

TRA ATLANTIC [50462] E050780989

Diesel Engine

SAE 15W40 (--- LTR)

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		CU0022205		
	Sample Date		Client Info		06 Jun 2024		
	Machine Age	hrs	Client Info		240		
	Oil Age	hrs	Client Info		0		
	Filter Age	hrs	Client Info		0		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				NORMAL		
WEAR	Iron	ppm	ASTM D5185(m)		2		
Metal levels are typical for a new component breaking in.	Chromium	ppm	ASTM D5185(m)		0		
	Nickel	ppm	ASTM D5185(m)		0		
	Titanium	ppm	ASTM D5185(m)		0		
	Silver	ppm	ASTM D5185(m)		0		
	Aluminum	ppm	ASTM D5185(m)	>20	<1		
	Lead	ppm	ASTM D5185(m)		0		
	Copper	ppm	ASTM D5185(m)	>330	<1		
	Tin	ppm	ASTM D5185(m)	>15	0		
	Vanadium	ppm	ASTM D5185(m)		0		
	White Metal	scalar	Visual*	NONE	NONE		
	Yellow Metal	scalar	Visual*	NONE	NONE		
	Ciliaan			05	<u>^</u>		
CONTAMINATION	Silicon	ppm	ASTM D5185(m)		6		
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185(m)		0		
	Fuel		WC Method		<1.0		
	Water		WC Method	>0.2	NEG		
	Glycol	0/	WC Method	. 6	NEG		
	Soot %	%	ASTM D7844*		0		
	Nitration	Abs/cm	ASTM D7624*	>20	6.4 20.1		
	Sulfation Silt	Abs/.1mm	ASTM D7415* Visual*	>30 NONE	NONE		
	Debris	scalar			NONE		
		scalar	Visual*	NONE			
	Sand/Dirt	scalar	Visual*	NONE	NONE NORML		
	Appearance Odor	scalar scalar	Visual* Visual*	NORML NORML	NORML		
	Emulsified Water		Visual*	>0.2	NEG		
		scalar	visuai	>0.2	NEG		
FLUID CONDITION	Sodium	ppm	ASTM D5185(m)	>57	3		
	Boron	ppm	ASTM D5185(m)		43		
The condition of the oil is acceptable for the time in service.	Barium	ppm	ASTM D5185(m)		0		
	Molybdenum	ppm	ASTM D5185(m)		44		
	Manganese	ppm	ASTM D5185(m)		<1		
	Magnesium	ppm	ASTM D5185(m)		744		
	Calcium	ppm	ASTM D5185(m)		1157		
	Phosphorus	ppm	ASTM D5185(m)		666		
	Zinc	ppm	ASTM D5185(m)		791		
	Sulfur	ppm	ASTM D5185(m)		1897		
	Oxidation	Abs/.1mm	ASTM D7414*	>25	16.7		
	Visc @ 40°C	cSt	ASTM D7279(m)		107		
	Visc @ 100°C	cSt	ASTM D7279(m)		14.3		
		0.1		100			

Viscosity Index (VI) Scale ASTM D2270* 128

NORMAL WEAR NORMAL CONTAMINATION **FLUID CONDITION** NORMAL

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