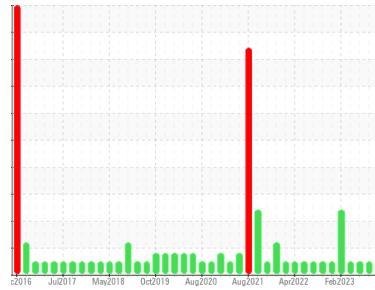




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
NOVA BUS 169

Component
Rear Diesel Engine

Fluid
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.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0816378	WC0816518	WC0816442
Sample Date	Client Info		27 Sep 2023	21 Jul 2023	25 May 2023
Machine Age	kms	Client Info	0	0	0
Oil Age	kms	Client Info	9760	9353	9490
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

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>75	21	17	15
Chromium	ppm	ASTM D5185(m)	>5	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	0	<1	0
Titanium	ppm	ASTM D5185(m)	>2	0	0	0
Silver	ppm	ASTM D5185(m)	>2	<1	<1	0
Aluminum	ppm	ASTM D5185(m)	>15	1	1	1
Lead	ppm	ASTM D5185(m)	>25	<1	0	0
Copper	ppm	ASTM D5185(m)	>100	<1	<1	<1
Tin	ppm	ASTM D5185(m)	>4	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)		53	66	66
Barium	ppm	ASTM D5185(m)		<1	0	0
Molybdenum	ppm	ASTM D5185(m)		<1	3	13
Manganese	ppm	ASTM D5185(m)		0	<1	<1
Magnesium	ppm	ASTM D5185(m)		17	44	185
Calcium	ppm	ASTM D5185(m)	3780	2200	2190	2061
Phosphorus	ppm	ASTM D5185(m)	1370	821	939	1076
Zinc	ppm	ASTM D5185(m)	1500	1009	1078	1164
Sulfur	ppm	ASTM D5185(m)	3800	2864	2879	2895
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>25	5	4	4
Sodium	ppm	ASTM D5185(m)	>192	32	22	37
Potassium	ppm	ASTM D5185(m)	>20	13	9	13
Glycol	%	ASTM D7922*		0.0	0.0	0.0

INFRA-RED

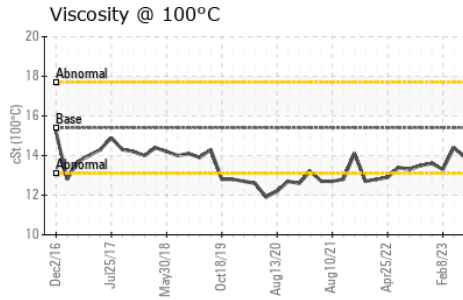
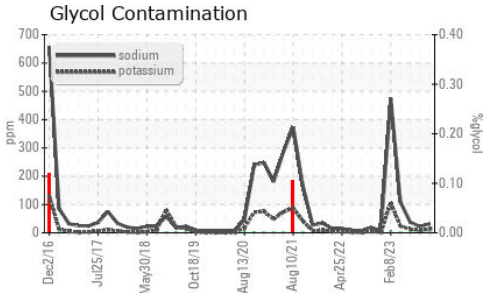
	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>6	1	0.8	0.7
Nitration	Abs/cm	ASTM D7624*	>20	10.6	10.1	9.2
Sulfation	Abs/.1mm	ASTM D7415*	>30	27.4	26.7	24.0

FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	ASTM D7414*	>25	25.6	24.4	20.3



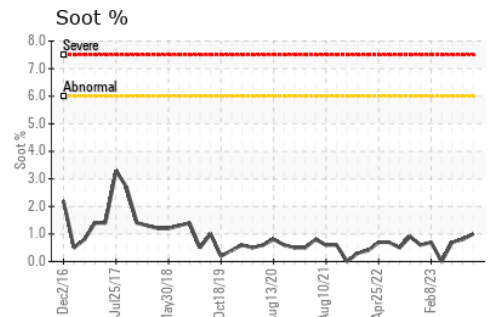
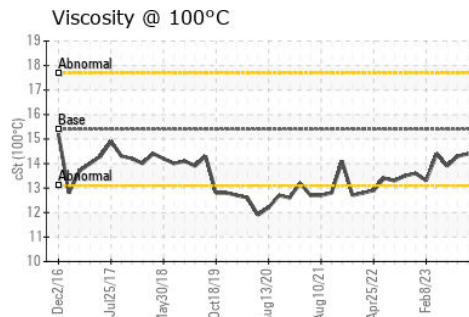
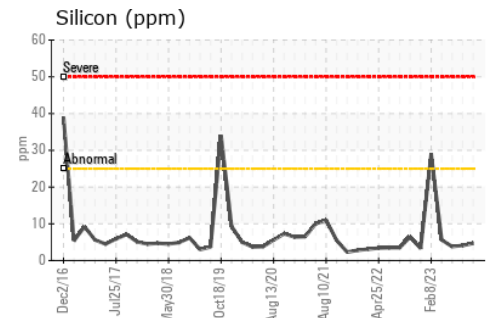
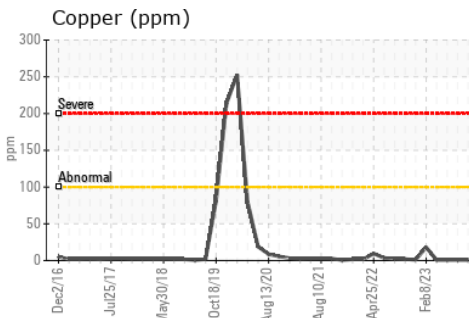
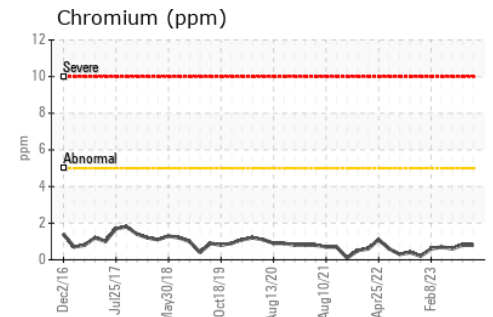
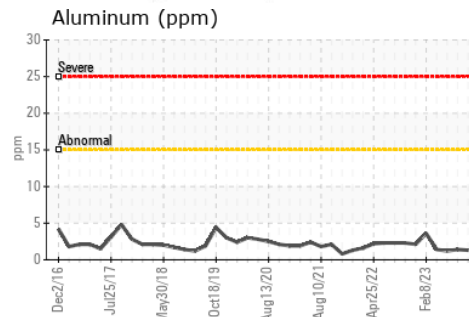
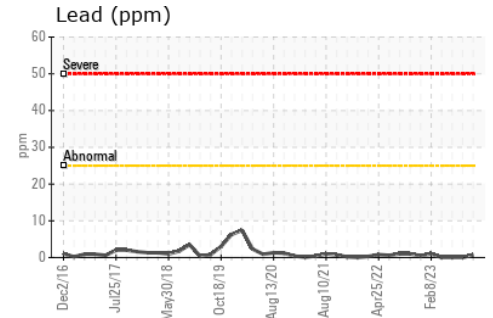
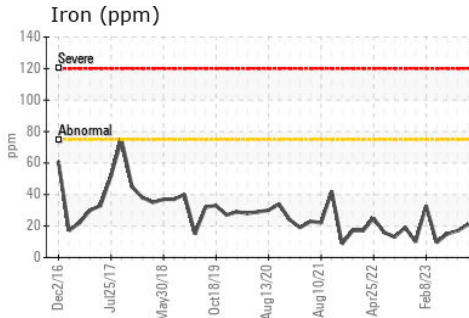
OIL ANALYSIS REPORT



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)	15.4	14.4	14.3

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0816378
Lab Number : 02586697
Unique Number : 5655763
Test Package : MOB 1 (Additional Tests: Glycol)

CITY OF THUNDER BAY
 AUTO MAINTENANCE STORES, 570 FORT WILLIAM ROAD
 THUNDER BAY, ON
 CA P7B 2Z8
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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.