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

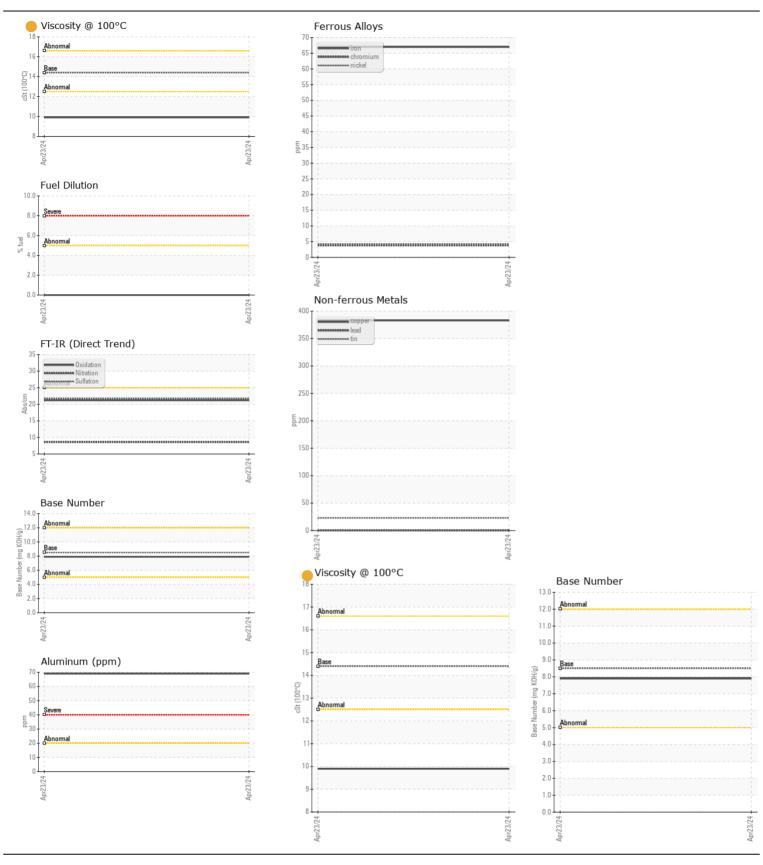
**NORMAL NORMAL ATTENTION** 

Machine Id

2241243

Component
Diesel Engine

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History
	Sample Number		Client Info		WC0879978		
Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.	Sample Date		Client Info		23 Apr 2024		
	Machine Age	mls	Client Info		24939		
	Oil Age	mls	Client Info		24939		
	Filter Age	mls	Client Info		24939		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				ATTENTION		
WEAR	Iron	ppm	ASTM D5185m		67		
Metal levels are typical for a new component breaking in.	Chromium	ppm	ASTM D5185m		4		
	Nickel	ppm	ASTM D5185m	>4	4		
	Titanium	ppm	ASTM D5185m		<1		
	Silver	ppm	ASTM D5185m		<1		
	Aluminum	ppm	ASTM D5185m		69		
	Lead	ppm	ASTM D5185m		<1		
	Copper	ppm	ASTM D5185m		383		
	Tin	ppm	ASTM D5185m	>15	23		
	Vanadium	ppm	ASTM D5185m		<1		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
ONTAMINATION	Silicon	ppm	ASTM D5185m	>25	10		
	Potassium	ppm	ASTM D5185m	>20	177		
Fuel content negligible. There is no indication of any contamination in the oil.	Fuel	%	ASTM D3524	>5	0.0		
	Water		WC Method	>0.2	NEG		
	Glycol		WC Method		NEG		
	Soot %	%	*ASTM D7844	>3	0.4		
	Nitration	Abs/cm	*ASTM D7624	>20	8.6		
	Sulfation	Abs/.1mm	*ASTM D7415	>30	21.7		
	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		
	<b>Emulsified Water</b>	scalar	*Visual	>0.2	NEG		
LUD CONDITION	O - althur		AOTA DESO	450	•		
LUID CONDITION	Sodium	ppm	ASTM D5185m		3		
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.	Boron	ppm	ASTM D5185m		39		
	Barium	ppm	ASTM D5185m		<1		
	Molybdenum	ppm	ASTM D5185m	100	39		
	Manganese	ppm	ASTM D5185m	150	4		
	Magnesium	ppm	ASTM D5185m		423		
	Calcium	ppm	ASTM D5185m		1703		
	Phosphorus	ppm	ASTM D5185m		662		
	Zinc	ppm	ASTM D5185m		807		
	Sulfur	ppm	ASTM D5185m		2171		
	Oxidation	Abs/.1mm	*ASTM D7414		21.2		
	Base Number (BN) Visc @ 100°C	mg KOH/g	ASTM D2896	8.5	7.9		







Certificate L2367

Laboratory Sample No.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Lab Number : 06178097

: WC0879978 Unique Number : 11029423

Received **Tested** Diagnosed

: 13 May 2024 : 17 May 2024

: 17 May 2024 - Jonathan Hester **Test Package**: FLEET (Additional Tests: FuelDilution, PercentFuel)

SALEM NATIONALEASE CORPORATION 198 PARK PLAZA DRIVE WINSTON SALEM, NC

US 27105 Contact: Audrey Hopkins Audrey.Hopkins@salemcorp.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. Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

T: (336)767-9642 F: x: