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#### Machine Id **T-919** Component **Diesel Engine** Fluid **DIESEL ENGINE OIL SAE 15W40 (--- GAL)**

## RECOMMENDATION

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 new component breaking in.

# CONTAMINATION

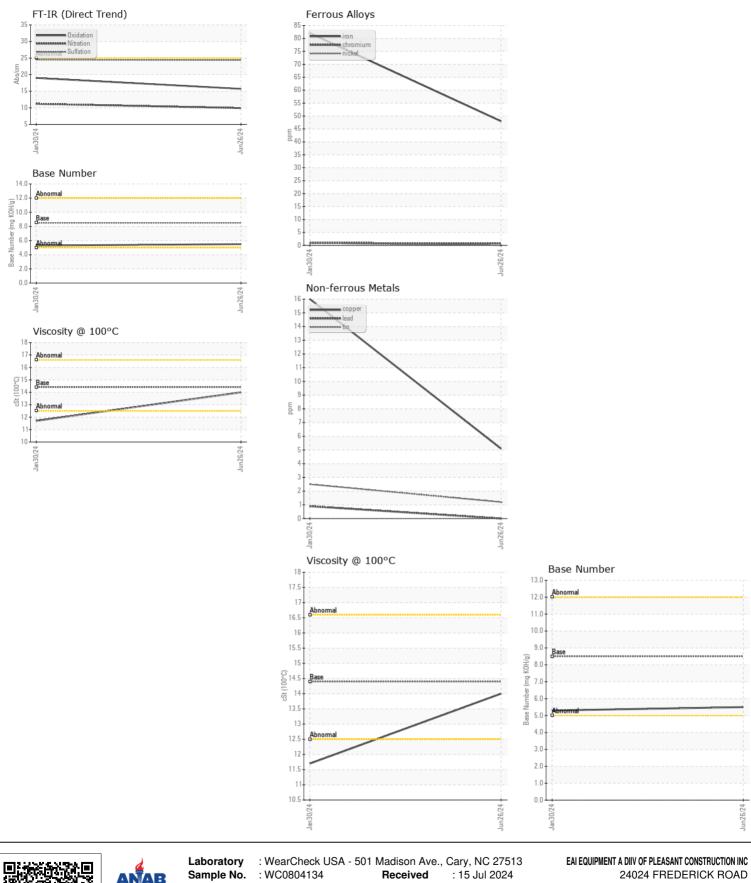
Elevated aluminum (AI) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

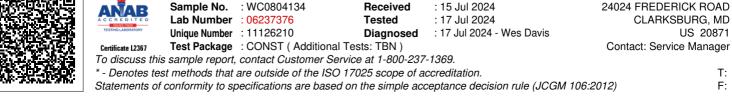
	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		WC0804134	WC0865129	
	Sample Date		Client Info		26 Jun 2024	30 Jan 2024	
	Machine Age	mls	Client Info		35775	18062	
	Oil Age	mls	Client Info		0	0	
	Filter Age	mls	Client Info		0	0	
	Oil Changed		Client Info		Changed	Changed	
	Filter Changed		Client Info		N/A	N/A	
	Sample Status				NORMAL	ATTENTION	
	Iron	ppm	ASTM D5185m	>100	48	82	
	Chromium	ppm	ASTM D5185m	>20	<1	<1	
	Nickel	ppm	ASTM D5185m	>4	0	<1	
	Titanium	ppm	ASTM D5185m		0	<1	
	Silver	ppm	ASTM D5185m	>3	<1	1	
	Aluminum	ppm	ASTM D5185m	>20	18	27	
	Lead	ppm	ASTM D5185m	>40	0	<1	
	Copper	ppm	ASTM D5185m	>330	5	16	
	Tin	ppm	ASTM D5185m	>15	1	2	
	Vanadium	ppm	ASTM D5185m		0	<1	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
	Silicon	ppm	ASTM D5185m	>25	10	15	
	Potassium	ppm	ASTM D5185m	>20	41	83	
	Fuel		WC Method	>5	<1.0	0.4	
	Water		WC Method	>0.2	NEG	NEG	
	Glycol		WC Method		NEG	NEG	
	Soot %	%	*ASTM D7844	>3	0.6	0.4	
	Nitration	Abs/cm	*ASTM D7624	>20	9.9	11.2	
	Sulfation	Abs/.1mm	*ASTM D7415	>30	24.4	24.5	
	Silt	scalar	*Visual	NONE	NONE	NONE	
	Debris	scalar	*Visual	NONE	NONE	NONE	
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
	Appearance	scalar	*Visual	NORML	NORML	NORML	
	Odor	scalar	*Visual	NORML	NORML	NORML	
	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	
	Sodium	ppm	ASTM D5185m	>158	2	3	
	Boron	ppm	ASTM D5185m	250	0	25	
	Barium	ppm	ASTM D5185m	10	0	0	
	Molybdenum	ppm	ASTM D5185m	100	2	2	
	Manganese	ppm	ASTM D5185m		<1	3	
	Magnesium	ppm	ASTM D5185m	450	139	678	
	Calcium	ppm	ASTM D5185m	3000	2416	1398	
	Phosphorus	ppm	ASTM D5185m	1150	987	825	
	Zinc	ppm	ASTM D5185m	1350	1155	817	
	Sulfur	ppm	ASTM D5185m	4250	4306	3461	
	Oxidation	Abs/.1mm	*ASTM D7414	>25	15.7	19.0	
	Base Number (BN)	mg KOH/g	ASTM D2896	8.5	5.5	5.3	
	Visc @ 100°C	cSt	ASTM D445	14.4	14.0	11.7	

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### 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: Service Manager - EAICLA Page 2 of 2