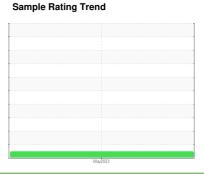


FUEL REPORT



Diesel Fuel

No.2 DIESEL FUEL (ULTRALOW SULPHUR) (--- GAL)





Recommendation

Laboratory test indicate that this fuel is suitable for use and meets all test requirements. Resample at the next service interval to monitor.

Corrosion

{not applicable}

Contaminants

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The water content is negligible. There is no indication of any contamination in the diesel fuel.

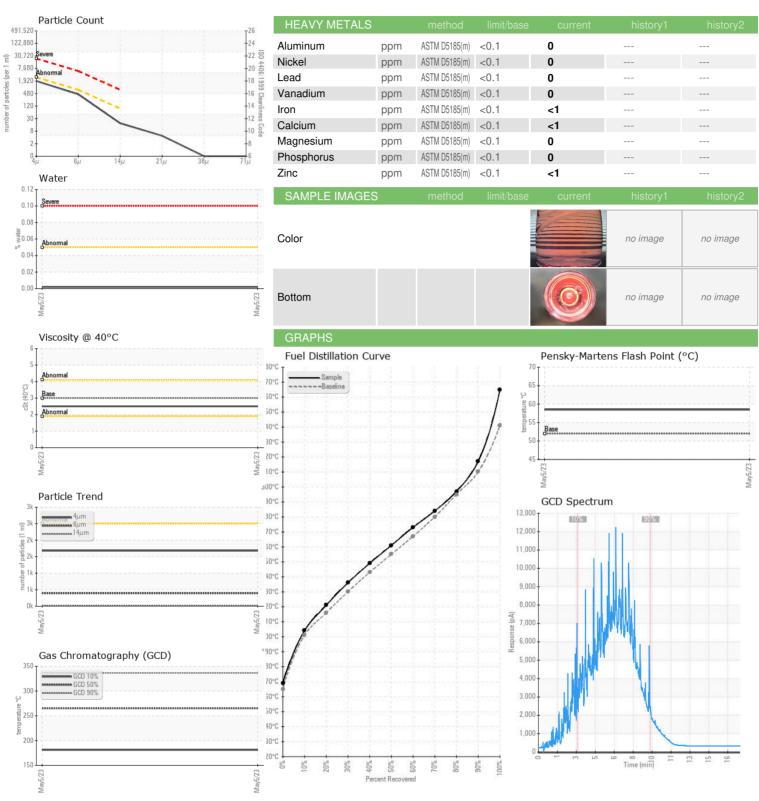
Fuel Condition

All laboratory tests indicate that this sample meets specifications for No.2 ultra-low-sulfur diesel fuel (US EPA/CGSB-3.517-3 type B).

Sample Number Client Info WC0791581	ALOW SULPHUR) (-	GAL)			May2023		
Sample Date Client Info 0	SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Date Client Info 0	Sample Number		Client Info		WC0791581		
Machine Age hrs Client Info NORMAL Machine Sample Status MoRMAL MORMA	•		Client Info		05 May 2023		
PHYSICAL PROPERTIES method limit/base current history1 history2	•	hrs	Client Info		-		
Specific Gravity	•				NORMAL		
Specific Gravity ASTM D1299" 0.839 0.845	PHYSICAL PROP	ERTIES	method	limit/base	current	history1	history2
Fuel Color text Visual Screen* Yillow Red				0.839	0.845		
Visc @ 40°C cSt ASTM D7279(m) 3.0 2.5 Pensky-Martens Flash Point °C ASTM D7215° 52 58.5 SULFUR CONTENT method limit/base current history1 history2 DISTILLATION method limit/base current history1 history2 Distillation Point °C ASTM D2887° 165 169 10% Distill Point °C ASTM D2887° 201 204 10% Distill Point °C ASTM D2887° 201 204 20% Distill Point °C ASTM D2887° 216 221 30% Distill Point °C ASTM D2887° 243 249 50% Distill Point °C ASTM D2887° 261 60%	•	text	Visual Screen*	Yllow	Red		
Persky-Martens Flash Point °C ASTM D7215" 52 58.5 SULFUR CONTENT method limit/base current history1 history2 Sulfur ppm ASTM D5865(m) 10 10 DISTILLATION method limit/base current history1 history2 Initial Boiling Point °C ASTM D2887" 155 169 10% Distill Point °C ASTM D2887" 213 10% Distill Point °C ASTM D2887" 213 20% Distill Point °C ASTM D2887" 230 236 30% Distill Point °C ASTM D2887" 243 249 30% Distill Point °C ASTM D2887" 255 261 20% Distill Point °C ASTM D2887" 267 273 273 20% Distill Point °C ASTM D2887" 295 297 20% Distill Point °C ASTM D2887" 295 297 20% Distill Point °C ASTM D2887" 307 20% Distillation Point °C ASTM D2887" 307 20% Distillation Point °C ASTM D2887" 310 317 20% Distillation Point °C ASTM D2887" 335 20% Distillation Point °C ASTM D2887" 335 20% Distillation Point °C ASTM D2887" 341 365 20% Distillation Point °C ASTM D2887" 341 365 20% Distillation Point °C ASTM D2887" 310 317 20% Distillation Point °C ASTM D2887" 341 365 20% Distillation Point °C ASTM D2887" 341 365 20% Distillation Point °C ASTM D2887" 340 20% Disti				3.0			
Sulfur ppm ASTM D5185(m) 10 10							
Sulfur ppm ASTM D5185(m) 10 10	SULFUR CONTE	NT	method	limit/base	current	history1	history2
DISTILLATION				10		,	
Initial Boiling Point °C ASTM D2887' 165 169	DISTILL ATION	1-1-		limit/hase	current	history1	history2
5% Distill Point °C ASTM D2887' 201 204 15% Distill Point °C ASTM D2887' 201 204 15% Distill Point °C ASTM D2887' 216 221 20% Distill Point °C ASTM D2887' 216 221 20% Distill Point °C ASTM D2887' 230 236 20% Distill Point °C ASTM D2887' 243 249 250% Distill Point °C ASTM D2887' 267 273 250% Distill Point °C ASTM D2887' 267 273 250% Distill Point °C ASTM D2887' 267 273 250% Distill Point °C ASTM D2887' 280 284 250% Distill Point °C ASTM D2887' 295 297 250% Distill Point °C ASTM D2887' 200 217 250% Distill Point °C ASTM D2887' 210 317 250% Distillation Point °C ASTM D2887' 310 317 250% Distillation Point °C ASTM D2887' 341 365 250% Distillation Point °C ASTM D3887' 350 250% D3887' 350 2		°C					
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15% Distillation Point °C ASTM D2887' 216 221 ··· ·· ·· ·· ·· ·· ·· ·· ·· ·· ·· ·· ·		_		201			
20% Distill Point				201			
30% Distill Point				016	_		
40% Distill Point							
50% Distill Point °C ASTM D2887* 255 261 60% Distill Point °C ASTM D2887* 267 273 70% Distill Point °C ASTM D2887* 280 284 80% Distill Point °C ASTM D2887* 295 297 85% Distillation Point °C ASTM D2887* 310 317 90% Distill Point °C ASTM D2887* 310 317 95% Distillation Point °C ASTM D2887* 341 365 Final Boiling Point °C ASTM D2887* 341 365 IGNITION QUALITY method limit/base current history1 history2 API Gravity ASTM D1288* 37.7 35 Cetane Index ASTM D5185(m) <1.0 0 Silicon<		_					
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70% Distill Point °C ASTM D2887* 280 284 80% Distill Point °C ASTM D2887* 295 297 85% Distillation Point °C ASTM D2887* 307 90% Distill Point °C ASTM D2887* 310 317 95% Distillation Point °C ASTM D2887* 335 Final Boiling Point °C ASTM D2887* 341 365 Final Boiling Point °C ASTM D2887* 341 365 IGNITION QUALITY method limit/base current history1 history2 API Gravity ASTM D1988* 37.7 35 Cetane Index ASTM D4737* <40.0 46 Contact Index ASTM D5185(m) <1.0 0 Silicon ppm ASTM D5185(m)					-		
80% Distill Point °C ASTM D2887* 295 297 85% Distillation Point °C ASTM D2887* 307 90% Distill Point °C ASTM D2887* 310 317 95% Distillation Point °C ASTM D2887* 341 365 Final Boiling Point °C ASTM D2887* 341 365 Final Boiling Point °C ASTM D2887* 341 365 IGNITION QUALITY method limit/base current history1 history2 API Gravity ASTM D1298* 37.7 35 Cetane Index ASTM D4737* <40.0 46 Cetane Index ASTM D4737* <40.0 0 Silicon ppm ASTM D5185(m) <0.1 0 Sodium ppm ASTM D5185(m) </th <td></td> <td></td> <td></td> <td></td> <th></th> <td></td> <td></td>							
85% Distillation Point °C ASTM D2887* 307 90% Distill Point °C ASTM D2887* 310 317 95% Distillation Point °C ASTM D2887* 341 365 Final Boiling Point °C ASTM D2887* 341 365 IGNITION QUALITY method limit/base current history1 history2 API Gravity ASTM D1298* 37.7 35 Cetane Index ASTM D4737* <40.0 46 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) <0.1 <1 Sodium ppm ASTM D5185(m) <0.1 <0 Potassium ppm ASTM D6304* <0.05 0.002 Water % ASTM D6304* <td></td> <td>_</td> <td></td> <td></td> <th></th> <td></td> <td></td>		_					
90% Distill Point °C ASTM D2887* 310 317 95% Distillation Point °C ASTM D2887* 341 365				295			
95% Distillation Point °C ASTM D2887* 335 Final Boiling Point °C ASTM D2887* 341 365 IGNITION QUALITY method limit/base current history1 history2 API Gravity ASTM D1298* 37.7 35 Cetane Index ASTM D4737* <40.0 46 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) <1.0 0 Sodium ppm ASTM D5185(m) <0.1 <1 Sodium ppm ASTM D5185(m) <0.1 <1 Water % ASTM D5185(m) <0.1 0 Water % ASTM D6304* <0.05 0.002 ppm Water ppm ASTM D7647 >2500							
Final Boiling Point				310			
IGNITION QUALITY							
API Gravity ASTM D1298* 37.7 35 Cetane Index ASTM D4737* <40.0			ASTM D2887*	341	365		
Cetane Index ASTM D4737* <40.0	IGNITION QUALIT	ΓΥ	method	limit/base	current	history1	history2
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) <1.0 0 Sodium ppm ASTM D5185(m) <0.1 <1 Potassium ppm ASTM D5185(m) <0.1 0 Water % ASTM D6304* <0.05 0.002 ppm Water ppm ASTM D6304* <500 20.6 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4μm ASTM D7647 >2500 1681 Particles >6μm ASTM D7647 >640 390 Particles >21μm ASTM D7647 >80 16 Particles >38μm ASTM D7647 >4 0 Particles >71μm ASTM D7647 >3 0	API Gravity		ASTM D1298*	37.7	35		
Silicon ppm ASTM D5185(m) <1.0	Cetane Index		ASTM D4737*	<40.0	46		
Sodium ppm ASTM D5185(m) <0.1	CONTAMINANTS		method	limit/base	current	history1	history2
Potassium ppm ASTM D5185(m) <0.1	Silicon	ppm	ASTM D5185(m)	<1.0	0		
Water % ASTM D6304* <0.05	Sodium	ppm	ASTM D5185(m)	<0.1	<1		
ppm Water ppm ASTM D6304* <500	Potassium	ppm	ASTM D5185(m)	<0.1	0		
FLUID CLEANLINESS method limit/base current history1 history2 Particles >4μm ASTM D7647 >2500 1681 Particles >6μm ASTM D7647 >640 390 Particles >14μm ASTM D7647 >80 16 Particles >21μm ASTM D7647 >20 4 Particles >38μm ASTM D7647 >4 0 Particles >71μm ASTM D7647 >3 0	Water	%	ASTM D6304*	< 0.05	0.002		
Particles >4μm ASTM D7647 >2500 1681 Particles >6μm ASTM D7647 >640 390 Particles >14μm ASTM D7647 >80 16 Particles >21μm ASTM D7647 >20 4 Particles >38μm ASTM D7647 >4 0 Particles >71μm ASTM D7647 >3 0	ppm Water	ppm	ASTM D6304*	<500	20.6		
Particles >6μm ASTM D7647 >640 390 Particles >14μm ASTM D7647 >80 16 Particles >21μm ASTM D7647 >20 4 Particles >38μm ASTM D7647 >4 0 Particles >71μm ASTM D7647 >3 0	FLUID CLEANLIN	ESS	method	limit/base	current	history1	history2
Particles >14μm ASTM D7647 >80 16 Particles >21μm ASTM D7647 >20 4 Particles >38μm ASTM D7647 >4 0 Particles >71μm ASTM D7647 >3 0	Particles >4µm		ASTM D7647	>2500	1681		
Particles >21μm ASTM D7647 >20 4 Particles >38μm ASTM D7647 >4 0 Particles >71μm ASTM D7647 >3 0	Particles >6μm		ASTM D7647	>640	390		
Particles >38μm ASTM D7647 >4 0 Particles >71μm ASTM D7647 >3 0	Particles >14µm		ASTM D7647	>80	16		
Particles >71μm ASTM D7647 >3 0	Particles >21µm		ASTM D7647	>20	4		
Particles >71μm ASTM D7647 >3 0	Particles >38µm		ASTM D7647	>4	0		
Oil Cleanliness ISO 4406 (c) >18/16/13 18/16/11			ASTM D7647	>3	0		
	Oil Cleanliness		ISO 4406 (c)	>18/16/13	18/16/11		



FUEL REPORT





CALA ISO 17025:2017 Accredited

Laboratory

Laboratory Sample No. Lab Number **Unique Number**

: WC0791581

: 5592357

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Received : 02563316

: 09 Jun 2023 Diagnosed : 12 Jun 2023 Diagnostician : Kevin Marson

Test Package : FUEL (Additional Tests: CC Flash, GC-PercFuel, PrtCount)

To discuss this sample report, contact Customer Service at 1-800-268-2131. Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. Validity of results and interpretation are based on the sample and information as supplied.

STRONGCO EQUIPMENT INC.

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F: (905)670-2338