

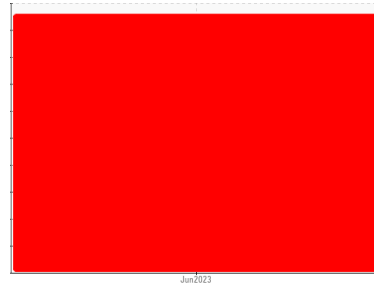
# PROBLEM SUMMARY

Sample Rating Trend

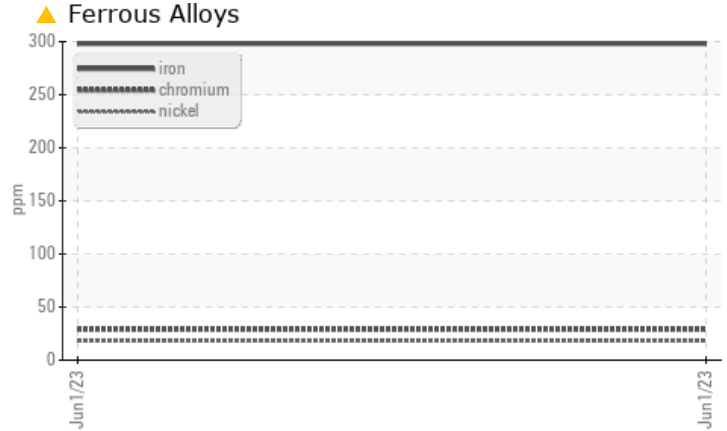
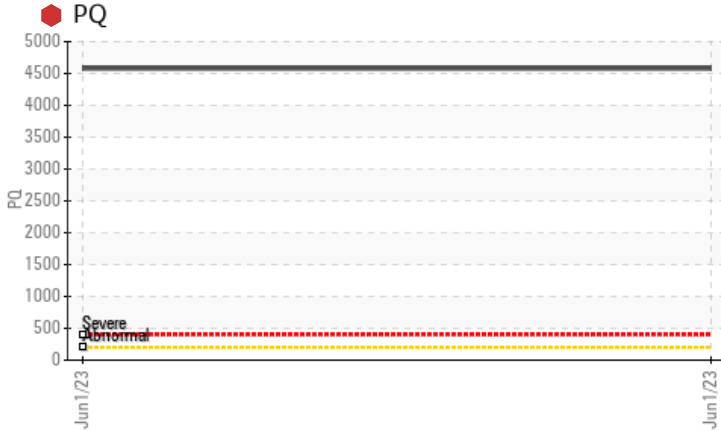
**WEAR**

Area  
**[450162574]**  
Machine Id  
**EXTRUDED GREASE**

Component  
**Grease**  
Fluid  
**PETRO CANADA PRECISION SYNTHETIC (--- GAL)**



## COMPONENT CONDITION SUMMARY



## RECOMMENDATION

We advise that you check all areas where contaminants can enter the system. We recommend that you re-grease the component if this has not already been done. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition. The fluid was not specified, however, a fluid match indicates that this fluid is PETRO CANADA PRECISION SYNTHETIC. Please confirm. We suspect that the abnormal contaminant(s) is the result of incorrect sampling technique. **DISCLAIMER:** Interpretation of results is based on the sample as received from the customer. The condition of the sample and the method of sampling cannot be verified.

## PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	---	---
PQ		ASTM D8184*	>200	4580	---	---
Iron	ppm	ASTM D5185(m)	>250	298	---	---
Chromium	ppm	ASTM D5185(m)	>10	29	---	---
Nickel	ppm	ASTM D5185(m)	>5	18	---	---
NLGI Consistency	NLGI Scale	SKF Method*	1	4	---	---
PrtFilter					no image	no image

Customer Id: TERHAM  
Sample No.: PC  
Lab Number: 02567155  
Test Package: GRS 1



To manage this report scan the QR code

To discuss the diagnosis or test data:  
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[Bill.Quesnel@wearcheck.com](mailto:Bill.Quesnel@wearcheck.com)

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Gloria Gonzalez +1 (289)291-4643 x4643  
[gloria.gonzalez@wearcheck.com](mailto:gloria.gonzalez@wearcheck.com)

## RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Filter	---	---	?	We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid.
Resample	---	---	?	We recommend an early resample to monitor this condition.
Alert	---	---	?	We suspect that the abnormal contaminant(s) is the result of incorrect sampling technique.
Information Required	---	---	?	The fluid was not specified, however, a fluid match indicates that this fluid is PETRO CANADA PRECISION SYNTHETIC. Please confirm.
Check Dirt Access	---	---	?	We advise that you check all areas where contaminants can enter the system.
Filter Fluid	---	---	?	We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid.

## HISTORICAL DIAGNOSIS

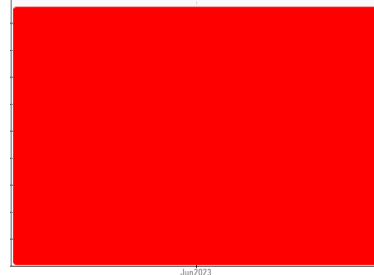
# GREASE ANALYSIS

Sample Rating Trend

**WEAR**

Area  
**[450162574]**  
Machine Id  
**EXTRUDED GREASE**

Component  
**Grease**  
Fluid  
**PETRO CANADA PRECISION SYNTHETIC (--- GAL)**



## DIAGNOSIS

### Recommendation

We advise that you check all areas where contaminants can enter the system. We recommend that you re-grease the component if this has not already been done. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition. The fluid was not specified, however, a fluid match indicates that this fluid is PETRO CANADA PRECISION SYNTHETIC. Please confirm. We suspect that the abnormal contaminant(s) is the result of incorrect sampling technique. **DISCLAIMER:** Interpretation of results is based on the sample as received from the customer. The condition of the sample and the method of sampling cannot be verified.

### Wear

PQ levels are severe. Chromium, iron and nickel ppm levels are abnormal. The very high ferrous density (PQ) index indicates that severe wear is occurring.

### Grease Condition

Grease consistency has changed by 3 NLGI grades from NLGI 1 to 4. The grease is no longer serviceable as a result of the abnormal and/or severe wear.

### Contaminants

High concentration of visible dirt/debris present in the grease.

## SAMPLE INFORMATION

method	limit/base	current	history 1	history 2
Sample Number	Client Info	<b>PC</b>	---	---
Sample Date	Client Info	<b>01 Jun 2023</b>	---	---
Machine Age	hrs Client Info	<b>0</b>	---	---
Grease Age	hrs Client Info	<b>0</b>	---	---
Grease Serviced	Client Info	<b>N/A</b>	---	---
Sample Status		<b>SEVERE</b>	---	---

## WEAR METALS

method	limit/base	current	history 1	history 2
PQ	ASTM D8184* >200	<b>4580</b>	---	---
Iron	ppm ASTM D5185(m) >250	<b>298</b>	---	---
Chromium	ppm ASTM D5185(m) >10	<b>29</b>	---	---
Nickel	ppm ASTM D5185(m) >5	<b>18</b>	---	---
Cadmium	ppm ASTM D5185(m)	<b>0</b>	---	---
Titanium	ppm ASTM D5185(m)	<b>2</b>	---	---
Vanadium	ppm ASTM D5185(m)	<b>&lt;1</b>	---	---
Lead	ppm ASTM D5185(m) >25	<b>&lt;1</b>	---	---
Copper	ppm ASTM D5185(m) >75	<b>12</b>	---	---
Tin	ppm ASTM D5185(m) >5	<b>&lt;1</b>	---	---
Silver	ppm ASTM D5185(m) >5	<b>&lt;1</b>	---	---

## ADDITIVES

method	limit/base	current	history 1	history 2
Boron	ppm ASTM D5185(m)	<b>2</b>	---	---
Magnesium	ppm ASTM D5185(m)	<b>12</b>	---	---
Manganese	ppm ASTM D5185(m)	<b>5</b>	---	---
Molybdenum	ppm ASTM D5185(m)	<b>2</b>	---	---
Phosphorus	ppm ASTM D5185(m)	<b>11</b>	---	---
Zinc	ppm ASTM D5185(m)	<b>32</b>	---	---
Antimony	ppm ASTM D5185(m)	<b>&lt;1</b>	---	---

## THICKENER/SOAP

method	limit/base	current	history 1	history 2
Aluminum	ppm ASTM D5185(m)	<b>5</b>	---	---
Barium	ppm ASTM D5185(m)	<b>&lt;1</b>	---	---
Calcium	ppm ASTM D5185(m)	<b>38</b>	---	---
Sodium	ppm ASTM D5185(m)	<b>22</b>	---	---
Lithium	ppm ASTM D5185(m)	<b>23</b>	---	---
Sulfur	ppm ASTM D5185(m)	<b>276</b>	---	---

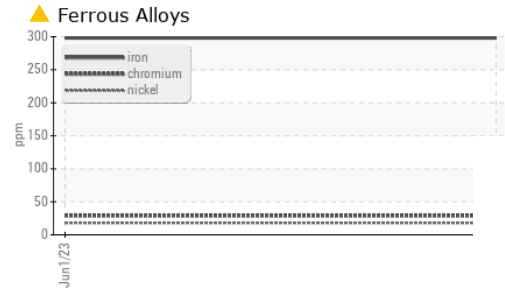
## CONTAMINANTS

method	limit/base	current	history 1	history 2
Silicon	ppm ASTM D5185(m) >150	<b>8</b>	---	---
Potassium	ppm ASTM D5185(m)	<b>0</b>	---	---

## GREASE CONDITION

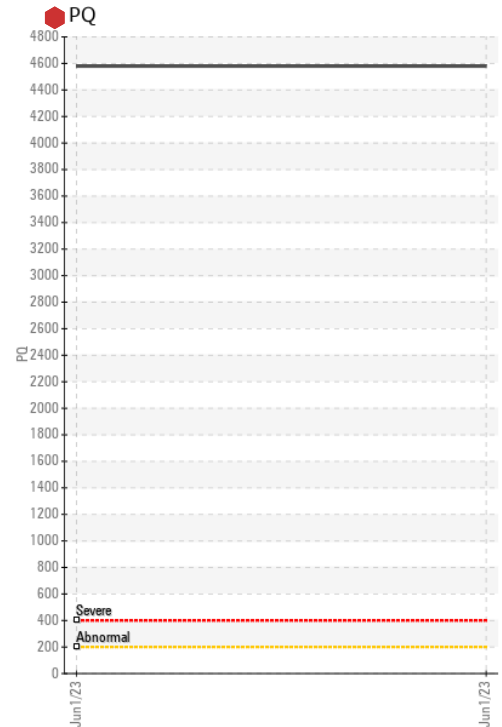
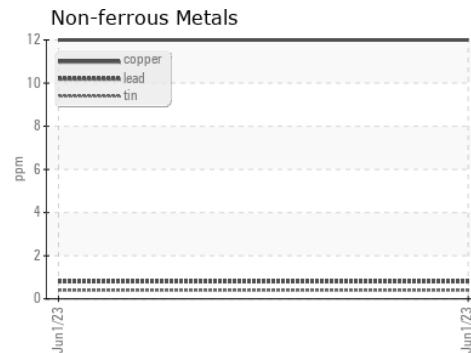
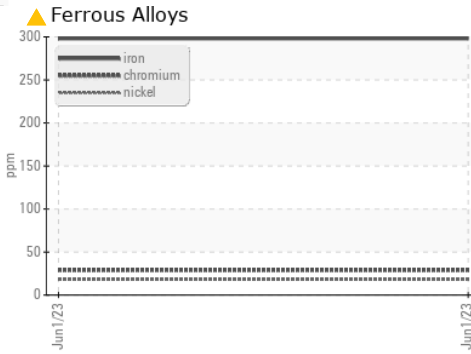
method	limit/base	current	history 1	history 2
Grease Color	Visual* Gold	<b>Brown</b>	---	---
Texture	In-house* Buttery	<b>Buttery</b>	---	---
NLGI Consistency	NLGI Scale SKF Method* 1	<b>4</b>	---	---

# GREASE ANALYSIS



SAMPLE IMAGES	method	limit/base	current	history 1	history 2
Color				no image	no image
Bottom				no image	no image
PrtFilter				no image	no image

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PC **Received** : 28 Jun 2023  
**Lab Number** : 02567155 **Diagnosed** : 07 Jul 2023  
**Unique Number** : 5604201 **Diagnostician** : Bill Quesnel  
**Test Package** : GRS 1 ( Additional Tests: BottomAnalysis )

To discuss this sample report, contact Customer Service at 1-800-268-2131.  
 Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab.  
 Validity of results and interpretation are based on the sample and information as supplied.

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