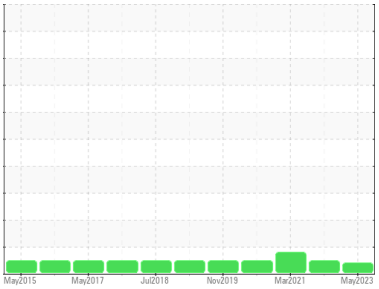
PROBLEM SUMMARY

Area
8
Machine Id
WTG-802
Component
Hydraulic System
Fluid
SHELL TELLUS 32 (--- LTR)

Sample Rating Trend



VIS DEBRIS

COMPONENT CONDITION SUMMARY

No relevant graphs to display

RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample.

PROBLEMATIC TEST RESULTS

Sample Status				**ABNORMAL**	NORMAL	SEVERE
Debris	scalar	*Visual	NONE	▲ **MODER**	NONE	NONE

Customer Id: ENEFRA
Sample No.: WC0804500
Lab Number: 05857952
Test Package: IND 2

To manage this report scan the QR code

To discuss the diagnosis or test data:
Don Baldridge +1
don.b505@comcast.net

To change component or sample information:
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Filter	---	---	?	We recommend you service the filters on this component.
Alert	---	---	?	We were unable to perform a particle count due to a high concentration of particles present in this sample.

HISTORICAL DIAGNOSIS

28 Mar 2022 Diag: Jonathan Hester

NORMAL

Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

10 Mar 2021 Diag: Doug Bogart

INSOLUBLES

The filter change at the time of sampling has been noted. We recommend that you use depth filtration to remove insolubles from the oil and to reduce the levels of varnish in the system. Alternatively draining a percentage of the oil and topping up with fresh oil (sweetening the oil) may provide a reduction in the varnish potential level. We recommend an early resample to monitor this condition. Please submit a sample of the new (unused) oil to establish a baseline for RULer testing.All component wear rates are normal. MPC (Membrane Patch Colorimetry) test indicates a high concentration of varnish present. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid.

view report

04 Aug 2020 Diag: Don Baldridge

NORMAL

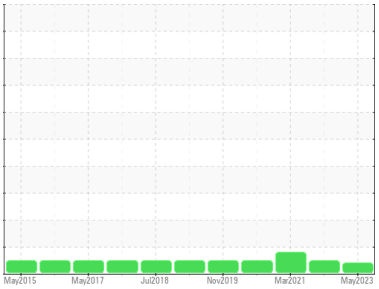
Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the component. The amount and size of particulates present in the system is acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

OIL ANALYSIS REPORT

Area
8
Machine Id
WTG-802
Component
Hydraulic System
Fluid
SHELL TELLUS 32 (--- LTR)

Sample Rating Trend



VIS DEBRIS

DIAGNOSIS

Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample.

Wear

All component wear rates are normal.

Contamination

Moderate concentration of visible dirt/debris present in the oil.

Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC0804500**	WC05504480	WC0547246
Sample Date		Client Info		**25 May 2023**	28 Mar 2022	10 Mar 2021
Machine Age	mths	Client Info		**0**	81	0
Oil Age	mths	Client Info		**0**	0	0
Oil Changed		Client Info		**Not Changd**	Not Changd	Not Changd
Sample Status				**ABNORMAL**	NORMAL	SEVERE

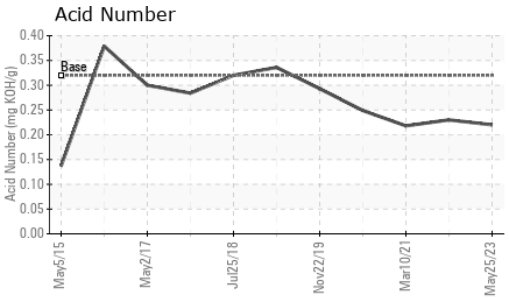
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184		**2**	15	---
Iron	ppm	ASTM D5185m	>20	**3**	2	3
Chromium	ppm	ASTM D5185m	>20	**5**	6	6
Nickel	ppm	ASTM D5185m	>20	**0**	0	0
Titanium	ppm	ASTM D5185m		**0**	0	0
Silver	ppm	ASTM D5185m		**0**	<1	0
Aluminum	ppm	ASTM D5185m	>20	**<1**	0	0
Lead	ppm	ASTM D5185m	>20	**0**	0	<1
Copper	ppm	ASTM D5185m	>20	**7**	7	6
Tin	ppm	ASTM D5185m	>20	**0**	0	<1
Antimony	ppm	ASTM D5185m		**---**	---	0
Vanadium	ppm	ASTM D5185m		**0**	0	0
Cadmium	ppm	ASTM D5185m		**0**	0	0

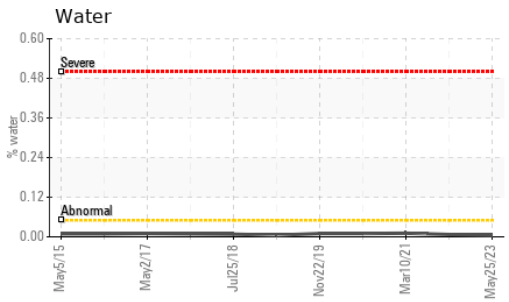
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**0**	0	<1
Barium	ppm	ASTM D5185m		**0**	0	0
Molybdenum	ppm	ASTM D5185m		**<1**	0	<1
Manganese	ppm	ASTM D5185m		**<1**	0	<1
Magnesium	ppm	ASTM D5185m	11	**2**	2	4
Calcium	ppm	ASTM D5185m	35	**13**	17	16
Phosphorus	ppm	ASTM D5185m	259	**272**	292	252
Zinc	ppm	ASTM D5185m	277	**217**	222	199
Sulfur	ppm	ASTM D5185m	1865	**4945**	4218	4191

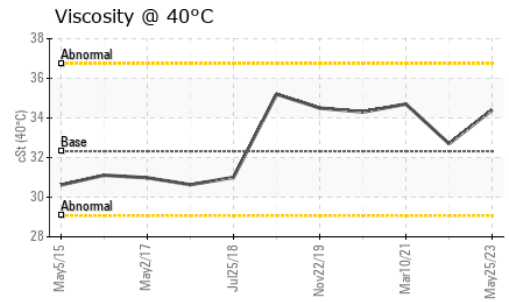
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	**<1**	0	<1
Sodium	ppm	ASTM D5185m		**1**	0	0
Potassium	ppm	ASTM D5185m	>20	**0**	0	0
Water	%	ASTM D6304	>0.05	**0.004**	0.007	0.011
ppm Water	ppm	ASTM D6304	>500	**44.6**	72.8	112.1

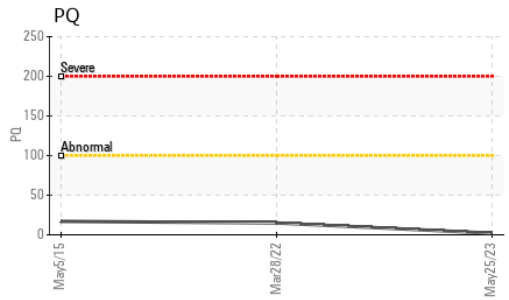
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		**---**	2335	2225
Particles >6µm		ASTM D7647	>5000	**---**	484	494
Particles >14µm		ASTM D7647	>640	**---**	41	50
Particles >21µm		ASTM D7647	>160	**---**	11	13
Particles >38µm		ASTM D7647	>40	**---**	1	2
Particles >71µm		ASTM D7647	>10	**---**	0	0
Oil Cleanliness		ISO 4406 (c)	>--/19/16	**---**	18/16/13	18/16/13

OIL ANALYSIS REPORT





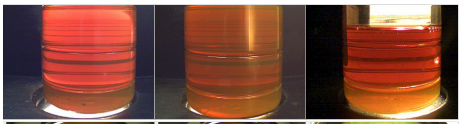
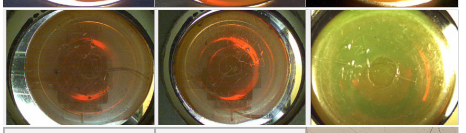




FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.32	**0.22**	0.23	0.218

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	▲ **MODER**	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Appearance	scalar	*Visual	NORML	**NORML**	NORML	NORML
Odor	scalar	*Visual	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	**NEG**	NEG	NEG
Free Water	scalar	*Visual		**NEG**	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	32.32	**34.4**	32.7	34.7

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					
MPC			*no image*	*no image*	

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0804500 **Received** : 26 May 2023
Lab Number : 05857952 **Diagnosed** : 30 May 2023
Unique Number : 10492417 **Diagnostician** : Don Baldridge
Test Package : IND 2 (Additional Tests: KF, PQ)

To discuss this sample report, contact Customer Service at 1-800-237-1369.
** - Denotes test methods that are outside of the ISO 17025 scope of accreditation.*
Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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