



# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**

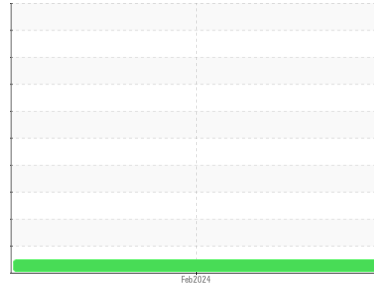


Area  
**ORIN CONTRACTORS**

Machine Id  
**857**

Component  
**Hydraulic System**

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



## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

### Fluid Condition

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>WC0899386</b>	---	---
Sample Date	Client Info	<b>24 Feb 2024</b>	---	---
Machine Age	hrs Client Info	<b>0</b>	---	---
Oil Age	hrs Client Info	<b>0</b>	---	---
Oil Changed	Client Info	<b>Changed</b>	---	---
Sample Status		<b>NORMAL</b>	---	---

## CONTAMINATION

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

## WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185(m) >20	<b>5</b>	---	---
Chromium	ppm ASTM D5185(m) >10	<b>0</b>	---	---
Nickel	ppm ASTM D5185(m) >10	<b>&lt;1</b>	---	---
Titanium	ppm ASTM D5185(m)	<b>0</b>	---	---
Silver	ppm ASTM D5185(m)	<b>0</b>	---	---
Aluminum	ppm ASTM D5185(m) >10	<b>2</b>	---	---
Lead	ppm ASTM D5185(m) >10	<b>&lt;1</b>	---	---
Copper	ppm ASTM D5185(m) >75	<b>2</b>	---	---
Tin	ppm ASTM D5185(m) >10	<b>0</b>	---	---
Antimony	ppm ASTM D5185(m)	<b>0</b>	---	---
Vanadium	ppm ASTM D5185(m)	<b>0</b>	---	---
Beryllium	ppm ASTM D5185(m)	<b>0</b>	---	---
Cadmium	ppm ASTM D5185(m)	<b>0</b>	---	---

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185(m) 0	<b>1</b>	---	---
Barium	ppm ASTM D5185(m) 0	<b>0</b>	---	---
Molybdenum	ppm ASTM D5185(m) 0	<b>0</b>	---	---
Manganese	ppm ASTM D5185(m) 0	<b>0</b>	---	---
Magnesium	ppm ASTM D5185(m) 0	<b>6</b>	---	---
Calcium	ppm ASTM D5185(m) 50	<b>199</b>	---	---
Phosphorus	ppm ASTM D5185(m) 330	<b>382</b>	---	---
Zinc	ppm ASTM D5185(m) 430	<b>483</b>	---	---
Sulfur	ppm ASTM D5185(m) 760	<b>996</b>	---	---
Lithium	ppm ASTM D5185(m)	<b>&lt;1</b>	---	---

## CONTAMINANTS

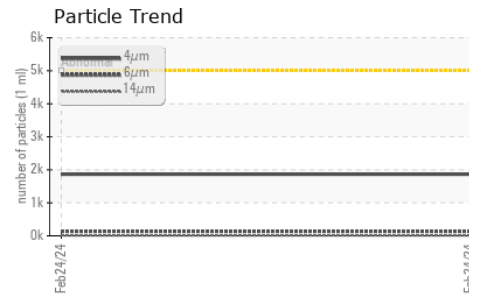
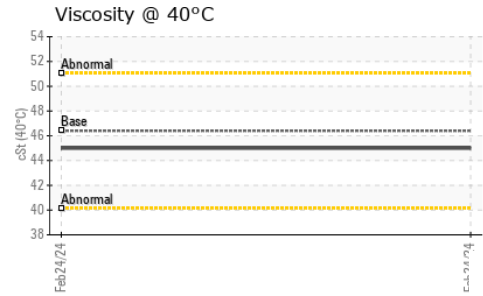
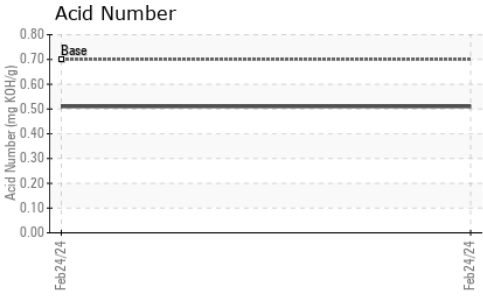
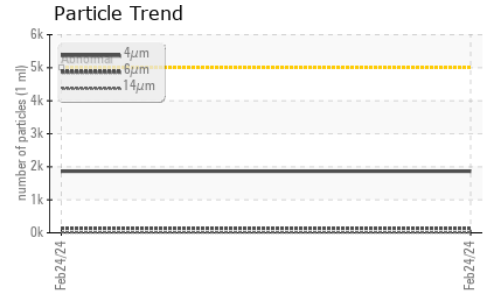
method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m) >20	<b>2</b>	---	---
Sodium	ppm ASTM D5185(m)	<b>&lt;1</b>	---	---
Potassium	ppm ASTM D5185(m) >20	<b>&lt;1</b>	---	---

## FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >5000	<b>1864</b>	---	---
Particles >6µm	ASTM D7647 >1300	<b>135</b>	---	---
Particles >14µm	ASTM D7647 >160	<b>13</b>	---	---
Particles >21µm	ASTM D7647 >40	<b>4</b>	---	---
Particles >38µm	ASTM D7647 >10	<b>1</b>	---	---
Particles >71µm	ASTM D7647 >3	<b>0</b>	---	---
Oil Cleanliness	ISO 4406 (c) >19/17/14	<b>18/14/11</b>	---	---



# OIL ANALYSIS REPORT



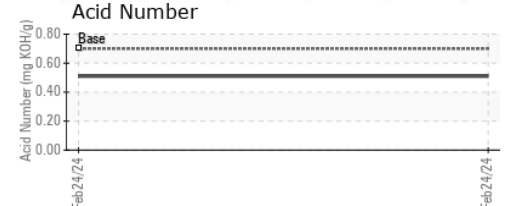
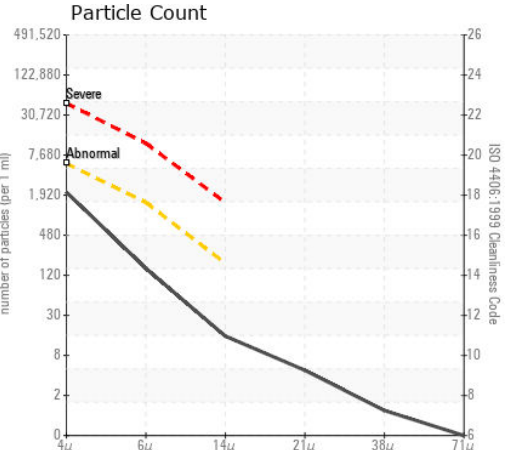
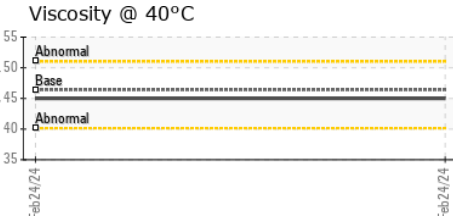
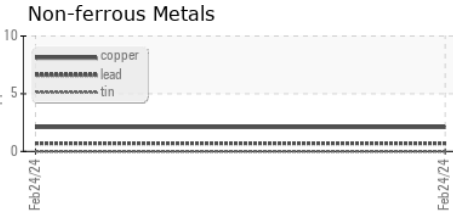
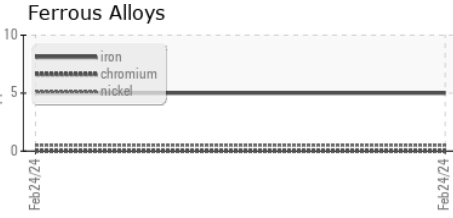
FLUID DEGRADATION	method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D974*	0.70	<b>0.51</b>	---	---

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

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D7279(m)	46.4	<b>45.0</b>	---	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color				<i>no image</i>	<i>no image</i>
Bottom				<i>no image</i>	<i>no image</i>

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0899386 **Received** : 11 Mar 2024  
**Lab Number** : **02621132** **Tested** : 12 Mar 2024  
**Unique Number** : 5746251 **Diagnosed** : 12 Mar 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.