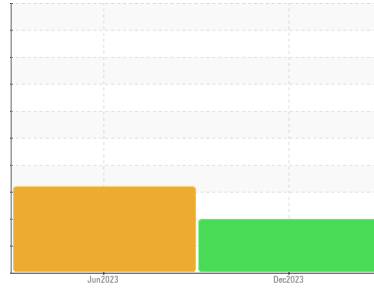




# PROBLEM SUMMARY

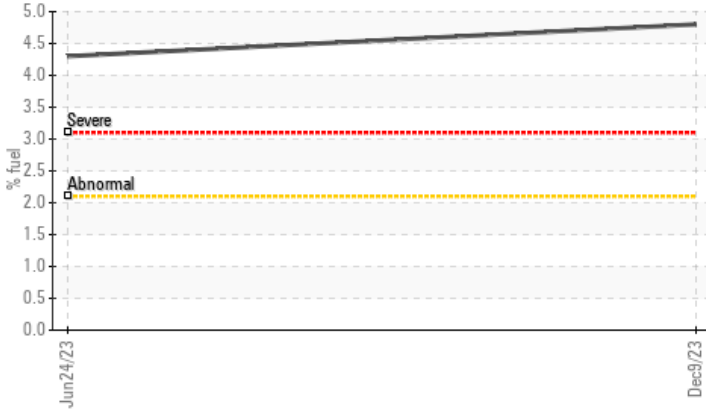
Area  
**ORIN CONTRACTORS**  
 Machine Id  
**878**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA 10W30 (--- GAL)**

Sample Rating Trend



## COMPONENT CONDITION SUMMARY

### Fuel Dilution



## RECOMMENDATION

We advise that you check the fuel injection system. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

## PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	SEVERE	---
Fuel	%	ASTM D7593*	>2.1	<b>4.8</b>	4.3	---

Customer Id: RONVAU  
 Sample No.: WC0872896  
 Lab Number: 02603071  
 Test Package: MOBCE



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Wes Davis +1 905-569-8600 x223  
[wesd@wearcheck.ca](mailto:wesd@wearcheck.ca)

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 Fuel/injector System	---	---	?	We advise that you check the fuel injection system.

## HISTORICAL DIAGNOSIS

**24 Jun 2023 Diag: Kevin Marson**

### FUEL



We advise that you check the fuel injection system. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. Copper ppm levels are abnormal. Bearing wear is indicated. There is a high amount of fuel present in the oil. Tests confirm the presence of fuel in the oil. Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

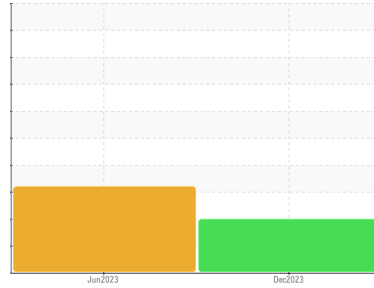
view report





# OIL ANALYSIS REPORT

Sample Rating Trend



FUEL



Area  
**ORIN CONTRACTORS**  
 Machine Id  
**878**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA 10W30 (--- GAL)**

## DIAGNOSIS

### Recommendation

We advise that you check the fuel injection system. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

### Wear

All component wear rates are normal.

### Contamination

There is a high amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

### Fluid Condition

The oil is no longer serviceable due to the presence of contaminants.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0872896</b>	LH0256901	---
Sample Date	Client Info		<b>09 Dec 2023</b>	24 Jun 2023	---
Machine Age	hrs	Client Info	<b>0</b>	1033	---
Oil Age	hrs	Client Info	<b>0</b>	0	---
Oil Changed	Client Info		<b>Changed</b>	Changed	---
Sample Status			<b>SEVERE</b>	SEVERE	---

## CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.21	<b>NEG</b>	NEG	---
Glycol	WC Method		<b>NEG</b>	NEG	---

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>51	<b>23</b>	38
Chromium	ppm	ASTM D5185(m)	>11	<b>&lt;1</b>	1
Nickel	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0
Silver	ppm	ASTM D5185(m)	>3	<b>&lt;1</b>	<1
Aluminum	ppm	ASTM D5185(m)	>31	<b>4</b>	4
Lead	ppm	ASTM D5185(m)	>26	<b>&lt;1</b>	3
Copper	ppm	ASTM D5185(m)	>26	<b>8</b>	39
Tin	ppm	ASTM D5185(m)	>4	<b>0</b>	0
Antimony	ppm	ASTM D5185(m)		<b>0</b>	0
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0
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)		<b>6</b>	53
Barium	ppm	ASTM D5185(m)		<b>&lt;1</b>	2
Molybdenum	ppm	ASTM D5185(m)		<b>69</b>	137
Manganese	ppm	ASTM D5185(m)		<b>0</b>	<1
Magnesium	ppm	ASTM D5185(m)		<b>904</b>	798
Calcium	ppm	ASTM D5185(m)		<b>1024</b>	1312
Phosphorus	ppm	ASTM D5185(m)		<b>941</b>	880
Zinc	ppm	ASTM D5185(m)		<b>1170</b>	1035
Sulfur	ppm	ASTM D5185(m)		<b>2446</b>	2403
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1

## CONTAMINANTS

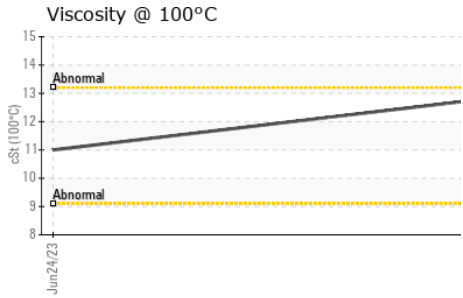
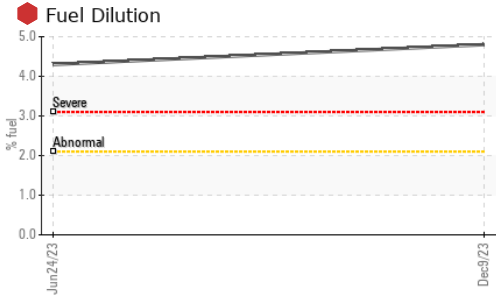
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>22	<b>9</b>	21
Sodium	ppm	ASTM D5185(m)		<b>2</b>	7
Potassium	ppm	ASTM D5185(m)	>20	<b>0</b>	<1
Fuel	%	ASTM D7593*	>2.1	<b>4.8</b>	4.3

## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	<b>0.3</b>	0.4
Nitration	Abs/cm	ASTM D7624*	>20	<b>9.4</b>	9.9
Sulfation	Abs./1mm	ASTM D7415*	>30	<b>20.7</b>	23.8



# OIL ANALYSIS REPORT

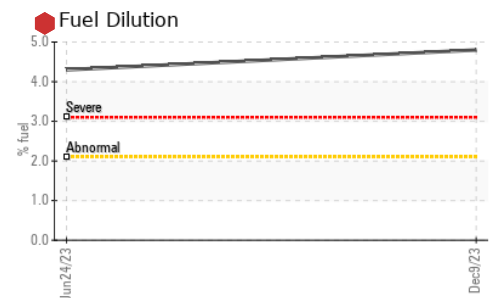
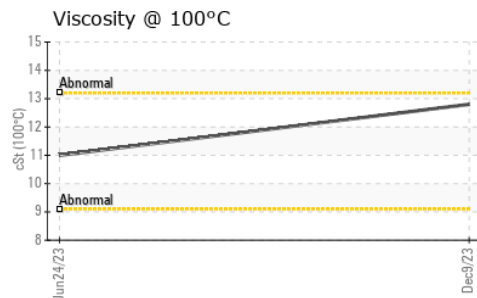
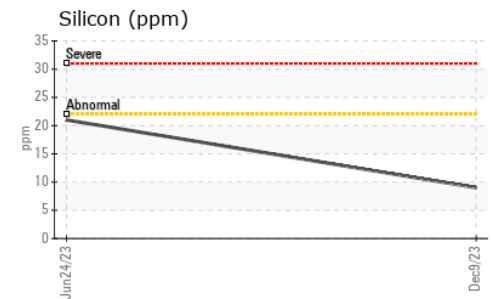
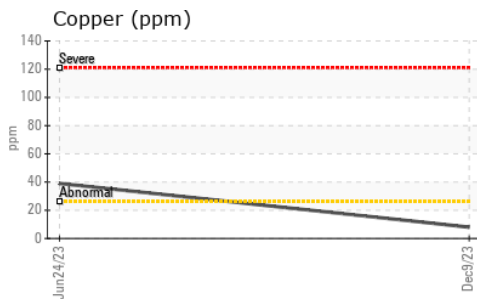
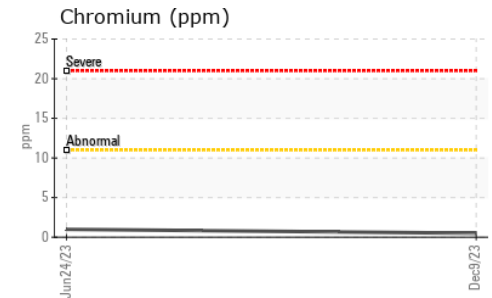
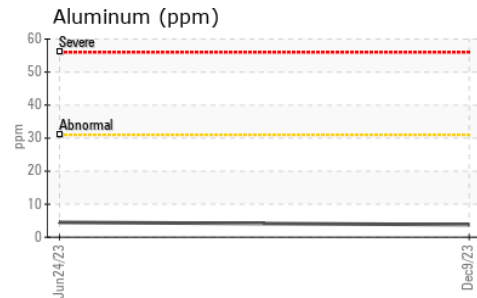
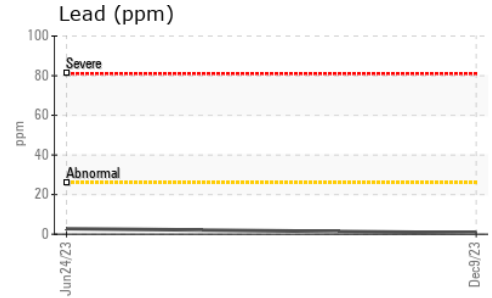
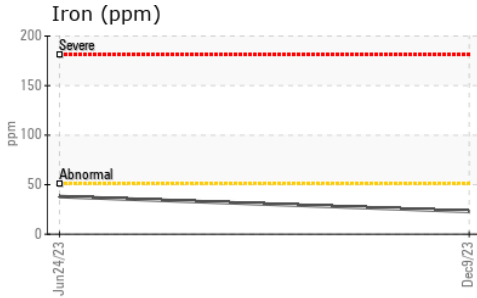


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	<b>18.3</b>	21.6	---

VISUAL		method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.21	<b>NEG</b>	NEG	---
Free Water	scalar	Visual*		<b>NEG</b>	NEG	---

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)		<b>12.8</b>	▲ 11.0	---

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **RONI/IRON SHORE EXCAVATING LTD.**  
**Sample No.** : WC0872896 **Received** : 14 Dec 2023 **100 MACINTOSH BLVD**  
**Lab Number** : **02603071** **Diagnosed** : 15 Dec 2023 **VAUGHAN, ON**  
**Unique Number** : 5696156 **Diagnostician** : Wes Davis **CA L4K 4P3**  
**Test Package** : MOBCE ( Additional Tests: PercentFuel ) **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.