WEAR CONTAMINATION **FLUID CONDITION**

NORMAL NORMAL NORMAL

Machine Id

YANMAR E16878

Component
Diesel Engine

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
TEOOMMENDATION	Sample Number	OOW	Client Info	LITTION	WC0732297		
Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.	Sample Date		Client Info		17 Jun 2024		
	Machine Age	hrs	Client Info		0		
	Oil Age	hrs	Client Info		0		
	Filter Age	hrs	Client Info		0		
	Oil Changed		Client Info		Not Changd		
	Filter Changed		Client Info		Not Changd		
	Sample Status				NORMAL		
WEAR	Iron	ppm	ASTM D5185m	>80	5		
	Chromium	ppm	ASTM D5185m		0		
All component wear rates are normal.	Nickel	ppm	ASTM D5185m		0		
	Titanium	ppm	ASTM D5185m		0		
	Silver	ppm	ASTM D5185m		0		
	Aluminum	ppm	ASTM D5185m		1		
	Lead	ppm	ASTM D5185m		0		
	Copper	ppm	ASTM D5185m	>85	<1		
	Tin	ppm	ASTM D5185m	>9	0		
	Vanadium	ppm	ASTM D5185m		0		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	8		
	Potassium	ppm	ASTM D5185m	>20	0		
There is no indication of any contamination in the oil.	Fuel		WC Method	>4.0	<1.0		
	Water		WC Method	>0.1	NEG		
	Glycol		WC Method		NEG		
	Soot %	%	*ASTM D7844		0.1		
	Nitration	Abs/cm	*ASTM D7624	>20	5.2		
	Sulfation	Abs/.1mm	*ASTM D7415	>30	17.9		
	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	>0.1	NEG		
FLUID CONDITION	Sodium	ppm	ASTM D5185m		1		
	Boron	ppm	ASTM D5185m		109		
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Barium	ppm	ASTM D5185m		0		
	Molybdenum	ppm	ASTM D5185m		69		
	Manganese	ppm	ASTM D5185m		<1		
	Magnesium	ppm	ASTM D5185m		297		
	Calcium	ppm	ASTM D5185m		2143		
	Phosphorus	ppm	ASTM D5185m		1131		
	Zinc	ppm	ASTM D5185m		1414		
	Sulfur	ppm	ASTM D5185m		4615		
	Oxidation	Abs/.1mm	*ASTM D7414	>25	13.6		
	Base Number (BN)				9.47		
	Visc @ 100°C	cSt	ASTM D445		14.4	/	





Certificate L2367

Laboratory Sample No.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : WC0732297 Lab Number : 06215951

Unique Number : 11088815

To discuss this sample report, contact Customer Service at 1-800-237-1369.

Received **Tested** Diagnosed

: 23 Jun 2024 Test Package : MOB 2 (Additional Tests: TAN Man)

: 23 Jun 2024 - Don Baldridge

: 20 Jun 2024

4234 LAKESIDE DR JACKSONVILLE, FL US 32210 Contact: ROBERT GULLEDGE

robgulledge@gmail.com T: (904)993-3140

Contact/Location: ROBERT GULLEDGE - CRCJAC

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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