



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

Area

**[CA MURREN & SONS]**

Machine Id

**JOHN DEERE 310SL 1T0310SLVFF286491**

Component

**Hydraulic System**

Fluid

**JOHN DEERE HYDRAU (--- GAL)**

### RECOMMENDATION

We advise that you check all areas where contaminants can enter the system. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. Resample in 30-45 days to monitor this situation.

### WEAR

All component wear rates are normal.

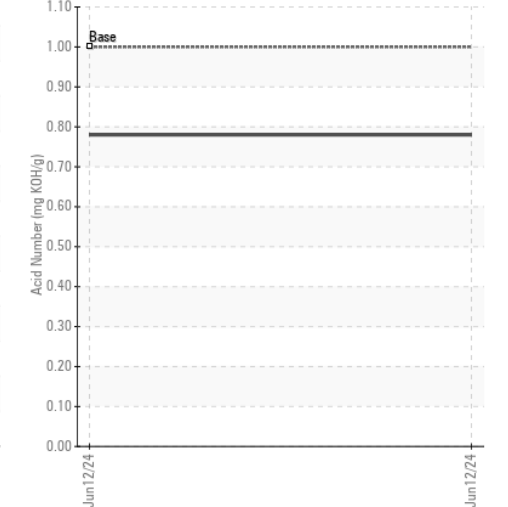
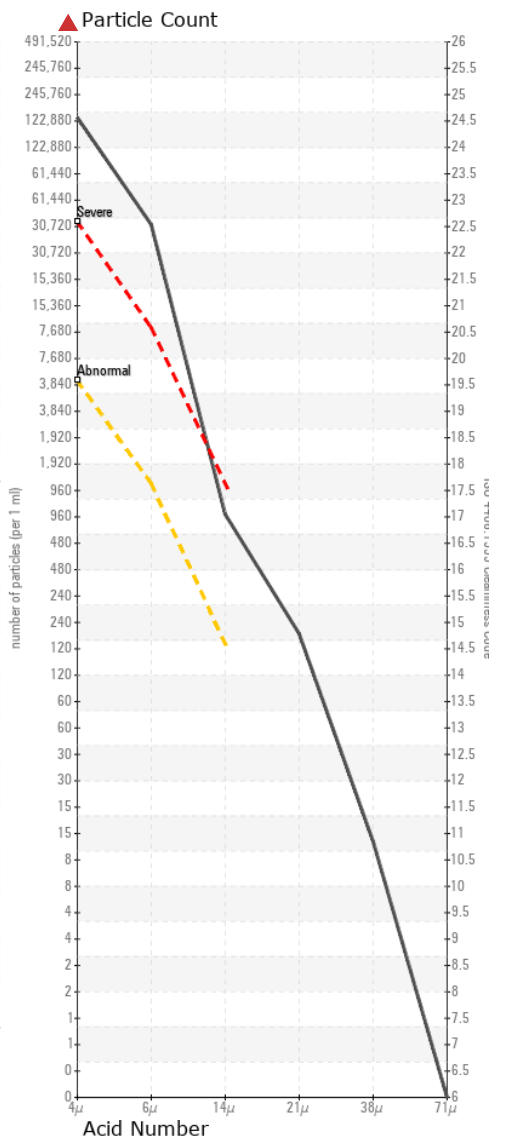
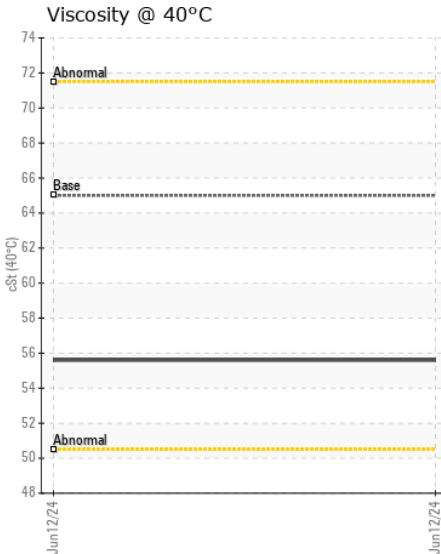
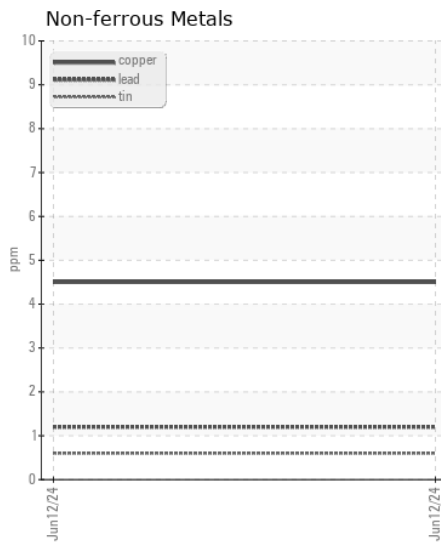
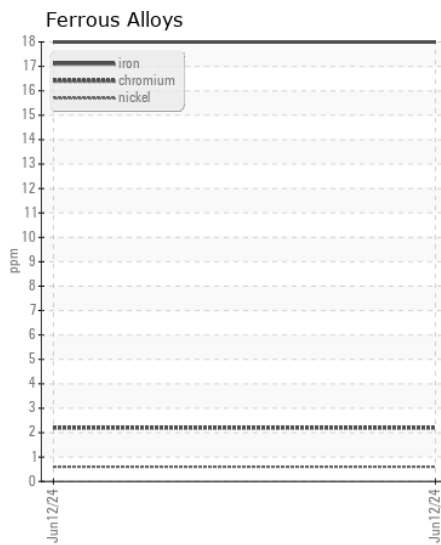
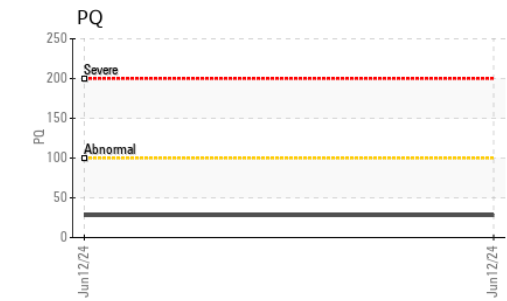
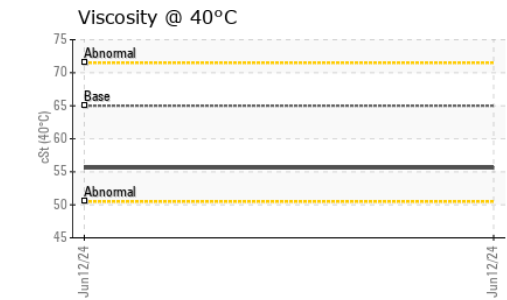
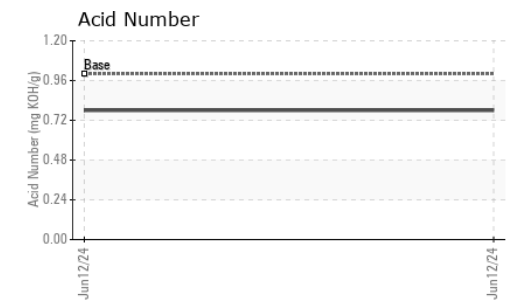
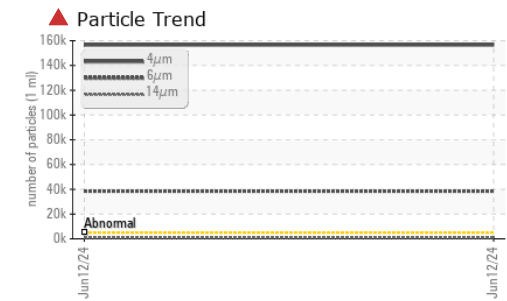
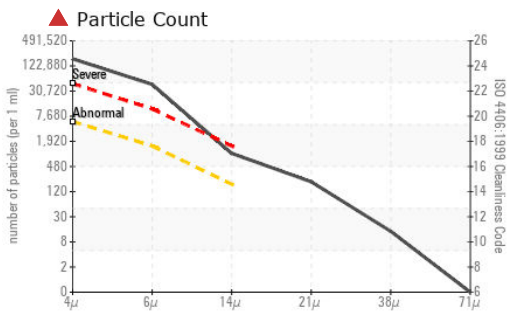
### CONTAMINATION

There is a high amount of particulates (2 to 100 microns in size) present in the oil.

### FLUID CONDITION

The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0218396</b>	---	---
Sample Date		Client Info		<b>12 Jun 2024</b>	---	---
Machine Age	hrs	Client Info		<b>1367</b>	---	---
Oil Age	hrs	Client Info		<b>0</b>	---	---
Filter Age	hrs	Client Info		<b>0</b>	---	---
Oil Changed		Client Info		<b>Not Changd</b>	---	---
Filter Changed		Client Info		<b>Changed</b>	---	---
Sample Status				<b>SEVERE</b>	---	---
PQ		ASTM D8184		<b>28</b>	---	---
Iron	ppm	ASTM D5185m	>20	<b>18</b>	---	---
Chromium	ppm	ASTM D5185m	>10	<b>2</b>	---	---
Nickel	ppm	ASTM D5185m	>10	<b>&lt;1</b>	---	---
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Silver	ppm	ASTM D5185m		<b>0</b>	---	---
Aluminum	ppm	ASTM D5185m	>10	<b>3</b>	---	---
Lead	ppm	ASTM D5185m	>10	<b>1</b>	---	---
Copper	ppm	ASTM D5185m	>75	<b>4</b>	---	---
Tin	ppm	ASTM D5185m	>10	<b>&lt;1</b>	---	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	---	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	---	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	---	---
Silicon	ppm	ASTM D5185m	>20	<b>8</b>	---	---
Potassium	ppm	ASTM D5185m	>20	<b>5</b>	---	---
Water		WC Method	>0.1	<b>NEG</b>	---	---
Particles >4µm		ASTM D7647	>5000	<b>▲ 156612</b>	---	---
Particles >6µm		ASTM D7647	>1300	<b>▲ 38514</b>	---	---
Particles >14µm		ASTM D7647	>160	<b>▲ 869</b>	---	---
Particles >21µm		ASTM D7647	>40	<b>▲ 182</b>	---	---
Particles >38µm		ASTM D7647	>10	<b>12</b>	---	---
Particles >71µm		ASTM D7647	>3	<b>0</b>	---	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>▲ 24/22/17</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	>0.1	<b>NEG</b>	---	---
Sodium	ppm	ASTM D5185m		<b>2</b>	---	---
Boron	ppm	ASTM D5185m		<b>0</b>	---	---
Barium	ppm	ASTM D5185m		<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Magnesium	ppm	ASTM D5185m		<b>4</b>	---	---
Calcium	ppm	ASTM D5185m	87	<b>103</b>	---	---
Phosphorus	ppm	ASTM D5185m	727	<b>637</b>	---	---
Zinc	ppm	ASTM D5185m	900	<b>862</b>	---	---
Sulfur	ppm	ASTM D5185m	1500	<b>1768</b>	---	---
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	<b>0.78</b>	---	---
Visc @ 40°C	cSt	ASTM D445	65	<b>55.6</b>	---	---



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0218396 **Received** : 17 Jun 2024  
**Lab Number** : 06211491 **Tested** : 18 Jun 2024  
**Unique Number** : 11084355 **Diagnosed** : 18 Jun 2024 - Wes Davis  
**Test Package** : CONST ( Additional Tests: PQ )

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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)