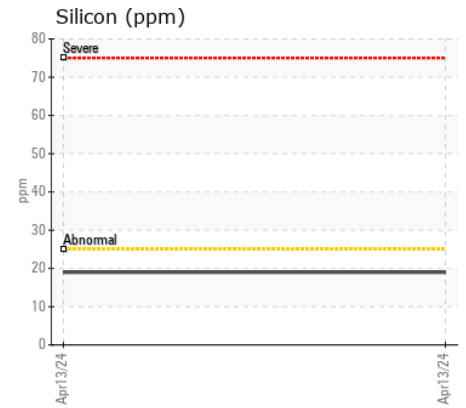
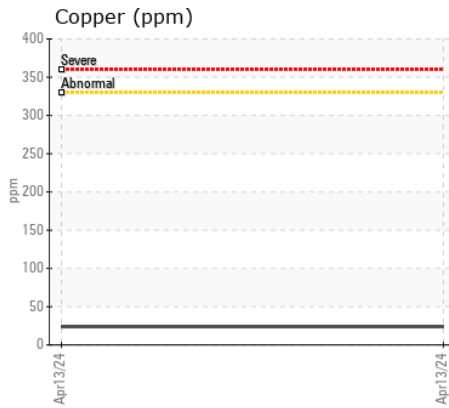
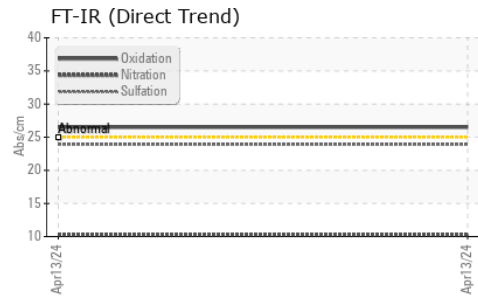
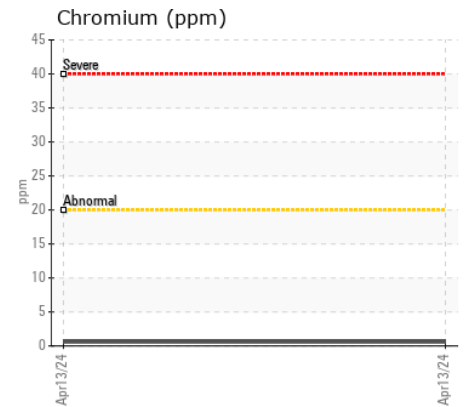
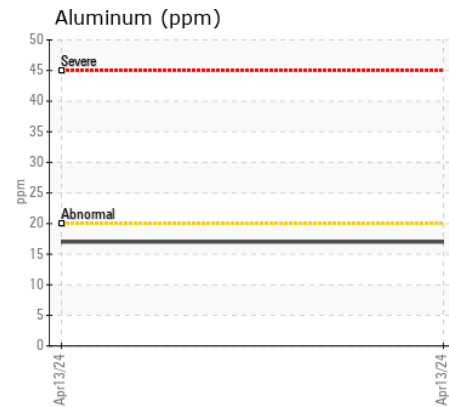
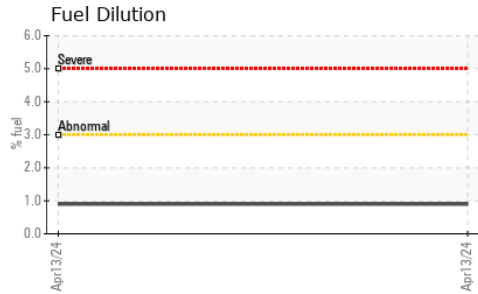
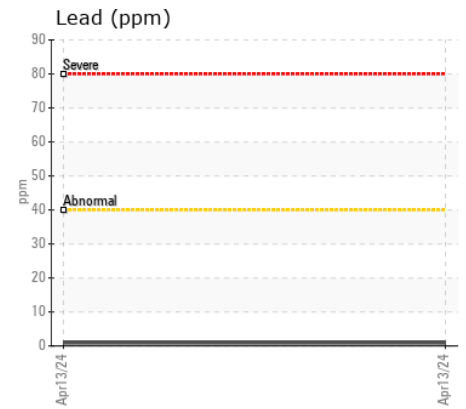
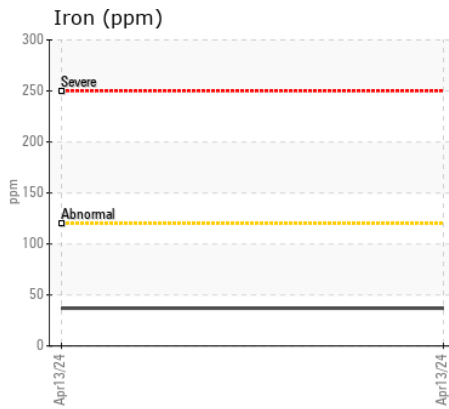
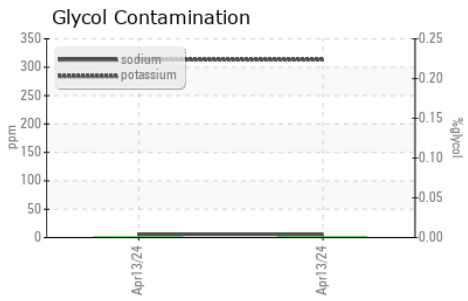
Fuel content negligible. Water treatment chemicals present, indicating slow coolant leak. Test for glycol is negative.

Silicon	ppm	ASTM D5185(m)	>25	19	---	---
Potassium	ppm	ASTM D5185(m)	>20	313	---	---
Fuel	%	ASTM D7593*	>3.0	0.9	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol	%	ASTM D7922*		0.0	---	---
Soot %	%	ASTM D7844*	>4	0.5	---	---
Nitration	Abs/cm	ASTM D7624*	>20	10.3	---	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	23.9	---	---
Emulsified Water	scalar	Visual*	>0.2	NEG	---	---

## FLUID CONDITION

Viscosity of sample indicates oil is within SAE 30 range, advise investigate. The condition of the oil is acceptable for the time in service (see recommendation).

Sodium	ppm	ASTM D5185(m)		6	---	---
Boron	ppm	ASTM D5185(m)		96	---	---
Barium	ppm	ASTM D5185(m)		<1	---	---
Molybdenum	ppm	ASTM D5185(m)		826	---	---
Manganese	ppm	ASTM D5185(m)		2	---	---
Magnesium	ppm	ASTM D5185(m)		302	---	---
Calcium	ppm	ASTM D5185(m)		781	---	---
Phosphorus	ppm	ASTM D5185(m)		225	---	---
Zinc	ppm	ASTM D5185(m)		262	---	---
Sulfur	ppm	ASTM D5185(m)		1751	---	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	26.5	---	---
Visc @ 100°C	cSt	ASTM D7279(m)		11.4	---	---



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0899273 **Received** : 16 Apr 2024  
**Lab Number** : 02629106 **Tested** : 17 Apr 2024  
**Unique Number** : 5762238 **Diagnosed** : 17 Apr 2024 - Kevin Marson  
**Test Package** : MOB 1 ( Additional Tests: FuelDilution, Glycol, PercentFuel )

**Hogg Fuel and Supply Limited**  
 5 Hill Street  
 Kitchener, ON  
 CA N2G 3X4  
 Contact: Richard Kakwoski

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.

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