



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



Area

**[W67070]**

Machine Id

**JOHN DEERE 524K 1DW524KZTJF688376**

Component

**Rear Differential**

Fluid

**JOHN DEERE HY-GARD HYDRAULIC/RANSMISSION (5 GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor. ( Customer Sample Comment: W67070 )

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0215418</b>	JR0143725	JR0119033
Sample Date		Client Info		<b>20 May 2024</b>	14 Sep 2022	27 Apr 2022
Machine Age	hrs	Client Info		<b>4544</b>	3464	2956
Oil Age	hrs	Client Info		<b>4036</b>	0	500
Filter Age	hrs	Client Info		<b>0</b>	0	500
Oil Changed		Client Info		<b>Changed</b>	Not Changd	Changed
Filter Changed		Client Info		<b>N/A</b>	N/A	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
PQ		ASTM D8184		<b>56</b>	59	16
Iron	ppm	ASTM D5185m	>500	<b>484</b>	213	2
Chromium	ppm	ASTM D5185m	>10	<b>3</b>	1	<1
Nickel	ppm	ASTM D5185m	>10	<b>3</b>	1	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185m		<b>1</b>	<1	<1
Aluminum	ppm	ASTM D5185m	>25	<b>1</b>	2	1
Lead	ppm	ASTM D5185m	>25	<b>5</b>	6	<1
Copper	ppm	ASTM D5185m	>100	<b>24</b>	18	0
Tin	ppm	ASTM D5185m	>10	<b>3</b>	2	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

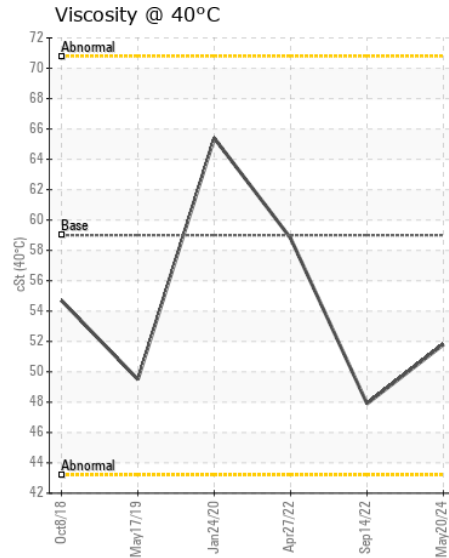
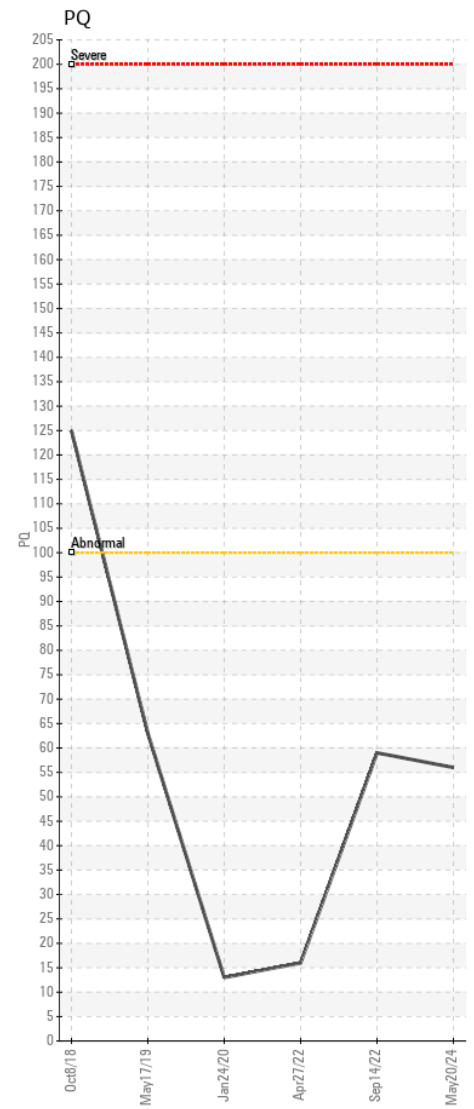
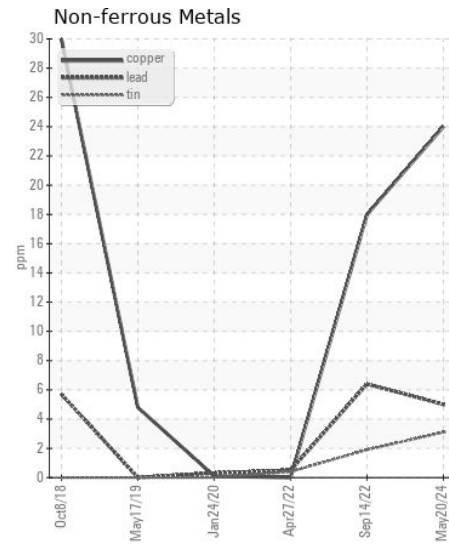
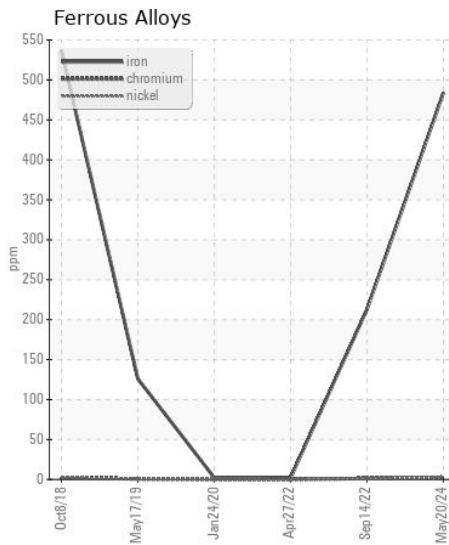
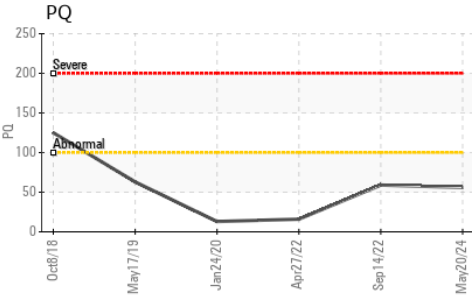
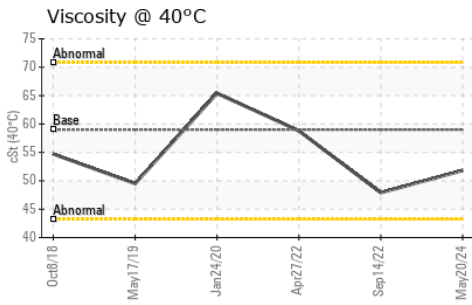
There is no indication of any contamination in the oil.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Silicon	ppm	ASTM D5185m	>75	<b>32</b>	13	5
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	0	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.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sodium	ppm	ASTM D5185m		<b>2</b>	3	<1
Boron	ppm	ASTM D5185m		<b>2</b>	9	3
Barium	ppm	ASTM D5185m		<b>1</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>2</b>	3	<1
Manganese	ppm	ASTM D5185m		<b>7</b>	3	<1
Magnesium	ppm	ASTM D5185m		<b>101</b>	96	113
Calcium	ppm	ASTM D5185m		<b>3424</b>	3326	3542
Phosphorus	ppm	ASTM D5185m		<b>1064</b>	935	1062
Zinc	ppm	ASTM D5185m		<b>1176</b>	1185	1210
Sulfur	ppm	ASTM D5185m		<b>4333</b>	3580	3316
Visc @ 40°C	cSt	ASTM D445	59	<b>51.8</b>	47.9	58.8



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0215418 **Received** : 24 May 2024  
**Lab Number** : 06191282 **Tested** : 29 May 2024  
**Unique Number** : 11048034 **Diagnosed** : 29 May 2024 - Sean Felton  
**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)