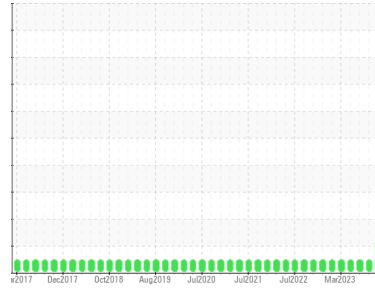




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id

156

Component

Rear Transmission (Auto)

Fluid

CASTROL TRANSYND (24 LTR)

DIAGNOSIS

Recommendation

We recommend you service the filters on this component. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

Contamination

There is a moderate amount of silt (particulates < 14 microns in size) present in the fluid.

Fluid Condition

The AN level is acceptable for this fluid. The fluid is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0866487	WC0816353	WC0816526
Sample Date	Client Info		20 Dec 2023	06 Oct 2023	28 Jul 2023
Machine Age	kms	Client Info	0	0	0
Oil Age	kms	Client Info	38410	28996	10000
Oil Changed	Client Info		Not Changed	Not Changd	Not Changed
Sample Status			ABNORMAL	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.1	NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>230	37	31	25
Chromium	ppm	ASTM D5185(m)	>2	0	0	0
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	<1	0
Aluminum	ppm	ASTM D5185(m)	>65	6	6	5
Lead	ppm	ASTM D5185(m)	>55	1	1	1
Copper	ppm	ASTM D5185(m)	>85	9	9	8
Tin	ppm	ASTM D5185(m)	>5	<1	<1	<1
Antimony	ppm	ASTM D5185(m)		0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
Beryllium	ppm	ASTM D5185(m)		0	0	0
Cadmium	ppm	ASTM D5185(m)		0	0	0

ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185(m)	150	49	51	52
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	0	0	0	<1
Manganese	ppm	ASTM D5185(m)		0	0	<1
Magnesium	ppm	ASTM D5185(m)	0	1	<1	1
Calcium	ppm	ASTM D5185(m)	40	125	124	122
Phosphorus	ppm	ASTM D5185(m)	320	250	252	275
Zinc	ppm	ASTM D5185(m)	5	7	6	7
Sulfur	ppm	ASTM D5185(m)	1050	1596	1544	1568
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS

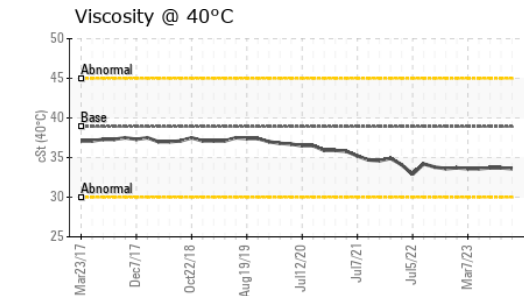
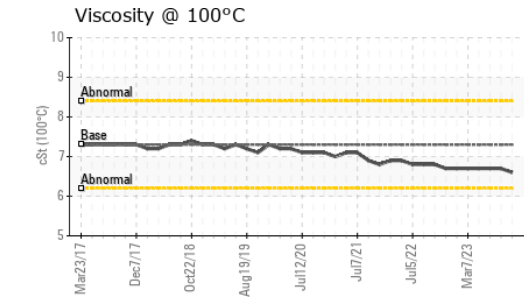
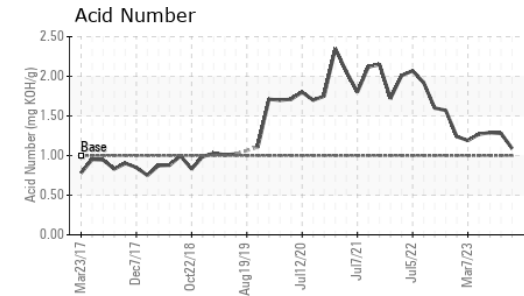
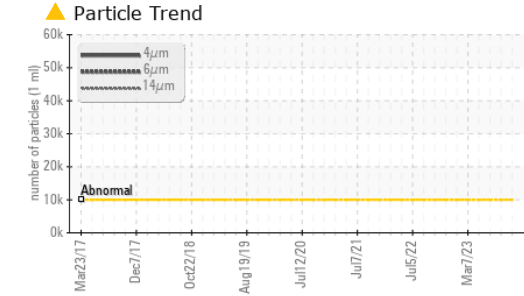
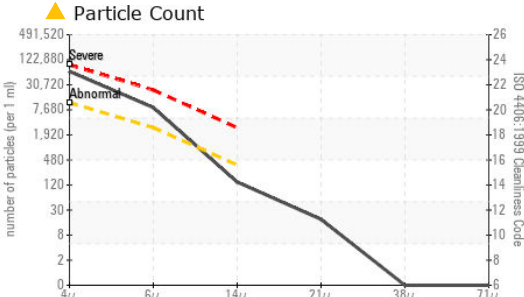
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>20	6	5	4
Sodium	ppm	ASTM D5185(m)		6	6	5
Potassium	ppm	ASTM D5185(m)	>20	0	1	1

FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	▲ 55767	---	---
Particles >6µm	ASTM D7647	>2500	▲ 7597	---	---
Particles >14µm	ASTM D7647	>320	125	---	---
Particles >21µm	ASTM D7647	>80	16	---	---
Particles >38µm	ASTM D7647	>20	0	---	---
Particles >71µm	ASTM D7647	>4	0	---	---
Oil Cleanliness	ISO 4406 (c)	>20/18/15	▲ 23/20/14	---	---



OIL ANALYSIS REPORT

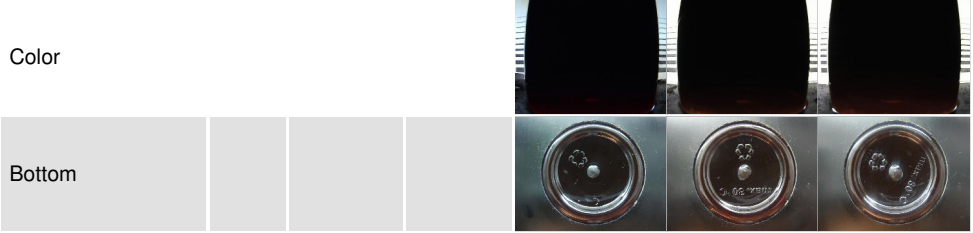


FLUID DEGRADATION	method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D974*	1.0	1.09	1.28	1.29

VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE	VLITE
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
Free Water	scalar	Visual*		NEG	NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D7279(m)	38.9	33.6	33.7	33.7
Visc @ 100°C	cSt	ASTM D7279(m)	7.3	6.6	6.7	6.7
Viscosity Index (VI)	Scale	ASTM D2270*	168	155	160	160

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0866487 **Received** : 27 Dec 2023
Lab Number : **02605331** **Diagnosed** : 28 Dec 2023
Unique Number : 5698416 **Diagnostician** : Wes Davis
Test Package : MOB 2 (Additional Tests: KV100, PrtCount, 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.