

# **FUEL REPORT**

Sample Rating Trend

**NORMAL** 

# HF BUSINESS CENTER UST 25K

Component

**Diesel Fuel** 

No.2 DIESEL FUEL (ULTRALOW SULPHUF

### Recommendation

All laboratory tests indicate that this sample meets specifications for No.2 ultra-low-sulfur diesel fuel.

#### Corrosion

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

### **Contaminants**

There is no bacteria or fungus (yeast and/or mold) indicated in the sample. The water content is negligible. There is no indication of any contamination in the fuel.

### **Fuel Condition**

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	\						
Client Info   WCDF4557   WCDF4347   WCDF43	) (25000 GAL)			Mar <sup>2</sup> 023	Mar2024		
Client Info	SAMPLE INFORM	MOITAN	method	limit/base	current	history1	history2
Machine Age   mls   Client Info   NORMAL   SEVERE   Sample Status   NORMAL   SEVERE   Sever	Sample Number		Client Info		WCDF4557	WCDF4347	
PHYSICAL PROPERTIES   method   imit/base   current   history1   history2	Sample Date		Client Info		13 Mar 2024	16 Mar 2023	
PHYSICAL PROPERTIES   method   imilibase   current   history1   history2	Machine Age	mls	Client Info		0	0	
Specific Gravity	Sample Status				NORMAL	SEVERE	
Fuel Color	PHYSICAL PROP	ERTIES	method	limit/base	current	history1	history2
ASTM Color scalar "ASTM D1500 LA.5 L5.0 Visc @ 40°C cSt ASTM D445 8.0 2.56 2.63  Persky Martens Flash Point "C "PILCC Caludad 52 66.6 58  Cloud Point "C ASTM D5771 -11 -12  SULFUR CONTENT method limit/base current history1 history2  SULFUR CONTENT method limit/base current history1 history2  Sulfur (UVF) ppm ASTM D5185m 10 94 0  Sulfur (UVF) ppm ASTM D5453 15 24  DISTILLATION method limit/base current history1 history2  Initial Boiling Point "C ASTM D86 165 178 162  So Distillation Point "C ASTM D86 200 193  10% Distill Point "C ASTM D86 201 208 205  10% Distill Point "C ASTM D86 216 223 221  30% Distill Point "C ASTM D86 243 251 249  30% Distill Point "C ASTM D86 243 251 249  50% Distill Point "C ASTM D86 255 264 263  30% Distill Point "C ASTM D86 255 264 263  30% Distill Point "C ASTM D86 280 291 291  30% Distill Point "C ASTM D86 291 291 291  30% Distill Point "C ASTM D86 291 291 291  30% Distill Point "C ASTM D86 201 208 205  30% Distill Point "C ASTM D86 255 264 263  30% Distill Point "C ASTM D86 255 264 263  30% Distill Point "C ASTM D86 255 264 263  30% Distill Point "C ASTM D86 291 291  30% Distill Point "C ASTM D86 201 201 201 201  30% Distill Point "C ASTM D86 201 201 201  30% Distill Point "C ASTM D86 310 326 326  30% Distill Point "C ASTM D86 310 326 326  30% Distill Point "C ASTM D86 341 357 349  Distillation Residue "M ASTM D86 3.0 1.4  Distillation Residue "M ASTM D86 3.0 1.4  CONTAMINANTS method limit/base current history1 history2  API Gravity ASTM D5185m <	Specific Gravity		*ASTM D1298	0.839		0.380	
Visc @ 40°C	Fuel Color	text	*Visual Screen	Yllow	Red	Red	
Persky-Martens Flash Point   °C   PMCC Calculated   52   66.6   58	ASTM Color	scalar	*ASTM D1500		L4.5	L5.0	
Cloud Point   °C   ASTM D5771   -11   -12	Visc @ 40°C	cSt	ASTM D445	3.0	2.56	2.63	
SULFUR CONTENT   method   limit/base   current   history1   history2	Pensky-Martens Flash Point	°C	*PMCC Calculated	52	66.6	58	
Sulfur   ppm   ASTM D5185m   10   94   0	Cloud Point	°C	ASTM D5771		-11	-12	
Sulfur   ppm	SULFUR CONTE	NΤ	method	limit/base	current	history1	history2
DISTILLATION	Sulfur	maa	ASTM D5185m	10	94	0	
DISTILLATION					_		
Initial Boiling Point   °C   ASTM D86   165   178   162		pp		lineit/lenen			histow.0
200   193							history2
10% Distill Point				165	-		
15% Distillation Point   °C   ASTM D86   216   223   221     20% Distill Point   °C   ASTM D86   216   223   221     30% Distill Point   °C   ASTM D86   230   238   235     40% Distill Point   °C   ASTM D86   243   251   249     50% Distill Point   °C   ASTM D86   255   264   263     50% Distill Point   °C   ASTM D86   267   278   276     70% Distill Point   °C   ASTM D86   280   291   291     80% Distill Point   °C   ASTM D86   295   306   306     80% Distill Point   °C   ASTM D86   295   306   306     80% Distill Point   °C   ASTM D86   295   306   306     80% Distill Point   °C   ASTM D86   316   315     90% Distill Point   °C   ASTM D86   310   326   326     90% Distill Point   °C   ASTM D86   343   341     90% Distillation Point   °C   ASTM D86   343   341     90% Distillation Point   °C   ASTM D86   343   341     90% Distillation Residue   %   ASTM D86   3.0     1.4     90% Distillation Loss   %   ASTM D86   3.0     0.7     90% Distillation Loss   %   ASTM D86   3.0     1.4     90% Distillation Loss   %   ASTM D7777   37.7   37.3   240.8     90% D15	5% Distillation Point	°C	ASTM D86		200	193	
20% Distill Point	10% Distill Point	°C	ASTM D86	201	208	205	
30% Distill Point   °C   ASTM D86   230   238   235	15% Distillation Point	°C	ASTM D86		216	214	
40% Distill Point	20% Distill Point	°C	ASTM D86	216	223	221	
50% Distill Point         °C         ASTM D86         255         264         263            60% Distill Point         °C         ASTM D86         267         278         276            70% Distill Point         °C         ASTM D86         280         291         291            80% Distill Point         °C         ASTM D86         295         306         306            85% Distillation Point         °C         ASTM D86         316         315            90% Distill Point         °C         ASTM D86         310         326         326            90% Distillation Point         °C         ASTM D86         343         341            95% Distillation Point         °C         ASTM D86         341         357         349            Final Boiling Point         °C         ASTM D86         3.0          1.4            Distillation Residue         %         ASTM D86         3.0          1.4            Distillation Loss         %         ASTM D86         3.0          0.7            IGNITION QUALITY	30% Distill Point	°C	ASTM D86	230	238	235	
Solution	40% Distill Point	°C	ASTM D86	243	251	249	
291   291   291   291   293   295   306   306   306   306   306   306   306   306   306   306   306   306   306   306   306   307   307   307   308   308   308   308   308   308   308   308   308   308   308   308   308   308   308   308   308   308   309   308   308   309   308   308   309   309   308   308   309	50% Distill Point	°C	ASTM D86	255	264	263	
B0% Distill Point	60% Distill Point	°C	ASTM D86	267	278	276	
Section   Sect	70% Distill Point	°C	ASTM D86	280	291	291	
90% Distill Point	80% Distill Point	°C	ASTM D86	295	306	306	
See	85% Distillation Point	°C	ASTM D86		316	315	
Final Boiling Point °C ASTM D86 341 357 349 Distillation Residue % ASTM D86 3.0 1.4 Distillation Loss % ASTM D86 3.0 0.7  IGNITION QUALITY method limit/base current history1 history2  API Gravity ASTM D7777 37.7 37.3 240.8 Cetane Index ASTM D4737 <40.0 50 50.0  CONTAMINANTS method limit/base current history1 history2  Silicon ppm ASTM D5185m <1.0 0 <1 Sodium ppm ASTM D5185m <0.1 <1 <1 Potassium ppm ASTM D5185m <0.1 <1 0 Water % ASTM D6304 <0.05 0.005 0.007 ppm Water ppm ASTM D6304 <500 53 78.8 % Gasoline % *In-House <0.50 0.00 0.0	90% Distill Point	°C	ASTM D86	310	326	326	
Distillation Residue         %         ASTM D86         3.0          1.4            Distillation Loss         %         ASTM D86         3.0          0.7            IGNITION QUALITY         method         limit/base         current         history1         history2           API Gravity         ASTM D7777         37.7         37.3         240.8            Cetane Index         ASTM D4737         <40.0	95% Distillation Point	°C	ASTM D86		343	341	
Distillation Loss   %   ASTM D86   3.0     0.7       IGNITION QUALITY   method   limit/base   current   history1   history2     API Gravity   ASTM D7777   37.7   37.3   240.8       Cetane Index   ASTM D4737   <40.0   50   50.0       CONTAMINANTS   method   limit/base   current   history1   history2     Silicon   ppm   ASTM D5185m   <1.0   0   <1       Sodium   ppm   ASTM D5185m   <0.1   <1   <1       Potassium   ppm   ASTM D5185m   <0.1   <1   0       Water   %   ASTM D6304   <0.05   0.005   0.007       Opm Water   ppm   ASTM D6304   <500   53   78.8       Gasoline   %   *In-House   <0.50   0.0   0.0	Final Boiling Point	°C	ASTM D86	341	357	349	
IGNITION QUALITY	Distillation Residue	%	ASTM D86	3.0		1.4	
API Gravity ASTM D7777 37.7 37.3 240.8 Cetane Index ASTM D4737 <40.0 50 50.0  CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m <1.0 0 <1 Sodium ppm ASTM D5185m <0.1 <1 <1 Potassium ppm ASTM D5185m <0.1 <1 0 Water % ASTM D6304 <0.05 0.005 0.007 ppm Water ppm ASTM D6304 <500 53 78.8 % Gasoline % *In-House <0.50 0.00 0.0	Distillation Loss	%	ASTM D86	3.0		0.7	
Cetane Index         ASTM D4737         <40.0         50         50.0            CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         <1.0	IGNITION QUALIT	ΓΥ	method	limit/base	current	history1	history2
Cetane Index         ASTM D4737         <40.0         50         50.0            CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         <1.0	API Gravity		ASTM D7777	37.7	37.3	240.8	
Silicon         ppm         ASTM D5185m         <1.0         0         <1            Sodium         ppm         ASTM D5185m         <0.1	Cetane Index		ASTM D4737	<40.0	50	50.0	
Sodium         ppm         ASTM D5185m         <0.1         <1         <1            Potassium         ppm         ASTM D5185m         <0.1	CONTAMINANTS		method	limit/base	current	history1	history2
Potassium         ppm         ASTM D5185m         < 0.1         <1         0            Water         %         ASTM D6304         < 0.05         0.005         0.007            opm Water         ppm         ASTM D6304         < 500         53         78.8            % Gasoline         %         *In-House         < 0.50         0.0         0.0	Silicon	ppm	ASTM D5185m	<1.0	0	<1	
Potassium         ppm         ASTM D5185m         < 0.1         <1         0            Water         %         ASTM D6304         < 0.05         0.005         0.007            opm Water         ppm         ASTM D6304         < 500         53         78.8            % Gasoline         %         *In-House         < 0.50         0.0         0.0	Sodium	ppm	ASTM D5185m	<0.1	<1	<1	
Water         %         ASTM D6304         <0.05         0.005         0.007            opm Water         ppm         ASTM D6304         <500         53         78.8            % Gasoline         %         *In-House         <0.50         0.0         0.0	Potassium		ASTM D5185m	<0.1	<1		
opm Water         ppm         ASTM D6304         <500         53         78.8            % Gasoline         % *In-House         <0.50         0.0         0.0	Water	• • • • • • • • • • • • • • • • • • • •	ASTM D6304	< 0.05	0.005	0.007	
% Gasoline	ppm Water						
	% Gasoline						
	% Biodiesel						



## **FUEL REPORT**





Laboratory

Sample No.

: WCDF4557 Lab Number : 06121288

: WearCheck USA - 501 Madison Ave., Cary, NC 27513

**Tested** Diagnosed

Unique Number: 10930121 Test Package: DF-2 (Additional Tests: CldPt, Fuel, 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.

Received

: 18 Mar 2024

: 01 Apr 2024

: 01 Apr 2024 - Doug Bogart

**TANK WIZARDS** 1511 MASTERS RD NW

PALM BAY, FL US 32907

Contact: WENDALL STRODERD wendall@tankwizards.com

T: (321)427-5149

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (321)574-4131

Contact/Location: 321-285-8878 X1 - WENDALL STRODERD - TANPAL