

WEAR NORMAL CONTAMINATION ABNORMAL FLUID CONDITION ABNORMAL

Machine Id **7017** Component **Diesel Engine** Fluid {not provided} (--- GAL) **RECOMMENDATION**

We advise that you check the fuel injection system. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

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All component wear rates are normal.

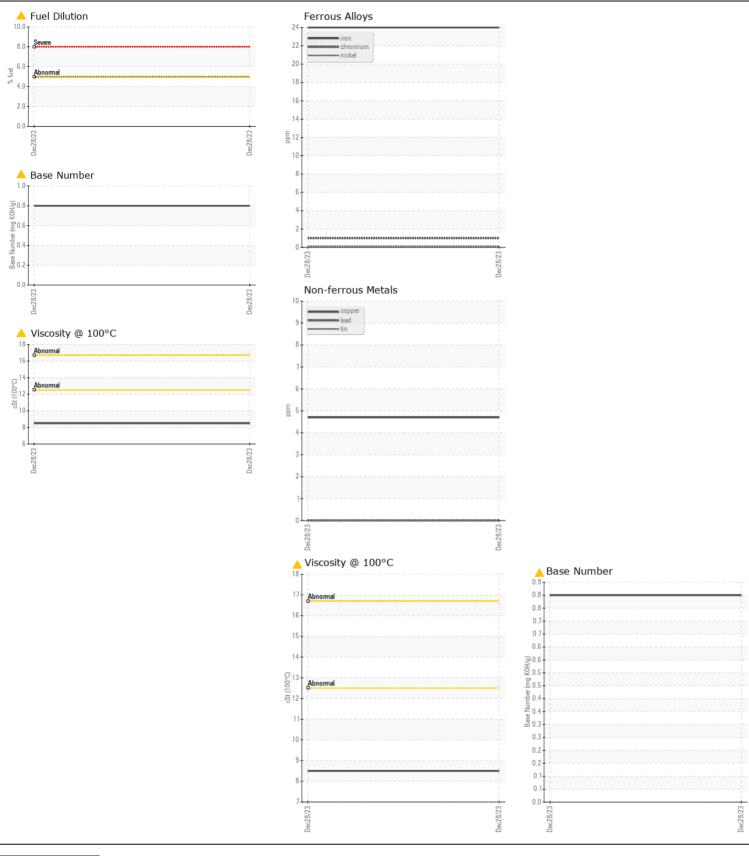
CONTAMINATION

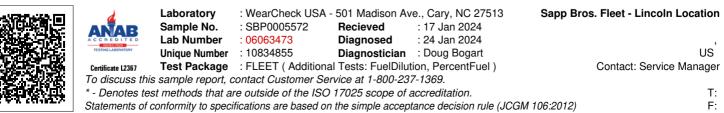
There is a moderate amount of fuel present in the oil.

FLUID CONDITION

Fuel is present in the oil and is lowering the viscosity. The BN level is low.

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Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		SBP0005572		
Sample Date		Client Info		28 Dec 2023		
Machine Age	mls	Client Info		211433		
Oil Age	mls	Client Info		10000		
Filter Age	mls	Client Info		10000		
Oil Changed		Client Info		Changed		
Filter Changed		Client Info		Changed		
Sample Status				ABNORMAL		
Iron	ppm	ASTM D5185m	>100	24		
Chromium	ppm	ASTM D5185m	>20	1		
Nickel	ppm	ASTM D5185m	>4	<1		
Titanium	ppm	ASTM D5185m		<1		
Silver	ppm	ASTM D5185m	>3	0		
Aluminum	ppm	ASTM D5185m	>20	3		
Lead	ppm	ASTM D5185m	>40	0		
Copper	ppm	ASTM D5185m	>330	5		
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	2		
Fuel	%	ASTM D3524	>5	5 .0		
Water		WC Method	>0.2	NEG		
Glycol		WC Method		NEG		
Soot %	%	*ASTM D7844	>3	0.1		
Nitration	Abs/cm	*ASTM D7624	>20	14.4		
Sulfation	Abs/.1mm	*ASTM D7415	>30	29.1		
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		
Sodium	ppm	ASTM D5185m		11		
Boron	ppm	ASTM D5185m		15		
Barium	ppm	ASTM D5185m		0		
Molybdenum	ppm	ASTM D5185m		66		
Manganese	ppm	ASTM D5185m		2		
Magnesium	ppm	ASTM D5185m		481		
Calcium	ppm	ASTM D5185m		1061		
Phosphorus	ppm	ASTM D5185m		688		
Zinc	ppm	ASTM D5185m		762		
Sulfur	ppm	ASTM D5185m		2744		
Oxidation	Abs/.1mm	*ASTM D7414	>25	27.5		
Base Number (BN)	mg KOH/g	ASTM D2896	-	0.8		
Visc @ 100°C	cSt	ASTM D445		▲ 8.5		
	501	. 10 1 11 0 4 40		- 0.0	•	





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