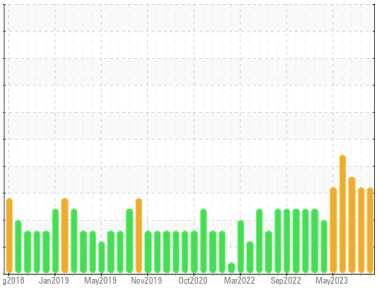
PROBLEM SUMMARY

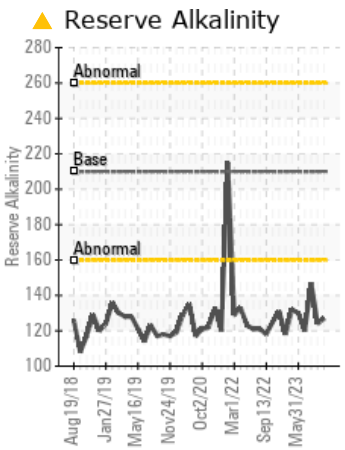
Area
RHOB/HYDRAULICS
Machine Id
E - Ladle Lift Hydraulics
Component
Tank Hydraulic System
Fluid
FORSYTHE NO FIRE WG 200R (1320 GAL)

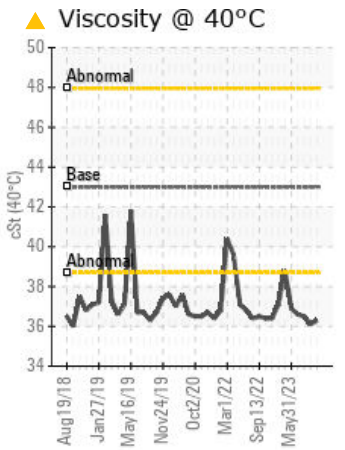
Sample Rating Trend

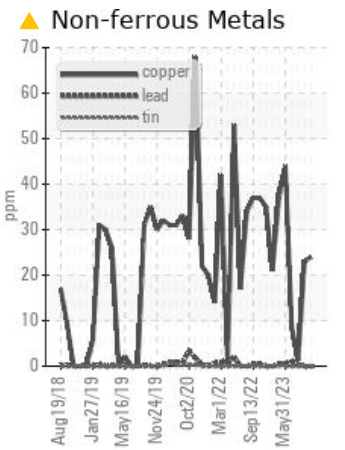


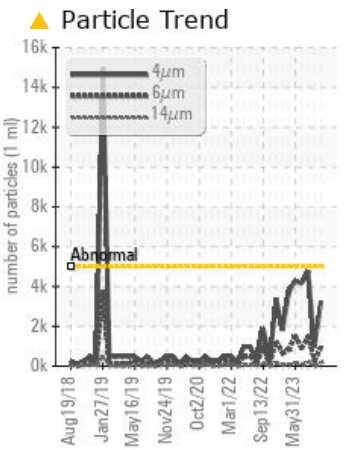
DEGRADATION

COMPONENT CONDITION SUMMARY









RECOMMENDATION

Due to the low reserve alkalinity it is advised that you contact FORSYTHE to assist in restoring the proper amine concentration. We recommend you service the filters on this component. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				**ABNORMAL**	ABNORMAL	ABNORMAL
Copper	ppm	ASTM D5185(m)	>20	▲ **24**	▲ 23	1
Particles >21µm		ASTM D7647	>40	▲ **71**	2	▲ 99
Particles >38µm		ASTM D7647	>10	▲ **17**	0	▲ 48

Customer Id: LEWBOSC
Sample No.: WC0871214
Lab Number: 02589792
Test Package: IND 2

To manage this report scan the QR code

To discuss the diagnosis or test data:
Kevin Marson +1 (289)291-4644 x4644
Kevin.Marson@wearcheck.com

To change component or sample information:
Gloria Gonzalez +1 (289)291-4643 x4643
gloria.gonzalez@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Filter	---	---	?	We recommend you service the filters on this component.
Resample	---	---	?	We recommend an early resample to monitor this condition.
Contact Required	---	---	?	Due to the low reserve alkalinity it is advised that you contact FORSYTHE to assist in restoring the proper amine concentration.

HISTORICAL DIAGNOSIS

DEGRADATION

16 Aug 2023 Diag: Kevin Marson

Due to the low reserve alkalinity it is advised that you contact FORSYTHE to assist in restoring the proper amine concentration. We recommend an early resample to monitor this condition. Please contact your representative for information regarding the proper sampling kits for your service. NOTE: We recommend using IND 3 test kits, this testkit includes Analytical Ferrography which provides a detailed morphological analysis of wear particles present in the fluid.Copper and silver ppm levels are abnormal. A sharp increase in the copper level is noted. A sharp increase in the silver level is noted. Oil cooler core leaching or motor piston wear is indicated. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. The reserve alkalinity of this fluid is lower than acceptable. Viscosity of sample indicates oil is within ISO 32 range, advise investigate. The AN level is acceptable for this fluid. The pH level of this fluid is within the acceptable limits. The water concentration level is acceptable for this fluid.

view report

DEGRADATION

13 Jul 2023 Diag: Kevin Marson

view report

COOL CHEMICALS

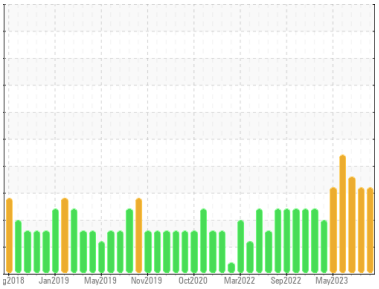
20 Jun 2023 Diag: Kevin Marson

Due to the low reserve alkalinity it is advised that you contact FORSYTHE to assist in restoring the proper amine concentration. Confirm the source of the lubricant being utilized for top-up/fill. We recommend an early resample to monitor this condition. Please contact your representative for information regarding the proper sampling kits for your service. NOTE: We recommend using IND 3 test kits, this testkit includes Analytical Ferrography which provides a detailed morphological analysis of wear particles present in the fluid.Component wear rates appear to be normal (unconfirmed). The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. The reserve alkalinity of this fluid is lower than acceptable. Viscosity of sample indicates oil is within ISO 32 range, advise investigate. This plus the additive levels indicates that this is not the same brand, or type of oil as reported. The AN level is acceptable for this fluid. The pH level of this fluid is within the acceptable limits. The water concentration level is acceptable for this fluid.

view report

COOLANT REPORT

Sample Rating Trend



DEGRADATION

Area
RHOB/HYDRAULICS
Machine Id
E - Ladle Lift Hydraulics
Component
Tank Hydraulic System
Fluid
FORSYTHE NO FIRE WG 200R (1320 GAL)

DIAGNOSIS

Recommendation

Due to the low reserve alkalinity it is advised that you contact FORSYTHE to assist in restoring the proper amine concentration. We recommend you service the filters on this component. We recommend an early resample to monitor this condition.

Wear

Copper ppm levels are abnormal. Oil cooler core leaching or motor piston wear is indicated.

Contamination

There is a light amount of silt (particulates < 14 microns in size) present in the oil.

Fluid Condition

The reserve alkalinity of this fluid is lower than acceptable. Viscosity of sample indicates oil is within ISO 32 range, advise investigate. The AN level is acceptable for this fluid. The pH level of this fluid is within the acceptable limits. The water concentration level is acceptable for this fluid.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC0871214**	WC0850110	WC0838978
Sample Date		Client Info		**16 Oct 2023**	16 Aug 2023	13 Jul 2023
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				**ABNORMAL**	ABNORMAL	ABNORMAL

CORROSION INHIBITORS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)		**<1**	0	<1
Phosphorus	ppm	ASTM D5185(m)		**<1**	0	0
Boron	ppm	ASTM D5185(m)		**<1**	<1	<1
Molybdenum	ppm	ASTM D5185(m)		**0**	0	<1

CORROSION		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>20	**0**	0	<1
Aluminum	ppm	ASTM D5185(m)	>20	**0**	0	0
Copper	ppm	ASTM D5185(m)	>20	▲ **24**	▲ 23	1
Lead	ppm	ASTM D5185(m)	>20	**0**	0	<1
Tin	ppm	ASTM D5185(m)	>20	**0**	0	0
Silver	ppm	ASTM D5185(m)		**<1**	▲ 2	0
Zinc	ppm	ASTM D5185(m)		**6**	10	0

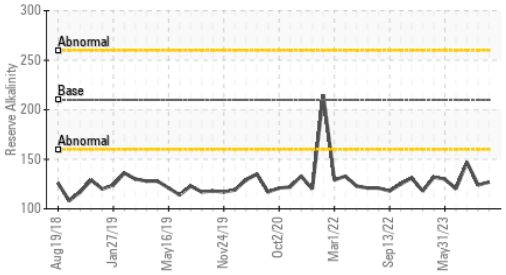
CONTAMINANTS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	**3252**	963	4770
Particles >6µm		ASTM D7647	>1300	**939**	271	▲ 1465
Particles >14µm		ASTM D7647	>160	**157**	27	▲ 190
Particles >21µm		ASTM D7647	>40	▲ **71**	2	▲ 99
Particles >38µm		ASTM D7647	>10	▲ **17**	0	▲ 48
Particles >71µm		ASTM D7647	>3	**0**	0	29
Oil Cleanliness		ISO 4406 (c)	>19/17/14	**19/17/14**	17/15/12	▲ 19/18/15

CARRIER SALTS		method	limit/base	current	history1	history2
Sodium	ppm	ASTM D5185(m)		**153**	176	138
Potassium	ppm	ASTM D5185(m)		**21**	12	0

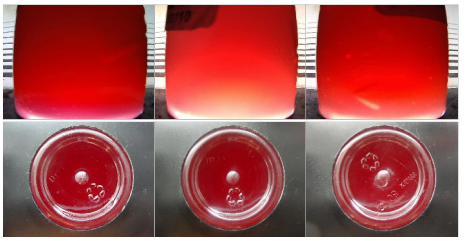
SCALE POTENTIAL		method	limit/base	current	history1	history2
Calcium	ppm	ASTM D5185(m)		**<1**	6	<1
Magnesium	ppm	ASTM D5185(m)		**0**	<1	<1

COOLANT REPORT

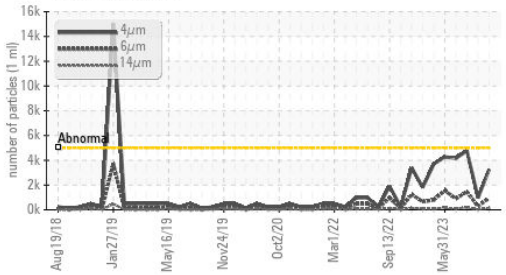
Reserve Alkalinity



VISUAL	method	limit/base	current	history1	history2
Color					
Bottom					

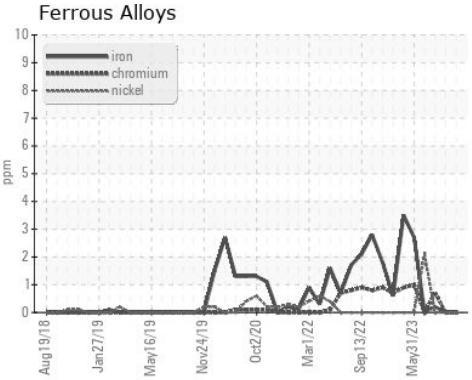


Particle Trend

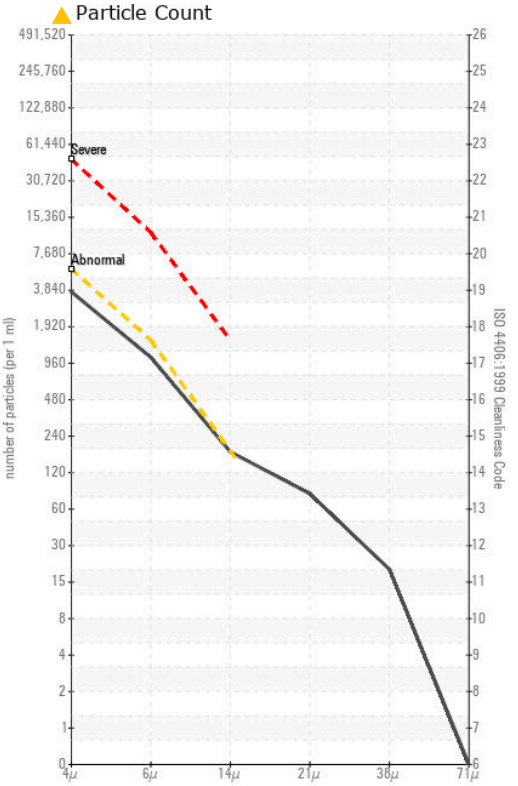


GRAPHS

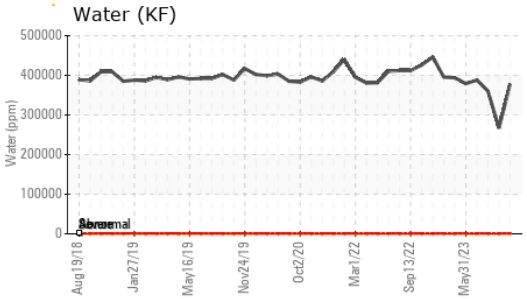
Ferrous Alloys



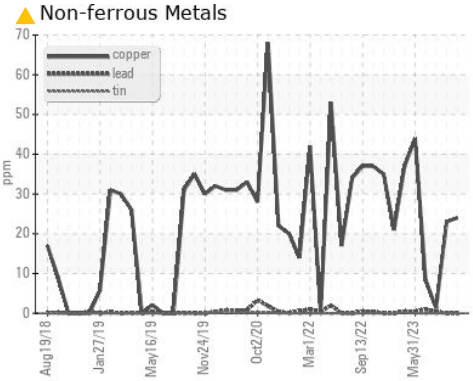
Particle Count



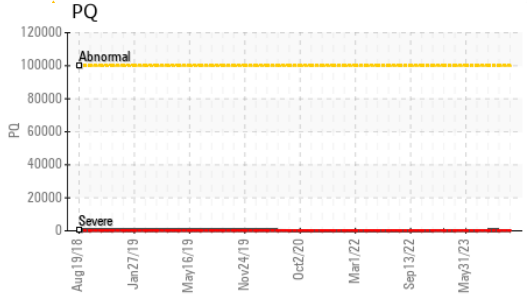
Water (KF)



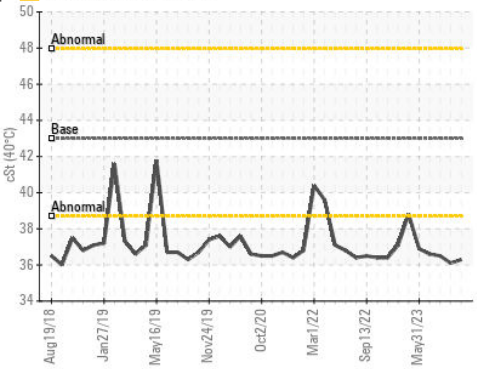
Non-ferrous Metals



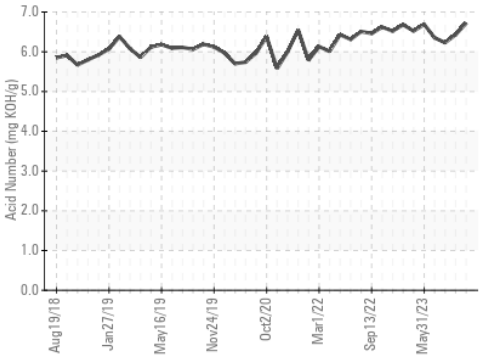
PQ



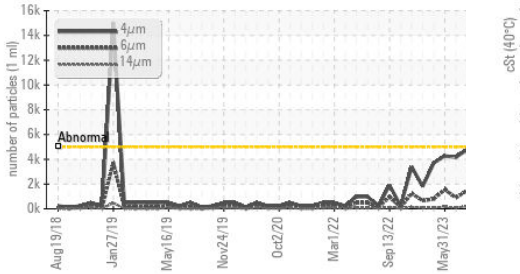
Viscosity @ 40°C



Acid Number



Particle Trend



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **STELCO - BOSC - Basic Oxygen Slab Caster**
Sample No. : WC0871214 **Received** : 17 Oct 2023 2330 Regional Road #3, Door: BOSC8
Lab Number : 02589792 **Diagnosed** : 19 Oct 2023 NANTICOKE, ON
Unique Number : 5658858 **Diagnostician** : Kevin Marson CA N0A 1L0
Test Package : IND 2 (Additional Tests: KF, pH, PQ, ReserveAlk, TAN Man) Contact: Tom Walden

To discuss this sample report, contact Customer Service at 1-800-268-2131. Thomas.Walden@stelco.com
Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. T: (519)587-4541
Validity of results and interpretation are based on the sample and information as supplied. F: (519)587-7702