

FUEL REPORT

Sample Rating Trend

ISO

Machine Id

KIOTI ZX6620 6323 (S/N VW4800002)

Component Diesel Fuel Fluid

DIESEL FUEL No. 2 (--- GAL)

DIAGNOSIS

A 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. The water content is negligible. There is no bacteria or fungus (yeast and/or mold) indicated in the sample.

Fuel Condition

Sulfur value derived by ASTM D5453 method for ULSD validation. Sulfur level is acceptable for ULSD specification.

SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		KT0000903	KT0000643	
Sample Date		Client Info		25 Jun 2024	08 Dec 2023	
Machine Age	hrs	Client Info		0	970	
Sample Status				ABNORMAL	NORMAL	
PHYSICAL PROP	ERTIES	method	limit/base	current	history1	history2
Specific Gravity		*ASTM D1298		0.837	0.818	
Fuel Color	text	*Visual Screen		Orang	Yllow	
ASTM Color	scalar	*ASTM D1500		L3.5	L3.5	
Pensky-Martens Flash Point	°C	*PMCC Calculated		70.6	55	
SULFUR CONTENT		method	limit/base	current	history1	history2
Sulfur	ppm	ASTM D5185m		0	0	
Sulfur (UVF)	ppm	ASTM D5453		5	5	
DISTILLATION		method	limit/base	current	history1	history2
Initial Boiling Point	°C	ASTM D86		184	154	
5% Distillation Point	°C	ASTM D86		208	206	
10% Distill Point	°C	ASTM D86		217	228	
15% Distillation Point	°C	ASTM D86		225	243	
20% Distill Point	°C	ASTM D86		231	253	
30% Distill Point	°C	ASTM D86		243	271	
40% Distill Point	°C	ASTM D86		255	282	
50% Distill Point	°C	ASTM D86		268	290	
60% Distill Point	°C	ASTM D86		282	296	
70% Distill Point	°C	ASTM D86		295	303	
80% Distill Point	°C	ASTM D86		309	310	
85% Distillation Point	°C	ASTM D86		317	315	
90% Distill Point	°C	ASTM D86		327	323	
95% Distillation Point	°C	ASTM D86		343	335	
Final Boiling Point	°C	ASTM D86		352	344	
Distillation Residue	%	ASTM D86		1.4	1.4	
Distillation Loss	%	ASTM D86		0.7	0.4	
IGNITION QUALIT	ΓY	method	limit/base	current	history1	history2
API Gravity		ASTM D7777		37.6	41.5	
Cetane Index		ASTM D4737	<40.0	52.3	67.2	
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	<1.0	0	0	
Sodium	ppm	ASTM D5185m	<0.1	<1	<1	
Potassium	ppm	ASTM D5185m	<0.1	0	0	
Water	%	ASTM D6304	< 0.05	0.003	0.003	
ppm Water	ppm	ASTM D6304	<500	35	38	
% Gasoline	%	*In-House	<0.50	0.0	0.0	
% Biodiesel	%	*In-House	<20.0	5.3	10.9	



🔺 Particle Count

🔺 Particle Trend

Water (KF)

Gas Chromatography (GCD)

Gas Chromatography (GCD)

GCD 10%

GCD 90%

GCD 10%

GCD 90%

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FUEL REPORT

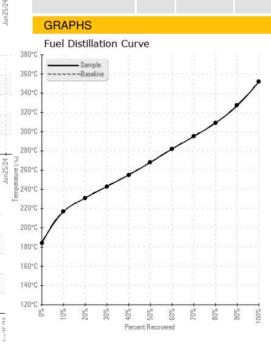
FLUID CLEANLIN	ESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>2500	A 3992	4724	
Particles >6µm		ASTM D7647	>640	<u> </u>	524	
Particles >14µm		ASTM D7647	>80	<u> </u>	17	
Particles >21µm		ASTM D7647	>20	<u> </u>	5	
Particles >38µm		ASTM D7647	>4	1	0	
Particles >71µm		ASTM D7647	>3	0	0	
Oil Cleanliness		ISO 4406 (c)	>18/16/13	19/18/14	19/16/11	
HEAVY METALS		method	limit/base	current	history1	history2
Aluminum	ppm	ASTM D5185m	<0.1	0	0	
Nickel	ppm	ASTM D5185m	<0.1	0	0	
Lead	ppm	ASTM D5185m	<0.1	0	0	
Vanadium	ppm	ASTM D5185m	<0.1	0	0	
Iron	ppm	ASTM D5185m	<0.1	0	0	
Calcium	ppm	ASTM D5185m	<0.1	0	0	
Magnesium	ppm	ASTM D5185m	<0.1	0	0	
Phosphorus	ppm	ASTM D5185m	<0.1	<1	0	
Zinc	ppm	ASTM D5185m	<0.1	0	0	
SAMPLE IMAGES		method	limit/base	current	history1	history2
Color						no image



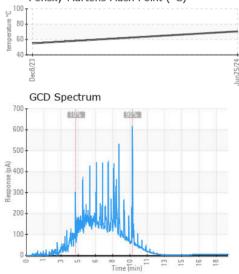
Bottom

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20 18 16



Pensky-Martens Flash Point (°C)





: KT0000903 1201 S UNION AVE Sample No. Received : 25 Jun 2024 Lab Number : 06220591 Tested : 02 Jul 2024 BAKERSFIELD, CA : 02 Jul 2024 - Doug Bogart Unique Number : 11098788 Diagnosed Test Package : DF-2 (Additional Tests: Fuel, Screen) Contact: FRED Jauch Certificate 12367 To discuss this sample report, contact Customer Service at 1-800-237-1369. fred@sanjoaquintractor.com T: (661)324-4517 * - 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) F: (661)324-2306

: WearCheck USA - 501 Madison Ave., Cary, NC 27513

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Laboratory

Contact/Location: FRED Jauch - SANBAKCA

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