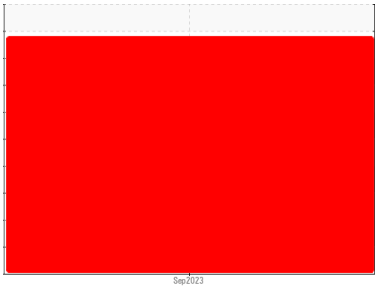
FUEL REPORT

Sample Rating Trend



CONTAMINANT

Machine Id
ASCENT K2
Component
Diesel Fuel
Fluid
DIESEL 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 advise an early resample to confirm this situation. We were unable to perform a particle count due to a high concentration of particles present in this sample.

Corrosion
The iron level is abnormal.

Contaminants
Appearance is unacceptable. High concentration of visible dirt/debris present in the fuel. There is a high amount of visible silt present in the sample. There is a light concentration of water present in the fuel. 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.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC0798131**	---	---
Sample Date		Client Info		**28 Sep 2023**	---	---
Machine Age	hrs	Client Info		**0**	---	---
Sample Status				**SEVERE**	---	---

PHYSICAL PROPERTIES		method	limit/base	current	history1	history2
Specific Gravity		*ASTM D1298		**0.851**	---	---
Fuel Color	text	*Visual Screen		**Red**	---	---
ASTM Color	scalar	*ASTM D1500		**L7.0**	---	---
Visc @ 40°C	cSt	ASTM D445	2.4	**2.62**	---	---
Pensky-Martens Flash Point	°C	*PMCC Calculated		**60**	---	---

SULFUR CONTENT		method	limit/base	current	history1	history2
Sulfur	ppm	ASTM D5185m		**618**	---	---
Sulfur (UVF)	ppm	ASTM D5453		**553**	---	---

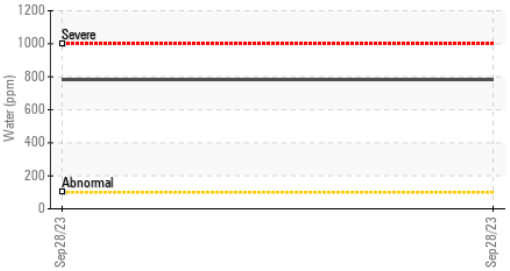
DISTILLATION		method	limit/base	current	history1	history2
Initial Boiling Point	°C	ASTM D86		**167**	---	---
5% Distillation Point	°C	ASTM D86		**196**	---	---
10% Distill Point	°C	ASTM D86		**208**	---	---
15% Distillation Point	°C	ASTM D86		**216**	---	---
20% Distill Point	°C	ASTM D86		**224**	---	---
30% Distill Point	°C	ASTM D86		**238**	---	---
40% Distill Point	°C	ASTM D86		**252**	---	---
50% Distill Point	°C	ASTM D86		**265**	---	---
60% Distill Point	°C	ASTM D86		**278**	---	---
70% Distill Point	°C	ASTM D86		**292**	---	---
80% Distill Point	°C	ASTM D86		**306**	---	---
85% Distillation Point	°C	ASTM D86		**315**	---	---
90% Distill Point	°C	ASTM D86		**326**	---	---
95% Distillation Point	°C	ASTM D86		**341**	---	---
Final Boiling Point	°C	ASTM D86		**349**	---	---
Distillation Residue	%	ASTM D86		**1.4**	---	---
Distillation Loss	%	ASTM D86		**0.5**	---	---

IGNITION QUALITY		method	limit/base	current	history1	history2
API Gravity		ASTM D7777		**34.8**	---	---
Cetane Index		ASTM D4737	<40.0	**43.4**	---	---

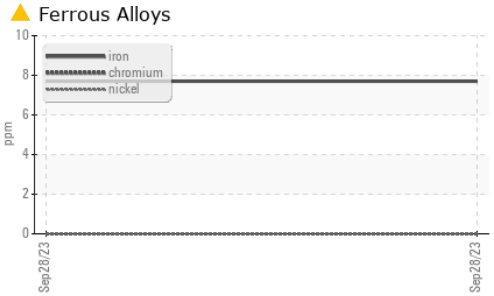
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	<1.0	**0**	---	---
Sodium	ppm	ASTM D5185m	<0.1	**0**	---	---
Potassium	ppm	ASTM D5185m	<0.1	**0**	---	---
Water	%	ASTM D6304	<0.05	▲ **0.078**	---	---
ppm Water	ppm	ASTM D6304	<500	▲ **783.3**	---	---
% Gasoline	%	*In-House	<0.50	**0.0**	---	---
% Biodiesel	%	*In-House	<20.0	**1.2**	---	---

FUEL REPORT

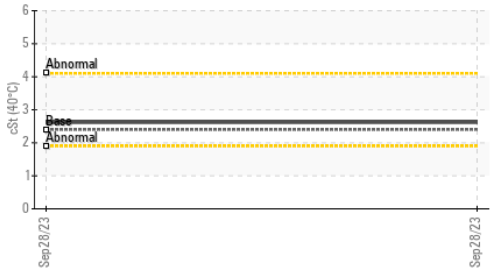
Water (KF)



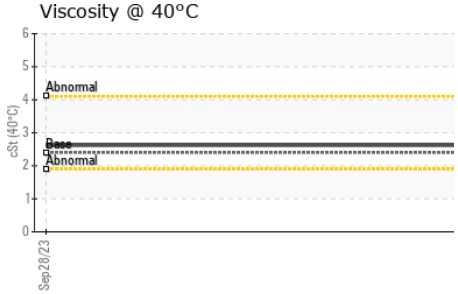
Ferrous Alloys



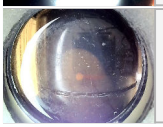
Viscosity @ 40°C



Viscosity @ 40°C

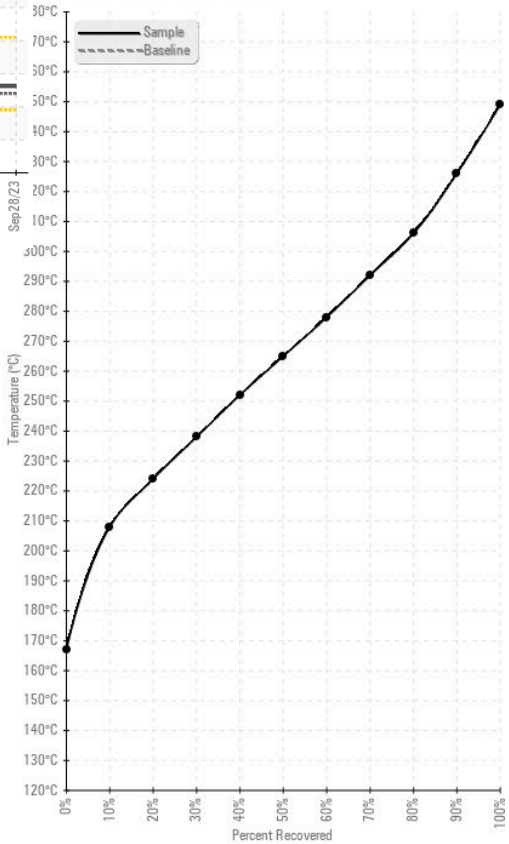


HEAVY METALS		method	limit/base	current	history1	history2
Aluminum	ppm	ASTM D5185m	<0.1	0	---	---
Nickel	ppm	ASTM D5185m	<0.1	0	---	---
Lead	ppm	ASTM D5185m	<0.1	0	---	---
Vanadium	ppm	ASTM D5185m	<0.1	0	---	---
Iron	ppm	ASTM D5185m	<0.1	▲ 8	---	---
Calcium	ppm	ASTM D5185m	<0.1	0	---	---
Magnesium	ppm	ASTM D5185m	<0.1	3	---	---
Phosphorus	ppm	ASTM D5185m	<0.1	4	---	---
Zinc	ppm	ASTM D5185m	<0.1	0	---	---

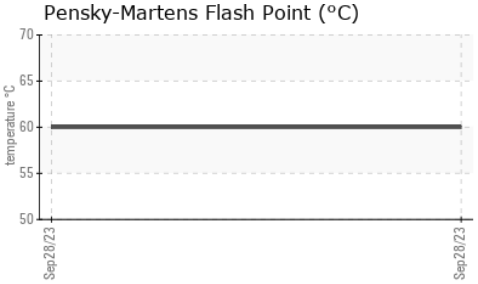
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color				no image	no image
Bottom				no image	no image

GRAPHS

Fuel Distillation Curve



Pensky-Martens Flash Point (°C)



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0798131 **Received** : 29 Sep 2023
Lab Number : 05965852 **Diagnosed** : 09 Oct 2023
Unique Number : 10672403 **Diagnostician** : Doug Bogart
Test Package : DF-2 (Additional Tests: 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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