

Machine Id **CI4C** Component **Diesel Engine** Fluid **DIESEL ENGINE OIL SAE 15W40 (--- GAL)**

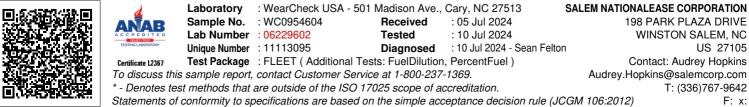
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.	Sample Number		Client Info		WC0954604		
	Sample Date		Client Info		24 Jun 2024		
	Machine Age	mls	Client Info		182791		
	Oil Age	mls	Client Info		7870		
	Filter Age	mls	Client Info		7870		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				ATTENTION		
WEAR All component wear rates are normal.	Iron	ppm	ASTM D5185m		14		
	Chromium	ppm	ASTM D5185m		<1		
	Nickel	ppm	ASTM D5185m	>4	0		
	Titanium	ppm	ASTM D5185m		0		
	Silver	ppm	ASTM D5185m		0		
	Aluminum	ppm	ASTM D5185m		4		
	Lead	ppm	ASTM D5185m		0		
	Copper	ppm	ASTM D5185m		<1		
	Tin	ppm	ASTM D5185m	>15	0		
	Vanadium	ppm	ASTM D5185m		0		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	5		
	Potassium	ppm	ASTM D5185m		4		
Fuel content negligible. There is no indication of any contamination in the oil.	Fuel	%	ASTM D3524		0.3		
	Water		WC Method		NEG		
	Glycol		WC Method		NEG		
	Soot %	%	*ASTM D7844	>3	0.5		
	Nitration	Abs/cm	*ASTM D7624		10.7		
	Sulfation	Abs/.1mm	*ASTM D7415		21.6		
	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		
FLUID CONDITION The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.	Sodium	ppm	ASTM D5185m		2		
	Boron	ppm	ASTM D5185m		34		
	Barium	ppm	ASTM D5185m		0		
	Molybdenum	ppm	ASTM D5185m	100	9		
	Manganese	ppm	ASTM D5185m		<1		
	Magnesium	ppm	ASTM D5185m		773		
	Calcium	ppm	ASTM D5185m		1498		
	Phosphorus	ppm	ASTM D5185m		793		
	Zinc	ppm	ASTM D5185m		890		
	Sulfur	ppm	ASTM D5185m		3670		
	Oxidation	Abs/.1mm	*ASTM D7414		16.5		
	Base Number (BN)	mg KOH/g	ASTM D2896	8.5	6.2		
		<u> </u>	AOTH D / / F				

Visc @ 100°C cSt

ASTM D445 14.4

11.2





Contact/Location: Audrey Hopkins - SALWIN Page 2 of 2