



# OIL ANALYSIS REPORT

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



Machine Id  
**JOHN DEERE 300DII 513 (S/N 1DW300DXJFE667370)**

Component  
**Hydraulic System**

Fluid  
**JOHN DEERE HY-GARD HYD/TRANS (21 GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>R005993617</b>	---	---
Sample Date		Client Info		<b>21 Oct 2023</b>	---	---
Machine Age	hrs	Client Info		<b>0</b>	---	---
Oil Age	hrs	Client Info		<b>1665</b>	---	---
Filter Age	hrs	Client Info		<b>1665</b>	---	---
Oil Changed		Client Info		<b>Changed</b>	---	---
Filter Changed		Client Info		<b>Changed</b>	---	---
Sample Status				<b>NORMAL</b>	---	---

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>23	<b>17</b>	---	---
Chromium	ppm	ASTM D5185m	>9	<b>4</b>	---	---
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	---	---
Titanium	ppm	ASTM D5185m		<b>0</b>	---	---
Silver	ppm	ASTM D5185m		<b>0</b>	---	---
Aluminum	ppm	ASTM D5185m	>9	<b>2</b>	---	---
Lead	ppm	ASTM D5185m	>28	<b>0</b>	---	---
Copper	ppm	ASTM D5185m	>51	<b>8</b>	---	---
Tin	ppm	ASTM D5185m	>5	<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

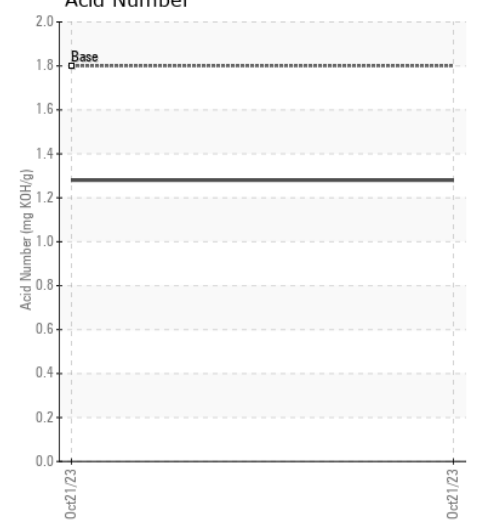
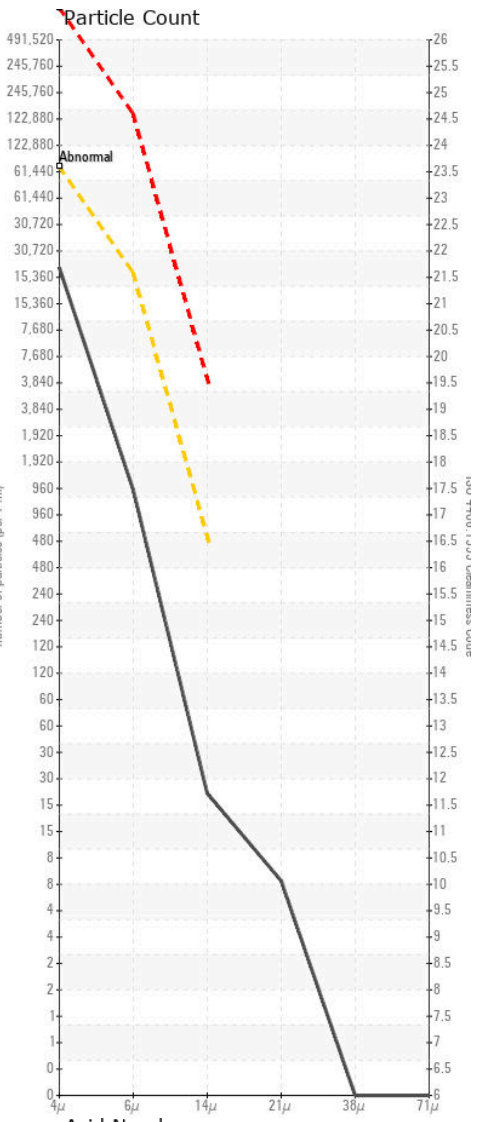
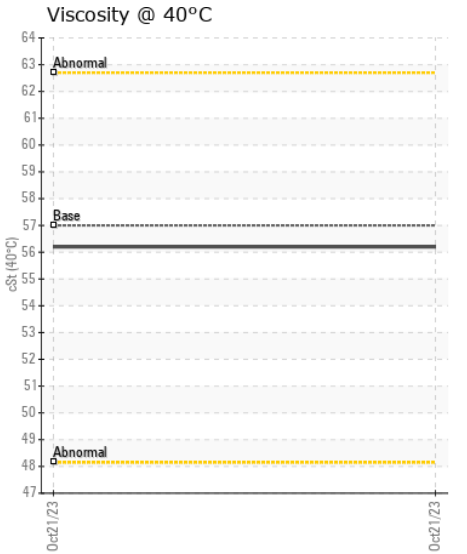
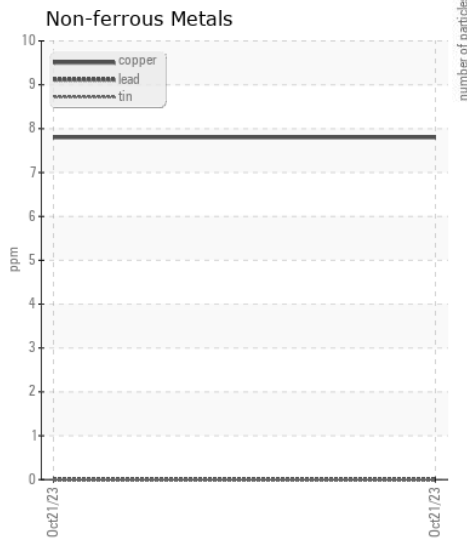
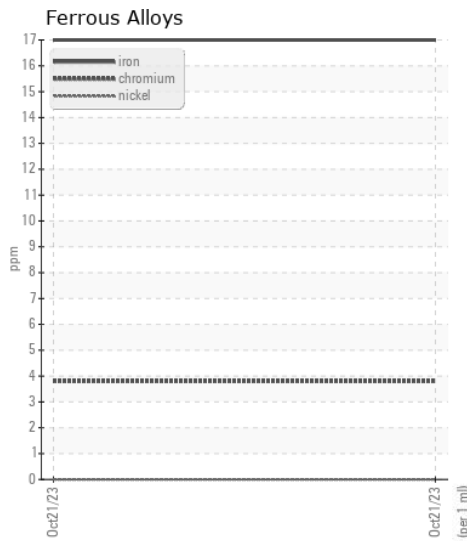
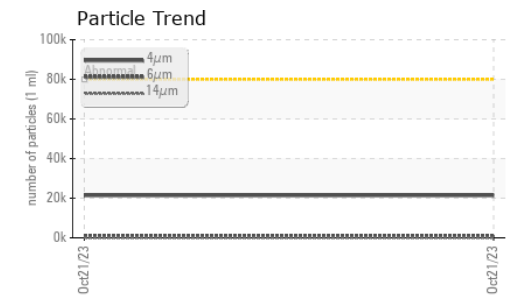
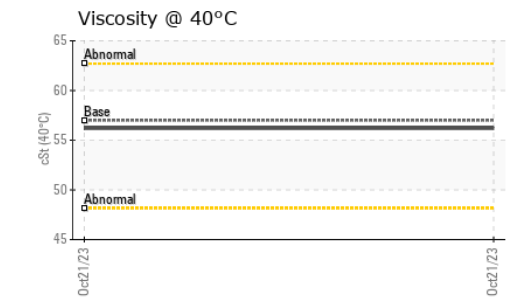
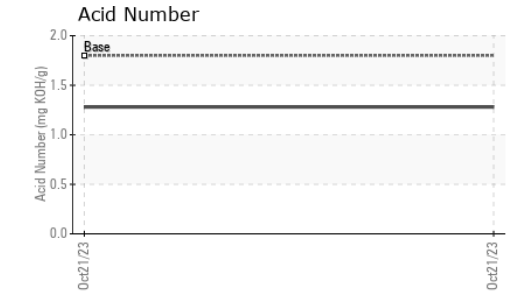
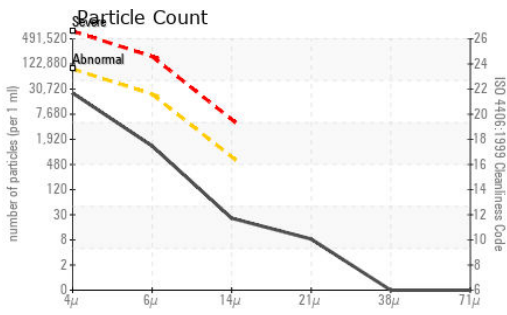
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>31	<b>10</b>	---	---
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	---	---
Water		WC Method	>0.075	<b>NEG</b>	---	---
Particles >4µm		ASTM D7647	>80000	<b>21410</b>	---	---
Particles >6µm		ASTM D7647	>20000	<b>1166</b>	---	---
Particles >14µm		ASTM D7647	>640	<b>22</b>	---	---
Particles >21µm		ASTM D7647	>160	<b>7</b>	---	---
Particles >38µm		ASTM D7647	>40	<b>0</b>	---	---
Particles >71µm		ASTM D7647	>10	<b>0</b>	---	---
Oil Cleanliness		ISO 4406 (c)	>23/21/16	<b>22/17/12</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	>0.075	<b>NEG</b>	---	---

## FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>21	<b>4</b>	---	---
Boron	ppm	ASTM D5185m	6	<b>6</b>	---	---
Barium	ppm	ASTM D5185m	0	<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185m	0	<b>&lt;1</b>	---	---
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Magnesium	ppm	ASTM D5185m	145	<b>84</b>	---	---
Calcium	ppm	ASTM D5185m	3570	<b>2943</b>	---	---
Phosphorus	ppm	ASTM D5185m	1290	<b>958</b>	---	---
Zinc	ppm	ASTM D5185m	1640	<b>1121</b>	---	---
Sulfur	ppm	ASTM D5185m		<b>3141</b>	---	---
Acid Number (AN)	mg KOH/g	ASTM D8045	1.8	<b>1.28</b>	---	---
Visc @ 40°C	cSt	ASTM D445	57.0	<b>56.2</b>	---	---



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : RO05993617  
**Lab Number** : 05993617  
**Unique Number** : 10716279  
**Test Package** : MOB 2  
**Received** : 30 Oct 2023  
**Tested** : 01 Nov 2023  
**Diagnosed** : 01 Nov 2023 - Wes Davis

**BIG 4 INC**  
 301 WORTH ST  
 HEMPHILL, TX  
 US 75948  
 Contact: JODIE MCGEE  
 jodie.mcgee@big4inc.com  
 T: (936)275-7532  
 F: (409)787-2071

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)