

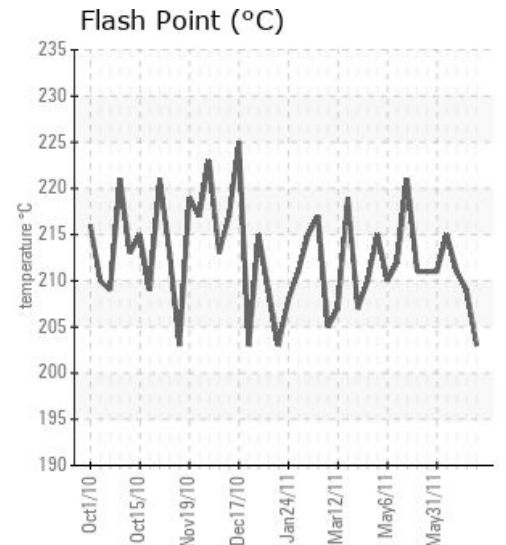
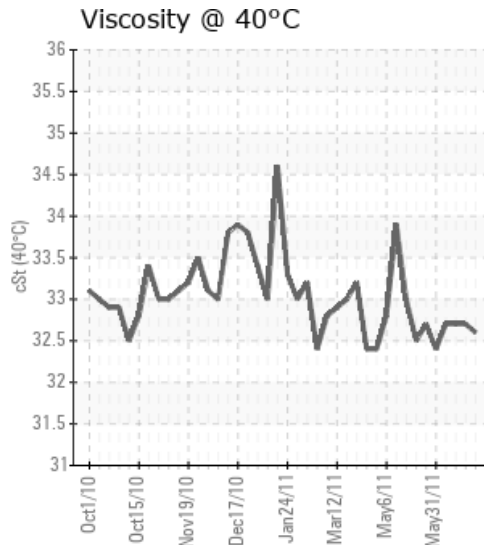
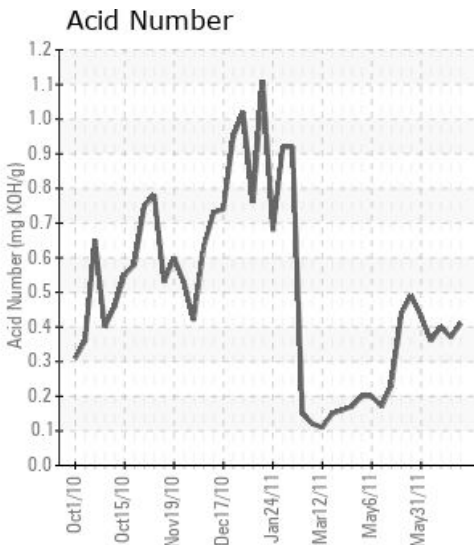
## [Disto Oil Loop] SILANE 4.0 DISTILLATION

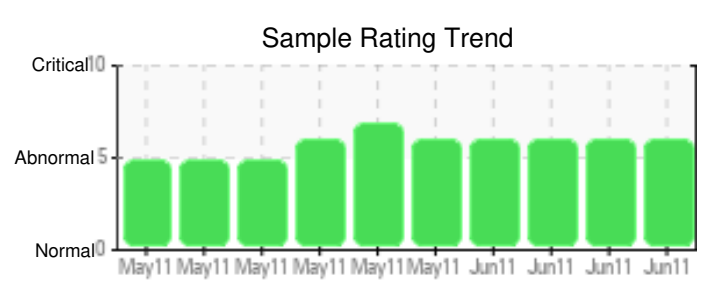
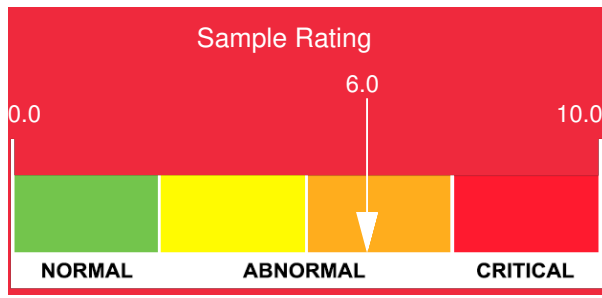
| Customer: PTRHTF10093  | System Information  | Sample Information  |
|--|---|---|
| REC GROUP<br>3322 ROAD N N.E.<br>MOSES LAKE, WA 98837 USA<br>Attn: Sam Bright<br>Tel: (509)766-8902<br>E-Mail: sam.bright@recsilicon.com | System Volume: 50000 gal<br>Bulk Operating Temp: 420F / 216C<br>Heating Source:<br>Blanket:<br>Fluid:<br>Make: COEN | Lab No: I-213705<br>Analyst: Gaston Arseneault<br>Sample Date: 06/23/11<br>Received Date: 06/29/11<br>Completed: 07/06/11<br>To discuss this report contact Gaston Arseneault at 973-986-6503 |

### Recommendation:

Comments: Silicon is at a SEVERE LEVEL; Acid Number is SLIGHTLY HIGH. Flash point is SLIGHTLY LOW. Slight variation since the last sample, slightly higher silicon, maybe the sample was taken from a different loaction. Let's keep monitoring the fluid.

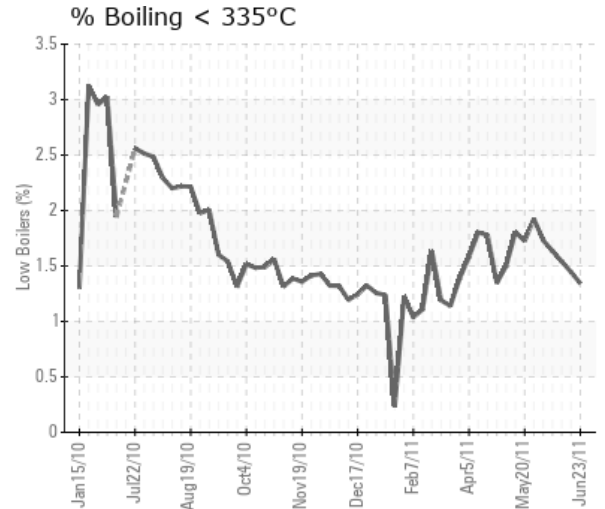
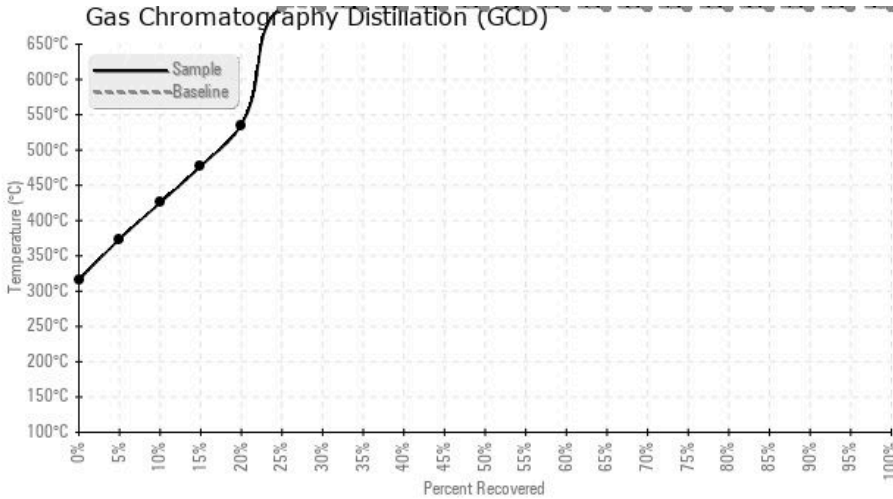
| Sample Date   | Received Date | Fluid Age | Sample Location      | Flash Point (COC) | Water (KF) | Viscosity (40°C) | Acid Number | Solids | GCD 10%   | GCD 50%   | GCD 90%   | GCD % < 335°C |
|---------------|---------------|-----------|----------------------|-------------------|------------|------------------|-------------|--------|-----------|-----------|-----------|---------------|
|               | mm/dd/yy      |           |                      | °F/°C             | ppm        | cSt              | mg/KOH/g    | %wt    | °F/°C     | °F/°C     | °F/°C     | %             |
| 06/23/11      | 06/29/11      |           |                      | 397 / 203         | 7          | 32.6             | 0.41        | 0.015  | 704 / 374 | 797 / 425 | 890 / 477 | 1.343         |
| 06/22/11      | 06/27/11      |           | HOT OIL EXPANSION TA | 408 / 209         | 11         | 32.7             | 0.37        | 0.040  | 703 / 373 | 796 / 425 | 890 / 477 | 1.445         |
| 06/13/11      | 06/15/11      |           | HOT OIL EXPANSION TA | 412 / 211         | 9          | 32.7             | 0.4         | 0.031  | 701 / 372 | 795 / 424 | 890 / 477 | 1.541         |
| 06/06/11      | 06/08/11      |           | EXPANSION TANK       | 419 / 215         | 7          | 32.7             | 0.36        | 0.040  | 701 / 372 | 794 / 424 | 889 / 476 | 1.635         |
| 05/31/11      | 06/02/11      |           | EXPANSION TANK       | 412 / 211         | 9          | 32.4             | 0.43        | 0.048  | 700 / 371 | 795 / 424 | 889 / 476 | 1.732         |
| 05/23/11      | 05/26/11      |           | EXPANSION TANK       | 412 / 211         | 62         | 32.7             | 0.49        | 0.413  | 699 / 370 | 795 / 424 | 888 / 476 | 1.926         |
| Baseline Data |               |           |                      |                   |            |                  |             |        |           |           |           |               |





| 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 |
|---------------|------|----------|--------|----------|--------|------|-----|---------|--------|----------|---------|--------|-----------|----------|------------|----------|-----------|---------|-------|-----------|---------|--------|------------|------|
| 06/23/11      | 2    | 0        | 0      | 0        | 0      | 0    | 0   | 0       | 0      | 0        | 367     | 0      | 0         | 0        | 0          | 0        | 0         | 0       | 0     | 0         | 0       | 0      | 28         | 1    |
| 06/22/11      | 5    | 0        | 0      | 0        | 0      | 0    | 2   | 0       | 0      | 0        | 348     | 0      | 3         | 0        | 0          | 0        | 0         | 0       | 2     | 0         | 0       | 0      | 7          | 0    |
| 06/13/11      | 6    | 0        | 0      | 0        | 0      | 0    | 0   | 0       | 0      | 0        | 358     | 0      | 0         | 0        | 0          | 0        | 0         | 0       | 0     | 0         | 0       | 0      | 12         | 0    |
| 06/06/11      | 5    | 0        | 0      | 0        | 0      | 0    | 6   | 0       | 0      | 0        | 381     | 0      | 0         | 0        | 0          | 0        | 0         | 0       | 0     | 0         | 0       | 0      | 7          | 0    |
| 05/31/11      | 5    | 0        | 0      | 0        | 0      | 0    | 1   | 3       | 0      | 0        | 359     | 0      | 2         | 0        | 0          | 1        | 0         | 0       | 0     | 0         | 3       | 0      | 11         | 1    |
| 05/23/11      | 5    | 0        | 0      | 0        | 0      | 0    | 3   | 3       | 0      | 0        | 135     | 0      | 0         | 0        | 0          | 0        | 0         | 0       | 0     | 0         | 3       | 0      | 10         | 1    |
| Baseline Data |      |          |        |          |        |      |     |         |        |          |         |        |           |          |            |          |           |         |       |           |         |        |            |      |

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



### Historical Comments

|          |  |
|----------|--|
| 06/22/11 |  |
| 06/13/11 |  |
| 06/06/11 |  |
| 05/31/11 |  |
| 05/23/11 |  |

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