



Machine Id
CATERPILLAR 219-1501
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) DIESEL ENGINE OIL SAE 15W40. Please confirm.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PC0088645	---	---
Sample Date		Client Info		28 Mar 2024	---	---
Machine Age	hrs	Client Info		3709	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		N/A	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				NORMAL	---	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	9	---	---
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	2	---	---
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

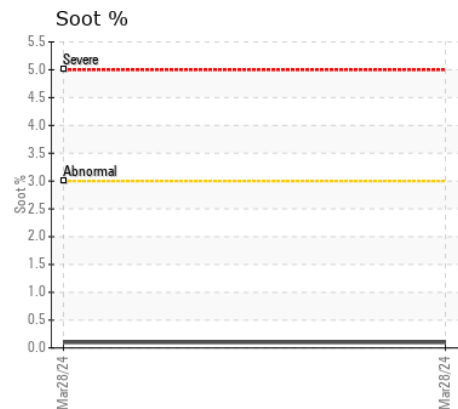
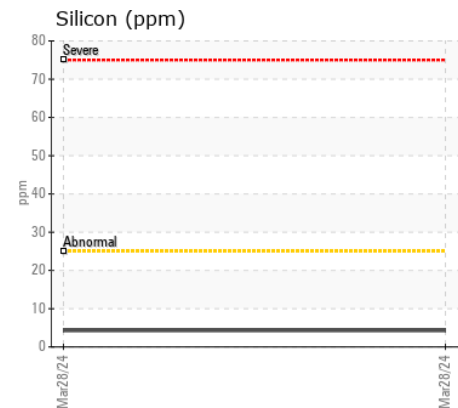
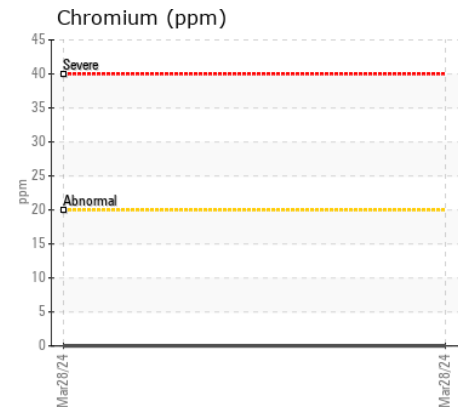
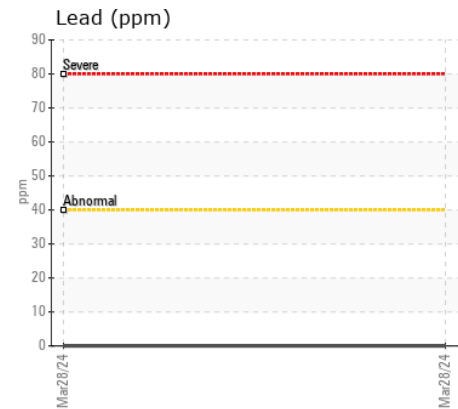
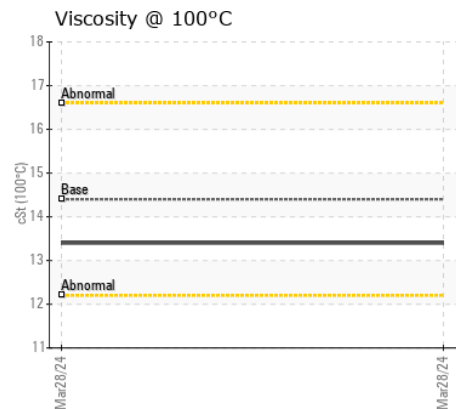
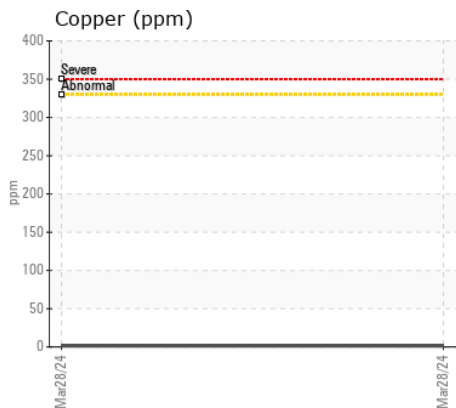
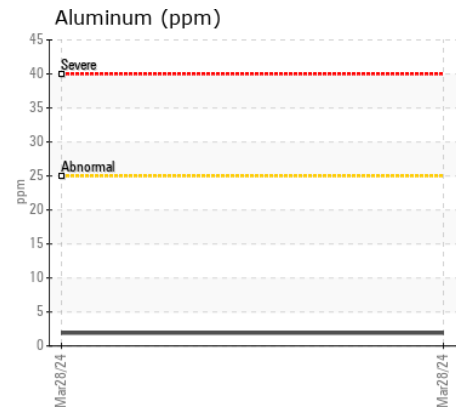
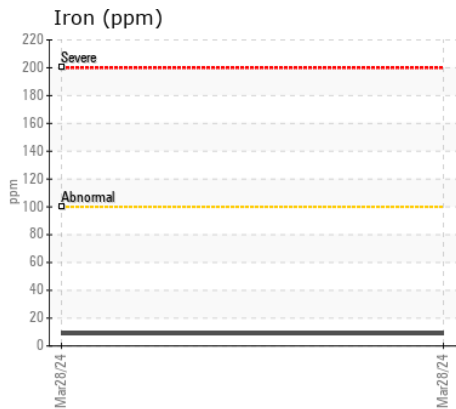
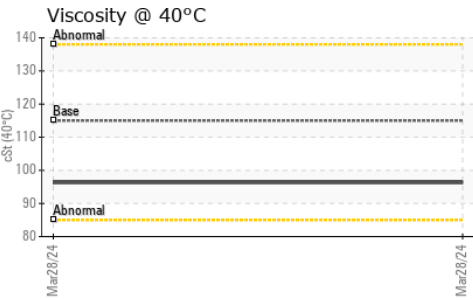
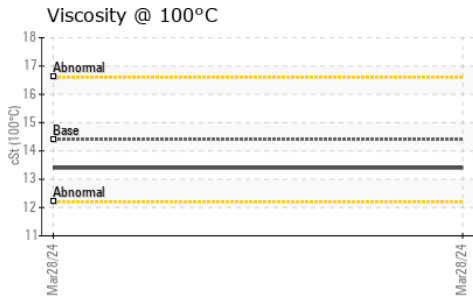
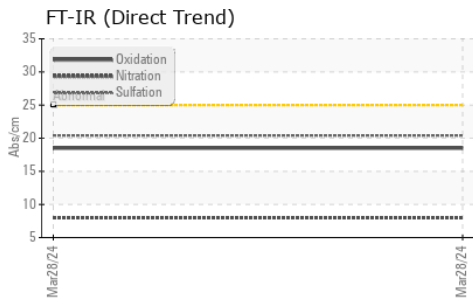
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	4	---	---
Potassium	ppm	ASTM D5185(m)	>20	<1	---	---
Fuel		WC Method	>5	<1.0	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	ASTM D7844*	>3	0.1	---	---
Nitration	Abs/cm	ASTM D7624*	>20	8.0	---	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	20.4	---	---
Silt	scalar	Visual*	NONE	VLITE	---	---
Debris	scalar	Visual*	NONE	NONE	---	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---	---
Appearance	scalar	Visual*	NORML	NORML	---	---
Odor	scalar	Visual*	NORML	NORML	---	---
Emulsified Water	scalar	Visual*	>0.2	NEG	---	---

FLUID CONDITION

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

Sodium	ppm	ASTM D5185(m)	>158	2	---	---
Boron	ppm	ASTM D5185(m)	250	51	---	---
Barium	ppm	ASTM D5185(m)	10	<1	---	---
Molybdenum	ppm	ASTM D5185(m)	100	50	---	---
Manganese	ppm	ASTM D5185(m)		<1	---	---
Magnesium	ppm	ASTM D5185(m)	450	312	---	---
Calcium	ppm	ASTM D5185(m)	3000	1844	---	---
Phosphorus	ppm	ASTM D5185(m)	1150	805	---	---
Zinc	ppm	ASTM D5185(m)	1350	935	---	---
Sulfur	ppm	ASTM D5185(m)	4250	2370	---	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	18.5	---	---
Visc @ 40°C	cSt	ASTM D7279(m)	115	96.3	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	13.4	---	---
Viscosity Index (VI)	Scale	ASTM D2270*	126	138	---	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0088645 **Received** : 19 Apr 2024
Lab Number : 02630158 **Tested** : 19 Apr 2024
Unique Number : 5763290 **Diagnosed** : 19 Apr 2024 - Kevin Marson
Test Package : MOB 1 (Additional Tests: KV40, VI, Visual)

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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