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

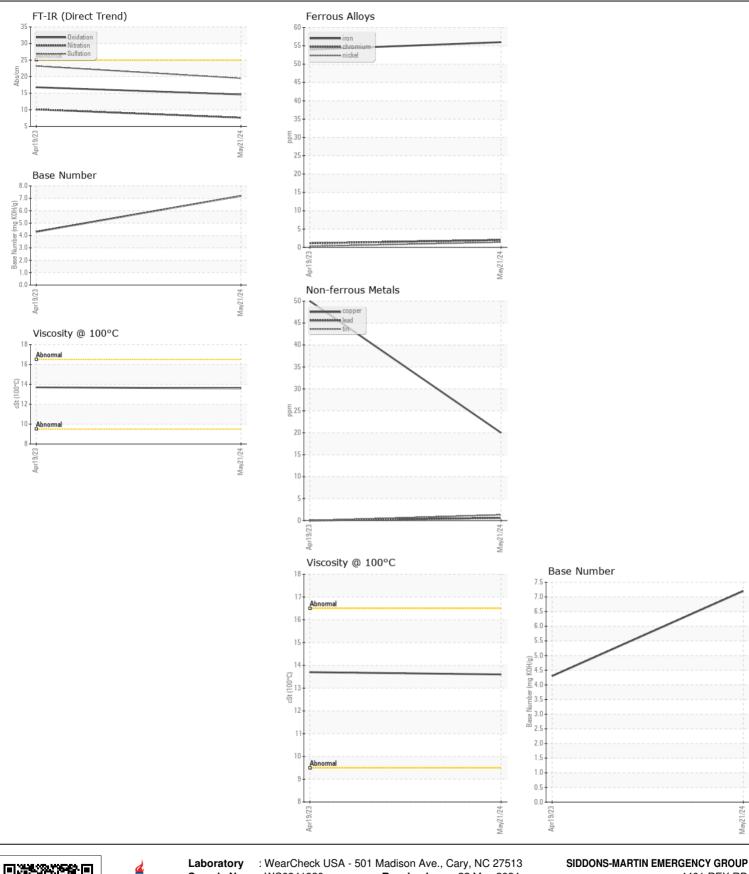
**NORMAL NORMAL NORMAL** 

Machine Id

## **MANVEL E-124**

Component Diesel Engine

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History
Resample at the next service interval to monitor.	Sample Number		Client Info		WC0941930	WC0792335	
	Sample Date		Client Info		21 May 2024	19 Apr 2023	
	Machine Age	mls	Client Info		0	0	
	Oil Age	mls	Client Info		0	0	
	Filter Age	mls	Client Info		0	0	
	Oil Changed		Client Info		N/A	N/A	
	Filter Changed		Client Info		N/A	N/A	
	Sample Status				NORMAL	NORMAL	
VEAR	Iron	ppm	ASTM D5185m	>100	56	54	
	Chromium	ppm	ASTM D5185m		2	1	
All component wear rates are normal.	Nickel	ppm	ASTM D5185m		1	<1	
	Titanium	ppm	ASTM D5185m		<1	0	
	Silver	ppm	ASTM D5185m	>3	1	0	
	Aluminum	ppm	ASTM D5185m		13	14	
	Lead	ppm	ASTM D5185m		<1	0	
	Copper	ppm	ASTM D5185m		20	50	
	Tin	ppm	ASTM D5185m		1	0	
	Vanadium	ppm	ASTM D5185m	710	<1	0	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
ONTAMINATION	0:::		AOTA DEADE	05	4 F	4.4	
ONTAMINATION	Silicon	ppm	ASTM D5185m		15	14	
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m		37	39	
	Fuel		WC Method		<1.0	<1.0	
	Water		WC Method	>0.2	NEG	NEG	
	Glycol	0/	WC Method	0	NEG	NEG	
	Soot %	% Ala a /ava	*ASTM D7844		0.5	0.8	
	Nitration	Abs/dmm	*ASTM D7624	>20	7.6	10.1	
	Sulfation	Abs/.1mm	*ASTM D7415		19.5	23.2	
	Silt	scalar	*Visual	NONE	NONE	NONE	
	Debris	scalar	*Visual	NONE	NONE	NONE	
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
	Appearance	scalar	*Visual *Visual	NORML	NORML	NORML	
	Odor	scalar		NORML	NORML	NORML	
	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	
LUID CONDITION	Sodium	ppm	ASTM D5185m	>75	4	4	
	Boron	ppm	ASTM D5185m		53	26	
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	1	
	Molybdenum	ppm	ASTM D5185m		65	27	
	Manganese	ppm	ASTM D5185m		1	1	
	Magnesium	ppm	ASTM D5185m		390	166	
	Calcium	ppm	ASTM D5185m		1883	1893	
	Phosphorus	ppm	ASTM D5185m		1026	848	
	Zinc	ppm	ASTM D5185m		1197	1085	
	Sulfur	ppm	ASTM D5185m		3842	3372	
	Oxidation	Abs/.1mm	*ASTM D7414	>25	14.6	16.8	
	Base Number (BN)		ASTM D2896		7.2	4.3	
	(211)					13.7	







Sample No. Lab Number : 06187333

: WC0941930 Unique Number : 11044085

Received **Tested** Diagnosed

: 22 May 2024 : 23 May 2024

: 24 May 2024 - Sean Felton

4401 REX RD FRIENDSWOOD, TX US 77546

Contact: M. LEWIS

Test Package : CONST (Additional Tests: 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.

mlewis@siddons-martin.com T:

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

F: