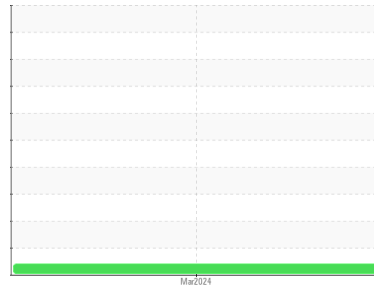




FUEL REPORT

Sample Rating Trend



VIS DEBRIS



Machine Id
C-2-C
 Component
Bulk Tank Diesel Fuel
 Fluid
 DIESEL FUEL No. 2 (--- GAL)

DIAGNOSIS

Recommendation

We advise that you filter this fluid before use. We were unable to perform a particle count due to a high concentration of particles present in this sample. 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

Moderate concentration of visible dirt/debris present in the fuel. The water content is negligible. There is no bacteria or fungus (yeast and/or mold) indicated in the sample.

Fuel Condition

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

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	WC0914200	---	---
Sample Date	Client Info	27 Mar 2024	---	---
Machine Age	hrs Client Info	0	---	---
Sample Status		ABNORMAL	---	---

PHYSICAL PROPERTIES

method	limit/base	current	history1	history2
Fuel Color	text *Visual Screen	Red	---	---
ASTM Color	scalar *ASTM D1500	L4.0	---	---
Visc @ 40°C	cSt ASTM D445 4.1	2.44	---	---
Pensky-Martens Flash Point	°C *PMCC Calculated	63.8	---	---

SULFUR CONTENT

method	limit/base	current	history1	history2
Sulfur	ppm ASTM D5185m	0	---	---
Sulfur (UVF)	ppm ASTM D5453	9	---	---

DISTILLATION

method	limit/base	current	history1	history2
Initial Boiling Point	°C ASTM D86	175	---	---
5% Distillation Point	°C ASTM D86	196	---	---
10% Distill Point	°C ASTM D86	205	---	---
15% Distillation Point	°C ASTM D86	212	---	---
20% Distill Point	°C ASTM D86	220	---	---
30% Distill Point	°C ASTM D86	234	---	---
40% Distill Point	°C ASTM D86	247	---	---
50% Distill Point	°C ASTM D86	260	---	---
60% Distill Point	°C ASTM D86	274	---	---
70% Distill Point	°C ASTM D86	288	---	---
80% Distill Point	°C ASTM D86	304	---	---
85% Distillation Point	°C ASTM D86	315	---	---
90% Distill Point	°C ASTM D86	325	---	---
95% Distillation Point	°C ASTM D86	344	---	---
Final Boiling Point	°C ASTM D86	359	---	---

IGNITION QUALITY

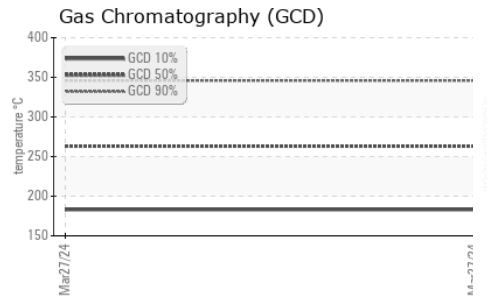
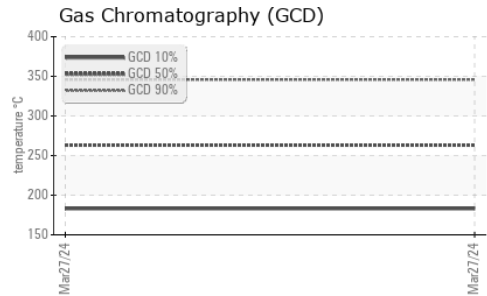
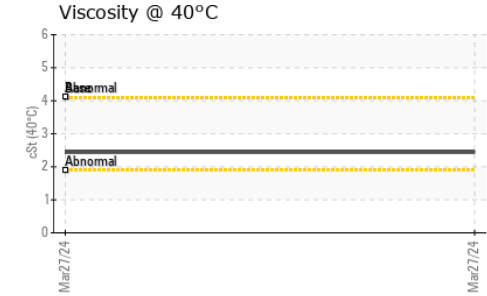
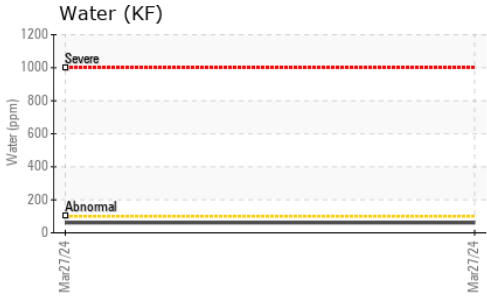
method	limit/base	current	history1	history2
API Gravity	ASTM D7777	37	---	---
Cetane Index	ASTM D4737 <40.0	49	---	---

CONTAMINANTS


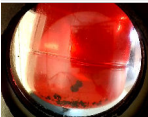
method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m <1.0	0	---	---
Sodium	ppm ASTM D5185m <0.1	1	---	---
Potassium	ppm ASTM D5185m <0.1	0	---	---
Water	% ASTM D6304 <0.05	0.006	---	---
ppm Water	ppm ASTM D6304 <500	61	---	---
% Gasoline	% *In-House <0.50	0.0	---	---
% Biodiesel	% *In-House <20.0	0.0	---	---



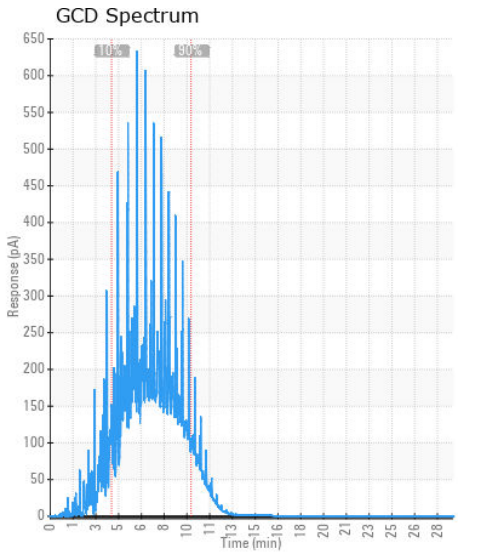
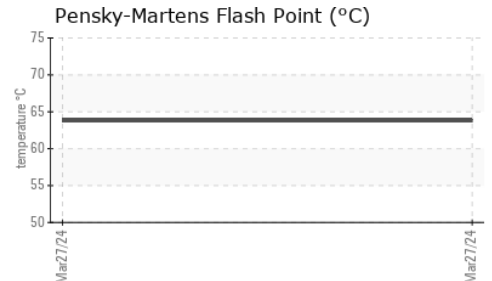
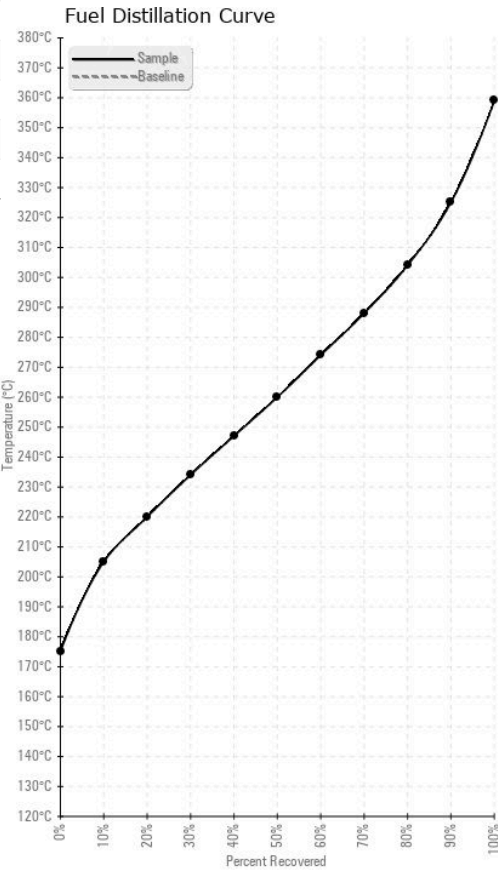
FUEL REPORT



HEAVY METALS		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	0	---	---
Phosphorus	ppm	ASTM D5185m	<0.1	0	---	---
Zinc	ppm	ASTM D5185m	<0.1	0	---	---

SAMPLE IMAGES		method	limit/base	current	history1	history2
Color				no image	no image	
Bottom				no image	no image	

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0914200 **Received** : 03 Apr 2024
Lab Number : 06138203 **Tested** : 15 Apr 2024
Unique Number : 10963011 **Diagnosed** : 15 Apr 2024 - Doug Bogart
Test Package : DF-2 (Additional Tests: Fuel, Screen)

VITAL FUEL SYSTEMS
 1076 CLASSIC RD
 APEX, NC
 US 27539
 Contact: SERVICE
 service@vitalfuelsystems.com
 T: (919)629-8180
 F: (919)303-7399

To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)