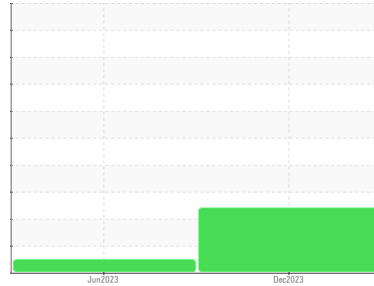




# OIL ANALYSIS REPORT

Sample Rating Trend

**WATER**



Area  
**ORIN CONTRACTORS**  
 Machine Id  
**100-012**  
 Component  
**Hydraulic System**  
 Fluid  
**PETRO CANADA HYDREX AW 46 (--- GAL)**

## DIAGNOSIS

### Recommendation

We advise that you check for the source of water entry. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

### Wear

All component wear rates are normal.

### Contamination

Free water present. The system cleanliness is acceptable for your target ISO 4406 cleanliness code.

### Fluid Condition

The AN level is acceptable for this fluid. The oil is no longer serviceable due to the presence of contaminants.

## SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>WC0888501</b>	LH0261502	---
Sample Date	Client Info	<b>27 Dec 2023</b>	21 Jun 2023	---
Machine Age	hrs	Client Info	<b>0</b>	3771
Oil Age	hrs	Client Info	<b>0</b>	0
Oil Changed	Client Info	<b>Changed</b>	Changed	---
Sample Status		<b>ABNORMAL</b>	NORMAL	---

## 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) >25	<b>4</b>	4	---
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>	<1	---
Aluminum	ppm ASTM D5185(m) >20	<b>1</b>	1	---
Lead	ppm ASTM D5185(m) >20	<b>&lt;1</b>	<1	---
Copper	ppm ASTM D5185(m) >150	<b>8</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>0</b>	0	---
Molybdenum	ppm ASTM D5185(m) 0	<b>0</b>	<1	---
Manganese	ppm ASTM D5185(m) 0	<b>0</b>	0	---
Magnesium	ppm ASTM D5185(m) 0	<b>36</b>	40	---
Calcium	ppm ASTM D5185(m) 50	<b>275</b>	295	---
Phosphorus	ppm ASTM D5185(m) 330	<b>408</b>	453	---
Zinc	ppm ASTM D5185(m) 430	<b>518</b>	522	---
Sulfur	ppm ASTM D5185(m) 760	<b>1047</b>	1038	---
Lithium	ppm ASTM D5185(m)	<b>&lt;1</b>	<1	---

## CONTAMINANTS

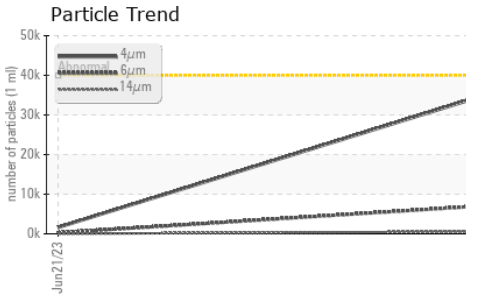
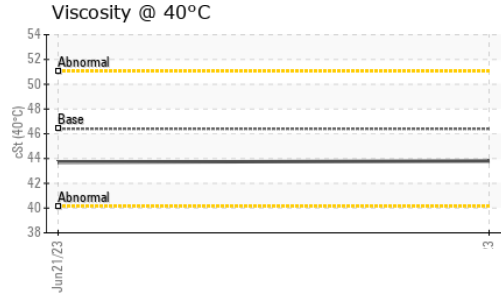
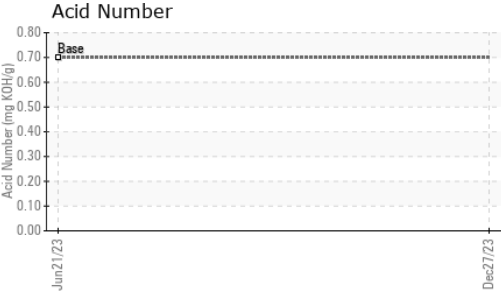
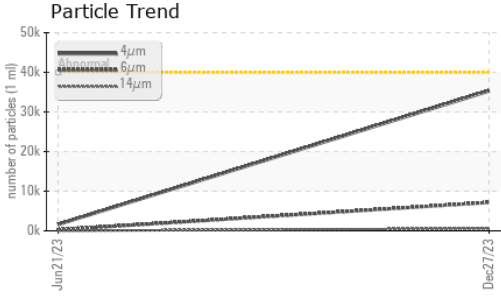
method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m) >50	<b>2</b>	2	---
Sodium	ppm ASTM D5185(m)	<b>1</b>	1	---
Potassium	ppm ASTM D5185(m) >20	<b>&lt;1</b>	<1	---

## FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >40000	<b>35308</b>	1603	---
Particles >6µm	ASTM D7647 >10000	<b>7158</b>	262	---
Particles >14µm	ASTM D7647 >2500	<b>573</b>	12	---
Particles >21µm	ASTM D7647 >640	<b>93</b>	3	---
Particles >38µm	ASTM D7647 >160	<b>0</b>	0	---
Particles >71µm	ASTM D7647 >40	<b>0</b>	0	---
Oil Cleanliness	ISO 4406 (c) >22/20/18	<b>22/20/16</b>	18/15/11	---



# OIL ANALYSIS REPORT



FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.70	<b>0.39</b>	---	---

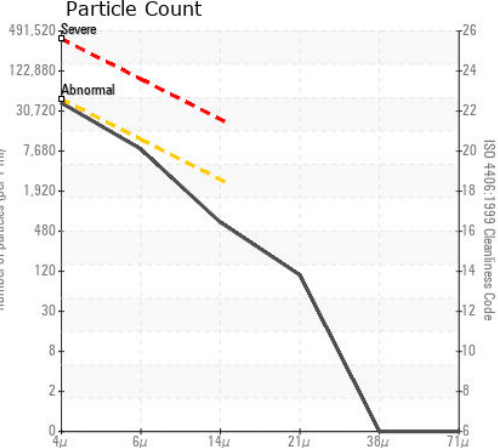
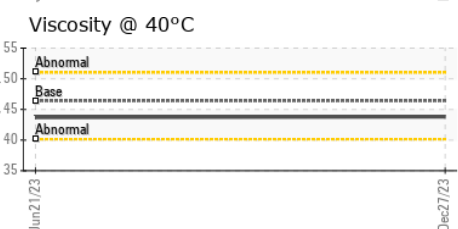
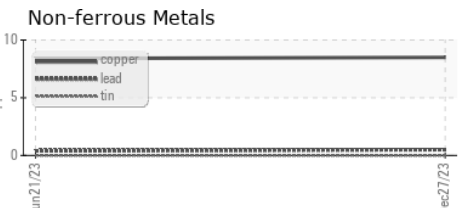
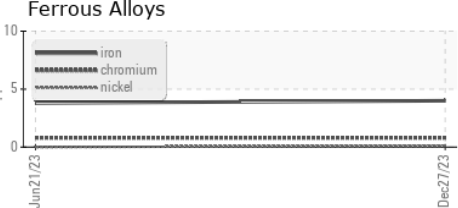
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	---
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	---
Precipitate	scalar	Visual*	NONE	<b>NONE</b>	NONE	---
Silt	scalar	Visual*	NONE	<b>NONE</b>	NONE	---
Debris	scalar	Visual*	NONE	<b>NONE</b>	VLITE	---
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	NONE	---
Appearance	scalar	Visual*	NORML	<b>▲ WGOIL</b>	NORML	---
Odor	scalar	Visual*	NORML	<b>NORML</b>	NORML	---
Emulsified Water	scalar	Visual*	>0.1	<b>.2%</b>	NEG	---
Free Water	scalar	Visual*		<b>▲ 1%</b>	NEG	---

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	46.4	<b>43.8</b>	43.7	---

### SAMPLE IMAGES

method	limit/base	current	history1	history2
Color				no image
Bottom				no image

### GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **RONI/IRON SHORE EXCAVATING LTD.**  
**Sample No.** : WC0888501 **Received** : 08 Jan 2024 **100 MACINTOSH BLVD**  
**Lab Number** : **02607137** **Diagnosed** : 09 Jan 2024 **VAUGHAN, ON**  
**Unique Number** : 5708223 **Diagnostician** : Kevin Marson **CA L4K 4P3**  
**Test Package** : MOBCE **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.