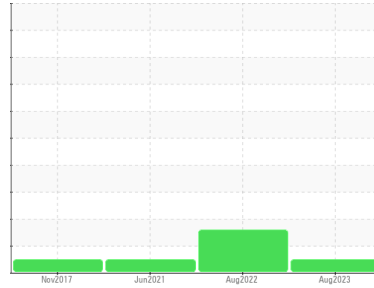




FUEL REPORT

Sample Rating Trend



NORMAL



Area
PSPC [99831]
 Machine Id
79278483

Component
Diesel Fuel
 Fluid

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

DIAGNOSIS

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 INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			CU0018941	CU0018936	CU0017934
Sample Date	Client Info			22 Aug 2023	23 Aug 2022	22 Jun 2021
Machine Age	hrs	Client Info		0	209	0
Sample Status				NORMAL	ATTENTION	NORMAL

PHYSICAL PROPERTIES		method	limit/base	current	history1	history2
Specific Gravity		ASTM D1298*	0.839	0.834	0.835	0.832
Fuel Color	text	Visual Screen*	Yellow	Red	Red	Pink
Visc @ 40°C	cSt	ASTM D7279(m)	3.0	2.4	2.4	2.2
Pensky-Martens Flash Point	°C	ASTM D7215*	52	55.8	54	56.6

SULFUR CONTENT		method	limit/base	current	history1	history2
Sulfur	ppm	ASTM D5185(m)	10	8	10	12

DISTILLATION		method	limit/base	current	history1	history2
Initial Boiling Point	°C	ASTM D2887*	165	165	155	159
5% Distillation Point	°C	ASTM D2887*		186	181	179
10% Distill Point	°C	ASTM D2887*	201	195	192	190
15% Distillation Point	°C	ASTM D2887*		203	201	198
20% Distill Point	°C	ASTM D2887*	216	211	209	207
30% Distill Point	°C	ASTM D2887*	230	226	225	221
40% Distill Point	°C	ASTM D2887*	243	240	240	235
50% Distill Point	°C	ASTM D2887*	255	255	255	249
60% Distill Point	°C	ASTM D2887*	267	270	270	264
70% Distill Point	°C	ASTM D2887*	280	285	285	279
80% Distill Point	°C	ASTM D2887*	295	301	303	298
85% Distillation Point	°C	ASTM D2887*		312	313	310
90% Distill Point	°C	ASTM D2887*	310	323	325	323
95% Distillation Point	°C	ASTM D2887*		342	341	342
Final Boiling Point	°C	ASTM D2887*	341	370	349	367
Distillation Residue	%	ASTM D86(e)*	3.0	---	---	---
Distillation Loss	%	ASTM D86(e)*	3.0	---	---	---

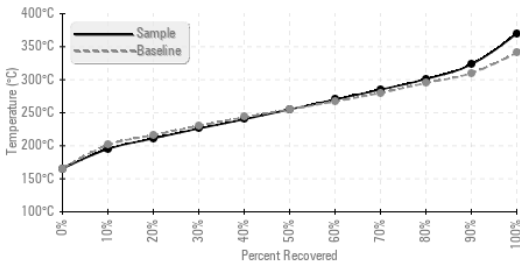
IGNITION QUALITY		method	limit/base	current	history1	history2
API Gravity		ASTM D1298*	37.7	38	37	38
Cetane Index		ASTM D4737*	<40.0	49	48	48

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	<1.0	0	0	<1
Sodium	ppm	ASTM D5185(m)	<0.1	0	0	<1
Potassium	ppm	ASTM D5185(m)	<0.1	<1	0	0
Water	%	ASTM D6304*	<0.05	0.003	0.004	0.002
ppm Water	ppm	ASTM D6304*	<500	27.4	45.5	24.4



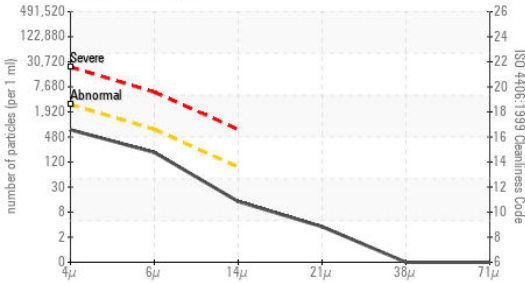
FUEL REPORT

Fuel Distillation Curve



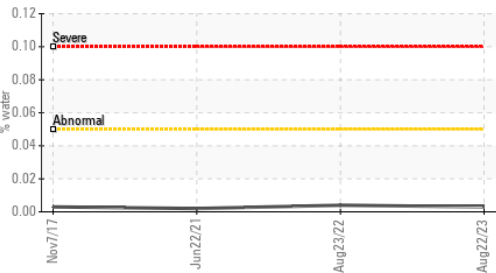
FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>2500	628	▲ 3180	804
Particles >6µm	ASTM D7647	>640	180	▲ 1072	183
Particles >14µm	ASTM D7647	>80	12	▲ 84	13
Particles >21µm	ASTM D7647	>20	3	17	4
Particles >38µm	ASTM D7647	>4	0	1	0
Particles >71µm	ASTM D7647	>3	0	0	0
Oil Cleanliness	ISO 4406 (c)	>18/16/13	16/15/11	▲ 19/17/14	17/15/11

Particle Count



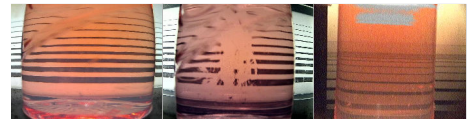
HEAVY METALS	method	limit/base	current	history1	history2
Aluminum	ppm	ASTM D5185(m)	<0.1	0	0
Nickel	ppm	ASTM D5185(m)	<0.1	0	0
Lead	ppm	ASTM D5185(m)	<0.1	0	<1
Vanadium	ppm	ASTM D5185(m)	<0.1	0	0
Iron	ppm	ASTM D5185(m)	<0.1	<1	<1
Calcium	ppm	ASTM D5185(m)	<0.1	<1	<1
Magnesium	ppm	ASTM D5185(m)	<0.1	<1	<1
Phosphorus	ppm	ASTM D5185(m)	<0.1	<1	<1
Zinc	ppm	ASTM D5185(m)	<0.1	0	<1

Water



SAMPLE IMAGES	method	limit/base	current	history1	history2
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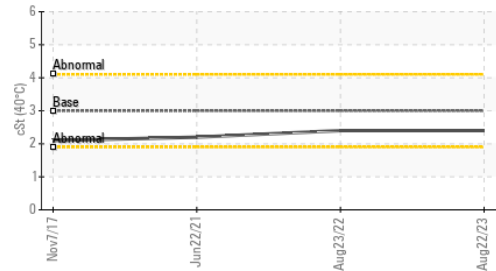
Color



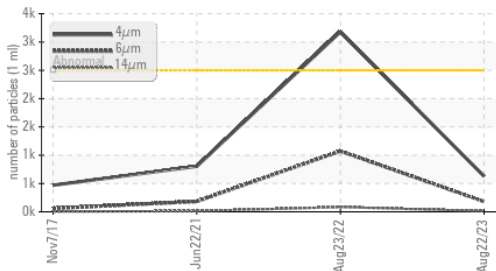
Bottom



Viscosity @ 40°C



Particle Trend



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : CU0018941
Lab Number : **02577830**
Unique Number : 5630890
Test Package : FUEL (Additional Tests: CC Flash, GC-PercFuel, PrtCount)

CUMMINS EASTERN CANADA LP
 3189 SWANSEA CRESCENT
 OTTAWA, ON
 CA K1G 3W5
 Contact: Cindy Harrison
 cindy.harrison@cummins.com
 T: (613)736-1146
 F: x:

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.