**WEAR** CONTAMINATION **FLUID CONDITION** 

**NORMAL NORMAL NORMAL** 

Machine Id

## 1389 Component Diesel Engine

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor. Please specify the component make and model with your next sample.	Sample Number		Client Info		WC0948945	WC0729753	
	Sample Date		Client Info		05 Jun 2024	13 Sep 2022	
	Machine Age	mls	Client Info		230397	204273	
	Oil Age	mls	Client Info		0	0	
	Filter Age	mls	Client Info		0	0	
	Oil Changed		Client Info		N/A	Not Changd	
	Filter Changed		Client Info		N/A	Not Changd	
	Sample Status				NORMAL	NORMAL	
VEAD				400			
VEAR	Iron	ppm	ASTM D5185m		15	16	
All component wear rates are normal.	Chromium	ppm	ASTM D5185m		<1	<1	
	Nickel	ppm	ASTM D5185m	>4	0	0	
	Titanium	ppm	ASTM D5185m		0	0	
	Silver	ppm	ASTM D5185m		0	0	
	Aluminum	ppm	ASTM D5185m		5	2	
	Lead	ppm	ASTM D5185m		0	<1	
	Copper	ppm	ASTM D5185m		2	8	
	Tin	ppm	ASTM D5185m	>15	0	<1	
	Vanadium	ppm	ASTM D5185m	NONE	0	0	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	6	6	
	Potassium	ppm	ASTM D5185m	>20	3	2	
There is no indication of any contamination in the oil.	Fuel		WC Method		<1.0	<1.0	
	Water		WC Method	>0.2	NEG	NEG	
	Glycol		WC Method		NEG	NEG	
	Soot %	%	*ASTM D7844	>3	0.3	0.3	
	Nitration	Abs/cm	*ASTM D7624	>20	9.6	9.6	
	Sulfation	Abs/.1mm	*ASTM D7415	>30	18.9	19.8	
	Silt	scalar	*Visual	NONE	NONE	NONE	
	Debris	scalar	*Visual	NONE	NONE	NONE	
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
	Appearance	scalar	*Visual	NORML	NORML	NORML	
	Odor	scalar	*Visual	NORML	NORML	NORML	
	<b>Emulsified Water</b>	scalar	*Visual	>0.2	NEG	NEG	
THUR CONDITION	0 "		AOTH DE LOS	450			
FLUID CONDITION	Sodium	ppm	ASTM D5185m		2	0	
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Boron	ppm	ASTM D5185m		39	18	
	Barium	ppm	ASTM D5185m		0	0	
	Molybdenum	ppm	ASTM D5185m ASTM D5185m	100	84	57 <1	
	Manganese Magnesium	ppm	ASTM D5185m	450	<1 112	94	
	Calcium	ppm	ASTM D5185m		2139	2216	
	Phosphorus	ppm	ASTM D5185m		1086	995	
	Zinc	ppm	ASTM D5185m		1253	1193	
	Sulfur	ppm ppm	ASTM D5185m		4233	4485	
	Oxidation	Abs/.1mm	*ASTM D7414		14.6	14.5	
	Base Number (BN)				6.8	8.0	
	Visc @ 100°C	cSt		14.4	0.0	13.8	





Certificate L2367

Laboratory Unique Number : 11099087

Sample No.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : WC0948945 Lab Number : 06220890

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

Received **Tested** Diagnosed

: 27 Jun 2024 - Wes Davis Test Package : MOB 1 ( Additional Tests: TBN )

: 26 Jun 2024

: 27 Jun 2024

1551 ROCK QUARRY ROAD RALEIGH, NC US 27610

Contact: DEVIN WEBER dweber@wcpss.net T: (919)856-8076

\* - 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: Contact/Location: DEVIN WEBER - WCPRAL

WAKE COUNTY PUBLIC SCHOOL SYSTEM