



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area

[47372]

Machine Id

JOHN DEERE 655K 1T0655KXHNF413079

Component

Diesel Engine

Fluid

JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0218654	JR0160345	---
Sample Date		Client Info		19 Jun 2024	28 Feb 2023	---
Machine Age	hrs	Client Info		961	451	---
Oil Age	hrs	Client Info		510	451	---
Filter Age	hrs	Client Info		0	451	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				NORMAL	ABNORMAL	---

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>51	16	31	---
Chromium	ppm	ASTM D5185m	>11	<1	1	---
Nickel	ppm	ASTM D5185m	>5	3	5	---
Titanium	ppm	ASTM D5185m		<1	<1	---
Silver	ppm	ASTM D5185m	>3	0	0	---
Aluminum	ppm	ASTM D5185m	>31	3	4	---
Lead	ppm	ASTM D5185m	>26	2	1	---
Copper	ppm	ASTM D5185m	>26	54	▲ 355	---
Tin	ppm	ASTM D5185m	>4	<1	4	---
Vanadium	ppm	ASTM D5185m		<1	<1	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

There is no indication of any contamination in the oil.

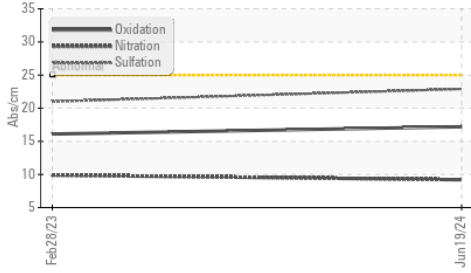
Silicon	ppm	ASTM D5185m	>22	6	10	---
Potassium	ppm	ASTM D5185m	>20	3	2	---
Fuel		WC Method	>2.1	<1.0	0.4	---
Water		WC Method	>0.21	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.2	0.2	---
Nitration	Abs/cm	*ASTM D7624	>20	9.2	9.9	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.9	21.0	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.21	NEG	NEG	---

FLUID CONDITION

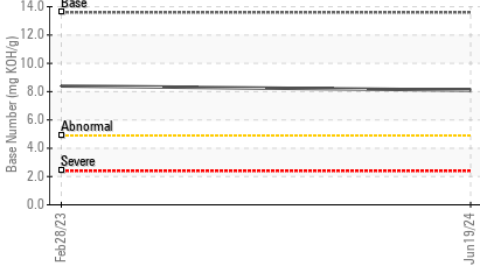
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>31	4	5	---
Boron	ppm	ASTM D5185m		224	209	---
Barium	ppm	ASTM D5185m		<1	2	---
Molybdenum	ppm	ASTM D5185m		243	267	---
Manganese	ppm	ASTM D5185m		1	4	---
Magnesium	ppm	ASTM D5185m		870	875	---
Calcium	ppm	ASTM D5185m		1665	1596	---
Phosphorus	ppm	ASTM D5185m		956	916	---
Zinc	ppm	ASTM D5185m		1177	1145	---
Sulfur	ppm	ASTM D5185m		3487	3662	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.2	16.1	---
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	8.1	8.4	---
Visc @ 100°C	cSt	ASTM D445	15.4	13.1	● 10.0	---

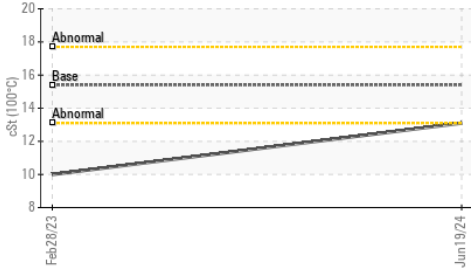
FT-IR (Direct Trend)



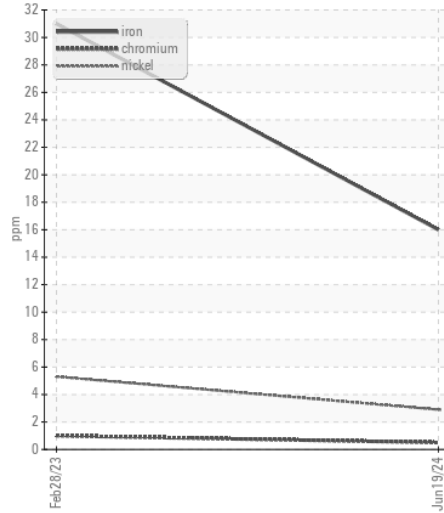
Base Number



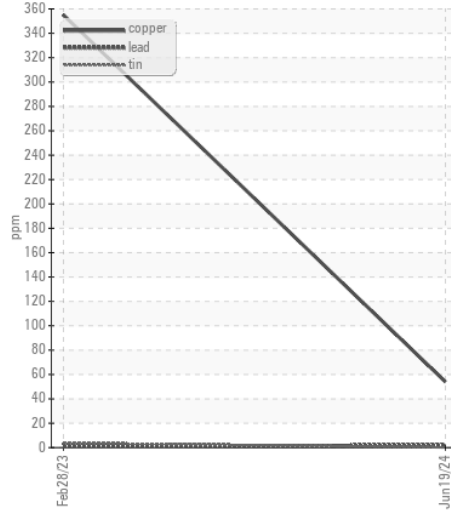
Viscosity @ 100°C



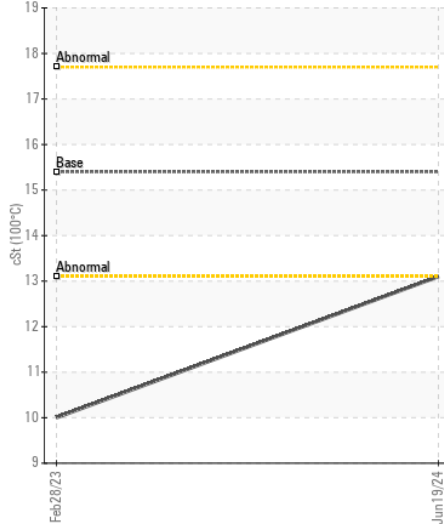
Ferrous Alloys



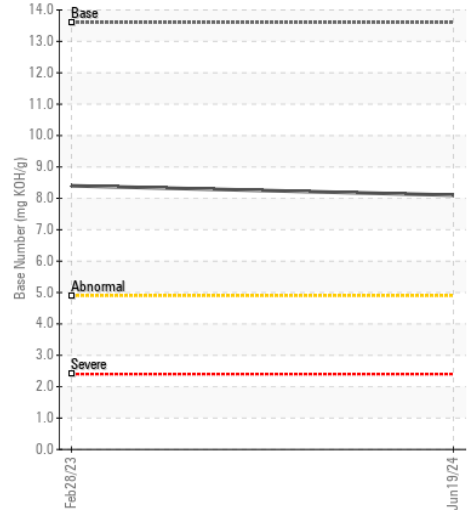
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0218654 **Received** : 20 Jun 2024
Lab Number : 06215638 **Tested** : 21 Jun 2024
Unique Number : 11088502 **Diagnosed** : 21 Jun 2024 - Wes Davis
Test Package : CONST (Additional Tests: TBN)

JRE - MANASSAS PARK
 9107 OWENS DRIVE
 MANASSAS PARK, VA
 US 20111

Contact: DON VEST
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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)