

Machine Id **13119** Component **Diesel Engine** Fluid **DIESEL ENGINE OIL SAE 15W40 (--- QTS)**

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
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.	Sample Number		Client Info		WC0742283		
	Sample Date		Client Info		04 Apr 2024		
	Machine Age	mls	Client Info		642128		
	Oil Age	mls	Client Info		0		
	Filter Age	mls	Client Info		0		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				NORMAL		
WEAR	Iron		ASTM D5185m	> 100	44		
WEAN	Iron Chromium	ppm	ASTM D5185m		11 <1		
All component wear rates are normal.	Nickel	ppm	ASTM D5185m		<1 <1		
	Titanium	ppm ppm	ASTM D5185m	>4	0		
	Silver		ASTM D5185m	-3	۰ <1		
	Aluminum	ppm ppm	ASTM D5185m		8		
	Lead	ppm	ASTM D5185m		ہ <1		
	Copper	ppm	ASTM D5185m		2		
	Tin	ppm	ASTM D5185m		- <1		
	Vanadium	ppm	ASTM D5185m		0		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m		7		
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m		2		
	Fuel		WC Method		<1.0		
	Water		WC Method	>0.2	NEG		
	Glycol		WC Method	0	NEG		
	Soot %	%	*ASTM D7844		0.7		
	Nitration	Abs/cm	*ASTM D7624	>20	8.2		
	Sulfation	Abs/.1mm	*ASTM D7415		22.5		
	Silt Debris	scalar	*Visual	NONE NONE	NONE NONE		
	Sand/Dirt	scalar scalar	*Visual *Visual	NONE	NONE		
	Appearance	scalar	*Visual	NORML	NORML		
	Odor	scalar	*Visual	NORML	NORML		
	Emulsified Water		*Visual	>0.2	NEG		
FLUID CONDITION	Sodium	ppm	ASTM D5185m	>158	1		
The DN regult indicates that there is suitable effectivity remaining in the	Boron	ppm	ASTM D5185m	250	227		
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Barium	ppm	ASTM D5185m		0		
	Molybdenum	ppm	ASTM D5185m	100	96		
	Manganese	ppm	ASTM D5185m		<1		
	Magnesium	ppm	ASTM D5185m		530		
	Calcium	ppm	ASTM D5185m		1405		
	Phosphorus	ppm	ASTM D5185m		881		
	Zinc	ppm		1350	1125		
	Sulfur	ppm	ASTM D5185m	4250	3258		
	()vidation	Abo/ 1mm	* A L' I N A F 7 7 4 4				

Oxidation

Visc @ 100°C cSt

16.3

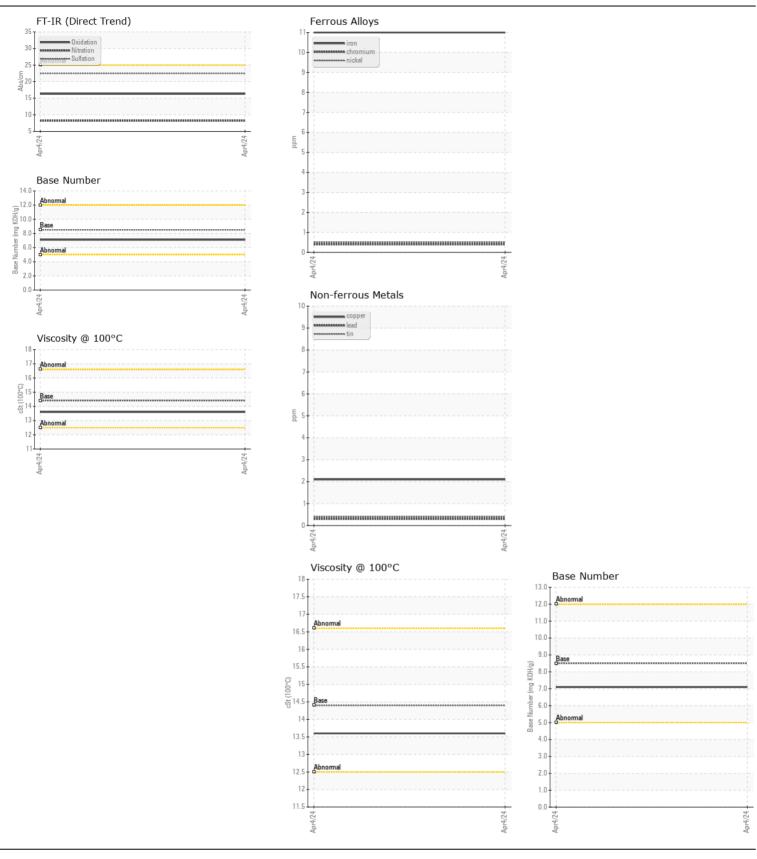
7.1

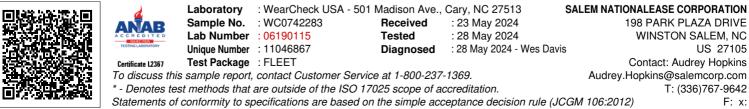
13.6

Abs/.1mm *ASTM D7414 >25

ASTM D445 14.4

Base Number (BN) mg KOH/g ASTM D2896 8.5





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