



OIL ANALYSIS REPORT

WEAR
CONTAMINATION
FLUID CONDITION

MARGINAL
SEVERE
SEVERE

Machine Id
KIOTI C5.2210
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 15W40 (--- GAL)

RECOMMENDATION

We advise that you check the fuel injection system. 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.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		KT0000380	---	---
Sample Date		Client Info		14 Mar 2023	---	---
Machine Age	hrs	Client Info		104	---	---
Oil Age	hrs	Client Info		104	---	---
Filter Age	hrs	Client Info		104	---	---
Oil Changed		Client Info		N/A	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				SEVERE	---	---

WEAR

Tin ppm levels are marginal. All other component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	36	---	---
Chromium	ppm	ASTM D5185(m)	>20	2	---	---
Nickel	ppm	ASTM D5185(m)	>4	<1	---	---
Titanium	ppm	ASTM D5185(m)		0	---	---
Silver	ppm	ASTM D5185(m)	>3	<1	---	---
Aluminum	ppm	ASTM D5185(m)	>20	3	---	---
Lead	ppm	ASTM D5185(m)	>40	61	---	---
Copper	ppm	ASTM D5185(m)	>330	447	---	---
Tin	ppm	ASTM D5185(m)	>15	▲ 46	---	---
Vanadium	ppm	ASTM D5185(m)		<1	---	---

CONTAMINATION

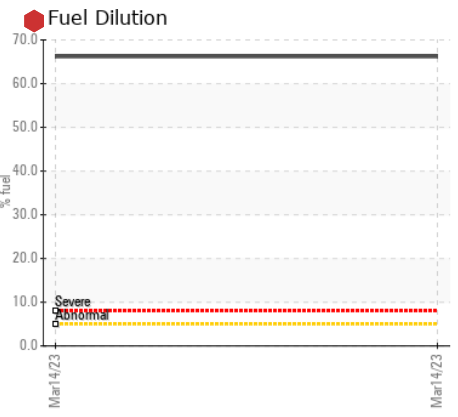
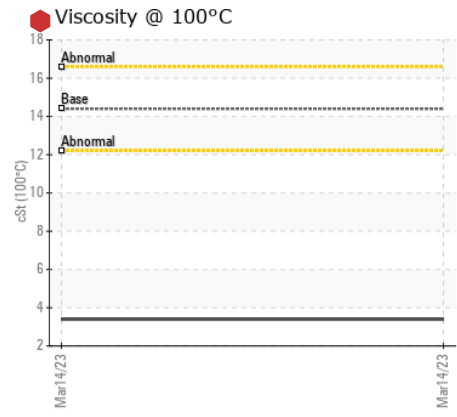
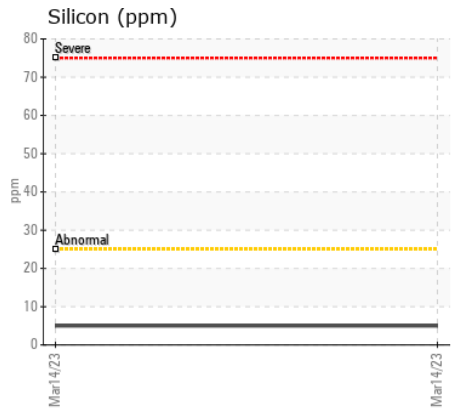
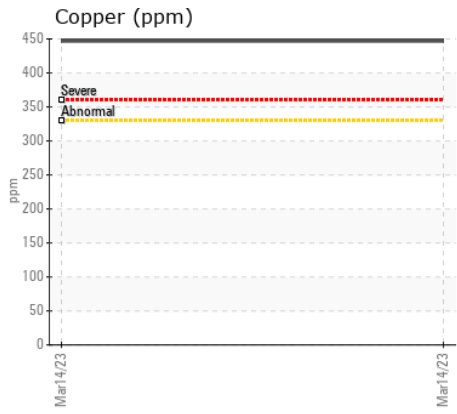
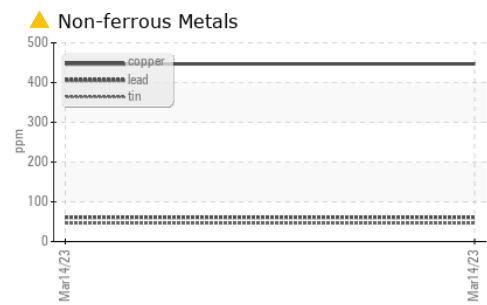
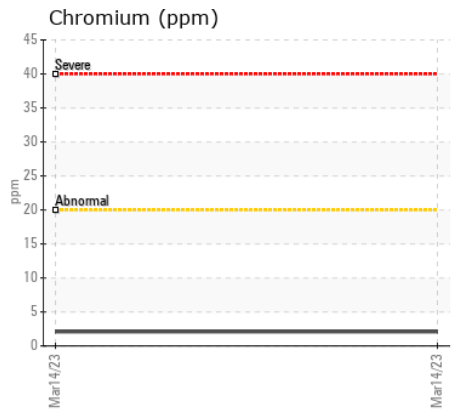
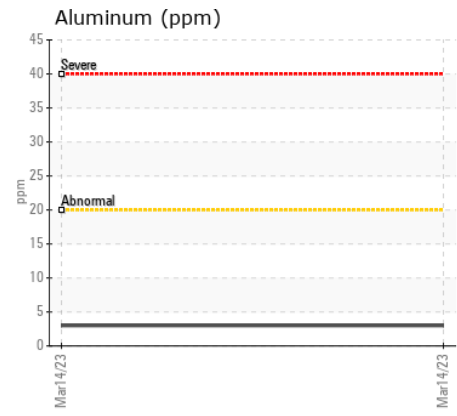
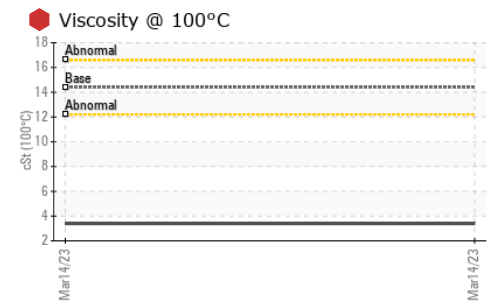
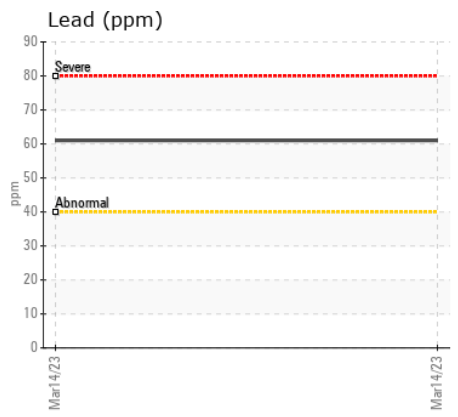
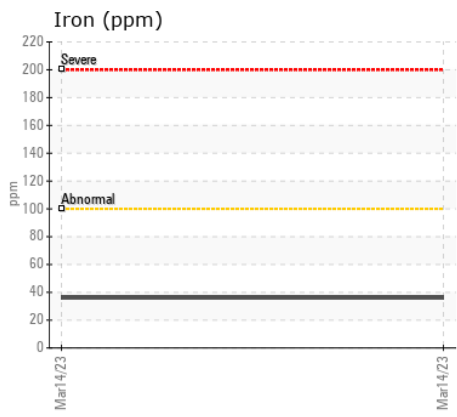
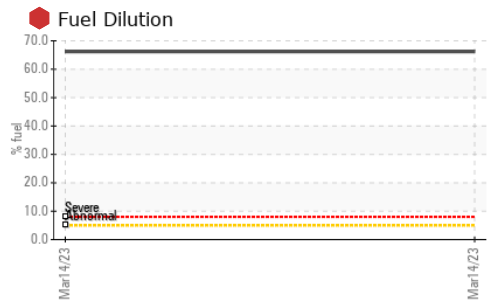
There is a high amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

Silicon	ppm	ASTM D5185(m)	>25	5	---	---
Potassium	ppm	ASTM D5185(m)	>20	<1	---	---
Fuel	%	ASTM D7593*	>5	◆ 66.2	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	ASTM D7844*	>3	0.1	---	---
Nitration	Abs/cm	ASTM D7624*	>20	9.5	---	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	13.6	---	---
Emulsified Water	scalar	Visual*	>0.2	NEG	---	---

FLUID CONDITION

Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185(m)	>158	2	---	---
Boron	ppm	ASTM D5185(m)	250	9	---	---
Barium	ppm	ASTM D5185(m)	10	7	---	---
Molybdenum	ppm	ASTM D5185(m)	100	<1	---	---
Manganese	ppm	ASTM D5185(m)		1	---	---
Magnesium	ppm	ASTM D5185(m)	450	217	---	---
Calcium	ppm	ASTM D5185(m)	3000	463	---	---
Phosphorus	ppm	ASTM D5185(m)	1150	380	---	---
Zinc	ppm	ASTM D5185(m)	1350	391	---	---
Sulfur	ppm	ASTM D5185(m)	4250	1053	---	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	8.3	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	◆ 3.4	---	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : KT0000380 **Received** : 28 Mar 2023
Lab Number : 02547897 **Tested** : 29 Mar 2023
Unique Number : 5552907 **Diagnosed** : 29 Mar 2023 - Kevin Marson
Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel)

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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.