



Machine Id
CATERPILLAR 216-1114
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 15W40 (--- LTR)

RECOMMENDATION

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PC0072505	---	---
Sample Date		Client Info		20 Dec 2023	---	---
Machine Age	hrs	Client Info		8886	---	---
Oil Age	hrs	Client Info		117	---	---
Filter Age	hrs	Client Info		117	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				ABNORMAL	---	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	5	---	---
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	2	---	---
Lead	ppm	ASTM D5185(m)	>40	0	---	---
Copper	ppm	ASTM D5185(m)	>330	1	---	---
Tin	ppm	ASTM D5185(m)	>15	0	---	---
Vanadium	ppm	ASTM D5185(m)		0	---	---
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---

CONTAMINATION

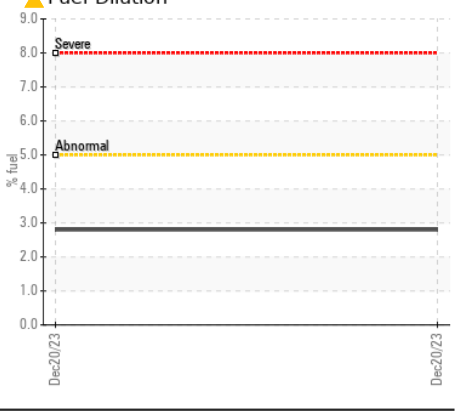
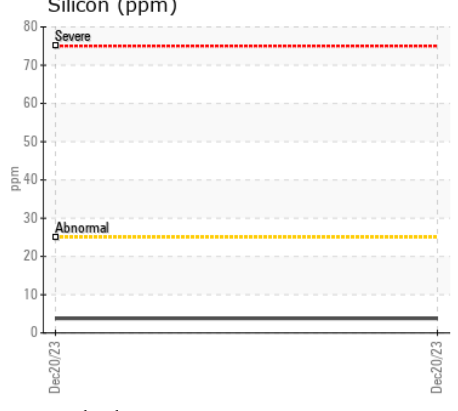
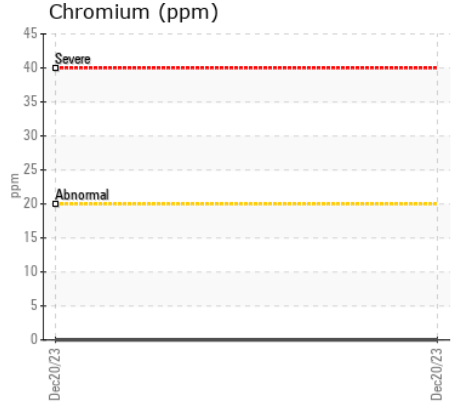
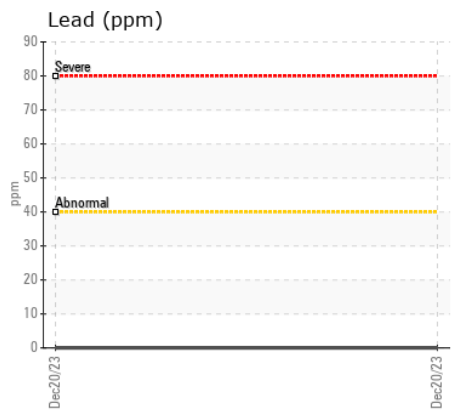
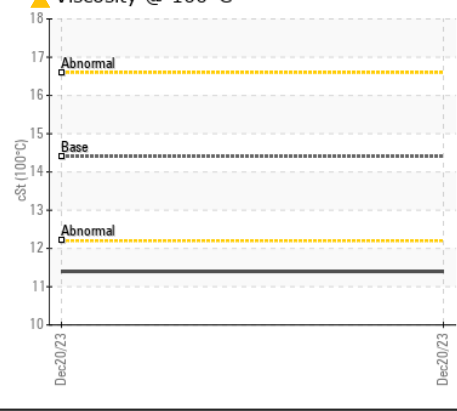
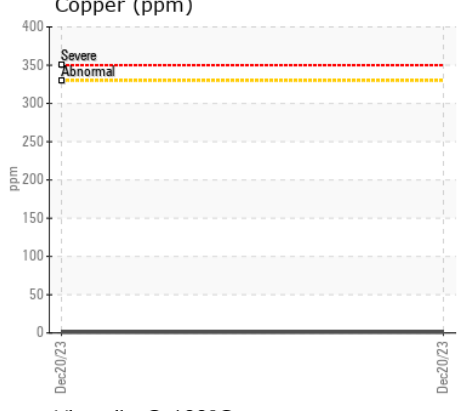
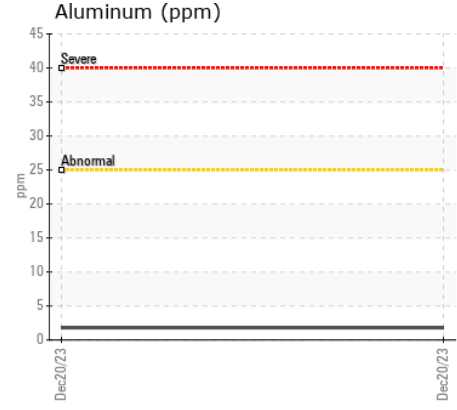
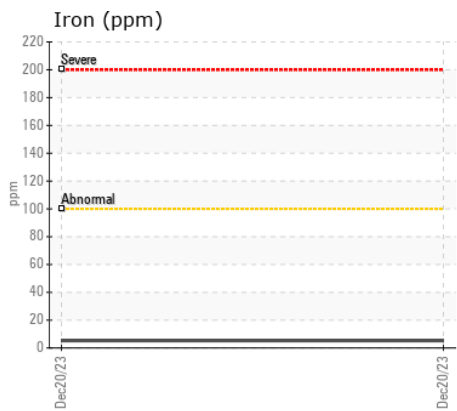
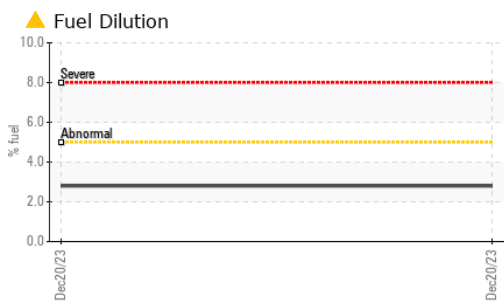
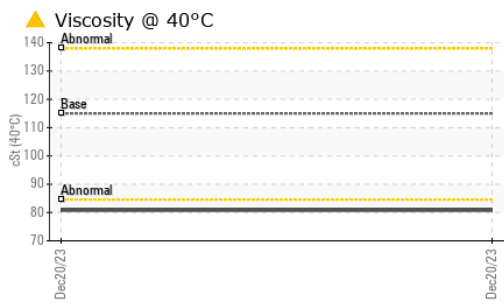
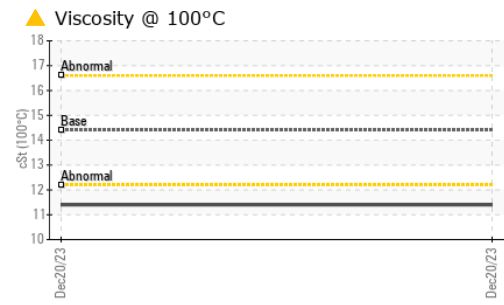
Light fuel dilution occurring.

Silicon	ppm	ASTM D5185(m)	>25	4	---	---
Potassium	ppm	ASTM D5185(m)	>20	<1	---	---
Fuel	%	ASTM D7593*	>5	▲ 2.8	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	ASTM D7844*	>3	0.1	---	---
Nitration	Abs/cm	ASTM D7624*	>20	7.5	---	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	21.5	---	---
Silt	scalar	Visual*	NONE	NONE	---	---
Debris	scalar	Visual*	NONE	NONE	---	---
Sand/Dirt	scalar	Visual*	NONE	VLITE	---	---
Appearance	scalar	Visual*	NORML	NORML	---	---
Odor	scalar	Visual*	NORML	NORML	---	---
Emulsified Water	scalar	Visual*	>0.2	NEG	---	---

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.

Sodium	ppm	ASTM D5185(m)	>158	3	---	---
Boron	ppm	ASTM D5185(m)	250	54	---	---
Barium	ppm	ASTM D5185(m)	10	0	---	---
Molybdenum	ppm	ASTM D5185(m)	100	40	---	---
Manganese	ppm	ASTM D5185(m)		0	---	---
Magnesium	ppm	ASTM D5185(m)	450	483	---	---
Calcium	ppm	ASTM D5185(m)	3000	1706	---	---
Phosphorus	ppm	ASTM D5185(m)	1150	751	---	---
Zinc	ppm	ASTM D5185(m)	1350	857	---	---
Sulfur	ppm	ASTM D5185(m)	4250	2358	---	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	20.4	---	---
Visc @ 40°C	cSt	ASTM D7279(m)	115	▲ 80.8	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	▲ 11.4	---	---
Viscosity Index (VI)	Scale	ASTM D2270*	126	131	---	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0072505 **Received** : 08 Jan 2024
Lab Number : 02606901 **Diagnosed** : 09 Jan 2024
Unique Number : 5707987 **Diagnostician** : Wes Davis
Test Package : MOB 1 (Additional Tests: FuelDilution, KV40, PercentFuel, VI, Visual)

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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.