

FUEL REPORT

Area OI CANADA CORP [152746] 37129146

Diesel Fuel Fluid No.2 DIESEL FUEL (ULTRALOW SULPHUR) (--- LTR)

DIAGNOSIS

Recommendation

Laboratory test indicate that this fuel is suitable for use and meets all test requirements. We advise that you filter this fluid before use. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Contaminants

There is a light amount of silt (particulates < 14 microns in size) present in the fuel. The water content is negligible.

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 INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		CU0022878	CU0020925	
Sample Date		Client Info		04 Mar 2024	13 Mar 2023	
Machine Age	hrs	Client Info		667	629	
Sample Status				ATTENTION	SEVERE	
PHYSICAL PROP	ERTIES	method	limit/base	current	history1	history2
Specific Gravity		ASTM D1298*	0.839	0.847	0.845	
Fuel Color	text	Visual Screen*	Yllow	Pink	Orang	
Visc @ 40°C	cSt	ASTM D7279(m)	3.0	2.7	2.6	
Pensky-Martens Flash Point	°C	ASTM D7215*	52	61.1	60.5	
SULFUR CONTER	NT	method	limit/base	current	history1	history2
Sulfur	ppm	ASTM D5185(m)	10	5	7	
DISTILLATION		method	limit/base	current	history1	history2
Initial Boiling Point	°C	ASTM D2887*	165	171	171	
5% Distillation Point	°C	ASTM D2887*		195	195	
10% Distill Point	°C	ASTM D2887*	201	206	205	
15% Distillation Point	°C	ASTM D2887*		214	213	
20% Distill Point	°C	ASTM D2887*	216	222	221	
30% Distill Point	°C	ASTM D2887*	230	236	235	
40% Distill Point	°C	ASTM D2887*	243	249	248	
50% Distill Point	°C	ASTM D2887*	255	262	261	
60% Distill Point	°C	ASTM D2887*	267	275	274	
70% Distill Point	°C	ASTM D2887*	280	288	288	
80% Distill Point	°C	ASTM D2887*	295	302	303	
85% Distillation Point	°C	ASTM D2887*		312	314	
90% Distill Point	°C	ASTM D2887*	310	323	325	
95% Distillation Point	°C	ASTM D2887*		341	345	
Final Boiling Point	°C	ASTM D2887*	341	367	368	
IGNITION QUALIT	ΓY	method	limit/base	current	history1	history2
API Gravity		ASTM D1298*	37.7	35	35	
Cetane Index		ASTM D4737*	<40.0	46	47	
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	<1.0	0	<1	
Sodium	ppm	ASTM D5185(m)	<0.1	<1	<1	
Potassium	ppm	ASTM D5185(m)	<0.1	0	0	
Water	%	ASTM D6304*	< 0.05	0.004	0.007	
ppm Water	ppm	ASTM D6304*	<500	44	72.1	
FLUID CLEANLIN	ESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>2500	e 3324	▲ 23948	
Particles >6µm		ASTM D7647	>640	<mark> </mark> 748	4 814	
Particles >14µm		ASTM D7647	>80	37	98	
Particles >21µm		ASTM D7647	>20	6	16	
Particles >38µm		ASTM D7647	>4	1	0	
Particles >71µm		ASTM D7647	>3	0	0	
Oil Cleanliness		ISO 4406 (c)	>18/16/13	— 19/17/12	a 22/19/14	

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FUEL REPORT

Particle Count		20	HEAVY META	ALS .
122,880 -		24	Aluminum	pr
30,720 Severe		-22 8	Nickel	Pr pr
7,680 Abnormal		20 406		PF pr
480		10 999	Vanadium	PF pr
120		14	Iron	PF pr
30-		-12 ES	Calcium	PF pr
8-		10 8	Magnesium	PF pr
2			Phosphorus	PF Dr
4μ 6μ 14μ	21μ 38μ	71μ	Zinc	49 00
			SAMPLE IMA	GES
Ē 20k				alo
salojitke			Color	
Abnormal				
Mar13/23		Mar4/24	Bottom	
Water (KF)			GRAPHS	
Severe			Fuel Distillation	ו Curve
000 + 0		38	Sample	
800 -		37	10°C - Baseline	
Abnormal		36	50°C -	
400		35		
200		33	10°C -	
		4Z 32	20°C -	
Mar13,		⁴ ₩ 31	0°C -	
		30	0°C -	
Viscosity @ 40°C		29	0°C -	
5-		28	10°C -	
Abnormal		27	/0°C -	
De 3 - Base	******	- 26 B	60°C -	1
Z Abnormal		te 25	0°C -	1.
1-		는 24 22		1
0		23		
13/23		+Z/t- 21	0°C	
Mari		20	10°C	
Gas Chromatography	(GCD)	19	10°C -	
		18	10°C	
GCD 10%		17	′0°C ∯	
- 200		16	60°C -	
300		15	- 0°C	
ĝ 250 -		14	+0°C -	
200		13	10°C -	
150		12		%0
ar13/23		1ar4/24 -	10 20 30	¥ 5 Percent R
ž		2		
	CALA Lab	oratory :	WearCheck - C8-	1175 Ap
	Levelation No. 100001 San	nple No. :	CU0022878	Í
ISO 17	025:2017 Lab	Number :	02640932	٦

HEAVY METALS						history2
luminum	ppm	ASTM D5185(m)	<0.1	0	0	
lickel	ppm	ASTM D5185(m)	<0.1	0	0	
ead	ppm	ASTM D5185(m)	<0.1	<1	<1	
anadium	ppm	ASTM D5185(m)	<0.1	0	0	
on	ppm	ASTM D5185(m)	<0.1	0	<1	
alcium	ppm	ASTM D5185(m)	<0.1	<1	3	
lagnesium	ppm	ASTM D5185(m)	<0.1	0	<1	
hosphorus	ppm	ASTM D5185(m)	<0.1	<1	<1	
inc	ppm	ASTM D5185(m)	<0.1	<1	2	







Received : 10 Jun 2024 Tested : 13 Jun 2024 Accredited : 13 Jun 2024 - Kevin Marson Unique Number : 5798471 Diagnosed Laboratory Test Package : FUEL (Additional Tests: CC Flash, 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.

50%

Percent Recover

90%

175 Appleby Line, Burlington, ON L7L 5H9 CUMMINS CANADA ULC - GENERATOR DIVISION 7175 PACIFIC CIRCLE MISSISSAUGA, ON CA L5T 2A5 Contact: Elisia Johnson elisia.johnson@cummins.com T: (905)795-0050 F: (905)795-9252

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