



OIL ANALYSIS REPORT

Sample Rating Trend

FUEL



Machine Id
CATERPILLAR 24207283
Component
Diesel Engine
Fluid
{not provided} (--- GAL)



DIAGNOSIS

▲ Recommendation

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

Wear

All component wear rates are normal.

▲ Contamination

Light fuel dilution occurring.

▲ Fluid Condition

Fuel is present in the oil and is lowering the viscosity. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0517153	---	---
Sample Date	Client Info		21 Dec 2023	---	---
Machine Age	hrs	Client Info	1200	---	---
Oil Age	hrs	Client Info	0	---	---
Oil Changed	Client Info		Not Chngd	---	---
Sample Status			ABNORMAL	---	---

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.2	NEG	---	---
Glycol	WC Method		NEG	---	---

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>100	3	---	---
Chromium	ppm	ASTM D5185(m)	>20	0	---	---
Nickel	ppm	ASTM D5185(m)	>2	<1	---	---
Titanium	ppm	ASTM D5185(m)	>2	0	---	---
Silver	ppm	ASTM D5185(m)	>2	0	---	---
Aluminum	ppm	ASTM D5185(m)	>25	1	---	---
Lead	ppm	ASTM D5185(m)	>40	<1	---	---
Copper	ppm	ASTM D5185(m)	>330	1	---	---
Tin	ppm	ASTM D5185(m)	>15	0	---	---
Antimony	ppm	ASTM D5185(m)		0	---	---
Vanadium	ppm	ASTM D5185(m)		0	---	---
Beryllium	ppm	ASTM D5185(m)		0	---	---
Cadmium	ppm	ASTM D5185(m)		0	---	---

ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185(m)		58	---	---
Barium	ppm	ASTM D5185(m)		0	---	---
Molybdenum	ppm	ASTM D5185(m)		39	---	---
Manganese	ppm	ASTM D5185(m)		0	---	---
Magnesium	ppm	ASTM D5185(m)		489	---	---
Calcium	ppm	ASTM D5185(m)		1625	---	---
Phosphorus	ppm	ASTM D5185(m)		895	---	---
Zinc	ppm	ASTM D5185(m)		1018	---	---
Sulfur	ppm	ASTM D5185(m)		2565	---	---
Lithium	ppm	ASTM D5185(m)		<1	---	---

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>25	6	---	---
Sodium	ppm	ASTM D5185(m)		2	---	---
Potassium	ppm	ASTM D5185(m)	>20	0	---	---
Fuel	%	ASTM D7593*	>5	▲ 2.7	---	---

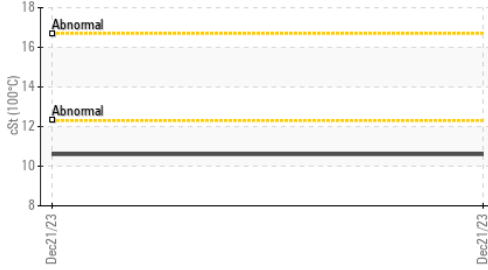
INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>3	0	---	---
Nitration	Abs/cm	ASTM D7624*	>20	5.1	---	---
Sulfation	Abs./1mm	ASTM D7415*	>30	22.2	---	---

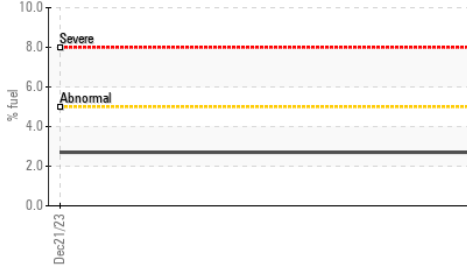


OIL ANALYSIS REPORT

▲ Viscosity @ 100°C



▲ Fuel Dilution



FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs./1mm ASTM D7414*	>25	19.5	---	---

VISUAL

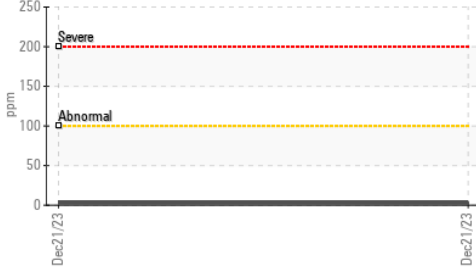
	method	limit/base	current	history1	history2
Emulsified Water	scalar Visual*	>0.2	NEG	---	---
Free Water	scalar Visual*		NEG	---	---

FLUID PROPERTIES

	method	limit/base	current	history1	history2
Visc @ 100°C	cSt ASTM D7279(m)		▲ 10.6	---	---

GRAPHS

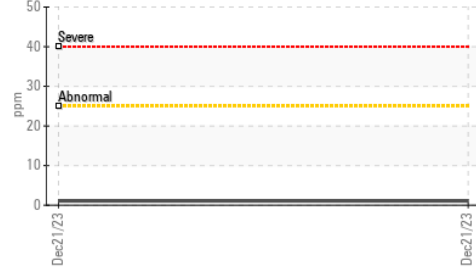
Iron (ppm)



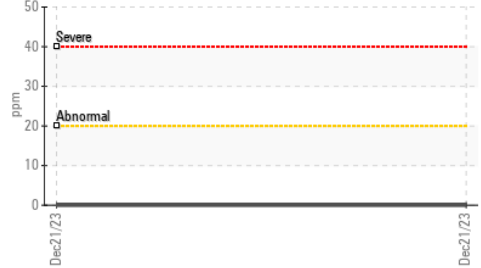
Lead (ppm)



Aluminum (ppm)



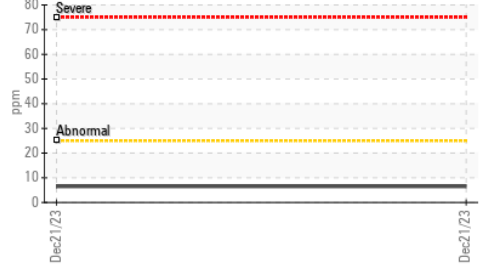
Chromium (ppm)



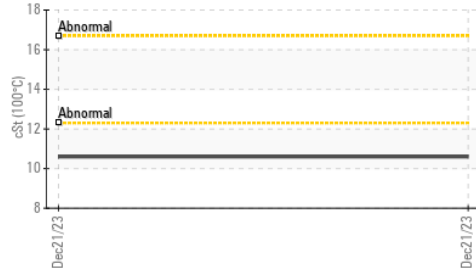
Copper (ppm)



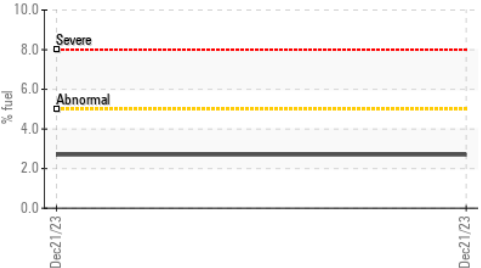
Silicon (ppm)



▲ Viscosity @ 100°C



▲ Fuel Dilution



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0517153 **Received** : 05 Jan 2024
Lab Number : 02606670 **Diagnosed** : 08 Jan 2024
Unique Number : 5707756 **Diagnostician** : Wes Davis
Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel)

Torontont CAT - Power Systems
 288 Orenda Rd.
 Brampton, ON
 CA L6T 1E9
 Contact: Scott McMahon
 smcmahon@torontont.com

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.

T:
F: