



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

### [SHOWTIME LOGGING]

Machine Id  
**JOHN DEERE 648L-II 1DW648LBTNF714374**

Component  
**Hydraulic System**

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

### RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0222064</b>	JR0212297	JR0170779
Sample Date		Client Info		<b>19 Jun 2024</b>	24 May 2024	15 Aug 2023
Machine Age	hrs	Client Info		<b>2039</b>	1977	1442
Oil Age	hrs	Client Info		<b>0</b>	1977	0
Filter Age	hrs	Client Info		<b>0</b>	1977	0
Oil Changed		Client Info		<b>N/A</b>	Not Changd	Not Changd
Filter Changed		Client Info		<b>N/A</b>	Not Changd	Not Changd
Sample Status				<b>ABNORMAL</b>	ABNORMAL	NORMAL

### WEAR

All component wear rates are normal.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
Iron	ppm	ASTM D5185m	>20	<b>9</b>	7	<1
Chromium	ppm	ASTM D5185m	>10	<b>4</b>	3	<1
Nickel	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m		<b>&lt;1</b>	1	0
Aluminum	ppm	ASTM D5185m	>10	<b>3</b>	1	1
Lead	ppm	ASTM D5185m	>10	<b>1</b>	<1	<1
Copper	ppm	ASTM D5185m	>75	<b>2</b>	3	<1
Tin	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
White Metal	scalar	*Visual	NONE	<b>LIGHT</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

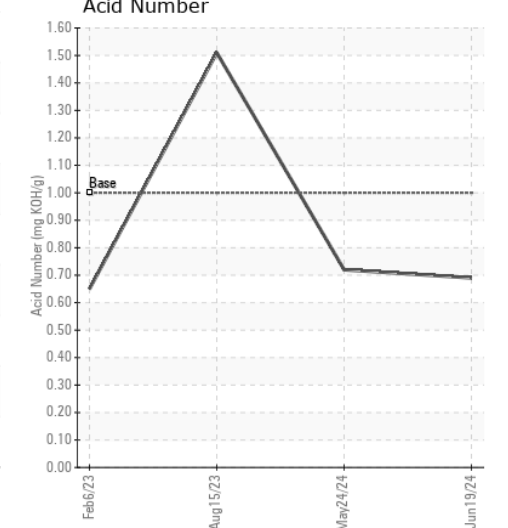
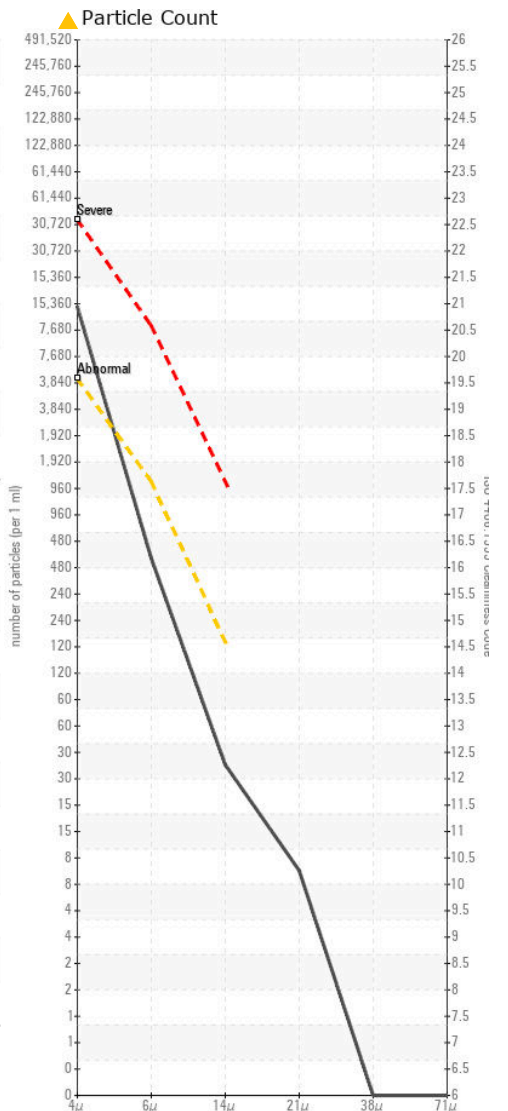
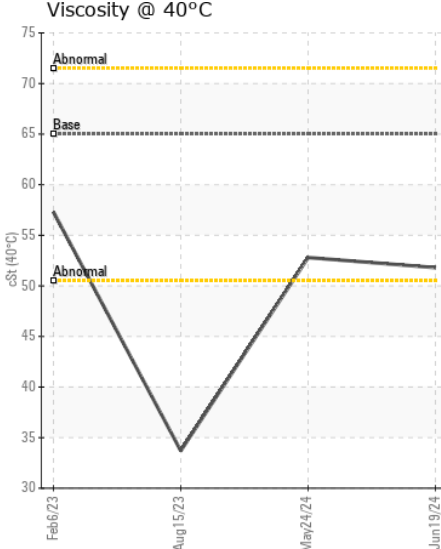
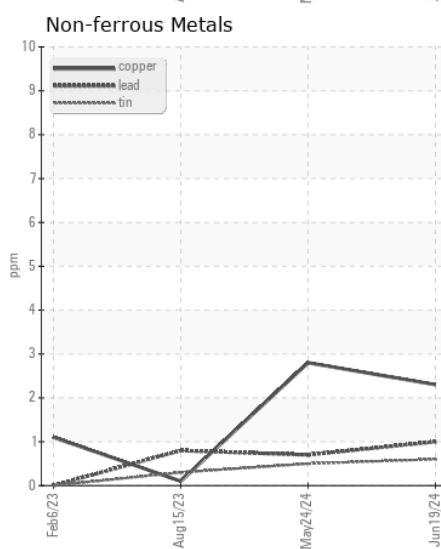
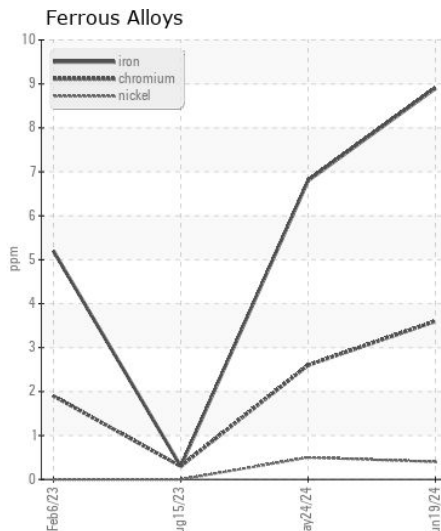
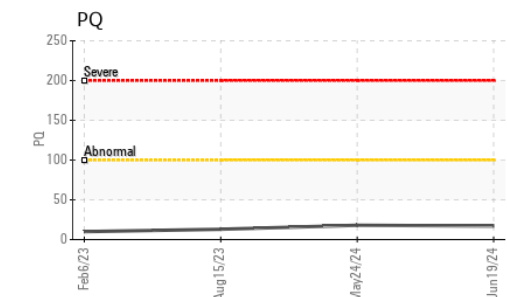
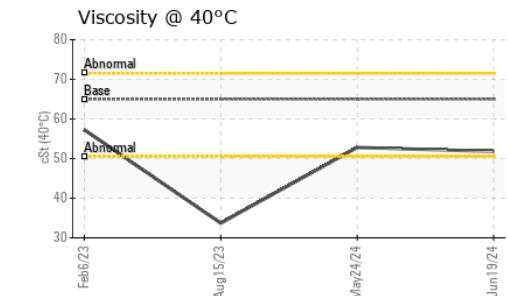
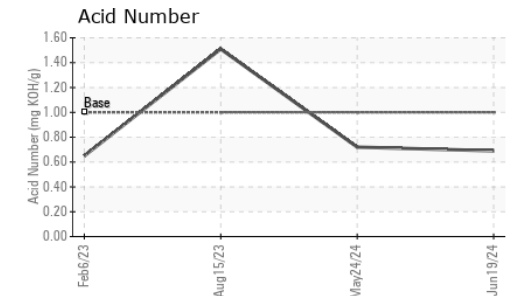
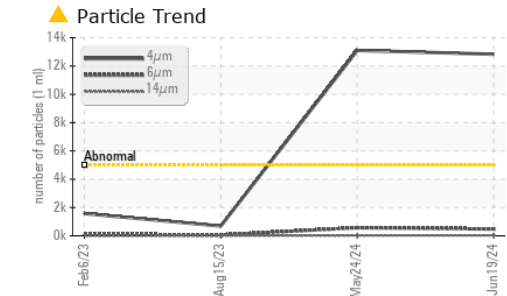
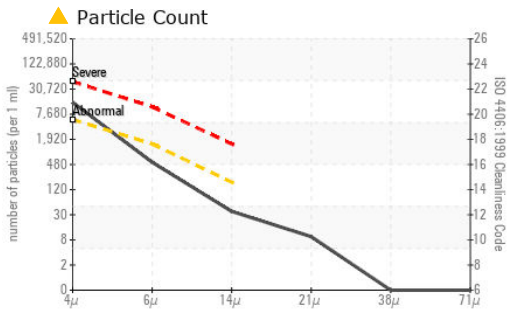
There is a high amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>8</b>	6	3
Potassium	ppm	ASTM D5185m	>20	<b>4</b>	3	2
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>5000	<b>▲ 12832</b>	▲ 13099	689
Particles >6µm		ASTM D7647	>1300	<b>477</b>	568	60
Particles >14µm		ASTM D7647	>160	<b>32</b>	22	6
Particles >21µm		ASTM D7647	>40	<b>8</b>	4	1
Particles >38µm		ASTM D7647	>10	<b>0</b>	0	0
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>▲ 21/16/12</b>	▲ 21/16/12	17/13/10
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	<b>NEG</b>	NEG	NEG

### FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		<b>&lt;1</b>	0	2
Boron	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Barium	ppm	ASTM D5185m		<b>2</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>2</b>	2	<1
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>6</b>	6	107
Calcium	ppm	ASTM D5185m	87	<b>707</b>	463	3338
Phosphorus	ppm	ASTM D5185m	727	<b>905</b>	615	976
Zinc	ppm	ASTM D5185m	900	<b>1108</b>	817	1230
Sulfur	ppm	ASTM D5185m	1500	<b>2592</b>	1971	3911
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	<b>0.69</b>	0.72	1.51
Visc @ 40°C	cSt	ASTM D445	65	<b>51.8</b>	52.8	33.7



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0222064 **Received** : 21 Jun 2024  
**Lab Number** : 06217256 **Tested** : 25 Jun 2024  
**Unique Number** : 11090120 **Diagnosed** : 25 Jun 2024 - Don Baldrige  
**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)