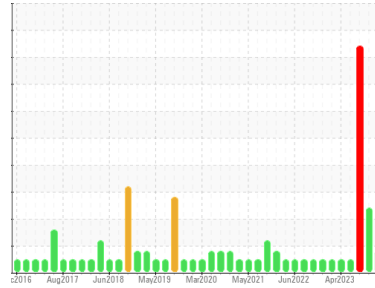




OIL ANALYSIS REPORT

Sample Rating Trend



FUEL



Machine Id
NOVA BUS 165

Component
Rear Diesel Engine

Fluid
ESSO XD-3 EXTRA 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. Test for glycol is negative. Tests confirm the presence of fuel in the oil.

Fluid Condition

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

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0866592	WC0816370	WC0816550
Sample Date	Client Info		08 Dec 2023	22 Sep 2023	11 Jul 2023
Machine Age	kms	Client Info	0	0	0
Oil Age	kms	Client Info	8838	9692	9590
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			ABNORMAL	ABNORMAL	SEVERE

CONTAMINATION

	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) >75	25	28	45
Chromium	ppm	ASTM D5185(m) >5	<1	<1	2
Nickel	ppm	ASTM D5185(m) >4	0	0	<1
Titanium	ppm	ASTM D5185(m) >2	0	0	<1
Silver	ppm	ASTM D5185(m) >2	<1	<1	<1
Aluminum	ppm	ASTM D5185(m) >15	1	2	3
Lead	ppm	ASTM D5185(m) >25	<1	<1	2
Copper	ppm	ASTM D5185(m) >100	6	10	19
Tin	ppm	ASTM D5185(m) >4	0	0	<1
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)	63	42	49
Barium	ppm	ASTM D5185(m)	<1	<1	<1
Molybdenum	ppm	ASTM D5185(m)	6	45	15
Manganese	ppm	ASTM D5185(m)	0	0	1
Magnesium	ppm	ASTM D5185(m)	50	293	206
Calcium	ppm	ASTM D5185(m) 3780	2102	1891	1736
Phosphorus	ppm	ASTM D5185(m) 1370	888	958	925
Zinc	ppm	ASTM D5185(m) 1500	1102	1181	1089
Sulfur	ppm	ASTM D5185(m) 3800	2805	2667	2802
Lithium	ppm	ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

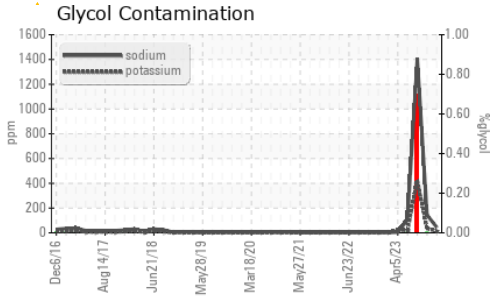
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Silicon	ppm	ASTM D5185(m) >25	9	12	61
Sodium	ppm	ASTM D5185(m) >192	44	144	▲ 1404
Potassium	ppm	ASTM D5185(m) >20	13	▲ 35	▲ 424
Fuel	%	ASTM D7593* >3.0	▲ 3.5	▲ 3.4	<1.0
Glycol	%	ASTM D7922*	0.0	0.0	● 0.696

INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844* >6	1.1	0.9	1.2
Nitration	Abs/cm	ASTM D7624* >20	10.8	9.5	17.4
Sulfation	Abs./1mm	ASTM D7415* >30	27.0	25.6	29.0



OIL ANALYSIS REPORT

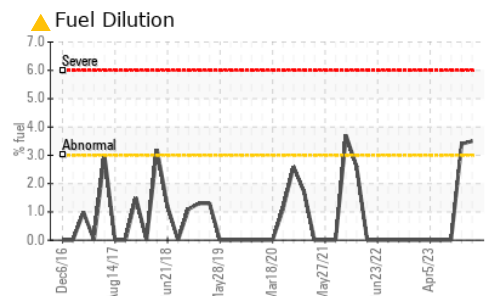
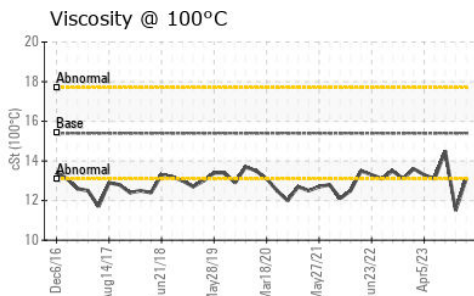
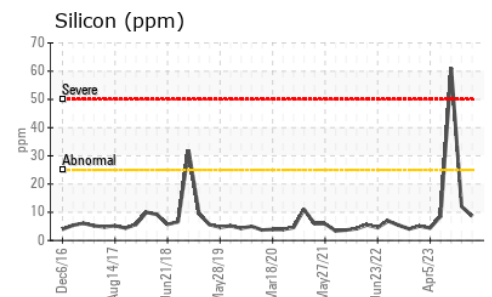
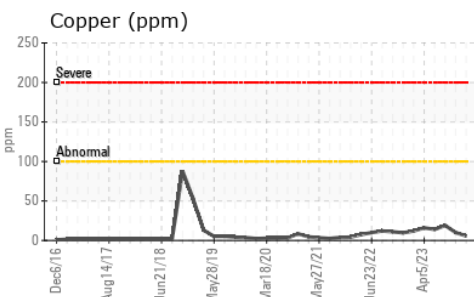
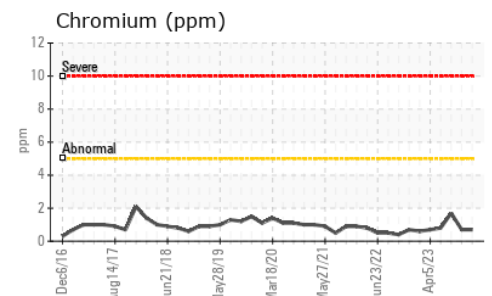
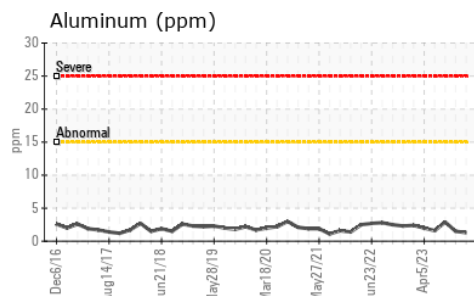
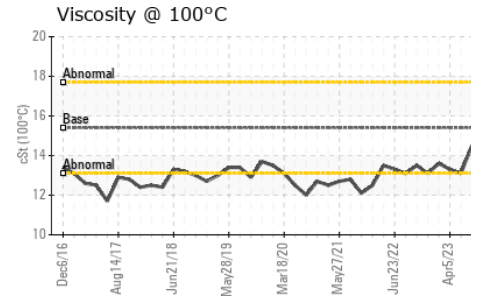
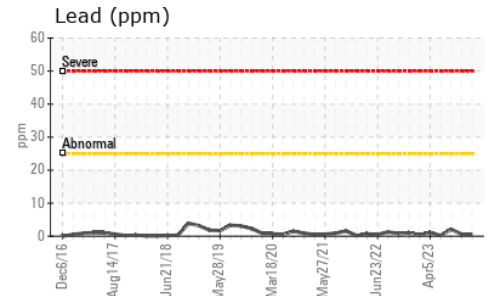
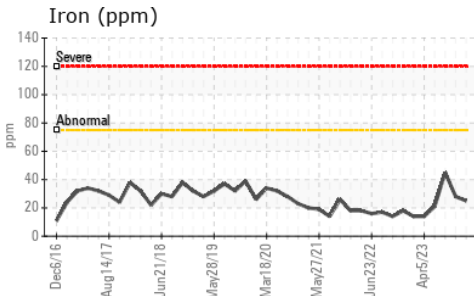
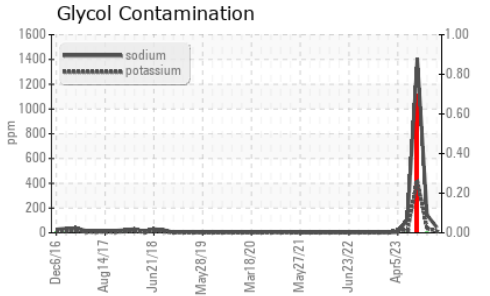


FLUID DEGRADATION	method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	24.5	22.8

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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	13.1	11.5

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0866592 **Received** : 14 Dec 2023
Lab Number : 02603118 **Diagnosed** : 15 Dec 2023
Unique Number : 5696203 **Diagnostician** : Wes Davis
Test Package : MOB 1 (Additional Tests: Glycol, PercentFuel)

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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.