



WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
JOHN DEERE 130G 1FF130GXHKF042303
 Component
Diesel Engine
 Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- GAL)

RECOMMENDATION

No corrective action is recommended at this time. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0211291	JR0037883	---
Sample Date		Client Info		11 Apr 2024	19 Mar 2020	---
Machine Age	hrs	Client Info		3831	564	---
Oil Age	hrs	Client Info		3267	564	---
Filter Age	hrs	Client Info		0	564	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				ABNORMAL	NORMAL	---

WEAR

Cylinder, crank, or cam shaft wear is indicated. All other component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	▲ 64	11	---
Chromium	ppm	ASTM D5185m	>11	<1	<1	---
Nickel	ppm	ASTM D5185m	>5	1	<1	---
Titanium	ppm	ASTM D5185m		0	0	---
Silver	ppm	ASTM D5185m	>3	0	0	---
Aluminum	ppm	ASTM D5185m	>31	4	2	---
Lead	ppm	ASTM D5185m	>26	2	<1	---
Copper	ppm	ASTM D5185m	>26	5	24	---
Tin	ppm	ASTM D5185m	>4	<1	<1	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

There is no indication of any contamination in the oil.

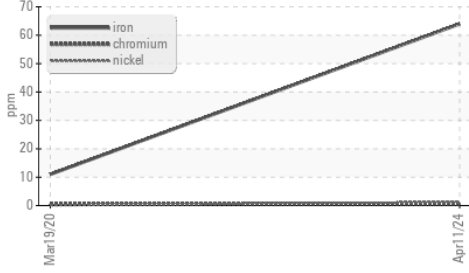
Silicon	ppm	ASTM D5185m	>22	9	2	---
Potassium	ppm	ASTM D5185m	>20	<1	8	---
Fuel		WC Method	>2.1	<1.0	<1.0	---
Water		WC Method	>0.21	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.9	0.3	---
Nitration	Abs/cm	*ASTM D7624	>20	11.5	8.6	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.7	21.7	---
Silt	scalar	*Visual	NONE	NONE	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	>0.21	NEG	NEG	---

FLUID CONDITION

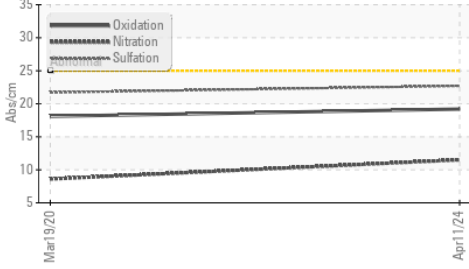
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>31	6	5	---
Boron	ppm	ASTM D5185m		36	168	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m		67	31	---
Manganese	ppm	ASTM D5185m		1	1	---
Magnesium	ppm	ASTM D5185m		610	102	---
Calcium	ppm	ASTM D5185m		1652	2072	---
Phosphorus	ppm	ASTM D5185m		987	924	---
Zinc	ppm	ASTM D5185m		1298	1053	---
Sulfur	ppm	ASTM D5185m		3602	2632	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	19.2	18.1	---
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	6.6	8.1	---
Visc @ 100°C	cSt	ASTM D445	15.4	13.8	14.0	---

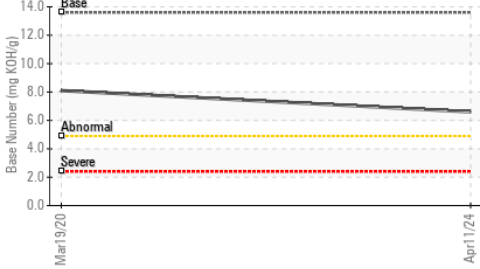
▲ Ferrous Alloys



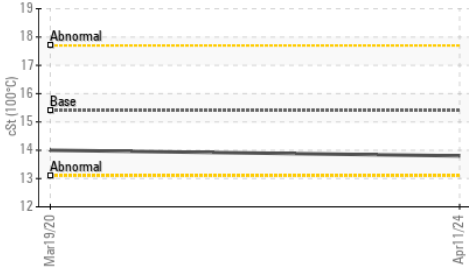
FT-IR (Direct Trend)



Base Number



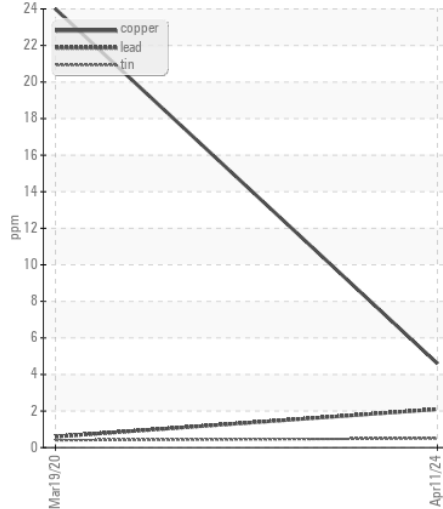
Viscosity @ 100°C



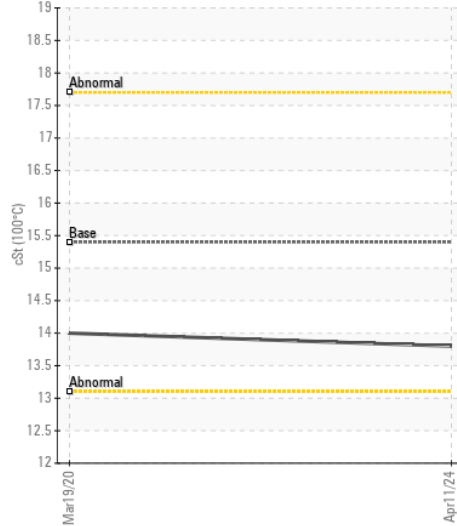
▲ Ferrous Alloys



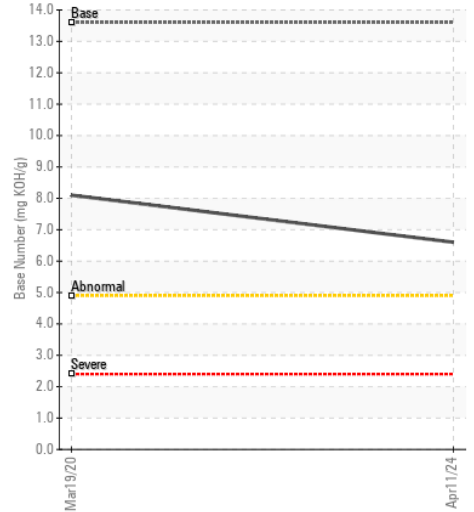
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : JR0211291

Lab Number : 06149269

Unique Number : 10979347

Test Package : CONST (Additional Tests: TBN)

Received : 15 Apr 2024

Tested : 16 Apr 2024

Diagnosed : 17 Apr 2024 - Don Baldrige

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)

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