



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id  
**CATERPILLAR 14234 STEELES**  
Component  
**Diesel Engine**  
Fluid  
**TOTAL FINA RUBIA TIR 7900 15W40 (--- LTR)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0888827</b>	WC0787159	WC0665478
Sample Date		Client Info		<b>23 Feb 2024</b>	03 Feb 2023	18 Apr 2022
Machine Age	hrs	Client Info		<b>432</b>	399	484
Oil Age	hrs	Client Info		<b>33</b>	0	0
Filter Age	hrs	Client Info		<b>33</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	MARGINAL

## WEAR

Metal levels are typical for a new component breaking in.

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

## CONTAMINATION

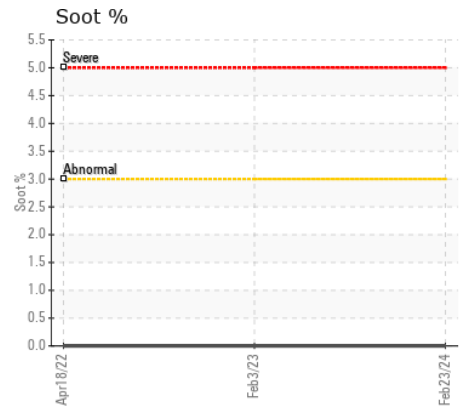
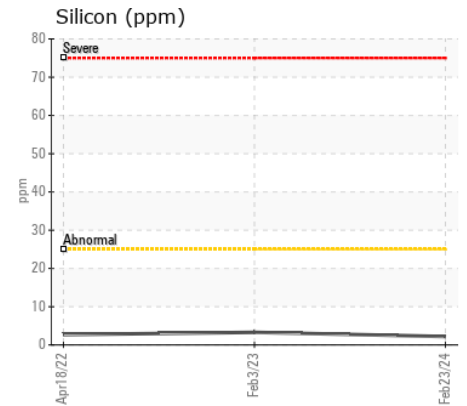
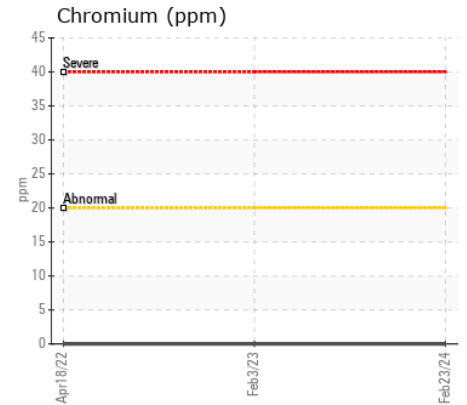
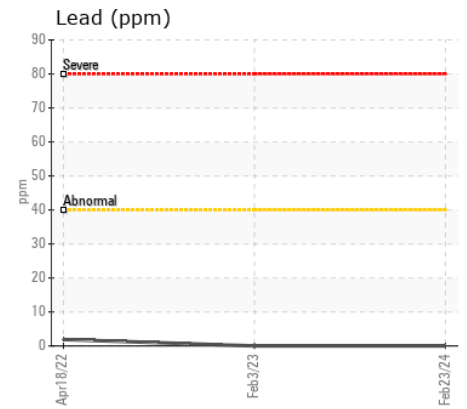
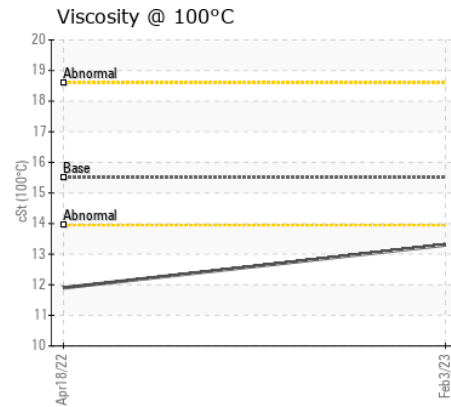
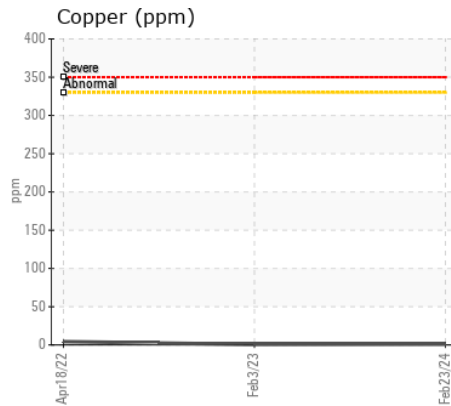
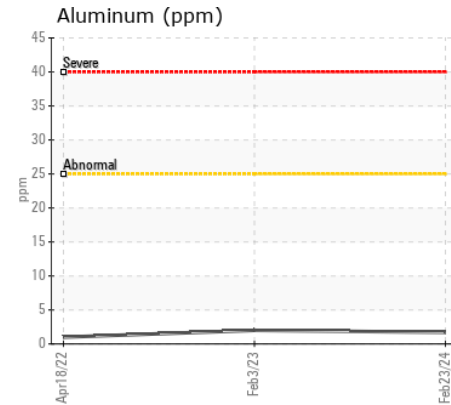
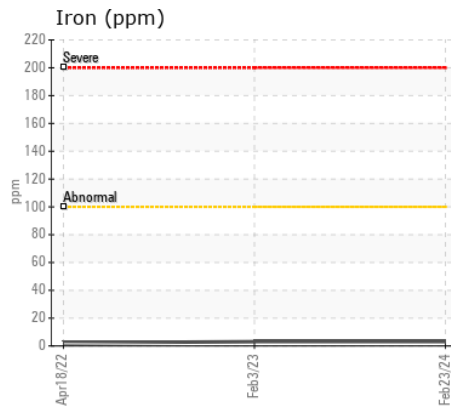
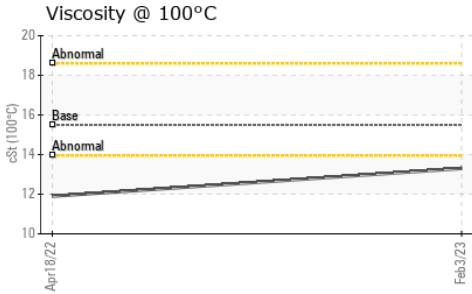
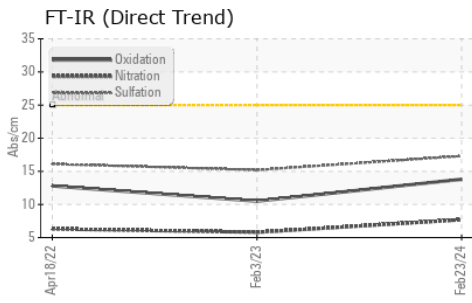
Insufficient sample was received to conduct all the routine laboratory tests.

Silicon	ppm	ASTM D5185(m)	>25	<b>2</b>	3	3
Potassium	ppm	ASTM D5185(m)	>20	<b>1</b>	<1	<1
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	▲ 2.7
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	ASTM D7844*	>3	<b>0</b>	0	0
Nitration	Abs/cm	ASTM D7624*	>20	<b>7.7</b>	5.8	6.3
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>17.3</b>	15.2	16.1
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)		<b>2</b>	2	2
Boron	ppm	ASTM D5185(m)		<b>80</b>	43	55
Barium	ppm	ASTM D5185(m)		<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185(m)		<b>78</b>	47	14
Manganese	ppm	ASTM D5185(m)		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)		<b>21</b>	100	200
Calcium	ppm	ASTM D5185(m)	3290	<b>2283</b>	2214	2123
Phosphorus	ppm	ASTM D5185(m)	1200	<b>996</b>	1076	1009
Zinc	ppm	ASTM D5185(m)	1400	<b>1126</b>	1102	1074
Sulfur	ppm	ASTM D5185(m)	4000	<b>3047</b>	2973	2413
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>13.8</b>	10.5	12.8
Visc @ 100°C	cSt	ASTM D7279(m)	15.5	<b>---</b>	13.3	11.9



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0888827 **Received** : 15 Apr 2024  
**Lab Number** : 02628797 **Tested** : 18 Apr 2024  
**Unique Number** : 5761929 **Diagnosed** : 18 Apr 2024 - Kevin Marson  
**Test Package** : MOB 1

**GenWorx Power Systems Inc.**  
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 Ajax, ON  
 CA L1S 7G1  
 Contact: J Curtis  
 jcurtis@genworx.ca

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.