



# OIL ANALYSIS REPORT

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



Machine Id  
**CATERPILLAR R1600G SCP215**  
Component  
**Diesel Engine**  
Fluid  
**DIESEL ENGINE OIL SAE 15W40 (--- GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0905504</b>	WC0890056	WC0888405
Sample Date		Client Info		<b>15 Feb 2024</b>	25 Dec 2023	21 Dec 2023
Machine Age	hrs	Client Info		<b>3275</b>	2428	0
Oil Age	hrs	Client Info		<b>0</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Changed	N/A
Filter Changed		Client Info		<b>Changed</b>	Changed	N/A
Sample Status				<b>NORMAL</b>	ABNORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	<b>37</b>	92	22
Chromium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	1	<1
Nickel	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	1	0
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>2	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185(m)	>25	<b>3</b>	5	2
Lead	ppm	ASTM D5185(m)	>40	<b>9</b>	18	3
Copper	ppm	ASTM D5185(m)	>330	<b>8</b>	20	4
Tin	ppm	ASTM D5185(m)	>15	<b>&lt;1</b>	2	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

## CONTAMINATION

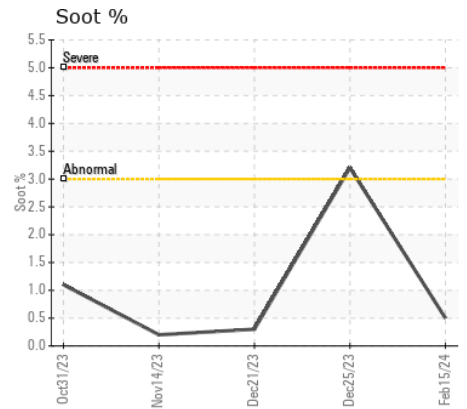
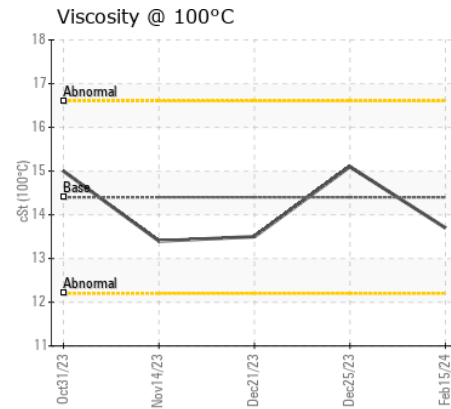
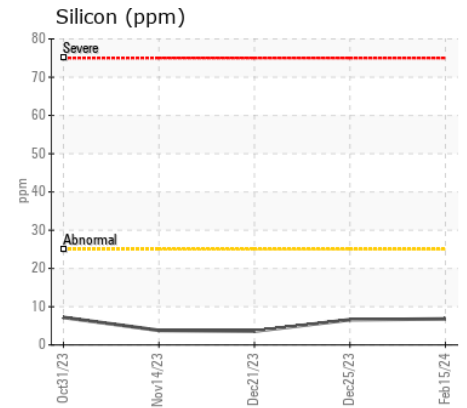
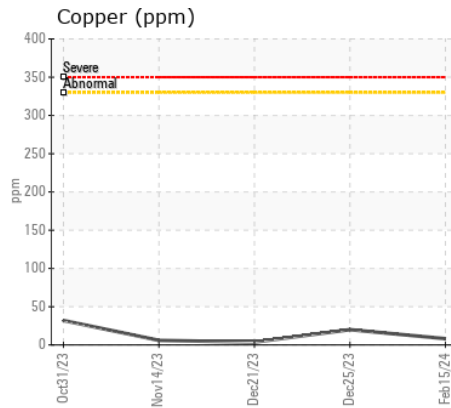
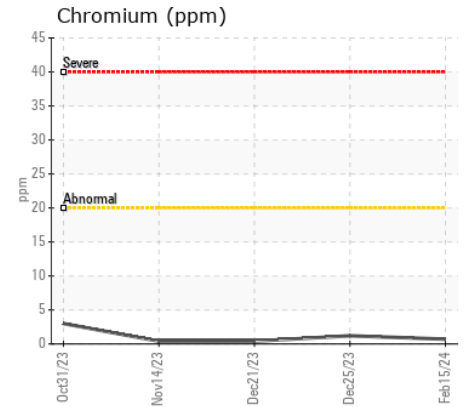
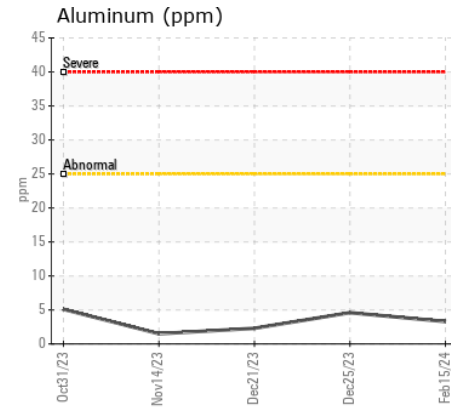
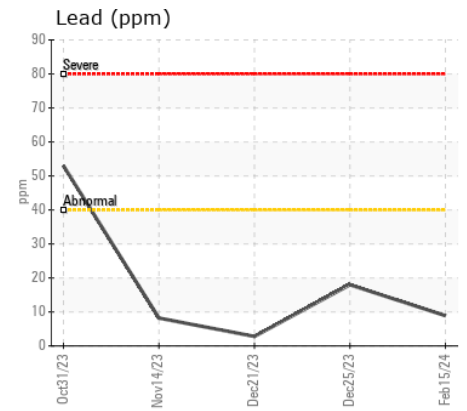
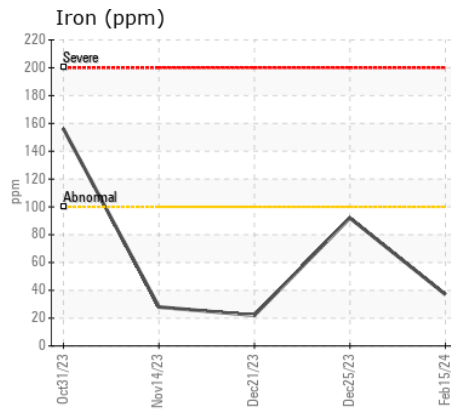
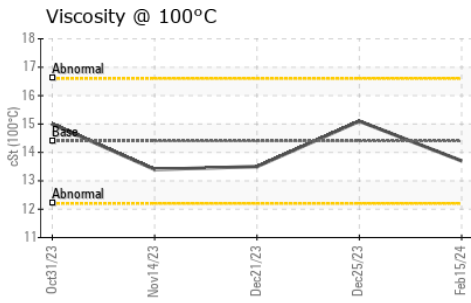
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>7</b>	7	4
Potassium	ppm	ASTM D5185(m)	>20	<b>2</b>	0	0
Fuel		WC Method	>5	<b>&lt;1.0</b>	▲ 2.3	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	ASTM D7844*	>3	<b>0.5</b>	▲ 3.2	0.3
Nitration	Abs/cm	ASTM D7624*	>20	<b>9.8</b>	12.7	8.5
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>24.7</b>	28.3	23.9
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	NEG	NEG

## FLUID CONDITION

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

Sodium	ppm	ASTM D5185(m)	>158	<b>3</b>	3	2
Boron	ppm	ASTM D5185(m)	250	<b>30</b>	18	34
Barium	ppm	ASTM D5185(m)	10	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	100	<b>42</b>	34	41
Manganese	ppm	ASTM D5185(m)		<b>0</b>	<1	0
Magnesium	ppm	ASTM D5185(m)	450	<b>524</b>	386	511
Calcium	ppm	ASTM D5185(m)	3000	<b>1766</b>	2127	1704
Phosphorus	ppm	ASTM D5185(m)	1150	<b>756</b>	755	758
Zinc	ppm	ASTM D5185(m)	1350	<b>895</b>	919	889
Sulfur	ppm	ASTM D5185(m)	4250	<b>2231</b>	3313	2235
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>23.9</b>	23.1	22.5
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	<b>13.7</b>	15.1	13.5



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0905504  
**Lab Number** : 02616946  
**Unique Number** : 5734056  
**Test Package** : MOB 1  
**Received** : 21 Feb 2024  
**Tested** : 22 Feb 2024  
**Diagnosed** : 22 Feb 2024 - Wes Davis

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To discuss this sample report, contact Customer Service at 1-800-268-2131.  
 Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab.  
 Validity of results and interpretation are based on the sample and information as supplied.