



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
JOHN DEERE 470G 1FF470GXVMF236782

Component
Diesel Engine

Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 0W40 (48 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0208796	JR0159319	JR0132246
Sample Date		Client Info		20 Mar 2024	02 Feb 2023	16 Sep 2022
Machine Age	hrs	Client Info		1976	1571	1429
Oil Age	hrs	Client Info		1976	142	500
Filter Age	hrs	Client Info		0	142	500
Oil Changed		Client Info		Changed	Not Changd	Changed
Filter Changed		Client Info		Changed	Not Changd	Changed
Sample Status				NORMAL	MARGINAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	11	13	38
Chromium	ppm	ASTM D5185m	>11	<1	<1	<1
Nickel	ppm	ASTM D5185m	>5	2	3	9
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>3	0	0	<1
Aluminum	ppm	ASTM D5185m	>31	3	4	9
Lead	ppm	ASTM D5185m	>26	3	6	31
Copper	ppm	ASTM D5185m	>26	3	9	23
Tin	ppm	ASTM D5185m	>4	<1	2	4
Vanadium	ppm	ASTM D5185m		<1	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

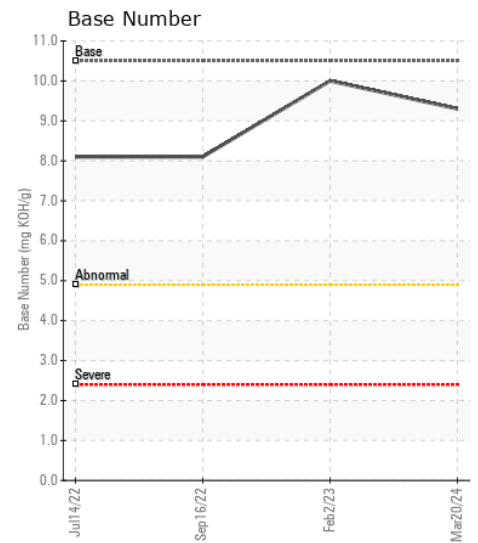
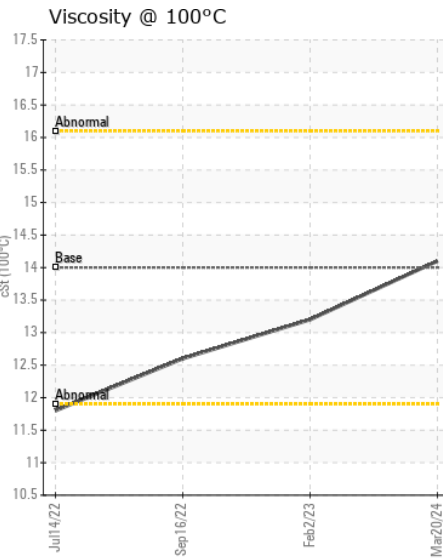
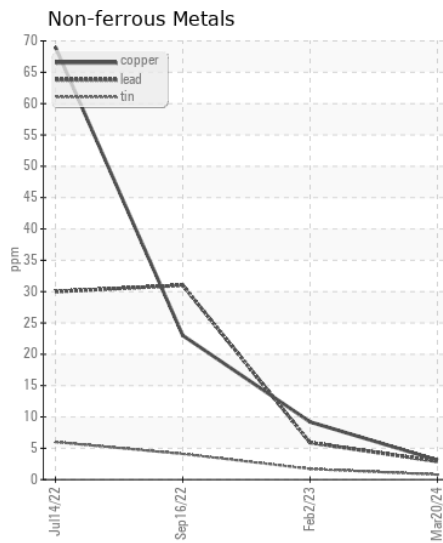
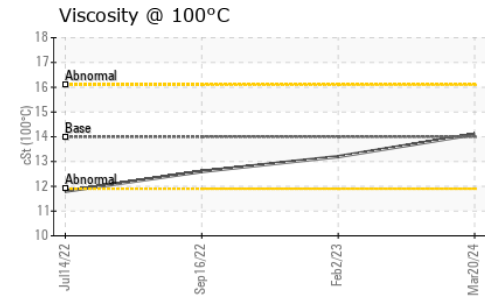
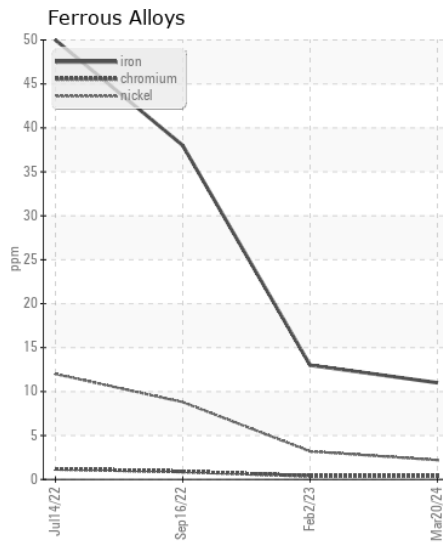
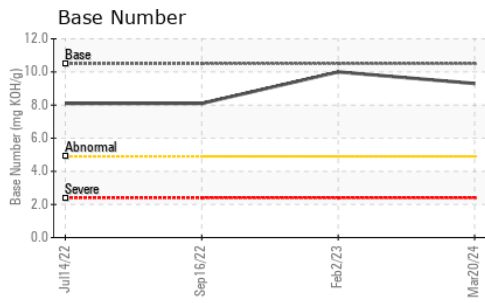
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>22	6	7	9
Potassium	ppm	ASTM D5185m	>20	4	4	16
Fuel		WC Method	>2.1	<1.0	▲ 3.0	▲ 5.9
Water		WC Method	>0.21	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.1	0.3	0.6
Nitration	Abs/cm	*ASTM D7624	>20	5.4	8.8	13.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.6	21.5	29.5
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 BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m	>31	<1	3	5
Boron	ppm	ASTM D5185m		81	233	69
Barium	ppm	ASTM D5185m		2	0	0
Molybdenum	ppm	ASTM D5185m		76	241	270
Manganese	ppm	ASTM D5185m		<1	<1	2
Magnesium	ppm	ASTM D5185m		407	818	797
Calcium	ppm	ASTM D5185m		1788	1406	1491
Phosphorus	ppm	ASTM D5185m		1023	860	898
Zinc	ppm	ASTM D5185m		1206	1048	1120
Sulfur	ppm	ASTM D5185m		3817	3556	2873
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.1	16.4	27.1
Base Number (BN)	mg KOH/g	ASTM D2896	10.5	9.3	10.0	8.1
Visc @ 100°C	cSt	ASTM D445	14	14.1	13.2	12.6



Certificate L2367

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

Sample No. : JR0208796

Lab Number : 06124753

Unique Number : 10938904

Test Package : CONST (Additional Tests: TBN)

Received : 21 Mar 2024

Tested : 22 Mar 2024

Diagnosed : 25 Mar 2024 - Sean Felton

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)

JRE - GREENVILLE

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