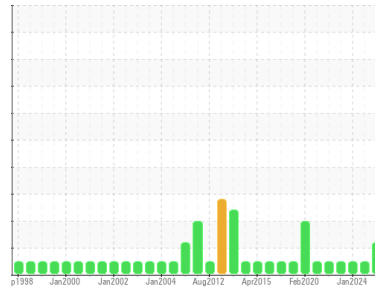




# OIL ANALYSIS REPORT

## Sample Rating Trend



## VISUAL METAL



Area

### Caster/Segment Drives

Machine Id

## B - Strand 2 - 1 Gear Box Roll # 48 Bottom

Component

### Gearbox

Fluid

### SHELL OMALA 220 (45 GAL)

## DIAGNOSIS

### Recommendation

We advise that you check for visible metal particles in the oil. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

### Wear

Light concentration of visible metal present. Gear wear is indicated.

### 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 oil is no longer serviceable as a result of the abnormal and/or severe wear.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0968490</b>	WC0913402	WC0898694
Sample Date	Client Info		<b>17 Jul 2024</b>	23 Feb 2024	10 Jan 2024
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>ABNORMAL</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>95</b>	42	34
Iron	ppm	ASTM D5185(m)	>200	<b>122</b>	107
Chromium	ppm	ASTM D5185(m)	>15	<b>&lt;1</b>	<1
Nickel	ppm	ASTM D5185(m)	>15	<b>1</b>	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0
Silver	ppm	ASTM D5185(m)		<b>0</b>	0
Aluminum	ppm	ASTM D5185(m)	>25	<b>2</b>	2
Lead	ppm	ASTM D5185(m)	>100	<b>0</b>	0
Copper	ppm	ASTM D5185(m)	>200	<b>&lt;1</b>	<1
Tin	ppm	ASTM D5185(m)	>25	<b>0</b>	0
Antimony	ppm	ASTM D5185(m)	>5	<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)	4.4	<b>8</b>	6
Barium	ppm	ASTM D5185(m)	0.0	<b>&lt;1</b>	0
Molybdenum	ppm	ASTM D5185(m)	0	<b>0</b>	0
Manganese	ppm	ASTM D5185(m)		<b>2</b>	1
Magnesium	ppm	ASTM D5185(m)	0	<b>5</b>	5
Calcium	ppm	ASTM D5185(m)	0	<b>13</b>	13
Phosphorus	ppm	ASTM D5185(m)	215	<b>257</b>	246
Zinc	ppm	ASTM D5185(m)	0	<b>4</b>	2
Sulfur	ppm	ASTM D5185(m)	7039	<b>10044</b>	10145
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1

## CONTAMINANTS

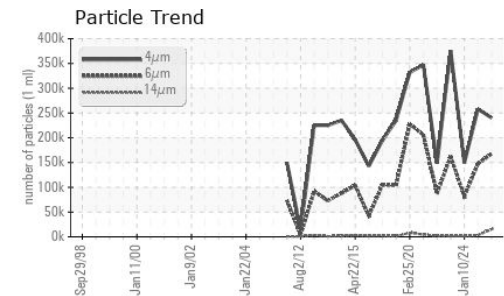
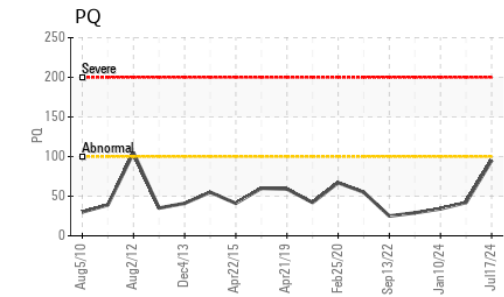
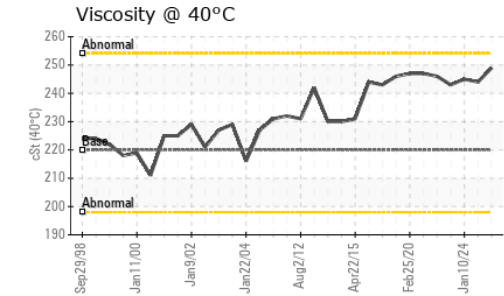
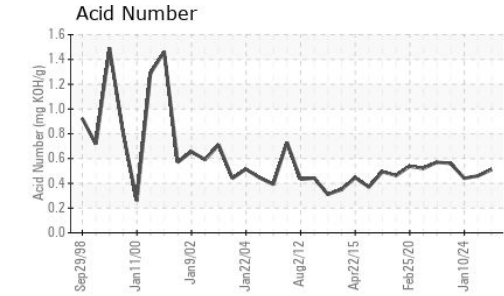
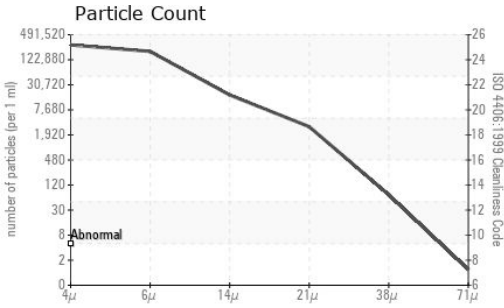
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>50	<b>6</b>	6
Sodium	ppm	ASTM D5185(m)		<b>2</b>	2
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1

Particle Filter (Magn: 100 x)





# OIL ANALYSIS REPORT



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0968490  
**Lab Number** : 02648520  
**Unique Number** : 5814072  
**Test Package** : IND 2 ( Additional Tests: Bottom, BottomAnalysis, FILTERPATCH, PQ, PrtCount, PrtFilter, TAN Contact)

**STELCO - BOSC - Basic Oxygen Slab Caster**  
 2330 Regional Road #3, Door: BOSC8  
 NANTICOKE, ON  
 CA N0A 1L0

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

FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		<b>240195</b>	257925	149152
Particles >6µm	ASTM D7647	>10240000	<b>167665</b>	147470	82033
Particles >14µm	ASTM D7647	>10240000	<b>15184</b>	3270	1298
Particles >21µm	ASTM D7647	>2560000	<b>2643</b>	626	177
Particles >38µm	ASTM D7647	>640000	<b>62</b>	26	9
Particles >71µm	ASTM D7647	>160000	<b>1</b>	0	4
Oil Cleanliness	ISO 4406 (c)	>--/30/30	<b>25/25/21</b>	25/24/19	24/24/17

FLUID DEGRADATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D974*		<b>0.51</b>	0.46	0.44

VISUAL	method	limit/base	current	history1	history2
White Metal	scalar Visual*	NONE	<b>▲ LTMOD</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>MODER</b>	NONE	NONE
Debris	scalar Visual*	NONE	<b>NONE</b>	NONE	VLITE
Sand/Dirt	scalar Visual*	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar Visual*	NORML	<b>NORML</b>	NORML	MILKY
Odor	scalar Visual*	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar Visual*	>5	<b>NEG</b>	NEG	.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)	220	<b>249</b>	244	245

SAMPLE IMAGES	method	limit/base	current	history1	history2
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