



# OIL ANALYSIS REPORT

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



Machine Id  
**CATERPILLAR R1600H SCP222**  
Component  
**Diesel Engine**  
Fluid  
**SHELL 15W40 (--- GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0920182</b>	WC0902350	WC0886118
Sample Date		Client Info		<b>10 Apr 2024</b>	11 Mar 2024	30 Jan 2024
Machine Age	hrs	Client Info		<b>1373</b>	1077	828
Oil Age	hrs	Client Info		<b>250</b>	250	250
Filter Age	hrs	Client Info		<b>250</b>	250	250
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	<b>20</b>	16	20
Chromium	ppm	ASTM D5185(m)	>20	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>2	<b>0</b>	0	0
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	1	<1
Aluminum	ppm	ASTM D5185(m)	>25	<b>1</b>	2	3
Lead	ppm	ASTM D5185(m)	>40	<b>7</b>	9	22
Copper	ppm	ASTM D5185(m)	>330	<b>96</b>	254	547
Tin	ppm	ASTM D5185(m)	>15	<b>3</b>	4	8
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

## CONTAMINATION

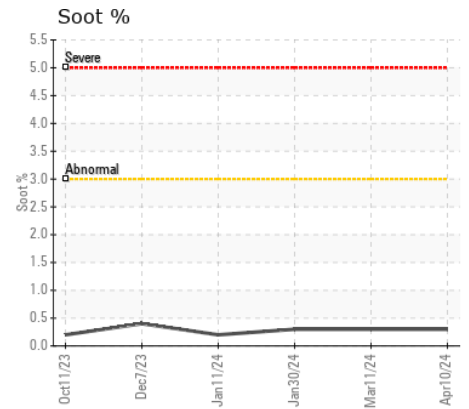
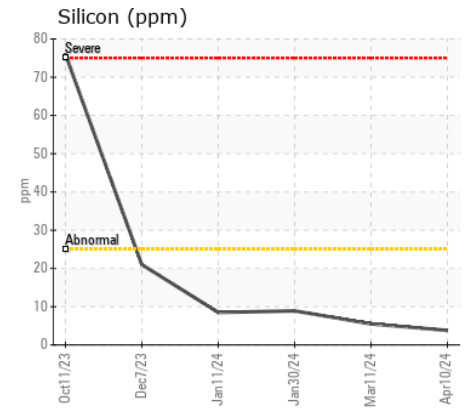
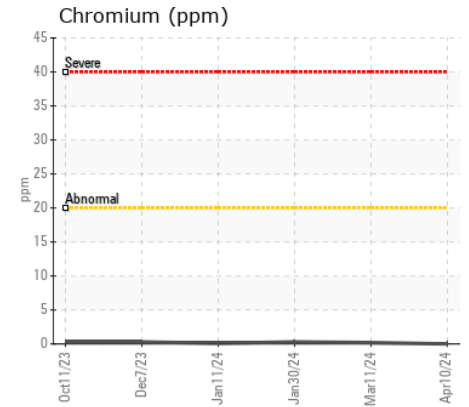
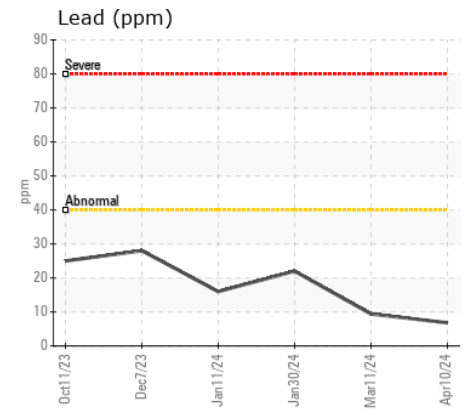
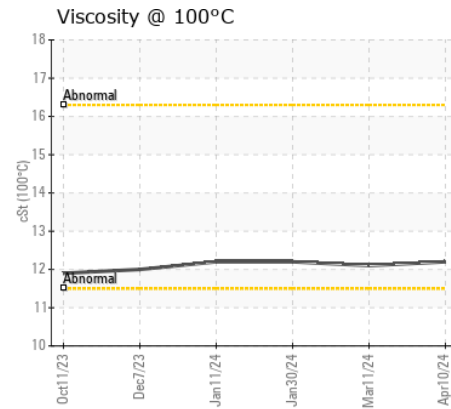
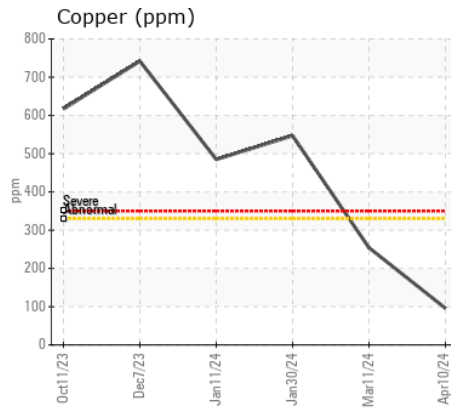
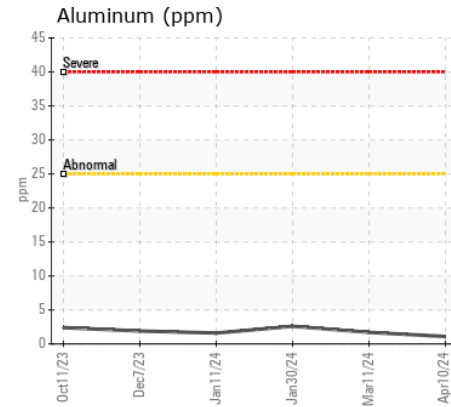
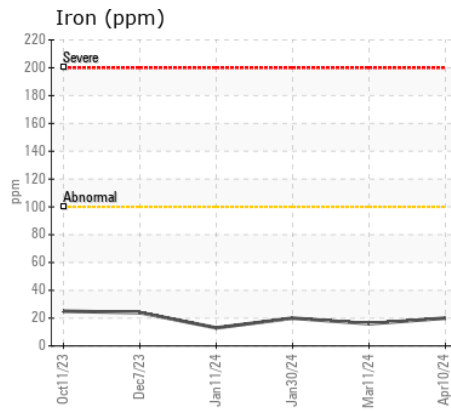
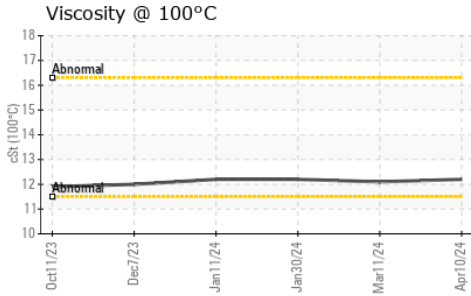
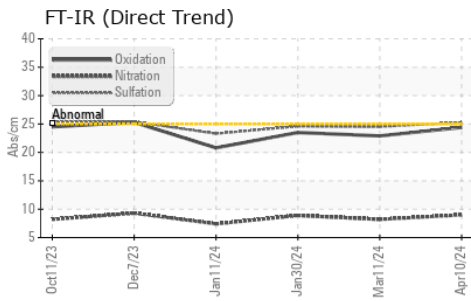
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>4</b>	6	9
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	1
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	<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>0.3</b>	0.3	0.3
Nitration	Abs/cm	ASTM D7624*	>20	<b>9.0</b>	8.2	8.9
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>25.3</b>	24.5	24.6
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)	>150	<b>2</b>	2	2
Boron	ppm	ASTM D5185(m)		<b>40</b>	40	42
Barium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)		<b>37</b>	39	39
Manganese	ppm	ASTM D5185(m)		<b>&lt;1</b>	0	0
Magnesium	ppm	ASTM D5185(m)		<b>495</b>	484	469
Calcium	ppm	ASTM D5185(m)		<b>1699</b>	1687	1636
Phosphorus	ppm	ASTM D5185(m)		<b>694</b>	729	737
Zinc	ppm	ASTM D5185(m)		<b>839</b>	832	837
Sulfur	ppm	ASTM D5185(m)		<b>1915</b>	2031	2041
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>24.4</b>	22.9	23.5
Visc @ 100°C	cSt	ASTM D7279(m)		<b>12.2</b>	12.1	12.2



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0920182  
**Lab Number** : 02628356  
**Unique Number** : 5761488  
**Test Package** : MOB 1

**Received** : 12 Apr 2024  
**Tested** : 12 Apr 2024  
**Diagnosed** : 12 Apr 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.