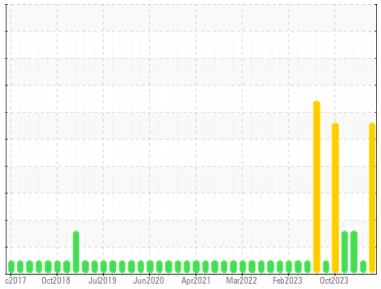
OIL ANALYSIS REPORT

Sample Rating Trend



DIRT

Machine Id
NOVA 157
Component
Rear Transmission (Auto)
Fluid
CASTROL TRANSYND (--- GAL)

DIAGNOSIS

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 advise that you flush the component thoroughly before re-filling with fluid. We recommend an early resample to monitor this condition.

Wear

Iron ppm levels are abnormal. The low ferrous density (PQ) index indicates the wear metal levels are due to corrosion.

Contamination

High 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.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC0889044**	WC0889172	WC0889168
Sample Date		Client Info		**18 Mar 2024**	06 Feb 2024	02 Feb 2024
Machine Age	kms	Client Info		**0**	0	0
Oil Age	kms	Client Info		**18895**	8190	19585
Oil Changed		Client Info		**Not Changd**	Not Changd	Not Changd
Sample Status				**SEVERE**	NORMAL	ABNORMAL

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

WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184*	>105	**14**	0	25
Iron	ppm	ASTM D5185(m)	>230	▲ **233**	35	204
Chromium	ppm	ASTM D5185(m)	>2	**<1**	0	<1
Nickel	ppm	ASTM D5185(m)	>5	**<1**	<1	<1
Titanium	ppm	ASTM D5185(m)	>2	**0**	0	0
Silver	ppm	ASTM D5185(m)	>5	**0**	0	0
Aluminum	ppm	ASTM D5185(m)	>65	**30**	22	22
Lead	ppm	ASTM D5185(m)	>55	**3**	4	3
Copper	ppm	ASTM D5185(m)	>85	**12**	7	10
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

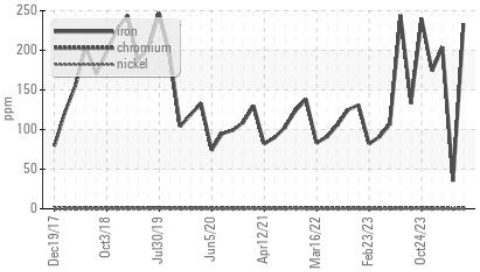
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	150	**71**	61	73
Barium	ppm	ASTM D5185(m)	0	**0**	0	<1
Molybdenum	ppm	ASTM D5185(m)	0	**3**	4	4
Manganese	ppm	ASTM D5185(m)		**<1**	0	<1
Magnesium	ppm	ASTM D5185(m)	0	**2**	1	1
Calcium	ppm	ASTM D5185(m)	40	**139**	128	143
Phosphorus	ppm	ASTM D5185(m)	320	**232**	224	232
Zinc	ppm	ASTM D5185(m)	5	**8**	7	6
Sulfur	ppm	ASTM D5185(m)	1050	**1436**	1359	1617
Lithium	ppm	ASTM D5185(m)		**<1**	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>20	▲ **31**	5	▲ 29
Sodium	ppm	ASTM D5185(m)		**5**	4	4
Potassium	ppm	ASTM D5185(m)	>20	**1**	3	2

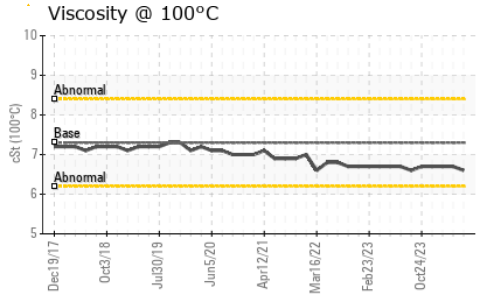
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	1.0	**1.21**	1.25	1.21

OIL ANALYSIS REPORT

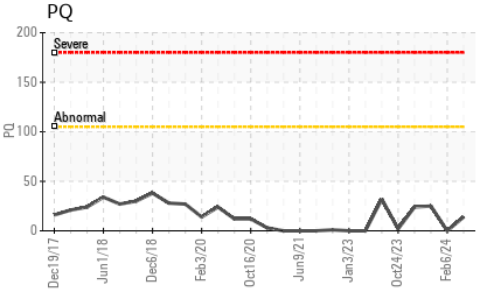
Ferrous Alloys



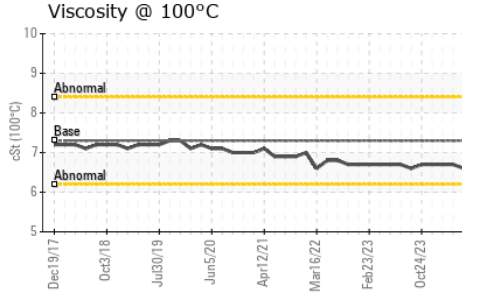
Viscosity @ 100°C



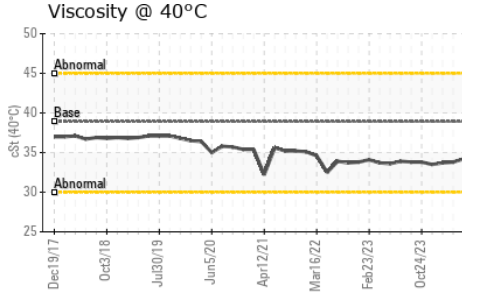
PQ



Viscosity @ 100°C

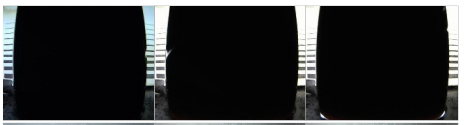


Viscosity @ 40°C



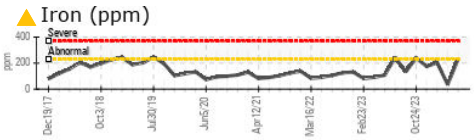
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	**NONE**	NONE	NONE
Precipitate	scalar	Visual*	NONE	**NONE**	NONE	NONE
Silt	scalar	Visual*	NONE	**NONE**	NONE	VLITE
Debris	scalar	Visual*	NONE	**NONE**	NONE	NONE
Sand/Dirt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

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	38.9	**34.2**	33.8	33.7
Visc @ 100°C	cSt	ASTM D7279(m)	7.3	**6.6**	6.7	6.7
Viscosity Index (VI)	Scale	ASTM D2270*	168	**151**	159	160

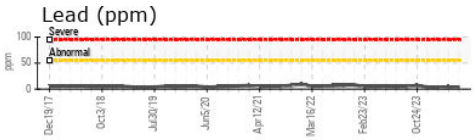
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

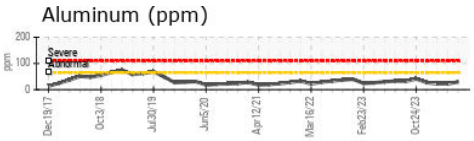
Iron (ppm)



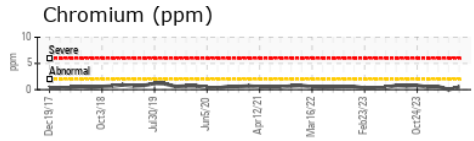
Lead (ppm)



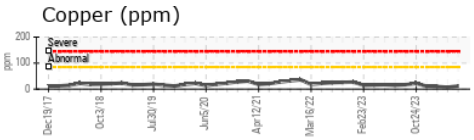
Aluminum (ppm)



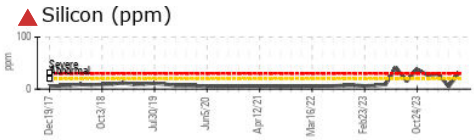
Chromium (ppm)



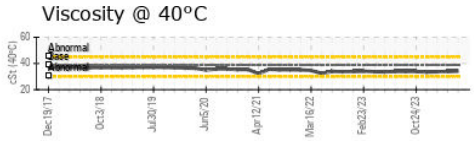
Copper (ppm)



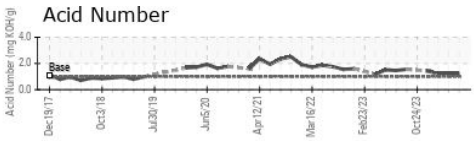
Silicon (ppm)



Viscosity @ 40°C



Acid Number



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0889044 **Received** : 27 Mar 2024
Lab Number : 02624998 **Tested** : 28 Mar 2024
Unique Number : 5750117 **Diagnosed** : 28 Mar 2024 - Kevin Marson
Test Package : MOB 2 (Additional Tests: KV100, PQ, TAN Man, VI)

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.

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