



WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION

Machine Id
JOHN DEERE 350G 1FF350GXJKF814262
 Component
Diesel Engine
 Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0222613	JR0197311	JR0163690
Sample Date		Client Info		24 Jun 2024	09 Jan 2024	03 Mar 2023
Machine Age	hrs	Client Info		3177	2889	1071
Oil Age	hrs	Client Info		288	1818	1071
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	ABNORMAL	NORMAL

WEAR

The copper level is abnormal. Cylinder, crank, or cam shaft wear is indicated.

Iron	ppm	ASTM D5185m	>51	▲ 118	▲ 80	48
Chromium	ppm	ASTM D5185m	>11	2	1	0
Nickel	ppm	ASTM D5185m	>5	6	5	4
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m	>3	<1	0	0
Aluminum	ppm	ASTM D5185m	>31	8	6	4
Lead	ppm	ASTM D5185m	>26	8	3	0
Copper	ppm	ASTM D5185m	>26	▲ 44	36	45
Tin	ppm	ASTM D5185m	>4	3	2	0
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

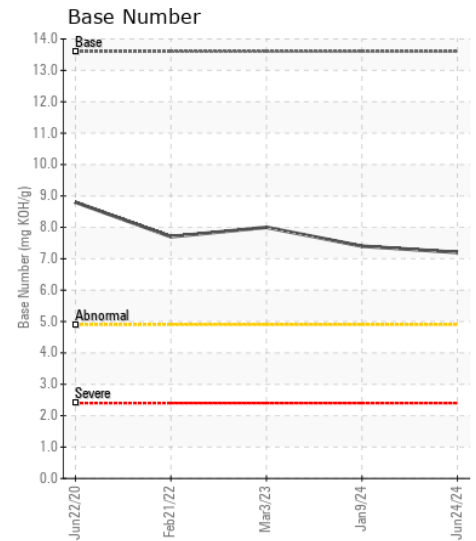
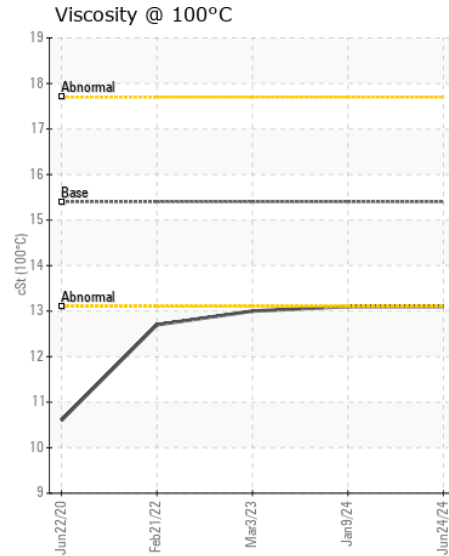
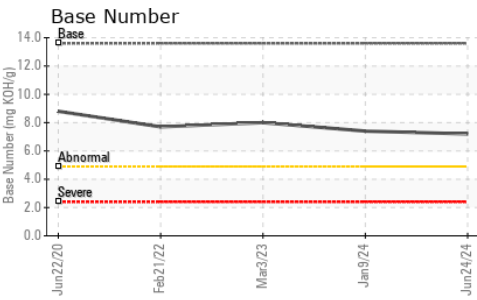
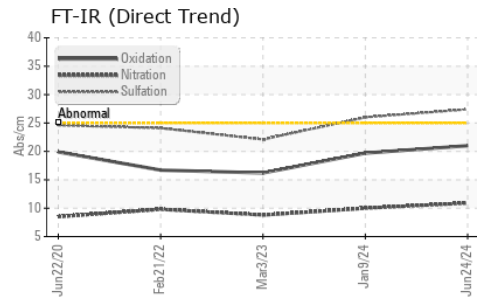
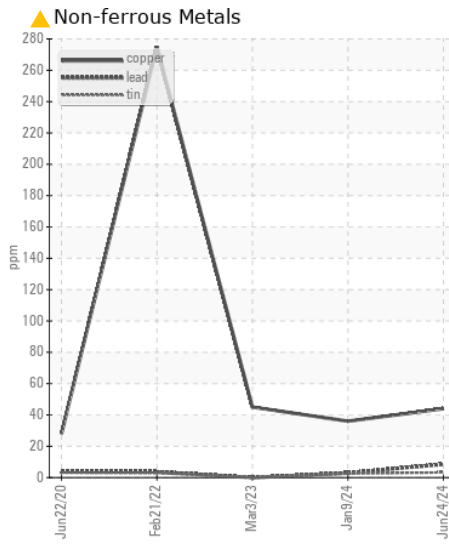
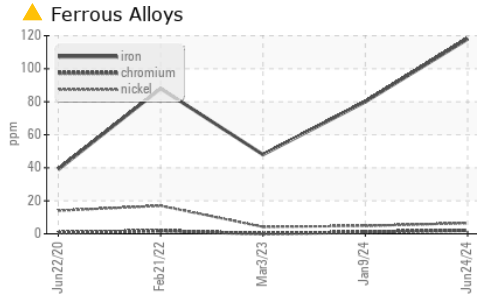
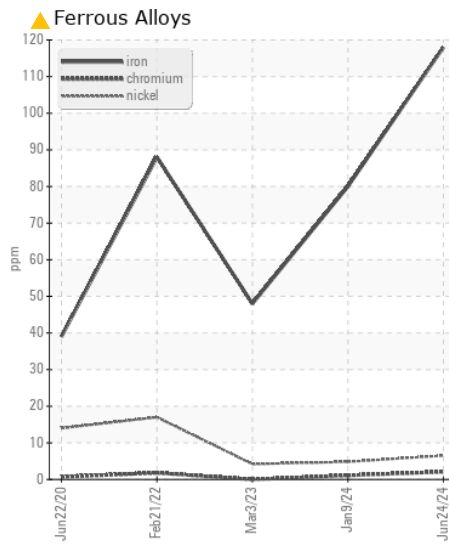
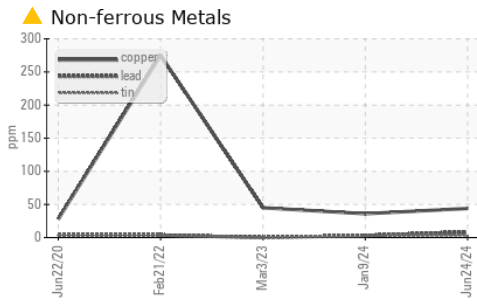
Sodium and/or potassium levels are high. Test for glycol is negative.

Silicon	ppm	ASTM D5185m	>22	13	10	6
Potassium	ppm	ASTM D5185m	>20	19	2	2
Fuel		WC Method	>2.1	<1.0	<1.0	<1.0
Water		WC Method	>0.21	NEG	NEG	NEG
Glycol	%	*ASTM D2982		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.9	0.7	0.4
Nitration	Abs/cm	*ASTM D7624	>20	10.9	10.0	8.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	27.4	26.0	22.1
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

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	● 70	5	<1
Boron	ppm	ASTM D5185m		18	33	194
Barium	ppm	ASTM D5185m		2	<1	0
Molybdenum	ppm	ASTM D5185m		269	254	250
Manganese	ppm	ASTM D5185m		2	1	0
Magnesium	ppm	ASTM D5185m		818	811	781
Calcium	ppm	ASTM D5185m		1518	1484	1467
Phosphorus	ppm	ASTM D5185m		809	852	860
Zinc	ppm	ASTM D5185m		1101	1081	1076
Sulfur	ppm	ASTM D5185m		2793	2668	3011
Oxidation	Abs/.1mm	*ASTM D7414	>25	21.0	19.7	16.2
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	7.2	7.4	8.0
Visc @ 100°C	cSt	ASTM D445	15.4	13.1	13.1	13.0



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0222613
Lab Number : 06219530
Unique Number : 11097727
Test Package : CONST (Additional Tests: Glycol, TBN)

JRE - GARNER
 4161 AUBURN CHURCH RD
 GARNER, NC
 US 27529

Contact: RALEIGH SHOP
 sean.betts@jamesriverequipment.com; catherine.anastasio@wearcheck.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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