MOB I

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
MARS [136033]
Machine Id
UNIT #1 (S/N 25291377)
Component
Diesel Engine
Fluid
VALVOLINE 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

Metal levels are typical for a new component breaking in.

CONTAMINATION

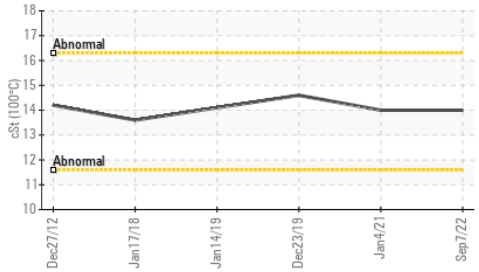
There is no indication of any contamination in the oil.

FLUID CONDITION

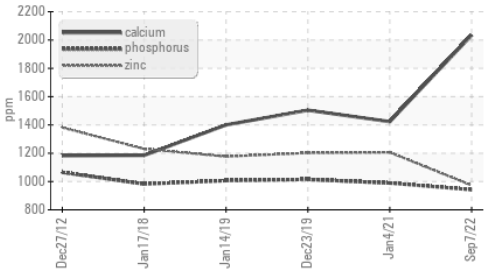
The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		CU0019588	CU0017162	CU0015808
Sample Date		Client Info		07 Sep 2022	04 Jan 2021	23 Dec 2019
Machine Age	hrs	Client Info		355	325	0
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	N/A	Changed
Filter Changed		Client Info		Changed	N/A	Changed
Sample Status				NORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185(m)	>90	2	2	2
Chromium	ppm	ASTM D5185(m)	>20	0	<1	<1
Nickel	ppm	ASTM D5185(m)	>2	0	<1	0
Titanium	ppm	ASTM D5185(m)	>2	<1	<1	1
Silver	ppm	ASTM D5185(m)	>2	0	0	0
Aluminum	ppm	ASTM D5185(m)	>20	<1	<1	<1
Lead	ppm	ASTM D5185(m)	>40	1	<1	<1
Copper	ppm	ASTM D5185(m)	>330	<1	<1	<1
Tin	ppm	ASTM D5185(m)	>15	0	<1	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
Silicon	ppm	ASTM D5185(m)	>25	3	3	3
Potassium	ppm	ASTM D5185(m)	>20	0	<1	<1
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>6	0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	6.8	6.1	6.8
Sulfation	Abs/.1mm	ASTM D7415*	>30	17.5	19.3	22.6
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG
Sodium	ppm	ASTM D5185(m)		3	4	2
Boron	ppm	ASTM D5185(m)		19	58	60
Barium	ppm	ASTM D5185(m)		0	0	0
Molybdenum	ppm	ASTM D5185(m)		15	44	47
Manganese	ppm	ASTM D5185(m)		<1	<1	<1
Magnesium	ppm	ASTM D5185(m)		156	606	633
Calcium	ppm	ASTM D5185(m)		2034	1423	1504
Phosphorus	ppm	ASTM D5185(m)		942	989	1015
Zinc	ppm	ASTM D5185(m)		973	1206	1202
Sulfur	ppm	ASTM D5185(m)		2934	2699	2671
Oxidation	Abs/.1mm	ASTM D7414*	>25	11.7	15.9	15.3
Visc @ 100°C	cSt	ASTM D7279(m)		14.0	14.0	14.6

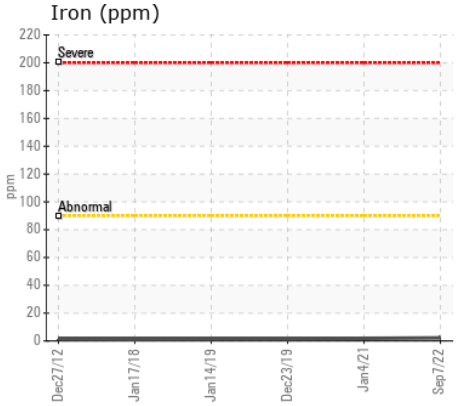
Viscosity @ 100°C



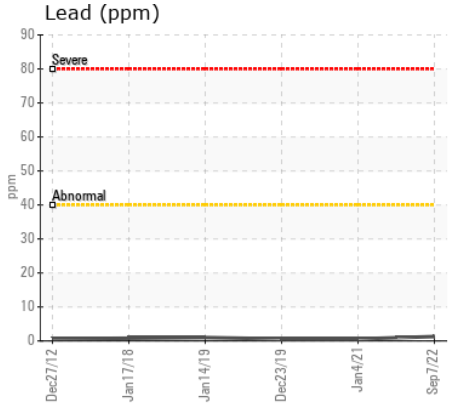
Additives



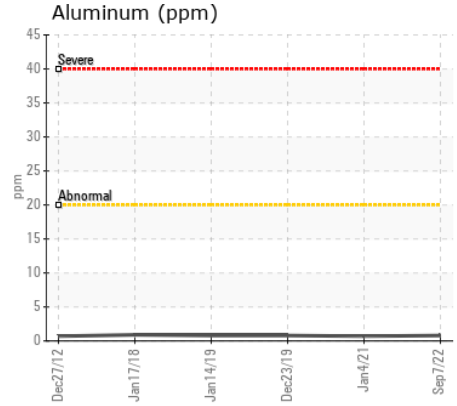
Iron (ppm)



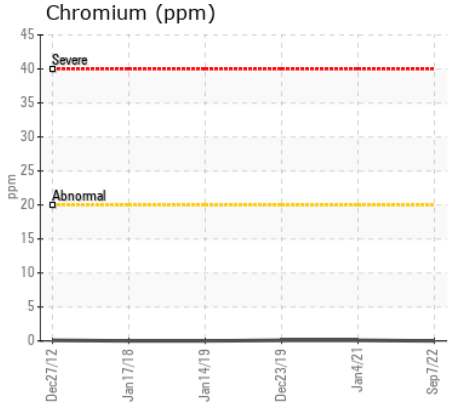
Lead (ppm)



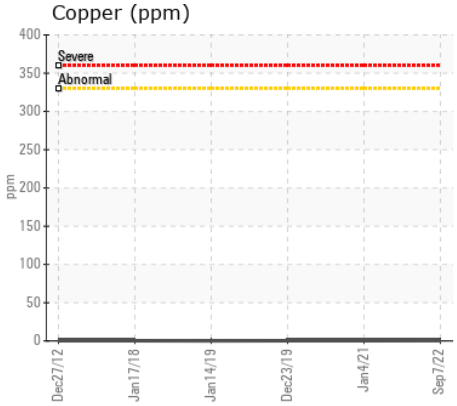
Aluminum (ppm)



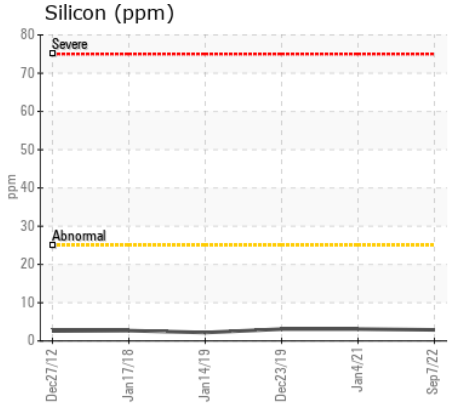
Chromium (ppm)



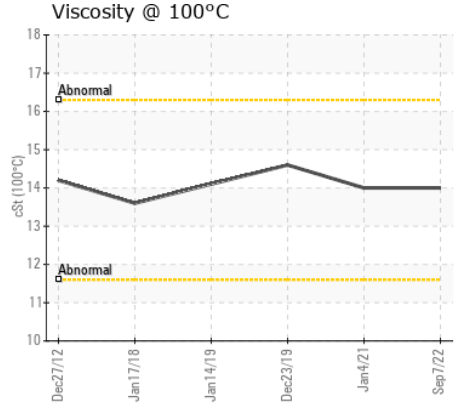
Copper (ppm)



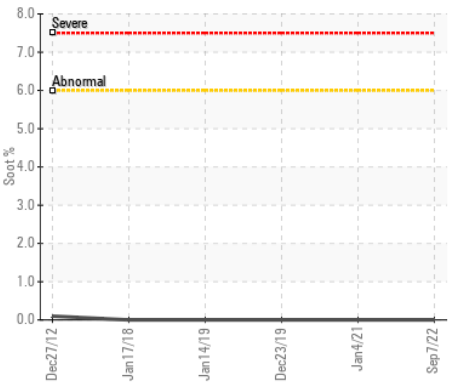
Silicon (ppm)



Viscosity @ 100°C



Soot %



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : CU0019588
Lab Number : 02510463
Unique Number : 5451433
Test Package : MOB 1

Received : 14 Sep 2022
Tested : 14 Sep 2022
Diagnosed : 14 Sep 2022 - Wes Davis

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.

CUMMINS CANADA ULC - GENERATOR DIVISION
7175 PACIFIC CIRCLE
MISSISSAUGA, ON
CA L5T 2A5
Contact: Elisia Johnson
elisia.johnson@cummins.com
T: (905)795-0050
F: (905)795-9252