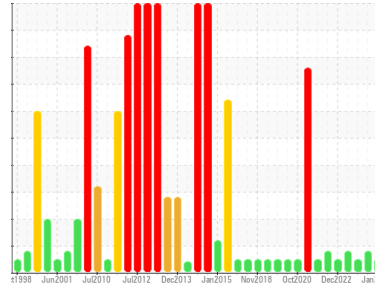




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**PUMPHOUSE/CASTER SPRAY WATER PUMPS**  
 Machine Id  
**C - Caster Spray Water 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 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>WC0898666</b>	WC0850118	WC0824401
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>	ABNORMAL	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>12</b>	0	0
Iron	ppm	ASTM D5185(m) >20	<b>23</b>	29	5
Chromium	ppm	ASTM D5185(m) >20	<b>0</b>	<1	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	<1
Lead	ppm	ASTM D5185(m) >20	<b>2</b>	4	<1
Copper	ppm	ASTM D5185(m) >20	<b>4</b>	▲ 28	1
Tin	ppm	ASTM D5185(m) >20	<b>0</b>	2	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

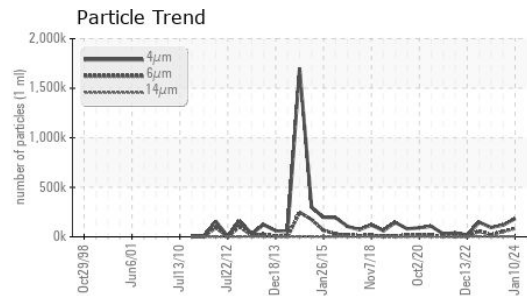
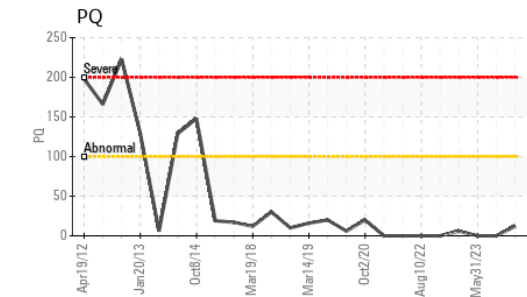
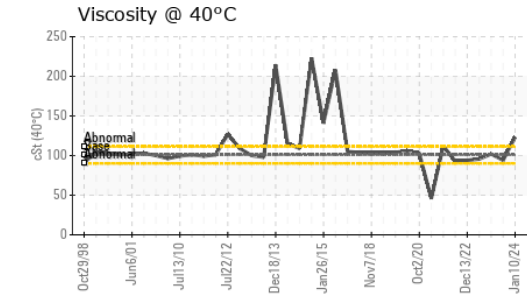
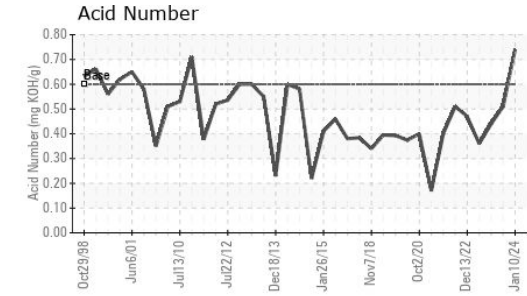
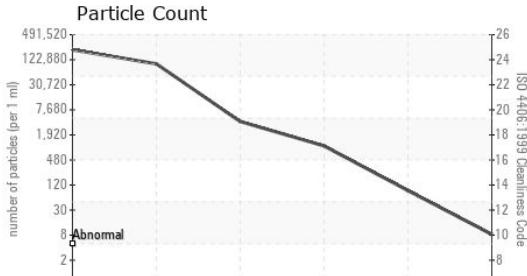
	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m) 0	<b>0</b>	<1	1
Barium	ppm	ASTM D5185(m) 0	<b>0</b>	0	7
Molybdenum	ppm	ASTM D5185(m) 0	<b>0</b>	0	2
Manganese	ppm	ASTM D5185(m) 0	<b>0</b>	<1	0
Magnesium	ppm	ASTM D5185(m) 0	<b>2</b>	<1	8
Calcium	ppm	ASTM D5185(m) 50	<b>38</b>	48	72
Phosphorus	ppm	ASTM D5185(m) 330	<b>426</b>	344	360
Zinc	ppm	ASTM D5185(m) 430	<b>349</b>	396	413
Sulfur	ppm	ASTM D5185(m) 760	<b>2541</b>	2454	2470
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>14</b>	3	5
Sodium	ppm	ASTM D5185(m)	<b>0</b>	4	<1
Potassium	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	<1	<1



# OIL ANALYSIS REPORT



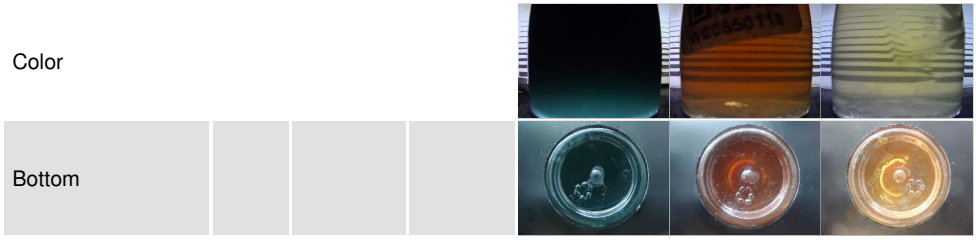
FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		<b>183587</b>	118169	93860
Particles >6µm	ASTM D7647	>10240000	<b>84570</b>	52474	19696
Particles >14µm	ASTM D7647	>10240000	<b>3520</b>	2374	1310
Particles >21µm	ASTM D7647	>2560000	<b>918</b>	460	315
Particles >38µm	ASTM D7647	>640000	<b>78</b>	9	4
Particles >71µm	ASTM D7647	>160000	<b>7</b>	1	0
Oil Cleanliness	ISO 4406 (c)	>--/30/30	<b>25/24/19</b>	24/23/18	24/21/18

FLUID DEGRADATION	method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D974*	0.60	<b>0.74</b>	0.51	0.44

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>	VLITE	NONE
Precipitate	scalar	Visual*	NONE	<b>LIGHT</b>	NONE	NONE
Silt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	Visual*	NONE	<b>NONE</b>	VLITE	VLITE
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>123</b>	94.1	102

SAMPLE IMAGES	method	limit/base	current	history1	history2
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**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **STELCO - BOSC - Basic Oxygen Slab Caster**  
**Sample No.** : WC0898666 **Received** : 10 Jan 2024 2330 Regional Road #3, Door: BOSC8  
**Lab Number** : **02608065** **Diagnosed** : 15 Jan 2024 NANTICOKE, ON  
**Unique Number** : 5709151 **Diagnostician** : Kevin Marson CA N0A 1L0  
**Test Package** : IND 2 ( Additional Tests: Bottom, 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.