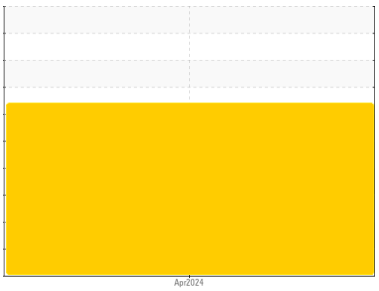
FUEL REPORT

Sample Rating Trend



CONTAMINANT

Machine Id
683965
Component
Diesel Fuel
Fluid
DIESEL FUEL No. 1 (--- GAL)

DIAGNOSIS

▲ Recommendation
Recommend drain fuel if not already done and flush before refilling with fuel.

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

▲ Contaminants
There is a high amount of gasoline present in the fuel. Tests confirm the presence of gasoline in the fuel. There is no bacteria or fungus (yeast and/or mold) indicated in the sample.

▲ Fuel Condition
Gasoline is present in the fuel and is lowering the viscosity. 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.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**RY0123419**	---	---
Sample Date		Client Info		**04 Apr 2024**	---	---
Machine Age	mls	Client Info		**0**	---	---
Sample Status				**SEVERE**	---	---

PHYSICAL PROPERTIES		method	limit/base	current	history1	history2
Specific Gravity		*ASTM D1298		**0.831**	---	---
Fuel Color	text	*Visual Screen		**YIlow**	---	---
ASTM Color	scalar	*ASTM D1500		**L3.0**	---	---
Visc @ 40°C	cSt	ASTM D445	2.4	▲ **1.76**	---	---

SULFUR CONTENT		method	limit/base	current	history1	history2
Sulfur	ppm	ASTM D5185m		**0**	---	---
Sulfur (UVF)	ppm	ASTM D5453		**8**	---	---

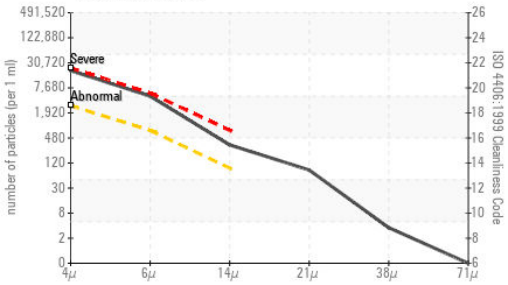
DISTILLATION		method	limit/base	current	history1	history2
Initial Boiling Point	°C	ASTM D86		▲ **55**	---	---
5% Distillation Point	°C	ASTM D86		**121**	---	---
10% Distill Point	°C	ASTM D86		**161**	---	---
15% Distillation Point	°C	ASTM D86		**182**	---	---
20% Distill Point	°C	ASTM D86		**195**	---	---
30% Distill Point	°C	ASTM D86		**215**	---	---
40% Distill Point	°C	ASTM D86		**232**	---	---
50% Distill Point	°C	ASTM D86		**248**	---	---
60% Distill Point	°C	ASTM D86		**265**	---	---
70% Distill Point	°C	ASTM D86		**283**	---	---
80% Distill Point	°C	ASTM D86		**303**	---	---
85% Distillation Point	°C	ASTM D86		**315**	---	---
90% Distill Point	°C	ASTM D86		**332**	---	---
95% Distillation Point	°C	ASTM D86		**343**	---	---
Final Boiling Point	°C	ASTM D86		**352**	---	---
Distillation Residue	%	ASTM D86		▲ **1.4**	---	---
Distillation Loss	%	ASTM D86		**3.6**	---	---

IGNITION QUALITY		method	limit/base	current	history1	history2
API Gravity		ASTM D7777		**38.8**	---	---
Cetane Index		ASTM D4737	<40.0	**47.4**	---	---

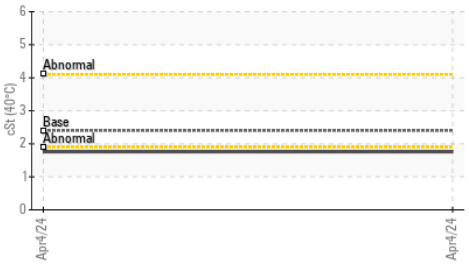
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	<1.0	**0**	---	---
Sodium	ppm	ASTM D5185m	<0.1	**0**	---	---
Potassium	ppm	ASTM D5185m	<0.1	**<1**	---	---
Water	%	ASTM D6304	<0.05	**0.008**	---	---
ppm Water	ppm	ASTM D6304	<500	**88**	---	---
% Gasoline	%	*In-House	<0.50	▲ **10.8**	---	---
% Biodiesel	%	*In-House	<20.0	**0.0**	---	---

FUEL REPORT

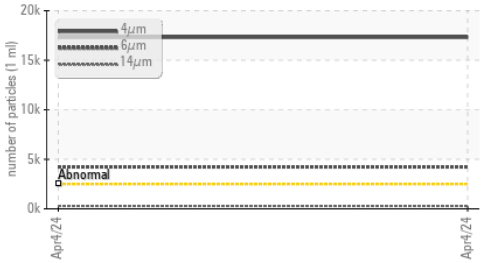
Particle Count



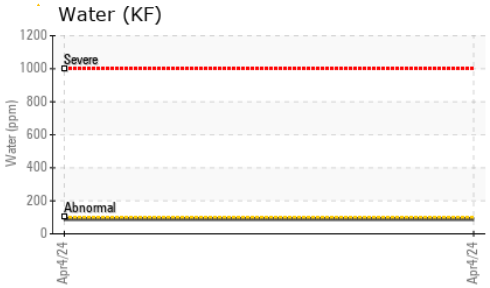
Viscosity @ 40°C



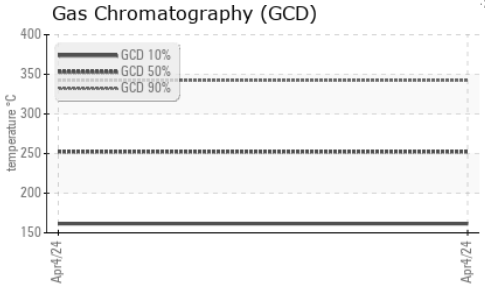
Particle Trend



Water (KF)

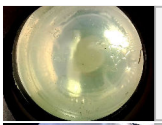
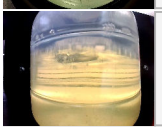


Gas Chromatography (GCD)



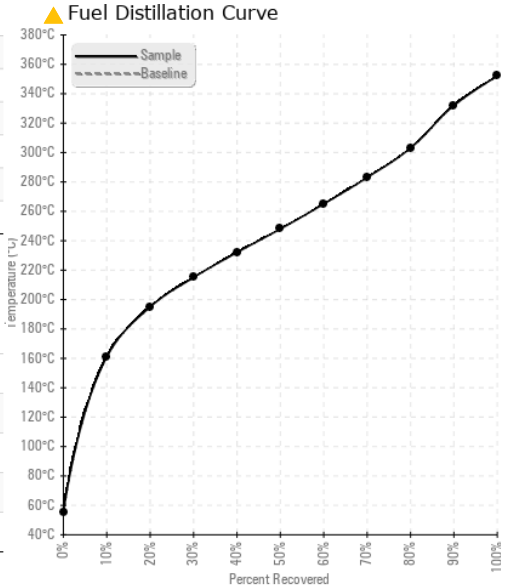
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>2500	▲ **17315**	---	---
Particles >6µm		ASTM D7647	>640	▲ **4231**	---	---
Particles >14µm		ASTM D7647	>80	▲ **288**	---	---
Particles >21µm		ASTM D7647	>20	▲ **72**	---	---
Particles >38µm		ASTM D7647	>4	**3**	---	---
Particles >71µm		ASTM D7647	>3	**0**	---	---
Oil Cleanliness		ISO 4406 (c)	>18/16/13	▲ **21/19/15**	---	---

HEAVY METALS		method	limit/base	current	history1	history2
Aluminum	ppm	ASTM D5185m	<0.1	**1**	---	---
Nickel	ppm	ASTM D5185m	<0.1	**<1**	---	---
Lead	ppm	ASTM D5185m	<0.1	**1**	---	---
Vanadium	ppm	ASTM D5185m	<0.1	**<1**	---	---
Iron	ppm	ASTM D5185m	<0.1	**<1**	---	---
Calcium	ppm	ASTM D5185m	<0.1	**5**	---	---
Magnesium	ppm	ASTM D5185m	<0.1	**<1**	---	---
Phosphorus	ppm	ASTM D5185m	<0.1	**2**	---	---
Zinc	ppm	ASTM D5185m	<0.1	**0**	---	---

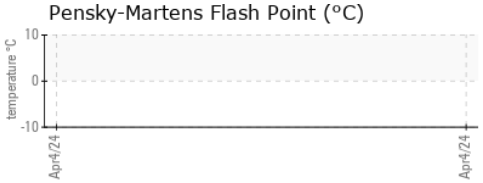
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color				*no image*	*no image*
Bottom				*no image*	*no image*

GRAPHS

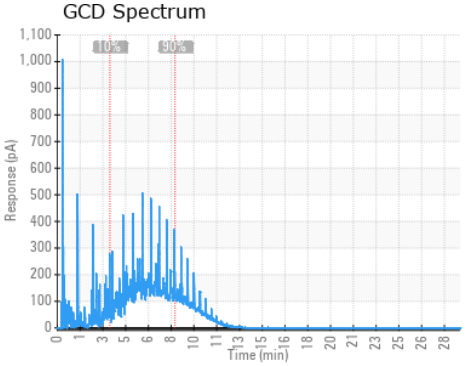
Fuel Distillation Curve



Pensky-Martens Flash Point (°C)



GCD Spectrum



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RY0123419 **Received** : 11 Apr 2024
Lab Number : 06146289 **Tested** : 23 Apr 2024
Unique Number : 10976367 **Diagnosed** : 23 Apr 2024 - Doug Bogart
Test Package : DF-3 (Additional Tests: Fuel, Screen)

Certificate L2367

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)

Ryder Transportation Services
1499 Lissner Ave
SAVANNAH, GA
US 31408
Contact: RICHARD BELL
T: (912)964-5153
F: (912)964-1120

Report Id: RYDER500 [WUSCAR] 06146289 (Generated: 04/23/2024 11:03:55) Rev: 1
Contact/Location: RICHARD BELL - RYDER500