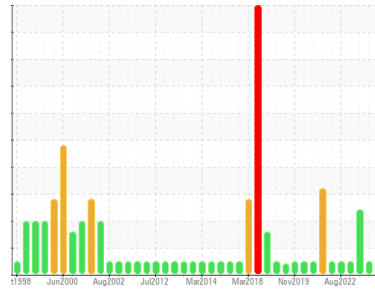




# OIL ANALYSIS REPORT

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 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>WC0866305</b>	WC0824409	WC0785670
Sample Date	Client Info		<b>04 Oct 2023</b>	31 May 2023	27 Jan 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	ABNORMAL

## WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184*	>DFLT	<b>0</b>	0	6
Iron	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	1
Chromium	ppm	ASTM D5185(m)	>20	<b>0</b>	0
Nickel	ppm	ASTM D5185(m)	>20	<b>0</b>	0
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0
Silver	ppm	ASTM D5185(m)		<b>&lt;1</b>	0
Aluminum	ppm	ASTM D5185(m)	>20	<b>0</b>	0
Lead	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1
Copper	ppm	ASTM D5185(m)	>20	<b>2</b>	<1
Tin	ppm	ASTM D5185(m)	>20	<b>2</b>	2
Antimony	ppm	ASTM D5185(m)		<b>0</b>	<1
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>	0
Barium	ppm	ASTM D5185(m)	0	<b>2</b>	1
Molybdenum	ppm	ASTM D5185(m)	0	<b>0</b>	0
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	0
Magnesium	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	<1
Calcium	ppm	ASTM D5185(m)	50	<b>42</b>	43
Phosphorus	ppm	ASTM D5185(m)	330	<b>287</b>	316
Zinc	ppm	ASTM D5185(m)	430	<b>368</b>	343
Sulfur	ppm	ASTM D5185(m)	760	<b>2351</b>	2686
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1

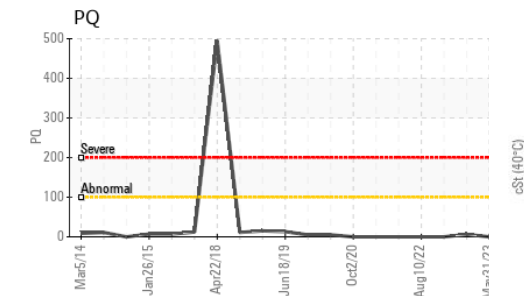
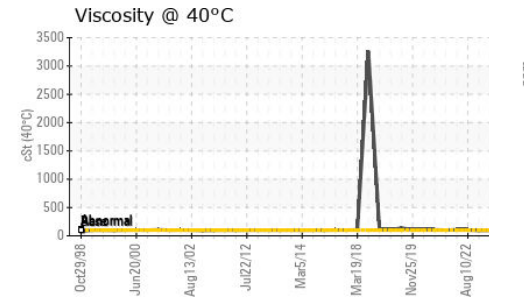
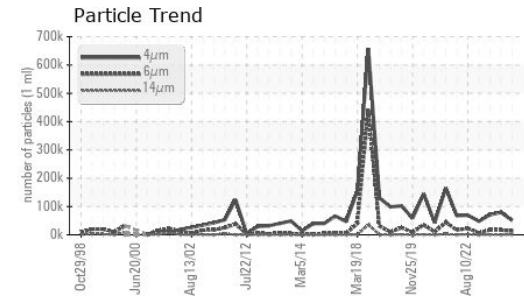
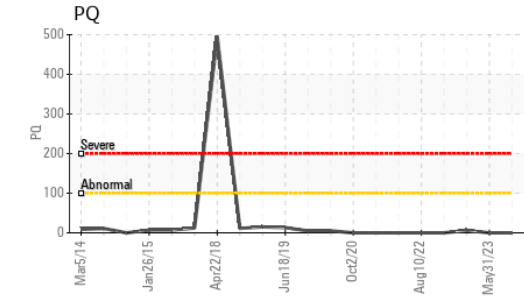
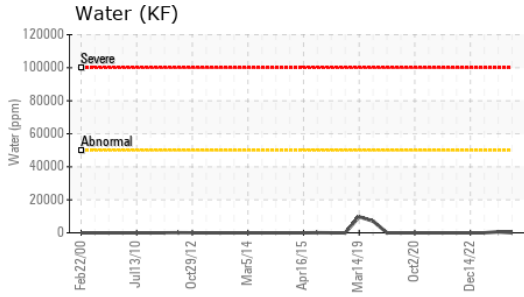
## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	<b>2</b>	2
Sodium	ppm	ASTM D5185(m)		<b>1</b>	<1
Potassium	ppm	ASTM D5185(m)	>20	<b>0</b>	0
Water	%	ASTM D6304*	>5	<b>0.006</b>	0.057
ppm Water	ppm	ASTM D6304*	>50000	<b>62.5</b>	579.7

## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		<b>50796</b>	79319	70871
Particles >6µm	ASTM D7647	>40000	<b>13311</b>	16874	17167
Particles >14µm	ASTM D7647	>10000	<b>860</b>	409	1074
Particles >21µm	ASTM D7647	>2500	<b>176</b>	64	309
Particles >38µm	ASTM D7647	>640	<b>7</b>	1	7
Particles >71µm	ASTM D7647	>160	<b>1</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>--/22/20	<b>23/21/17</b>	23/21/16	23/21/17

# OIL ANALYSIS REPORT

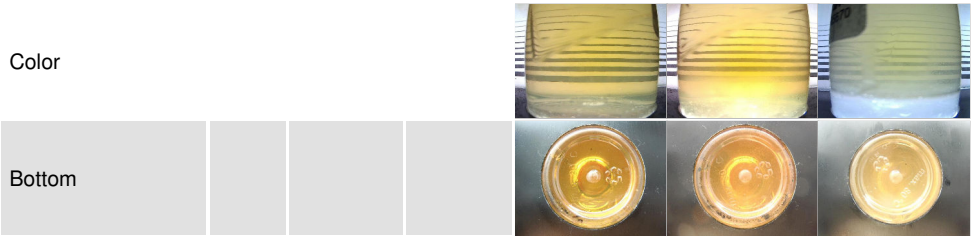


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.60	<b>0.41</b>	0.41	0.37

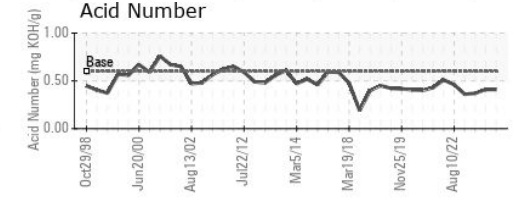
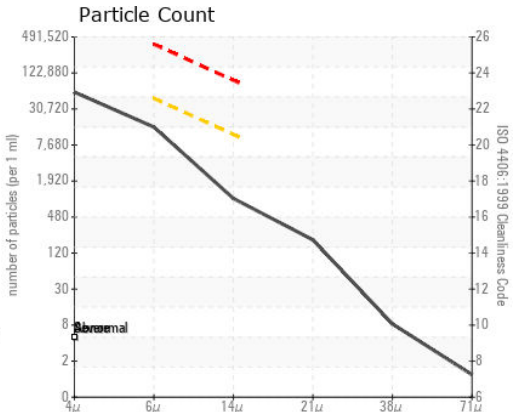
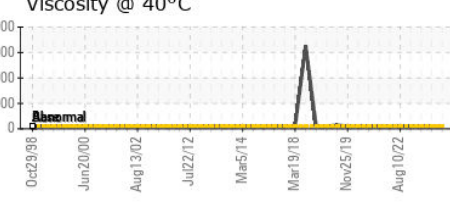
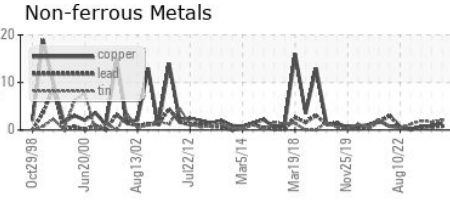
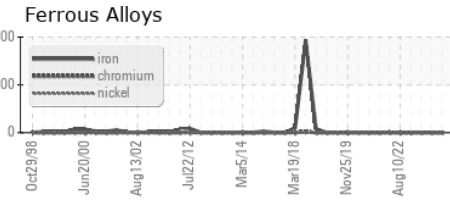
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Precipitate	scalar	Visual*	NONE	<b>NONE</b>	VLITE	NONE
Silt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	<b>VLITE</b>	LIGHT	NONE
Appearance	scalar	Visual*	NORML	<b>NORML</b>	NORML	▲ LAYRD
Odor	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	Visual*	>5	<b>.2%</b>	.2%	.5%
Free Water	scalar	Visual*		<b>NEG</b>	NEG	▲ >10%

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	101	<b>100</b>	105	96.3

### SAMPLE IMAGES



### GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **STELCO - BOSC - Basic Oxygen Slab Caster**  
**Sample No.** : WC0866305 **Received** : 04 Oct 2023 2330 Regional Road #3, Door: BOSC8  
**Lab Number** : 02586758 **Diagnosed** : 05 Oct 2023 NANTICOKE, ON  
**Unique Number** : 5655824 **Diagnostician** : Wes Davis CA N0A 1L0  
**Test Package** : IND 2 ( Additional Tests: KF, PQ ) Contact: Tom Walden  
 Thomas.Walden@stelco.com

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.

T: (519)587-4541  
 F: (519)587-7702