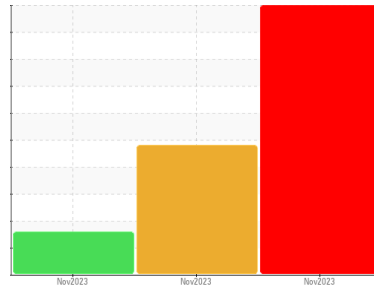




# FUEL REPORT

Sample Rating Trend



ISO



Machine Id  
**WL0348**

Component  
**Diesel Fuel**

Fluid  
**DIESEL FUEL No. 2 (--- GAL)**

## DIAGNOSIS

### Recommendation

We advise that you check all areas where contaminants can enter the system. We advise that you filter this fluid before use. We advise that you follow the water drain-off procedure for this component. We recommend you service the filters on this component. We recommend an early resample to monitor this condition.

### Corrosion

{not applicable}

### Contaminants

There is a light amount of silt (particulates < 14 microns in size) present in the fuel. Excessive free water present. NOTE: coolant refractometer measures 35.5% EG, indicating the presence of glycol.

### Fuel Condition

The fuel is no longer serviceable due to the presence of contaminants.

## SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>GFL0099594</b>	GFL0099580	GFL0099581
Sample Date	Client Info	<b>29 Nov 2023</b>	29 Nov 2023	20 Nov 2023
Machine Age	hrs	<b>6620</b>	6620	6620
Sample Status		<b>SEVERE</b>	ABNORMAL	ABNORMAL

## PHYSICAL PROPERTIES

method	limit/base	current	history1	history2		
Specific Gravity	ASTM D1298*	0.850	<b>0.847</b>	0.848	0.847	
Fuel Color	text	Visual Screen*	<b>YELLOW</b>	Red	Red	
Visc @ 40°C	cSt	ASTM D7279(m)	4.1	<b>2.2</b>	2.2	
Pensky-Martens Flash Point	°C	ASTM D7215*	40	<b>51.8</b>	53.9	52.2

## SULFUR CONTENT

method	limit/base	current	history1	history2		
Sulfur	ppm	ASTM D5185(m)		<b>16</b>	15	13

## DISTILLATION

method	limit/base	current	history1	history2		
Initial Boiling Point	°C	ASTM D2887*	174	<b>162</b>	165	163
5% Distillation Point	°C	ASTM D2887*		<b>183</b>	184	183
10% Distill Point	°C	ASTM D2887*	186	<b>193</b>	194	193
15% Distillation Point	°C	ASTM D2887*		<b>200</b>	201	201
20% Distill Point	°C	ASTM D2887*	206	<b>207</b>	209	208
30% Distill Point	°C	ASTM D2887*	226	<b>221</b>	224	223
40% Distill Point	°C	ASTM D2887*	245	<b>234</b>	237	236
50% Distill Point	°C	ASTM D2887*	260	<b>247</b>	250	249
60% Distill Point	°C	ASTM D2887*	272	<b>261</b>	264	263
70% Distill Point	°C	ASTM D2887*	285	<b>275</b>	278	277
80% Distill Point	°C	ASTM D2887*	315	<b>292</b>	294	293
85% Distillation Point	°C	ASTM D2887*		<b>304</b>	306	304
90% Distill Point	°C	ASTM D2887*	360	<b>315</b>	317	316
95% Distillation Point	°C	ASTM D2887*		<b>335</b>	335	334
Final Boiling Point	°C	ASTM D2887*	>360	<b>360</b>	355	353

## IGNITION QUALITY

method	limit/base	current	history1	history2	
API Gravity	ASTM D1298*	35.0	<b>---</b>	35	35
Cetane Index	ASTM D4737*	<40.0	<b>---</b>	43	43

## CONTAMINANTS

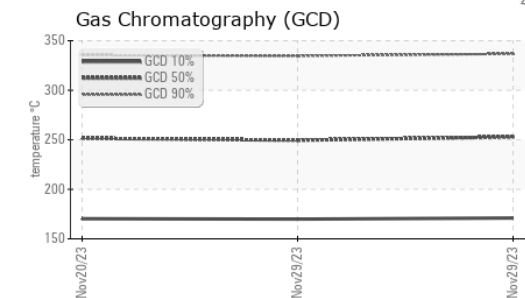
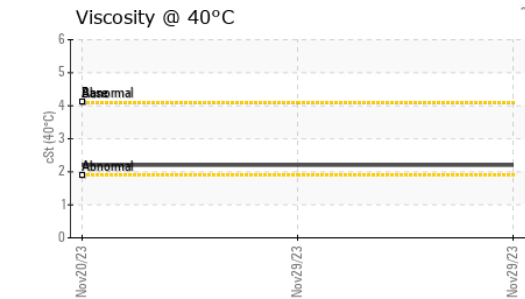
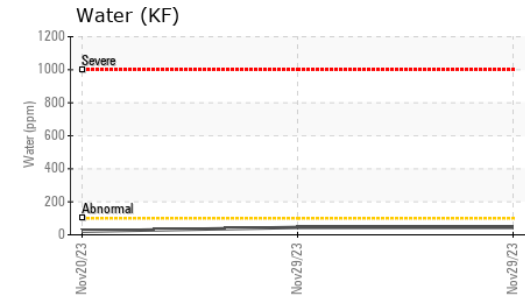
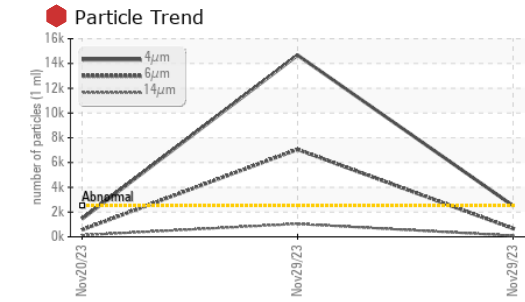
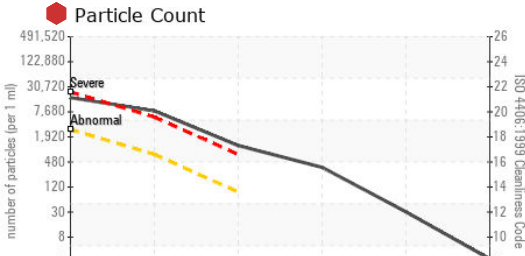
method	limit/base	current	history1	history2		
Silicon	ppm	ASTM D5185(m)	<1.0	<b>0</b>	0	0
Sodium	ppm	ASTM D5185(m)	<0.1	<b>&lt;1</b>	1	<1
Potassium	ppm	ASTM D5185(m)	<0.1	<b>0</b>	<1	<1
Water	%	ASTM D6304*	<0.05	<b>0.004</b>	0.004	0.002
ppm Water	ppm	ASTM D6304*	<500	<b>45</b>	45	22

## FLUID CLEANLINESS

method	limit/base	current	history1	history2	
Particles >4µm	ASTM D7647	>2500	<b>▲ 14666</b>	▲ 2507	1447
Particles >6µm	ASTM D7647	>640	<b>● 7056</b>	▲ 674	566
Particles >14µm	ASTM D7647	>80	<b>● 1044</b>	▲ 89	▲ 130
Particles >21µm	ASTM D7647	>20	<b>● 314</b>	▲ 40	▲ 66
Particles >38µm	ASTM D7647	>4	<b>▲ 27</b>	▲ 8	▲ 11
Particles >71µm	ASTM D7647	>3	<b>2</b>	1	0
Oil Cleanliness	ISO 4406 (c)	>18/16/13	<b>● 21/20/17</b>	▲ 19/17/14	▲ 18/16/14



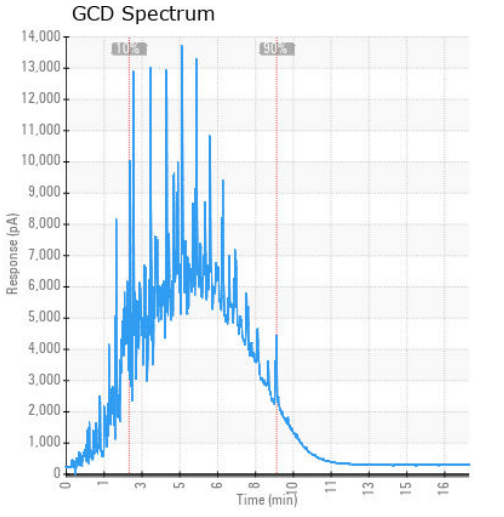
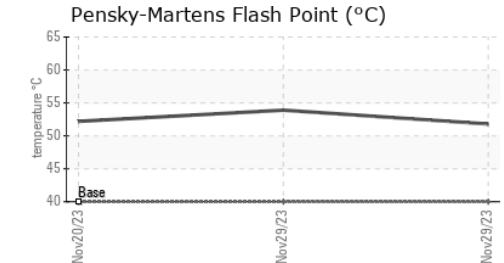
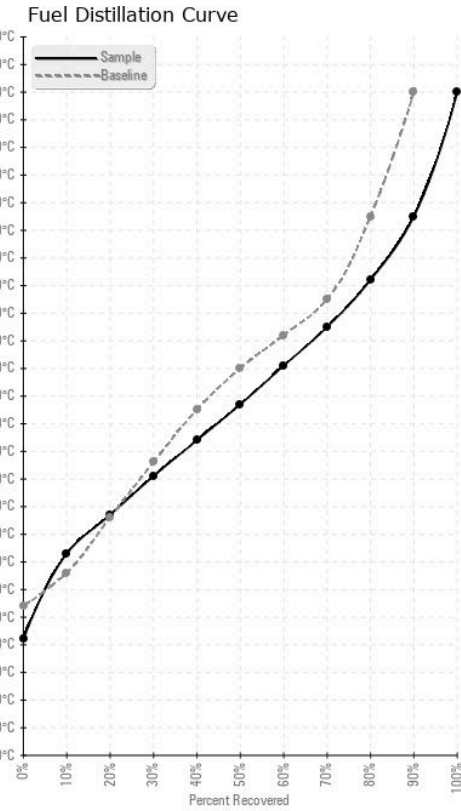
# FUEL REPORT



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

SAMPLE IMAGES		method	limit/base	current	history1	history2
Color						
Bottom						

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 550 - Rocky View County  
**Sample No.** : GFL0099594 **Received** : 05 Dec 2023 220 Carmek Blvd  
**Lab Number** : 02601076 **Diagnosed** : 07 Dec 2023 Rocky View County, AB  
**Unique Number** : 5694161 **Diagnostician** : Kevin Marson CA T1X 1X1  
**Test Package** : FUEL ( Additional Tests: CC Flash, CENTRIFUGE(WARD), GC-PercFuel, PriCount) Contact: GFL Calgary calgarymaintenance@gflenv.com

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.

T:  
 F: (403)369-6163