



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ABNORMAL



Area
Store 4 - Fairmont [RO#142908]
Machine Id
JOHN DEERE 350G 1FF350GXEFF810968
Component
Hydraulic System
Fluid
HITACHI HYDRAULIC SUPER EX 46HN (77 GAL)

RECOMMENDATION

Recommend drain oil if not already done. Reduce drain interval to 2000 hours or drain and flush and use recommended zinc free oil.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LEC0042237	LEC0020155	LEC0017306
Sample Date		Client Info		05 Sep 2023	19 May 2021	23 Nov 2020
Machine Age	hrs	Client Info		5784	5002	4786
Oil Age	hrs	Client Info		782	216	1
Filter Age	hrs	Client Info		782	216	303
Oil Changed		Client Info		Not Changed	Changed	Changed
Filter Changed		Client Info		Not Changed	Changed	Changed
Sample Status				ABNORMAL	ABNORMAL	NORMAL

WEAR

All component wear rates are normal.

PQ		ASTM D8184	>50	7	19	19
Iron	ppm	ASTM D5185m	>32	4	7	<1
Chromium	ppm	ASTM D5185m	>9	4	5	<1
Nickel	ppm	ASTM D5185m	>5	0	0	0
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m		0	<1	<1
Aluminum	ppm	ASTM D5185m	>9	2	0	0
Lead	ppm	ASTM D5185m	>28	0	<1	0
Copper	ppm	ASTM D5185m	>50	<1	3	<1
Tin	ppm	ASTM D5185m	>5	0	<1	0
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

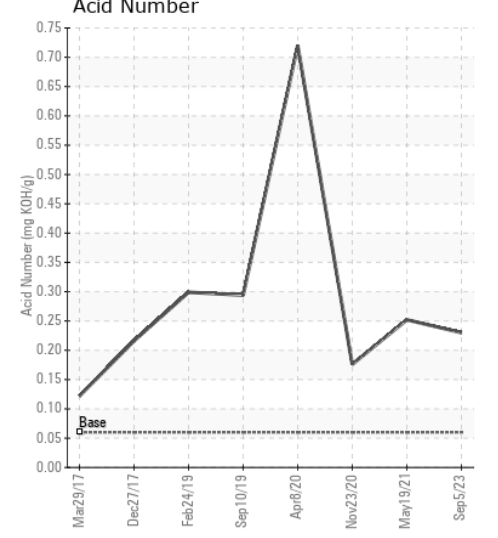
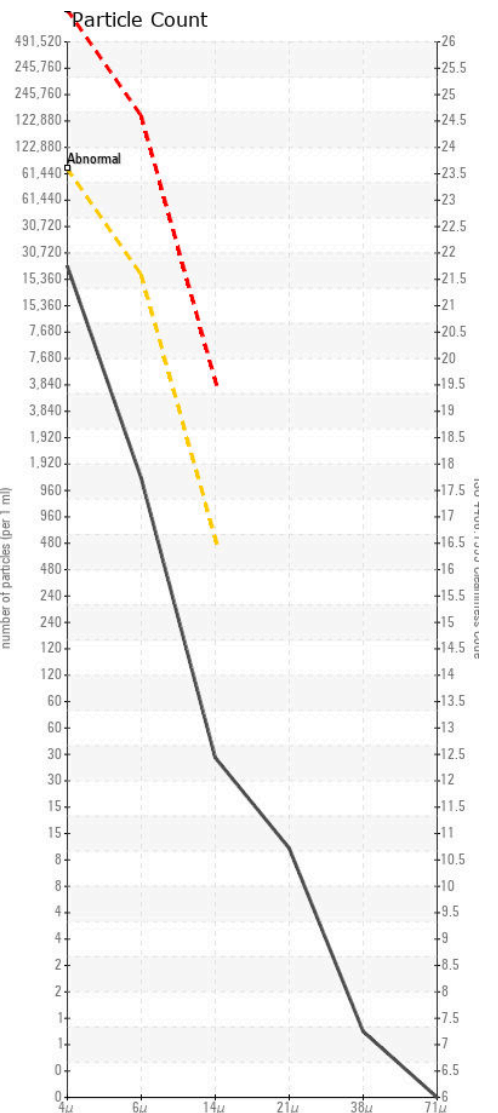
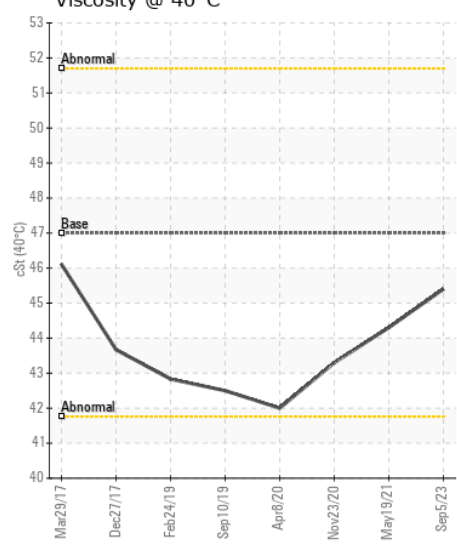
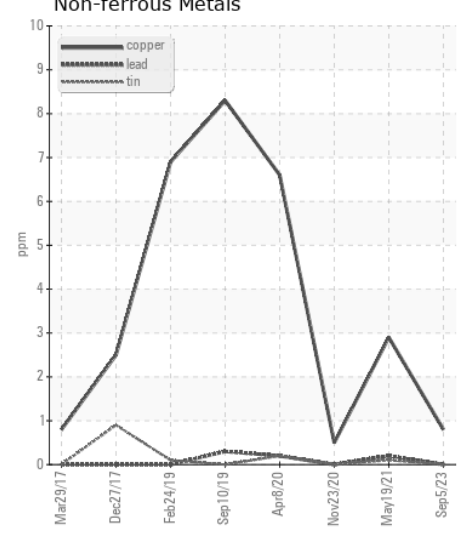
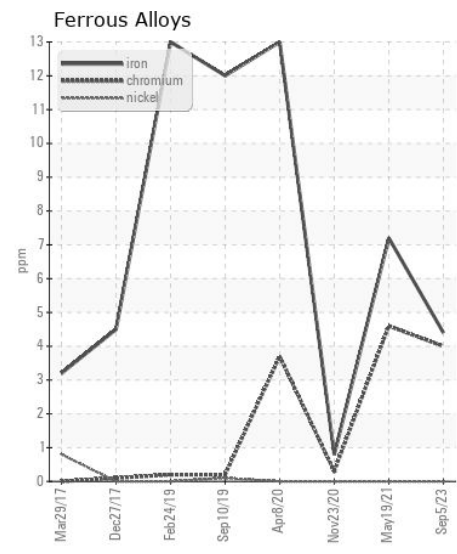
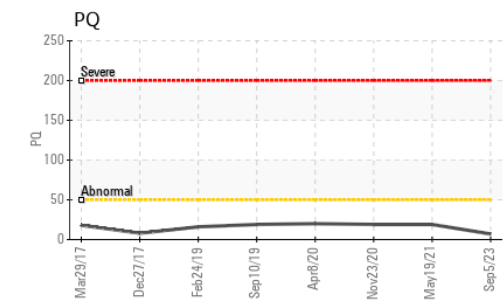
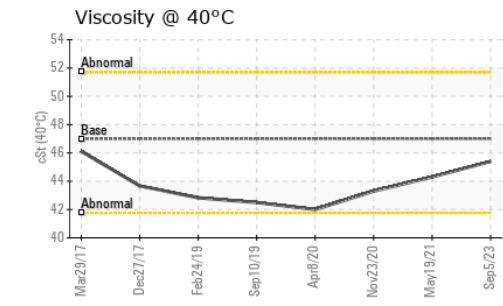
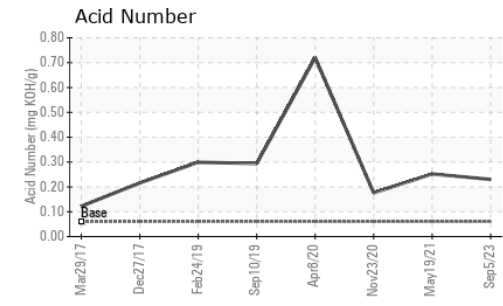
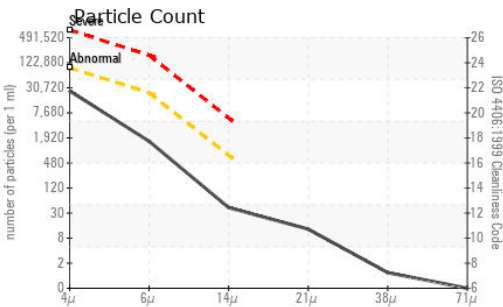
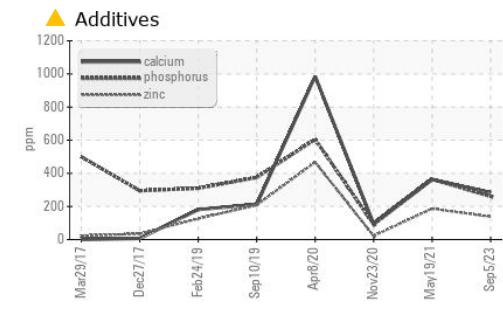
The amount and size of particulates present in the system are acceptable.

Silicon	ppm	ASTM D5185m	>11	2	2	0
Potassium	ppm	ASTM D5185m	>20	0	1	0
Water		WC Method	>0.075	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>80000	22409	3213	4831
Particles >6µm		ASTM D7647	>20000	1394	506	235
Particles >14µm		ASTM D7647	>640	36	21	11
Particles >21µm		ASTM D7647	>160	11	6	5
Particles >38µm		ASTM D7647	>40	1	0	0
Particles >71µm		ASTM D7647	>10	0	0	0
Oil Cleanliness		ISO 4406 (c)	>23/21/16	22/18/12	19/16/12	19/15/11
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT	LIGHT
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

Zinc level above manufacturer's recommendations. The AN level is acceptable for this fluid.

Sodium	ppm	ASTM D5185m	>21	<1	<1	<1
Boron	ppm	ASTM D5185m		0	3	<1
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		0	1	0
Manganese	ppm	ASTM D5185m		0	<1	0
Magnesium	ppm	ASTM D5185m		1	12	<1
Calcium	ppm	ASTM D5185m		284	363	94
Phosphorus	ppm	ASTM D5185m	827	261	364	92
Zinc	ppm	ASTM D5185m	0	▲ 138	▲ 186	22
Sulfur	ppm	ASTM D5185m	13	578	513	201
Acid Number (AN)	mg KOH/g	ASTM D8045	0.06	0.23	0.252	0.176
Visc @ 40°C	cSt	ASTM D445	47	45.4	44.3	43.3



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LEC0042237 **Received** : 08 Sep 2023
Lab Number : 05945609 **Tested** : 11 Sep 2023
Unique Number : 10636221 **Diagnosed** : 11 Sep 2023 - Don Baldrige
Test Package : CONST (Additional Tests: PQ)

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

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)