



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
Store 2 - Beaver [RO#147458]
Machine Id
JOHN DEERE 550K 1T0550KKTNF432092
Component
Diesel Engine
Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 10W30 (4 GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. (Customer Sample Comment: Installed new engine. sampled new oil. Break in oil)

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LEC0048847	LEC0048511	LEC0047521
Sample Date		Client Info		15 Apr 2024	06 Mar 2024	31 Jan 2024
Machine Age	hrs	Client Info		1101	1100	1099
Oil Age	hrs	Client Info		1	517	516
Filter Age	hrs	Client Info		1	517	516
Oil Changed		Client Info		Changed	Not Changd	Not Changd
Filter Changed		Client Info		Changed	Not Changd	Not Changd
Sample Status				NORMAL	SEVERE	SEVERE

WEAR

All component wear rates are normal for time on oil.

Iron	ppm	ASTM D5185m	>51	10	▲ 224	▲ 358
Chromium	ppm	ASTM D5185m	>11	0	8	▲ 12
Nickel	ppm	ASTM D5185m	>5	0	5	▲ 8
Titanium	ppm	ASTM D5185m		0	5	6
Silver	ppm	ASTM D5185m	>3	0	<1	0
Aluminum	ppm	ASTM D5185m	>31	7	● 119	● 135
Lead	ppm	ASTM D5185m	>26	<1	▲ 184	▲ 171
Copper	ppm	ASTM D5185m	>26	2	▲ 88	▲ 103
Tin	ppm	ASTM D5185m	>4	2	▲ 18	▲ 17
Vanadium	ppm	ASTM D5185m		0	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

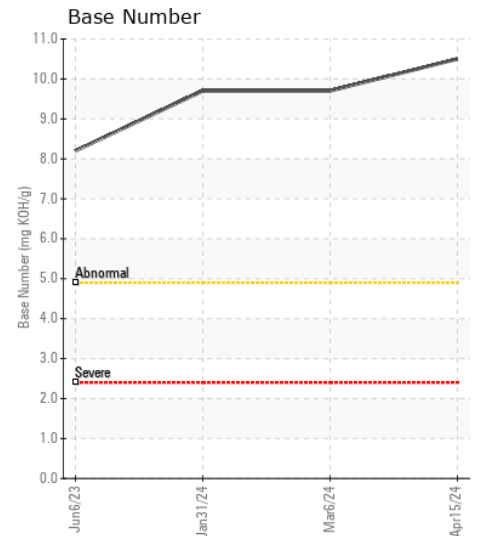
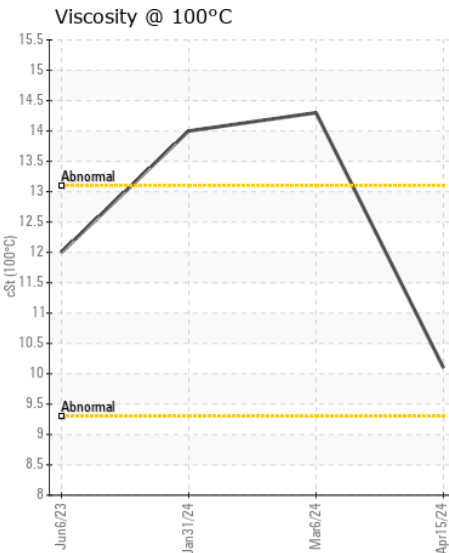
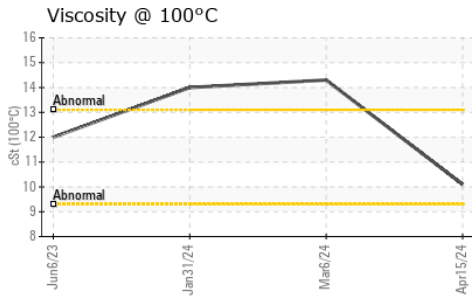
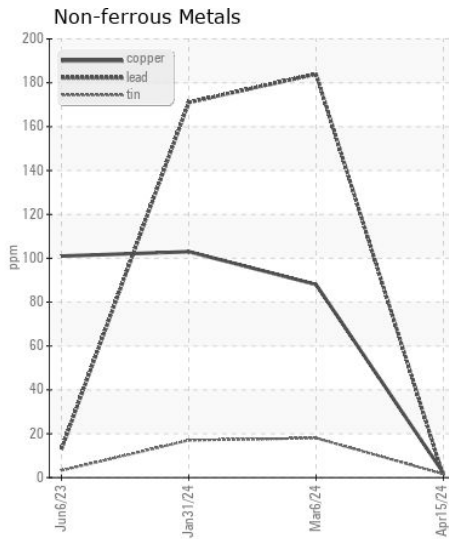
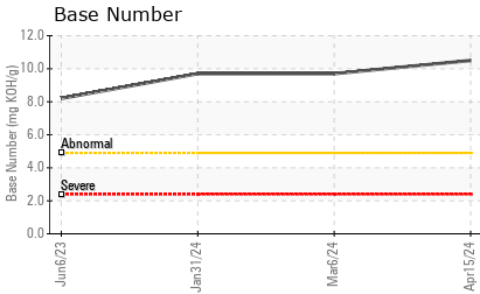
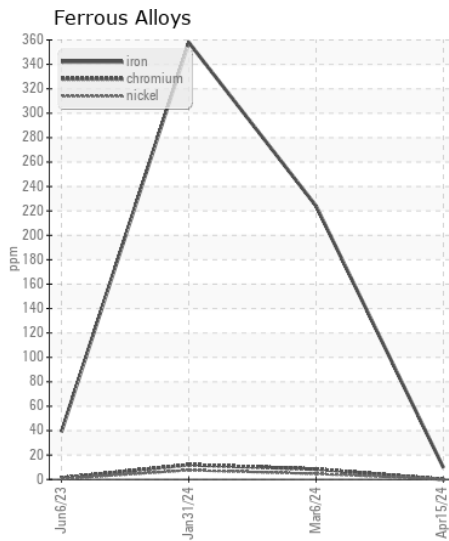
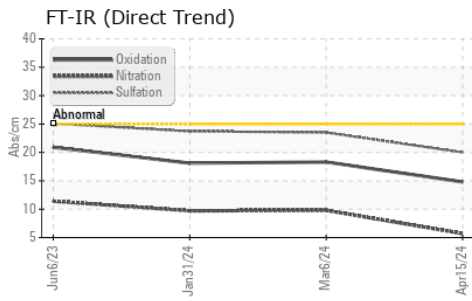
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>120	8	▲ 226	▲ 253
Potassium	ppm	ASTM D5185m	>20	2	35	40
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	0.1	0.6	0.7
Nitration	Abs/cm	*ASTM D7624	>20	5.7	9.8	9.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.0	23.5	23.7
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	7	9
Boron	ppm	ASTM D5185m		282	89	84
Barium	ppm	ASTM D5185m		3	0	0
Molybdenum	ppm	ASTM D5185m		218	170	168
Manganese	ppm	ASTM D5185m		2	5	6
Magnesium	ppm	ASTM D5185m		824	813	724
Calcium	ppm	ASTM D5185m		1417	1511	1340
Phosphorus	ppm	ASTM D5185m		840	1004	927
Zinc	ppm	ASTM D5185m		1034	1291	1144
Sulfur	ppm	ASTM D5185m		3679	3350	2947
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.8	18.3	18.1
Base Number (BN)	mg KOH/g	ASTM D2896		10.5	9.7	9.7
Visc @ 100°C	cSt	ASTM D445		10.1	14.3	14.0



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LEC0048847 **Received** : 16 Apr 2024
Lab Number : 06150162 **Tested** : 17 Apr 2024
Unique Number : 10980240 **Diagnosed** : 18 Apr 2024 - Don Baldrige
Test Package : CONST (Additional Tests: TBN)

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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)