



Machine Id
CATERPILLAR 202-0000
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 15W40 (--- GAL)

RECOMMENDATION

The oil change at the time of sampling has been noted. Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. No other corrective action is recommended at this time. The fluid was specified as (GENERIC) DIESEL ENGINE OIL SAE 15W40, however, a fluid match indicates that this fluid is SAE 5W40 Diesel Engine Oil. Please confirm the oil type and grade on your next sample.

WEAR

All component wear rates are normal.

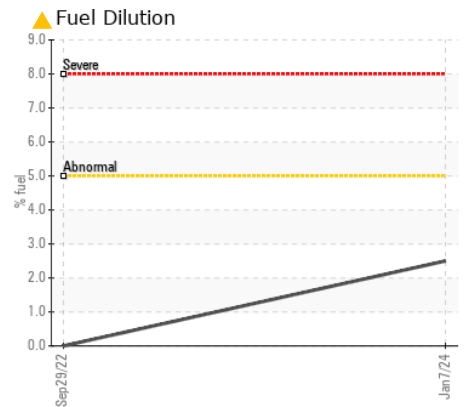
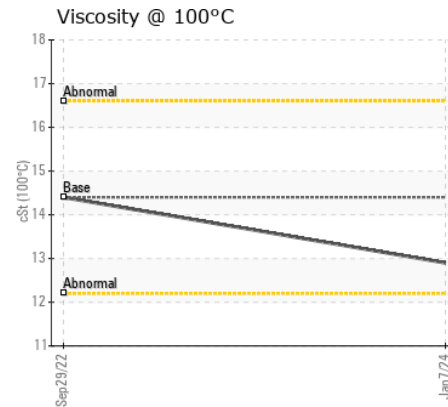
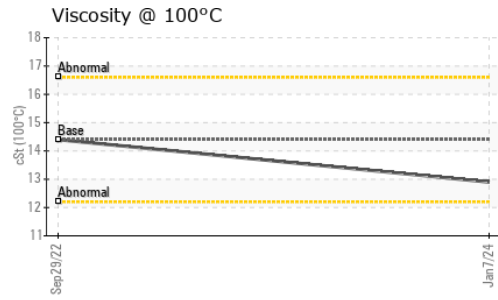
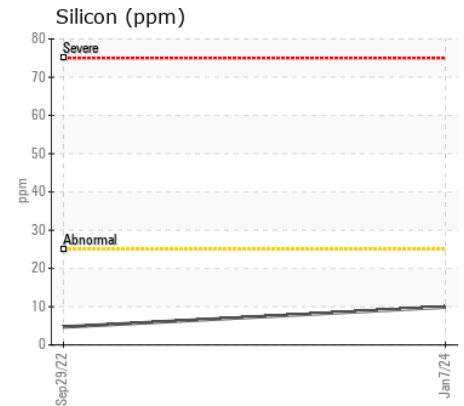
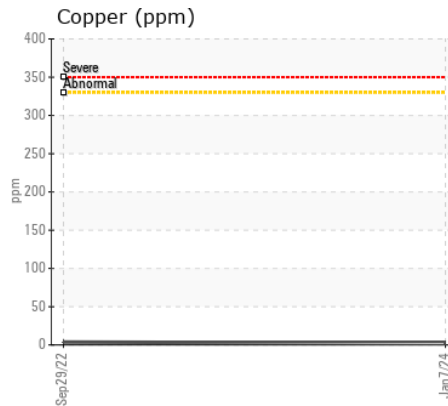
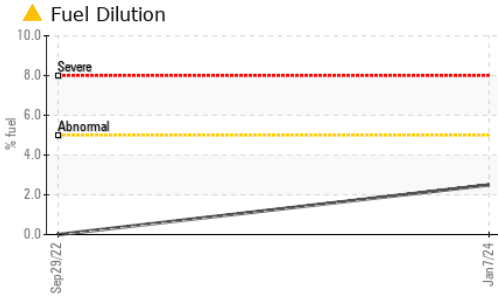
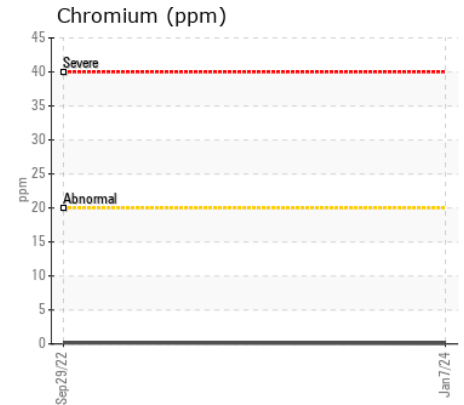
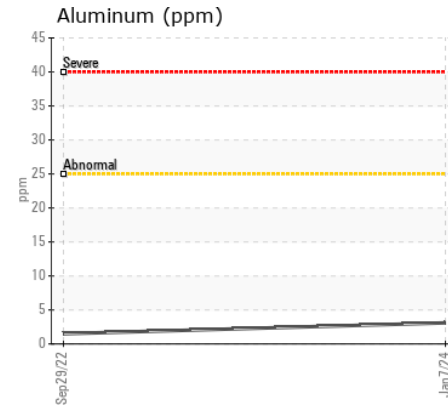
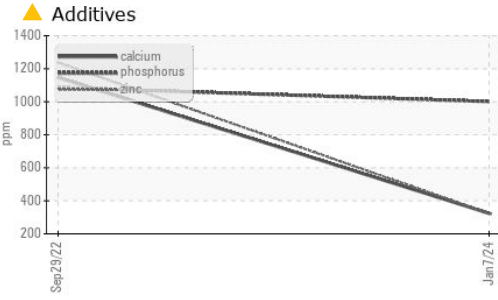
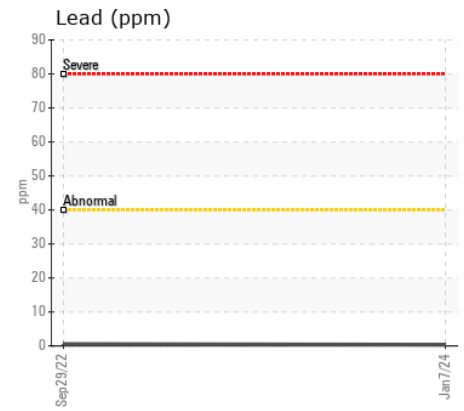
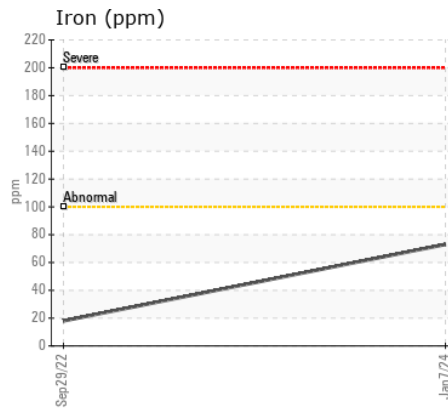
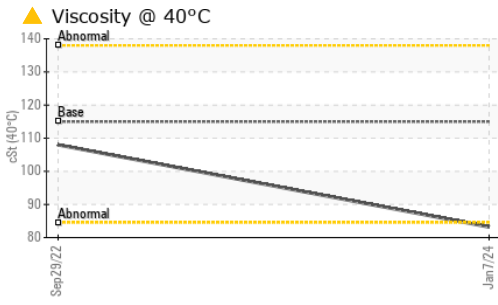
CONTAMINATION

Light fuel dilution occurring. No other contaminants were detected in the oil.

FLUID CONDITION

Viscosity of sample indicates oil is within SAE 5W40 range, advise investigate. This plus the additive levels indicates that this is not the same brand, or type of oil as reported. The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PC0072510	PC0066699	---
Sample Date		Client Info		07 Jan 2024	29 Sep 2022	---
Machine Age	hrs	Client Info		7452	6987	---
Oil Age	hrs	Client Info		465	500	---
Filter Age	hrs	Client Info		465	500	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				ABNORMAL	NORMAL	---
Iron	ppm	ASTM D5185(m)	>100	73	18	---
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	---
Nickel	ppm	ASTM D5185(m)	>2	1	<1	---
Titanium	ppm	ASTM D5185(m)	>2	0	<1	---
Silver	ppm	ASTM D5185(m)	>2	<1	0	---
Aluminum	ppm	ASTM D5185(m)	>25	3	2	---
Lead	ppm	ASTM D5185(m)	>40	<1	<1	---
Copper	ppm	ASTM D5185(m)	>330	2	4	---
Tin	ppm	ASTM D5185(m)	>15	0	0	---
Vanadium	ppm	ASTM D5185(m)		0	0	---
White Metal	scalar	Visual*	NONE	VLITE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---
Silicon	ppm	ASTM D5185(m)	>25	10	5	---
Potassium	ppm	ASTM D5185(m)	>20	1	0	---
Fuel	%	ASTM D7593*	>5	▲ 2.5	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	ASTM D7844*	>3	0.1	0.1	---
Nitration	Abs/cm	ASTM D7624*	>20	5.3	9.0	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	35.9	19.9	---
Silt	scalar	Visual*	NONE	NONE	---	---
Debris	scalar	Visual*	NONE	NONE	---	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---	---
Appearance	scalar	Visual*	NORML	NORML	---	---
Odor	scalar	Visual*	NORML	NORML	NORML	---
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	---
Sodium	ppm	ASTM D5185(m)	>158	12	6	---
Boron	ppm	ASTM D5185(m)	250	154	4	---
Barium	ppm	ASTM D5185(m)	10	<1	0	---
Molybdenum	ppm	ASTM D5185(m)	100	17	62	---
Manganese	ppm	ASTM D5185(m)		<1	<1	---
Magnesium	ppm	ASTM D5185(m)	450	264	994	---
Calcium	ppm	ASTM D5185(m)	3000	▲ 324	1147	---
Phosphorus	ppm	ASTM D5185(m)	1150	1001	1085	---
Zinc	ppm	ASTM D5185(m)	1350	▲ 323	1238	---
Sulfur	ppm	ASTM D5185(m)	4250	1145	2501	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	38.9	16.4	---
Visc @ 40°C	cSt	ASTM D7279(m)	115	▲ 83.2	108	---
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	12.9	14.4	---
Viscosity Index (VI)	Scale	ASTM D2270*	126	154	136	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0072510 **Received** : 08 Jan 2024
Lab Number : 02606902 **Diagnosed** : 12 Jan 2024
Unique Number : 5707988 **Diagnostician** : Kevin Marson
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.