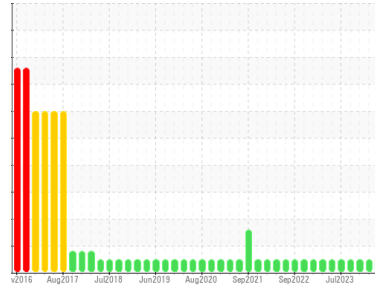




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
147
 Component
Rear Transmission (Auto)
 Fluid
CASTROL TRANSYND (--- LTR)

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 fluid.

Fluid Condition

The AN level is acceptable for this fluid. The condition of the fluid is suitable for further service.

SAMPLE INFORMATION

| | method | limit/base | current | history1 | history2 |
|---------------|-------------|-------------|--------------------|-------------|-------------|
| Sample Number | Client Info | | WC0889032 | WC0889164 | WC0816356 |
| Sample Date | Client Info | | 25 Mar 2024 | 01 Feb 2024 | 16 Oct 2023 |
| Machine Age | kms | Client Info | 0 | 0 | 0 |
| Oil Age | kms | Client Info | 37297 | 17143 | 19146 |
| Oil Changed | Client Info | | Not Changed | Not Changed | Not Changed |
| Sample Status | | | NORMAL | 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 | |
|-----------|-------------|---------------|----------|--------------|----------|----|
| PQ | ASTM D8184* | >105 | 3 | 0 | --- | |
| Iron | ppm | ASTM D5185(m) | >230 | 79 | 67 | 60 |
| Chromium | ppm | ASTM D5185(m) | >2 | 0 | 0 | 0 |
| 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 | <1 |
| Aluminum | ppm | ASTM D5185(m) | >65 | 19 | 15 | 12 |
| Lead | ppm | ASTM D5185(m) | >55 | 3 | 4 | 4 |
| Copper | ppm | ASTM D5185(m) | >85 | 5 | 4 | 4 |
| 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 | 60 | 61 | 62 |
| Barium | ppm | ASTM D5185(m) | 0 | 0 | 0 | <1 |
| Molybdenum | ppm | ASTM D5185(m) | 0 | 0 | 0 | 0 |
| Manganese | ppm | ASTM D5185(m) | | 0 | <1 | <1 |
| Magnesium | ppm | ASTM D5185(m) | 0 | 2 | 1 | 2 |
| Calcium | ppm | ASTM D5185(m) | 40 | 112 | 116 | 113 |
| Phosphorus | ppm | ASTM D5185(m) | 320 | 215 | 219 | 219 |
| Zinc | ppm | ASTM D5185(m) | 5 | 6 | 6 | 6 |
| Sulfur | ppm | ASTM D5185(m) | 1050 | 1185 | 1318 | 1276 |
| Lithium | ppm | ASTM D5185(m) | | <1 | <1 | <1 |

CONTAMINANTS

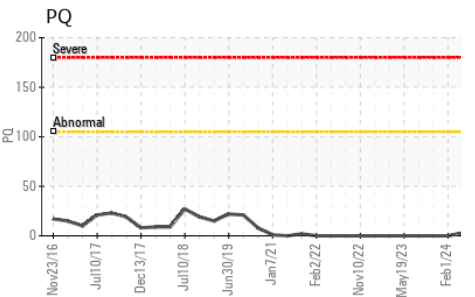
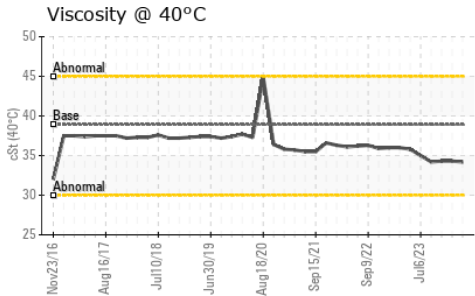
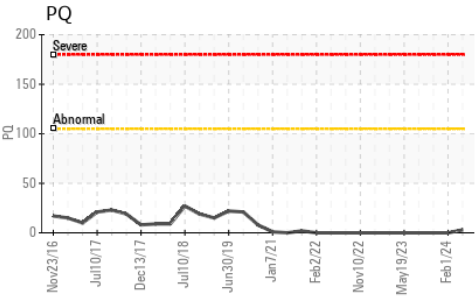
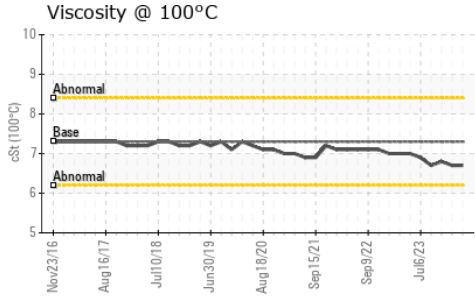
| | method | limit/base | current | history1 | history2 | |
|-----------|--------|---------------|---------|----------|----------|---|
| Silicon | ppm | ASTM D5185(m) | >20 | 7 | 6 | 6 |
| Sodium | ppm | ASTM D5185(m) | | 5 | 4 | 6 |
| Potassium | ppm | ASTM D5185(m) | >20 | 2 | 2 | 1 |

FLUID DEGRADATION

| | method | limit/base | current | history1 | history2 | |
|------------------|----------|------------|---------|-------------|----------|------|
| Acid Number (AN) | mg KOH/g | ASTM D974* | 1.0 | 1.07 | 1.28 | 1.37 |



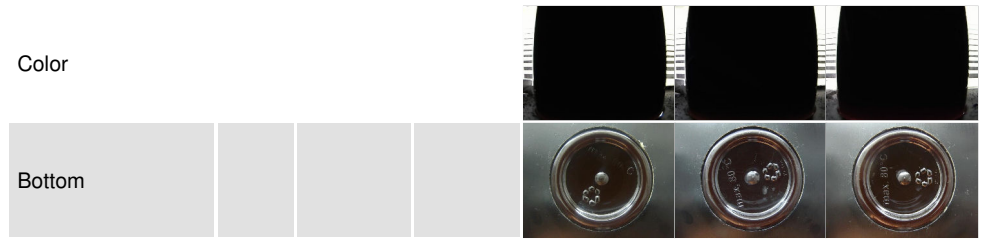
OIL ANALYSIS REPORT



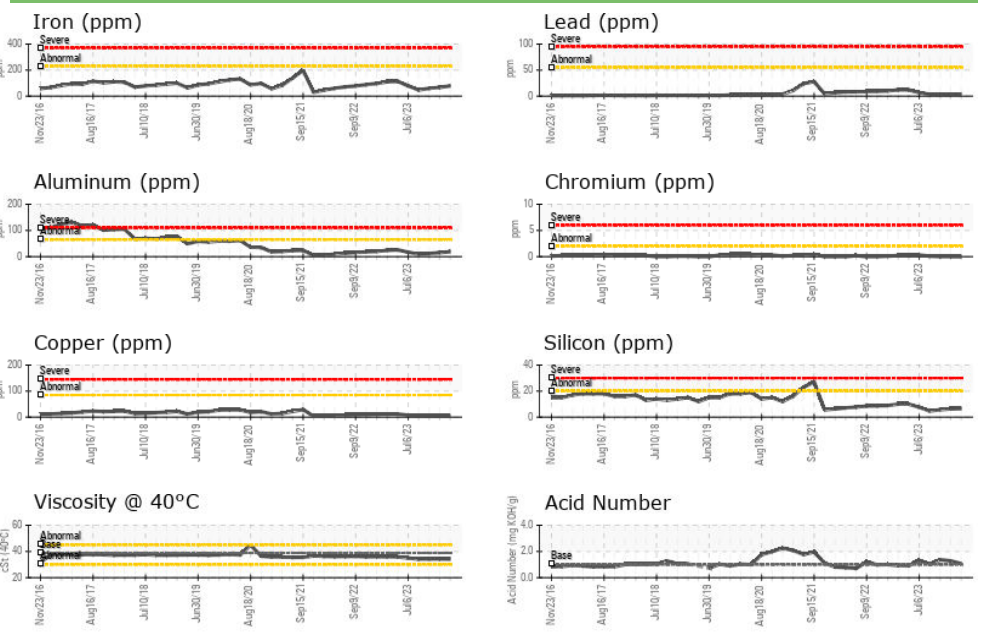
| VISUAL | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal | scalar | Visual* | NONE | NONE | NONE |
| Yellow Metal | scalar | Visual* | NONE | NONE | NONE |
| Precipitate | scalar | Visual* | NONE | NONE | NONE |
| Silt | scalar | Visual* | NONE | NONE | NONE |
| Debris | scalar | Visual* | NONE | NONE | NONE |
| Sand/Dirt | scalar | Visual* | NONE | NONE | NONE |
| Appearance | scalar | Visual* | NORML | NORML | NORML |
| Odor | scalar | Visual* | NORML | NORML | NORML |
| Emulsified Water | scalar | Visual* | >0.1 | NEG | NEG |
| Free Water | scalar | Visual* | | NEG | NEG |

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|----------------------|--------|---------------|---------|----------|----------|
| Visc @ 40°C | cSt | ASTM D7279(m) | 38.9 | 34.2 | 34.3 |
| Visc @ 100°C | cSt | ASTM D7279(m) | 7.3 | 6.7 | 6.8 |
| Viscosity Index (VI) | Scale | ASTM D2270* | 168 | 156 | 161 |

SAMPLE IMAGES



GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0889032
Lab Number : 02626443
Unique Number : 5759575
Test Package : MOB 2 (Additional Tests: KV100, PQ, VI)
Received : 03 Apr 2024
Tested : 04 Apr 2024
Diagnosed : 04 Apr 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.