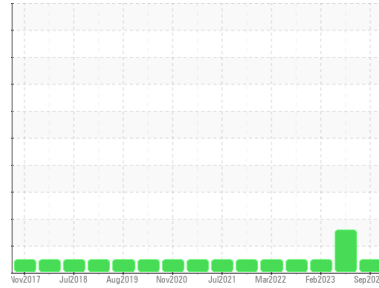


# OIL ANALYSIS REPORT

**Sample Rating Trend**

**NORMAL**


Area

**[W46883]**

Machine Id

**JOHN DEERE 310SL 1T0310SLTHF313104**

Component

**Hydraulic System**

Fluid

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

Resample at the next service interval to monitor.

**Wear**

All component wear rates are normal.

**Contamination**

The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

**Fluid Condition**

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

**SAMPLE INFORMATION**

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>JR0179195</b>	JR0165600	JR0148361
Sample Date	Client Info		<b>28 Sep 2023</b>	13 Jun 2023	08 Feb 2023
Machine Age	hrs	Client Info	<b>8961</b>	8458	7948
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>Not Chngd</b>	Not Chngd	Changed
Sample Status			<b>NORMAL</b>	ABNORMAL	NORMAL

**WEAR METALS**

	method	limit/base	current	history1	history2
PQ	ASTM D8184		<b>14</b>	12	14
Iron	ppm	ASTM D5185m >20	<b>9</b>	8	8
Chromium	ppm	ASTM D5185m >10	<b>4</b>	4	4
Nickel	ppm	ASTM D5185m >10	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	1
Silver	ppm	ASTM D5185m	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >10	<b>2</b>	0	0
Lead	ppm	ASTM D5185m >10	<b>0</b>	0	0
Copper	ppm	ASTM D5185m >75	<b>6</b>	3	5
Tin	ppm	ASTM D5185m >10	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

**ADDITIVES**

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>0</b>	0	0
Barium	ppm	ASTM D5185m	<b>0</b>	2	0
Molybdenum	ppm	ASTM D5185m	<b>1</b>	1	2
Manganese	ppm	ASTM D5185m	<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185m	<b>9</b>	7	5
Calcium	ppm	ASTM D5185m 87	<b>84</b>	83	88
Phosphorus	ppm	ASTM D5185m 727	<b>517</b>	471	441
Zinc	ppm	ASTM D5185m 900	<b>683</b>	623	615
Sulfur	ppm	ASTM D5185m 1500	<b>2189</b>	1837	1669

**CONTAMINANTS**

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >20	<b>2</b>	1	1
Sodium	ppm	ASTM D5185m	<b>2</b>	0	<1
Potassium	ppm	ASTM D5185m >20	<b>&lt;1</b>	2	0

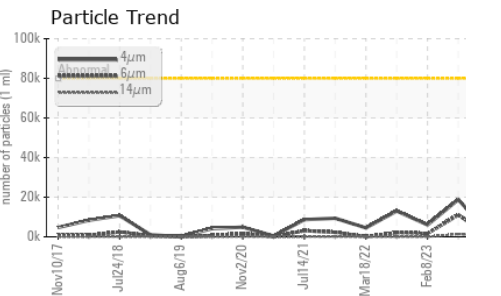
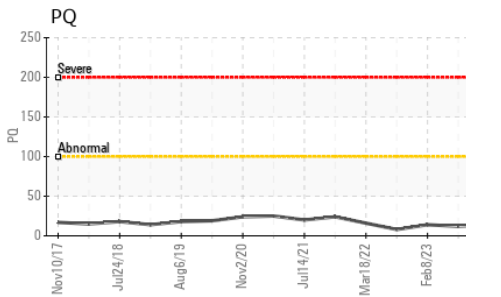
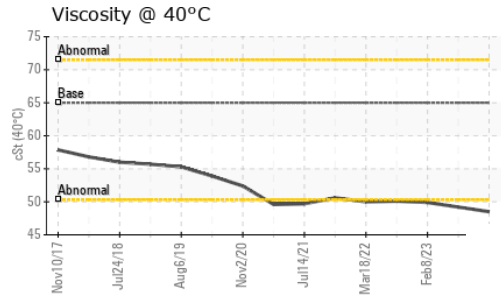
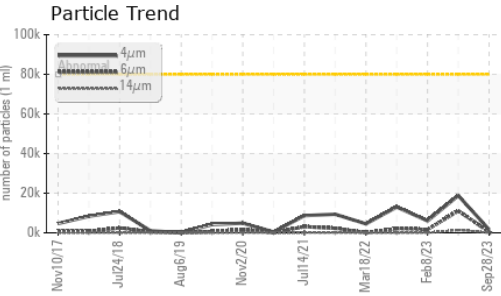
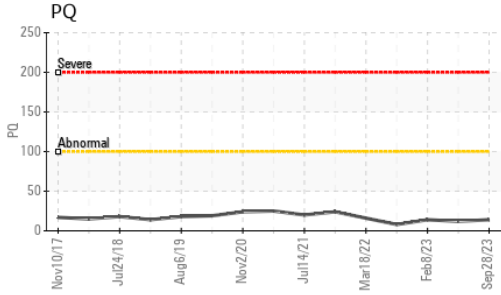
**FLUID CLEANLINESS**

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>80000	<b>1652</b>	18789	6021
Particles >6µm	ASTM D7647	>5000	<b>465</b>	▲ 11114	1677
Particles >14µm	ASTM D7647	>640	<b>34</b>	▲ 1398	25
Particles >21µm	ASTM D7647	>160	<b>7</b>	▲ 256	2
Particles >38µm	ASTM D7647	>40	<b>0</b>	0	0
Particles >71µm	ASTM D7647	>10	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>23/19/16	<b>18/16/12</b>	▲ 21/21/18	20/18/12

**FLUID DEGRADATION**

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 1.0	<b>0.61</b>	0.65	0.63

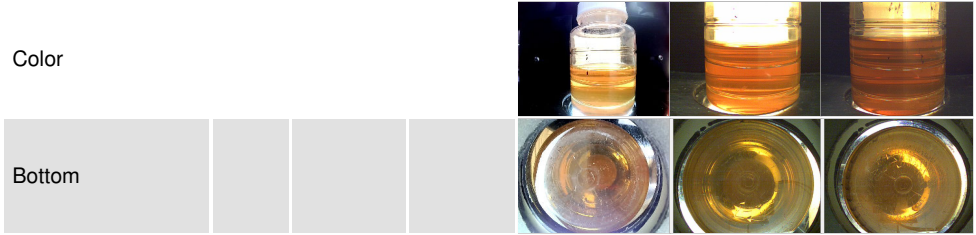
# OIL ANALYSIS REPORT



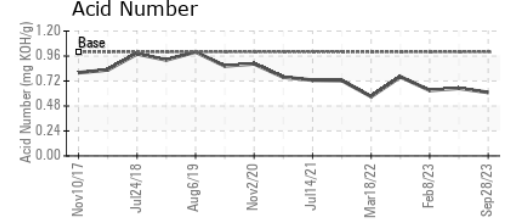
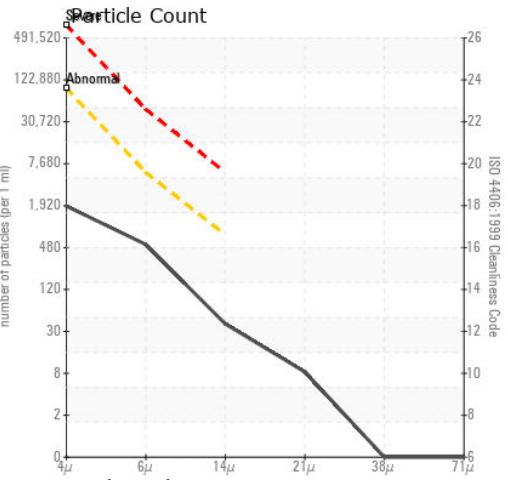
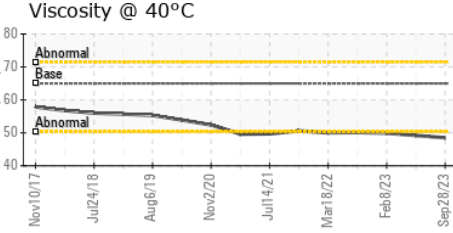
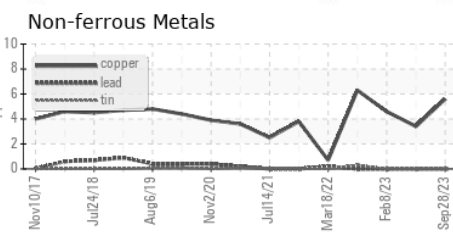
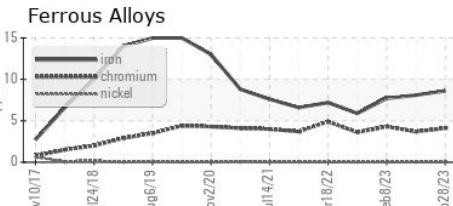
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	<b>LIGHT</b>	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE
Precipitate	scalar	*Visual	NONE	<b>NONE</b>	NONE
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML
Emulsified Water	scalar	*Visual	>0.1	<b>NEG</b>	NEG
Free Water	scalar	*Visual		<b>NEG</b>	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	65	<b>48.5</b>	49.2

SAMPLE IMAGES	method	limit/base	current	history1	history2
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## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0179195  
**Lab Number** : 05968844  
**Unique Number** : 10675395  
**Test Package** : CONST ( Additional Tests: PQ )

**ACNAB ACCREDITED**  
 Certificate L2367

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)

**Received** : 04 Oct 2023  
**Diagnosed** : 06 Oct 2023  
**Diagnostician** : Don Baldrige

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