

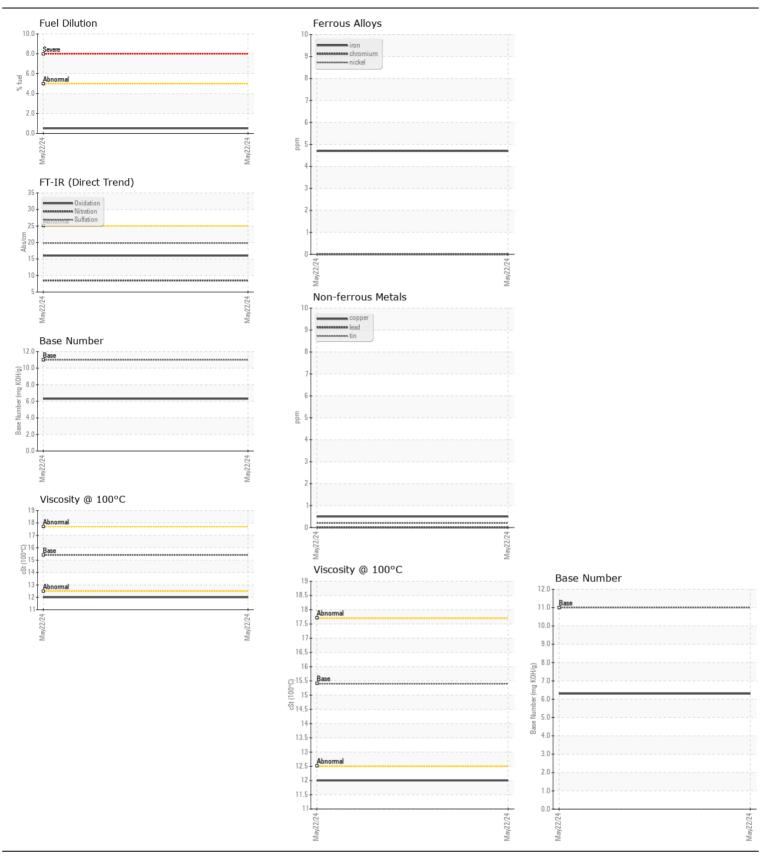
Machine Id 6560 Component Diesel Engine Fluid CITGO CITGUARD 600 15W40 (--- GAL)

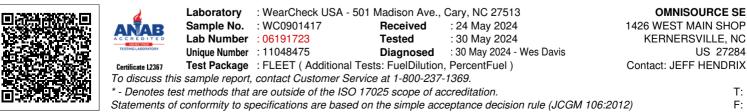
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RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
No corrective action is recommended at this time. Resample at the next service interval to monitor. Please specify the component make and model with your next sample.	Sample Number		Client Info		WC0901417		
	Sample Date		Client Info		22 May 2024		
	Machine Age	mls	Client Info		441872		
	Oil Age	mls	Client Info		15313		
	Filter Age	mls	Client Info		15313		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				NORMAL		
WEAR All component wear rates are normal.				100	_		
	Iron	ppm	ASTM D5185m		5		
	Chromium	ppm	ASTM D5185m		0		
	Nickel	ppm	ASTM D5185m	>4	0		
	Titanium	ppm	ASTM D5185m	0	<1		
	Silver	ppm	ASTM D5185m		0		
	Aluminum	ppm	ASTM D5185m		6		
	Lead	ppm	ASTM D5185m		0		
	Copper	ppm	ASTM D5185m		<1		
	Tin	ppm	ASTM D5185m	>15	<1		
	Vanadium	ppm	ASTM D5185m	NONE	0		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	5		
	Potassium	ppm	ASTM D5185m		1		
Fuel content negligible. There is no indication of any contamination in the oil.	Fuel	%	ASTM D3524		0.5		
	Water		WC Method	>0.2	NEG		
	Glycol		WC Method		NEG		
	Soot %	%	*ASTM D7844	>3	0.3		
	Nitration	Abs/cm	*ASTM D7624	>20	8.5		
	Sulfation	Abs/.1mm	*ASTM D7415	>30	19.8		
	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	10	<1		
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		6		
	Barium	ppm	ASTM D5185m		0		
	Molybdenum	ppm	ASTM D5185m	57	66		
	Manganese	ppm	ASTM D5185m	005	<1		
	Magnesium	ppm	ASTM D5185m		409		
	Calcium	ppm		1100	1582		
	Phosphorus	ppm	ASTM D5185m		968		
	Zinc	ppm	ASTM D5185m		1139		
	Sulfur	ppm	ASTM D5185m		3372		
	Oxidation	Abs/.1mm	*ASTM D7414		16.0		
	Base Number (BN)	mg KOH/g	ASTM D2896	11.0	6.3		

Visc @ 100°C cSt

ASTM D445 15.4

12.0





Contact/Location: JEFF HENDRIX - OMNKER Page 2 of 2