



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

Machine Id  
**JOHN DEERE 35G 1FF035GXANK297061**

Component  
**Diesel Engine**

Fluid  
**JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- GAL)**

### RECOMMENDATION

The oil 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>JR0225328</b>	---	---
Sample Date		Client Info		<b>19 Jun 2024</b>	---	---
Machine Age	hrs	Client Info		<b>618</b>	---	---
Oil Age	hrs	Client Info		<b>618</b>	---	---
Filter Age	hrs	Client Info		<b>618</b>	---	---
Oil Changed		Client Info		<b>Changed</b>	---	---
Filter Changed		Client Info		<b>N/A</b>	---	---
Sample Status				<b>ATTENTION</b>	---	---

### WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>51	<b>71</b>	---	---
Chromium	ppm	ASTM D5185m	>11	<b>&lt;1</b>	---	---
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	---	---
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Silver	ppm	ASTM D5185m	>3	<b>0</b>	---	---
Aluminum	ppm	ASTM D5185m	>31	<b>5</b>	---	---
Lead	ppm	ASTM D5185m	>26	<b>1</b>	---	---
Copper	ppm	ASTM D5185m	>26	<b>13</b>	---	---
Tin	ppm	ASTM D5185m	>4	<b>0</b>	---	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	---	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	---	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	---	---

### CONTAMINATION

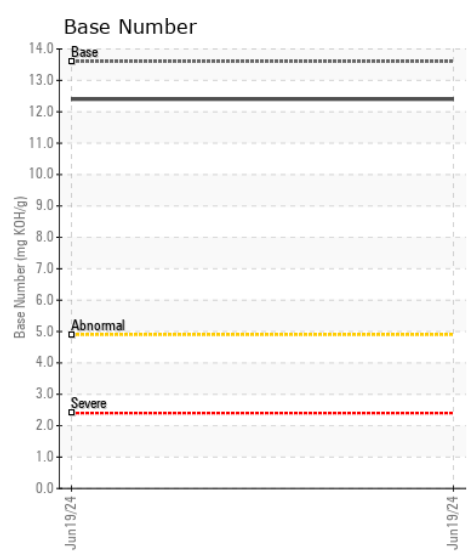
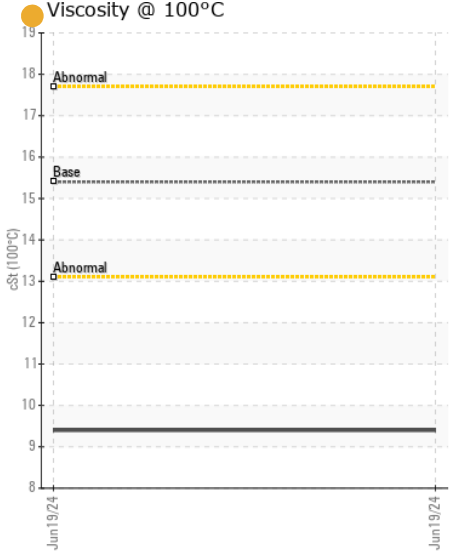
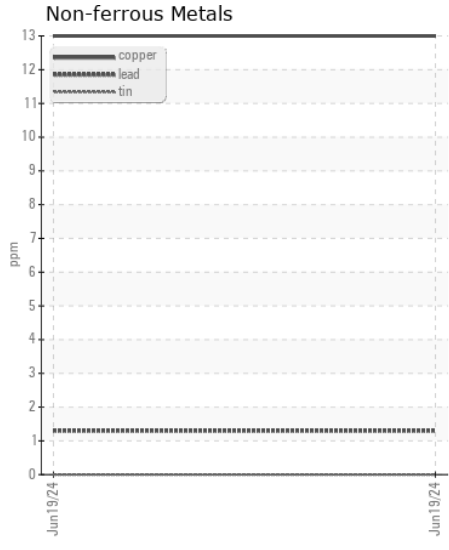
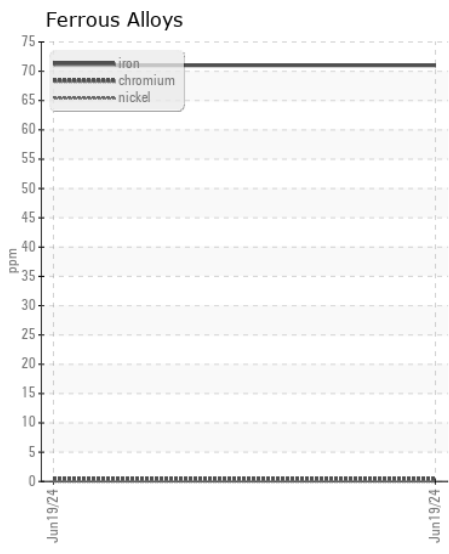
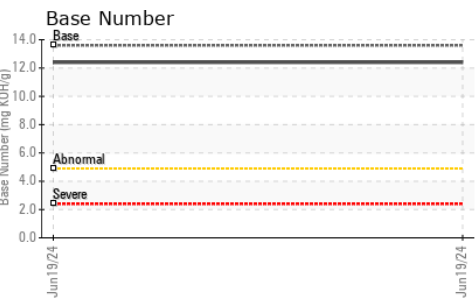
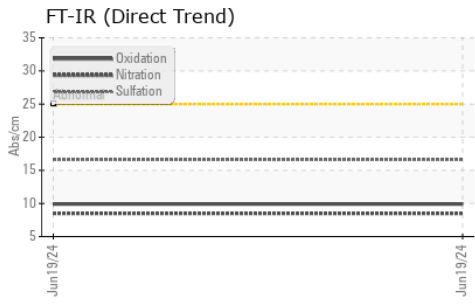
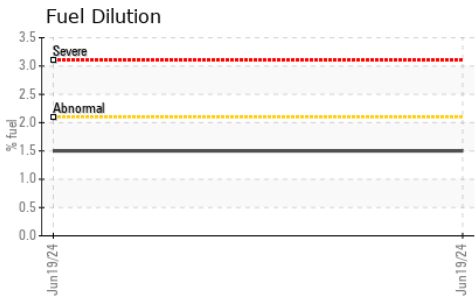
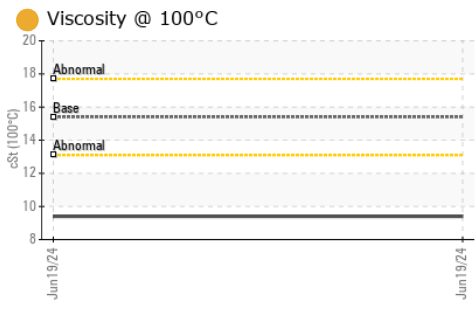
Fuel content negligible. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>22	<b>57</b>	---	---
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	---	---
Fuel	%	ASTM D3524	>2.1	<b>1.5</b>	---	---
Water		WC Method	>0.21	<b>NEG</b>	---	---
Glycol		WC Method		<b>NEG</b>	---	---
Soot %	%	*ASTM D7844	>3	<b>0.3</b>	---	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.5</b>	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>16.6</b>	---	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	---	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	---	---
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	---	---
Appearance	scalar	*Visual	NORML	<b>NORML</b>	---	---
Odor	scalar	*Visual	NORML	<b>NORML</b>	---	---
Emulsified Water	scalar	*Visual	>0.21	<b>NEG</b>	---	---

### FLUID CONDITION

The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Sodium	ppm	ASTM D5185m	>31	<b>19</b>	---	---
Boron	ppm	ASTM D5185m		<b>40</b>	---	---
Barium	ppm	ASTM D5185m		<b>19</b>	---	---
Molybdenum	ppm	ASTM D5185m		<b>111</b>	---	---
Manganese	ppm	ASTM D5185m		<b>2</b>	---	---
Magnesium	ppm	ASTM D5185m		<b>36</b>	---	---
Calcium	ppm	ASTM D5185m		<b>4076</b>	---	---
Phosphorus	ppm	ASTM D5185m		<b>1124</b>	---	---
Zinc	ppm	ASTM D5185m		<b>1362</b>	---	---
Sulfur	ppm	ASTM D5185m		<b>7289</b>	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>9.9</b>	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	<b>12.4</b>	---	---
Visc @ 100°C	cSt	ASTM D445	15.4	<b>9.4</b>	---	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0225328 **Received** : 24 Jun 2024  
**Lab Number** : 06218010 **Tested** : 27 Jun 2024  
**Unique Number** : 11096207 **Diagnosed** : 27 Jun 2024 - Jonathan Hester  
**Test Package** : CONST ( Additional Tests: FuelDilution, PercentFuel, TBN )

**JRE - MANASSAS PARK**  
 9107 OWENS DRIVE  
 MANASSAS PARK, VA  
 US 20111  
 Contact: DON VEST  
 dvest@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) T: (703)631-8500 F: (703)631-4715