James River Equipment

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
JOHN DEERE 350G 1FF350GXKMF815106
Component
Diesel Engine
Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- QTS)

RECOMMENDATION

No corrective action is recommended at this time. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

WEAR

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

CONTAMINATION

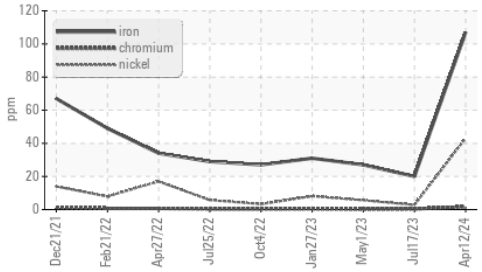
There is no indication of any contamination in the oil.

FLUID CONDITION

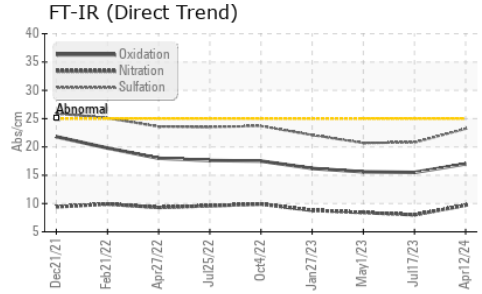
The BN result indicates that there is suitable alkalinity remaining in the oil.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0211043	JR0181785	JR0168848
Sample Date		Client Info		12 Apr 2024	17 Jul 2023	01 May 2023
Machine Age	hrs	Client Info		4021	3699	3459
Oil Age	hrs	Client Info		0	0	505
Filter Age	hrs	Client Info		0	0	505
Oil Changed		Client Info		Changed	Not Changd	Changed
Filter Changed		Client Info		Changed	Not Changd	Changed
Sample Status				ABNORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>51	▲ 107	20	27
Chromium	ppm	ASTM D5185m	>11	2	<1	<1
Nickel	ppm	ASTM D5185m	>5	▲ 43	3	6
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>31	7	2	0
Lead	ppm	ASTM D5185m	>26	6	0	<1
Copper	ppm	ASTM D5185m	>26	8	<1	2
Tin	ppm	ASTM D5185m	>4	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>22	10	7	6
Potassium	ppm	ASTM D5185m	>20	2	<1	2
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	0.6	0.3	0.4
Nitration	Abs/cm	*ASTM D7624	>20	9.7	8.0	8.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.2	20.8	20.7
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	4	2	0
Boron	ppm	ASTM D5185m		194	262	178
Barium	ppm	ASTM D5185m		<1	0	0
Molybdenum	ppm	ASTM D5185m		276	258	255
Manganese	ppm	ASTM D5185m		3	<1	<1
Magnesium	ppm	ASTM D5185m		894	867	794
Calcium	ppm	ASTM D5185m		1581	1531	1462
Phosphorus	ppm	ASTM D5185m		989	916	866
Zinc	ppm	ASTM D5185m		1187	1132	1085
Sulfur	ppm	ASTM D5185m		3661	3856	2894
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.0	15.5	15.6
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	8.7	9.3	7.1
Visc @ 100°C	cSt	ASTM D445	15.4	13.2	13.7	13.2

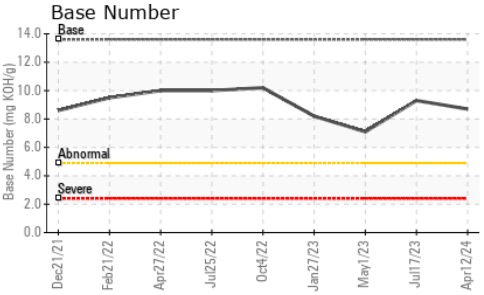
Ferrous Alloys



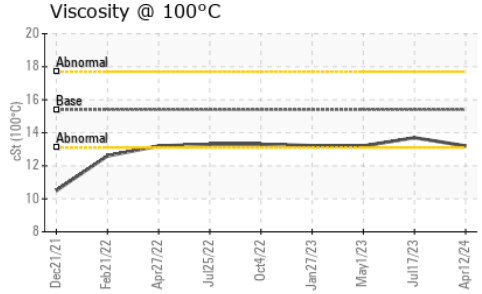
FT-IR (Direct Trend)



Base Number



Viscosity @ 100°C



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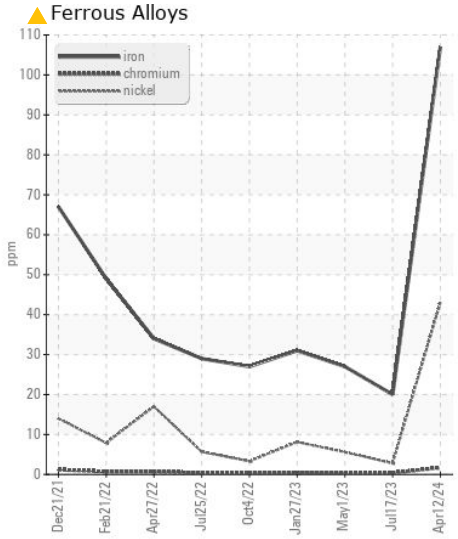
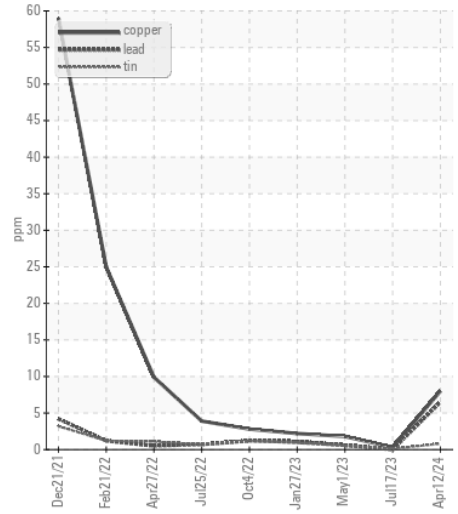


Non-ferrous Metals



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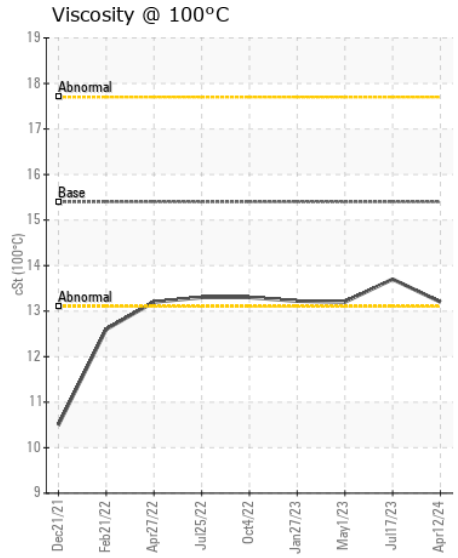

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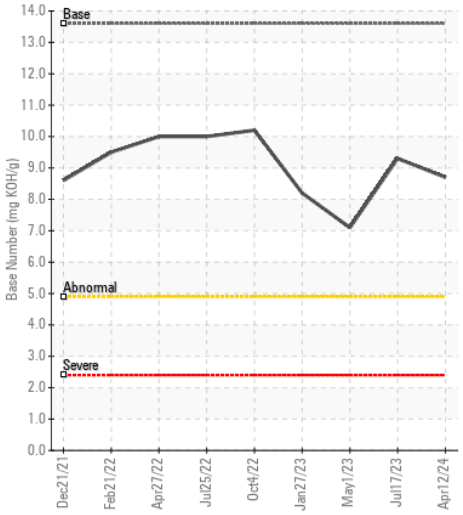

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0211043 **Received** : 15 Apr 2024
Lab Number : 06149273 **Tested** : 16 Apr 2024
Unique Number : 10979351 **Diagnosed** : 17 Apr 2024 - Don Baldridge
Test Package : CONST (Additional Tests: TBN)

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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