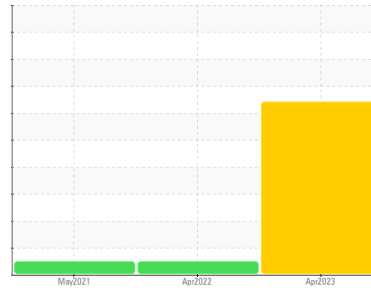




FUEL REPORT

Sample Rating Trend



CONTAMINANT



Area
[W103954]
 Machine Id
5DA03835
 Component
Diesel Fuel
 Fluid
DIESSEL FUEL No. 1 (--- GAL)

DIAGNOSIS

Recommendation
 We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. We recommend you service and check the fuel filters for mucous-like deposits. Check with fuel supplier for biocides available to destroy the microorganisms in the fuel system.

Corrosion
 The iron level is abnormal.

Contaminants
 Appearance is hazy. There is a light concentration of water present in the fuel. There is a high amount of visible silt present in the sample. High concentration of visible dirt/debris present in the fuel. There is a light concentration of Bacteria, Yeast and Fungus present in the sample.

Fuel Condition
 Sulfur value derived by ASTM D5453 method for ULSD validation.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			WC0711891	WC0633710	WCDF03238
Sample Date	Client Info			14 Apr 2023	20 Apr 2022	06 May 2021
Machine Age	hrs	Client Info		0	0	0
Sample Status				ABNORMAL	NORMAL	NORMAL

PHYSICAL PROPERTIES		method	limit/base	current	history1	history2
ASTM Color	scalar	*ASTM D1500		L6.5	L4.5	L5.0
Visc @ 40°C	cSt	ASTM D445	2.4	2.46	2.46	2.52

SULFUR CONTENT		method	limit/base	current	history1	history2
Sulfur	ppm	ASTM D5185m		0	118	346
Sulfur (UVF)	ppm	ASTM D5453		161	142	242

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	<1.0	0	0	0
Sodium	ppm	ASTM D5185m	<0.1	0	0	0
Potassium	ppm	ASTM D5185m	<0.1	0	0	0
Water	%	ASTM D6304	<0.05	▲ 0.302	0.003	0.003
ppm Water	ppm	ASTM D6304	<500	▲ 3021.0	33.0	38.7
% Gasoline	%	*In-House	<0.50	0.0	0.0	0.0
% Biodiesel	%	*In-House	<20.0	1.1	0.0	1.1

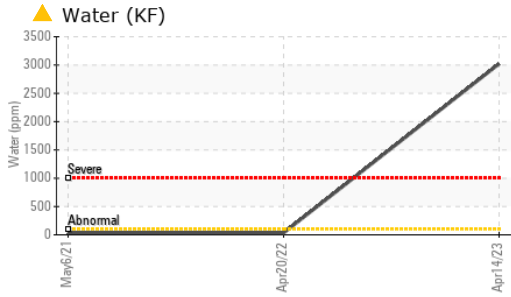
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>2500	---	3008	---
Particles >6µm		ASTM D7647	>640	---	1018	---
Particles >14µm		ASTM D7647	>80	---	94	---
Particles >21µm		ASTM D7647	>20	---	23	---
Particles >38µm		ASTM D7647	>4	---	2	---
Particles >71µm		ASTM D7647	>3	---	0	---
Oil Cleanliness		ISO 4406 (c)	>18/16/13	---	19/17/14	---

MICROBIAL		method	limit/base	current	history1	history2
Bacteria	CFU/ml	WC-Method	>=100000	0	---	---
Yeast	CFU/ml	WC-Method	>=100000	▲ 10	---	---
Mold	Colonies	WC-Method	MODER	---	---	---

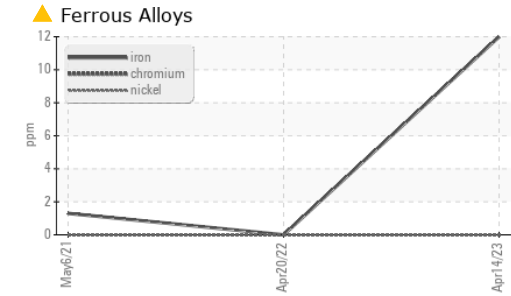
HEAVY METALS		method	limit/base	current	history1	history2
Aluminum	ppm	ASTM D5185m	<0.1	0	0	<1
Nickel	ppm	ASTM D5185m	<0.1	0	0	0
Lead	ppm	ASTM D5185m	<0.1	0	0	0
Vanadium	ppm	ASTM D5185m	<0.1	0	0	0
Iron	ppm	ASTM D5185m	<0.1	▲ 12	0	1
Calcium	ppm	ASTM D5185m	<0.1	0	0	0
Magnesium	ppm	ASTM D5185m	<0.1	0	0	<1
Phosphorus	ppm	ASTM D5185m	<0.1	0	0	0
Zinc	ppm	ASTM D5185m	<0.1	0	0	3



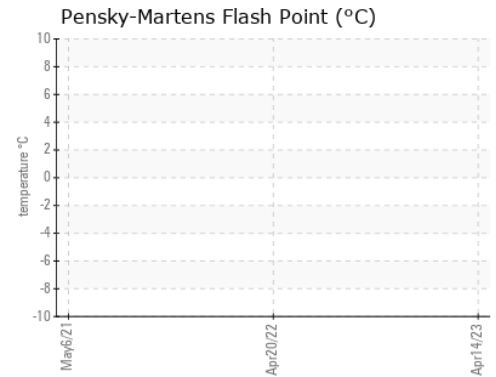
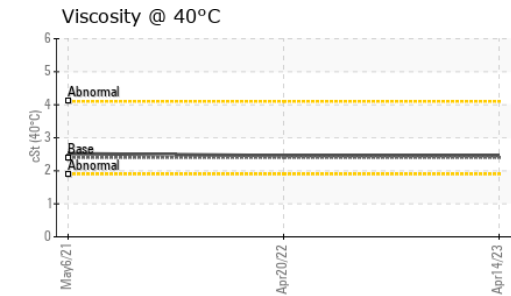
FUEL REPORT



SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					



GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0711891 **Received** : 01 May 2023
Lab Number : **05834341** **Diagnosed** : 12 May 2023
Unique Number : 10453144 **Diagnostician** : Doug Bogart
Test Package : DF-5 (Additional Tests: BACTERIA, Screen)

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.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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