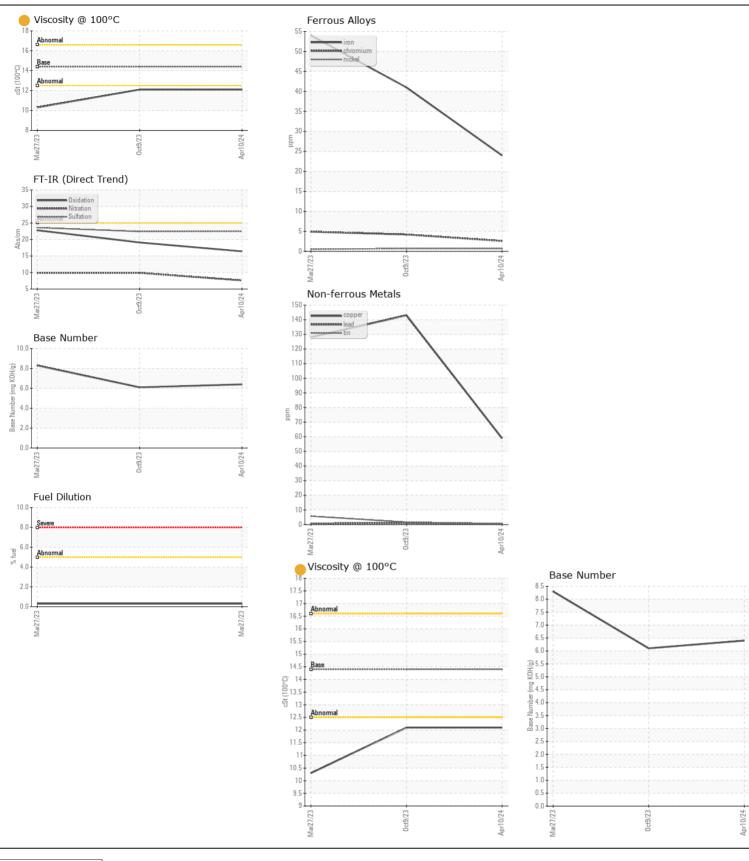
WEAR CONTAMINATION **FLUID CONDITION**

NORMAL NORMAL ATTENTION

Machine Id

USL2593
Component
Diesel Engine

ECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		WC0918499	WC0857881	WC076331
The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.	Sample Date		Client Info		10 Apr 2024	09 Oct 2023	27 Mar 202
	Machine Age	mls	Client Info		118091	73735	26538
	Oil Age	mls	Client Info		23461	47197	26538
	Filter Age	mls	Client Info		0	0	0
	Oil Changed		Client Info		Changed	Changed	Changed
	Filter Changed		Client Info		N/A	N/A	N/A
	Sample Status				ATTENTION	ATTENTION	ATTENTIO
/EAR	Iron	ppm	ASTM D5185m	>100	24	41	54
	Chromium	ppm	ASTM D5185m		3	4	5
All component wear rates are normal.	Nickel	ppm	ASTM D5185m		<1	<1	<1
	Titanium	ppm	ASTM D5185m		<1	<1	0
	Silver	ppm	ASTM D5185m	>3	<1	0	0
	Aluminum	ppm	ASTM D5185m	>20	13	35	66
	Lead	ppm	ASTM D5185m	>40	<1	1	<1
	Copper	ppm	ASTM D5185m	>330	59	143	128
	Tin	ppm	ASTM D5185m	>15	<1	2	6
	Vanadium	ppm	ASTM D5185m		<1	0	0
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
ONTAMINATION	Silicon	ppm	ASTM D5185m	>25	9	7	8
ONTAMINATION	Potassium	ppm	ASTM D5185m		20	85	133
There is no indication of any contamination in the oil.	Fuel	%	ASTM D3524		<1.0	<1.0	0.3
	Water		WC Method	>0.2	NEG	NEG	NEG
	Glycol		WC Method		NEG	NEG	NEG
	Soot %	%	*ASTM D7844	>3	0.6	1.2	0.8
	Nitration	Abs/cm	*ASTM D7624	>20	7.6	9.9	9.9
	Sulfation	Abs/.1mm	*ASTM D7415	>30	22.5	22.4	23.6
	Silt	scalar	*Visual	NONE	NONE	NONE	NONE
	Debris	scalar	*Visual	NONE	NONE	NONE	NONE
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
	Appearance	scalar	*Visual	NORML	NORML	NORML	NORM
	Odor	scalar	*Visual	NORML	NORML	NORML	NORM
	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
LUID CONDITION	Sodium	ppm	ASTM D5185m	>50	2	4	5
	Boron	ppm	ASTM D5185m		338	3	34
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		0	4	0
	Molybdenum	ppm	ASTM D5185m		124	71	44
	Manganese	ppm	ASTM D5185m		<1	2	3
	Magnesium	ppm	ASTM D5185m		675	865	617
	Calcium	ppm	ASTM D5185m		1954	1178	1924
	Phosphorus	ppm	ASTM D5185m		1496	853	786
	Zinc	ppm	ASTM D5185m		1751	1088	1027
	Sulfur	ppm	ASTM D5185m		4397	1953	2533
	Oxidation	Abs/.1mm	*ASTM D7414	>25	16.4	19.1	22.8







Certificate L2367

Laboratory Sample No.

Lab Number : 06155144 Unique Number: 10990567

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : WC0918499

To discuss this sample report, contact Customer Service at 1-800-237-1369.

Received **Tested** Diagnosed

: 19 Apr 2024 : 24 Apr 2024

: 24 Apr 2024 - Sean Felton Test Package: FLEET (Additional Tests: FuelDilution)

SALEM NATIONALEASE CORPORATION 198 PARK PLAZA DRIVE WINSTON SALEM, NC

US 27105 Contact: Audrey Hopkins

Audrey.Hopkins@salemcorp.com

* - 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: