

# ISO

# OTS SUWANEE DC2 [17763] [OTS SUWANEE DC2] G3-3

**Diesel Fuel** 

Area

### Fluid No.2 DIESEL FUEL (ULTRALOW SULPHUR) (8000 GAL)

### DIAGNOSIS

### A Recommendation

We advise that you filter this fluid before use. All laboratory tests indicate that this sample meets specifications for No.2 low-sulfur diesel fuel.

### Corrosion

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

### Contaminants

There is a high amount of particulates present in the fuel. Moderate concentration of visible dirt/debris present in the fuel. The water content is negligible. 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 INFORM	ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0953856		
Sample Date		Client Info		20 May 2024		
Machine Age	hrs	Client Info		0		
Sample Status				ABNORMAL		
PHYSICAL PROP	ERTIES	method	limit/base	current	history1	history2
Fuel Color	text	*Visual Screen	Yllow	Red		
ASTM Color	scalar	*ASTM D1500		L4.5		
Visc @ 40°C	cSt	ASTM D445	3.0	2.57		
Pensky-Martens Flash Point	°C	*PMCC Calculated	52	63.2		
SULFUR CONTE	NT	method	limit/base	current	history1	history2
Sulfur	ppm	ASTM D5185m	10	131		
Sulfur (UVF)	ppm	ASTM D5453		103		
DISTILLATION		method	limit/base	current	history1	history2
Initial Boiling Point	°C	ASTM D86	165	175		
5% Distillation Point	°C	ASTM D86		199		
10% Distill Point	°C	ASTM D86	201	209		
15% Distillation Point	°C	ASTM D86		217		
20% Distill Point	°C	ASTM D86	216	225		
30% Distill Point	°C	ASTM D86	230	239		
40% Distill Point	°C	ASTM D86	243	251		
50% Distill Point	°C	ASTM D86	255	264		
60% Distill Point	°C	ASTM D86	267	277		
70% Distill Point	°C	ASTM D86	280	290		
80% Distill Point	°C	ASTM D86	295	304		
85% Distillation Point	°C	ASTM D86		314		
90% Distill Point	°C	ASTM D86	310	324		
95% Distillation Point	°C	ASTM D86		342		
Final Boiling Point	°C	ASTM D86	341	356		
IGNITION QUALIT	ΓY	method	limit/base	current	history1	history2
API Gravity		ASTM D7777	37.7	35		
Cetane Index		ASTM D4737	<40.0	46		
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	<1.0	0		
Sodium	ppm	ASTM D5185m	<0.1	2		
Potassium	ppm	ASTM D5185m	<0.1	<1		
Water	%	ASTM D6304	<0.05	0.003		
ppm Water	ppm	ASTM D6304	<500	34		
% Gasoline	%	*In-House	<0.50	0.0		
% Biodiesel	%	*In-House	<20.0	0.0		



## FUEL REPORT

method

ASTM D7647

ASTM D7647

ASTM D7647

ASTM D7647

ASTM D7647

ISO 4406 (c)

method

WC-Method

WC-Method

method

ASTM D5185m

ASTM D5185m

ASTM D5185m

ASTM D5185m <0.1

ASTM D5185m <0.1

ASTM D5185m <0.1

CFU/ml WC-Method

CFU/ml

Colonies

ppm

ppm

ppm

ppm

ppm

ppm

ASTM D7647 >20

limit/base

limit/base

>=100000

>=100000

limit/base

MODER

<0.1

<0.1

<0.1

>2500

>640

>80

>4

>3

current

current

current

4318

2043

329

103

10

0

0

0

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0

<1

0

0

0

0

>18/16/13 🔺 19/18/16

history1

history1

history<sup>-</sup>

**FLUID CLEANLINESS** 

Particles >4µm

Particles >6µm

Particles >14µm

Particles >21µm

Particles >38µm

Particles >71µm

**Oil Cleanliness** 

MICROBIAL

HEAVY METALS

Bacteria

Aluminum

Vanadium

Calcium

Nickel

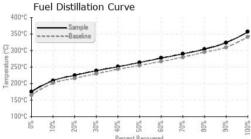
Lead

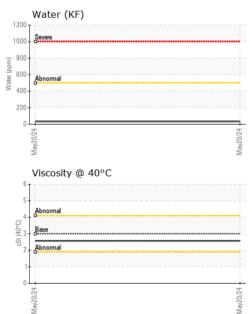
Iron

Yeast

Mold

1,520 T	icle Cou	inc.			T <sup>26</sup>
2,880 -					-24
0,720 Severe					-22
7,680 Abnorm	al				-20
1,920					-18
480 -		-			+16
120-					-14
30 -					-20 -18 -16 -14 -12 -10
8-				1	
2-					18
0. 4µ	6µ	14µ	21µ	38 <sup>j</sup> µ	71µ
(Te 1) sappined to aquine 1k	4μm 6μm 14μm				
Abno	rmal				
5 2k -					
E 1k					
0k 45					₽C/UC/~W
9 May20/24					





Color no image no image	Phosphorus       ppm       ASTM D5185m       <0.1	Phosphorus       ppm       ASTM D5185m       <0.1	Phosphorus       ppm       ASTM D5185m       <0.1	Phosphorus       ppm       ASTM D5185m       <0.1	Phosphorus ppm ASTM D5185m <0.1 0 Zine ppm ASTM D5185m <0.1 0 SAMIPLE IMAGES method limit/base current history1 history Color no image no image Bottom no image no image								
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SAMPLE IMAGES       method       limit/base       current       history1       history1         g       g       Color       Imit/base       no image       no image       no image         Bottom       Imit/base       Imit/base       Imit/base       Imit/base       Imit/base       Imit/base       Imit/base	SAMPLE IMAGES       method       limit/base       current       history1       histor         g       g       Color       Imit/base       no image       no image       no image         Bottom       Imit/base       Imit/base       Imit/base       Imit/base       Imit/base       Imit/base	SAMPLE IMAGES       method       limit/base       current       history1       history1         g       g       Color       Imit/base       no image       no image       no image         Bottom       Imit/base       Imit/	SAMPLE IMAGES       method       limit/base       current       history1       history         g       g       Color       ano image       no image       no image       no image         Bottom       ano image       ano image       no image       no image       no image	SAMPLE IMAGES method limit/base current history1 history Color Bottom no image no image no image no image	SAMPLE IMAGES method limit/base current history1 history Color I I I I I I I I I I I I I I I I I I I	······	Phosphorus	ppm	ASTM D5185m	<0.1	0		
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Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 PETROLEUM RECOVERY SERVIN Sample No. : WC0953856 Received : 10 Jun 2024 210 POWELL Lab Number : 06205295 Tested : 18 Jun 2024 SUMMERVILLE Unique Number : 11072756 Diagnosed : 18 Jun 2024 - Elizabeth Valachovic US 29	Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 PETROLEUM RECOVERY SERVI Sample No. : WC0953856 Received : 10 Jun 2024 210 POWELL Lab Number : 06205295 Tested : 18 Jun 2024 SUMMERVILLE Unique Number : 11072756 Diagnosed : 18 Jun 2024 - Elizabeth Valachovic US 29	Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 PETROLEUM RECOVERY SERVIC Sample No. : WC0953856 Received : 10 Jun 2024 210 POWELL Lab Number : 06205295 Tested : 18 Jun 2024 SUMMERVILLE, Jinique Number : 11072756 Diagnosed : 18 Jun 2024 - Elizabeth Valachovic US 29	Dratory       : WearCheck USA - 501 Madison Ave., Cary, NC 27513       PETROLEUM RECOVERY SERVIC         uple No.       : WC0953856       Received       : 10 Jun 2024       210 POWELL         Number       : 06205295       Tested       : 18 Jun 2024       SUMMERVILLE,         ue Number       : 11072756       Diagnosed       : 18 Jun 2024 · Elizabeth Valachovic       US 29	Sample No.         : WC0953856         Received         : 10 Jun 2024         210 POWELL           Lab Number         : 06205295         Tested         : 18 Jun 2024         SUMMERVILLE,           Unique Number         : 11072756         Diagnosed         : 18 Jun 2024 - Elizabeth Valachovic         US 29	Jue Number : 11072756 Diagnosed : 18 Jun 2024 - Elizabeth Valachovic US 29	Laboratory Sample No. Lab Number Unique Number	: WC0953856 : 06205295 : 11072756	Recei Teste Diagr	ived : 10 ed : 18 nosed : 18	Jun 2024 Jun 2024 un 2024 - Elizabe		21 SUMI	0 POWELL MERVILLE, US 294
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\* - 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)

Report Id: PETSUM [WUSCAR] 06205295 (Generated: 06/19/2024 13:36:40) Rev: 1

Contact/Location: AJAY EL - PETSUM

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history2

history2

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