



WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Machine Id  
**JOHN DEERE 300G C215652 (S/N 1FF300GXAJF730900)**  
 Component  
**Diesel Engine**  
 Fluid  
**JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0221795</b>	JR0170311	JR0131128
Sample Date		Client Info		<b>01 Jul 2024</b>	11 Aug 2023	20 Jun 2022
Machine Age	hrs	Client Info		<b>2655</b>	2353	2035
Oil Age	hrs	Client Info		<b>2353</b>	0	0
Filter Age	hrs	Client Info		<b>2353</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	<b>18</b>	27	30
Chromium	ppm	ASTM D5185m	>11	<b>&lt;1</b>	2	3
Nickel	ppm	ASTM D5185m	>5	<b>&lt;1</b>	1	1
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	<1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>31	<b>5</b>	4	4
Lead	ppm	ASTM D5185m	>26	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m	>26	<b>&lt;1</b>	4	5
Tin	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

There is no indication of any contamination in the oil.

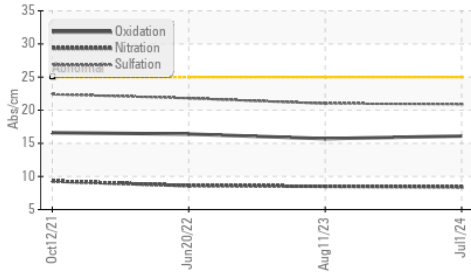
Silicon	ppm	ASTM D5185m	>22	<b>8</b>	4	8
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	2	0
Fuel		WC Method	>2.1	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.21	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.3</b>	0.4	0.4
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.4</b>	8.5	8.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>20.9</b>	21.0	21.8
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.21	<b>NEG</b>	NEG	NEG

### FLUID CONDITION

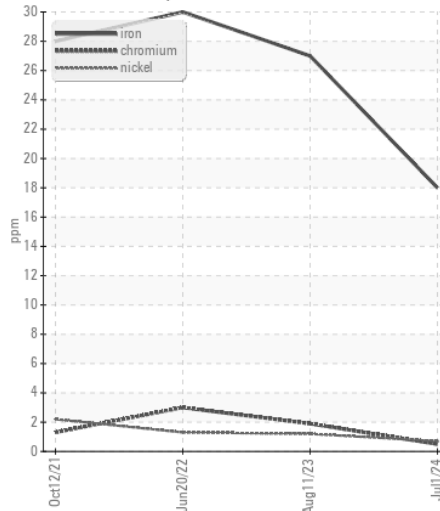
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>31	<b>3</b>	0	3
Boron	ppm	ASTM D5185m		<b>235</b>	220	271
Barium	ppm	ASTM D5185m		<b>0</b>	0	<1
Molybdenum	ppm	ASTM D5185m		<b>237</b>	253	255
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	1	1
Magnesium	ppm	ASTM D5185m		<b>858</b>	772	809
Calcium	ppm	ASTM D5185m		<b>1410</b>	1399	1515
Phosphorus	ppm	ASTM D5185m		<b>893</b>	862	880
Zinc	ppm	ASTM D5185m		<b>1094</b>	1039	1117
Sulfur	ppm	ASTM D5185m		<b>3493</b>	2923	3023
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>16.1</b>	15.7	16.4
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	<b>9.2</b>	8.3	8.6
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.2</b>	12.8	13.6

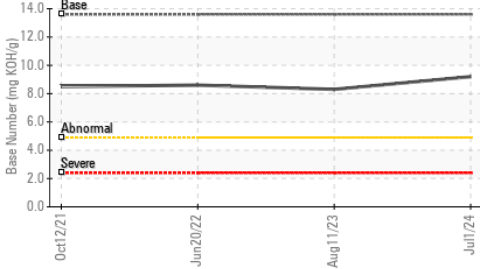
**FT-IR (Direct Trend)**



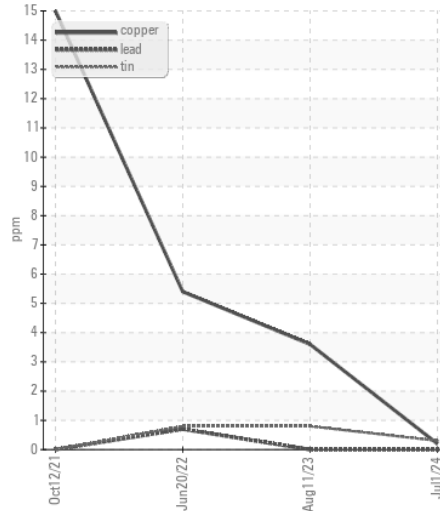
**Ferrous Alloys**



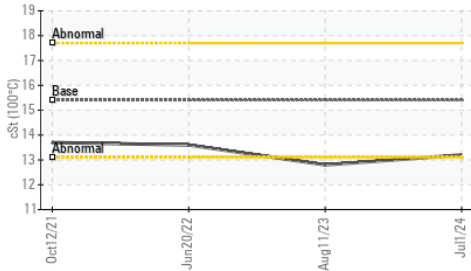
**Base Number**



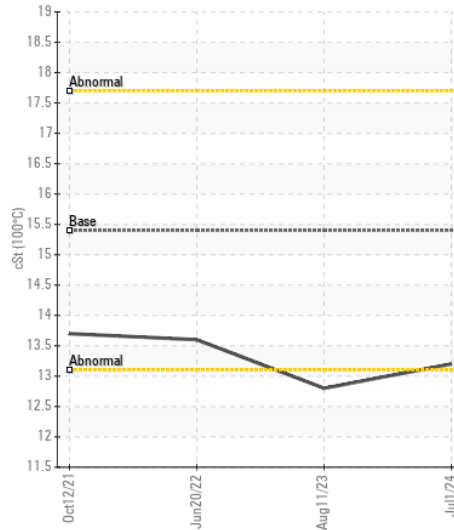
**Non-ferrous Metals**



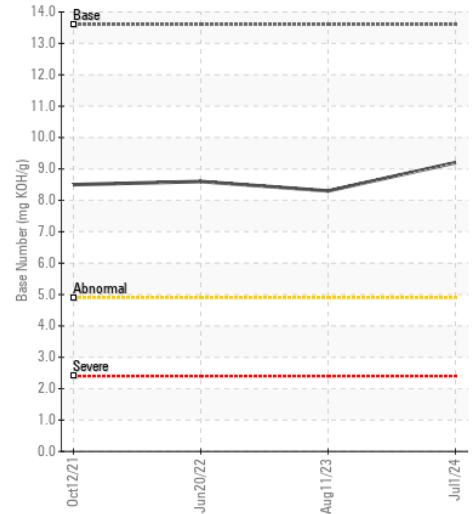
**Viscosity @ 100°C**



**Viscosity @ 100°C**



**Base Number**



Certificate L2367

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

**Sample No.** : JR0221795

**Lab Number** : 06228236

**Unique Number** : 11111729

**Test Package** : CONST ( Additional Tests: TBN )

**Received** : 05 Jul 2024

**Tested** : 05 Jul 2024

**Diagnosed** : 05 Jul 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 - STEPHENSON**

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