



# OIL ANALYSIS REPORT

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

Machine Id  
**JOHN DEERE 30212**

Component  
**Right Final Drive**

Fluid  
**CHEVRON DELO GEAR ESI OIL 80W90 (--- QTS)**

## RECOMMENDATION

We advise that you check all areas where dirt can enter the system. Oil and filter change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

## WEAR

Gear wear is indicated.

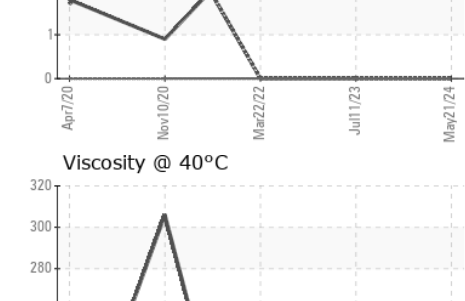
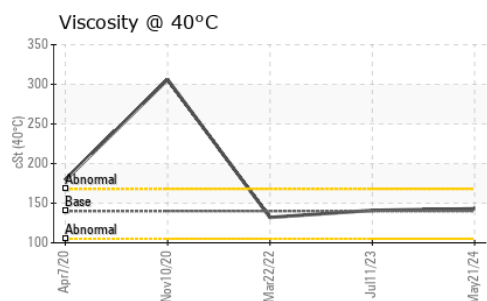
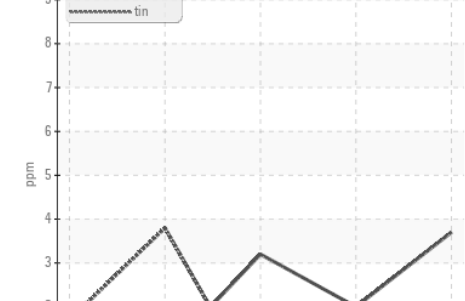
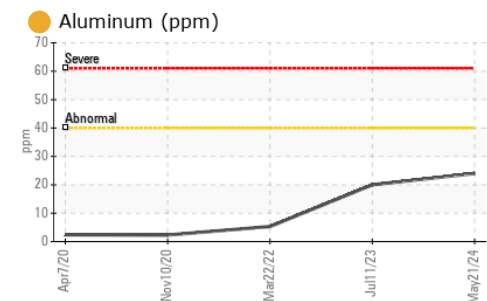
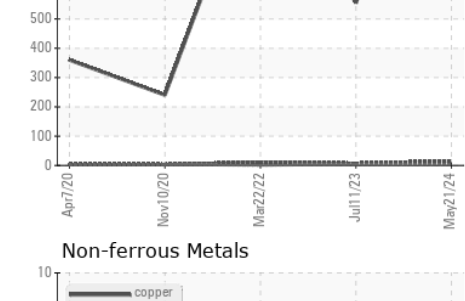
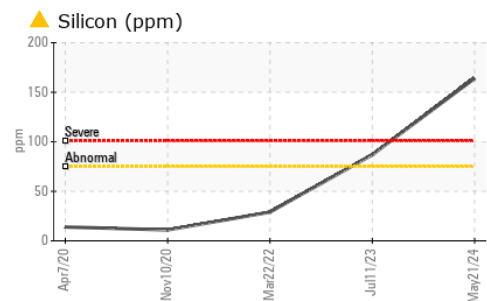
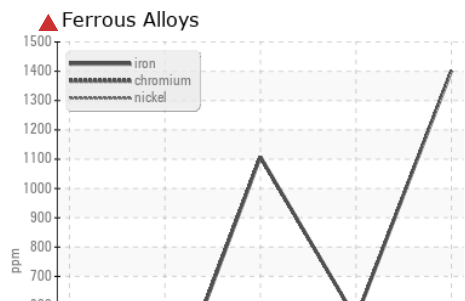
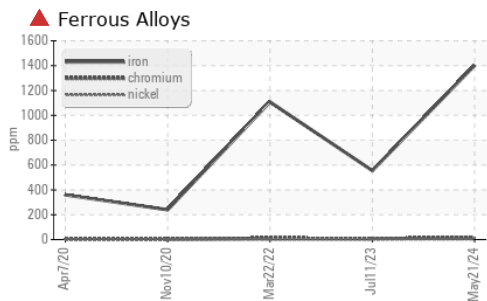
## CONTAMINATION

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

## FLUID CONDITION

The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0924418</b>	WC0822709	WC0639414
Sample Date		Client Info		<b>21 May 2024</b>	11 Jul 2023	22 Mar 2022
Machine Age	hrs	Client Info		<b>3801</b>	3076	2165
Oil Age	hrs	Client Info		<b>750</b>	1000	629
Filter Age	hrs	Client Info		<b>750</b>	1000	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	N/A
Sample Status				<b>SEVERE</b>	ABNORMAL	ABNORMAL
Iron	ppm	ASTM D5185m	>750	<b>▲ 1402</b>	555	▲ 1108
Chromium	ppm	ASTM D5185m	>9	<b>▲ 15</b>	7	▲ 11
Nickel	ppm	ASTM D5185m	>10	<b>3</b>	2	0
Titanium	ppm	ASTM D5185m		<b>2</b>	2	<1
Silver	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>40	<b>● 24</b>	● 20	5
Lead	ppm	ASTM D5185m	>15	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>40	<b>4</b>	2	3
Tin	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>MODER</b>	MODER	MODER
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Silicon	ppm	ASTM D5185m	>75	<b>▲ 164</b>	▲ 87	29
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	5	4
Water		WC Method	>0.075	<b>NEG</b>	NEG	NEG
Silt	scalar	*Visual	NONE	<b>MODER</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	>0.075	<b>NEG</b>	NEG	NEG
Sodium	ppm	ASTM D5185m	>51	<b>15</b>	11	0
Boron	ppm	ASTM D5185m	15	<b>228</b>	245	140
Barium	ppm	ASTM D5185m	0	<b>1</b>	0	0
Molybdenum	ppm	ASTM D5185m	0	<b>3</b>	<1	4
Manganese	ppm	ASTM D5185m		<b>15</b>	7	10
Magnesium	ppm	ASTM D5185m	0	<b>2</b>	0	13
Calcium	ppm	ASTM D5185m	5	<b>40</b>	36	49
Phosphorus	ppm	ASTM D5185m	600	<b>1123</b>	1041	3274
Zinc	ppm	ASTM D5185m	0	<b>86</b>	60	66
Sulfur	ppm	ASTM D5185m	22000	<b>21721</b>	19782	17536
Visc @ 40°C	cSt	ASTM D445	140	<b>143</b>	141	132



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0924418  
**Lab Number** : 06191379  
**Unique Number** : 11048131  
**Test Package** : CONST  
**Received** : 24 May 2024  
**Tested** : 28 May 2024  
**Diagnosed** : 29 May 2024 - Sean Felton

**SULLIVAN EASTERN INC**  
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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)