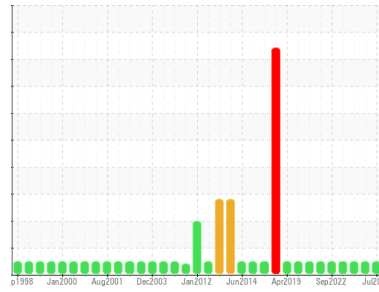




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area

**Caster/Segment Drives**

Machine Id

**B - Strand 2 - 1 Gear Box Roll # 85 Top**

Component

**Gearbox**

Fluid

**SHELL OMALA 220 (45 GAL)**

## DIAGNOSIS

### Recommendation

Confirm the source of the lubricant being utilized for top-up/fill. 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

Additive levels indicate the addition of a different brand, or type of oil. 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>WC0968477</b>	WC0913407	WC0898679
Sample Date	Client Info	<b>17 Jul 2024</b>	23 Feb 2024	10 Jan 2024
Machine Age	hrs	Client Info	<b>0</b>	0
Oil Age	hrs	Client Info	<b>0</b>	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>3</b>	28	12	
Iron	ppm	ASTM D5185(m) >200	<b>24</b>	29	24
Chromium	ppm	ASTM D5185(m) >15	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185(m) >15	<b>&lt;1</b>	0	<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>	0	0
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	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

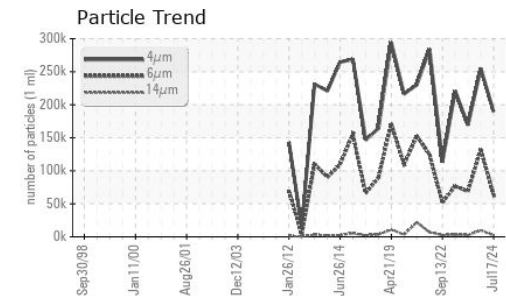
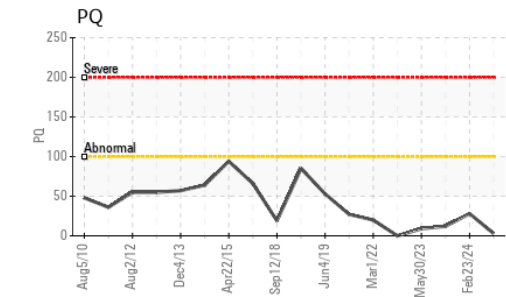
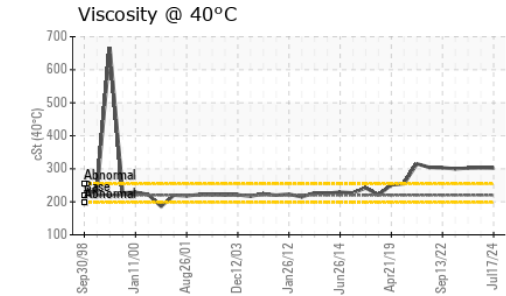
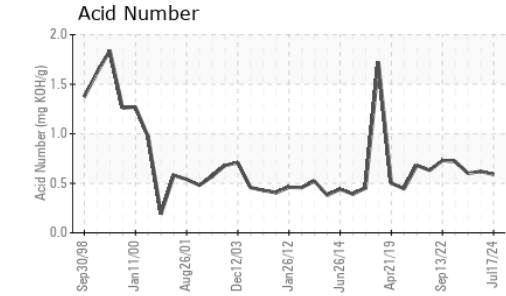
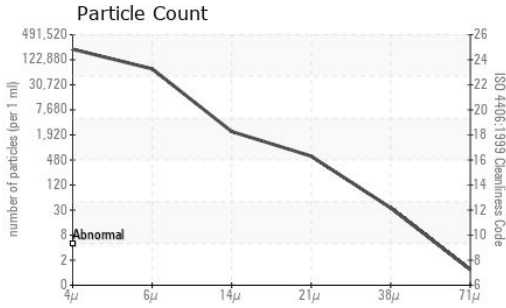
method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185(m) 4.4	<b>22</b>	21	21
Barium	ppm	ASTM D5185(m) 0.0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m) 0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185(m)	<b>&lt;1</b>	0	0
Magnesium	ppm	ASTM D5185(m) 0	<b>&lt;1</b>	<1	1
Calcium	ppm	ASTM D5185(m) 0	<b>3</b>	3	3
Phosphorus	ppm	ASTM D5185(m) 215	<b>329</b>	314	316
Zinc	ppm	ASTM D5185(m) 0	<b>2</b>	1	2
Sulfur	ppm	ASTM D5185(m) 7039	<b>15268</b>	15337	14965
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>	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



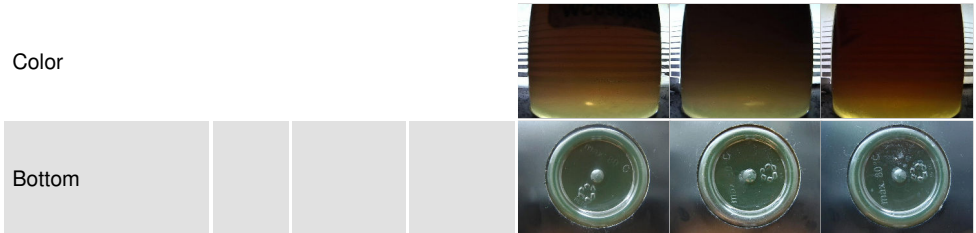
FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		<b>189456</b>	254974	169207
Particles >6µm	ASTM D7647	>10240000	<b>64174</b>	132242	68710
Particles >14µm	ASTM D7647	>10240000	<b>2028</b>	9749	2656
Particles >21µm	ASTM D7647	>2560000	<b>521</b>	2697	626
Particles >38µm	ASTM D7647	>640000	<b>30</b>	156	31
Particles >71µm	ASTM D7647	>160000	<b>1</b>	7	2
Oil Cleanliness	ISO 4406 (c)	>--/30/30	<b>25/23/18</b>	25/24/20	25/23/19

FLUID DEGRADATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D974*		<b>0.59</b>	0.62	0.60

VISUAL	method	limit/base	current	history1	history2
White Metal	scalar Visual*	NONE	<b>LIGHT</b>	LIGHT	VLITE
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>	VLITE	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	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>302</b>	303	302

### SAMPLE IMAGES



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0968477  
**Lab Number** : **02648500**  
**Unique Number** : 5814052  
**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

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.