

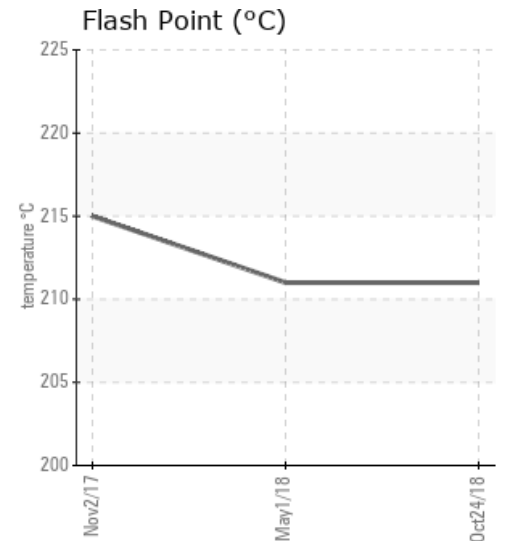
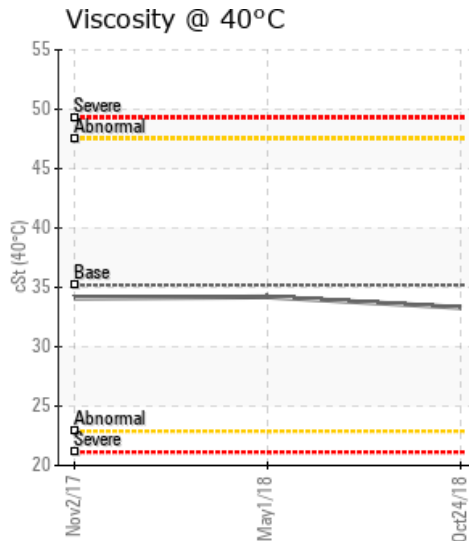
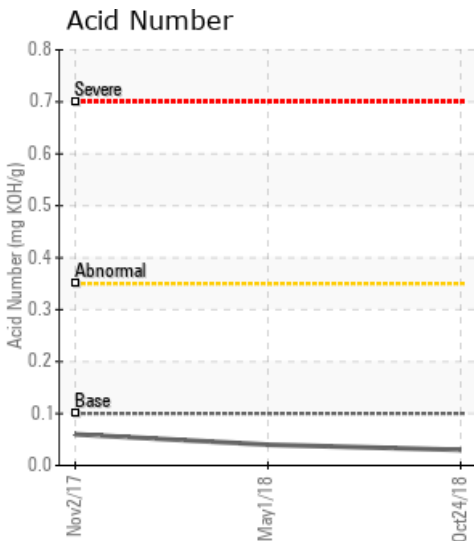
LN01 Laminator Hot Oil System

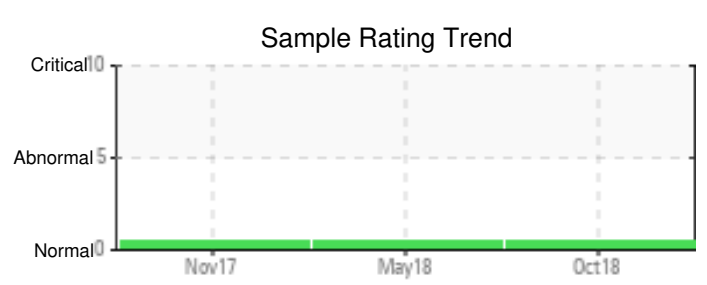
| Customer: PTRHTF10141 | System Information | Sample Information |
|--|---|--|
| TAMKO BUILDING PRODUCTS 2300 35TH ST TUSCALOOSA, AL 35401 USA Attn: Greg Colburn Tel: (205)752-3555 E-Mail: gregory_colburn@tamko.com | System Volume: 110 gal Bulk Operating Temp: 350F / 177C Heating Source: Blanket: Fluid: PETRO CANADA CALFLO HTF Make: Heat Exchanger And T | Lab No: 02249083 Analyst: Manny Garcia Sample Date: 10/24/18 Received Date: 11/02/18 Completed: 11/12/18 |

Recommendation: 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.

Comments:

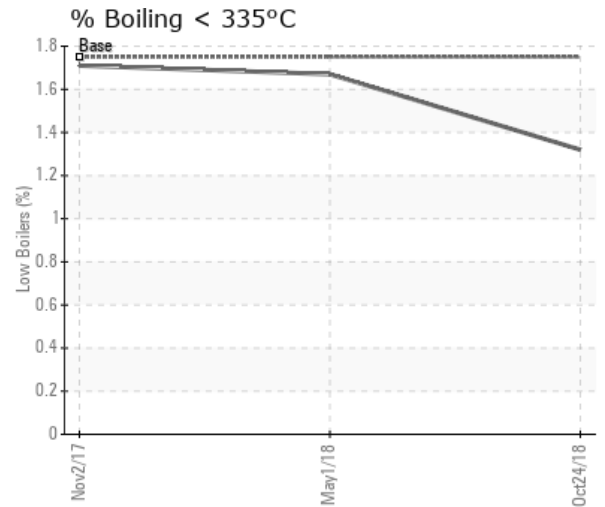
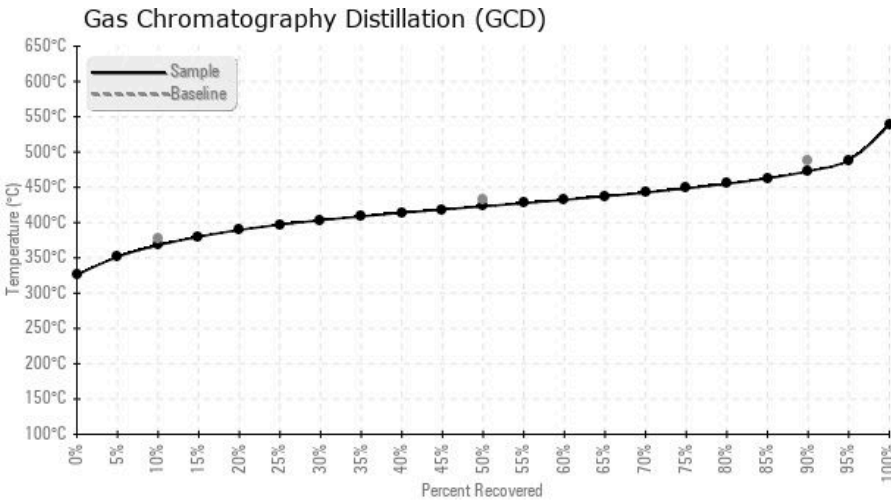
| Sample Date | Received Date | Fluid Age | Sample Location | Flash Point (COC) | Water (KF) | Viscosity (40°C) | Acid Number | Solids | GCD 10% | GCD 50% | GCD 90% | GCD % < 335°C |
|---------------|---------------|-----------|-----------------|-------------------|------------|------------------|-------------|--------|-----------|-----------|-----------|---------------|
| | mm/dd/yy | | | °F/°C | ppm | cSt | mg/KOH/g | %wt | °F/°C | °F/°C | °F/°C | % |
| 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 |
| 11/02/17 | 11/13/17 | 10y | | 419 / 215 | 14.4 | 34.1 | 0.06 | 0.036 | 708 / 375 | 804 / 429 | 898 / 481 | 1.71 |
| 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 |
|----------------------|------|----------|--------|----------|--------|------|-----|---------|--------|----------|---------|--------|-----------|----------|------------|----------|-----------|---------|-------|-----------|---------|--------|------------|------|
| 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 | 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 | 17 | 0 |
| 11/02/17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 0 |
| Baseline Data | | | 0 | 0 | | | | | | 0 | | | 0 | 0 | | | | | 0 | | | | 280 | |

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



Historical Comments

| | |
|----------|---|
| 05/01/18 | Fluid is suitable for continued use. Please submit sample on May 1, 2019 All parameters of the fluid look above satisfactory. There is some light visible debris that may be filtered out safely during any future shutdowns. |
| 11/02/17 | Oil is suitable for continued use. Please re-submit sample in 1-year for analysis Low Wear Metals and Contamination levels; 14.4 ppm water (Low); Acid number is low; 34.1 CsT @40oC Viscosity; COC Flash Point is 215oC - Excellent; Very Light Debris visible |
| | |
| | |

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