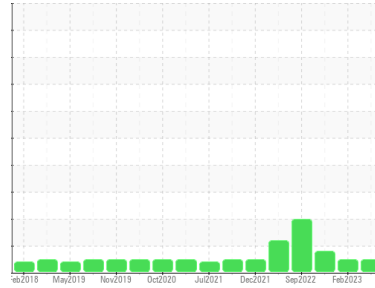




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**[351030]**  
 Machine Id  
**REX-RTOH TURBINE**  
 Component  
**Turbine**  
 Fluid  
**PETRO CANADA HYDREX AW 32 (120 LTR)**

## 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 water content is negligible. 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>WC0706570</b>	WC0706582	WC0706594
Sample Date	Client Info	<b>25 May 2023</b>	27 Feb 2023	12 Dec 2022
Machine Age	hrs	Client Info	<b>0</b>	0
Oil Age	hrs	Client Info	<b>0</b>	0
Oil Changed	Client Info	<b>N/A</b>	N/A	N/A
Sample Status		<b>NORMAL</b>	NORMAL	ATTENTION

## WEAR METALS

method	limit/base	current	history1	history2		
Iron	ppm	ASTM D5185(m)	>15	<b>&lt;1</b>	<1	<1
Chromium	ppm	ASTM D5185(m)	>4	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>10	<b>&lt;1</b>	0	0
Lead	ppm	ASTM D5185(m)		<b>0</b>	<1	<1
Copper	ppm	ASTM D5185(m)	>5	<b>2</b>	1	3
Tin	ppm	ASTM D5185(m)	>5	<b>0</b>	0	0
Antimony	ppm	ASTM D5185(m)		<b>0</b>	<1	0
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Beryllium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185(m)		<b>0</b>	0	0

## ADDITIVES

method	limit/base	current	history1	history2		
Boron	ppm	ASTM D5185(m)	0	<b>0</b>	<1	0
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Magnesium	ppm	ASTM D5185(m)	0	<b>0</b>	<1	<1
Calcium	ppm	ASTM D5185(m)	50	<b>51</b>	51	51
Phosphorus	ppm	ASTM D5185(m)	330	<b>362</b>	365	362
Zinc	ppm	ASTM D5185(m)	430	<b>404</b>	411	410
Sulfur	ppm	ASTM D5185(m)	760	<b>770</b>	759	763
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

## CONTAMINANTS

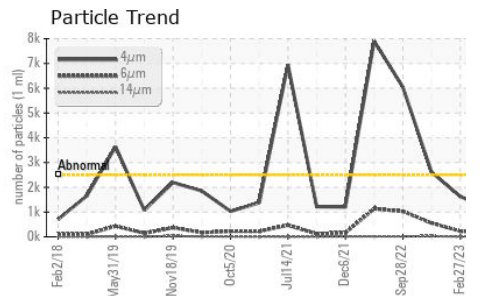
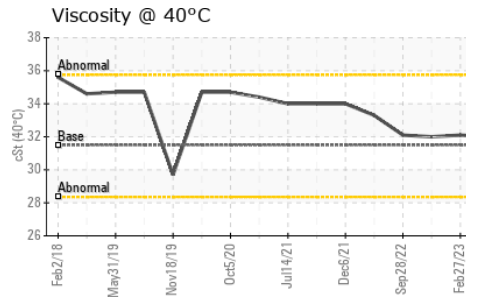
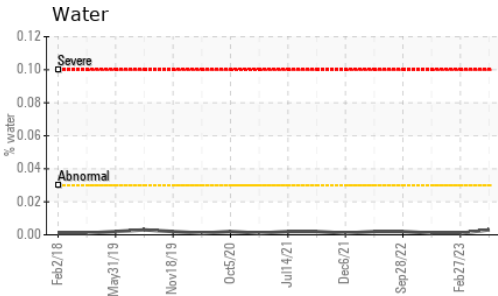
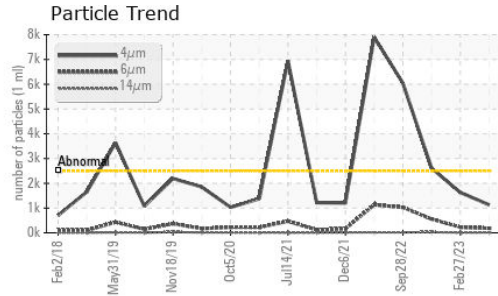
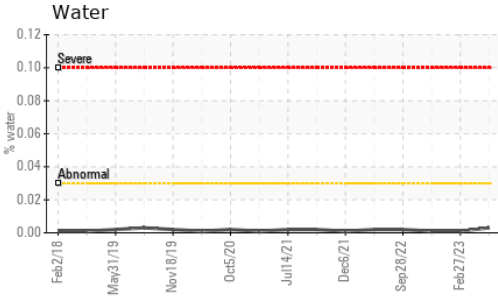
method	limit/base	current	history1	history2		
Silicon	ppm	ASTM D5185(m)	>15	<b>0</b>	<1	0
Sodium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	0	<1
Water	%	ASTM D6304*	>0.03	<b>0.003</b>	0.001	0.001
ppm Water	ppm	ASTM D6304*	>300	<b>36.0</b>	7.4	13.6

## FLUID CLEANLINESS

method	limit/base	current	history1	history2	
Particles >4µm	ASTM D7647	>2500	<b>1130</b>	1631	▲ 2607
Particles >6µm	ASTM D7647	>640	<b>183</b>	225	553
Particles >14µm	ASTM D7647	>80	<b>13</b>	6	27
Particles >21µm	ASTM D7647	>20	<b>3</b>	2	5
Particles >38µm	ASTM D7647	>4	<b>0</b>	1	1
Particles >71µm	ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>18/16/13	<b>17/15/11</b>	18/15/10	▲ 19/16/12



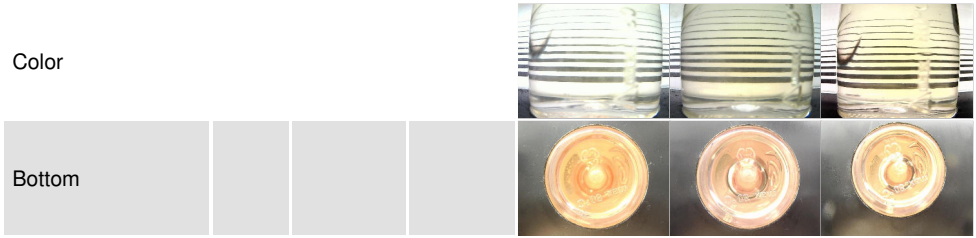
# OIL ANALYSIS REPORT



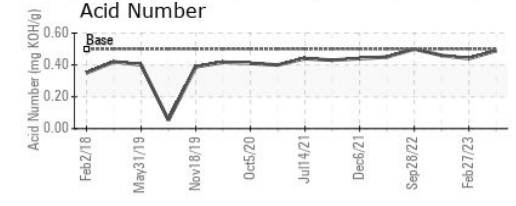
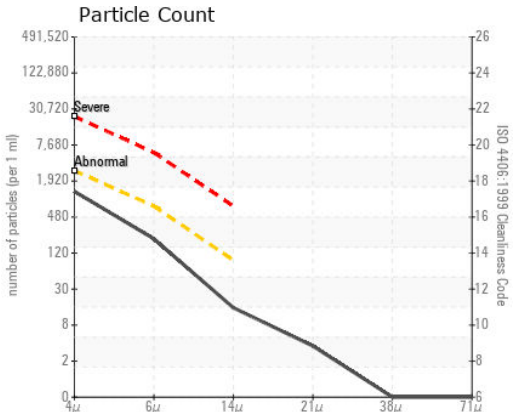
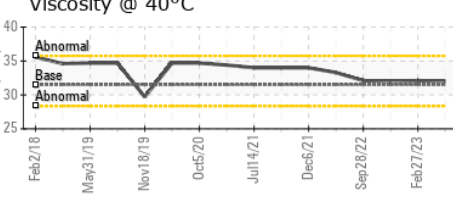
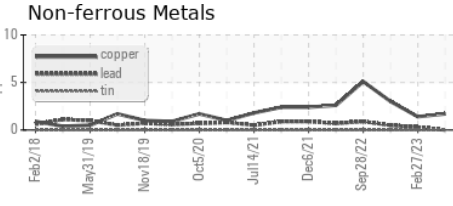
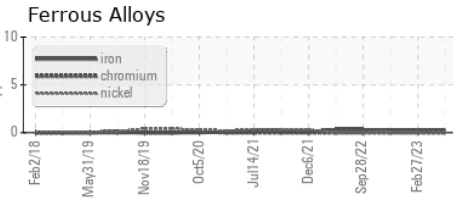
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.50	<b>0.49</b>	0.44	0.46
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Precipitate	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Silt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	Visual*	>0.03	<b>NEG</b>	NEG	NEG
Free Water	scalar	Visual*		<b>NEG</b>	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	31.5	<b>32.0</b>	32.1	32.0

SAMPLE IMAGES		method	limit/base	current	history1	history2
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## GRAPHS



**Laboratory Sample No. :** WC0706570  
**Lab Number :** 02559461  
**Unique Number :** 5580501  
**Test Package :** IND 2

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **ONTARIO CLEAN WATER AGENCY**  
 : 25 May 2023  
**Received** : 25 May 2023  
**Diagnosed** : 26 May 2023  
**Diagnostician** : Kevin Marson  
 2307 LAKESHORE RD. WEST  
 MISSISSAUGA, ON  
 CA L5J 1J9

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.  
 Contact: Hisham Alkurdi  
 halkurdi@ocwa.com  
 T:  
 F: (905)822-6197