



Machine Id
OR626
Component
Diesel Engine
Fluid
{not provided} (9 LTR)



DIAGNOSIS

▲ Recommendation
We advise that you check for faulty combustion, plugged air filters, or aftercoolers. 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.

Wear
All component wear rates are normal.

▲ Contamination
There is an abnormal amount of solids and carbon present in the oil.

▲ Fluid Condition
The oil viscosity is higher than normal. The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION method limit/base current history1 history2

Sample Number	Client Info	PC0088264	---	---
Sample Date	Client Info	30 Apr 2024	---	---
Machine Age	hrs	0	---	---
Oil Age	hrs	0	---	---
Oil Changed	Client Info	Changed	---	---
Sample Status		SEVERE	---	---

CONTAMINATION method limit/base current history1 history2

Fuel	WC Method	>5	<1.0	---	---
Water	WC Method	>0.2	NEG	---	---
Glycol	WC Method		NEG	---	---

WEAR METALS method limit/base current history1 history2

Iron	ppm	ASTM D5185(m)	>100	19	---	---
Chromium	ppm	ASTM D5185(m)	>20	0	---	---
Nickel	ppm	ASTM D5185(m)	>4	0	---	---
Titanium	ppm	ASTM D5185(m)		0	---	---
Silver	ppm	ASTM D5185(m)	>3	0	---	---
Aluminum	ppm	ASTM D5185(m)	>20	2	---	---
Lead	ppm	ASTM D5185(m)	>40	2	---	---
Copper	ppm	ASTM D5185(m)	>330	1	---	---
Tin	ppm	ASTM D5185(m)	>15	0	---	---
Antimony	ppm	ASTM D5185(m)		0	---	---
Vanadium	ppm	ASTM D5185(m)		0	---	---
Beryllium	ppm	ASTM D5185(m)		0	---	---
Cadmium	ppm	ASTM D5185(m)		0	---	---

ADDITIVES method limit/base current history1 history2

Boron	ppm	ASTM D5185(m)		12	---	---
Barium	ppm	ASTM D5185(m)		0	---	---
Molybdenum	ppm	ASTM D5185(m)		5	---	---
Manganese	ppm	ASTM D5185(m)		<1	---	---
Magnesium	ppm	ASTM D5185(m)		124	---	---
Calcium	ppm	ASTM D5185(m)		1932	---	---
Phosphorus	ppm	ASTM D5185(m)		758	---	---
Zinc	ppm	ASTM D5185(m)		882	---	---
Sulfur	ppm	ASTM D5185(m)		2513	---	---
Lithium	ppm	ASTM D5185(m)		<1	---	---

CONTAMINANTS method limit/base current history1 history2

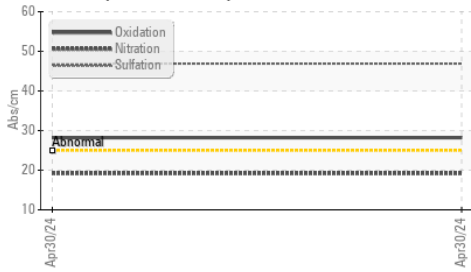
Silicon	ppm	ASTM D5185(m)	>25	4	---	---
Sodium	ppm	ASTM D5185(m)		2	---	---
Potassium	ppm	ASTM D5185(m)	>20	<1	---	---

INFRA-RED method limit/base current history1 history2

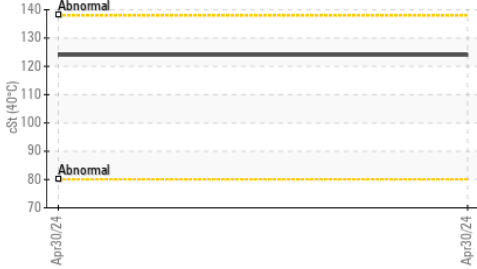
Soot %	%	ASTM D7844*	>3	▲ 6.5	---	---
Nitration	Abs/cm	ASTM D7624*	>20	19.2	---	---
Sulfation	Abs./1mm	ASTM D7415*	>30	46.9	---	---

OIL ANALYSIS REPORT

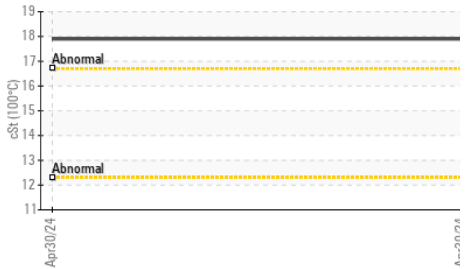
▲ FT-IR (Direct Trend)



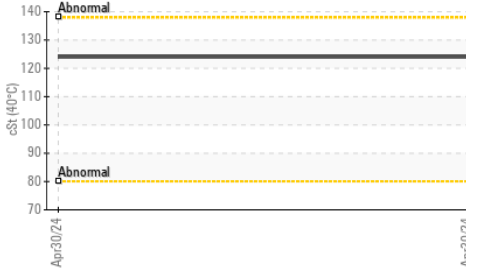
Viscosity @ 40°C



▲ Viscosity @ 100°C



Viscosity @ 40°C



Viscosity @ 100°C



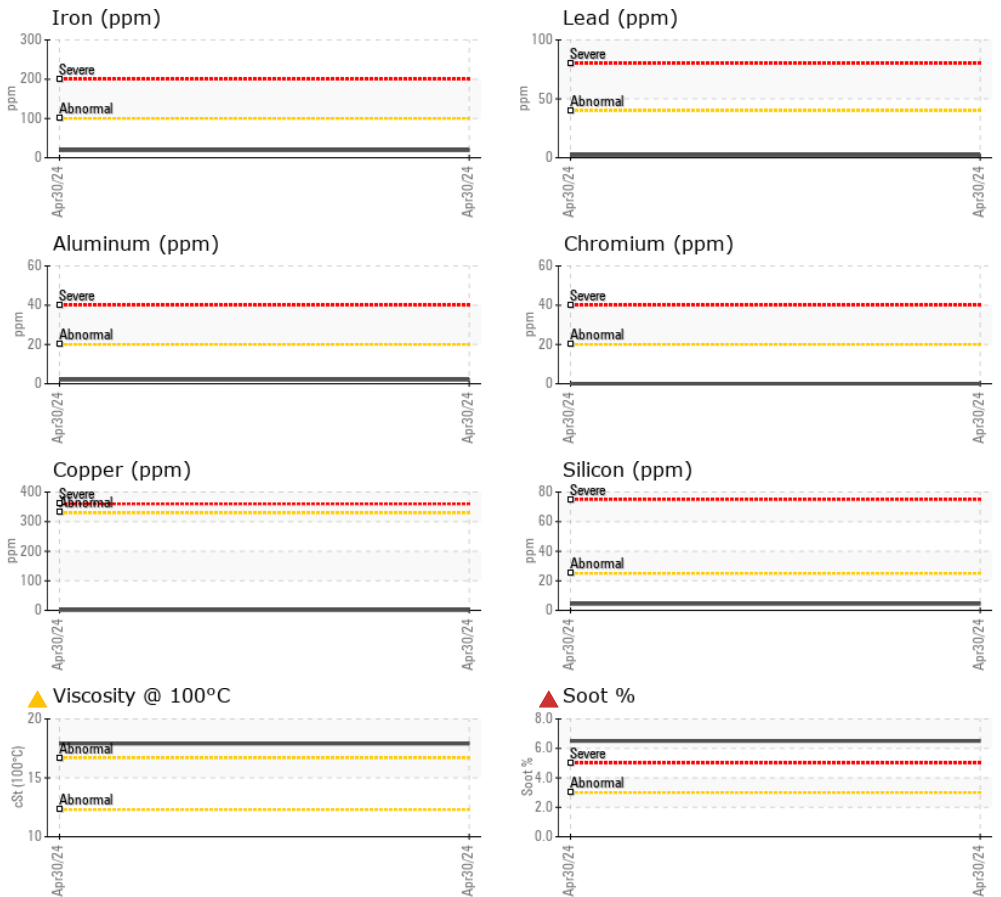
FLUID DEGRADATION

Method	Limit/Base	Current	History1	History2
Oxidation	Abs./1mm ASTM D7414*	28.2	---	---
VISUAL				
White Metal	scalar Visual*	NONE	---	---
Yellow Metal	scalar Visual*	NONE	---	---
Precipitate	scalar Visual*	NONE	---	---
Silt	scalar Visual*	NONE	---	---
Debris	scalar Visual*	NONE	---	---
Sand/Dirt	scalar Visual*	NONE	---	---
Appearance	scalar Visual*	NORML	---	---
Odor	scalar Visual*	NORML	---	---
Emulsified Water	scalar Visual*	NEG	---	---
Free Water	scalar Visual*	NEG	---	---

FLUID PROPERTIES

Method	Limit/Base	Current	History1	History2
Visc @ 40°C	cSt ASTM D7279(m)	124	---	---
Visc @ 100°C	cSt ASTM D7279(m)	17.9	---	---
Viscosity Index (VI)	Scale ASTM D2270*	160	---	---

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0088264
Lab Number : 02632509
Unique Number : 5773662
Test Package : MOB 1 (Additional Tests: KV40, VI, Visual)

Green Infrastructure and Partners Inc (GIPI) - 286 - Shoring & Foundations
 151 Ram Forest Rd,
 Stouffville, ON
 CA L4A 2G8
 Contact: Bill Acton
 bacton@gipi.com

*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.*