



Machine Id
JOHN DEERE 35G 1FF035GXAKK286787

Component
Diesel Engine

Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- GAL)

RECOMMENDATION

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0214664	---	---
Sample Date		Client Info		17 Apr 2024	---	---
Machine Age	hrs	Client Info		972	---	---
Oil Age	hrs	Client Info		200	---	---
Filter Age	hrs	Client Info		200	---	---
Oil Changed		Client Info		Not Chngd	---	---
Filter Changed		Client Info		Not Chngd	---	---
Sample Status				ABNORMAL	---	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	17	---	---
Chromium	ppm	ASTM D5185m	>11	<1	---	---
Nickel	ppm	ASTM D5185m	>5	1	---	---
Titanium	ppm	ASTM D5185m		<1	---	---
Silver	ppm	ASTM D5185m	>3	<1	---	---
Aluminum	ppm	ASTM D5185m	>31	6	---	---
Lead	ppm	ASTM D5185m	>26	3	---	---
Copper	ppm	ASTM D5185m	>26	13	---	---
Tin	ppm	ASTM D5185m	>4	2	---	---
Vanadium	ppm	ASTM D5185m		<1	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

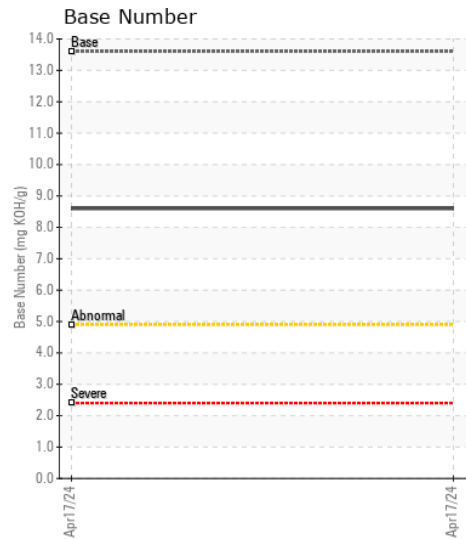
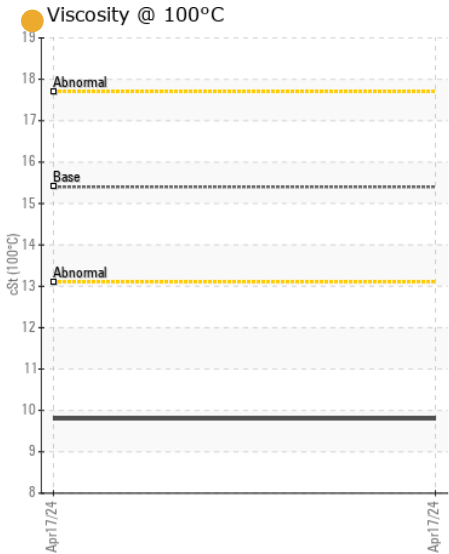
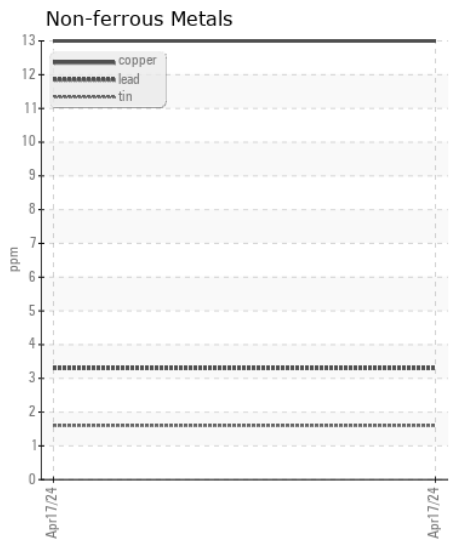
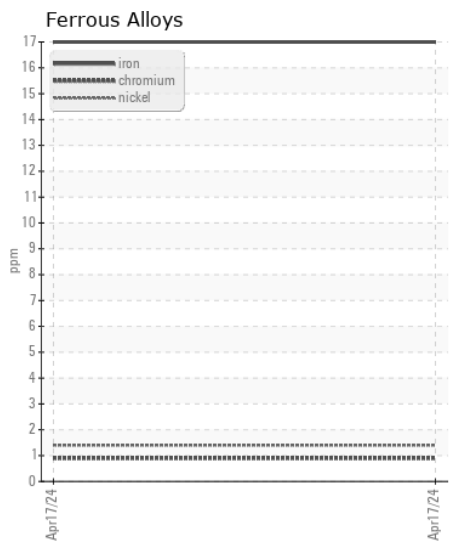
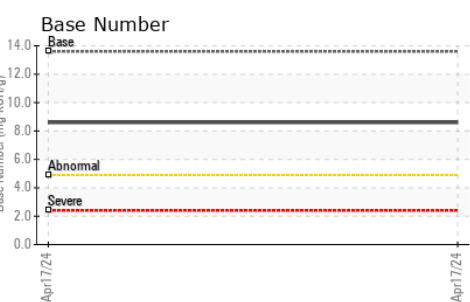
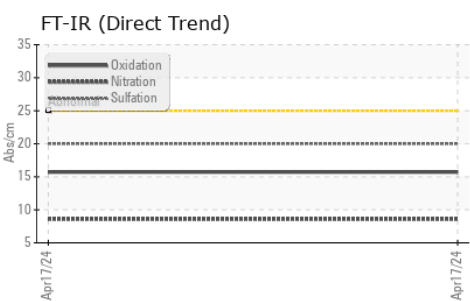
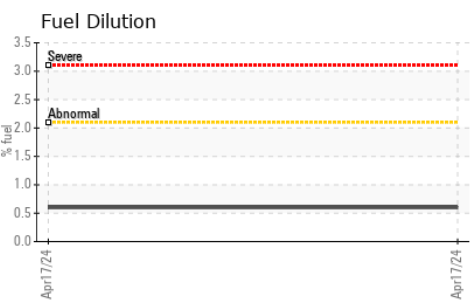
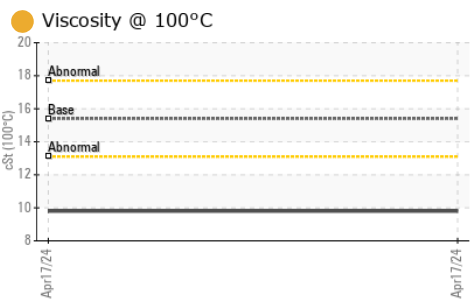
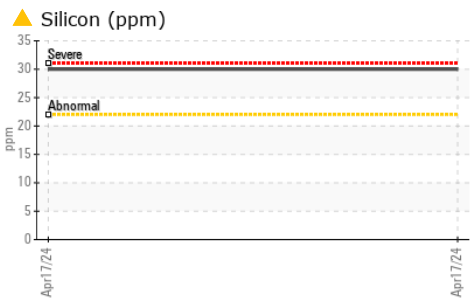
Fuel content negligible. Elemental level of silicon (Si) above normal indicating ingress of dirt/seal material. No other contaminants were detected in the oil.

Silicon	ppm	ASTM D5185m	>22	▲ 30	---	---
Potassium	ppm	ASTM D5185m	>20	2	---	---
Fuel	%	ASTM D3524	>2.1	0.6	---	---
Water		WC Method	>0.21	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	*ASTM D7844	>3	0.1	---	---
Nitration	Abs/cm	*ASTM D7624	>20	8.6	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.0	---	---
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. The condition of the oils additive package is suitable for further service.

Sodium	ppm	ASTM D5185m	>31	6	---	---
Boron	ppm	ASTM D5185m		284	---	---
Barium	ppm	ASTM D5185m		4	---	---
Molybdenum	ppm	ASTM D5185m		248	---	---
Manganese	ppm	ASTM D5185m		2	---	---
Magnesium	ppm	ASTM D5185m		685	---	---
Calcium	ppm	ASTM D5185m		1556	---	---
Phosphorus	ppm	ASTM D5185m		935	---	---
Zinc	ppm	ASTM D5185m		1032	---	---
Sulfur	ppm	ASTM D5185m		3448	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.7	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	8.6	---	---
Visc @ 100°C	cSt	ASTM D445	15.4	● 9.8	---	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0214664 **Received** : 18 Apr 2024
Lab Number : 06152896 **Tested** : 22 Apr 2024
Unique Number : 10982974 **Diagnosed** : 22 Apr 2024 - Doug Bogart
Test Package : CONST (Additional Tests: FuelDilution, PercentFuel, TBN)

JRE - MANASSAS PARK
 9107 OWENS DRIVE
 MANASSAS PARK, VA
 US 20111
 Contact: DON VEST
 dvest@jamesriverequipment.com
 T: (703)631-8500
 F: (703)631-4715

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)