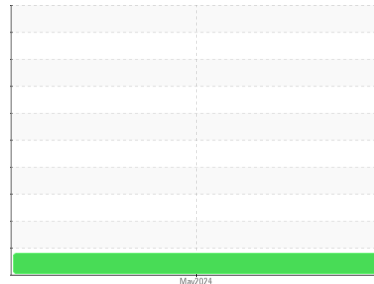




# FUEL REPORT

Sample Rating Trend



WEAR



Area  
**BEANFIELD TECHNOLOGIES [154967]**  
 Machine Id  
**WJ3889N1167322**  
 Component  
**Diesel Fuel**  
 Fluid  
**No.2 DIESEL FUEL (LOW-SULPHUR) (--- GAL)**

## DIAGNOSIS

### Recommendation

The fuel change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

### Corrosion

Iron ppm levels are abnormal. The high metal levels indicate corrosion in the system.

### 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 diesel fuel, low sulfur (US EPA/CGSB-3.517-3 type B).

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>CU0023355</b>	---	---
Sample Date	Client Info			<b>09 May 2024</b>	---	---
Machine Age	hrs	Client Info		<b>235</b>	---	---
Sample Status				<b>ABNORMAL</b>	---	---

PHYSICAL PROPERTIES		method	limit/base	current	history1	history2
Specific Gravity		ASTM D1298*	0.839	<b>0.842</b>	---	---
Fuel Color	text	Visual Screen*	Yellow	<b>Pink</b>	---	---
Visc @ 40°C	cSt	ASTM D7279(m)	3.0	<b>2.4</b>	---	---
Pensky-Martens Flash Point	°C	ASTM D7215*	52	<b>64.5</b>	---	---

SULFUR CONTENT		method	limit/base	current	history1	history2
Sulfur	ppm	ASTM D5185(m)	250	<b>123</b>	---	---

DISTILLATION		method	limit/base	current	history1	history2
Initial Boiling Point	°C	ASTM D2887*	165	<b>175</b>	---	---
5% Distillation Point	°C	ASTM D2887*		<b>197</b>	---	---
10% Distill Point	°C	ASTM D2887*	201	<b>208</b>	---	---
15% Distillation Point	°C	ASTM D2887*		<b>216</b>	---	---
20% Distill Point	°C	ASTM D2887*	216	<b>223</b>	---	---
30% Distill Point	°C	ASTM D2887*	230	<b>237</b>	---	---
40% Distill Point	°C	ASTM D2887*	243	<b>248</b>	---	---
50% Distill Point	°C	ASTM D2887*	255	<b>259</b>	---	---
60% Distill Point	°C	ASTM D2887*	267	<b>270</b>	---	---
70% Distill Point	°C	ASTM D2887*	280	<b>282</b>	---	---
80% Distill Point	°C	ASTM D2887*	295	<b>294</b>	---	---
85% Distillation Point	°C	ASTM D2887*		<b>305</b>	---	---
90% Distill Point	°C	ASTM D2887*	310	<b>316</b>	---	---
95% Distillation Point	°C	ASTM D2887*		<b>337</b>	---	---
Final Boiling Point	°C	ASTM D2887*	341	<b>366</b>	---	---

IGNITION QUALITY		method	limit/base	current	history1	history2
API Gravity		ASTM D1298*	37.7	<b>36</b>	---	---
Cetane Index		ASTM D4737*	<40.0	<b>47</b>	---	---

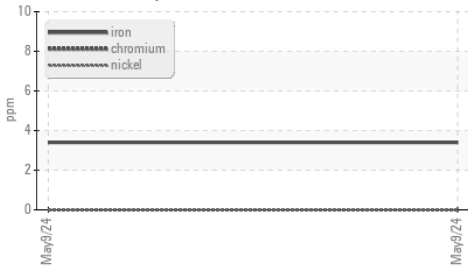
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	<1.0	<b>0</b>	---	---
Sodium	ppm	ASTM D5185(m)	<0.1	<b>1</b>	---	---
Potassium	ppm	ASTM D5185(m)	<0.1	<b>0</b>	---	---
Water	%	ASTM D6304*	<0.05	<b>0.003</b>	---	---
ppm Water	ppm	ASTM D6304*	<500	<b>34</b>	---	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>2500	<b>1052</b>	---	---
Particles >6µm		ASTM D7647	>640	<b>278</b>	---	---
Particles >14µm		ASTM D7647	>80	<b>16</b>	---	---
Particles >21µm		ASTM D7647	>20	<b>3</b>	---	---
Particles >38µm		ASTM D7647	>4	<b>0</b>	---	---
Particles >71µm		ASTM D7647	>3	<b>0</b>	---	---
Oil Cleanliness		ISO 4406 (c)	>18/16/13	<b>17/15/11</b>	---	---



# FUEL REPORT

### ▲ Ferrous Alloys



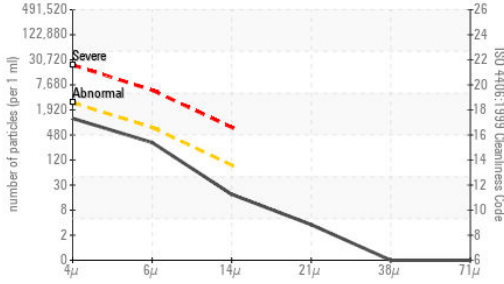
HEAVY METALS	method	limit/base	current	history1	history2
Aluminum	ppm	ASTM D5185(m)	<0.1	0	---
Nickel	ppm	ASTM D5185(m)	<0.1	0	---
Lead	ppm	ASTM D5185(m)	<0.1	0	---
Vanadium	ppm	ASTM D5185(m)	<0.1	0	---
Iron	ppm	ASTM D5185(m)	<0.1	▲ 3	---
Calcium	ppm	ASTM D5185(m)	<0.1	<1	---
Magnesium	ppm	ASTM D5185(m)	<0.1	<1	---
Phosphorus	ppm	ASTM D5185(m)	<0.1	<1	---
Zinc	ppm	ASTM D5185(m)	<0.1	<1	---

### SAMPLE IMAGES

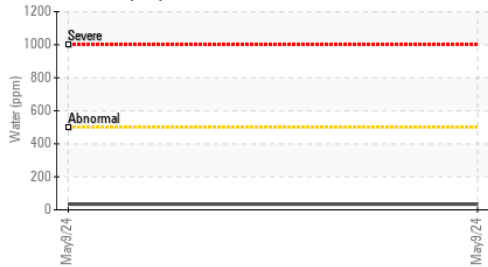
	method	limit/base	current	history1	history2
Color				no image	no image
Bottom				no image	no image

### GRAPHS

### Particle Count



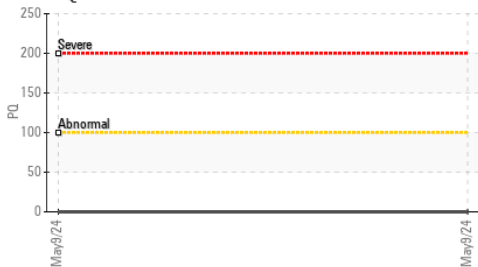
### Water (KF)



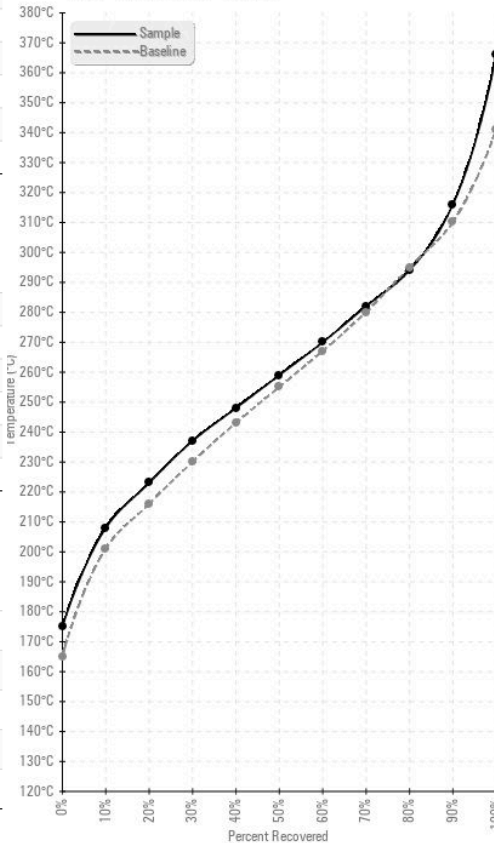
### Viscosity @ 40°C



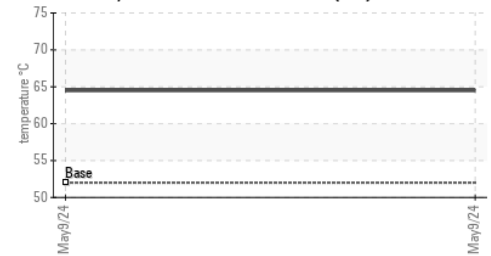
### PQ



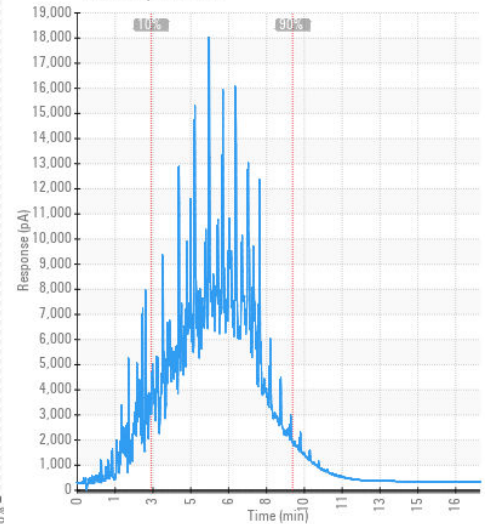
### Fuel Distillation Curve



### Pensky-Martens Flash Point (°C)



### GCD Spectrum



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **CUMMINS CANADA ULC - GENERATOR DIVISION**  
**Sample No.** : CU0023355 **Received** : 10 Jun 2024 **7175 PACIFIC CIRCLE**  
**Lab Number** : 02640926 **Tested** : 12 Jun 2024 **MISSISSAUGA, ON**  
**Unique Number** : 5798465 **Diagnosed** : 12 Jun 2024 - Kevin Marson **CA L5T 2A5**  
**Test Package** : FUEL ( Additional Tests: CC Flash, PQ, PrtCount ) **Contact: Elisia Johnson**  
**7175 PACIFIC CIRCLE**  
**MISSISSAUGA, ON**  
**CA L5T 2A5**  
**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.