



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



Area  
**[W63110]**  
 Machine Id  
**JOHN DEERE 524L 1DW524LZKKF701078**  
 Component  
**Rear Differential**  
 Fluid  
**JOHN DEERE HY-GARD HYD/TRANS (--- GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor. ( Customer Sample Comment: W63110 )

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0198596</b>	JR0172054	JR0151407
Sample Date		Client Info		<b>16 Jan 2024</b>	05 Jun 2023	01 Dec 2022
Machine Age	hrs	Client Info		<b>4508</b>	4508	4032
Oil Age	hrs	Client Info		<b>4032</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		ASTM D8184		<b>13</b>	17	7
Iron	ppm	ASTM D5185m	>500	<b>23</b>	26	60
Chromium	ppm	ASTM D5185m	>10	<b>0</b>	0	<1
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>&lt;1</b>	1	<1
Lead	ppm	ASTM D5185m	>25	<b>25</b>	15	65
Copper	ppm	ASTM D5185m	>100	<b>7</b>	4	13
Tin	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	MODER	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

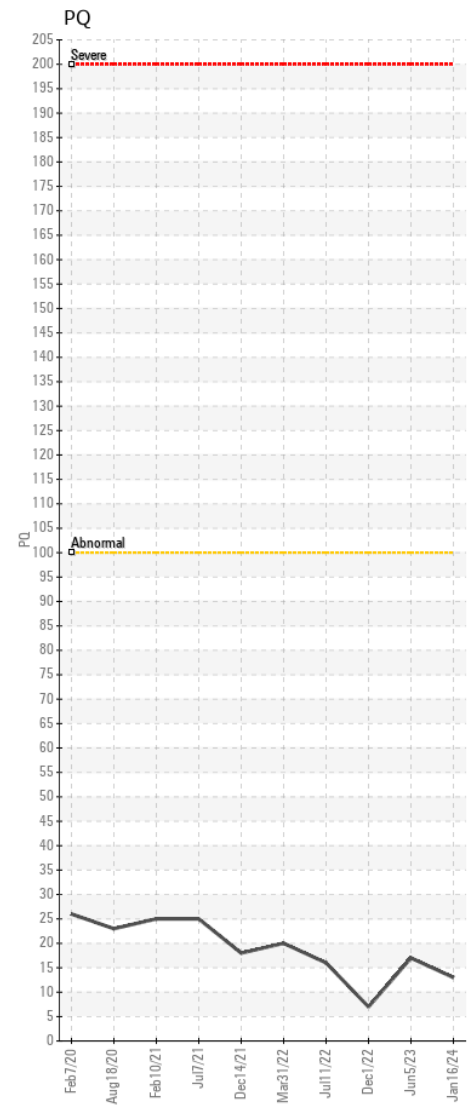
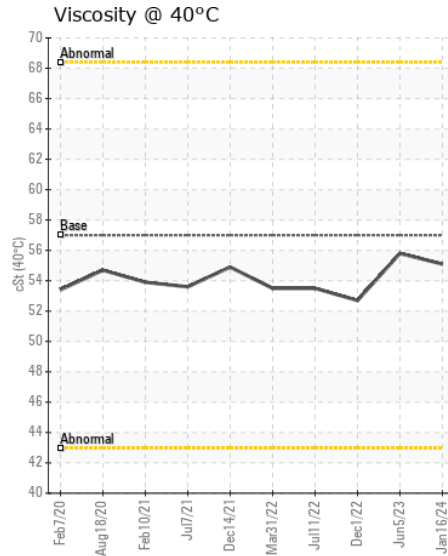
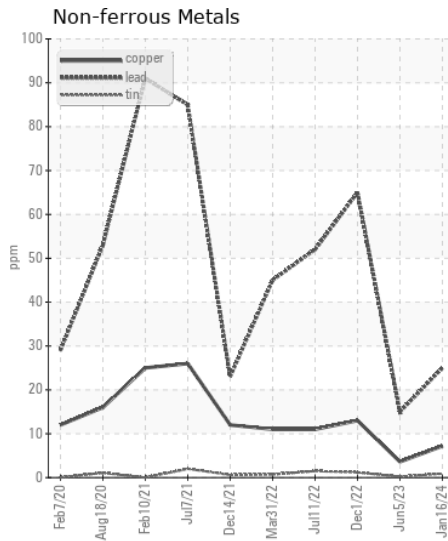
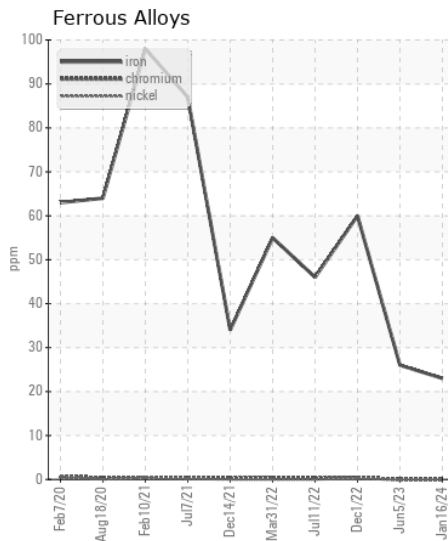
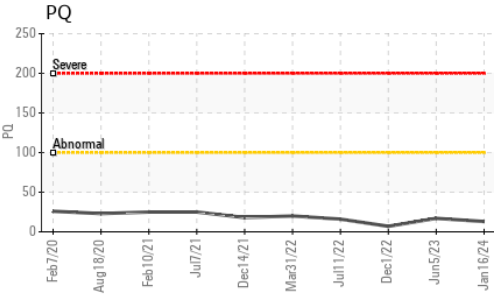
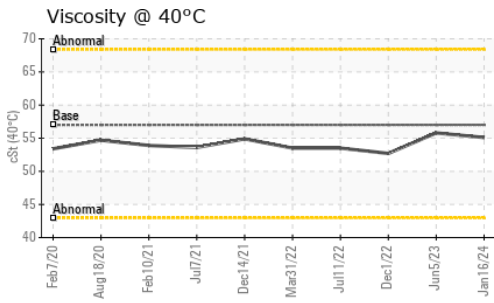
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>75	<b>4</b>	7	4
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	2	0
Water		WC Method	>.2	<b>NEG</b>	NEG	NEG
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	>.2	<b>NEG</b>	NEG	NEG

### FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		<b>1</b>	0	4
Boron	ppm	ASTM D5185m	6	<b>1</b>	0	6
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	0	<b>3</b>	3	2
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	1
Magnesium	ppm	ASTM D5185m	145	<b>101</b>	94	93
Calcium	ppm	ASTM D5185m	3570	<b>3427</b>	3652	3316
Phosphorus	ppm	ASTM D5185m	1290	<b>1066</b>	1034	924
Zinc	ppm	ASTM D5185m	1640	<b>1245</b>	1239	1084
Sulfur	ppm	ASTM D5185m		<b>3874</b>	4072	3774
Visc @ 40°C	cSt	ASTM D445	57.0	<b>55.1</b>	55.8	52.7



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0198596 **Received** : 18 Jan 2024  
**Lab Number** : 06064517 **Diagnosed** : 21 Jan 2024  
**Unique Number** : 10835899 **Diagnostician** : Don Baldrige  
**Test Package** : CONST ( Additional Tests: PQ )

**JRE - CHARLOTTE**  
 9550 STATESVILLE ROAD  
 CHARLOTTE, NC  
 US 28269  
 Contact: CHARLOTTE SHOP  
 myoung@jamesriverequipment.com  
 T: (704)597-0211  
 F: (704)596-6198

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)