

## [153295]

1859 G1

## Diesel Engine

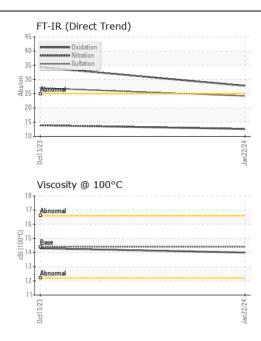
## DIESEL ENGINE OIL SAE 5W40 (--- GAL)

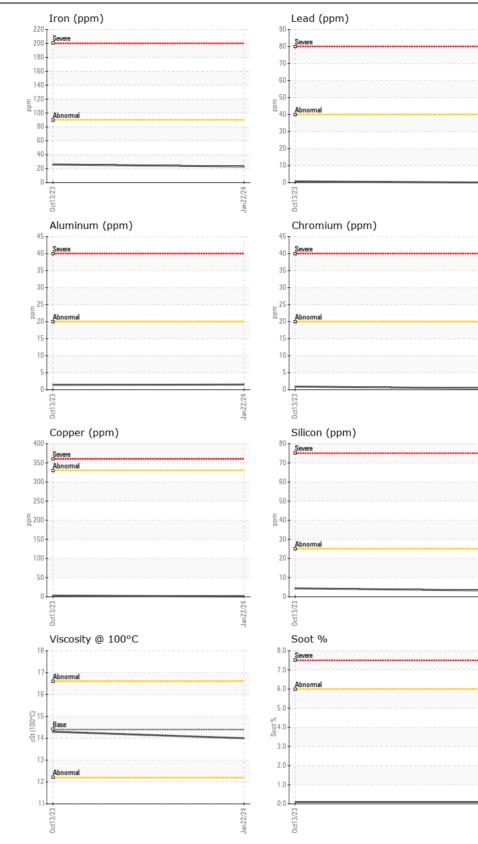
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		CU0022761	CU0021821	
	Sample Date		Client Info		22 Jan 2024	13 Oct 2023	
	Machine Age	hrs	Client Info		3278	2437	
	Oil Age	hrs	Client Info		0	0	
	Filter Age	hrs	Client Info		0	0	
	Oil Changed		Client Info		Changed	Changed	
	Filter Changed		Client Info		Changed	Changed	
	Sample Status				NORMAL	NORMAL	
WEAR	Iron	ppm	ASTM D5185(m)	>90	23	26	
All component wear rates are normal.	Chromium	ppm	ASTM D5185(m)	>20	<1	<1	
	Nickel	ppm	ASTM D5185(m)	>2	<1	<1	
	Titanium	ppm	ASTM D5185(m)	>2	0	0	
	Silver	ppm	ASTM D5185(m)		0	0	
	Aluminum	ppm	ASTM D5185(m)		2	1	
	Lead	ppm	ASTM D5185(m)	>40	0	<1	
	Copper	ppm	ASTM D5185(m)	>330	<1	3	
	Tin	ppm	ASTM D5185(m)	>15	0	0	
	Vanadium	ppm	ASTM D5185(m)		0	0	
	White Metal	scalar	Visual*	NONE	VLITE		
	Yellow Metal	scalar	Visual*	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185(m)	>25	3	4	
<b>OONTAININATION</b>	Potassium	ppm	ASTM D5185(m)		<1	<1	
There is no indication of any contamination in the oil.	Fuel	ppm	WC Method		<1.0	<1.0	
	Water		WC Method		NEG	NEG	
	Glycol		WC Method	20.2	NEG	NEG	
	Soot %	%	ASTM D7844*	>6	0.1	0.1	
	Nitration	Abs/cm	ASTM D7624*	>20	12.6	13.9	
	Sulfation	Abs/.1mm	ASTM D7415*		24.2	27.0	
	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	NORML	
	Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	
FLUID CONDITION	Sodium	nom	ASTM D5185(m)	>44	л	4	
	Boron	ppm ppm	ASTM D5185(m)		37	36	
The condition of the oil is acceptable for the time in service.	Barium	ppm	ASTM D5185(m)		0	0	
	Molybdenum	ppm	ASTM D5185(m)		64	68	
	Manganese	ppm	ASTM D5185(m)		<1	0	
	Magnesium	ppm	ASTM D5185(m)	450	1080	1030	
	Calcium	ppm	ASTM D5185(m)		925	994	
	Phosphorus	ppm	ASTM D5185(m)		968	978	
	Zinc	ppm	ASTM D5185(m)		1173	1204	
	Sulfur	ppm	ASTM D5185(m)		2614	2606	
	Oxidation		ASTM D3103(III) ASTM D7414*		27.8	34.3	
	Chidation	7.007.111111				0 1.0	

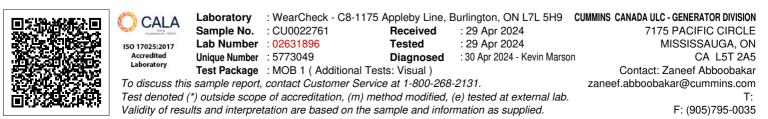
Visc @ 100°C cSt ASTM D7279(m) 14.4

14.3

14.0







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