



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area

[47942]

Machine Id

JOHN DEERE 85G 1FF085GXJNJ024386

Component

Diesel Engine

Fluid

JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (12 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0218568	JR0203359	---
Sample Date		Client Info		11 Jul 2024	01 Feb 2024	---
Machine Age	hrs	Client Info		925	595	---
Oil Age	hrs	Client Info		330	595	---
Filter Age	hrs	Client Info		0	595	---
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	13	42	---
Chromium	ppm	ASTM D5185m	>11	<1	2	---
Nickel	ppm	ASTM D5185m	>5	0	2	---
Titanium	ppm	ASTM D5185m		0	<1	---
Silver	ppm	ASTM D5185m	>3	0	0	---
Aluminum	ppm	ASTM D5185m	>31	4	5	---
Lead	ppm	ASTM D5185m	>26	0	1	---
Copper	ppm	ASTM D5185m	>26	<1	6	---
Tin	ppm	ASTM D5185m	>4	0	<1	---
Vanadium	ppm	ASTM D5185m		0	0	---
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.

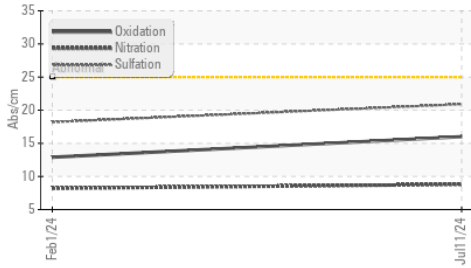
Silicon	ppm	ASTM D5185m	>22	15	47	---
Potassium	ppm	ASTM D5185m	>20	23	▲ 207	---
Fuel		WC Method	>2.1	<1.0	1.4	---
Water		WC Method	>0.21	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.3	0.4	---
Nitration	Abs/cm	*ASTM D7624	>20	8.8	8.2	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.9	18.2	---
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

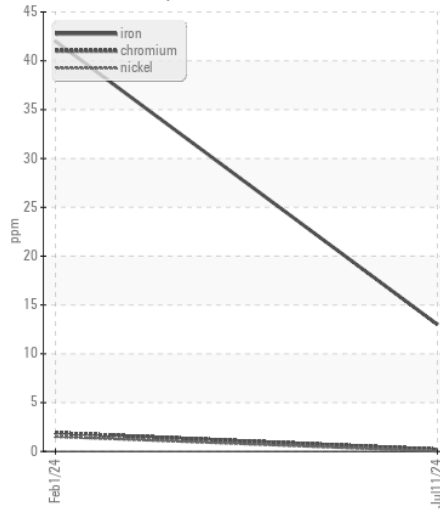
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>31	3	9	---
Boron	ppm	ASTM D5185m		250	203	---
Barium	ppm	ASTM D5185m		<1	0	---
Molybdenum	ppm	ASTM D5185m		246	183	---
Manganese	ppm	ASTM D5185m		<1	1	---
Magnesium	ppm	ASTM D5185m		821	20	---
Calcium	ppm	ASTM D5185m		1522	2302	---
Phosphorus	ppm	ASTM D5185m		919	682	---
Zinc	ppm	ASTM D5185m		1058	835	---
Sulfur	ppm	ASTM D5185m		3448	2422	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.0	12.9	---
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	9.1	6.2	---
Visc @ 100°C	cSt	ASTM D445	15.4	13.9	● 10.4	---

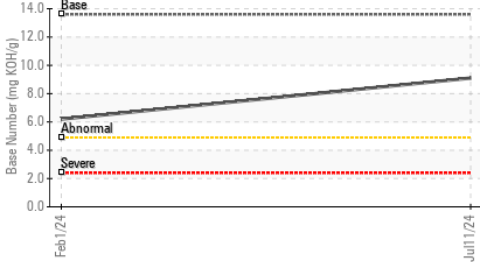
FT-IR (Direct Trend)



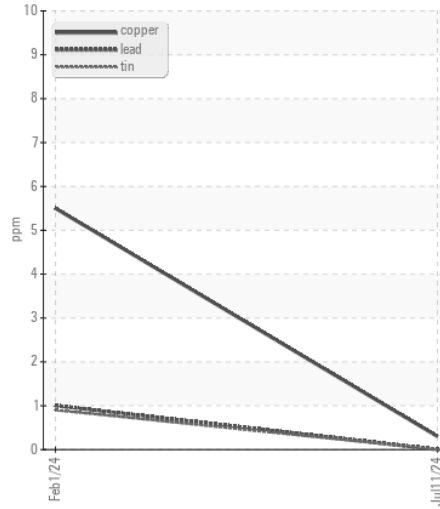
Ferrous Alloys



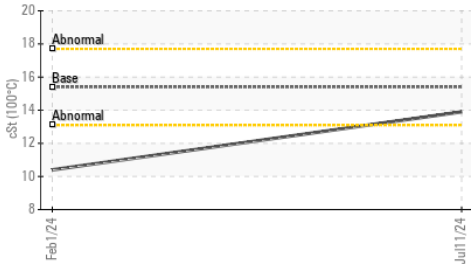
Base Number



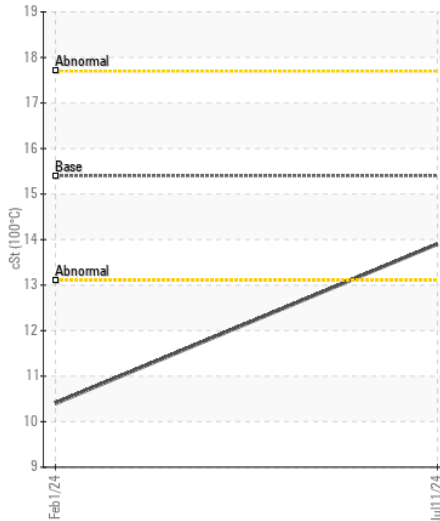
Non-ferrous Metals



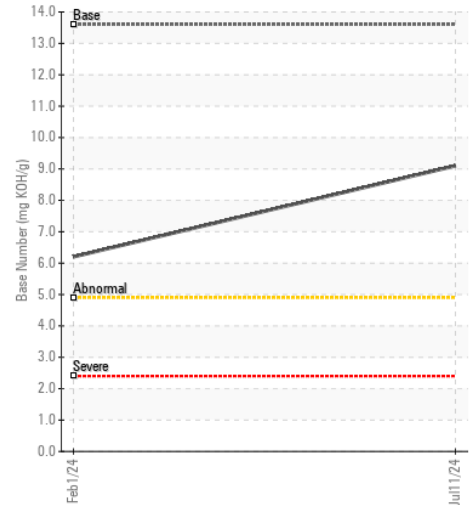
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : JR0218568 Received : 15 Jul 2024
 Lab Number : 06235707 Tested : 16 Jul 2024
 Unique Number : 11124541 Diagnosed : 16 Jul 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)