

## 2D35-EQ-01

**Customer: PTRHTF30038**  
 BUILDING PRODUCTS OF CANADA  
 9510 ST PATRICK STREET  
 LASALLE, QC H8R 1R9 Canada  
 Attn: Jonathan Veronneau  
 Tel:  
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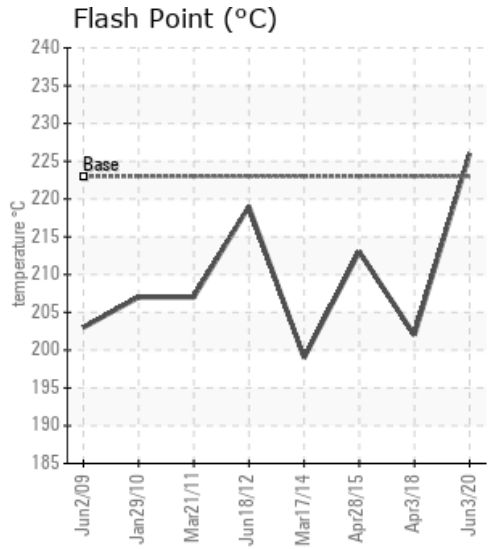
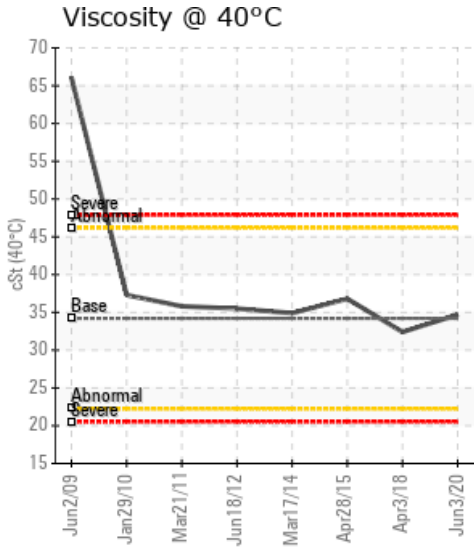
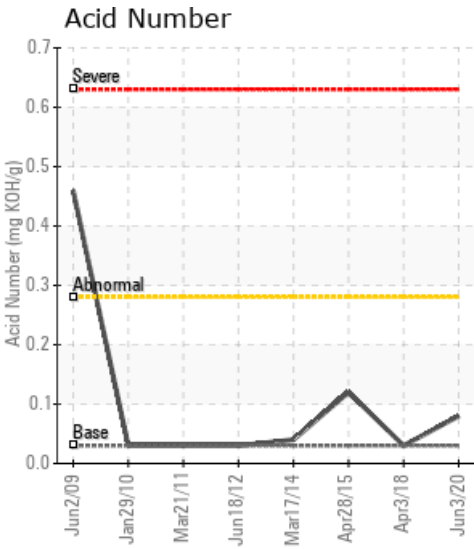
**System Information**  
 System Volume: 203 ltr  
 Bulk Operating Temp: 246F / 119C  
 Heating Source:  
 Blanket:  
 Fluid: PETRO CANADA PETRO-THERM  
 Make: ELEMENT ELECTRIQUE

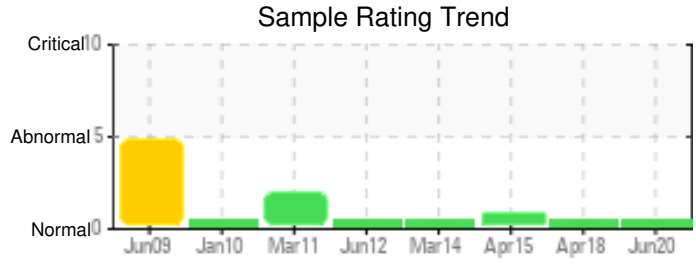
**Sample Information**  
 Lab No: 02357797  
 Analyst: Pierre Castagne  
 Sample Date: 06/03/20  
 Received Date: 06/04/20  
 Completed: 06/08/20  
 Pierre Castagne  
 pierre.castagne@petrocanadalsp.com

Recommendation: Il y a présence de soufre dans l'huile, assurez-vous de faire tout transvasage du fluide caloporteur à partir d'une pompe dédiée à cet effet. L'huile est OK, pour usage continue. Reprendre un échantillon à la date prévue.

Comments:

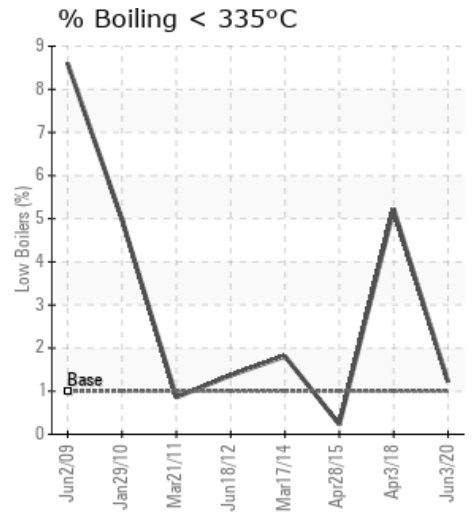
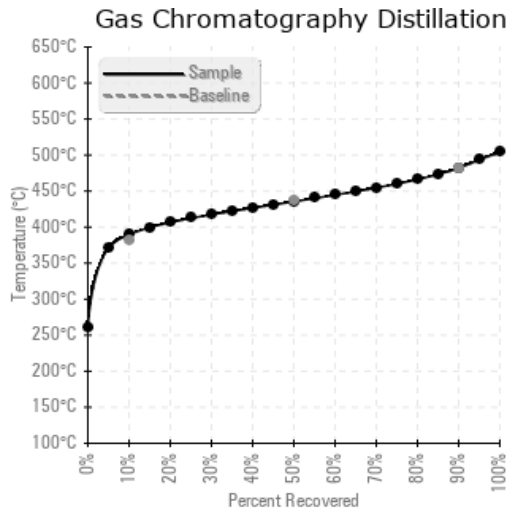
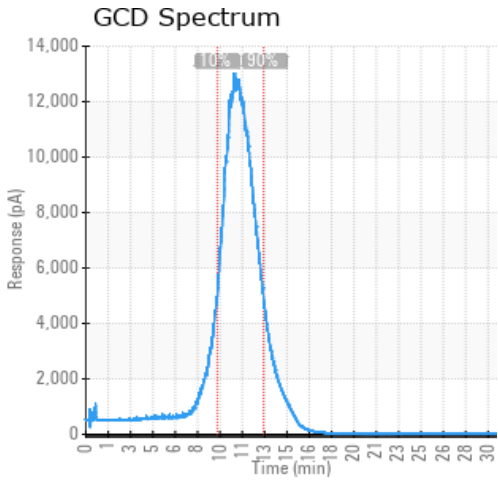
| Sample Date          | Received Date | Fluid Age | Sample Location      | Flash Point (COC) | Water (KF) | Viscosity (40°C) | Acid Number | Solids | GCD 10%   | GCD 50%   | GCD 90%   | GCD % < 335°C |
|----------------------|---------------|-----------|----------------------|-------------------|------------|------------------|-------------|--------|-----------|-----------|-----------|---------------|
|                      | mm/dd/yy      |           |                      | °F/°C             | ppm        | cSt              | mg/KOH/g    | %wt    | °F/°C     | °F/°C     | °F/°C     | %             |
| 06/03/20             | 06/04/20      | 3m        | BASSIN               | 439 / 226         | 7.2        | 34.7             | 0.08        | 0.088  | 733 / 390 | 816 / 436 | 899 / 482 | 1.22          |
| 04/03/18             | 05/03/18      | 0m        |                      | 396 / 202         | 11.6       | 32.4             | 0.03        | 0.142  | 674 / 357 | 784 / 418 | 899 / 482 | 5.22          |
| 04/28/15             | 05/01/15      | 1m        | 2 VALVES PANNE ADHES | 415 / 213         | 13.2       | 36.8             | 0.12        | 0.208  | 718 / 381 | 814 / 434 | 930 / 499 | 0.23          |
| 03/17/14             | 03/21/14      | 1m        |                      | 390 / 199         | 16.5       | 34.9             | 0.04        | 0.293  | 711 / 377 | 810 / 432 | 911 / 489 | 1.81          |
| 06/18/12             | 07/12/12      |           |                      | 426 / 219         | 14         | 35.5             | 0.03        | 0.038  | 711 / 377 | 802 / 428 | 899 / 481 | 1.367         |
| <b>Baseline Data</b> |               |           |                      | 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 |
|---------------|------|----------|--------|----------|--------|------|-----|---------|--------|----------|---------|--------|-----------|----------|------------|----------|-----------|---------|-------|-----------|---------|--------|------------|------|
| 06/03/20      | 0    | 0        | 0      | 0        | 0      | 0    | 0   | 0       | 0      | 0        | 0       | 0      | 0         | 0        | 0          | 0        | 0         | 0       | 0     | 0         | 0       | 0      | 0          | 0    |
| 04/03/18      | 0    | 0        | 0      | 0        | 0      | 0    | 0   | 0       | 0      | 0        | 0       | 0      | 0         | 0        | 0          | 0        | 0         | 0       | 0     | 0         | 0       | 0      | 0          | 0    |
| 04/28/15      | 2    | 0        | 0      | 1        | 0      | 0    | 0   | 0       | 0      | 0        | 4       | 2      | 0         | 0        | 0          | 0        | 0         | 0       | 0     | 0         | 4       | 0      | 0          | 0    |
| 03/17/14      | 0    | 0        | 0      | 0        | 0      | 0    | 0   | 0       | 0      | 0        | 0       | 1      | 0         | 0        | 0          | 0        | 0         | 0       | 0     | 0         | 0       | 0      | 0          | 0    |
| 06/18/12      | 0    | 0        | 0      | 0        | 0      | 0    | 0   | 0       | 0      | 0        | 0       | 0      | 1         | 0        | 0          | 0        | 0         | 0       | 0     | 0         | 0       | 0      | 5          | 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

|          |   |
|----------|---|
| 04/03/18 | Reprendre un échantillon à intervalle normal  |
| 04/28/15 | Les fractions lourdes sont élevées (GCD 90%. (GCD) 90% Distillation Point is abnormally high.   |
| 03/17/14 | L'huile caloporteuse est en bonne condition. Nous recommandons de re-échantillonner dans un an  |
| 06/18/12 | Les propriétés de l'huile semblent normales. Le point d'éclair est semblable à l'huile neuve, viscosité est normale, le nombre d'acidité est très bas. SVP continuer à échantillonner les systèmes régulièrement. |

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