

WEAR NORMAL CONTAMINATION NORMAL FLUID CONDITION NORMAL

CERTAS HOME & AUTO [154434]

25301242

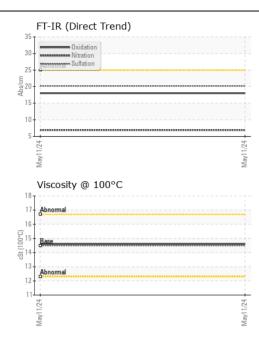
Diesel Engine

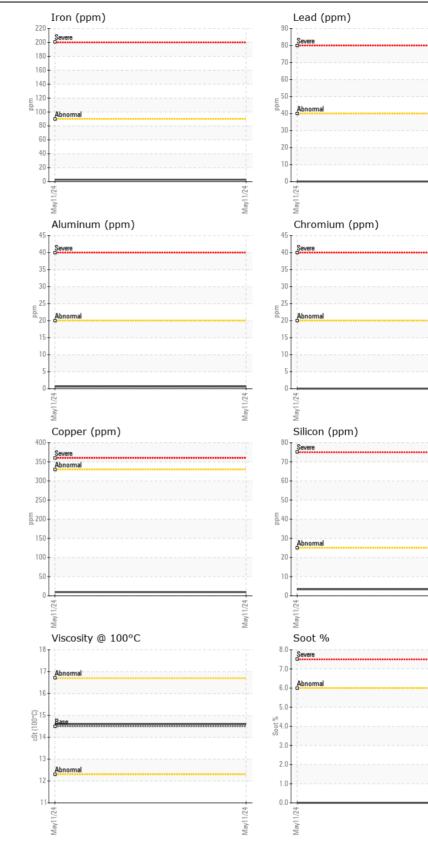
SAE 15W40 (--- GAL)

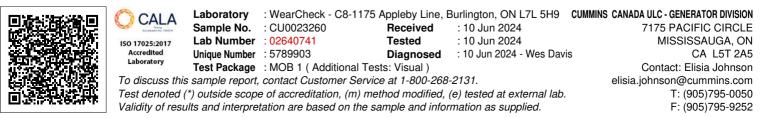
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		CU0023260		
	Sample Date		Client Info		11 May 2024		
	Machine Age	hrs	Client Info		0		
	Oil Age	hrs	Client Info		0		
	Filter Age	hrs	Client Info		0		
	Oil Changed		Client Info		N/A		
	Filter Changed		Client Info		N/A		
	Sample Status				NORMAL		
WEAR	Iron	ppm	ASTM D5185(m)	>90	3		
All component wear rates are normal.	Chromium	ppm	ASTM D5185(m)		0		
	Nickel	ppm	ASTM D5185(m)	>2	0		
	Titanium	ppm	ASTM D5185(m)		0		
	Silver	ppm	ASTM D5185(m)		0		
	Aluminum	ppm	ASTM D5185(m)		<1		
	Lead	ppm	ASTM D5185(m)	>40	0		
	Copper	ppm	ASTM D5185(m)		10		
	Tin	ppm	ASTM D5185(m)		0		
	Vanadium	ppm	ASTM D5185(m)		0		
	White Metal	scalar	Visual*	NONE	LIGHT		
	Yellow Metal	scalar	Visual*	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185(m)	>25	3		
OONTAMINATION	Potassium	ppm	ASTM D5185(m)		۲ ۲		
There is no indication of any contamination in the oil.	Fuel	ppm	WC Method		<1.0		
	Water		WC Method		NEG		
	Glycol		WC Method	20.2	NEG		
	Soot %	%	ASTM D7844*	>6	0		
	Nitration	Abs/cm	ASTM D7624*	>20	6.9		
	Sulfation	Abs/.1mm	ASTM D7024 ASTM D7415*		20.2		
	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		Visual*	>0.2	NEG		
FLUID CONDITION	Sodium	ppm	ASTM D5185(m)	>57	3		
The condition of the oil is acceptable for the time in service.	Boron Barium	ppm	ASTM D5185(m) ASTM D5185(m)		43 0		
		ppm	ASTM D5185(m) ASTM D5185(m)				
	Molybdenum	ppm			46		
	Manganese	ppm	ASTM D5185(m)		<1 794		
	Magnesium	ppm	ASTM D5185(m)		784		
	Calcium	ppm	ASTM D5185(m)		1154		
	Phosphorus	ppm	ASTM D5185(m)		705		
	Zinc	ppm	ASTM D5185(m)		815		
	Sulfur	ppm	ASTM D5185(m)	. 05	1913		
	Oxidation	ADS/.1MM	ASTM D7414*	>25	18.0		

Visc @ 100°C cSt ASTM D7279(m) 14.5

14.6







Contact/Location: Elisia Johnson - CUMMISGEN Page 2 of 2

Aav11/24

104