



OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Area  
**Store 8 - Pikeville [RO#145787]**  
 Machine Id  
**JOHN DEERE 160G 1FF160GXAKF057758**  
 Component  
**Hydraulic System**  
 Fluid  
**HITACHI HYDRAULIC SUPER EX 46HN (--- GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>LEC0042599</b>	LEC0040607	LEC0035261
Sample Date		Client Info		<b>12 Dec 2023</b>	16 May 2023	30 Sep 2022
Machine Age	hrs	Client Info		<b>2500</b>	1890	1339
Oil Age	hrs	Client Info		<b>2500</b>	1890	1339
Filter Age	hrs	Client Info		<b>610</b>	1079	528
Oil Changed		Client Info		<b>Not Chngd</b>	Not Chngd	Not Chngd
Filter Changed		Client Info		<b>Not Chngd</b>	Changed	Not Chngd
Sample Status				<b>NORMAL</b>	ABNORMAL	NORMAL

**WEAR**

All component wear rates are normal.

PQ		ASTM D8184	>50	<b>12</b>	19	12
Iron	ppm	ASTM D5185m	>32	<b>4</b>	5	4
Chromium	ppm	ASTM D5185m	>9	<b>0</b>	0	<1
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>9	<b>0</b>	<1	<1
Lead	ppm	ASTM D5185m	>28	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>50	<b>4</b>	5	<1
Tin	ppm	ASTM D5185m	>5	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

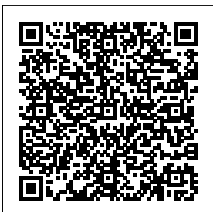
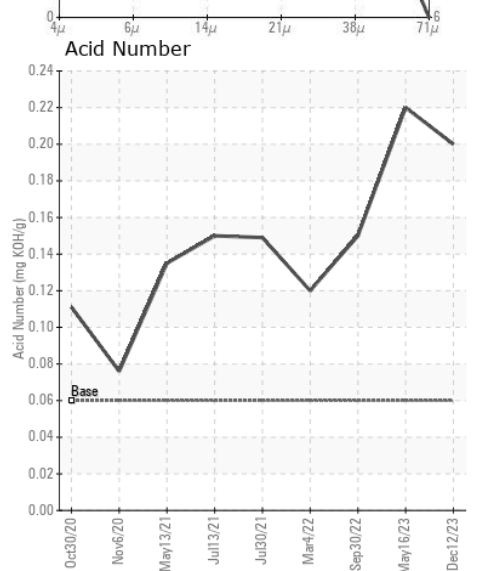
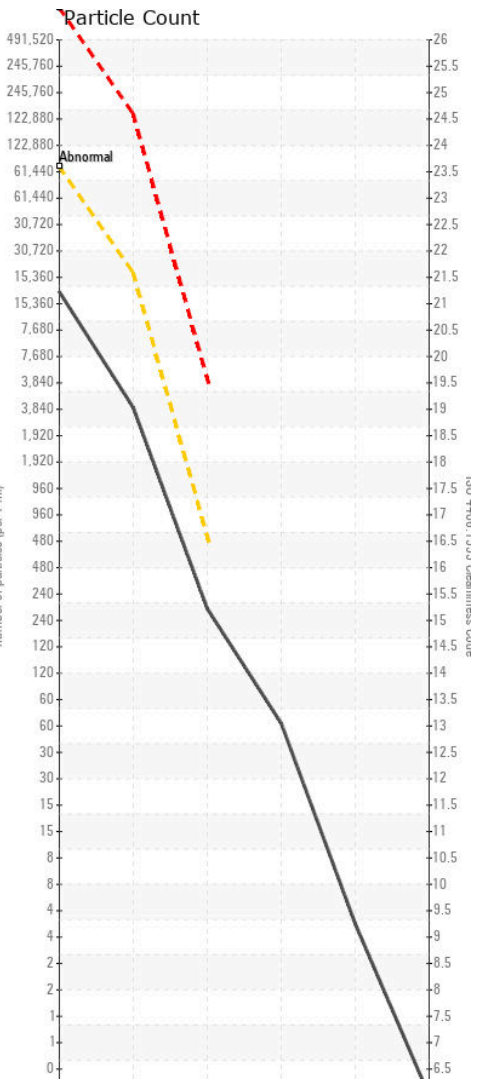
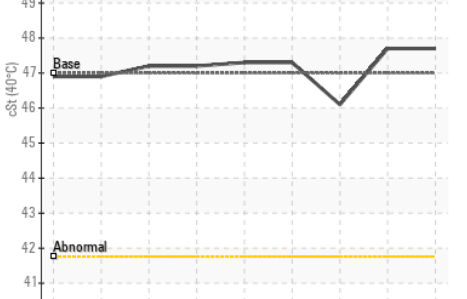
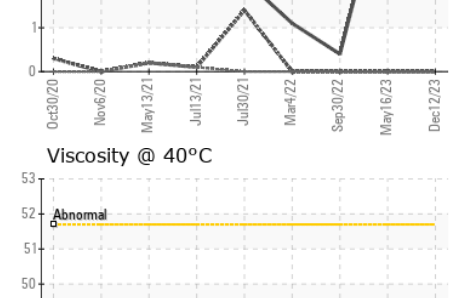
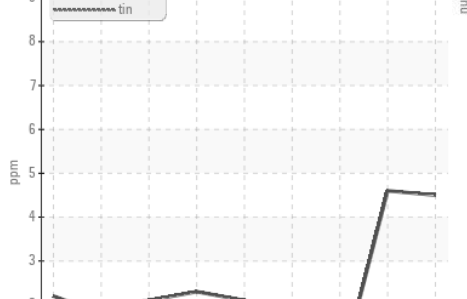
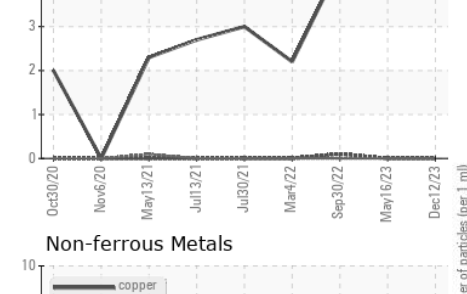
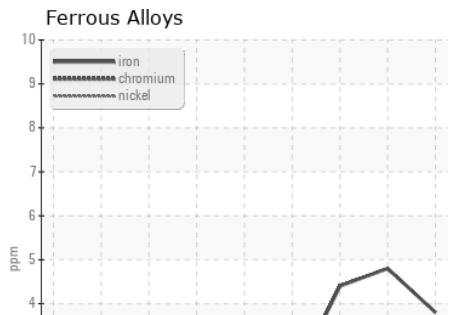
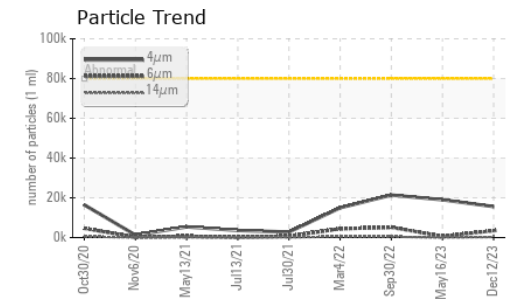
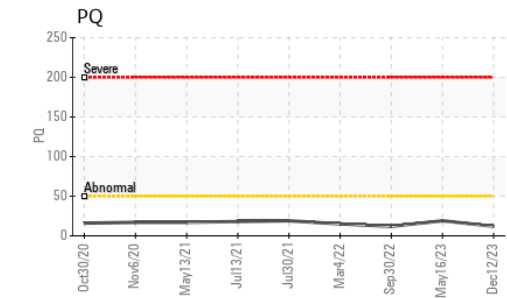
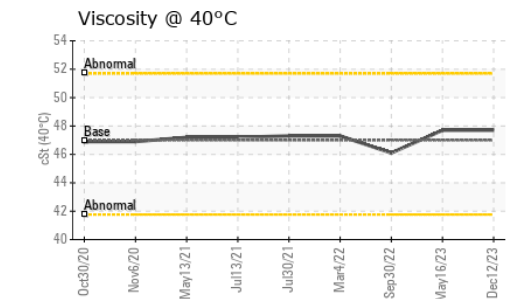
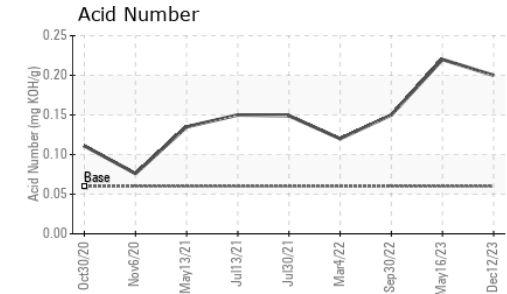
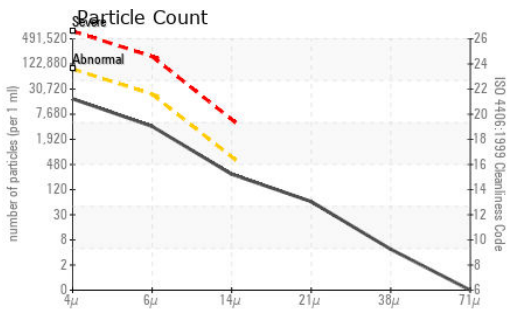
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>11	<b>2</b>	<1	<1
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	<1	0
Water		WC Method	>0.075	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>80000	<b>15589</b>	19014	21401
Particles >6µm		ASTM D7647	>20000	<b>3426</b>	668	5147
Particles >14µm		ASTM D7647	>640	<b>247</b>	5	393
Particles >21µm		ASTM D7647	>160	<b>55</b>	1	83
Particles >38µm		ASTM D7647	>40	<b>4</b>	0	9
Particles >71µm		ASTM D7647	>10	<b>0</b>	0	1
Oil Cleanliness		ISO 4406 (c)	>23/21/16	<b>21/19/15</b>	21/17/10	22/20/16
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.075	<b>NEG</b>	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	<b>0</b>	0	<1
Boron	ppm	ASTM D5185m		<b>0</b>	0	0
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	0
Magnesium	ppm	ASTM D5185m		<b>0</b>	0	0
Calcium	ppm	ASTM D5185m		<b>87</b>	233	0
Phosphorus	ppm	ASTM D5185m	827	<b>532</b>	611	525
Zinc	ppm	ASTM D5185m	0	<b>0</b>	▲ 111	4
Sulfur	ppm	ASTM D5185m	13	<b>0</b>	22	89
Acid Number (AN)	mg KOH/g	ASTM D8045	0.06	<b>0.20</b>	0.22	0.15
Visc @ 40°C	cSt	ASTM D445	47	<b>47.7</b>	47.7	46.1



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : LEC0042599 **Received** : 14 Dec 2023  
**Lab Number** : 06034558 **Tested** : 15 Dec 2023  
**Unique Number** : 10789787 **Diagnosed** : 15 Dec 2023 - Wes Davis  
**Test Package** : CONST ( 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)

F: (740)373-5570