

FUEL REPORT

Kioti NX4510CH 4396 (S/N VW6900101)

Diesel Fuel Fluid

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

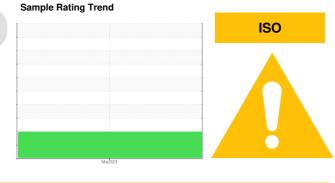
All metal levels are normal indicating no corrosion in the cooling system.

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		KT0000921		
Sample Date		Client Info		29 Mar 2024		
Machine Age	hrs	Client Info		374		
Sample Status				ABNORMAL		
PHYSICAL PROP	ERTIES	method	limit/base	current	history1	history2
Fuel Color	text	*Visual Screen	Yllow	Yllow		
ASTM Color	scalar	*ASTM D1500		L3.5		
Visc @ 40°C	cSt	ASTM D445	3.0	2.63		
Pensky-Martens Flash Point	°C	*PMCC Calculated	52	64.3		
SULFUR CONTER	NT	method	limit/base	current	history1	history2
Sulfur	ppm	ASTM D5185m	10	0		
Sulfur (UVF)	ppm	ASTM D5453		9		
DISTILLATION		method	limit/base	current	history1	history2
Initial Boiling Point	°C	ASTM D86	165	175		
5% Distillation Point	°C	ASTM D86		196		
10% Distill Point	°C	ASTM D86	201	205		
15% Distillation Point	°C	ASTM D86		212		
20% Distill Point	°C	ASTM D86	216	220		
30% Distill Point	°C	ASTM D86	230	234		
40% Distill Point	°C	ASTM D86	243	247		
50% Distill Point	°C	ASTM D86	255	260		
60% Distill Point	°C	ASTM D86	267	274		
70% Distill Point	°C	ASTM D86	280	287		
80% Distill Point	°C	ASTM D86	295	303		
85% Distillation Point	°C	ASTM D86		313		
90% Distill Point	°C	ASTM D86	310	324		
95% Distillation Point	°C	ASTM D86		342		
Final Boiling Point	°C	ASTM D86	341	356		
IGNITION QUALI	ΓY	method	limit/base	current	history1	history2
API Gravity		ASTM D7777	37.7	36		
Cetane Index		ASTM D4737	<40.0	47		
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	<1.0	0		
Sodium	ppm	ASTM D5185m	<0.1	<1		
Potassium	ppm	ASTM D5185m	<0.1	0		
Water	%	ASTM D6304	<0.05	0.003		
ppm Water	ppm	ASTM D6304	<500	37		
% Gasoline	%	*In-House	<0.50	0.0		
% Biodiesel	%	*In-House	<20.0	1.4		



FUEL REPORT

		-24							
			Particles >4µm		ASTM D7647	>2500	A 19687		
		-22 ISO -20 4406:1999 -18 999 -16 Cla	Particles >6µm		ASTM D7647	>640	6378		
mal		18 20	Particles >14µm		ASTM D7647		681		
		+16 C	Particles >21µm		ASTM D7647	>20	A 189		
		+14 aniin			ASTM D7647	>4	3		
		12 5			ASTM D7647	>3	0		
			Oil Cleanliness				21/20/17		
6u 14u	214	384 714		0				In the tax work	la ta ta muno
	a i fa	o o pa		5				history I	history2
				ppm			-		
малалала 6µm				ppm			0		
14μm			Lead	ppm		<0.1	0		
			Vanadium	ppm	ASTM D5185m		0		
			Iron	ppm	ASTM D5185m	<0.1	0		
ormal			Calcium	ppm	ASTM D5185m	<0.1	0		
			Magnesium	ppm	ASTM D5185m	<0.1	0		
		9/24 -	Phosphorus	ppm	ASTM D5185m	<0.1	0		
		Mar2	Zinc	ppm	ASTM D5185m	<0.1	0		
tor (KE)			SAMPLE IMAGE	-s	method	limit/base	current	history1	history2
				_0	mothod		ourroint	motory	motory
ere									
			Color					no image	no image
iormai									
			Bottom					no image	no image
		9/24 -							
		Mar2	GRAPHS						
cosity @ 40°C				Curve			Pensky-Marte	ns Flash Point (°C)
			1 ^{2°08}			ç.	⁸⁰ T		
		3				atrice	70		
ormal		3	40°C			- Index			
e						1/ *	50		
ormal		3	20°C -		/		ar29/2		
		3	00°C -		1.				
					1.	7		n	
		9/24 e ("U)	60°C -	1	****		1081		
		Mai		A		6	:00 -		
Characterist		emb.	40°C			5	00-		
s Chromatogra	iphy (GCD)	2	20°C			(Pd	00		
GCD 10%		2	00°C -			onse (
GCD 90%		1	80°C			dsa 3	00-		
			V III III						
		1	60°C -						
		1	40°C -			(assa)		N. III	
		1	0 0 0				000000	0 0 0	21 23 25 26 28
		24	0% 20% 30%	60% 50%	70%	909	-	Time (min)	AAAA
		Mar29,		r ercent Kecovered	I				
		5.							
20252.61	d						:	SOUTHERN ST	
	AÑAB	Sample No. Lab Number	: KT0000921	Rece		2 Apr 2024			RLESON BL
	ACCREDITED	i an Number	10613/015	Teste	a :12	2 Apr 2024		A	LVARADO, 1
	TESTING LABORATORY						aug Danat		
	Certificate L2367	Unique Number		Diagr	nosed : 12	Apr 2024 - D	oug Bogart		US 760 Itact: GEORO
	ticle Trend	ticle Trend 4µm 6µm 6µm 14µm ter (KF) re ormal cosity @ 40°C ormal cosity @ 40°C ormal cosity @ 40°C	cosity @ 40°C	Particles >38µm Particles >71µm Oil Cleanliness HEAVY METAL Aluminum Nickel Lead Vanadium Iron Calaium Magnesium Phosphorus Zinc SAMPLE IMAGI Color Enter (KF) Color Enter (KF) Enter (KF) Color Enter (KF) Color Enter (KF) Color Enter (KF) Enter (KF)	Particles >38µm Particles >71µm Oil Cleanliness HEAVY METALS Aluminum ppm Nickel ppm Lead ppm Vanadium ppm Calcium ppm Magnesium ppm Phosphorus ppm Zinc ppm Zinc ppm SAMPLE IMAGES Color Colo	Particles >38µm ASTM D7647 Particles >71µm ASTM D7647 Oil Cleanliness ISO 4406 (c) HEAVY METALS method Auminum ppm ASTM D5185m Nickel ppm ASTM D5185m Vanadium ppm ASTM D5185m Calcium ppm AS	Particles 38µm ASTM D7647 >4 Particles 38µm ASTM D7647 >4 ASTM D7647 >4 Particles 37µm ASTM D7647 >4 Particles 37µm ASTM D7647 >4 Dil Clealiness Liso 406 (c) >18/16/13 HEAVY METALS method limit/base Aluminum ppm ASTM D5185m <0.1 Nickel ppm ASTM D5185m <0.1 Lead ppm ASTM D5185m <0.1 Calcium ppm ASTM D5185m <0.1 Calcium ppm ASTM D5185m <0.1 Torn ppm ASTM D5185m <0.1 Phosphorus ppm ASTM D5185m <0.1 Zinc ppm	Particles >38µm Particles >37µm ASTM D7647 >4 3 Particles >30 Particles >71µm ASTM D7647 >4 3 Particles >71µm ASTM D7647 >4 3 Particles >71µm ASTM D7647 >4 2 0 0 1 1 1 HEAVY METALS method im// mathod im// Magnesium ppm ASTM D5185m 0.1 0 Calcium ppm ASTM D5185m 0.1 0 Calcium ppm ASTM D5185m 0.1 0 Calcium ppm ASTM D5185m 0.1 0 Calcium ppm ASTM D5185m 0.1 0 Calcium ppm ASTM D5185m 0.1 0 Calcium ppm ASTM D5185m 0.1 0 Calcium ppm ASTM D5185m 0.1 0 Calcium ppm ASTM D5185m 0.1 0 Color Color Fuel Distillation Curve Pensky-Marter and 0 Color Col	Particles >36µm ASTM 0767 >4 3 3 Particles >71µm OPT >4 3 3 Particles >71µm ASTM 0767 >4 3 0 Oil Cleantiness ISO 406 (c) >18/16/13 2 1/20/17 HEAVY METALS method limitbase current history1 Aluminum ppm ASTM 05168 -0.1 0 Lead ppm ASTM 05168 -0.1 0 Lead ppm ASTM 05168 -0.1 0 Calcium ppm ASTM 05168 -0.1 0 Calcium ppm ASTM 05168 -0.1 0 Tere (KF) SAMPLE IMAGES method limitbase current history1 Magnesium ppm ASTM 05168 -0.1 0 Zinc ppm ASTM 05168 -0.1 0 Zinc ppm ASTM 05168 -0.1 0 Particles >700 Color no image no image costly (@ 40°C

Report Id: SOUALVTX [WUSCAR] 06137015 (Generated: 04/12/2024 18:05:06) Rev: 1

Contact/Location: GEORGE ? - SOUALVTX Page 2 of 2