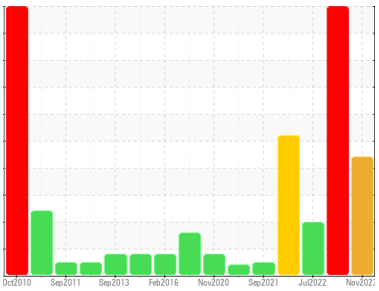
PROBLEM SUMMARY

Sample Rating Trend

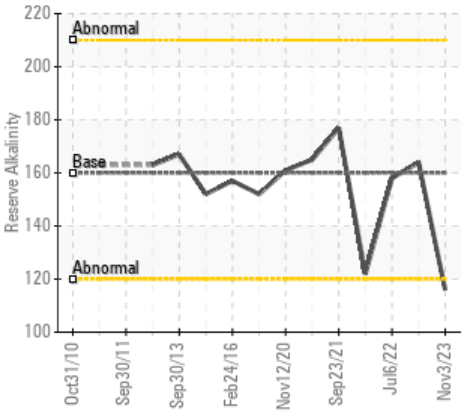


DEGRADATION

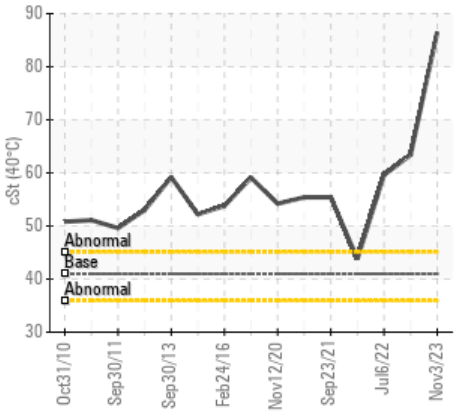
Area
[7892398]
Machine Id
K-MATIC LIFT TABLE (S/N PH83115)
Component
Hydraulic System
Fluid
CITGO CITGO GLYCOL FR-40 XD (100 GAL)

COMPONENT CONDITION SUMMARY

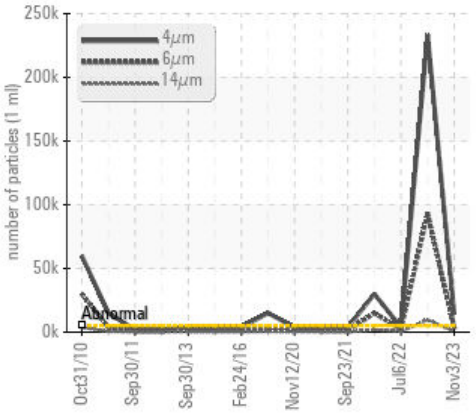
Reserve Alkalinity



Viscosity @ 40°C



Particle Trend



RECOMMENDATION

Due to the low reserve alkalinity it is advised that you contact CITGO to assist in restoring the proper amine concentration. 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.

PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	SEVERE	ABNORMAL
Particles >4µm		ASTM D7647	>5000	▲ **14265**	⬢ 233391	3750
Particles >6µm		ASTM D7647	>1300	▲ **3992**	⬢ 93260	▲ 1900
Particles >14µm		ASTM D7647	>160	▲ **427**	⬢ 9710	▲ 480
Particles >21µm		ASTM D7647	>40	▲ **169**	⬢ 2638	▲ 60
Particles >38µm		ASTM D7647	>10	▲ **34**	⬢ 122	7
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ **21/19/16**	⬢ 25/24/20	▲ 19/18/16

Customer Id: ESCPOR
Sample No.: WC0741311
Lab Number: 02602942
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	---	---	?	We recommend an early resample to monitor this condition.
Contact Required	---	---	?	Due to the low reserve alkalinity it is advised that you contact CITGO to assist in restoring the proper amine concentration.
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

02 Mar 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.All component wear rates are normal. There is a high amount of particulates (2 to 100 microns in size) present in the oil. Viscosity of sample indicates oil is within ISO 68 range, advise investigate. 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

06 Jul 2022 Diag: Kevin Marson

VISCOSITY

We recommend you service the filters on this component. We recommend an early resample to monitor this condition.All component wear rates are normal. Particles >14µm and oil cleanliness are abnormally high. Particles >21µm are notably high. Particles >6µm are notably high. Viscosity of sample indicates oil is within ISO 68 range, advise investigate. 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

06 Apr 2022 Diag: Kevin Marson

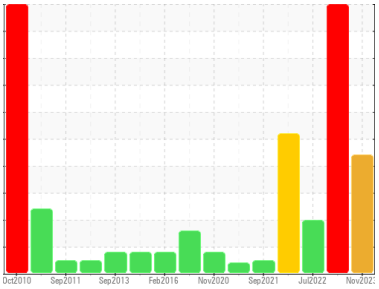
ISO

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.All component wear rates are normal. Particles >14µm are severely high. Particles >6µm are severely high. Particles >21µm are abnormally high. Particles >4µm are abnormally high. Particles >38µm 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 condition of the oil is suitable for further service.

view report

COOLANT REPORT

Sample Rating Trend



DEGRADATION

Area
[7892398]
Machine Id
K-MATIC LIFT TABLE (S/N PH83115)
Component
Hydraulic System
Fluid
CITGO CITGO GLYCOL FR-40 XD (100 GAL)

DIAGNOSIS

Recommendation

Due to the low reserve alkalinity it is advised that you contact CITGO to assist in restoring the proper amine concentration. 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.

Wear

All component wear rates are normal.

Contamination

There is a moderate amount of particulates (2 to 100 microns in size) present in the oil.

Fluid Condition

The reserve alkalinity of this fluid is lower than acceptable. The pH is low indicating a high acidity of the fluid. Viscosity of sample indicates oil is within ISO 100 range, advise investigate. The AN level is acceptable for this fluid. 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		**WC0741311**	WC0741332	WC0566153
Sample Date		Client Info		**03 Nov 2023**	02 Mar 2023	06 Jul 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	ABNORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Water		WC Method	>50	**NEG**	NEG	NEG

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

CORROSION		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>20	**0**	3	<1
Aluminum	ppm	ASTM D5185(m)	>20	**0**	<1	2
Copper	ppm	ASTM D5185(m)	>20	**0**	3	<1
Lead	ppm	ASTM D5185(m)	>20	**0**	4	<1
Tin	ppm	ASTM D5185(m)	>20	**0**	<1	0
Silver	ppm	ASTM D5185(m)		**<1**	<1	<1
Zinc	ppm	ASTM D5185(m)		**0**	3	1

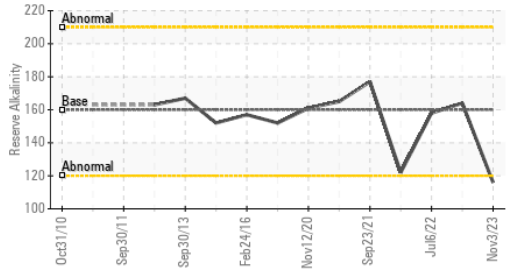
CONTAMINANTS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	▲ **14265**	⬢ 233391	3750
Particles >6µm	ASTM D7647	>1300	▲ **3992**	⬢ 93260	▲ 1900
Particles >14µm	ASTM D7647	>160	▲ **427**	⬢ 9710	▲ 480
Particles >21µm	ASTM D7647	>40	▲ **169**	⬢ 2638	▲ 60
Particles >38µm	ASTM D7647	>10	▲ **34**	⬢ 122	7
Particles >71µm	ASTM D7647	>3	**0**	▲ 11	0
Oil Cleanliness	ISO 4406 (c)	>19/17/14	▲ **21/19/16**	⬢ 25/24/20	▲ 19/18/16

CARRIER SALTS		method	limit/base	current	history1	history2
Sodium	ppm	ASTM D5185(m)		**10**	14	14
Potassium	ppm	ASTM D5185(m)		**27**	62	45

SCALE POTENTIAL		method	limit/base	current	history1	history2
Calcium	ppm	ASTM D5185(m)		**<1**	5	<1
Magnesium	ppm	ASTM D5185(m)		**<1**	1	1

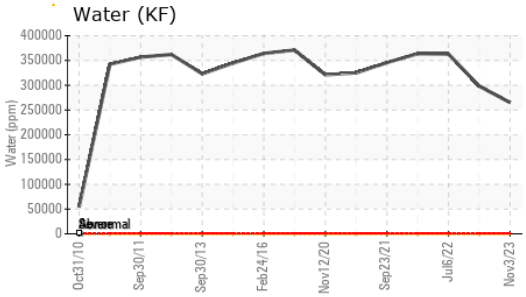
COOLANT REPORT

Reserve Alkalinity

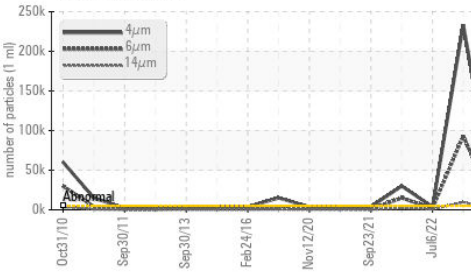


Particle Trend

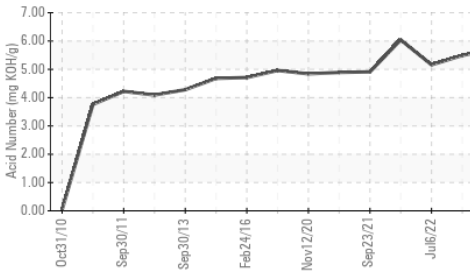
Water (KF)



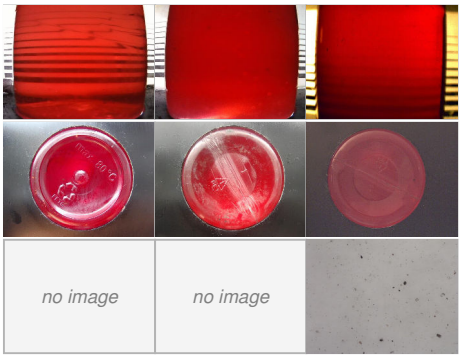
Particle Trend



Acid Number

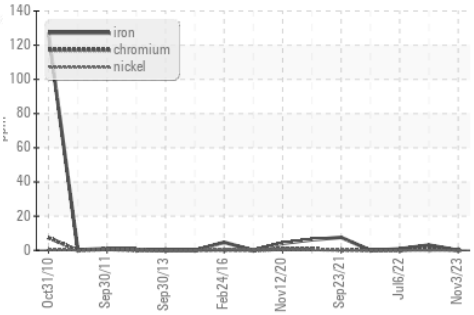


VISUAL	method	limit/base	current	history1	history2
Color					
Bottom					
PrtFilter					

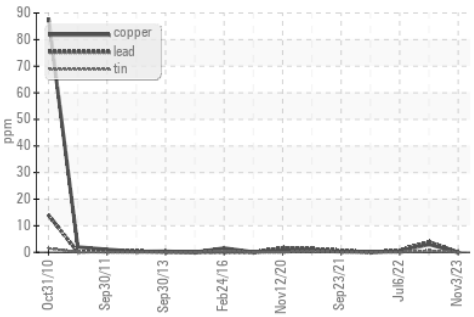


GRAPHS

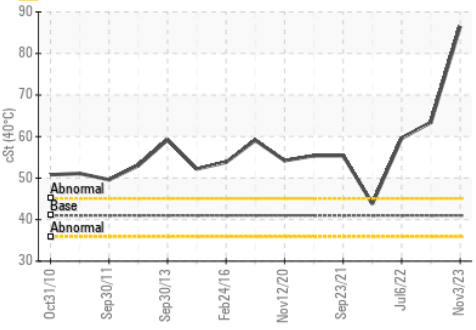
Ferrous Alloys



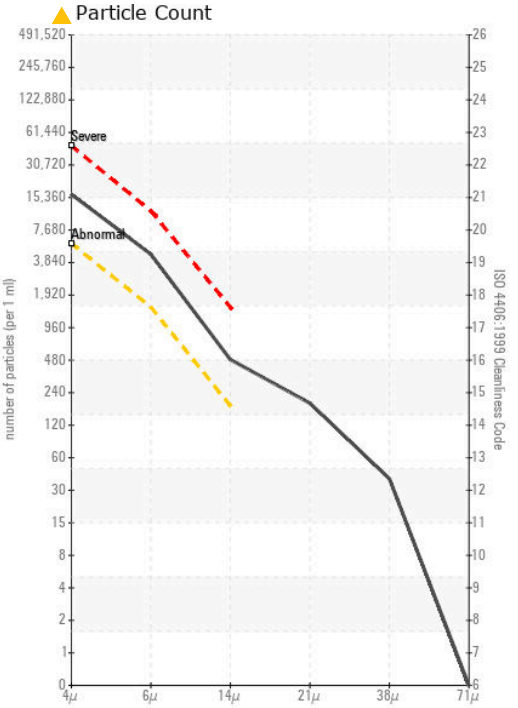
Non-ferrous Metals



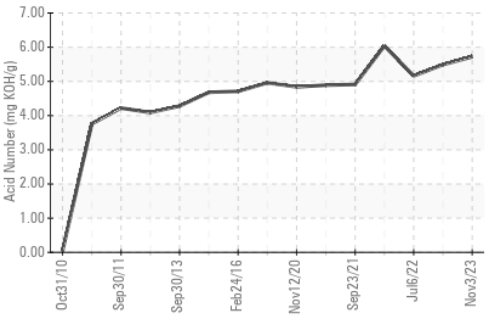
Viscosity @ 40°C



Particle Count



Acid Number



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0741311 **Recieved** : 13 Dec 2023
Lab Number : 02602942 **Diagnosed** : 18 Dec 2023
Unique Number : 5696027 **Diagnostician** : Kevin Marson
Test Package : IND 2 (Additional Tests: KF, pH, 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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