James River Equipment

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
JOHN DEERE 317G 1T0317GJTMJ395570
Component
Diesel Engine
Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 0W40 (--- GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

WEAR

The aluminum level is abnormal. All other component wear rates are normal.

CONTAMINATION

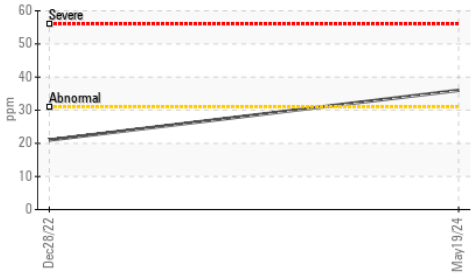
There is no indication of any contamination in the oil.

FLUID CONDITION

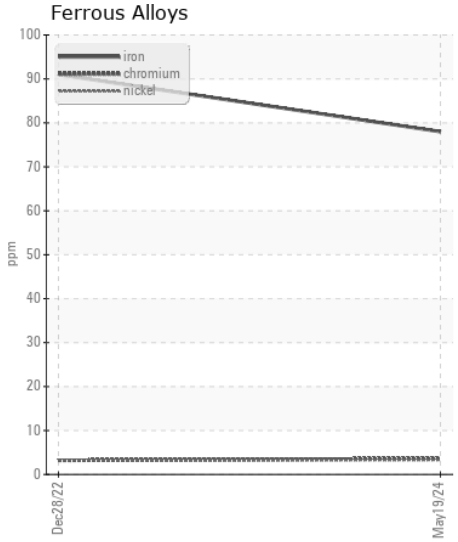
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0212713	JR0156710	---
Sample Date		Client Info		19 May 2024	28 Dec 2022	---
Machine Age	hrs	Client Info		1448	840	---
Oil Age	hrs	Client Info		608	0	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				ABNORMAL	ABNORMAL	---
Iron	ppm	ASTM D5185m	>51	78	91	---
Chromium	ppm	ASTM D5185m	>11	4	3	---
Nickel	ppm	ASTM D5185m	>5	3	3	---
Titanium	ppm	ASTM D5185m		<1	0	---
Silver	ppm	ASTM D5185m	>3	1	<1	---
Aluminum	ppm	ASTM D5185m	>31	▲ 36	21	---
Lead	ppm	ASTM D5185m	>26	4	7	---
Copper	ppm	ASTM D5185m	>26	42	▲ 90	---
Tin	ppm	ASTM D5185m	>4	2	1	---
Vanadium	ppm	ASTM D5185m		<1	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---
Silicon	ppm	ASTM D5185m	>22	21	26	---
Potassium	ppm	ASTM D5185m	>20	3	1	---
Fuel		WC Method	>2.1	<1.0	<1.0	---
Water		WC Method	>0.21	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.2	1.3	---
Nitration	Abs/cm	*ASTM D7624	>20	7.3	12.5	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.0	29.4	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.21	NEG	NEG	---
Sodium	ppm	ASTM D5185m	>31	5	9	---
Boron	ppm	ASTM D5185m		90	120	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m		265	249	---
Manganese	ppm	ASTM D5185m		2	2	---
Magnesium	ppm	ASTM D5185m		851	775	---
Calcium	ppm	ASTM D5185m		1671	1793	---
Phosphorus	ppm	ASTM D5185m		1023	957	---
Zinc	ppm	ASTM D5185m		1166	1247	---
Sulfur	ppm	ASTM D5185m		3656	3750	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.4	25.3	---
Base Number (BN)	mg KOH/g	ASTM D2896	10.5	7.6	9.0	---
Visc @ 100°C	cSt	ASTM D445	14	14.3	13.2	---

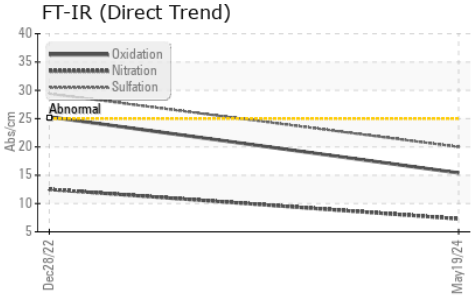
Aluminum (ppm)



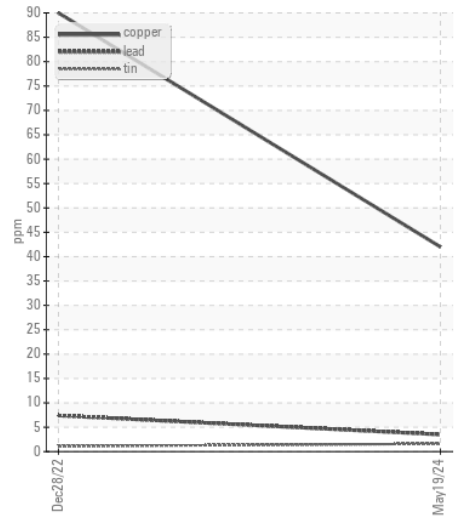
Ferrous Alloys



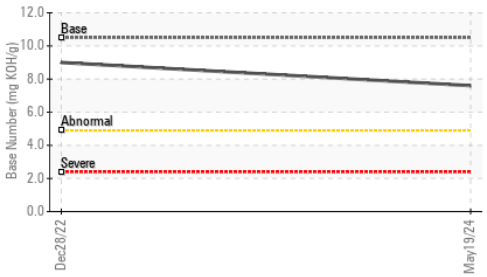
FT-IR (Direct Trend)



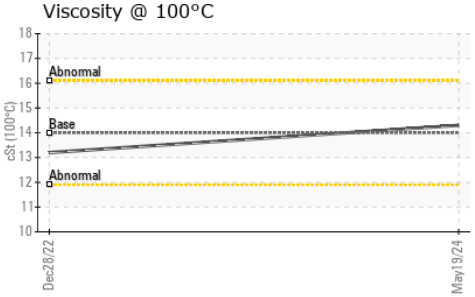
Non-ferrous Metals



Base Number



Viscosity @ 100°C



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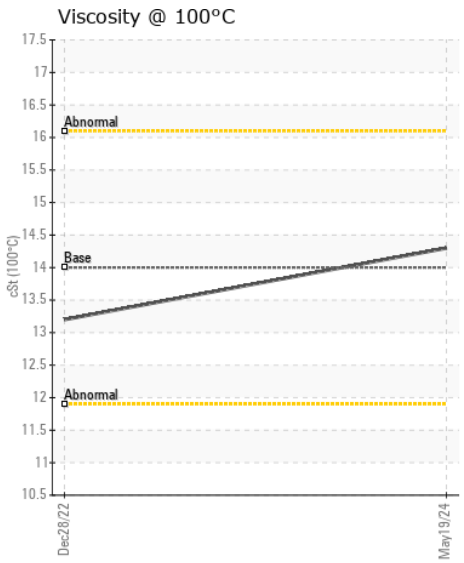

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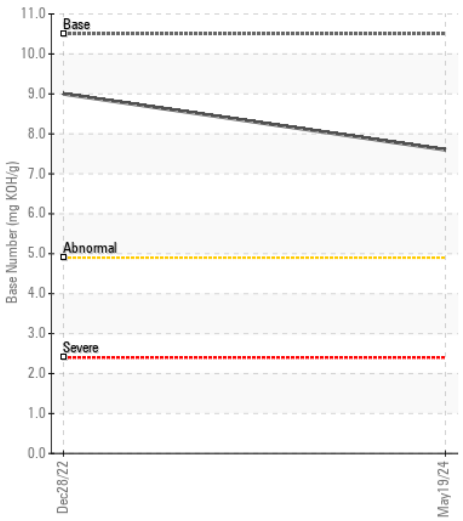

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0212713
Lab Number : 06185957
Unique Number : 11042709
Test Package : CONST (Additional Tests: TBN)

Received : 21 May 2024
Tested : 22 May 2024
Diagnosed : 23 May 2024 - Jonathan Hester

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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