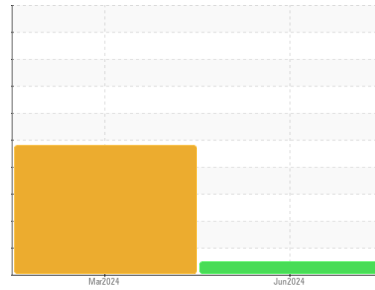




FUEL REPORT

Sample Rating Trend



NORMAL



Area

Carilion Roanoke Memorial Hospital [17691]

Machine Id

[Carilion Roanoke Memorial Hospital] TANK 4 BOILER RES

Component

Diesel Fuel

Fluid

No.2 DIESEL FUEL (ULTRALOW SULPHUR) (20000 GAL)

DIAGNOSIS

Recommendation

All laboratory tests indicate that this sample meets specifications for No.2 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. There is no indication of any contamination in the fuel. The amount and size of particulates present in the system are acceptable.

Fuel Condition

Sulfur value derived by ASTM D5453 method for ULSD validation.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			WC0957804	WC06139079	---
Sample Date	Client Info			23 Jun 2024	21 Mar 2024	---
Machine Age	hrs	Client Info		0	0	---
Sample Status				NORMAL	ABNORMAL	---

PHYSICAL PROPERTIES		method	limit/base	current	history1	history2
Fuel Color	text	*Visual Screen	Yllow	Red	Red	---
ASTM Color	scalar	*ASTM D1500		L4.5	L4.0	---
Visc @ 40°C	cSt	ASTM D445	3.0	2.53	2.57	---
Pensky-Martens Flash Point	°C	*PMCC Calculated	52	63.2	63.4	---

SULFUR CONTENT		method	limit/base	current	history1	history2
Sulfur	ppm	ASTM D5185m	10	186	188	---
Sulfur (UVF)	ppm	ASTM D5453		109	153	---

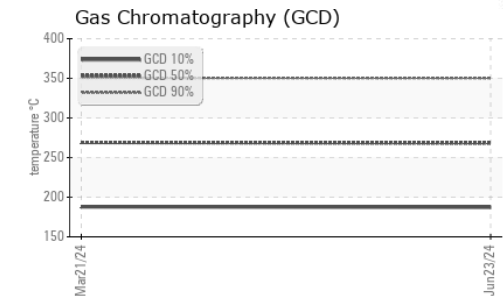
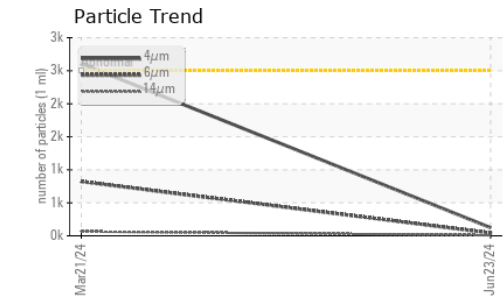
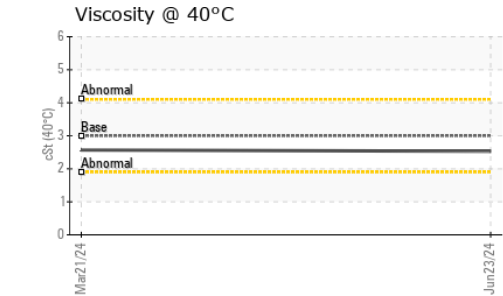
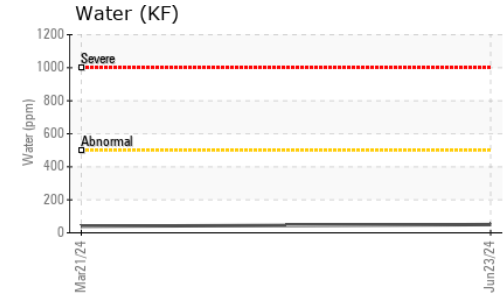
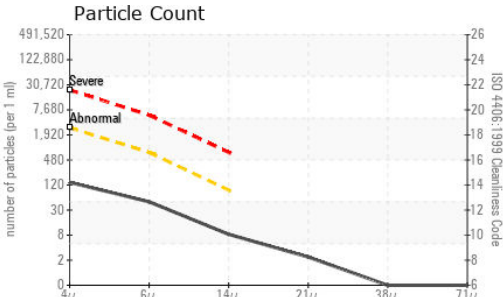
DISTILLATION		method	limit/base	current	history1	history2
Initial Boiling Point	°C	ASTM D86	165	174	174	---
5% Distillation Point	°C	ASTM D86		199	199	---
10% Distill Point	°C	ASTM D86	201	209	210	---
15% Distillation Point	°C	ASTM D86		217	218	---
20% Distill Point	°C	ASTM D86	216	225	226	---
30% Distill Point	°C	ASTM D86	230	240	240	---
40% Distill Point	°C	ASTM D86	243	252	253	---
50% Distill Point	°C	ASTM D86	255	265	266	---
60% Distill Point	°C	ASTM D86	267	279	279	---
70% Distill Point	°C	ASTM D86	280	292	293	---
80% Distill Point	°C	ASTM D86	295	308	308	---
85% Distillation Point	°C	ASTM D86		318	318	---
90% Distill Point	°C	ASTM D86	310	328	328	---
95% Distillation Point	°C	ASTM D86		344	344	---
Final Boiling Point	°C	ASTM D86	341	357	356	---

IGNITION QUALITY		method	limit/base	current	history1	history2
API Gravity		ASTM D7777	37.7	36	36	---
Cetane Index		ASTM D4737	<40.0	49	48	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	<1.0	0	0	---
Sodium	ppm	ASTM D5185m	<0.1	1	<1	---
Potassium	ppm	ASTM D5185m	<0.1	<1	0	---
Water	%	ASTM D6304	<0.05	0.005	0.003	---
ppm Water	ppm	ASTM D6304	<500	50	40	---
% Gasoline	%	*In-House	<0.50	0.0	0.0	---
% Biodiesel	%	*In-House	<20.0	1.3	1.2	---



FUEL REPORT



FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>2500	123	2608	---
Particles >6µm	ASTM D7647	>640	42	821	---
Particles >14µm	ASTM D7647	>80	7	65	---
Particles >21µm	ASTM D7647	>20	2	17	---
Particles >38µm	ASTM D7647	>4	0	1	---
Particles >71µm	ASTM D7647	>3	0	0	---
Oil Cleanliness	ISO 4406 (c)	>18/16/13	14/13/10	19/17/13	---

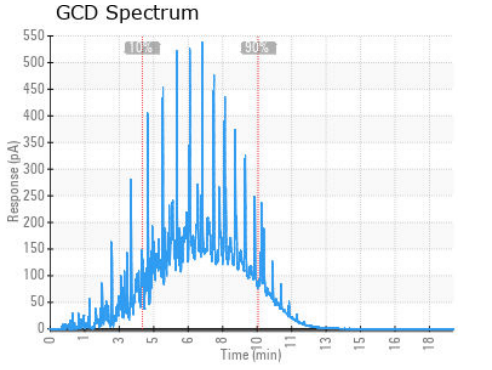
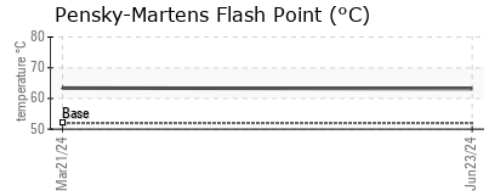
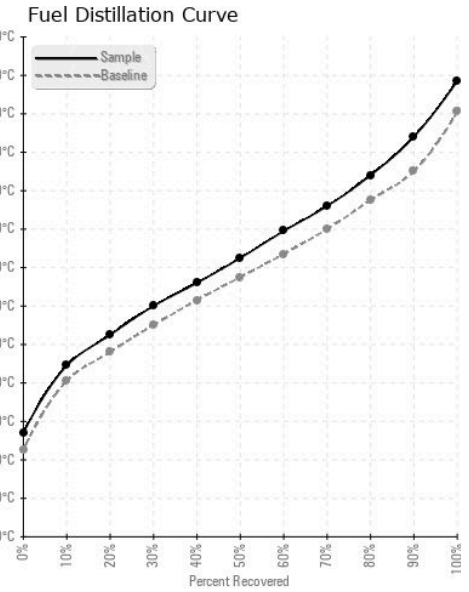
HEAVY METALS	method	limit/base	current	history1	history2
Aluminum	ppm	ASTM D5185m <0.1	0	0	---
Nickel	ppm	ASTM D5185m <0.1	0	0	---
Lead	ppm	ASTM D5185m <0.1	0	0	---
Vanadium	ppm	ASTM D5185m <0.1	0	0	---
Iron	ppm	ASTM D5185m <0.1	0	0	---
Calcium	ppm	ASTM D5185m <0.1	0	0	---
Magnesium	ppm	ASTM D5185m <0.1	0	0	---
Phosphorus	ppm	ASTM D5185m <0.1	0	0	---
Zinc	ppm	ASTM D5185m <0.1	0	0	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

no image

no image

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0957804 **Received** : 24 Jun 2024
Lab Number : **06218728** **Tested** : 27 Jun 2024
Unique Number : 11096925 **Diagnosed** : 27 Jun 2024 - Elizabeth Valachovic
Test Package : DF-2 (Additional Tests: Fuel, Screen)

PETROLEUM RECOVERY SERVICES
 210 POWELL DR
 SUMMERVILLE, SC
 US 29483
 Contact: AJAY EL
 Ajay@prsfuel.com
 T: (843)225-1777
 F:

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)