



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
JOHN DEERE 8520 RW8520P031081
 Component
Diesel Engine
 Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (44 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0201596	JR0039703	JRMC364960
Sample Date		Client Info		29 Feb 2024	30 Jul 2021	11 Feb 2013
Machine Age	hrs	Client Info		0	2462	1933
Oil Age	hrs	Client Info		0	0	544
Filter Age	hrs	Client Info		0	0	544
Oil Changed		Client Info		N/A	Not Changd	Not Changd
Filter Changed		Client Info		N/A	Not Changd	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

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

CONTAMINATION

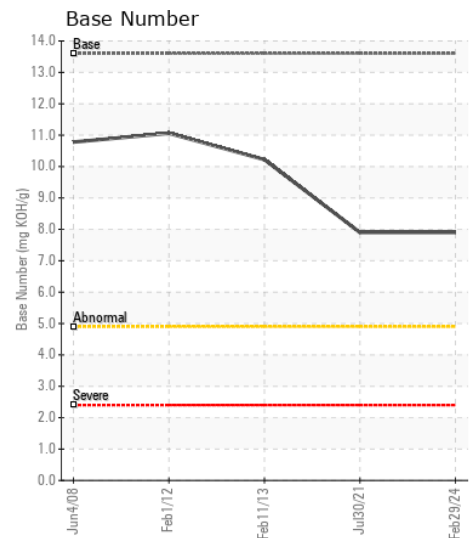
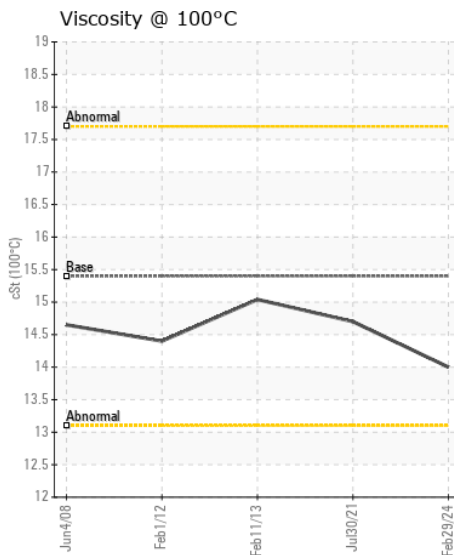
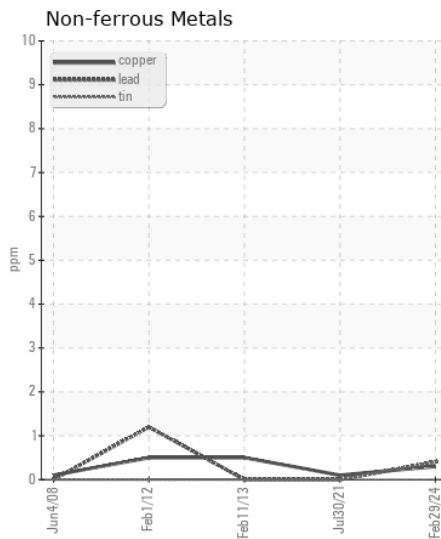
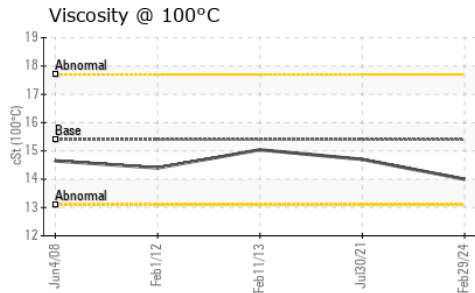
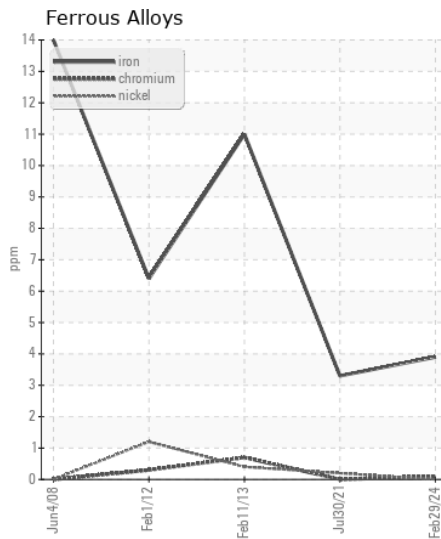
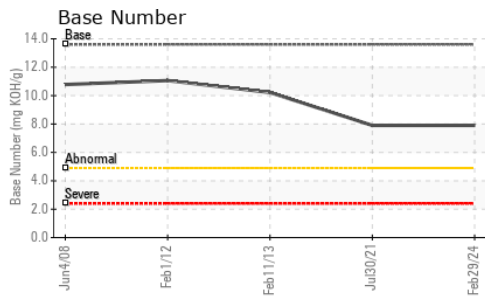
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>22	7	2	5
Potassium	ppm	ASTM D5185m	>20	<1	1	0
Fuel		WC Method	>2.1	<1.0	<1.0	<1.0
Water		WC Method	>0.21	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.2	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	6.4	5.7	6.
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.6	15.8	16.
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.21	NEG	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	<1	4	4
Boron	ppm	ASTM D5185m		295	24	25
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		104	19	58
Manganese	ppm	ASTM D5185m		<1	0	0
Magnesium	ppm	ASTM D5185m		490	62	702
Calcium	ppm	ASTM D5185m		1395	2601	1341
Phosphorus	ppm	ASTM D5185m		854	1008	1072
Zinc	ppm	ASTM D5185m		1024	1040	1270
Sulfur	ppm	ASTM D5185m		2934	3610	2606
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.6	9.2	11.
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	7.9	7.9	10.22
Visc @ 100°C	cSt	ASTM D445	15.4	14.0	14.7	15.04



Certificate L2367

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

Sample No. : JR0201596

Lab Number : 06105827

Unique Number : 10909324

Test Package : CONST (Additional Tests: TBN)

Received : 01 Mar 2024

Tested : 02 Mar 2024

Diagnosed : 02 Mar 2024 - Wes Davis

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 - WAKEFIELD

10489 GENERAL MAHONE HWY

WAKEFIELD, VA

US 23888

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