



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



Machine Id  
**JOHN DEERE 844J DW844JX613105**  
Component  
**Rear Differential**  
Fluid  
**JOHN DEERE GL-5 80W90 (--- GAL)**

### RECOMMENDATION

We advise that you check all areas where dirt can enter the system. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0186425</b>	JR0197534	JR0197880
Sample Date		Client Info		<b>23 Apr 2024</b>	18 Jan 2024	16 Jan 2024
Machine Age	hrs	Client Info		<b>35162</b>	34682	34513
Oil Age	hrs	Client Info		<b>0</b>	531	362
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Not Changd	Not Changd
Filter Changed		Client Info		<b>None</b>	None	N/A
Sample Status				<b>ABNORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
PQ		ASTM D8184		<b>220</b>	93	81
Iron	ppm	ASTM D5185m	>1501	<b>257</b>	143	124
Chromium	ppm	ASTM D5185m	>11	<b>1</b>	1	<1
Nickel	ppm	ASTM D5185m	>10	<b>2</b>	1	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>21	<b>7</b>	2	3
Lead	ppm	ASTM D5185m	>51	<b>0</b>	<1	0
Copper	ppm	ASTM D5185m	>101	<b>25</b>	17	13
Tin	ppm	ASTM D5185m	>10	<b>0</b>	<1	0
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

Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

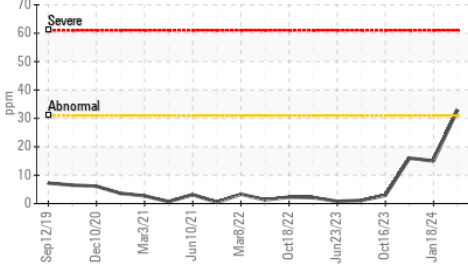
Silicon	ppm	ASTM D5185m	>31	<b>33</b>	15	16
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	2	<1
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	<b>NEG</b>	NEG	NEG

### FLUID CONDITION

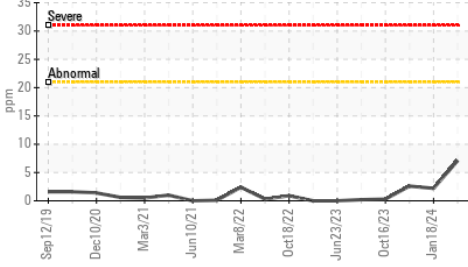
The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m	>51	<b>3</b>	0	2
Boron	ppm	ASTM D5185m		<b>0</b>	<1	5
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>0</b>	<1	5
Manganese	ppm	ASTM D5185m		<b>3</b>	2	<1
Magnesium	ppm	ASTM D5185m		<b>4</b>	19	35
Calcium	ppm	ASTM D5185m		<b>151</b>	566	602
Phosphorus	ppm	ASTM D5185m		<b>2328</b>	2057	2042
Zinc	ppm	ASTM D5185m		<b>62</b>	199	214
Sulfur	ppm	ASTM D5185m		<b>30652</b>	24945	22133
Visc @ 40°C	cSt	ASTM D445		<b>144</b>	123	123

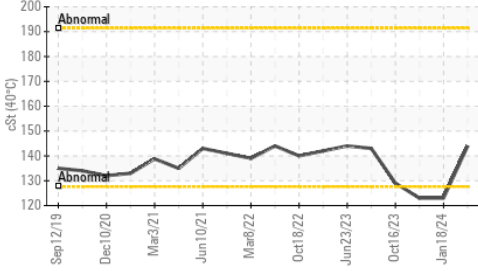
▲ Silicon (ppm)



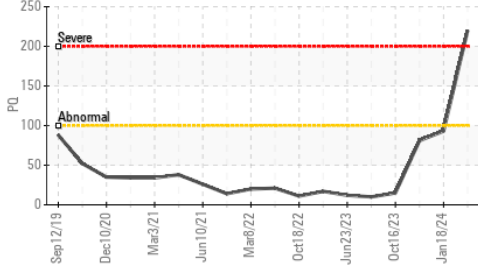
● Aluminum (ppm)



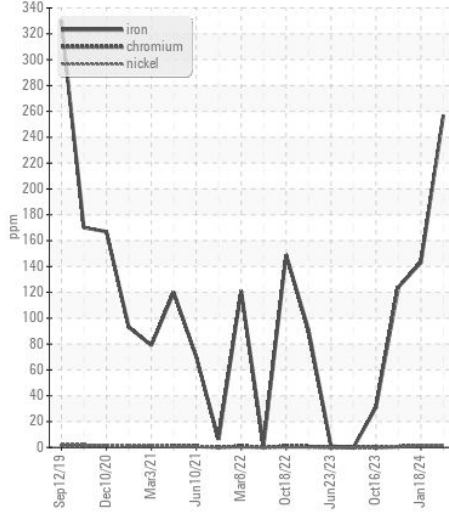
Viscosity @ 40°C



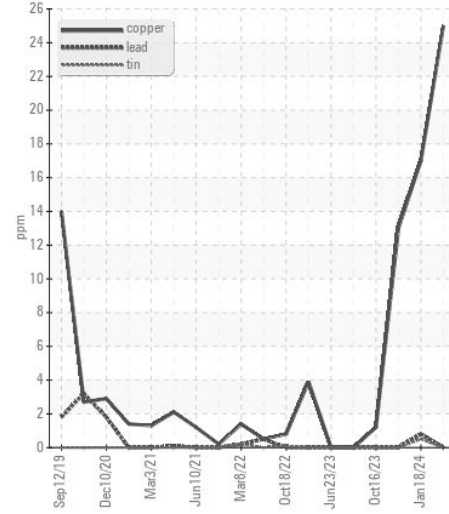
PQ



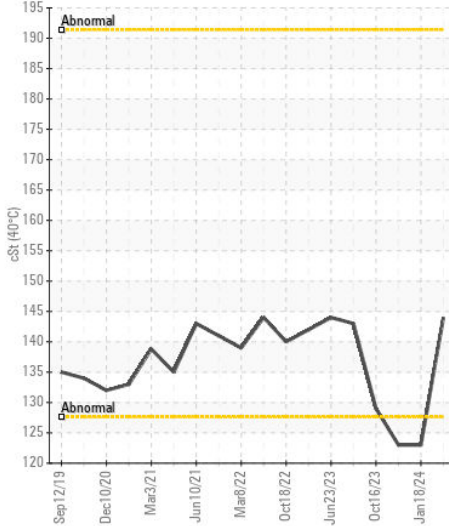
Ferrous Alloys



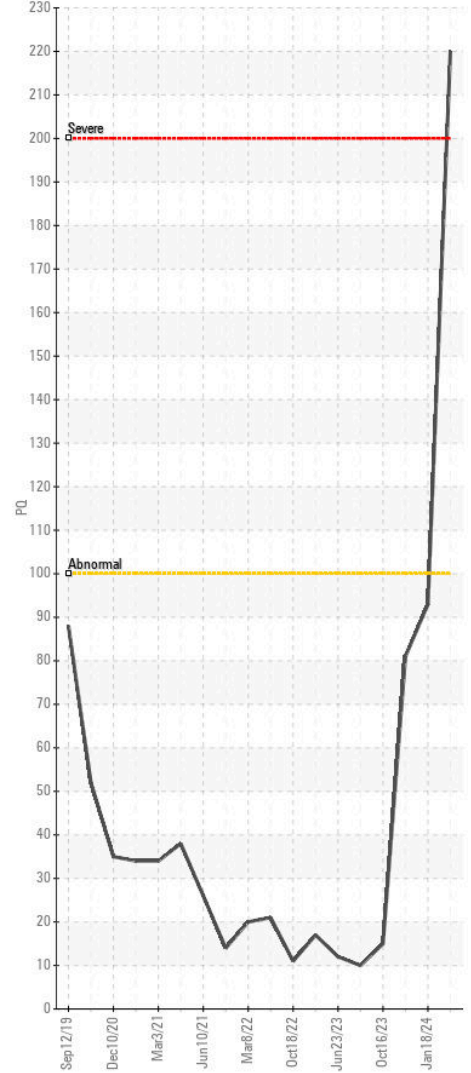
Non-ferrous Metals



Viscosity @ 40°C



PQ



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0186425 **Received** : 24 Apr 2024  
**Lab Number** : 06159380 **Tested** : 25 Apr 2024  
**Unique Number** : 10994803 **Diagnosed** : 26 Apr 2024 - Don Baldrige  
**Test Package** : CONST ( Additional Tests: PQ )

**FUQUAY - MARTIN MARIETTA**  
 7400 BUCKHORN DUNCAN RD  
 HOLLY SPRINGS, NC  
 US 27549  
 Contact: DARIN HESS  
 darin.hess@martinmarietta.com

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)

T:  
F: