

# **FUEL REPORT**

### Sample Rating Trend



# VERMEER 1002076 - VERMEER MIDWEST Component

**Diesel Fuel** NOT GIVEN (--- GAL)

### Recommendation

All laboratory tests indicate that this sample meets specifications for No.2 ultra-low-sulfur diesel fuel.

### Corrosion

All metal levels are normal indicating no corrosion in the system.

### Contaminants

The water content is negligible. There is no bacteria or fungus (yeast and/or mold) indicated in the sample. The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the fuel.

## **Fuel Condition**

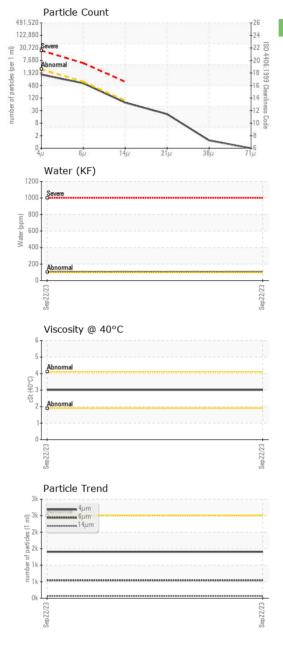
Sulfur value derived by ASTM D5453 method for ULSD validation. Sulfur level is acceptable for ULSD specification.

|                 |   |              |            | Sep2023     |          |          |
|-----------------|---|--------------|------------|-------------|----------|----------|
| SAMPLE INFOR    | MATION                                  | method       | limit/base | current     | history1 | history2 |
| Sample Number   |   | Client Info  |            | AOL05963887 |          |          |
| Sample Date     |   | Client Info  |            | 22 Sep 2023 |          |          |
| Machine Age     | hrs                                     | Client Info  |            | 661         |          |          |
| Sample Status   |   |              |            | NORMAL      |          |          |
| PHYSICAL PRO    | PERTIES                                 | method       | limit/base | current     | history1 | history2 |
| ASTM Color      | scalar                                  | *ASTM D1500  |            | L3.0        |          |          |
| Visc @ 40°C     | cSt                                     | ASTM D445    |            | 3.01        |          |          |
| SULFUR CONTE    | ENT                                     | method       | limit/base | current     | history1 | history2 |
| Sulfur          | ppm                                     | ASTM D5185m  |            | 0           |          |          |
| Sulfur (UVF)    | ppm                                     | ASTM D5453   |            | 9           |          |          |
| CONTAMINANT     | S                                       | method       | limit/base | current     | history1 | history2 |
| Silicon         | ppm                                     | ASTM D5185m  | <1.0       | 0           |          |          |
| Sodium          | ppm                                     | ASTM D5185m  | <0.1       | 0           |          |          |
| Potassium       | ppm                                     | ASTM D5185m  | <0.1       | <1          |          |          |
| Water           | %                                       | ASTM D6304   | < 0.05     | 0.010       |          |          |
| ppm Water       | ppm                                     | ASTM D6304   | <500       | 105.8       |          |          |
| % Gasoline      | %                                       | *In-House    | < 0.50     | 0.0         |          |          |
| % Biodiesel     | %                                       | *In-House    | <20.0      | 11.3        |          |          |
| FLUID CLEANLI   | NESS                                    | method       | limit/base | current     | history1 | history2 |
| Particles >4µm  |   | ASTM D7647   | >2500      | 1403        |          |          |
| Particles >6µm  |   | ASTM D7647   | >640       | 543         |          |          |
| Particles >14µm |   | ASTM D7647   | >80        | 64          |          |          |
| Particles >21µm |   | ASTM D7647   | >20        | 18          |          |          |
| Particles >38µm |   | ASTM D7647   | >4         | 1           |          |          |
| Particles >71µm |   | ASTM D7647   | >3         | 0           |          |          |
| Oil Cleanliness |   | ISO 4406 (c) | >18/16/13  | 18/16/13    |          |          |
| HEAVY METALS    | 6                                       | method       | limit/base | current     | history1 | history2 |
| Aluminum        | ppm                                     | ASTM D5185m  | <0.1       | 0           |          |          |
| Nickel          | ppm                                     | ASTM D5185m  | <0.1       | 0           |          |          |
| Lead            | ppm                                     | ASTM D5185m  | <0.1       | 0           |          |          |
| Vanadium        | ppm                                     | ASTM D5185m  | <0.1       | 0           |          |          |
| Iron            | ppm                                     | ASTM D5185m  | <0.1       | 0           |          |          |
| Calcium         | ppm                                     | ASTM D5185m  | <0.1       | 0           |          |          |
| Magnesium       | ppm                                     | ASTM D5185m  | <0.1       | <1          |          |          |
| Phosphorus      | ppm                                     | ASTM D5185m  | <0.1       | 1           |          |          |
| Zinc            | ppm                                     | ASTM D5185m  | <0.1       | 0           |          |          |
| SAMPLE IMAGE    | S                                       | method       | limit/base | current     | history1 | history2 |
| Color           |   |              |            |             | no image | no image |
| Bottom          |   |              |            |             | no image | no image |
| 48:40) Rev: 1   | Contact/Location: JASON RAINEY - APEGRA |              |            |             |          |          |

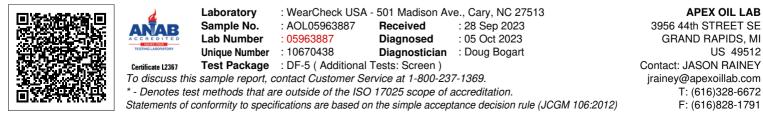
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# **FUEL REPORT**



# Pensky-Martens Flash Point (°C)



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Contact/Location: JASON RAINEY - APEGRA