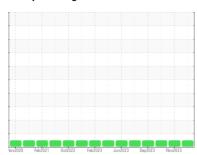


OIL ANALYSIS REPORT

Sample Rating Trend







[6150] Machine Id 2002 Component

Diesel Engine

VALVOLINE 15W40 (--- GAL)

DIAGNOSIS

Recommendation

Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

Additive levels indicate the addition of a different brand, or type of oil. The condition of the oil is acceptable for the time in service.

		Vov2020 Fe	b2021 Oct2022 Feb	2023 Jun2023 Sep2023	Nov2023	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0875081	WC0858010	WC0858046
Sample Date		Client Info		29 Dec 2023	14 Nov 2023	14 Oct 2023
Machine Age	kms	Client Info		317525	308233	298891
Oil Age	kms	Client Info		0	0	0
Oil Changed		Client Info		Changed	N/A	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATION	J	method	limit/base	current	history1	history2
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
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>75	8	8	8
Chromium	ppm	ASTM D5185(m)	>5	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	<1	<1	0
Titanium	ppm	ASTM D5185(m)	>2	0	0	0
Silver	ppm	ASTM D5185(m)	>2	0	<1	<1
Aluminum	ppm	ASTM D5185(m)	>15	1	1	1
Lead	ppm	ASTM D5185(m)	>25	<1	<1	0
Copper	ppm	ASTM D5185(m)	>100	<1	<1	<1
Tin	ppm	ASTM D5185(m)	>4	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	10	12	10
Barium	ppm	ASTM D5185(m)	1	0	<1	<1
Molybdenum	ppm	ASTM D5185(m)	49	8	9	10
Manganese	ppm	ASTM D5185(m)	1	0	0	0
Magnesium	ppm	ASTM D5185(m)	616	47	47	28
Calcium	ppm	ASTM D5185(m)	1554	2106	2163	2208
Phosphorus	ppm	ASTM D5185(m)	899	833	862	870
Zinc	ppm	ASTM D5185(m)	1069	969	982	1013
Sulfur	ppm	ASTM D5185(m)	2624	3063	2859	2974
Lithium	ppm	ASTM D5185(m)		<1	<1	<1
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	3	3	3
Sodium	ppm	ASTM D5185(m)		1	1	2
Potassium	ppm	ASTM D5185(m)	>20	1	<1	0
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>6	0.2	0.1	0.1
Nitration	Abs/cm	ASTM D7624*	>20	7.4	7.3	7.5
Cultation	Aba/ 1	ACTM D7445*	00	10.5	10.0	10.0

18.5

Sulfation

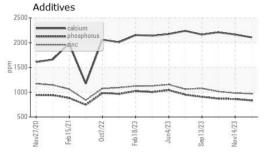
Abs/.1mm ASTM D7415* >30

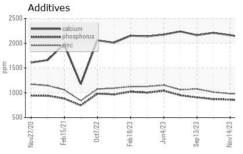
19.0

18.9



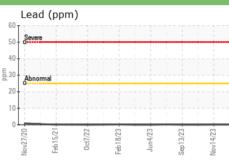
OIL ANALYSIS REPORT

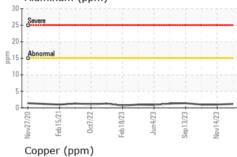


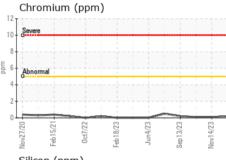


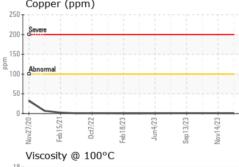
FLUID DEGRADA	ATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	11.5	11.9	12.6
VISUAL		method	limit/base	current	history1	history2
Emulsified Water Free Water	scalar	Visual* Visual*	>0.2	NEG NEG	NEG NEG	NEG NEG
FLUID PROPER	TIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	13.6	12.7	12.9	13.2
GRAPHS						

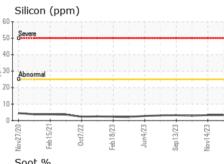
140 Sever							_
00							
80 - Abno	mal						
60							
40							
20							
200	12/	727	73	- 23	73	73	1
Nov27/	Feb15/21	0ct7/	Feb 18/23	Jun4/	Sep13/	Nov14/2	
Alur	ninum	(ppm)				

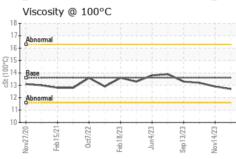


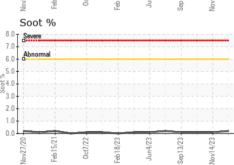














CALA ISO 17025:2017 Accredited

Laboratory Sample No. Lab Number **Unique Number** Test Package : MOB 1

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 : 02606935

: WC0875081 : 5708021

Recieved : 08 Jan 2024 Diagnosed : 08 Jan 2024

Diagnostician : Kevin Marson

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.

MVT Canadian Bus 133 Welham Road Barrie, ON

CA L4N 8Y3 Contact: Frank Mastromarco frank.mastromarco@mvtransit.com T: (709)792-5033

F: