

CORROSION CONTAMINANTS FUEL CONDITION NORMAL

ABNORMAL

NORMAL

[2016157]

## **UNDERGROUND #3-B**

Component
Diesel Fuel

DIESEL FUEL No. 2 ( GAL)							
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. We recommend you service the filters on this component. We recommend an early resample to monitor this condition.	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		WC0950437		
	Sample Date		Client Info		31 May 2024		
	Machine Age	hrs	Client Info		0		
	Sample Status				ABNORMAL		
CORROSION	Aluminum	ppm	ASTM D5185(m)	<0.1	0		
{not applicable}	Nickel	ppm	ASTM D5185(m)	< 0.1	0		
	Lead	ppm	ASTM D5185(m)	<0.1	<1		
	Vanadium	ppm	ASTM D5185(m)	< 0.1	0		
	Iron	ppm	ASTM D5185(m)	<0.1	<1		
CONTAMINANTS	Silicon	ppm	ASTM D5185(m)	<10	0		
There is a moderate amount of silt (particulates < 14 microns in size) present in the fuel. The water content is negligible.	Sodium	ppm	ASTM D5185(m)		<1		
	Potassium	ppm	ASTM D5185(m)	<0.1	0		
	Water	%	ASTM D6304*		0.005		
	ppm Water	ppm	ASTM D6304*	<500	60		
	Particles >4µm		ASTM D7647	>2500	<b>▲</b> 8462		
	Particles >6µm		ASTM D7647	>640	<u> </u>		
	Particles >14µm		ASTM D7647	>80	<b>86</b>		
	Particles >21µm		ASTM D7647	>20	20		
	Particles >38µm		ASTM D7647	>4	2		
	Particles >71μm		ASTM D7647	>3	0		
	Oil Cleanliness		ISO 4406 (c)	>18/16/13	<u> </u>		
	Calcium	ppm	ASTM D5185(m)	< 0.1	0		
	Magnesium	ppm	ASTM D5185(m)	<0.1	0		
	Phosphorus	ppm	ASTM D5185(m)	<0.1	0		
	Zinc	ppm	ASTM D5185(m)	<0.1	0		
FUEL CONDITION	Specific Gravity		ASTM D1298*	0.850	0.826		
All laboratory tests indicate that this sample meets specifications for No.2 diesel fuel, low sulfur (US EPA/CGSB-3.517-3 type B). The fuel is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.	Fuel Color	text	Visual Screen*	YELLO	Pink		
	Visc @ 40°C	cSt	ASTM D7279(m)	4.1	2.1		
	Sulfur	ppm	ASTM D5185(m)		12		
	Initial Boiling Point	°C	ASTM D2887*	174	161		
	10% Distill Point	°C	ASTM D2887*	186	192		
	20% Distill Point	°C	ASTM D2887*	206	207		
	30% Distill Point	°C	ASTM D2887*	226	221		
	40% Distill Point	°C	ASTM D2887*	245	235		
	50% Distill Point	°C	ASTM D2887*	260	249		
	60% Distill Point	°C	ASTM D2887*	272	262		
	70% Distill Point	°C	ASTM D2887*	285	276		
	80% Distill Point	°C	ASTM D2887*	315	292		
	90% Distill Point	°C	ASTM D2887*	360	314		

Final Boiling Point °C

**API** Gravity

Cetane Index

367

39

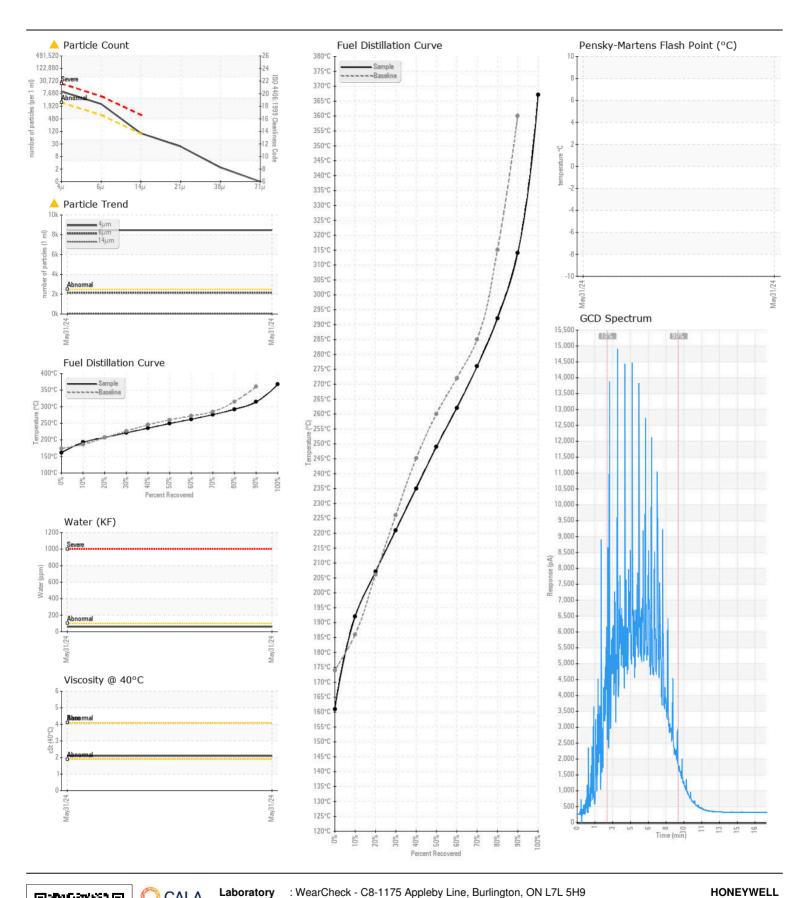
50

ASTM D2887\*

ASTM D1298\* 35.0

ASTM D4737\* <40.0

>360





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No. Lab Number

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 : 02640917

: WC0950437 Unique Number : 5798456

Received **Tested** Diagnosed

: 10 Jun 2024 : 13 Jun 2024

: 13 Jun 2024 - Kevin Marson

Test Package: FUEL (Additional Tests: 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.

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