



# OIL ANALYSIS REPORT

WEAR	<b>SEVERE</b>
CONTAMINATION	<b>ABNORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

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.

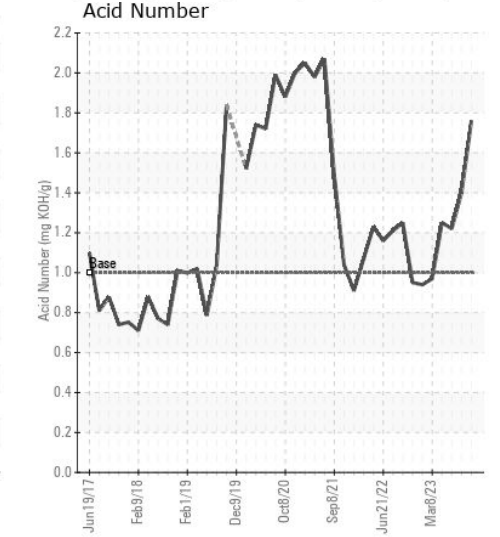
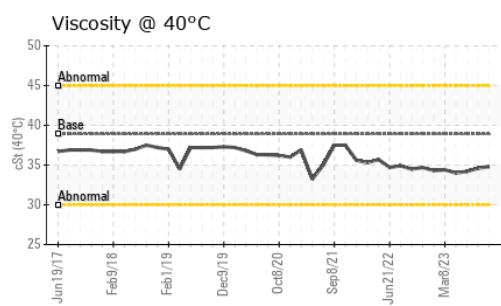
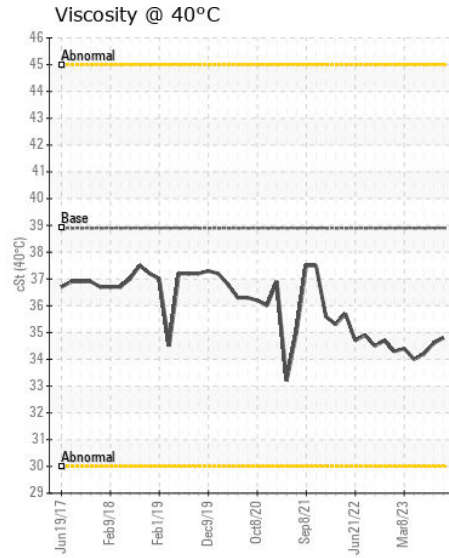
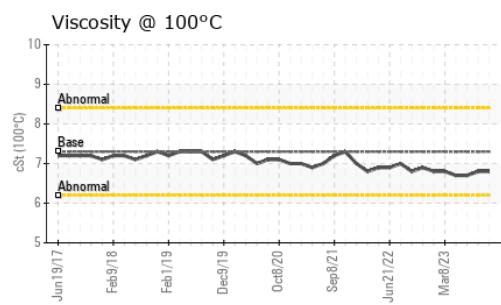
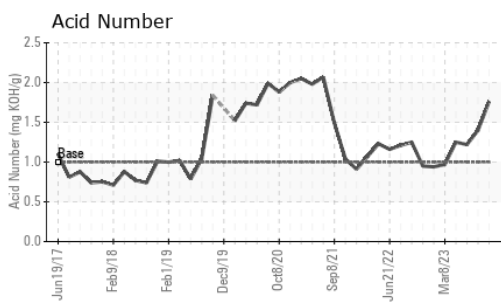
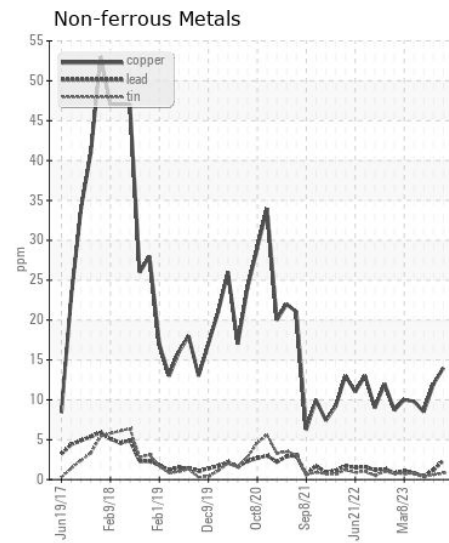
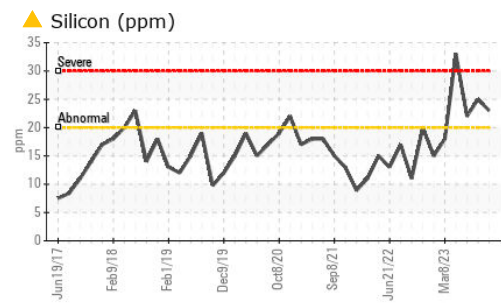
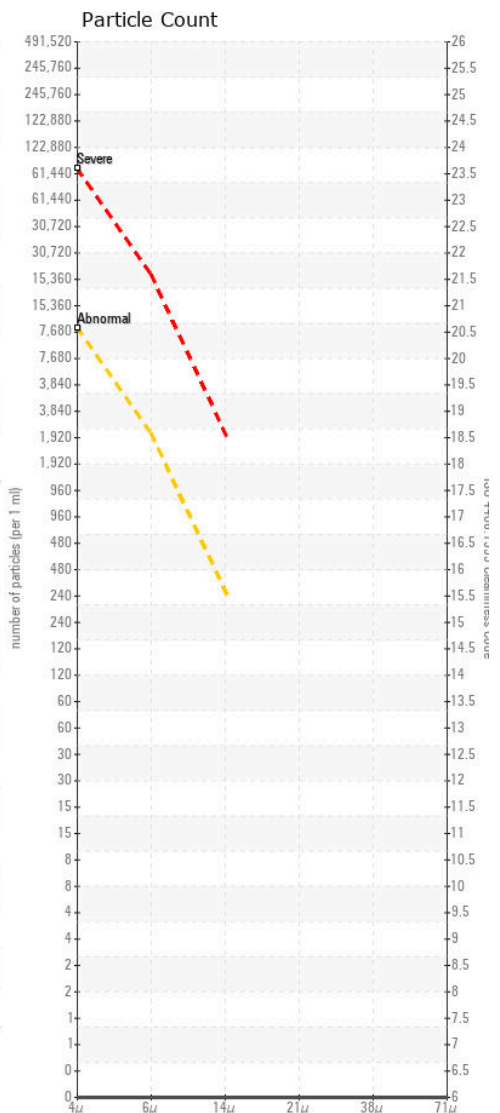
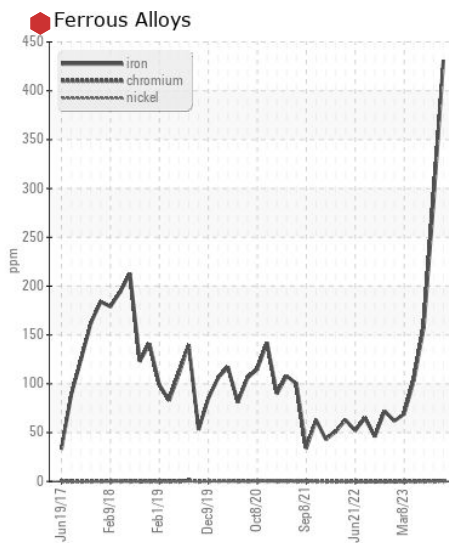
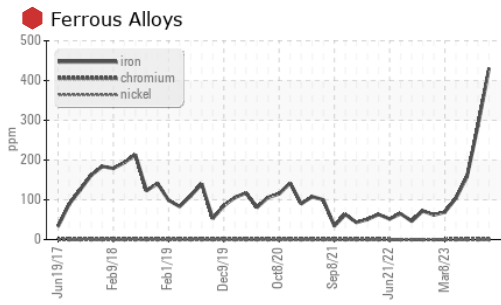
## CONTAMINATION

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		<b>WC0889184</b>	WC0866635	WC0816499
Sample Date		Client Info		<b>28 Dec 2023</b>	15 Nov 2023	13 Jul 2023
Machine Age	kms	Client Info		<b>0</b>	0	0
Oil Age	kms	Client Info		<b>31839</b>	22319	39873
Filter Age	kms	Client Info		<b>31839</b>	22319	39873
Oil Changed		Client Info		<b>Not Changd</b>	Not Changd	Not Changd
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>SEVERE</b>	ABNORMAL	ABNORMAL
PQ		ASTM D8184*	>105	<b>60</b>	20	---
Iron	ppm	ASTM D5185(m)	>230	<b>431</b>	287	158
Chromium	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>5	<b>0</b>	<1	<1
Aluminum	ppm	ASTM D5185(m)	>65	<b>49</b>	45	39
Lead	ppm	ASTM D5185(m)	>55	<b>2</b>	1	<1
Copper	ppm	ASTM D5185(m)	>85	<b>14</b>	12	8
Tin	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
White Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Silicon	ppm	ASTM D5185(m)	>20	<b>23</b>	25	22
Potassium	ppm	ASTM D5185(m)	>20	<b>1</b>	<1	1
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Silt	scalar	Visual*	NONE	<b>NONE</b>	NONE	VLITE
Debris	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	Visual*	>0.1	<b>NEG</b>	NEG	NEG
Sodium	ppm	ASTM D5185(m)		<b>6</b>	6	5
Boron	ppm	ASTM D5185(m)	150	<b>56</b>	59	58
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	0	<b>0</b>	0	<1
Manganese	ppm	ASTM D5185(m)		<b>5</b>	3	2
Magnesium	ppm	ASTM D5185(m)	0	<b>2</b>	2	2
Calcium	ppm	ASTM D5185(m)	40	<b>123</b>	122	119
Phosphorus	ppm	ASTM D5185(m)	320	<b>225</b>	225	235
Zinc	ppm	ASTM D5185(m)	5	<b>5</b>	5	5
Sulfur	ppm	ASTM D5185(m)	1050	<b>1448</b>	1392	1390
Acid Number (AN)	mg KOH/g	ASTM D974*	1.0	<b>1.76</b>	1.40	1.22
Visc @ 40°C	cSt	ASTM D7279(m)	38.9	<b>34.8</b>	34.6	34.2
Visc @ 100°C	cSt	ASTM D7279(m)	7.3	<b>6.8</b>	6.8	6.7
Viscosity Index (VI)	Scale	ASTM D2270*	168	<b>157</b>	159	156



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0889184  
**Lab Number** : 02606814  
**Unique Number** : 5707900  
**Test Package** : MOB 2 ( Additional Tests: KV100, PQ, PrcCount, TAN Man, VI )

**CITY OF THUNDER BAY**  
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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.