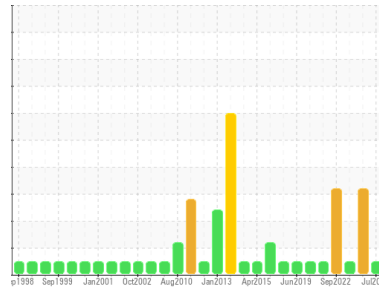




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area

**Caster/Segment Drives**

Machine Id

**B - Strand 2 - 1 Gear Box Roll # 65 Bottom**

Component

**Gearbox**

Fluid

**SHELL OMALA 220 (45 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

Viscosity of sample indicates oil is within ISO 320 range, advise investigate. 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>WC0968484</b>	WC0898688	WC0824365
Sample Date	Client Info	<b>17 Jul 2024</b>	10 Jan 2024	30 May 2023
Machine Age	hrs	Client Info	0	0
Oil Age	hrs	Client Info	0	0
Oil Changed	Client Info	<b>N/A</b>	N/A	N/A
Sample Status		<b>NORMAL</b>	SEVERE	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>0</b>	---	0
Iron	ppm ASTM D5185(m) >200	<b>10</b>	---	10
Chromium	ppm ASTM D5185(m) >15	<b>0</b>	---	0
Nickel	ppm ASTM D5185(m) >15	<b>&lt;1</b>	---	0
Titanium	ppm ASTM D5185(m)	<b>0</b>	---	0
Silver	ppm ASTM D5185(m)	<b>&lt;1</b>	---	<1
Aluminum	ppm ASTM D5185(m) >25	<b>&lt;1</b>	---	<1
Lead	ppm ASTM D5185(m) >100	<b>0</b>	---	0
Copper	ppm ASTM D5185(m) >200	<b>&lt;1</b>	---	0
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

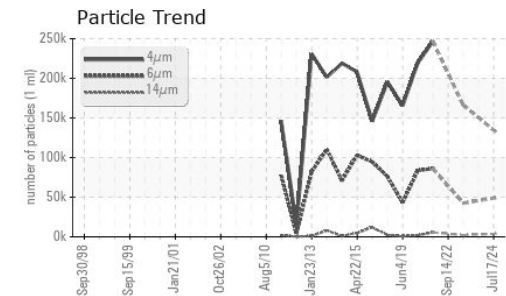
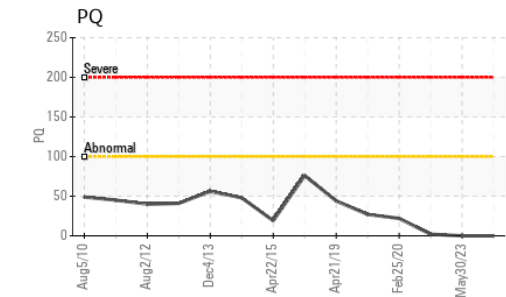
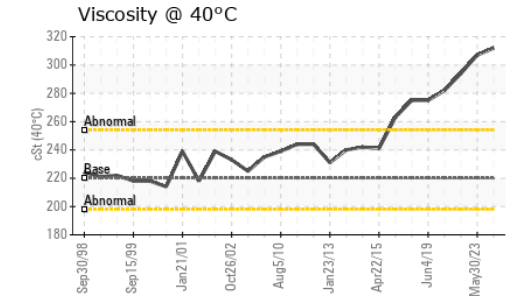
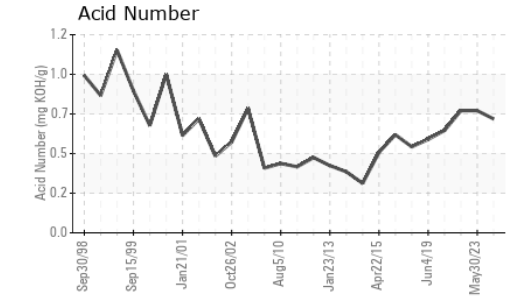
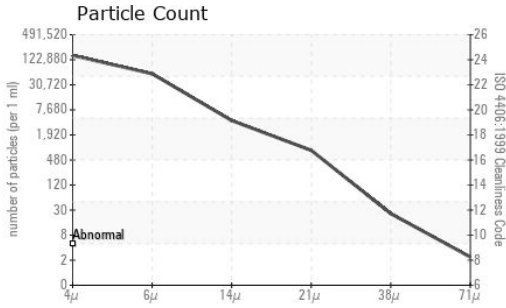
method	limit/base	current	history1	history2
Boron	ppm ASTM D5185(m) 4.4	<b>26</b>	---	25
Barium	ppm ASTM D5185(m) 0.0	<b>0</b>	---	0
Molybdenum	ppm ASTM D5185(m) 0	<b>0</b>	---	0
Manganese	ppm ASTM D5185(m)	<b>0</b>	---	<1
Magnesium	ppm ASTM D5185(m) 0	<b>0</b>	---	<1
Calcium	ppm ASTM D5185(m) 0	<b>2</b>	---	<1
Phosphorus	ppm ASTM D5185(m) 215	<b>342</b>	---	360
Zinc	ppm ASTM D5185(m) 0	<b>3</b>	---	1
Sulfur	ppm ASTM D5185(m) 7039	<b>9867</b>	---	9820
Lithium	ppm ASTM D5185(m)	<b>&lt;1</b>	---	<1

## CONTAMINANTS

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



# OIL ANALYSIS REPORT



FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		<b>134788</b>	---	166046
Particles >6µm	ASTM D7647	>10240000	<b>48950</b>	---	42461
Particles >14µm	ASTM D7647	>10240000	<b>3712</b>	---	2050
Particles >21µm	ASTM D7647	>2560000	<b>719</b>	---	348
Particles >38µm	ASTM D7647	>640000	<b>22</b>	---	4
Particles >71µm	ASTM D7647	>160000	<b>2</b>	---	0
Oil Cleanliness	ISO 4406 (c)	>--/30/30	<b>24/23/19</b>	---	25/23/18

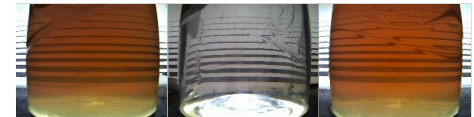
FLUID DEGRADATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D974*		<b>0.69</b>	---	0.74

VISUAL	method	limit/base	current	history1	history2
White Metal	scalar Visual*	NONE	<b>VLITE</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	VLITE
Appearance	scalar Visual*	NORML	<b>NORML</b>	▲ NOOIL	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

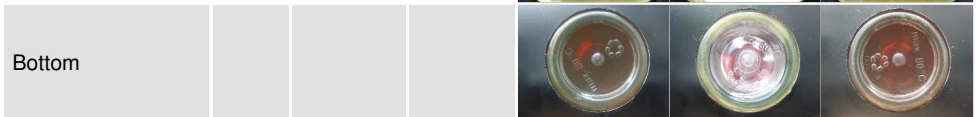
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt ASTM D7279(m)	220	<b>312</b>	---	307

SAMPLE IMAGES	method	limit/base	current	history1	history2
---------------	--------	------------	---------	----------	----------

Color



Bottom



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0968484  
**Lab Number** : 02648526  
**Unique Number** : 5814078  
**Test Package** : IND 2 ( Additional Tests: PQ, PrtCount, TAN Man )

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