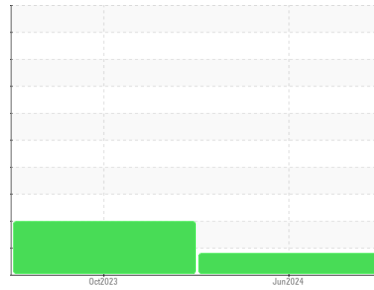




# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area  
**ORIN CONTRACTORS**

Machine Id

**874**

Component

**Hydraulic System**

Fluid

**PETRO CANADA HYDREX AW 46 (--- GAL)**

## DIAGNOSIS

### Recommendation

The filter change at the time of sampling has been noted. Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

There is a light amount of silt (particulates < 14 microns in size) present in the oil.

### Fluid Condition

Additive levels indicate the addition of a different brand, or type of oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0932568</b>	LH0275097	---
Sample Date	Client Info		<b>15 Jun 2024</b>	11 Oct 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>	Not Changd	---
Sample Status			<b>ATTENTION</b>	ABNORMAL	---

## CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.1	<b>NEG</b>	NEG	---

## WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184*		<b>0</b>	0	---
Iron	ppm	ASTM D5185(m) >20	<b>20</b>	▲ 35	---
Chromium	ppm	ASTM D5185(m) >10	<b>3</b>	5	---
Nickel	ppm	ASTM D5185(m) >10	<b>&lt;1</b>	<1	---
Titanium	ppm	ASTM D5185(m)	<b>0</b>	0	---
Silver	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	---
Aluminum	ppm	ASTM D5185(m) >10	<b>3</b>	4	---
Lead	ppm	ASTM D5185(m) >10	<b>0</b>	<1	---
Copper	ppm	ASTM D5185(m) >75	<b>4</b>	8	---
Tin	ppm	ASTM D5185(m) >10	<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

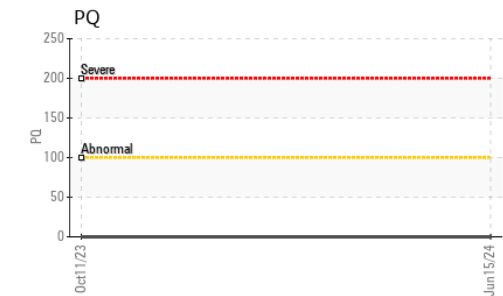
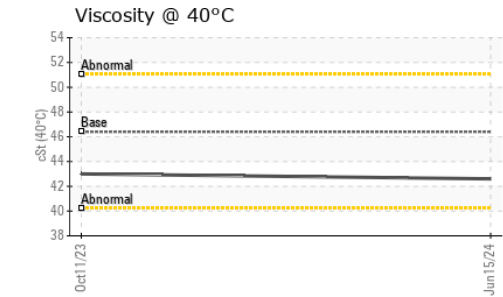
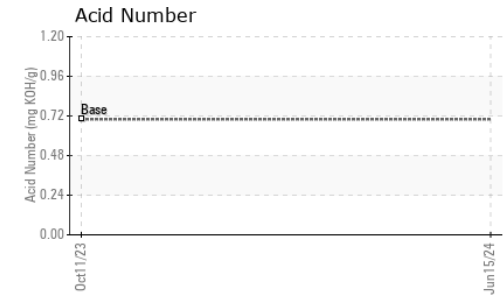
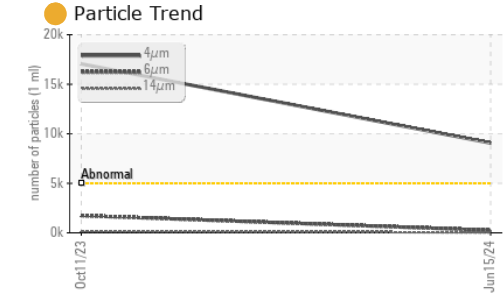
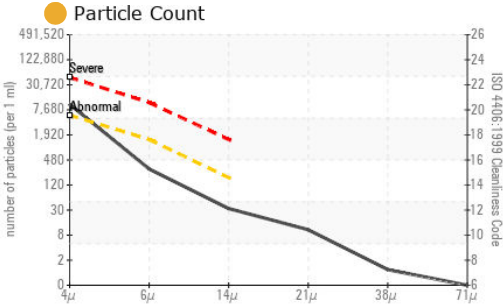
	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m) 0	<b>&lt;1</b>	<1	---
Barium	ppm	ASTM D5185(m) 0	<b>&lt;1</b>	<1	---
Molybdenum	ppm	ASTM D5185(m) 0	<b>0</b>	0	---
Manganese	ppm	ASTM D5185(m) 0	<b>&lt;1</b>	<1	---
Magnesium	ppm	ASTM D5185(m) 0	<b>356</b>	79	---
Calcium	ppm	ASTM D5185(m) 50	<b>404</b>	90	---
Phosphorus	ppm	ASTM D5185(m) 330	<b>646</b>	227	---
Zinc	ppm	ASTM D5185(m) 430	<b>754</b>	260	---
Sulfur	ppm	ASTM D5185(m) 760	<b>1602</b>	736	---
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >20	<b>5</b>	6	---
Sodium	ppm	ASTM D5185(m)	<b>&lt;1</b>	2	---
Potassium	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	1	---



# OIL ANALYSIS REPORT



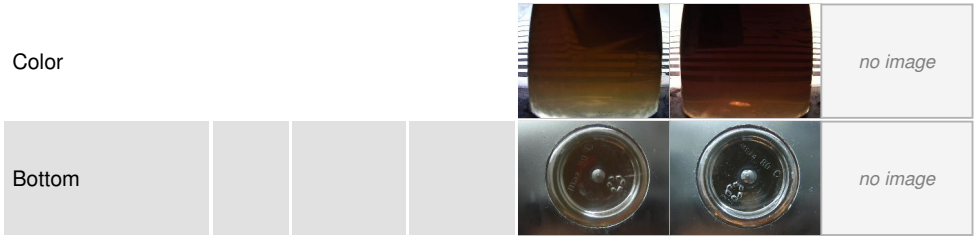
FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	● 9066	▲ 17054	---
Particles >6µm	ASTM D7647	>1300	● 257	● 1738	---
Particles >14µm	ASTM D7647	>160	● 29	155	---
Particles >21µm	ASTM D7647	>40	● 9	35	---
Particles >38µm	ASTM D7647	>10	● 1	2	---
Particles >71µm	ASTM D7647	>3	● 0	1	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	● 20/15/12	▲ 21/18/14	---

FLUID DEGRADATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.70	1.14	---

VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	---
Yellow Metal	scalar	Visual*	NONE	NONE	---
Precipitate	scalar	Visual*	NONE	NONE	---
Silt	scalar	Visual*	NONE	NONE	---
Debris	scalar	Visual*	NONE	NONE	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---
Appearance	scalar	Visual*	NORML	NORML	---
Odor	scalar	Visual*	NORML	NORML	---
Emulsified Water	scalar	Visual*	>0.1	NEG	---
Free Water	scalar	Visual*		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	46.4	42.6	43.0

SAMPLE IMAGES	method	limit/base	current	history1	history2
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**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0932568  
**Lab Number** : 02647057  
**Unique Number** : 5812609  
**Test Package** : MOBCE ( Additional Tests: PQ, TAN Man )

**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.