



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION

Machine Id
JOHN DEERE 470G 1FF470GXELF236558
 Component
Diesel Engine
 Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (12 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0221010	JR0202602	JR0174090
Sample Date		Client Info		25 Jun 2024	31 Jan 2024	19 Jun 2023
Machine Age	hrs	Client Info		5971	5297	4163
Oil Age	hrs	Client Info		674	0	0
Filter Age	hrs	Client Info		674	0	0
Oil Changed		Client Info		Changed	Changed	N/A
Filter Changed		Client Info		Changed	Changed	N/A
Sample Status				ATTENTION	ATTENTION	SEVERE

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	23	17	40
Chromium	ppm	ASTM D5185m	>11	<1	<1	<1
Nickel	ppm	ASTM D5185m	>5	0	<1	<1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>31	4	3	3
Lead	ppm	ASTM D5185m	>26	7	4	17
Copper	ppm	ASTM D5185m	>26	10	9	10
Tin	ppm	ASTM D5185m	>4	2	2	3
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

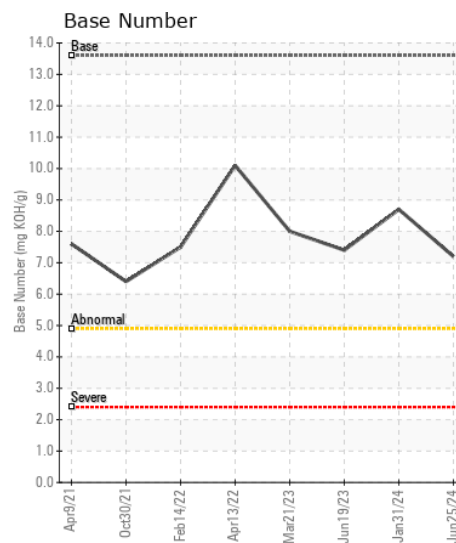
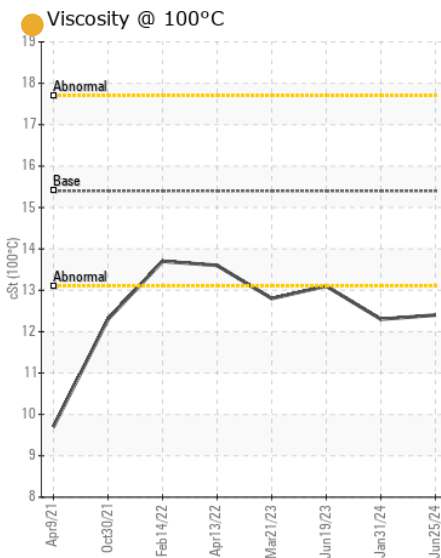
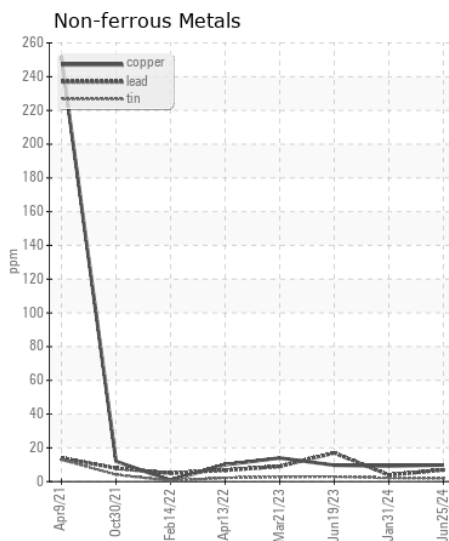
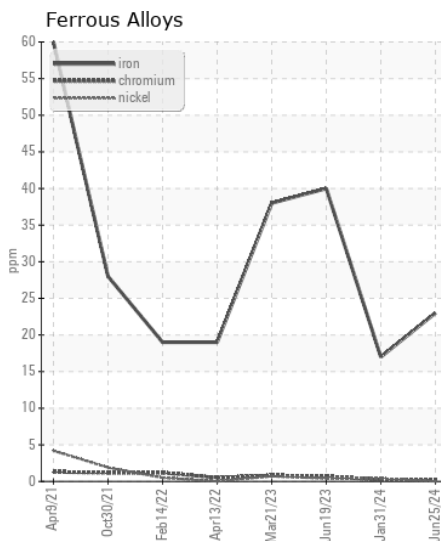
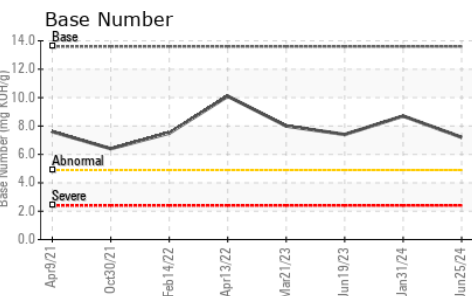
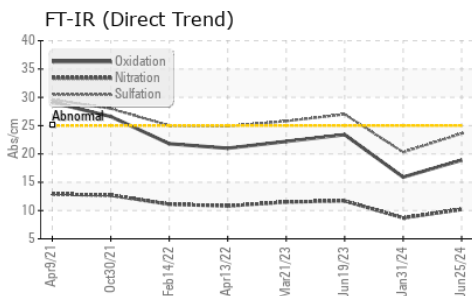
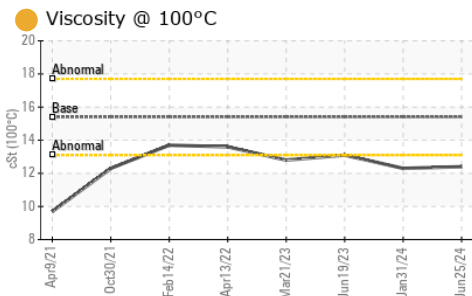
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>22	7	7	8
Potassium	ppm	ASTM D5185m	>20	5	2	4
Fuel		WC Method	>2.1	<1.0	1.8	▲ 3.5
Water		WC Method	>0.21	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.5	0.4	0.7
Nitration	Abs/cm	*ASTM D7624	>20	10.2	8.7	11.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.6	20.3	27.0
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

FLUID CONDITION

The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Sodium	ppm	ASTM D5185m	>31	8	4	7
Boron	ppm	ASTM D5185m		50	34	25
Barium	ppm	ASTM D5185m		0	<1	2
Molybdenum	ppm	ASTM D5185m		181	89	190
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m		721	800	881
Calcium	ppm	ASTM D5185m		1409	1159	1333
Phosphorus	ppm	ASTM D5185m		858	968	964
Zinc	ppm	ASTM D5185m		1166	1170	1185
Sulfur	ppm	ASTM D5185m		2761	2853	3076
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.9	15.9	23.4
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	7.2	8.7	7.4
Visc @ 100°C	cSt	ASTM D445	15.4	● 12.4	● 12.3	13.1



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : JR0221010

Lab Number : 06220808

Unique Number : 11099005

Test Package : CONST (Additional Tests: TBN)

Received : 26 Jun 2024

Tested : 26 Jun 2024

Diagnosed : 27 Jun 2024 - Sean Felton

JRE - NEW BERN

3816 MARTIN LUTHER KING BLVD

NEW BERN, NC

US 28562

Contact: NEW BERN SHOP

nick.etherdridge@jamesriverequipment.com;canastasio@wearcheckusa.com

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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F: