



# OIL ANALYSIS REPORT

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

Machine Id  
**ALLISON 233**  
Component  
**Rear Transmission (Auto)**  
Fluid  
**CASTROL TRANSYND (--- GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0889136</b>	WC0866611	WC0866569
Sample Date		Client Info		<b>15 Feb 2024</b>	18 Dec 2023	25 Oct 2023
Machine Age	kms	Client Info		<b>0</b>	0	0
Oil Age	kms	Client Info		<b>9114</b>	47731	39091
Filter Age	kms	Client Info		<b>9114</b>	47731	39091
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>NORMAL</b>	ABNORMAL	NORMAL

## WEAR

All component wear rates are normal.

PQ		ASTM D8184*	>105	<b>0</b>	---	---
Iron	ppm	ASTM D5185(m)	>230	<b>31</b>	56	50
Chromium	ppm	ASTM D5185(m)	>2	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m)	>5	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>5	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185(m)	>65	<b>5</b>	9	7
Lead	ppm	ASTM D5185(m)	>55	<b>2</b>	3	3
Copper	ppm	ASTM D5185(m)	>85	<b>5</b>	9	9
Tin	ppm	ASTM D5185(m)	>5	<b>0</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

## CONTAMINATION

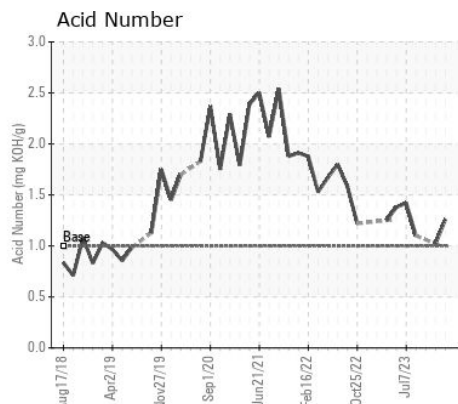
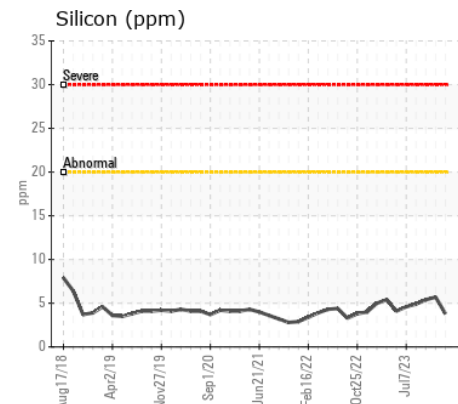
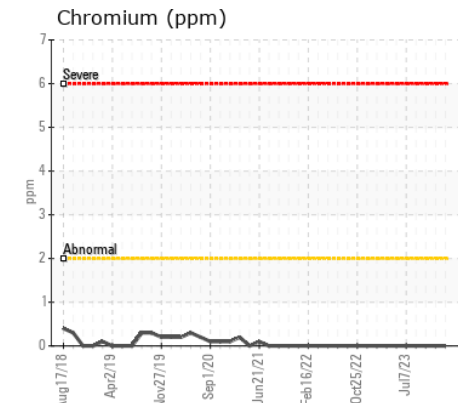
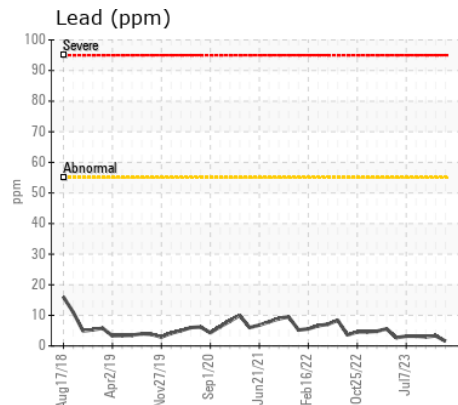
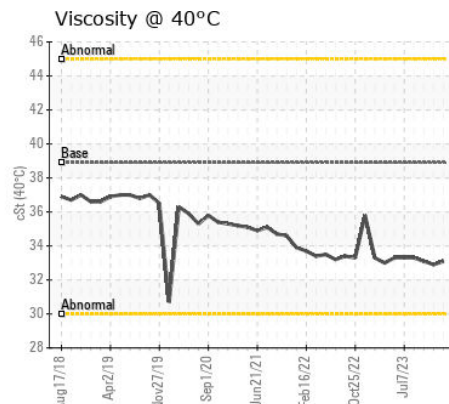
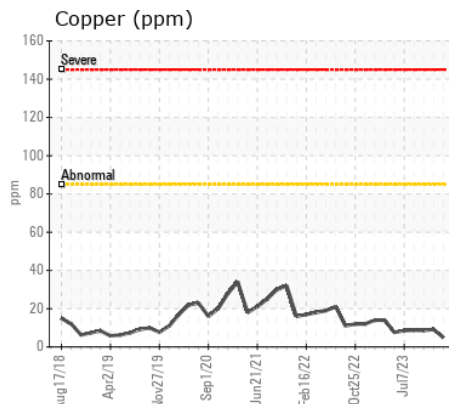
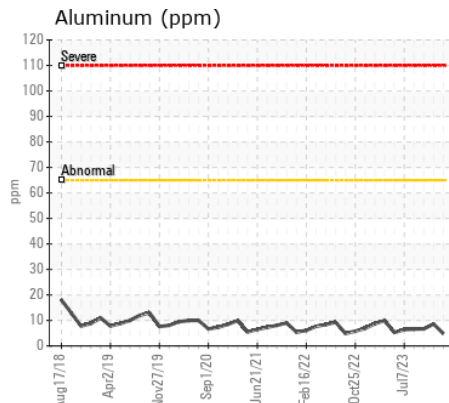
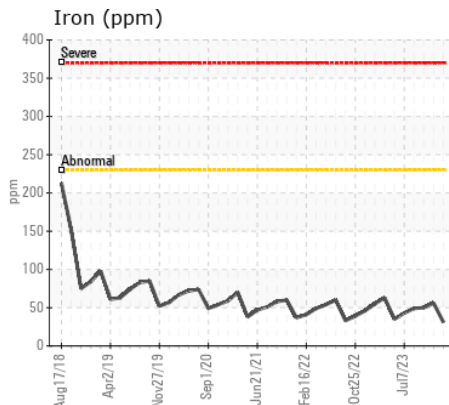
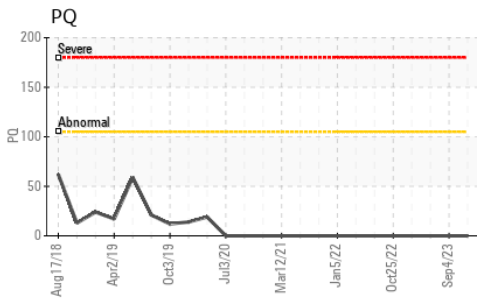
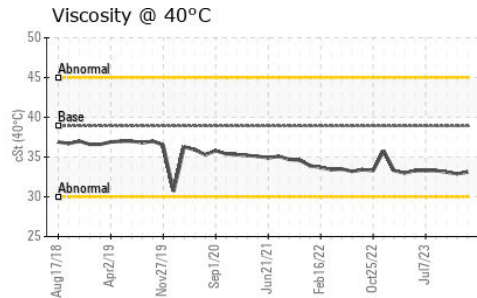
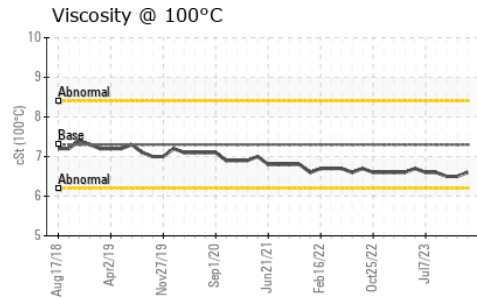
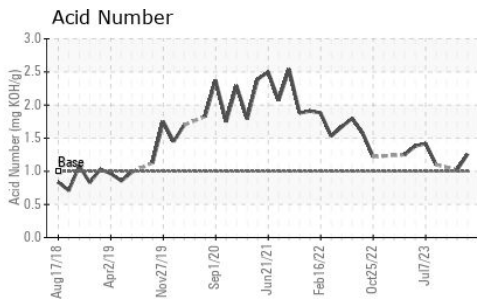
There is no indication of any contamination in the fluid.

Silicon	ppm	ASTM D5185(m)	>20	<b>4</b>	6	5
Potassium	ppm	ASTM D5185(m)	>20	<b>1</b>	2	<1
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Silt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
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

## FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the fluid is suitable for further service.

Sodium	ppm	ASTM D5185(m)		<b>2</b>	4	4
Boron	ppm	ASTM D5185(m)	150	<b>72</b>	78	81
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	<1
Molybdenum	ppm	ASTM D5185(m)	0	<b>4</b>	0	0
Manganese	ppm	ASTM D5185(m)		<b>0</b>	0	0
Magnesium	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	1	<1
Calcium	ppm	ASTM D5185(m)	40	<b>132</b>	126	125
Phosphorus	ppm	ASTM D5185(m)	320	<b>221</b>	261	252
Zinc	ppm	ASTM D5185(m)	5	<b>5</b>	5	5
Sulfur	ppm	ASTM D5185(m)	1050	<b>1542</b>	1646	1551
Acid Number (AN)	mg KOH/g	ASTM D974*	1.0	<b>1.26</b>	1.02	---
Visc @ 40°C	cSt	ASTM D7279(m)	38.9	<b>33.1</b>	32.9	33.1
Visc @ 100°C	cSt	ASTM D7279(m)	7.3	<b>6.6</b>	6.5	6.5
Viscosity Index (VI)	Scale	ASTM D2270*	168	<b>159</b>	155	154



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0889136 **Received** : 28 Feb 2024  
**Lab Number** : 02618721 **Tested** : 28 Feb 2024  
**Unique Number** : 5735831 **Diagnosed** : 28 Feb 2024 - Wes Davis  
**Test Package** : MOB 2 ( Additional Tests: KV100, PQ, 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.