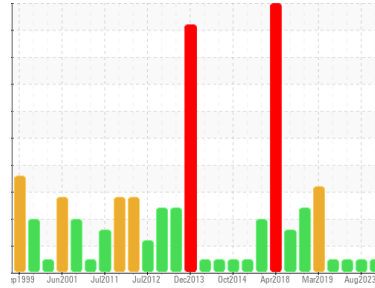




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**PUMPHOUSE/CASTER MACHINE WATER PUMPS**  
 Machine Id  
**C - Caster Machine Water Electric Pump OB**

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 oil viscosity is higher than typical. 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>WC0898670</b>	WC0850116	WC0824397
Sample Date	Client Info		<b>10 Jan 2024</b>	16 Aug 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	>1	<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>3</b>	2	2
Chromium	ppm	ASTM D5185(m) >20	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m) >20	<b>0</b>	<1	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>	<1	0
Lead	ppm	ASTM D5185(m) >20	<b>2</b>	2	2
Copper	ppm	ASTM D5185(m) >20	<b>2</b>	2	1
Tin	ppm	ASTM D5185(m) >20	<b>0</b>	0	0
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

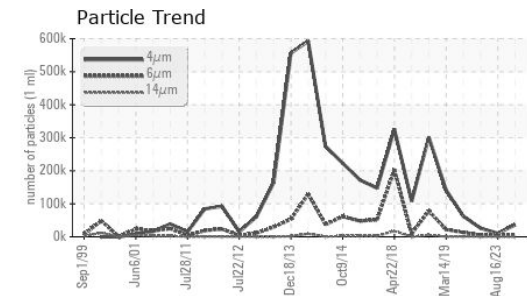
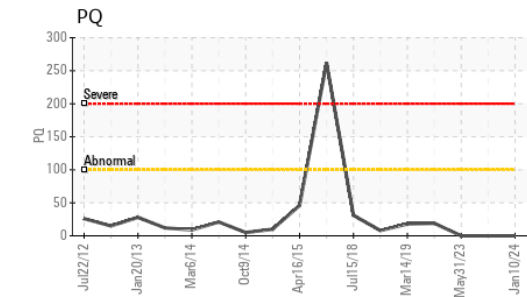
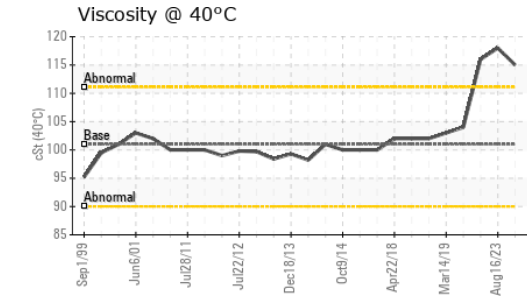
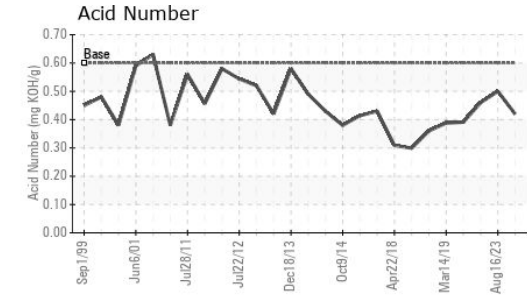
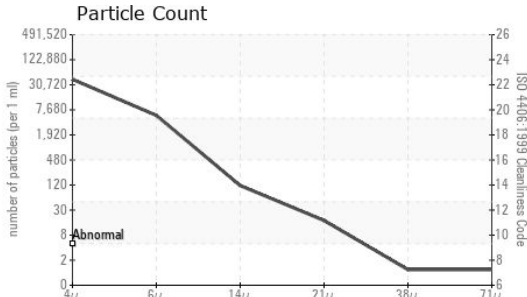
	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m) 0	<b>&lt;1</b>	<1	<1
Barium	ppm	ASTM D5185(m) 0	<b>&lt;1</b>	<1	<1
Molybdenum	ppm	ASTM D5185(m) 0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185(m) 0	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185(m) 0	<b>&lt;1</b>	<1	<1
Calcium	ppm	ASTM D5185(m) 50	<b>39</b>	40	41
Phosphorus	ppm	ASTM D5185(m) 330	<b>319</b>	341	357
Zinc	ppm	ASTM D5185(m) 430	<b>339</b>	337	331
Sulfur	ppm	ASTM D5185(m) 760	<b>3529</b>	3485	3526
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>2</b>	2	2
Sodium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1
Potassium	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	<1	<1



# OIL ANALYSIS REPORT



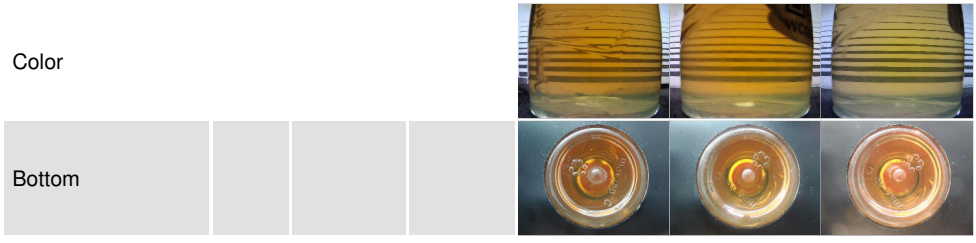
FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		<b>36115</b>	10722	26080
Particles >6µm	ASTM D7647	>10240000	<b>4937</b>	3190	5480
Particles >14µm	ASTM D7647	>10240000	<b>103</b>	279	251
Particles >21µm	ASTM D7647	>2560000	<b>15</b>	69	49
Particles >38µm	ASTM D7647	>640000	<b>1</b>	2	1
Particles >71µm	ASTM D7647	>160000	<b>1</b>	1	0
Oil Cleanliness	ISO 4406 (c)	>--/30/30	<b>22/19/14</b>	21/19/15	22/20/15

FLUID DEGRADATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D974*	0.60	<b>0.42</b>	0.50	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>VLITE</b>	VLITE	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*	>1	<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>115</b>	118	116

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color

Bottom



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **STELCO - BOSC - Basic Oxygen Slab Caster**  
**Sample No.** : WC0898670 **Received** : 10 Jan 2024 2330 Regional Road #3, Door: BOSC8  
**Lab Number** : **02608061** **Diagnosed** : 15 Jan 2024 NANTICOKE, ON  
**Unique Number** : 5709147 **Diagnostician** : Kevin Marson CA N0A 1L0  
**Test Package** : IND 2 ( Additional Tests: PQ )  
 Contact: Tom Walden  
 Thomas.Walden@stelco.com  
 T: (519)587-4541  
 F: (519)587-7702

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.