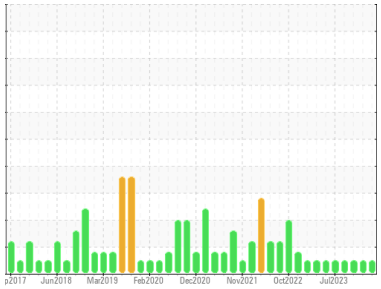
OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL

Machine Id
NOVA 157
Component
Rear Diesel Engine
Fluid
ESSO XD-3 EXTRA 15W40 (--- GAL)

DIAGNOSIS

Recommendation
Resample at the next service interval to monitor.

Wear
All component wear rates are normal.

Contamination
There is no indication of any contamination in the oil.

Fluid Condition
The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC0889043**	WC0889167	WC0866602
Sample Date		Client Info		**18 Mar 2024**	02 Feb 2024	12 Dec 2023
Machine Age	kms	Client Info		**0**	0	0
Oil Age	kms	Client Info		**9103**	8868	9115
Oil Changed		Client Info		**Changed**	Changed	Changed
Sample Status				**NORMAL**	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel		WC Method	>3.0	**<1.0**	<1.0	<1.0
Water		WC Method	>0.2	**NEG**	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>75	**38**	36	40
Chromium	ppm	ASTM D5185(m)	>5	**<1**	1	<1
Nickel	ppm	ASTM D5185(m)	>4	**<1**	<1	<1
Titanium	ppm	ASTM D5185(m)	>2	**0**	0	0
Silver	ppm	ASTM D5185(m)	>2	**0**	0	<1
Aluminum	ppm	ASTM D5185(m)	>15	**2**	3	3
Lead	ppm	ASTM D5185(m)	>25	**0**	<1	<1
Copper	ppm	ASTM D5185(m)	>100	**<1**	<1	1
Tin	ppm	ASTM D5185(m)	>4	**0**	0	0
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)		**81**	82	83
Barium	ppm	ASTM D5185(m)		**0**	0	0
Molybdenum	ppm	ASTM D5185(m)		**<1**	1	<1
Manganese	ppm	ASTM D5185(m)		**0**	0	0
Magnesium	ppm	ASTM D5185(m)		**20**	21	18
Calcium	ppm	ASTM D5185(m)	3780	**2380**	2271	2266
Phosphorus	ppm	ASTM D5185(m)	1370	**977**	955	957
Zinc	ppm	ASTM D5185(m)	1500	**1217**	1157	1195
Sulfur	ppm	ASTM D5185(m)	3800	**2787**	2907	2815
Lithium	ppm	ASTM D5185(m)		**<1**	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	**5**	6	7
Sodium	ppm	ASTM D5185(m)	>192	**24**	4	3
Potassium	ppm	ASTM D5185(m)	>20	**10**	7	6
Glycol	%	ASTM D7922*		**0.0**	NEG	NEG

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>6	**1.4**	1.3	1.2
Nitration	Abs/cm	ASTM D7624*	>20	**12.9**	12.6	12.5
Sulfation	Abs/.1mm	ASTM D7415*	>30	**29.2**	28.8	29.1

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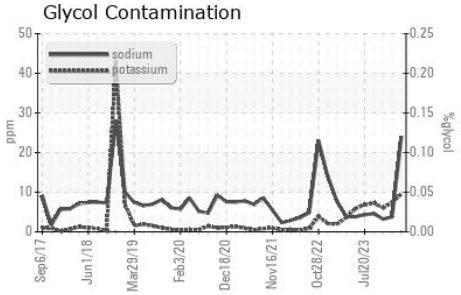
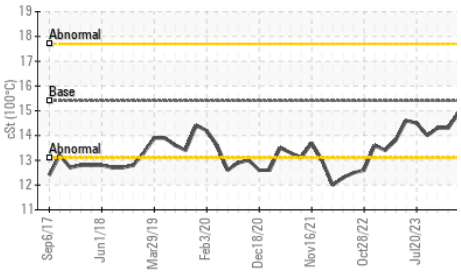
Glycol Contamination



Viscosity @ 100°C



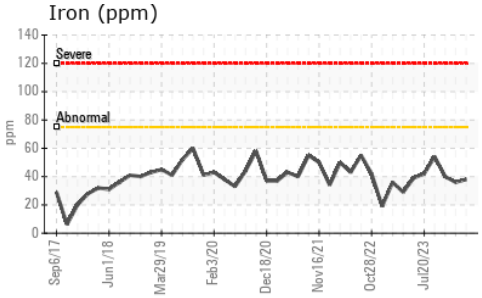
FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	**27.2**	26.5	27.8

VISUAL		method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.2	**NEG**	NEG	NEG
Free Water	scalar	Visual*		**NEG**	NEG	NEG

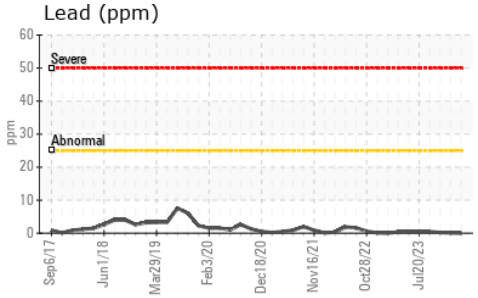
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	**14.9**	14.3	14.3

GRAPHS

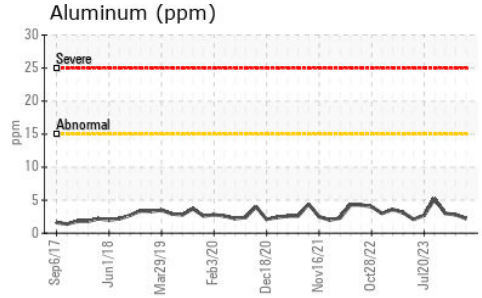
Iron (ppm)



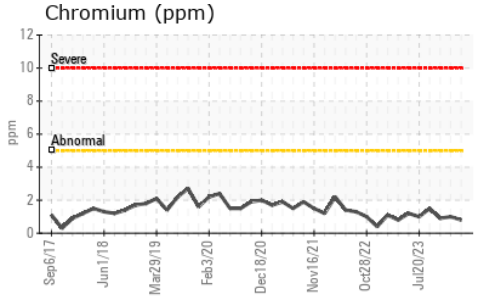
Lead (ppm)



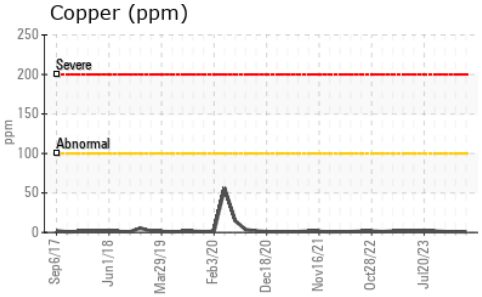
Aluminum (ppm)



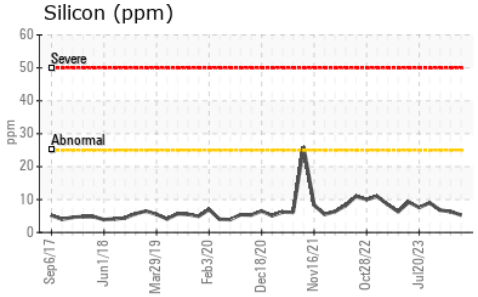
Chromium (ppm)



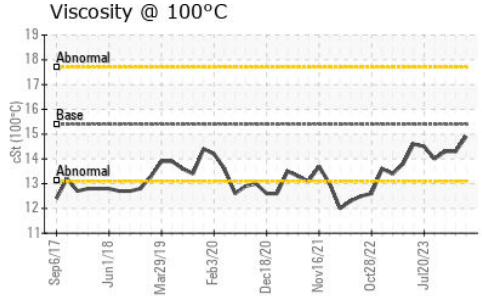
Copper (ppm)



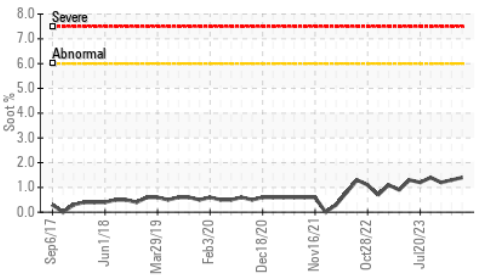
Silicon (ppm)



Viscosity @ 100°C



Soot %



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0889043 **Received** : 27 Mar 2024
Lab Number : 02624914 **Tested** : 27 Mar 2024
Unique Number : 5750033 **Diagnosed** : 27 Mar 2024 - Kevin Marson
Test Package : MOB 1 (Additional Tests: Glycol)

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.

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