



OIL ANALYSIS REPORT

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

Area
(GMN476) City Of Mount Pearl
Machine Id
INTERNATIONAL Dual Arm Garbage Truck, 20-13G
Component
Hydraulic System
Fluid
PETRO CANADA HYDREX AW 32 (239 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | OF0000284 | OF0000282 | OF0000280 |
| Sample Date | | Client Info | | 30 Aug 2021 | 07 Jun 2021 | 12 Apr 2021 |
| Machine Age | hrs | Client Info | | 829 | 567 | 376 |
| Oil Age | hrs | Client Info | | 829 | 567 | 376 |
| Filter Age | hrs | Client Info | | 262 | 191 | 198 |
| Oil Changed | | Client Info | | Not Chngd | Not Chngd | Not Chngd |
| Filter Changed | | Client Info | | Changed | Changed | Changed |
| Sample Status | | | | NORMAL | NORMAL | NORMAL |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|---------------|------|--------------|------|------|
| Iron | ppm | ASTM D5185(m) | >20 | 2 | 1 | 2 |
| Chromium | ppm | ASTM D5185(m) | >10 | <1 | <1 | <1 |
| Nickel | ppm | ASTM D5185(m) | | <1 | 0 | 0 |
| Titanium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185(m) | | <1 | 0 | 0 |
| Aluminum | ppm | ASTM D5185(m) | >10 | <1 | 0 | <1 |
| Lead | ppm | ASTM D5185(m) | >10 | <1 | 0 | 0 |
| Copper | ppm | ASTM D5185(m) | >75 | 1 | <1 | <1 |
| Tin | ppm | ASTM D5185(m) | >10 | 0 | 0 | 0 |
| 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

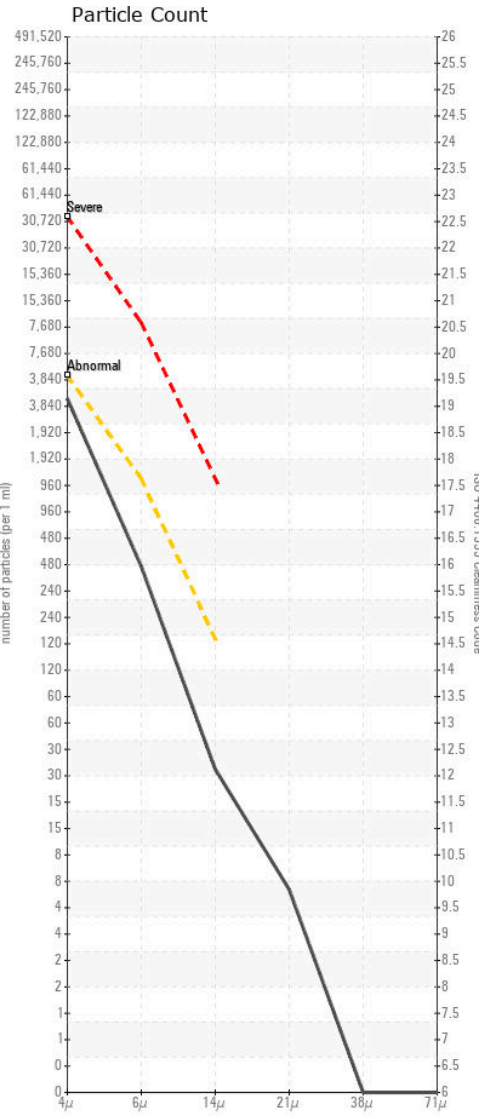
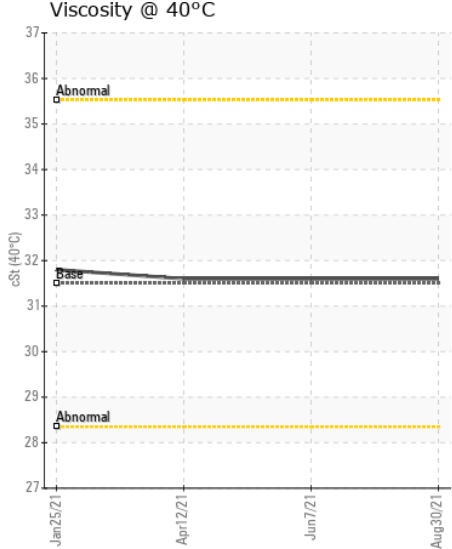
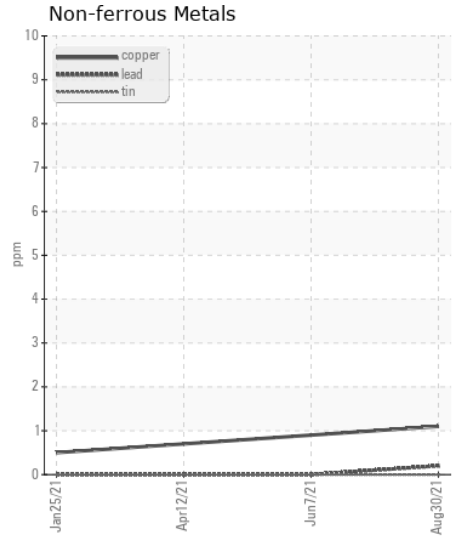
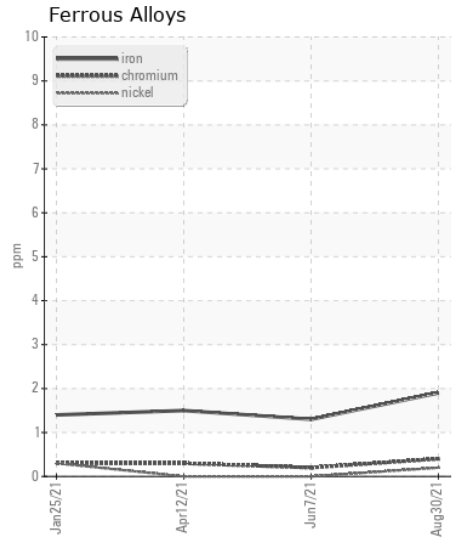
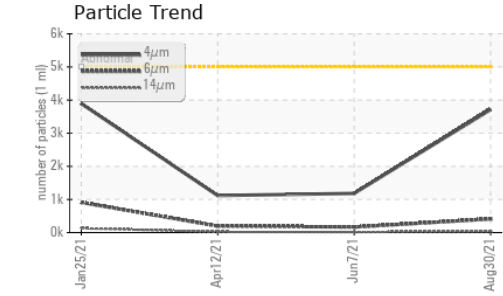
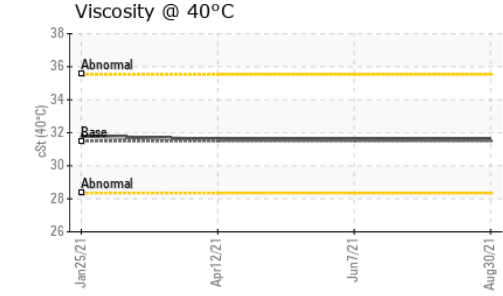
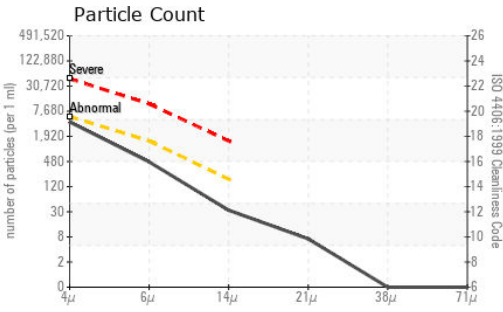
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

| | | | | | | |
|------------------|--------|---------------|-----------|-----------------|----------|----------|
| Silicon | ppm | ASTM D5185(m) | >20 | 2 | 2 | 3 |
| Potassium | ppm | ASTM D5185(m) | >20 | <1 | <1 | <1 |
| Water | | WC Method | >0.1 | NEG | NEG | NEG |
| Particles >4µm | | ASTM D7647 | >5000 | 3713 | 1183 | 1117 |
| Particles >6µm | | ASTM D7647 | >1300 | 412 | 166 | 195 |
| Particles >14µm | | ASTM D7647 | >160 | 29 | 14 | 18 |
| Particles >21µm | | ASTM D7647 | >40 | 6 | 3 | 5 |
| Particles >38µm | | ASTM D7647 | >10 | 0 | 0 | 0 |
| Particles >71µm | | ASTM D7647 | >3 | 0 | 0 | 0 |
| Oil Cleanliness | | ISO 4406 (c) | >19/17/14 | 19/16/12 | 17/15/11 | 17/15/11 |
| Silt | scalar | Visual* | NONE | NONE | NONE | NONE |
| Debris | scalar | Visual* | NONE | NONE | NONE | VLITE |
| 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 condition of the oil is acceptable for the time in service.

| | | | | | | |
|-------------|-----|---------------|------|--------------|------|------|
| Sodium | ppm | ASTM D5185(m) | | <1 | <1 | <1 |
| Boron | ppm | ASTM D5185(m) | 0 | <1 | <1 | <1 |
| Barium | ppm | ASTM D5185(m) | 0 | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185(m) | 0 | 0 | 0 | 0 |
| Manganese | ppm | ASTM D5185(m) | 0 | 0 | 0 | 0 |
| Magnesium | ppm | ASTM D5185(m) | 0 | <1 | <1 | <1 |
| Calcium | ppm | ASTM D5185(m) | 50 | 38 | 44 | 46 |
| Phosphorus | ppm | ASTM D5185(m) | 330 | 327 | 324 | 330 |
| Zinc | ppm | ASTM D5185(m) | 430 | 393 | 397 | 395 |
| Sulfur | ppm | ASTM D5185(m) | 760 | 746 | 733 | 743 |
| Visc @ 40°C | cSt | ASTM D7279(m) | 31.5 | 31.6 | 31.6 | 31.6 |



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : OF0000284
Lab Number : 02475793
Unique Number : 5360716
Test Package : MOB 2
Received : 07 Mar 2022
Tested : 08 Mar 2022
Diagnosed : 08 Mar 2022 - Wes Davis

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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.