



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
80361458
 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		JR0212433	JR0141373	---
Sample Date		Client Info		19 Apr 2024	18 Aug 2023	---
Machine Age	hrs	Client Info		755	389	---
Oil Age	hrs	Client Info		389	389	---
Filter Age	hrs	Client Info		0	389	---
Oil Changed		Client Info		Not Changd	Changed	---
Filter Changed		Client Info		Not Changd	Changed	---
Sample Status				NORMAL	NORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	18	19	---
Chromium	ppm	ASTM D5185m	>20	6	5	---
Nickel	ppm	ASTM D5185m	>4	0	0	---
Titanium	ppm	ASTM D5185m		<1	<1	---
Silver	ppm	ASTM D5185m	>3	0	0	---
Aluminum	ppm	ASTM D5185m	>20	7	3	---
Lead	ppm	ASTM D5185m	>40	0	<1	---
Copper	ppm	ASTM D5185m	>330	7	10	---
Tin	ppm	ASTM D5185m	>15	<1	1	---
Vanadium	ppm	ASTM D5185m		0	<1	---
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.

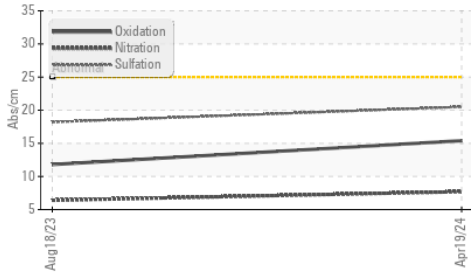
Silicon	ppm	ASTM D5185m	>25	21	23	---
Potassium	ppm	ASTM D5185m	>20	2	<1	---
Fuel		WC Method	>5	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.1	0.1	---
Nitration	Abs/cm	*ASTM D7624	>20	7.7	6.4	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.5	18.2	---
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	>0.2	NEG	NEG	---

FLUID CONDITION

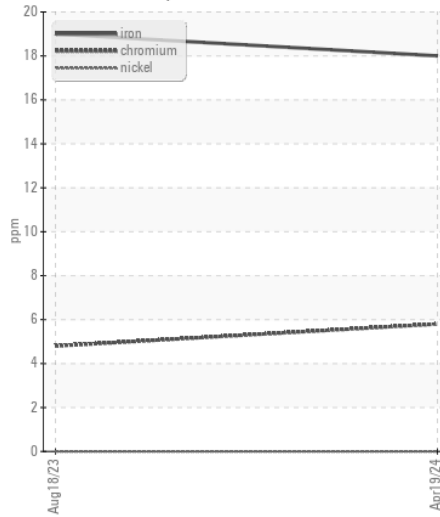
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		5	3	---
Boron	ppm	ASTM D5185m		290	343	---
Barium	ppm	ASTM D5185m		4	3	---
Molybdenum	ppm	ASTM D5185m		217	42	---
Manganese	ppm	ASTM D5185m		2	3	---
Magnesium	ppm	ASTM D5185m		727	128	---
Calcium	ppm	ASTM D5185m		1892	3644	---
Phosphorus	ppm	ASTM D5185m		952	1004	---
Zinc	ppm	ASTM D5185m		1132	1209	---
Sulfur	ppm	ASTM D5185m		3628	4287	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.4	11.8	---
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	7.9	10.0	---
Visc @ 100°C	cSt	ASTM D445	15.4	13.7	12.7	---

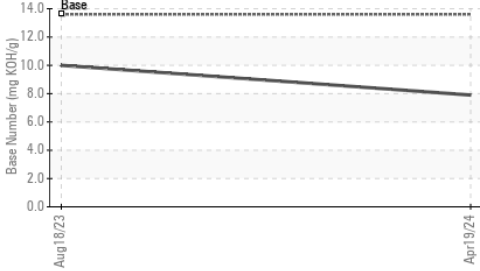
FT-IR (Direct Trend)



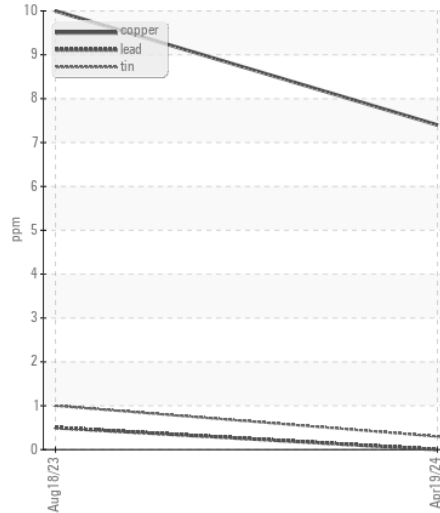
Ferrous Alloys



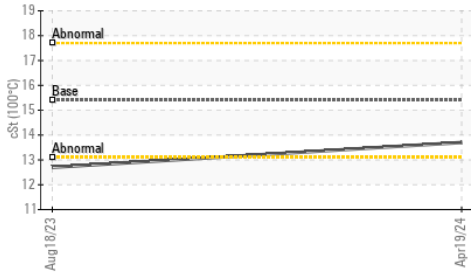
Base Number



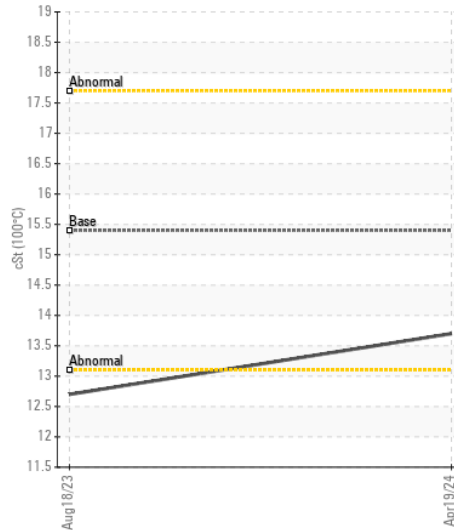
Non-ferrous Metals



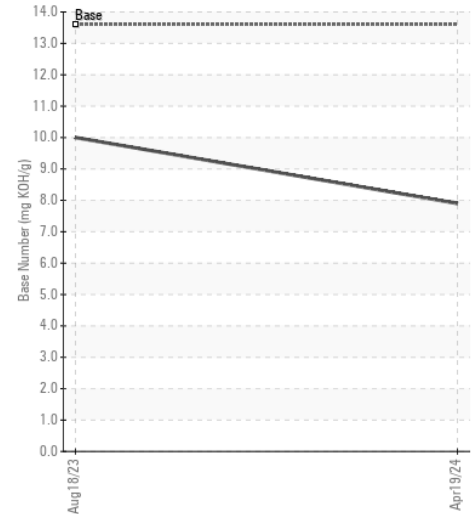
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0212433
Lab Number : 06155630
Unique Number : 10991053
Test Package : CONST (Additional Tests: TBN)

JRE - GARNER
 4161 AUBURN CHURCH RD
 GARNER, NC
 US 27529

Contact: RALEIGH SHOP
 sean.betts@jamesriverequipment.com; catherine.anastasio@wearcheck.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: (919)614-2260
 F: (919)779-5432