



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
Store 2 - Beaver [73500]
Machine Id
John Deere 648L 1DW648LXAFF668941
Component
Hydraulic System
Fluid
JOHN DEERE HYDRAU (33 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LECP176805	LECP181523	LECP174296
Sample Date		Client Info		29 Mar 2018	14 Jul 2017	08 Feb 2017
Machine Age	hrs	Client Info		4519	3401	2673
Oil Age	hrs	Client Info		4519	3401	2673
Filter Age	hrs	Client Info		2436	1318	590
Oil Changed		Client Info		Changed	Not Changd	Not Changd
Filter Changed		Client Info		Changed	Not Changd	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

PQ		ASTM D8184	>50	18	16	15
Iron	ppm	ASTM D5185m	>23	18	16	11
Chromium	ppm	ASTM D5185m	>9	2	2	1
Nickel	ppm	ASTM D5185m	>5	<1	<1	<1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>9	2	2	1
Lead	ppm	ASTM D5185m	>28	<1	1	2
Copper	ppm	ASTM D5185m	>51	2	3	2
Tin	ppm	ASTM D5185m	>5	<1	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

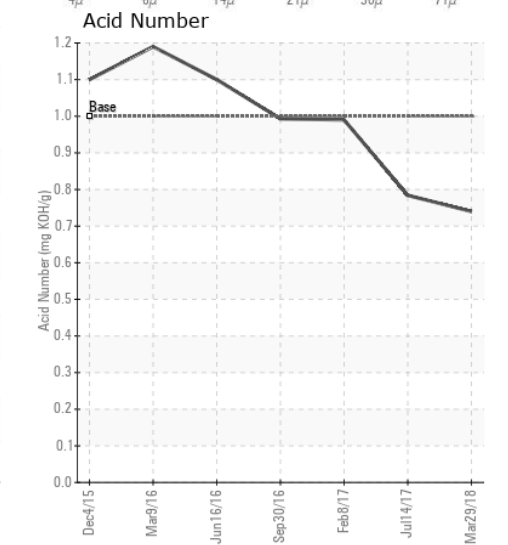
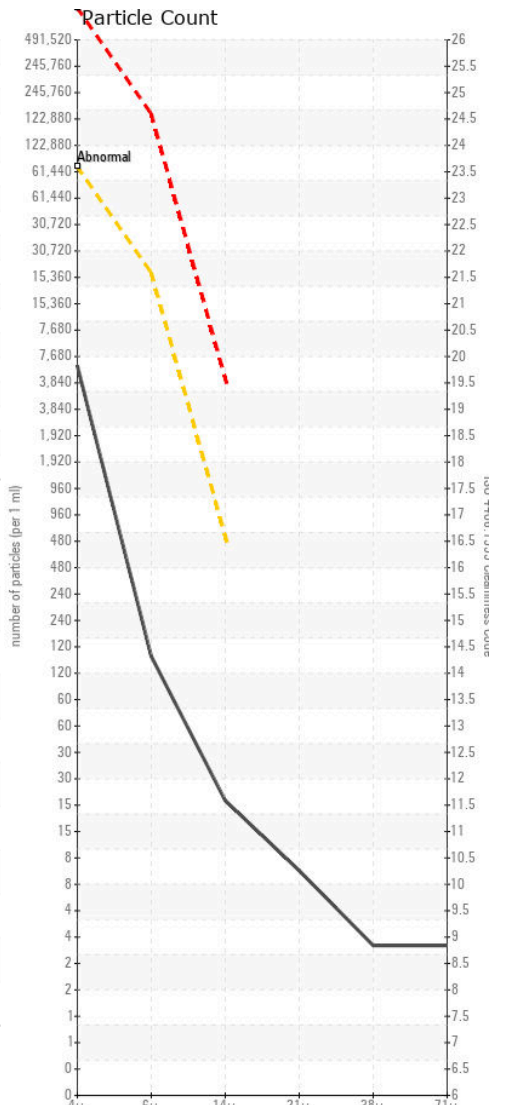
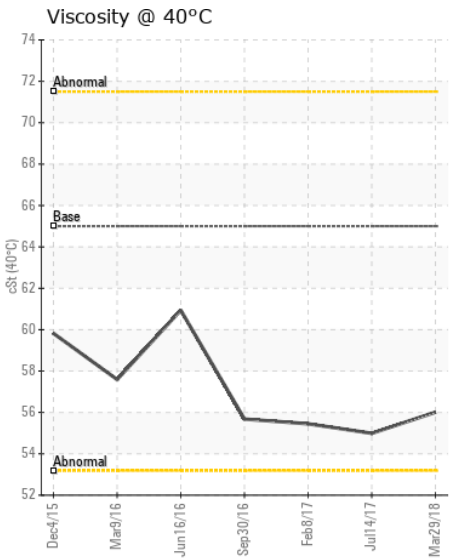
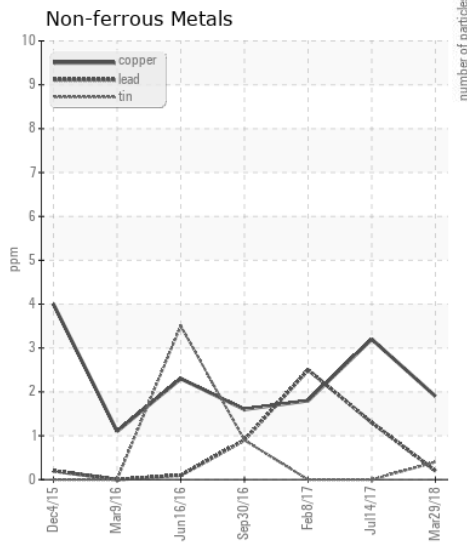
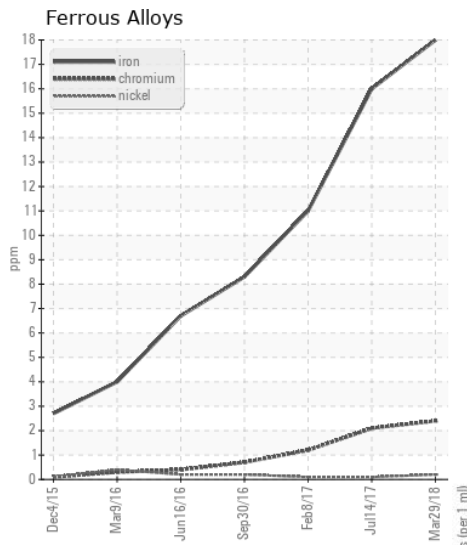
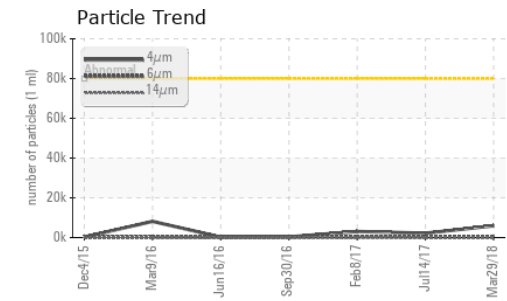
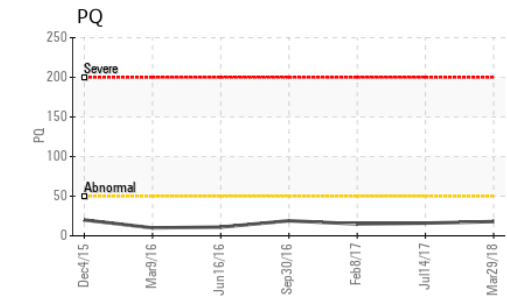
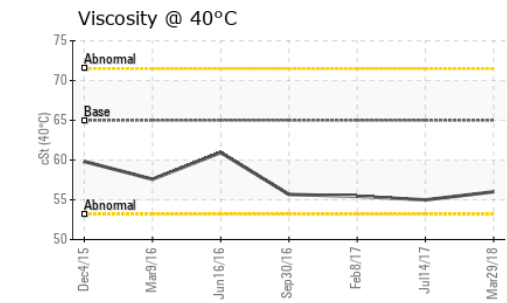
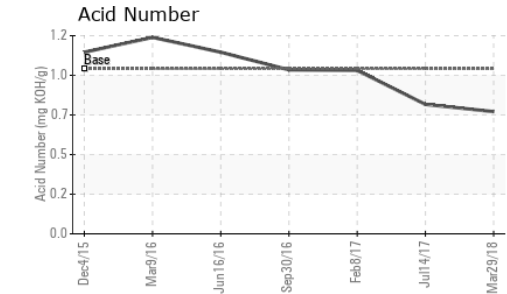
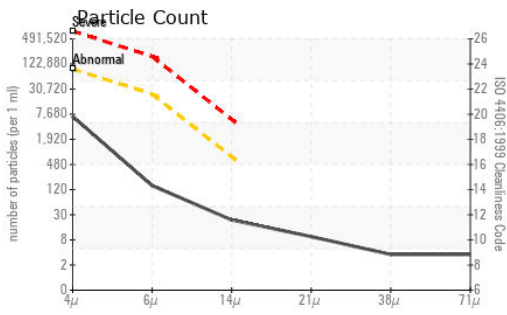
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>31	7	7	6
Potassium	ppm	ASTM D5185m	>20	2	4	0
Water		WC Method	>0.075	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>80000	5932	2194	3062
Particles >6µm		ASTM D7647	>20000	132	100	180
Particles >14µm		ASTM D7647	>640	20	10	16
Particles >21µm		ASTM D7647	>160	8	5	8
Particles >38µm		ASTM D7647	>40	3	2	5
Particles >71µm		ASTM D7647	>10	3	2	4
Oil Cleanliness		ISO 4406 (c)	>23/21/16	20/14/11	18/14/10	19/15/11
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	>0.075	NEG	NEG	NEG

FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>21	1	<1	2
Boron	ppm	ASTM D5185m		<1	1	<1
Barium	ppm	ASTM D5185m		0	0	<1
Molybdenum	ppm	ASTM D5185m		0	0	0
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		0	0	2
Calcium	ppm	ASTM D5185m	87	121	188	130
Phosphorus	ppm	ASTM D5185m	727	648	747	627
Zinc	ppm	ASTM D5185m	900	753	931	796
Sulfur	ppm	ASTM D5185m	1500	1351	1812	1532
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	0.740	0.784	0.990
Visc @ 40°C	cSt	ASTM D445	65	56.01	54.99	55.45



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LEC176805 **Received** : 04 Apr 2018
Lab Number : 04442745 **Tested** : 05 Apr 2018
Unique Number : 8156489 **Diagnosed** : 05 Apr 2018 - Wes Davis
Test Package : MOB 2 (Additional Tests: PQ)

LESLIE EQUIPMENT COMPANY
 105 TENNIS CENTER DR.
 MARIETTA, OH
 US 45750-9765
 Contact: LEANNE KENDALL
 KendalLeanne@lec1.com

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)

T:
 F: (740)373-5570