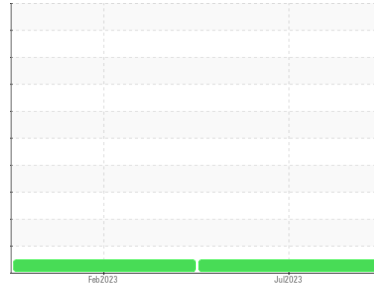




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**L-440**

Component  
**Hydraulic System**

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

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

### Wear

All component wear rates are normal.

### Contamination

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

### 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>WC0828525</b>	WC0780387	---
Sample Date	Client Info			<b>13 Jul 2023</b>	21 Feb 2023	---
Machine Age	hrs	Client Info		<b>1062</b>	528	---
Oil Age	hrs	Client Info		<b>1062</b>	528	---
Oil Changed	Client Info			<b>Not Chngd</b>	Not Chngd	---
Sample Status				<b>NORMAL</b>	NORMAL	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	<b>2</b>	<1	---
Chromium	ppm	ASTM D5185m	>10	<b>1</b>	<1	---
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	0	---
Titanium	ppm	ASTM D5185m		<b>0</b>	0	---
Silver	ppm	ASTM D5185m		<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m	>10	<b>1</b>	<1	---
Lead	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	---
Copper	ppm	ASTM D5185m	>75	<b>2</b>	1	---
Tin	ppm	ASTM D5185m	>10	<b>0</b>	0	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	---
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>0</b>	0	---
Barium	ppm	ASTM D5185m		<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m		<b>&lt;1</b>	<1	---
Manganese	ppm	ASTM D5185m		<b>0</b>	0	---
Magnesium	ppm	ASTM D5185m		<b>1</b>	<1	---
Calcium	ppm	ASTM D5185m	87	<b>97</b>	95	---
Phosphorus	ppm	ASTM D5185m	727	<b>648</b>	618	---
Zinc	ppm	ASTM D5185m	900	<b>869</b>	816	---
Sulfur	ppm	ASTM D5185m	1500	<b>1844</b>	1868	---

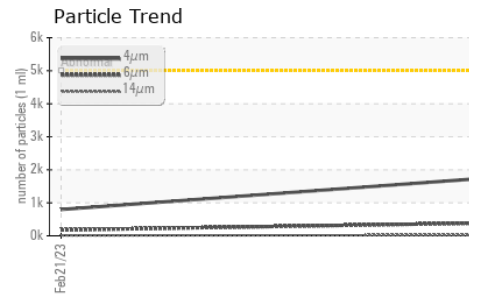
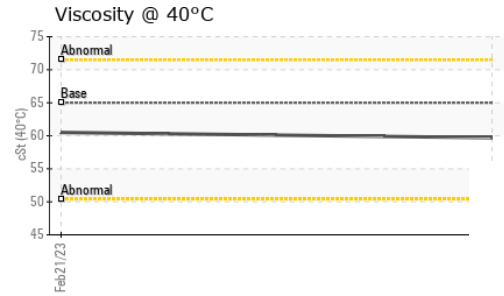
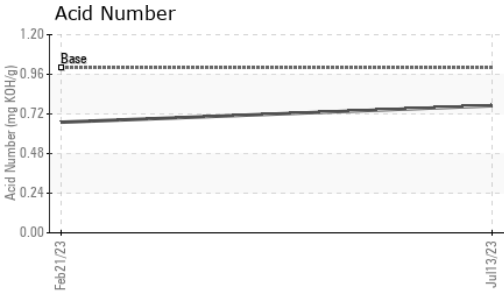
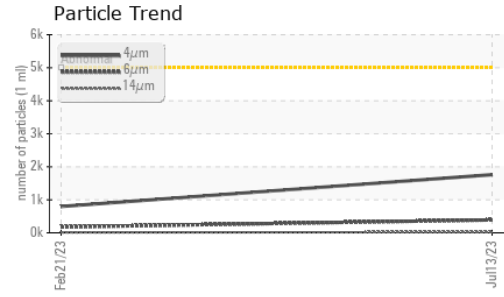
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	---
Sodium	ppm	ASTM D5185m		<b>0</b>	2	---
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	2	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	<b>1761</b>	798	---
Particles >6µm		ASTM D7647	>1300	<b>391</b>	177	---
Particles >14µm		ASTM D7647	>160	<b>20</b>	12	---
Particles >21µm		ASTM D7647	>40	<b>4</b>	3	---
Particles >38µm		ASTM D7647	>10	<b>0</b>	0	---
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>18/16/11</b>	17/15/11	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	<b>0.77</b>	0.67	---



# OIL ANALYSIS REPORT



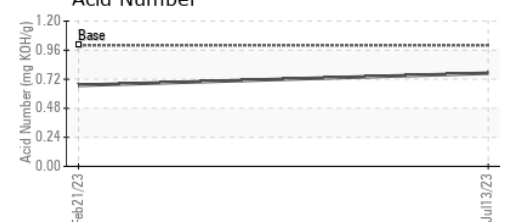
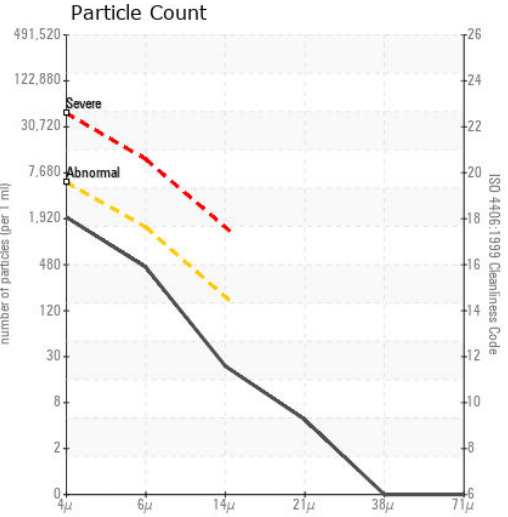
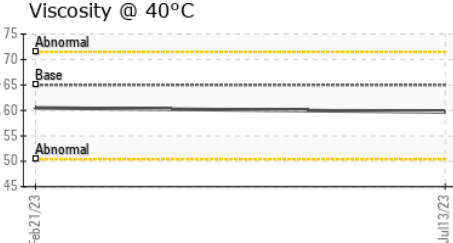
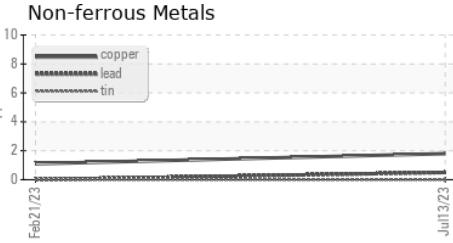
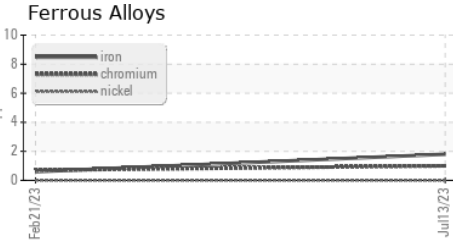
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 65	59.7	60.5	---

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



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : WC0828525 Received : 19 Jul 2023  
 Lab Number : 05902236 Diagnosed : 20 Jul 2023  
 Unique Number : 10563592 Diagnostician : Wes Davis  
 Test Package : CONST

**DUKE LAZZARA**  
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 RALEIGH, NC  
 US 27603  
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 NICK.DIXON@DUKELAZZAM.COM  
 T: (919)760-7797  
 F:

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)