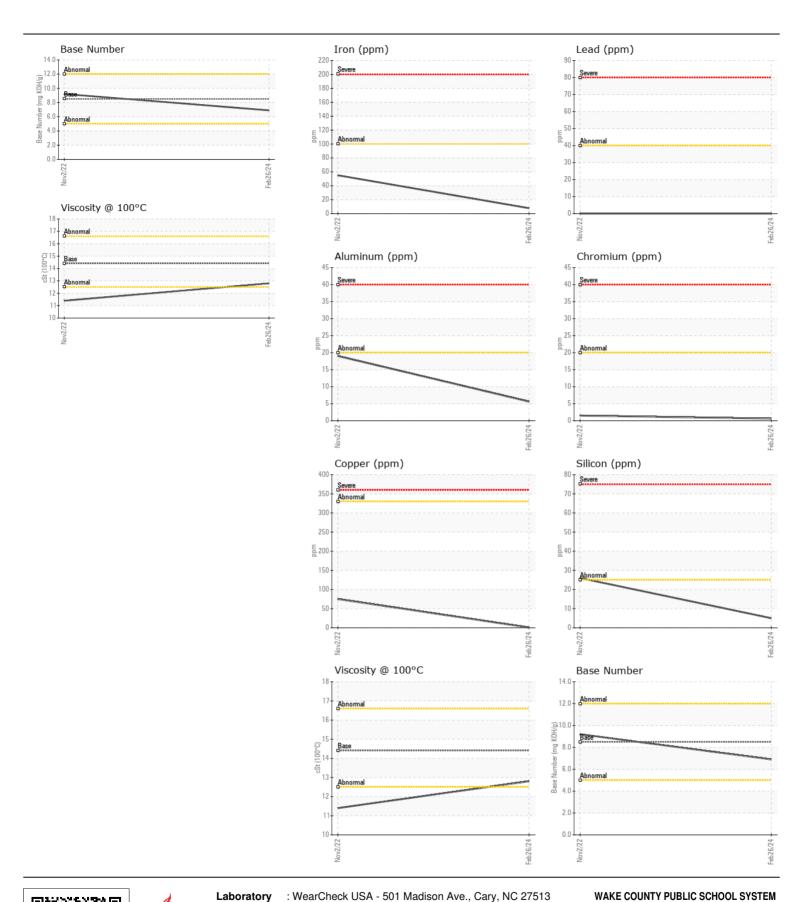


**WEAR** CONTAMINATION **FLUID CONDITION**  **NORMAL NORMAL NORMAL** 

Machine Id 1798

Diesel Engine

DIESEL ENGINE OIL SAE 15W40 ( QTS)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		WC0906145	WC0729789	
Resample at the next service interval to monitor. Please specify the component make and model with your next sample.	Sample Date		Client Info		26 Feb 2024	02 Nov 2022	
	Machine Age	mls	Client Info		34209	4123	
	Oil Age	mls	Client Info		0	0	
	Filter Age	mls	Client Info		0	0	
	Oil Changed		Client Info		Not Changd	Not Changd	
	Filter Changed		Client Info		Not Changd	Not Changd	
	Sample Status				NORMAL	ATTENTION	
WEAD			40TH DE (05	400			
WEAR	Iron	ppm	ASTM D5185m		8	55	
Metal levels are typical for a new component breaking in.	Chromium	ppm	ASTM D5185m		<1	2	
	Nickel	ppm	ASTM D5185m	>4	<1	0	
	Titanium	ppm	ASTM D5185m		0	0	
	Silver	ppm	ASTM D5185m		0	0	
	Aluminum	ppm	ASTM D5185m		6	19	
	Lead	ppm	ASTM D5185m		0	0	
	Copper	ppm	ASTM D5185m		<1	75	
	Tin	ppm	ASTM D5185m	>15	0	0	
	Vanadium	ppm	ASTM D5185m		0	0	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	5	26	
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m	>20	5	67	
	Fuel		WC Method	>5	<1.0	1.8	
	Water		WC Method	>0.2	NEG	NEG	
	Glycol		WC Method		NEG	NEG	
	Soot %	%	*ASTM D7844	>3	0.2	0.4	
	Nitration	Abs/cm	*ASTM D7624	>20	8.3	10.7	
	Sulfation	Abs/.1mm	*ASTM D7415	>30	18.0	22.7	
	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	
	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	
FLUID CONDITION	Sodium	ppm	ASTM D5185m	<b>\158</b>	2	8	
TEGID CONDITION	Boron	ppm	ASTM D5185m		52	36	
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		0	6	
	Molybdenum	ppm	ASTM D5185m		87	51	
	Manganese	ppm	ASTM D5185m		0	5	
	Magnesium	ppm	ASTM D5185m	450	111	747	
	Calcium	ppm	ASTM D5185m		2038	1267	
	Phosphorus	ppm	ASTM D5185m		1057	745	
	Zinc	ppm	ASTM D5185m		1253	852	
	Sulfur	ppm	ASTM D5185m		4079	2731	
	Oxidation	Abs/.1mm	*ASTM D7414		13.4	20.2	
	Base Number (BN)				6.9	9.2	
	Visc @ 100°C	cSt	ASTM D445		12.8	11.4	
				•			





Laboratory Sample No.

: WC0906145 Lab Number : 06104832

Unique Number : 10903062

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

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 29 Feb 2024 **Tested** : 01 Mar 2024

Diagnosed Test Package : MOB 1 ( Additional Tests: TBN )

: 01 Mar 2024 - Wes Davis

US 27610 Contact: DEVIN WEBER dweber@wcpss.net

1551 ROCK QUARRY ROAD

\* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (919)856-8076 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

F: x:

RALEIGH, NC