

# OIL ANALYSIS REPORT

Sample Rating Trend



**WEAR**



Machine Id  
**NO UNIT PC0088292**  
Component  
**Diesel Engine**  
Fluid  
**SAE 5W40 (--- GAL)**

## DIAGNOSIS

### Recommendation

The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

### Wear

Iron ppm levels are abnormal. Cylinder, crank, or cam shaft wear is indicated.

### Contamination

There is no indication of any contamination in the oil.

### Fluid Condition

Viscosity of sample indicates oil is within SAE 10W50 range, advise investigate. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>PC0088292</b>	---	---
Sample Date	Client Info			<b>24 Apr 2024</b>	---	---
Machine Age	hrs	Client Info		<b>19392</b>	---	---
Oil Age	hrs	Client Info		<b>0</b>	---	---
Oil Changed	Client Info			<b>Changed</b>	---	---
Sample Status				<b>ABNORMAL</b>	---	---

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>2.1		<b>&lt;1.0</b>	---	---
Water	WC Method	>0.21		<b>NEG</b>	---	---
Glycol	WC Method			<b>NEG</b>	---	---

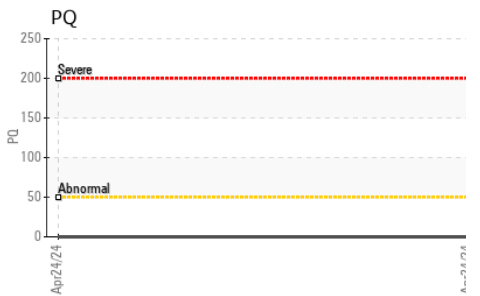
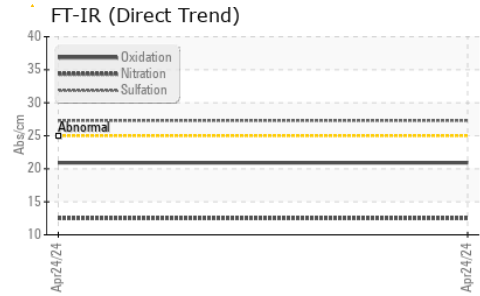
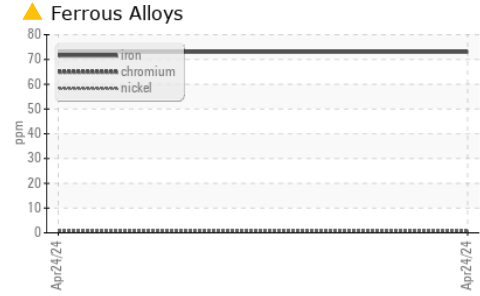
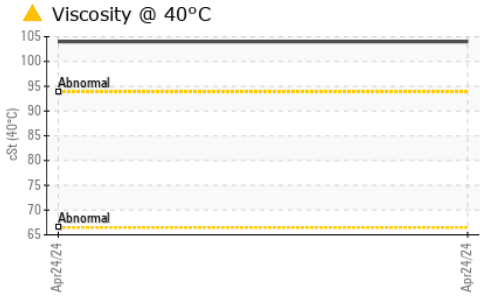
WEAR METALS		method	limit/base	current	history1	history2
PQ	ASTM D8184*	>50		<b>0</b>	---	---
Iron	ppm	ASTM D5185(m)	>51	<b>▲ 73</b>	---	---
Chromium	ppm	ASTM D5185(m)	>11	<b>&lt;1</b>	---	---
Nickel	ppm	ASTM D5185(m)	>5	<b>1</b>	---	---
Titanium	ppm	ASTM D5185(m)		<b>0</b>	---	---
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	---	---
Aluminum	ppm	ASTM D5185(m)	>31	<b>3</b>	---	---
Lead	ppm	ASTM D5185(m)	>26	<b>2</b>	---	---
Copper	ppm	ASTM D5185(m)	>26	<b>1</b>	---	---
Tin	ppm	ASTM D5185(m)	>4	<b>0</b>	---	---
Antimony	ppm	ASTM D5185(m)		<b>0</b>	---	---
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	---	---
Beryllium	ppm	ASTM D5185(m)		<b>0</b>	---	---
Cadmium	ppm	ASTM D5185(m)		<b>0</b>	---	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		<b>38</b>	---	---
Barium	ppm	ASTM D5185(m)		<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185(m)		<b>63</b>	---	---
Manganese	ppm	ASTM D5185(m)		<b>&lt;1</b>	---	---
Magnesium	ppm	ASTM D5185(m)		<b>1190</b>	---	---
Calcium	ppm	ASTM D5185(m)		<b>900</b>	---	---
Phosphorus	ppm	ASTM D5185(m)		<b>1030</b>	---	---
Zinc	ppm	ASTM D5185(m)		<b>1272</b>	---	---
Sulfur	ppm	ASTM D5185(m)		<b>2676</b>	---	---
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	---	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>22	<b>3</b>	---	---
Sodium	ppm	ASTM D5185(m)		<b>4</b>	---	---
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	---	---

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	<b>2.8</b>	---	---
Nitration	Abs/cm	ASTM D7624*	>20	<b>12.5</b>	---	---
Sulfation	Abs.:1mm	ASTM D7415*	>30	<b>27.3</b>	---	---

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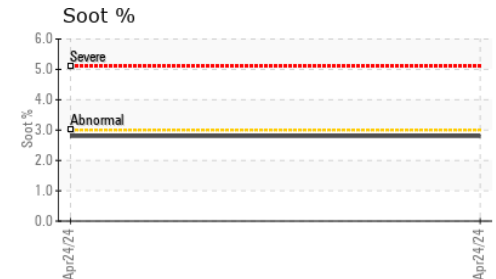
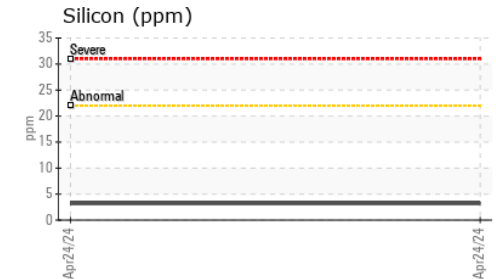
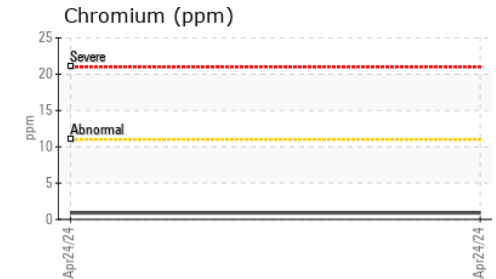
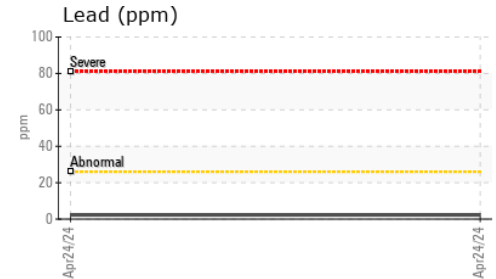
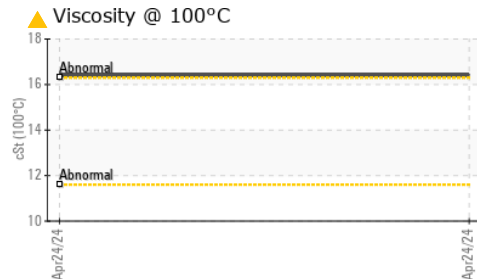
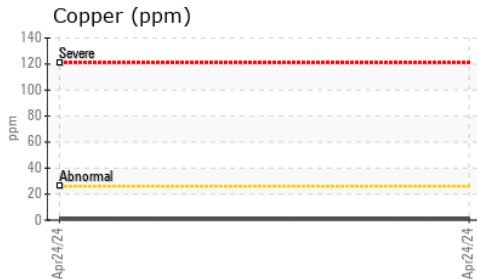
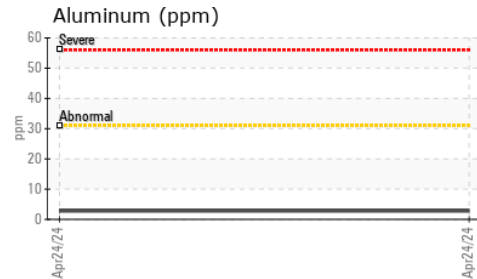
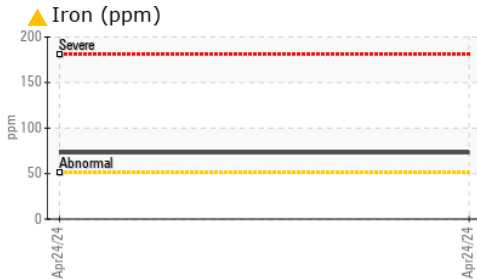


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	<b>20.9</b>	---	---

VISUAL		method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.21	<b>NEG</b>	---	---
Free Water	scalar	Visual*		<b>NEG</b>	---	---

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)		<b>▲ 104</b>	---	---
Visc @ 100°C	cSt	ASTM D7279(m)		<b>▲ 16.4</b>	---	---
Viscosity Index (VI)	Scale	ASTM D2270*		<b>170</b>	---	---

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PC0088292  
**Lab Number** : **02634521**  
**Unique Number** : 5775674  
**Test Package** : MOB 1 ( Additional Tests: KV40, PQ, VI )

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