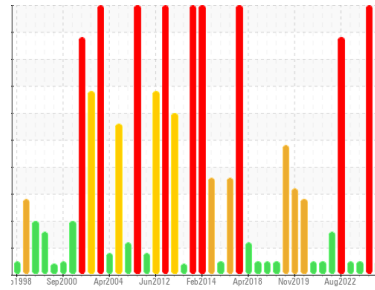




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**PUMPHOUSE/LANCE & FCE PUMPS**  
 Machine Id  
**C - Lance and Furnace 2 Electric Pump 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>WC0866301</b>	WC0824422	WC0785684
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>	SEVERE	NORMAL

## WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184*	>DFLT	<b>1</b>	67	3
Iron	ppm	ASTM D5185(m)	>20	<b>23</b>	241
Chromium	ppm	ASTM D5185(m)	>20	<b>0</b>	1
Nickel	ppm	ASTM D5185(m)	>20	<b>1</b>	<1
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>&lt;1</b>	<1
Lead	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	12
Copper	ppm	ASTM D5185(m)	>20	<b>1</b>	93
Tin	ppm	ASTM D5185(m)	>20	<b>0</b>	7
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>&lt;1</b>	<1
Molybdenum	ppm	ASTM D5185(m)	0	<b>0</b>	0
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	1
Magnesium	ppm	ASTM D5185(m)	0	<b>0</b>	<1
Calcium	ppm	ASTM D5185(m)	50	<b>48</b>	45
Phosphorus	ppm	ASTM D5185(m)	330	<b>326</b>	362
Zinc	ppm	ASTM D5185(m)	430	<b>416</b>	400
Sulfur	ppm	ASTM D5185(m)	760	<b>2587</b>	2627
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1

## CONTAMINANTS

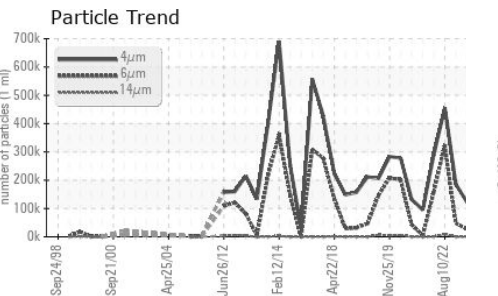
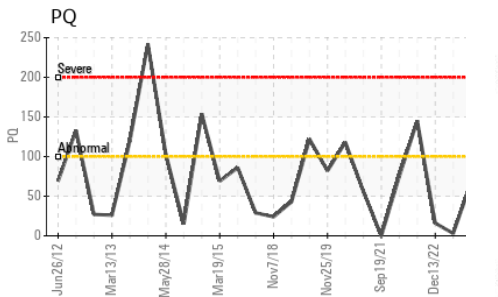
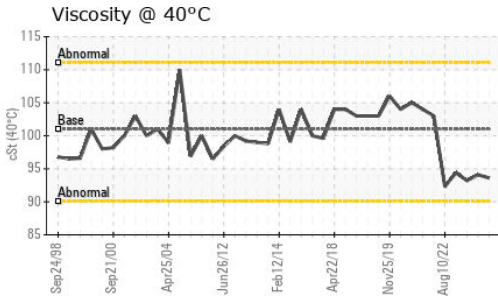
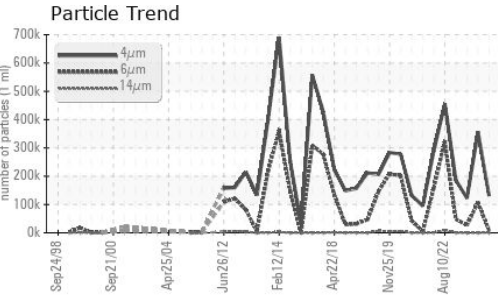
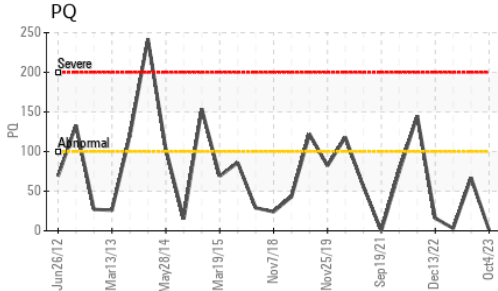
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	<b>3</b>	8
Sodium	ppm	ASTM D5185(m)		<b>&lt;1</b>	2
Potassium	ppm	ASTM D5185(m)	>20	<b>0</b>	<1

## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		<b>130959</b>	356682	122299
Particles >6µm	ASTM D7647	>10240000	<b>8127</b>	107756	26501
Particles >14µm	ASTM D7647	>10240000	<b>194</b>	548	110
Particles >21µm	ASTM D7647	>2560000	<b>34</b>	67	21
Particles >38µm	ASTM D7647	>640000	<b>1</b>	1	0
Particles >71µm	ASTM D7647	>160000	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>--/30/30	<b>24/20/15</b>	26/24/16	24/22/14



# OIL ANALYSIS REPORT

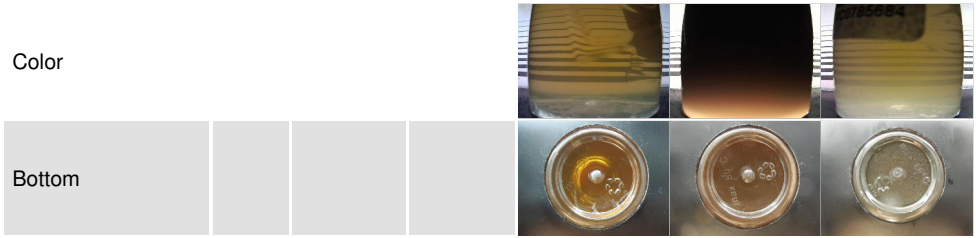


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.60	<b>0.39</b>	0.33	0.43

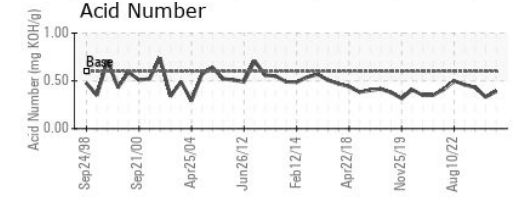
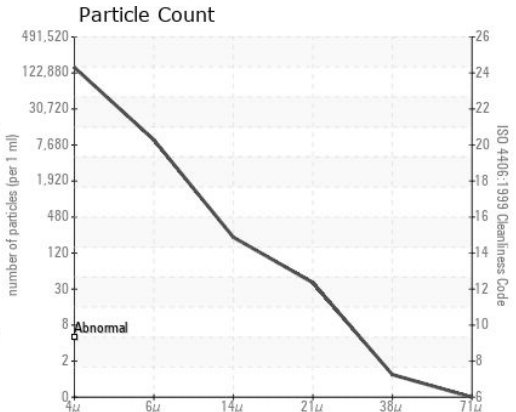
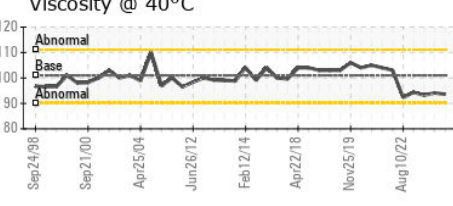
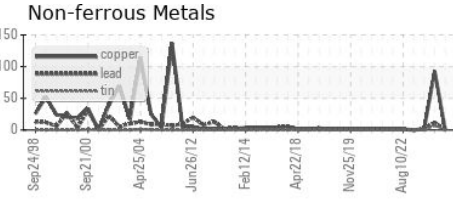
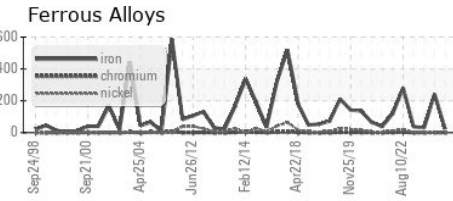
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Precipitate	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Silt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	Visual*	NONE	<b>NONE</b>	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*	>5	<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)	101	<b>93.6</b>	94.1	93.2

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



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **STELCO - BOSC - Basic Oxygen Slab Caster**  
**Sample No.** : WC0866301 **Received** : 04 Oct 2023 2330 Regional Road #3, Door: BOSC8  
**Lab Number** : **02586770** **Diagnosed** : 05 Oct 2023 NANTICOKE, ON  
**Unique Number** : 5655836 **Diagnostician** : Kevin Marson CA N0A 1L0  
**Test Package** : IND 2 ( Additional Tests: PQ )

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: Tom Walden  
 Thomas.Walden@stelco.com  
 T: (519)587-4541  
 F: (519)587-7702