



OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area

Store 5 - Cross Lanes

Machine Id

JOHN DEERE 1FF350GXVEE809964

Component

Diesel Engine

Fluid

JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (7 GAL)

RECOMMENDATION

No corrective action is recommended at this time. 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		LEC0039319	LEC0036030	LEC0023710
Sample Date		Client Info		12 Apr 2023	03 Oct 2022	08 Nov 2021
Machine Age	hrs	Client Info		7031	6466	5875
Oil Age	hrs	Client Info		565	591	809
Filter Age	hrs	Client Info		565	591	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL

WEAR

Cylinder, crank, or cam shaft wear is indicated.

Iron	ppm	ASTM D5185m	>51	▲ 124	▲ 187	▲ 126
Chromium	ppm	ASTM D5185m	>11	2	4	2
Nickel	ppm	ASTM D5185m	>5	3	5	5
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>3	0	0	<1
Aluminum	ppm	ASTM D5185m	>31	3	7	5
Lead	ppm	ASTM D5185m	>26	2	3	2
Copper	ppm	ASTM D5185m	>26	2	3	1
Tin	ppm	ASTM D5185m	>4	<1	1	<1
Vanadium	ppm	ASTM D5185m		<1	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

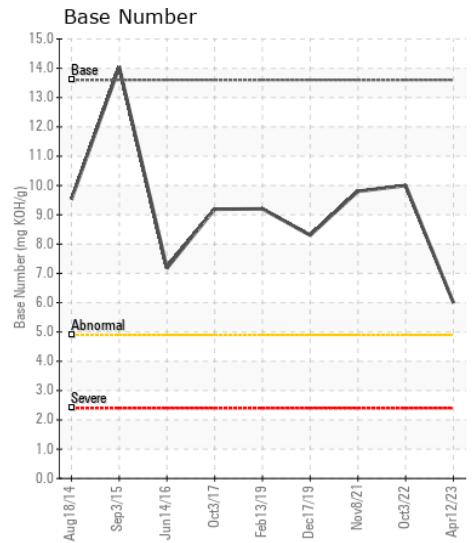
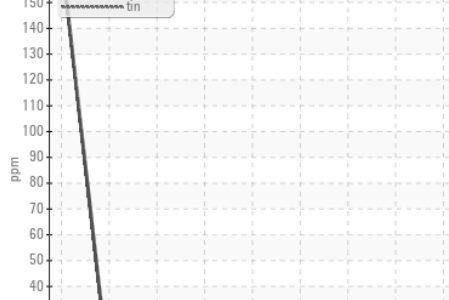
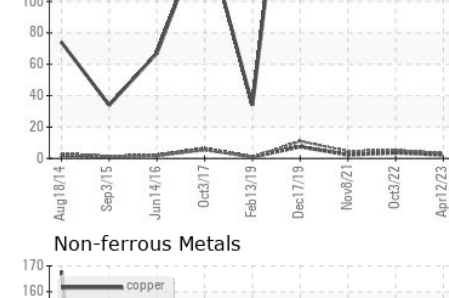
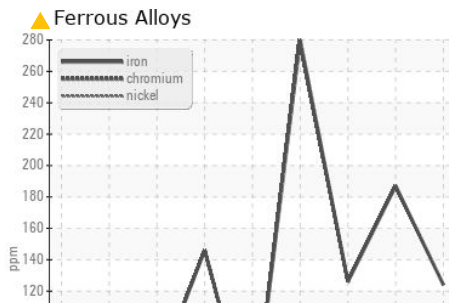
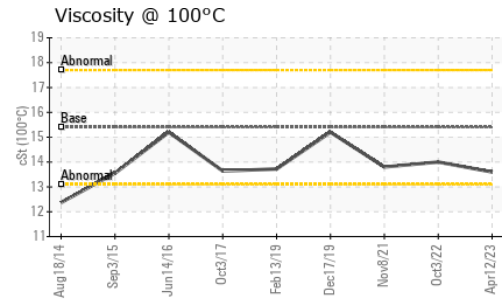
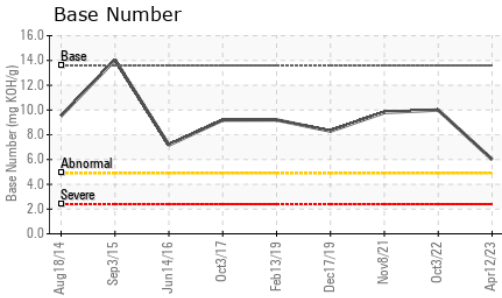
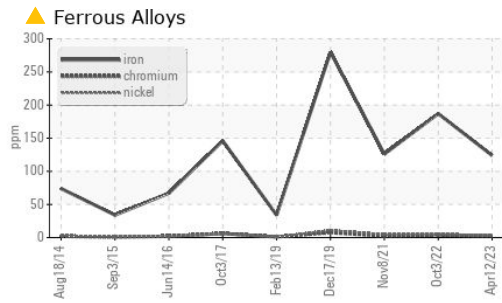
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>120	12	11	5
Potassium	ppm	ASTM D5185m	>20	2	6	2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.21	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.5	0.6	0.3
Nitration	Abs/cm	*ASTM D7624	>20	9.8	13.9	7.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.3	24.8	20.3
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	3	2	1
Boron	ppm	ASTM D5185m		113	46	11
Barium	ppm	ASTM D5185m		2	0	0
Molybdenum	ppm	ASTM D5185m		168	209	88
Manganese	ppm	ASTM D5185m		2	2	1
Magnesium	ppm	ASTM D5185m		575	707	947
Calcium	ppm	ASTM D5185m		1543	1654	1132
Phosphorus	ppm	ASTM D5185m		878	949	1030
Zinc	ppm	ASTM D5185m		1073	1146	1262
Sulfur	ppm	ASTM D5185m		3065	3675	2912
Oxidation	Abs/.1mm	*ASTM D7414	>25	19.0	20.9	15.6
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	6.0	10.0	9.8
Visc @ 100°C	cSt	ASTM D445	15.4	13.6	14.0	13.8



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LEC0039319 **Received** : 14 Apr 2023
Lab Number : 05820228 **Diagnosed** : 17 Apr 2023
Unique Number : 10428311 **Diagnostician** : Don Baldrige
Test Package : CONST (Additional Tests: TBN)

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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)