

# **PROBLEM SUMMARY**

Sample Rating Trend

GLYCOL

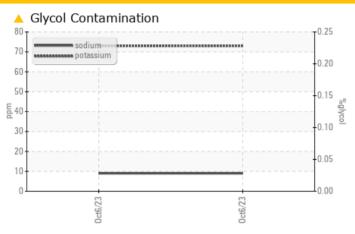


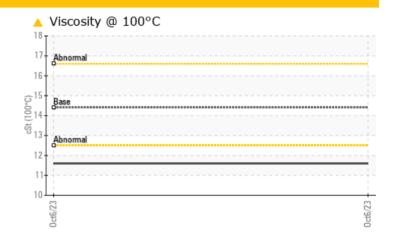
T-910

Component **Diesel Engine** 

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

## COMPONENT CONDITION SUMMARY





## RECOMMENDATION

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS											
Sample Status				ABNORMAL							
Potassium	ppm	ASTM D5185m	>20	<b>^</b> 73							
Visc @ 100°C	cSt	ASTM D445	144	<b>116</b>							

Customer Id: EAICLA Sample No.: WC0865159 Lab Number: 05994011 Test Package: CONST



To manage this report scan the QR code

To discuss the diagnosis or test data: Jonathan Hester +1 919-379-4092 x4092 jhester@wearcheckusa.com

To change component or sample information: Customer Service +1 1-800-237-1369 customerservice@wearcheck.com

## RECOMMENDED ACTIONS

There are no recommended actions for this sample.

## HISTORICAL DIAGNOSIS



# **OIL ANALYSIS REPORT**

T 3



GLYCOL



T-910
Component

**Diesel Engine** 

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

## DIAGNOSIS

#### Recommendation

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

#### Wear

Metal levels are typical for a new component breaking in.

## Contamination

Sodium and/or potassium levels are high. Fuel content negligible. Test for glycol is negative.

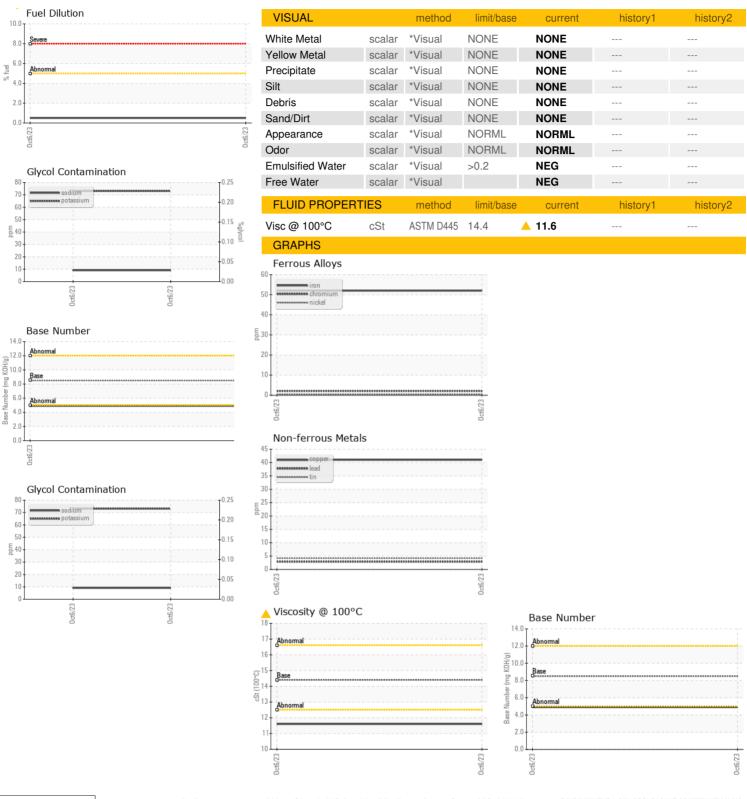
## Fluid Condition

The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

				Oct2023		
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0865159		
Sample Date		Client Info		06 Oct 2023		
Machine Age	mls	Client Info		25036		
Oil Age	mls	Client Info		0		
Oil Changed		Client Info		Changed		
Sample Status				ABNORMAL		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	52		
Chromium	ppm	ASTM D5185m	>20	2		
Nickel	ppm	ASTM D5185m	>4	<1		
Titanium	ppm	ASTM D5185m		<1		
Silver	ppm	ASTM D5185m	>3	<1		
Aluminum	ppm	ASTM D5185m	>20	18		
Lead	ppm	ASTM D5185m	>40	3		
Copper	ppm	ASTM D5185m	>330	41		
Tin	ppm	ASTM D5185m	>15	4		
Vanadium	ppm	ASTM D5185m		0		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	250	22		
Barium	ppm	ASTM D5185m	10	25		
Molybdenum	ppm	ASTM D5185m	100	9		
Manganese	ppm	ASTM D5185m		6		
Magnesium	ppm	ASTM D5185m	450	626		
Calcium	ppm	ASTM D5185m	3000	1265		
Phosphorus	ppm	ASTM D5185m	1150	697		
Zinc	ppm	ASTM D5185m	1350	777		
Sulfur	ppm	ASTM D5185m	4250	3196		
CONTAMINANTS	}	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	46		
Sodium	ppm	ASTM D5185m	>158	9		
Potassium	ppm	ASTM D5185m	>20	<b>^</b> 73		
Fuel	%	ASTM D3524	>5	0.5		
Glycol	%	*ASTM D2982		NEG		
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.4		
Nitration	Abs/cm	*ASTM D7624	>20	10.7		
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.5		
FLUID DEGRADA	ATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.9		
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	4.9		



# **OIL ANALYSIS REPORT**







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

: WC0865159

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 05994011

: 31 Oct 2023 Diagnosed

: 03 Nov 2023 Diagnostician : Jonathan Hester EAI EQUIPMENT A DIIV OF PLEASANT CONSTRUCTION INC 24024 FREDERICK ROAD

CLARKSBURG, MD US 20871 Contact: Service Manager

: 10722371 Test Package : CONST ( Additional Tests: FuelDilution, Glycol, PercentFuel, TBN ) Certificate L2367 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)

T: F: