

# WEAR NORMAL CONTAMINATION SEVERE FLUID CONDITION ABNORMAL

#### Machine Id **NOT GIVEN WC0822313** 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

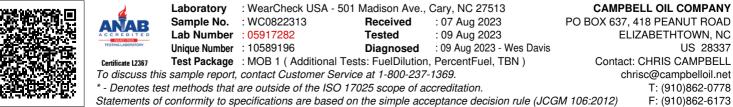
There is a high amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

### 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.

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Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0822313		
Sample Date		Client Info		06 Aug 2023		
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	13		
Chromium	ppm	ASTM D5185m	>20	<1		
Nickel	ppm	ASTM D5185m	>4	<1		
Titanium	ppm	ASTM D5185m	0	0		
Silver	ppm	ASTM D5185m	>3	<1		
Aluminum	ppm	ASTM D5185m	>20	2		
Lead	ppm	ASTM D5185m	>40	0		
Copper	ppm	ASTM D5185m	>330	1		
Tin	ppm	ASTM D5185m	>15	<1		
Vanadium	ppm	ASTM D5185m	NONE	0		
White Metal	scalar	*Visual	NONE	NONE		
Yellow Metal	scalar	*Visual	NONE	NONE		
Silicon	ppm	ASTM D5185m	>25	4		
Potassium	ppm	ASTM D5185m	>20	3		
Fuel	%	ASTM D3524	>5	▲ 17.5		
Water		WC Method	>0.2	NEG		
Glycol		WC Method		NEG		
Soot %	%	*ASTM D7844	>3	0.5		
Nitration	Abs/cm	*ASTM D7624	>20	11.1		
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.5		
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		
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Sodium	ppm	ASTM D5185m		9		
Boron	ppm	ASTM D5185m		3		
Barium	ppm	ASTM D5185m		0		
Molybdenum	ppm	ASTM D5185m ASTM D5185m		50		
Manganese	ppm			<1		
Magnesium	ppm	ASTM D5185m		687 905		
Calcium Phosphorus	ppm	ASTM D5185m		905 911		
·	ppm	ASTM D5185m ASTM D5185m		811		
Zinc Sulfur	ppm	ASTM D5185m ASTM D5185m		973 0267		
Oxidation	ppm Abs/.1mm	*ASTM D518500	>25	2367 20.3		
Base Number (BN)	mg KOH/g	ASTM D7414 ASTM D2896	>20	6.2		
Visc @ 100°C						
VISC @ 100°C	cSt	ASTM D445		10.3		





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Contact/Location: CHRIS CAMPBELL - CAMELI