



# OIL ANALYSIS REPORT

WEAR  
CONTAMINATION  
FLUID CONDITION

**ATTENTION**  
**ABNORMAL**  
**NORMAL**



Area

**Store 5 - Cross Lanes**

Machine Id

**JOHN DEERE 250G E-32 (S/N 1FF250GXXKDE608944)**

Component

**Right Final Drive**

Fluid

**JOHN DEERE HY-GARD HYD/TRANS (--- GAL)**

## RECOMMENDATION

We advise that you check all areas where dirt can enter the system. The oil 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		LEC0039988	LECP145258	---
Sample Date		Client Info		28 May 2024	25 Mar 2014	---
Machine Age	hrs	Client Info		7604	1500	---
Oil Age	hrs	Client Info		5600	0	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		N/A	N/A	---
Sample Status				ABNORMAL	SEVERE	---

## WEAR

Aluminum ppm levels are noted. All other component wear rates are normal.

PQ		ASTM D8184	>1250	148	922	---
Iron	ppm	ASTM D5185m	>750	733	▲ 2090	---
Chromium	ppm	ASTM D5185m	>9	6	▲ 23	---
Nickel	ppm	ASTM D5185m	>10	2	4	---
Titanium	ppm	ASTM D5185m		4	21	---
Silver	ppm	ASTM D5185m		0	0	---
Aluminum	ppm	ASTM D5185m	>40	● 45	● 314	---
Lead	ppm	ASTM D5185m	>15	0	3	---
Copper	ppm	ASTM D5185m	>40	2	2	---
Tin	ppm	ASTM D5185m	>10	0	0	---
Vanadium	ppm	ASTM D5185m		<1	1	---
White Metal	scalar	*Visual	NONE	MODER	LIGHT	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

## CONTAMINATION

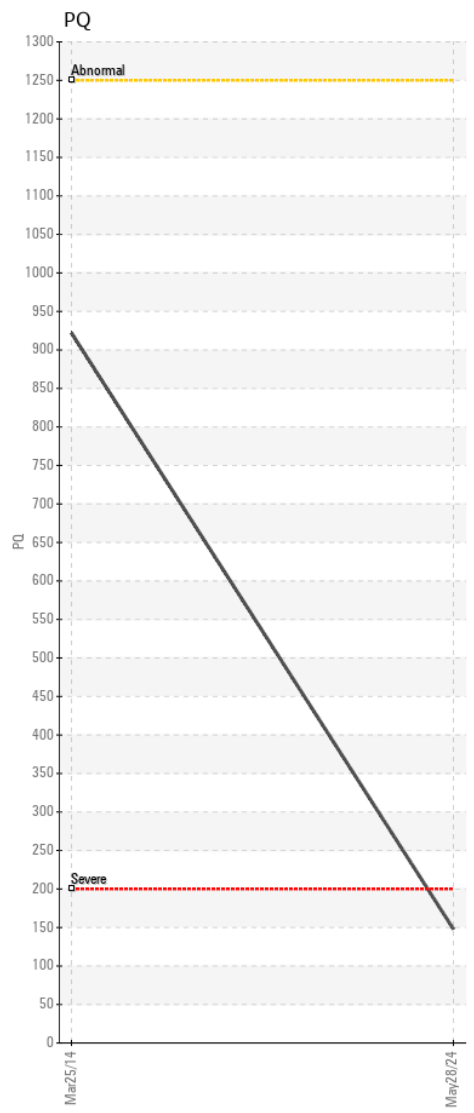
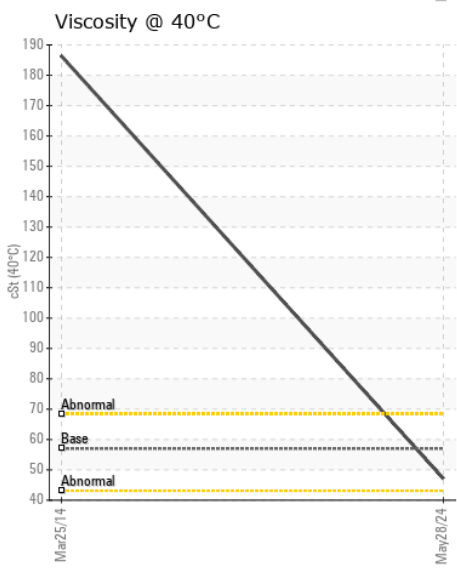
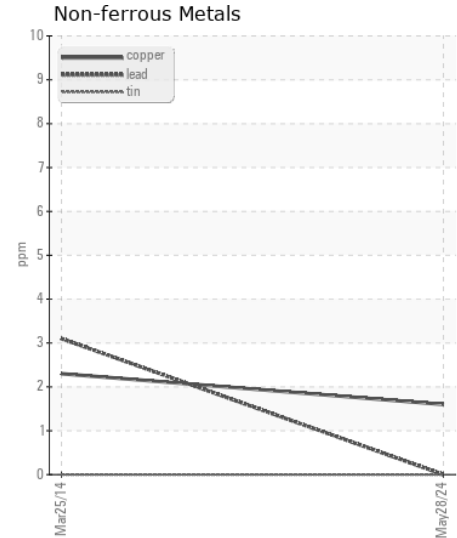
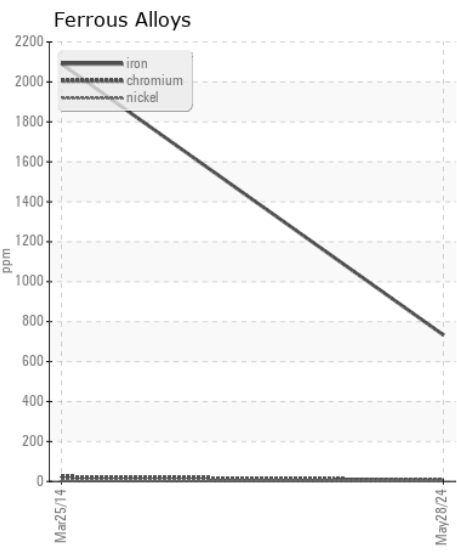
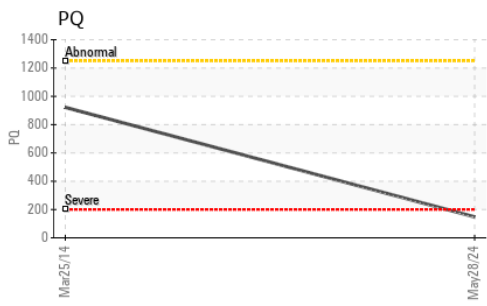
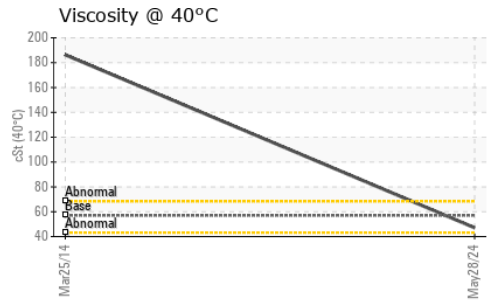
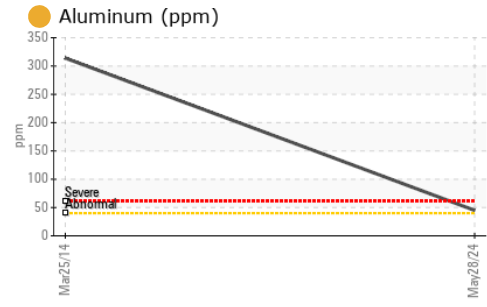
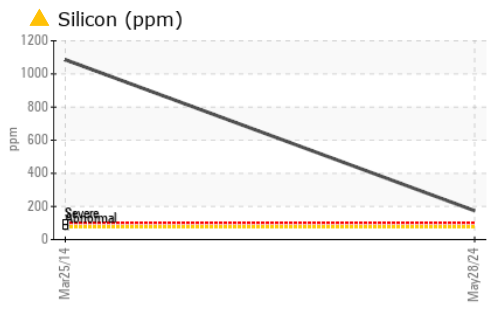
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Silicon	ppm	ASTM D5185m	>75	▲ 174	▲ 1086	---
Potassium	ppm	ASTM D5185m	>20	12	76	---
Water		WC Method	>0.075	NEG	NEG	---
Silt	scalar	*Visual	NONE	MODER	NONE	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.075	NEG	NEG	---

## FLUID CONDITION

The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185m	>51	5	13	---
Boron	ppm	ASTM D5185m	6	8	58	---
Barium	ppm	ASTM D5185m	0	0	6	---
Molybdenum	ppm	ASTM D5185m	0	1	2	---
Manganese	ppm	ASTM D5185m		6	26	---
Magnesium	ppm	ASTM D5185m	145	97	34	---
Calcium	ppm	ASTM D5185m	3570	3514	58	---
Phosphorus	ppm	ASTM D5185m	1290	1020	506	---
Zinc	ppm	ASTM D5185m	1640	1180	29	---
Sulfur	ppm	ASTM D5185m		4412	16326	---
Visc @ 40°C	cSt	ASTM D445	57.0	47.1	186.3	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : LEC0039988 **Received** : 19 Jun 2024  
**Lab Number** : 06215008 **Tested** : 20 Jun 2024  
**Unique Number** : 11087872 **Diagnosed** : 21 Jun 2024 - Sean Felton  
**Test Package** : CONST ( Additional Tests: PQ )

**APEX PIPELINE**  
 P.O. BOX 580  
 NITRO, WV  
 US 25143  
 Contact: KELLY TUCKER

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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