



OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
Store 9 - Marietta
Machine Id
JOHN DEERE 850K 1T0850KXEKF349022
Component
Diesel Engine
Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (7 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		LEC0032839	LEC0024411	LEC0015032
Sample Date		Client Info		12 Jul 2022	08 Nov 2021	07 Aug 2020
Machine Age	hrs	Client Info		1487	954	526
Oil Age	hrs	Client Info		533	428	523
Filter Age	hrs	Client Info		0	428	523
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	NORMAL	ABNORMAL

WEAR

The copper level is abnormal. All other component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	31	4	▲ 69
Chromium	ppm	ASTM D5185m	>11	<1	<1	2
Nickel	ppm	ASTM D5185m	>5	0	1	6
Titanium	ppm	ASTM D5185m		<1	1	<1
Silver	ppm	ASTM D5185m		0	<1	0
Aluminum	ppm	ASTM D5185m	>31	5	1	7
Lead	ppm	ASTM D5185m	>26	<1	1	<1
Copper	ppm	ASTM D5185m	>26	▲ 53	15	▲ 246
Tin	ppm	ASTM D5185m	>4	<1	<1	3
Vanadium	ppm	ASTM D5185m		0	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

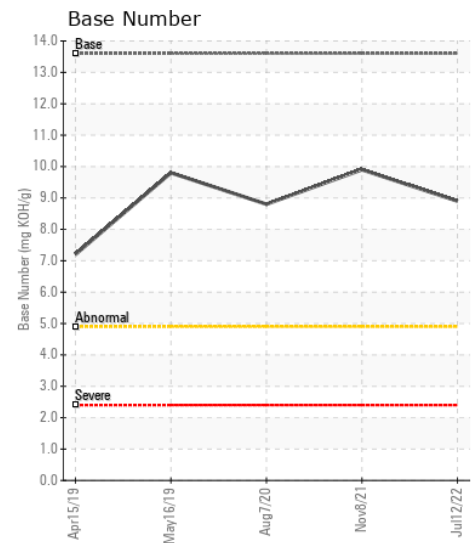
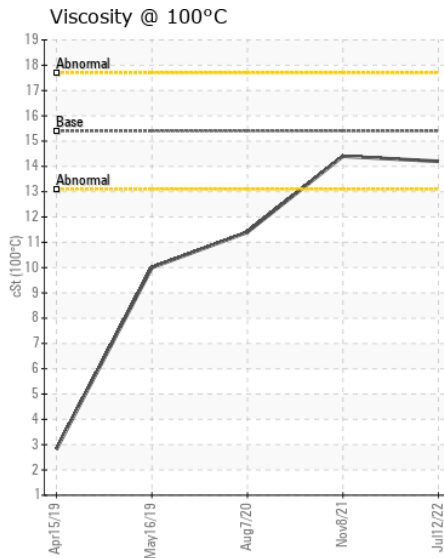
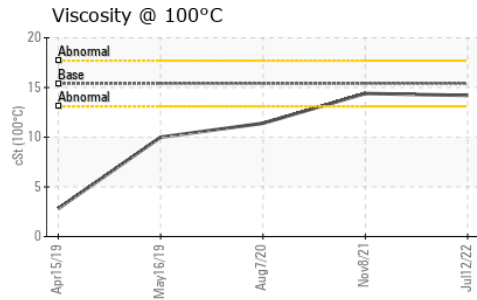
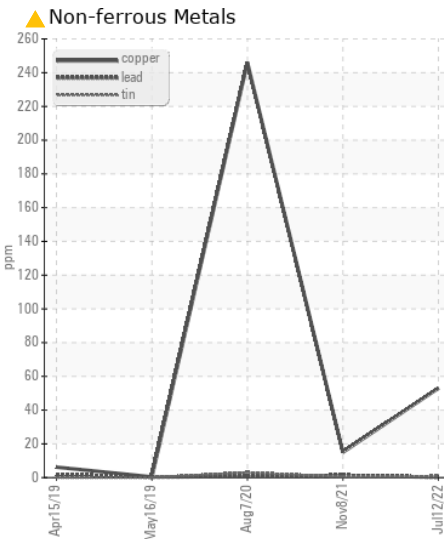
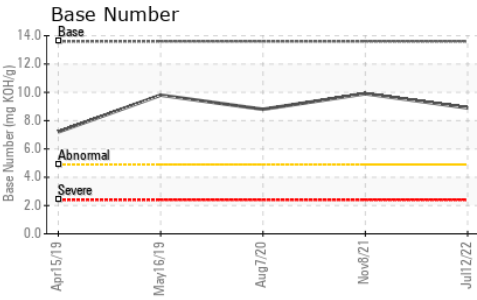
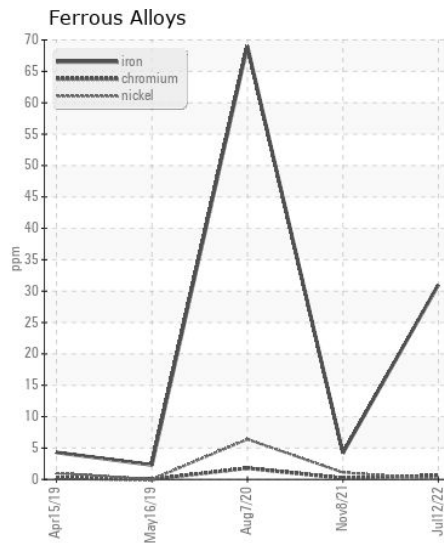
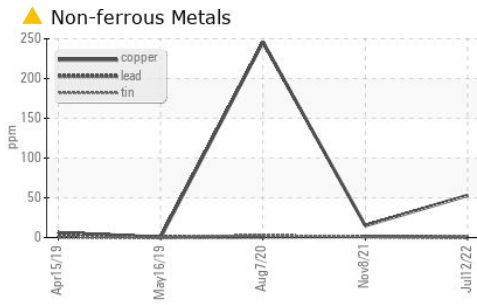
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>120	7	5	12
Potassium	ppm	ASTM D5185m	>20	2	4	4
Fuel		WC Method	>2.1	<1.0	<1.0	<1.0
Water		WC Method	>0.21	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.4	0.1	0.6
Nitration	Abs/cm	*ASTM D7624	>20	10.0	6.2	11.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.7	18.9	24.6
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	2	2	7
Boron	ppm	ASTM D5185m		180	98	153
Barium	ppm	ASTM D5185m		0	0	1
Molybdenum	ppm	ASTM D5185m		231	16	265
Manganese	ppm	ASTM D5185m		<1	<1	2
Magnesium	ppm	ASTM D5185m		776	645	848
Calcium	ppm	ASTM D5185m		1604	1299	1554
Phosphorus	ppm	ASTM D5185m		887	1022	900
Zinc	ppm	ASTM D5185m		1161	1214	1139
Sulfur	ppm	ASTM D5185m		3494	3481	2314
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.8	12.8	19.9
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	8.9	9.9	8.8
Visc @ 100°C	cSt	ASTM D445	15.4	14.2	14.4	11.4



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LEC0032839 **Received** : 14 Jul 2022
Lab Number : 05590957 **Tested** : 15 Jul 2022
Unique Number : 10050404 **Diagnosed** : 15 Jul 2022 - Jonathan Hester
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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