WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL NORMAL

Machine Id

HC2382

Component
Diesel Engine

DIESEL ENGINE OIL SAE 15W40 ( QTS)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		WC0875927		
No corrective action is recommended at this time. Resample at the next service interval to monitor. 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 Date		Client Info		10 Jun 2024		
	Machine Age	mls	Client Info		25031		
	Oil Age	mls	Client Info		25031		
	Filter Age	mls	Client Info		25031		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				NORMAL		
WEAD	lua ia		ACTM DE10E	100	40		
WEAR	Iron	ppm	ASTM D5185m		16		
Metal levels are typical for a components first oil change.	Chromium Nickel	ppm	ASTM D5185m		<1		
		ppm	ASTM D5185m ASTM D5185m	>4	<1		
	Titanium Silver	ppm	ASTM D5185m	. 2	<1 <1		
	Aluminum	ppm	ASTM D5185m				
	Lead	ppm	ASTM D5185m		8 <1		
	Copper	ppm	ASTM D5185m		5		
	Tin	ppm	ASTM D5185m		<1		
	Vanadium	ppm	ASTM D5185m	- 10	<1		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	5		
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	17		
	Fuel	%	ASTM D3524		0.2		
	Water		WC Method	>0.2	NEG		
	Glycol		WC Method		NEG		
	Soot %	%	*ASTM D7844		0.2		
	Nitration	Abs/cm	*ASTM D7624		6.9		
	Sulfation	Abs/.1mm	*ASTM D7415		17.7		
	Silt	scalar	*Visual	NONE	NONE		
	Debris	scalar	*Visual	NONE	NONE		
	Sand/Dirt	scalar	*Visual	NONE	NONE NORML		
	Appearance Odor	scalar scalar	*Visual *Visual	NORML NORML	NORML		
	Emulsified Water		*Visual	>0.2	NEG		
<u></u>			Visuai				
FLUID CONDITION	Sodium	ppm	ASTM D5185m	>158	2		
	Boron	ppm	ASTM D5185m	250	118		
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Barium	ppm	ASTM D5185m	10	<1		
	Molybdenum	ppm	ASTM D5185m	100	75		
	Manganese	ppm	ASTM D5185m		1		
	Magnesium	ppm	ASTM D5185m	450	250		
	Calcium	ppm	ASTM D5185m	3000	1832		
	Phosphorus	ppm	ASTM D5185m	1150	920		
	Zinc	ppm	ASTM D5185m		1024		
	Sulfur	ppm	ASTM D5185m		3365		
	Oxidation	Abs/.1mm	*ASTM D7414		11.2		
	Base Number (BN)	mg KOH/g	ASTM D2896	8.5	7.4		
	V: (2) 10000	~C+	A CTM D 445	4 4 4			

12.3

ASTM D445 14.4

Visc @ 100°C cSt





Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No.

: WC0875927 Lab Number : 06213012 Unique Number : 11085876

Received **Tested** 

: 17 Jun 2024 : 20 Jun 2024 Diagnosed Test Package: FLEET (Additional Tests: FuelDilution, PercentFuel)

: 20 Jun 2024 - Wes Davis

198 PARK PLAZA DRIVE WINSTON SALEM, NC

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

Contact/Location: Audrey Hopkins - SALWIN

SALEM NATIONALEASE CORPORATION

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:

US 27105