

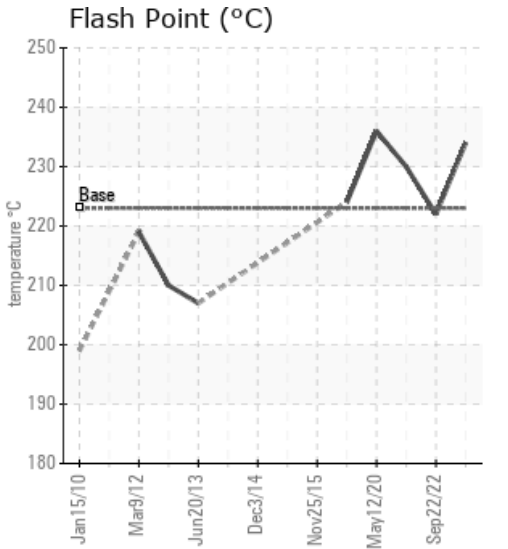
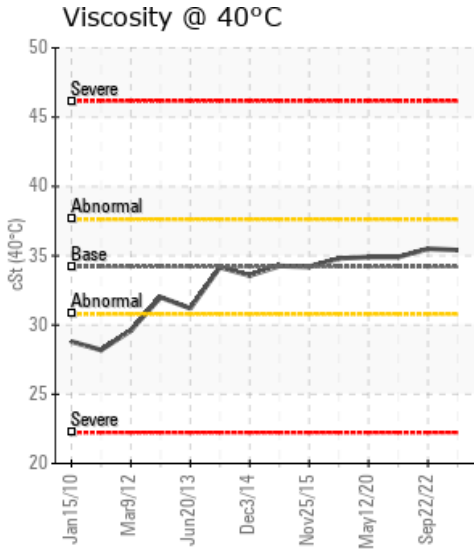
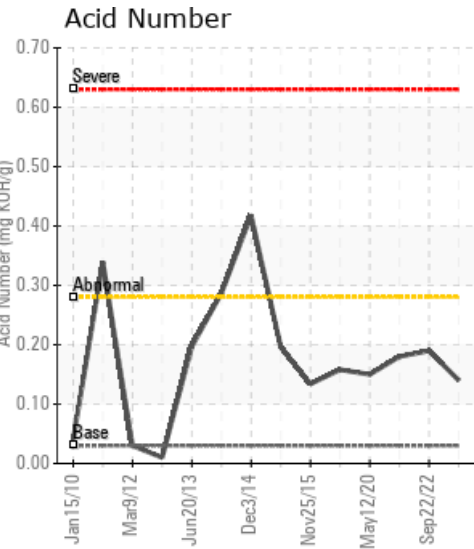
STILLYARD HOT OIL SYSTEM

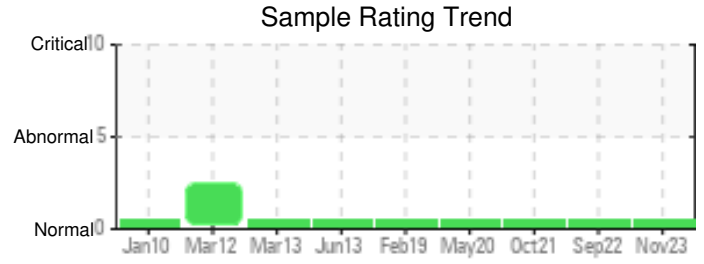
| Customer: PTRHTF10094 | System Information | Sample Information |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CERTAINEED CORPORATION - OXFORD 200 CERTAINEED RD OXFORD, NC 27565 US Attn: Seth Newton Tel: (919)693-1141 E-Mail: Seth.newton@saint-gobain.com | System Volume: 0 gal Bulk Operating Temp: 450F / 232C Heating Source: Blanket: Fluid: PETRO CANADA PETRO-THERM Make: | Lab No: 02616805 Analyst: Manny Garcia Sample Date: 11/01/23 Received Date: 02/20/24 Completed: 03/05/24 Manny Garcia manuel.garcia@HFSinclair.com |

Recommendation: Oil is suitable for continued use. Please re-submit sample in the fall of 2024.

Comments: Wear metals/contamination are nil. Water ppm has increased slightly, but acid number has dropped. Viscosity is in satisfactory range. COC Flash point has been very steady at 234oC. Pentane insolubles have dropped to satisfactory levels of .074; appearance of the fluid sample is GOOD.

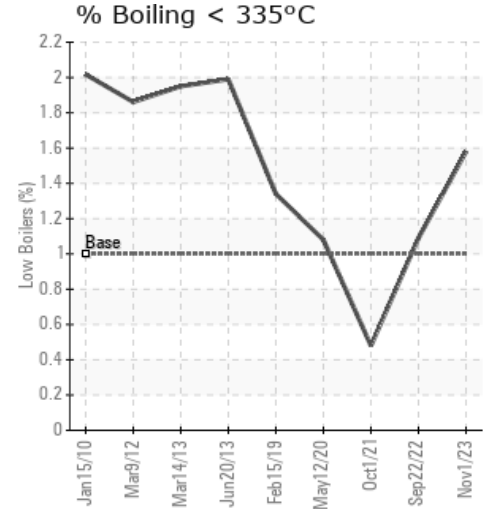
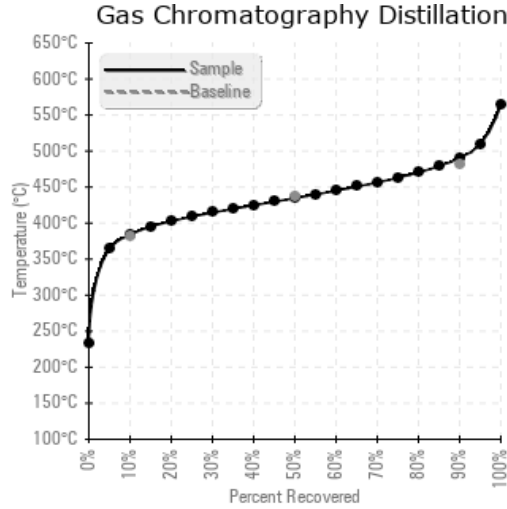
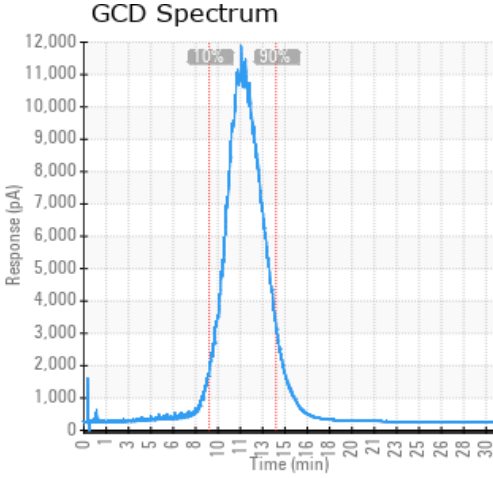
| Sample Date | Received Date | Fluid Age | Sample Location | Flash Point (COC) | Water (KF) | Viscosity (40°C) | Acid Number | Solids | GCD 10% | GCD 50% | GCD 90% | GCD % < 335°C |
|---------------|---------------|-----------|-----------------|-------------------|------------|------------------|-------------|--------|-----------|-----------|-----------|---------------|
| | mm/dd/yy | | | °F/°C | ppm | cSt | mg/KOH/g | %wt | °F/°C | °F/°C | °F/°C | % |
| 11/01/23 | 02/20/24 | 12.0m | | 453 / 234 | 42 | 35.4 | 0.14 | 0.074 | 723 / 384 | 814 / 435 | 915 / 490 | 1.58 |
| 09/22/22 | 10/12/22 | 0.0m | TRACING LINE | 432 / 222 | 9.4 | 35.5 | 0.19 | 0.267 | 728 / 386 | 816 / 436 | 915 / 491 | 1.09 |
| 10/01/21 | 10/18/21 | 0.0m | | 446 / 230 | 16.2 | 34.9 | 0.18 | 0.055 | 729 / 387 | 817 / 436 | 913 / 490 | 0.48 |
| 05/12/20 | 07/06/20 | 5.0m | | 457 / 236 | 22.8 | 34.9 | 0.15 | 0.191 | 723 / 384 | 813 / 434 | 912 / 489 | 1.08 |
| 02/15/19 | 02/28/19 | 1.0m | DRAIN POINT | 435 / 224 | 9.7 | 34.8 | 0.158 | 0.029 | 698 / 370 | 788 / 420 | 892 / 478 | 1.34 |
| Baseline Data | | | | 433 / 223 | | 34.2 | 0.03 | | 720 / 382 | 817 / 436 | 900 / 482 | 1.00 |





| 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 |
|---------------|------|----------|--------|----------|--------|------|-----|---------|--------|----------|---------|--------|-----------|----------|------------|----------|-----------|---------|-------|-----------|---------|--------|------------|------|
| 11/01/23 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 09/22/22 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10/01/21 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 05/12/20 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 02/15/19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Baseline Data | | | 0 | 0 | | | | | | 0 | | | 0 | 0 | | | | | 0 | | | | 0 | |

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



Historical Comments

| | |
|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 09/22/22 | Please re-submit fluid in September 2023 as scheduled. Fluid is suitable for continued use as expected for a 12-month old product. Parameters all look great! |
| 10/01/21 | Fluid condition looks excellent. Please re-submit next oil sample in October 2022 |
| 05/12/20 | Despite the dark appearance, which is normal for hot oils, the sample shows nothing abnormal or marginal to act upon. Re-sample at next scheduled interval. |
| 02/15/19 | Glad to see this system back on our normal Hot Oil testing program. All parameters are within acceptable limits, contamination by water is barely detectable, oxidation is very mild. Keep monitoring along with the other systems. No action needed at this time. |

Petro-Canada makes no representation or warranty of any kind, either express or implied, as to the accuracy or completeness of the analysis and assumes no responsibility and shall have no liability whatsoever with respect to such analysis, or a party's use of it. Petro-Canada is a division of HollyFrontier Corporation.