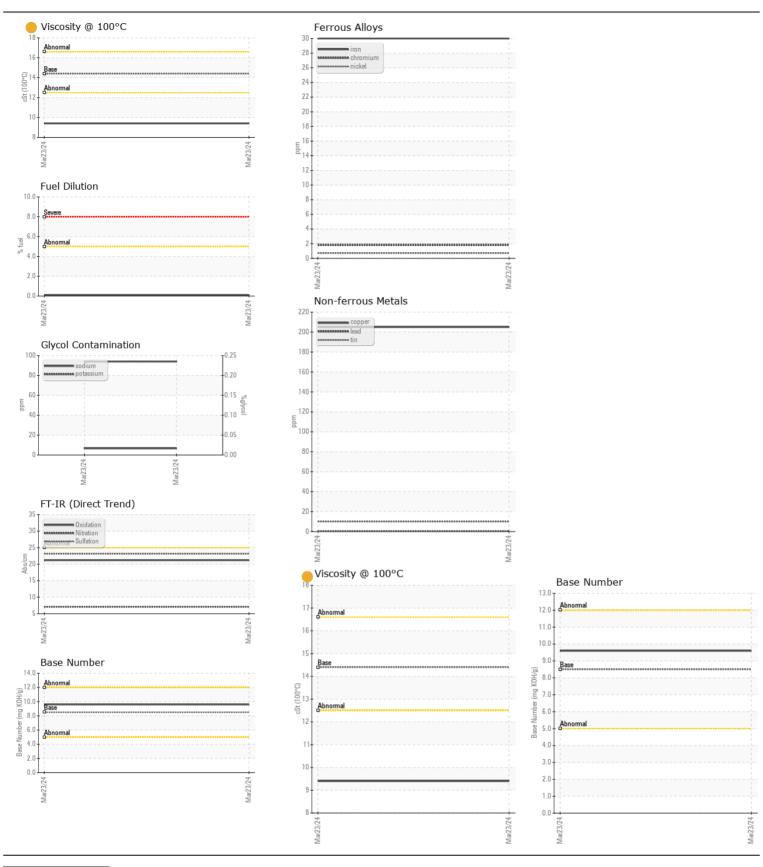
**WEAR** CONTAMINATION **FLUID CONDITION** 

**NORMAL NORMAL ATTENTION** 

Machine Id

23580 Component

Diesel Engine							
DIESEL ENGINE OIL SAE 15W40 ( GAL)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.	Sample Number		Client Info		WC0912560		
	Sample Date		Client Info		23 Mar 2024		
	Machine Age	mls	Client Info		14280		
	Oil Age	mls	Client Info		0		
	Filter Age	mls	Client Info		0		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				ATTENTION		
WEAR	Iron	ppm	ASTM D5185m	>100	30		
	Chromium	ppm	ASTM D5185m	>20	2		
All component wear rates are normal.	Nickel	ppm	ASTM D5185m	>4	<1		
	Titanium	ppm	ASTM D5185m		0		
	Silver	ppm	ASTM D5185m	>3	1		
	Aluminum	ppm	ASTM D5185m	>20	27		
	Lead	ppm	ASTM D5185m	>40	<1		
	Copper	ppm	ASTM D5185m	>330	205		
	Tin	ppm	ASTM D5185m	>15	10		
	Vanadium	ppm	ASTM D5185m		0		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	6		
Fuel content negligible. Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components.	Potassium	ppm	ASTM D5185m	>20	94		
	Fuel	%	ASTM D3524	>5	0.1		
	Water		WC Method	>0.2	NEG		
	Glycol		WC Method		NEG		
	Soot %	%	*ASTM D7844	>3	0.2		
	Nitration	Abs/cm	*ASTM D7624	>20	7.1		
	Sulfation	Abs/.1mm	*ASTM D7415	>30	23.1		
	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		
FLUID CONDITION	Sodium	ppm	ASTM D5185m	>158	7		
	Boron	ppm	ASTM D5185m		66		
The oil viscosity is lower than normal. The BN result indicates that	Barium	ppm	ASTM D5185m	10	0		
there is suitable alkalinity remaining in the oil. Confirm oil type.	Molybdenum	ppm	ASTM D5185m	100	41		
	Manganese	ppm	ASTM D5185m		4		
	Magnesium	ppm	ASTM D5185m	450	515		
	Calcium	ppm	ASTM D5185m	3000	1680		
	Phosphorus	ppm	ASTM D5185m	1150	773		
	Zinc	ppm	ASTM D5185m	1350	909		
	Sulfur	ppm	ASTM D5185m	4250	2650		
	Oxidation	Abs/.1mm	*ASTM D7414	>25	21.2		
	Base Number (BN)	ma KOH/a	ASTM D2896	8.5	9.6		
	Dase Nulliber (DIN)	mg nomg		0.0	0.0		







Certificate L2367

Laboratory Sample No.

Lab Number : 06153602

: WC0912560 Unique Number: 10983680

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

Diagnosed **Test Package**: FLEET (Additional Tests: FuelDilution, PercentFuel)

: 18 Apr 2024 : 23 Apr 2024

: 23 Apr 2024 - Don Baldridge

SALEM NATIONALEASE CORPORATION 198 PARK PLAZA DRIVE WINSTON SALEM, NC US 27105

> Contact: Audrey Hopkins Audrey.Hopkins@salemcorp.com T: (336)767-9642

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.

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