



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

Area

**[LARRY ROYSTON]**

Machine Id

**JOHN DEERE 325G 1T0325GMVKJ355280**

Component

**Diesel Engine**

Fluid

**JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- 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		<b>JR0195648</b>	JR0112199	JR0052253
Sample Date		Client Info		<b>03 Jan 2024</b>	13 Jan 2022	24 Jul 2020
Machine Age	hrs	Client Info		<b>1508</b>	801	255
Oil Age	hrs	Client Info		<b>0</b>	161	255
Filter Age	hrs	Client Info		<b>0</b>	161	255
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	N/A	Changed
Sample Status				<b>ABNORMAL</b>	NORMAL	ABNORMAL

### WEAR

Cylinder, crank, or cam shaft wear is indicated.

Iron	ppm	ASTM D5185m	>51	<b>▲ 123</b>	21	28
Chromium	ppm	ASTM D5185m	>11	<b>2</b>	<1	<1
Nickel	ppm	ASTM D5185m	>5	<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	1	1
Aluminum	ppm	ASTM D5185m	>31	<b>19</b>	4	<1
Lead	ppm	ASTM D5185m	>26	<b>&lt;1</b>	1	<1
Copper	ppm	ASTM D5185m	>26	<b>11</b>	14	<b>▲ 158</b>
Tin	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

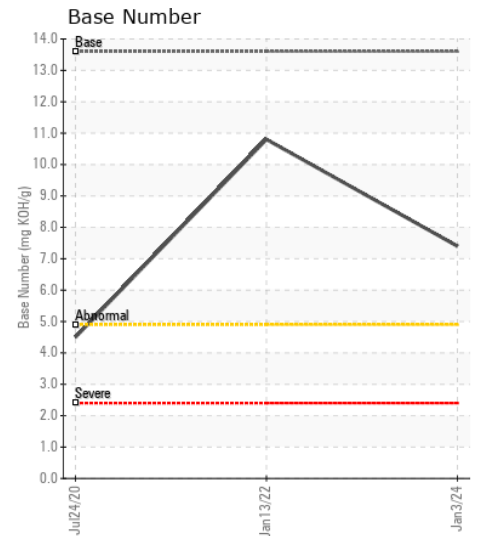
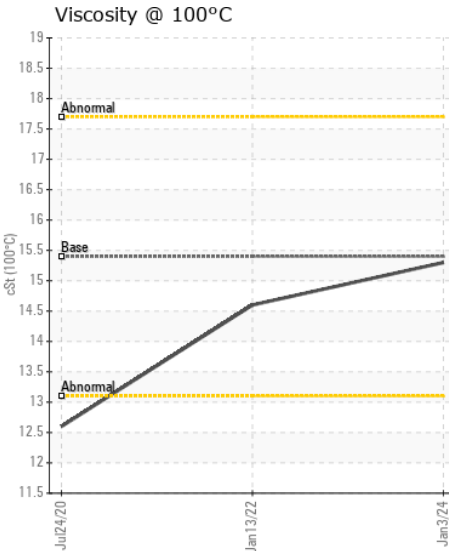
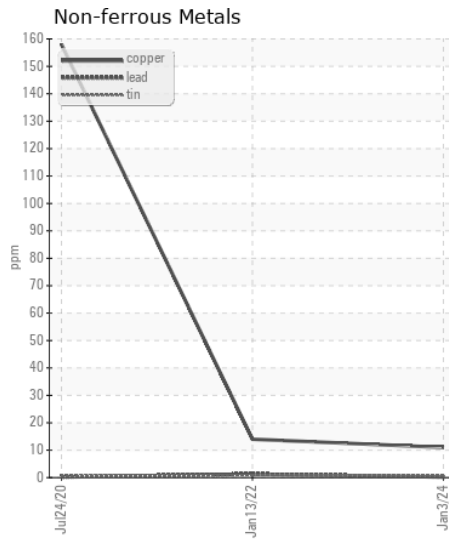
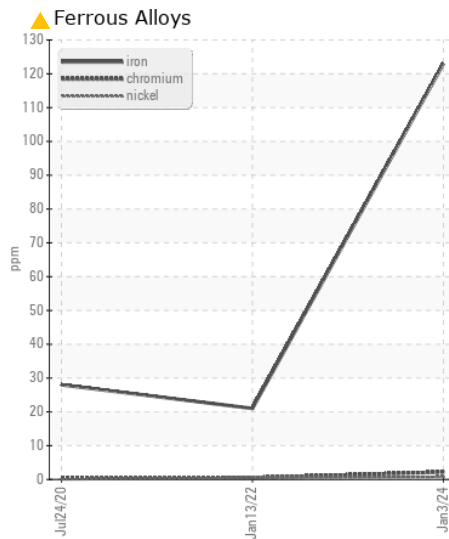
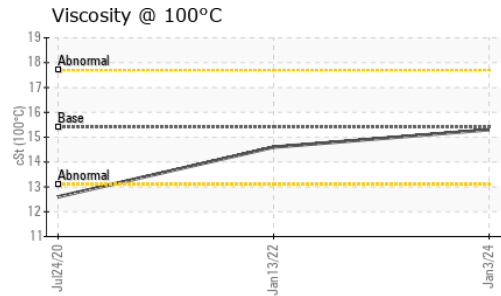
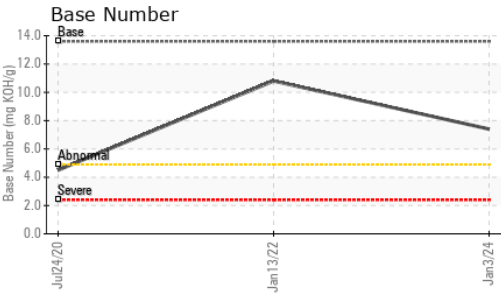
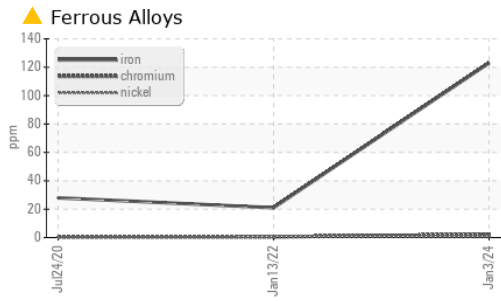
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>22	<b>19</b>	13	36
Potassium	ppm	ASTM D5185m	>20	<b>4</b>	2	2
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>2</b>	0.5	0
Nitration	Abs/cm	*ASTM D7624	>20	<b>14.5</b>	9.0	4.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>35.8</b>	23.8	20.7
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>9</b>	2	12
Boron	ppm	ASTM D5185m		<b>93</b>	239	271
Barium	ppm	ASTM D5185m		<b>0</b>	0	2
Molybdenum	ppm	ASTM D5185m		<b>246</b>	258	232
Manganese	ppm	ASTM D5185m		<b>1</b>	<1	1
Magnesium	ppm	ASTM D5185m		<b>817</b>	835	725
Calcium	ppm	ASTM D5185m		<b>1516</b>	1519	1478
Phosphorus	ppm	ASTM D5185m		<b>1159</b>	908	807
Zinc	ppm	ASTM D5185m		<b>1100</b>	1148	1029
Sulfur	ppm	ASTM D5185m		<b>5105</b>	3044	2498
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>34.8</b>	17.7	9.2
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	<b>7.4</b>	10.8	4.5
Visc @ 100°C	cSt	ASTM D445	15.4	<b>15.3</b>	14.6	12.6



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0195648 **Received** : 09 Jan 2024  
**Lab Number** : 06055715 **Diagnosed** : 10 Jan 2024  
**Unique Number** : 10821664 **Diagnostician** : Jonathan Hester  
**Test Package** : CONST ( Additional Tests: TBN )

**JRE - STEPHENSON**  
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 STEPHENSON, VA  
 US 22656-1761  
 Contact: PHIL DAUGHERTY  
 pdaugherty@jamesriverequipment.com

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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