



# OIL ANALYSIS REPORT

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

Area

[127686]

Machine Id

JOHN DEERE 824L 1DW824LXVML712912

Component

Hydraulic System

Fluid

JOHN DEERE HYDRAU (--- QTS)

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WE0007983</b>	WE0006911	WE0006446
Sample Date		Client Info		<b>15 Jul 2024</b>	11 Apr 2024	05 Feb 2024
Machine Age	hrs	Client Info		<b>5107</b>	4524	4097
Oil Age	hrs	Client Info		<b>0</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>N/A</b>	Not Changd	Changed
Filter Changed		Client Info		<b>N/A</b>	Not Changd	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
Iron	ppm	ASTM D5185m	>20	<b>6</b>	6	17
Chromium	ppm	ASTM D5185m	>10	<b>2</b>	2	8
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Silver	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>10	<b>4</b>	<1	1
Lead	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	0
Copper	ppm	ASTM D5185m	>75	<b>4</b>	3	6
Tin	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

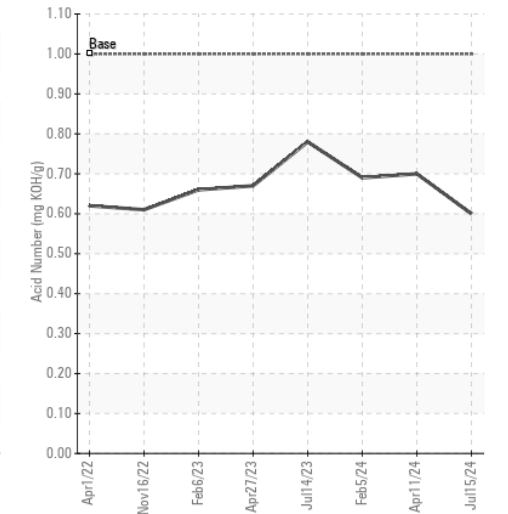
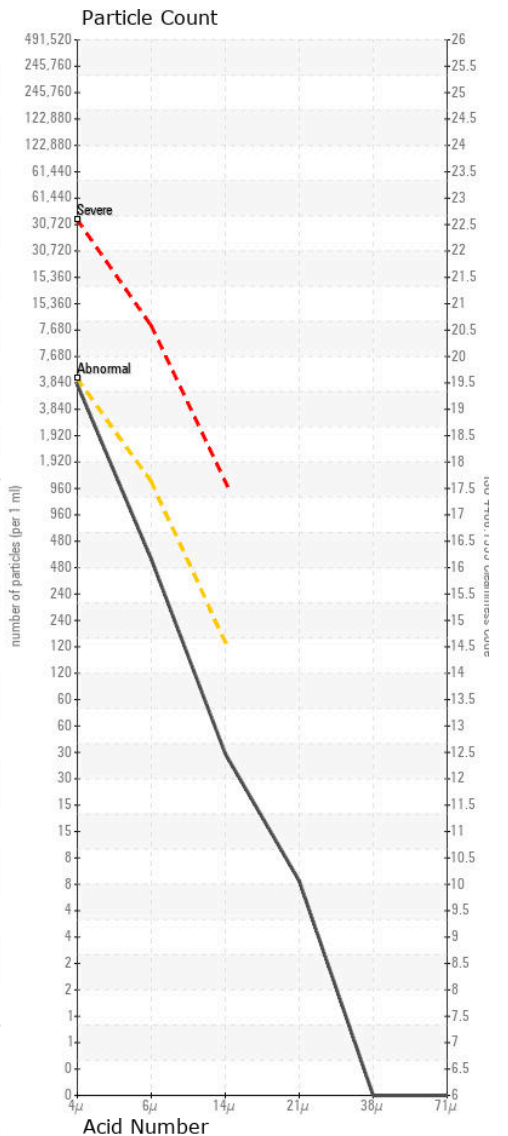
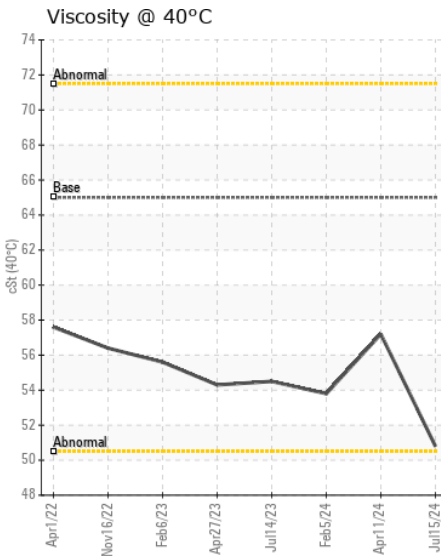
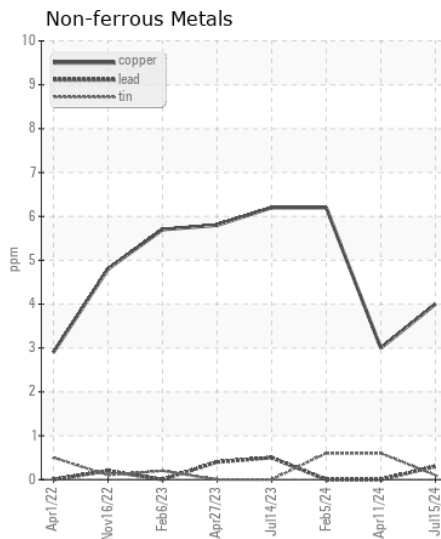
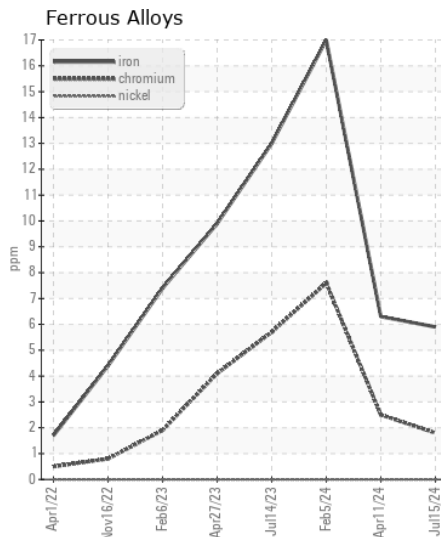
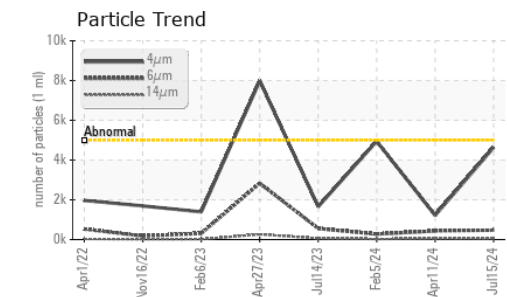
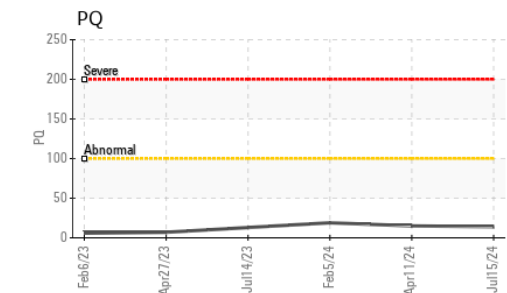
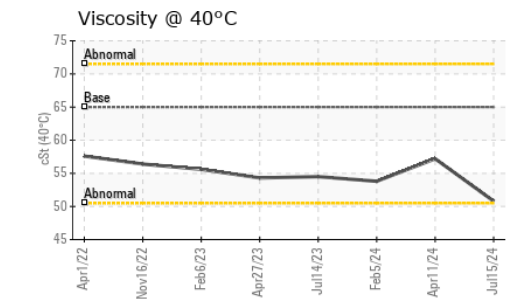
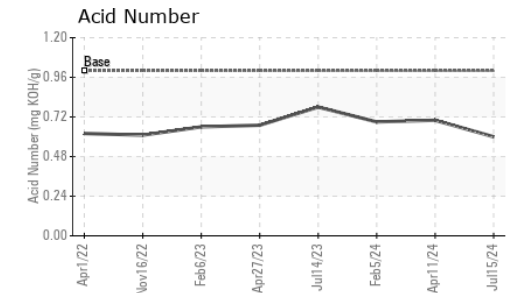
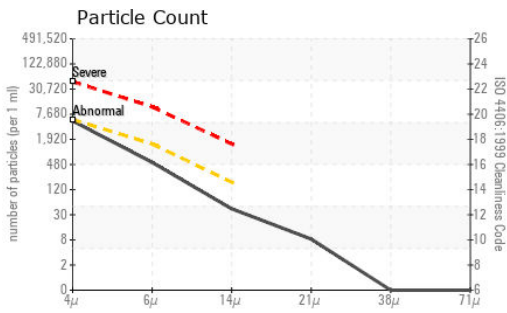
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>20	<b>&lt;1</b>	2	3
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	0	0
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>5000	<b>4632</b>	1216	4944
Particles >6µm		ASTM D7647	>1300	<b>472</b>	437	277
Particles >14µm		ASTM D7647	>160	<b>37</b>	42	25
Particles >21µm		ASTM D7647	>40	<b>7</b>	12	7
Particles >38µm		ASTM D7647	>10	<b>0</b>	1	1
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>19/16/12</b>	17/16/13	19/15/12
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>0</b>	4	6
Boron	ppm	ASTM D5185m		<b>0</b>	0	0
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Manganese	ppm	ASTM D5185m		<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185m		<b>2</b>	0	<1
Calcium	ppm	ASTM D5185m	87	<b>69</b>	94	84
Phosphorus	ppm	ASTM D5185m	727	<b>542</b>	607	638
Zinc	ppm	ASTM D5185m	900	<b>708</b>	674	819
Sulfur	ppm	ASTM D5185m	1500	<b>1554</b>	1739	1618
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	<b>0.60</b>	0.70	0.69
Visc @ 40°C	cSt	ASTM D445	65	<b>50.8</b>	57.2	53.8



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : WE0007983

Lab Number : 06240192

Unique Number : 11129026

Test Package : CONST ( Additional Tests: PQ )

Received : 18 Jul 2024

Tested : 19 Jul 2024

Diagnosed : 19 Jul 2024 - Wes Davis

WARRIOR TRACTOR AND EQUIPMENT - NORTHPORT

P.O. BOX 412

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US 35476

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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)