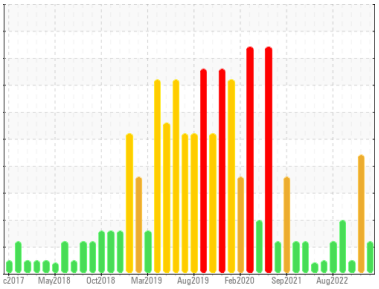
PROBLEM SUMMARY

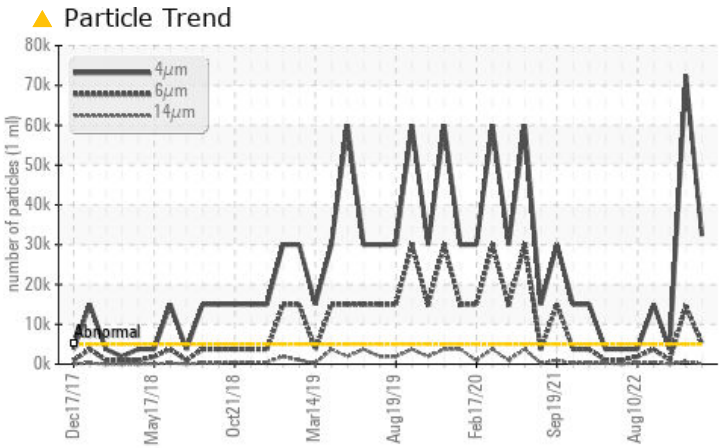
Sample Rating Trend



ISO

Area
RHOB/HYDRAULICS
Machine Id
E - 1 Hydraulics Repair Car
Component
Tank Hydraulic System
Fluid
AMERICAN CHEMICAL TECH. FR WG 200-D (132 GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

We recommend you service the filters on this component. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	SEVERE	NORMAL
Particles >4µm		ASTM D7647	>5000	▲ **32307**	⬢ 72435	3750
Particles >6µm		ASTM D7647	>1300	▲ **5167**	⬢ 14520	970
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ **22/20/14**	⬢ 23/21/16	19/17/13

Customer Id: LEWBOSC
Sample No.: WC0782106
Lab Number: 02535509
Test Package: IND 2

To manage this report scan the QR code

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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	DONE	Mar 22 2023	?	We recommend you service the filters on this component.
Resample	SKIPPED	Mar 22 2023	?	We recommend an early resample to monitor this condition.
Other Action (see Note)	DONE	Mar 22 2023	?	No recommended actions

HISTORICAL DIAGNOSIS

ISO

13 Dec 2022 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. Particles >6µm are severely high. Particles >4µm are severely high. Oil Cleanliness are severely high. Particles >14µm are abnormally high. Particles >21µm are abnormally high. 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

NORMAL

26 Oct 2022 Diag: Kevin Marson

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

ISO

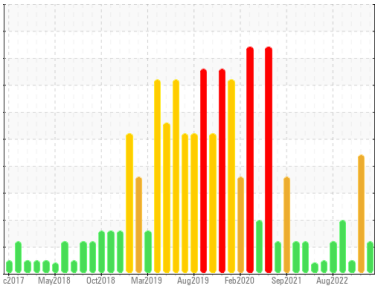
13 Sep 2022 Diag: Kevin Marson

We recommend you service the filters on this component. We recommend an early resample to monitor this condition.All component wear rates are normal. Oil Cleanliness are abnormally high. Particles >14µm are abnormally high. Particles >4µm are abnormally high. Particles >6µm are abnormally high. Particles >21µm are notably high. 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

OIL ANALYSIS REPORT

Sample Rating Trend



ISO

Area
RHOB/HYDRAULICS
Machine Id
E - 1 Hydraulics Repair Car
Component
Tank Hydraulic System
Fluid
AMERICAN CHEMICAL TECH. FR WG 200-D (132 GAL)

DIAGNOSIS

Recommendation
We recommend you service the filters on this component. We recommend an early resample to monitor this condition.

Wear
All component wear rates are normal.

Contamination
Particles >4µm are abnormally high. Particles >6µm and oil cleanliness are abnormally high.

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	history 1	history 2
Sample Number		Client Info		**WC0782106**	WC0772152	WC0756750
Sample Date		Client Info		**24 Jan 2023**	13 Dec 2022	26 Oct 2022
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**	SEVERE	NORMAL

WEAR METALS		method	limit/base	current	history 1	history 2
PQ		ASTM D8184*	>99999	**2**	0	0
Iron	ppm	ASTM D5185(m)	>20	**<1**	2	<1
Chromium	ppm	ASTM D5185(m)	>20	**<1**	1	<1
Nickel	ppm	ASTM D5185(m)	>20	**0**	0	0
Titanium	ppm	ASTM D5185(m)		**0**	0	0
Silver	ppm	ASTM D5185(m)		**0**	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	**0**	<1	<1
Lead	ppm	ASTM D5185(m)	>20	**0**	0	0
Copper	ppm	ASTM D5185(m)	>20	**1**	2	2
Tin	ppm	ASTM D5185(m)	>20	**0**	0	0
Antimony	ppm	ASTM D5185(m)		**0**	0	0
Vanadium	ppm	ASTM D5185(m)		**0**	<1	0
Beryllium	ppm	ASTM D5185(m)		**0**	0	0
Cadmium	ppm	ASTM D5185(m)		**0**	0	0

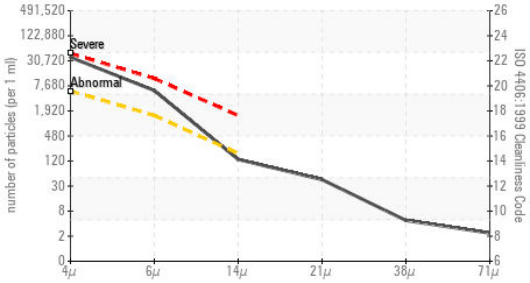
ADDITIVES		method	limit/base	current	history 1	history 2
Boron	ppm	ASTM D5185(m)		**<1**	1	<1
Barium	ppm	ASTM D5185(m)		**0**	0	0
Molybdenum	ppm	ASTM D5185(m)		**<1**	1	<1
Manganese	ppm	ASTM D5185(m)		**0**	0	0
Magnesium	ppm	ASTM D5185(m)		**<1**	1	<1
Calcium	ppm	ASTM D5185(m)		**<1**	1	<1
Phosphorus	ppm	ASTM D5185(m)		**4**	2	2
Zinc	ppm	ASTM D5185(m)		**0**	<1	<1
Sulfur	ppm	ASTM D5185(m)		**2**	16	4
Lithium	ppm	ASTM D5185(m)		**<1**	<1	<1

CONTAMINANTS		method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185(m)	>15	**0**	4	<1
Sodium	ppm	ASTM D5185(m)		**198**	250	218
Potassium	ppm	ASTM D5185(m)	>20	**11**	26	21
Water	%	ASTM D6304*	>55	**34.01**	37.93	40.67
ppm Water	ppm	ASTM D6304*	>55000	**340145.6**	379368.2	406772.7

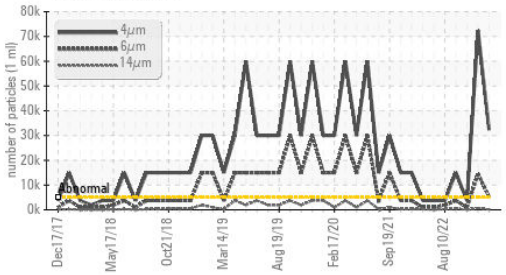
FLUID CLEANLINESS		method	limit/base	current	history 1	history 2
Particles >4µm		ASTM D7647	>5000	▲ **32307**	⬢ 72435	3750
Particles >6µm		ASTM D7647	>1300	▲ **5167**	⬢ 14520	970
Particles >14µm		ASTM D7647	>160	**116**	▲ 626	60
Particles >21µm		ASTM D7647	>40	**38**	▲ 137	7
Particles >38µm		ASTM D7647	>10	**4**	10	0
Particles >71µm		ASTM D7647	>3	**2**	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ **22/20/14**	⬢ 23/21/16	19/17/13

OIL ANALYSIS REPORT

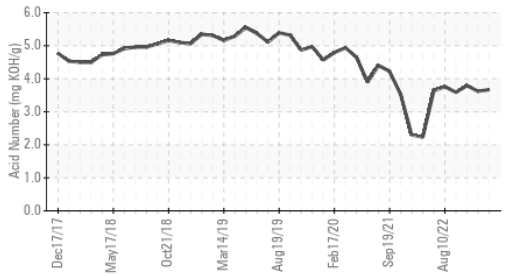
Particle Count



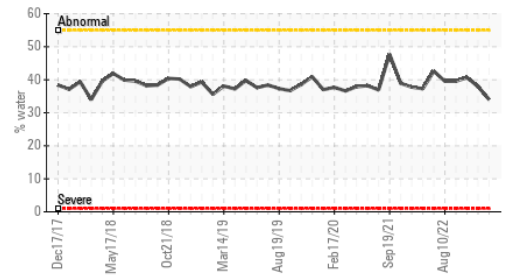
Particle Trend



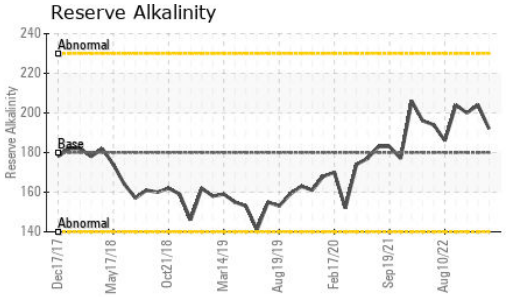
Acid Number



Water



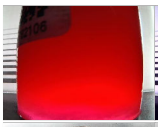
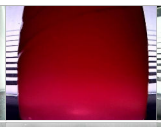
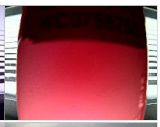
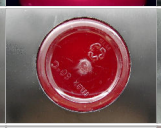
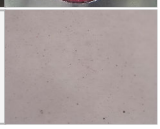
Reserve Alkalinity



FLUID DEGRADATION		method	limit/base	current	history 1	history 2
Acid Number (AN)	mg KOH/g	ASTM D974*		**3.67**	3.62	3.79
Alkiline Reserve (Oils)	ml KOH/g	ASTM D1121*		**192**	204	200

VISUAL		method	limit/base	current	history 1	history 2
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	NONE
Appearance	scalar	Visual*	NORML	**FRGLY**	FRGLY	FRGLY
Odor	scalar	Visual*	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	Visual*	>55	**>10%**	>10%	>10%
Free Water	scalar	Visual*		**NEG**	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history 1	history 2
pH	Scale 0-14	ASTM D1287*		**9.34**	9.70	9.35
Visc @ 40°C	cSt	ASTM D7279(m)	46	**42.6**	43.2	42.3

SAMPLE IMAGES	method	limit/base	current	history 1	history 2
Color					
Bottom					
PrtFilter			*no image*	*no image*	

ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0782106 **Received** : 25 Jan 2023
Lab Number : 02535509 **Diagnosed** : 03 Feb 2023
Unique Number : 5516508 **Diagnostician** : Kevin Marson
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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