



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area

[46267]

Machine Id

JOHN DEERE 700L 1T0700LXJNF420997

Component

Diesel Engine

Fluid

JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (29 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0214365	JR0199259	JR0190134
Sample Date		Client Info		23 Apr 2024	25 Jan 2024	24 Oct 2023
Machine Age	hrs	Client Info		3965	3432	2977
Oil Age	hrs	Client Info		533	2934	498
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	N/A
Filter Changed		Client Info		Changed	Changed	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	16	14	16
Chromium	ppm	ASTM D5185m	>11	0	0	<1
Nickel	ppm	ASTM D5185m	>5	0	0	<1
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>31	3	3	5
Lead	ppm	ASTM D5185m	>26	0	0	<1
Copper	ppm	ASTM D5185m	>26	3	<1	2
Tin	ppm	ASTM D5185m	>4	0	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

There is no indication of any contamination in the oil.

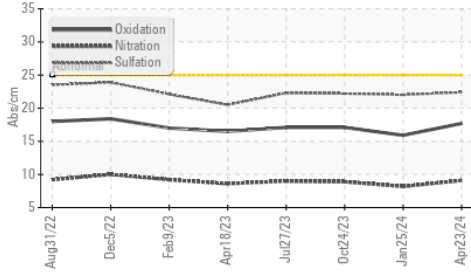
Silicon	ppm	ASTM D5185m	>22	6	6	7
Potassium	ppm	ASTM D5185m	>20	0	<1	3
Fuel		WC Method	>2.1	<1.0	<1.0	<1.0
Water		WC Method	>0.21	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.3	0.2	0.3
Nitration	Abs/cm	*ASTM D7624	>20	9.1	8.2	8.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.4	22.0	22.2
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

FLUID CONDITION

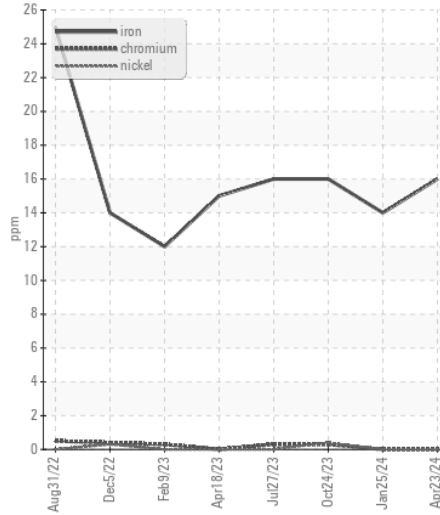
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>31	3	3	0
Boron	ppm	ASTM D5185m		191	219	234
Barium	ppm	ASTM D5185m		<1	0	4
Molybdenum	ppm	ASTM D5185m		223	213	271
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		799	753	789
Calcium	ppm	ASTM D5185m		1529	1883	1422
Phosphorus	ppm	ASTM D5185m		907	976	847
Zinc	ppm	ASTM D5185m		1072	1184	1111
Sulfur	ppm	ASTM D5185m		3393	3322	3417
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.7	15.9	17.1
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	8.8	8.7	8.6
Visc @ 100°C	cSt	ASTM D445	15.4	13.2	12.6	13.8

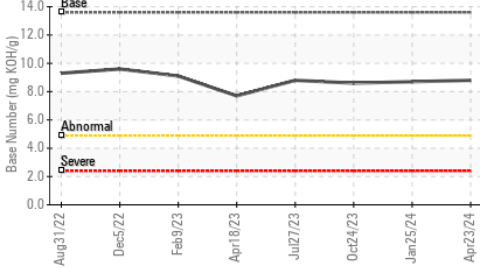
FT-IR (Direct Trend)



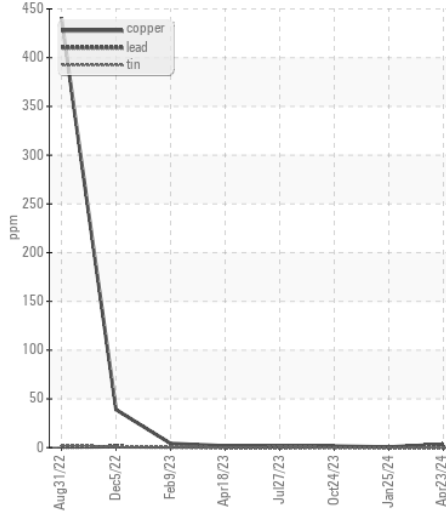
Ferrous Alloys



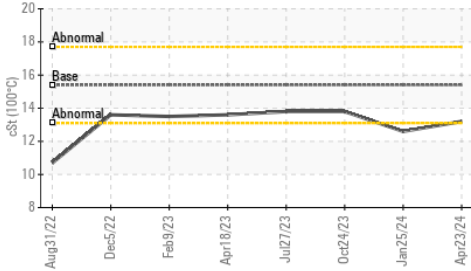
Base Number



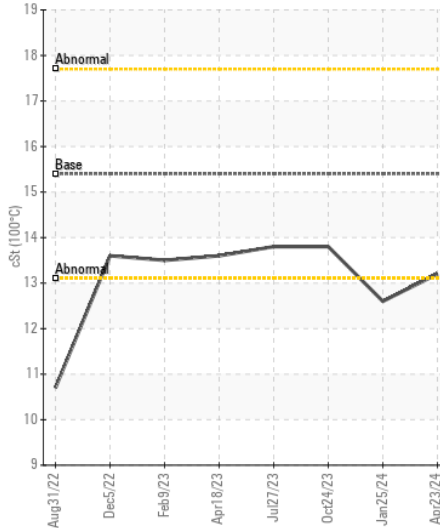
Non-ferrous Metals



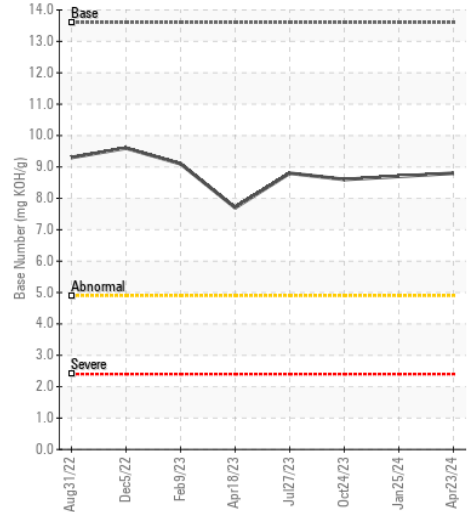
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0214365 **Received** : 24 Apr 2024
Lab Number : 06159665 **Tested** : 25 Apr 2024
Unique Number : 10995088 **Diagnosed** : 25 Apr 2024 - Wes Davis
Test Package : CONST (Additional Tests: TBN)

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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)