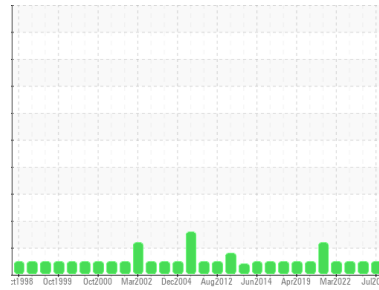




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area

**Caster/Segment Drives**

Machine Id

**B - Strand 2 - 2 Gear Box Roll # 20 Top**

Component

**Gearbox**

Fluid

**SHELL OMALA 220 (36 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>WC0968476</b>	WC0838958	WC0743644
Sample Date	Client Info		<b>16 Jul 2024</b>	13 Jul 2023	13 Sep 2022
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	>5	<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184*	>DFLT	<b>2</b>	0	0
Iron	ppm	ASTM D5185(m) >200	<b>72</b>	60	78
Chromium	ppm	ASTM D5185(m) >15	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185(m) >15	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m) >25	<b>&lt;1</b>	<1	<1
Lead	ppm	ASTM D5185(m) >100	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185(m) >200	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185(m) >25	<b>0</b>	0	0
Antimony	ppm	ASTM D5185(m) >5	<b>0</b>	0	<1
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

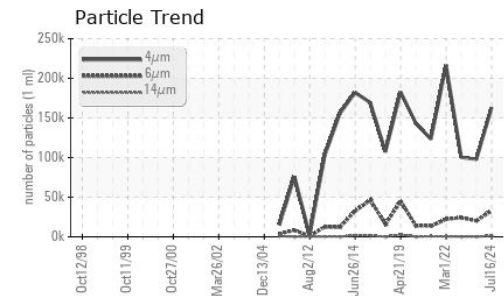
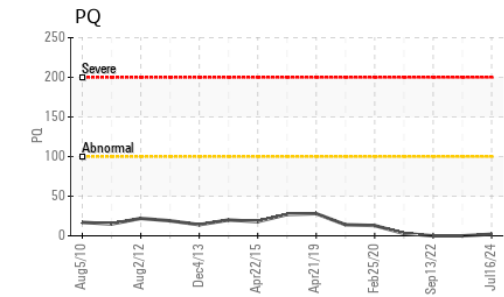
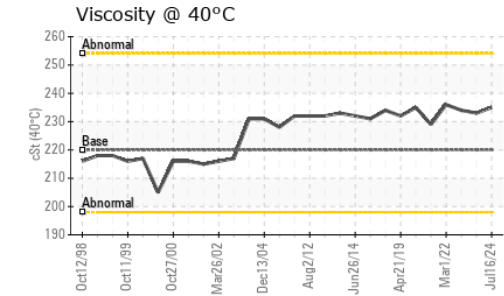
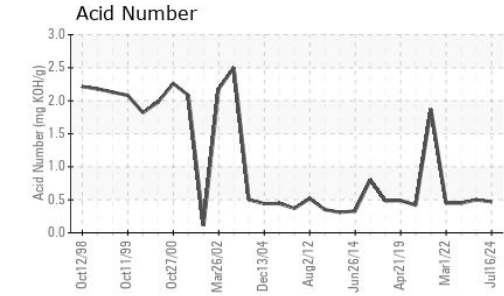
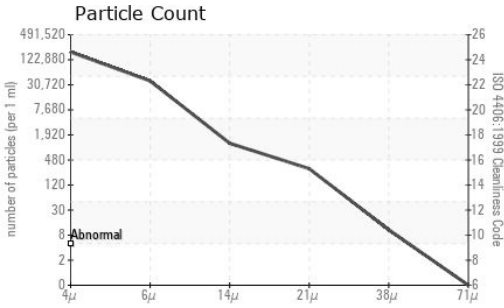
	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m) 4.4	<b>&lt;1</b>	<1	<1
Barium	ppm	ASTM D5185(m) 0.0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m) 0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185(m)	<b>1</b>	<1	1
Magnesium	ppm	ASTM D5185(m) 0	<b>&lt;1</b>	<1	<1
Calcium	ppm	ASTM D5185(m) 0	<b>2</b>	1	<1
Phosphorus	ppm	ASTM D5185(m) 215	<b>185</b>	180	192
Zinc	ppm	ASTM D5185(m) 0	<b>8</b>	7	7
Sulfur	ppm	ASTM D5185(m) 7039	<b>8109</b>	8102	8262
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >50	<b>2</b>	3	3
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



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0968476  
**Lab Number** : 02648501  
**Unique Number** : 5814053  
**Test Package** : IND 2 ( Additional Tests: PQ, PrtCount )

**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

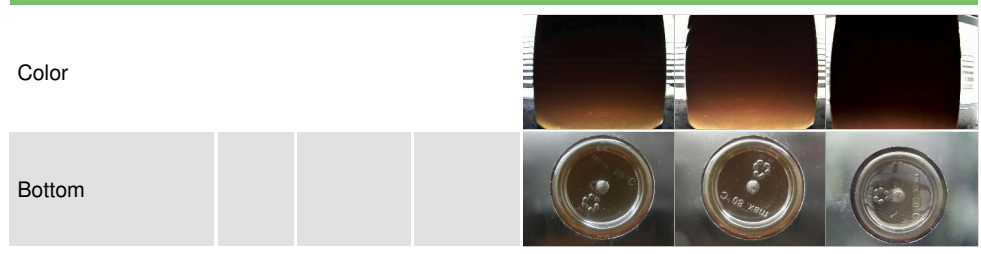
FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		<b>162756</b>	97883	100206
Particles >6µm	ASTM D7647	>10240000	<b>32941</b>	20072	23988
Particles >14µm	ASTM D7647	>10240000	<b>1060</b>	306	334
Particles >21µm	ASTM D7647	>25600000	<b>261</b>	63	73
Particles >38µm	ASTM D7647	>6400000	<b>9</b>	1	1
Particles >71µm	ASTM D7647	>1600000	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>--/30/30	<b>25/22/17</b>	24/22/15	24/22/16

FLUID DEGRADATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D974*		<b>0.47</b>	0.50	0.45

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>VLITE</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	.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>235</b>	233	234

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color

Bottom