

## Machine Id NOT GIVEN WC0928952 Component Diesel Engine Fluid DIESEL ENGINE OIL SAE 15W40 (--- GAL)

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		WC0928952		
Resample at the next service interval to monitor. Please specify the	Sample Date		Client Info		20 Apr 2024		
component make and model with your next sample. Please specify the	Machine Age	mls	Client Info		286532		
brand, type, and viscosity of the oil on your next sample.	Oil Age	mls	Client Info		0		
	Filter Age	mls	Client Info		0		
	Oil Changed	11115	Client Info		N/A		
	-			_	N/A N/A		
	Filter Changed		Client Info				
	Sample Status				NORMAL		
WEAR	Iron	ppm	ASTM D5185m	>100	20		
	Chromium	ppm	ASTM D5185m	>20	<1		
All component wear rates are normal.	Nickel	ppm	ASTM D5185m	>4	0		
	Titanium	ppm	ASTM D5185m		0		
	Silver	ppm	ASTM D5185m	>3	0		
	Aluminum	ppm	ASTM D5185m	>20	5		
	Lead	ppm	ASTM D5185m		0		
	Copper	ppm	ASTM D5185m		<1		
	Tin	ppm	ASTM D5185m		0		
	Vanadium	ppm	ASTM D5185m	10	0		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
		504141	visuai				
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	6		
	Potassium	ppm	ASTM D5185m		4		
There is no indication of any contamination in the oil.	Fuel	1-1-	WC Method		<1.0		
	Water		WC Method	>0.2	NEG		
	Glycol		WC Method		NEG		
	Soot %	%	*ASTM D7844	>3	0.4		
	Nitration	Abs/cm	*ASTM D7624	>20	9.3		
	Sulfation	Abs/.1mm	*ASTM D7415		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		*Visual	>0.2	NEG		
FLUID CONDITION	Sodium	ppm	ASTM D5185m	>158	1		
	Boron	ppm	ASTM D5185m	250	273		
The BN result indicates that there is suitable alkalinity remaining in the	Barium	ppm	ASTM D5185m	10	0		
oil. The condition of the oil is suitable for further service.	Molybdenum	ppm	ASTM D5185m	100	85		
	Manganese	ppm	ASTM D5185m		<1		
	Magnesium	ppm	ASTM D5185m	450	482		
	Calcium	ppm	ASTM D5185m	3000	1368		
	Phosphorus	ppm	ASTM D5185m	1150	1049		
	Zinc	ppm	ASTM D5185m		1284		

Sulfur

Oxidation

Visc @ 100°C cSt

ppm ASTM D5185m 4250

ASTM D445 14.4

Abs/.1mm \*ASTM D7414 >25

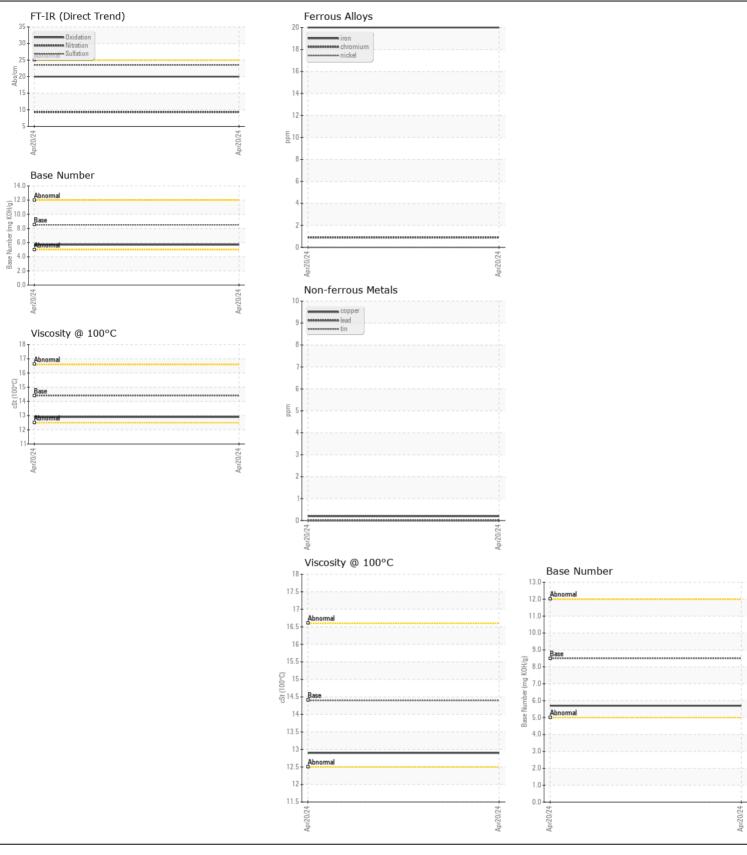
Base Number (BN) mg KOH/g ASTM D2896 8.5

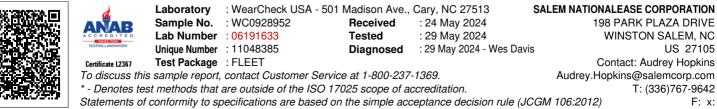
3402

20.0

5.7

12.9





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