

Machine Id NOT GIVEN WC0932842 Component Diesel Engine Fluid DIESEL ENGINE OIL SAE 15W40 (--- QTS)

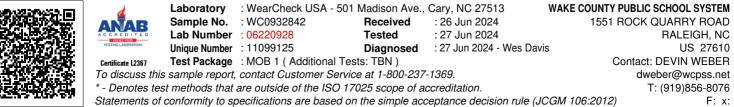
RECOMMENDATION	Test	UOM	Method	Limit/Abn		History1	History2
Resample at the next service interval to monitor. Please specify the component make and model with your next sample.	Sample Number		Client Info		WC0932842		
	Sample Date		Client Info		14 Jun 2024		
	Machine Age	mls	Client Info		184162		
	Oil Age	mls	Client Info		0		
	Filter Age	mls	Client Info		0		
	Oil Changed		Client Info		Not Changd		
	Filter Changed		Client Info		Not Changd		
	Sample Status				NORMAL		
WEAR All component wear rates are normal.	Iron	ppm	ASTM D5185m		2		
	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	>20	3		
	Lead	ppm	ASTM D5185m		0		
	Copper	ppm	ASTM D5185m	>330	0		
	Tin	ppm	ASTM D5185m	>15	0		
	Vanadium	ppm	ASTM D5185m		0		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION There is no indication of any contamination in the oil.	Silicon	ppm	ASTM D5185m	>25	6		
	Potassium	ppm	ASTM D5185m		2		
	Fuel	pp	WC Method		- <1.0		
	Water		WC Method		NEG		
	Glycol		WC Method		NEG		
	Soot %	%	*ASTM D7844	>3	0.1		
	Nitration	Abs/cm	*ASTM D7624	>20	6.7		
	Sulfation	Abs/.1mm	*ASTM D7415		17.2		
	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	Sodium	ppm	ASTM D5185m	>158	2		
	Boron	ppm	ASTM D5185m		119		
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		83		
	Manganese	ppm	ASTM D5185m		0		
	Magnesium	ppm	ASTM D5185m	450	84		
	Calcium	ppm	ASTM D5185m		1841		
	Phosphorus	ppm	ASTM D5185m		847		
	Zinc	ppm	ASTM D5185m		1118		
	Sulfur	ppm	ASTM D5185m		3132		
	Oxidation	Abs/.1mm	*ASTM D7414		12.5		
		ma KOH/a	ASTM D2896		7.1		

Visc @ 100°C cSt

ASTM D445 14.4

14.2





Contact/Location: DEVIN WEBER - WCPRAL Page 2 of 2