



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	ATTENTION

Machine Id
KIOTI CK4010 VR000051

Component
Diesel Engine

Fluid
{not provided} (--- GAL)

RECOMMENDATION

We advise that you check for the source of water entry. We recommend that you drain the oil and perform a filter service on this component if not already done. We recommend an early resample to monitor this condition. Please note that there was too much water present in the oil to perform an accurate viscosity test.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		KT0000542	---	---
Sample Date		Client Info		04 Sep 2023	---	---
Machine Age	hrs	Client Info		150	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		N/A	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				SEVERE	---	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	60	---	---
Chromium	ppm	ASTM D5185m	>20	2	---	---
Nickel	ppm	ASTM D5185m	>4	<1	---	---
Titanium	ppm	ASTM D5185m		<1	---	---
Silver	ppm	ASTM D5185m	>3	0	---	---
Aluminum	ppm	ASTM D5185m	>20	26	---	---
Lead	ppm	ASTM D5185m	>40	10	---	---
Copper	ppm	ASTM D5185m	>330	54	---	---
Tin	ppm	ASTM D5185m	>15	4	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

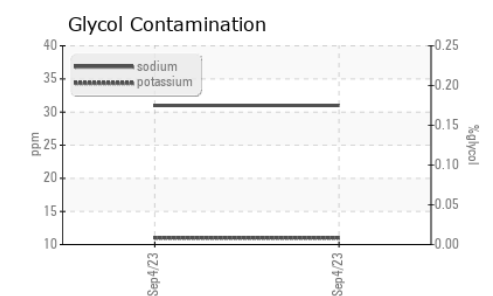
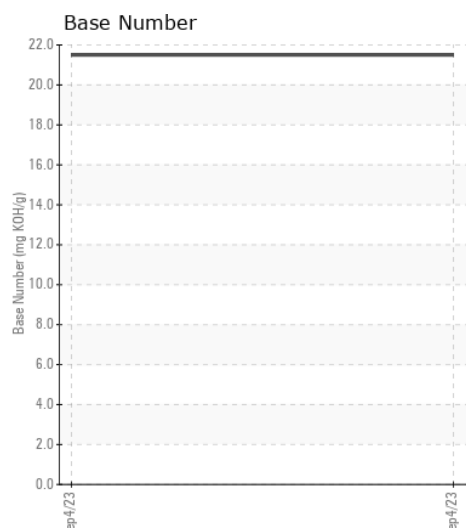
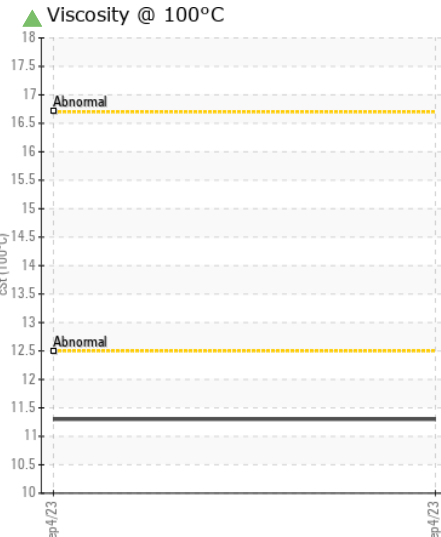
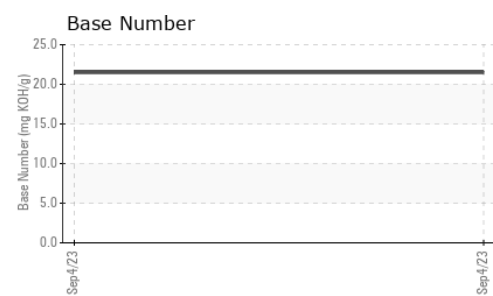
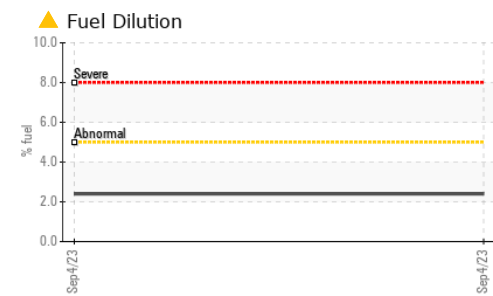
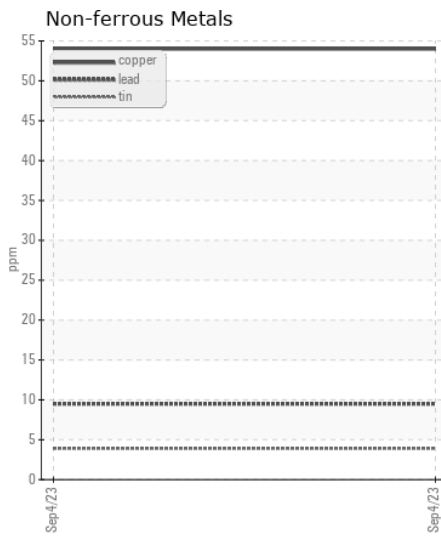
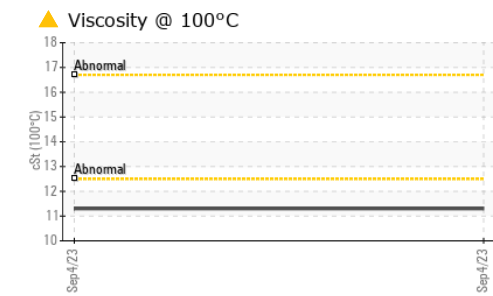
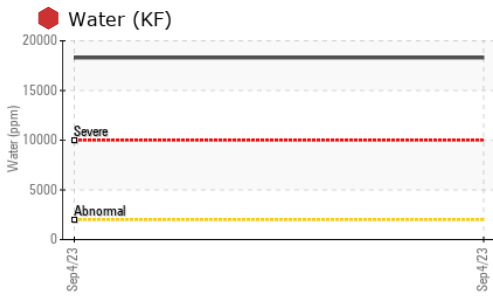
There is a high concentration of water present in the oil. Light fuel dilution occurring. Moderate concentration of visible dirt/debris present in the oil.

Silicon	ppm	ASTM D5185m	>25	17	---	---
Potassium	ppm	ASTM D5185m	>20	11	---	---
Fuel	%	ASTM D3524	>5	▲ 2.4	---	---
Water	%	ASTM D6304	>0.2	● 1.83	---	---
ppm Water	ppm	ASTM D6304	>2000	● 18300	---	---
Glycol	%	*ASTM D2982		NEG	---	---
Soot %	%	*ASTM D7844	>3	0.1	---	---
Nitration	Abs/cm	*ASTM D7624	>20	10.9	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	10.7	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	▲ MODER	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.2	● 0.2%	---	---

FLUID CONDITION

The oil viscosity is lower than normal. The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185m		31	---	---
Boron	ppm	ASTM D5185m		43	---	---
Barium	ppm	ASTM D5185m		3	---	---
Molybdenum	ppm	ASTM D5185m		4	---	---
Manganese	ppm	ASTM D5185m		3	---	---
Magnesium	ppm	ASTM D5185m		765	---	---
Calcium	ppm	ASTM D5185m		1238	---	---
Phosphorus	ppm	ASTM D5185m		927	---	---
Zinc	ppm	ASTM D5185m		1217	---	---
Sulfur	ppm	ASTM D5185m		3468	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.1	---	---
Base Number (BN)	mg KOH/g	ASTM D2896		21.5	---	---
Visc @ 100°C	cSt	ASTM D445		▲ 11.3	---	---



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KT0000542
Lab Number : 05984088
Unique Number : 10701383
Test Package : CONST (Additional Tests: FuelDilution, Glycol, KF, PercentFuel, TBN)

LTTM - LARRY'S TRACTORS TRAILERS & MORE
 1094 S 1ST ST
 HAMILTON, MT
 US 59840

Received : 19 Oct 2023
Tested : 24 Oct 2023
Diagnosed : 24 Oct 2023 - Jonathan Hester
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