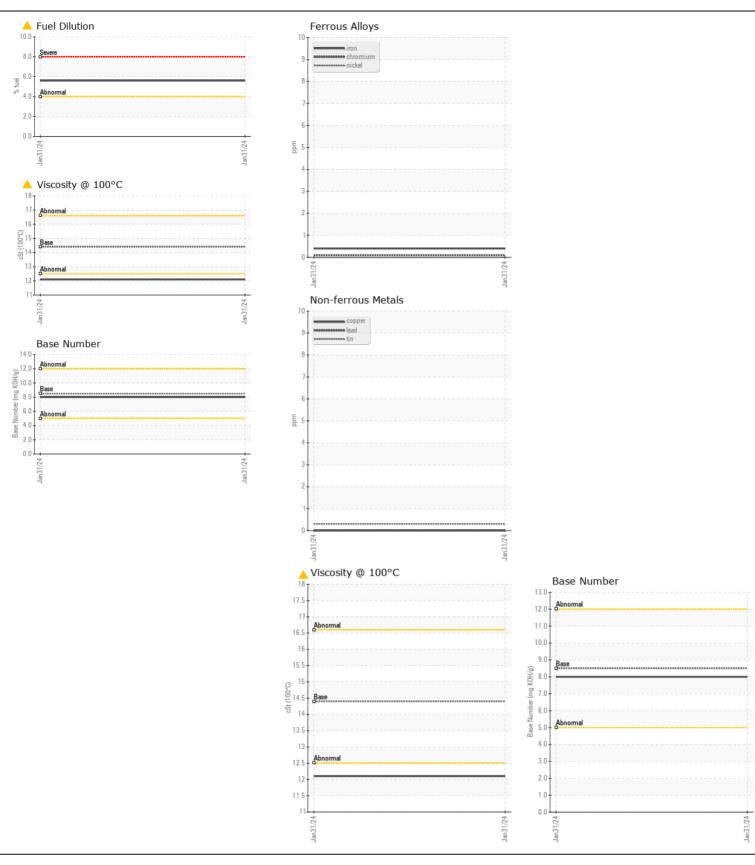
WEAR CONTAMINATION **FLUID CONDITION**

NORMAL ABNORMAL ABNORMAL

Machine Id

NOT GIVEN MW0057125							
Port Genset							
DIESEL ENGINE OIL SAE 15W40 (3 GAL)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. Please specify the component make and model with your next sample. Please specify the brand, type, and viscosity of the oil on your next sample.	Sample Number		Client Info		MW0057125		
	Sample Date		Client Info		31 Jan 2024		
	Machine Age	hrs	Client Info		14311		
	Oil Age	hrs	Client Info		0		
	Filter Age	hrs	Client Info		0		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				ABNORMAL		
WEAR	Iron	ppm	ASTM D5185m	>50	<1		
All component wear rates are normal.	Chromium	ppm	ASTM D5185m	>4	<1		
	Nickel	ppm	ASTM D5185m	>2	0		
	Titanium	ppm	ASTM D5185m		0		
	Silver	ppm	ASTM D5185m	>5	0		
	Aluminum	ppm	ASTM D5185m	>12	2		
	Lead	ppm	ASTM D5185m	>17	0		
	Copper	ppm	ASTM D5185m	>70	0		
	Tin	ppm	ASTM D5185m	>15	<1		
	Vanadium	ppm	ASTM D5185m		0		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTABBINATION	Ciliana		ACTM DE10E	05	•		
CONTAMINATION	Silicon	ppm	ASTM D5185m		3 0		
There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.	Potassium Fuel	ppm %	ASTM D5185m ASTM D3524	>4.0			
	Water	70	WC Method		▲ 5.6 NEG		
	Glycol		WC Method	>0.1	NEG		
	Soot %	%	*ASTM D7844		0.1		
	Nitration	Abs/cm	*ASTM D7624	>20	8.7		
	Sulfation	Abs/.1mm	*ASTM D7415		19.2		
	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 The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.	Sodium	ppm	ASTM D5185m	<158	<1		
	Boron	ppm	ASTM D5185m		93		
	Barium	ppm		10	0		
	Molybdenum	ppm	ASTM D5185m		52		
	Manganese	ppm	ASTM D5185m		0		
	Magnesium	ppm	ASTM D5185m	450	500		
	Calcium	ppm	ASTM D5185m		1399		
	Phosphorus	ppm	ASTM D5185m	1150	836		
	Zinc	ppm	ASTM D5185m	1350	982		
	Sulfur	ppm	ASTM D5185m	4250	2813		
	Oxidation	Abs/.1mm	*ASTM D7414		16.1		
	Base Number (BN)	mg KOH/g	ASTM D2896	8.5	8.0		
	Visc @ 100°C	cSt	ASTM D445	14.4	<u>12.1</u>		





Laboratory Sample No.

Lab Number : 06082979

: MW0057125

Unique Number : 10870424 Test Package: MAR 2 (Additional Tests: FuelDilution, PercentFuel)

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

: 07 Feb 2024

: 09 Feb 2024

: 09 Feb 2024 - Wes Davis

C & B MARINE

50 E RIVERCENTER BLVD, SUITE 1180 COVINGTON, KY US 41011

> Contact: DAVID WESTRICH dwestrich@carlislebray.com

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: (812)290-4063 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (859)655-7504

Diagnosed