

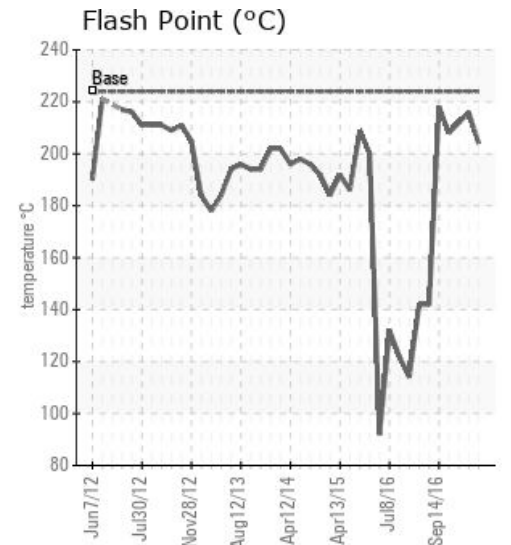
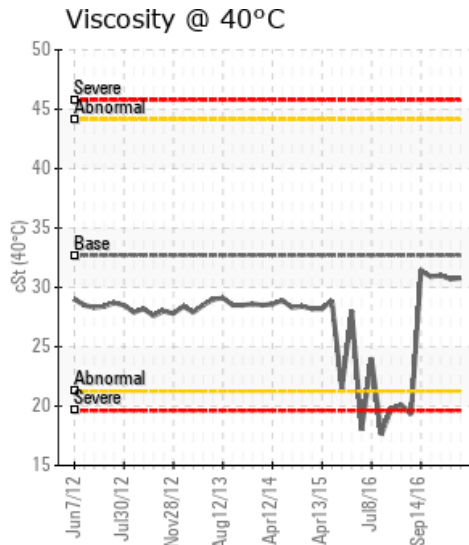
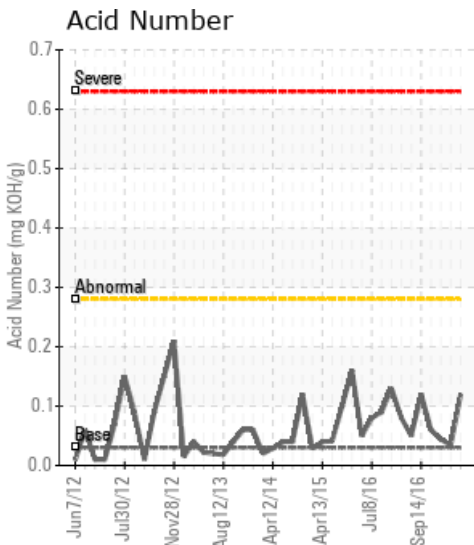
[HOT OIL SAMPLE STATION] SILANE 4.0 DISTILLATION

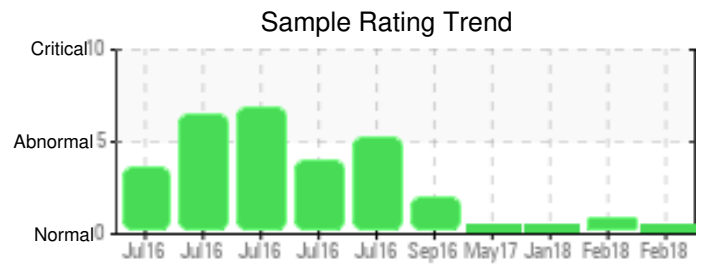
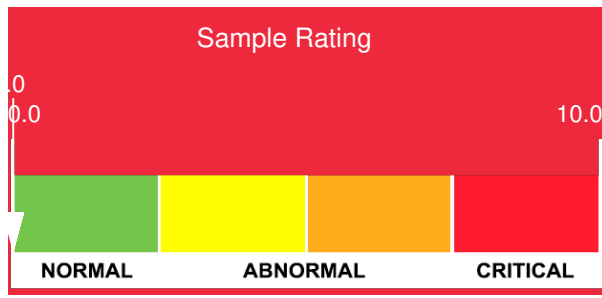
| Customer: PTRHTF10093 | System Information | Sample Information |
|--|--|--|
| REC GROUP 3322 ROAD N N.E. MOSES LAKE, WA 98837 USA Attn: Loren Poulson Tel: E-Mail: loren.poulson@recsilicon.com | System Volume: 50000 gal Bulk Operating Temp: 420F / 216C Heating Source: Blanket: Fluid: PETRO CANADA CALFLO AF Make: COEN | Lab No: 02199997 Analyst: Ron LeBlanc Sample Date: 02/16/18 Received Date: 02/22/18 Completed: 02/26/18 To discuss this report contact Ron LeBlanc at (541)678-7044 |

Recommendation: Sample appears close to normal. The silicon stayed relatively the same as the last 3 samples. The (GCD) 10% distillation point dropped to normal this sample.

Comments:

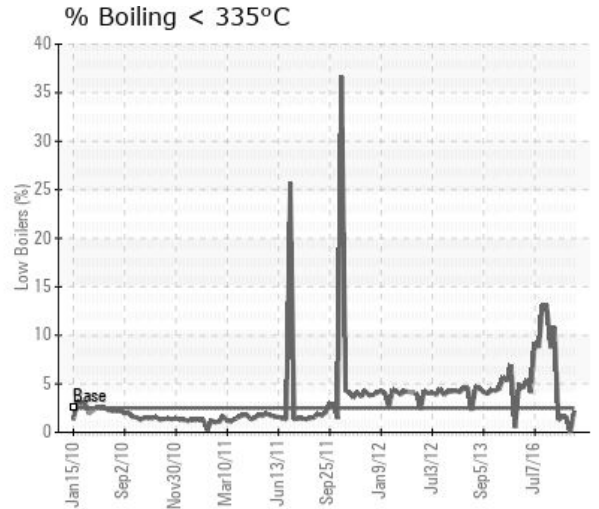
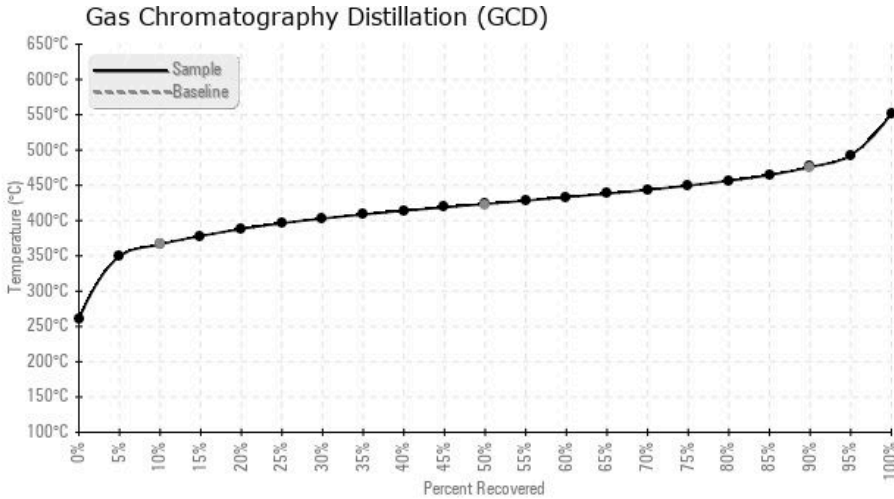
| Sample Date | Received Date | Fluid Age | Sample Location | Flash Point (COC) | Water (KF) | Viscosity (40°C) | Acid Number | Solids | GCD 10% | GCD 50% | GCD 90% | GCD % < 335°C |
|---------------|---------------|-----------|----------------------|-------------------|------------|------------------|-------------|--------|-----------|-----------|-----------|---------------|
| | mm/dd/yy | | | °F/°C | ppm | cSt | mg/KOH/g | %wt | °F/°C | °F/°C | °F/°C | % |
| 02/16/18 | 02/22/18 | 17m | | 399 / 204 | 8.7 | 30.8 | 0.12 | 0.046 | 691 / 366 | 794 / 424 | 889 / 476 | 2.19 |
| 02/08/18 | 02/15/18 | 17m | | 421 / 216 | 2.6 | 30.7 | 0.034 | 0.049 | 728 / 387 | 800 / 427 | 888 / 476 | 0.00 |
| 01/30/18 | 02/07/18 | 16m | | 414 / 212 | 5.3 | 31.0 | 0.044 | 0.074 | 692 / 367 | 792 / 422 | 888 / 476 | 1.57 |
| 05/31/17 | 06/05/17 | 8m | DISTO HOT OIL | 406 / 208 | 17.0 | 30.9 | 0.060 | 0.052 | 692 / 367 | 797 / 425 | 897 / 481 | 1.60 |
| 09/14/16 | 09/19/16 | 58m | HOT OIL SMPL STATION | 424 / 218 | 184.2 | 31.4 | 0.12 | 0.713 | 694 / 368 | 795 / 424 | 898 / 481 | 1.30 |
| 07/28/16 | 08/02/16 | 58m | PRV VENT NR TCS VAP | 288 / 142 | 11.3 | 19.3 | 0.05 | 0.051 | 609 / 321 | 788 / 420 | 893 / 479 | 10.84 |
| Baseline Data | | | | 435 / 224 | | 32.7 | 0.03 | | 693 / 367 | 790 / 421 | 887 / 475 | 2.5 |





| 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 |
|----------------------|------|----------|--------|----------|--------|------|-----|---------|--------|----------|---------|--------|-----------|----------|------------|----------|-----------|---------|-------|-----------|---------|--------|------------|------|
| 02/16/18 | 54 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 200 | 0 |
| 02/08/18 | 50 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 198 | 0 |
| 01/30/18 | 66 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 212 | 0 |
| 05/31/17 | 36 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 231 | 0 |
| 09/14/16 | 21 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 260 | 1 |
| 07/28/16 | 25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 42 | 0 |
| Baseline Data | | | 0 | 0 | | | | | | 0 | | 0 | 0 | | | | | | 0 | | | | 270 | |

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



| Historical Comments | |
|---------------------|---|
| 02/08/18 | Pentane insoluble have dropped over the last 3 samples. The viscosity has dropped slightly over the last 3 samples as well. The (GCD) 10% distillation point is elevated approximately 20 degrees over last 2 samples. (GCD) 10% Distillation Point is marginally high. |
| 01/30/18 | Pentane insoluble dropped significantly in this sample. Debris dropped from moderate to very lite. |
| 05/31/17 | Sample appears normal. Resample in 3 months. |
| 09/14/16 | Pentane is elevated indicating sediment. Filter cart should be run on oil to clean it up. Pentane Insolubles levels are severely high. |
| 07/28/16 | COC Flash Point is severely low. Visc @ 40°C is severely low. (GCD) 10% Distillation Point is abnormally low. (GCD) % < 335°C is marginally high. COC Flash Point is severely low. Visc @ 40°C is severely low. (GCD) 10% Distillation Point is abnormally low. (GCD) % < 335°C is marginally high. |

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