WEAR
CONTAMINATION
FLUID CONDITION

NORMAL NORMAL ATTENTION

Machine Id

LUMOS 8KW-3

Component Diesel Engine

SHELL BOTFLLA T 15W40 (--- OTS)

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		WC0946742		
Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.	Sample Date		Client Info		17 May 2024		
	Machine Age	hrs	Client Info		1		
	Oil Age	hrs	Client Info		0		
	Filter Age	hrs	Client Info		0		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				ATTENTION		
VEAR	Iron	nnm	ASTM D5185m	> 100	4		
VEAN		ppm					
All component wear rates are normal.	Chromium	ppm	ASTM D5185m		0		
	Nickel	ppm	ASTM D5185m	>4	0		
	Titanium	ppm	ASTM D5185m		0		
	Silver	ppm	ASTM D5185m		<1		
	Aluminum	ppm	ASTM D5185m		1		
	Lead	ppm	ASTM D5185m		1		
	Copper	ppm	ASTM D5185m		5		
	Tin	ppm	ASTM D5185m	>15	<1		
	Vanadium	ppm	ASTM D5185m		<1		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	12		
CONTAMINATION	Potassium	ppm	ASTM D5185m		1		
Fuel content negligible. There is no indication of any contamination in the oil.	Fuel	%	ASTM D3524		0.3		
	Water	/6	WC Method		NEG		
	Glycol		WC Method	>0.2	NEG		
	Soot %	%	*ASTM D7844	. 0			
					0		
	Nitration	Abs/cm	*ASTM D7624	>20	4.3		
	Sulfation	Abs/.1mm	*ASTM D7415		17.3		
	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	*Visual	>0.2	NEG		
LUID CONDITION	Sodium	ppm	ASTM D5185m		2		
	Boron	ppm	ASTM D5185m	316	102		
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.	Barium	ppm	ASTM D5185m		4		
	Molybdenum	ppm	ASTM D5185m		61		
	Manganese	ppm	ASTM D5185m		2		
	Magnesium	ppm	ASTM D5185m	24	405		
	Calcium		ASTM D5185m		2112		
	Phosphorus	ppm	ASTM D5185m		1092		
	•	ppm					
	Zinc	ppm	ASTM D5185m		1336		
	Sulfur	ppm	ASTM D5185m		4481		
	Oxidation	Abs/.1mm	*ASTM D7414		13.1		
	Base Number (BN)		ASTM D2896		9.4		
	Visc @ 100°C	cSt	ASTM D445		11.6		





Lab Number

Laboratory Sample No.

: 06188856 Unique Number : 11045608

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : WC0946742 Received **Tested**

Diagnosed

: 28 May 2024 : 28 May 2024 - Don Baldridge

: 23 May 2024

PIEDMONT GENERATOR 7560 NC HWY 22 NORTH CLIMAX, NC

US 27233 Contact: TERRY SHEPPARD

Test Package: MOB 1 (Additional Tests: FuelDilution, PercentFuel, TBN) Certificate L2367 terry1pg@bellsouth.net; bill3pg@bellsouth.net 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. T: (336)685-4859 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (336)685-5297