



**James River  
Equipment**

**OIL ANALYSIS REPORT**

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



Machine Id  
**2023**

Component  
**Center Differential**

Fluid  
**JOHN DEERE HY-GARD HYD/TRANS (36 QTS)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0195540</b>	JR0184585	JR0169986
Sample Date		Client Info		<b>16 Feb 2024</b>	08 Nov 2023	21 Aug 2023
Machine Age	hrs	Client Info		<b>3509</b>	3022	2472
Oil Age	hrs	Client Info		<b>500</b>	3000	0
Filter Age	hrs	Client Info		<b>500</b>	3000	0
Oil Changed		Client Info		<b>N/A</b>	Not Changd	Not Changd
Filter Changed		Client Info		<b>N/A</b>	Changed	Not Changd
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

PQ		ASTM D8184		<b>124</b>	41	58
Iron	ppm	ASTM D5185m	>500	<b>199</b>	140	123
Chromium	ppm	ASTM D5185m	>10	<b>2</b>	<1	<1
Nickel	ppm	ASTM D5185m	>10	<b>5</b>	1	1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Silver	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>&lt;1</b>	3	2
Lead	ppm	ASTM D5185m	>25	<b>&lt;1</b>	12	8
Copper	ppm	ASTM D5185m	>100	<b>134</b>	91	68
Tin	ppm	ASTM D5185m	>10	<b>5</b>	5	4
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

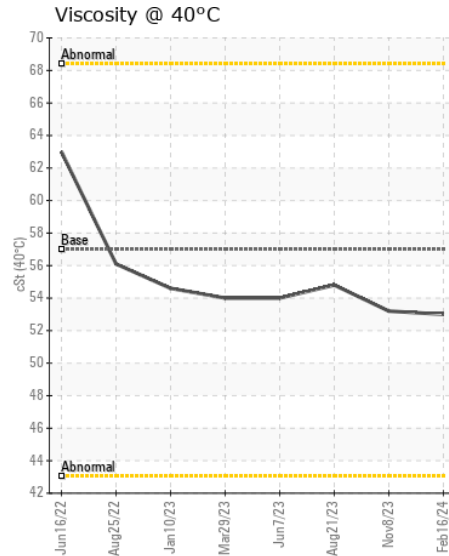
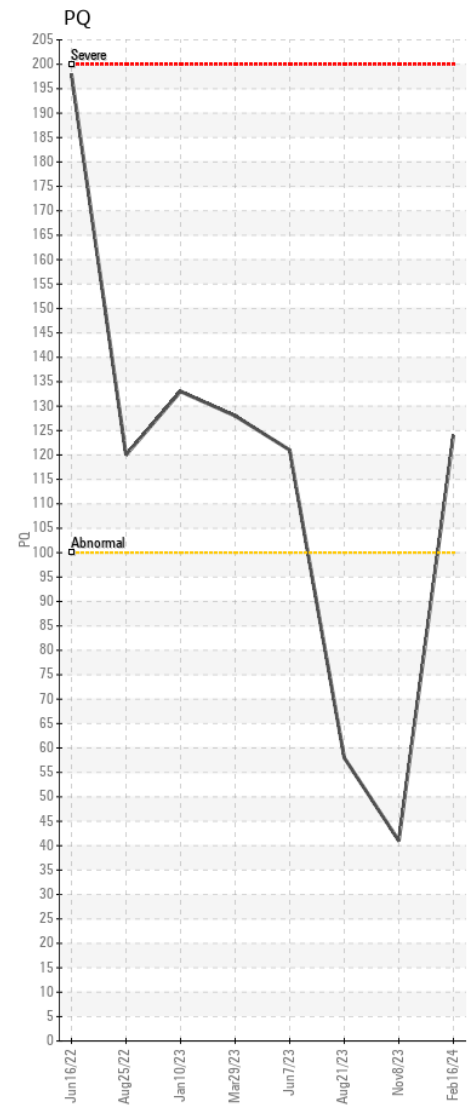
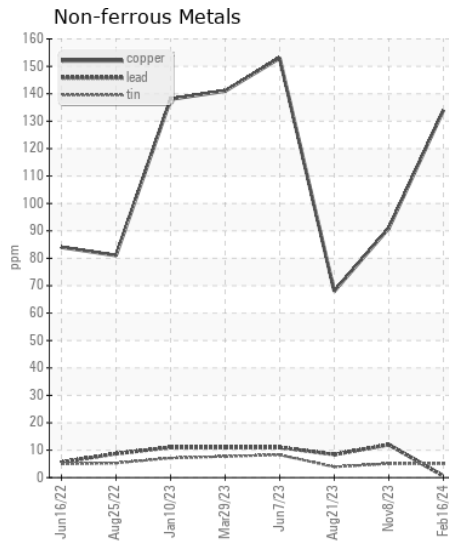
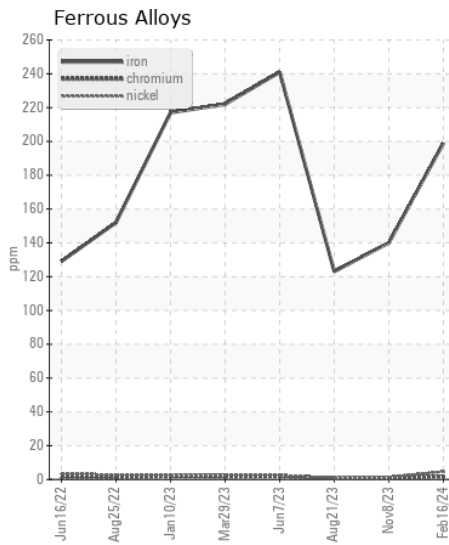
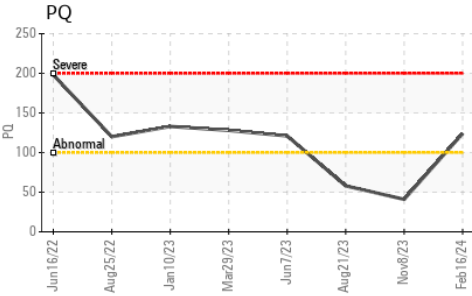
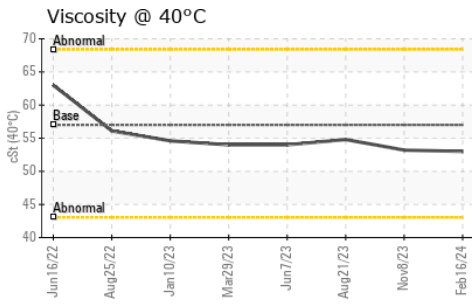
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>75	<b>13</b>	9	8
Potassium	ppm	ASTM D5185m	>20	<b>1</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>	LIGHT	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>0</b>	4	4
Boron	ppm	ASTM D5185m	6	<b>13</b>	13	16
Barium	ppm	ASTM D5185m	0	<b>6</b>	0	0
Molybdenum	ppm	ASTM D5185m	0	<b>5</b>	3	4
Manganese	ppm	ASTM D5185m		<b>10</b>	9	9
Magnesium	ppm	ASTM D5185m	145	<b>100</b>	107	116
Calcium	ppm	ASTM D5185m	3570	<b>3051</b>	3189	3499
Phosphorus	ppm	ASTM D5185m	1290	<b>932</b>	1035	1075
Zinc	ppm	ASTM D5185m	1640	<b>1179</b>	1222	1307
Sulfur	ppm	ASTM D5185m		<b>3453</b>	3285	4262
Visc @ 40°C	cSt	ASTM D445	57.0	<b>53.0</b>	53.2	54.8



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0195540 **Received** : 22 Feb 2024  
**Lab Number** : 06097959 **Tested** : 23 Feb 2024  
**Unique Number** : 10896189 **Diagnosed** : 25 Feb 2024 - Don Baldrige  
**Test Package** : CONST ( Additional Tests: PQ )

**PATRIOT DEVELOPMENT CORP**  
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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)