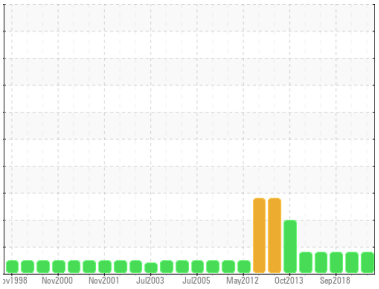
OIL ANALYSIS REPORT

Sample Rating Trend



WEAR

Area
BOF/ALLOY SYSTEM
Machine Id
A - F3 Conveyor Drive Gear Box
Component
Gearbox
Fluid
SHELL OMALA 220 (8 GAL)

DIAGNOSIS

▲ Recommendation
Resample at the next service interval to monitor.

▲ Wear
Iron ppm levels are noted. The low ferrous density (PQ) index indicates the wear metal levels are due to corrosion. All other 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		**WC0898705**	WC0838940	WC22131675
Sample Date		Client Info		**10 Jan 2024**	13 Jul 2023	12 Sep 2018
Machine Age	hrs	Client Info		**0**	0	0
Oil Age	hrs	Client Info		**0**	0	0
Oil Changed		Client Info		**N/A**	N/A	N/A
Sample Status				**ATTENTION**	ATTENTION	ATTENTION

CONTAMINATION		method	limit/base	current	history1	history2
Water		WC Method	>5	**NEG**	NEG	NEG

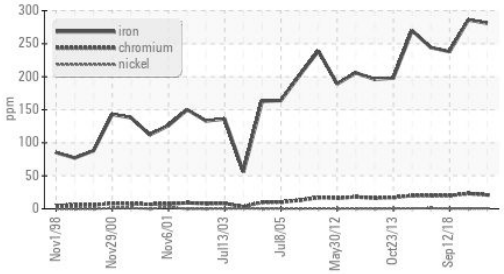
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184*	>DFLT	**71**	59	55
Iron	ppm	ASTM D5185(m)	>200	▲ **281**	▲ 286	▲ 238
Chromium	ppm	ASTM D5185(m)	>15	**21**	23	20
Nickel	ppm	ASTM D5185(m)	>15	**<1**	<1	<1
Titanium	ppm	ASTM D5185(m)		**0**	<1	0
Silver	ppm	ASTM D5185(m)		**0**	0	0
Aluminum	ppm	ASTM D5185(m)	>25	**3**	3	3
Lead	ppm	ASTM D5185(m)	>100	**6**	7	7
Copper	ppm	ASTM D5185(m)	>200	**1**	1	2
Tin	ppm	ASTM D5185(m)	>25	**0**	0	0
Antimony	ppm	ASTM D5185(m)	>5	**0**	0	0
Vanadium	ppm	ASTM D5185(m)		**0**	0	0
Beryllium	ppm	ASTM D5185(m)		**0**	0	0
Cadmium	ppm	ASTM D5185(m)		**0**	0	<1

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	4.4	**2**	<1	<1
Barium	ppm	ASTM D5185(m)	0.0	**0**	<1	<1
Molybdenum	ppm	ASTM D5185(m)	0	**0**	0	<1
Manganese	ppm	ASTM D5185(m)		**4**	4	3
Magnesium	ppm	ASTM D5185(m)	0	**10**	9	8
Calcium	ppm	ASTM D5185(m)	0	**13**	10	12
Phosphorus	ppm	ASTM D5185(m)	215	**528**	605	589
Zinc	ppm	ASTM D5185(m)	0	**47**	45	39
Sulfur	ppm	ASTM D5185(m)	7039	**7231**	7278	7540
Lithium	ppm	ASTM D5185(m)		**<1**	<1	<1

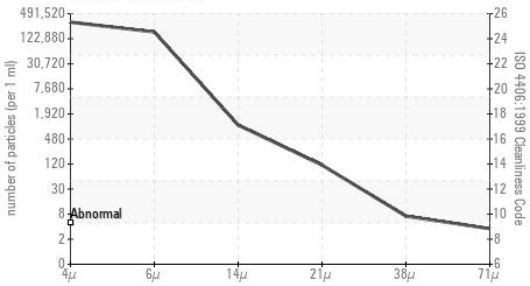
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>50	**2**	2	2
Sodium	ppm	ASTM D5185(m)		**3**	4	3
Potassium	ppm	ASTM D5185(m)	>20	**8**	8	7

OIL ANALYSIS REPORT

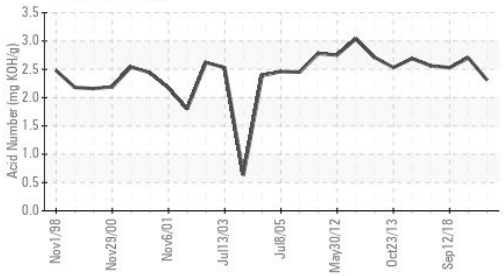
Ferrous Alloys



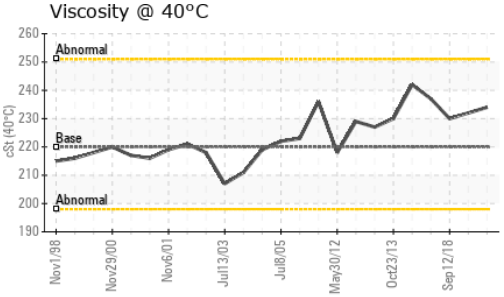
Particle Count



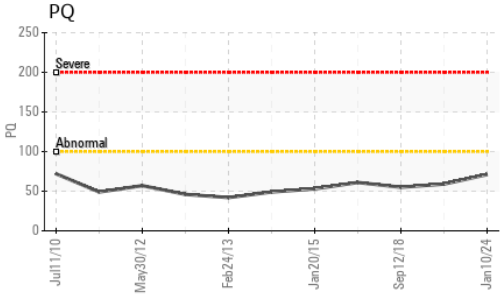
Acid Number



Viscosity @ 40°C



PQ



FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		**264377**	327616	201017
Particles >6µm		ASTM D7647	>10240000	**154124**	172376	94210
Particles >14µm		ASTM D7647	>10240000	**911**	789	1069
Particles >21µm		ASTM D7647	>2560000	**100**	85	278
Particles >38µm		ASTM D7647	>640000	**6**	0	4
Particles >71µm		ASTM D7647	>160000	**3**	0	0
Oil Cleanliness		ISO 4406 (c)	>--/30/30	**25/24/17**	26/25/17	25/24/17

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*		**2.31**	2.70	2.53

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	**NONE**	NONE	NONE
Precipitate	scalar	Visual*	NONE	**NONE**	NONE	NONE
Silt	scalar	Visual*	NONE	**NONE**	NONE	NONE
Debris	scalar	Visual*	NONE	**NONE**	NONE	LIGHT
Sand/Dirt	scalar	Visual*	NONE	**NONE**	NONE	NONE
Appearance	scalar	Visual*	NORML	**NORML**	NORML	NORML
Odor	scalar	Visual*	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	Visual*	>5	**NEG**	NEG	NEG
Free Water	scalar	Visual*		**NEG**	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	220	**234**	232	230

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0898705
Lab Number : 02608042
Unique Number : 5709128
Test Package : IND 2 (Additional Tests: PQ, PrtCount)

Recieved : 10 Jan 2024
Diagnosed : 12 Jan 2024
Diagnostician : Kevin Marson

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.

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

Report Id: LEWBOSC [WCAMIS] 02608042 (Generated: 01/12/2024 11:34:10) Rev: 1

Submitted By: Bob Melanson