



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
JOHN DEERE 345G 1FF345GXCMF020838

Component
Diesel Engine

Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (52 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0199105	JR0192388	JR0183807
Sample Date		Client Info		26 Feb 2024	29 Nov 2023	23 Aug 2023
Machine Age	hrs	Client Info		2935	2406	1964
Oil Age	hrs	Client Info		529	442	452
Filter Age	hrs	Client Info		529	0	452
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	5	2	7
Chromium	ppm	ASTM D5185m	>20	<1	0	0
Nickel	ppm	ASTM D5185m	>4	<1	0	0
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	3	2	3
Lead	ppm	ASTM D5185m	>40	<1	0	0
Copper	ppm	ASTM D5185m	>330	<1	<1	4
Tin	ppm	ASTM D5185m	>15	<1	0	<1
Vanadium	ppm	ASTM D5185m		<1	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

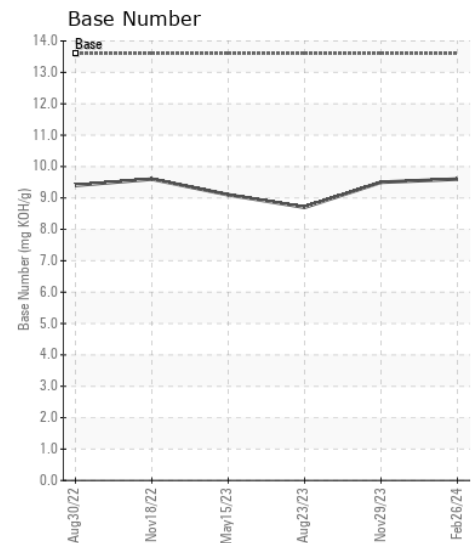
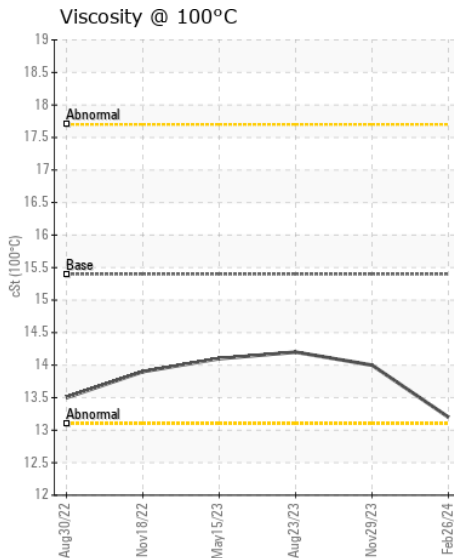
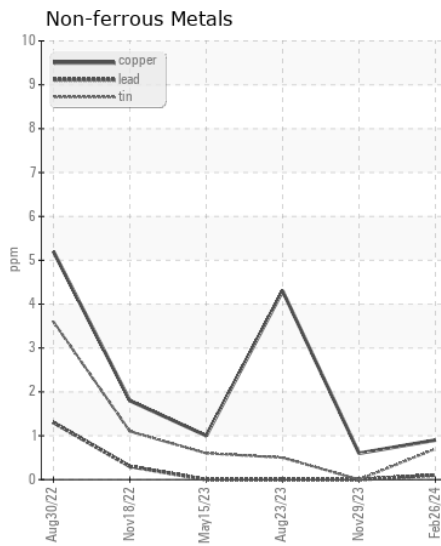
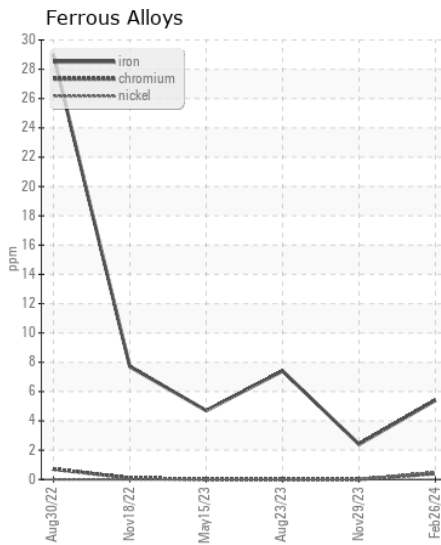
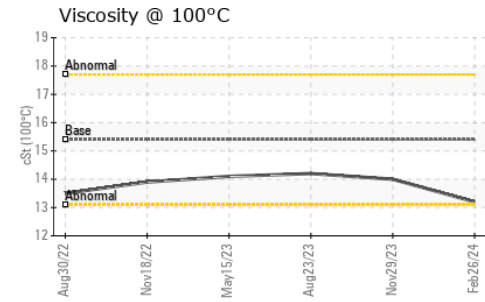
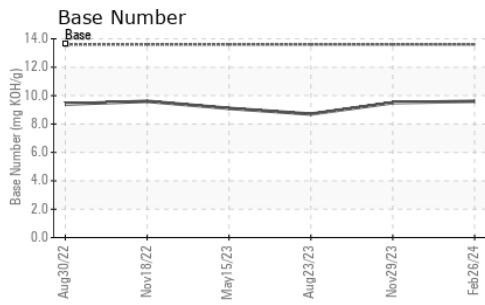
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	8	6	6
Potassium	ppm	ASTM D5185m	>20	3	0	2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.1	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	7.2	7.2	7.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.7	20.3	20.1
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	>0.2	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		0	2	1
Boron	ppm	ASTM D5185m		199	256	275
Barium	ppm	ASTM D5185m		1	0	0
Molybdenum	ppm	ASTM D5185m		205	230	255
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		692	775	839
Calcium	ppm	ASTM D5185m		1410	1511	1523
Phosphorus	ppm	ASTM D5185m		915	917	908
Zinc	ppm	ASTM D5185m		1009	1038	1104
Sulfur	ppm	ASTM D5185m		3128	2877	3696
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.7	14.9	14.7
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	9.6	9.5	8.7
Visc @ 100°C	cSt	ASTM D445	15.4	13.2	14.0	14.2



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0199105 **Received** : 27 Feb 2024
Lab Number : 06102287 **Tested** : 28 Feb 2024
Unique Number : 10900517 **Diagnosed** : 28 Feb 2024 - Wes Davis
Test Package : CONST (Additional Tests: 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)