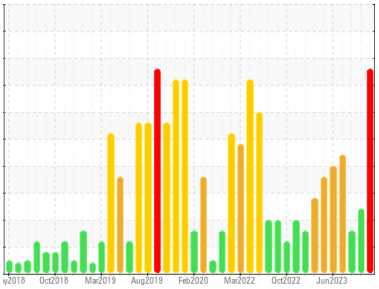
PROBLEM SUMMARY

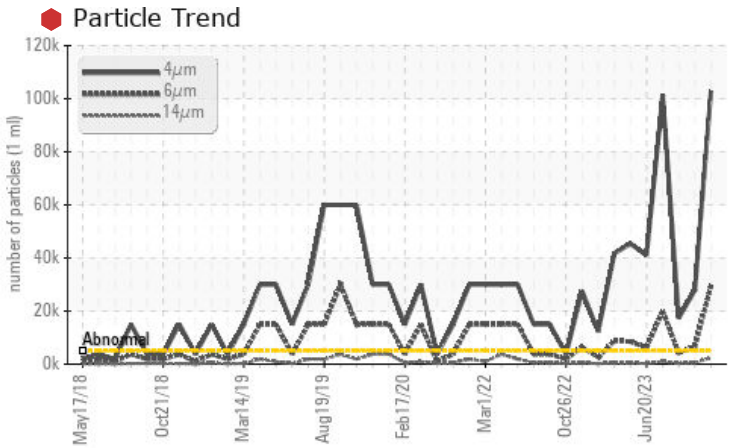
Area
RHOB/HYDRAULICS
Machine Id
E - 2 Hydraulics Repair Car
Component
Tank Hydraulic System
Fluid
FIRE-RESISTANT FLUID ISO 46 (132 GAL)

Sample Rating Trend



ISO

COMPONENT CONDITION SUMMARY



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. Please specify the brand, type, and viscosity of the oil on your next sample.

PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	ABNORMAL	ABNORMAL
Particles >4µm		ASTM D7647	>5000	**102841**	27920	17365
Particles >6µm		ASTM D7647	>1300	**29646**	6525	4201
Particles >14µm		ASTM D7647	>160	**2463**	491	245
Particles >21µm		ASTM D7647	>40	**345**	155	49
Oil Cleanliness		ISO 4406 (c)	>19/17/14	**24/22/18**	22/20/16	21/19/15

Customer Id: LEWBOSC
Sample No.: WC0890377
Lab Number: 02603616
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 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.
Information Required	---	---	?	Please specify the brand, type, and viscosity of the oil on your next sample.
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

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. Please specify the brand, type, and viscosity of the oil on your next sample.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

ISO

We recommend you service the filters on this component. We recommend an early resample to monitor this condition. Please specify the brand, type, and viscosity of the oil on your next sample.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

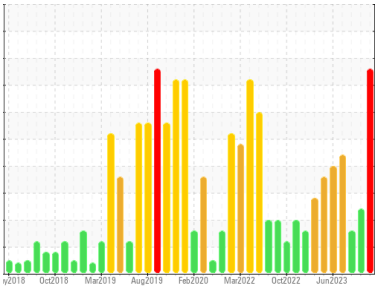
ISO

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. Please specify the brand, type, and viscosity of the oil on your next sample.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
RHOB/HYDRAULICS
Machine Id
E - 2 Hydraulics Repair Car
Component
Tank Hydraulic System
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FIRE-RESISTANT FLUID ISO 46 (132 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. Please specify the brand, type, and viscosity of the oil on your next sample.

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		**WC0890377**	WC0871209	WC0850109
Sample Date		Client Info		**15 Dec 2023**	16 Oct 2023	16 Aug 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	ABNORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Water		WC Method	>55	**NEG**	NEG	NEG

CORROSION INHIBITORS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)		**<1**	<1	0
Phosphorus	ppm	ASTM D5185(m)	175	**2**	<1	0
Boron	ppm	ASTM D5185(m)	5	**<1**	<1	0
Molybdenum	ppm	ASTM D5185(m)	5	**0**	0	0

CORROSION		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>20	**0**	0	0
Aluminum	ppm	ASTM D5185(m)	>20	**0**	0	0
Copper	ppm	ASTM D5185(m)	>20	**0**	0	<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**	<1	0
Zinc	ppm	ASTM D5185(m)	>125	**0**	0	0

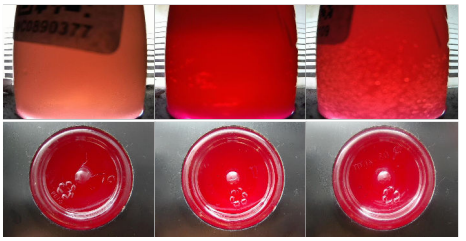
CONTAMINANTS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	**102841**	27920	17365
Particles >6µm	ASTM D7647	>1300	**29646**	6525	4201
Particles >14µm	ASTM D7647	>160	**2463**	491	245
Particles >21µm	ASTM D7647	>40	**345**	155	49
Particles >38µm	ASTM D7647	>10	**12**	19	6
Particles >71µm	ASTM D7647	>3	**2**	4	0
Oil Cleanliness	ISO 4406 (c)	>19/17/14	**24/22/18**	22/20/16	21/19/15

CARRIER SALTS		method	limit/base	current	history1	history2
Sodium	ppm	ASTM D5185(m)		**179**	173	163
Potassium	ppm	ASTM D5185(m)		**8**	17	0

SCALE POTENTIAL		method	limit/base	current	history1	history2
Calcium	ppm	ASTM D5185(m)	>100	**1**	<1	2
Magnesium	ppm	ASTM D5185(m)	>10	**<1**	0	0

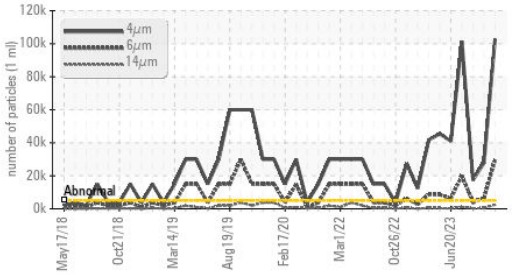
COOLANT REPORT

VISUAL	method	limit/base	current	history1	history2
Color					
Bottom					

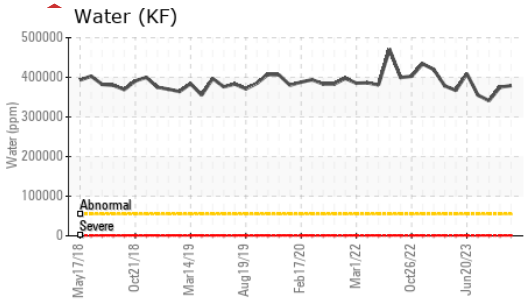


GRAPHS

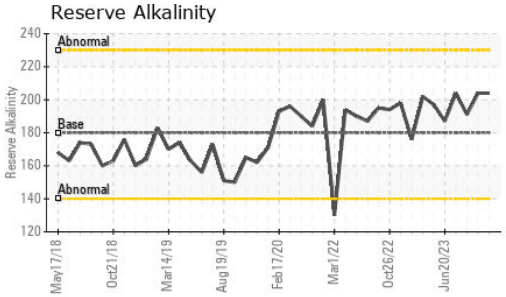
Particle Trend



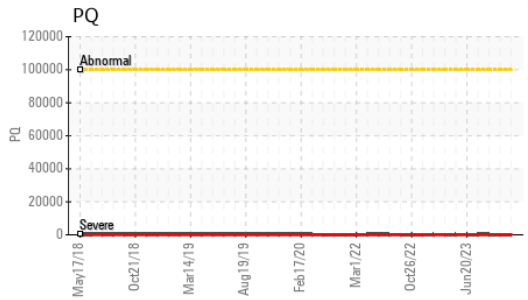
Water (KF)



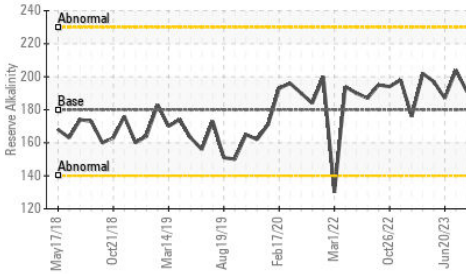
Reserve Alkalinity



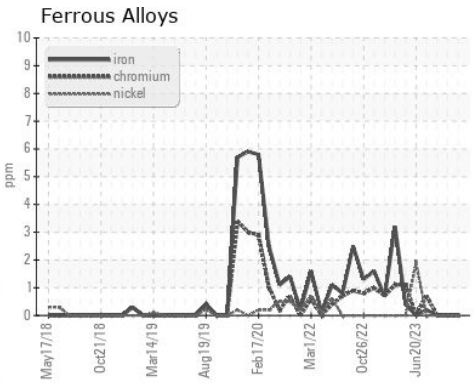
PQ



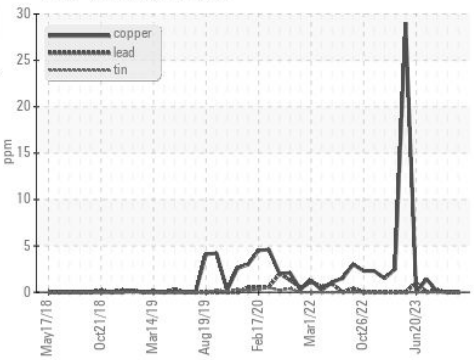
Reserve Alkalinity



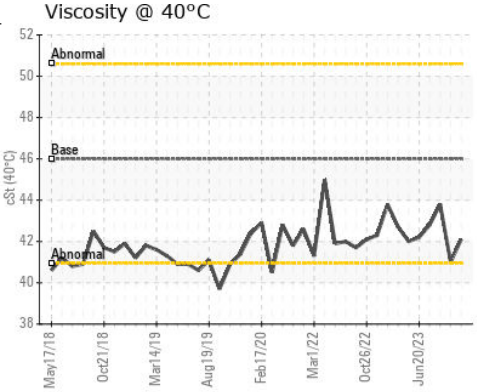
Ferrous Alloys



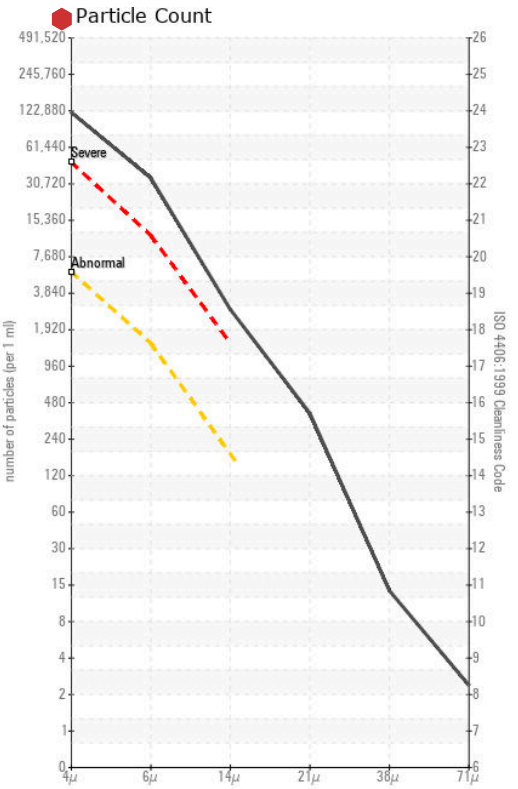
Non-ferrous Metals



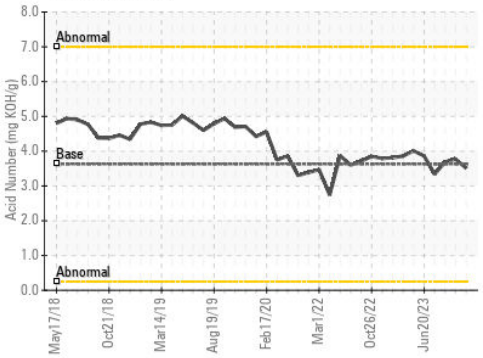
Viscosity @ 40°C



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.	: WC0890377	**Recieved**	: 15 Dec 2023	2330 Regional Road #3, Door: BOSC8
Lab Number	: 02603616	**Diagnosed**	: 21 Dec 2023	NANTICOKE, ON
Unique Number	: 5696701	**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