

WEAR NORMAL CONTAMINATION ABNORMAL FLUID CONDITION NORMAL

Current

WC0889033

22 Mar 2024

0

9271

9271

N/A

Changed

ABNORMAL

30

1

0

0

O

8

<1

1

History1

18 Jan 2024

0

9385

9385

N/A

Changed

SEVERE

25

2

<1

0

0

6

<1

<1

History2

20 Nov 2023

WC0889196 WC0866434

0

9115

9115

N/A

Changed

ABNORMAL

23

<1

0

0

<1

4

1

<1

Machine Id **2008 NOVA 148** Component **Rear Diesel Engine** Fluid ESSO XD-3 EXTRA 15W40 (--- GAL)

RECOMMENDATION

The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

WEAR	

All component wear rates are normal.

CONTAMINATION

There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

>15 0 0 Tin ppm ASTM D5185(m) 0 Vanadium ppm ASTM D5185(m) 0 0 0 Silicon 5 6 5 ASTM D5185(m) >25 ppm Potassium ASTM D5185(m) >20 8 7 6 ppm Fuel % ASTM D7593* >5 7.1 9.8 7 Water WC Method >0.2 NEG NEG NEG NEG NEG NEG Glycol WC Method Soot % % ASTM D7844* >3 0.5 0.6 1 Nitration 12.4 Abs/cm ASTM D7624* >20 12.6 12.8 Sulfation Abs/.1mm ASTM D7415* 29.8 >30 27.4 27.4 Emulsified Water NEG NEG scalar Visual* >0.2 NEG Sodium ASTM D5185(m) >192 3 3 3 ppm 87 ASTM D5185(m) 79 Boron 80 ppm Barium ASTM D5185(m) 0 0 <1 ppm ppm Molybdenum ASTM D5185(m) <1 <1 <1 0 0 0 Manganese ASTM D5185(m) ppm Magnesium ppm ASTM D5185(m) 19 16 21 Calcium ppm ASTM D5185(m) 3780 2317 2244 2230 Phosphorus ASTM D5185(m) 1370 970 957 902 ppm Zinc ASTM D5185(m) 1500 1179 1165 1107 ppm Sulfur ASTM D5185(m) 3800 2769 2949 2746 ppm Oxidation ASTM D7414* Abs/.1mm >25 24.5 26.3 31.7

ASTM D7279(m)

15.4

UOM

kms

kms

kms

ppm

ppm

ppm

ppm

ppm

ppm

ppm

ppm

Method

Client Info

Client Info

Client Info

Client Info

Client Info

Client Info

Client Info

ASTM D5185(m)

Limit/Abn

>100

>20

>4

>3

>20

>40

>330

Test

Sample Number

Sample Date

Machine Age

Oil Age

Iron

Nickel

Silver

Lead

Copper

Visc @ 100°C

cSt

Titanium

Aluminum

Chromium

Filter Age

Oil Changed

Filter Changed

Sample Status

FLUID CONDITION

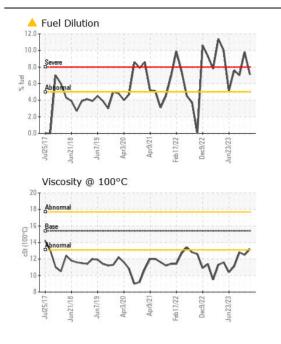
The oil is no longer serviceable due to the presence of contaminants.

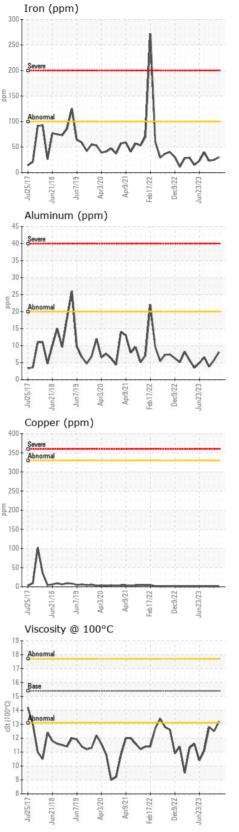
Contact/Location: Sean Malcolm - CITTHU

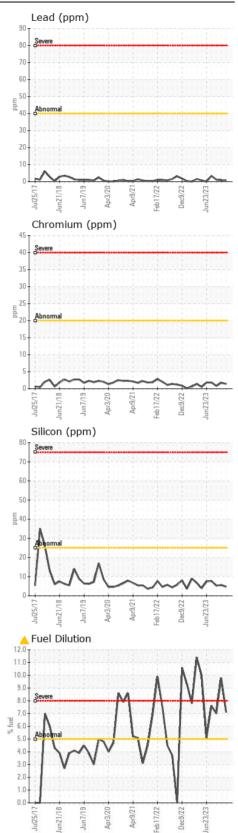
12.5

13.2

12.8







CITY OF THUNDER BAY Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 CALA Sample No. : WC0889033 Received : 27 Mar 2024 AUTO MAINTENANCE STORES, 570 FORT WILLIAM ROAD Lab Number : 02624918 Tested THUNDER BAY, ON : 28 Mar 2024 ISO 17025:2017 Unique Number : 5750037 Accredited : 28 Mar 2024 - Wes Davis CA P7B 2Z8 Diagnosed Laboratory Test Package : MOB 1 (Additional Tests: PercentFuel) Contact: Sean Malcolm sean.malcolm@thunderbay.ca To discuss this sample report, contact Customer Service at 1-800-268-2131. T: (807)684-2716 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. F: (807)344-0237 Validity of results and interpretation are based on the sample and information as supplied.