WEAR CONTAMINATION FLUID CONDITION

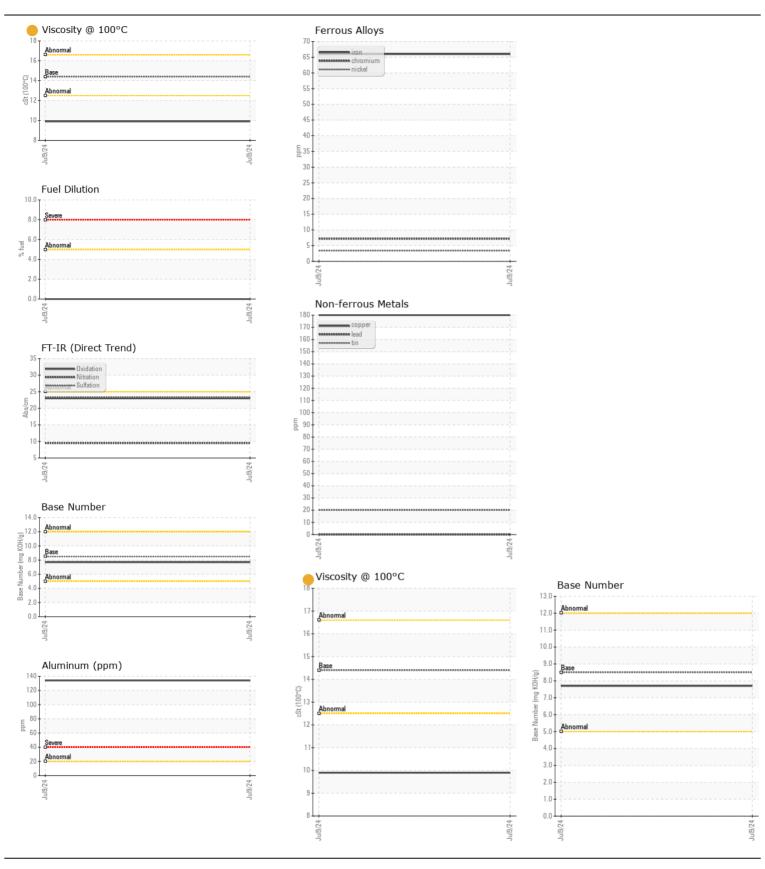
NORMAL NORMAL ATTENTION

Machine Id

6561

Component
Diesel Engine

DIESEL ENGINE OIL SAE 15W40 (GAL)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		WC0945811		
Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.	Sample Date		Client Info		09 Jul 2024		
	Machine Age	mls	Client Info		29283		
	Oil Age	mls	Client Info		29283		
	Filter Age	mls	Client Info		29283		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				ATTENTION		
WEAD	Iron	nnm	ASTM D5185m	>100	66		
WEAR		ppm			7		
Metal levels are typical for a new component breaking in.	Chromium Nickel	ppm	ASTM D5185m				
		ppm	ASTM D5185m	>4	3		
	Titanium	ppm	ASTM D5185m	0	0		
	Silver	ppm	ASTM D5185m		<1		
	Aluminum	ppm	ASTM D5185m		134		
	Lead	ppm	ASTM D5185m		0		
	Copper	ppm	ASTM D5185m		180		
	Tin	ppm	ASTM D5185m	>10	20		
	Vanadium	ppm	ASTM D5185m	NONE	0		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	8		
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. There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m	>20	344		
	Fuel	%	ASTM D3524	>5	0.0		
	Water		WC Method	>0.2	NEG		
	Glycol		WC Method		NEG		
	Soot %	%	*ASTM D7844	>3	0.8		
	Nitration	Abs/cm	*ASTM D7624	>20	9.5		
	Sulfation	Abs/.1mm	*ASTM D7415	>30	23.4		
	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		
ELUID CONDITION	Sodium	nnm	ASTM D5185m	. 150	8		
FLUID CONDITION	Boron	ppm	ASTM D5185m		13		
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		
	Molybdenum	ppm	ASTM D5185m		40		
	•	ppm	ASTM D5185m	100	5		
	Manganese Magnesium	ppm	ASTM D5185m	150	5 498		
	Calcium	ppm	ASTM D5185m		496 1746		
	Phosphorus	ppm	ASTM D5185m		750		
	Zinc	ppm	ASTM D5185m		888		
	Sulfur	ppm ppm	ASTM D5185m		2350		
	Oxidation	Abs/.1mm	*ASTM D7414		23.0		
	Base Number (BN)				7.7		
	Visc @ 100°C	cSt	ASTM D2030		9.9		
	V130 @ 100 O	001	TOTIM D440	17.4	9.9	-	







Certificate L2367

Laboratory Sample No.

Lab Number : 06237292

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : WC0945811

Unique Number: 11126126

Received : 15 Jul 2024 **Tested** Diagnosed

: 19 Jul 2024

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

F: x: