



FUEL REPORT

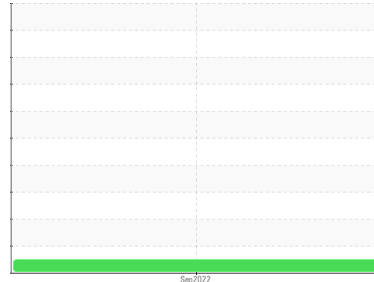
Sample Rating Trend

NORMAL



Machine Id
Woodlands Nursing 350kw CAT

Component
Tank Diesel Fuel
Fluid
NOT GIVEN (--- 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.

Fuel Condition

Sulfur value derived by ASTM D5453 method for ULSD validation.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			WC0658739	---	---
Sample Date	Client Info			14 Sep 2022	---	---
Machine Age	hrs	Client Info		528	---	---
Sample Status				NORMAL	---	---

PHYSICAL PROPERTIES		method	limit/base	current	history1	history2
Specific Gravity		*ASTM D1298		0.849	---	---
Fuel Color	text	*Visual Screen		Red	---	---
ASTM Color	scalar	*ASTM D1500		L4.5	---	---
Visc @ 40°C	cSt	ASTM D445		2.56	---	---
Pensky-Martens Flash Point	°C	*PMCC Calculated		62	---	---
Cloud Point	°C	ASTM D5771		-12	---	---
Pour Point	°C	ASTM D5950		-21	---	---

SULFUR CONTENT		method	limit/base	current	history1	history2
Sulfur	ppm	ASTM D5185m		602	---	---
Sulfur (UVF)	ppm	ASTM D5453		464	---	---

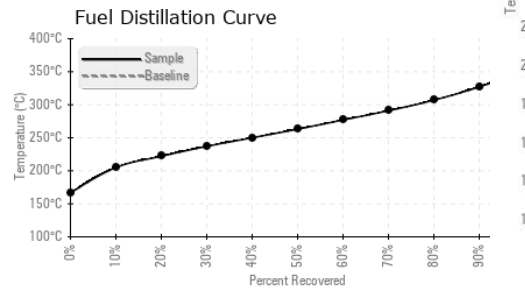
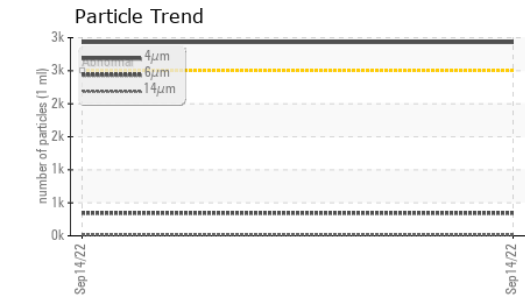
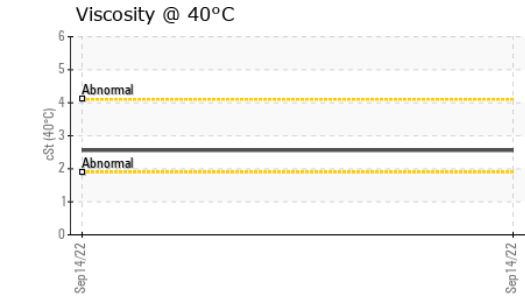
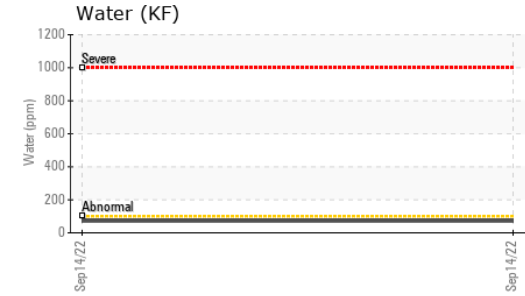
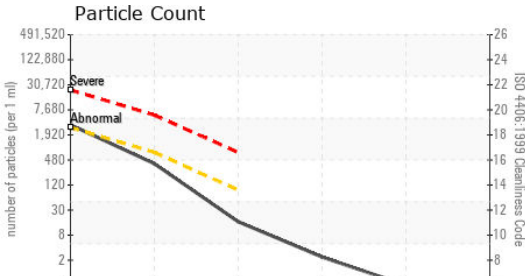
DISTILLATION		method	limit/base	current	history1	history2
Initial Boiling Point	°C	ASTM D86		166	---	---
5% Distillation Point	°C	ASTM D86		193	---	---
10% Distill Point	°C	ASTM D86		205	---	---
15% Distillation Point	°C	ASTM D86		214	---	---
20% Distill Point	°C	ASTM D86		222	---	---
30% Distill Point	°C	ASTM D86		237	---	---
40% Distill Point	°C	ASTM D86		250	---	---
50% Distill Point	°C	ASTM D86		263	---	---
60% Distill Point	°C	ASTM D86		277	---	---
70% Distill Point	°C	ASTM D86		291	---	---
80% Distill Point	°C	ASTM D86		307	---	---
85% Distillation Point	°C	ASTM D86		316	---	---
90% Distill Point	°C	ASTM D86		327	---	---
95% Distillation Point	°C	ASTM D86		343	---	---
Final Boiling Point	°C	ASTM D86		351	---	---
Distillation Residue	%	ASTM D86		1.4	---	---
Distillation Loss	%	ASTM D86		0.9	---	---

IGNITION QUALITY		method	limit/base	current	history1	history2
API Gravity		ASTM D7777		35.2	---	---
Cetane Index		ASTM D4737	<40.0	43.6	---	---

CONTAMINANTS		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	0.007	---	---
ppm Water	ppm	ASTM D6304	<500	71.7	---	---
% Gasoline	%	*In-House	<0.50	0.0	---	---
% Biodiesel	%	*In-House	<20.0	0.0	---	---



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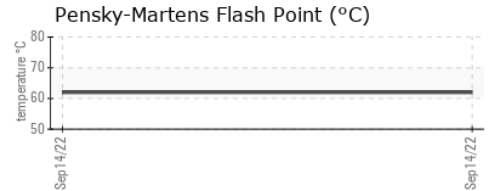
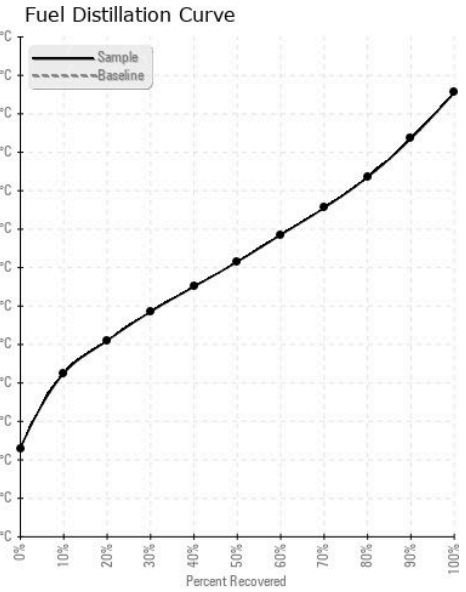


FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>2500	2931	---	---
Particles >6µm	ASTM D7647	>640	344	---	---
Particles >14µm	ASTM D7647	>80	14	---	---
Particles >21µm	ASTM D7647	>20	2	---	---
Particles >38µm	ASTM D7647	>4	0	---	---
Particles >71µm	ASTM D7647	>3	0	---	---
Oil Cleanliness	ISO 4406 (c)	>18/16/13	19/16/11	---	---

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	<1	---	---
Calcium	ppm	ASTM D5185m <0.1	0	---	---
Magnesium	ppm	ASTM D5185m <0.1	0	---	---
Phosphorus	ppm	ASTM D5185m <0.1	2	---	---
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. : WC0658739 **Received** : 20 Sep 2022
Lab Number : **05646301** **Diagnosed** : 27 Sep 2022
Unique Number : 10140840 **Diagnostician** : Doug Bogart
Test Package : DF-3 (Additional Tests: Screen)

ALTERNATIVE POWER
 1000 NORTHGATE CT
 MORRISVILLE, NC
 US 27560
 Contact: ROBERT MCARTHUR
 rmcARTHUR@bittingelectric.com
 T: (919)467-9417
 F:

Certificate L2367
 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)