



OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
Store 9 - Marietta
Machine Id
JOHN DEERE 950K 1T0950KPPJF332504
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 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		LECP192085	LECP186242	---
Sample Date		Client Info		29 Apr 2019	17 Oct 2018	---
Machine Age	hrs	Client Info		1233	555	---
Oil Age	hrs	Client Info		0	555	---
Filter Age	hrs	Client Info		0	555	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				ABNORMAL	ABNORMAL	---

WEAR

The copper level has decreased, but is still abnormal. Cylinder, crank, or cam shaft wear is indicated.

Iron	ppm	ASTM D5185m	>51	▲ 54	57	---
Chromium	ppm	ASTM D5185m	>11	1	1	---
Nickel	ppm	ASTM D5185m	>5	<1	1	---
Titanium	ppm	ASTM D5185m		<1	<1	---
Silver	ppm	ASTM D5185m		0	0	---
Aluminum	ppm	ASTM D5185m	>31	10	6	---
Lead	ppm	ASTM D5185m	>26	1	0	---
Copper	ppm	ASTM D5185m	>26	▲ 64	▲ 171	---
Tin	ppm	ASTM D5185m	>4	0	2	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

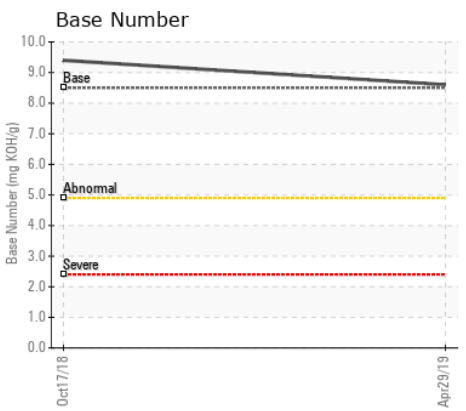
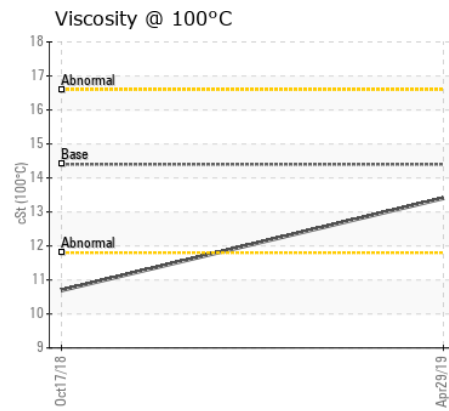
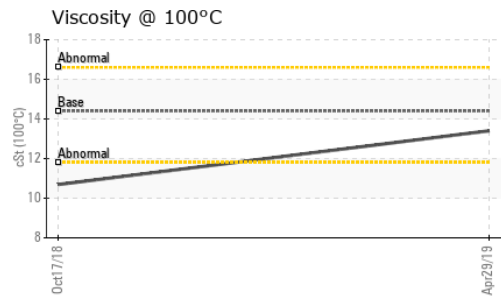
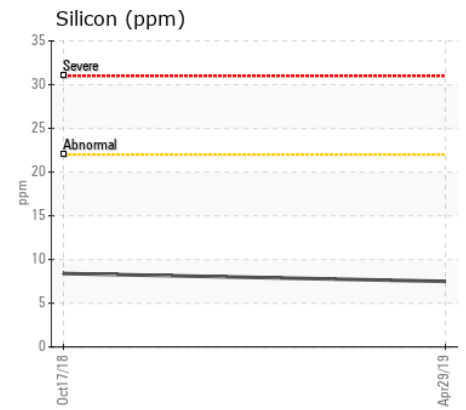
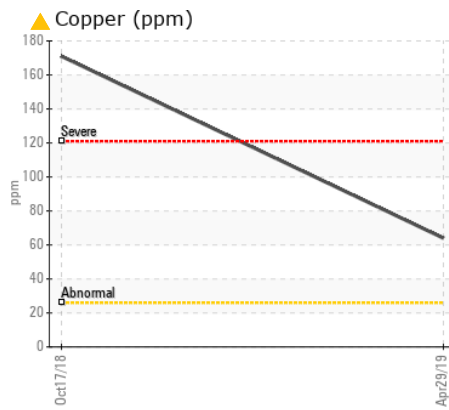
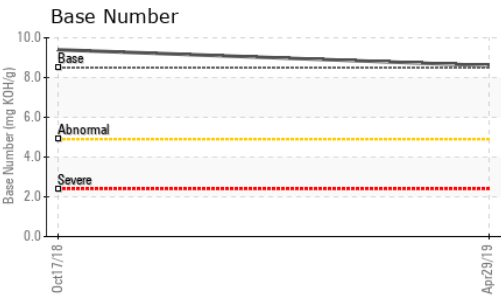
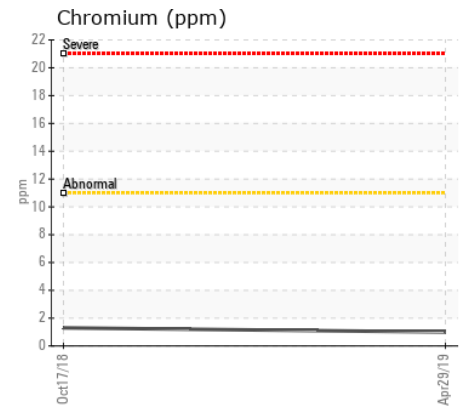
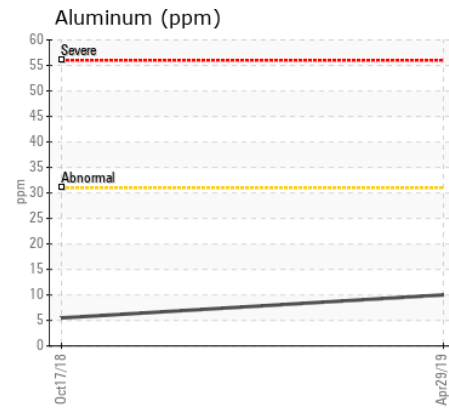
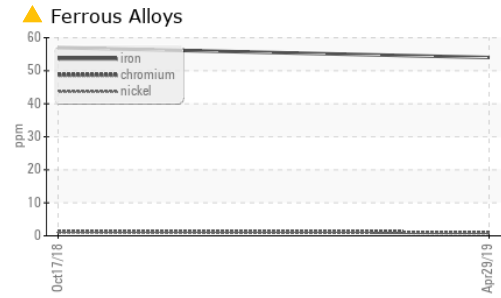
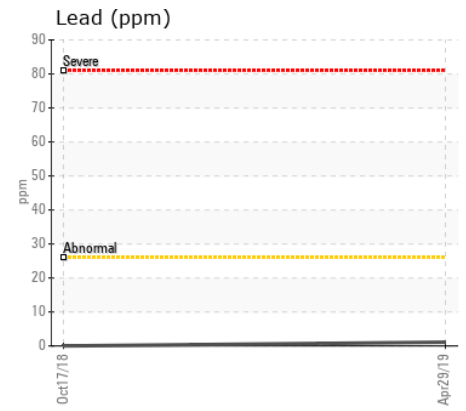
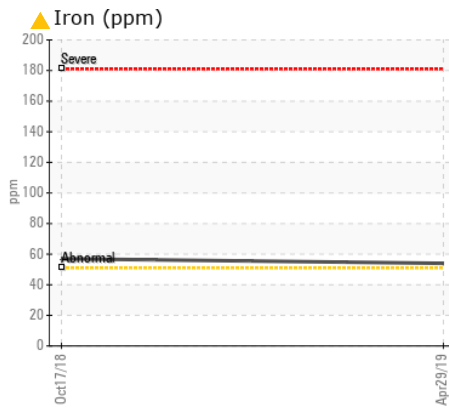
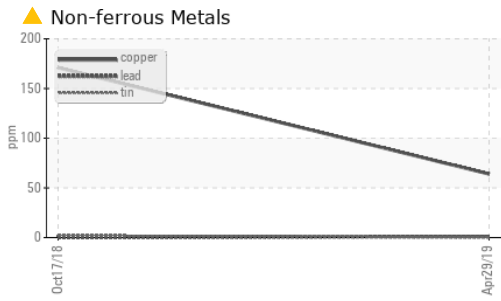
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>22	8	8	---
Potassium	ppm	ASTM D5185m	>20	0	7	---
Fuel		WC Method	>2.1	<1.0	<1.0	---
Water		WC Method	>0.21	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.5	0.5	---
Nitration	Abs/cm	*ASTM D7624	>20	9.2	9.5	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.9	22.7	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.21	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	>158	6	11	---
Boron	ppm	ASTM D5185m	250	170	105	---
Barium	ppm	ASTM D5185m	10	0	1	---
Molybdenum	ppm	ASTM D5185m	100	248	226	---
Manganese	ppm	ASTM D5185m		<1	1	---
Magnesium	ppm	ASTM D5185m	450	845	828	---
Calcium	ppm	ASTM D5185m	3000	1445	1680	---
Phosphorus	ppm	ASTM D5185m	1150	892	862	---
Zinc	ppm	ASTM D5185m	1350	1079	1047	---
Sulfur	ppm	ASTM D5185m	4250	2454	2552	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.2	17.2	---
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	8.6	9.4	---
Visc @ 100°C	cSt	ASTM D445	14.4	13.4	10.69	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LECP192085 **Received** : 02 May 2019
Lab Number : 04705107 **Diagnosed** : 03 May 2019
Unique Number : 8581629 **Diagnostician** : Don Baldrige
Test Package : MOB1+ (Additional Tests: 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