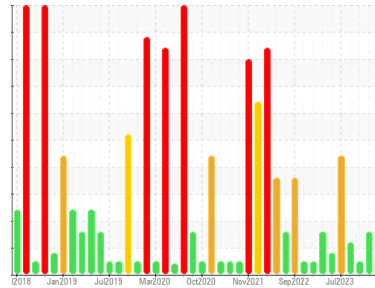




# FUEL REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**TDT411202C DIESEL DAY TANK FIRE WATER PUMP C**

Component  
**Diesel Fuel**  
Fluid

**No.2 DIESEL FUEL (ULTRALOW SULPHUR) (--- GAL)**

## DIAGNOSIS

### Recommendation

Laboratory test indicate that this fuel is suitable for use and meets all test requirements. Resample at the next service interval to monitor.

### Contaminants

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The water content is negligible. There is no indication of any contamination in the diesel fuel.

### Fuel Condition

All laboratory tests indicate that this sample meets specifications for No.2 ultra-low-sulfur diesel fuel (US EPA/CGSB-3.517-3 type B).

| SAMPLE INFORMATION |             | method      | limit/base | current            | history1    | history2    |
|--------------------|-------------|-------------|------------|--------------------|-------------|-------------|
| Sample Number      | Client Info |             |            | <b>PP13964294</b>  | PP13941989  | PP13920747  |
| Sample Date        | Client Info |             |            | <b>15 Mar 2024</b> | 07 Jan 2024 | 07 Nov 2023 |
| Machine Age        | hrs         | Client Info |            | <b>0</b>           | 0           | 0           |
| Sample Status      |             |             |            | <b>NORMAL</b>      | ABNORMAL    | NORMAL      |

| PHYSICAL PROPERTIES        |      | method         | limit/base | current      | history1 | history2 |
|----------------------------|------|----------------|------------|--------------|----------|----------|
| Specific Gravity           |      | ASTM D1298*    | 0.839      | <b>0.845</b> | 0.843    | 0.842    |
| Fuel Color                 | text | Visual Screen* | Yllow      | <b>Yllow</b> | Yllow    | Yllow    |
| Visc @ 40°C                | cSt  | ASTM D7279(m)  | 3.0        | <b>2.9</b>   | 2.9      | 2.7      |
| Pensky-Martens Flash Point | °C   | ASTM D7215*    | 52         | <b>72.6</b>  | 69.4     | 66.9     |

| SULFUR CONTENT |     | method        | limit/base | current  | history1 | history2 |
|----------------|-----|---------------|------------|----------|----------|----------|
| Sulfur         | ppm | ASTM D5185(m) | 10         | <b>7</b> | 8        | 9        |

| DISTILLATION           |    | method      | limit/base | current    | history1 | history2 |
|------------------------|----|-------------|------------|------------|----------|----------|
| Initial Boiling Point  | °C | ASTM D2887* | 165        | <b>184</b> | 181      | 178      |
| 5% Distillation Point  | °C | ASTM D2887* |            | <b>205</b> | 201      | 198      |
| 10% Distill Point      | °C | ASTM D2887* | 201        | <b>214</b> | 212      | 209      |
| 15% Distillation Point | °C | ASTM D2887* |            | <b>222</b> | 220      | 217      |
| 20% Distill Point      | °C | ASTM D2887* | 216        | <b>229</b> | 228      | 226      |
| 30% Distill Point      | °C | ASTM D2887* | 230        | <b>243</b> | 242      | 241      |
| 40% Distill Point      | °C | ASTM D2887* | 243        | <b>256</b> | 255      | 253      |
| 50% Distill Point      | °C | ASTM D2887* | 255        | <b>268</b> | 268      | 266      |
| 60% Distill Point      | °C | ASTM D2887* | 267        | <b>281</b> | 281      | 280      |
| 70% Distill Point      | °C | ASTM D2887* | 280        | <b>295</b> | 295      | 293      |
| 80% Distill Point      | °C | ASTM D2887* | 295        | <b>310</b> | 310      | 309      |
| 85% Distillation Point | °C | ASTM D2887* |            | <b>321</b> | 321      | 320      |
| 90% Distill Point      | °C | ASTM D2887* | 310        | <b>332</b> | 332      | 331      |
| 95% Distillation Point | °C | ASTM D2887* |            | <b>351</b> | 351      | 350      |
| Final Boiling Point    | °C | ASTM D2887* | 341        | <b>379</b> | 379      | 374      |

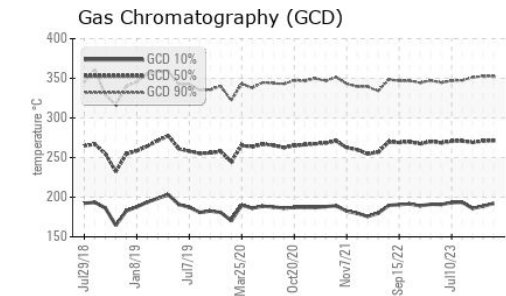
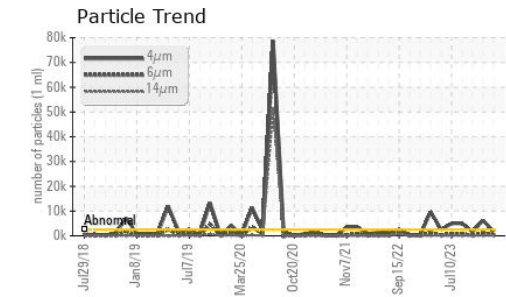
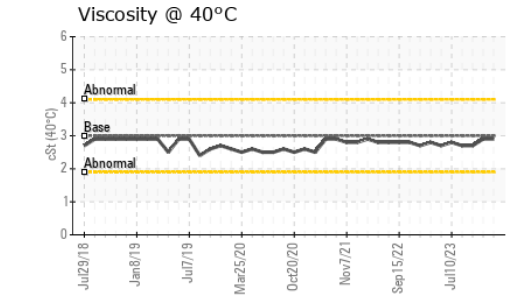
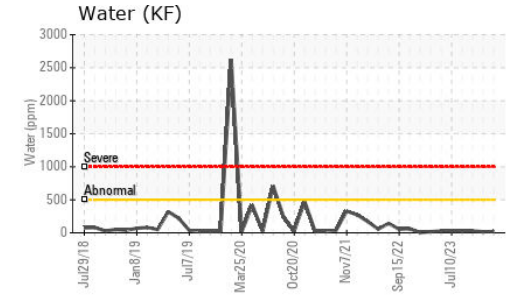
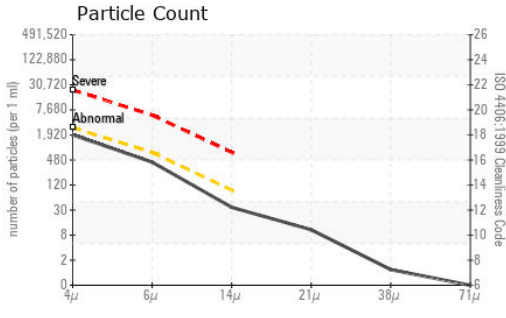
| IGNITION QUALITY |  | method      | limit/base | current   | history1 | history2 |
|------------------|--|-------------|------------|-----------|----------|----------|
| API Gravity      |  | ASTM D1298* | 37.7       | <b>35</b> | 36       | 36       |
| Cetane Index     |  | ASTM D4737* | <40.0      | <b>48</b> | 49       | 49       |

| CONTAMINANTS |     | method        | limit/base | current      | history1 | history2 |
|--------------|-----|---------------|------------|--------------|----------|----------|
| Silicon      | ppm | ASTM D5185(m) | <1.0       | <b>0</b>     | 0        | 0        |
| Sodium       | ppm | ASTM D5185(m) | <0.1       | <b>0</b>     | <1       | 0        |
| Potassium    | ppm | ASTM D5185(m) | <0.1       | <b>0</b>     | 0        | <1       |
| Water        | %   | ASTM D6304*   | <0.05      | <b>0.002</b> | 0.002    | 0.003    |
| ppm Water    | ppm | ASTM D6304*   | <500       | <b>19</b>    | 16       | 29       |

| FLUID CLEANLINESS |  | method       | limit/base | current         | history1   | history2 |
|-------------------|--|--------------|------------|-----------------|------------|----------|
| Particles >4µm    |  | ASTM D7647   | >2500      | <b>1686</b>     | ▲ 6252     | 1624     |
| Particles >6µm    |  | ASTM D7647   | >640       | <b>375</b>      | ● 1168     | 219      |
| Particles >14µm   |  | ASTM D7647   | >80        | <b>31</b>       | ● 85       | 8        |
| Particles >21µm   |  | ASTM D7647   | >20        | <b>9</b>        | 24         | 2        |
| Particles >38µm   |  | ASTM D7647   | >4         | <b>1</b>        | 3          | 0        |
| Particles >71µm   |  | ASTM D7647   | >3         | <b>0</b>        | 0          | 0        |
| Oil Cleanliness   |  | ISO 4406 (c) | >18/16/13  | <b>18/16/12</b> | ▲ 20/17/14 | 18/15/10 |

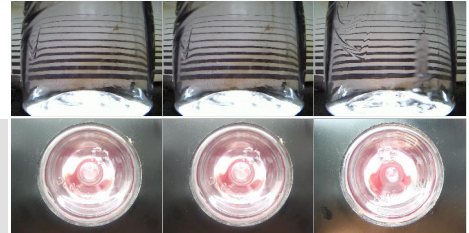


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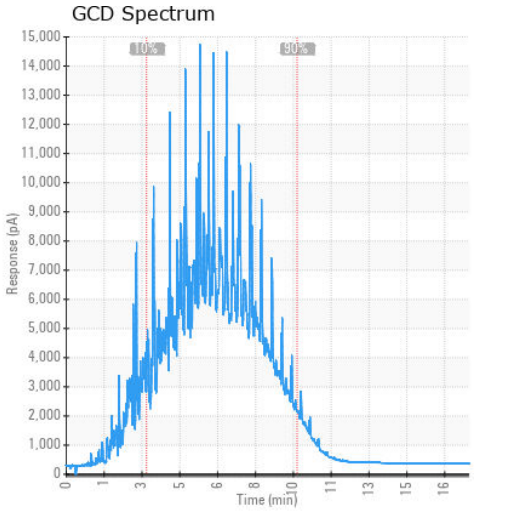
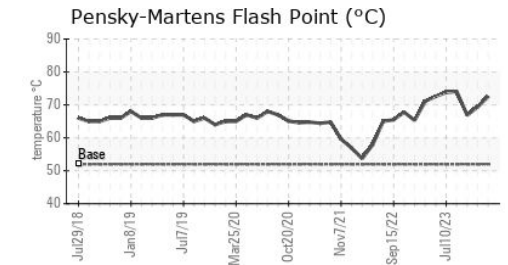
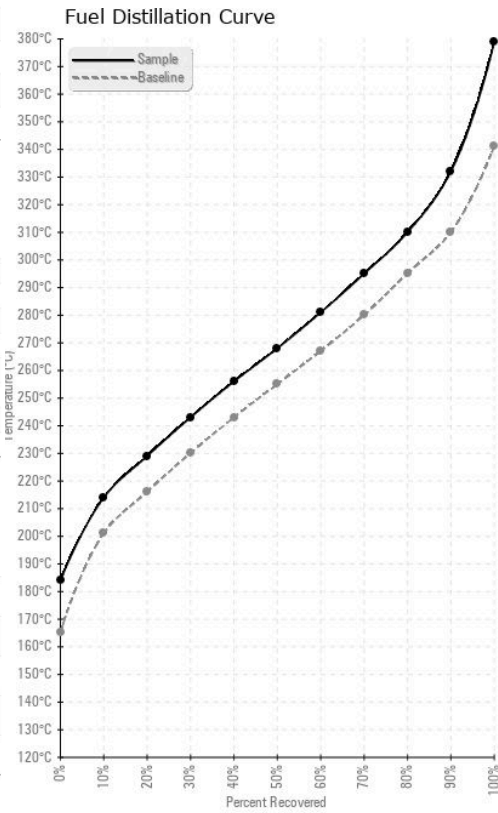


| HEAVY METALS | method | limit/base    | current | history1 | history2 |
|--------------|--------|---------------|---------|----------|----------|
| Aluminum     | ppm    | ASTM D5185(m) | <0.1    | 0        | 0        |
| Nickel       | ppm    | ASTM D5185(m) | <0.1    | 0        | 0        |
| Lead         | ppm    | ASTM D5185(m) | <0.1    | 0        | 0        |
| Vanadium     | ppm    | ASTM D5185(m) | <0.1    | 0        | 0        |
| Iron         | ppm    | ASTM D5185(m) | <0.1    | 0        | <1       |
| Calcium      | ppm    | ASTM D5185(m) | <0.1    | <1       | 0        |
| Magnesium    | ppm    | ASTM D5185(m) | <0.1    | 0        | 0        |
| Phosphorus   | ppm    | ASTM D5185(m) | <0.1    | <1       | <1       |
| Zinc         | ppm    | ASTM D5185(m) | <0.1    | 0        | 0        |

| SAMPLE IMAGES | method | limit/base | current | history1 | history2 |
|---------------|--------|------------|---------|----------|----------|
| Color         |        |            |         |          |          |
| Bottom        |        |            |         |          |          |



## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PP13964294 **Received** : 01 Apr 2024  
**Lab Number** : 02625848 **Tested** : 03 Apr 2024  
**Unique Number** : 5758980 **Diagnosed** : 03 Apr 2024 - Kevin Marson  
**Test Package** : FUEL ( Additional Tests: CC Flash, PrtCount )

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 F:

To discuss this sample report, contact Customer Service at 1-800-268-2131.  
 Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab.  
 Validity of results and interpretation are based on the sample and information as supplied.