



WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
JOHN DEERE 700L 1T0700LXVMF401903

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.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0202765	JR0190725	JR0181269
Sample Date		Client Info		27 Feb 2024	01 Dec 2023	25 Jul 2023
Machine Age	hrs	Client Info		3032	2665	2066
Oil Age	hrs	Client Info		966	2665	556
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	NORMAL	NORMAL

WEAR

Valve wear is indicated. All other component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	45	21	11
Chromium	ppm	ASTM D5185m	>11	<1	<1	<1
Nickel	ppm	ASTM D5185m	>5	▲ 11	3	3
Titanium	ppm	ASTM D5185m		0	3	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>31	4	4	3
Lead	ppm	ASTM D5185m	>26	1	<1	0
Copper	ppm	ASTM D5185m	>26	3	4	4
Tin	ppm	ASTM D5185m	>4	<1	0	<1
Vanadium	ppm	ASTM D5185m		<1	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.

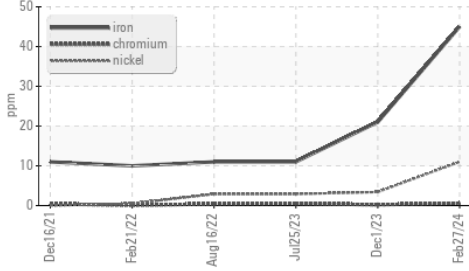
Silicon	ppm	ASTM D5185m	>22	8	8	6
Potassium	ppm	ASTM D5185m	>20	<1	3	1
Fuel		WC Method	>2.1	<1.0	<1.0	<1.0
Water		WC Method	>0.21	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.4	0.4	0.3
Nitration	Abs/cm	*ASTM D7624	>20	8.7	10.1	9.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.0	24.9	22.3
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

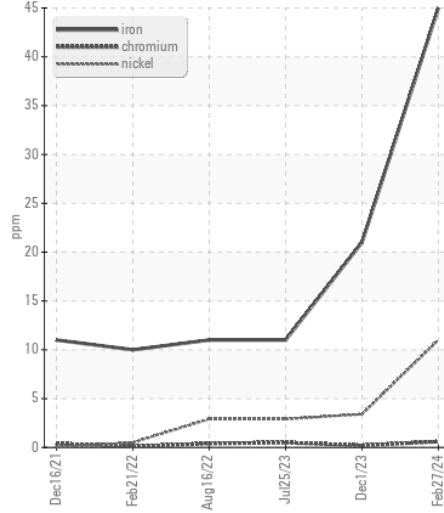
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>31	2	2	3
Boron	ppm	ASTM D5185m		177	104	238
Barium	ppm	ASTM D5185m		0	3	0
Molybdenum	ppm	ASTM D5185m		268	234	261
Manganese	ppm	ASTM D5185m		<1	0	<1
Magnesium	ppm	ASTM D5185m		1010	784	873
Calcium	ppm	ASTM D5185m		1710	1384	1583
Phosphorus	ppm	ASTM D5185m		943	793	963
Zinc	ppm	ASTM D5185m		1286	1032	1195
Sulfur	ppm	ASTM D5185m		3395	3082	3776
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.1	20.5	17.3
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	8.6	7.7	8.2
Visc @ 100°C	cSt	ASTM D445	15.4	13.6	13.7	13.5

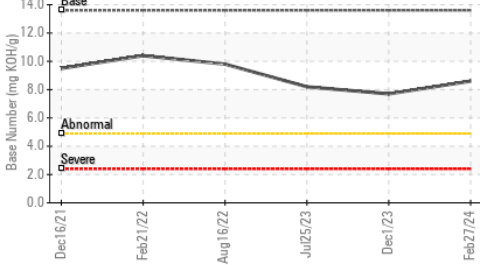
▲ Ferrous Alloys



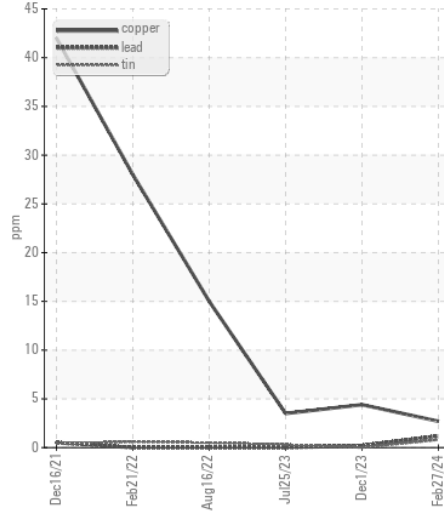
▲ Ferrous Alloys



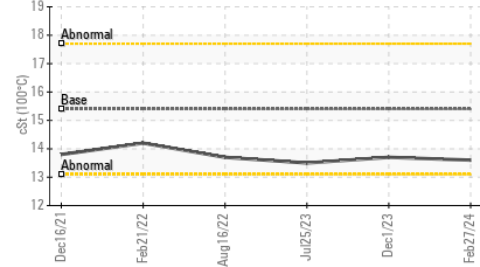
Base Number



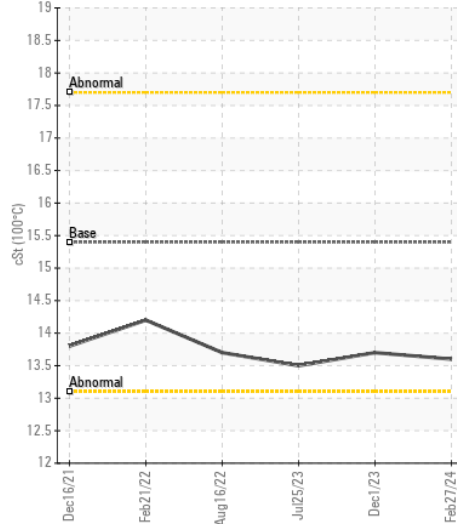
Non-ferrous Metals



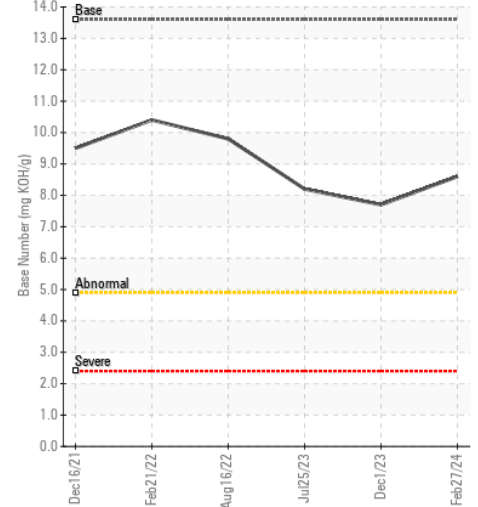
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0202765 **Received** : 29 Feb 2024
Lab Number : 06104154 **Tested** : 29 Feb 2024
Unique Number : 10902384 **Diagnosed** : 02 Mar 2024 - Don Baldrige
Test Package : CONST (Additional Tests: TBN)

JRE - GARNER
 4161 AUBURN CHURCH RD
 GARNER, NC
 US 27529
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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)