



# PROBLEM SUMMARY

## Sample Rating Trend

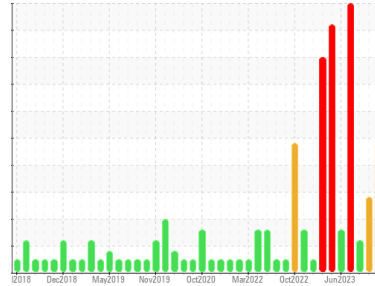
ISO



Area  
**BOF/DESULF**  
Machine Id  
**D Desulph Bubbler**

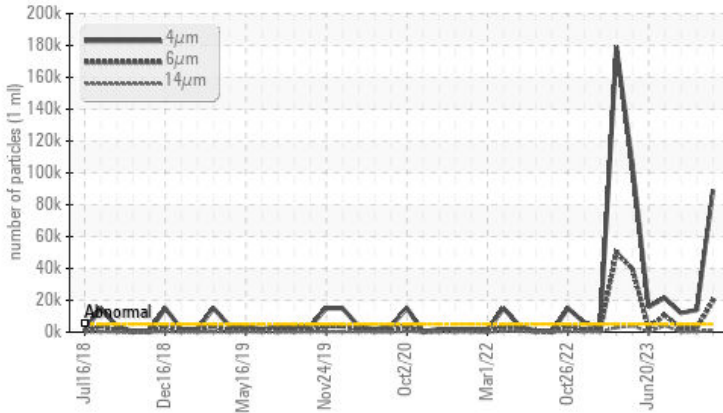
Component  
**Hydraulic System**

Fluid  
**FORSYTHE NO FIRE WG 200R (130 GAL)**



## COMPONENT CONDITION SUMMARY

### Particle Trend



## RECOMMENDATION

We advise that you check all areas where contaminants can enter the system. 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.

## PROBLEMATIC TEST RESULTS

Sample Status			SEVERE	ABNORMAL	ABNORMAL
Particles >4µm	ASTM D7647	>5000	89115	13958	11971
Particles >6µm	ASTM D7647	>1300	19738	2675	2593
Particles >14µm	ASTM D7647	>160	1199	263	61
Particles >21µm	ASTM D7647	>40	315	101	13
Particles >38µm	ASTM D7647	>10	22	23	2
Oil Cleanliness	ISO 4406 (c)	>19/17/14	24/21/17	21/19/15	21/19/13

Customer Id: LEWBOSC  
Sample No.: WC0890385  
Lab Number: 02603622  
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](mailto:Kevin.Marson@wearcheck.com)

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

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Filter	---	---	?	We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid.
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 Dirt Access	---	---	?	We advise that you check all areas where contaminants can enter the system.
Filter Fluid	---	---	?	We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid.

HISTORICAL DIAGNOSIS

16 Oct 2023 Diag: Kevin Marson



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



16 Aug 2023 Diag: Kevin Marson



We recommend you service the filters on this component. We recommend an early resample to monitor this condition. All component wear rates are normal. There is a moderate amount of silt (particulates < 14 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



13 Jul 2023 Diag: Kevin Marson



We advise that you check all areas where contaminants can enter the system. 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. All component wear rates are normal. There is a high 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.

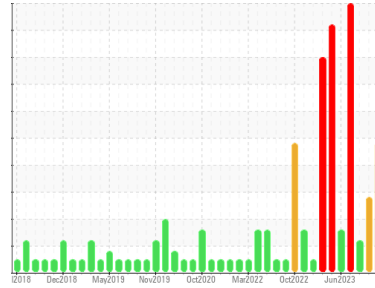
view report





# COOLANT REPORT

Sample Rating Trend



ISO



Area  
**BOF/DESULF**  
Machine Id  
**D Desulph Bubbler**

Component  
**Hydraulic System**  
Fluid  
**FORSYTHE NO FIRE WG 200R (130 GAL)**

## DIAGNOSIS

### Recommendation

We advise that you check all areas where contaminants can enter the system. 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.

### Wear

All component wear rates are normal.

### Contamination

There is a high amount of particulates (2 to 100 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		<b>WC0890385</b>	WC0871212	WC0850083
Sample Date	Client Info		<b>15 Dec 2023</b>	16 Oct 2023	16 Aug 2023
Machine Age	hrs	Client Info	<b>0</b>	0	0
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>N/A</b>	N/A	N/A
Sample Status			<b>SEVERE</b>	ABNORMAL	ABNORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method		<b>NEG</b>	NEG	NEG

## CORROSION INHIBITORS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	<b>1</b>	<1	0
Phosphorus	ppm	ASTM D5185(m)	<b>2</b>	1	0
Boron	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	0
Molybdenum	ppm	ASTM D5185(m)	<b>0</b>	0	0

## CORROSION

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	0
Aluminum	ppm	ASTM D5185(m)	>20	<b>0</b>	0
Copper	ppm	ASTM D5185(m)	>20	<b>0</b>	0
Lead	ppm	ASTM D5185(m)	>20	<b>0</b>	0
Tin	ppm	ASTM D5185(m)	>20	<b>0</b>	0
Silver	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1
Zinc	ppm	ASTM D5185(m)		<b>22</b>	14

## CONTAMINANTS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	<b>89115</b>	13958	11971
Particles >6µm	ASTM D7647	>1300	<b>19738</b>	2675	2593
Particles >14µm	ASTM D7647	>160	<b>1199</b>	263	61
Particles >21µm	ASTM D7647	>40	<b>315</b>	101	13
Particles >38µm	ASTM D7647	>10	<b>22</b>	23	2
Particles >71µm	ASTM D7647	>3	<b>2</b>	6	2
Oil Cleanliness	ISO 4406 (c)	>19/17/14	<b>24/21/17</b>	21/19/15	21/19/13

## CARRIER SALTS

	method	limit/base	current	history1	history2
Sodium	ppm	ASTM D5185(m)		<b>187</b>	170
Potassium	ppm	ASTM D5185(m)		<b>26</b>	18

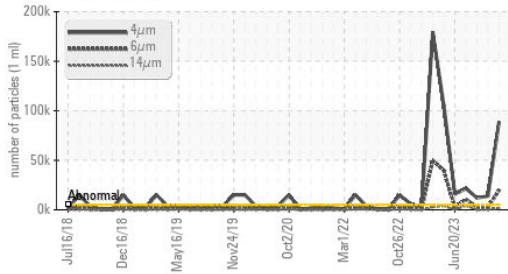
## SCALE POTENTIAL

	method	limit/base	current	history1	history2
Calcium	ppm	ASTM D5185(m)		<b>1</b>	<1
Magnesium	ppm	ASTM D5185(m)		<b>&lt;1</b>	0



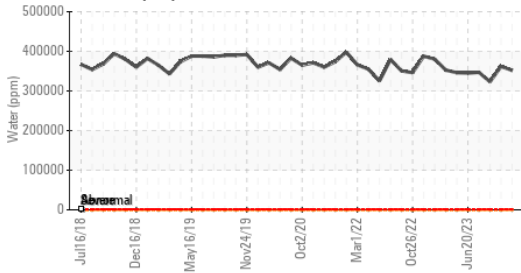
# COOLANT REPORT

## Particle Trend



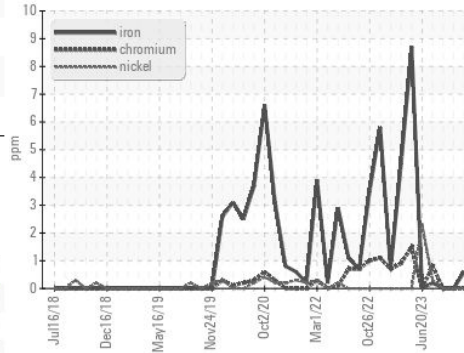
VISUAL	method	limit/base	current	history1	history2
Color					
Bottom					

## Water (KF)

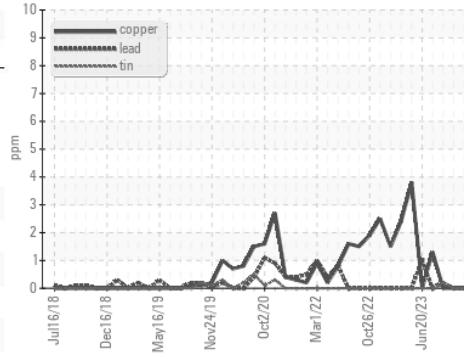


## GRAPHS

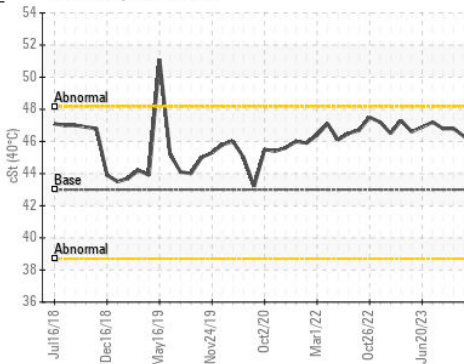
### Ferrous Alloys



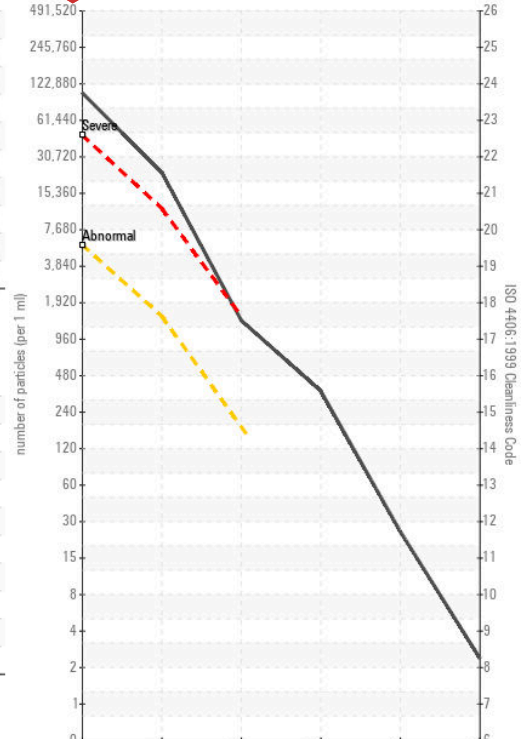
### Non-ferrous Metals



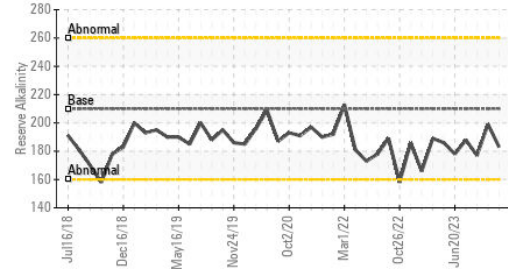
### Viscosity @ 40°C



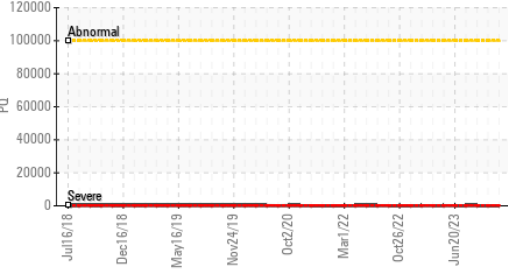
## Particle Count



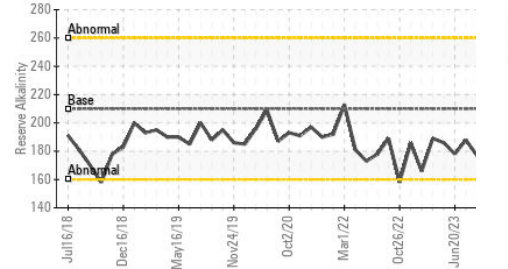
## Reserve Alkalinity



## PQ



## Reserve Alkalinity



ISO 17025:2017  
Accredited  
Laboratory

**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **STELCO - BOSC - Basic Oxygen Slab Caster**  
**Sample No.** : WC0890385 **Received** : 15 Dec 2023 2330 Regional Road #3, Door: BOSC8  
**Lab Number** : 02603622 **Diagnosed** : 21 Dec 2023 NANTICOKE, ON  
**Unique Number** : 5696707 **Diagnostician** : Kevin Marson CA N0A 1L0  
**Test Package** : IND 2 ( Additional Tests: KF, pH, PQ, ReserveAlk, TAN Man )

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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