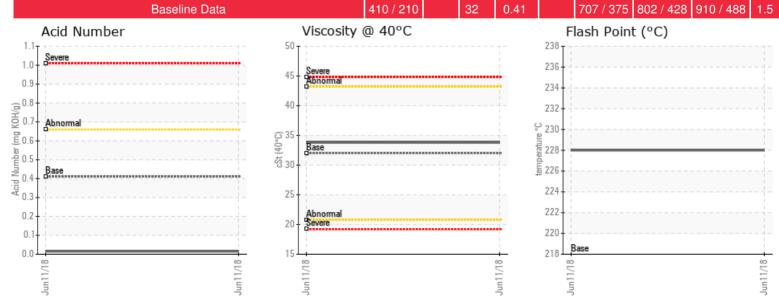


| QUADRA CHEMICALS             | System Volume: 0 gal               | Lab No: 02222191                     |
|------------------------------|------------------------------------|--------------------------------------|
| 12925 146TH STREET           | Bulk Operating Temp: Not Specified | Analyst: Peter Harteveld             |
| EDMONTON, AB T5L 2H6 CANADA  | Heating Source:                    | Sample Date: 06/11/18                |
| Attn: Ada Aponte             | Blanket:                           | Received Date: 06/14/18              |
| Tel:                         | Fluid: HEAT TRANSFER FLUID ISO 32  | Completed: 07/03/18                  |
| E-Mail: Ada Aponte@quadra.ca | Make:                              | To discuss this report contact Peter |
|                              |                                    | Harteveld at (780)967-4234           |
|                              |                                    |                                      |

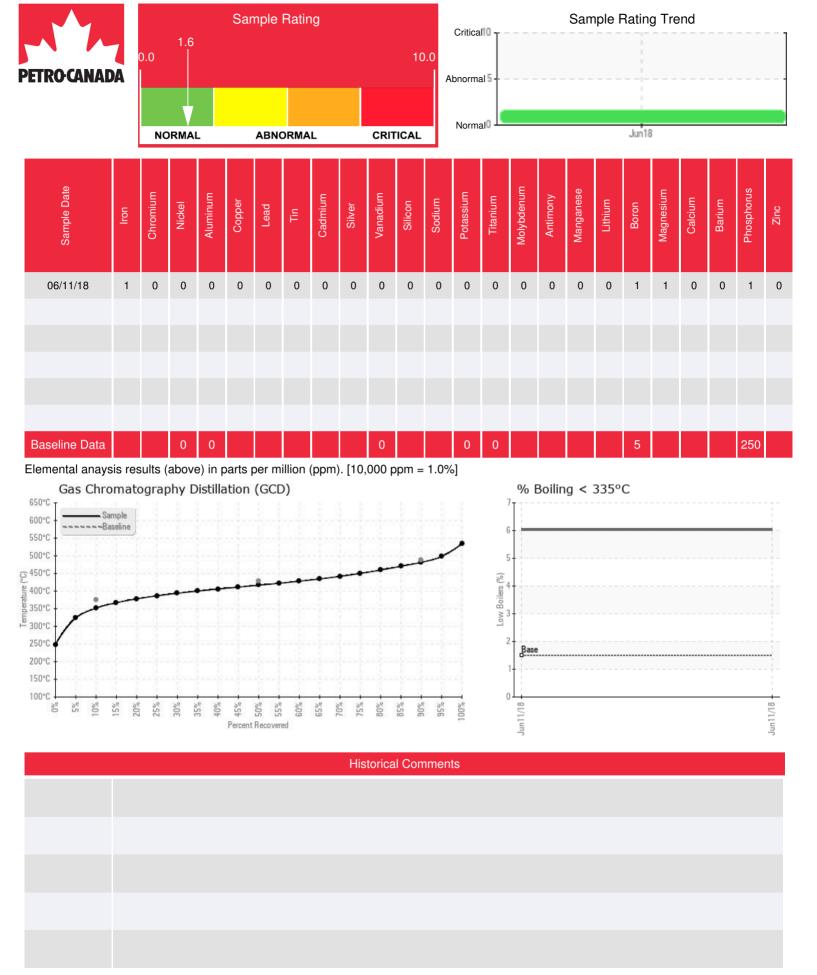
Recommendation: The water content of the fluid is elevated. It is recommended to boil off the water. The fluid shows indications of thermal degradation. % low boiler vapor (<335C.) is high and 10% GCD temperature low. The fluid is suitable for further use.

Comments: Water contamination levels are marginally high. Water contamination levels are marginally high.. ppm Water contamination levels are marginally high. (GCD) % < 335°C is abnormally high. (GCD) 10% Distillation Point is abnormally low. (GCD) 90% Distillation Point is abnormally 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/<br>g | %wt    | °F/°C     | °F/°C     | °F/°C     | %             |
| 06/11/18    | 06/14/18      | 2у        | 16-03-65-18WSM  | 442 / 228         | <u>595.3</u> | 33.8             | 0.015        | 0.066  | 665 / 352 | 782 / 417 | 899 / 482 | 6.03          |
|             |               |           |                 |                   |              |                  |              |        |           |           |           |               |
|             |               |           |                 |                   |              |                  |              |        |           |           |           |               |
|             |               |           |                 |                   |              |                  |              |        |           |           |           |               |
|             |               |           |                 |                   |              |                  |              |        |           |           |           |               |



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