



OIL ANALYSIS REPORT

| | |
|-----------------|---------------|
| WEAR | NORMAL |
| CONTAMINATION | NORMAL |
| FLUID CONDITION | NORMAL |

Machine Id
156
 Component
Rear Transmission (Auto)
 Fluid
CASTROL TRANSYND (24 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | WC0889000 | WC0889114 | WC0866487 |
| Sample Date | | Client Info | | 08 Apr 2024 | 20 Feb 2024 | 20 Dec 2023 |
| Machine Age | kms | Client Info | | 0 | 0 | 0 |
| Oil Age | kms | Client Info | | 9280 | 47924 | 38410 |
| Filter Age | kms | Client Info | | 9280 | 47924 | 38410 |
| Oil Changed | | Client Info | | Not Changd | Not Changd | Not Changd |
| Filter Changed | | Client Info | | N/A | N/A | N/A |
| Sample Status | | | | NORMAL | NORMAL | ABNORMAL |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|---------------|------|-------------|------|------|
| Iron | ppm | ASTM D5185(m) | >230 | 27 | 46 | 37 |
| Chromium | ppm | ASTM D5185(m) | >2 | 0 | 0 | 0 |
| Nickel | ppm | ASTM D5185(m) | >5 | 0 | <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 | 4 | 8 | 6 |
| Lead | ppm | ASTM D5185(m) | >55 | 0 | 1 | 1 |
| Copper | ppm | ASTM D5185(m) | >85 | 6 | 10 | 9 |
| Tin | ppm | ASTM D5185(m) | >5 | 0 | <1 | <1 |
| Vanadium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| White Metal | scalar | Visual* | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | Visual* | NONE | NONE | NONE | NONE |

CONTAMINATION

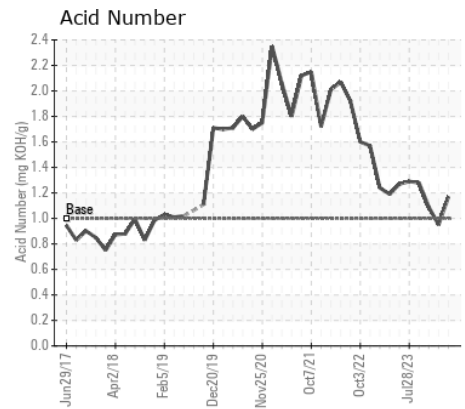
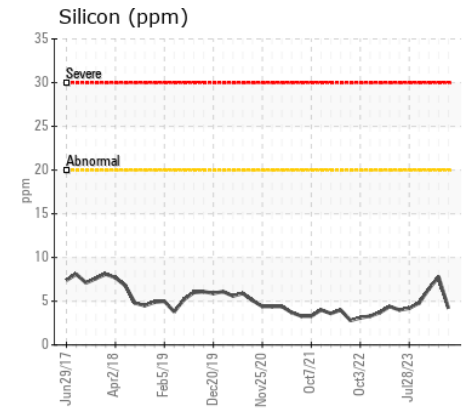
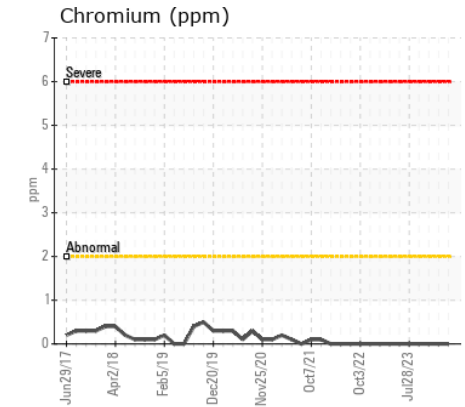
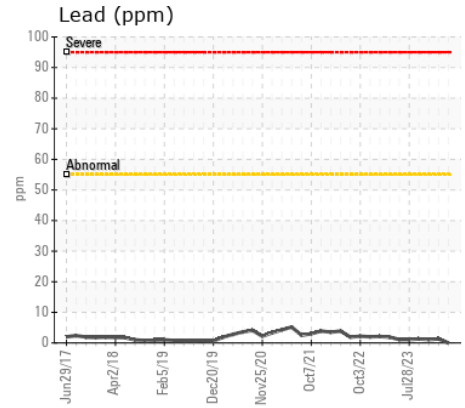
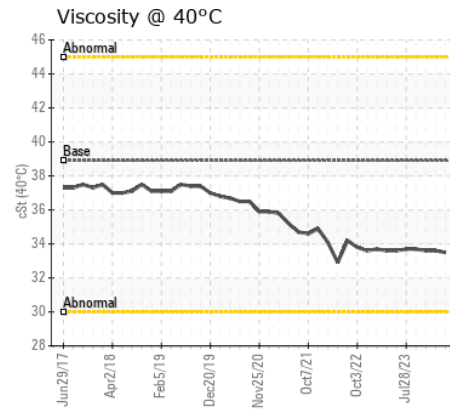
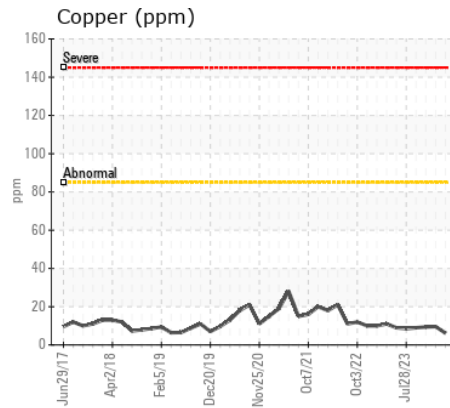
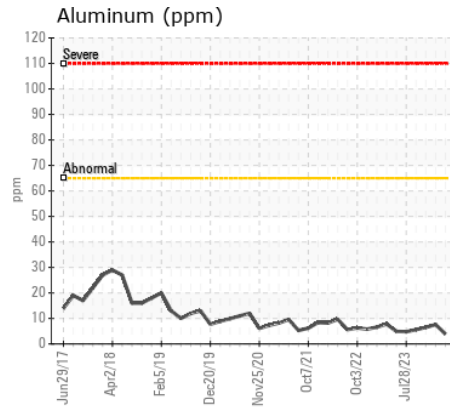
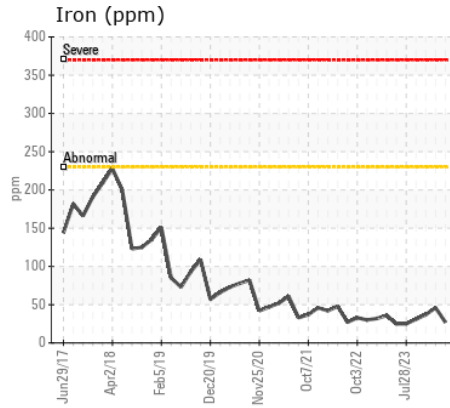
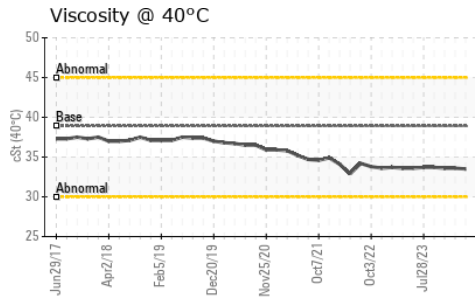
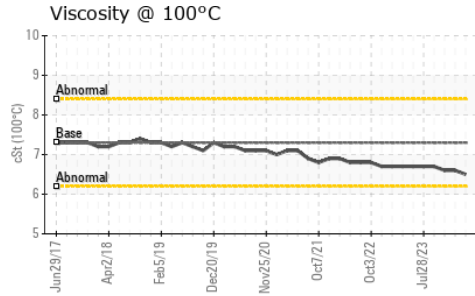
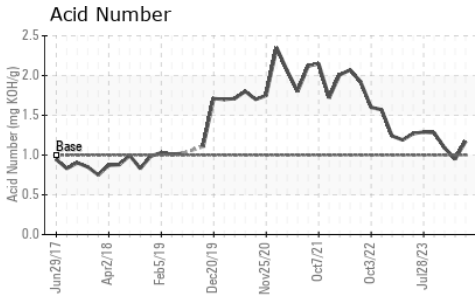
There is no indication of any contamination in the fluid.

| | | | | | | |
|------------------|--------|---------------|-------|--------------|-------|-------|
| Silicon | ppm | ASTM D5185(m) | >20 | 4 | 8 | 6 |
| Potassium | ppm | ASTM D5185(m) | >20 | 1 | 2 | 0 |
| Water | | WC Method | >0.1 | NEG | NEG | NEG |
| Silt | scalar | Visual* | NONE | NONE | NONE | NONE |
| Debris | scalar | Visual* | NONE | VLITE | 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 |

FLUID CONDITION

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

| | | | | | | |
|----------------------|----------|---------------|------|--------------|------|------|
| Sodium | ppm | ASTM D5185(m) | | 3 | 6 | 6 |
| Boron | ppm | ASTM D5185(m) | 150 | 62 | 49 | 49 |
| Barium | ppm | ASTM D5185(m) | 0 | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185(m) | 0 | 6 | 0 | 0 |
| Manganese | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| Magnesium | ppm | ASTM D5185(m) | 0 | <1 | 2 | 1 |
| Calcium | ppm | ASTM D5185(m) | 40 | 142 | 126 | 125 |
| Phosphorus | ppm | ASTM D5185(m) | 320 | 234 | 257 | 250 |
| Zinc | ppm | ASTM D5185(m) | 5 | 7 | 6 | 7 |
| Sulfur | ppm | ASTM D5185(m) | 1050 | 1495 | 1613 | 1596 |
| Acid Number (AN) | mg KOH/g | ASTM D974* | 1.0 | 1.17 | 0.95 | 1.09 |
| Visc @ 40°C | cSt | ASTM D7279(m) | 38.9 | 33.5 | 33.6 | 33.6 |
| Visc @ 100°C | cSt | ASTM D7279(m) | 7.3 | 6.5 | 6.6 | 6.6 |
| Viscosity Index (VI) | Scale | ASTM D2270* | 168 | 151 | 155 | 155 |



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0889000
Lab Number : 02628927
Unique Number : 5762059
Test Package : MOB 2 (Additional Tests: KV100, TAN Man, VI)

Received : 15 Apr 2024
Tested : 16 Apr 2024
Diagnosed : 16 Apr 2024 - Wes Davis

CITY OF THUNDER BAY
 AUTO MAINTENANCE STORES, 570 FORT WILLIAM ROAD
 THUNDER BAY, ON
 CA P7B 2Z8

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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.