James River Equipment

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
JOHN DEERE 650K 1T0605KXJGE300684
Component
Diesel Engine
Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (17 QTS)

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

CONTAMINATION

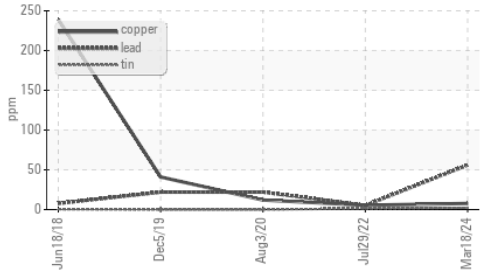
There is no indication of any contamination in the oil.

FLUID CONDITION

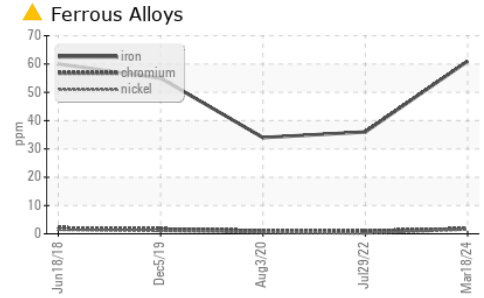
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0208091	JR0136803	JR0056563
Sample Date		Client Info		18 Mar 2024	29 Jul 2022	03 Aug 2020
Machine Age	hrs	Client Info		2956	1454	1454
Oil Age	hrs	Client Info		1502	1454	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	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>51	▲ 61	36	34
Chromium	ppm	ASTM D5185m	>11	2	1	1
Nickel	ppm	ASTM D5185m	>5	2	<1	<1
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>31	12	8	9
Lead	ppm	ASTM D5185m	>26	▲ 56	5	22
Copper	ppm	ASTM D5185m	>26	8	6	12
Tin	ppm	ASTM D5185m	>4	2	1	0
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>22	10	7	7
Potassium	ppm	ASTM D5185m	>20	3	2	16
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	0.8	0.6	0.5
Nitration	Abs/cm	*ASTM D7624	>20	10.9	11.8	10.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	27.2	25.9	24.9
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	5	4	5
Boron	ppm	ASTM D5185m		70	115	152
Barium	ppm	ASTM D5185m		<1	0	0
Molybdenum	ppm	ASTM D5185m		238	139	262
Manganese	ppm	ASTM D5185m		1	<1	<1
Magnesium	ppm	ASTM D5185m		792	679	967
Calcium	ppm	ASTM D5185m		1550	1630	1578
Phosphorus	ppm	ASTM D5185m		854	759	909
Zinc	ppm	ASTM D5185m		1076	1006	1028
Sulfur	ppm	ASTM D5185m		2912	3229	2476
Oxidation	Abs/.1mm	*ASTM D7414	>25	22.2	22.7	19.7
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	7.3	9.0	8.2
Visc @ 100°C	cSt	ASTM D445	15.4	13.7	13.9	14.5

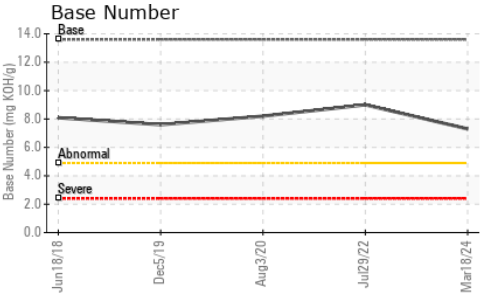
Non-ferrous Metals



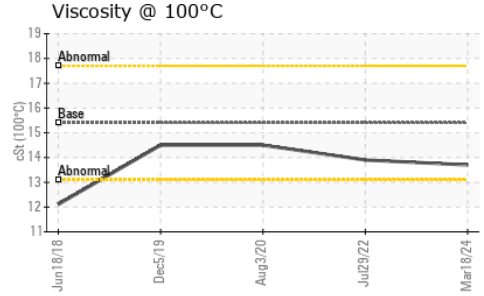
Ferrous Alloys



Base Number



Viscosity @ 100°C



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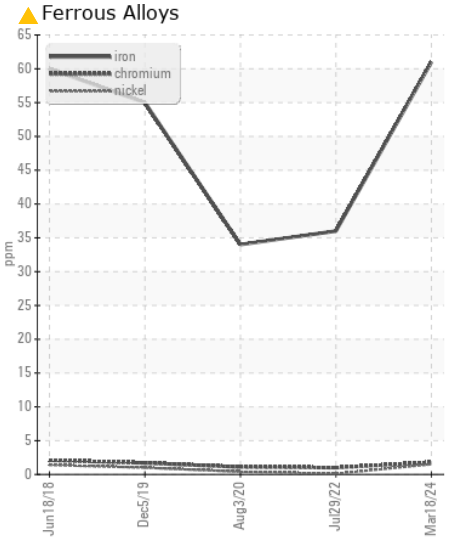

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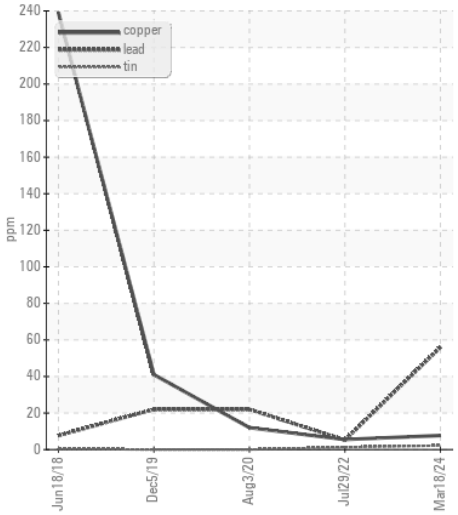

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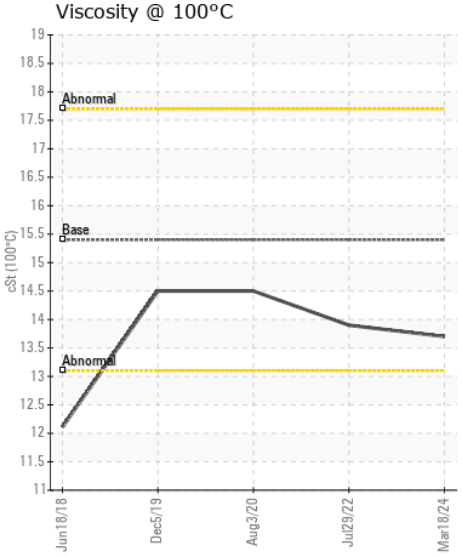

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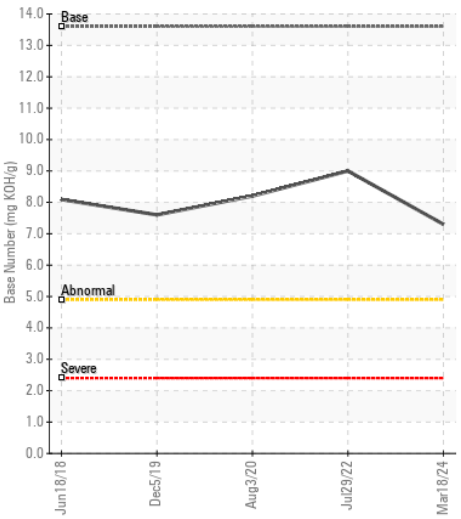

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0208091
Lab Number : 06123500
Unique Number : 10937651
Test Package : CONST (Additional Tests: TBN)

Received : 20 Mar 2024
Tested : 21 Mar 2024
Diagnosed : 22 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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