



# PROBLEM SUMMARY

Sample Rating Trend

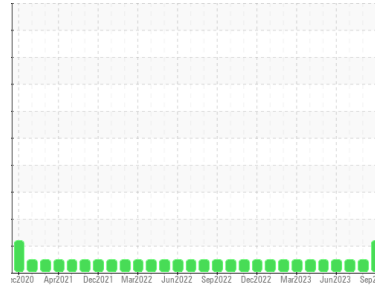
GLYCOL



Area  
**GEORGIA**  
Machine Id  
**4906**

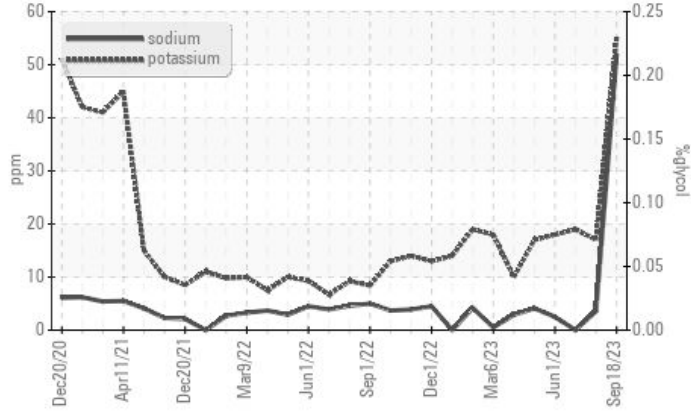
Component  
**Diesel Engine**

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



## COMPONENT CONDITION SUMMARY

### ▲ Glycol Contamination



## RECOMMENDATION

No corrective action is recommended at this time.  
Resample at the next service interval to monitor.

## PROBLEMATIC TEST RESULTS

Sample Status				<b>ABNORMAL</b>	NORMAL	NORMAL
Potassium	ppm	ASTM D5185m	>20	<b>▲ 55</b>	17	19

Customer Id: SEAOKL  
Sample No.: WC0857176  
Lab Number: 05964069  
Test Package: FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data:  
Jonathan Hester +1 919-379-4092 x4092  
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To change component or sample information:  
Customer Service +1 1-800-237-1369  
[customerservice@wearcheck.com](mailto:customerservice@wearcheck.com)

## RECOMMENDED ACTIONS

*There are no recommended actions for this sample.*

## HISTORICAL DIAGNOSIS

### 21 Aug 2023 Diag: Doug Bogart

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

view report



### 06 Jun 2023 Diag: Don Baldrige

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

view report



### 01 Jun 2023 Diag: Don Baldrige

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

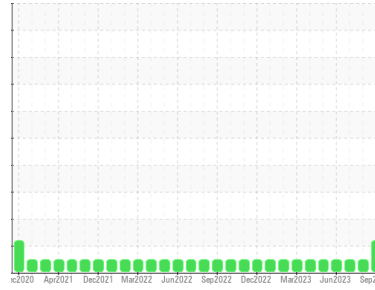
view report





# OIL ANALYSIS REPORT

Sample Rating Trend



GLYCOL



Area  
**GEORGIA**  
 Machine Id  
**4906**

Component  
**Diesel Engine**  
 Fluid

**Fluid**  
**Fluid**  
**DIESSEL ENGINE OIL SAE 15W40 (--- QTS)**

## DIAGNOSIS

### Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

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

### Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0857176</b>	WC0646036	WC0754698
Sample Date	Client Info		<b>18 Sep 2023</b>	21 Aug 2023	06 Jun 2023
Machine Age	mls	Client Info	<b>72823</b>	70959	69831
Oil Age	mls	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>Not Changed</b>	Not Changed	Not Changed
Sample Status			<b>ABNORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0

## WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>100	<b>25</b>	61	66
Chromium	ppm	ASTM D5185m	>20	<b>1</b>	3	3
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m	>20	<b>5</b>	6	6
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	26	26
Copper	ppm	ASTM D5185m	>330	<b>5</b>	25	24
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	2	2
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	250	<b>4</b>	36	34
Barium	ppm	ASTM D5185m	10	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	100	<b>69</b>	42	45
Manganese	ppm	ASTM D5185m		<b>2</b>	2	1
Magnesium	ppm	ASTM D5185m	450	<b>1072</b>	526	469
Calcium	ppm	ASTM D5185m	3000	<b>1166</b>	1781	1719
Phosphorus	ppm	ASTM D5185m	1150	<b>1088</b>	978	957
Zinc	ppm	ASTM D5185m	1350	<b>1368</b>	1295	1186
Sulfur	ppm	ASTM D5185m	4250	<b>3229</b>	3381	3022

## CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>25	<b>6</b>	14	14
Sodium	ppm	ASTM D5185m	>158	<b>52</b>	4	0
Potassium	ppm	ASTM D5185m	>20	<b>55</b>	17	19
Glycol	%	*ASTM D2982		<b>NEG</b>	NEG	NEG

## INFRA-RED

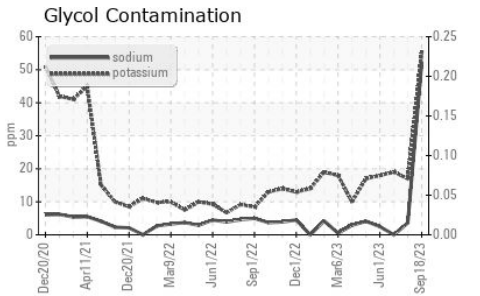
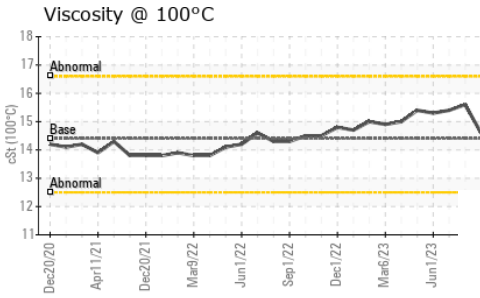
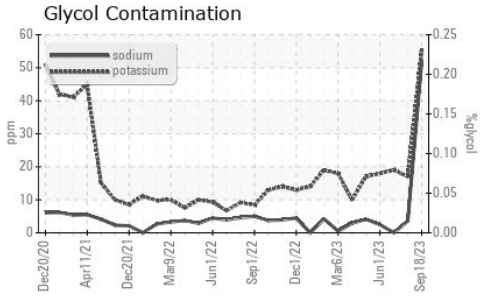
	method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844	>3	<b>2</b>	1.9	1.9
Nitration	Abs/cm	*ASTM D7624	>20	<b>15.8</b>	15.8	14.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>30.2</b>	29.9	29.9

## FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>28.2</b>	27.9	29.8
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>6.1</b>	6.4	5.8



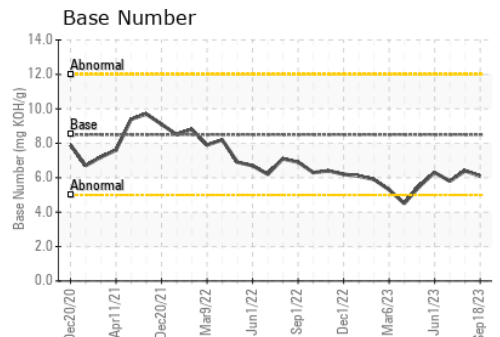
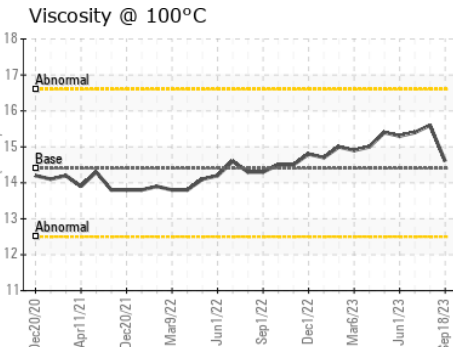
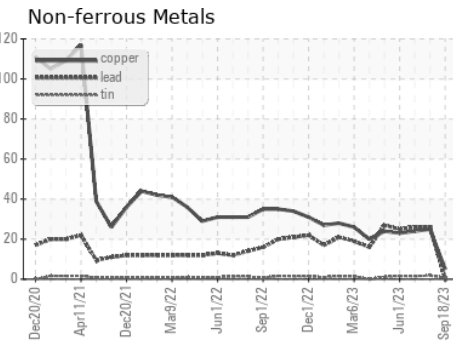
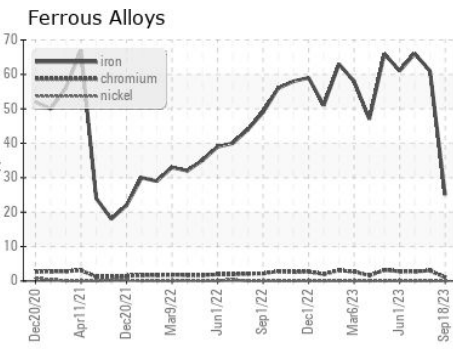
# OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
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
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	14.4	<b>14.6</b>	15.6

## GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : WC0857176 Received : 28 Sep 2023  
 Lab Number : 05964069 Diagnosed : 02 Oct 2023  
 Unique Number : 10670620 Diagnostician : Jonathan Hester  
 Test Package : FLEET ( Additional Tests: Glycol )

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)

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