



OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
Store 4 - Fairmont
Machine Id
JOHN DEERE 250G 1FF250GXLF611927
Component
Diesel Engine
Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (5 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		LEC0051637	LEC0045527	LEC0043845
Sample Date		Client Info		12 Jun 2024	25 Oct 2023	01 Aug 2023
Machine Age	hrs	Client Info		1662	1429	1177
Oil Age	hrs	Client Info		485	252	528
Filter Age	hrs	Client Info		485	252	528
Oil Changed		Client Info		Changed	Not Changed	Changed
Filter Changed		Client Info		Changed	Not Changed	Changed
Sample Status				ABNORMAL	NORMAL	ABNORMAL

WEAR

Valve wear is indicated.

Iron	ppm	ASTM D5185m	>51	39	11	7
Chromium	ppm	ASTM D5185m	>11	<1	<1	<1
Nickel	ppm	ASTM D5185m	>5	▲ 11	3	2
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m	>3	0	0	<1
Aluminum	ppm	ASTM D5185m	>31	7	7	1
Lead	ppm	ASTM D5185m	>26	0	0	0
Copper	ppm	ASTM D5185m	>26	9	4	5
Tin	ppm	ASTM D5185m	>4	1	<1	<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.

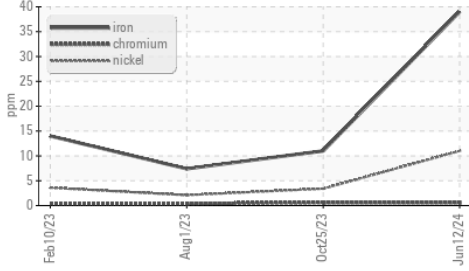
Silicon	ppm	ASTM D5185m	>120	10	8	9
Potassium	ppm	ASTM D5185m	>20	55	52	▲ 358
Fuel		WC Method	>2.1	<1.0	<1.0	<1.0
Water		WC Method	>0.21	NEG	NEG	NEG
Glycol	%	*ASTM D2982		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.5	0.3	0.2
Nitration	Abs/cm	*ASTM D7624	>20	9.4	8.5	6.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.1	20.7	22.9
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

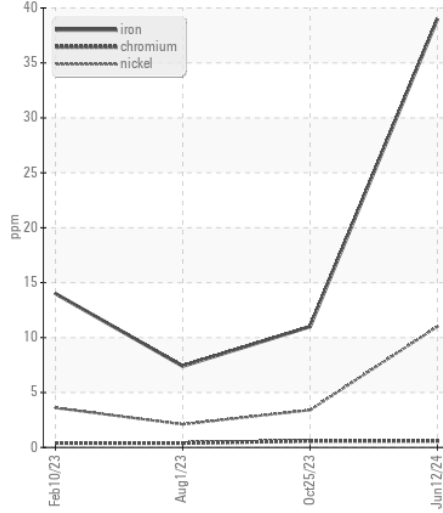
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>31	5	4	5
Boron	ppm	ASTM D5185m		178	332	● 671
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		361	355	● 959
Manganese	ppm	ASTM D5185m		2	<1	<1
Magnesium	ppm	ASTM D5185m		800	723	● 207
Calcium	ppm	ASTM D5185m		1394	1263	● 664
Phosphorus	ppm	ASTM D5185m		883	842	● 167
Zinc	ppm	ASTM D5185m		1018	978	● 213
Sulfur	ppm	ASTM D5185m		3369	3452	● 2612
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.9	17.0	21.5
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	7.3	9.2	4.1
Visc @ 100°C	cSt	ASTM D445	15.4	14.0	13.8	14.1

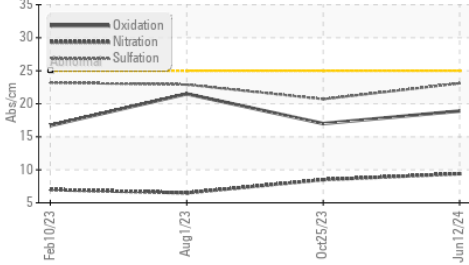
▲ Ferrous Alloys



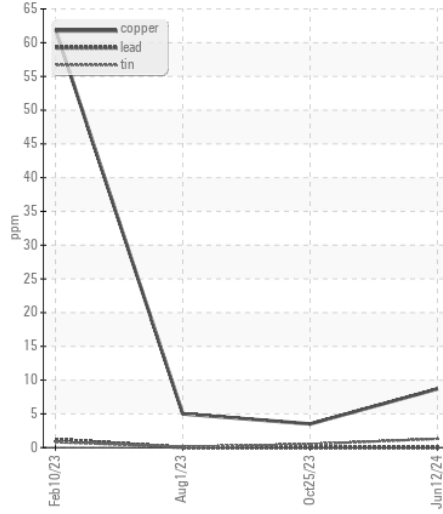
▲ Ferrous Alloys



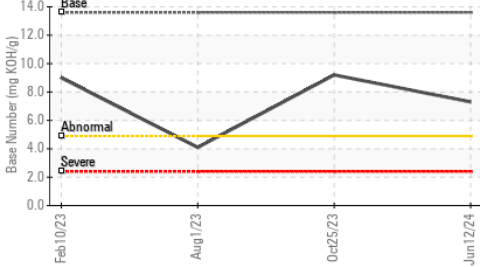
FT-IR (Direct Trend)



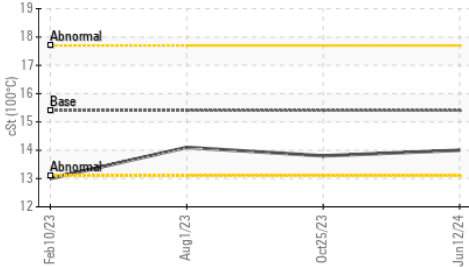
Non-ferrous Metals



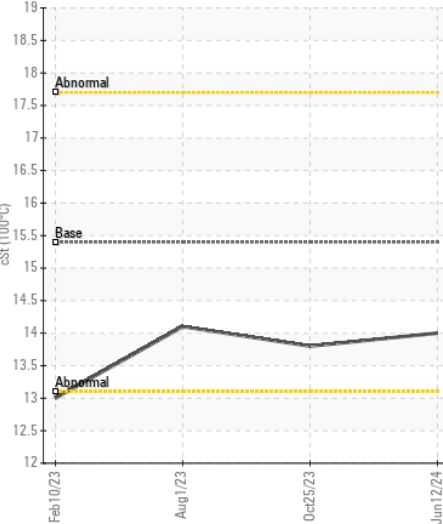
Base Number



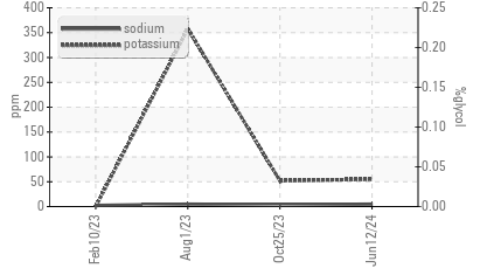
Viscosity @ 100°C



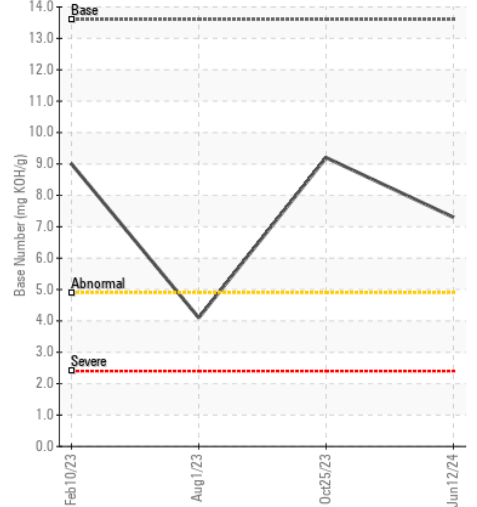
Viscosity @ 100°C



Glycol Contamination



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : LEC0051637
 Lab Number : 06213310
 Unique Number : 11086174
 Test Package : CONST (Additional Tests: Glycol, 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)

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 F: (740)373-5570