



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL



Area
Store 4 - Fairmont
Machine Id
JOHN DEERE 130P 1FF130PATPF000074
Component
Hydraulic System
Fluid
HITACHI HYDRAULIC SUPER EX 46HN (49 GAL)

RECOMMENDATION

We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LEC0046602	LEC0046053	---
Sample Date		Client Info		12 Jan 2024	13 Dec 2023	---
Machine Age	hrs	Client Info		300	298	---
Oil Age	hrs	Client Info		300	298	---
Filter Age	hrs	Client Info		300	298	---
Oil Changed		Client Info		Not Chngd	Not Chngd	---
Filter Changed		Client Info		Not Chngd	Not Chngd	---
Sample Status				ABNORMAL	ABNORMAL	---

WEAR

All component wear rates are normal.

PQ		ASTM D8184	>50	16	16	---
Iron	ppm	ASTM D5185m	>32	5	2	---
Chromium	ppm	ASTM D5185m	>9	0	0	---
Nickel	ppm	ASTM D5185m	>5	0	0	---
Titanium	ppm	ASTM D5185m		0	0	---
Silver	ppm	ASTM D5185m		0	0	---
Aluminum	ppm	ASTM D5185m	>9	0	0	---
Lead	ppm	ASTM D5185m	>28	0	0	---
Copper	ppm	ASTM D5185m	>50	3	2	---
Tin	ppm	ASTM D5185m	>5	0	0	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

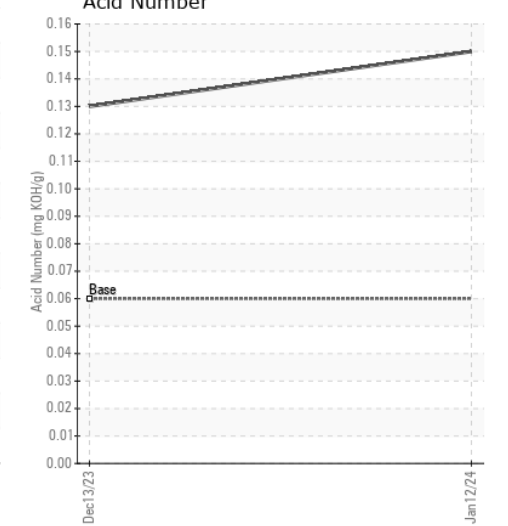
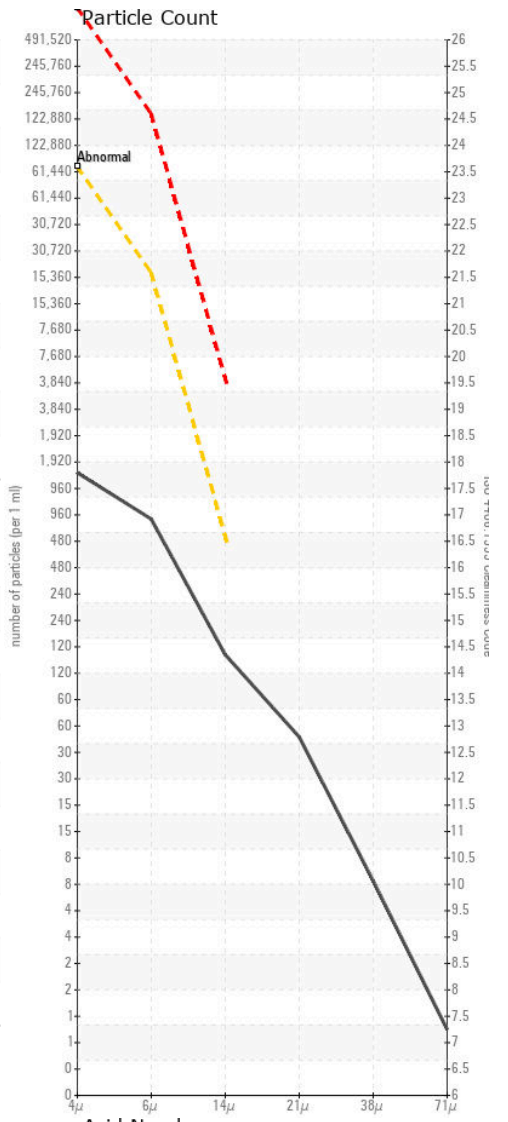
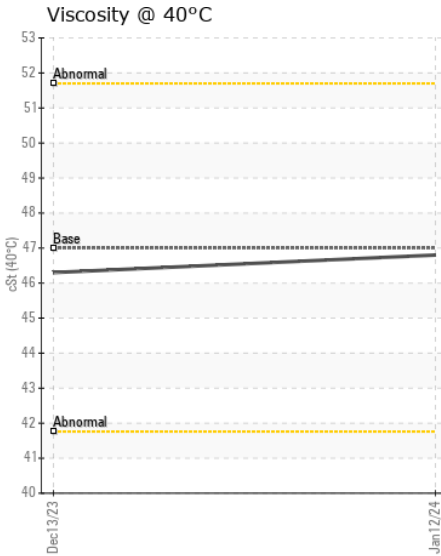
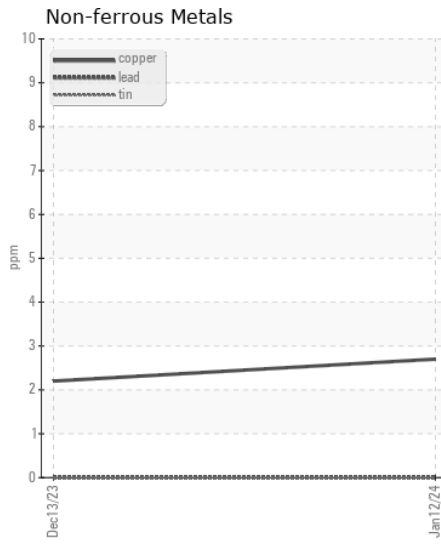
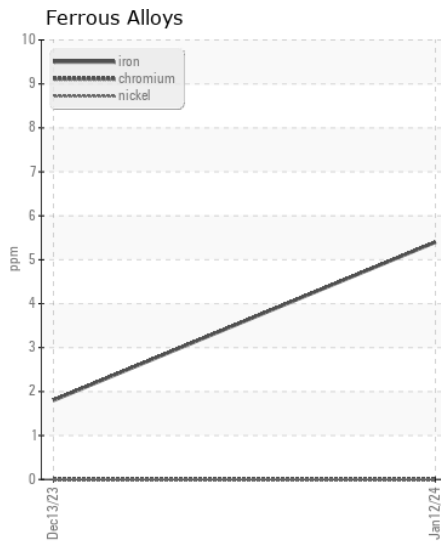
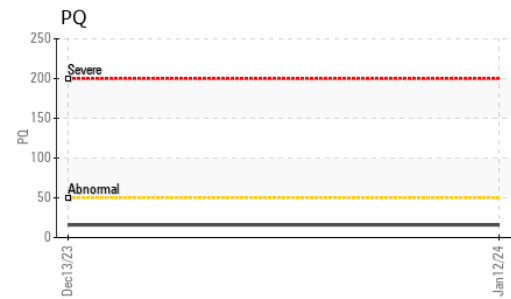
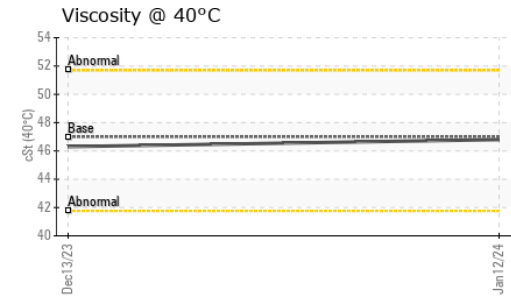
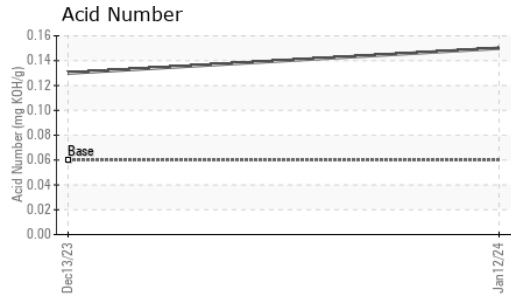
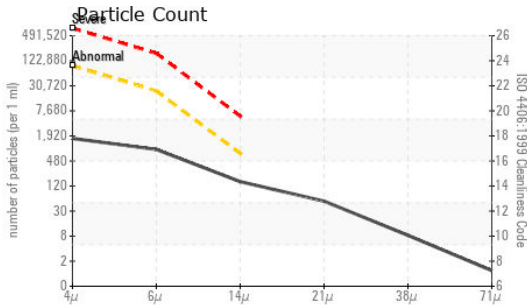
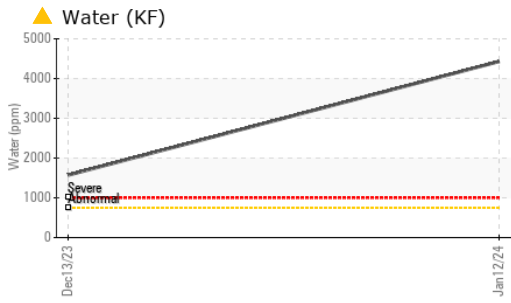
Appearance is hazy. There is a moderate concentration of water present in the oil. The amount and size of particulates present in the system are acceptable.

Silicon	ppm	ASTM D5185m	>11	2	1	---
Potassium	ppm	ASTM D5185m	>20	10	6	---
Water	%	ASTM D6304	>0.075	▲ 0.443	▲ 0.157	---
ppm Water	ppm	ASTM D6304	>750	▲ 4430	▲ 1570	---
Particles >4µm		ASTM D7647	>80000	1461	2636	---
Particles >6µm		ASTM D7647	>20000	796	1436	---
Particles >14µm		ASTM D7647	>640	135	244	---
Particles >21µm		ASTM D7647	>160	46	82	---
Particles >38µm		ASTM D7647	>40	7	13	---
Particles >71µm		ASTM D7647	>10	1	1	---
Oil Cleanliness		ISO 4406 (c)	>23/21/16	18/17/14	19/18/15	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	▲ HAZY	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.075	▲ 0.2%	▲ 0.2%	---

FLUID CONDITION

The AN level is acceptable for this fluid.

Sodium	ppm	ASTM D5185m	>21	<1	3	---
Boron	ppm	ASTM D5185m		0	0	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m		0	0	---
Manganese	ppm	ASTM D5185m		0	<1	---
Magnesium	ppm	ASTM D5185m		0	0	---
Calcium	ppm	ASTM D5185m		0	0	---
Phosphorus	ppm	ASTM D5185m	827	479	449	---
Zinc	ppm	ASTM D5185m	0	20	0	---
Sulfur	ppm	ASTM D5185m	13	43	0	---
Acid Number (AN)	mg KOH/g	ASTM D8045	0.06	0.15	0.13	---
Visc @ 40°C	cSt	ASTM D445	47	46.8	46.3	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LEC0046602 **Received** : 16 Jan 2024
Lab Number : 06060960 **Diagnosed** : 23 Jan 2024
Unique Number : 10832342 **Diagnostician** : Doug Bogart
Test Package : CONST (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