



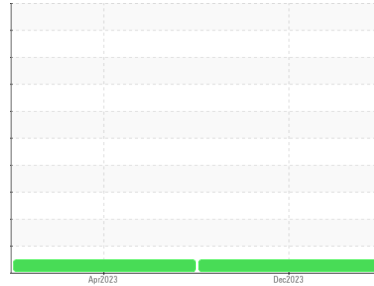
# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**ORIN CONTRACTORS**  
 Machine Id  
**100-016**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA 10W30 (--- GAL)**



## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the oil.

### Fluid Condition

Viscosity of sample indicates oil is within SAE 40 range, advise investigate. 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>WC0888500</b>	LH0232069	---
Sample Date	Client Info	<b>23 Dec 2023</b>	11 Apr 2023	---
Machine Age	hrs Client Info	<b>0</b>	500	---
Oil Age	hrs Client Info	<b>0</b>	0	---
Oil Changed	Client Info	<b>Changed</b>	Changed	---
Sample Status		<b>NORMAL</b>	NORMAL	---

## CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >5	<b>&lt;1.0</b>	<1.0	---
Water	WC Method >0.2	<b>NEG</b>	NEG	---
Glycol	WC Method	<b>NEG</b>	NEG	---

## WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185(m) >100	<b>12</b>	6	---
Chromium	ppm ASTM D5185(m) >5	<b>&lt;1</b>	0	---
Nickel	ppm ASTM D5185(m) >5	<b>&lt;1</b>	<1	---
Titanium	ppm ASTM D5185(m)	<b>0</b>	<1	---
Silver	ppm ASTM D5185(m) >3	<b>0</b>	0	---
Aluminum	ppm ASTM D5185(m) >15	<b>3</b>	2	---
Lead	ppm ASTM D5185(m) >30	<b>&lt;1</b>	1	---
Copper	ppm ASTM D5185(m) >125	<b>2</b>	3	---
Tin	ppm ASTM D5185(m) >5	<b>&lt;1</b>	<1	---
Antimony	ppm ASTM D5185(m)	<b>0</b>	<1	---
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>&lt;1</b>	2	---
Barium	ppm ASTM D5185(m)	<b>&lt;1</b>	0	---
Molybdenum	ppm ASTM D5185(m)	<b>58</b>	58	---
Manganese	ppm ASTM D5185(m)	<b>0</b>	<1	---
Magnesium	ppm ASTM D5185(m)	<b>957</b>	980	---
Calcium	ppm ASTM D5185(m)	<b>1036</b>	1102	---
Phosphorus	ppm ASTM D5185(m)	<b>1003</b>	1104	---
Zinc	ppm ASTM D5185(m)	<b>1179</b>	1214	---
Sulfur	ppm ASTM D5185(m)	<b>2727</b>	2736	---
Lithium	ppm ASTM D5185(m)	<b>&lt;1</b>	<1	---

## CONTAMINANTS

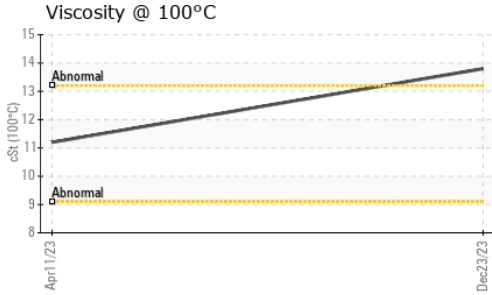
method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m) >60	<b>3</b>	7	---
Sodium	ppm ASTM D5185(m)	<b>1</b>	1	---
Potassium	ppm ASTM D5185(m) >20	<b>2</b>	<1	---

## INFRA-RED

method	limit/base	current	history1	history2
Soot %	% ASTM D7844* >3	<b>0</b>	0	---
Nitration	Abs/cm ASTM D7624* >20	<b>6.4</b>	9.1	---
Sulfation	Abs.1mm ASTM D7415* >30	<b>18.3</b>	19.1	---



# OIL ANALYSIS REPORT



FLUID DEGRADATION		method	limit/base	current	history1	history2
-------------------	--	--------	------------	---------	----------	----------

Oxidation	Abs./1mm	ASTM D7414*	>25	<b>14.3</b>	16.1	---
-----------	----------	-------------	-----	-------------	------	-----

VISUAL		method	limit/base	current	history1	history2
--------	--	--------	------------	---------	----------	----------

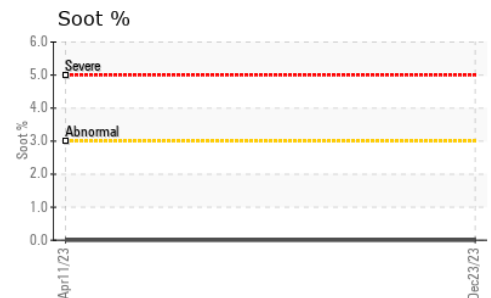
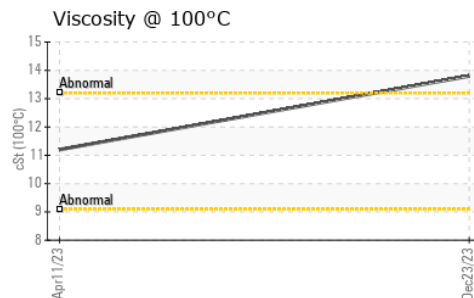
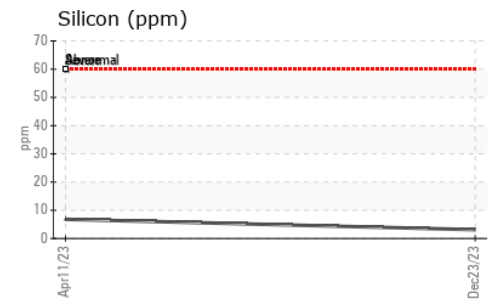
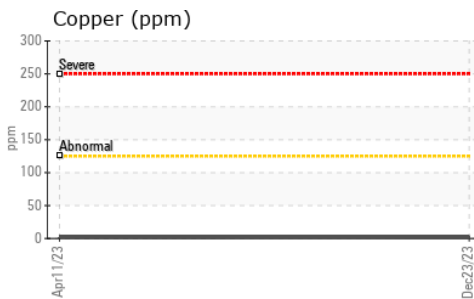
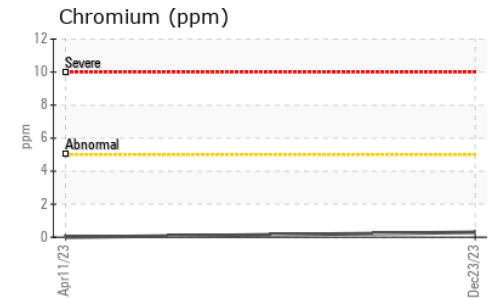
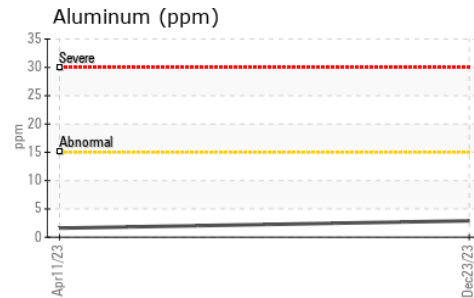
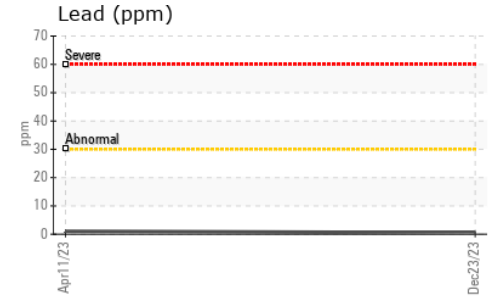
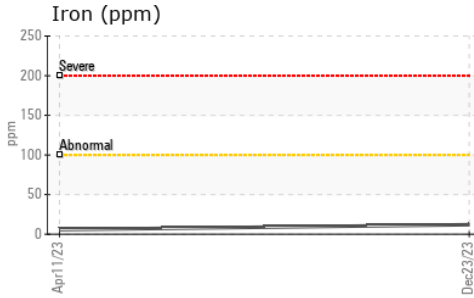
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	NEG	---
------------------	--------	---------	------	------------	-----	-----

Free Water	scalar	Visual*		<b>NEG</b>	NEG	---
------------	--------	---------	--	------------	-----	-----

FLUID PROPERTIES		method	limit/base	current	history1	history2
------------------	--	--------	------------	---------	----------	----------

Visc @ 100°C	cSt	ASTM D7279(m)		<b>13.8</b>	11.2	---
--------------	-----	---------------	--	-------------	------	-----

## GRAPHS



<b>Laboratory</b>	: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 <b>RONI/IRON SHORE EXCAVATING LTD.</b>		
<b>Sample No.</b>	: WC0888500	<b>Recieved</b>	: 08 Jan 2024
<b>Lab Number</b>	: 02606919	<b>Diagnosed</b>	: 08 Jan 2024
<b>Unique Number</b>	: 5708005	<b>Diagnostician</b>	: Kevin Marson
<b>Test Package</b>	: MOBCE		

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.

100 MACINTOSH BLVD  
 VAUGHAN, ON  
 CA L4K 4P3

T:  
 F: