



OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
JOHN DEERE 210G 1FF210GXCMF529694
Component
Diesel Engine
Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (6 GAL)

RECOMMENDATION

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

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LEC0041850	LEC0035739	LEC0028418
Sample Date		Client Info		31 May 2023	28 Nov 2022	11 May 2022
Machine Age	hrs	Client Info		831	412	1083
Oil Age	hrs	Client Info		831	412	1083
Filter Age	hrs	Client Info		831	412	500
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL

WEAR

The copper level has decreased, but is still abnormal. All other component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	24	53	34
Chromium	ppm	ASTM D5185m	>11	<1	2	2
Nickel	ppm	ASTM D5185m	>5	3	8	▲ 17
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>3	0	<1	0
Aluminum	ppm	ASTM D5185m	>31	5	5	4
Lead	ppm	ASTM D5185m	>26	<1	6	2
Copper	ppm	ASTM D5185m	>26	▲ 68	▲ 489	▲ 110
Tin	ppm	ASTM D5185m	>4	1	2	1
Vanadium	ppm	ASTM D5185m		<1	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

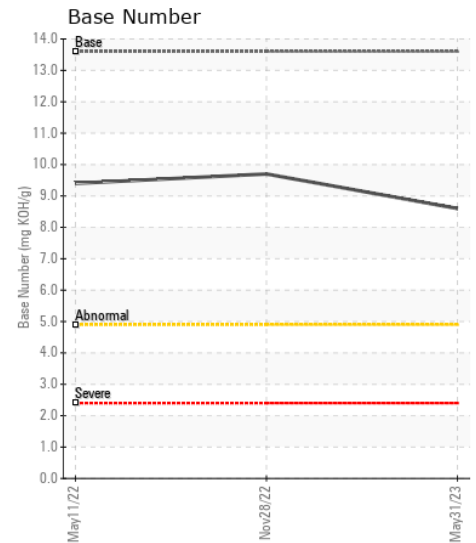
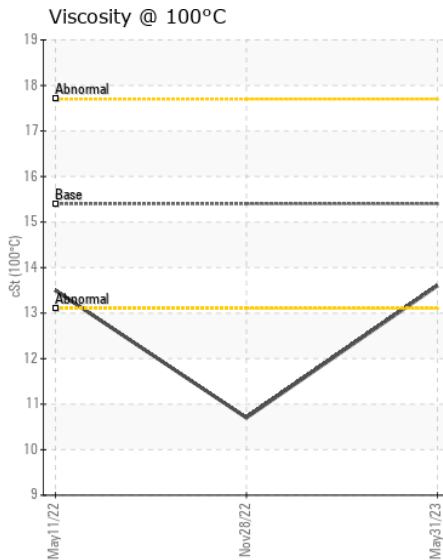
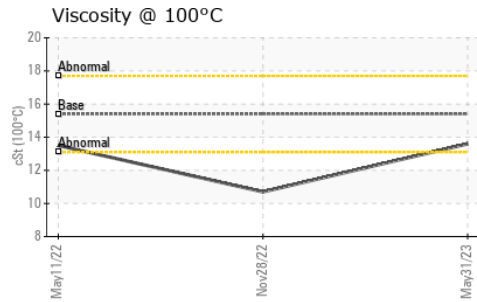
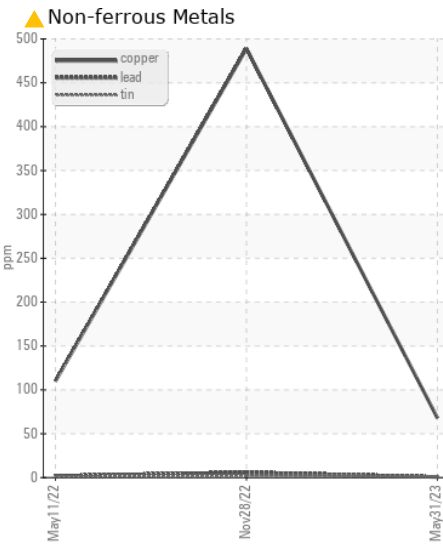
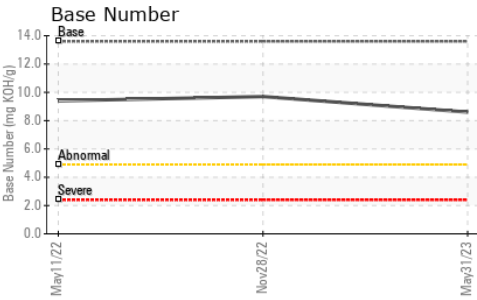
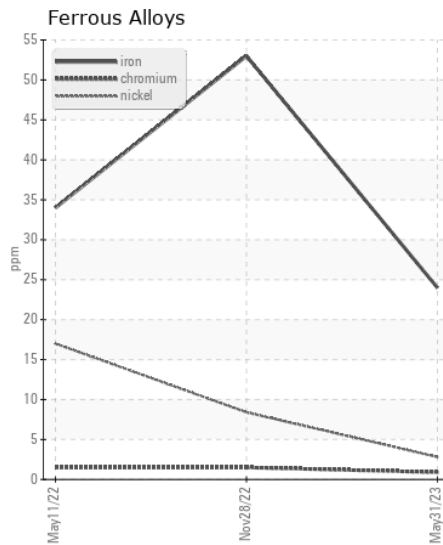
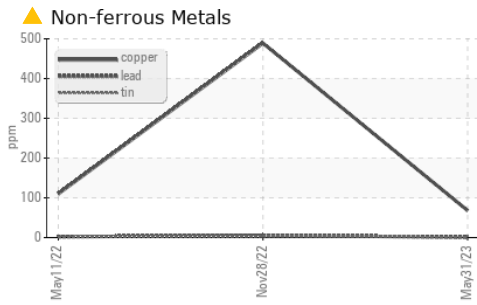
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>120	8	12	8
Potassium	ppm	ASTM D5185m	>20	4	<1	<1
Fuel		WC Method	>2.1	<1.0	0.4	<1.0
Water		WC Method	>0.21	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.5	0.6	0.9
Nitration	Abs/cm	*ASTM D7624	>20	9.4	10.5	11.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.6	26.7	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 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	4	8	4
Boron	ppm	ASTM D5185m		209	178	141
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		244	253	244
Manganese	ppm	ASTM D5185m		2	6	2
Magnesium	ppm	ASTM D5185m		851	807	847
Calcium	ppm	ASTM D5185m		1525	1503	1558
Phosphorus	ppm	ASTM D5185m		931	842	853
Zinc	ppm	ASTM D5185m		1174	1041	1067
Sulfur	ppm	ASTM D5185m		3283	3143	2412
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.1	22.1	21.7
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	8.6	9.7	9.4
Visc @ 100°C	cSt	ASTM D445	15.4	13.6	▲ 10.7	13.5



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LEC0041850 **Received** : 02 Jun 2023
Lab Number : 05862815 **Tested** : 02 Jun 2023
Unique Number : 10497280 **Diagnosed** : 05 Jun 2023 - Don Baldrige
Test Package : CONST (Additional Tests: TBN)

LESLIE EQUIPMENT COMPANY
 105 TENNIS CENTER DR.
 MARIETTA, OH
 US 45750-9765
 Contact: LEANNE KENDALL
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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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