

Machine Id **174** Component **Diesel Engine** Fluid **{not provided} (--- GAL)**

RECOMMENDATION

We advise that you check for the source of the coolant leak. Check for low coolant level. We advise that you check the fuel injection system. We recommend an early resample to monitor this condition.

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All component wear rates are normal.

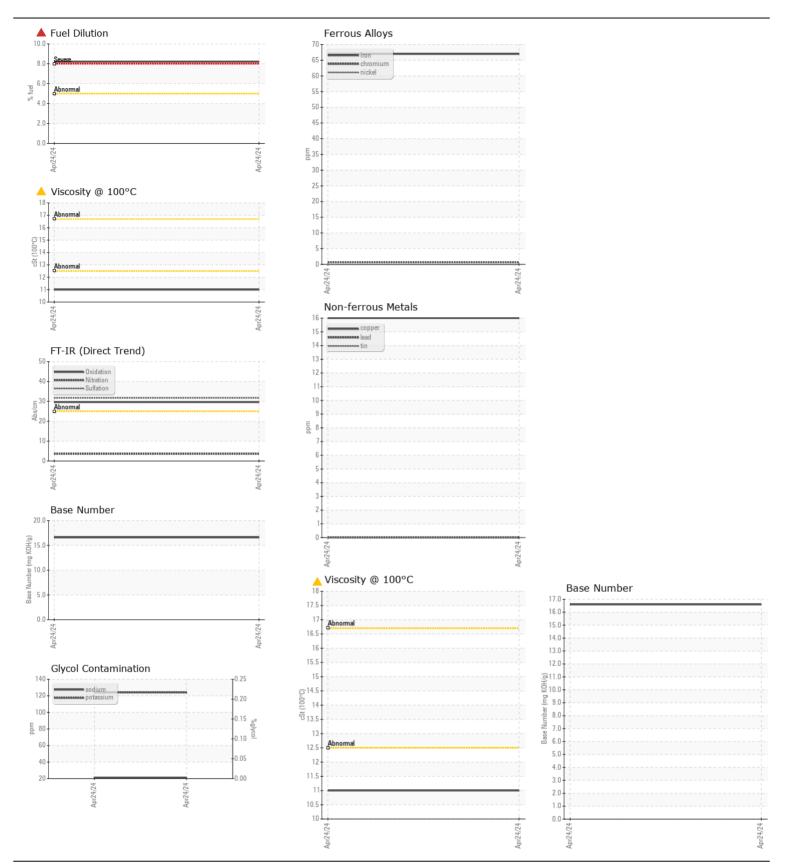
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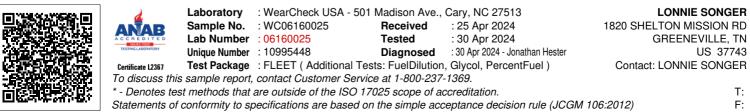
Sodium and/or potassium levels are high. There is a high amount of fuel present in the oil.

FLU	IIN	CO	ND	ТС	

Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC06160025		
Sample Date		Client Info		24 Apr 2024		
Machine Age	mls	Client Info		759188		
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	67		
Chromium	ppm	ASTM D5185m	>20	<1		
Nickel	ppm	ASTM D5185m	>4	0		
Titanium	ppm	ASTM D5185m		2		
Silver	ppm	ASTM D5185m	>3	0		
Aluminum	ppm	ASTM D5185m	>20	3		
Lead	ppm	ASTM D5185m	>40	0		
Copper	ppm	ASTM D5185m	>330	16		
Tin	ppm	ASTM D5185m	>15	0		
Vanadium	ppm	ASTM D5185m	NIGNE	0		
White Metal	scalar	*Visual	NONE	NONE		
Yellow Metal	scalar	*Visual	NONE	NONE		
Silicon	ppm	ASTM D5185m	>25	23		
Potassium	ppm	ASTM D5185m	>20	<u> </u>		
Fuel	%	ASTM D3524	>5	▲ 8.2		
Water		WC Method	>0.2	NEG		
Glycol	%	*ASTM D2982		NEG		
Soot %	%	*ASTM D7844	>3	0.1		
Nitration	Abs/cm	*ASTM D7624	>20	3.6		
Sulfation	Abs/.1mm	*ASTM D7415	>30	31.7		
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		
O - diam						
Sodium	ppm	ASTM D5185m		▲ 21 00		
Boron	ppm	ASTM D5185m		29		
Barium	ppm	ASTM D5185m		<1		
Molybdenum	ppm	ASTM D5185m		<1		
Manganese	ppm	ASTM D5185m		2		
Magnesium	ppm	ASTM D5185m		33		
Calcium	ppm	ASTM D5185m ASTM D5185m		3296		
Phosphorus	ppm			884 977		
Zinc Sulfur	ppm	ASTM D5185m ASTM D5185m		877 2025		
Oxidation	ppm Abs/.1mm	*ASTM D5165111	>25	2925 29.6		
Base Number (BN)	mg KOH/g	ASTM D7414 ASTM D2896	20	29.6 16.6		
Visc @ 100°C	cSt	ASTM D2090 ASTM D445		11.0		
	001	AG HVI D443				





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