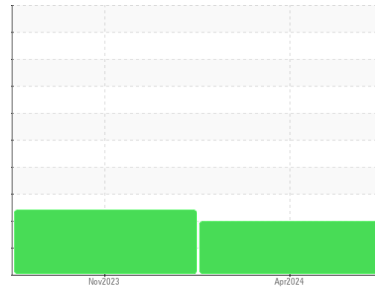




FUEL REPORT

Sample Rating Trend



ISO



Machine Id
KIOTI NX6010 VL6000086

Component
Diesel Fuel

Fluid
No.2 DIESEL FUEL (ULTRALOW SULPHUR) (--- GAL)

DIAGNOSIS

Recommendation

We advise that you filter this fluid before use. 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 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. Sulfur level is acceptable for ULSD specification.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			KT0000603	KT0000885	---
Sample Date	Client Info			09 Apr 2024	10 Nov 2023	---
Machine Age	hrs	Client Info		294	294	---
Sample Status				ABNORMAL	ATTENTION	---

PHYSICAL PROPERTIES		method	limit/base	current	history1	history2
Specific Gravity		*ASTM D1298	0.839	---	0.831	---
Fuel Color	text	*Visual Screen	Yellow	Red	Red	---
ASTM Color	scalar	*ASTM D1500		L4.0	L4.0	---
Visc @ 40°C	cSt	ASTM D445	3.0	2.52	2.3	---
Pensky-Martens Flash Point	°C	*PMCC Calculated	52	60.2	57	---

SULFUR CONTENT		method	limit/base	current	history1	history2
Sulfur	ppm	ASTM D5185m	10	3	0	---
Sulfur (UVF)	ppm	ASTM D5453		10	8	---

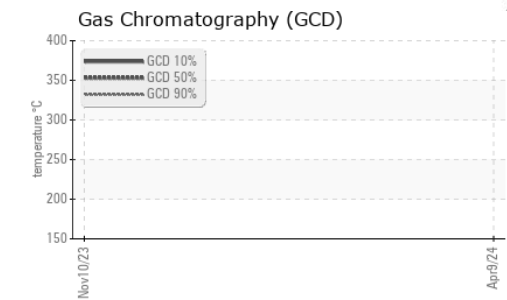
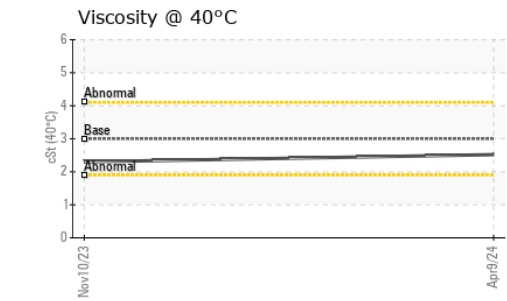
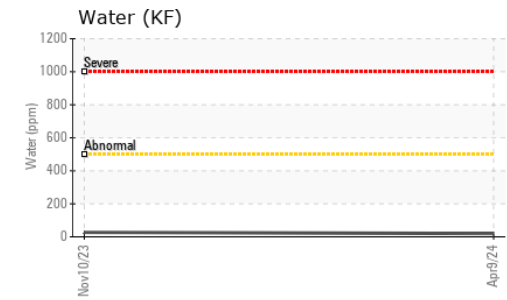
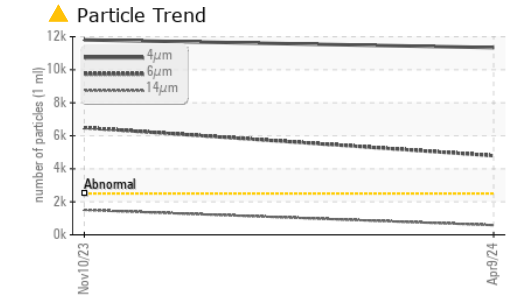
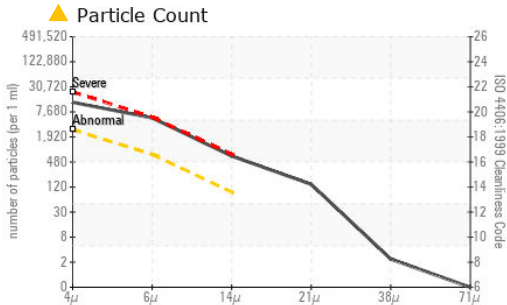
DISTILLATION		method	limit/base	current	history1	history2
Initial Boiling Point	°C	ASTM D86	165	173	160	---
5% Distillation Point	°C	ASTM D86		192	184	---
10% Distill Point	°C	ASTM D86	201	201	195	---
15% Distillation Point	°C	ASTM D86		208	203	---
20% Distill Point	°C	ASTM D86	216	215	211	---
30% Distill Point	°C	ASTM D86	230	229	225	---
40% Distill Point	°C	ASTM D86	243	242	240	---
50% Distill Point	°C	ASTM D86	255	256	255	---
60% Distill Point	°C	ASTM D86	267	271	269	---
70% Distill Point	°C	ASTM D86	280	286	285	---
80% Distill Point	°C	ASTM D86	295	302	303	---
85% Distillation Point	°C	ASTM D86		313	314	---
90% Distill Point	°C	ASTM D86	310	325	327	---
95% Distillation Point	°C	ASTM D86		344	346	---
Final Boiling Point	°C	ASTM D86	341	358	357	---
Distillation Residue	%	ASTM D86	3.0	---	1.4	---
Distillation Loss	%	ASTM D86	3.0	---	0.3	---

IGNITION QUALITY		method	limit/base	current	history1	history2
API Gravity		ASTM D7777	37.7	38	38.8	---
Cetane Index		ASTM D4737	<40.0	51	50.6	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	<1.0	<1	0	---
Sodium	ppm	ASTM D5185m	<0.1	<1	0	---
Potassium	ppm	ASTM D5185m	<0.1	0	<1	---
Water	%	ASTM D6304	<0.05	0.002	0.003	---
ppm Water	ppm	ASTM D6304	<500	20	27.4	---
% Gasoline	%	*In-House	<0.50	0.0	0.0	---
% Biodiesel	%	*In-House	<20.0	0.0	0.0	---



FUEL REPORT

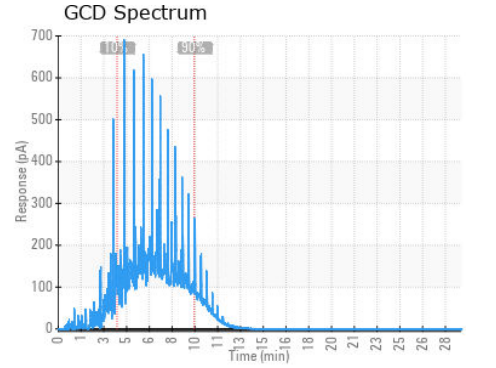
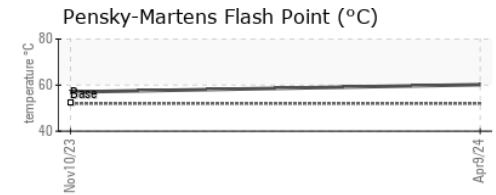
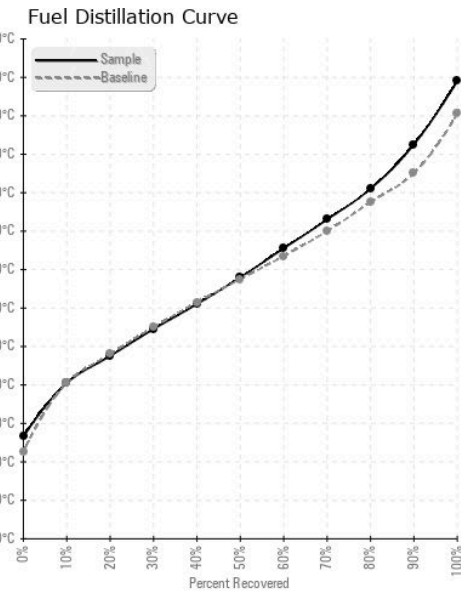


FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>2500	▲ 11339	● 11810	---
Particles >6µm	ASTM D7647	>640	▲ 4792	● 6489	---
Particles >14µm	ASTM D7647	>80	▲ 586	● 1508	---
Particles >21µm	ASTM D7647	>20	▲ 123	● 467	---
Particles >38µm	ASTM D7647	>4	2	● 10	---
Particles >71µm	ASTM D7647	>3	0	0	---
Oil Cleanliness	ISO 4406 (c)	>18/16/13	▲ 21/19/16	● 21/20/18	---

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

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KT0000603
Lab Number : **06149745**
Unique Number : 10979823
Test Package : DF-2 (Additional Tests: Fuel, Screen)
Received : 15 Apr 2024
Tested : 30 Apr 2024
Diagnosed : 30 Apr 2024 - Doug Bogart

SHERWOOD WHOLESALE
 3110 LITTLE ROCK RD
 ROSE BUD, AR
 US 72137
 Contact: Service Manager

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)