

Machine Id
SCRAPPER HPU PC11
Component
Hydraulic System
Fluid
{not provided} (--- GAL)

RECOMMENDATION

Little or no information is provided as to the component and lubricant being tested. Recommendations are therefore generic in nature and may not apply to the current application. Please forward information as to equipment type, reservoir capacity, lubricant type and any pertinent information to allow for a more accurate assessment. We advise that you check all areas where contaminants can enter the system. We recommend that you drain the oil from the component if this has not already been done. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. Resample in 30-45 days to monitor this situation. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Please specify the brand, type, and viscosity of the oil on your next sample.

WEAR

All component wear rates are normal.

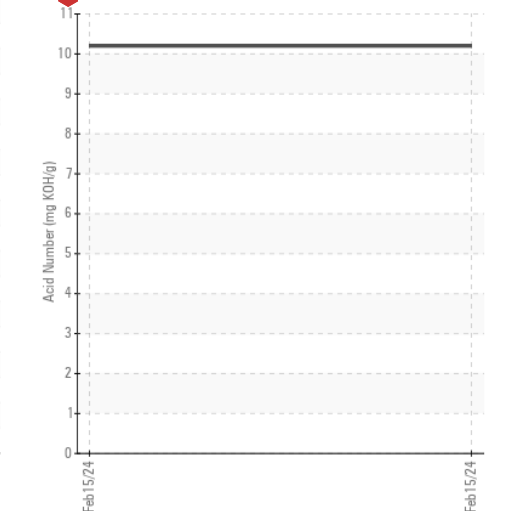
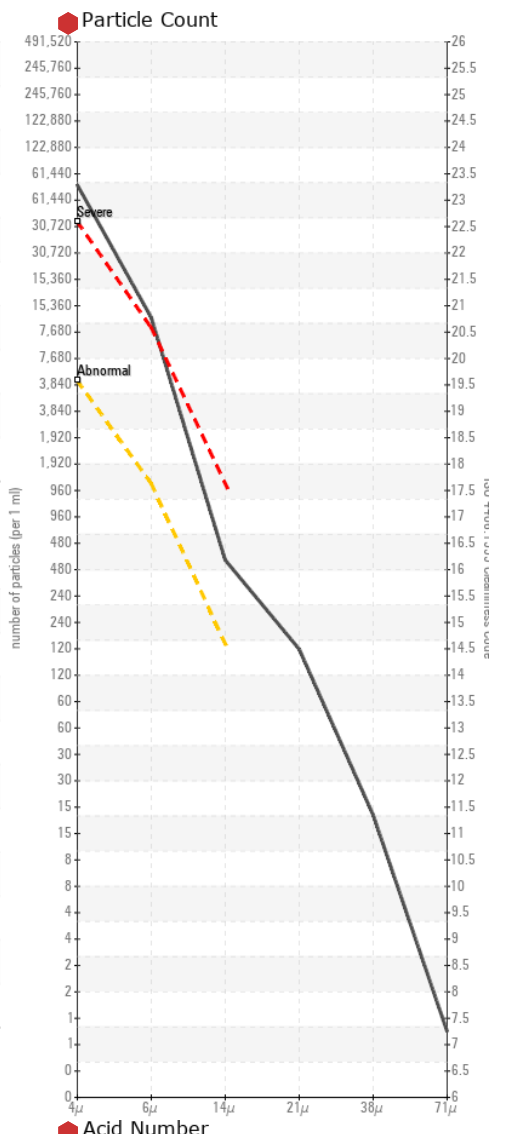
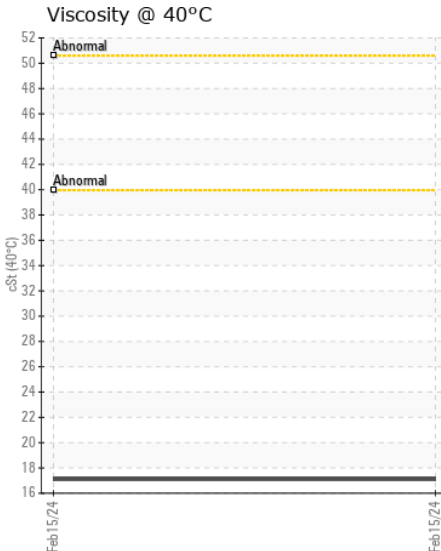
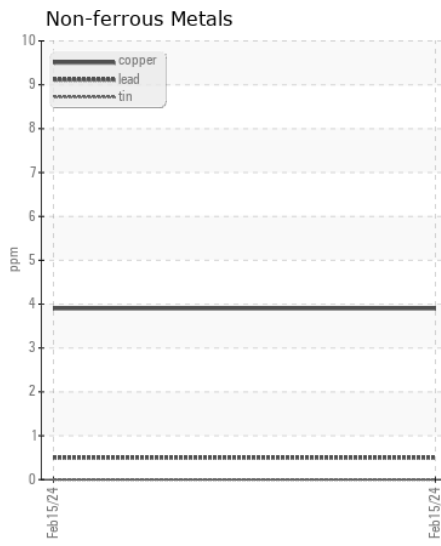
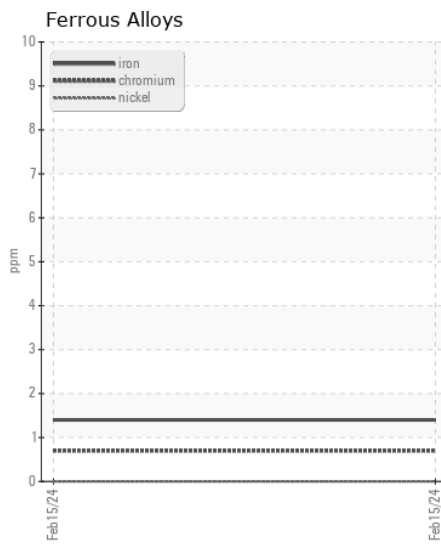
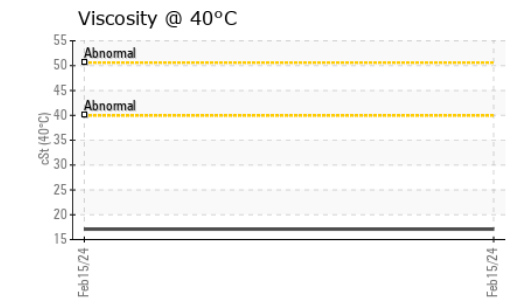
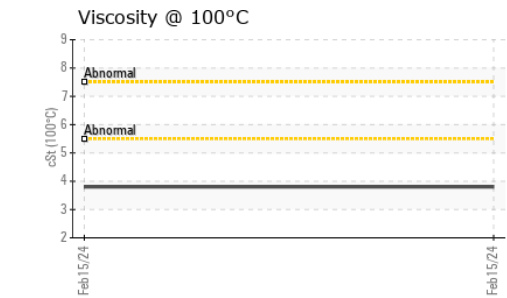
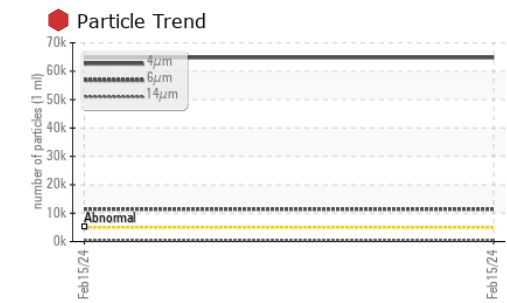
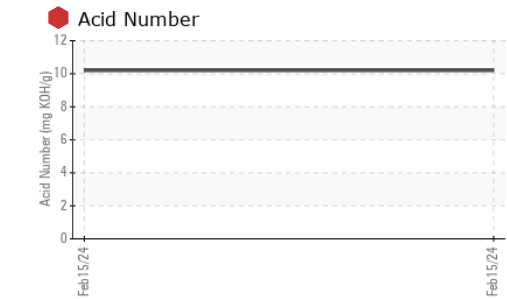
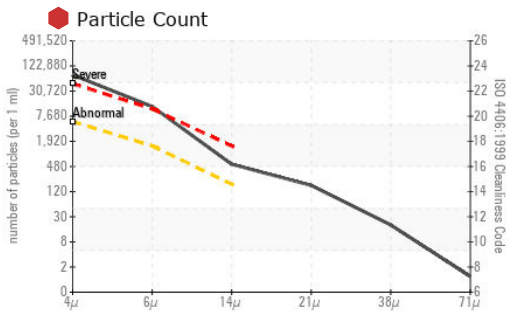
CONTAMINATION

There is a high amount of particulates (2 to 100 microns in size) present in the oil.

FLUID CONDITION

The high AN level of the oil indicates the presence of oxi-polymerized products. The AN level is much higher than the recommended limit. The oil is no longer serviceable.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------------|----------|---------------|-----------|--------------------|----------|----------|
| Sample Number | | Client Info | | PC | --- | --- |
| Sample Date | | Client Info | | 15 Feb 2024 | --- | --- |
| Machine Age | hrs | Client Info | | 0 | --- | --- |
| Oil Age | hrs | Client Info | | 0 | --- | --- |
| Filter Age | hrs | Client Info | | 0 | --- | --- |
| Oil Changed | | Client Info | | N/A | --- | --- |
| Filter Changed | | Client Info | | N/A | --- | --- |
| Sample Status | | | | SEVERE | --- | --- |
| Iron | ppm | ASTM D5185(m) | >20 | 1 | --- | --- |
| Chromium | ppm | ASTM D5185(m) | >20 | <1 | --- | --- |
| Nickel | ppm | ASTM D5185(m) | >20 | 0 | --- | --- |
| Titanium | ppm | ASTM D5185(m) | | 0 | --- | --- |
| Silver | ppm | ASTM D5185(m) | | 0 | --- | --- |
| Aluminum | ppm | ASTM D5185(m) | >20 | <1 | --- | --- |
| Lead | ppm | ASTM D5185(m) | >20 | <1 | --- | --- |
| Copper | ppm | ASTM D5185(m) | >20 | 4 | --- | --- |
| Tin | ppm | ASTM D5185(m) | >20 | 0 | --- | --- |
| Vanadium | ppm | ASTM D5185(m) | | 0 | --- | --- |
| White Metal | scalar | Visual* | NONE | NONE | --- | --- |
| Yellow Metal | scalar | Visual* | NONE | NONE | --- | --- |
| Silicon | ppm | ASTM D5185(m) | >15 | 0 | --- | --- |
| Potassium | ppm | ASTM D5185(m) | >20 | <1 | --- | --- |
| Water | | WC Method | >0.05 | NEG | --- | --- |
| Particles >4µm | | ASTM D7647 | >5000 | 64788 | --- | --- |
| Particles >6µm | | ASTM D7647 | >1300 | 11416 | --- | --- |
| Particles >14µm | | ASTM D7647 | >160 | 478 | --- | --- |
| Particles >21µm | | ASTM D7647 | >40 | 149 | --- | --- |
| Particles >38µm | | ASTM D7647 | >10 | 17 | --- | --- |
| Particles >71µm | | ASTM D7647 | >3 | 1 | --- | --- |
| Oil Cleanliness | | ISO 4406 (c) | >19/17/14 | 23/21/16 | --- | --- |
| Silt | scalar | Visual* | NONE | NONE | --- | --- |
| Debris | scalar | Visual* | NONE | NONE | --- | --- |
| Sand/Dirt | scalar | Visual* | NONE | NONE | --- | --- |
| Appearance | scalar | Visual* | NORML | NORML | --- | --- |
| Odor | scalar | Visual* | NORML | NORML | --- | --- |
| Emulsified Water | scalar | Visual* | >0.05 | NEG | --- | --- |
| Sodium | ppm | ASTM D5185(m) | | 0 | --- | --- |
| Boron | ppm | ASTM D5185(m) | | 0 | --- | --- |
| Barium | ppm | ASTM D5185(m) | | 0 | --- | --- |
| Molybdenum | ppm | ASTM D5185(m) | | 0 | --- | --- |
| Manganese | ppm | ASTM D5185(m) | | 0 | --- | --- |
| Magnesium | ppm | ASTM D5185(m) | | <1 | --- | --- |
| Calcium | ppm | ASTM D5185(m) | | <1 | --- | --- |
| Phosphorus | ppm | ASTM D5185(m) | | 0 | --- | --- |
| Zinc | ppm | ASTM D5185(m) | | 2 | --- | --- |
| Sulfur | ppm | ASTM D5185(m) | | 60 | --- | --- |
| Acid Number (AN) | mg KOH/g | ASTM D974* | | 10.2 | --- | --- |
| Visc @ 40°C | cSt | ASTM D7279(m) | | 17.1 | --- | --- |
| Visc @ 100°C | cSt | ASTM D7279(m) | | 3.8 | --- | --- |
| Viscosity Index (VI) | Scale | ASTM D2270* | | 112 | --- | --- |



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC
Lab Number : 02616232
Unique Number : 5733342
Test Package : IND 2 (Additional Tests: KV100, TAN Man, VI)

Petro-Canada Technical/Behshad Sabah

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 CA L5J 1K2
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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.