WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL NORMAL

CHRIS THOMPSON [6615] YANMAR KM4A 20642

Component Civia

Genset

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info	21111071011	VPA051561		
No corrective action is recommended at this time. Resample at the next service interval to monitor.	Sample Date		Client Info		15 Apr 2024		
	Machine Age	hrs	Client Info		1936		
	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	4		
All component wear rates are normal.	Chromium	ppm	ASTM D5185m	>6	0		
	Nickel	ppm		>2	0		
	Titanium	ppm	ASTM D5185m	>2	0		
	Silver	ppm	ASTM D5185m		0		
	Aluminum	ppm	ASTM D5185m		<1		
	Lead	ppm	ASTM D5185m		0		
	Copper	ppm	ASTM D5185m		13		
	Tin	ppm	ASTM D5185m	>9	1		
	Vanadium	ppm	ASTM D5185m		0		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	8		
CONTAMINATION	Potassium	ppm	ASTM D5185m		1		
No evidence of fuel present in the oil. There is no indication of any contamination in the oil.	Fuel	%	ASTM D3524	>4.0	<1.0		
	Water	/0	WC Method		NEG		
	Glycol		WC Method	70.1	NEG		
	Soot %	%	*ASTM D7844		0		
	Nitration	Abs/cm	*ASTM D7624	>20	5.4		
	Sulfation	Abs/.1mm	*ASTM D7415		16.6		
	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		3		
The BN result indicates that there is suitable alkalinity remaining in the	Boron	ppm	ASTM D5185m		129		
oil. Confirm oil type. The condition of the oil is acceptable for the time in service.	Barium	ppm	ASTM D5185m		0		
	Molybdenum	ppm	ASTM D5185m		9		
	Manganese	ppm	ASTM D5185m		0		
	Magnesium	ppm	ASTM D5185m		392		
	Calcium	ppm	ASTM D5185m		1633		
	Phosphorus	ppm	ASTM D5185m		768		
	Zinc	ppm	ASTM D5185m		852		
	Sulfur	ppm	ASTM D5185m	05	3465		
	Oxidation	Abs/.1mm	*ASTM D7414	>25	11.1		
	Base Number (BN)	mg NUH/g	42 LIVI D5886		8.5		





Laboratory Sample No.

: VPA051561 Lab Number : 06150136 Unique Number: 10980214

: WearCheck USA - 501 Madison Ave., Cary, NC 27513

Received **Tested** Diagnosed

: 16 Apr 2024 : 16 Apr 2024 Test Package: MOB 1 (Additional Tests: FuelDilution, PercentFuel, TBN)

: 16 Apr 2024 - Doug Bogart

1325 ROEDER AVE SUITE 103 BELLINGHAM, WA US 98225

Contact: BRANDON ROBERTSON parts@nwdieselpower.com

Northwest Diesel Power

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.

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

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