

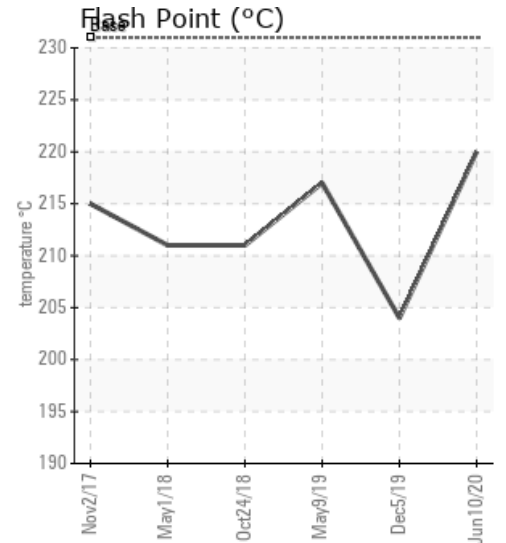
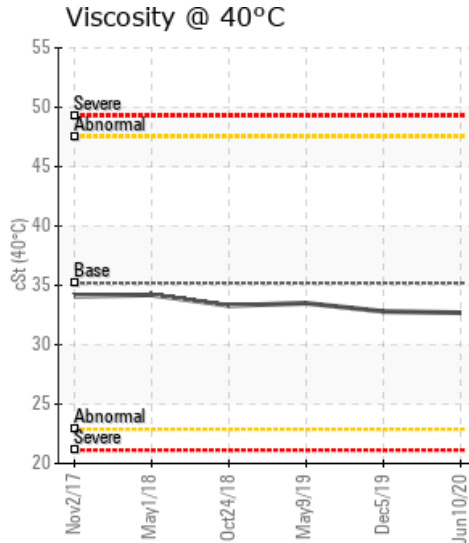
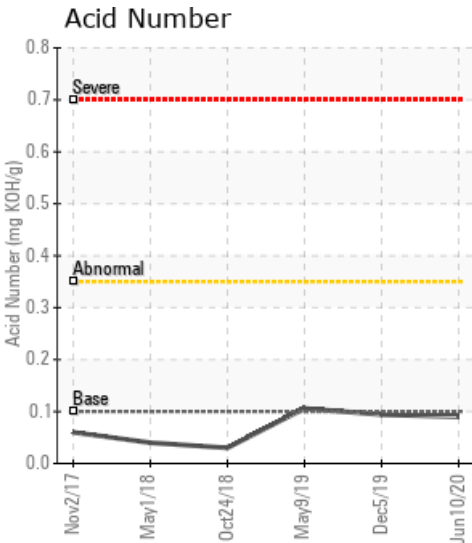
## LN01 Laminator Hot Oil System

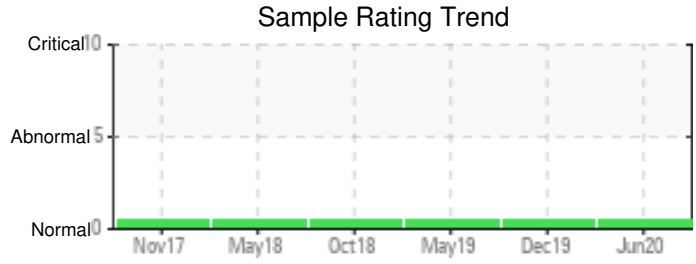
| Customer: PTRHTF10141  | System Information  | Sample Information   |
|--|---|--|
| TAMKO BUILDING PRODUCTS<br>2300 35TH ST<br>TUSCALOOSA, AL 35401 USA<br>Attn: Greg Colburn<br>Tel: (205)752-3555<br>E-Mail: gregory_colburn@tamko.com | System Volume: 110 gal<br>Bulk Operating Temp: 350F / 177C<br>Heating Source:<br>Blanket:<br>Fluid: PETRO CANADA CALFLO HTF<br>Make: Heat Exchanger And T | Lab No: 02362007<br>Analyst: Jake Finn<br>Sample Date: 06/10/20<br>Received Date: 06/29/20<br>Completed: 07/02/20<br>Jake Finn<br>jake.finn@petrocanadalsp.com |

Recommendation: Fluid is suitable for continued use. Please resubmit for testing in one year.

Comments: Very light white metal and debris noted by lab. Consider checking system filters and changing them if necessary.

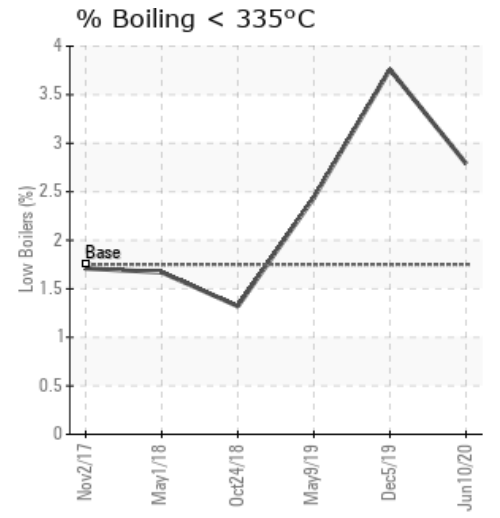
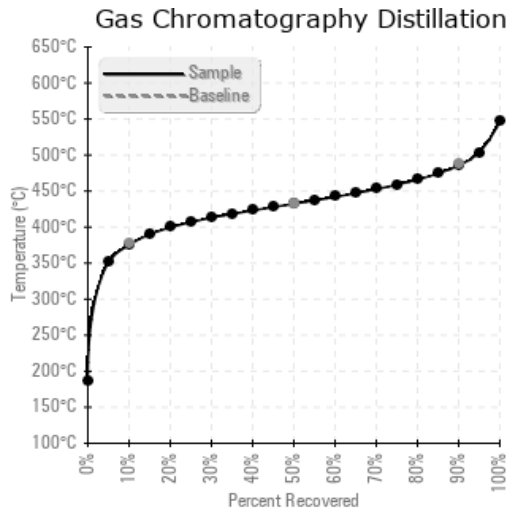
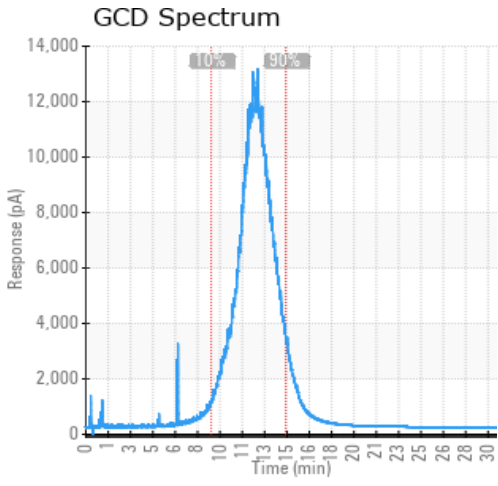
| Sample Date   | Received Date | Fluid Age | Sample Location | Flash Point (COC) | Water (KF) | Viscosity (40°C) | Acid Number | Solids | GCD 10%   | GCD 50%   | GCD 90%   | GCD % < 335°C |
|---------------|---------------|-----------|-----------------|-------------------|------------|------------------|-------------|--------|-----------|-----------|-----------|---------------|
|               | mm/dd/yy      |           |                 | °F/°C             | ppm        | cSt              | mg/KOH/g    | %wt    | °F/°C     | °F/°C     | °F/°C     | %             |
| 06/10/20      | 06/29/20      | 0y        |                 | 428 / 220         | 6.7        | 32.7             | 0.09        | 0.162  | 708 / 375 | 810 / 432 | 906 / 486 | 2.79          |
| 12/05/19      | 12/13/19      | 0y        | PORT            | 399 / 204         | 35.7       | 32.8             | 0.094       | 0.052  | 691 / 366 | 804 / 429 | 914 / 490 | 3.76          |
| 05/09/19      | 05/17/19      | 2y        | PORT            | 423 / 217         | 32.4       | 33.5             | 0.106       | 0.026  | 705 / 374 | 809 / 432 | 917 / 491 | 2.44          |
| 10/24/18      | 11/02/18      | 0y        |                 | 412 / 211         | 24.0       | 33.3             | 0.03        | 0.037  | 694 / 368 | 793 / 423 | 883 / 473 | 1.32          |
| 05/01/18      | 05/09/18      | 2y        | PORT            | 412 / 211         | 7.5        | 34.2             | 0.04        | 0.019  | 710 / 376 | 809 / 432 | 902 / 484 | 1.67          |
| Baseline Data |               |           |                 | 448 / 231         |            | 35.20            | .1          |        | 712 / 378 | 810 / 432 | 910 / 488 | 1.75          |





| 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 |   |
|---------------|------|----------|--------|----------|--------|------|-----|---------|--------|----------|---------|--------|-----------|----------|------------|----------|-----------|---------|-------|-----------|---------|--------|------------|------|---|
| 06/10/20      | 0    | 0        | 0      | 0        | 0      | 0    | 0   | 0       | 0      | 0        | 0       | 0      | 0         | 0        | 0          | 0        | 0         | 0       | 0     | 0         | 0       | 0      | 27         | 0    |   |
| 12/05/19      | 0    | 0        | 0      | 0        | 0      | 0    | 0   | 0       | 0      | 0        | 0       | 0      | 0         | 0        | 0          | 0        | 0         | 0       | 0     | 0         | 0       | 0      | 0          | 27   | 0 |
| 05/09/19      | 0    | 0        | 0      | 0        | 0      | 0    | 0   | 0       | 0      | 0        | 0       | 0      | 0         | 0        | 0          | 0        | 0         | 0       | 0     | 0         | 0       | 0      | 0          | 23   | 0 |
| 10/24/18      | 0    | 0        | 0      | 0        | 0      | 0    | 0   | 0       | 0      | 0        | 0       | 0      | 0         | 0        | 0          | 0        | 0         | 0       | 0     | 0         | 0       | 0      | 0          | 23   | 0 |
| 05/01/18      | 0    | 0        | 0      | 0        | 0      | 0    | 0   | 0       | 0      | 0        | 0       | 0      | 0         | 0        | 0          | 0        | 0         | 0       | 0     | 0         | 0       | 0      | 0          | 17   | 0 |
| Baseline Data |      |          | 0      | 0        |        |      |     |         |        | 0        |         |        | 0         | 0        |            |          |           | 0       | 0     |           |         |        |            | 280  |   |

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



| Historical Comments |  |
|---------------------|--|
| 12/05/19            | Oil is suitable for continued use. Remember to please include the time on oil when submitting oil samples for evaluation. Oil can be sent in for testing in one year.N/A   |
| 05/09/19            | Oil is suitable for continued use. Please re-submit sample in 1 year.Acid number is normal, but has risen since the last sample, monitor at next test interval. Very light debris is noted by the lab.                       |
| 10/24/18            | Fluid is suitable for continued use. Please re-submit annual sample in October 2019. Please include time on the unit and time on the fluid on next sample entry.   |
| 05/01/18            | Fluid is suitable for continued use. Please submit sample on May 1, 2019All parameters of the fluid look above satisfactory. There is some light visible debris that may be filtered out safely during any future shutdowns. |

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.