MOB II

WEAR CHECK

OIL ANALYSIS REPORT

WEAR	SEVERE
CONTAMINATION	SEVERE
FLUID CONDITION	ATTENTION

Machine Id
108283231
Component
Diesel Engine
Fluid
{not provided} (--- GAL)

RECOMMENDATION

We advise that you check for the source of the coolant leak. We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. We recommend that you drain the oil from the component if this has not already been done. We advise that you flush the component thoroughly before re-filling with oil. We recommend you service the filters on this component. We recommend an early resample to monitor this condition. Please specify the component make and model with your next sample. Please specify the brand, type, and viscosity of the oil on your next sample.

WEAR

Iron ppm levels are severe. PQ levels are severe. Nickel and chromium ppm levels are abnormal. Aluminum ppm levels are noted. Cylinder, crank, or cam shaft wear is indicated. Ring wear is indicated. Exhaust valve wear is indicated. The very high ferrous density (PQ) index indicates that severe wear is occurring.

CONTAMINATION

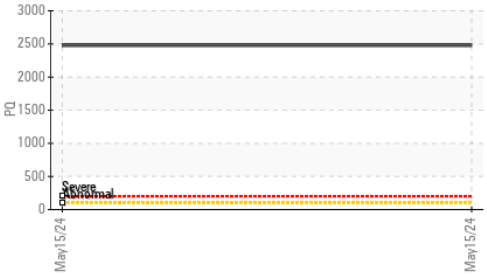
Test for glycol is positive. There is a light concentration of glycol present in the oil. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. High amount of ingressed dirt has caused abrasive wear to the component.

FLUID CONDITION

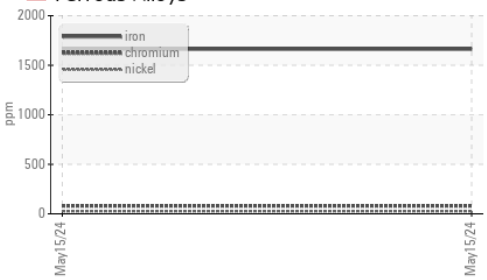
The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0942552	---	---
Sample Date		Client Info		15 May 2024	---	---
Machine Age	hrs	Client Info		50	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		Not Changd	---	---
Filter Changed		Client Info		Not Changd	---	---
Sample Status				SEVERE	---	---
PQ		ASTM D8184*		▲ 2477	---	---
Iron	ppm	ASTM D5185(m)	>100	▲ 1663	---	---
Chromium	ppm	ASTM D5185(m)	>20	▲ 80	---	---
Nickel	ppm	ASTM D5185(m)	>4	▲ 26	---	---
Titanium	ppm	ASTM D5185(m)		7	---	---
Silver	ppm	ASTM D5185(m)	>3	0	---	---
Aluminum	ppm	ASTM D5185(m)	>20	● 186	---	---
Lead	ppm	ASTM D5185(m)	>40	3	---	---
Copper	ppm	ASTM D5185(m)	>330	45	---	---
Tin	ppm	ASTM D5185(m)	>15	5	---	---
Vanadium	ppm	ASTM D5185(m)		<1	---	---
Silicon	ppm	ASTM D5185(m)	>25	▲ 473	---	---
Potassium	ppm	ASTM D5185(m)	>20	▲ 59	---	---
Fuel		WC Method	>5	<1.0	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol	%	ASTM D7922*		▲ 0.011	---	---
Soot %	%	ASTM D7844*	>3	1.1	---	---
Nitration	Abs/cm	ASTM D7624*	>20	9.6	---	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	29.2	---	---
Emulsified Water	scalar	Visual*	>0.2	NEG	---	---
Sodium	ppm	ASTM D5185(m)		● 34	---	---
Boron	ppm	ASTM D5185(m)		138	---	---
Barium	ppm	ASTM D5185(m)		1	---	---
Molybdenum	ppm	ASTM D5185(m)		17	---	---
Manganese	ppm	ASTM D5185(m)		15	---	---
Magnesium	ppm	ASTM D5185(m)		260	---	---
Calcium	ppm	ASTM D5185(m)		2643	---	---
Phosphorus	ppm	ASTM D5185(m)		1081	---	---
Zinc	ppm	ASTM D5185(m)		1224	---	---
Sulfur	ppm	ASTM D5185(m)		2722	---	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	21.1	---	---
Base Number (BN)	mg KOH/g	ASTM D2896*		13.39	---	---
Visc @ 100°C	cSt	ASTM D7279(m)		15.1	---	---

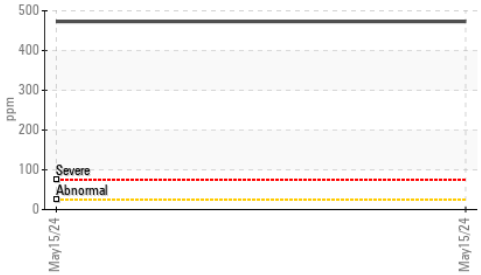
PQ



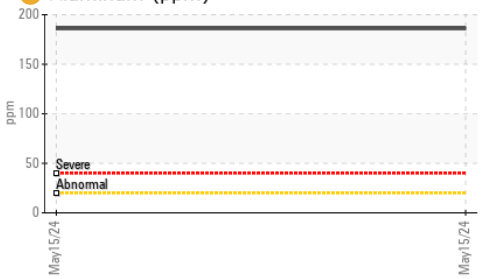
Ferrous Alloys



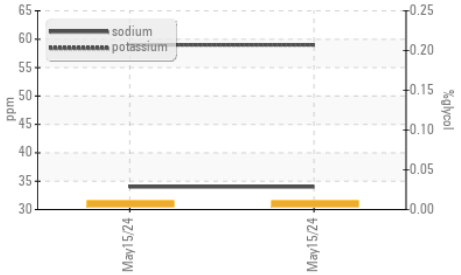
Silicon (ppm)



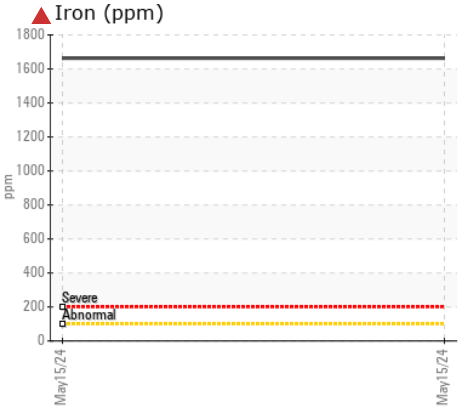
Aluminum (ppm)



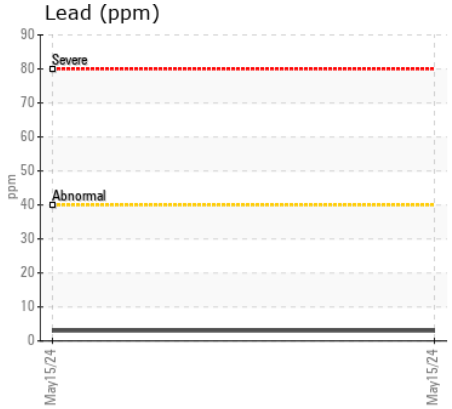
Glycol Contamination



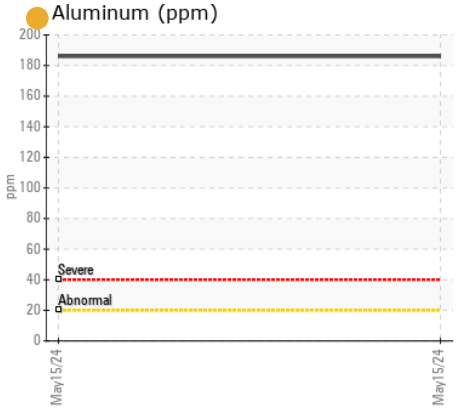
Iron (ppm)



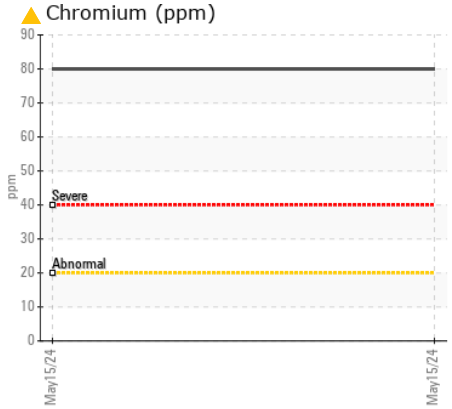
Lead (ppm)



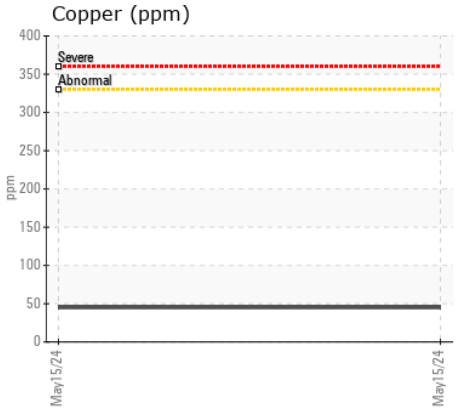
Aluminum (ppm)



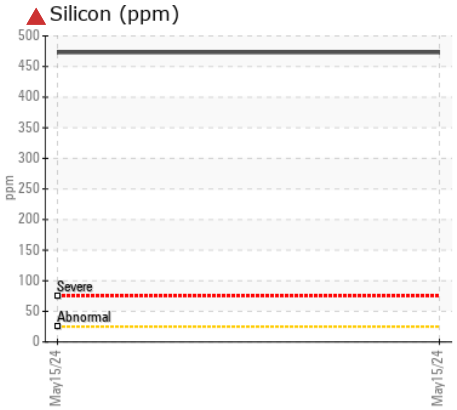
Chromium (ppm)



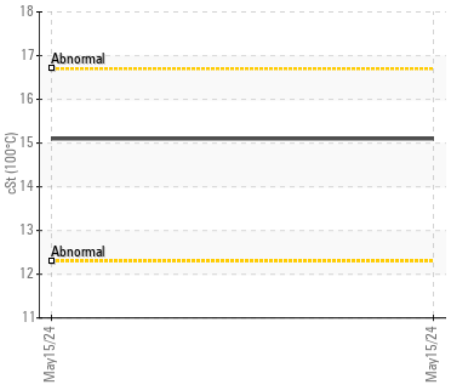
Copper (ppm)



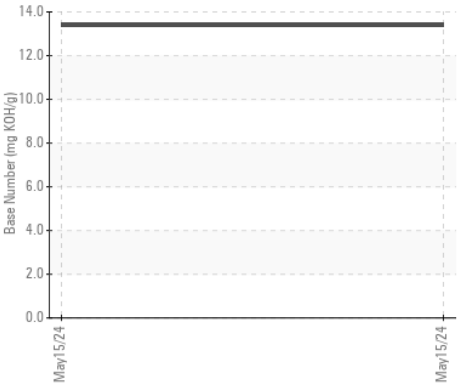
Silicon (ppm)



Viscosity @ 100°C



Base Number



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0942552 **Received** : 16 May 2024
Lab Number : 02635998 **Tested** : 17 May 2024
Unique Number : 5785160 **Diagnosed** : 17 May 2024 - Kevin Marson
Test Package : MOB 2 (Additional Tests: Glycol, PQ)

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.

GENREP LTD.
134 RIVALDA ROAD
NORTH YORK, ON
CA M9M 2M8
Contact: Service Manager

T:
F: