

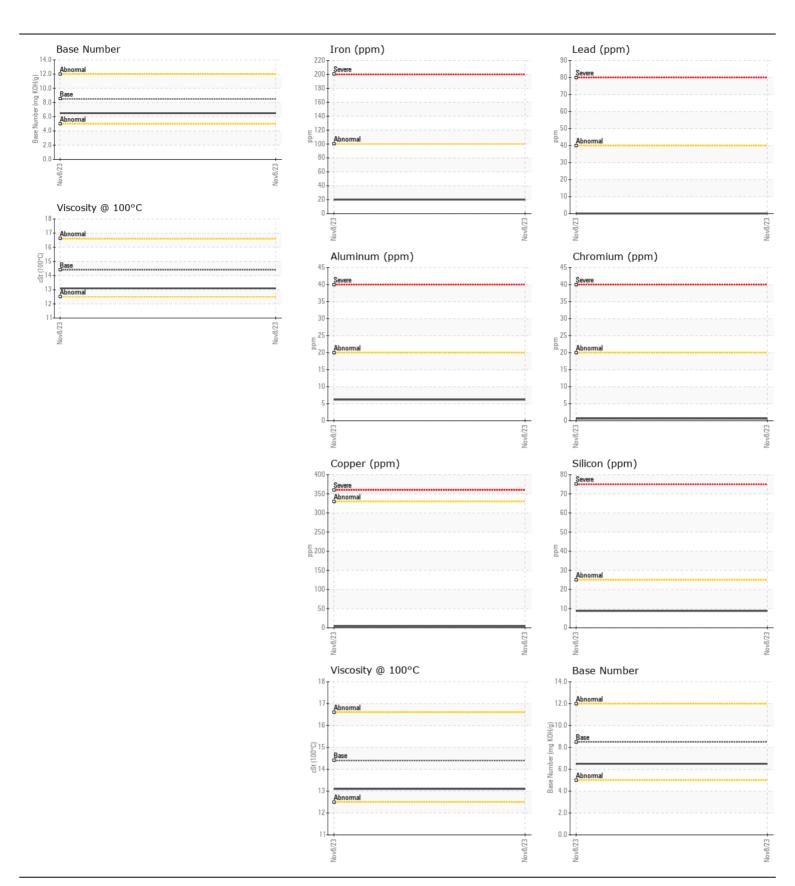
WEAR CONTAMINATION **FLUID CONDITION** **NORMAL NORMAL NORMAL**

Machine Id

1531

Component

Component Diesel Engine Fluid							
DIESEL ENGINE OIL SAE 15W40 (QTS)							
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		WC0870828		
	Sample Date		Client Info		08 Nov 2023		
	Machine Age	mls	Client Info		124056		
	Oil Age	mls	Client Info		0		
	Filter Age	mls	Client Info		0		
	Oil Changed		Client Info		Not Changd		
	Filter Changed		Client Info		Not Changd		
	Sample Status				NORMAL		
WEAR	Iron	ppm	ASTM D5185m	>100	20		
	Chromium	ppm	ASTM D5185m	>20	<1		
All component wear rates are normal.	Nickel	ppm	ASTM D5185m	>4	0		
	Titanium	ppm	ASTM D5185m		0		
	Silver	ppm	ASTM D5185m	>3	0		
	Aluminum	ppm	ASTM D5185m	>20	6		
	Lead	ppm	ASTM D5185m	>40	0		
	Copper	ppm	ASTM D5185m	>330	4		
	Tin	ppm	ASTM D5185m	>15	0		
	Vanadium	ppm	ASTM D5185m		<1		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Ciliana		ACTM DE10E	05			
CONTAMINATION	Silicon	ppm	ASTM D5185m		9		
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 Fuel	ppm	ASTM D5185m WC Method		11		
					<1.0 NEG		
	Water Glycol		WC Method	>0.2	NEG		
	Soot %	%	*ASTM D7844	. 2	0.3		
	Nitration	Abs/cm	*ASTM D7624	>20	9.8		
	Sulfation	Abs/.1mm	*ASTM D7415		19.4		
	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		
FLUID CONDITION	Sodium	ppm	ASTM D5185m		3		
The BN result indicates that there is suitable alkalinity remaining in the	Boron	ppm	ASTM D5185m		41		
oil. The condition of the oil is suitable for further service.	Barium	ppm	ASTM D5185m		0		
	Molybdenum	ppm	ASTM D5185m	100	76		
	Manganese	ppm	ASTM D5185m	1=6	<1		
	Magnesium	ppm	ASTM D5185m		149		
	Calcium	ppm	ASTM D5185m		2019		
	Phosphorus	ppm	ASTM D5185m		997		
	Zinc	ppm	ASTM D5185m		1159		
	Sulfur	ppm	ASTM D5185m		3471		
	Oxidation	Abs/.1mm	*ASTM D7414		15.4		
	Base Number (BN) Visc @ 100°C	mg KOH/g cSt	ASTM D2896 ASTM D445		6.5		
	visc @ 100°C	W	A3 1 IVI D443	14.4	13.1		







Laboratory Sample No. Lab Number **Unique Number**

: WC0870828 : 06061757 : 10833139

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Recieved : 16 Jan 2024 Diagnosed : 18 Jan 2024

Diagnostician : Wes Davis Test Package : MOB 1 (Additional Tests: TBN)

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)

WAKE COUNTY PUBLIC SCHOOL SYSTEM

1551 ROCK QUARRY ROAD RALEIGH, NC US 27610

Contact: DEVIN WEBER dweber@wcpss.net

T: (919)856-8076 F: x:

Contact/Location: DEVIN WEBER - WCPRAL