



OIL ANALYSIS REPORT

WEAR	SEVERE
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
NOVA BUS 159
Component
Rear Transmission (Auto)
Fluid
CASTROL TRANSYND (--- GAL)

RECOMMENDATION

We advise that you check all areas where dirt can enter the system. We recommend that you drain the fluid from the component if this has not already been done. We recommend an early resample to monitor this condition.

WEAR

Iron ppm levels are severe. The low ferrous density (PQ) index indicates the wear metal levels are due to corrosion.

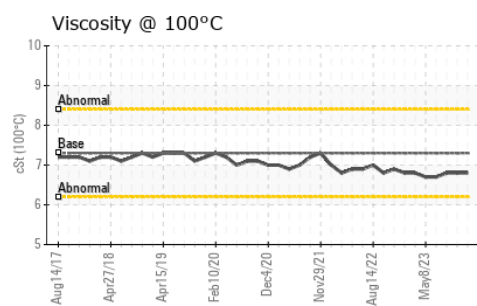
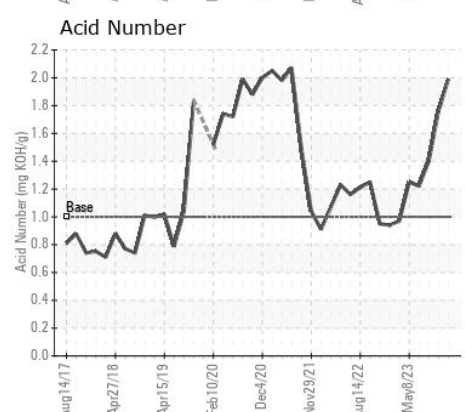
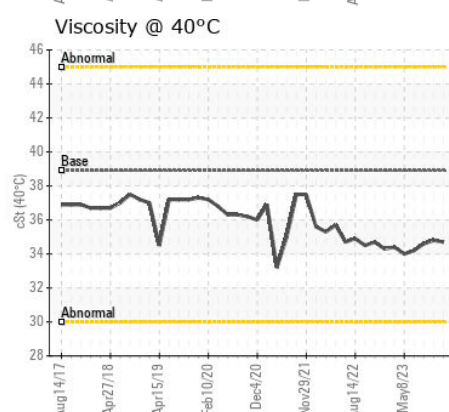
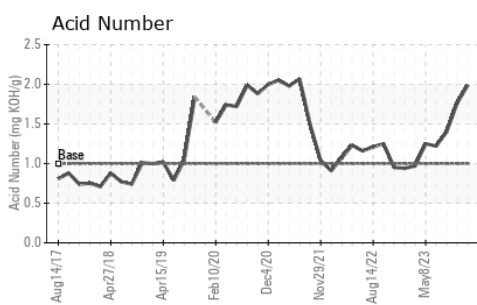
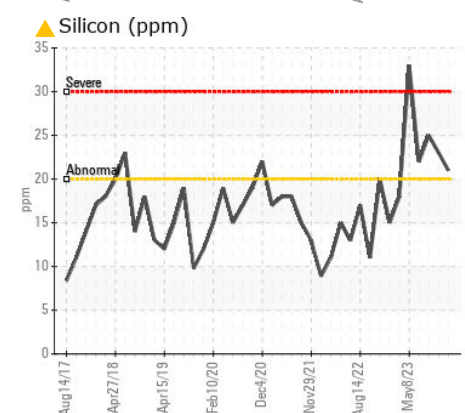
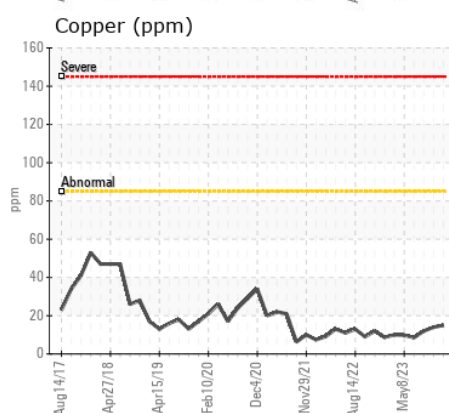
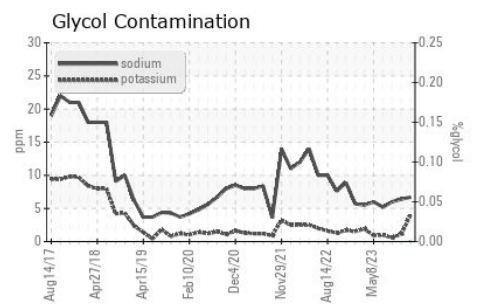
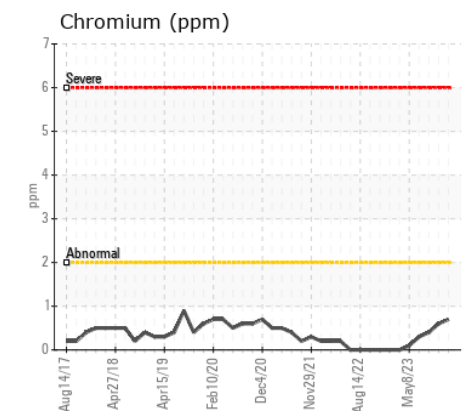
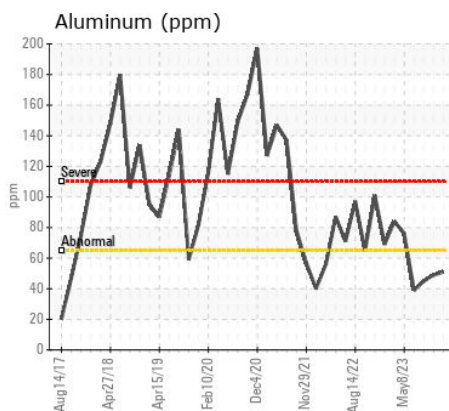
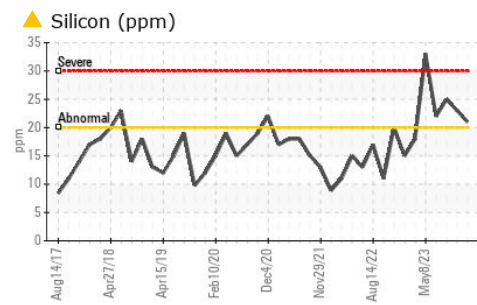
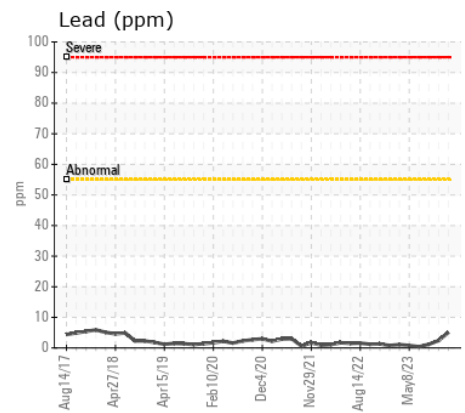
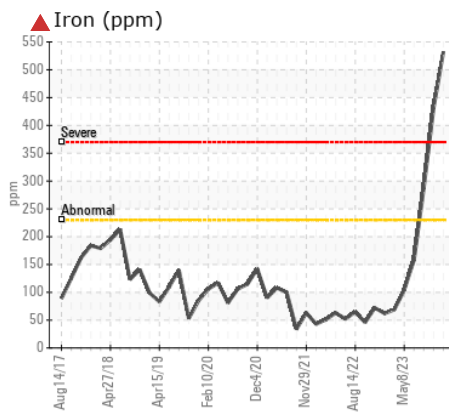
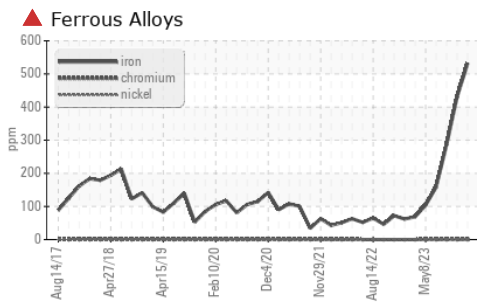
CONTAMINATION

There is a moderate concentration of dirt present in the fluid. High amount of ingressed dirt has caused abrasive wear to the component.

FLUID CONDITION

The AN level is acceptable for this fluid. The fluid is no longer serviceable as a result of the abnormal and/or severe wear.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0889121	WC0889184	WC0866635
Sample Date		Client Info		29 Feb 2024	28 Dec 2023	15 Nov 2023
Machine Age	kms	Client Info		0	0	0
Oil Age	kms	Client Info		41218	31839	22319
Filter Age	kms	Client Info		41218	31839	22319
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				SEVERE	SEVERE	ABNORMAL
PQ		ASTM D8184*	>105	92	60	20
Iron	ppm	ASTM D5185(m)	>230	▲ 532	▲ 431	▲ 287
Chromium	ppm	ASTM D5185(m)	>2	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>5	<1	<1	0
Titanium	ppm	ASTM D5185(m)	>2	0	0	0
Silver	ppm	ASTM D5185(m)	>5	0	0	<1
Aluminum	ppm	ASTM D5185(m)	>65	51	49	45
Lead	ppm	ASTM D5185(m)	>55	5	2	1
Copper	ppm	ASTM D5185(m)	>85	15	14	12
Tin	ppm	ASTM D5185(m)	>5	1	<1	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	LIGHT	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185(m)	>20	▲ 21	▲ 23	▲ 25
Potassium	ppm	ASTM D5185(m)	>20	4	1	<1
Water		WC Method	>0.1	NEG	NEG	NEG
Glycol	%	ASTM D7922*		0.0	---	---
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG	NEG
Sodium	ppm	ASTM D5185(m)		7	6	6
Boron	ppm	ASTM D5185(m)	150	56	56	59
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	0	<1	0	0
Manganese	ppm	ASTM D5185(m)		7	5	3
Magnesium	ppm	ASTM D5185(m)	0	2	2	2
Calcium	ppm	ASTM D5185(m)	40	124	123	122
Phosphorus	ppm	ASTM D5185(m)	320	224	225	225
Zinc	ppm	ASTM D5185(m)	5	5	5	5
Sulfur	ppm	ASTM D5185(m)	1050	1432	1448	1392
Acid Number (AN)	mg KOH/g	ASTM D974*	1.0	1.99	1.76	1.40
Visc @ 40°C	cSt	ASTM D7279(m)	38.9	34.7	34.8	34.6
Visc @ 100°C	cSt	ASTM D7279(m)	7.3	6.8	6.8	6.8
Viscosity Index (VI)	Scale	ASTM D2270*	168	158	157	159



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0889121
Lab Number : 02619598
Unique Number : 5736708
Test Package : MOB 2 (Additional Tests: GLYCOL, KV100, PQ, TAN Man, VI)

Received : 04 Mar 2024
Tested : 05 Mar 2024
Diagnosed : 06 Mar 2024 - Kevin Marson

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.