



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
CATERPILLAR 2XR02303
Component
Left Diesel Engine
Fluid
SHELL ROTELLA T4 15W40 (27 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC909843	WC991503	---
Sample Date		Client Info		10 Jan 2022	15 Oct 2016	---
Machine Age	hrs	Client Info		1497	1240	---
Oil Age	hrs	Client Info		70	75	---
Filter Age	hrs	Client Info		0	75	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		N/A	N/A	---
Sample Status				NORMAL	NORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	6	23	---
Chromium	ppm	ASTM D5185(m)	>20	0	<1	---
Nickel	ppm	ASTM D5185(m)	>2	0	<1	---
Titanium	ppm	ASTM D5185(m)	>2	0	0	---
Silver	ppm	ASTM D5185(m)	>2	0	<1	---
Aluminum	ppm	ASTM D5185(m)	>25	<1	2	---
Lead	ppm	ASTM D5185(m)	>40	0	<1	---
Copper	ppm	ASTM D5185(m)	>330	4	21	---
Tin	ppm	ASTM D5185(m)	>15	0	<1	---
Vanadium	ppm	ASTM D5185(m)		0	0	---
White Metal	scalar	Visual*	NONE	NONE	VLITE	---
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	---

CONTAMINATION

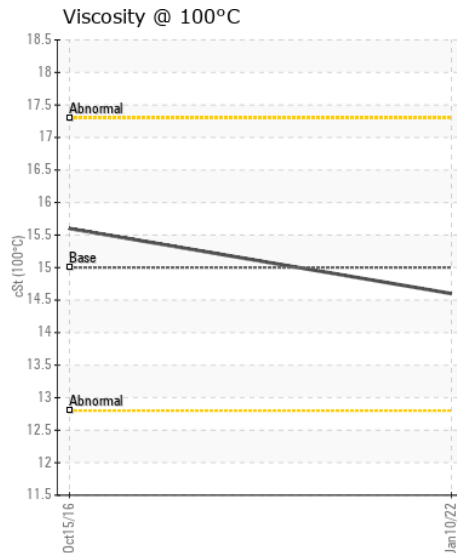
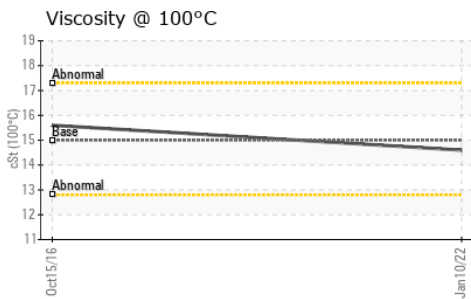
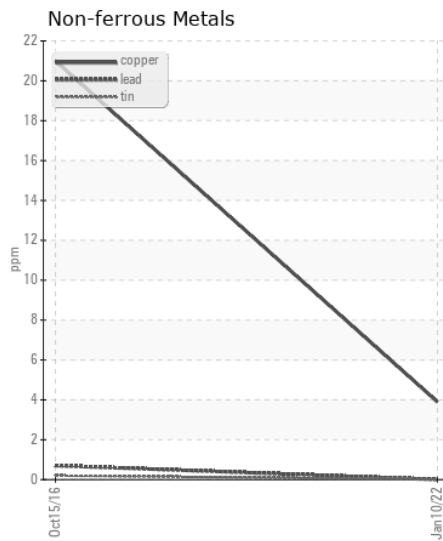
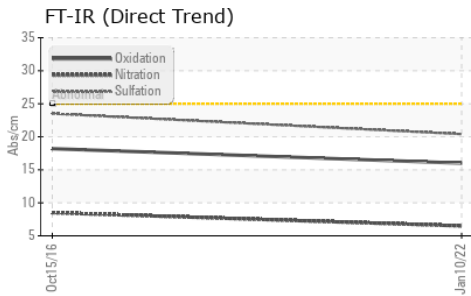
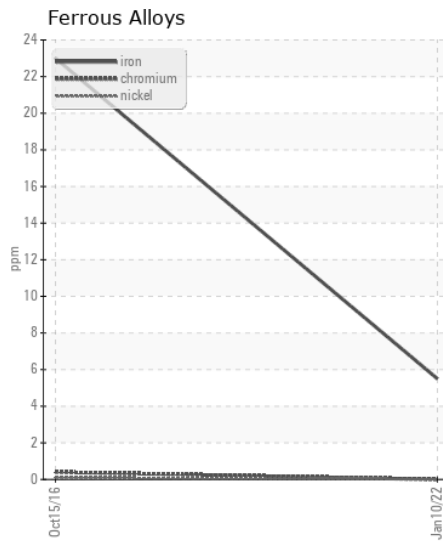
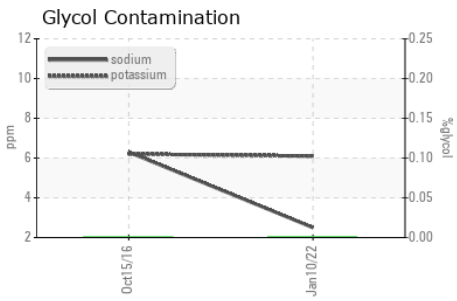
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<1	4	---
Potassium	ppm	ASTM D5185(m)	>20	6	6	---
Fuel		WC Method	>5	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol	%	ASTM D7922*		0.0	0.0	---
Soot %	%	ASTM D7844*	>3	0	0.1	---
Nitration	Abs/cm	ASTM D7624*	>20	6.5	8.5	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	20.4	23.5	---
Silt	scalar	Visual*	NONE	NONE	NONE	---
Debris	scalar	Visual*	NONE	NONE	NONE	---
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	---
Appearance	scalar	Visual*	NORML	NORML	NORML	---
Odor	scalar	Visual*	NORML	NORML	NORML	---
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	---

FLUID CONDITION

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

Sodium	ppm	ASTM D5185(m)		2	6	---
Boron	ppm	ASTM D5185(m)		154	30	---
Barium	ppm	ASTM D5185(m)		0	<1	---
Molybdenum	ppm	ASTM D5185(m)		0	<1	---
Manganese	ppm	ASTM D5185(m)		0	<1	---
Magnesium	ppm	ASTM D5185(m)		11	11	---
Calcium	ppm	ASTM D5185(m)		1947	2460	---
Phosphorus	ppm	ASTM D5185(m)		866	1005	---
Zinc	ppm	ASTM D5185(m)		1033	1248	---
Sulfur	ppm	ASTM D5185(m)		2637	3390	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	16.0	18.2	---
Visc @ 100°C	cSt	ASTM D7279(m)	15	14.6	15.6	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC909843 **Received** : 23 May 2024
Lab Number : **02637121** **Tested** : 24 May 2024
Unique Number : 5786283 **Diagnosed** : 24 May 2024 - Wes Davis
Test Package : MAR 1 (Additional Tests: Glycol)

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.

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