



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



Area

**[W66345]**

Machine Id

**CATERPILLAR 938M CAT0938MJJ3R04964**

Component

**Front Differential**

Fluid

**JOHN DEERE HY-GARD HYDRAULIC/RANSMISSION (10 GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor. ( Customer Sample Comment: W66345 )

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0206709</b>	JR0192649	JR0161833
Sample Date		Client Info		<b>23 Apr 2024</b>	13 Dec 2023	19 May 2023
Machine Age	hrs	Client Info		<b>11048</b>	10324	9508
Oil Age	hrs	Client Info		<b>8105</b>	8197	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Not Changd	N/A
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	ABNORMAL	NORMAL

### WEAR

All component wear rates are normal.

Test	UOM	Method	Limit/Abn	Current	History1	History2
PQ		ASTM D8184		<b>51</b>	11	18
Iron	ppm	ASTM D5185m	>500	<b>116</b>	13	14
Chromium	ppm	ASTM D5185m	>3	<b>&lt;1</b>	0	0
Nickel	ppm	ASTM D5185m	>3	<b>2</b>	0	0
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>30	<b>1</b>	<1	<1
Lead	ppm	ASTM D5185m	>13	<b>0</b>	▲ 25	2
Copper	ppm	ASTM D5185m	>103	<b>0</b>	7	0
Tin	ppm	ASTM D5185m	>5	<b>&lt;1</b>	1	<1
Vanadium	ppm	ASTM D5185m		<b>0</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.

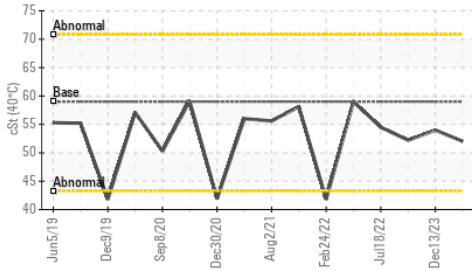
Test	UOM	Method	Limit/Abn	Current	History1	History2
Silicon	ppm	ASTM D5185m	>100	<b>11</b>	3	3
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	<1	<1
Water		WC Method	>.2	<b>NEG</b>	NEG	NEG
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	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

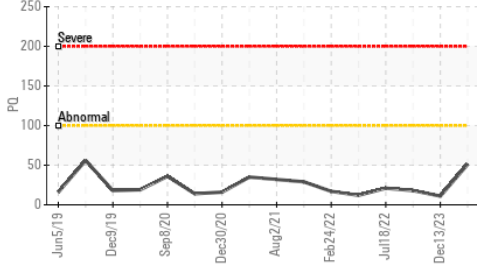
The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sodium	ppm	ASTM D5185m		<b>&lt;1</b>	2	<1
Boron	ppm	ASTM D5185m		<b>1</b>	0	2
Barium	ppm	ASTM D5185m		<b>2</b>	<1	0
Molybdenum	ppm	ASTM D5185m		<b>0</b>	<1	<1
Manganese	ppm	ASTM D5185m		<b>2</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>98</b>	99	104
Calcium	ppm	ASTM D5185m		<b>3237</b>	3506	3472
Phosphorus	ppm	ASTM D5185m		<b>1028</b>	1060	1011
Zinc	ppm	ASTM D5185m		<b>1197</b>	1280	1307
Sulfur	ppm	ASTM D5185m		<b>3872</b>	3636	4276
Visc @ 40°C	cSt	ASTM D445	59	<b>52.0</b>	54.0	52.2

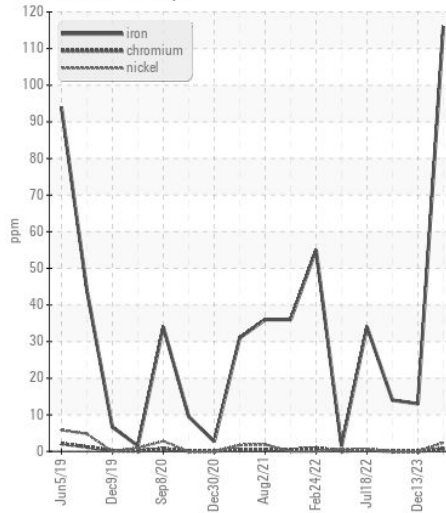
Viscosity @ 40°C



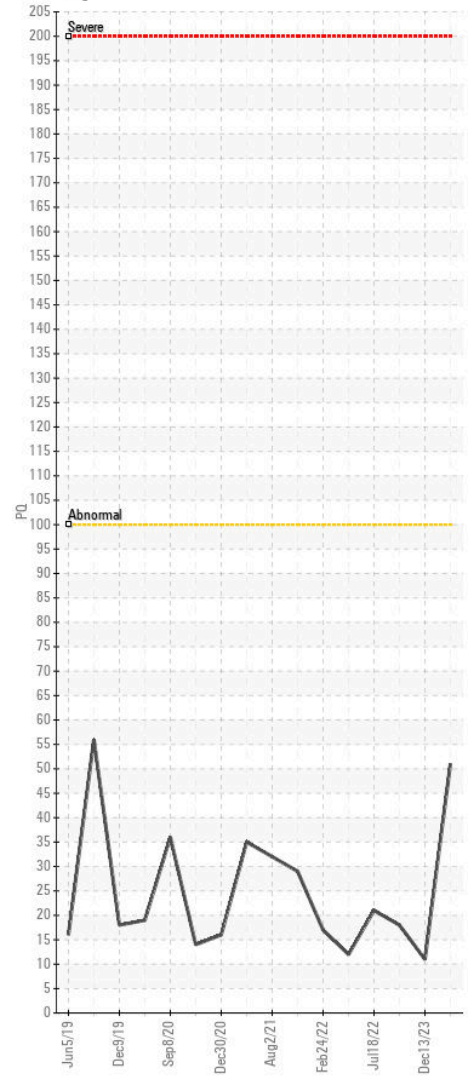
PQ



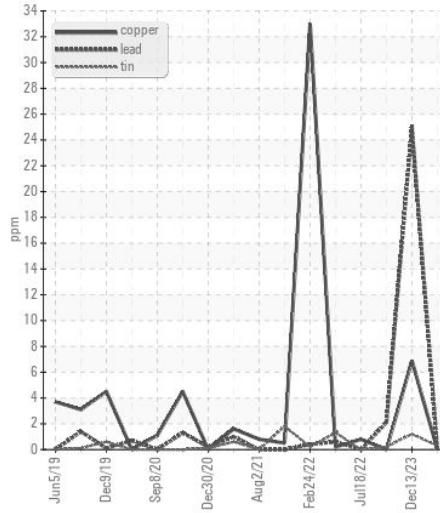
Ferrous Alloys



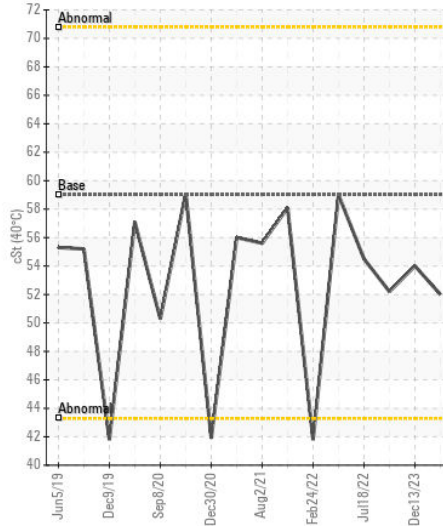
PQ



Non-ferrous Metals



Viscosity @ 40°C



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0206709 **Received** : 25 Apr 2024  
**Lab Number** : 06160669 **Tested** : 26 Apr 2024  
**Unique Number** : 10996092 **Diagnosed** : 27 Apr 2024 - Don Baldrige  
**Test Package** : CONST ( Additional Tests: PQ )

**JRE - CHARLOTTE**  
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 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)