James River Equipment

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
[W52620 CD HALL]
Machine Id
JOHN DEERE 160G 1FF160GXCNF058841
Component
Diesel Engine
Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

WEAR

The lead level has decreased, but is still abnormal. All other component wear rates are normal.

CONTAMINATION

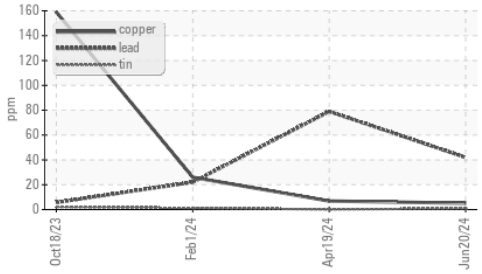
There is no indication of any contamination in the oil.

FLUID CONDITION

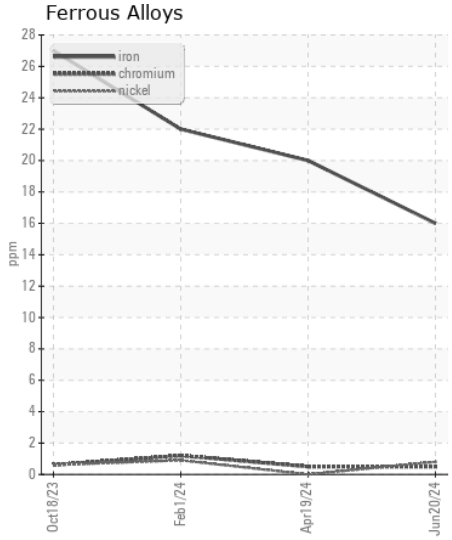
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0212054	JR0199670	JR0199760
Sample Date		Client Info		20 Jun 2024	19 Apr 2024	01 Feb 2024
Machine Age	hrs	Client Info		1950	1510	972
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	ABNORMAL	ATTENTION
Iron	ppm	ASTM D5185m	>51	16	20	22
Chromium	ppm	ASTM D5185m	>11	<1	<1	1
Nickel	ppm	ASTM D5185m	>5	<1	0	<1
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>31	6	4	4
Lead	ppm	ASTM D5185m	>26	▲ 42	▲ 79	22
Copper	ppm	ASTM D5185m	>26	5	7	26
Tin	ppm	ASTM D5185m	>4	<1	<1	1
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>22	9	8	10
Potassium	ppm	ASTM D5185m	>20	3	<1	13
Fuel		WC Method	>2.1	<1.0	<1.0	<1.0
Water		WC Method	>0.21	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.3	0.4	0.4
Nitration	Abs/cm	*ASTM D7624	>20	9.6	10.5	10.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.7	25.8	25.4
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.21	NEG	NEG	NEG
Sodium	ppm	ASTM D5185m	>31	7	5	13
Boron	ppm	ASTM D5185m		91	93	106
Barium	ppm	ASTM D5185m		<1	2	0
Molybdenum	ppm	ASTM D5185m		203	248	242
Manganese	ppm	ASTM D5185m		<1	<1	1
Magnesium	ppm	ASTM D5185m		719	817	812
Calcium	ppm	ASTM D5185m		1753	1658	1447
Phosphorus	ppm	ASTM D5185m		1053	922	887
Zinc	ppm	ASTM D5185m		1254	1158	1107
Sulfur	ppm	ASTM D5185m		3786	3741	3016
Oxidation	Abs/.1mm	*ASTM D7414	>25	19.0	21.4	21.1
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	8.1	7.9	7.5
Visc @ 100°C	cSt	ASTM D445	15.4	13.5	13.6	11.8

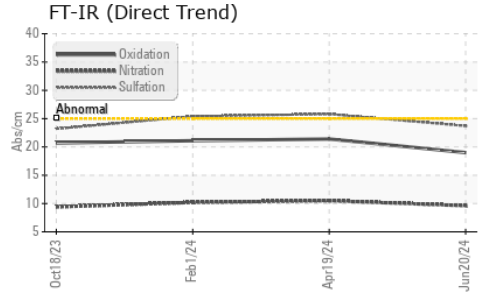
Non-ferrous Metals



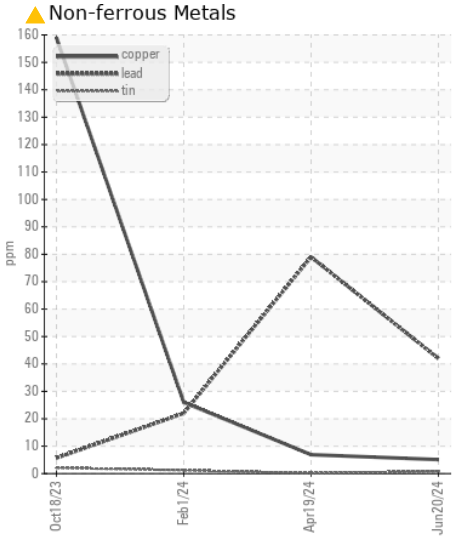
Ferrous Alloys



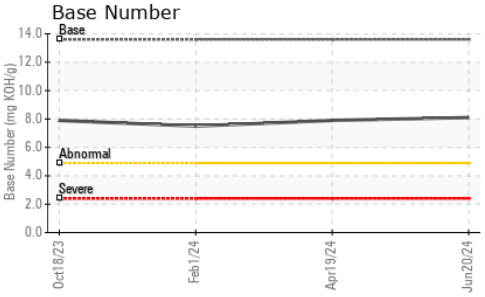
FT-IR (Direct Trend)



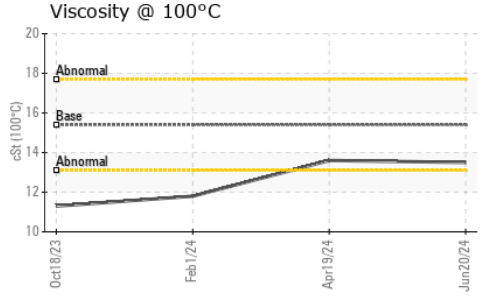
Non-ferrous Metals



Base Number



Viscosity @ 100°C



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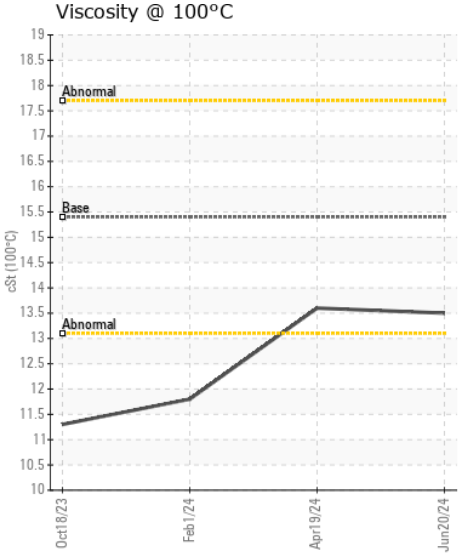

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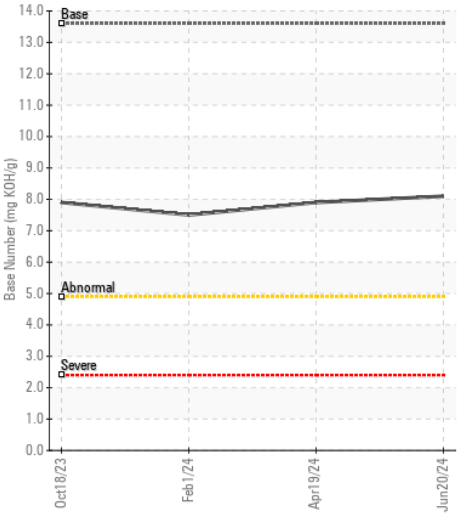

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0212054
Lab Number : 06222195
Unique Number : 11100392
Test Package : CONST (Additional Tests: TBN)

Received : 27 Jun 2024
Tested : 28 Jun 2024
Diagnosed : 28 Jun 2024 - Don Baldridge

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)

JRE - ASHLAND
11047 LEADBETTER RD
ASHLAND, VA
US 23005
Contact: DAVID ZIEG
dzieg@jamesriverequipment.com
T: (804)798-6001
F: (804)798-0292