

Machine Id **17823** 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

FLUID CONDITION

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.

The BN result indicates that there is suitable alkalinity remaining in the

oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0867024		
Sample Date		Client Info		29 Jan 2024		
Machine Age	mls	Client Info		5975		
Oil Age	mls	Client Info		5975		
Filter Age	mls	Client Info		5975		
Oil Changed		Client Info		Changed		
Filter Changed		Client Info		Changed		
Sample Status				NORMAL		
Iron	ppm	ASTM D5185m	>100	41		
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	7		
Lead	ppm	ASTM D5185m	>40	<1		
Copper	ppm	ASTM D5185m	>330	20		
Tin	ppm	ASTM D5185m	>15	1		
Vanadium	ppm	ASTM D5185m		<1		
White Metal	scalar	*Visual	NONE	NONE		
Yellow Metal	scalar	*Visual	NONE	NONE		
Silicon	ppm	ASTM D5185m	>25	24		
Potassium	ppm	ASTM D5185m	>20	16		
Fuel	ррпі	WC Method	>5	<1.0		
Water		WC Method	>0.2	NEG		
Glycol		WC Method	20.2	NEG		
Soot %	%	*ASTM D7844	>3	0.4		
Nitration	Abs/cm	*ASTM D7624	>20	7.2		
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.3		
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	6		
Boron	ppm	ASTM D5185m	250	52		
Barium	ppm	ASTM D5185m	10	0		
Molybdenum	ppm	ASTM D5185m	100	40		
Manganese	ppm	ASTM D5185m		6		
Magnesium	ppm	ASTM D5185m	450	513		
Calcium	ppm	ASTM D5185m	3000	1523		
Phosphorus	ppm	ASTM D5185m	1150	700		
Zinc	ppm	ASTM D5185m	1350	848		
Sulfur	ppm	ASTM D5185m	4250	2262		
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.7		
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	6.5		
Visc @ 100°C	cSt	ASTM D445	14.4	12.9		

