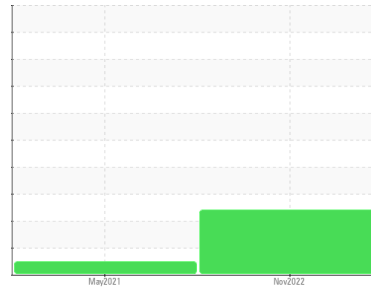




FUEL REPORT

Sample Rating Trend



VISUAL METAL



Machine Id
USF BYRD
 Component
Diesel Fuel
 Fluid
OFF-ROAD (6000 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 that you inspect for the source(s) of rust.

Corrosion

Moderate concentration of visible metal present as rust.

Contaminants

Appearance is hazy. High concentration of visible dirt/debris present in the fuel.

Fuel Condition

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

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			WCDF05057	WCDF02689	---
Sample Date	Client Info			06 Nov 2022	13 May 2021	---
Machine Age	mls	Client Info		0	0	---
Sample Status				ABNORMAL	NORMAL	---

PHYSICAL PROPERTIES		method	limit/base	current	history1	history2
Specific Gravity		*ASTM D1298		0.841	0.841	---
Fuel Color	text	*Visual Screen		Red	Red	---
ASTM Color	scalar	*ASTM D1500		L5.5	L5.0	---
Visc @ 40°C	cSt	ASTM D445		2.46	2.46	---
Pensky-Martens Flash Point	°C	*PMCC Calculated		65	63	---
Cloud Point	°C	ASTM D5771		-14	-14	---

SULFUR CONTENT		method	limit/base	current	history1	history2
Sulfur	ppm	ASTM D5185m		0	512	---
Sulfur (UVF)	ppm	ASTM D5453		536	520	---

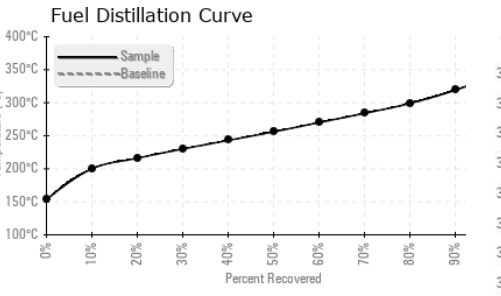
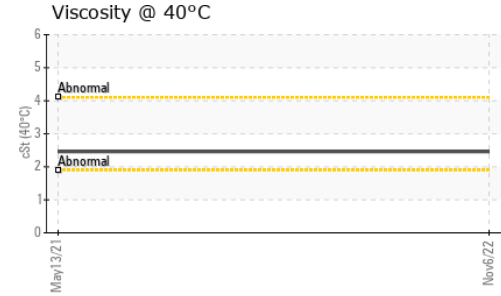
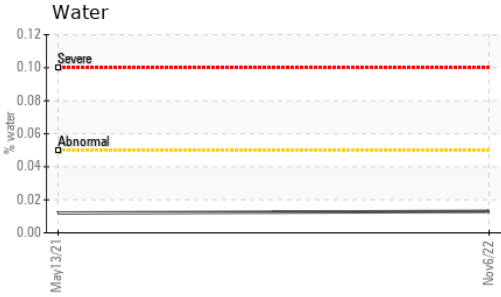
DISTILLATION		method	limit/base	current	history1	history2
Initial Boiling Point	°C	ASTM D86		153	158	---
5% Distillation Point	°C	ASTM D86		189	193	---
10% Distill Point	°C	ASTM D86		200	202	---
15% Distillation Point	°C	ASTM D86		208	209	---
20% Distill Point	°C	ASTM D86		216	216	---
30% Distill Point	°C	ASTM D86		230	229	---
40% Distill Point	°C	ASTM D86		243	242	---
50% Distill Point	°C	ASTM D86		256	255	---
60% Distill Point	°C	ASTM D86		270	269	---
70% Distill Point	°C	ASTM D86		284	283	---
80% Distill Point	°C	ASTM D86		299	299	---
85% Distillation Point	°C	ASTM D86		308	308	---
90% Distill Point	°C	ASTM D86		319	319	---
95% Distillation Point	°C	ASTM D86		335	337	---
Final Boiling Point	°C	ASTM D86		344	345	---
Distillation Residue	%	ASTM D86		1.4	1.4	---
Distillation Loss	%	ASTM D86		0.2	0.4	---

IGNITION QUALITY		method	limit/base	current	history1	history2
API Gravity		ASTM D7777		36.8	36.8	---
Cetane Index		ASTM D4737	<40.0	44.8	47.3	---



CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	<1.0	0	0	---
Sodium	ppm	ASTM D5185m	<0.1	0	0	---
Potassium	ppm	ASTM D5185m	<0.1	0	0	---
Water	%	ASTM D6304	<0.05	0.013	0.012	---
ppm Water	ppm	ASTM D6304	<500	130.8	125.3	---
% Gasoline	%	*In-House	<0.50	0.0	0.0	---
% Biodiesel	%	*In-House	<20.0	0.0	0.0	---



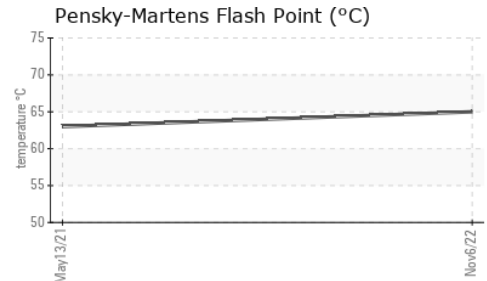
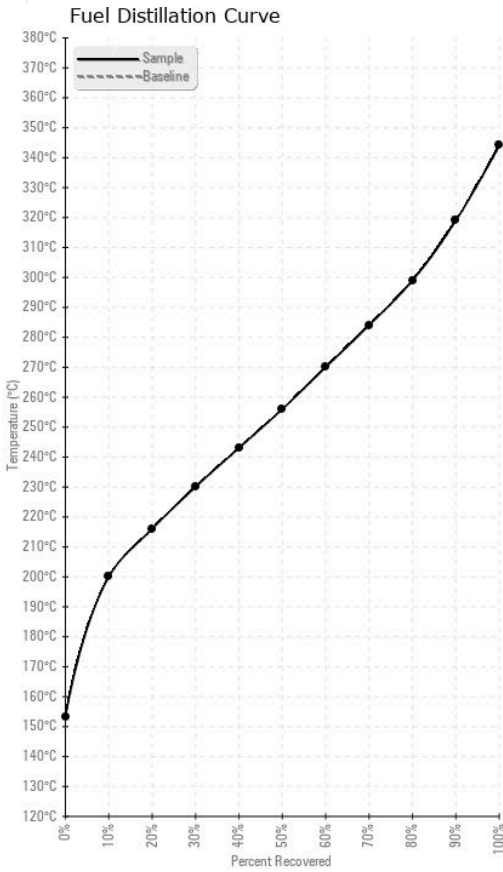
FUEL REPORT



HEAVY METALS		method	limit/base	current	history1	history2
Aluminum	ppm	ASTM D5185m	<0.1	<1	0	---
Nickel	ppm	ASTM D5185m	<0.1	0	0	---
Lead	ppm	ASTM D5185m	<0.1	0	<1	---
Vanadium	ppm	ASTM D5185m	<0.1	0	0	---
Iron	ppm	ASTM D5185m	<0.1	<1	<1	---
Calcium	ppm	ASTM D5185m	<0.1	0	0	---
Magnesium	ppm	ASTM D5185m	<0.1	<1	0	---
Phosphorus	ppm	ASTM D5185m	<0.1	0	2	---
Zinc	ppm	ASTM D5185m	<0.1	0	0	---

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

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WCDF05057 **Received** : 14 Dec 2022
Lab Number : 05717748 **Diagnosed** : 22 Dec 2022
Unique Number : 10257324 **Diagnostician** : Doug Bogart
Test Package : DF-2 (Additional Tests: CldPt, Screen)

TANK WIZARDS
 1511 MASTERS RD NW
 PALM BAY, FL
 US 32907
 Contact: WENDALL STRODERD
 wendall@tankwizards.com
 T: (321)427-5149
 F: (321)574-4131

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)