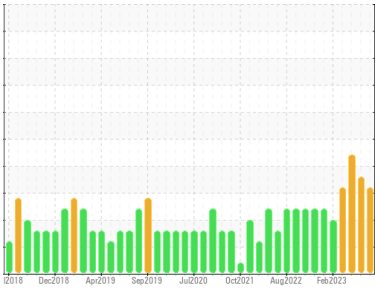
PROBLEM SUMMARY

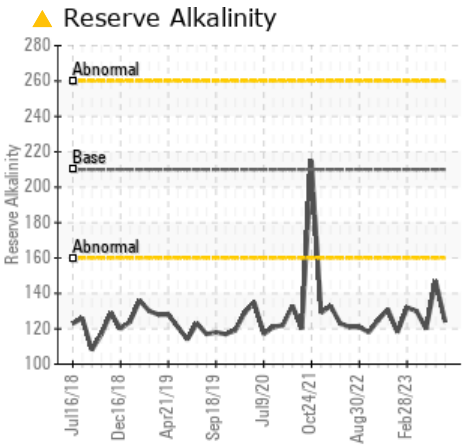
Sample Rating Trend

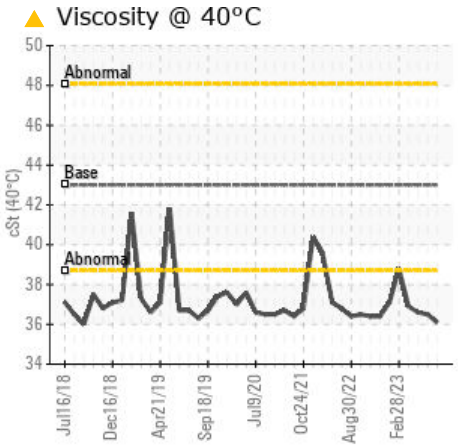


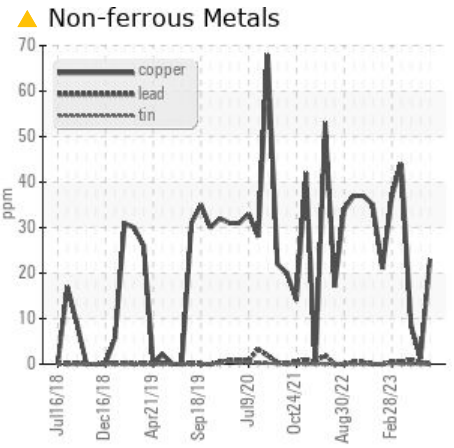
DEGRADATION

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

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 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.

PROBLEMATIC TEST RESULTS

Sample Status				**ABNORMAL**	ABNORMAL	ABNORMAL
Copper	ppm	ASTM D5185(m)	>20	▲ **23**	1	8
Silver	ppm	ASTM D5185(m)		▲ **2**	0	<1

Customer Id: LEWBOSC
Sample No.: WC0850110
Lab Number: 02576287
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
Resample	---	---	?	We recommend an early resample to monitor this condition.
Contact Required	---	---	?	Please contact your representative for information regarding the proper sampling kits for your service.
Alert	---	---	?	NOTE: We recommend using IND 3 test kits,

HISTORICAL DIAGNOSIS

13 Jul 2023 Diag: Kevin Marson

DEGRADATION

view report

20 Jun 2023 Diag: Kevin Marson

COOL CHEMICALS

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

31 May 2023 Diag: Kevin Marson

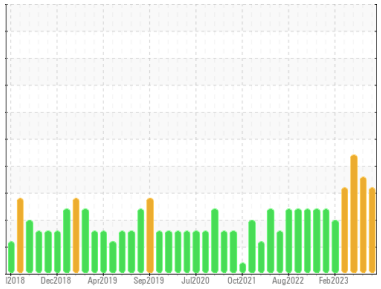
DEGRADATION

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.Copper ppm levels are abnormal. Oil cooler core leaching or motor piston wear is indicated. There is a light amount of silt (particulates < 14 microns in size) present in the oil. 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

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 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.

▲ Wear

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.

Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

▲ 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		**WC0850110**	WC0838978	WC0832561
Sample Date		Client Info		**16 Aug 2023**	13 Jul 2023	20 Jun 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)		**0**	<1	0
Phosphorus	ppm	ASTM D5185(m)		**0**	0	0
Boron	ppm	ASTM D5185(m)		**<1**	<1	2
Molybdenum	ppm	ASTM D5185(m)		**0**	<1	2

CORROSION		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>20	**0**	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	**0**	0	<1
Copper	ppm	ASTM D5185(m)	>20	▲ **23**	1	8
Lead	ppm	ASTM D5185(m)	>20	**0**	<1	1
Tin	ppm	ASTM D5185(m)	>20	**0**	0	0
Silver	ppm	ASTM D5185(m)		▲ **2**	0	<1
Zinc	ppm	ASTM D5185(m)		**10**	0	0

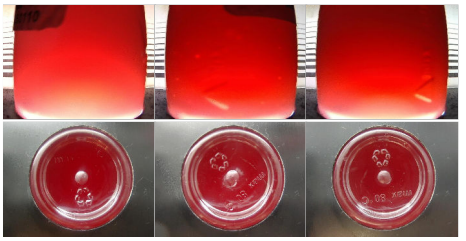
CONTAMINANTS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	**963**	4770	4158
Particles >6µm		ASTM D7647	>1300	**271**	▲ 1465	895
Particles >14µm		ASTM D7647	>160	**27**	▲ 190	88
Particles >21µm		ASTM D7647	>40	**2**	▲ 99	35
Particles >38µm		ASTM D7647	>10	**0**	▲ 48	0
Particles >71µm		ASTM D7647	>3	**0**	29	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	**17/15/12**	▲ 19/18/15	19/17/14

CARRIER SALTS		method	limit/base	current	history1	history2
Sodium	ppm	ASTM D5185(m)		**176**	138	▲ 178
Potassium	ppm	ASTM D5185(m)		**12**	0	▲ 6

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

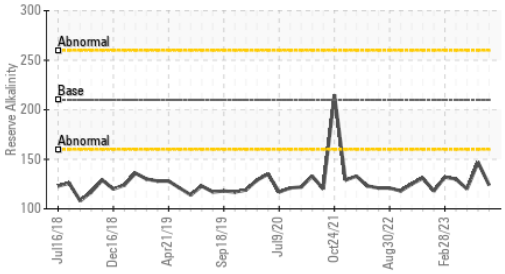
COOLANT REPORT

VISUAL	method	limit/base	current	history1	history2
Color					
Bottom					

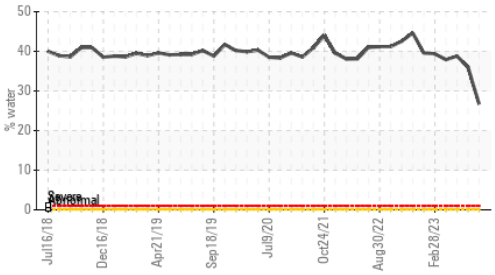


GRAPHS

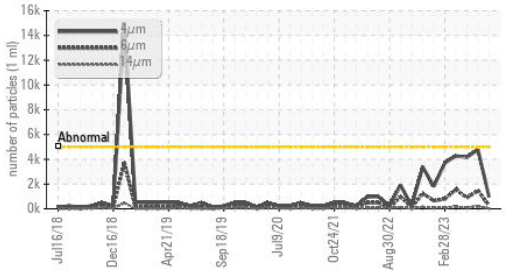
Reserve Alkalinity



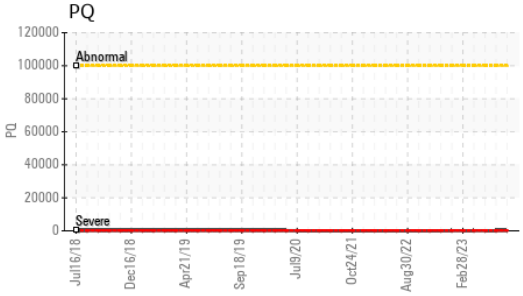
Water



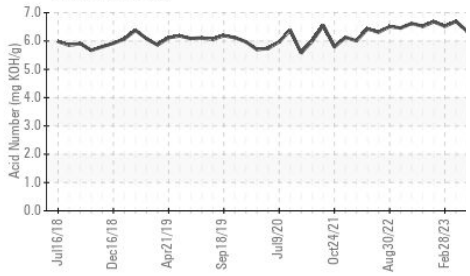
Particle Trend



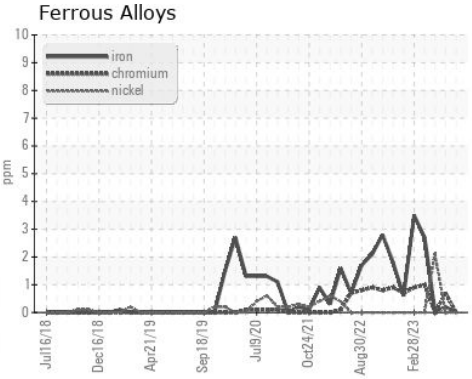
PQ



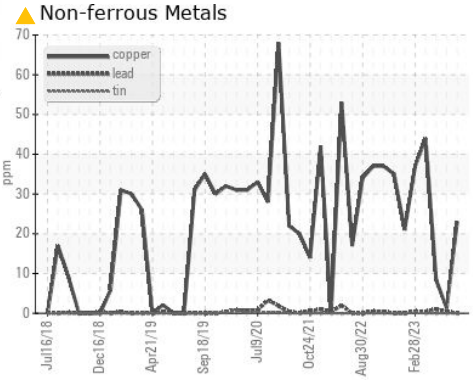
Acid Number



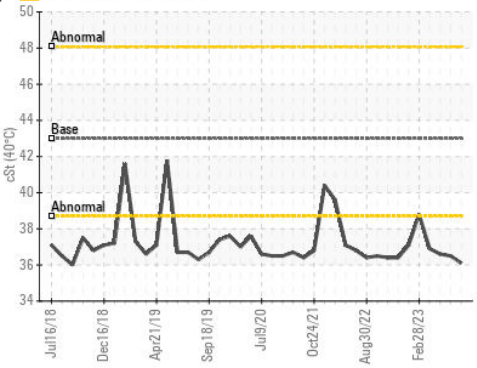
Ferrous Alloys



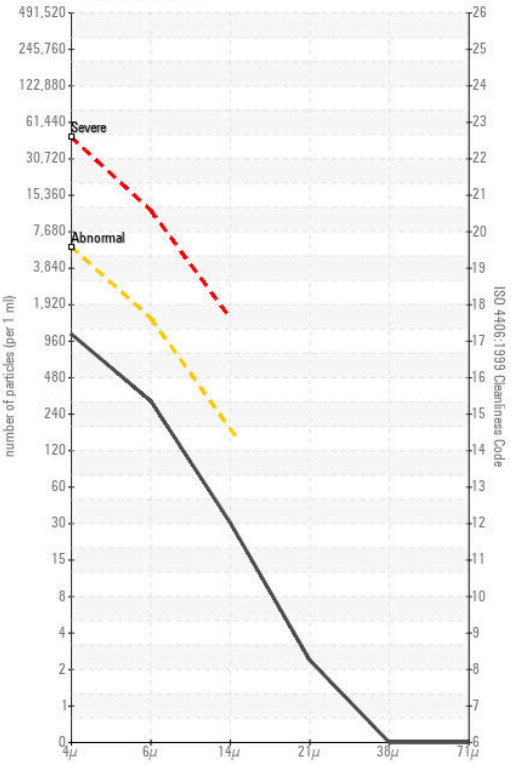
Non-ferrous Metals



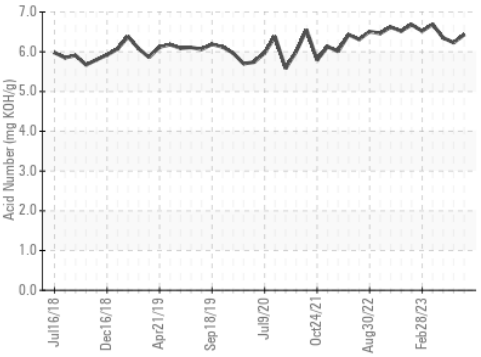
Viscosity @ 40°C



Particle Count



Acid Number



ISO 17025:2017 Accredited Laboratory

Laboratory	: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9	**STELCO - BOSC - Basic Oxygen Slab Caster**		
Sample No.	: WC0850110	**Received**	: 16 Aug 2023	2330 Regional Road #3, Door: BOSC8
Lab Number	: 02576287	**Diagnosed**	: 21 Aug 2023	NANTICOKE, ON
Unique Number	: 5629347	**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.
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.

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F: (519)587-7702