

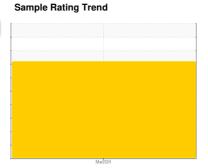
FUEL REPORT



Machine Id
NEW FLYER NEW FLYER XCELSIOR - MBTA EVERETT
Component

Diesel Fuel

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





DIAGNOSIS

Recommendation

We advise that you check for the source of the coolant leak. Recommend drain fuel if not already done and flush before refilling with fuel. We were unable to perform a particle count due to a high concentration of particles present in this sample. Please note that the fuel was too contaminated to perform some of the normal laboratory tests.

Corrosion

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

Contaminants

Sample consists almost entirely of free water. (coolant) There is a high concentration of glycol present in the fuel. Moderate concentration of visible dirt/debris present in the fuel. Bacteria and/or fungus (yeast and/or mold) present in the sample.

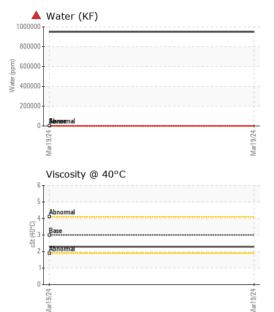
Fuel Condition

The fuel is no longer serviceable due to the presence of contaminants. Sulfur value derived by ASTM D5453 method for ULSD validation. Sulfur level is acceptable for ULSD specification.

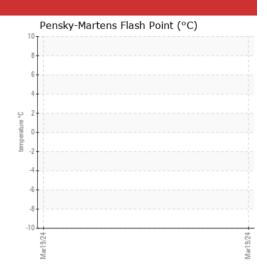
ALOW SULPHUR) (-	GAL)	<u>-</u>		Mar2024		
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		AOL06136731		
Sample Date		Client Info		19 Mar 2024		
Machine Age	mls	Client Info		0		
Sample Status				SEVERE		
PHYSICAL PROP	ERTIES	method	limit/base	current	history1	history2
Fuel Color	text	*Visual Screen	Yllow	Red		
Visc @ 40°C	cSt	ASTM D445	3.0	2.29		
SULFUR CONTE	NΤ	method	limit/base	current	history1	history2
Sulfur	ppm	ASTM D5185m	10	0		
Sulfur (UVF)	ppm	ASTM D5453		9		
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	0		
Water	%	ASTM D6304	< 0.05	4 95.0		
ppm Water	ppm	ASTM D6304	< 500	4 950000		
% Gasoline	%	*In-House	< 0.50	0.0		
% Biodiesel	%	*In-House	<20.0	1.5		
MICROBIAL		method	limit/base	current	history1	history2
Bacteria	CFU/ml	WC-Method	>=100000	0		
Yeast	CFU/ml	WC-Method	>=100000	<u> </u>		
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		
Magnesium	ppm	ASTM D5185m	<0.1	0		
Phosphorus	ppm	ASTM D5185m ASTM D5185m		0		
Zinc	ppm					
SAMPLE IMAGES	5	method	limit/base	current	history1	history2
Color					no image	no image
Bottom					no image	no image

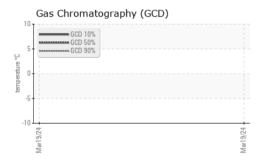


FUEL REPORT











Certificate 12367

Laboratory

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No.

: AOL06136731 Lab Number : 06136731 Unique Number : 10956196

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

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

Received **Tested** Diagnosed

: 02 Apr 2024 : 09 Apr 2024

: 09 Apr 2024 - Doug Bogart Test Package : DF-1 (Additional Tests: Bacteria, Fuel, Screen)

GRAND RAPIDS, MI US 49512 Contact: JASON RAINEY jrainey@apexoillab.com T: (616)328-6672

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) Report Id: APEGRA [WUSCAR] 06136731 (Generated: 04/09/2024 16:17:37) Rev: 1

Contact/Location: JASON RAINEY - APEGRA

F: (616)828-1791

APEX OIL LAB

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