



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
ALLISON 224
 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		WC0866553	WC0888984	WC0889142
Sample Date		Client Info		31 May 2024	16 Apr 2024	14 Feb 2024
Machine Age	kms	Client Info		0	0	0
Oil Age	kms	Client Info		17943	9101	48368
Filter Age	kms	Client Info		17943	9101	48368
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>230	33	26	45
Chromium	ppm	ASTM D5185(m)	>2	0	0	0
Nickel	ppm	ASTM D5185(m)	>5	0	0	0
Titanium	ppm	ASTM D5185(m)	>2	0	0	0
Silver	ppm	ASTM D5185(m)	>5	0	0	0
Aluminum	ppm	ASTM D5185(m)	>65	7	6	10
Lead	ppm	ASTM D5185(m)	>55	1	1	4
Copper	ppm	ASTM D5185(m)	>85	7	6	10
Tin	ppm	ASTM D5185(m)	>5	0	0	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE

CONTAMINATION

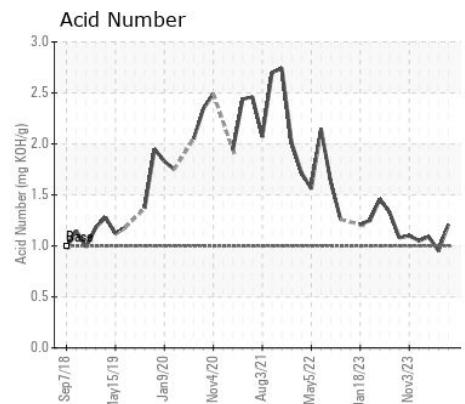
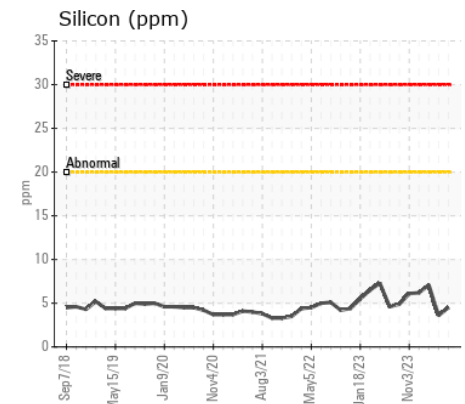
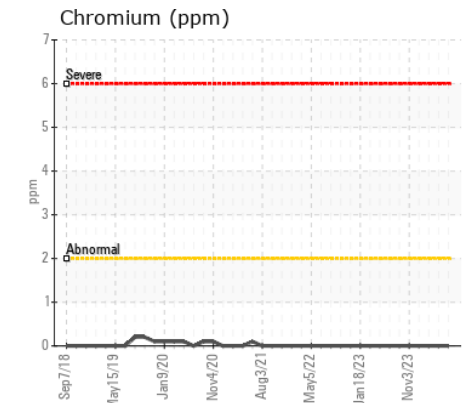
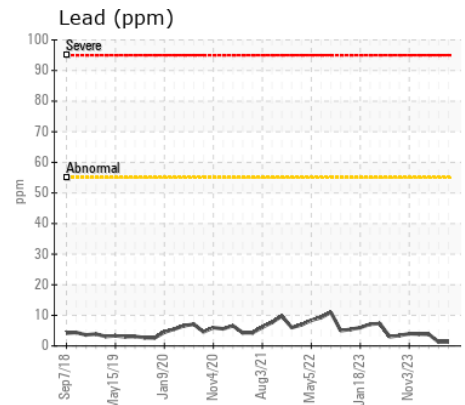
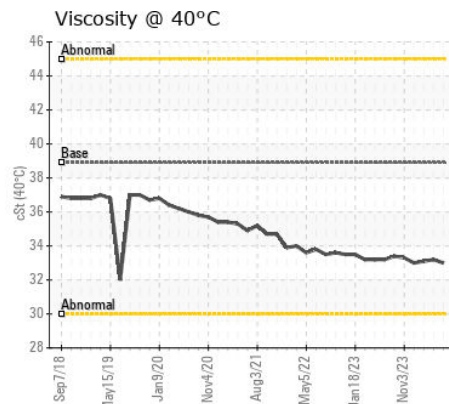
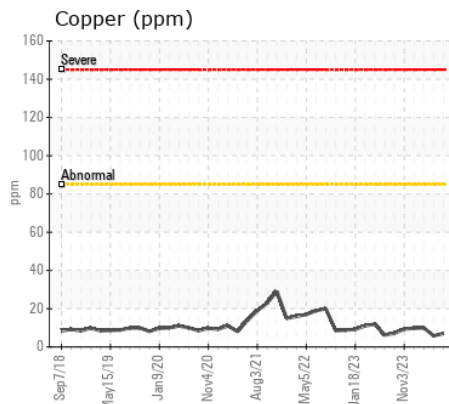
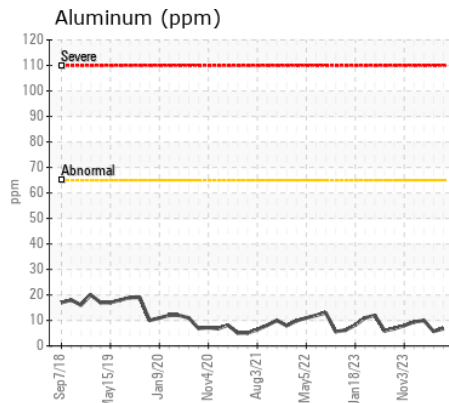
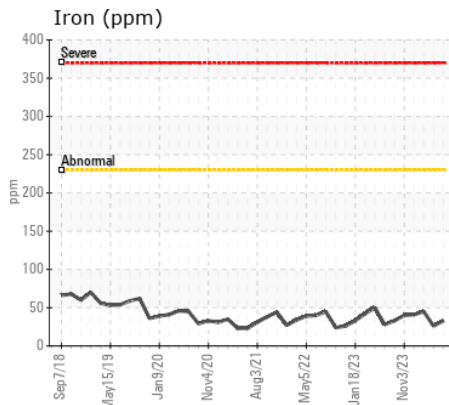
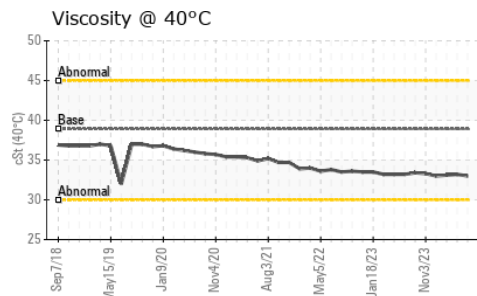
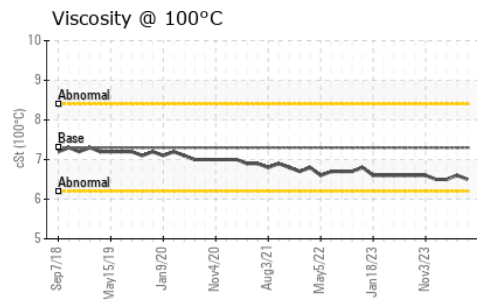
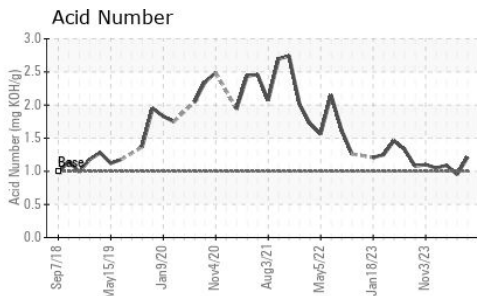
There is no indication of any contamination in the fluid.

Silicon	ppm	ASTM D5185(m)	>20	4	4	7
Potassium	ppm	ASTM D5185(m)	>20	1	<1	1
Water		WC Method	>0.1	NEG	NEG	NEG
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

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)		3	3	4
Boron	ppm	ASTM D5185(m)	150	74	73	73
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	0	6	6	<1
Manganese	ppm	ASTM D5185(m)		<1	0	0
Magnesium	ppm	ASTM D5185(m)	0	<1	1	1
Calcium	ppm	ASTM D5185(m)	40	145	142	126
Phosphorus	ppm	ASTM D5185(m)	320	233	228	252
Zinc	ppm	ASTM D5185(m)	5	6	6	4
Sulfur	ppm	ASTM D5185(m)	1050	1523	1451	1638
Acid Number (AN)	mg KOH/g	ASTM D974*	1.0	1.21	0.95	1.09
Visc @ 40°C	cSt	ASTM D7279(m)	38.9	33.0	33.2	33.1
Visc @ 100°C	cSt	ASTM D7279(m)	7.3	6.5	6.6	6.5
Viscosity Index (VI)	Scale	ASTM D2270*	168	154	158	154



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0866553
Lab Number : 02640816
Unique Number : 5789978
Test Package : MOB 2 (Additional Tests: KV100, TAN Man, VI)

Received : 10 Jun 2024
Tested : 10 Jun 2024
Diagnosed : 10 Jun 2024 - Wes Davis

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.