James River Equipment

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
[W52762 HENERSON]
Machine Id
JOHN DEERE 624K 1DW624KZLCE649536
Component
Diesel Engine
Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- 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 iron level has decreased, but is still abnormal. All other component wear rates are normal.

CONTAMINATION

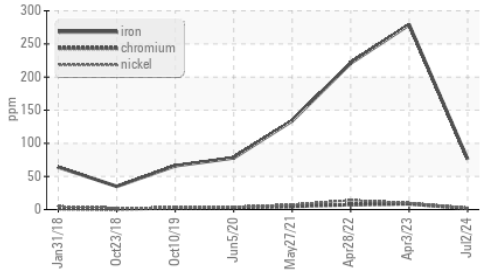
There is no indication of any contamination in the oil.

FLUID CONDITION

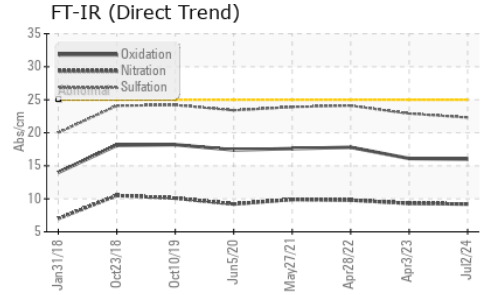
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0224891	JR0164789	JR0125300
Sample Date		Client Info		02 Jul 2024	03 Apr 2023	28 Apr 2022
Machine Age	hrs	Client Info		5931	5444	4956
Oil Age	hrs	Client Info		0	0	500
Filter Age	hrs	Client Info		0	0	500
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	SEVERE	SEVERE
Iron	ppm	ASTM D5185m	>51	▲ 76	▲ 279	▲ 221
Chromium	ppm	ASTM D5185m	>11	2	9	7
Nickel	ppm	ASTM D5185m	>5	2	▲ 10	▲ 14
Titanium	ppm	ASTM D5185m		<1	1	<1
Silver	ppm	ASTM D5185m	>3	0	0	<1
Aluminum	ppm	ASTM D5185m	>31	4	● 14	● 11
Lead	ppm	ASTM D5185m	>26	0	0	<1
Copper	ppm	ASTM D5185m	>26	1	5	5
Tin	ppm	ASTM D5185m	>4	0	<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	12	▲ 53	▲ 39
Potassium	ppm	ASTM D5185m	>20	1	2	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	0.5	0.7	0.6
Nitration	Abs/cm	*ASTM D7624	>20	9.2	9.3	9.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.3	22.9	24.1
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		210	193	201
Barium	ppm	ASTM D5185m		<1	0	0
Molybdenum	ppm	ASTM D5185m		254	241	238
Manganese	ppm	ASTM D5185m		<1	3	3
Magnesium	ppm	ASTM D5185m		858	846	844
Calcium	ppm	ASTM D5185m		1614	1507	1466
Phosphorus	ppm	ASTM D5185m		983	910	939
Zinc	ppm	ASTM D5185m		1136	1092	1098
Sulfur	ppm	ASTM D5185m		3670	3464	2845
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.0	16.1	17.8
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	8.5	8.5	9.7
Visc @ 100°C	cSt	ASTM D445	15.4	13.8	13.7	13.4

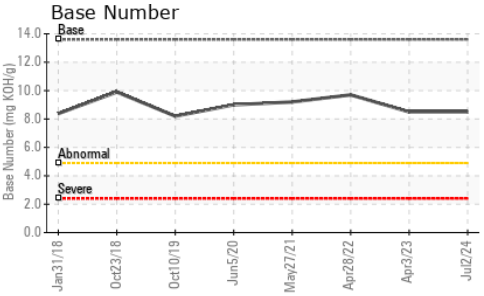
Ferrous Alloys



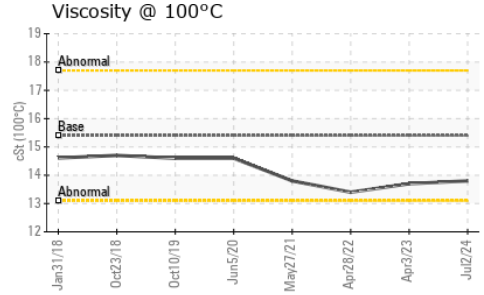
FT-IR (Direct Trend)



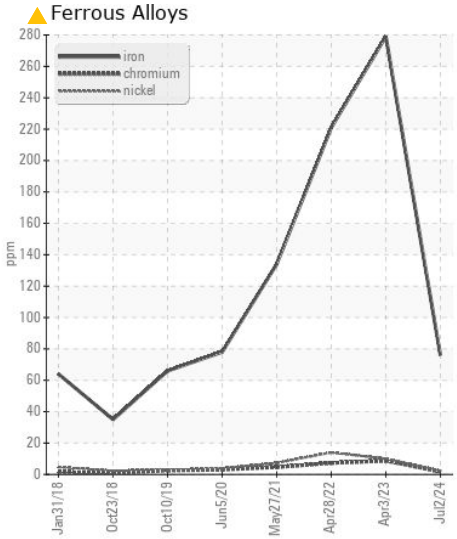
Base Number



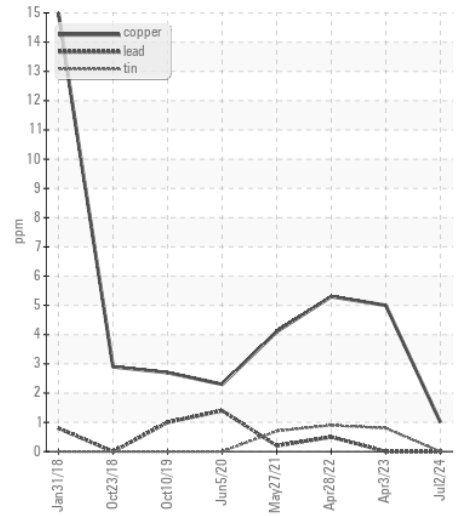
Viscosity @ 100°C



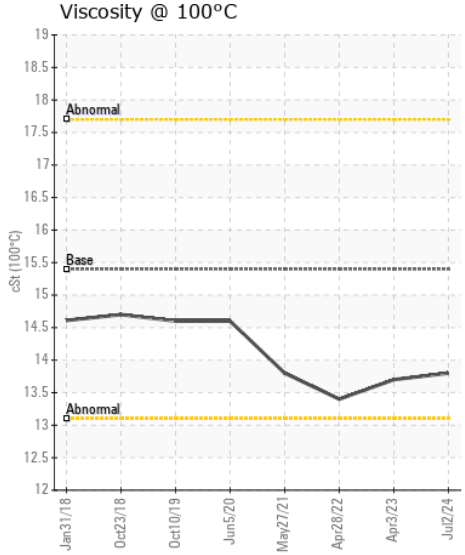
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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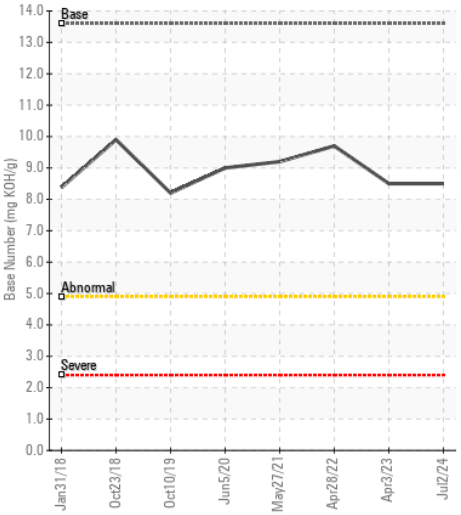

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0224891 **Received** : 11 Jul 2024
Lab Number : 06234150 **Tested** : 12 Jul 2024
Unique Number : 11122984 **Diagnosed** : 14 Jul 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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