



FUEL REPORT

Sample Rating Trend

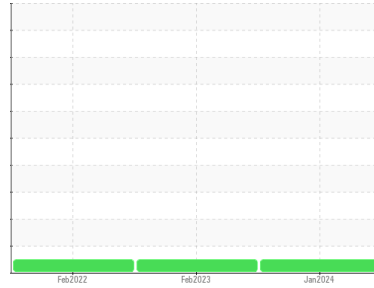
NORMAL



Machine Id
NYU KIMMEL FARM TANK 3

Component
Diesel Fuel
Fluid

No.2 DIESEL FUEL (ULTRALOW SULPHUR) (25000 GAL)



DIAGNOSIS

Recommendation

No corrective action is recommended at this time. 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 a moderate amount of particulates present in the fuel. There is no bacteria or fungus (yeast and/or mold) indicated in the sample. The water content is negligible.

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			WC06073457	WC05761167	WC05461851
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	0.837
Fuel Color	text	*Visual Screen	Yellow	Red	Red	Orang
ASTM Color	scalar	*ASTM D1500		L4.0	L4.0	L1.5
Visc @ 40°C	cSt	ASTM D445	3.0	2.46	2.56	2.44

SULFUR CONTENT		method	limit/base	current	history1	history2
Sulfur	ppm	ASTM D5185m	10	0	0	14
Sulfur (UVF)	ppm	ASTM D5453		6	8	7

DISTILLATION		method	limit/base	current	history1	history2
Initial Boiling Point	°C	ASTM D86	165	163	164	168
5% Distillation Point	°C	ASTM D86		187	191	191
10% Distill Point	°C	ASTM D86	201	198	201	201
15% Distillation Point	°C	ASTM D86		208	211	208
20% Distill Point	°C	ASTM D86	216	217	220	215
30% Distill Point	°C	ASTM D86	230	233	237	230
40% Distill Point	°C	ASTM D86	243	249	252	245
50% Distill Point	°C	ASTM D86	255	264	267	260
60% Distill Point	°C	ASTM D86	267	279	282	276
70% Distill Point	°C	ASTM D86	280	295	298	292
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	329	330	329
95% Distillation Point	°C	ASTM D86		344	342	342
Final Boiling Point	°C	ASTM D86	341	353	350	352
Distillation Residue	%	ASTM D86	3.0	1.4	1.4	1.4
Distillation Loss	%	ASTM D86	3.0	0.7	0.7	0.6

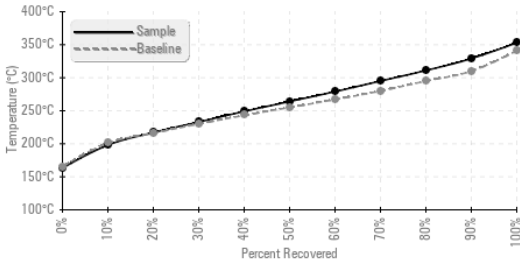
IGNITION QUALITY		method	limit/base	current	history1	history2
API Gravity		ASTM D7777	37.7	37.0	36.8	37.6
Cetane Index		ASTM D4737	<40.0	48.9	49.1	49.4

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	0.007	0.005	0.003
ppm Water	ppm	ASTM D6304	<500	70	50.5	36.3
% Gasoline	%	*In-House	<0.50	0.0	0.0	0.0
% Biodiesel	%	*In-House	<20.0	3.8	7.1	6.1



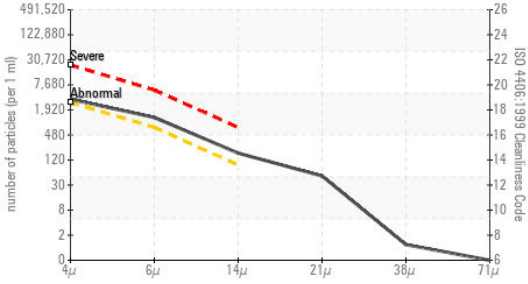
FUEL REPORT

Fuel Distillation Curve



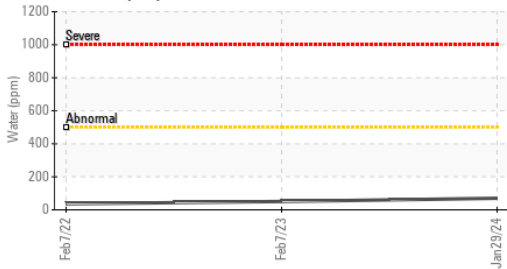
FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>2500	3026	4717	1658
Particles >6µm	ASTM D7647	>640	1106	1148	371
Particles >14µm	ASTM D7647	>80	155	25	24
Particles >21µm	ASTM D7647	>20	44	4	5
Particles >38µm	ASTM D7647	>4	1	0	0
Particles >71µm	ASTM D7647	>3	0	0	0
Oil Cleanliness	ISO 4406 (c)	>18/16/13	19/17/14	19/17/12	18/16/12

Particle Count



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	3
Zinc	ppm	ASTM D5185m <0.1	0	0	0

Water (KF)

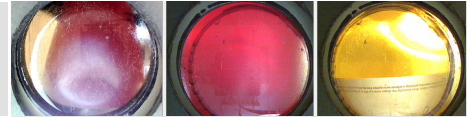


SAMPLE IMAGES	method	limit/base	current	history1	history2
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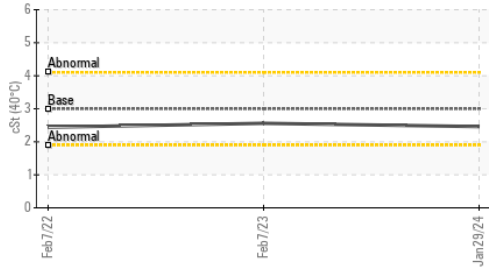
Color



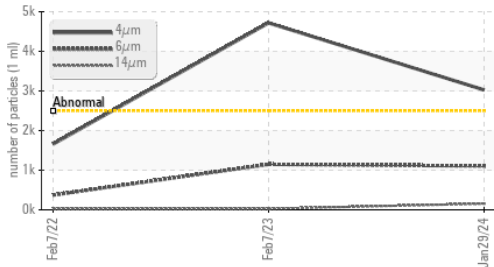
Bottom



Viscosity @ 40°C



Particle Trend



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC06073457 **Received** : 30 Jan 2024
Lab Number : **06073457** **Diagnosed** : 06 Feb 2024
Unique Number : 10850134 **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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