

#### Machine Id **195** Component **Diesel Engine** Fluid **{not provided} (--- GAL)**

## RECOMMENDATION

We advise that you check the fuel injection system. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition. Please specify the component make and model with your next sample. Please specify the brand, type, and viscosity of the oil on your next sample.

### **WEAR**

All component wear rates are normal.

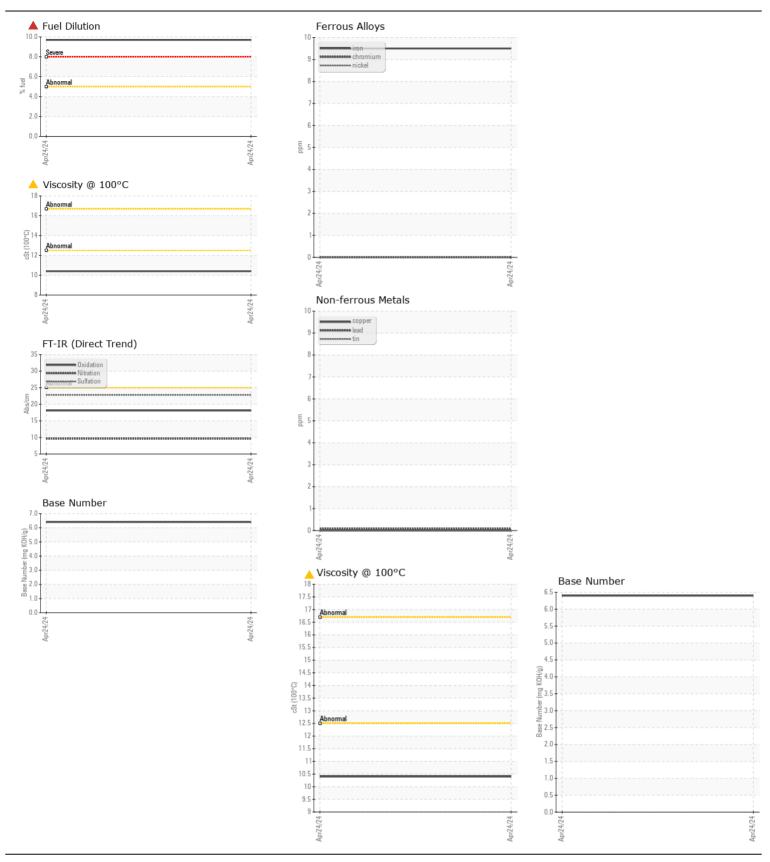
# CONTAMINATION

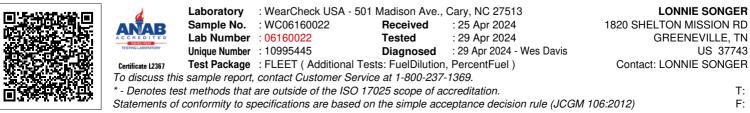
There is a high amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

### **FLUID CONDITION**

The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC06160022		
Sample Date		Client Info		24 Apr 2024		
Machine Age	mls	Client Info		0		
Oil Age	mls	Client Info		0		
Filter Age	mls	Client Info		0		
Oil Changed		Client Info		N/A		
Filter Changed		Client Info		N/A		
Sample Status				SEVERE		
Iron	ppm	ASTM D5185m	>100	10		
Chromium	ppm	ASTM D5185m	>20	0		
Nickel	ppm	ASTM D5185m	>4	0		
Titanium	ppm	ASTM D5185m		78		
Silver	ppm	ASTM D5185m	>3	0		
Aluminum	ppm	ASTM D5185m	>20	2		
Lead	ppm	ASTM D5185m	>40	<1		
Copper	ppm	ASTM D5185m	>330	0		
Tin	ppm	ASTM D5185m	>15	0		
Vanadium	ppm	ASTM D5185m		0		
White Metal	scalar	*Visual	NONE	NONE		
Yellow Metal	scalar	*Visual	NONE	NONE		
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Silicon	ppm	ASTM D5185m	>25	6		
Potassium	ppm	ASTM D5185m	>20	3		
Fuel	%	ASTM D3524	>5	▲ 9.7		
Water		WC Method	>0.2	NEG		
Glycol Soot %	%	WC Method	>3	NEG 0.1		
Nitration	7 <sub>o</sub> Abs/cm	*ASTM D7844 *ASTM D7624	>3 >20	9.6		
Sulfation	Abs/.1mm	*ASTM D7624	>20	22.8		
Silt	scalar	*Visual	NONE	NONE		
Debris	scalar	*Visual	NONE	NONE		
Sand/Dirt	scalar	*Visual	NONE	NONE		
Appearance	scalar	*Visual	NORML	NORML		
Odor	scalar	*Visual	NORML	NORML		
Emulsified Water	scalar	*Visual	>0.2	NEG		
	304141	VISUAI	20.2			
Sodium	ppm	ASTM D5185m		4		
Boron	ppm	ASTM D5185m		74		
Barium	ppm	ASTM D5185m		0		
Molybdenum	ppm	ASTM D5185m		9		
Manganese	ppm	ASTM D5185m		0		
Magnesium	ppm	ASTM D5185m		502		
Calcium	ppm	ASTM D5185m		1890		
Phosphorus	ppm	ASTM D5185m		1051		
Zinc	ppm	ASTM D5185m		1298		
Sulfur	ppm	ASTM D5185m		4440		
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.1		
Base Number (BN)	mg KOH/g	ASTM D2896		6.4		
Visc @ 100°C	cSt	ASTM D445		A 10.4		





Contact/Location: LONNIE SONGER - LONGRETN Page 2 of 2