



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
Store 2 - Beaver [99004]
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		LECP172052	LEC0007439	LEC0003227
Sample Date		Client Info		20 Dec 2019	08 Oct 2019	18 Jun 2019
Machine Age	hrs	Client Info		7531	7220	6704
Oil Age	hrs	Client Info		3012	2701	2185
Filter Age	hrs	Client Info		3012	2701	2185
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

PQ		ASTM D8184	>50	23	21	18
Iron	ppm	ASTM D5185m	>23	15	22	18
Chromium	ppm	ASTM D5185m	>9	5	7	5
Nickel	ppm	ASTM D5185m	>5	<1	<1	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m		2	0	0
Aluminum	ppm	ASTM D5185m	>9	2	3	2
Lead	ppm	ASTM D5185m	>28	<1	<1	<1
Copper	ppm	ASTM D5185m	>51	1	2	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

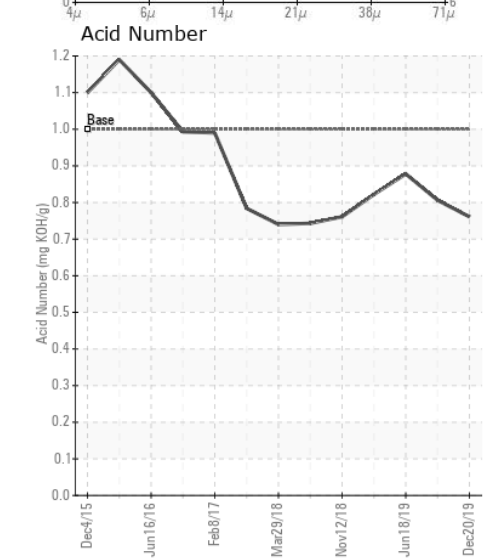
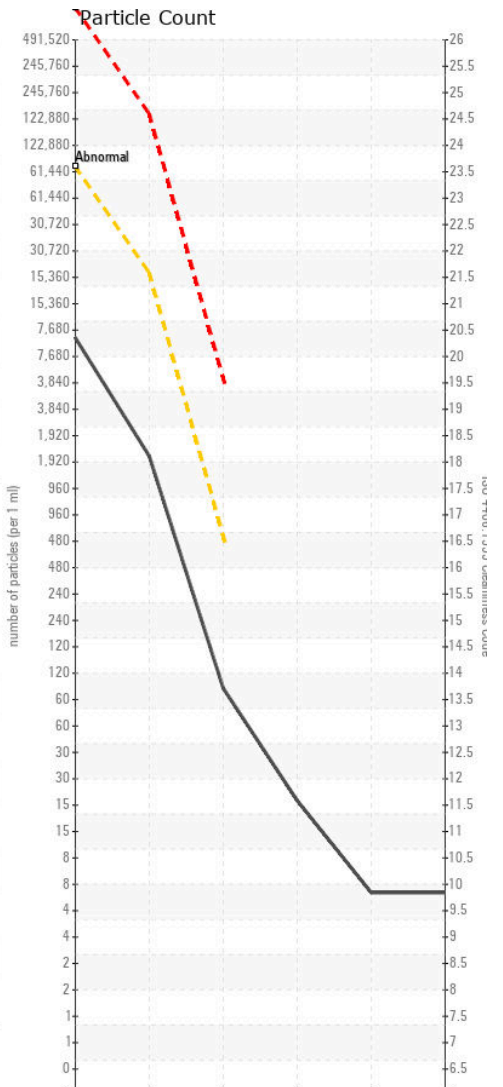
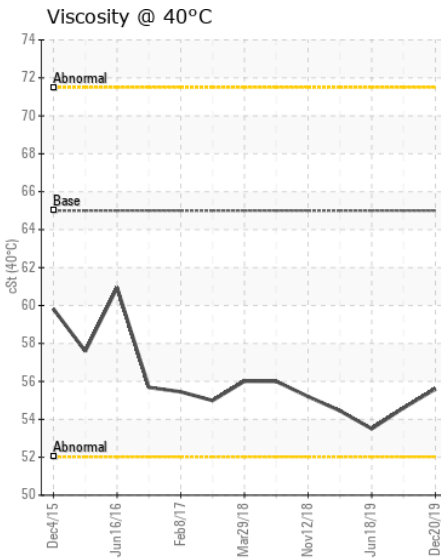
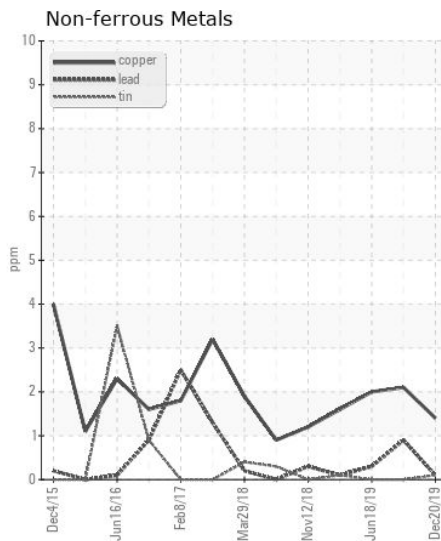
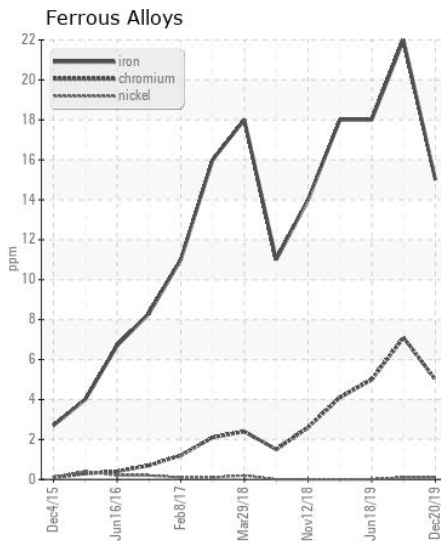
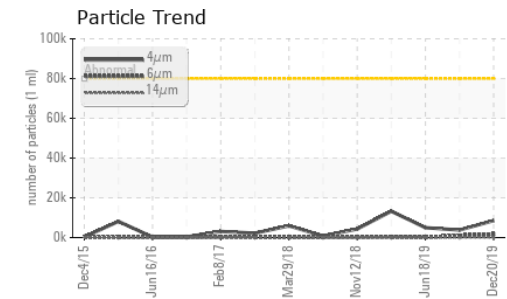
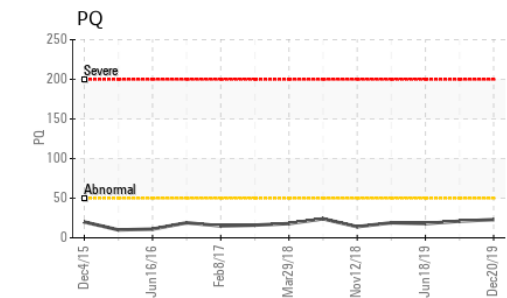
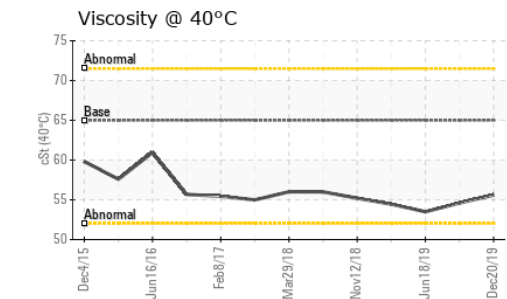
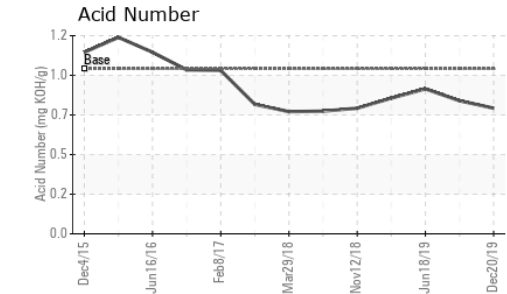
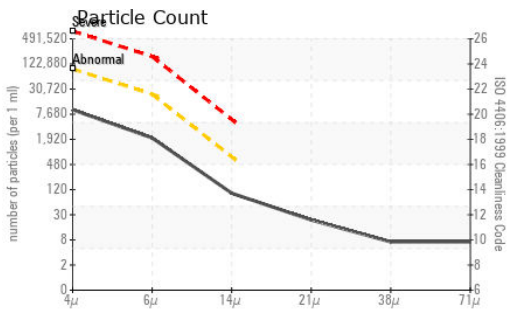
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>31	5	6	6
Potassium	ppm	ASTM D5185m	>20	1	2	2
Water		WC Method	>0.075	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>80000	8538	3798	4974
Particles >6µm		ASTM D7647	>20000	1815	1111	123
Particles >14µm		ASTM D7647	>640	87	115	16
Particles >21µm		ASTM D7647	>160	20	25	5
Particles >38µm		ASTM D7647	>40	6	2	0
Particles >71µm		ASTM D7647	>10	6	2	0
Oil Cleanliness		ISO 4406 (c)	>23/21/16	20/18/14	19/17/14	19/14/11
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	0	1	1
Boron	ppm	ASTM D5185m		1	<1	<1
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		<1	<1	<1
Manganese	ppm	ASTM D5185m		<1	1	<1
Magnesium	ppm	ASTM D5185m		13	11	10
Calcium	ppm	ASTM D5185m	87	548	451	421
Phosphorus	ppm	ASTM D5185m	727	711	835	652
Zinc	ppm	ASTM D5185m	900	875	1010	780
Sulfur	ppm	ASTM D5185m	1500	1679	1286	1656
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	0.761	0.806	0.878
Visc @ 40°C	cSt	ASTM D445	65	55.6	54.6	53.5



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LEC172052 **Received** : 03 Jan 2020
Lab Number : 04879037 **Tested** : 06 Jan 2020
Unique Number : 8869075 **Diagnosed** : 06 Jan 2020 - 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)

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