



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
Store 9 - Marietta
Machine Id
JOHN DEERE 50G 1FF050GXEMH295955
Component
Diesel Engine
Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (2 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LEC0046328	LEC0034756	---
Sample Date		Client Info		05 Apr 2024	17 Mar 2023	---
Machine Age	hrs	Client Info		830	302	---
Oil Age	hrs	Client Info		528	302	---
Filter Age	hrs	Client Info		528	302	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Not Changed	---
Sample Status				NORMAL	SEVERE	---

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>51	25	23	---
Chromium	ppm	ASTM D5185m	>11	<1	0	---
Nickel	ppm	ASTM D5185m	>5	<1	0	---
Titanium	ppm	ASTM D5185m		<1	0	---
Silver	ppm	ASTM D5185m	>3	0	0	---
Aluminum	ppm	ASTM D5185m	>31	5	2	---
Lead	ppm	ASTM D5185m	>26	4	1	---
Copper	ppm	ASTM D5185m	>26	4	16	---
Tin	ppm	ASTM D5185m	>4	<1	<1	---
Vanadium	ppm	ASTM D5185m		<1	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

There is no indication of any contamination in the oil.

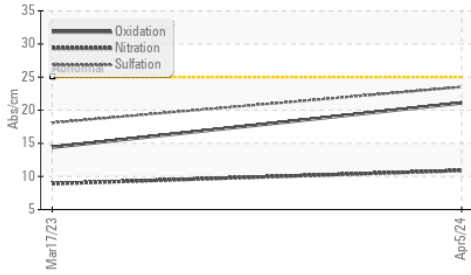
Silicon	ppm	ASTM D5185m	>120	15	▲ 36	---
Potassium	ppm	ASTM D5185m	>20	22	164	---
Fuel	%	ASTM D3524	>2.1	<1.0	▲ 5.3	---
Water		WC Method	>0.21	NEG	NEG	---
Glycol		WC Method		NEG	0.0	---
Soot %	%	*ASTM D7844	>3	0.4	0.2	---
Nitration	Abs/cm	*ASTM D7624	>20	10.9	8.9	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.5	18.1	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.21	NEG	NEG	---

FLUID CONDITION

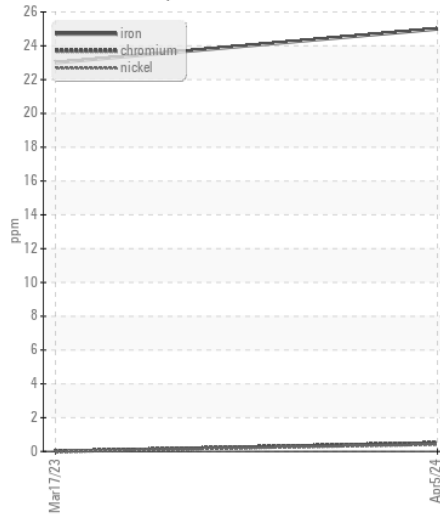
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m	>31	4	13	---
Boron	ppm	ASTM D5185m		177	180	---
Barium	ppm	ASTM D5185m		1	0	---
Molybdenum	ppm	ASTM D5185m		232	143	---
Manganese	ppm	ASTM D5185m		<1	<1	---
Magnesium	ppm	ASTM D5185m		747	29	---
Calcium	ppm	ASTM D5185m		1544	1975	---
Phosphorus	ppm	ASTM D5185m		854	533	---
Zinc	ppm	ASTM D5185m		1034	706	---
Sulfur	ppm	ASTM D5185m		3342	2152	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	21.1	14.4	---
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	8.3	7.1	---
Visc @ 100°C	cSt	ASTM D445	15.4	13.1	▲ 9.8	---

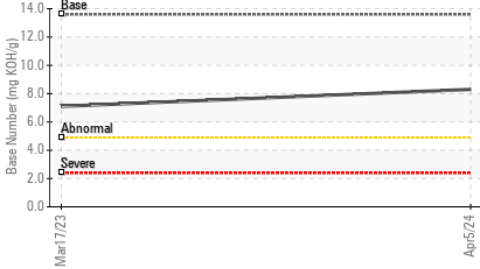
FT-IR (Direct Trend)



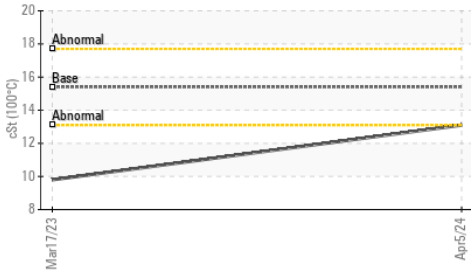
Ferrous Alloys



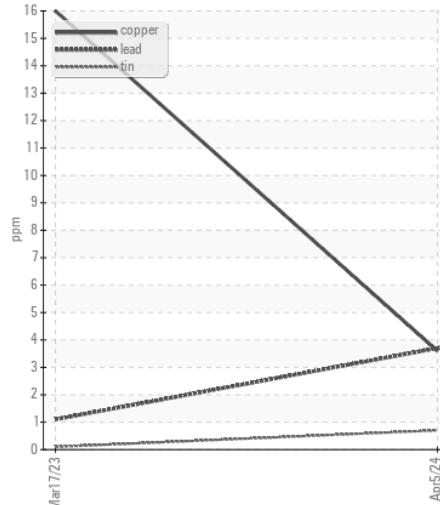
Base Number



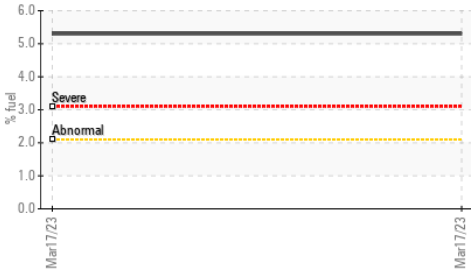
Viscosity @ 100°C



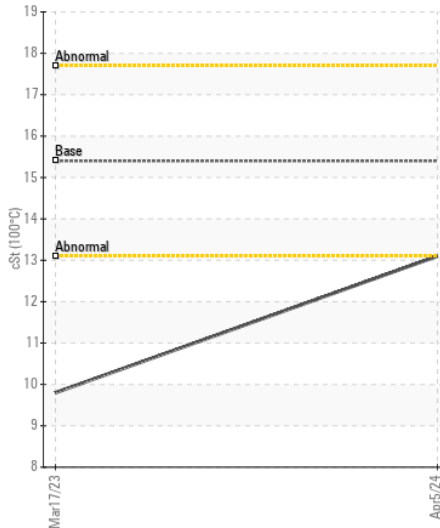
Non-ferrous Metals



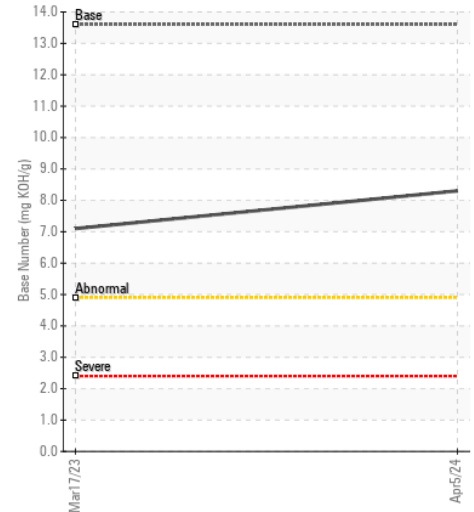
Fuel Dilution



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LEC0046328 **Received** : 11 Apr 2024
Lab Number : 06145553 **Tested** : 15 Apr 2024
Unique Number : 10970361 **Diagnosed** : 15 Apr 2024 - Sean Felton
Test Package : CONST (Additional Tests: PercentFuel, 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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