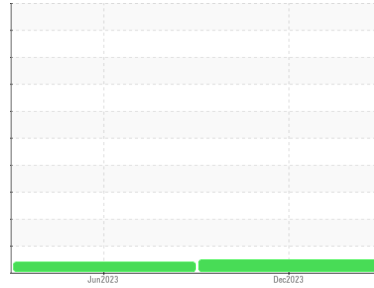




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**ORIN CONTRACTORS**  
 Machine Id  
**222**  
 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

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>WC0872982</b>	LH0261614	---
Sample Date	Client Info			<b>06 Dec 2023</b>	21 Jun 2023	---
Machine Age	hrs	Client Info		<b>0</b>	594	---
Oil Age	hrs	Client Info		<b>0</b>	0	---
Oil Changed	Client Info			<b>Changed</b>	Changed	---
Sample Status				<b>NORMAL</b>	ABNORMAL	---

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>5		<b>&lt;1.0</b>	0.6	---
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>55</b>	56	---
Chromium	ppm	ASTM D5185(m)	>20	<b>1</b>	1	---
Nickel	ppm	ASTM D5185(m)	>4	<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)	>20	<b>6</b>	5	---
Lead	ppm	ASTM D5185(m)	>40	<b>5</b>	7	---
Copper	ppm	ASTM D5185(m)	>330	<b>128</b>	273	---
Tin	ppm	ASTM D5185(m)	>15	<b>&lt;1</b>	<1	---
Antimony	ppm	ASTM D5185(m)		<b>0</b>	0	---
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	<1	---
Beryllium	ppm	ASTM D5185(m)		<b>0</b>	0	---
Cadmium	ppm	ASTM D5185(m)		<b>0</b>	0	---

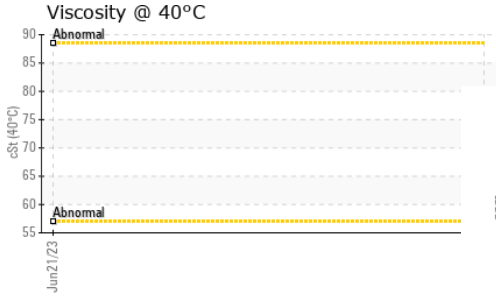
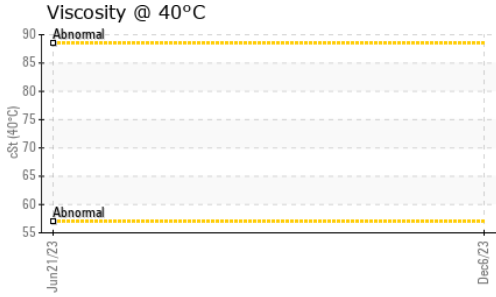
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		<b>1</b>	5	---
Barium	ppm	ASTM D5185(m)		<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185(m)		<b>53</b>	23	---
Manganese	ppm	ASTM D5185(m)		<b>&lt;1</b>	1	---
Magnesium	ppm	ASTM D5185(m)		<b>811</b>	296	---
Calcium	ppm	ASTM D5185(m)		<b>1369</b>	1970	---
Phosphorus	ppm	ASTM D5185(m)		<b>860</b>	898	---
Zinc	ppm	ASTM D5185(m)		<b>1207</b>	1076	---
Sulfur	ppm	ASTM D5185(m)		<b>2517</b>	2651	---
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	1	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	<b>20</b>	21	---
Sodium	ppm	ASTM D5185(m)		<b>3</b>	4	---
Potassium	ppm	ASTM D5185(m)	>20	<b>2</b>	2	---

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	<b>0.4</b>	0.2	---
Nitration	Abs/cm	ASTM D7624*	>20	<b>9.7</b>	7.8	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>21.3</b>	20.6	---



# OIL ANALYSIS REPORT

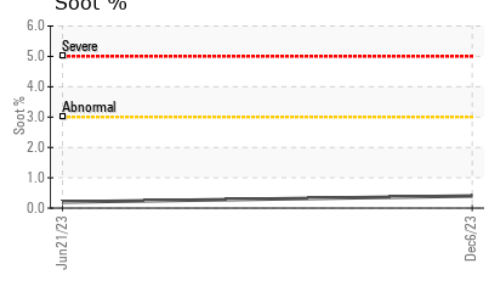
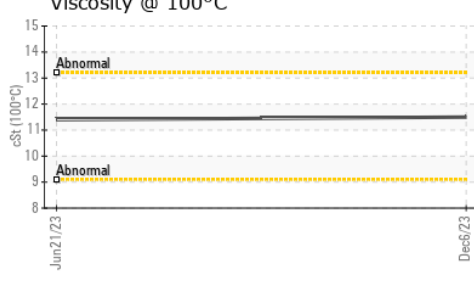
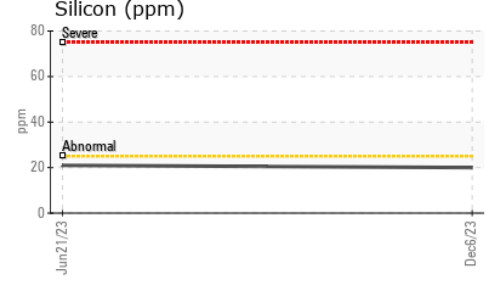
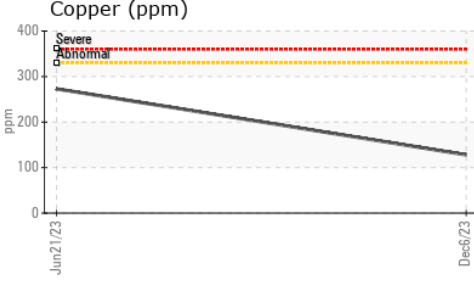
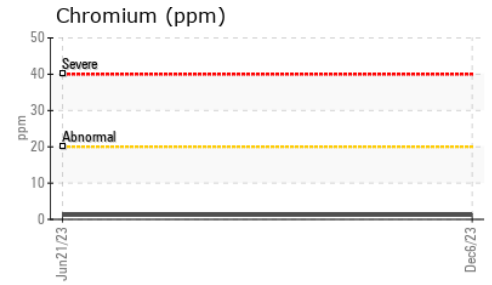
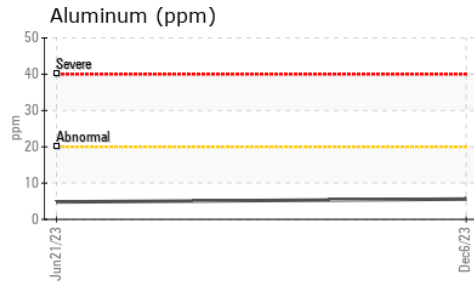
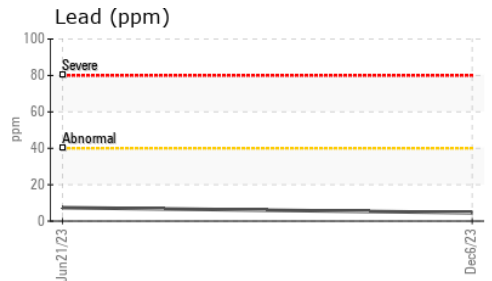
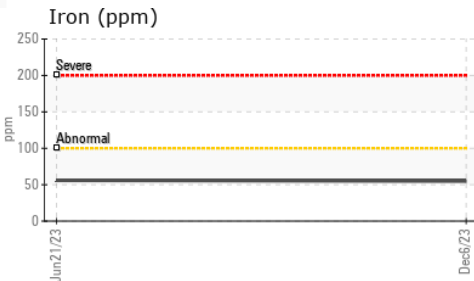


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	<b>16.4</b>	12.9	---

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 @ 40°C	cSt	ASTM D7279(m)		<b>83.4</b>	---	---
Visc @ 100°C	cSt	ASTM D7279(m)		<b>11.5</b>	▲ 11.4	---
Viscosity Index (VI)	Scale	ASTM D2270*		<b>128</b>	---	---

### GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **RONI/IRON SHORE EXCAVATING LTD.**  
**Sample No.** : WC0872982 **Received** : 27 Dec 2023 **100 MACINTOSH BLVD**  
**Lab Number** : **02605410** **Diagnosed** : 28 Dec 2023 **VAUGHAN, ON**  
**Unique Number** : 5698495 **Diagnostician** : Wes Davis **CA L4K 4P3**  
**Test Package** : MOBCE ( Additional Tests: KV40, VI ) **Contact: Service Team**  
**service.team@roni.ca**

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