



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
ECO STACK 8048F 1234

Component
Diesel Engine

Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (2 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0214260	JR0168650	---
Sample Date		Client Info		24 Apr 2024	12 Sep 2023	---
Machine Age	hrs	Client Info		3159	490	---
Oil Age	hrs	Client Info		500	490	---
Filter Age	hrs	Client Info		500	490	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				NORMAL	NORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	10	37	---
Chromium	ppm	ASTM D5185m	>20	0	1	---
Nickel	ppm	ASTM D5185m	>4	0	<1	---
Titanium	ppm	ASTM D5185m		0	1	---
Silver	ppm	ASTM D5185m	>3	0	0	---
Aluminum	ppm	ASTM D5185m	>20	4	<1	---
Lead	ppm	ASTM D5185m	>40	0	<1	---
Copper	ppm	ASTM D5185m	>330	0	8	---
Tin	ppm	ASTM D5185m	>15	<1	<1	---
Vanadium	ppm	ASTM D5185m		0	<1	---
White Metal	scalar	*Visual	NONE	LIGHT	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

There is no indication of any contamination in the oil.

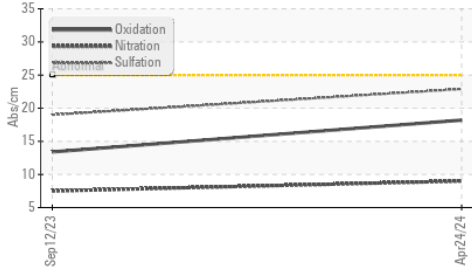
Silicon	ppm	ASTM D5185m	>25	7	18	---
Potassium	ppm	ASTM D5185m	>20	0	1	---
Fuel		WC Method	>5	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.2	0.2	---
Nitration	Abs/cm	*ASTM D7624	>20	9.0	7.5	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.9	19.0	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	LIGHT	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	---

FLUID CONDITION

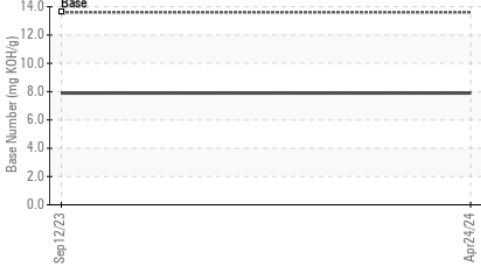
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<1	2	---
Boron	ppm	ASTM D5185m		184	32	---
Barium	ppm	ASTM D5185m		<1	0	---
Molybdenum	ppm	ASTM D5185m		268	28	---
Manganese	ppm	ASTM D5185m		1	12	---
Magnesium	ppm	ASTM D5185m		851	63	---
Calcium	ppm	ASTM D5185m		1479	2767	---
Phosphorus	ppm	ASTM D5185m		946	839	---
Zinc	ppm	ASTM D5185m		1109	1029	---
Sulfur	ppm	ASTM D5185m		3386	5033	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.2	13.4	---
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	7.9	7.9	---
Visc @ 100°C	cSt	ASTM D445	15.4	13.6	12.9	---

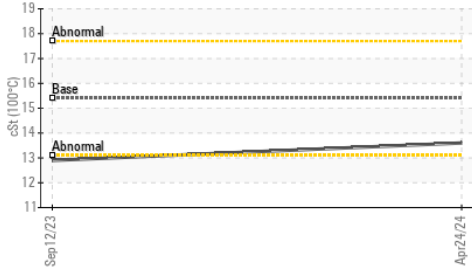
FT-IR (Direct Trend)



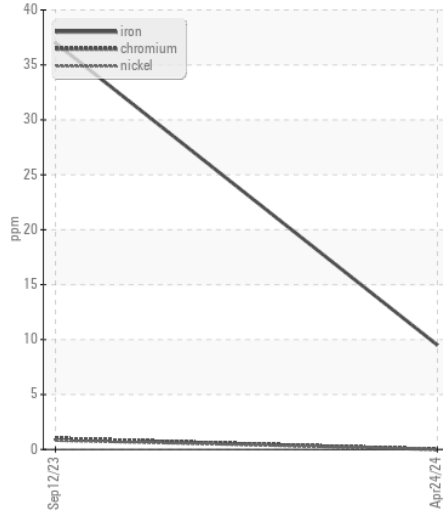
Base Number



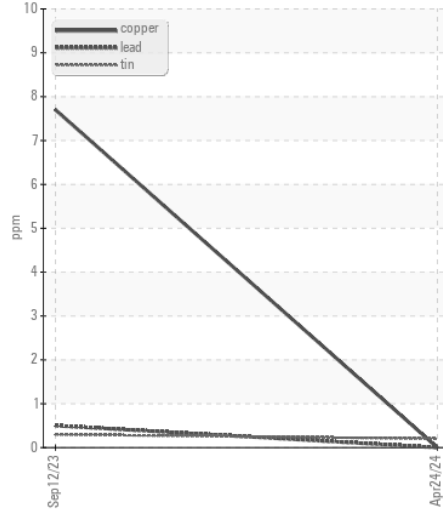
Viscosity @ 100°C



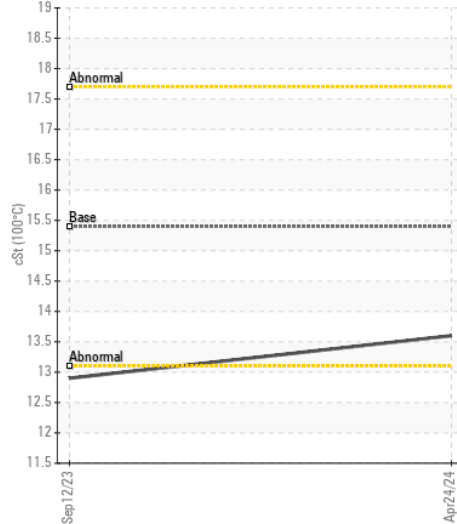
Ferrous Alloys



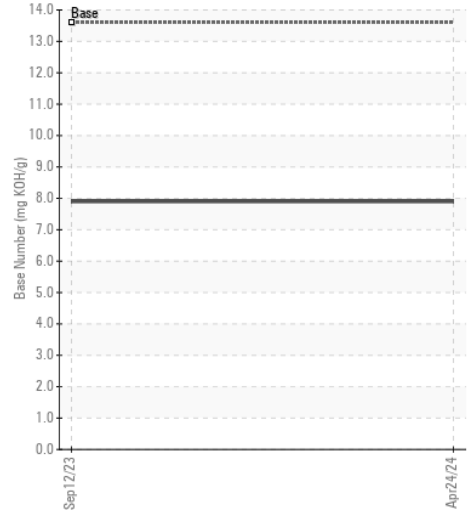
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

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

Sample No. : JR0214260

Lab Number : 06160110

Unique Number : 10995533

Test Package : CONST (Additional Tests: TBN)

Received : 25 Apr 2024

Tested : 26 Apr 2024

Diagnosed : 26 Apr 2024 - Wes Davis

JRE - NEW BERN

3816 MARTIN LUTHER KING BLVD

NEW BERN, NC

US 28562

Contact: NEW BERN SHOP

nick.etherdridge@jamesriverequipment.com;canastasio@wearcheckusa.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)

T:

F: