

WEAR NORMAL CONTAMINATION NORMAL FLUID CONDITION NORMAL

Machine Id **139541** Component **Diesel Engine** Fluid **{not provided} (--- LTR)**

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor. 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

Metal levels are typical for a components first oil change.

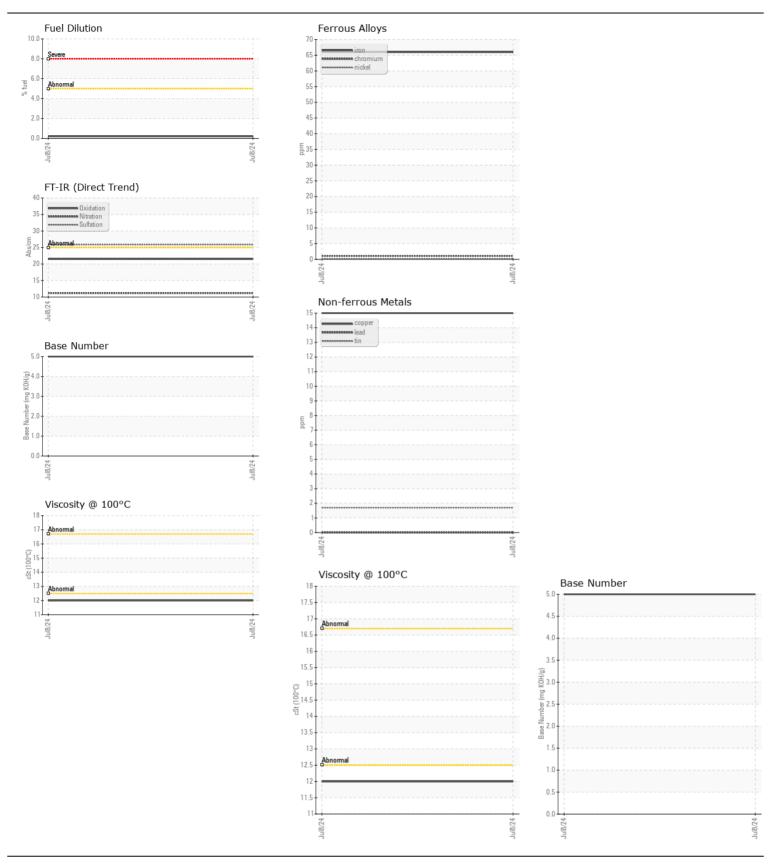
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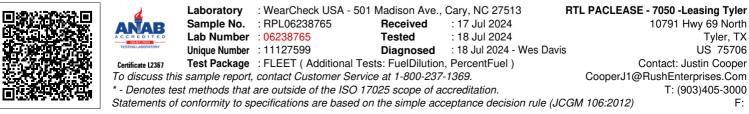
Fuel content negligible. Elevated aluminum (AI) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		RPL06238765		
Sample Date		Client Info		08 Jul 2024		
Machine Age	mls	Client Info		26681		
Oil Age	mls	Client Info		26681		
Filter Age	mls	Client Info		0		
Oil Changed		Client Info		N/A		
Filter Changed		Client Info		N/A		
Sample Status				NORMAL		
Iron	ppm		>100	66		
Chromium	ppm	ASTM D5185m	>20	1		
Nickel	ppm	ASTM D5185m	>4	<1		
Titanium	ppm	ASTM D5185m		<1		
Silver	ppm	ASTM D5185m	>3	<1		
Aluminum	ppm	ASTM D5185m	>20	44		
Lead	ppm	ASTM D5185m	>40	0		
Copper	ppm	ASTM D5185m	>330	15		
Tin	ppm	ASTM D5185m	>15	2		
Vanadium	ppm	ASTM D5185m		<1		
White Metal	scalar	*Visual	NONE	NONE		
Yellow Metal	scalar	*Visual	NONE	NONE		
Silicon	ppm	ASTM D5185m	>25	19		
Potassium	ppm	ASTM D5185m	>20	142		
Fuel	%	ASTM D3524	>5	0.2		
Water		WC Method	>0.2	NEG		
Glycol		WC Method		NEG		
Soot %	%	*ASTM D7844	>3	0.3		
Nitration	Abs/cm	*ASTM D7624	>20	11.2		
Sulfation	Abs/.1mm	*ASTM D7415	>30	25.9		
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	nom	ASTM D5185m		7		
Boron	ppm	ASTM D5185m		25		
	ppm	ASTM D5185m ASTM D5185m				
Barium	ppm	ASTM D5185m ASTM D5185m		0 24		
Molybdenum Manganese	ppm			24 4		
Magnesium	ppm	ASTM D5185m ASTM D5185m		4 755		
Calcium	ppm			755 1436		
Phosphorus	ppm	ASTM D5185m ASTM D5185m				
	ppm			755		
Zinc	ppm	ASTM D5185m		901		
Sulfur	ppm	ASTM D5185m	. 05	3469		
Oxidation	Abs/.1mm	*ASTM D7414	>25	21.5		
Base Number (BN)	mg KOH/g	ASTM D2896		5.0		
Visc @ 100°C	cSt	ASTM D445		12.0		

FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.





Contact/Location: Justin Cooper - PAC7050 Page 2 of 2