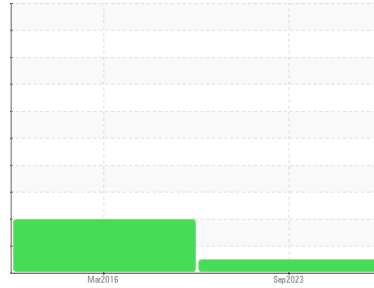




FUEL REPORT

Sample Rating Trend

NORMAL



Area
FEDEX [149650]
 Machine Id
79832394
 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			CU0021892	CU0011641	---
Sample Date	Client Info			26 Sep 2023	04 Mar 2016	---
Machine Age	hrs	Client Info		216	4	---
Sample Status				NORMAL	ABNORMAL	---

PHYSICAL PROPERTIES		method	limit/base	current	history1	history2
Specific Gravity		ASTM D1298*	0.839	0.841	0.847	---
Fuel Color	text	Visual Screen*	Yllow	Pink	Pink	---
Visc @ 40°C	cSt	ASTM D7279(m)	3.0	2.6	2.9	---
Pensky-Martens Flash Point	°C	ASTM D7215*	52	60.2	56	---

SULFUR CONTENT		method	limit/base	current	history1	history2
Sulfur	ppm	ASTM D5185(m)	10	8	4	---

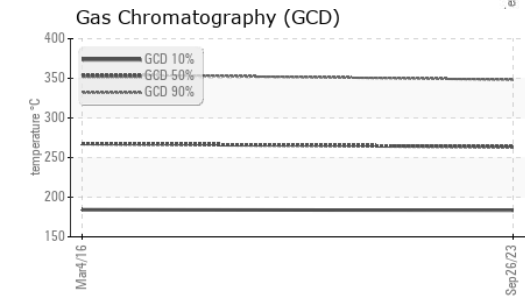
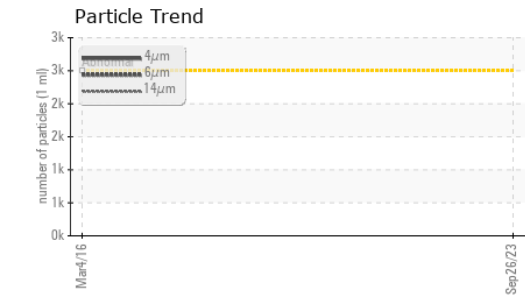
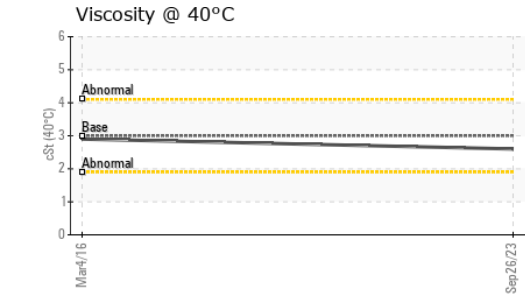
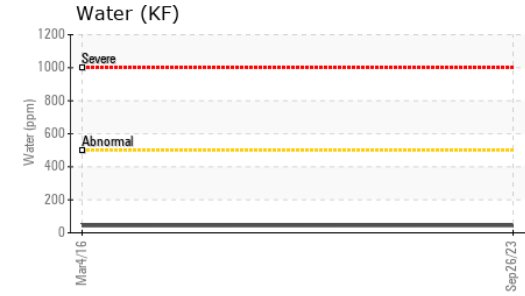
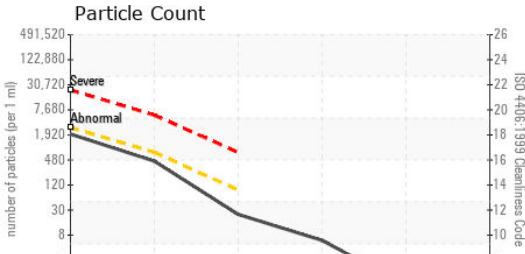
DISTILLATION		method	limit/base	current	history1	history2
Initial Boiling Point	°C	ASTM D2887*	165	172	162	---
5% Distillation Point	°C	ASTM D2887*		195	193	---
10% Distill Point	°C	ASTM D2887*	201	205	206	---
15% Distillation Point	°C	ASTM D2887*		213	216	---
20% Distill Point	°C	ASTM D2887*	216	220	224	---
30% Distill Point	°C	ASTM D2887*	230	234	239	---
40% Distill Point	°C	ASTM D2887*	243	248	253	---
50% Distill Point	°C	ASTM D2887*	255	261	266	---
60% Distill Point	°C	ASTM D2887*	267	275	279	---
70% Distill Point	°C	ASTM D2887*	280	289	293	---
80% Distill Point	°C	ASTM D2887*	295	305	308	---
85% Distillation Point	°C	ASTM D2887*		316	316	---
90% Distill Point	°C	ASTM D2887*	310	327	327	---
95% Distillation Point	°C	ASTM D2887*		344	342	---
Final Boiling Point	°C	ASTM D2887*	341	363	351	---
Distillation Residue	%	ASTM D86(e)*	3.0	---	1.4	---
Distillation Loss	%	ASTM D86(e)*	3.0	---	0.5	---

IGNITION QUALITY		method	limit/base	current	history1	history2
API Gravity		ASTM D1298*	37.7	36	35.6	---
Cetane Index		ASTM D4737*	<40.0	48	47.9	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	<1.0	0	0	---
Sodium	ppm	ASTM D5185(m)	<0.1	0	0	---
Potassium	ppm	ASTM D5185(m)	<0.1	<1	0	---
Water	%	ASTM D6304*	<0.05	0.004	0.004	---
ppm Water	ppm	ASTM D6304*	<500	44.5	43.6	---



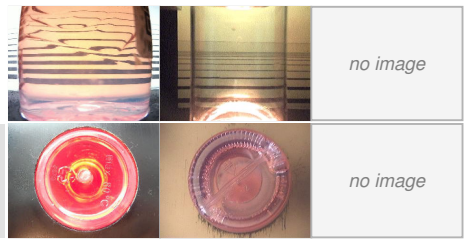
FUEL REPORT



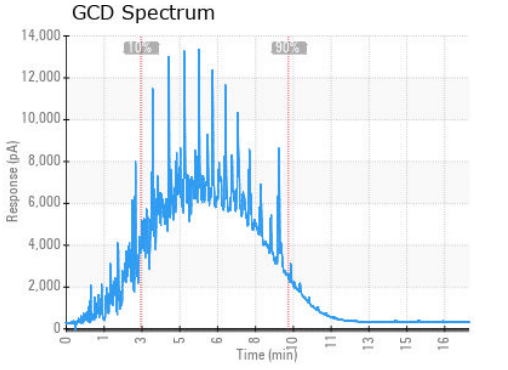
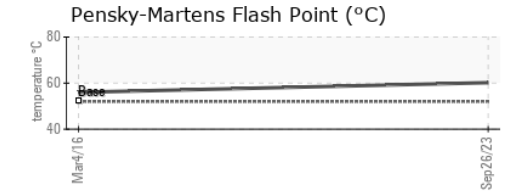
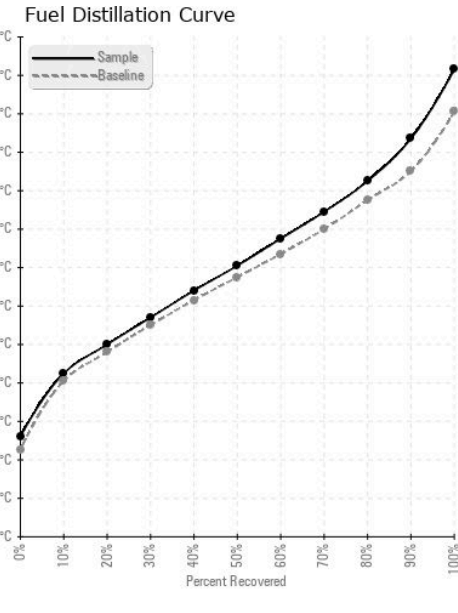
FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>2500	1759	---	---
Particles >6µm	ASTM D7647	>640	395	---	---
Particles >14µm	ASTM D7647	>80	21	---	---
Particles >21µm	ASTM D7647	>20	5	---	---
Particles >38µm	ASTM D7647	>4	0	---	---
Particles >71µm	ASTM D7647	>3	0	---	---
Oil Cleanliness	ISO 4406 (c)	>18/16/13	18/16/12	---	---

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	0	---
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	0	<1	---
Magnesium	ppm	ASTM D5185(m)	<0.1	0	0	---
Phosphorus	ppm	ASTM D5185(m)	<0.1	<1	0	---
Zinc	ppm	ASTM D5185(m)	<0.1	0	<1	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					



GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 CUMMINS CANADA ULC - GENERATOR DIVISION
Sample No. : CU0021892 **Received** : 06 Oct 2023 7175 PACIFIC CIRCLE
Lab Number : 02587882 **Diagnosed** : 11 Oct 2023 MISSISSAUGA, ON
Unique Number : 5656948 **Diagnostician** : Kevin Marson CA L5T 2A5
Test Package : FUEL (Additional Tests: CC Flash, GC-PercFuel, PrtCount)
 Contact: Elisia Johnson
 elisia.johnson@cummins.com
 T: (905)795-0050
 F: (905)795-9252

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.