



**POWER SYSTEMS**  
**SYSTÈMES DE PUISSANCE**

OIL ANALYSIS REPORT

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

Area  
**GN PLASTICS [6100248859]**  
Machine Id  
**JOHN DEERE RE4045D412462**  
Component  
**Diesel Engine**  
Fluid  
**SHELL ROTELLA T 15W40 (4 GAL)**

**RECOMMENDATION**

Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WA0021165</b>	WA0018451	WA0017286
Sample Date		Client Info		<b>12 Feb 2024</b>	18 Nov 2022	22 Nov 2021
Machine Age	hrs	Client Info		<b>591</b>	535	490
Oil Age	hrs	Client Info		<b>0</b>	0	30
Filter Age	hrs	Client Info		<b>0</b>	0	30
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**

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>51	<b>2</b>	2	2
Chromium	ppm	ASTM D5185(m)	>11	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m)	>5	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>31	<b>1</b>	<1	<1
Lead	ppm	ASTM D5185(m)	>26	<b>0</b>	<1	0
Copper	ppm	ASTM D5185(m)	>26	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185(m)	>4	<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

**CONTAMINATION**

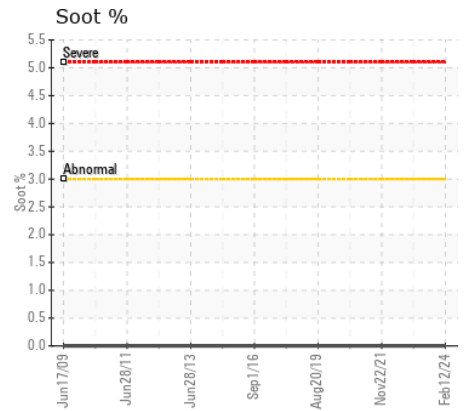
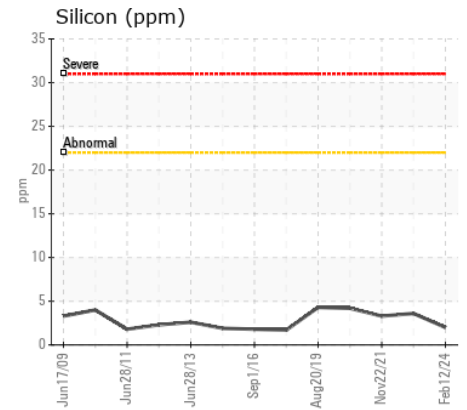
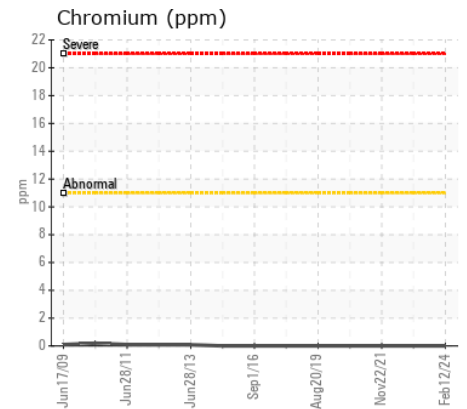
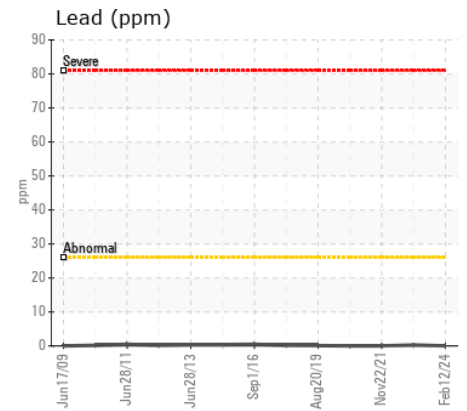
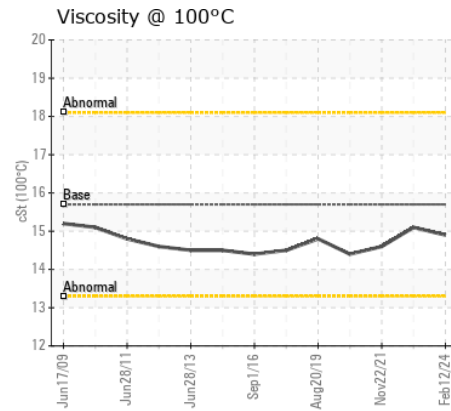
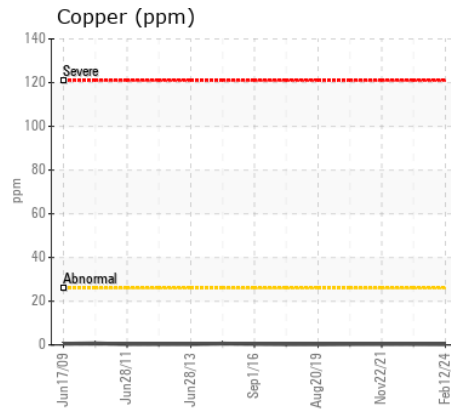
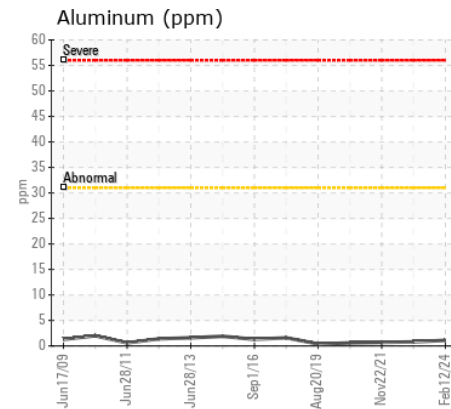
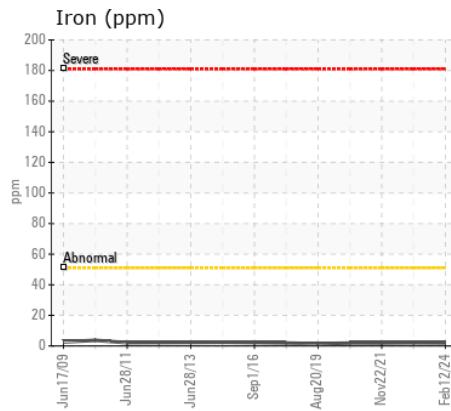
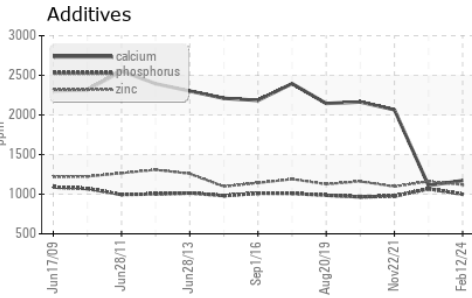
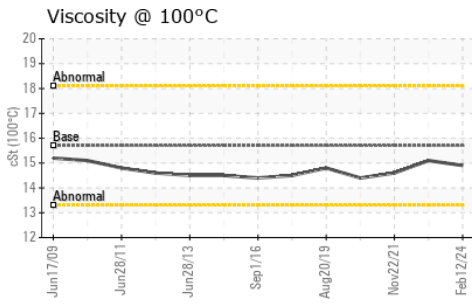
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>22	<b>2</b>	4	3
Potassium	ppm	ASTM D5185(m)	>20	<b>1</b>	<1	7
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</b>	0	0
Nitration	Abs/cm	ASTM D7624*	>20	<b>4.9</b>	5.2	4.5
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>17.9</b>	19.1	17.9
Emulsified Water	scalar	Visual*	>0.21	<b>NEG</b>	NEG	NEG

**FLUID CONDITION**

Additive levels indicate the addition of a different brand, or type of oil. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)	>31	<b>1</b>	2	2
Boron	ppm	ASTM D5185(m)	35	<b>25</b>	13	180
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	0	<b>49</b>	53	<1
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)	10	<b>811</b>	893	14
Calcium	ppm	ASTM D5185(m)	2340	<b>1172</b>	1109	2066
Phosphorus	ppm	ASTM D5185(m)	1110	<b>1000</b>	1068	975
Zinc	ppm	ASTM D5185(m)	1210	<b>1118</b>	1161	1097
Sulfur	ppm	ASTM D5185(m)	3890	<b>2756</b>	2690	2908
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>13.5</b>	14.1	11.7
Visc @ 100°C	cSt	ASTM D7279(m)	15.7	<b>14.9</b>	15.1	14.6



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WA0021165 **Received** : 21 Feb 2024  
**Lab Number** : 02616959 **Tested** : 22 Feb 2024  
**Unique Number** : 5734069 **Diagnosed** : 22 Feb 2024 - Wes Davis  
**Test Package** : MOB 1

To discuss this sample report, contact Customer Service at 1-800-268-2131.  
 Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab.  
 Validity of results and interpretation are based on the sample and information as supplied.

**Wajax Power Systems**  
 70 Raddall Avenue  
 Dartmouth, NS  
 CA B3B 1T7  
 Contact: Danelle Hoffman  
 dhoffman@wajax.com  
 T: (902)468-6200  
 F: (902)468-3325