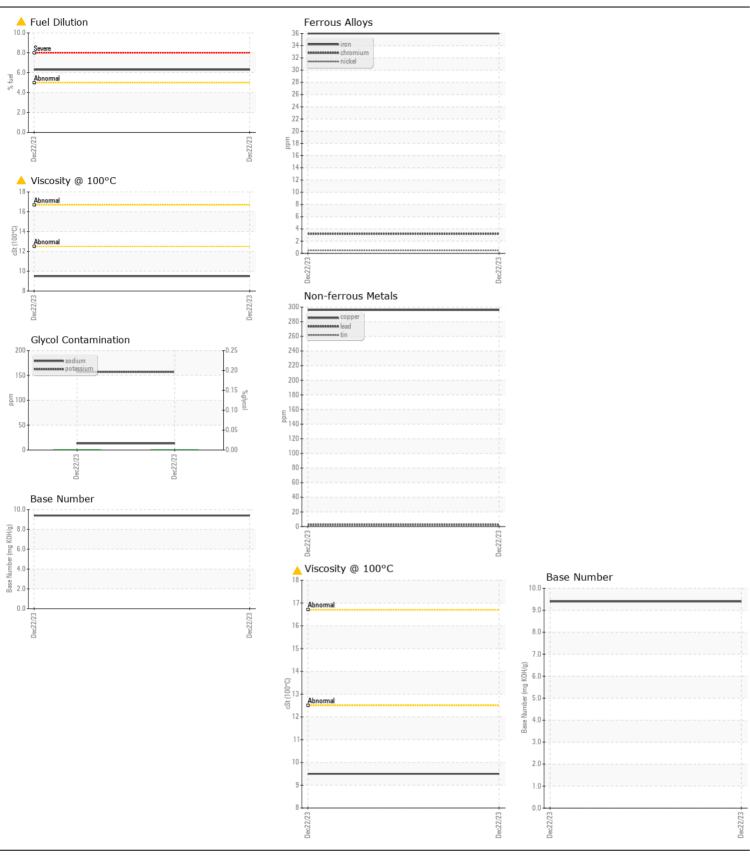


WEAR CONTAMINATION FLUID CONDITION

NORMAL ABNORMAL ABNORMAL

Machine Id

19992							
Component Diesel Engine							
Fluid							
{not provided} ( QTS)							
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		WC0871940		
	Sample Date		Client Info		22 Dec 2023		
	Machine Age	mls	Client Info		18300		
	Oil Age	mls	Client Info		18300		
	Filter Age	mls	Client Info		18300		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				ABNORMAL		
WEAR	Iron	ppm	ASTM D5185m	>100	36		
Metal levels are typical for a components first oil change.	Chromium	ppm	ASTM D5185m		3		
	Nickel	ppm	ASTM D5185m		<1		
	Titanium	ppm	ASTM D5185m		<1		
	Silver	ppm	ASTM D5185m	>3	<1		
	Aluminum	ppm	ASTM D5185m	>20	46		
	Lead	ppm	ASTM D5185m	>40	2		
	Copper	ppm	ASTM D5185m	>330	296		
	Tin	ppm	ASTM D5185m	>15	2		
	Vanadium	ppm	ASTM D5185m		<1		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION Silicon ppm ASTM D5185m >25							
CONTAININATION	Potassium	ppm	ASTM D5185m		9 157		
There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.	Fuel	%	ASTM D3524		▲ 6.3		
	Water	70	WC Method		NEG		
	Glycol	%	*ASTM D2982	7 0.2	0.0		
	Soot %	%	*ASTM D7844	>3	0.3		
	Nitration	Abs/cm	*ASTM D7624	>20	7.2		
	Sulfation	Abs/.1mm	*ASTM D7415	>30	22.5		
	Silt	scalar	*Visual	NONE	NONE		
	Debris	scalar	*Visual	NONE	NONE		
	Sand/Dirt	scalar	*Visual	NONE	NONE		
	Appearance	scalar		NORML	NORML		
	Odor	scalar	*Visual	NORML	NORML		
	Emulsified Water	scalar	*Visual	>0.2	NEG		
FLUID CONDITION	Sodium	ppm	ASTM D5185m		13		
	Boron	ppm	ASTM D5185m		46		
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.	Barium	ppm	ASTM D5185m		<1		
	Molybdenum	ppm	ASTM D5185m		42		
	Manganese	ppm	ASTM D5185m		4		
	Magnesium	ppm	ASTM D5185m		539		
	Calcium	ppm	ASTM D5185m		1642		
	Phosphorus	ppm	ASTM D5185m		798		
	Zinc	ppm	ASTM D5185m		947		
	Sulfur	ppm	ASTM D5185m		2401		
	Oxidation	Abs/.1mm	*ASTM D7414	>25	20.7		
	Base Number (BN)		ASTM D2896		9.4		
	Visc @ 100°C	cSt	ASTM D445		9.5		





Certificate L2367

Laboratory Sample No. Lab Number

**Unique Number** 

: WC0871940 : 06064866 : 10836248

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Recieved : 18 Jan 2024 Diagnosed

: 01 Feb 2024 Diagnostician : Wes Davis

Test Package : FLEET ( Additional Tests: FuelDilution, Glycol, PercentFuel ) To discuss this sample report, contact Customer Service at 1-800-237-1369.

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

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

\* - 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)

F: x: