



# PROBLEM SUMMARY

Sample Rating Trend



DIRT

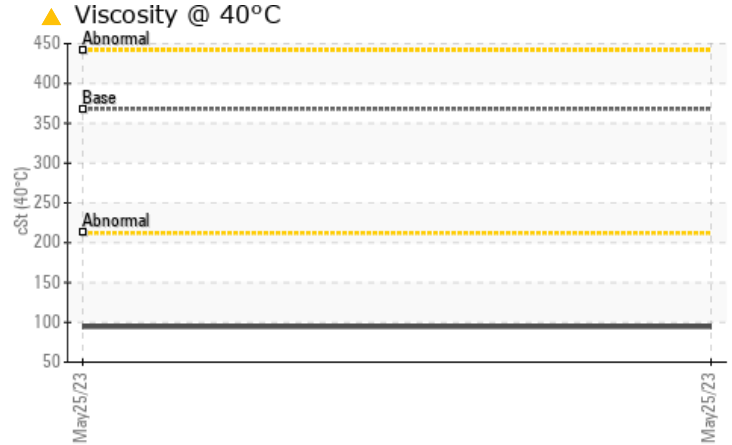
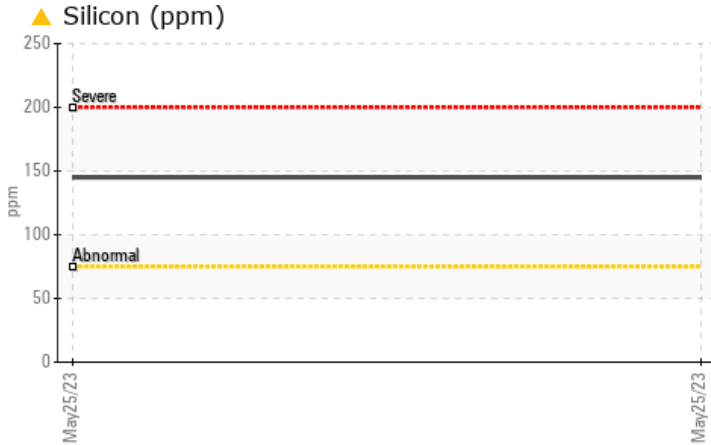


Machine Id  
**TD-403**

Component  
**Rear Differential**

Fluid  
**GEAR OIL SAE 85W140 (--- GAL)**

## COMPONENT CONDITION SUMMARY



## RECOMMENDATION

Resample at the next service interval to monitor.

## PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	---	---
Silicon	ppm	ASTM D5185m	>75	▲ 145	---	---
Visc @ 40°C	cSt	ASTM D445	368	▲ 94.5	---	---

Customer Id: ECPROA  
 Sample No.: WC0705345  
 Lab Number: 05901600  
 Test Package: FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Don Baldrige +1  
[don.b505@comcast.net](mailto:don.b505@comcast.net)

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

## RECOMMENDED ACTIONS

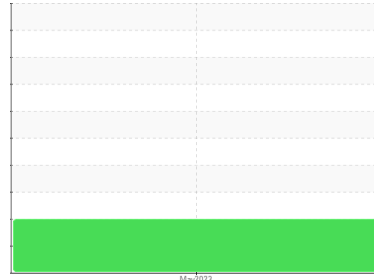
*There are no recommended actions for this sample.*

## HISTORICAL DIAGNOSIS



# OIL ANALYSIS REPORT

Sample Rating Trend



**DIRT**



Machine Id  
**TD-403**

Component  
**Rear Differential**

Fluid  
**GEAR OIL SAE 85W140 (--- GAL)**

## DIAGNOSIS

### ▲ Recommendation

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 oil viscosity is lower than normal. Confirm oil type.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0705345</b>	---	---
Sample Date	Client Info		<b>25 May 2023</b>	---	---
Machine Age	mls	Client Info	<b>75825</b>	---	---
Oil Age	mls	Client Info	<b>75825</b>	---	---
Oil Changed	Client Info		<b>Not Chngd</b>	---	---
Sample Status			<b>ABNORMAL</b>	---	---

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >500	<b>362</b>	---	---
Chromium	ppm	ASTM D5185m >10	<b>4</b>	---	---
Nickel	ppm	ASTM D5185m >10	<b>0</b>	---	---
Titanium	ppm	ASTM D5185m	<b>1</b>	---	---
Silver	ppm	ASTM D5185m	<b>0</b>	---	---
Aluminum	ppm	ASTM D5185m >25	<b>18</b>	---	---
Lead	ppm	ASTM D5185m >25	<b>0</b>	---	---
Copper	ppm	ASTM D5185m >100	<b>20</b>	---	---
Tin	ppm	ASTM D5185m >10	<b>&lt;1</b>	---	---
Vanadium	ppm	ASTM D5185m	<b>0</b>	---	---
Cadmium	ppm	ASTM D5185m	<b>1</b>	---	---

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 400	<b>231</b>	---	---
Barium	ppm	ASTM D5185m 200	<b>3</b>	---	---
Molybdenum	ppm	ASTM D5185m 12	<b>0</b>	---	---
Manganese	ppm	ASTM D5185m	<b>15</b>	---	---
Magnesium	ppm	ASTM D5185m 12	<b>6</b>	---	---
Calcium	ppm	ASTM D5185m 150	<b>22</b>	---	---
Phosphorus	ppm	ASTM D5185m 1650	<b>1477</b>	---	---
Zinc	ppm	ASTM D5185m 125	<b>46</b>	---	---
Sulfur	ppm	ASTM D5185m 22500	<b>30562</b>	---	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >75	▲ <b>145</b>	---	---
Sodium	ppm	ASTM D5185m	<b>14</b>	---	---
Potassium	ppm	ASTM D5185m >20	<b>4</b>	---	---

## VISUAL

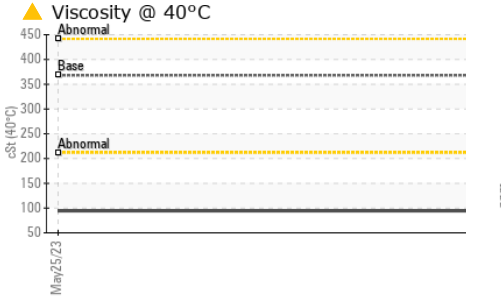
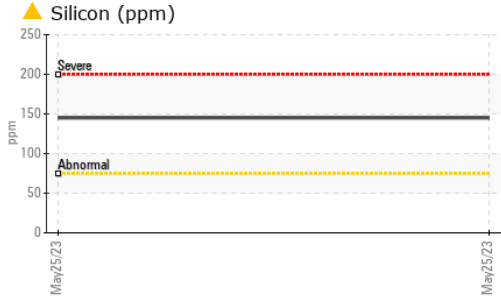
	method	limit/base	current	history1	history2
White Metal	scalar	*Visual NONE	<b>NONE</b>	---	---
Yellow Metal	scalar	*Visual NONE	<b>NONE</b>	---	---
Precipitate	scalar	*Visual NONE	<b>NONE</b>	---	---
Silt	scalar	*Visual NONE	<b>NONE</b>	---	---
Debris	scalar	*Visual NONE	<b>NONE</b>	---	---
Sand/Dirt	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>	---	---

## FLUID PROPERTIES

	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 368	▲ <b>94.5</b>	---	---

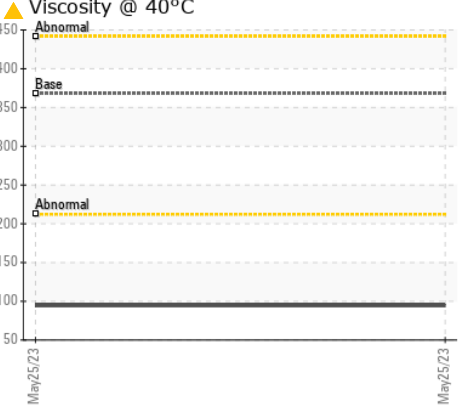
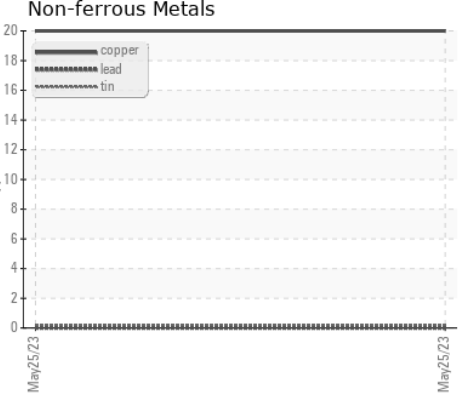
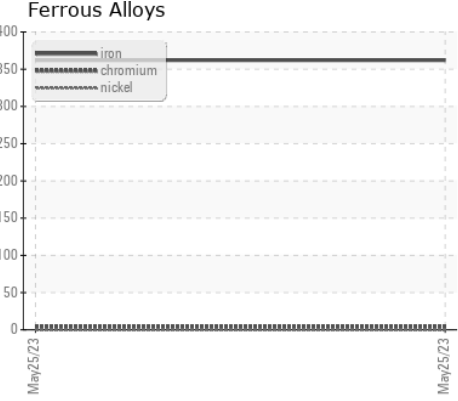


# OIL ANALYSIS REPORT



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.** : WC0705345 **Received** : 18 Jul 2023  
**Lab Number** : 05901600 **Diagnosed** : 20 Jul 2023  
**Unique Number** : 10562956 **Diagnostician** : Don Baldrige  
**Test Package** : FLEET ( Additional Tests: PrtCount )

**E.C. PACE CO.**  
 1811 HOLLINS RD.  
 ROANOKE, VA  
 US 24012  
 Contact: EDDIE SECO  
 ESECO@ECPACE.COM  
 T: (276)266-5849  
 F: (540)343-6909

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)