



OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
Store 2 - Beaver [60293]
Machine Id
JOHN DEERE 350G 1FF350GXPDE809634
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		LECP173986	LECP166849	LECP151323
Sample Date		Client Info		03 Apr 2017	23 Jun 2016	10 Dec 2015
Machine Age	hrs	Client Info		3738	3227	2659
Oil Age	hrs	Client Info		511	568	558
Filter Age	hrs	Client Info		511	568	558
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	NORMAL	ABNORMAL

WEAR

Cylinder, crank, or cam shaft wear is indicated. All other component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	▲ 88	88	▲ 139
Chromium	ppm	ASTM D5185m	>11	2	2	4
Nickel	ppm	ASTM D5185m	>5	2	1	3
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>31	8	5	6
Lead	ppm	ASTM D5185m	>26	7	5	2
Copper	ppm	ASTM D5185m	>26	3	4	8
Tin	ppm	ASTM D5185m	>4	2	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
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 component.

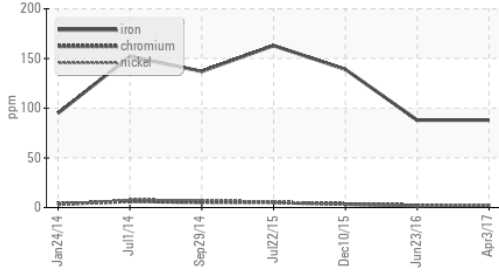
Silicon	ppm	ASTM D5185m	>22	6	5	5
Potassium	ppm	ASTM D5185m	>20	6	8	6
Fuel		WC Method	>2.1	<1.0	<1.0	<1.0
Water		WC Method	>0.21	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.6	0.3	0.8
Nitration	Abs/cm	*ASTM D7624		10.	8.	10.
Sulfation	Abs/.1mm	*ASTM D7415		24.	20.	26.
Silt	scalar	*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

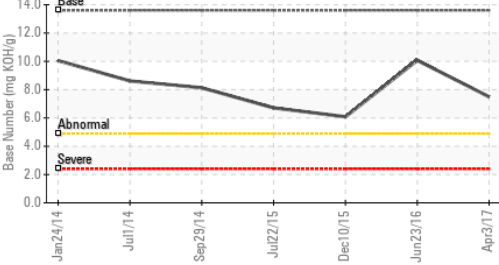
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>31	6	7	12
Boron	ppm	ASTM D5185m		68	72	97
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		100	87	91
Manganese	ppm	ASTM D5185m		<1	1	2
Magnesium	ppm	ASTM D5185m		518	356	390
Calcium	ppm	ASTM D5185m		1612	1857	1644
Phosphorus	ppm	ASTM D5185m		1031	998	1000
Zinc	ppm	ASTM D5185m		1230	1228	1207
Sulfur	ppm	ASTM D5185m		2859	3125	2975
Oxidation	Abs/.1mm	*ASTM D7414		20.	15.	20.
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	7.49	10.07	6.08
Visc @ 100°C	cSt	ASTM D445	15.4	15.05	15.5	14.67

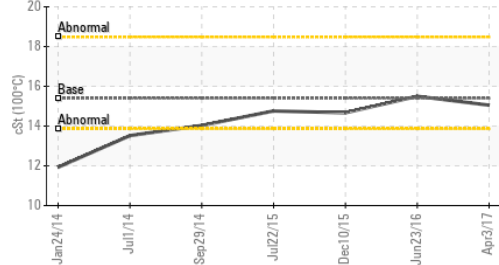
▲ Ferrous Alloys



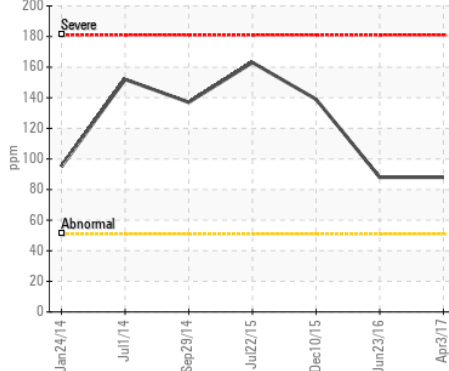
Base Number



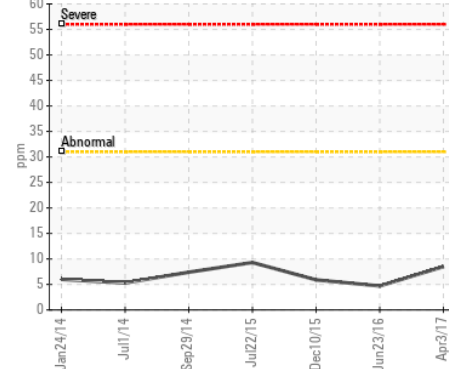
Viscosity @ 100°C



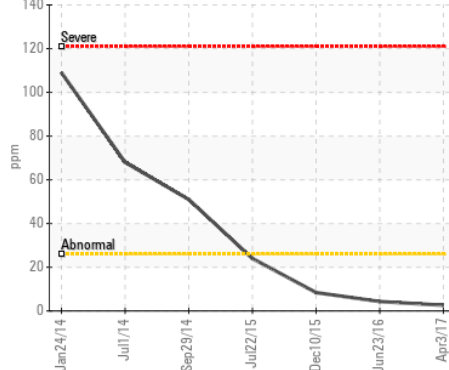
▲ Iron (ppm)



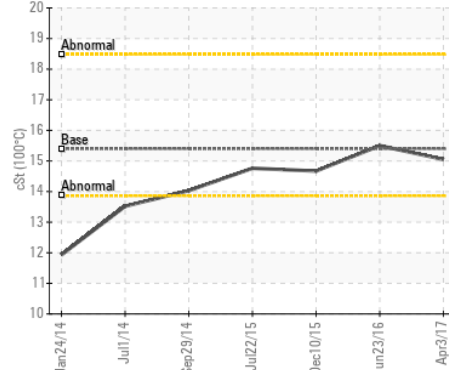
Aluminum (ppm)



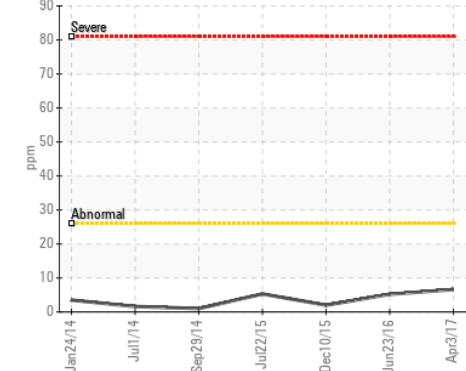
Copper (ppm)



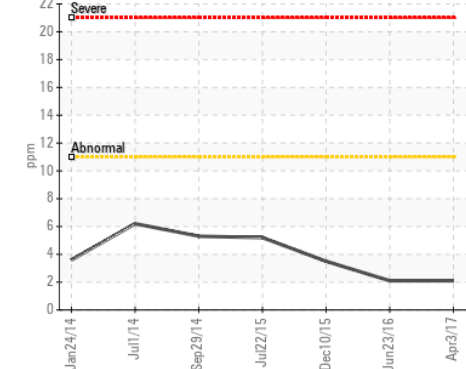
Viscosity @ 100°C



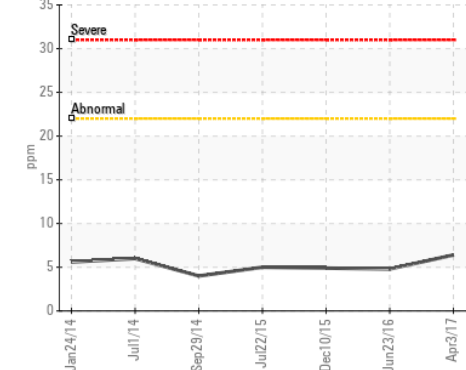
Lead (ppm)



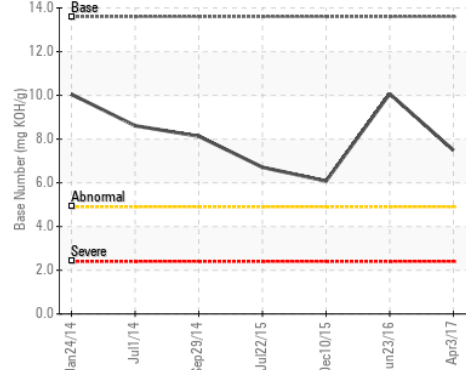
Chromium (ppm)



Silicon (ppm)



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LEC173986 **Received** : 06 Apr 2017
Lab Number : 04197105 **Diagnosed** : 09 Apr 2017
Unique Number : 7755526 **Diagnostician** : Don Baldrige
Test Package : MOB 2 (Additional Tests: PQ)

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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)