

OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Machine Id
INTERNATIONAL 7017
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 15W40 (--- GAL)

DIAGNOSIS

Recommendation

We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) DIESEL ENGINE OIL SAE 15W40. Please confirm.

Wear

Aluminum ppm levels are abnormal. Piston wear is indicated.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

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			PC0089717	---	---
Sample Date	Client Info			05 Jun 2024	---	---
Machine Age	kms	Client Info		247407	---	---
Oil Age	kms	Client Info		0	---	---
Oil Changed	Client Info			N/A	---	---
Sample Status				ABNORMAL	---	---

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method		>3.0	<1.0	---	---
Water	WC Method		>0.2	NEG	---	---

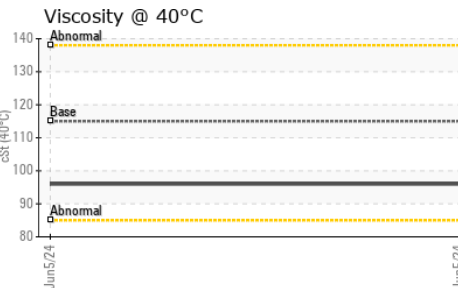
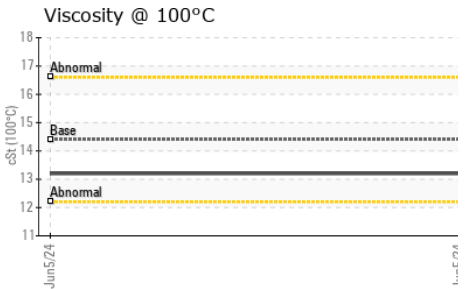
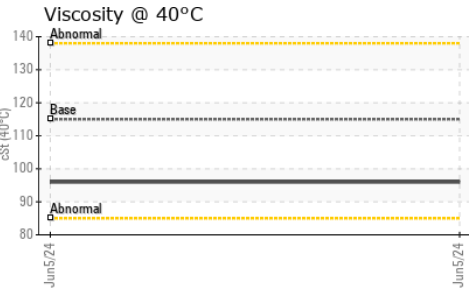
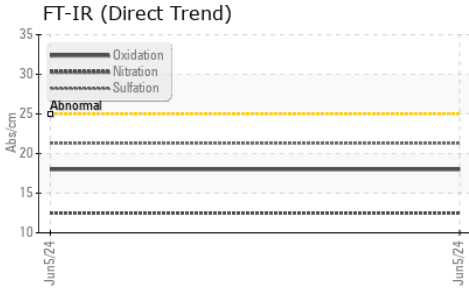
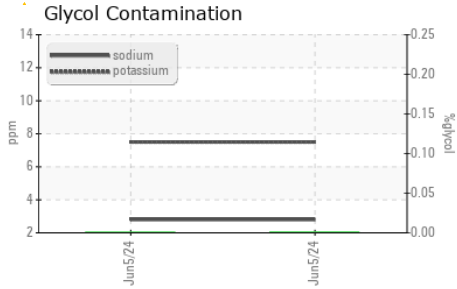
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>90	79	---	---
Chromium	ppm	ASTM D5185(m)	>20	3	---	---
Nickel	ppm	ASTM D5185(m)	>2	<1	---	---
Titanium	ppm	ASTM D5185(m)	>2	0	---	---
Silver	ppm	ASTM D5185(m)	>2	0	---	---
Aluminum	ppm	ASTM D5185(m)	>20	▲ 22	---	---
Lead	ppm	ASTM D5185(m)	>40	0	---	---
Copper	ppm	ASTM D5185(m)	>330	3	---	---
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)	250	3	---	---
Barium	ppm	ASTM D5185(m)	10	0	---	---
Molybdenum	ppm	ASTM D5185(m)	100	64	---	---
Manganese	ppm	ASTM D5185(m)		<1	---	---
Magnesium	ppm	ASTM D5185(m)	450	985	---	---
Calcium	ppm	ASTM D5185(m)	3000	1064	---	---
Phosphorus	ppm	ASTM D5185(m)	1150	1004	---	---
Zinc	ppm	ASTM D5185(m)	1350	1213	---	---
Sulfur	ppm	ASTM D5185(m)	4250	2530	---	---
Lithium	ppm	ASTM D5185(m)		<1	---	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	6	---	---
Sodium	ppm	ASTM D5185(m)	>158	3	---	---
Potassium	ppm	ASTM D5185(m)	>20	8	---	---
Glycol	%	ASTM D7922*		0.0	---	---

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>6	0.9	---	---
Nitration	Abs/cm	ASTM D7624*	>20	12.5	---	---
Sulfation	Abs.1mm	ASTM D7415*	>30	21.3	---	---

OIL ANALYSIS REPORT



FLUID DEGRADATION

Method	Limit/Base	Current	History1	History2
Oxidation	Abs./1mm ASTM D7414*	18.0	---	---

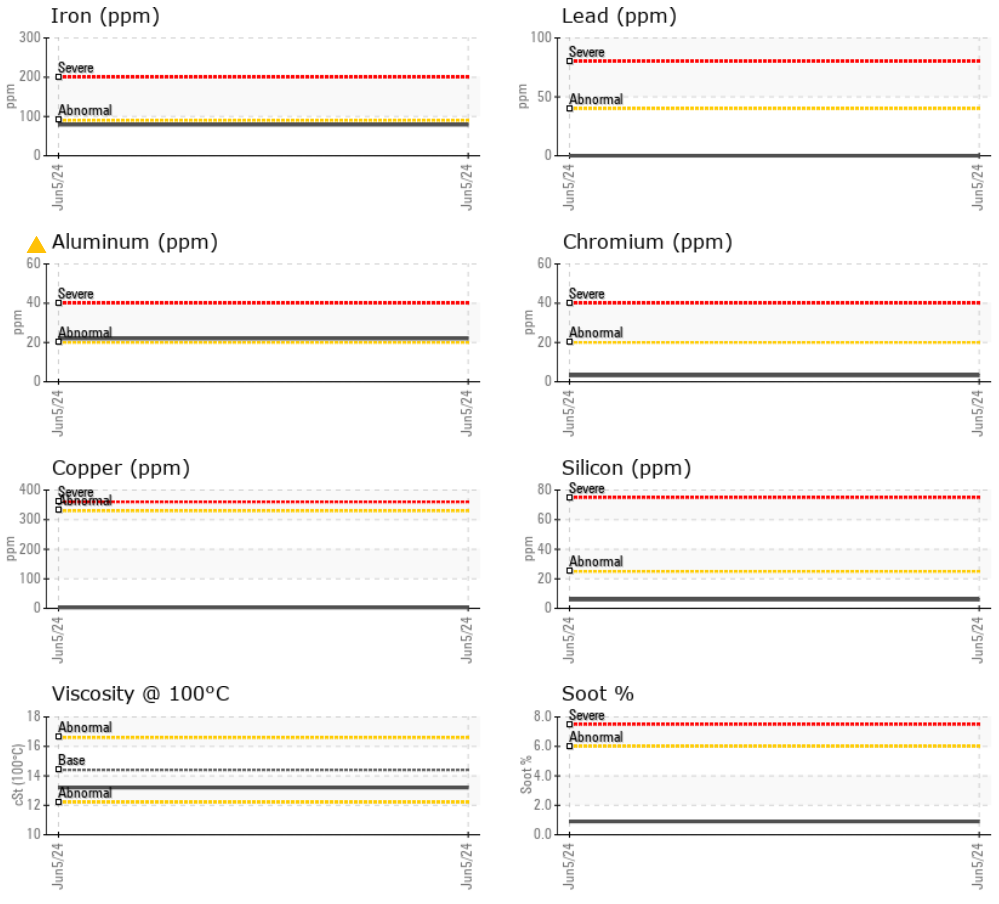
VISUAL

Method	Limit/Base	Current	History1	History2
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*	>0.2	---	---
Free Water	scalar Visual*	NEG	---	---

FLUID PROPERTIES

Method	Limit/Base	Current	History1	History2
Visc @ 40°C	cSt ASTM D7279(m)	115	---	---
Visc @ 100°C	cSt ASTM D7279(m)	14.4	---	---
Viscosity Index (VI)	Scale ASTM D2270*	126	---	---

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0089717 **Received** : 09 Jul 2024
Lab Number : 02646611 **Tested** : 09 Jul 2024
Unique Number : 5812163 **Diagnosed** : 10 Jul 2024 - Kevin Marson
Test Package : MOB 1 (Additional Tests: Glycol, KV40, VI, Visual)

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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.