

## Machine Id **17815** 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 components first oil change.

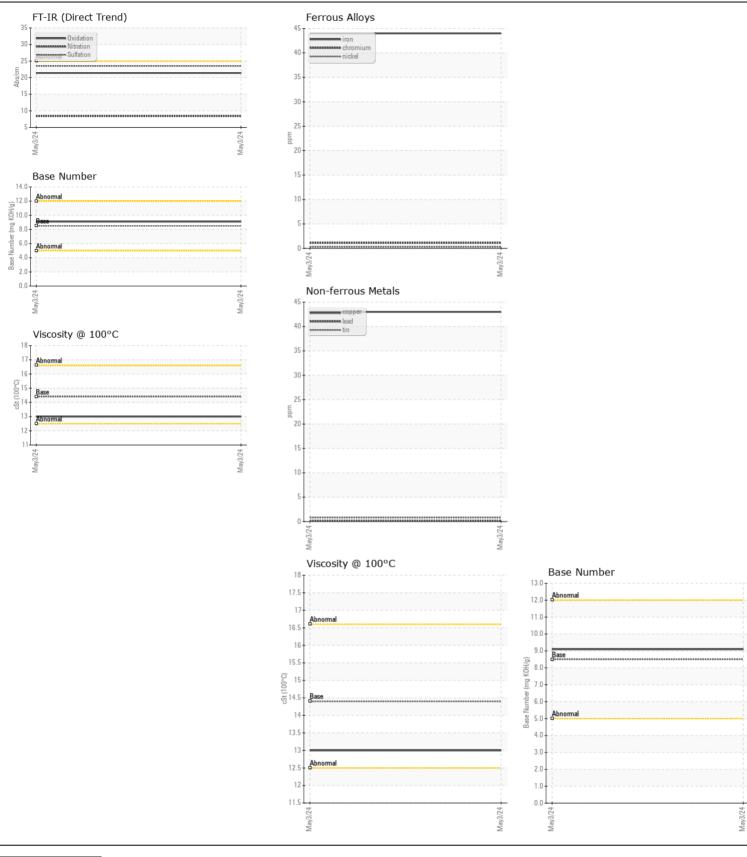
## CONTAMINATION

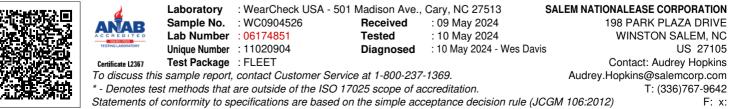
Elevated aluminum (AI) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0904526		
Sample Date		Client Info		03 May 2024		
Machine Age	mls	Client Info		6274		
Oil Age	mls	Client Info		6274		
Filter Age	mls	Client Info		6274		
Oil Changed		Client Info		Changed		
Filter Changed		Client Info		Changed		
Sample Status				NORMAL		
			100			
Iron Chromium	ppm	ASTM D5185m ASTM D5185m	>100	44 1		
Nickel	ppm	ASTM D5185m	>20 >4	۱ <1		
Titanium	ppm	ASTM D5185m	>4	<1		
Silver	ppm	ASTM D5185m	>3	0		
Aluminum	ppm	ASTM D5185m	>20	8		
Lead	ppm	ASTM D5185m	>20	。 <1		
	ppm		>40	<1 43		
Copper Tin	ppm	ASTM D5185m				
	ppm	ASTM D5185m	>15	<1		
Vanadium White Metal	ppm	ASTM D5185m	NONE	<1 NONE		
	scalar	*Visual	-	NONE		
Yellow Metal	scalar	*Visual	NONE	NONE		
Silicon	ppm	ASTM D5185m	>25	29		
Potassium	ppm	ASTM D5185m	>20	27		
Fuel	lelerri	WC Method	>5	<1.0		
Water		WC Method	>0.2	NEG		
Glycol		WC Method		NEG		
Soot %	%	*ASTM D7844	>3	0.4		
Nitration	Abs/cm	*ASTM D7624	>20	8.4		
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.5		
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		
Sodium	ppm	ASTM D5185m	>158	5		
Boron	ppm	ASTM D5185m	250	69		
Barium	ppm	ASTM D5185m	10	3		
Molybdenum	ppm	ASTM D5185m	100	43		
Manganese	ppm	ASTM D5185m		5		
Magnesium	ppm	ASTM D5185m	450	535		
Calcium	ppm	ASTM D5185m	3000	1568		
Phosphorus	ppm	ASTM D5185m	1150	795		
Zinc	ppm	ASTM D5185m	1350	917		
Sulfur	ppm	ASTM D5185m	4250	2623		
Oxidation	Abs/.1mm	*ASTM D7414	>25	21.4		
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	9.1		
Visc @ 100°C	cSt	ASTM D445	14.4	13.0		

## **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: Audrey Hopkins - SALWIN Page 2 of 2