

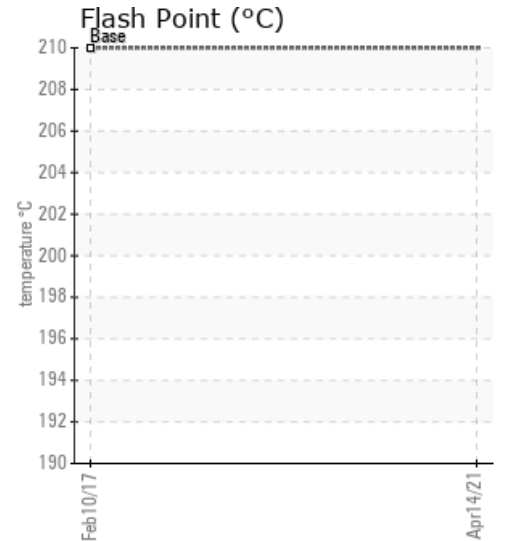
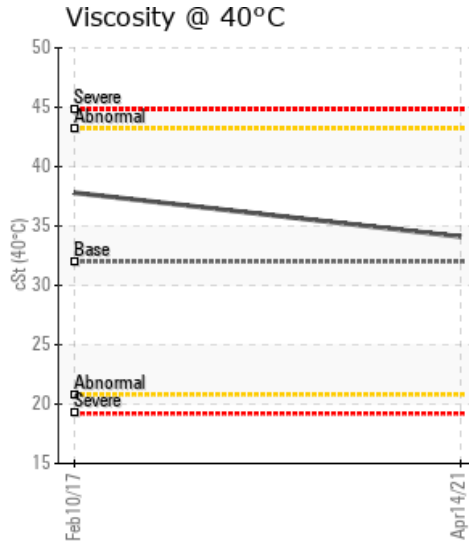
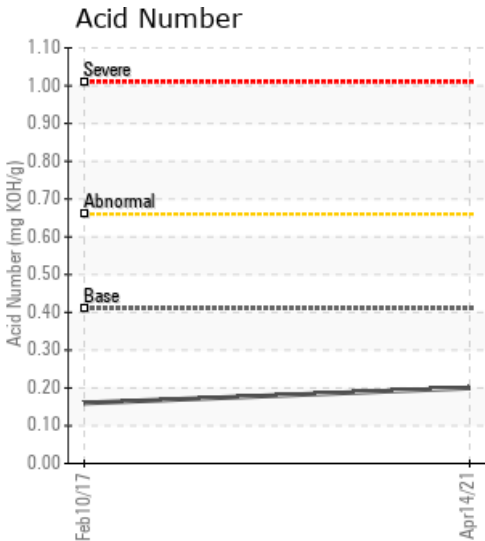
DUMP TANK

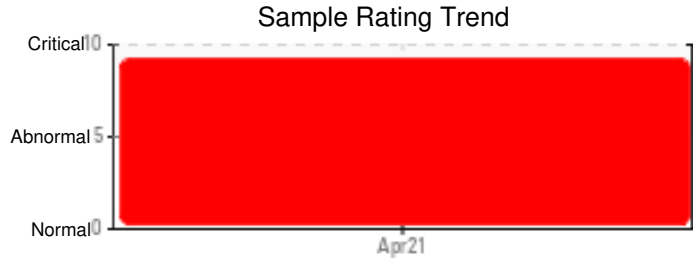
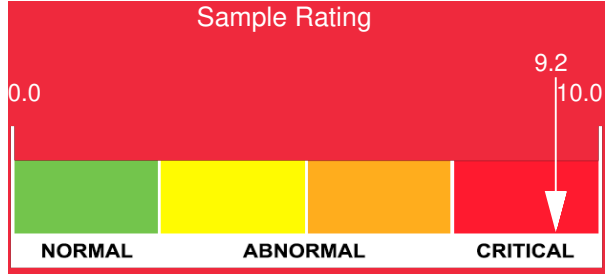
| Customer: PTRHTF30101 | System Information | Sample Information |
|---|---|---|
| Roseburg Pembroke MDF Inc. 777 Fibreboard Drive Pembroke, ON K8A 6W5 Canada Attn: Dan Havis Tel: (613)732-3939 E-Mail: danielh@rfpco.com | System Volume: 0 gal Bulk Operating Temp: Not Specified Heating Source: Blanket: Fluid: HEAT TRANSFER FLUID ISO 32 Make: | Lab No: 02415561 Analyst: Pierre Castagne Sample Date: 04/14/21 Received Date: 04/16/21 Completed: 04/20/21 Pierre Castagne pierre.castagne@hollyfrontier.com |

Recommendation: The ppm of Potassium are abnormal (due to the mixing of glycol in the system). The water is abnormally high (1219.6 ppm). The pentane insoluble are elevated. Flash point is OK.

Comments: Potassium ppm levels are severely high. Water contamination levels are severely high. ppm Water contamination levels are severely high.

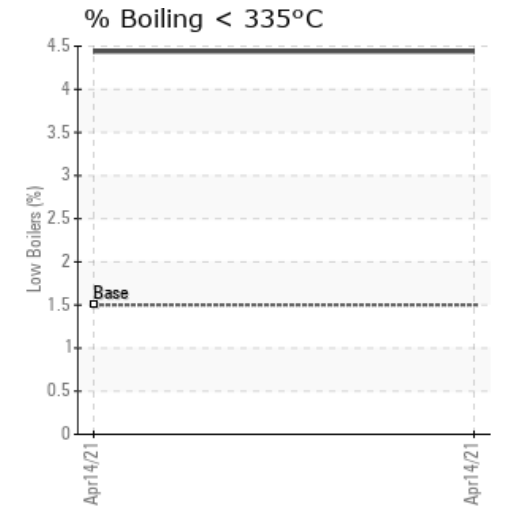
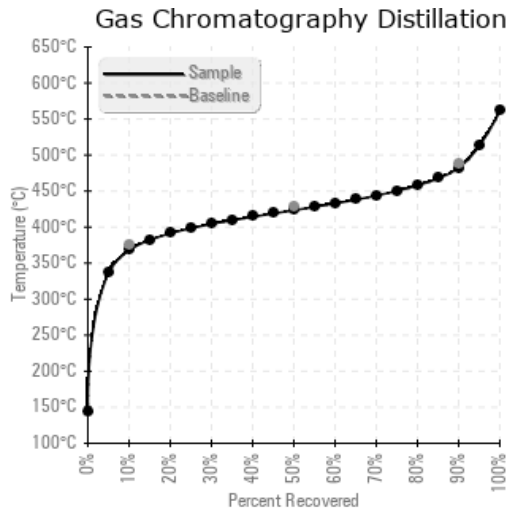
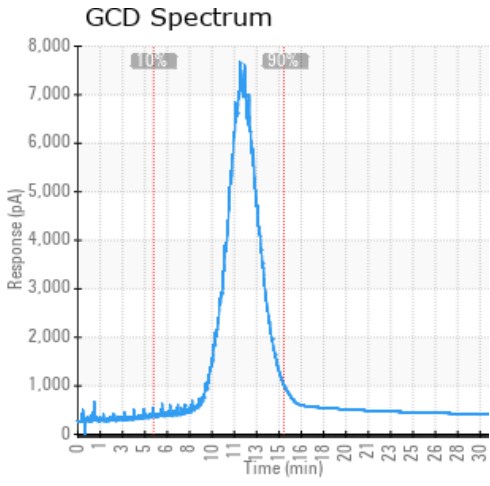
| Sample Date | Received Date | Fluid Age | Sample Location | Flash Point (COC) | Water (KF) | Viscosity (40°C) | Acid Number | Solids | GCD 10% | GCD 50% | GCD 90% | GCD % < 335°C |
|---------------|---------------|-----------|-----------------|-------------------|------------|------------------|-------------|--------|-----------|-----------|-----------|---------------|
| | mm/dd/yy | | | °F/°C | ppm | cSt | mg/KOH/g | %wt | °F/°C | °F/°C | °F/°C | % |
| 04/14/21 | 04/16/21 | 0.0d | Dump tank | 392 / 200 | 1219.6 | 34.1 | 0.20 | 0.378 | 694 / 368 | 794 / 423 | 900 / 482 | 4.44 |
| 02/10/17 | 02/15/17 | 0.0d | | | 26534.2 | 37.8 | 0.16 | | | | | |
| Baseline Data | | | | 410 / 210 | | 32 | 0.41 | | 707 / 375 | 802 / 428 | 910 / 488 | 1.5 |





| Sample Date | Iron | Chromium | Nickel | Aluminum | Copper | Lead | Tin | Cadmium | Silver | Vanadium | Silicon | Sodium | Potassium | Titanium | Molybdenum | Antimony | Manganese | Lithium | Boron | Magnesium | Calcium | Barium | Phosphorus | Zinc |
|---------------|------|----------|--------|----------|--------|------|-----|---------|--------|----------|---------|--------|-----------|----------|------------|----------|-----------|---------|-------|-----------|---------|--------|------------|------|
| 04/14/21 | 84 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 230 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 2 | 0 | 2 | 1 |
| 02/10/17 | 48 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 |
| Baseline Data | | | 0 | 0 | | | | | | 0 | | | 0 | 0 | | | | | 5 | | | | 250 | |

Elemental analysis results (above) in parts per million (ppm). [10,000 ppm = 1.0%]



Historical Comments

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| 02/10/17 | This is a baseline read-out on the submitted sample. WearCheck recommends using HTTFL sample kits for heat transfer fluids. Please contact us at 1-800-268-2131 and provide a purchase order for \$245 + HST in order to conduct additional testing (boiling points @ 10%, 50%, and 90%, percent boiling < 335°C, and solids) to determine the suitability for continued use. {not applicable} {not applicable} {not applicable} |
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