



OIL ANALYSIS REPORT

WEAR	SEVERE
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
Store 8 - Pikeville
Machine Id
JOHN DEERE 130G 1FF130GXJJF042048
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. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LEC0037508	LEC0019516	LEC0014726
Sample Date		Client Info		13 Jan 2023	08 Mar 2021	13 Aug 2020
Machine Age	hrs	Client Info		3689	2087	1520
Oil Age	hrs	Client Info		1602	567	500
Filter Age	hrs	Client Info		1602	567	500
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				SEVERE	NORMAL	NORMAL

WEAR

Cylinder, crank, or cam shaft wear is indicated. Bearing and/or bushing wear is indicated.

Iron	ppm	ASTM D5185m	>51	▲ 91	28	27
Chromium	ppm	ASTM D5185m	>11	2	<1	1
Nickel	ppm	ASTM D5185m	>5	0	<1	<1
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>3	0	<1	0
Aluminum	ppm	ASTM D5185m	>31	15	5	7
Lead	ppm	ASTM D5185m	>26	▲ 93	7	3
Copper	ppm	ASTM D5185m	>26	10	6	12
Tin	ppm	ASTM D5185m	>4	3	1	0
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

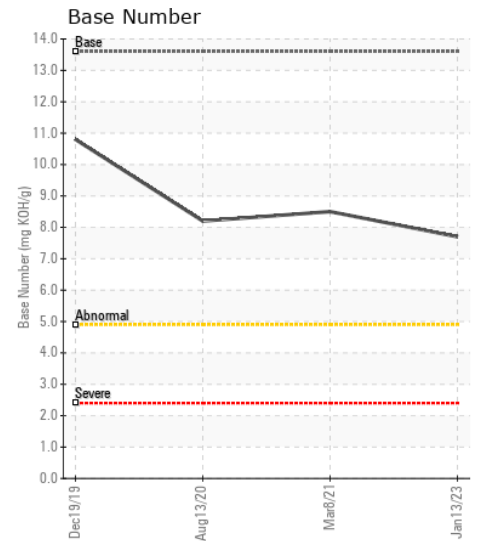
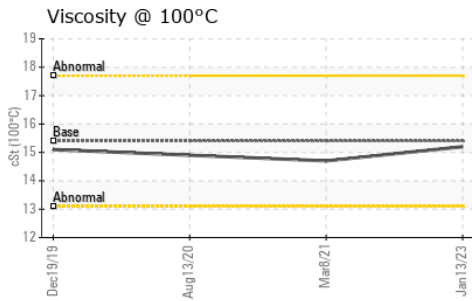
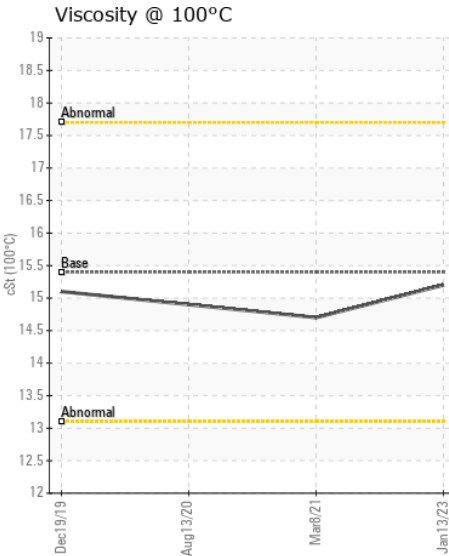
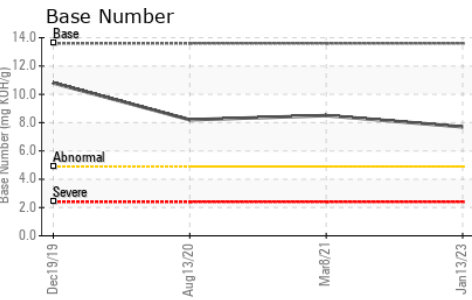
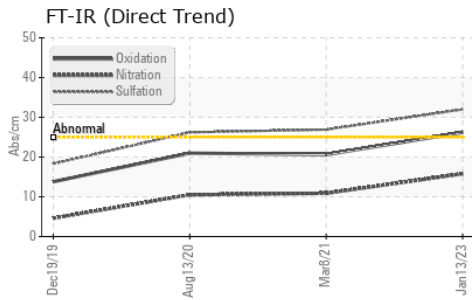
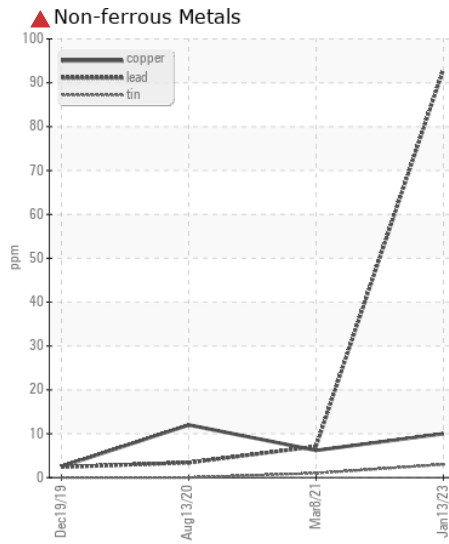
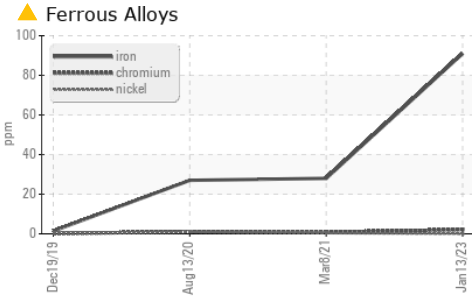
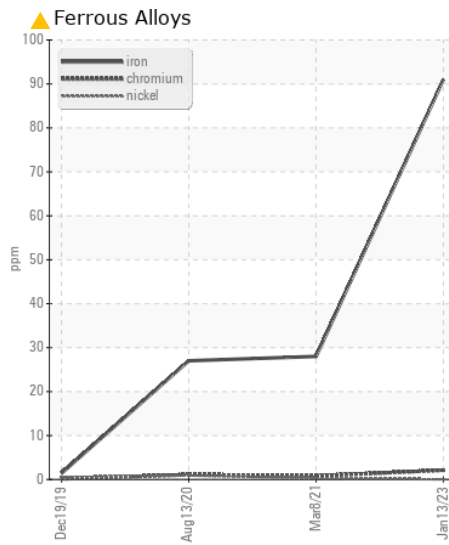
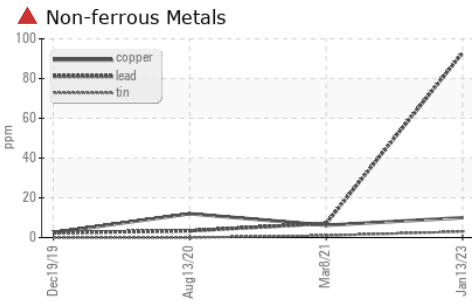
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>120	15	5	7
Potassium	ppm	ASTM D5185m	>20	6	1	1
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.21	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	2	1.1	0.9
Nitration	Abs/cm	*ASTM D7624	>20	15.8	10.9	10.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	32.0	26.9	26.2
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.

Sodium	ppm	ASTM D5185m	>31	3	5	5
Boron	ppm	ASTM D5185m		31	143	75
Barium	ppm	ASTM D5185m		2	0	0
Molybdenum	ppm	ASTM D5185m		206	247	173
Manganese	ppm	ASTM D5185m		2	<1	<1
Magnesium	ppm	ASTM D5185m		576	795	594
Calcium	ppm	ASTM D5185m		1879	1570	1688
Phosphorus	ppm	ASTM D5185m		930	871	898
Zinc	ppm	ASTM D5185m		1133	1073	1004
Sulfur	ppm	ASTM D5185m		3102	2742	2352
Oxidation	Abs/.1mm	*ASTM D7414	>25	26.2	20.6	21
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	7.7	8.5	8.2
Visc @ 100°C	cSt	ASTM D445	15.4	15.2	14.7	14.9



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LEC0037508 **Received** : 17 Jan 2023
Lab Number : 05740425 **Tested** : 18 Jan 2023
Unique Number : 10295024 **Diagnosed** : 18 Jan 2023 - Jonathan Hester
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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