



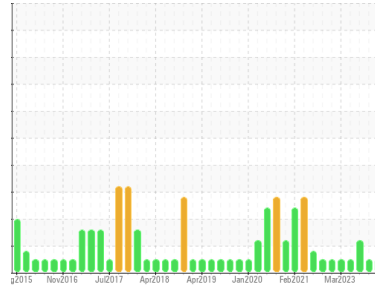
OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
[4139]
 Machine Id
NEW FLYER 1202
 Component
Diesel Engine
 Fluid
VALVOLINE 15W40 (--- GAL)



DIAGNOSIS

Recommendation

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

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

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0843534	WC0805063	WC0805038
Sample Date	Client Info		29 Aug 2023	19 Jul 2023	07 Jun 2023
Machine Age	kms	Client Info	408234	400241	389657
Oil Age	kms	Client Info	0	0	0
Oil Changed	Client Info		N/A	N/A	Changed
Sample Status			NORMAL	NORMAL	ABNORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<1.0	<1.0	<1.0

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >100	13	14	12
Chromium	ppm	ASTM D5185(m) >20	<1	<1	<1
Nickel	ppm	ASTM D5185(m) >4	0	0	0
Titanium	ppm	ASTM D5185(m)	0	0	<1
Silver	ppm	ASTM D5185(m) >3	<1	0	0
Aluminum	ppm	ASTM D5185(m) >20	1	2	1
Lead	ppm	ASTM D5185(m) >40	<1	<1	0
Copper	ppm	ASTM D5185(m) >330	<1	<1	<1
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	23	85	38
Barium	ppm	ASTM D5185(m) 1	<1	0	0
Molybdenum	ppm	ASTM D5185(m) 49	30	99	34
Manganese	ppm	ASTM D5185(m) 1	0	<1	<1
Magnesium	ppm	ASTM D5185(m) 616	128	665	80
Calcium	ppm	ASTM D5185(m) 1554	2004	1435	2211
Phosphorus	ppm	ASTM D5185(m) 899	808	766	913
Zinc	ppm	ASTM D5185(m) 1069	954	875	1030
Sulfur	ppm	ASTM D5185(m) 2624	2686	2172	2932
Lithium	ppm	ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >25	5	6	6
Sodium	ppm	ASTM D5185(m)	10	13	101
Potassium	ppm	ASTM D5185(m) >20	20	32	▲ 304
Glycol	%	ASTM D7922*	0.0	0.0	0.0

INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844* >3	0.6	0.8	0.6
Nitration	Abs/cm	ASTM D7624* >20	10.4	10.5	10.7
Sulfation	Abs/.1mm	ASTM D7415* >30	24.2	26.2	25.8

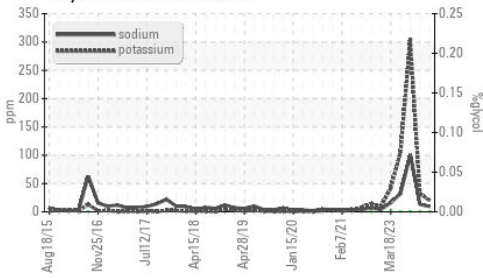
FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414* >25	20.1	22.2	22.9

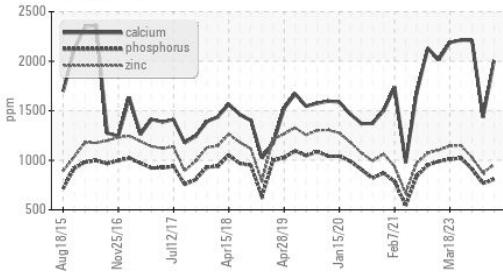


OIL ANALYSIS REPORT

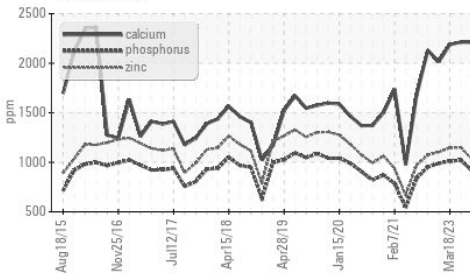
Glycol Contamination



Additives



Additives

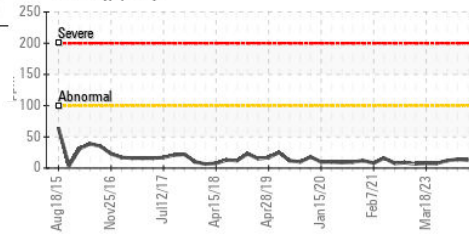


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	VLITE	---
Yellow Metal	scalar	Visual*	NONE	NONE	---
Precipitate	scalar	Visual*	NONE	NONE	---
Silt	scalar	Visual*	NONE	NONE	---
Debris	scalar	Visual*	NONE	NONE	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---
Appearance	scalar	Visual*	NORML	NORML	---
Odor	scalar	Visual*	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

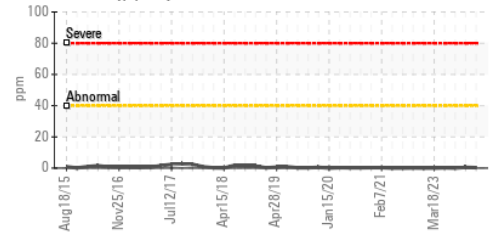
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	13.6	12.8	13.8

GRAPHS

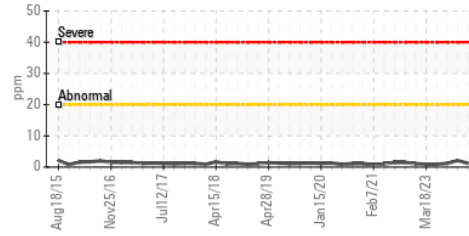
Iron (ppm)



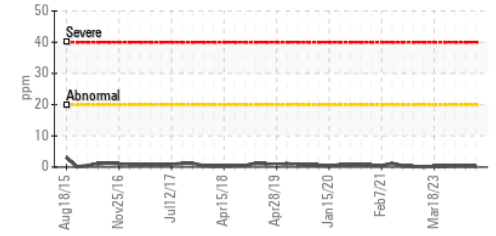
Lead (ppm)



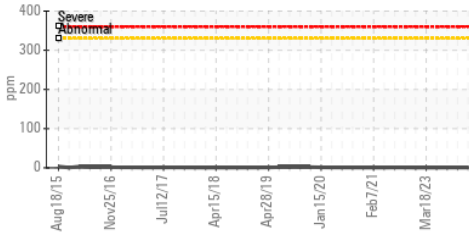
Aluminum (ppm)



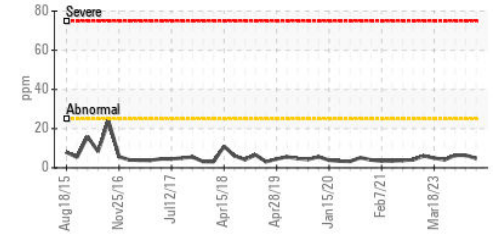
Chromium (ppm)



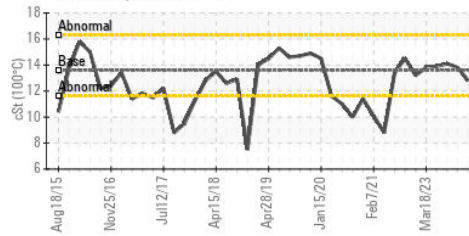
Copper (ppm)



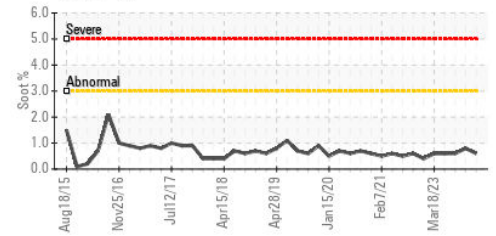
Silicon (ppm)



Viscosity @ 100°C



Soot %



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0843534 **Received** : 02 Oct 2023
Lab Number : 02586040 **Diagnosed** : 02 Oct 2023
Unique Number : 5655106 **Diagnostician** : Wes Davis
Test Package : MOB 1 (Additional Tests: Glycol, Visual)

MVT Canadian Bus
 133 Welham Road
 Barrie, ON
 CA L4N 8Y3
 Contact: Frank Mastromarco
 frank.mastromarco@mvttransit.com
 T: (709)792-5033
 F:

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.