WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL ATTENTION

Machine Id **22531**

Component Diesel Engine

DIESEL ENGINE OIL SAE 15W40 (--- QTS)

ECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History
Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.	Sample Number		Client Info		WC0891604		
	Sample Date		Client Info		26 Jan 2024		
	Machine Age	mls	Client Info		20592		
	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		
EAD	Iron	nnm	ASTM D5185m	>100	35		
WEAR	Chromium	ppm	ASTM D5185m		2		
Metal levels are typical for a new component breaking in.	Nickel	ppm					
		ppm	ASTM D5185m	>4	1		
	Titanium	ppm	ASTM D5185m	0	0		
	Silver	ppm	ASTM D5185m		<1		
	Aluminum	ppm	ASTM D5185m		42		
	Lead	ppm	ASTM D5185m		<1		
	Copper	ppm	ASTM D5185m		253		
	Tin	ppm	ASTM D5185m	>15	10		
	Vanadium	ppm	ASTM D5185m		0		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
ONTAMINATION	Silicon	ppm	ASTM D5185m	>25	6		
	Potassium	ppm	ASTM D5185m	>20	130		
Fuel content negligible. There is no indication of any contamination in the oil.	Fuel	%	ASTM D3524	>5	0.2		
	Water		WC Method	>0.2	NEG		
	Glycol		WC Method		NEG		
	Soot %	%	*ASTM D7844	>3	0.6		
	Nitration	Abs/cm	*ASTM D7624	>20	9.4		
	Sulfation	Abs/.1mm	*ASTM D7415	>30	23.3		
	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		
LUD CONDITION	0		AOTM DE405	450			
LUID CONDITION	Sodium	ppm	ASTM D5185m		6		
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		43		
	Barium	ppm	ASTM D5185m		0		
	Molybdenum	ppm	ASTM D5185m	100	44		
	Manganese	ppm	ASTM D5185m	150	4		
	Magnesium	ppm	ASTM D5185m		581		
	Calcium	ppm	ASTM D5185m		1635		
	Phosphorus	ppm	ASTM D5185m		793		
	Zinc	ppm	ASTM D5185m		942		
	Sulfur	ppm	ASTM D5185m		2596		
	Oxidation	Abs/.1mm	*ASTM D7414 ASTM D2896		22.2 8.5		
	Base Number (BN)						







Certificate L2367

Laboratory Sample No.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : WC0891604 Lab Number : 06153661

Unique Number: 10983739

Received : 18 Apr 2024 **Tested**

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

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

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