



OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL



Area
Store 2 - Beaver [ro#150153]
Machine Id
JOHN DEERE 333G 1T0333GMVPF449803
Component
Diesel Engine
Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (3 GAL)

RECOMMENDATION

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. 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		LEC0048903	LEC0046884	---
Sample Date		Client Info		22 Apr 2024	24 Jan 2024	---
Machine Age	hrs	Client Info		975	626	---
Oil Age	hrs	Client Info		349	626	---
Filter Age	hrs	Client Info		349	626	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				ABNORMAL	ABNORMAL	---

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 metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>51	18	36	---
Chromium	ppm	ASTM D5185m	>11	0	<1	---
Nickel	ppm	ASTM D5185m	>5	0	<1	---
Titanium	ppm	ASTM D5185m		0	<1	---
Silver	ppm	ASTM D5185m	>3	<1	<1	---
Aluminum	ppm	ASTM D5185m	>31	6	8	---
Lead	ppm	ASTM D5185m	>26	0	<1	---
Copper	ppm	ASTM D5185m	>26	71	237	---
Tin	ppm	ASTM D5185m	>4	<1	1	---
Vanadium	ppm	ASTM D5185m		0	<1	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

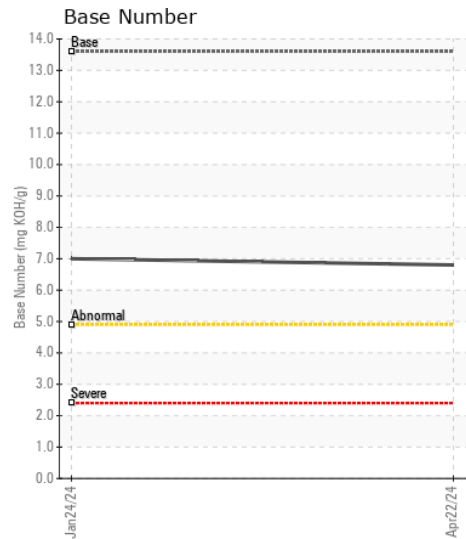
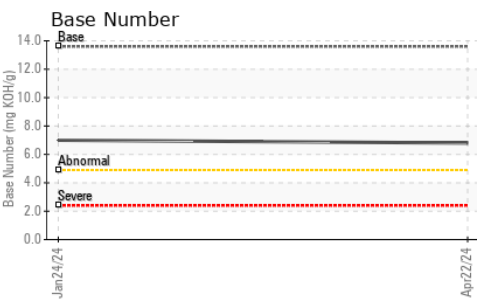
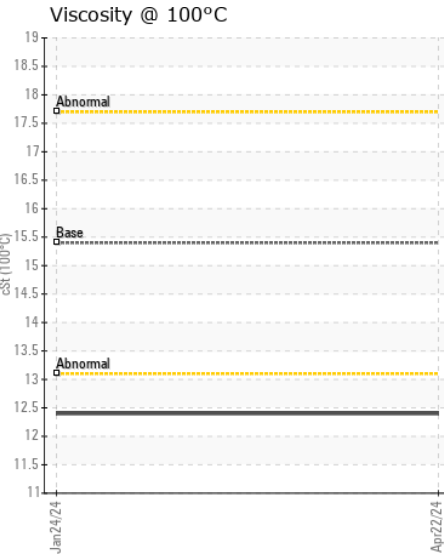
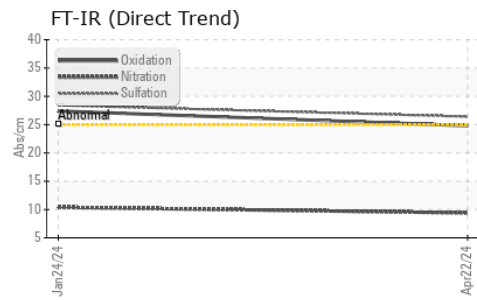
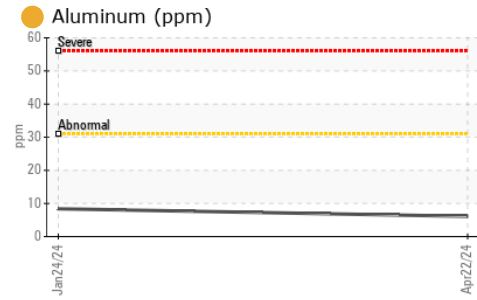
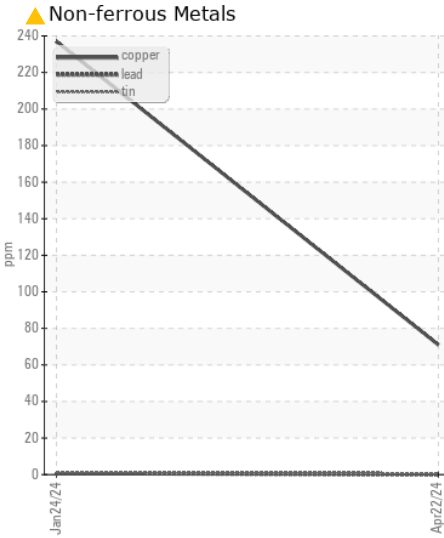
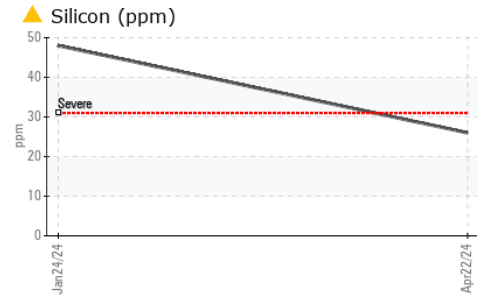
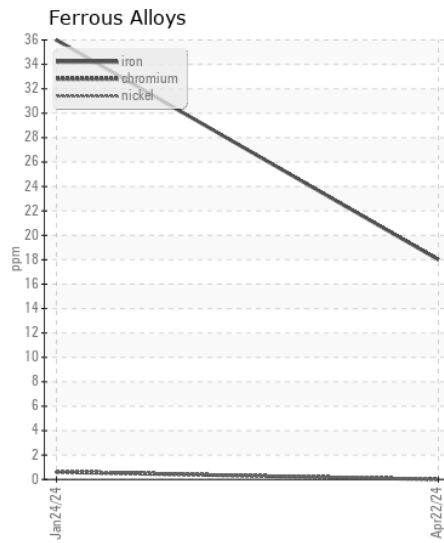
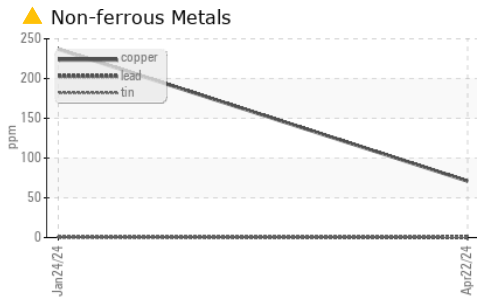
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Silicon	ppm	ASTM D5185m	>120	26	48	---
Potassium	ppm	ASTM D5185m	>20	0	<1	---
Fuel	%	ASTM D3524	>2.1	<1.0	<1.0	---
Water		WC Method	>0.21	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.3	0.4	---
Nitration	Abs/cm	*ASTM D7624	>20	9.4	10.4	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	26.4	28.4	---
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	2	9	---
Boron	ppm	ASTM D5185m		223	180	---
Barium	ppm	ASTM D5185m		1	4	---
Molybdenum	ppm	ASTM D5185m		275	244	---
Manganese	ppm	ASTM D5185m		<1	3	---
Magnesium	ppm	ASTM D5185m		818	767	---
Calcium	ppm	ASTM D5185m		1544	1731	---
Phosphorus	ppm	ASTM D5185m		876	850	---
Zinc	ppm	ASTM D5185m		1053	1117	---
Sulfur	ppm	ASTM D5185m		2934	2810	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	24.8	27.4	---
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	6.8	7.0	---
Visc @ 100°C	cSt	ASTM D445	15.4	12.4	12.4	---



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LEC0048903 **Received** : 25 Apr 2024
Lab Number : 06160130 **Tested** : 26 Apr 2024
Unique Number : 10995553 **Diagnosed** : 26 Apr 2024 - Sean Felton
Test Package : CONST (Additional Tests: FuelDilution, TBN)

LESLIE EQUIPMENT COMPANY
 105 TENNIS CENTER DR.
 MARIETTA, OH
 US 45750-9765
 Contact: LEANNE KENDALL
 KendalLeanne@lec1.com
 T:
 F: (740)373-5570

Certificate L2367
 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)