

WANSON DEO 60 MBI 8000

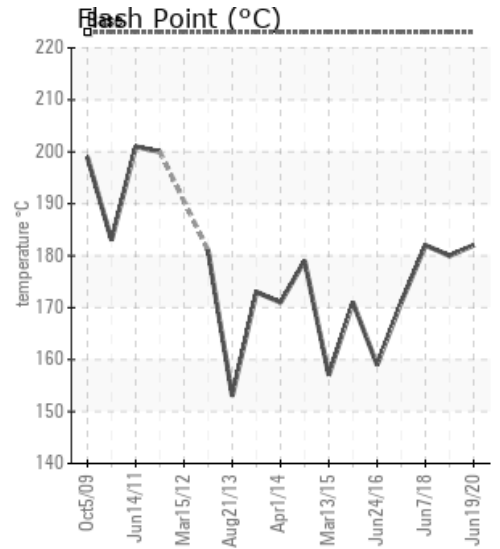
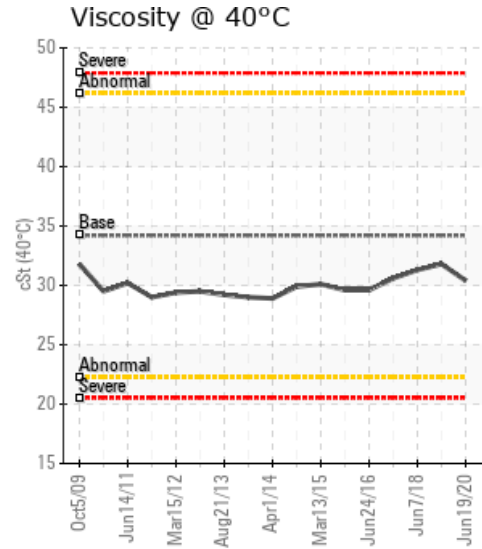
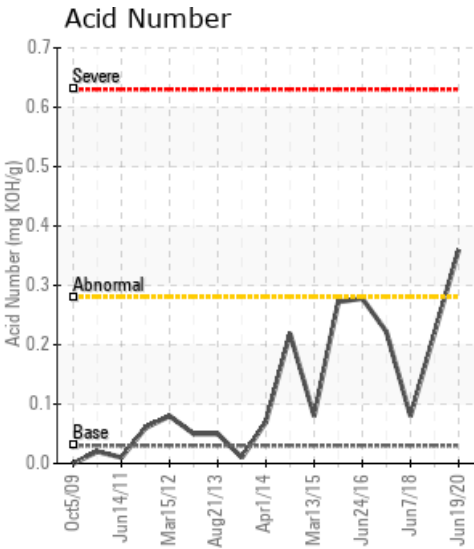
Customer: PTRHTF40075
 TOP TASTE BV
 KLOOSTERPOORT 33
 KAPELLE 4421SN
 KAPELLE, 4421SN Netherlands
 Attn: WILBERT SNIJERS
 Tel:
 E-Mail: w.snijers@klt.nl

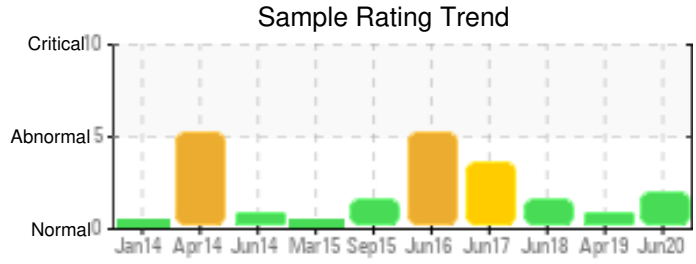
System Information
 System Volume: 6000 ltr
 Bulk Operating Temp: 473F / 245C
 Heating Source:
 Blanket:
 Fluid: PETRO CANADA PETRO-THERM
 Make: WANSON

Sample Information
 Lab No: 02361863
 Analyst: Matthias Voss
 Sample Date: 06/19/20
 Received Date: 06/26/20
 Completed: 06/30/20
 Matthias Voss
 Matthias.Voss@petrocanadalsp.com

Recommendation:
 Comments: Acid Number (AN) is abnormally high. COC Flash Point is marginally low.

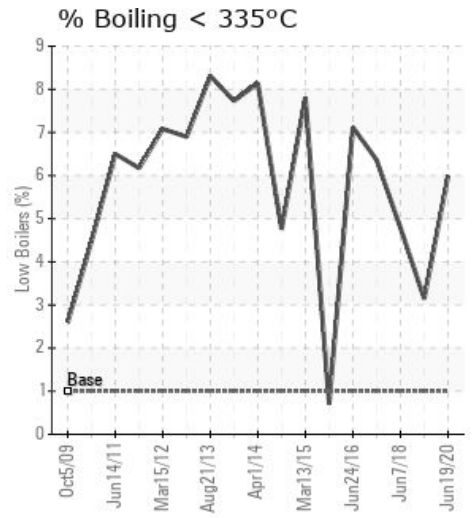
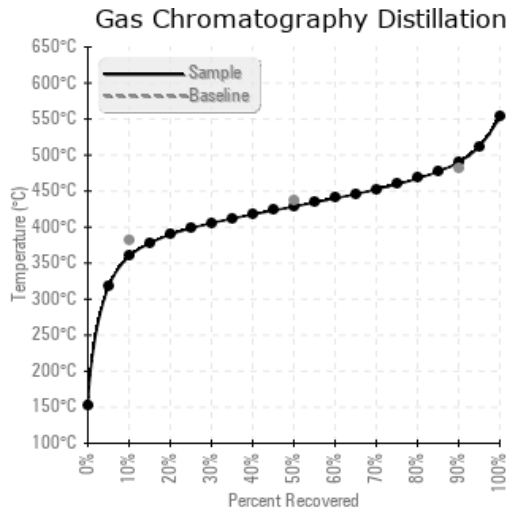
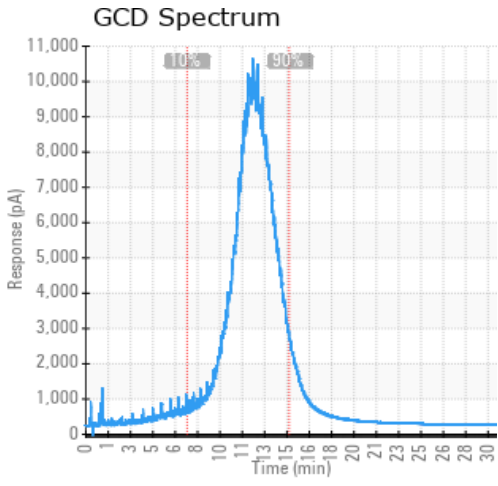
| Sample Date | Received Date | Fluid Age | Sample Location | Flash Point (COC) | Water (KF) | Viscosity (40°C) | Acid Number | Solids | GCD 10% | GCD 50% | GCD 90% | GCD % < 335°C |
|----------------------|---------------|-----------|-----------------|-------------------|------------|------------------|-------------|--------|-----------|-----------|-----------|---------------|
| | mm/dd/yy | | | °F/°C | ppm | cSt | mg/KOH/g | %wt | °F/°C | °F/°C | °F/°C | % |
| 06/19/20 | 06/26/20 | 11y | | 360 / 182 | 19.8 | 30.4 | 0.36 | 0.129 | 679 / 360 | 803 / 429 | 914 / 490 | 5.99 |
| 04/16/19 | 04/24/19 | 0y | | 356 / 180 | 44.5 | 31.8 | 0.22 | 0.216 | 694 / 368 | 803 / 428 | 912 / 489 | 3.15 |
| 06/07/18 | 06/11/18 | 10y | | 360 / 182 | 22.5 | 31.3 | 0.08 | 0.204 | 672 / 356 | 777 / 414 | 875 / 468 | 4.79 |
| 06/21/17 | 06/26/17 | 9y | | 340 / 171 | 38.0 | 30.6 | 0.222 | 0.171 | 669 / 354 | 804 / 429 | 940 / 505 | 6.36 |
| 06/24/16 | 07/05/16 | 7y | PTRHTF40075 | 318 / 159 | 7.0 | 29.6 | 0.278 | 0.071 | 661 / 350 | 801 / 427 | 924 / 496 | 7.12 |
| Baseline Data | | | | 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 |
|---------------|------|----------|--------|----------|--------|------|-----|---------|--------|----------|---------|--------|-----------|----------|------------|----------|-----------|---------|-------|-----------|---------|--------|------------|------|
| 06/19/20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 04/16/19 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 06/07/18 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 06/21/17 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 06/24/16 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 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

| | |
|----------|--|
| 04/16/19 | Flash Point marginally low but consistent with (or improved on) majority of the last 6 annual samples. Review again at normal period. Light end molecules have been vented looking at previous sample results COC Flash Point is marginally low. |
| 06/07/18 | Flash Point marginally low but higher than previous samples for this oil charge. Looks to have improved in condition since last sample in a number of parameters so ask if there has been a partial change or sweetening of the oil in the system. Based on improved condition fit for further use but would suspect a bit of maintenance of fluid occurred. Overall sample rating is improved and leaves no concern for further use |
| 06/21/17 | Oil appears fit for further service. Suggest sample at next scheduled maintenance interval. (GCD) 90% Distillation Point is severely high. COC Flash Point is severely low. |
| 06/24/16 | Flash point is lower than expected. Oil contains some low boilers. Remove low boilers if possible. Oil is fit for further service at this time suggest sample at next scheduled maintenance interval. COC Flash Point is severely low. (GCD) % < 335°C is marginally high. (GCD) 90% Distillation Point is marginally high. (GCD) 10% Distillation Point is marginally low. |

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