

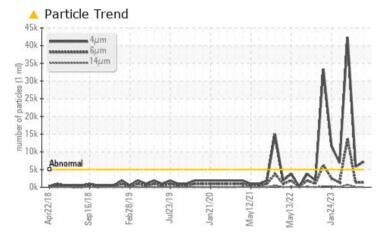
PROBLEM SUMMARY

BOF/OG SYSTEM Machine Id D - 8 Skirt Lifting and Seal Jacking Hydraulics Component

Hydraulic System

FORSYTHE NO FIRE WG 200R (350 GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS							
Sample Status			ATTENTION	ATTENTION	SEVERE		
Particles >4µm	ASTM D7647	>5000	A 7196	<mark>▲</mark> 5798	42292		
Particles >6µm	ASTM D7647	>1300	🔺 1357	1 357	13692		
Oil Cleanliness	ISO 4406 (c)	>19/17/14	<u> </u>	🔺 20/18/13	23/21/17		

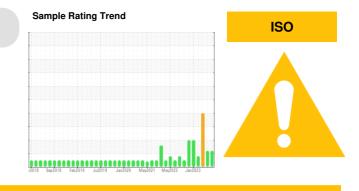
Customer Id: LEWBOSC Sample No.: WC0830412 Lab Number: 02564553 Test Package: IND 2



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 <u>gloria.gonzalez@wearcheck.com</u>



RECOMMENDED ACTIONS						
Action	Status	Date	Done By	Description		
Change Filter	MISSED	Jun 23 2023	?	We recommend you service the filters on this component.		

HISTORICAL DIAGNOSIS



13 Jun 2023 Diag: Kevin Marson

We recommend you service the filters on this component. Resample at the next service interval to monitor.All component wear rates are normal. There is a light 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 condition of the oil is suitable for further service.





30 May 2023 Diag: Kevin Marson

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. All component wear rates are normal. There is a high 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.



ISO

28 Feb 2023 Diag: Kevin Marson

We recommend you service the filters on this component. Resample at the next service interval to monitor.All component wear rates are normal. There is a light 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 condition of the oil is suitable for further service.





OIL ANALYSIS REPORT

Area BOF/OG SYSTEM Machine Id D - 8 Skirt Lifting and Seal Jacking Hydraulics

Hydraulic System

FORSYTHE NO FIRE WG 200R (350 GAL)

DIAGNOSIS

Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is a light 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 condition of the oil is suitable for further service.



SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0830412	WC0830413	WC0824345
Sample Date		Client Info		14 Jun 2023	13 Jun 2023	30 May 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				ATTENTION	ATTENTION	SEVERE
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184*	>999999	0	0	1
Iron	ppm	ASTM D5185(m)		<1	<1	<1
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	<1
Nickel	ppm	ASTM D5185(m)		0	0	0
Titanium	ppm	ASTM D5185(m)	220	0	0	0
Silver	ppm	ASTM D5185(m)		0	0	0
Aluminum	ppm	ASTM D5185(m)	>20	0	<1	0
Lead		ASTM D5185(m)		0	0	0
	ppm	ASTM D5185(m)	>20	2	2	2
Copper Tin	ppm	. /		0	0	0
	ppm	ASTM D5185(m)	>20			
Antimony	ppm	ASTM D5185(m)		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	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		2	<1	4
Barium	ppm	ASTM D5185(m)		0	0	0
Molybdenum	ppm	ASTM D5185(m)		1	<1	1
Manganese	ppm	ASTM D5185(m)		0	0	0
Magnesium	ppm	ASTM D5185(m)		<1	<1	0
Calcium	ppm	ASTM D5185(m)		1	<1	1
Phosphorus	ppm	ASTM D5185(m)		5	<1	2
Zinc	ppm	ASTM D5185(m)		0	0	0
Sulfur	ppm	ASTM D5185(m)		14	7	14
Lithium	ppm	ASTM D5185(m)		<1	<1	<1
CONTAMINANTS	6	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	1	<1	1
Sodium	ppm	ASTM D5185(m)		237	215	230
Potassium	ppm	ASTM D5185(m)	>20	56	26	51
Water	%	ASTM D6304*		36.8	37.1	36.4
ppm Water	ppm	ASTM D6304*	>10%	368000	371000	364000
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	7196	▲ 5798	42292
Particles >6µm		ASTM D7647	>1300	<u> </u>	1 357	13692
Particles >14µm		ASTM D7647	>160	62	78	▲ 700
Particles >21um		ASTM D7647	>40	15	1/	27
Particles >21µm Particles >38µm		ASTM D7647 ASTM D7647	>40 >10	15 1	17	27 0
Particles >38µm		ASTM D7647	>10	1	1	0
			>10			

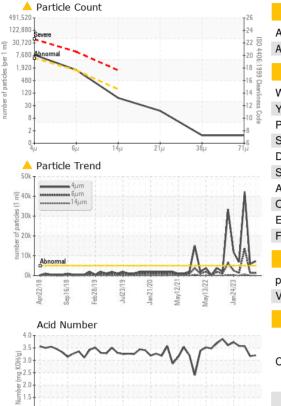
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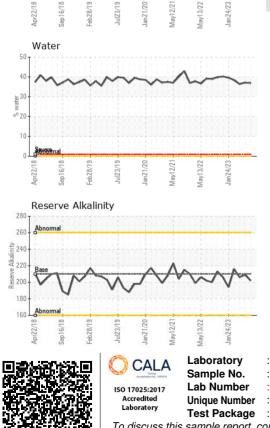
Pio 1.0

0.5 0.0

OIL ANALYSIS REPORT



FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*		3.20	3.17	3.57
Alkiline Reserve (Oils)	ml KOH/g	ASTM D1121*	210	202	209	206
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	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	VLITE
Appearance	scalar	Visual*	NORML	FRGLY	FRGLY	FRGLY
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*		>10%	>10%	>10%
Free Water	scalar	Visual*		NEG	NEG	NEG
FLUID PROPERT	IES	method	limit/base	current	history1	history2
рН	Scale 0-14	ASTM D1287*		9.50	9.49	9.54
Visc @ 40°C	cSt	ASTM D7279(m)	43	42.3	42.2	42.3
SAMPLE IMAGES	6	method	limit/base	current	history1	history2
Color						
Bottom						



: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 STELCO - BOSC - Basic Oxygen Slab Caster : WC0830412 Received : 15 Jun 2023 2330 Regional Road #3, Door: BOSC8 : 02564553 Diagnosed : 20 Jun 2023 NANTICOKE, ON : 5593594 Diagnostician : Kevin Marson CA NOA 1L0 Test Package : IND 2 (Additional Tests: KF, pH, PQ, ReserveAlk, TAN Man) Contact: Tom Walden Thomas.Walden@stelco.com 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. T: (519)587-4541 Validity of results and interpretation are based on the sample and information as supplied. F: (519)587-7702