**WEAR** CONTAMINATION **FLUID CONDITION**  **NORMAL NORMAL NORMAL** 

Machine Id

## **ONAN F190584960**

Component Genset

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		VPA062753		
No corrective action is recommended at this time. Resample at the next service interval to monitor.	Sample Date		Client Info		13 Jun 2024		
	Machine Age	hrs	Client Info		837		
	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		
VEAR	Iron	ppm	ASTM D5185m	>50	18		
	Chromium	ppm	ASTM D5185m		<1		
All component wear rates are normal.	Nickel	ppm	ASTM D5185m		<1		
	Titanium	ppm	ASTM D5185m	_	<1		
	Silver	ppm	ASTM D5185m	>5	0		
	Aluminum	ppm	ASTM D5185m		3		
	Lead	ppm	ASTM D5185m		<1		
	Copper	ppm	ASTM D5185m	>70	5		
	Tin	ppm	ASTM D5185m		<1		
	Vanadium	ppm	ASTM D5185m		0		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
ONTAMINATION	Silicon	ppm	ASTM D5185m		16		
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m	>20	6		
	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	7.2		
	Sulfation	Abs/.1mm	*ASTM D7415		19.3		
	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	visuai	>0.1	NEG		
LUID CONDITION	Sodium	ppm	ASTM D5185m		11		
	Boron	ppm	ASTM D5185m		151		
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		15		
	Manganese	ppm	ASTM D5185m		<1		
	Magnesium	ppm	ASTM D5185m		138		
	Calcium	ppm	ASTM D5185m		2035		
	Phosphorus	ppm	ASTM D5185m		880		
	Zinc	ppm	ASTM D5185m		1110		
	Sulfur	ppm	ASTM D5185m		4946		
	Oxidation	Abs/.1mm	*ASTM D7414	>25	16.6		
	Base Number (BN)	mg KOH/g	ASTM D2896		5.7		
	Visc @ 100°C	cSt	ASTM D445		13.44		





Certificate L2367

Laboratory Sample No.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : VPA062753 Lab Number : 06210673

Unique Number : 11083537

Diagnosed Test Package : MOB 1 ( Additional Tests: KV40, TBN )

To discuss this sample report, contact Customer Service at 1-800-237-1369. \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Harry's Marine Service LLC 1141 N. Citrus St. Orange, CA US 92887

Contact: TARAH AULD info@harrysmarine.com T: (714)771-7899

F:

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

Received

**Tested** 

: 14 Jun 2024

: 14 Jun 2024

: 14 Jun 2024 - Doug Bogart