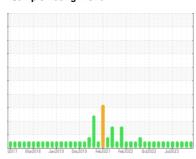


## **OIL ANALYSIS REPORT**

#### Sample Rating Trend



NORMAL



# NOVA BUS 173

Component

Rear Diesel Engine

ESSO XD-3 EXTRA 15W40 (--- LTR)

#### 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

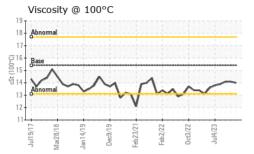
### **Fluid Condition**

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

			18 Jan2019 Dec2019			
SAMPLE INFORM	ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0889035	WC0866636	WC0816382
Sample Date		Client Info		22 Mar 2024	15 Nov 2023	04 Oct 2023
Machine Age	kms	Client Info		0	0	0
Oil Age	kms	Client Info		9183	9216	10308
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATION		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)	>90	25	14	17
Chromium	ppm	ASTM D5185(m)	>20	1	<1	<1
Nickel	ppm	ASTM D5185(m)	>2	<1	0	<1
Titanium	ppm	ASTM D5185(m)	>2	0	0	0
Silver	ppm	ASTM D5185(m)	>2	0	<1	<1
Aluminum	ppm	ASTM D5185(m)	>20	2	1	1
Lead	ppm	ASTM D5185(m)	>40	0	<1	<1
Copper	ppm	ASTM D5185(m)	>330	3	4	5
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)		71	75	52
Barium	ppm	ASTM D5185(m)		0	<1	<1
Molybdenum	ppm	ASTM D5185(m)		0	0	<1
Manganese	ppm	ASTM D5185(m)		0	0	0
Magnesium	ppm	ASTM D5185(m)		14	13	17
Calcium	ppm	ASTM D5185(m)	3780	2213	2245	2205
Phosphorus	ppm	ASTM D5185(m)	1370	932	968	883
Zinc	ppm	ASTM D5185(m)	1500	1139	1157	1076
Sulfur	ppm	ASTM D5185(m)	3800	2759	2894	2861
Lithium	ppm	ASTM D5185(m)		<1	<1	<1
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	2	3	3
Sodium	ppm	ASTM D5185(m)	>192	2	2	2
Potassium	ppm	ASTM D5185(m)	>20	5	4	4
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>6	1.3	0.9	1
Nitration	Abs/cm	ASTM D7624*	>20	10.2	9.1	10.5
Nitration	/ 100/0111	/ TO TIVI D / OLT	120	10.2	0.1	10.0



## **OIL ANALYSIS REPORT**



FLUID DEGRADA	method	limit/base	current	history1	history2	
Oxidation Abs/.1mm		ASTM D7414*	>25	19.2	19.0	23.9
VISUAL		method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG
Free Water sca		Visual*		NEG	NEG	NEG
FLUID PROPERT	method	limit/base	current	history1	history2	
Visc @ 100°C cSt		ASTM D7279(m)	15.4	14.0	14.1	14.1

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**CALA** ISO 17025:2017 Accredited Laboratory

Laboratory Sample No.

Lab Number : 02624919 Unique Number : 5750038

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 : WC0889035 Received **Tested** 

Diagnosed Test Package : MOB 1

: 27 Mar 2024 : 27 Mar 2024 - Wes Davis

: 27 Mar 2024

**CITY OF THUNDER BAY** AUTO MAINTENANCE STORES, 570 FORT WILLIAM ROAD THUNDER BAY, ON

CA P7B 2Z8 Contact: Sean Malcolm

sean.malcolm@thunderbay.ca T: (807)684-2716 F: (807)344-0237

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.

Contact/Location: Sean Malcolm - CITTHU