



OIL ANALYSIS REPORT

WEAR
CONTAMINATION
FLUID CONDITION

ABNORMAL
NORMAL
ATTENTION



Area
Store 9 - Marietta
Machine Id
JOHN DEERE 350G 74344 (S/N 1FF350GXLJF812340)
Component
Center Diesel Engine
Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- GAL)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LECP4662623	---	---
Sample Date		Client Info		25 Feb 2019	---	---
Machine Age	hrs	Client Info		1169	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		N/A	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				ABNORMAL	---	---

WEAR

The iron level is abnormal. The copper level is abnormal. Valve wear is indicated.

Iron	ppm	ASTM D5185m	>51	▲ 83	---	---
Chromium	ppm	ASTM D5185m	>11	2	---	---
Nickel	ppm	ASTM D5185m	>5	▲ 8	---	---
Titanium	ppm	ASTM D5185m		<1	---	---
Silver	ppm	ASTM D5185m		0	---	---
Aluminum	ppm	ASTM D5185m	>31	6	---	---
Lead	ppm	ASTM D5185m	>26	2	---	---
Copper	ppm	ASTM D5185m	>26	▲ 65	---	---
Tin	ppm	ASTM D5185m	>4	0	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

Tests indicate that there is no fuel present in the oil. There is no indication of any contamination in the oil.

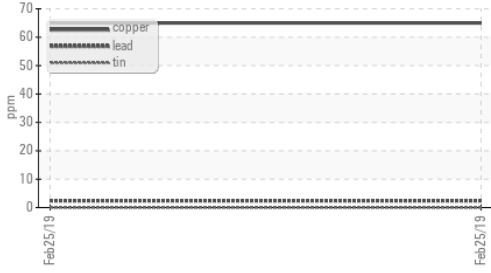
Silicon	ppm	ASTM D5185m	>22	7	---	---
Potassium	ppm	ASTM D5185m	>20	22	---	---
Fuel	%	ASTM D3524	>2.1	0.0	---	---
Water		WC Method	>0.21	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	*ASTM D7844	>3	0.5	---	---
Nitration	Abs/cm	*ASTM D7624	>20	10.2	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	26.2	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.21	NEG	---	---

FLUID CONDITION

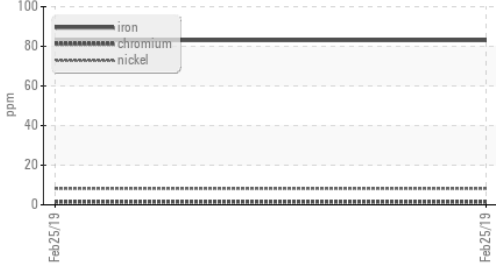
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Sodium	ppm	ASTM D5185m	>31	10	---	---
Boron	ppm	ASTM D5185m		58	---	---
Barium	ppm	ASTM D5185m		<1	---	---
Molybdenum	ppm	ASTM D5185m		181	---	---
Manganese	ppm	ASTM D5185m		2	---	---
Magnesium	ppm	ASTM D5185m		700	---	---
Calcium	ppm	ASTM D5185m		1818	---	---
Phosphorus	ppm	ASTM D5185m		829	---	---
Zinc	ppm	ASTM D5185m		1035	---	---
Sulfur	ppm	ASTM D5185m		2411	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	22.1	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	6.8	---	---
Visc @ 100°C	cSt	ASTM D445	15.4	▲ 11.52	---	---

▲ Non-ferrous Metals



▲ Ferrous Alloys



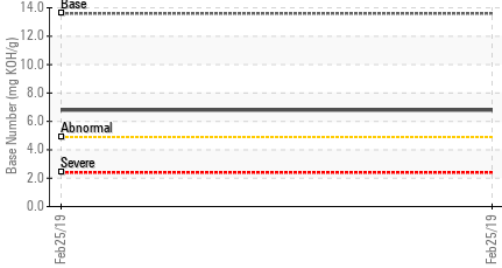
▲ Viscosity @ 100°C



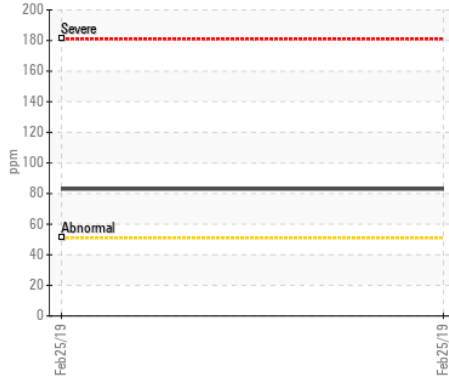
Fuel Dilution



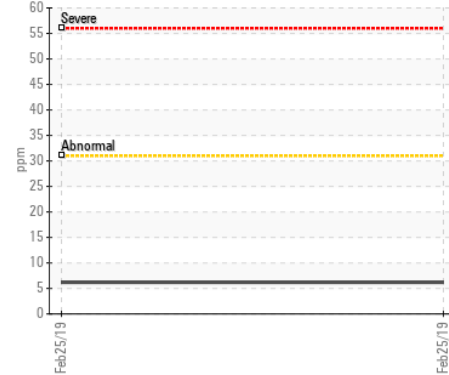
Base Number



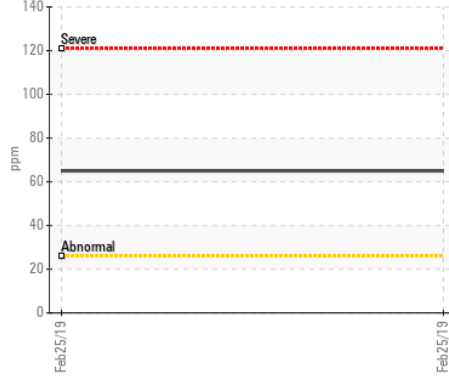
▲ Iron (ppm)



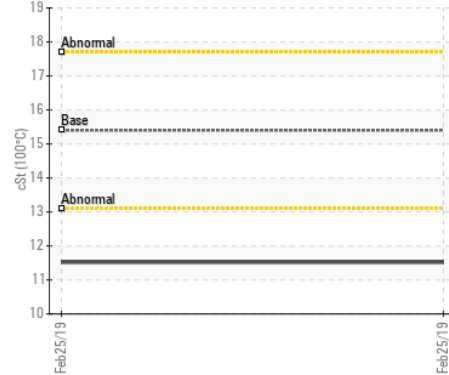
Aluminum (ppm)



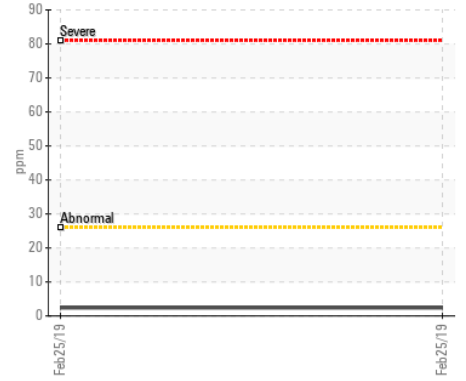
▲ Copper (ppm)



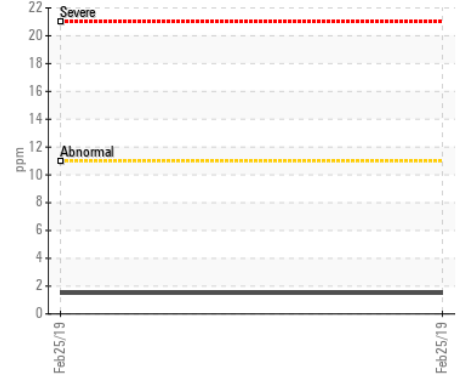
▲ Viscosity @ 100°C



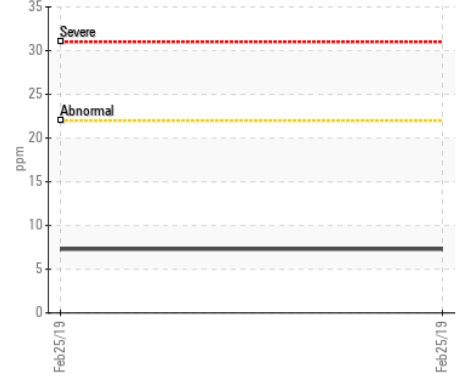
Lead (ppm)



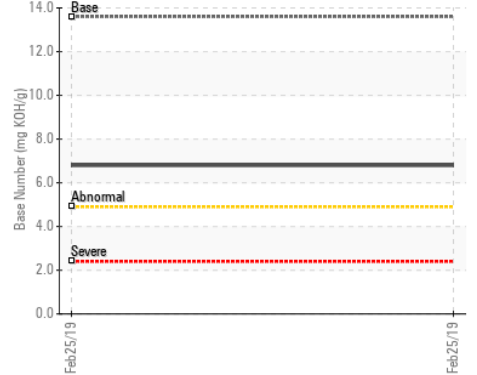
Chromium (ppm)



Silicon (ppm)



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LECP4662623 **Received** : 04 Mar 2019
Lab Number : 04662623 **Diagnosed** : 08 Mar 2019
Unique Number : 8514128 **Diagnostician** : Jonathan Hester
Test Package : MOB1+ (Additional Tests: FuelDilution, PercentFuel, PQ)

BRIDGEPORT EQUIPMENT & TOOL
 15 ACME ST
 MARIETTA, OH
 US 45750
 Contact: ROBBIE CLIFTON
 rclifton@bridgeportequip.com
 T: (740)373-6686
 F: (740)373-3895

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)