



# OIL ANALYSIS REPORT

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



Area  
**Store 3 - Norton**  
Machine Id  
**JOHN DEERE 350G 1FF350GXCF811076**  
Component  
**Diesel Engine**  
Fluid  
**JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (7 GAL)**

## RECOMMENDATION

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		<b>LEC0000093</b>	LECP177264	LECP167571
Sample Date		Client Info		<b>28 Jan 2019</b>	27 Dec 2017	06 Mar 2017
Machine Age	hrs	Client Info		<b>2894</b>	2317	1086
Oil Age	hrs	Client Info		<b>579</b>	2	605
Filter Age	hrs	Client Info		<b>579</b>	0	605
Oil Changed		Client Info		<b>Changed</b>	Not Changd	Changed
Filter Changed		Client Info		<b>Changed</b>	Not Changd	Changed
Sample Status				<b>ABNORMAL</b>	NORMAL	NORMAL

## WEAR

The iron level is abnormal. All other component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	<b>▲ 84</b>	11	16
Chromium	ppm	ASTM D5185m	>11	<b>1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>5	<b>2</b>	<1	2
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>31	<b>3</b>	1	2
Lead	ppm	ASTM D5185m	>26	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>26	<b>8</b>	2	26
Tin	ppm	ASTM D5185m	>4	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
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.

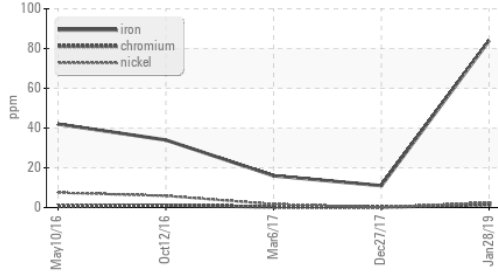
Silicon	ppm	ASTM D5185m	>22	<b>5</b>	6	5
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	0	2
Fuel		WC Method	>2.1	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.21	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.3</b>	0	0
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.2</b>	6.	5.
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>20.3</b>	19.	15.
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

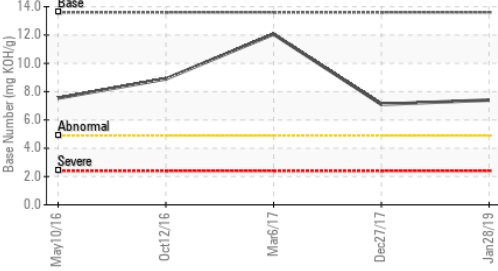
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>31	<b>3</b>	2	5
Boron	ppm	ASTM D5185m		<b>34</b>	71	9
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>5</b>	5	63
Manganese	ppm	ASTM D5185m		<b>1</b>	<1	1
Magnesium	ppm	ASTM D5185m		<b>739</b>	632	840
Calcium	ppm	ASTM D5185m		<b>1434</b>	1208	1128
Phosphorus	ppm	ASTM D5185m		<b>906</b>	891	938
Zinc	ppm	ASTM D5185m		<b>1173</b>	1013	1053
Sulfur	ppm	ASTM D5185m		<b>3185</b>	2891	1103
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>13.4</b>	13.	10.
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	<b>7.4</b>	7.10	12.06
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.17</b>	14.47	13.98

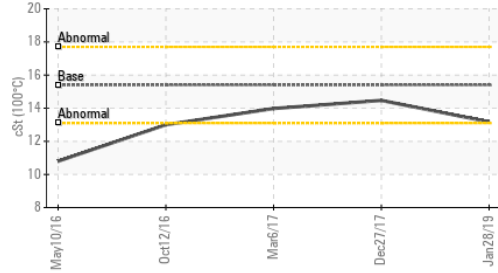
▲ Ferrous Alloys



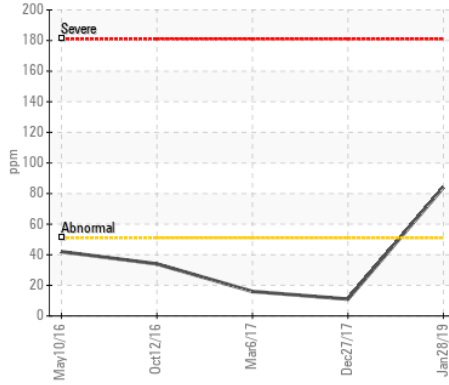
Base Number



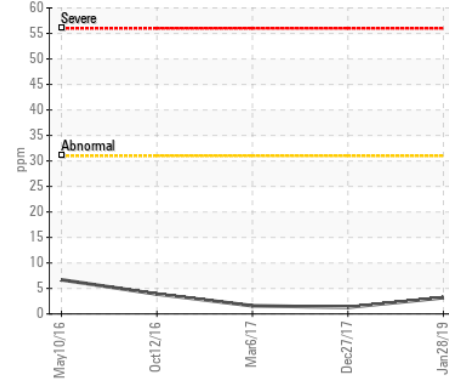
Viscosity @ 100°C



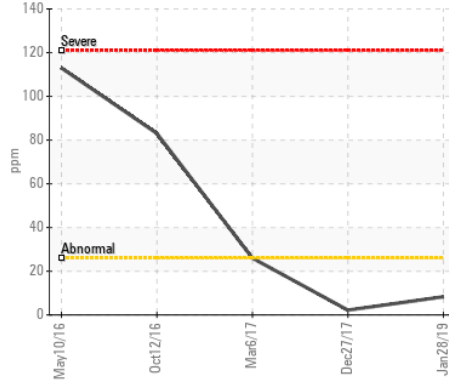
▲ Iron (ppm)



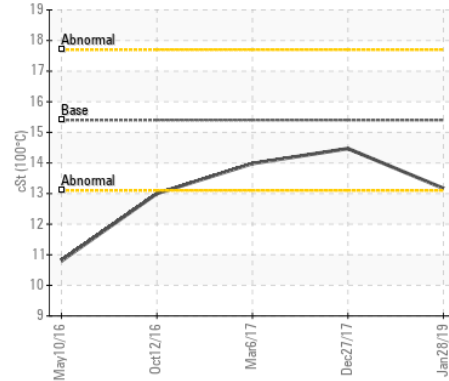
Aluminum (ppm)



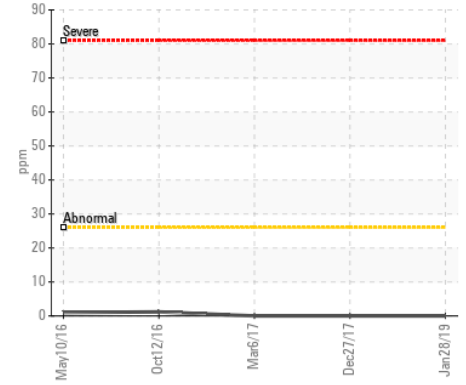
Copper (ppm)



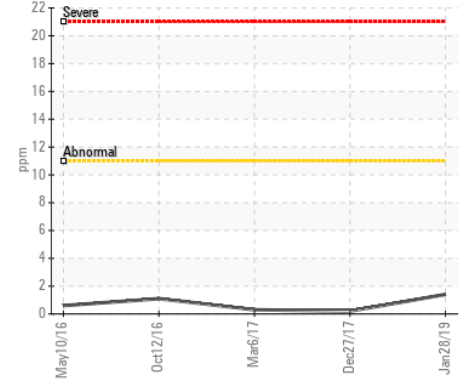
Viscosity @ 100°C



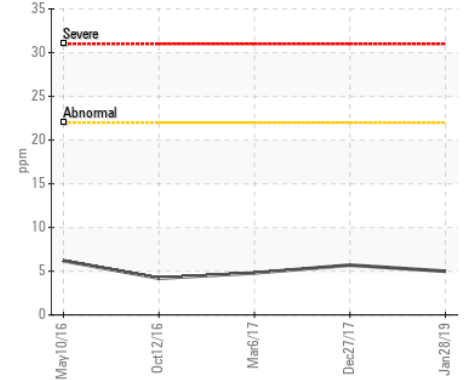
Lead (ppm)



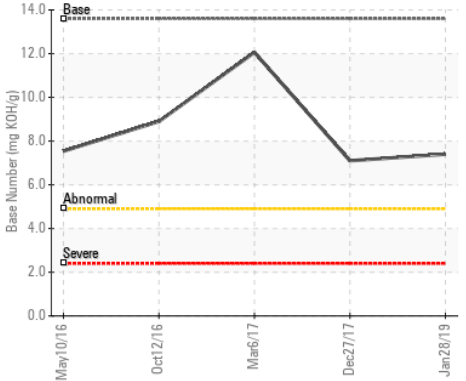
Chromium (ppm)



Silicon (ppm)



Base Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : LEC0000093 **Received** : 01 Feb 2019  
**Lab Number** : 04642509 **Diagnosed** : 04 Feb 2019  
**Unique Number** : 8483945 **Diagnostician** : Jonathan Hester  
**Test Package** : MOBCE ( Additional Tests: PQ, TBN )

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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