



WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
JOHN DEERE 300G 1FF300GXAGF730338
 Component
Diesel Engine
 Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (5 GAL)

RECOMMENDATION

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		JR0209989	JR0104522	JR0021205
Sample Date		Client Info		09 May 2024	03 Nov 2021	12 Nov 2019
Machine Age	hrs	Client Info		3321	3017	2094
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	ABNORMAL	NORMAL

WEAR

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

Iron	ppm	ASTM D5185m	>51	▲ 74	▲ 63	37
Chromium	ppm	ASTM D5185m	>11	<1	1	<1
Nickel	ppm	ASTM D5185m	>5	2	2	2
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>31	5	6	7
Lead	ppm	ASTM D5185m	>26	0	2	2
Copper	ppm	ASTM D5185m	>26	6	6	6
Tin	ppm	ASTM D5185m	>4	1	0	2
Vanadium	ppm	ASTM D5185m		<1	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.

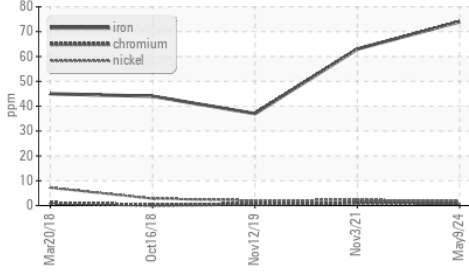
Silicon	ppm	ASTM D5185m	>22	9	9	9
Potassium	ppm	ASTM D5185m	>20	3	4	0
Fuel		WC Method	>2.1	<1.0	<1.0	<1.0
Water		WC Method	>0.21	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.4	0.7	0.5
Nitration	Abs/cm	*ASTM D7624	>20	10.2	11.1	11.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	24.8	27.9	28.2
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

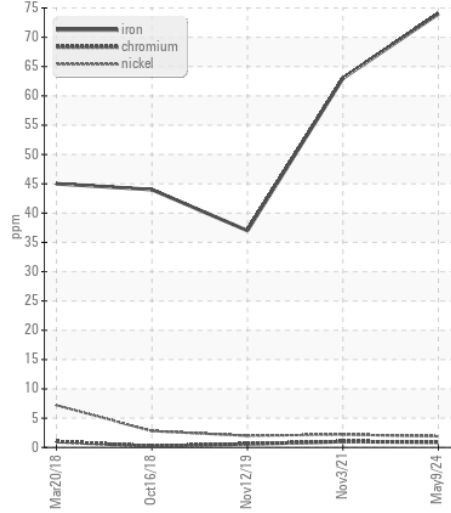
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>31	5	8	6
Boron	ppm	ASTM D5185m		120	20	25
Barium	ppm	ASTM D5185m		1	0	0
Molybdenum	ppm	ASTM D5185m		253	252	234
Manganese	ppm	ASTM D5185m		1	2	2
Magnesium	ppm	ASTM D5185m		796	908	832
Calcium	ppm	ASTM D5185m		1436	1701	1513
Phosphorus	ppm	ASTM D5185m		883	811	858
Zinc	ppm	ASTM D5185m		1073	1054	1016
Sulfur	ppm	ASTM D5185m		3064	3710	2306
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.7	22.9	23.7
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	7.4	6.1	6.5
Visc @ 100°C	cSt	ASTM D445	15.4	13.4	14.1	14.6

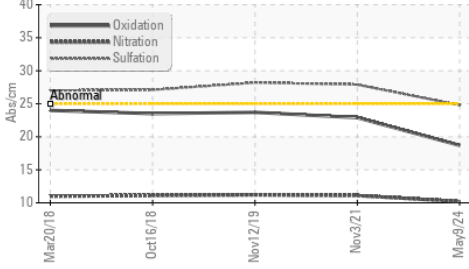
▲ Ferrous Alloys



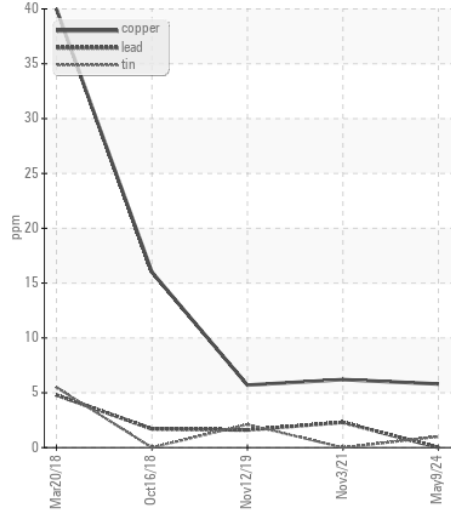
▲ Ferrous Alloys



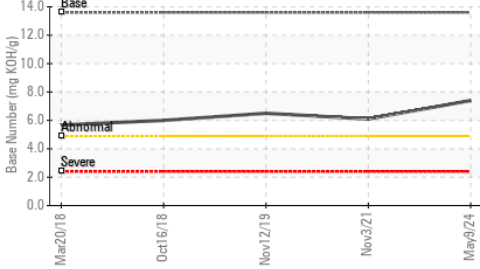
FT-IR (Direct Trend)



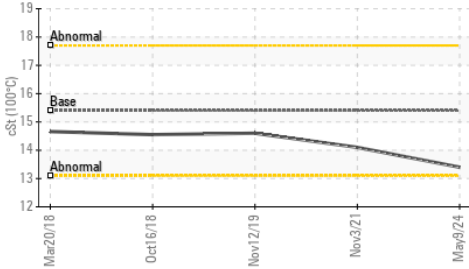
Non-ferrous Metals



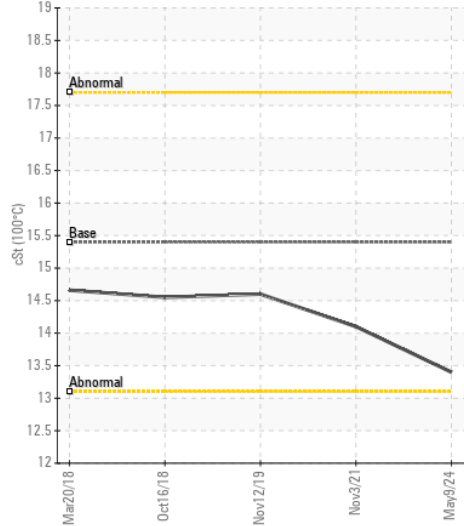
Base Number



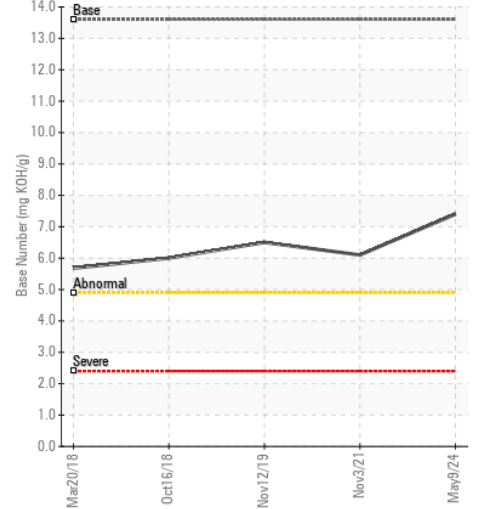
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

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

Sample No. : JR0209989

Lab Number : 06178474

Unique Number : 11029800

Test Package : CONST (Additional Tests: TBN)

Received : 14 May 2024

Tested : 15 May 2024

Diagnosed : 16 May 2024 - Sean Felton

JRE - STEPHENSON

245 YARDMASTER COURT

STEPHENSON, VA

US 22656-1761

Contact: PHIL DAUGHERTY

pdaugherty@jamesriverequipment.com

T: x:

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)

F: (540)693-2588