



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

Machine Id  
**JOHN DEERE 409**  
 Component  
**Diesel Engine**  
 Fluid  
**MOBIL 15W40 (--- QTS)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0189718</b>	JR0189881	JR0189721
Sample Date		Client Info		<b>23 Apr 2024</b>	08 Mar 2024	18 Dec 2023
Machine Age	hrs	Client Info		<b>7218</b>	6500	6004
Oil Age	hrs	Client Info		<b>218</b>	500	500
Filter Age	hrs	Client Info		<b>218</b>	500	500
Oil Changed		Client Info		<b>N/A</b>	Changed	Changed
Filter Changed		Client Info		<b>N/A</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	ABNORMAL	ABNORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	<b>10</b>	36	19
Chromium	ppm	ASTM D5185m	>11	<b>0</b>	<1	1
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	▲ 11	2
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>31	<b>1</b>	2	2
Lead	ppm	ASTM D5185m	>26	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>26	<b>&lt;1</b>	<1	2
Tin	ppm	ASTM D5185m	>4	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>0</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.

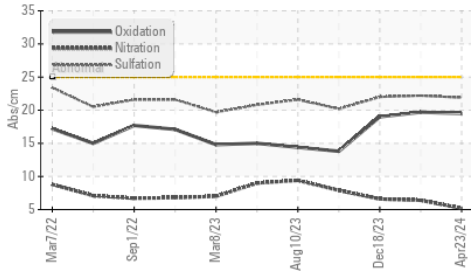
Silicon	ppm	ASTM D5185m	>22	<b>5</b>	5	5
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	● 50	▲ 160
Fuel		WC Method	>2.1	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.21	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	0.0
Soot %	%	*ASTM D7844	>3	<b>0.1</b>	0.2	0.2
Nitration	Abs/cm	*ASTM D7624	>20	<b>5.2</b>	6.4	6.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>21.9</b>	22.2	22.0
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

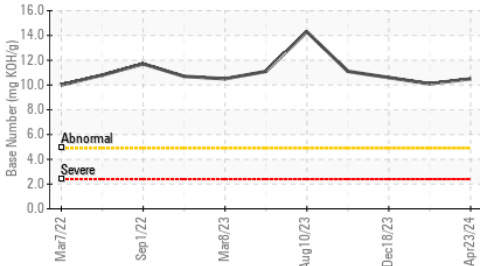
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>118	<b>2</b>	54	● 178
Boron	ppm	ASTM D5185m		<b>49</b>	42	42
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>41</b>	46	63
Manganese	ppm	ASTM D5185m		<b>0</b>	1	<1
Magnesium	ppm	ASTM D5185m		<b>527</b>	542	564
Calcium	ppm	ASTM D5185m		<b>1833</b>	1687	1531
Phosphorus	ppm	ASTM D5185m		<b>978</b>	956	929
Zinc	ppm	ASTM D5185m		<b>1174</b>	1150	1083
Sulfur	ppm	ASTM D5185m		<b>3651</b>	3445	2922
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>19.5</b>	19.7	19.0
Base Number (BN)	mg KOH/g	ASTM D2896		<b>10.5</b>	10.1	10.6
Visc @ 100°C	cSt	ASTM D445		<b>12.9</b>	12.8	12.7

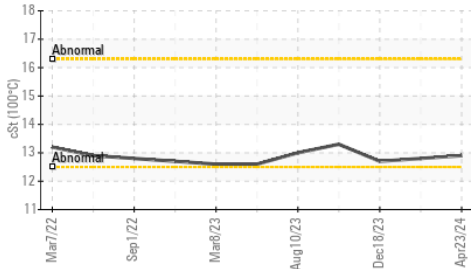
**FT-IR (Direct Trend)**



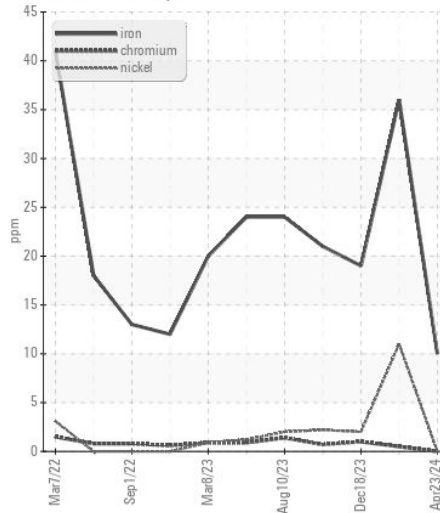
**Base Number**



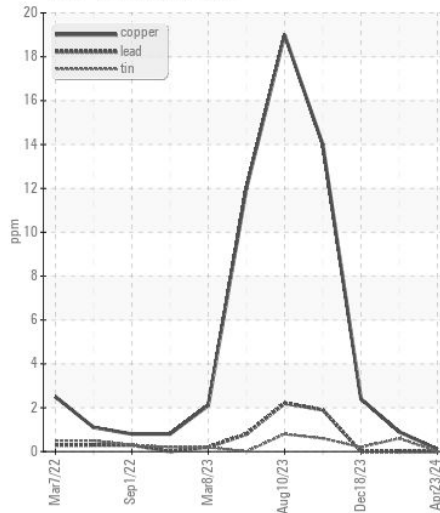
**Viscosity @ 100°C**



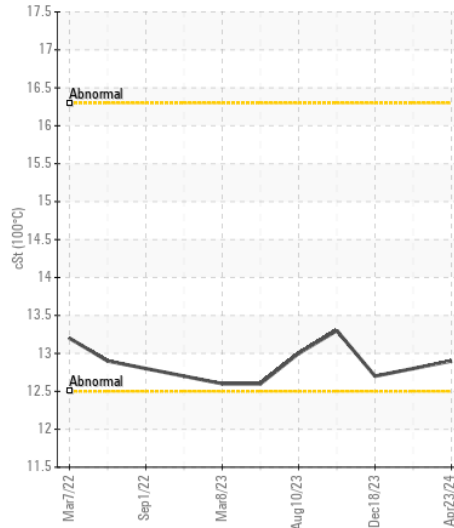
**Ferrous Alloys**



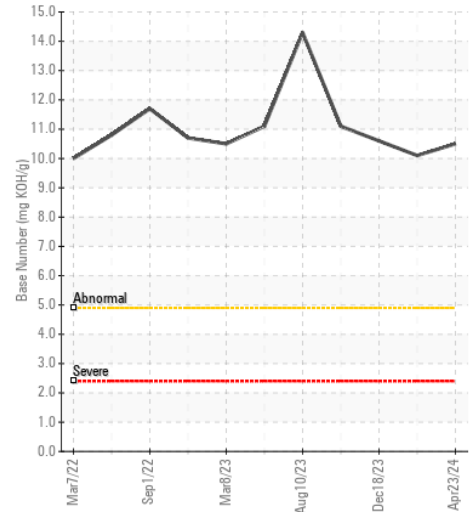
**Non-ferrous Metals**



**Viscosity @ 100°C**



**Base Number**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0189718 **Received** : 25 Apr 2024  
**Lab Number** : 06160063 **Tested** : 25 Apr 2024  
**Unique Number** : 10995486 **Diagnosed** : 25 Apr 2024 - Wes Davis  
**Test Package** : CONST ( Additional Tests: TBN )

**THE SCOTTS COMPANY**  
 3175 BRIGHT LEAF RD  
 LAWRENCEVILLE, VA  
 US 23868  
 Contact: REX WATSON

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)

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