

Machine Id **22801** Component **Diesel Engine** Fluid **DIESEL ENGINE OIL 10W40 (--- 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		WC0950723		
	Sample Date		Client Info		03 Jul 2024		
	Machine Age	hrs	Client Info		5596		
	Oil Age	hrs	Client Info		1250		
	Filter Age	hrs	Client Info		1250		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				NORMAL		
WEAR	Iron	ppm	ASTM D5185m		6		
All component wear rates are normal.	Chromium	ppm	ASTM D5185m		<1		
	Nickel	ppm	ASTM D5185m	>4	<1		
	Titanium	ppm	ASTM D5185m		<1		
	Silver	ppm	ASTM D5185m		<1		
	Aluminum	ppm	ASTM D5185m		2		
	Lead	ppm	ASTM D5185m		<1		
	Copper	ppm	ASTM D5185m		2		
	Tin	ppm	ASTM D5185m	>15	<1		
	Vanadium	ppm	ASTM D5185m	NONE	<1		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	7		
	Potassium	ppm	ASTM D5185m	>20	4		
There is no indication of any contamination in the oil.	Fuel		WC Method	>5	<1.0		
	Water		WC Method	>0.2	NEG		
	Glycol		WC Method		NEG		
	Soot %	%	*ASTM D7844	>3	0.1		
	Nitration	Abs/cm	*ASTM D7624	>20	10.5		
	Sulfation	Abs/.1mm	*ASTM D7415	>30	19.5		
	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	scalar	*Visual	>0.2	NEG		
					•		
FLUID CONDITION	Sodium	ppm	ASTM D5185m	050	0		
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Boron	ppm	ASTM D5185m		149		
	Barium	ppm	ASTM D5185m		0		
	Molybdenum	ppm	ASTM D5185m	100	21		
	Manganese	ppm	ASTM D5185m	450	<1		
	Magnesium	ppm	ASTM D5185m		701		
	Calcium	ppm	ASTM D5185m		1913		
	Phosphorus	ppm	ASTM D5185m		912		
	Zinc Sulfur	ppm	ASTM D5185m ASTM D5185m		1014		
	Outlation	ppm		4230	3251		

Oxidation

Visc @ 100°C cSt

Abs/.1mm *ASTM D7414 >25

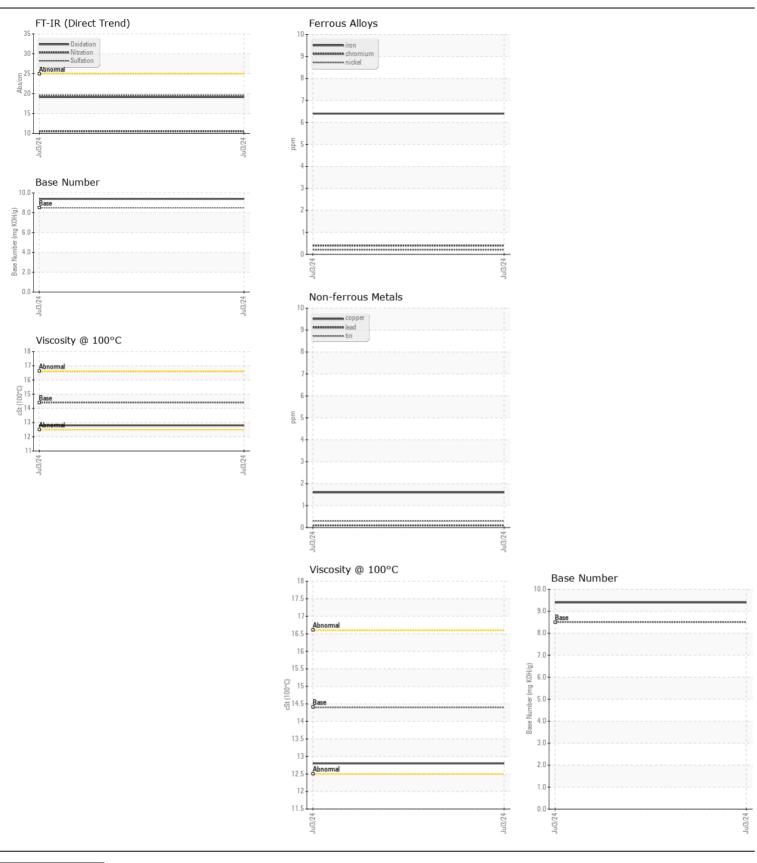
ASTM D445 14.4

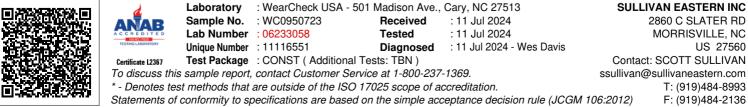
Base Number (BN) mg KOH/g ASTM D2896 8.5

19.1

9.4

12.8





Contact/Location: SCOTT SULLIVAN - MSCDUR Page 2 of 2