

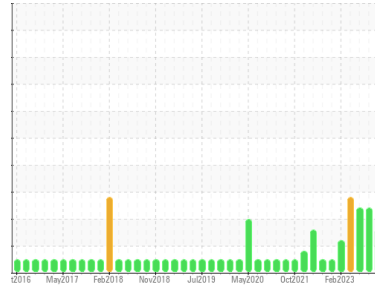


OIL ANALYSIS REPORT

Sample Rating Trend

FUEL

Area
[4780]
 Machine Id
NOVA BUS 1502-312
 Component
Diesel Engine
 Fluid
VALVOLINE 15W40 (26 LTR)



DIAGNOSIS

Recommendation

The oil change at the time of sampling has been noted. Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. No other corrective action is recommended at this time.

Wear

All component wear rates are normal.

Contamination

Light fuel dilution occurring. No other contaminants were detected 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.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0843561	WC0843538	WC0805062
Sample Date	Client Info		07 Oct 2023	05 Sep 2023	18 Jul 2023
Machine Age	kms	Client Info	595184	0	577497
Oil Age	kms	Client Info	0	0	0
Oil Changed	Client Info		Changed	Changed	N/A
Sample Status			ATTENTION	SEVERE	SEVERE

CONTAMINATION

	method	limit/base	current	history1	history2
Glycol	WC Method		NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >100	3	6	6
Chromium	ppm	ASTM D5185(m) >20	0	<1	1
Nickel	ppm	ASTM D5185(m) >4	0	<1	<1
Titanium	ppm	ASTM D5185(m)	0	<1	0
Silver	ppm	ASTM D5185(m) >3	<1	<1	0
Aluminum	ppm	ASTM D5185(m) >20	<1	<1	1
Lead	ppm	ASTM D5185(m) >40	0	0	0
Copper	ppm	ASTM D5185(m) >330	<1	3	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	16	10	64
Barium	ppm	ASTM D5185(m) 1	<1	0	0
Molybdenum	ppm	ASTM D5185(m) 49	8	8	30
Manganese	ppm	ASTM D5185(m) 1	0	0	0
Magnesium	ppm	ASTM D5185(m) 616	▲ 35	22	38
Calcium	ppm	ASTM D5185(m) 1554	▲ 2159	1822	1919
Phosphorus	ppm	ASTM D5185(m) 899	845	785	907
Zinc	ppm	ASTM D5185(m) 1069	972	838	973
Sulfur	ppm	ASTM D5185(m) 2624	2917	2510	2839
Lithium	ppm	ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >25	3	5	4
Sodium	ppm	ASTM D5185(m)	1	<1	2
Potassium	ppm	ASTM D5185(m) >20	0	<1	<1
Fuel	%	ASTM D7593* >5	▲ 2.2	15.6	8.2

INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844* >3	0	0	0
Nitration	Abs/cm	ASTM D7624* >20	5.8	8.2	6.6
Sulfation	Abs/.1mm	ASTM D7415* >30	16.7	21.4	19.5

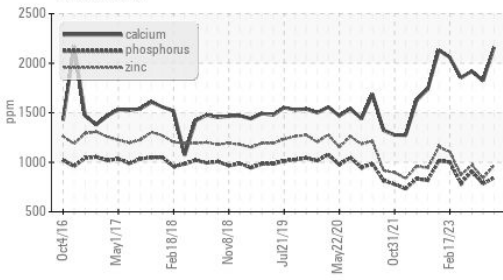
FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414* >25	10.6	20.4	15.6

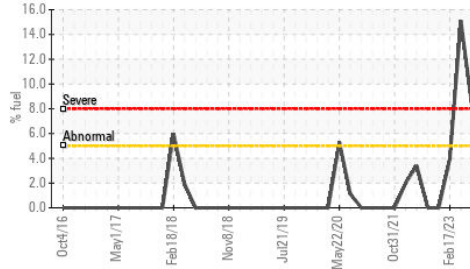


OIL ANALYSIS REPORT

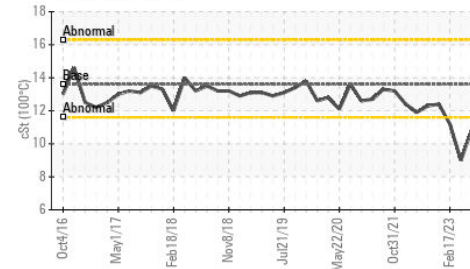
Additives



Fuel Dilution



Viscosity @ 100°C

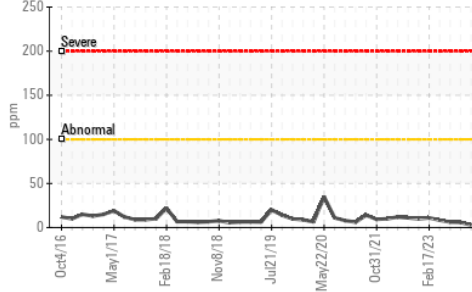


VISUAL	method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

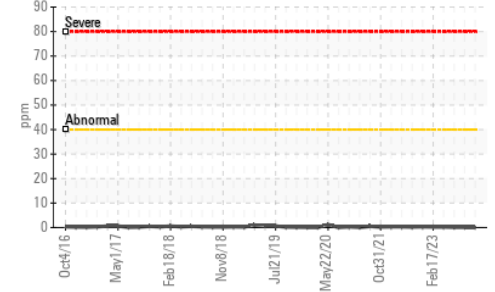
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	13.6	12.7	▲ 8.7 ▲ 10.9

GRAPHS

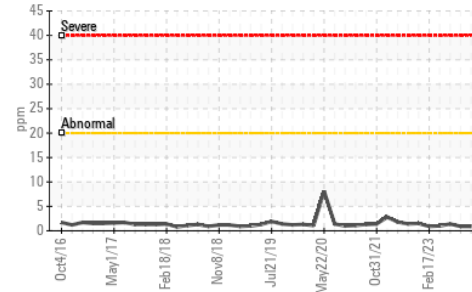
Iron (ppm)



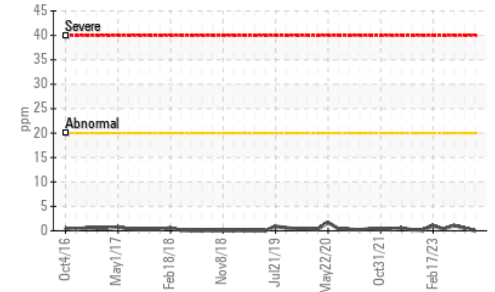
Lead (ppm)



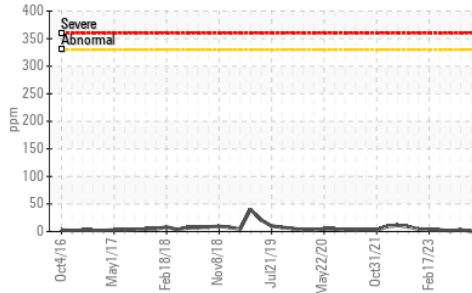
Aluminum (ppm)



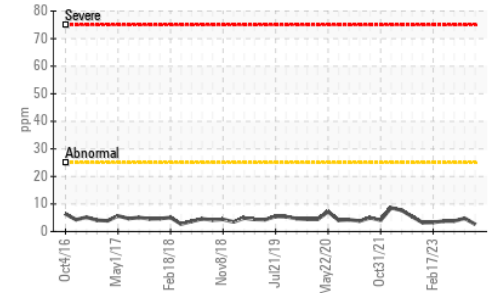
Chromium (ppm)



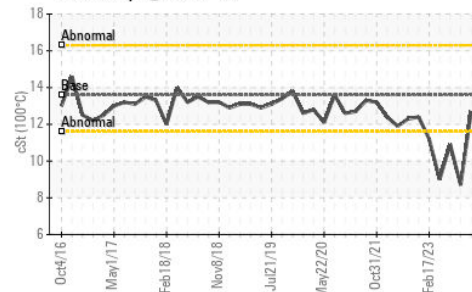
Copper (ppm)



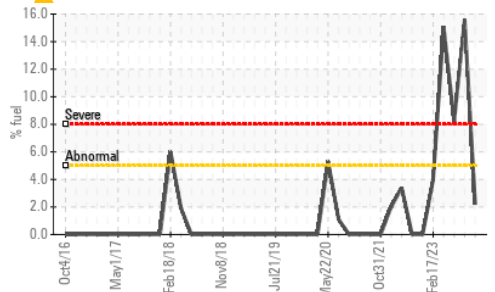
Silicon (ppm)



Viscosity @ 100°C



Fuel Dilution



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0843561 **Received** : 16 Oct 2023
Lab Number : 02589124 **Diagnosed** : 17 Oct 2023
Unique Number : 5658190 **Diagnostician** : Wes Davis
Test Package : MOB 1 (Additional Tests: PercentFuel)

MVT Canadian Bus

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Barrie, ON
CA L4N 8Y3
Contact: Frank Mastromarco
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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.