

FUEL REPORT

Sample Rating Trend

ISO

KIOTI CK2620H PA3TA2948

Diesel Fuel Fluid NOT GIVEN (--- 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.

				Nov2023		
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		KT0000671		
Sample Date		Client Info		17 Nov 2023		
Machine Age	hrs	Client Info		2		
Sample Status				ATTENTION		
PHYSICAL PROP	ERTIES	method	limit/base	current	history1	history2
Specific Gravity		*ASTM D1298		0.853		
Fuel Color	text	*Visual Screen		Red		
ASTM Color	scalar	*ASTM D1500		4.0		
Visc @ 40°C	cSt	ASTM D445		2.7		
Pensky-Martens Flash Point	°C	*PMCC Calculated		58		
SULFUR CONTE	NT	method	limit/base	current	history1	history2
Sulfur	ppm	ASTM D5185m		4		
Sulfur (UVF)	ppm	ASTM D5185III		4		
DISTILLATION	le le	mothod	limit/bass	ourront	historyd	history
	00	method	limit/base	current	history1	history2
Initial Boiling Point	°C	ASTM D86		162		
5% Distillation Point	°C	ASTM D86		187		
10% Distill Point	°C	ASTM D86		199		
15% Distillation Point	-	ASTM D86		210		
20% Distill Point	°C	ASTM D86		220		
30% Distill Point	°C	ASTM D86		2410		
40% Distill Point	°C	ASTM D86		256		
50% Distill Point	°C	ASTM D86		271		
60% Distill Point	°C	ASTM D86		285		
70% Distill Point	°C	ASTM D86		298		
80% Distill Point	°C	ASTM D86		312		
85% Distillation Point	°C	ASTM D86		321		
90% Distill Point	°C	ASTM D86		331		
95% Distillation Point	°C	ASTM D86		348		
Final Boiling Point	°C	ASTM D86		358		
Distillation Residue	%	ASTM D86		1.4		
Distillation Loss	%	ASTM D86		0.5		
IGNITION QUALIT	ΓY	method	limit/base	current	history1	history2
API Gravity		ASTM D7777		34.4		
Cetane Index		ASTM D4737	<40.0	45.2		
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	0.005		
ppm Water	ppm	ASTM D6304	<500	56		
% Gasoline	%	*In-House	<0.50	0.0		
% Biodiesel	%	*In-House	<20.0	0.0		
-			-			



🔺 Particle Count

491,520

FUEL REPORT

T²⁶

FLUID CLEANLINESS method limit/base current

,880 -	-24	Particles >4µm	A	STM D7647	>2500	13611		
,720 Severe	-22 8		A	STM D7647	>640	A 3895		
Abnormal	-20 40 -18 1999	Particles >14µm	A	STM D7647	>80	<u> </u>		
480-	-16 Ce	Particles >21µm	A	STM D7647	>20	<u> </u>		
120-	-14 1	Particles >38µm	A	STM D7647	>4	0		
30-	12 83	Particles >71µm	A	STM D7647	>3	0		
2-		Oil Cleanliness	15	SO 4406 (c)	>18/16/13	A 21/19/15		
0 4μ 6μ 14μ 2	1μ 38μ 71μ	HEAVY METALS	•	una a bla a al	limit/base		la la tament	history O
A Particle Trend	na se area en			method			history1	history2
^{14k} T		Aluminum			<0.1	0		
12k4μm 6μm		Nickel			<0.1	0		
10k		Lead		STM D5185m	<0.1	0		
8k		Vanadium			<0.1	0		
6k		Iron		STM D5185m	<0.1	0		
2k Abnormal		Calcium			<0.1	0		
0k		Magnesium		STM D5185m	<0.1	0		
Nov17/23	Nov17/23	Phosphorus		STM D5185m	<0.1	0		
Nov	Nov	Zinc	ppm A	STM D5185m	<0.1	0		
Water (KF)		SAMPLE IMAGE	S	method	limit/base	current	history1	history2
1200 - Severe		Color					no image	no image
600		Color					no image	no image
200 Abnormal		Bottom				(\bigcirc)	no image	no image
CZ/LIVoN	Nov17/23							
		GRAPHS	urvje	3 8	ç	Pensky-Marter	ns Flash Point (°C)
Viscosity @ 40°C		GRAPHS	urve			70	ns Flash Point (°C)
Viscosity @ 40°C		GRAPHS Fuel Distillation Co Sample 50°C 40°C 20°C	urve			70 50 50	ns Flash Point (
Viscosity @ 40°C		GRAPHS Fuel Distillation Cu Sorc Sample torc Corc Sample torc Corc Corc Corc Corc Corc Corc Corc C	urve			70	ns Flash Point (
Viscosity @ 40°C		GRAPHS Fuel Distillation Co Sample 10°C 20°C 30°C	urve	_		70 50 50	ns Flash Point (
Viscosity @ 40°C	0017/23	GRAPHS Fuel Distillation Cu Sorc Sample torc Corc Sample torc Corc Corc Corc Corc Corc Corc Corc C	urve	_		70 50 50 10	ns Flash Point (
Viscosity @ 40°C	Mov12/23 -	GRAPHS Fuel Distillation Co Sample 10°C 20°C 30°C	urve			70 50 50 10	ns Flash Point (
Viscosity @ 40°C	Ter Nov17/23	GRAPHS Fuel Distillation Cu Sample for C corc corc corc sor C	urve	_		70 50 50 10	ns Flash Point (
Viscosity @ 40°C	Ter Nov1723	GRAPHS Fuel Distillation Co Sorc Corc Sarce Sorce Corc Corc Corce	urve			70 50 50 10	ns Flash Point (
Viscosity @ 40°C	12 12 12 12 12 12 12 12 12 12 12 12 12 1	GRAPHS Fuel Distillation Cu Sample Sorc 20°C 30°C 30°C 30°C 40°C 20°C	urve			70 50 50 10	ns Flash Point (
Viscosity @ 40°C	12 Ten Nov1723	GRAPHS Fuel Distillation Co Sorc Corc Sorc Corc Corc Corc Corc Corc Corc Corc C	urve			70 50 50 10	ns Flash Point (
Viscosity @ 40°C	22 11 11	GRAPHS Fuel Distillation Cu Sample 0°C 2°C 0°C 0°C 0°C 0°C 0°C 0°C 0°C 0°C 0°C	urve			70 50 50 10	ns Flash Point (
Viscosity @ 40°C	2 2 1 1 1 1 1 1 1 1	GRAPHS Fuel Distillation Co Sample 10°C 20°C 30°C 30°C 40°C 20°C 40°C 40°C	urve			70 50 50 10	ns Flash Point (°C)
Viscosity @ 40°C	11 12 12 14 14 15 15 14 14 14 14 14 14 14 14 14 14 14 14 14	GRAPHS Fuel Distillation Cu Sample Or C Cor Cor Cor Cor Cor Cor Cor Cor Cor Cor				70 50 50 10	ns Flash Point (
Viscosity @ 40°C	60% 70% 90% 11 11 12 75 7 Ten Nov1723	GRAPHS Fuel Distillation Cu Sample OCC OCC OCC OCC OCC OCC OCC OCC OCC OC		70% 80%		70 50 50 10	ns Flash Point (
Viscosity @ 40°C	60% 70% 90% 11 11 12 75 7 Ten Nov1723	GRAPHS Fuel Distillation Cu Sample OCC OCC OCC OCC OCC OCC OCC OCC OCC OC	50% 60%	70%		70 50 50 10	ns Flash Point (
Viscosity @ 40°C	EZLINAN 400 400 400 400 400 400 400 40	GRAPHS Fuel Distillation Cu Sample Core Core Core Core Core Core Core Cor	ercent Received	n Ave., Ca : 22 M	ry, NC 2751 Nov 2023	70 50 50 50 50 50 50 50 50 50 50 50 50 50	COWLITZ RI 1540 IND	VER RIGGIN
Viscosity @ 40°C	EZZLION Laboratory Sample No. Lab Number	GRAPHS Fuel Distillation Cu Sample Core Core Core Core Core Core Core Cor	ercent Received 501 Madison Received Diagnosed	n Ave., Ca : 22 M : 13 [ry, NC 2751 Nov 2023 Dec 2023	70 50 50 50 50 50 50 50 50 50 50 50 50 50	COWLITZ RI 1540 IND	VER RIGGIN USTRIAL WA DNGVIEW, W
Viscosity @ 40°C	Laboratory Sample No. Lab Number Unique Number Test Package	GRAPHS Fuel Distillation Cu Sample Core Core Core Core Core Core Core Cor	ercent Received Diagnosed Diagnosed Diagnostici ests: Screer	n Ave., Ca : 22 N : 13 I ian : Dou 1)	ry, NC 2751 Nov 2023 Dec 2023 Ig Bogart	70 50 50 50 50 50 50 50 50 50 50 50 50 50	COWLITZ RI 1540 IND LC Cor	VER RIGGIN USTRIAL WA DNGVIEW, W US 9863 ntact: GARRE
Viscosity @ 40°C	EZLINAN 400 400 400 400 400 400 400 40	GRAPHS Fuel Distillation Cu Sample Core Core Core Core Core Core Core Cor	seceived Diagnosed Diagnosetic ests: Screer rice at 1-800	n Ave., Ca : 22 M : 13 [ian : Dou 1))-237-1369	ry, NC 2751 Nov 2023 Dec 2023 Ig Bogart	70 50 50 50 50 50 50 50 50 50 50 50 50 50	COWLITZ RI 1540 IND LC garret@logg	VER RIGGIN

Contact/Location: GARRET ? - COWLON

history1 history2