James River Equipment

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
JOHN DEERE 700K 1T0700KXAHF317296
Component
Diesel Engine
Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- GAL)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

WEAR

Cylinder, crank, or cam shaft wear is indicated. All other component wear rates are normal.

CONTAMINATION

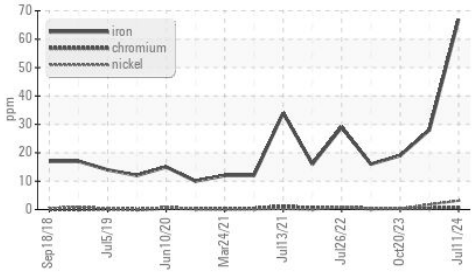
There is no indication of any contamination in the oil.

FLUID CONDITION

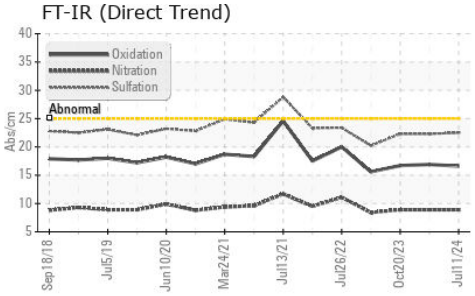
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0220126	JR0206472	JR0178821
Sample Date		Client Info		11 Jul 2024	29 Feb 2024	20 Oct 2023
Machine Age	hrs	Client Info		7502	6993	6518
Oil Age	hrs	Client Info		509	475	549
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	Changed	Changed
Filter Changed		Client Info		N/A	Changed	Changed
Sample Status				ABNORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>51	▲ 67	28	19
Chromium	ppm	ASTM D5185m	>11	<1	<1	<1
Nickel	ppm	ASTM D5185m	>5	3	2	<1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>31	4	5	4
Lead	ppm	ASTM D5185m	>26	0	3	<1
Copper	ppm	ASTM D5185m	>26	2	<1	1
Tin	ppm	ASTM D5185m	>4	0	0	<1
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>22	8	7	8
Potassium	ppm	ASTM D5185m	>20	<1	<1	<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	0.5
Nitration	Abs/cm	*ASTM D7624	>20	8.9	8.9	8.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.5	22.3	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
Sodium	ppm	ASTM D5185m	>31	4	3	3
Boron	ppm	ASTM D5185m		222	197	185
Barium	ppm	ASTM D5185m		<1	<1	0
Molybdenum	ppm	ASTM D5185m		241	236	251
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		792	828	837
Calcium	ppm	ASTM D5185m		1455	1373	1507
Phosphorus	ppm	ASTM D5185m		920	887	888
Zinc	ppm	ASTM D5185m		1036	1044	1120
Sulfur	ppm	ASTM D5185m		3249	2938	2877
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.6	16.9	16.7
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	8.4	8.5	7.7
Visc @ 100°C	cSt	ASTM D445	15.4	13.7	13.6	13.8

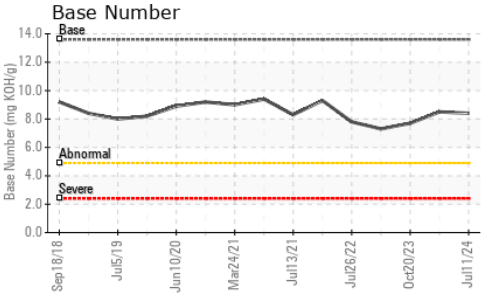
Ferrous Alloys



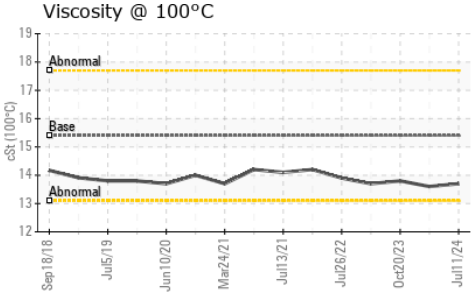
FT-IR (Direct Trend)



Base Number



Viscosity @ 100°C



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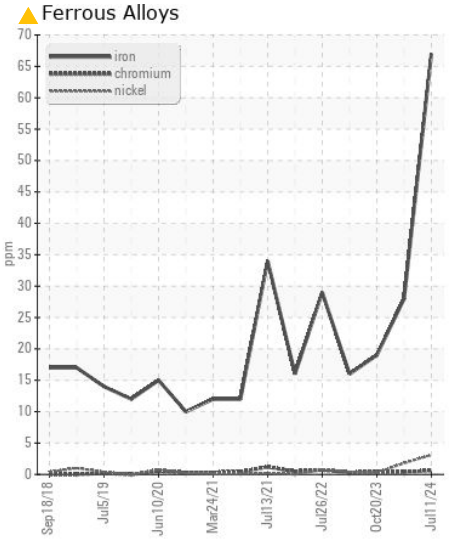
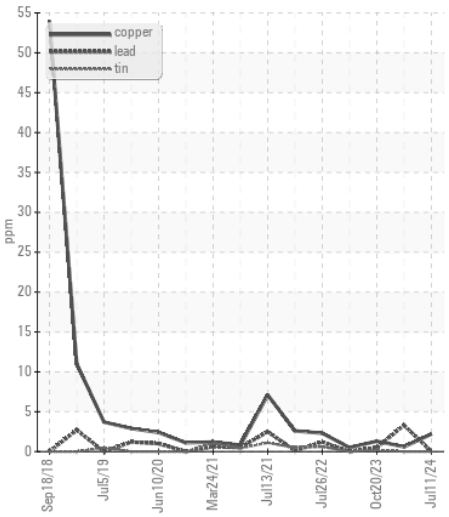


Non-ferrous Metals



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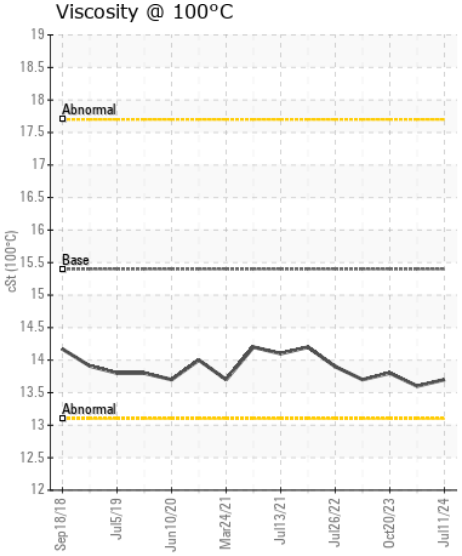

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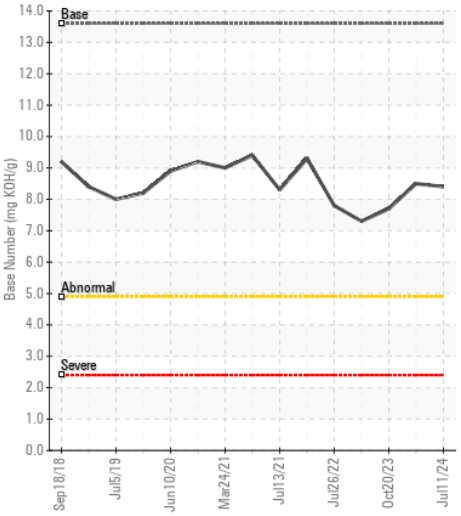

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0220126
Lab Number : 06235676
Unique Number : 11124510
Test Package : CONST (Additional Tests: TBN)

Received : 15 Jul 2024
Tested : 16 Jul 2024
Diagnosed : 16 Jul 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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