

[ATHABASCA OIL CORP / 14-22-078-10W4M] L2 (PAD B) LIESMER

Customer: PTRHTF20133
 ATHABASCA OIL CORP.
 LEISMER DEMONSTRATION PLANT
 LSD2-79-10-W4M
 NEAR CONKLIN, AB CA
 Attn: George Ball
 Tel: (587)233-1312
 E-Mail: gball@atha.com

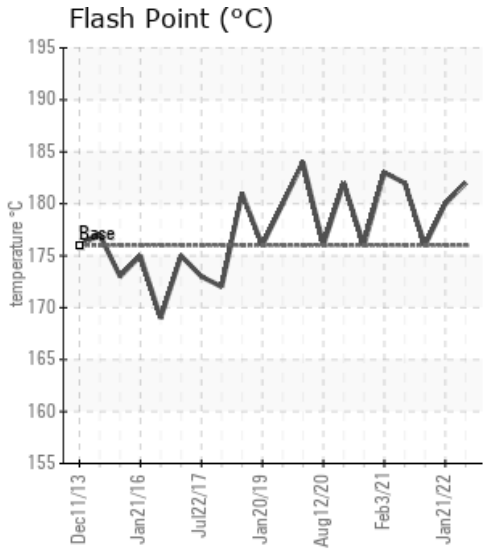
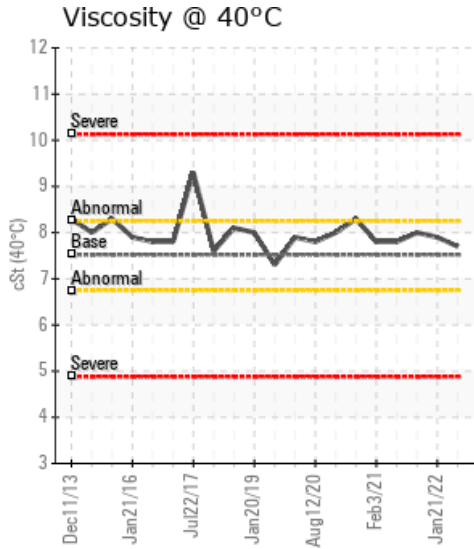
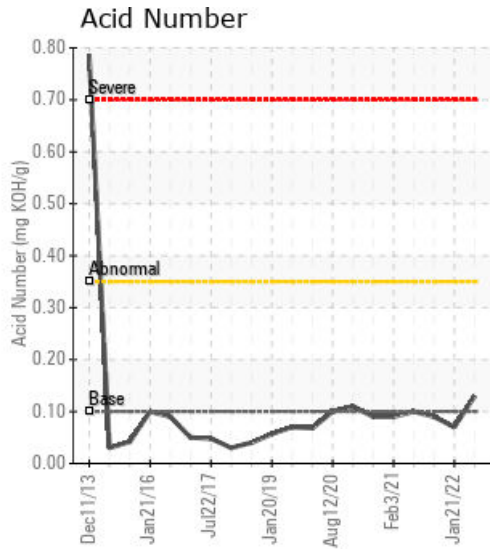
System Information
 System Volume: 8000 ltr
 Bulk Operating Temp: 212F / 100C
 Heating Source:
 Blanket:
 Fluid: PETRO CANADA CALFLO LT
 Make: TORNADO TECHNOLOGIES

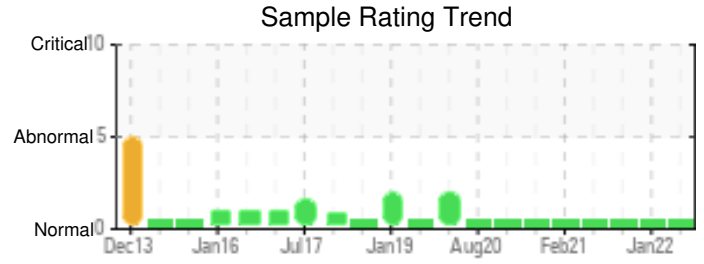
Sample Information
 Lab No: 02506465
 Analyst: Terry Veenstra
 Sample Date: 07/20/22
 Received Date: 08/22/22
 Completed: 08/24/22
 Terry Veenstra
 terry.veenstra@HFSinclair.com

Recommendation: Results Normal. No action needed at this time. Resample at next scheduled date.

Comments:

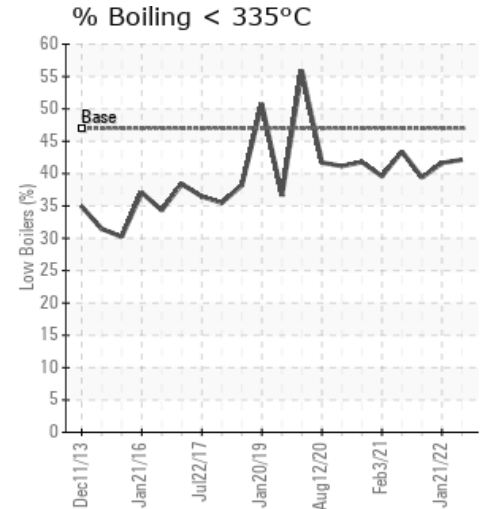
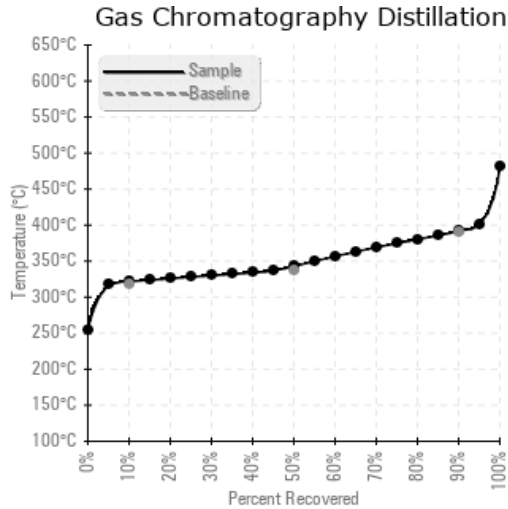
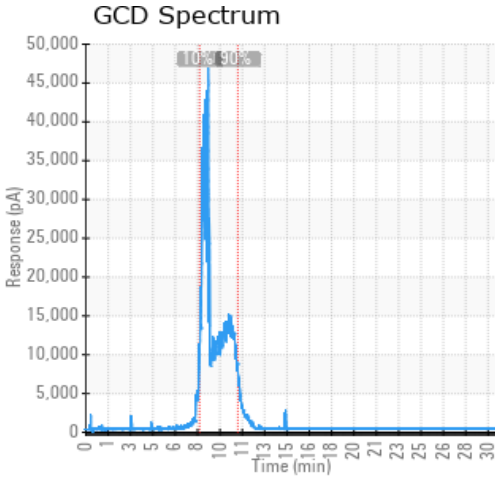
| Sample Date | Received Date | Fluid Age | Sample Location | Flash Point (COC) | Water (KF) | Viscosity (40°C) | Acid Number | Solids | GCD 10% | GCD 50% | GCD 90% | GCD % < 335°C |
|----------------------|---------------|-----------|----------------------|-------------------|------------|------------------|-------------|--------|------------------|------------------|------------------|---------------|
| | mm/dd/yy | | | °F/°C | ppm | cSt | mg/KOH/g | %wt | °F/°C | °F/°C | °F/°C | % |
| 07/20/22 | 08/22/22 | 0.0y | 14-22-078-10W4M L2 B | 360 / 182 | 0.00 | 7.7 | 0.13 | 0.032 | 611 / 322 | 649 / 343 | 737 / 392 | 42.13 |
| 01/21/22 | 02/04/22 | 0.0y | system header | 356 / 180 | 4.3 | 7.9 | 0.07 | 0.022 | 611 / 322 | 649 / 343 | 738 / 392 | 41.63 |
| 07/29/21 | 08/10/21 | 0.0y | 12B pit 0285 | 349 / 176 | 14.4 | 8 | 0.09 | 0.038 | 614 / 323 | 648 / 342 | 737 / 392 | 39.38 |
| 03/05/21 | 03/16/21 | 0.0y | | 360 / 182 | 0.00 | 7.8 | 0.10 | 0.045 | 609 / 321 | 647 / 342 | 739 / 393 | 43.41 |
| 02/03/21 | 02/24/21 | 0.0y | Bott. of tracer tree | 361 / 183 | 111.0 | 7.8 | 0.09 | 0.046 | 612 / 322 | 651 / 344 | 740 / 393 | 39.59 |
| Baseline Data | | | | 349 / 176 | | 7.52 | 0.1 | | 604 / 318 | 640 / 338 | 734 / 390 | 47.0 |





| 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 | |
|----------------------|------|----------|--------|----------|--------|------|-----|---------|--------|----------|---------|--------|-----------|----------|------------|----------|-----------|---------|-------|-----------|---------|--------|------------|------|---|
| 07/20/22 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 175 | 0 | |
| 01/21/22 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 177 | 0 |
| 07/29/21 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 185 | 0 |
| 03/05/21 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 171 | 0 |
| 02/03/21 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 172 | 0 |
| Baseline Data | | | 0 | 0 | | | | | | 0 | | | 0 | 0 | | | | 0 | 0 | | | | | 270 | |

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



| Historical Comments | |
|---------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| 01/21/22 | Fluid is in good condition and suitable for continued use. Resample in 6 months. |
| 07/29/21 | Fluid is in good condition and is suitable for continued use. Resample in 6 months. |
| 03/05/21 | This oil appears to be in very good condition. GCD's all look normal, Pentane Insolubles are low. Flash point is at new oil spec. |
| 02/03/21 | Fluid is in good condition and good for continued use. Resample in 6 months |

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