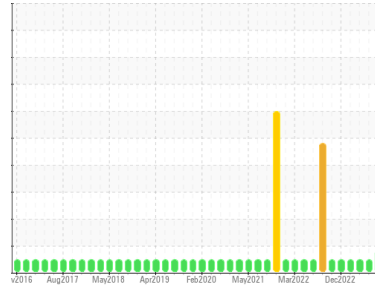




# OIL ANALYSIS REPORT

Sample Rating Trend



**WEAR**



Machine Id  
**NOVA BUS 163**  
 Component  
**Rear Transmission (Auto)**  
 Fluid  
**CASTROL TRANSYND (24 LTR)**

## DIAGNOSIS

### ▲ Recommendation

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

Aluminum ppm levels are abnormal. Torque converter wear is indicated.

### Contamination

There is no indication of any contamination in the fluid.

### 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.

## SAMPLE INFORMATION

method	limit/base	current	history1	history2	
Sample Number	Client Info	<b>WC0816369</b>	WC0816515	WC0730850	
Sample Date	Client Info	<b>20 Sep 2023</b>	21 Jul 2023	12 Apr 2023	
Machine Age	kms	Client Info	0	0	
Oil Age	kms	Client Info	<b>47589</b>	38153	29147
Oil Changed	Client Info	<b>Not Changed</b>	Not Changed	Not Changed	
Sample Status		<b>ABNORMAL</b>	NORMAL	NORMAL	

## WEAR METALS

method	limit/base	current	history1	history2		
PQ	ASTM D8184*	>105	<b>0</b>	---	---	
Iron	ppm	ASTM D5185(m)	>230	<b>54</b>	43	34
Chromium	ppm	ASTM D5185(m)	>2	<b>0</b>	<1	0
Nickel	ppm	ASTM D5185(m)	>5	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	<1	0
Aluminum	ppm	ASTM D5185(m)	>65	<b>▲ 69</b>	53	39
Lead	ppm	ASTM D5185(m)	>55	<b>4</b>	3	3
Copper	ppm	ASTM D5185(m)	>85	<b>16</b>	14	12
Tin	ppm	ASTM D5185(m)	>5	<b>2</b>	2	1
Antimony	ppm	ASTM D5185(m)		<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Beryllium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185(m)		<b>0</b>	0	0

## ADDITIVES

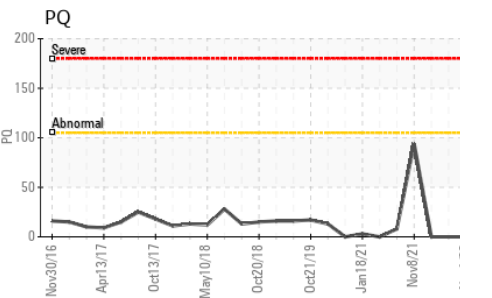
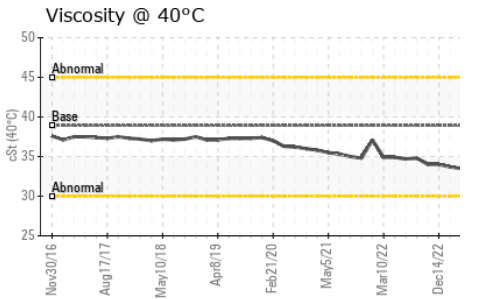
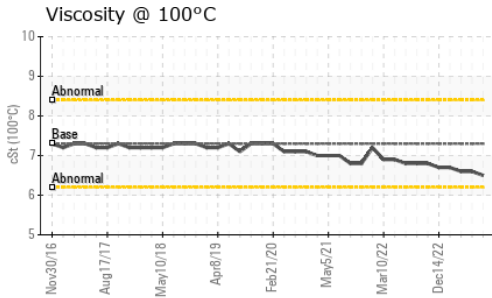
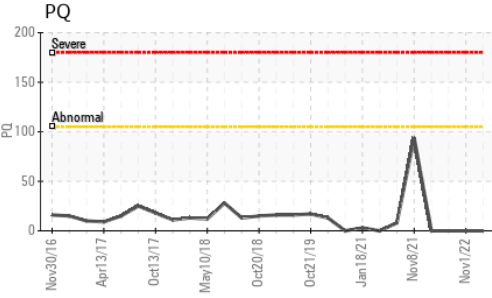
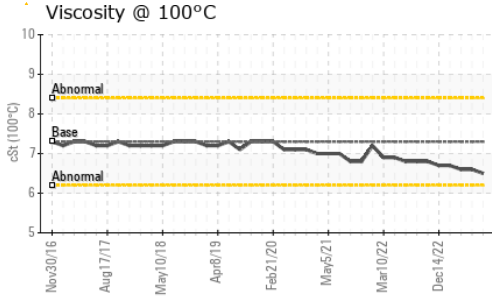
method	limit/base	current	history1	history2		
Boron	ppm	ASTM D5185(m)	150	<b>42</b>	44	49
Barium	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	0	<b>0</b>	<1	<1
Manganese	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)	0	<b>1</b>	1	<1
Calcium	ppm	ASTM D5185(m)	40	<b>115</b>	115	121
Phosphorus	ppm	ASTM D5185(m)	320	<b>228</b>	247	260
Zinc	ppm	ASTM D5185(m)	5	<b>8</b>	8	7
Sulfur	ppm	ASTM D5185(m)	1050	<b>1341</b>	1361	1449
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

## CONTAMINANTS

method	limit/base	current	history1	history2		
Silicon	ppm	ASTM D5185(m)	>20	<b>9</b>	7	6
Sodium	ppm	ASTM D5185(m)		<b>11</b>	10	9
Potassium	ppm	ASTM D5185(m)	>20	<b>2</b>	3	3

## FLUID DEGRADATION

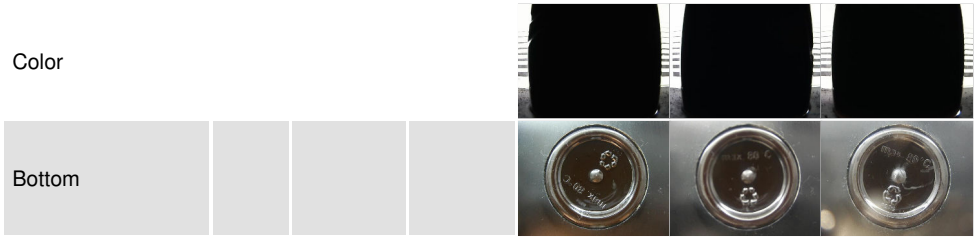
method	limit/base	current	history1	history2		
Acid Number (AN)	mg KOH/g	ASTM D974*	1.0	<b>1.23</b>	1.29	1.15



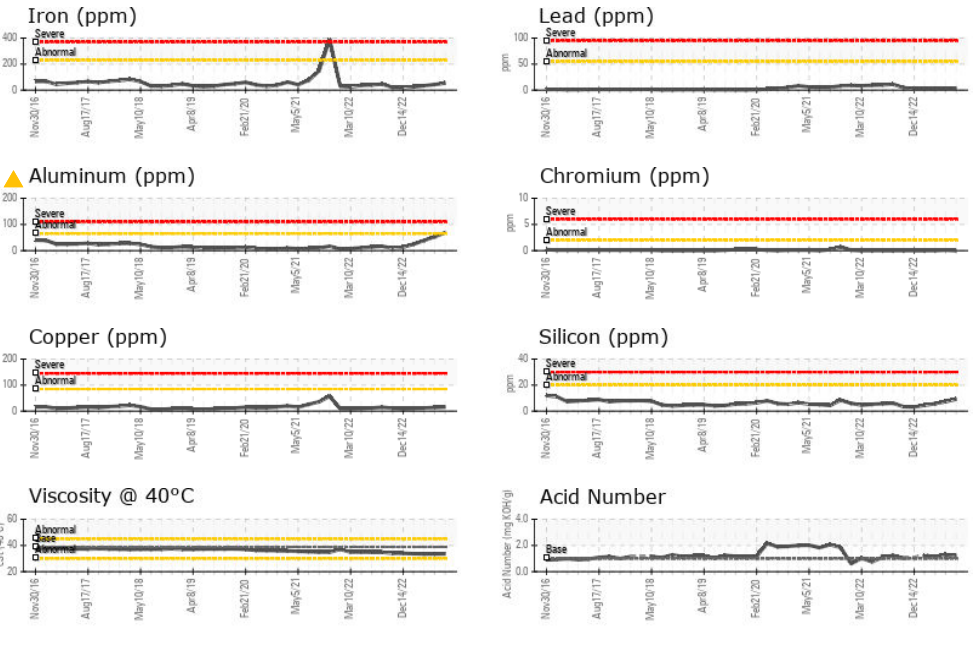
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	38.9	33.5	33.5
Visc @ 100°C	cSt	ASTM D7279(m)	7.3	6.6	6.6
Viscosity Index (VI)	Scale	ASTM D2270*	168	156	156

### SAMPLE IMAGES



### GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0816369  
**Lab Number** : 02586843  
**Unique Number** : 5655909  
**Test Package** : MOB 2 ( Additional Tests: KV100, PQ, TAN Man, VI )

**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.