



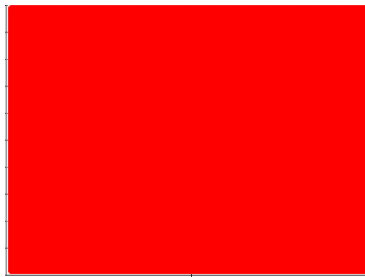
OIL ANALYSIS REPORT

Sample Rating Trend

GLYCOL



Machine Id
JCB 50-42 2501600
 Component
Diesel Engine
 Fluid
JCB 15W40 (4 GAL)



DIAGNOSIS

Recommendation

We advise that you check for the source of the coolant leak. Check for low coolant level. 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.

Wear

The copper level is abnormal. Valve wear is indicated. In the absence of other significant wear metals, suspect copper due to sources other than wear (i.e. cooling core).

Contamination

Sodium and/or potassium levels are high. Test for glycol is positive. There is a high concentration of water present in the oil.

Fluid Condition

The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	JCB005836	---	---
Sample Date	Client Info	16 Oct 2023	---	---
Machine Age	hrs	425	---	---
Oil Age	hrs	0	---	---
Oil Changed	Client Info	N/A	---	---
Sample Status		SEVERE	---	---

CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method	<1.0	---	---

WEAR METALS

method	limit/base	current	history1	history2		
Iron	ppm	ASTM D5185m	>125	39	---	---
Chromium	ppm	ASTM D5185m	>5	<1	---	---
Nickel	ppm	ASTM D5185m	>4	▲ 12	---	---
Titanium	ppm	ASTM D5185m		0	---	---
Silver	ppm	ASTM D5185m	>3	0	---	---
Aluminum	ppm	ASTM D5185m	>25	2	---	---
Lead	ppm	ASTM D5185m	>15	5	---	---
Copper	ppm	ASTM D5185m	>125	▲ 240	---	---
Tin	ppm	ASTM D5185m	>4	<1	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
Cadmium	ppm	ASTM D5185m		0	---	---

ADDITIVES

method	limit/base	current	history1	history2		
Boron	ppm	ASTM D5185m		218	---	---
Barium	ppm	ASTM D5185m		2	---	---
Molybdenum	ppm	ASTM D5185m		2	---	---
Manganese	ppm	ASTM D5185m		7	---	---
Magnesium	ppm	ASTM D5185m		30	---	---
Calcium	ppm	ASTM D5185m		2507	---	---
Phosphorus	ppm	ASTM D5185m		826	---	---
Zinc	ppm	ASTM D5185m		1006	---	---
Sulfur	ppm	ASTM D5185m		3623	---	---

CONTAMINANTS

method	limit/base	current	history1	history2		
Silicon	ppm	ASTM D5185m	>50	30	---	---
Sodium	ppm	ASTM D5185m		▲ 1412	---	---
Potassium	ppm	ASTM D5185m	>20	▲ 91	---	---
Water	%	ASTM D6304	>0.2	◆ 1.47	---	---
ppm Water	ppm	ASTM D6304	>2000	◆ 14700	---	---
Glycol	%	*ASTM D2982		◆ 0.10	---	---

INFRA-RED

method	limit/base	current	history1	history2		
Soot %	%	*ASTM D7844	>3	0.1	---	---
Nitration	Abs/cm	*ASTM D7624	>20	8.7	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	13.3	---	---

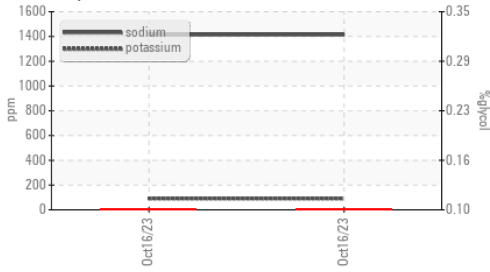
FLUID DEGRADATION

method	limit/base	current	history1	history2		
Oxidation	Abs/.1mm	*ASTM D7414	>25	4.9	---	---
Base Number (BN)	mg KOH/g	ASTM D2896		35.0	---	---

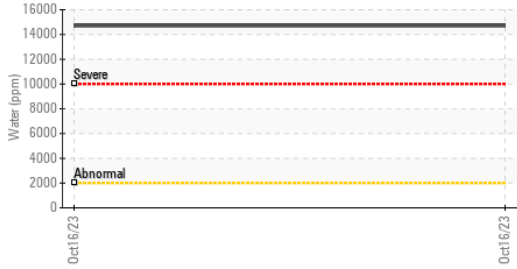


OIL ANALYSIS REPORT

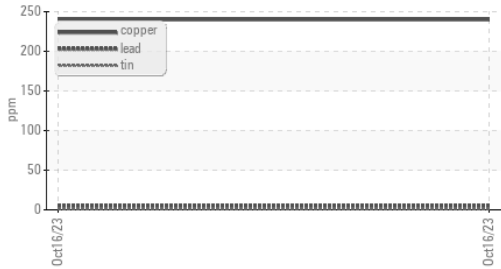
Glycol Contamination



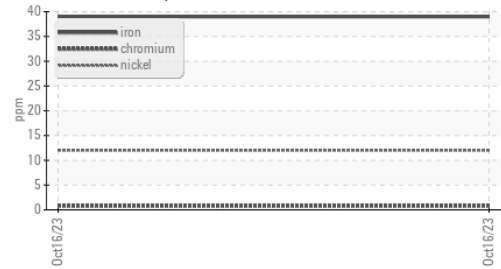
Water (KF)



Non-ferrous Metals



Ferrous Alloys



Viscosity @ 40°C

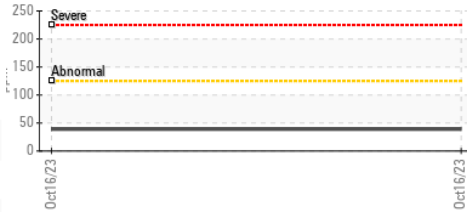


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	0.2%	---
Free Water	scalar	*Visual		NEG	---

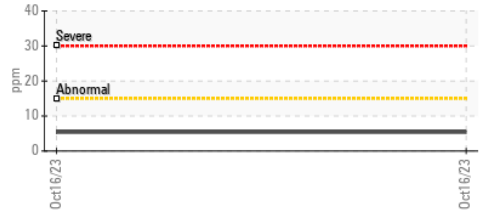
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	119	---	---
Visc @ 100°C	cSt	ASTM D445	16.0	---	---
Viscosity Index (VI)	Scale	ASTM D2270	143	---	---

GRAPHS

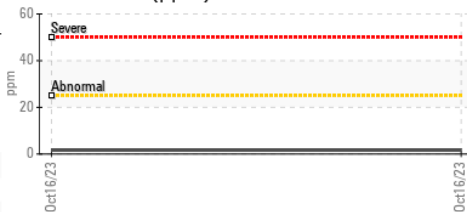
Iron (ppm)



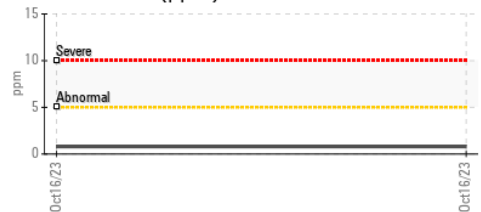
Lead (ppm)



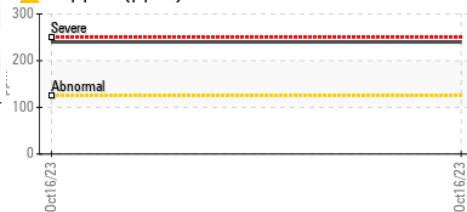
Aluminum (ppm)



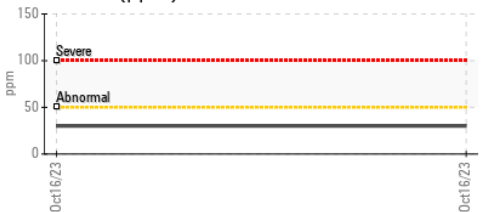
Chromium (ppm)



Copper (ppm)



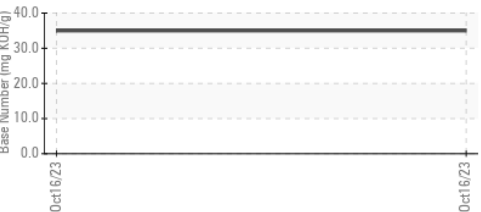
Silicon (ppm)



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JCB005836 **Received** : 18 Oct 2023
Lab Number : 05982299 **Diagnosed** : 20 Oct 2023
Unique Number : 10699594 **Diagnostician** : Jonathan Hester
Test Package : MOB 1 (Additional Tests: Glycol, KF, KV40, TBN, VI)

BRIGGS JCB - LEHIGH ACRES
 5566 6TH STREET SW
 LEHIGH ACRES, FL
 US 33971
 Contact: SANDRO MUNIZ
 sandro.muniz@briggsequipment.com

To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

T: (229)388-8121