



OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
Store 1 - Cowen
Machine Id
JOHN DEERE 350G 1FF350GXCDE809713 (S/N 1FF350GXEDE809713)
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		LECP193494	LECP178326	LECP175208
Sample Date		Client Info		09 Apr 2019	04 Sep 2018	06 Jul 2018
Machine Age	hrs	Client Info		4865	4383	400
Oil Age	hrs	Client Info		482	4383	400
Filter Age	hrs	Client Info		482	4383	400
Oil Changed		Client Info		Changed	Changed	Not Changed
Filter Changed		Client Info		Changed	Changed	Not Changed
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL

WEAR

The iron level has decreased, but is still abnormal. All other component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	▲ 199	▲ 307	▲ 190
Chromium	ppm	ASTM D5185m	>11	3	6	3
Nickel	ppm	ASTM D5185m	>5	2	6	4
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>31	9	9	7
Lead	ppm	ASTM D5185m	>26	1	1	0
Copper	ppm	ASTM D5185m	>26	1	3	2
Tin	ppm	ASTM D5185m	>4	0	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

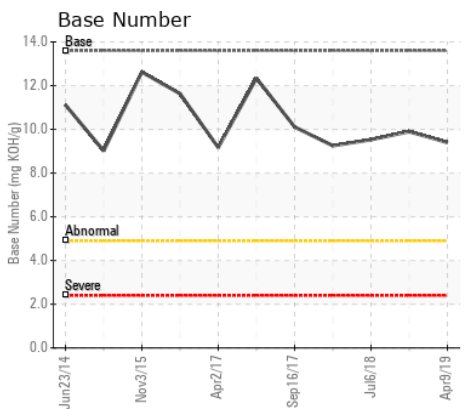
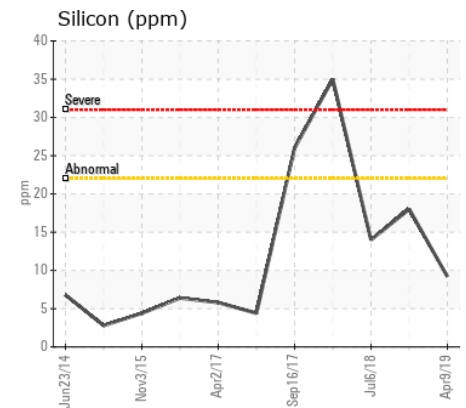
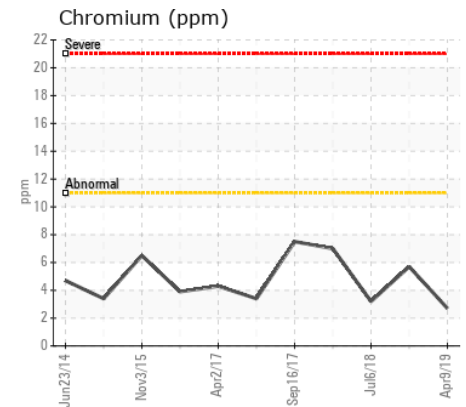
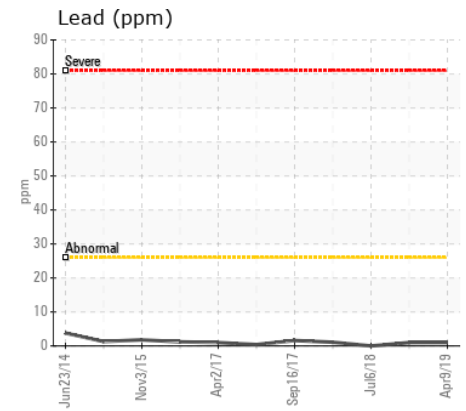
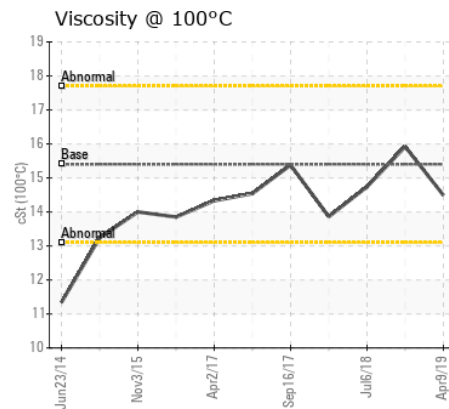
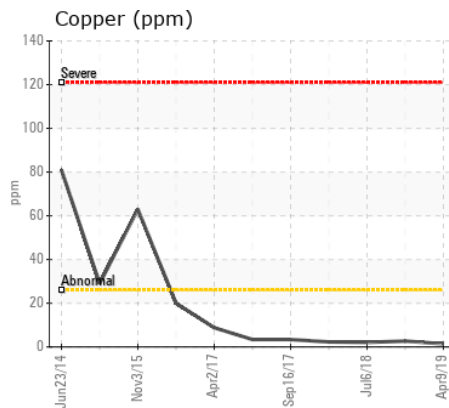
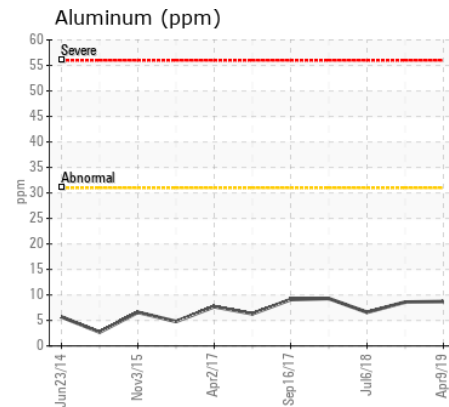
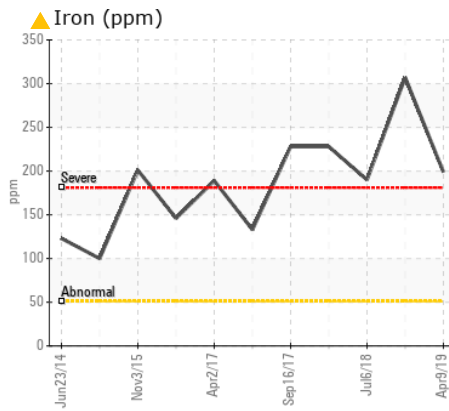
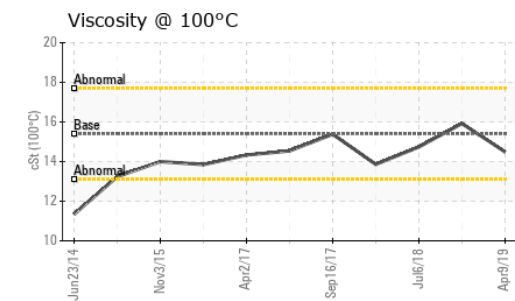
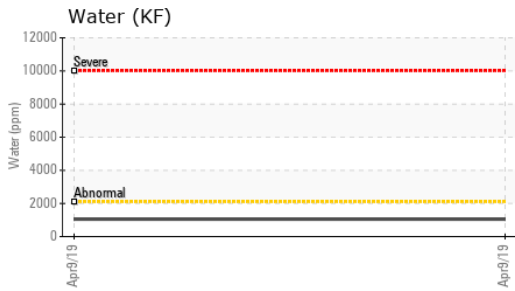
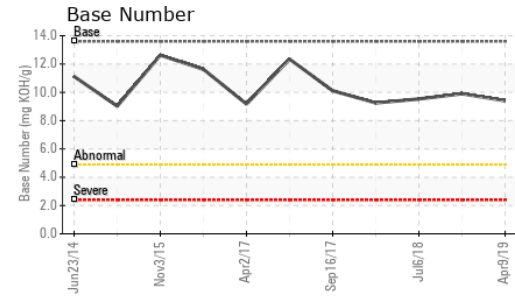
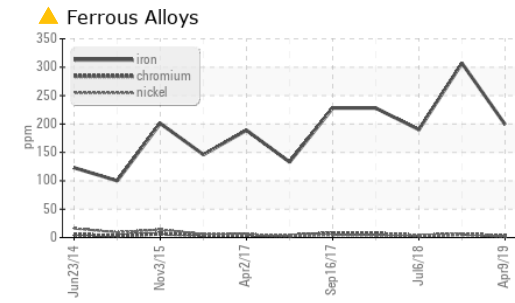
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>22	9	18	14
Potassium	ppm	ASTM D5185m	>20	6	8	5
Fuel		WC Method	>2.1	<1.0	<1.0	<1.0
Water	%	ASTM D6304	>0.21	0.105	---	---
ppm Water	ppm	ASTM D6304	>2100	1050	---	---
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.7	0.9	0.4
Nitration	Abs/cm	*ASTM D7624	>20	10.6	10.1	6.
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.8	23	18.
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	5	4	3
Boron	ppm	ASTM D5185m		134	110	198
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		217	235	238
Manganese	ppm	ASTM D5185m		2	3	2
Magnesium	ppm	ASTM D5185m		772	805	808
Calcium	ppm	ASTM D5185m		1374	1312	1381
Phosphorus	ppm	ASTM D5185m		728	809	757
Zinc	ppm	ASTM D5185m		870	957	990
Sulfur	ppm	ASTM D5185m		3332	2399	2588
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.7	17.5	12.
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	9.4	9.9	9.53
Visc @ 100°C	cSt	ASTM D445	15.4	14.49	15.92	14.74



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LECP193494 **Received** : 12 Apr 2019
Lab Number : 04691919 **Diagnosed** : 16 Apr 2019
Unique Number : 8563436 **Diagnostician** : Don Baldrige
Test Package : MOB1+ (Additional Tests: KF, PQ)

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)

LESLIE EQUIPMENT COMPANY
 105 TENNIS CENTER DR.
 MARIETTA, OH
 US 45750-9765
 Contact: LEANNE KENDALL
 KendalLeanne@lec1.com
 T:
 F: (740)373-5570