

FUEL REPORT

Sample Rating Trend

NORMAL

KIOTI CS2520 XY8800352

Diesel Fuel Fluid NOT GIVEN (--- GAL)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. 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 moderate 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.

				Aug2023		
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		KT0000684		
Sample Date		Client Info		24 Aug 2023		
Machine Age	hrs	Client Info		107		
Sample Status				NORMAL		
PHYSICAL PROP	ERTIES	method	limit/base	current	history1	history2
Specific Gravity		*ASTM D1298		0.841		
Fuel Color	text	*Visual Screen		Orang		
ASTM Color	scalar	*ASTM D1500		L3.5		
Visc @ 40°C	cSt	ASTM D445		2.46		
Pensky-Martens Flash Point	°C	*PMCC Calculated		58		
SULFUR CONTEI	NT	method	limit/base	current	history1	history2
Sulfur	ppm	ASTM D5185m		0		
Sulfur (UVF)	ppm	ASTM D5453		8		
. ,	la la		11 1.4			
DISTILLATION		method	limit/base	current	history1	history2
Initial Boiling Point	°C	ASTM D86		161		
5% Distillation Point	°C	ASTM D86		191		
10% Distill Point	°C	ASTM D86		203		
15% Distillation Point	°C	ASTM D86		213		
20% Distill Point	°C	ASTM D86		221		
30% Distill Point	°C	ASTM D86		235		
40% Distill Point	°C	ASTM D86		249		
50% Distill Point	°C	ASTM D86		262		
60% Distill Point	°C	ASTM D86		275		
70% Distill Point	°C	ASTM D86		290		
80% Distill Point	°C	ASTM D86		305		
85% Distillation Point	°C	ASTM D86		314		
90% Distill Point	°C	ASTM D86		324		
95% Distillation Point	°C	ASTM D86		339		
Final Boiling Point	°C	ASTM D86		348		
Distillation Residue	%	ASTM D86		1.4		
Distillation Loss	%	ASTM D86		0.7		
IGNITION QUALI	ΓY	method	limit/base	current	history1	history2
API Gravity		ASTM D7777		36.8		
Cetane Index		ASTM D4737	<40.0	48.3		
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	<1.0	<1		
Sodium	ppm	ASTM D5185m	<0.1	<1		
Potassium	ppm	ASTM D5185m	<0.1	2		
Water	%	ASTM D6304	<0.05	0.007		
ppm Water	ppm	ASTM D6304	<500	78.9		
% Gasoline	%	*In-House	<0.50	0.0		
% Biodiesel	%	*In-House	<20.0	2.5		



FUEL REPORT

Particle Count	FLUID CLEAN	ILINESS	method	limit/base	current	history1	
+	⁻²⁴ _ Particles >4µm		ASTM D7647	>2500	2710		-
levere	Particles >6μm		ASTM D7647		1017		
bnormal	²²² Particles >6μm Particles >14μm 16 ²⁰ Particles >21μm Particles >21μm Particles >38μm		ASTM D7647		150		-
	Particles >21µm		ASTM D7647		51		
	Particles >38µm		ASTM D7647	>4	1		-
	Particles >71µm		ASTM D7647	>3	0		
	-8 Oil Cleanliness		ISO 4406 (c)		19/17/14		
6μ 14μ 21μ 38μ	16 71μ HEAVY META	ALS	method	limit/base	current	history1	
ter	Aluminum	ppm	ASTM D5185m	<0.1	0		
re	Nickel	ppm	ASTM D5185m	<0.1	0		
	Lead	ppm	ASTM D5185m	<0.1	<1		
	Vanadium	ppm	ASTM D5185m	<0.1	<1		
mal	Iron	ppm	ASTM D5185m	<0.1	0		
	Calcium	ppm	ASTM D5185m	<0.1	0		
	Magnesium	ppm	ASTM D5185m	<0.1	6		
	Phosphorus Zinc	ppm	ASTM D5185m	<0.1	7		
	Zinc Zinc	ppm	ASTM D5185m	<0.1	11		
osity @ 40°C	SAMPLE IMA	GES	method	limit/base	current	history1	
normal	Color					no image	n
na	Bottom					no image	n
	GRAPHS						
article Trend	Fuel Distillation	n Curve		ې ⁷	Pensky-Marte	ns Flash Point	(°C)
onomar 4μm 6μm	50°C - Sample			ftrire C			
14μm					0		
	+0°C -						
	20°C		/	· · · · ·	Aug24/23		
)0°C -		/		Aut		
	30°C		/				
	24/23 2,1/23	/					
	Aug						
Distillation Curve	25 10°C						
Distillation Curve	220°C						
	200°C						
	180°C						
****	160°C •						
	140°C						
	120°C	2º 2º 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3 ⁰ 3 ⁰			
10% - 20% - 50% - 60% - 70% - 70% -	90% 90% 10% 20%	Percent Recover		90% 100%			
Percent Recovered		T should from Volt	5.E.				
	oratory : WearCheck US					NOLTS POWE	
	ple No. : KT0000684	Receive	ed : 28 /	Aug 2023		3720 SHERMA	

: 05936876

To discuss this sample report, contact Customer Service at 1-800-237-1369.

Test Package : DF-2 (Additional Tests: Screen)

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Diagnosed

: 04 Sep 2023

Diagnostician : Doug Bogart

Lab Number

Unique Number : 10622147

ER EQUIPMENT 3720 SHERMANS VALLEY RD LOYSVILLE, PA US 17047 Contact: DELBERT delbert@perrypower.com T: (717)789-3532 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F:

no image

no image

Aug24/23

Certificate L2367

Contact/Location: DELBERT ? - NOLLOY