

FUEL REPORT

Sample Rating Trend

WATER

CORESITE-RESTON-UST4

Bottom Diesel Fuel Fluid DIESEL FUEL No. 2 (--- GAL)

DIAGNOSIS

A Recommendation

We advise that you follow the water drain-off procedure for this component, and use off-line filtration to improve the cleanliness of the system fluid.

Corrosion

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

Contaminants

Moderate concentration of visible dirt/debris present in the fuel. There is a moderate amount of visible silt present in the sample. Free water present. There is no bacteria or fungus (yeast and/or mold) present in the sample.

Fuel Condition

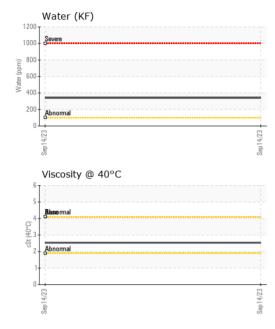
Sulfur value derived by ASTM D5453 method for ULSD validation.

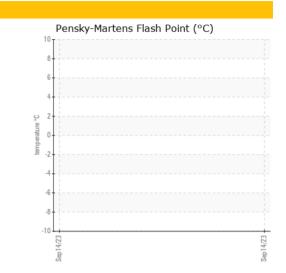
				Sep2023		
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0787066		
Sample Date		Client Info		14 Sep 2023		
Machine Age	hrs	Client Info		0		
Sample Status				ABNORMAL		
PHYSICAL PROP	ERTIES	method	limit/base	current	history1	history2
ASTM Color	scalar	*ASTM D1500		L4.5		
Visc @ 40°C	cSt	ASTM D445	4.1	2.53		
SULFUR CONTER	NT	method	limit/base	current	history1	history2
Sulfur	ppm	ASTM D5185m		620		
Sulfur (UVF)	ppm	ASTM D5453		457		
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	0.034		
ppm Water	ppm	ASTM D6304	<500	340.1		
% Gasoline	%	*In-House	<0.50	0.0		
% Biodiesel	%	*In-House	<20.0	0.0		
MICROBIAL		method	limit/base	current	history1	history2
Bacteria	CFU/ml	WC-Method	>=100000	0		
Yeast	CFU/ml	WC-Method	>=100000	0		
Mold	Colonies	WC-Method	MODER			
HEAVY METALS		method	limit/base	current	history1	history2
Aluminum	ppm	ASTM D5185m	<0.1	0		
Nickel	ppm	ASTM D5185m	<0.1	0		
Lead	ppm	ASTM D5185m	<0.1	0		
Vanadium	ppm	ASTM D5185m	<0.1	0		
Iron	ppm	ASTM D5185m	<0.1	0		
Calcium	ppm	ASTM D5185m	<0.1	1		
Magnesium	ppm	ASTM D5185m	<0.1	2		
Phosphorus	ppm	ASTM D5185m		1		
Zinc	ppm	ASTM D5185m	<0.1	0		
SAMPLE IMAGES	6	method	limit/base	current	history1	history2
Color					no image	no image
Bottom					no image	no image



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GRAPHS





E14303230563.E1	d	Laboratory	: WearCheck USA	- 501 Madison Av	VITAL FUEL SYSTEMS			
	ANAB	Sample No.	: WC0787066	Received	: 22 Sep 2023	1076 CLASSIC RD		
	ACCREDITED	Lab Number	: 05958877	Diagnosed	: 03 Oct 2023	APEX, NC		
	TESTING LABORATORY	Unique Number	: 10660090	Diagnostician	: Doug Bogart	US 27539		
	Certificate L2367	Test Package	Contact: JOHN MORREALE					
	To discuss th	jmorreale@vitalfuelsystems.com						
	* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (919)629-8180							
	Statements of	conformity to speci	ifications are based o	n the simple accep	tance decision rule (JCGM 106.	<i>2012)</i> F: (919)303-7399		

Contact/Location: JOHN MORREALE - VITAPE