

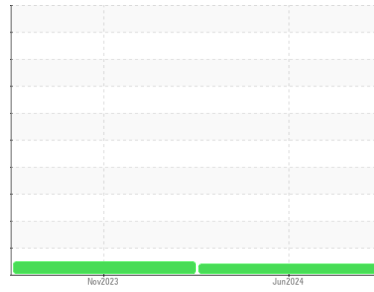


# OIL ANALYSIS REPORT



Area  
**RONI**  
 Machine Id  
**228**  
 Component  
**Diesel Engine**  
 Fluid  
**SAE 10W40 (--- GAL)**

## Sample Rating Trend



## VISCOSITY



### DIAGNOSIS

#### ▲ Recommendation

Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

#### Contamination

Tests indicate that there is no fuel present in the oil. There is no indication of any contamination in the oil.

#### ▲ Fluid Condition

Viscosity of sample indicates oil is within SAE 30 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>WC0932664</b>	WC0872798	---
Sample Date	Client Info		<b>20 Jun 2024</b>	13 Nov 2023	---
Machine Age	hrs	Client Info	<b>0</b>	0	---
Oil Age	hrs	Client Info	<b>0</b>	0	---
Oil Changed	Client Info		<b>Changed</b>	N/A	---
Sample Status			<b>ABNORMAL</b>	NORMAL	---

### CONTAMINATION

	method	limit/base	current	history1	history2
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>5</b>	6	---
Chromium	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	<1	---
Nickel	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	0	---
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	---
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	<1	---
Aluminum	ppm	ASTM D5185(m)	>15	<b>1</b>	1	---
Lead	ppm	ASTM D5185(m)	>30	<b>1</b>	6	---
Copper	ppm	ASTM D5185(m)	>125	<b>49</b>	233	---
Tin	ppm	ASTM D5185(m)	>5	<b>0</b>	<1	---
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>3</b>	12	---
Barium	ppm	ASTM D5185(m)		<b>2</b>	8	---
Molybdenum	ppm	ASTM D5185(m)		<b>60</b>	56	---
Manganese	ppm	ASTM D5185(m)		<b>&lt;1</b>	0	---
Magnesium	ppm	ASTM D5185(m)		<b>995</b>	958	---
Calcium	ppm	ASTM D5185(m)		<b>1056</b>	1102	---
Phosphorus	ppm	ASTM D5185(m)		<b>1011</b>	960	---
Zinc	ppm	ASTM D5185(m)		<b>1203</b>	1142	---
Sulfur	ppm	ASTM D5185(m)		<b>2529</b>	2342	---
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	---

### CONTAMINANTS

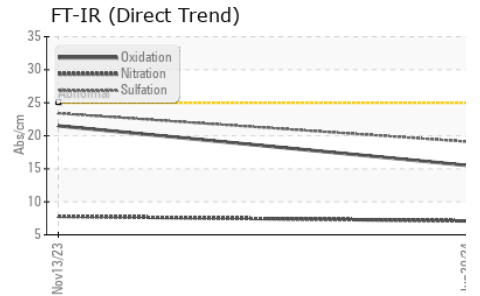
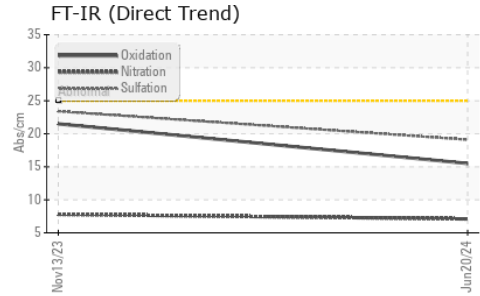
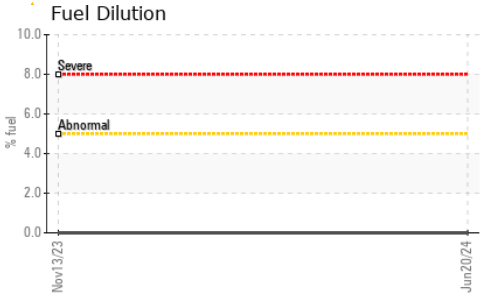
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>60	<b>6</b>	7	---
Sodium	ppm	ASTM D5185(m)	>401	<b>1</b>	2	---
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	---
Fuel	%	ASTM D7593*	>5	<b>0.0</b>	<1.0	---

### INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>3	<b>0</b>	0	---
Nitration	Abs/cm	ASTM D7624*	>20	<b>7.1</b>	7.8	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>19.1</b>	23.4	---



# OIL ANALYSIS REPORT

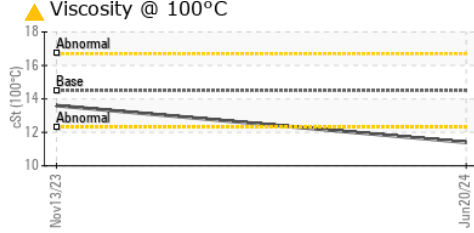
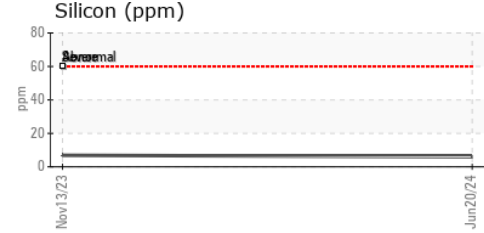
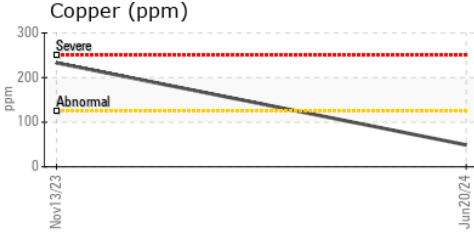
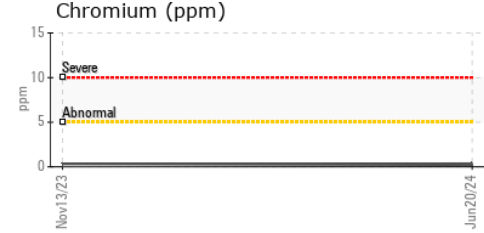
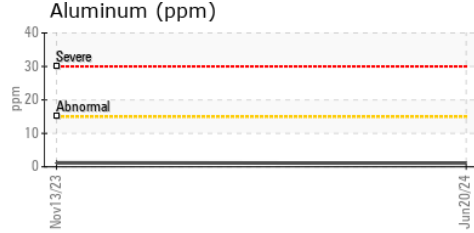
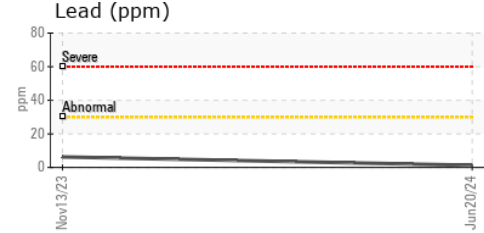
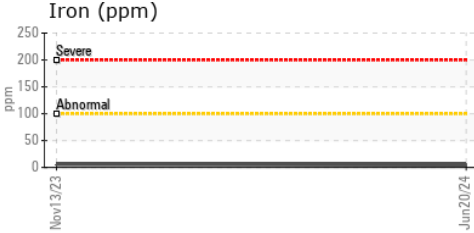


FLUID DEGRADATION	method	limit/base	current	history1	history2	
Oxidation	Abs./1mm	ASTM D7414*	>25	<b>15.5</b>	21.5	---

VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	Visual*	NONE	<b>VLITE</b>	---	---
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	---	---
Precipitate	scalar	Visual*	NONE	<b>NONE</b>	---	---
Silt	scalar	Visual*	NONE	<b>NONE</b>	---	---
Debris	scalar	Visual*	NONE	<b>VLITE</b>	---	---
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	---	---
Appearance	scalar	Visual*	NORML	<b>NORML</b>	---	---
Odor	scalar	Visual*	NORML	<b>NORML</b>	NORML	---
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)	14.5	<b>▲ 11.4</b>	13.6	---

### GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0932664      **Received** : 10 Jul 2024  
**Lab Number** : **02646953**      **Tested** : 11 Jul 2024  
**Unique Number** : 5812505      **Diagnosed** : 11 Jul 2024 - Kevin Marson  
**Test Package** : MOBCE ( Additional Tests: FuelDilution, PercentFuel, Visual )

**RONI/IRON SHORE EXCAVATING LTD.**  
 100 MACINTOSH BLVD  
 VAUGHAN, ON  
 CA L4K 4P3  
 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.