



OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
Store 3 - Norton
Machine Id
JOHN DEERE 210GL 1FF210GXCNF530281
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. No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LEC0040023	LEC0041987	LEC0039252
Sample Date		Client Info		03 Nov 2023	12 Jun 2023	20 Jan 2023
Machine Age	hrs	Client Info		1102	632	231
Oil Age	hrs	Client Info		470	632	231
Filter Age	hrs	Client Info		470	632	231
Oil Changed		Client Info		Changed	Changed	Not Changd
Filter Changed		Client Info		Changed	Changed	Not Changd
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	44	69	34
Chromium	ppm	ASTM D5185m	>11	1	2	1
Nickel	ppm	ASTM D5185m	>5	16	28	14
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>31	6	6	4
Lead	ppm	ASTM D5185m	>26	0	1	2
Copper	ppm	ASTM D5185m	>26	▲ 61	▲ 425	▲ 267
Tin	ppm	ASTM D5185m	>4	1	3	2
Vanadium	ppm	ASTM D5185m		<1	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

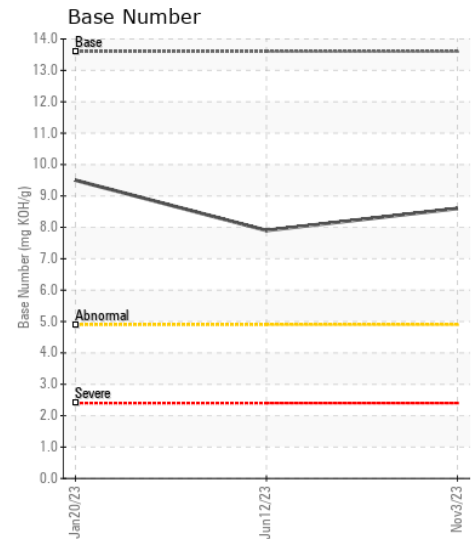
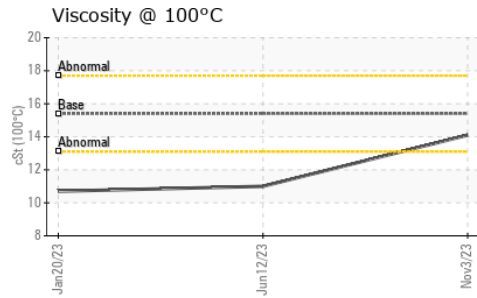
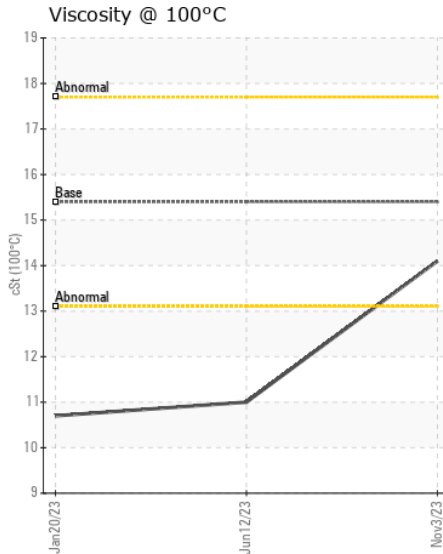
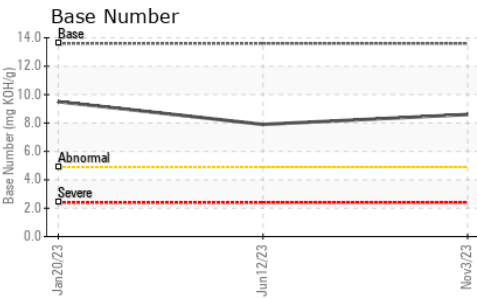
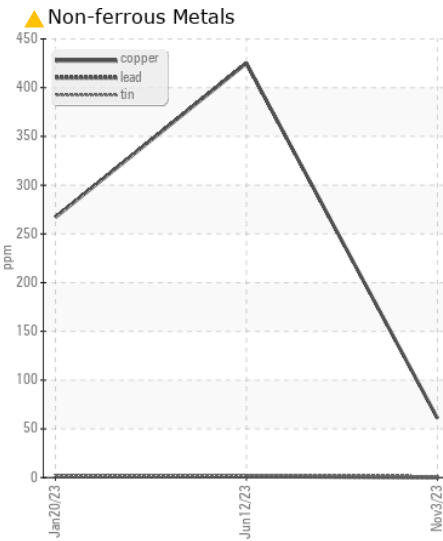
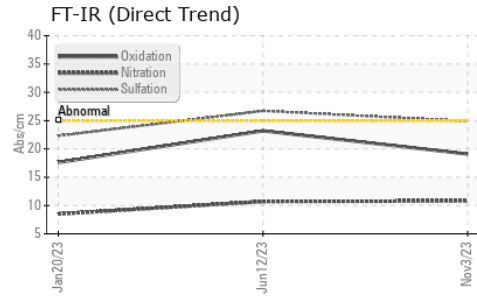
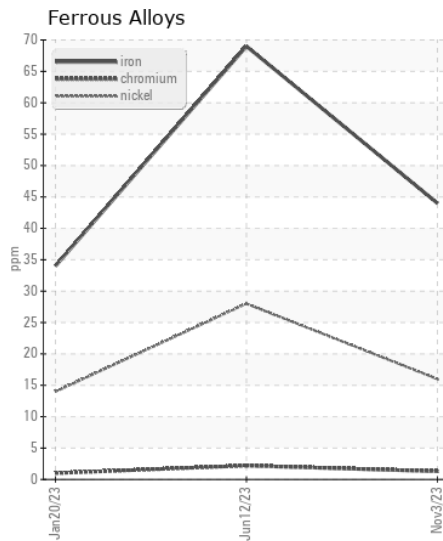
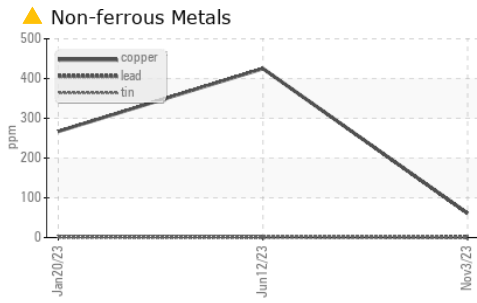
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>120	11	16	13
Potassium	ppm	ASTM D5185m	>20	2	4	3
Fuel		WC Method	>2.1	<1.0	0.5	0.5
Water		WC Method	>0.21	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	1.1	0.8	0.3
Nitration	Abs/cm	*ASTM D7624	>20	10.8	10.7	8.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	24.9	26.7	22.3
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 suitable for further service.

Sodium	ppm	ASTM D5185m	>31	3	7	6
Boron	ppm	ASTM D5185m		128	141	244
Barium	ppm	ASTM D5185m		<1	1	2
Molybdenum	ppm	ASTM D5185m		239	244	235
Manganese	ppm	ASTM D5185m		2	6	5
Magnesium	ppm	ASTM D5185m		805	849	794
Calcium	ppm	ASTM D5185m		1727	1498	1383
Phosphorus	ppm	ASTM D5185m		933	887	837
Zinc	ppm	ASTM D5185m		1239	1129	1036
Sulfur	ppm	ASTM D5185m		2990	3326	3474
Oxidation	Abs/.1mm	*ASTM D7414	>25	19.1	23.2	17.6
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	8.6	7.9	9.5
Visc @ 100°C	cSt	ASTM D445	15.4	14.1	● 11.0	● 10.7



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LEC0040023 **Received** : 06 Nov 2023
Lab Number : 05998919 **Tested** : 07 Nov 2023
Unique Number : 10727279 **Diagnosed** : 07 Nov 2023 - Don Baldrige
Test Package : CONST (Additional Tests: TBN)

LESLIE EQUIPMENT COMPANY
 105 TENNIS CENTER DR.
 MARIETTA, OH
 US 45750-9765
 Contact: LEANNE KENDALL
 KendalLeanne@lec1.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)

T:
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