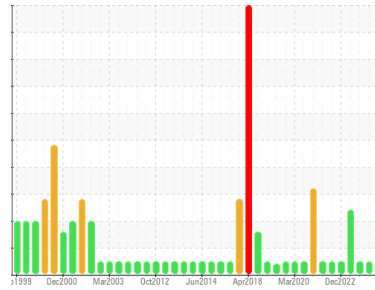




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**PUMPHOUSE/DIRTY WATER PUMPS**  
 Machine Id  
**C - Dirty Water Turbine IB**  
 Component  
**Lube System**  
 Fluid  
**PETRO CANADA HYDREX AW 100 (1 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>WC0968455</b>	WC0866305	WC0824409
Sample Date	Client Info		<b>17 Jul 2024</b>	04 Oct 2023	31 May 2023
Machine Age	hrs	Client Info	<b>0</b>	0	0
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>N/A</b>	N/A	N/A
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>5	<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184*	>DFLT	<b>0</b>	0	0
Iron	ppm	ASTM D5185(m) >20	<b>1</b>	<1	1
Chromium	ppm	ASTM D5185(m) >20	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	0	0
Lead	ppm	ASTM D5185(m) >20	<b>2</b>	<1	<1
Copper	ppm	ASTM D5185(m) >20	<b>4</b>	2	<1
Tin	ppm	ASTM D5185(m) >20	<b>3</b>	2	2
Antimony	ppm	ASTM D5185(m)	<b>0</b>	0	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

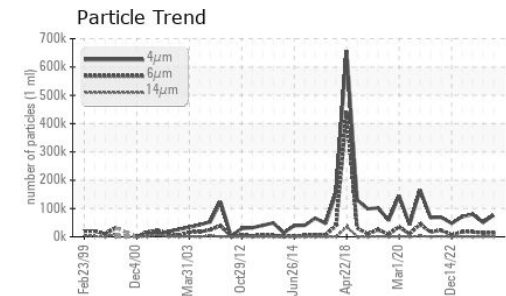
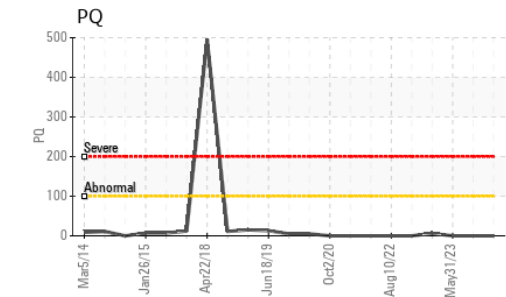
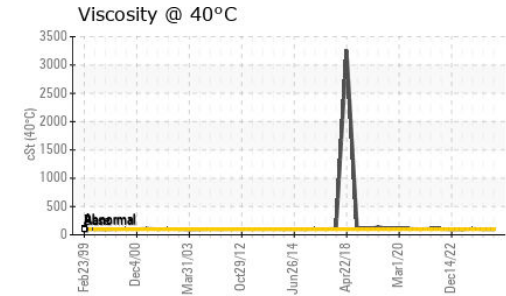
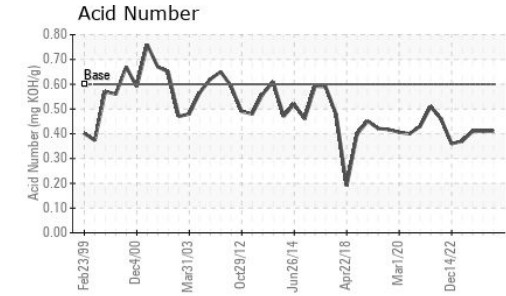
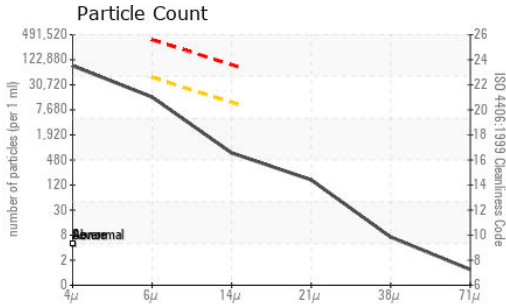
	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m) 0	<b>0</b>	<1	0
Barium	ppm	ASTM D5185(m) 0	<b>&lt;1</b>	2	1
Molybdenum	ppm	ASTM D5185(m) 0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185(m) 0	<b>0</b>	0	0
Magnesium	ppm	ASTM D5185(m) 0	<b>&lt;1</b>	<1	<1
Calcium	ppm	ASTM D5185(m) 50	<b>56</b>	42	43
Phosphorus	ppm	ASTM D5185(m) 330	<b>329</b>	287	316
Zinc	ppm	ASTM D5185(m) 430	<b>406</b>	368	343
Sulfur	ppm	ASTM D5185(m) 760	<b>2480</b>	2351	2686
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>3</b>	2	2
Sodium	ppm	ASTM D5185(m)	<b>0</b>	1	<1
Potassium	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	0	0



# OIL ANALYSIS REPORT



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0968455  
**Lab Number** : 02648437  
**Unique Number** : 5813989  
**Test Package** : IND 2 ( Additional Tests: Bottom, PQ )

**Received** : 17 Jul 2024  
**Tested** : 18 Jul 2024  
**Diagnosed** : 18 Jul 2024 - Kevin Marson

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.

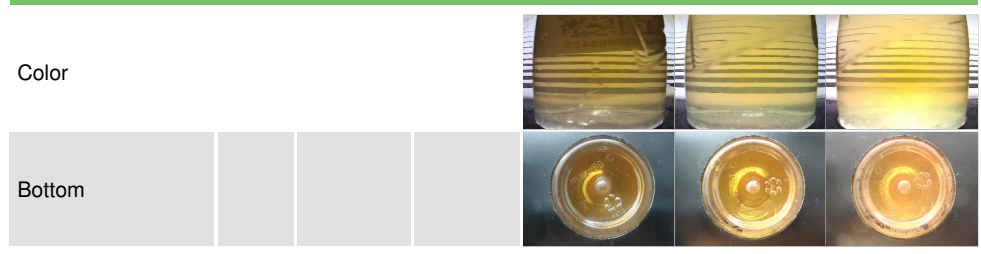
FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		<b>75997</b>	50796	79319
Particles >6µm	ASTM D7647	>40000	<b>13511</b>	13311	16874
Particles >14µm	ASTM D7647	>10000	<b>621</b>	860	409
Particles >21µm	ASTM D7647	>2500	<b>141</b>	176	64
Particles >38µm	ASTM D7647	>640	<b>6</b>	7	1
Particles >71µm	ASTM D7647	>160	<b>1</b>	1	0
Oil Cleanliness	ISO 4406 (c)	>--/22/20	<b>23/21/16</b>	23/21/17	23/21/16

FLUID DEGRADATION	method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D974*	0.60	<b>0.41</b>	0.41	0.41

VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	Visual*	NONE	<b>VLITE</b>	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Precipitate	scalar	Visual*	NONE	<b>NONE</b>	NONE	VLITE
Silt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	Visual*	NONE	<b>VLITE</b>	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	VLITE	LIGHT
Appearance	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	Visual*	>5	<b>NEG</b>	.2%	.2%
Free Water	scalar	Visual*		<b>NEG</b>	NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D7279(m)	101	<b>96.5</b>	100	105

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color

Bottom