CONST

LESLIE EQUIPMENT CO.

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
Store 2 - Beaver [RO#148883]
Machine Id
JOHN DEERE 460P 1DW460PAEPFB06250
Component
Diesel Engine
Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (15 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.

WEAR

The copper level has decreased, but is still abnormal. In the absence of other significant wear metals, suspect copper due to sources other than wear (i.e. cooling core). All other component wear rates are normal.

CONTAMINATION

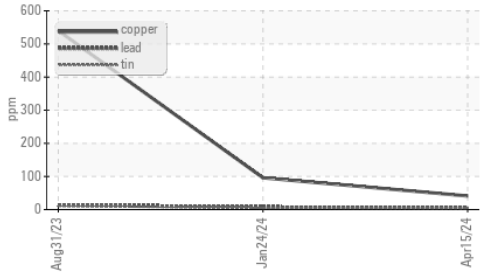
There is no indication of any contamination in the oil.

FLUID CONDITION

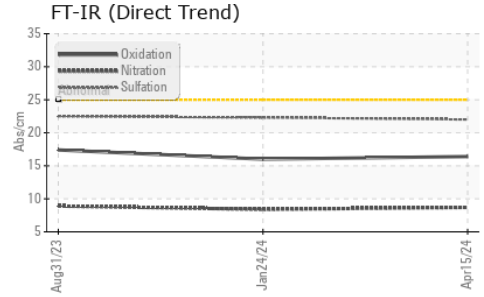
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LEC0048862	LEC0046922	LEC0042616
Sample Date		Client Info		15 Apr 2024	24 Jan 2024	31 Aug 2023
Machine Age	hrs	Client Info		1636	1148	577
Oil Age	hrs	Client Info		488	571	577
Filter Age	hrs	Client Info		488	571	577
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
Iron	ppm	ASTM D5185m	>51	17	15	35
Chromium	ppm	ASTM D5185m	>11	1	<1	<1
Nickel	ppm	ASTM D5185m	>5	1	<1	<1
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>3	<1	0	0
Aluminum	ppm	ASTM D5185m	>31	5	6	4
Lead	ppm	ASTM D5185m	>26	6	7	14
Copper	ppm	ASTM D5185m	>26	▲ 41	▲ 96	▲ 540
Tin	ppm	ASTM D5185m	>4	5	5	11
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>!20	8	6	13
Potassium	ppm	ASTM D5185m	>20	2	<1	3
Fuel	%	ASTM D3524	>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	0.3	0.2	0.3
Nitration	Abs/cm	*ASTM D7624	>20	8.7	8.4	8.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.0	22.3	22.5
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
Sodium	ppm	ASTM D5185m	>31	3	4	9
Boron	ppm	ASTM D5185m		220	202	176
Barium	ppm	ASTM D5185m		<1	<1	<1
Molybdenum	ppm	ASTM D5185m		248	232	238
Manganese	ppm	ASTM D5185m		2	2	11
Magnesium	ppm	ASTM D5185m		760	815	829
Calcium	ppm	ASTM D5185m		1402	1318	1358
Phosphorus	ppm	ASTM D5185m		941	896	856
Zinc	ppm	ASTM D5185m		1043	1100	1050
Sulfur	ppm	ASTM D5185m		3318	2884	3330
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.4	16.0	17.4
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	8.7	7.8	8.6
Visc @ 100°C	cSt	ASTM D445	15.4	12.9	12.6	10.0

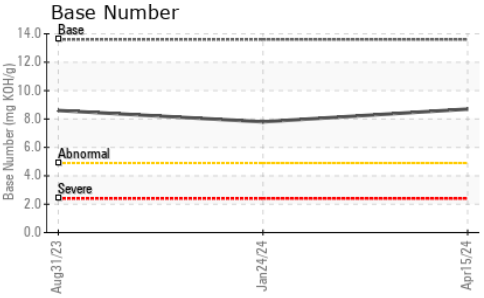
Non-ferrous Metals



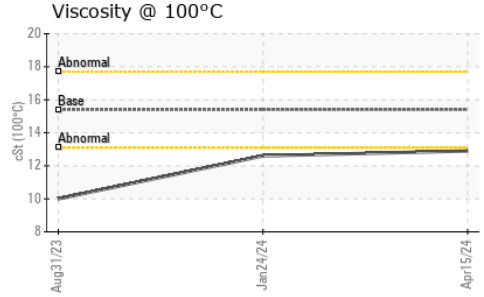
FT-IR (Direct Trend)



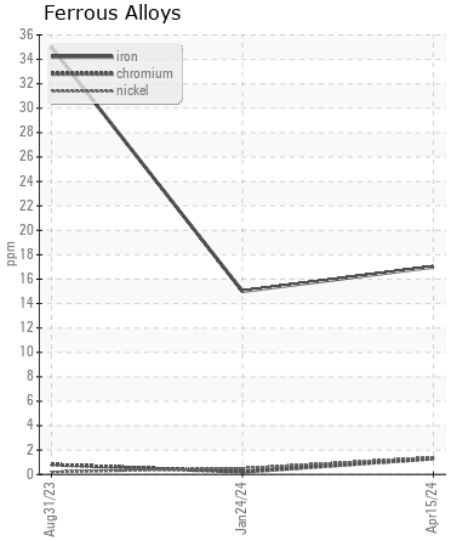
Base Number



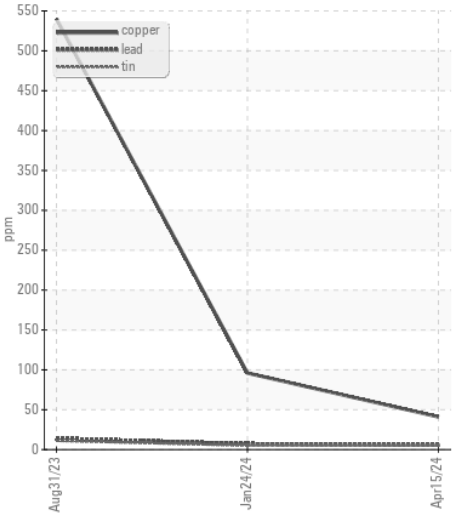
Viscosity @ 100°C



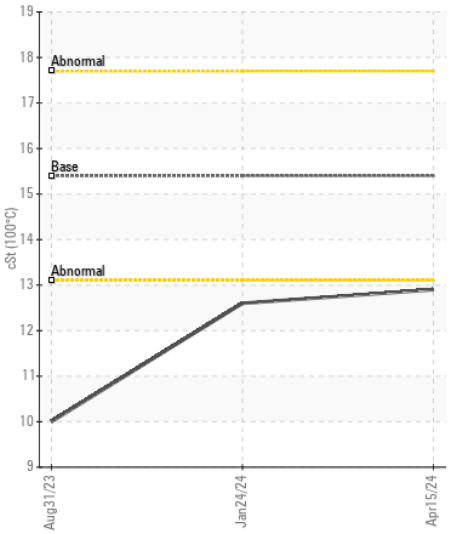
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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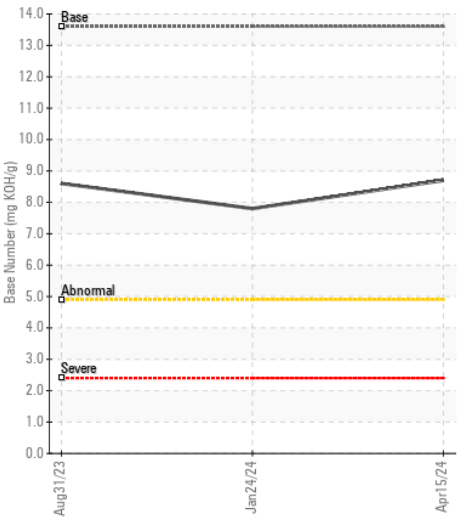

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LEC0048862
Lab Number : 06152865
Unique Number : 10982943
Test Package : CONST (Additional Tests: FuelDilution, TBN)

Received : 18 Apr 2024
Tested : 19 Apr 2024
Diagnosed : 22 Apr 2024 - Sean Felton

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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