



# OIL ANALYSIS REPORT

Sample Rating Trend



DIRT



Machine Id  
**460**  
 Component  
**1 Differential**  
 Fluid  
**GEAR OIL SAE 80W90 (--- GAL)**

## DIAGNOSIS

### ▲ Recommendation

The oil change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

### Wear

Metal levels are typical for a new component breaking in.

### ▲ Contamination

Elemental level of silicon (Si) above normal indicating ingress of seal material.

### Fluid Condition

The condition of the oil is acceptable for the time in service.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0847910</b>	---	---
Sample Date	Client Info		<b>30 Dec 2023</b>	---	---
Machine Age	hrs	Client Info	<b>5743</b>	---	---
Oil Age	hrs	Client Info	<b>5743</b>	---	---
Oil Changed	Client Info		<b>Changed</b>	---	---
Sample Status			<b>ABNORMAL</b>	---	---

## CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>.2	<b>NEG</b>	---	---

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >1200	<b>171</b>	---	---
Chromium	ppm	ASTM D5185m >8	<b>1</b>	---	---
Nickel	ppm	ASTM D5185m >20	<b>24</b>	---	---
Titanium	ppm	ASTM D5185m >4	<b>0</b>	---	---
Silver	ppm	ASTM D5185m	<b>0</b>	---	---
Aluminum	ppm	ASTM D5185m >30	<b>2</b>	---	---
Lead	ppm	ASTM D5185m >25	<b>0</b>	---	---
Copper	ppm	ASTM D5185m >50	<b>2</b>	---	---
Tin	ppm	ASTM D5185m >5	<b>0</b>	---	---
Vanadium	ppm	ASTM D5185m	<b>0</b>	---	---
Cadmium	ppm	ASTM D5185m	<b>0</b>	---	---

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 400	<b>132</b>	---	---
Barium	ppm	ASTM D5185m 200	<b>&lt;1</b>	---	---
Molybdenum	ppm	ASTM D5185m 12	<b>0</b>	---	---
Manganese	ppm	ASTM D5185m	<b>5</b>	---	---
Magnesium	ppm	ASTM D5185m 12	<b>2</b>	---	---
Calcium	ppm	ASTM D5185m 150	<b>23</b>	---	---
Phosphorus	ppm	ASTM D5185m 1650	<b>1077</b>	---	---
Zinc	ppm	ASTM D5185m 125	<b>13</b>	---	---
Sulfur	ppm	ASTM D5185m 22500	<b>21883</b>	---	---

## CONTAMINANTS

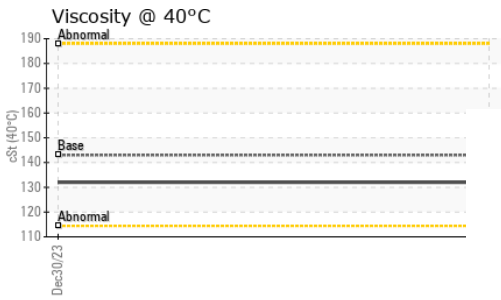
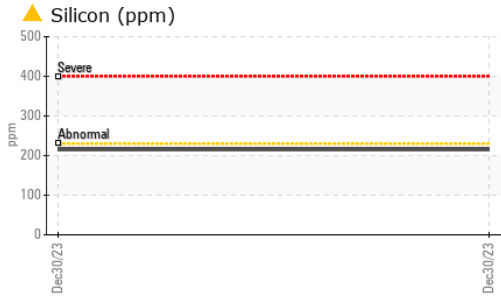
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >230	<b>▲ 215</b>	---	---
Sodium	ppm	ASTM D5185m >170	<b>6</b>	---	---
Potassium	ppm	ASTM D5185m >20	<b>2</b>	---	---

## VISUAL

	method	limit/base	current	history1	history2
White Metal	scalar	*Visual NONE	<b>NONE</b>	---	---
Yellow Metal	scalar	*Visual NONE	<b>NONE</b>	---	---
Precipitate	scalar	*Visual NONE	<b>NONE</b>	---	---
Silt	scalar	*Visual NONE	<b>NONE</b>	---	---
Debris	scalar	*Visual NONE	<b>NONE</b>	---	---
Sand/Dirt	scalar	*Visual NONE	<b>NONE</b>	---	---
Appearance	scalar	*Visual NORML	<b>NORML</b>	---	---
Odor	scalar	*Visual NORML	<b>NORML</b>	---	---
Emulsified Water	scalar	*Visual >.2	<b>NEG</b>	---	---
Free Water	scalar	*Visual	<b>NEG</b>	---	---



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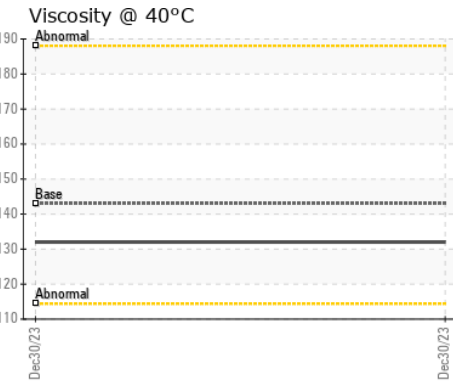
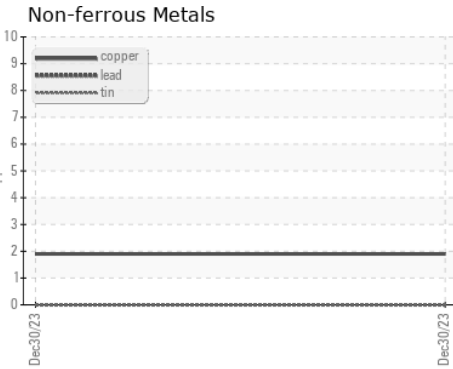
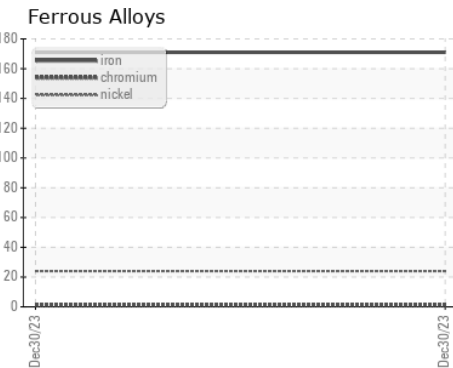
### FLUID PROPERTIES

method	limit/base	current	history1	history2
Visc @ 40°C	cSt ASTM D445 143	<b>132</b>	---	---

### SAMPLE IMAGES

method	limit/base	current	history1	history2
Color		no image	no image	no image
Bottom		no image	no image	no image

### GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0847910 **Recieved** : 17 Jan 2024  
**Lab Number** : **06063930** **Diagnosed** : 20 Jan 2024  
**Unique Number** : 10835312 **Diagnostician** : Don Baldrige  
**Test Package** : CONST

**Apple Valley Waste - Chambersburg Location**  
 5436 Sunset Pike  
 Chambersburg, PA  
 US 17202  
 Contact: Service Manager

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: