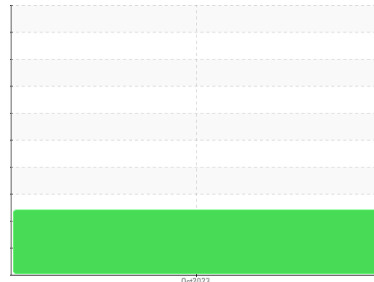




FUEL REPORT

Sample Rating Trend



ISO



Machine Id
KIOTI CK4010 VR000051

Component
Diesel Fuel
Fluid
NOT GIVEN (--- GAL)

DIAGNOSIS

Recommendation

We advise that you filter this fluid before use. 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

There is a high 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.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			KT0000605	---	---
Sample Date	Client Info			10 Oct 2023	---	---
Machine Age	hrs	Client Info		150	---	---
Sample Status				ATTENTION	---	---

PHYSICAL PROPERTIES		method	limit/base	current	history1	history2
Specific Gravity		*ASTM D1298		0.852	---	---
Fuel Color	text	*Visual Screen		Yellow	---	---
ASTM Color	scalar	*ASTM D1500		L2.0	---	---
Visc @ 40°C	cSt	ASTM D445		2.72	---	---
Pensky-Martens Flash Point	°C	*PMCC Calculated		61	---	---

SULFUR CONTENT		method	limit/base	current	history1	history2
Sulfur	ppm	ASTM D5185m		18	---	---
Sulfur (UVF)	ppm	ASTM D5453		18	---	---

DISTILLATION		method	limit/base	current	history1	history2
Initial Boiling Point	°C	ASTM D86		168	---	---
5% Distillation Point	°C	ASTM D86		192	---	---
10% Distill Point	°C	ASTM D86		203	---	---
15% Distillation Point	°C	ASTM D86		212	---	---
20% Distill Point	°C	ASTM D86		220	---	---
30% Distill Point	°C	ASTM D86		236	---	---
40% Distill Point	°C	ASTM D86		251	---	---
50% Distill Point	°C	ASTM D86		264	---	---
60% Distill Point	°C	ASTM D86		279	---	---
70% Distill Point	°C	ASTM D86		295	---	---
80% Distill Point	°C	ASTM D86		313	---	---
85% Distillation Point	°C	ASTM D86		323	---	---
90% Distill Point	°C	ASTM D86		334	---	---
95% Distillation Point	°C	ASTM D86		351	---	---
Final Boiling Point	°C	ASTM D86		360	---	---
Distillation Residue	%	ASTM D86		1.4	---	---
Distillation Loss	%	ASTM D86		0.9	---	---

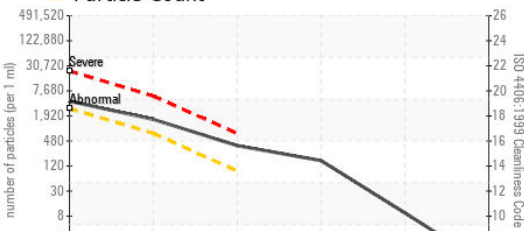
IGNITION QUALITY		method	limit/base	current	history1	history2
API Gravity		ASTM D7777		34.6	---	---
Cetane Index		ASTM D4737	<40.0	44.9	---	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	<1.0	0	---	---
Sodium	ppm	ASTM D5185m	<0.1	2	---	---
Potassium	ppm	ASTM D5185m	<0.1	0	---	---
Water	%	ASTM D6304	<0.05	0.004	---	---
ppm Water	ppm	ASTM D6304	<500	42.3	---	---
% Gasoline	%	*In-House	<0.50	0.0	---	---
% Biodiesel	%	*In-House	<20.0	4.9	---	---

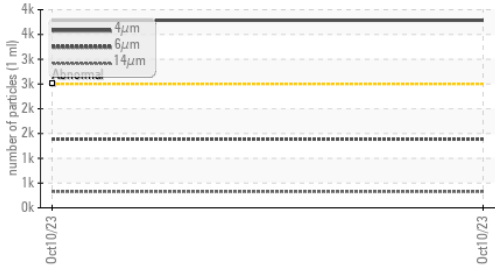


FUEL REPORT

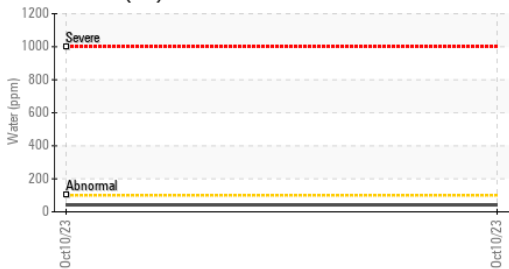
Particle Count



Particle Trend



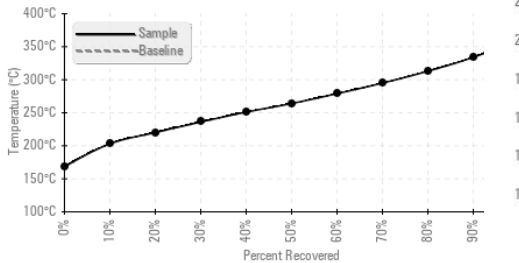
Water (KF)



Viscosity @ 40°C



Fuel Distillation Curve



FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>2500	▲ 3787	---	---
Particles >6µm	ASTM D7647	>640	▲ 1388	---	---
Particles >14µm	ASTM D7647	>80	▲ 326	---	---
Particles >21µm	ASTM D7647	>20	▲ 143	---	---
Particles >38µm	ASTM D7647	>4	▲ 8	---	---
Particles >71µm	ASTM D7647	>3	▲ 0	---	---
Oil Cleanliness	ISO 4406 (c)	>18/16/13	▲ 19/18/16	---	---

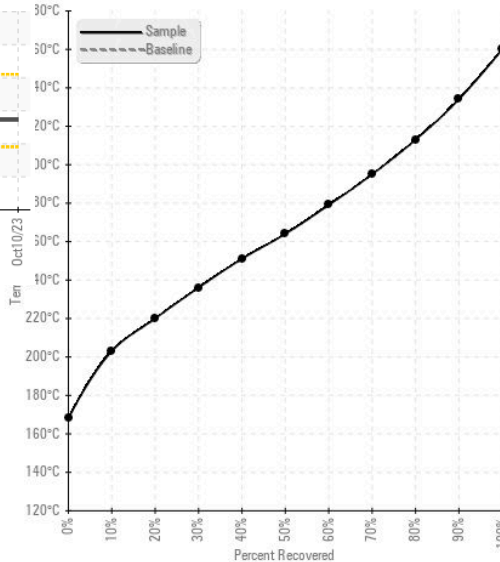
HEAVY METALS	method	limit/base	current	history1	history2
Aluminum	ppm	ASTM D5185m <0.1	0	---	---
Nickel	ppm	ASTM D5185m <0.1	0	---	---
Lead	ppm	ASTM D5185m <0.1	0	---	---
Vanadium	ppm	ASTM D5185m <0.1	0	---	---
Iron	ppm	ASTM D5185m <0.1	0	---	---
Calcium	ppm	ASTM D5185m <0.1	<1	---	---
Magnesium	ppm	ASTM D5185m <0.1	11	---	---
Phosphorus	ppm	ASTM D5185m <0.1	1	---	---
Zinc	ppm	ASTM D5185m <0.1	0	---	---

SAMPLE IMAGES

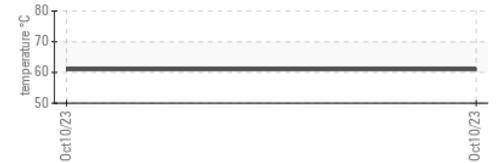
	method	limit/base	current	history1	history2
Color				no image	no image
Bottom				no image	no image

GRAPHS

Fuel Distillation Curve



Pensky-Martens Flash Point (°C)



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KT0000605
Lab Number : 05993925
Unique Number : 10722285
Test Package : DF-2 (Additional Tests: Screen)

Received : 30 Oct 2023
Diagnosed : 03 Nov 2023
Diagnostician : Doug Bogart

LTTM - LARRY'S TRACTORS TRAILERS & MORE
 1094 S 1ST ST
 HAMILTON, MT
 US 59840

Contact: SERVICE MANAGER
 lttmlchamilton@gmail.com

T: (406)363-7027

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)