



# OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>



Area  
**Store 1 - Cowen**  
Machine Id  
**JOHN DEERE 135G 1FF135GXHKF501620**  
Component  
**Diesel Engine**  
Fluid  
**JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (5 GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>LEC0041379</b>	LEC0032998	LEC0027164
Sample Date		Client Info		<b>31 May 2023</b>	05 Oct 2022	24 Mar 2022
Machine Age	hrs	Client Info		<b>1594</b>	1056	527
Oil Age	hrs	Client Info		<b>538</b>	529	527
Filter Age	hrs	Client Info		<b>538</b>	529	527
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	<b>7</b>	7	5
Chromium	ppm	ASTM D5185m	>11	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>5	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>3	<b>&lt;1</b>	0	<1
Aluminum	ppm	ASTM D5185m	>31	<b>4</b>	3	2
Lead	ppm	ASTM D5185m	>26	<b>&lt;1</b>	0	<1
Copper	ppm	ASTM D5185m	>26	<b>4</b>	5	1
Tin	ppm	ASTM D5185m	>4	<b>&lt;1</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

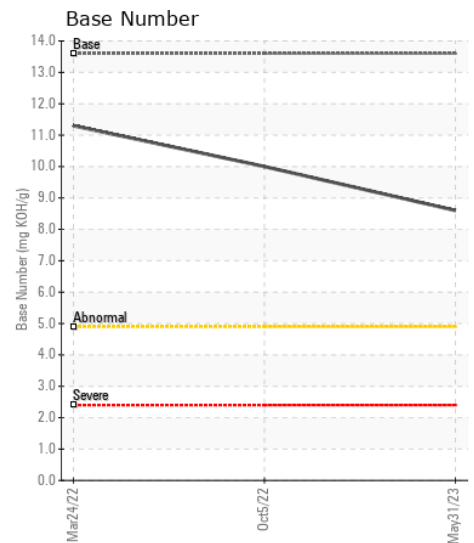
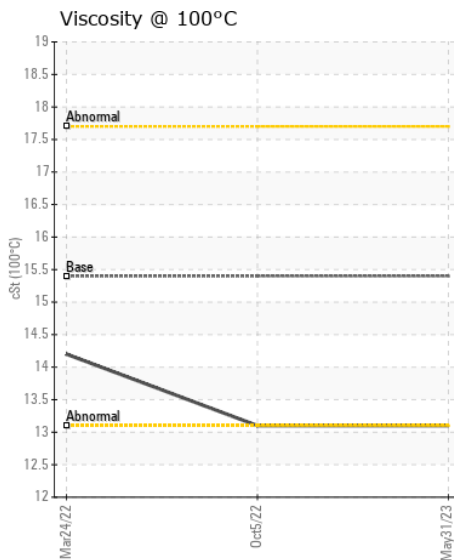
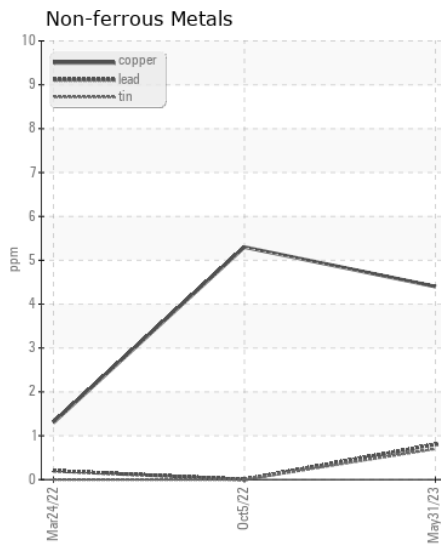
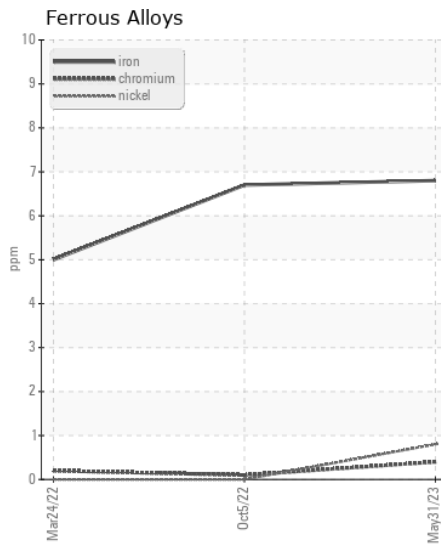
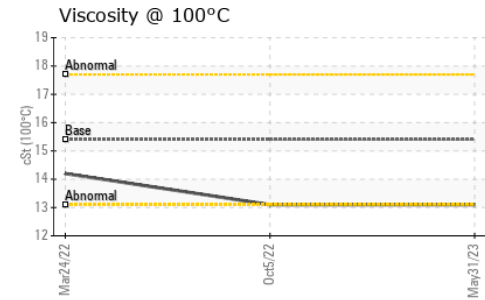
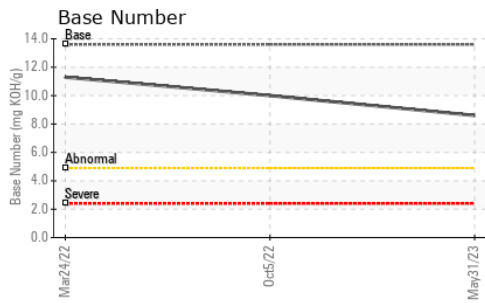
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>120	<b>9</b>	6	7
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	0	<1
Fuel		WC Method	>2.1	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.21	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.1</b>	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.9</b>	8.5	6.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>21.9</b>	23.1	20.7
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.21	<b>NEG</b>	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	<b>2</b>	1	9
Boron	ppm	ASTM D5185m		<b>263</b>	253	241
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>249</b>	219	222
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>847</b>	730	727
Calcium	ppm	ASTM D5185m		<b>1503</b>	1589	1451
Phosphorus	ppm	ASTM D5185m		<b>944</b>	874	842
Zinc	ppm	ASTM D5185m		<b>1165</b>	1019	955
Sulfur	ppm	ASTM D5185m		<b>3386</b>	3533	2497
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>15.7</b>	16.2	15.2
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	<b>8.6</b>	10.0	11.3
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.1</b>	13.1	14.2



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : LEC0041379 **Received** : 02 Jun 2023  
**Lab Number** : 05862808 **Tested** : 02 Jun 2023  
**Unique Number** : 10497273 **Diagnosed** : 05 Jun 2023 - Don Baldrige  
**Test Package** : CONST ( Additional Tests: 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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