



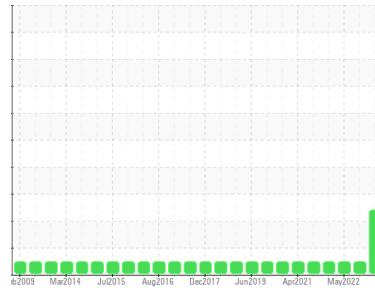
OIL ANALYSIS REPORT

Sample Rating Trend

FUEL



Machine Id
NOVA BUS 60044
 Component
Rear Diesel Engine
 Fluid
VALVOLINE 15W40 (24 LTR)



DIAGNOSIS

Recommendation

We advise that you check the fuel injection system. 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 high amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

Fluid Condition

Viscosity of sample indicates oil is within SAE 30 range, advise investigate. The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0887266	WC0770732	WC0700623
Sample Date	Client Info		12 Dec 2023	08 May 2023	31 May 2022
Machine Age	kms	Client Info	979925	943892	894941
Oil Age	kms	Client Info	10000	10000	10000
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			SEVERE	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
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	35	35	45
Chromium	ppm	ASTM D5185(m)	>5	1	2	2
Nickel	ppm	ASTM D5185(m)	>4	<1	<1	0
Titanium	ppm	ASTM D5185(m)	>2	0	<1	0
Silver	ppm	ASTM D5185(m)	>2	0	0	0
Aluminum	ppm	ASTM D5185(m)	>15	3	4	3
Lead	ppm	ASTM D5185(m)	>25	2	2	2
Copper	ppm	ASTM D5185(m)	>100	2	2	2
Tin	ppm	ASTM D5185(m)	>4	0	<1	<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)	39	3	2	2
Barium	ppm	ASTM D5185(m)	1	0	0	0
Molybdenum	ppm	ASTM D5185(m)	49	63	63	66
Manganese	ppm	ASTM D5185(m)	1	0	<1	<1
Magnesium	ppm	ASTM D5185(m)	616	1041	1002	1097
Calcium	ppm	ASTM D5185(m)	1554	1124	1146	1137
Phosphorus	ppm	ASTM D5185(m)	899	1045	1089	1147
Zinc	ppm	ASTM D5185(m)	1069	1239	1236	1336
Sulfur	ppm	ASTM D5185(m)	2624	2532	2447	2532
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS

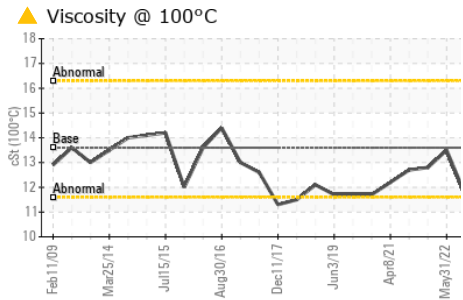
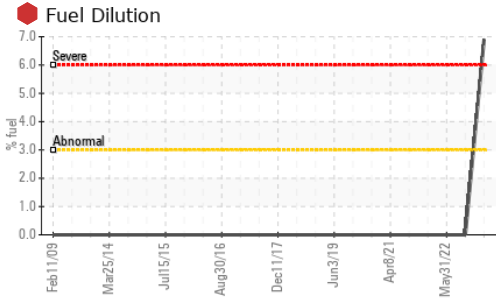
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>25	8	11	8
Sodium	ppm	ASTM D5185(m)		6	6	6
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	<1
Fuel	%	ASTM D7593*	>3.0	6.9	<1.0	<1.0

INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>6	1	0.7	0.7
Nitration	Abs/cm	ASTM D7624*	>20	12.9	12.6	12.5
Sulfation	Abs/.1mm	ASTM D7415*	>30	25.6	26.0	26.2



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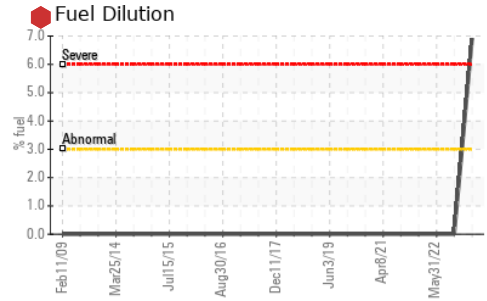
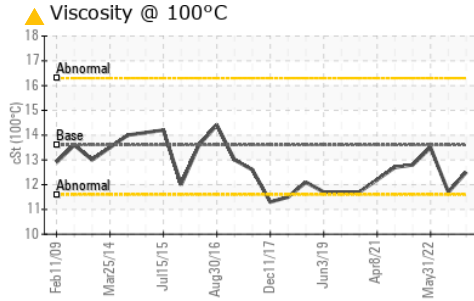
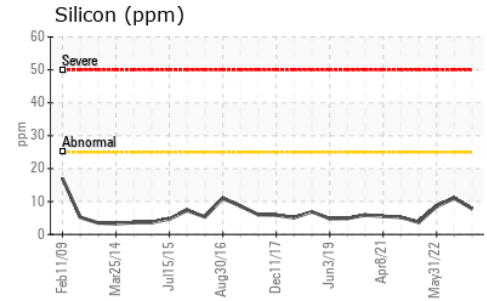
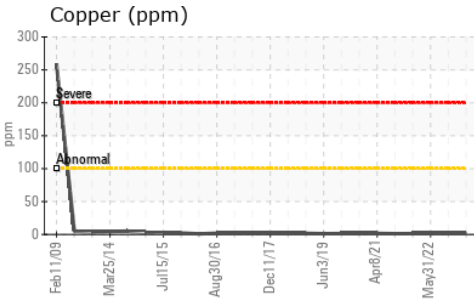
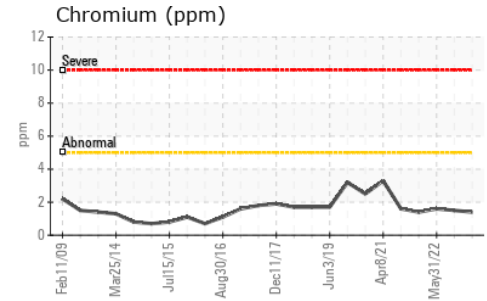
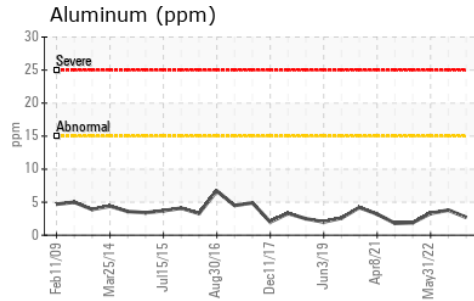
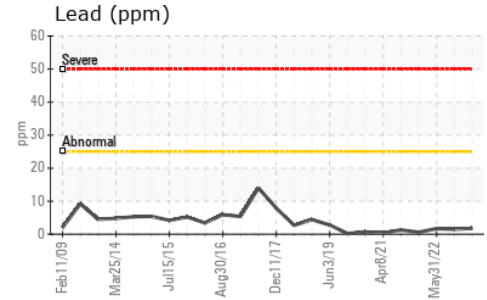
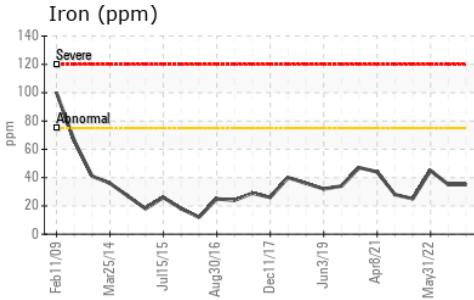


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	25.1	26.1	22.6

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

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	13.6	▲ 12.5	11.7	13.5

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0887266 **Received** : 20 Dec 2023
Lab Number : 02604312 **Diagnosed** : 22 Dec 2023
Unique Number : 5697397 **Diagnostician** : Kevin Marson
Test Package : MOB 1 (Additional Tests: FUELDILUTION, 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.