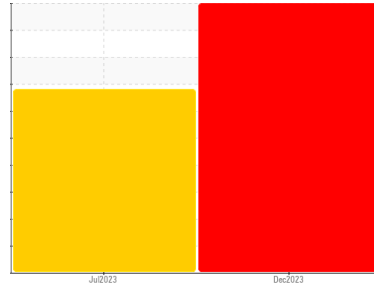




# PROBLEM SUMMARY

Sample Rating Trend



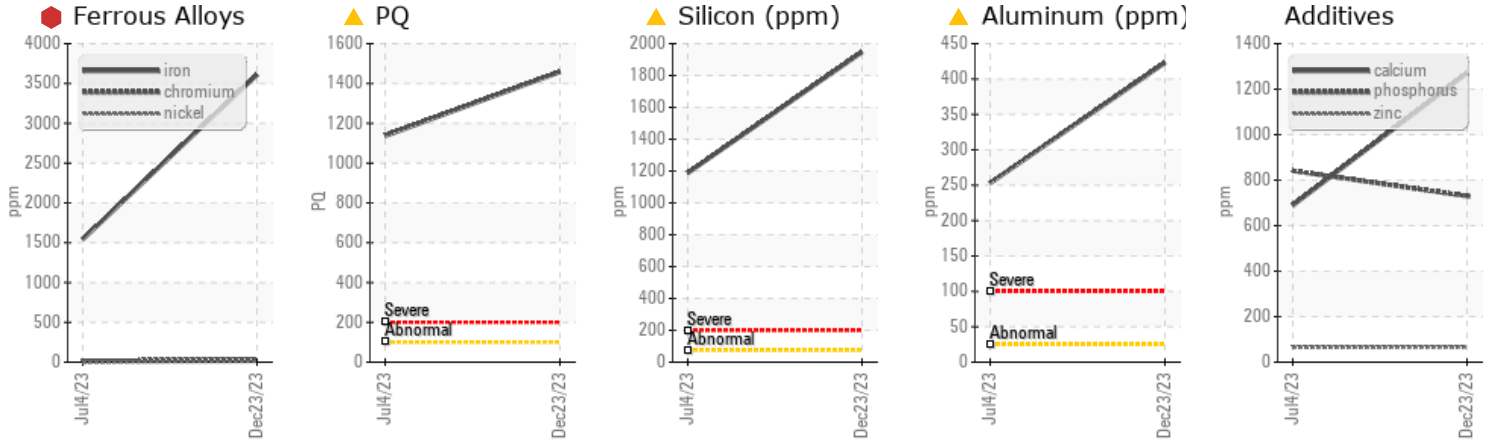
WEAR



Area  
**ORIN CONTRACTORS**  
 Machine Id  
**180**

Component  
**Left Final Drive**  
 Fluid  
**PETRO CANADA TRAXON 80W90 (--- GAL)**

## COMPONENT CONDITION SUMMARY



## RECOMMENDATION

We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. Confirm the source of the lubricant being utilized for top-up/fill. We recommend an early resample to monitor this condition.

## PROBLEMATIC TEST RESULTS

Sample Status			SEVERE	ABNORMAL	---
PQ		ASTM D8184*	▲ 1458	▲ 1136	---
Iron	ppm	ASTM D5185(m) >500	● 3610	▲ 1543	---
Chromium	ppm	ASTM D5185(m) >10	● 32	▲ 13	---
Titanium	ppm	ASTM D5185(m)	▲ 26	▲ 14	---
Silicon	ppm	ASTM D5185(m) >75	▲ 1947	▲ 1188	---

Customer Id: RONVAU  
 Sample No.: WC0888452  
 Lab Number: 02607214  
 Test Package: MOBCE



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Kevin Marson +1 (289)291-4644 x4644  
[Kevin.Marson@wearcheck.com](mailto:Kevin.Marson@wearcheck.com)

To change component or sample information:  
 Gloria Gonzalez +1 (289)291-4643 x4643  
[gloria.gonzalez@wearcheck.com](mailto:gloria.gonzalez@wearcheck.com)

## RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Resample	---	---	?	We recommend an early resample to monitor this condition.
Check Dirt Access	---	---	?	We advise that you check all areas where dirt can enter the system.
Check Fluid Source	---	---	?	Confirm the source of the lubricant being utilized for top-up/fill.

## HISTORICAL DIAGNOSIS

### 04 Jul 2023 Diag: Kevin Marson

#### WEAR



We advise that you check all areas where dirt can enter the system. We recommend that you drain the oil from the component if this has not already been done. Confirm the source of the lubricant being utilized for top-up/fill. We recommend an early resample to monitor this condition. PQ levels are abnormal. Chromium and iron and titanium ppm levels are abnormal. Aluminum ppm levels are noted. Gear wear is indicated. The high ferrous density (PQ) index indicates that abnormal wear is occurring. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. The water content is negligible. High amount of ingressed dirt has caused abrasive wear to the component. Additive levels indicate the addition of a different brand, or type of oil. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

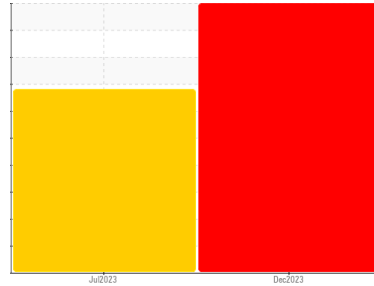
view report





# OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Area  
**ORIN CONTRACTORS**  
 Machine Id  
**180**

Component  
**Left Final Drive**  
 Fluid  
**PETRO CANADA TRAXON 80W90 (--- GAL)**

## DIAGNOSIS

### Recommendation

We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. Confirm the source of the lubricant being utilized for top-up/fill. We recommend an early resample to monitor this condition.

### Wear

Chromium and iron ppm levels are severe. PQ levels are abnormal. Titanium ppm levels are abnormal. Aluminum ppm levels are noted. Gear wear is indicated. The high ferrous density (PQ) index indicates that abnormal wear is occurring.

### Contamination

Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. High amount of ingressed dirt has caused abrasive wear to the component.

### Fluid Condition

Additive levels indicate the addition of a different brand, or type of oil. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0888452</b>	LH0270758	---
Sample Date	Client Info		<b>23 Dec 2023</b>	04 Jul 2023	---
Machine Age	hrs	Client Info	<b>0</b>	4820	---
Oil Age	hrs	Client Info	<b>0</b>	0	---
Oil Changed	Client Info		<b>Changed</b>	Not Changd	---
Sample Status			<b>SEVERE</b>	ABNORMAL	---

## CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.2	<b>NEG</b>	NEG	---

## WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184*		<b>▲ 1458</b>	▲ 1136	---
Iron	ppm	ASTM D5185(m) >500	<b>● 3610</b>	▲ 1543	---
Chromium	ppm	ASTM D5185(m) >10	<b>● 32</b>	▲ 13	---
Nickel	ppm	ASTM D5185(m) >10	<b>8</b>	2	---
Titanium	ppm	ASTM D5185(m)	<b>▲ 26</b>	▲ 14	---
Silver	ppm	ASTM D5185(m)	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185(m) >25	<b>▲ 423</b>	▲ 253	---
Lead	ppm	ASTM D5185(m) >25	<b>1</b>	<1	---
Copper	ppm	ASTM D5185(m) >50	<b>4</b>	3	---
Tin	ppm	ASTM D5185(m) >10	<b>0</b>	0	---
Antimony	ppm	ASTM D5185(m) >5	<b>0</b>	0	---
Vanadium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	---
Beryllium	ppm	ASTM D5185(m)	<b>0</b>	0	---
Cadmium	ppm	ASTM D5185(m)	<b>0</b>	0	---

## ADDITIVES

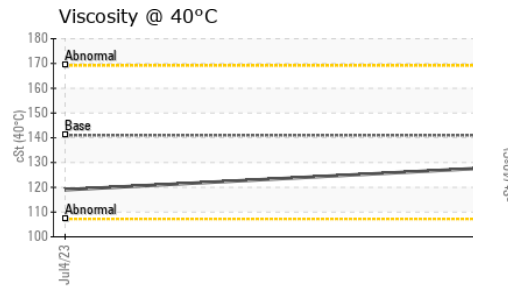
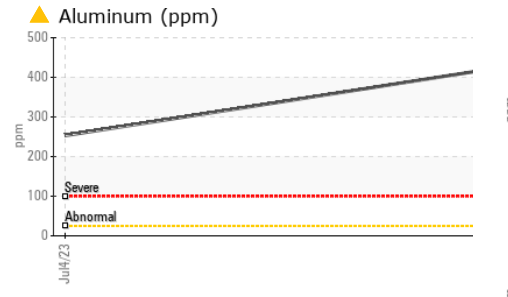
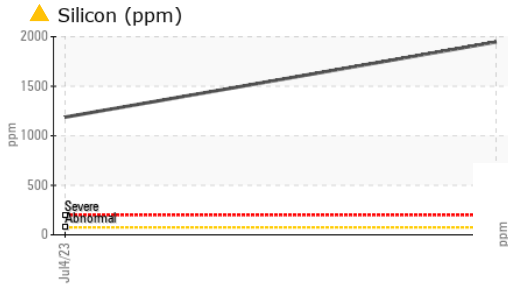
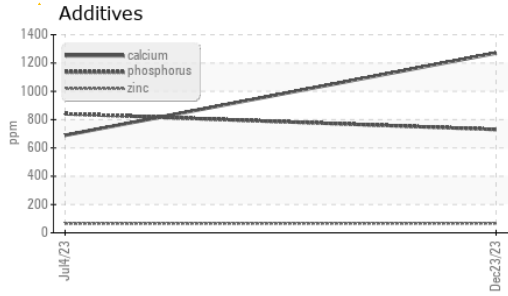
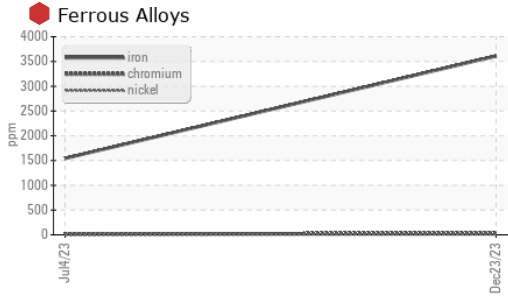
	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m) 243	<b>127</b>	89	---
Barium	ppm	ASTM D5185(m) 1	<b>&lt;1</b>	3	---
Molybdenum	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	---
Manganese	ppm	ASTM D5185(m)	<b>29</b>	13	---
Magnesium	ppm	ASTM D5185(m) 2	<b>187</b>	109	---
Calcium	ppm	ASTM D5185(m) 6	<b>1270</b>	689	---
Phosphorus	ppm	ASTM D5185(m) 987	<b>730</b>	841	---
Zinc	ppm	ASTM D5185(m) 1	<b>66</b>	65	---
Sulfur	ppm	ASTM D5185(m) 21530	<b>19997</b>	15281	---
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >75	<b>▲ 1947</b>	▲ 1188	---
Sodium	ppm	ASTM D5185(m)	<b>103</b>	60	---
Potassium	ppm	ASTM D5185(m) >20	<b>151</b>	95	---



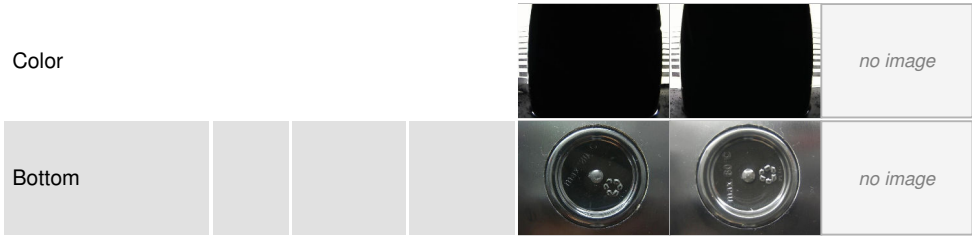
# OIL ANALYSIS REPORT



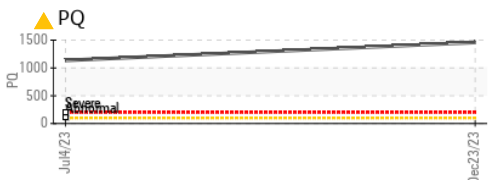
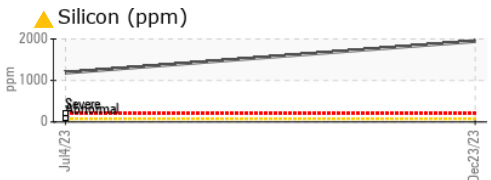
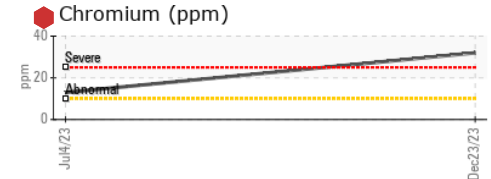
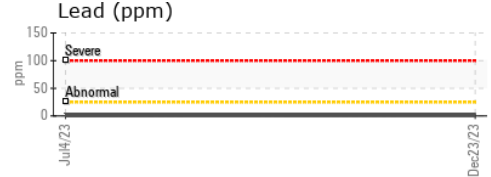
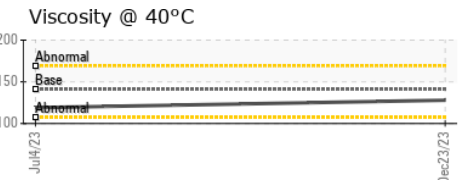
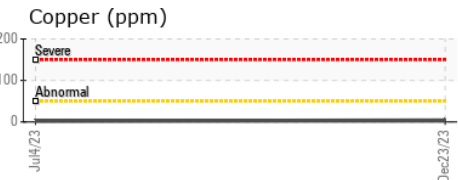
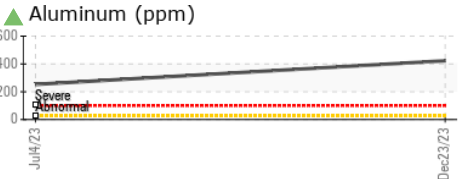
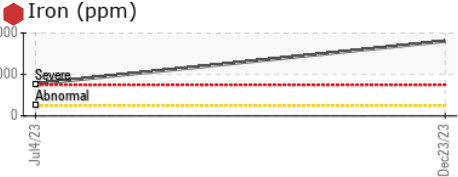
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	VLITE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	NEG	.2%
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	141.0	128	119

SAMPLE IMAGES	method	limit/base	current	history1	history2
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## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **RONI/IRON SHORE EXCAVATING LTD.**  
**Sample No.** : WC0888452 **Recieved** : 08 Jan 2024 **100 MACINTOSH BLVD**  
**Lab Number** : 02607214 **Diagnosed** : 09 Jan 2024 **VAUGHAN, ON**  
**Unique Number** : 5708300 **Diagnostician** : Kevin Marson **CA L4K 4P3**  
**Test Package** : MOBCE ( Additional Tests: PQ, Visual ) **Contact: Service Team**  
**service.team@roni.ca**

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.