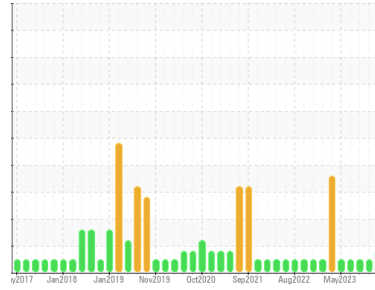




OIL ANALYSIS REPORT

Sample Rating Trend



FUEL



Machine Id
NOVA BUS 160

Component
Rear Diesel Engine

Fluid
ESSO XD-3 EXTRA 15W40 (24 LTR)

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. 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	WC0889177	WC0730986	WC0730835
Sample Date	Client Info	27 Dec 2023	07 Nov 2023	11 Sep 2023
Machine Age	kms	0	0	0
Oil Age	kms	10139	10656	10447
Oil Changed	Client Info	Changed	Changed	Changed
Sample Status		ABNORMAL	NORMAL	NORMAL

CONTAMINATION

method	limit/base	current	history1	history2
Water	WC Method >0.2	NEG	NEG	NEG
Glycol	WC Method	NEG	NEG	0.0

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m) >75	35	52	47
Chromium	ppm	ASTM D5185(m) >5	1	3	1
Nickel	ppm	ASTM D5185(m) >4	<1	<1	<1
Titanium	ppm	ASTM D5185(m) >2	0	0	0
Silver	ppm	ASTM D5185(m) >2	0	<1	0
Aluminum	ppm	ASTM D5185(m) >15	3	4	5
Lead	ppm	ASTM D5185(m) >25	<1	2	2
Copper	ppm	ASTM D5185(m) >100	1	2	2
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)	69	58	53
Barium	ppm	ASTM D5185(m)	0	<1	0
Molybdenum	ppm	ASTM D5185(m)	<1	<1	3
Manganese	ppm	ASTM D5185(m)	0	0	<1
Magnesium	ppm	ASTM D5185(m)	16	19	42
Calcium	ppm	ASTM D5185(m) 3780	2419	2414	2253
Phosphorus	ppm	ASTM D5185(m) 1370	1002	956	1019
Zinc	ppm	ASTM D5185(m) 1500	1221	1215	1182
Sulfur	ppm	ASTM D5185(m) 3800	2979	2759	2742
Lithium	ppm	ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

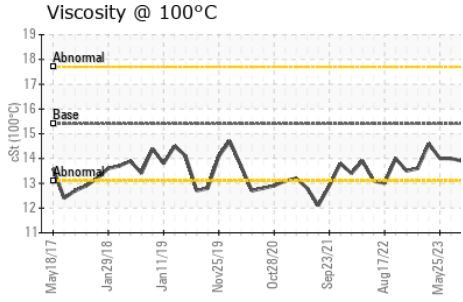
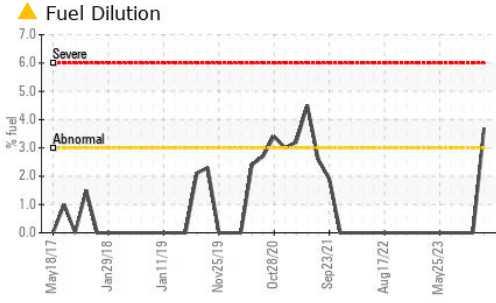
method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m) >25	6	11	10
Sodium	ppm	ASTM D5185(m) >192	12	14	18
Potassium	ppm	ASTM D5185(m) >20	8	8	12
Fuel	%	ASTM D7593* >3.0	▲ 3.7	<1.0	<1.0

INFRA-RED

method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844* >6	1.6	1.6	1.4
Nitration	Abs/cm	ASTM D7624* >20	13.6	13.2	13.6
Sulfation	Abs/.1mm	ASTM D7415* >30	30.7	32.7	38.6



OIL ANALYSIS REPORT

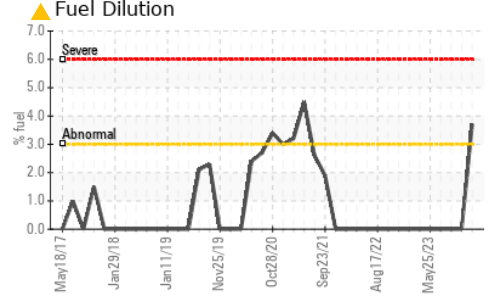
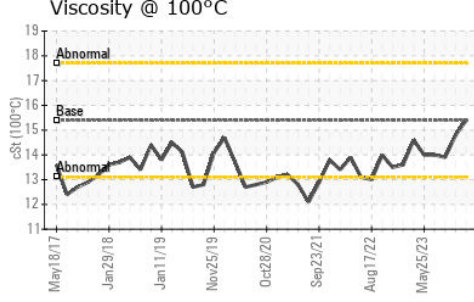
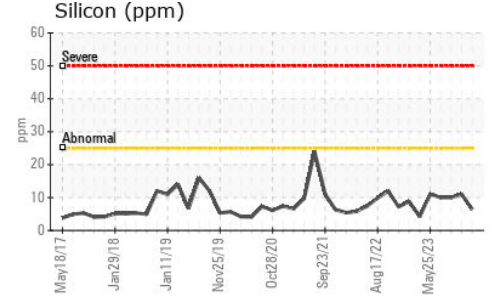
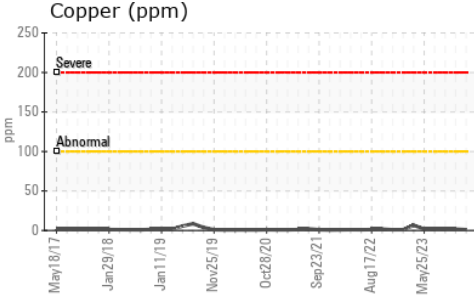
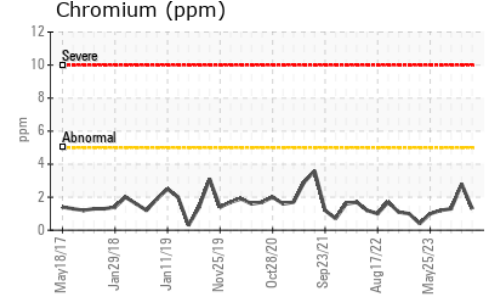
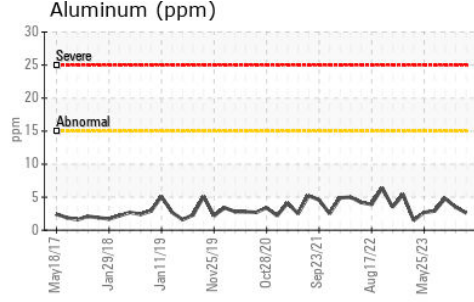
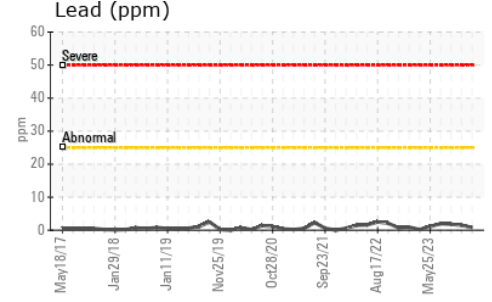
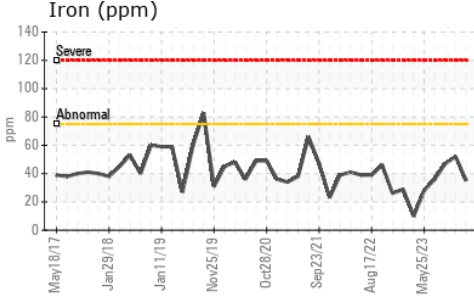


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	28.1	32.4	45.2

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)	15.4	15.4	14.8	13.9

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0889177 **Received** : 05 Jan 2024
Lab Number : **02606748** **Diagnosed** : 09 Jan 2024
Unique Number : 5707834 **Diagnostician** : Wes Davis
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.