



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ATTENTION

Area  
**Store 8 - Pikeville [152988]**  
Machine Id  
**JOHN DEERE 60G 1FF060GXHPJ297105**  
Component  
**Diesel Engine**  
Fluid  
**JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (3 GAL)**

## RECOMMENDATION

Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LEC0044234	---	---
Sample Date		Client Info		15 Jul 2024	---	---
Machine Age	hrs	Client Info		418	---	---
Oil Age	hrs	Client Info		418	---	---
Filter Age	hrs	Client Info		418	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				ABNORMAL	---	---

## WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>51	26	---	---
Chromium	ppm	ASTM D5185m	>11	<1	---	---
Nickel	ppm	ASTM D5185m	>5	1	---	---
Titanium	ppm	ASTM D5185m		<1	---	---
Silver	ppm	ASTM D5185m	>3	0	---	---
Aluminum	ppm	ASTM D5185m	>31	6	---	---
Lead	ppm	ASTM D5185m	>26	<1	---	---
Copper	ppm	ASTM D5185m	>26	7	---	---
Tin	ppm	ASTM D5185m	>4	1	---	---
Vanadium	ppm	ASTM D5185m		<1	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

## CONTAMINATION

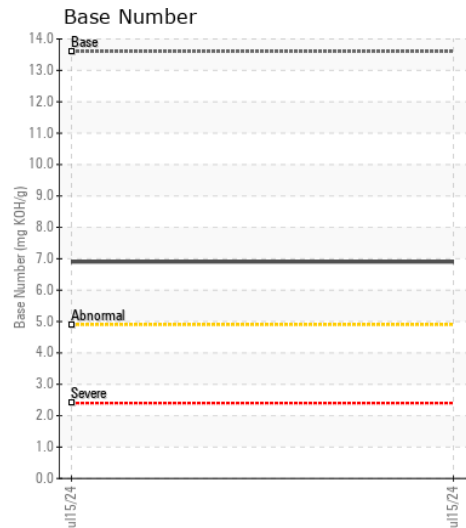
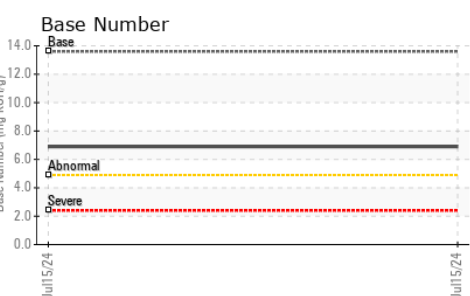
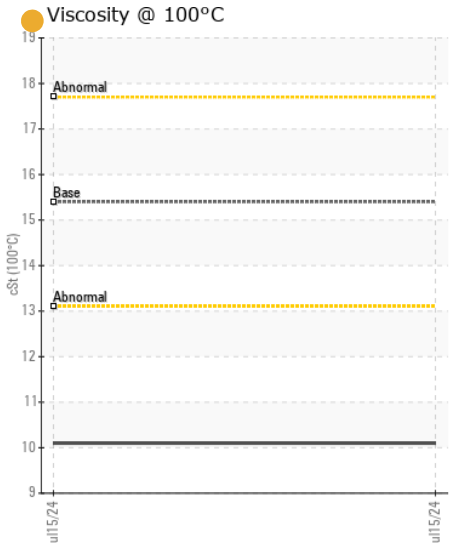
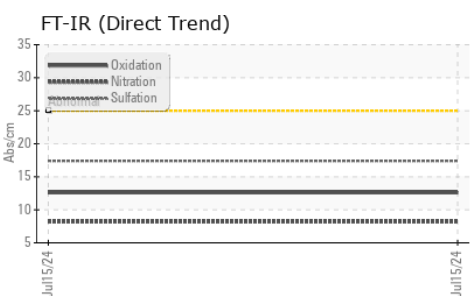
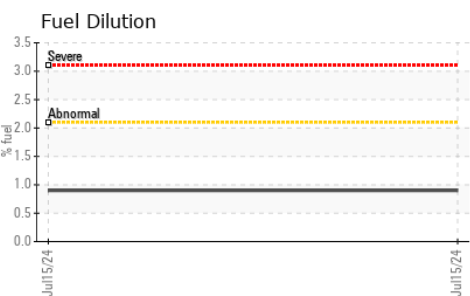
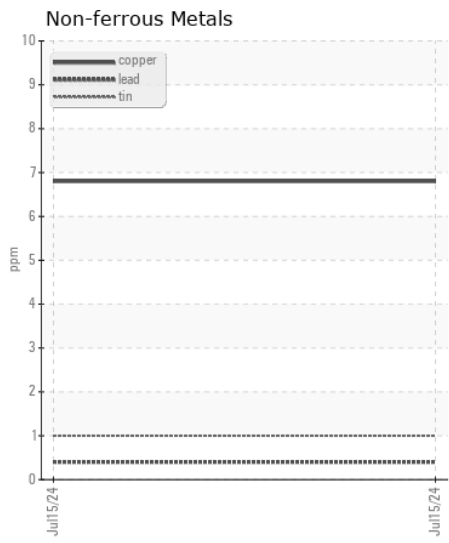
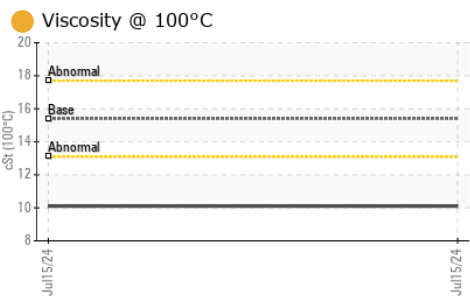
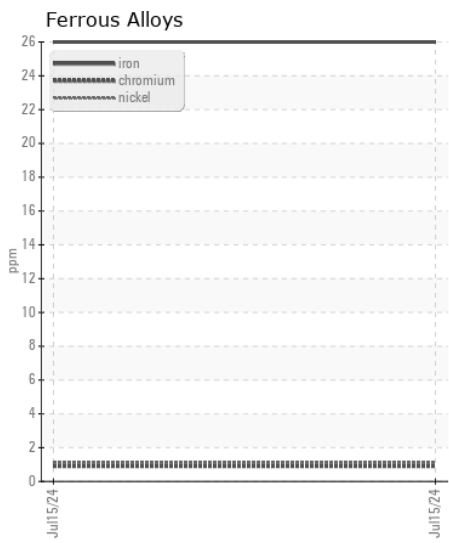
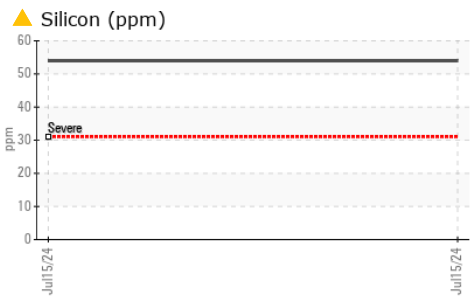
Sodium and/or potassium levels are high. Fuel content negligible. Elemental level of silicon (Si) above normal indicating ingress of seal material. Test for glycol is negative.

Silicon	ppm	ASTM D5185m	>120	▲ 54	---	---
Potassium	ppm	ASTM D5185m	>20	▲ 228	---	---
Fuel	%	ASTM D3524	>2.1	0.9	---	---
Water		WC Method	>0.21	NEG	---	---
Glycol	%	*ASTM D2982		NEG	---	---
Soot %	%	*ASTM D7844	>3	0.2	---	---
Nitration	Abs/cm	*ASTM D7624	>20	8.2	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	17.4	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.21	NEG	---	---

## FLUID CONDITION

The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Sodium	ppm	ASTM D5185m	>31	18	---	---
Boron	ppm	ASTM D5185m		233	---	---
Barium	ppm	ASTM D5185m		6	---	---
Molybdenum	ppm	ASTM D5185m		198	---	---
Manganese	ppm	ASTM D5185m		<1	---	---
Magnesium	ppm	ASTM D5185m		17	---	---
Calcium	ppm	ASTM D5185m		2576	---	---
Phosphorus	ppm	ASTM D5185m		774	---	---
Zinc	ppm	ASTM D5185m		940	---	---
Sulfur	ppm	ASTM D5185m		3608	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	12.6	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	6.9	---	---
Visc @ 100°C	cSt	ASTM D445	15.4	● 10.1	---	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : LEC0044234  
**Lab Number** : 06238988  
**Unique Number** : 11127822  
**Test Package** : CONST ( Additional Tests: FuelDilution, Glycol, PercentFuel, TBN )

**Received** : 17 Jul 2024  
**Tested** : 19 Jul 2024  
**Diagnosed** : 19 Jul 2024 - Jonathan Hester

**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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