

OIL ANALYSIS REPORT

Nitration

Sulfation

Abs/cm ASTM D7624* >20

Abs/.1mm ASTM D7415* >30



Diesel Engine VALVOLINE 15W40 (--- GAL)

DIAGNOSIS

Recommendation

The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Wear

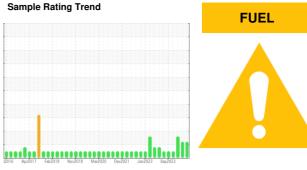
All component wear rates are normal.

Contamination

There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

Fluid Condition

The oil is no longer serviceable due to the presence of contaminants.



		12016 Apr20	17 Feb2018 Nov2018	Mar2020 Dec2021 Jan2023	Sep2023	
SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0891761	WC0875087	WC0875113
Sample Date		Client Info		19 Feb 2024	03 Jan 2024	29 Nov 2023
Machine Age	kms	Client Info		498656	489530	480216
Oil Age	kms	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	ABNORMAL	ATTENTION
CONTAMINATIO	N	method	limit/base	current	history1	history2
Water		WC Method	>0.2	NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>100	20	19	36
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	0	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>3	0	0	<1
Aluminum	ppm	ASTM D5185(m)	>20	<1	2	2
Lead	ppm	ASTM D5185(m)	>40	0	<1	1
Copper	ppm	ASTM D5185(m)	>330	11	15	22
Tin	ppm	ASTM D5185(m)	>15	0	0	0
Antimony	ppm	ASTM D5185(m)		0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
Beryllium	ppm	ASTM D5185(m)		0	0	0
Cadmium	ppm	ASTM D5185(m)		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	39	8	10	9
Barium	ppm	ASTM D5185(m)	1	0	0	<1
Molybdenum	ppm	ASTM D5185(m)	49	8	8	9
Manganese	ppm	ASTM D5185(m)	1	0	0	0
Magnesium	ppm	ASTM D5185(m)	616	47	48	34
Calcium	ppm	ASTM D5185(m)	1554	2120	2147	2296
Phosphorus	ppm	ASTM D5185(m)	899	796	813	825
Zinc	ppm	ASTM D5185(m)	1069	960	954	1026
Sulfur	ppm	ASTM D5185(m)	2624	2651	2789	2665
Lithium	ppm	ASTM D5185(m)		<1	<1	<1
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	5	5	7
Sodium	ppm	ASTM D5185(m)		8	2	3
Potassium	ppm	ASTM D5185(m)	>20	21	2	<1
Fuel	%	ASTM D3103(iii) ASTM D7593*	>5	▲ 5.1	<u>∧</u> 6.5	▲ 3.2
Glycol	%	ASTM D7593 ASTM D7922*	20	0.0	NEG	NEG
INFRA-RED	<i>,</i> ,,	method	limit/base		history1	
	0/					history2
Soot %	%	ASTM D7844*	>3	0.3	0.3	0.5

8.5

20.8

9.9

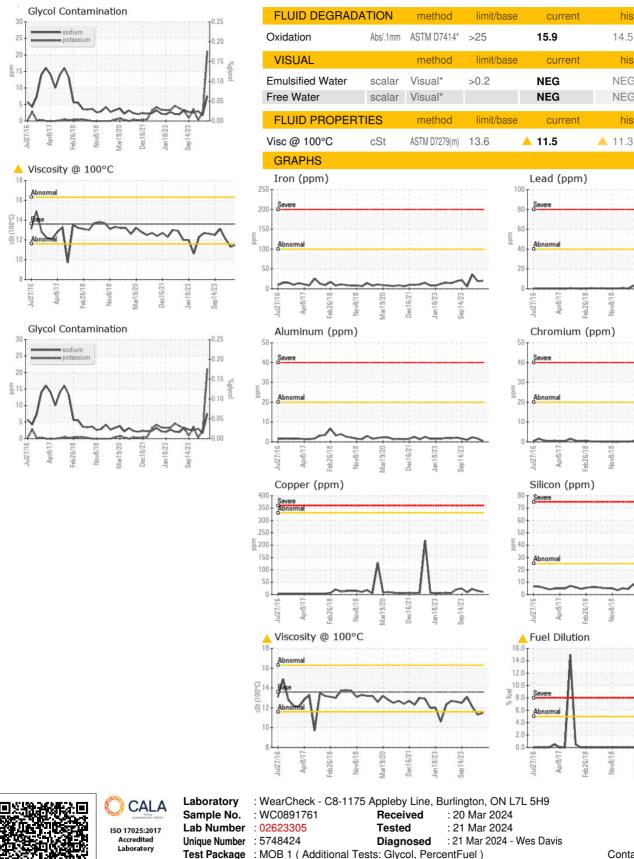
24.5

9.0

21.4



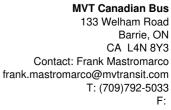
OIL ANALYSIS REPORT



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.



Dec16/21

Aar19/70

Jan 18/23

history1

history1

historv1

lar19/70 lec16/7 an 18/73

14.5

NEG

NEG

history2

history2

historv2

4/23

eo

en 14/23

ec16/7 an 18/73

20.3

NEG

NEG

12.1

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Contact/Location: Frank Mastromarco - MVTBAR

4/23

Sepl