James River Equipment

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
JOHN DEERE 750L 1T0750LXCNF423174
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. We recommend an early resample to monitor this condition.

WEAR

Cylinder, crank, or cam shaft wear is indicated. Valve wear is indicated.

CONTAMINATION

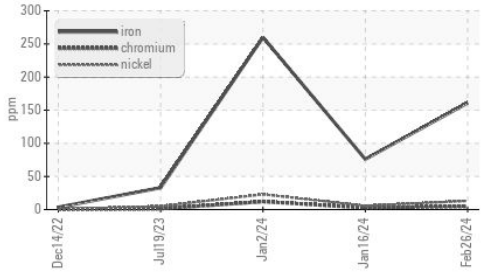
There is no indication of any contamination in the oil.

FLUID CONDITION

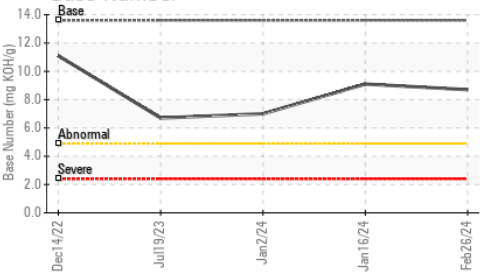
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0202340	JR0122037	JR0186952
Sample Date		Client Info		26 Feb 2024	16 Jan 2024	02 Jan 2024
Machine Age	hrs	Client Info		3037	2871	2811
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	N/A	N/A
Filter Changed		Client Info		Changed	N/A	N/A
Sample Status				ABNORMAL	ABNORMAL	SEVERE
Iron	ppm	ASTM D5185m	>51	▲ 161	▲ 76	▲ 260
Chromium	ppm	ASTM D5185m	>11	4	3	▲ 12
Nickel	ppm	ASTM D5185m	>5	▲ 13	6	▲ 23
Titanium	ppm	ASTM D5185m		<1	<1	1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>31	7	6	● 25
Lead	ppm	ASTM D5185m	>26	1	0	1
Copper	ppm	ASTM D5185m	>26	6	3	15
Tin	ppm	ASTM D5185m	>4	<1	0	2
Vanadium	ppm	ASTM D5185m		<1	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>22	18	14	▲ 56
Potassium	ppm	ASTM D5185m	>20	4	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	0.2	0.1	0.6
Nitration	Abs/cm	*ASTM D7624	>20	8.1	6.7	10.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.3	20.2	26.8
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	2	<1	4
Boron	ppm	ASTM D5185m		217	248	69
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		261	238	256
Manganese	ppm	ASTM D5185m		2	<1	4
Magnesium	ppm	ASTM D5185m		971	837	799
Calcium	ppm	ASTM D5185m		1726	1440	1636
Phosphorus	ppm	ASTM D5185m		957	891	973
Zinc	ppm	ASTM D5185m		1343	1109	1189
Sulfur	ppm	ASTM D5185m		3460	3067	2853
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.9	15.0	22.7
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	8.7	9.1	7.0
Visc @ 100°C	cSt	ASTM D445	15.4	14.0	14.0	14.3

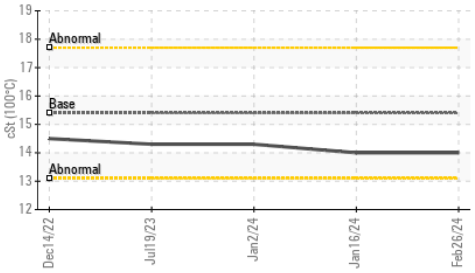
Ferrous Alloys



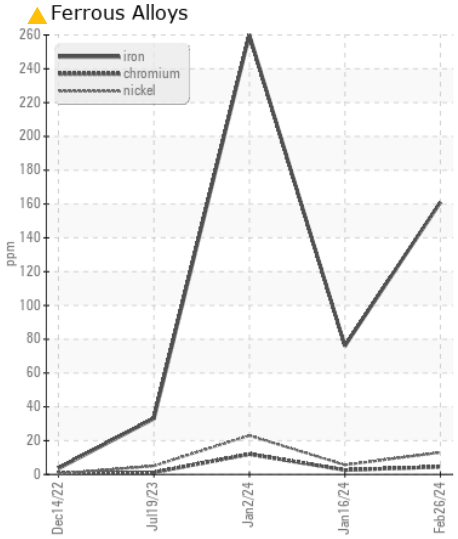
Base Number



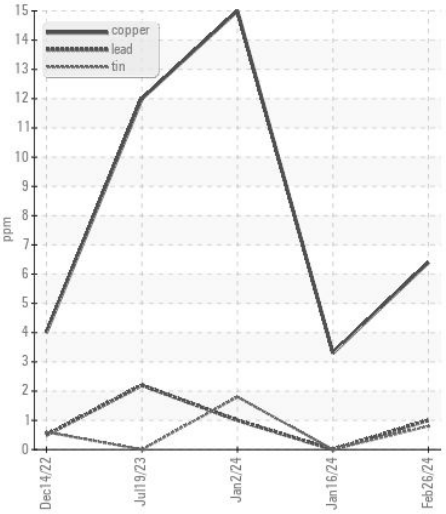
Viscosity @ 100°C



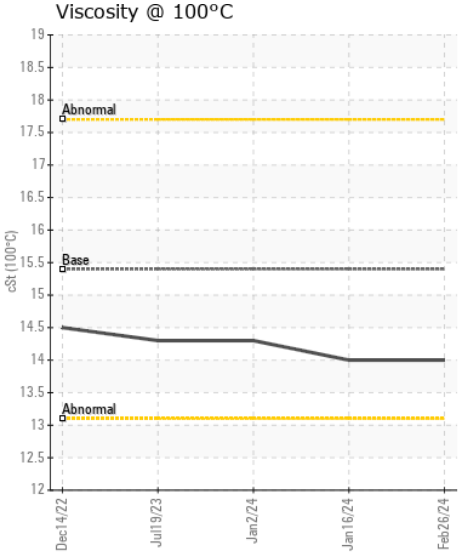
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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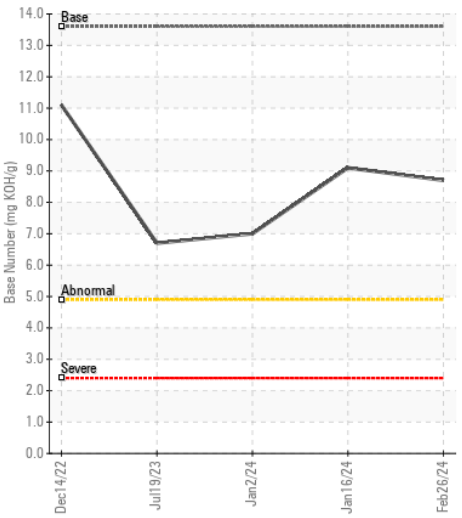

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0202340
Lab Number : 06104167
Unique Number : 10902397
Test Package : CONST (Additional Tests: TBN)

Received : 29 Feb 2024
Tested : 29 Feb 2024
Diagnosed : 02 Mar 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)

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