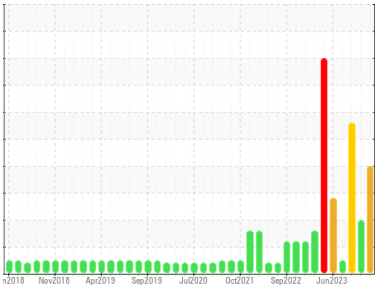
PROBLEM SUMMARY

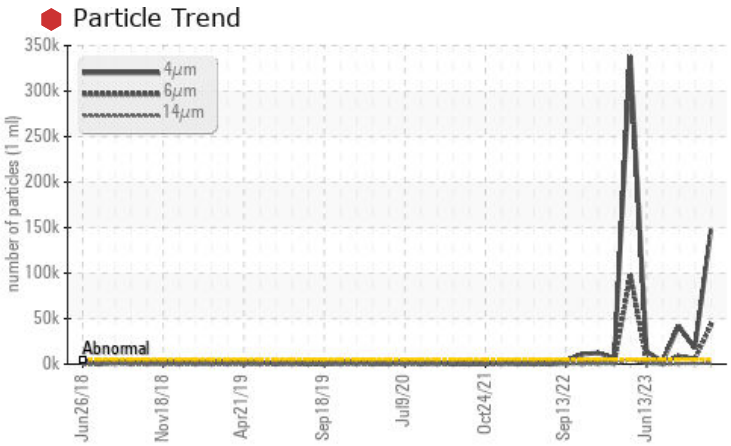
Sample Rating Trend



ISO

Area
BOF/OG SYSTEM
Machine Id
D - 7 Skirt Lifting and Seal Jacking Hydraulics
Component
Hydraulic System
Fluid
FORSYTHE NO FIRE WG 200R (350 GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

Check seals and/or filters for points of contaminant entry. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. We recommend you service the filters on this component. Resample in 30-45 days to monitor this situation.

PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	ABNORMAL	SEVERE
Particles >4µm		ASTM D7647	>5000	**147635**	17434	42034
Particles >6µm		ASTM D7647	>1300	**42937**	5641	8779
Particles >14µm		ASTM D7647	>160	**1013**	723	532
Oil Cleanliness		ISO 4406 (c)	>19/17/14	**24/23/17**	21/20/17	23/20/16

Customer Id: LEWBOSC
Sample No.: WC0850089
Lab Number: 02576290
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	---	---	?	Resample in 30-45 days to monitor this situation.
Check Breathers	---	---	?	The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather.
Check Seals	---	---	?	Check seals and/or filters for points of contaminant entry.

HISTORICAL DIAGNOSIS

13 Jul 2023 Diag: Kevin Marson

ISO

We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition.All component wear rates are normal. There is a moderate amount of particulates (2 to 100 microns in size) present in the oil. The AN level is acceptable for this fluid. The pH level of this fluid is within the acceptable limits. The reserve alkalinity of this fluid is acceptable. The water concentration level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

view report

20 Jun 2023 Diag: Kevin Marson

COOL CHEMICALS

We advise that you check all areas where contaminants can enter the system. We advise that you add water to increase the water concentration level to 41%. Ensure that only distilled water or boiler feed water condensate are used for make-up. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. Resample in 30-45 days to monitor this situation. 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). There is a high amount of particulates (2 to 100 microns in size) present in the oil. The water concentration level is lower than acceptable for this fluid. Additive levels indicate the addition of a different brand, or type of oil. The AN level is acceptable for this fluid. The pH level of this fluid is within the acceptable limits. The reserve alkalinity of this fluid is acceptable.

view report

14 Jun 2023 Diag: Kevin Marson

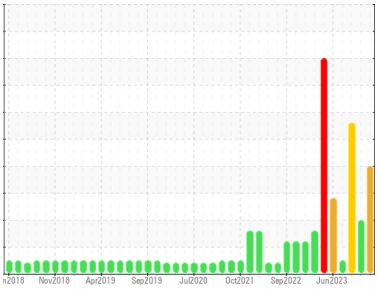
NORMAL

Resample at the next service interval to monitor.All component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. The AN level is acceptable for this fluid. The pH level of this fluid is within the acceptable limits. The reserve alkalinity of this fluid is acceptable. The water concentration level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

COOLANT REPORT

Sample Rating Trend



ISO

Area
BOF/OG SYSTEM
Machine Id
D - 7 Skirt Lifting and Seal Jacking Hydraulics
Component
Hydraulic System
Fluid
FORSYTHE NO FIRE WG 200R (350 GAL)

DIAGNOSIS

Recommendation

Check seals and/or filters for points of contaminant entry. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. We recommend you service the filters on this component. Resample in 30-45 days to monitor this situation.

Wear

All component wear rates are normal.

Contamination

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

Fluid Condition

The AN level is acceptable for this fluid. The pH level of this fluid is within the acceptable limits. The reserve alkalinity of this fluid is acceptable. The water concentration level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC0850089**	WC0838947	WC0832569
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				**SEVERE**	ABNORMAL	SEVERE

CORROSION INHIBITORS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)		**0**	<1	0
Phosphorus	ppm	ASTM D5185(m)		**0**	0	<1
Boron	ppm	ASTM D5185(m)		**0**	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	**<1**	1	0
Lead	ppm	ASTM D5185(m)	>20	**0**	0	1
Tin	ppm	ASTM D5185(m)	>20	**0**	0	0
Silver	ppm	ASTM D5185(m)		**0**	0	<1
Zinc	ppm	ASTM D5185(m)		**0**	0	0

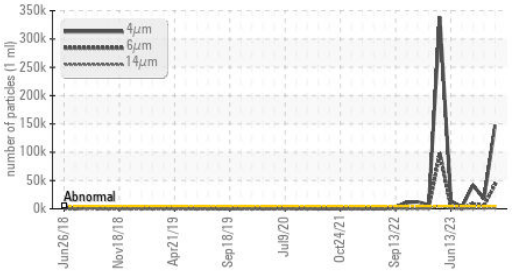
CONTAMINANTS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	**147635**	17434	42034
Particles >6µm		ASTM D7647	>1300	**42937**	5641	8779
Particles >14µm		ASTM D7647	>160	**1013**	723	532
Particles >21µm		ASTM D7647	>40	**35**	171	137
Particles >38µm		ASTM D7647	>10	**4**	10	14
Particles >71µm		ASTM D7647	>3	**0**	1	2
Oil Cleanliness		ISO 4406 (c)	>19/17/14	**24/23/17**	21/20/17	23/20/16

CARRIER SALTS		method	limit/base	current	history1	history2
Sodium	ppm	ASTM D5185(m)		**171**	19	190
Potassium	ppm	ASTM D5185(m)		**0**	0	7

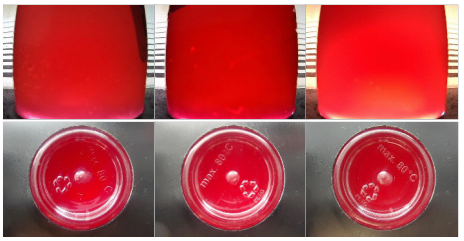
SCALE POTENTIAL		method	limit/base	current	history1	history2
Calcium	ppm	ASTM D5185(m)		**2**	<1	0
Magnesium	ppm	ASTM D5185(m)		**<1**	1	<1

COOLANT REPORT

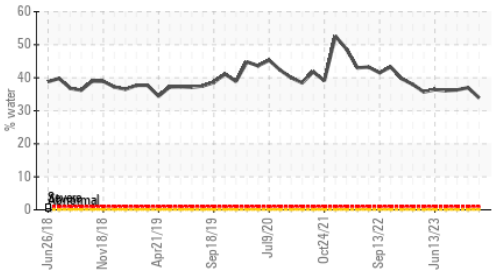
Particle Trend



VISUAL	method	limit/base	current	history1	history2
Color					
Bottom					

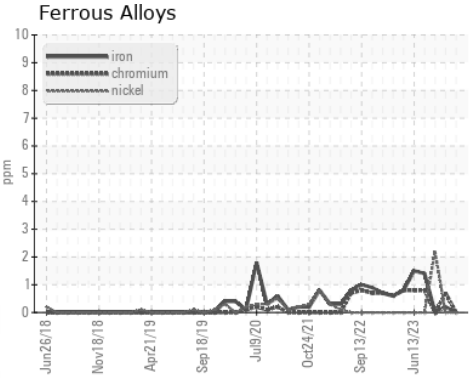


Water

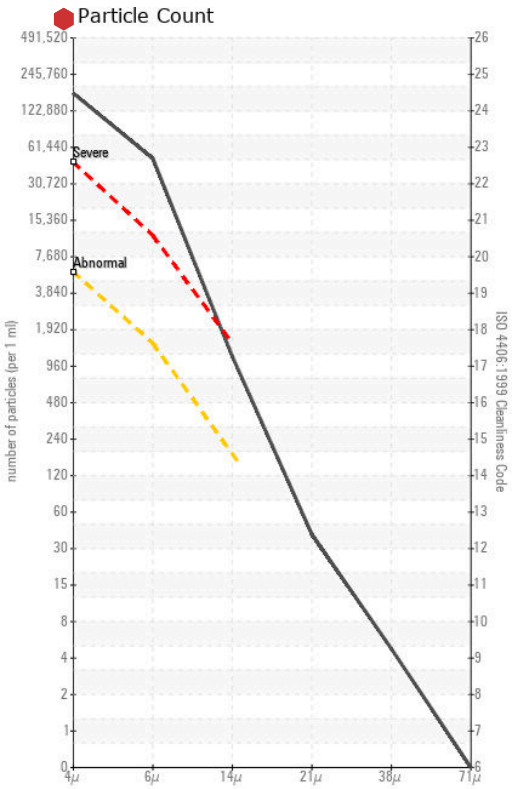


GRAPHS

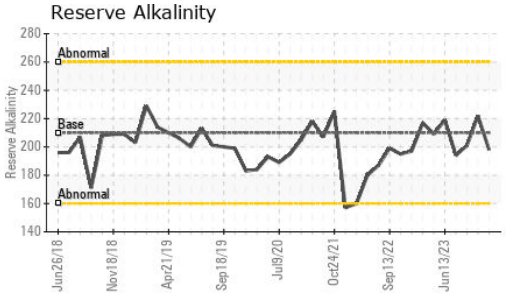
Ferrous Alloys



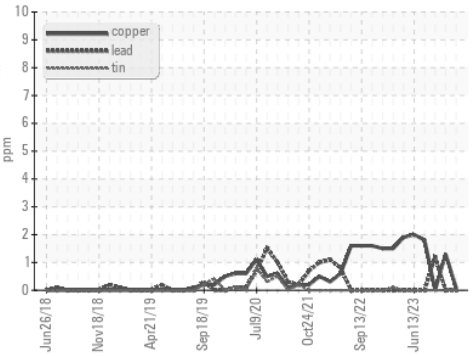
Particle Count



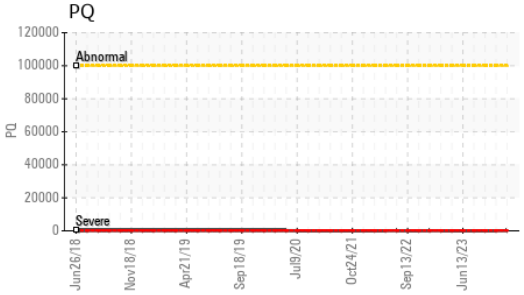
Reserve Alkalinity



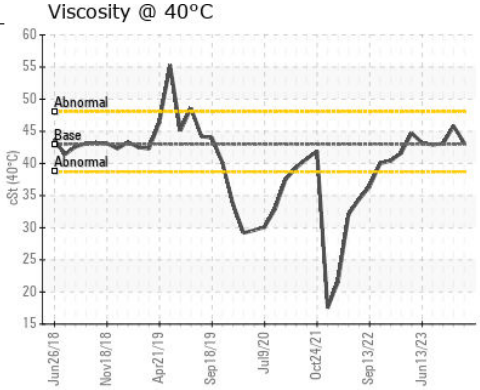
Non-ferrous Metals



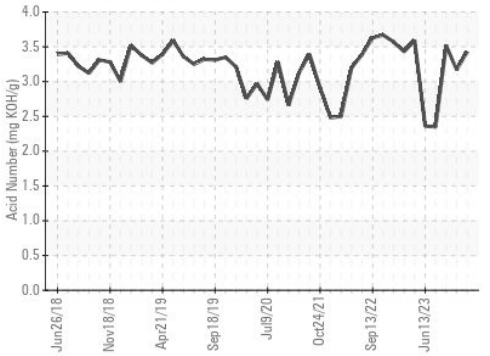
PQ



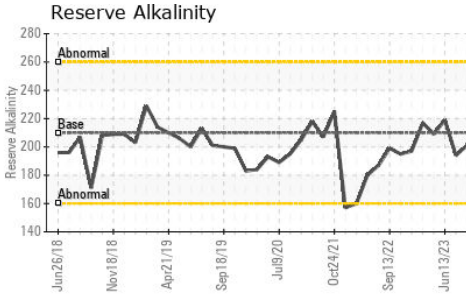
Viscosity @ 40°C



Acid Number



Reserve Alkalinity



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0850089
Lab Number : 02576290
Unique Number : 5629350
Test Package : IND 2 (Additional Tests: KF, pH, PQ, ReserveAlk, TAN Man)

Received : 16 Aug 2023
Diagnosed : 21 Aug 2023
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