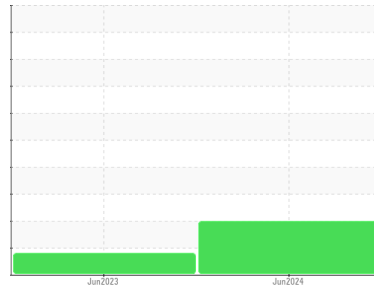




# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area  
**RONI**  
 Machine Id  
**170**  
 Component  
**Hydraulic System**  
 Fluid  
**PETRO CANADA HYDREX AW 46 (--- GAL)**

## DIAGNOSIS

### Recommendation

We recommend you service the filters on this component. We recommend an early resample to monitor this condition.

### Wear

All component wear rates are normal.

### Contamination

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

### Fluid Condition

The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0920716</b>	LH0256733	---
Sample Date	Client Info		<b>27 Jun 2024</b>	06 Jun 2023	---
Machine Age	hrs	Client Info	<b>0</b>	5613	---
Oil Age	hrs	Client Info	<b>0</b>	0	---
Oil Changed	Client Info		<b>Changed</b>	Changed	---
Sample Status			<b>ABNORMAL</b>	ATTENTION	---

## CONTAMINATION

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

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >20	<b>4</b>	8	---
Chromium	ppm	ASTM D5185(m) >10	<b>&lt;1</b>	<1	---
Nickel	ppm	ASTM D5185(m) >10	<b>&lt;1</b>	0	---
Titanium	ppm	ASTM D5185(m)	<b>0</b>	<1	---
Silver	ppm	ASTM D5185(m)	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185(m) >10	<b>1</b>	1	---
Lead	ppm	ASTM D5185(m) >10	<b>0</b>	<1	---
Copper	ppm	ASTM D5185(m) >75	<b>2</b>	4	---
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>6</b>	13	---
Barium	ppm	ASTM D5185(m) 0	<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185(m) 0	<b>0</b>	1	---
Manganese	ppm	ASTM D5185(m) 0	<b>0</b>	<1	---
Magnesium	ppm	ASTM D5185(m) 0	<b>10</b>	23	---
Calcium	ppm	ASTM D5185(m) 50	<b>241</b>	539	---
Phosphorus	ppm	ASTM D5185(m) 330	<b>386</b>	513	---
Zinc	ppm	ASTM D5185(m) 430	<b>490</b>	580	---
Sulfur	ppm	ASTM D5185(m) 760	<b>1005</b>	1429	---
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	---

## CONTAMINANTS

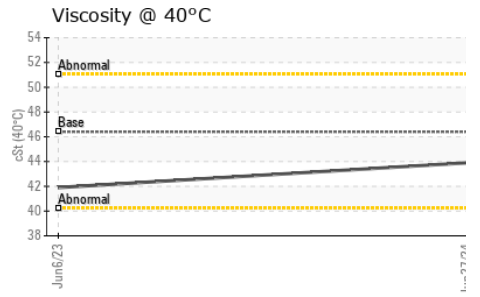
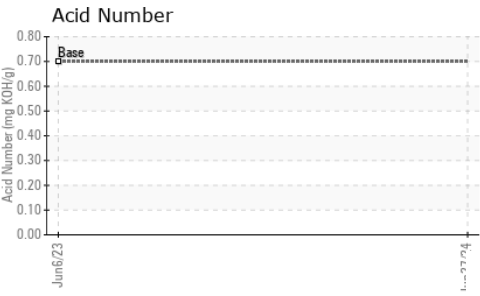
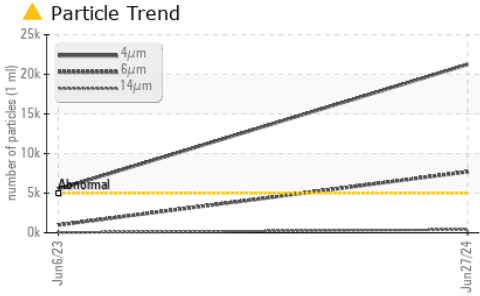
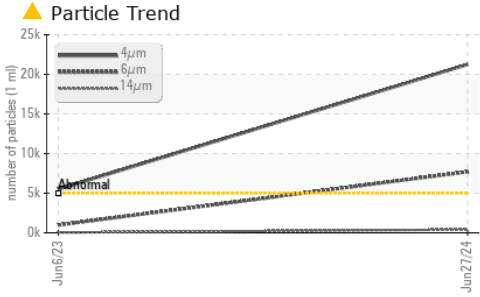
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >20	<b>1</b>	4	---
Sodium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	---
Potassium	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	1	---

## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	<b>▲ 21248</b>	● 5503	---
Particles >6µm	ASTM D7647	>1300	<b>▲ 7702</b>	982	---
Particles >14µm	ASTM D7647	>160	<b>▲ 402</b>	34	---
Particles >21µm	ASTM D7647	>40	<b>● 58</b>	9	---
Particles >38µm	ASTM D7647	>10	<b>3</b>	1	---
Particles >71µm	ASTM D7647	>3	<b>1</b>	0	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	<b>▲ 22/20/16</b>	● 20/17/12	---



# OIL ANALYSIS REPORT

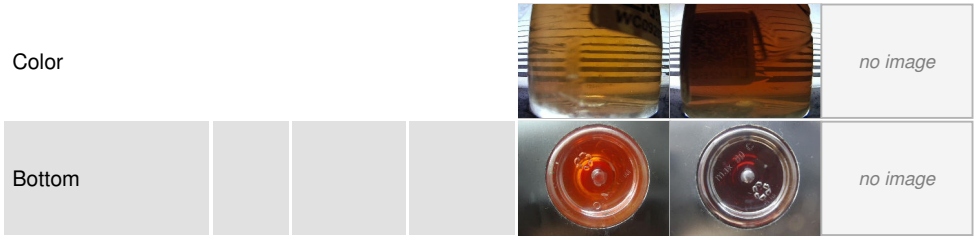


FLUID DEGRADATION	method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D974*	0.70	<b>0.47</b>	---	---

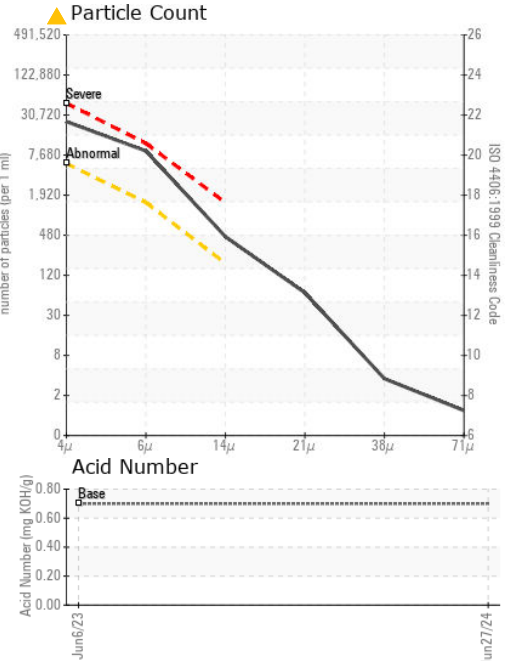
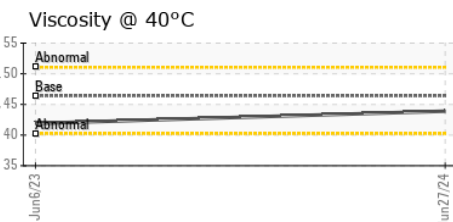
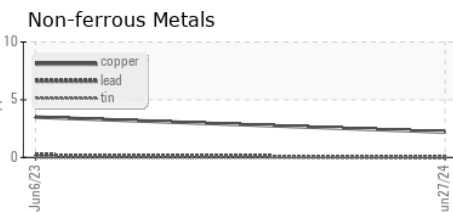
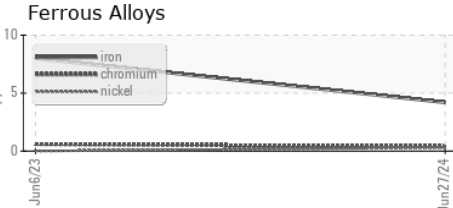
VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	---
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	---
Precipitate	scalar	Visual*	NONE	<b>NONE</b>	NONE	---
Silt	scalar	Visual*	NONE	<b>NONE</b>	NONE	---
Debris	scalar	Visual*	NONE	<b>NONE</b>	NONE	---
Sand/Dirt	scalar	Visual*	NONE	<b>VLITE</b>	NONE	---
Appearance	scalar	Visual*	NORML	<b>NORML</b>	NORML	---
Odor	scalar	Visual*	NORML	<b>NORML</b>	NORML	---
Emulsified Water	scalar	Visual*	>0.1	<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)	46.4	<b>43.9</b>	41.9	---

### SAMPLE IMAGES



### GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0920716 **Received** : 10 Jul 2024  
**Lab Number** : **02647036** **Tested** : 11 Jul 2024  
**Unique Number** : 5812588 **Diagnosed** : 11 Jul 2024 - Wes Davis  
**Test Package** : MOBCE

**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.