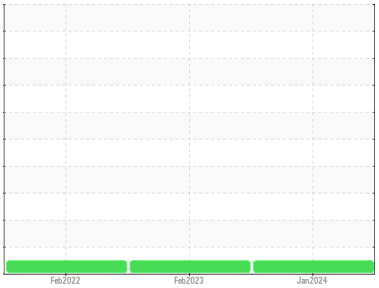
FUEL REPORT

Sample Rating Trend



NORMAL

Machine Id
NYU KIMMEL FARM TANK 2
Component
Diesel Fuel
Fluid
No.2 DIESEL FUEL (ULTRALOW SULPHUR) (25000 GAL)

DIAGNOSIS

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
There is no bacteria or fungus (yeast and/or mold) indicated in the sample. The water content is negligible. 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. Sulfur level is acceptable for ULSD specification.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC06073452**	WC05761168	WC05461855
Sample Date		Client Info		**29 Jan 2024**	07 Feb 2023	07 Feb 2022
Machine Age	hrs	Client Info		**0**	0	0
Sample Status				**NORMAL**	NORMAL	NORMAL

PHYSICAL PROPERTIES		method	limit/base	current	history1	history2
Specific Gravity		*ASTM D1298	0.839	**0.840**	0.841	0.838
Fuel Color	text	*Visual Screen	Yllow	**Red**	Red	Orang
ASTM Color	scalar	*ASTM D1500		**L4.0**	L4.0	L1.5
Visc @ 40°C	cSt	ASTM D445	3.0	**2.5**	2.57	2.42

SULFUR CONTENT		method	limit/base	current	history1	history2
Sulfur	ppm	ASTM D5185m	10	**0**	0	21
Sulfur (UVF)	ppm	ASTM D5453		**6**	7	6

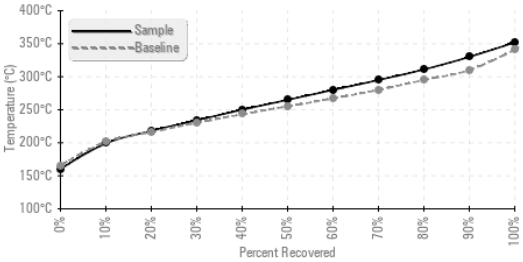
DISTILLATION		method	limit/base	current	history1	history2
Initial Boiling Point	°C	ASTM D86	165	**160**	166	168
5% Distillation Point	°C	ASTM D86		**187**	190	190
10% Distill Point	°C	ASTM D86	201	**199**	201	199
15% Distillation Point	°C	ASTM D86		**209**	211	208
20% Distill Point	°C	ASTM D86	216	**218**	220	216
30% Distill Point	°C	ASTM D86	230	**234**	236	231
40% Distill Point	°C	ASTM D86	243	**250**	252	245
50% Distill Point	°C	ASTM D86	255	**265**	267	261
60% Distill Point	°C	ASTM D86	267	**280**	283	276
70% Distill Point	°C	ASTM D86	280	**295**	298	293
80% Distill Point	°C	ASTM D86	295	**311**	314	310
85% Distillation Point	°C	ASTM D86		**320**	322	319
90% Distill Point	°C	ASTM D86	310	**330**	331	329
95% Distillation Point	°C	ASTM D86		**344**	343	342
Final Boiling Point	°C	ASTM D86	341	**352**	350	351
Distillation Residue	%	ASTM D86	3.0	**1.4**	1.4	1.4
Distillation Loss	%	ASTM D86	3.0	**0.9**	0.7	0.5

IGNITION QUALITY	method	limit/base	current	history1	history2
API Gravity	ASTM D7777	37.7	**37.0**	36.8	37.4
Cetane Index	ASTM D4737	<40.0	**49.2**	49.1	49.4

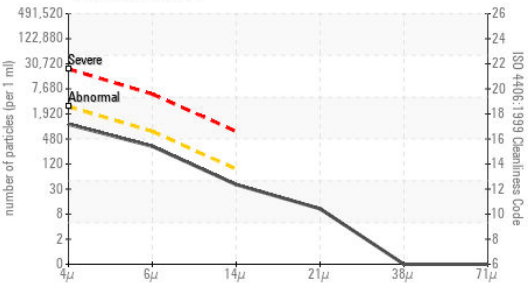
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	<1.0	**0**	0	0
Sodium	ppm	ASTM D5185m	<0.1	**0**	0	0
Potassium	ppm	ASTM D5185m	<0.1	**0**	0	0
Water	%	ASTM D6304	<0.05	**0.006**	0.005	0.003
ppm Water	ppm	ASTM D6304	<500	**68**	52.4	34.1
% Gasoline	%	*In-House	<0.50	**0.0**	0.0	0.0
% Biodiesel	%	*In-House	<20.0	**3.7**	7.1	6.0

FUEL REPORT

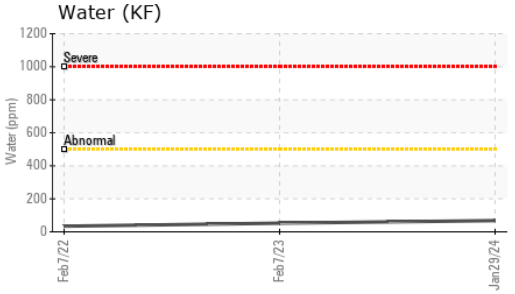
Fuel Distillation Curve



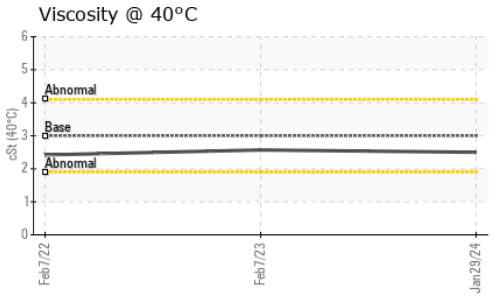
Particle Count



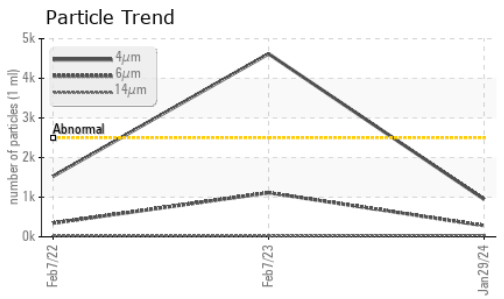
Water (KF)



Viscosity @ 40°C

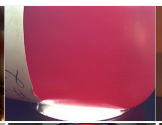
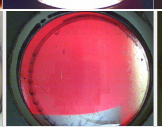
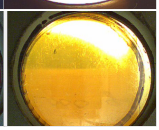


Particle Trend



FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>2500	**947**	4619	1529
Particles >6µm		ASTM D7647	>640	**281**	1112	346
Particles >14µm		ASTM D7647	>80	**34**	20	25
Particles >21µm		ASTM D7647	>20	**9**	3	6
Particles >38µm		ASTM D7647	>4	**0**	0	0
Particles >71µm		ASTM D7647	>3	**0**	0	0
Oil Cleanliness		ISO 4406 (c)	>18/16/13	**17/15/12**	19/17/11	18/16/12

HEAVY METALS		method	limit/base	current	history1	history2
Aluminum	ppm	ASTM D5185m	<0.1	**0**	0	0
Nickel	ppm	ASTM D5185m	<0.1	**0**	<1	0
Lead	ppm	ASTM D5185m	<0.1	**0**	0	0
Vanadium	ppm	ASTM D5185m	<0.1	**0**	0	0
Iron	ppm	ASTM D5185m	<0.1	**0**	0	0
Calcium	ppm	ASTM D5185m	<0.1	**0**	0	0
Magnesium	ppm	ASTM D5185m	<0.1	**0**	0	0
Phosphorus	ppm	ASTM D5185m	<0.1	**0**	0	2
Zinc	ppm	ASTM D5185m	<0.1	**0**	0	0

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC06073452 **Recieved** : 30 Jan 2024
Lab Number : 06073452 **Diagnosed** : 06 Feb 2024
Unique Number : 10850129 **Diagnostician** : Doug Bogart
Test Package : DF-1 (Additional Tests: Screen)

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)

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