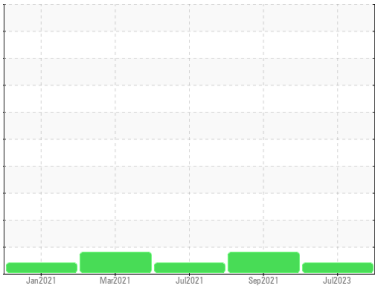
PROBLEM SUMMARY

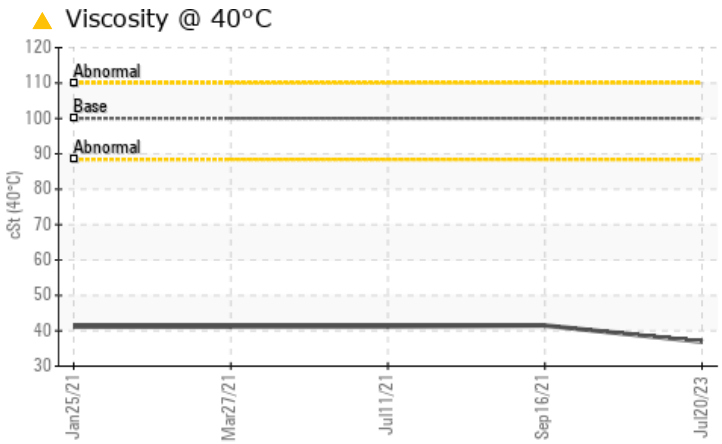
Area
Canton
Machine Id
[Canton] Hydraulic - Steering
Component
Hydraulic System
Fluid
R&O OIL ISO 100 (--- GAL)

Sample Rating Trend



VISCOSITY

COMPONENT CONDITION SUMMARY



RECOMMENDATION

No corrective action is recommended at this time.
Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status				ATTENTION	ABNORMAL	ATTENTION
Visc @ 40°C	cSt	ASTM D445	100	▲ **36.9**	▲ 41.5	▲ 41.2

Customer Id: MARCAT
Sample No.: WC0769244
Lab Number: 05966288
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

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

16 Sep 2021 Diag: Don Baldridge

VISCOSITY

No corrective action is recommended at this time. The filter change at the time of sampling has been noted. 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.All component wear rates are normal. Moderate concentration of visible dirt/debris present in the oil. Viscosity of sample indicates oil is within ISO 46 range, advise investigate. Confirm oil type. The AN level is acceptable for this fluid.

view report

11 Jul 2021 Diag: Angela Borella

VISCOSITY

No corrective action is recommended at this time. 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. Viscosity of sample indicates oil is within ISO 46 range, advise investigate. Confirm oil type. The AN level is acceptable for this fluid.

view report

27 Mar 2021 Diag: Jonathan Hester

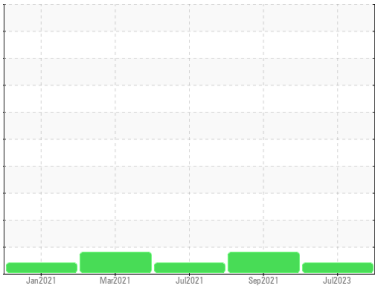
VISCOSITY

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.All component wear rates are normal. Moderate concentration of visible dirt/debris present in the oil. Viscosity of sample indicates oil is within ISO 46 range, advise investigate. Confirm oil type. The AN level is acceptable for this fluid.

view report

OIL ANALYSIS REPORT

Sample Rating Trend



VISCOSITY

Area
Canton
Machine Id
[Canton] Hydraulic - Steering
Component
Hydraulic System
Fluid
R&O OIL ISO 100 (--- GAL)

DIAGNOSIS

Recommendation
No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear
All component wear rates are normal.

Contamination
There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

Fluid Condition
The oil viscosity is lower than normal. Confirm oil type. The AN level is acceptable for this fluid.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC0769244**	WC0601904	RP0020083
Sample Date		Client Info		**20 Jul 2023**	16 Sep 2021	11 Jul 2021
Machine Age	hrs	Client Info		**0**	0	0
Oil Age	hrs	Client Info		**0**	0	0
Oil Changed		Client Info		**N/A**	Not Changd	N/A
Sample Status				**ATTENTION**	ABNORMAL	ATTENTION

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	**4**	7	7
Chromium	ppm	ASTM D5185m	>20	**<1**	<1	<1
Nickel	ppm	ASTM D5185m	>20	**0**	0	<1
Titanium	ppm	ASTM D5185m		**0**	0	0
Silver	ppm	ASTM D5185m		**0**	0	0
Aluminum	ppm	ASTM D5185m	>20	**0**	<1	<1
Lead	ppm	ASTM D5185m	>20	**0**	0	2
Copper	ppm	ASTM D5185m	>20	**<1**	<1	<1
Tin	ppm	ASTM D5185m	>20	**0**	0	0
Antimony	ppm	ASTM D5185m		**---**	0	<1
Vanadium	ppm	ASTM D5185m		**0**	0	0
Cadmium	ppm	ASTM D5185m		**0**	0	<1

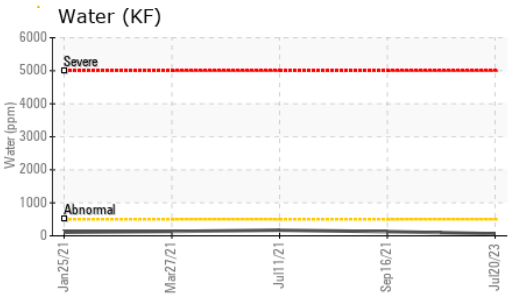
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	5	**0**	<1	2
Barium	ppm	ASTM D5185m	5	**0**	0	0
Molybdenum	ppm	ASTM D5185m	5	**<1**	<1	1
Manganese	ppm	ASTM D5185m		**0**	<1	<1
Magnesium	ppm	ASTM D5185m	5	**11**	9	8
Calcium	ppm	ASTM D5185m	5	**20**	14	15
Phosphorus	ppm	ASTM D5185m	100	**136**	201	197
Zinc	ppm	ASTM D5185m	25	**127**	173	165
Sulfur	ppm	ASTM D5185m	1500	**2268**	2982	3318

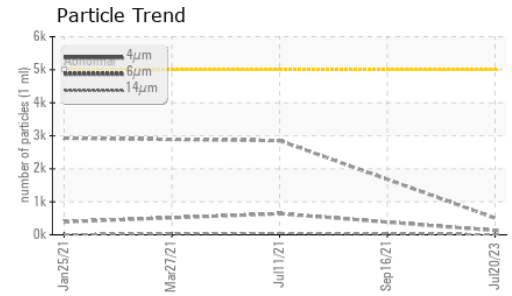
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	**2**	<1	2
Sodium	ppm	ASTM D5185m		**4**	4	4
Potassium	ppm	ASTM D5185m	>20	**<1**	0	10
Water	%	ASTM D6304	>0.05	**0.006**	0.012	0.017
ppm Water	ppm	ASTM D6304	>500	**64.0**	127.1	170.0

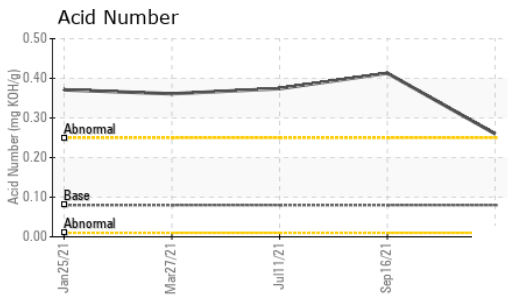
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	**506**	---	2853
Particles >6µm		ASTM D7647	>1300	**130**	---	640
Particles >14µm		ASTM D7647	>160	**13**	---	50
Particles >21µm		ASTM D7647	>40	**5**	---	14
Particles >38µm		ASTM D7647	>10	**1**	---	0
Particles >71µm		ASTM D7647	>3	**0**	---	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	**16/14/11**	---	19/16/13

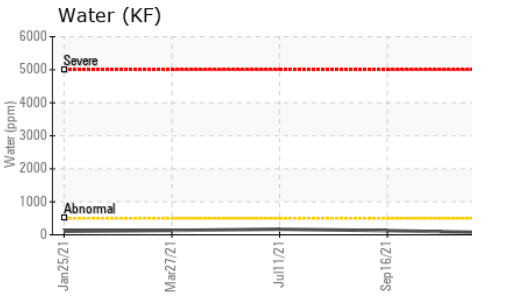
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.08	**0.26**	0.413	0.374

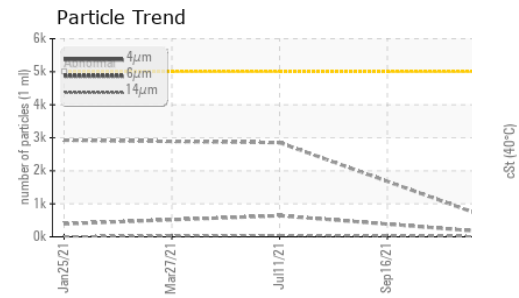
OIL ANALYSIS REPORT









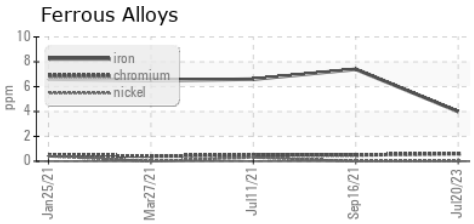


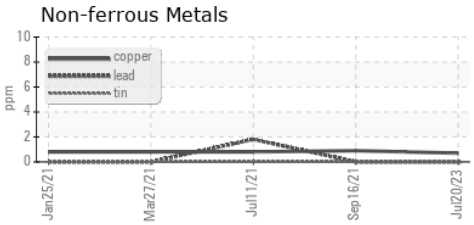
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	▲ MODER	NONE
Sand/Dirt	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

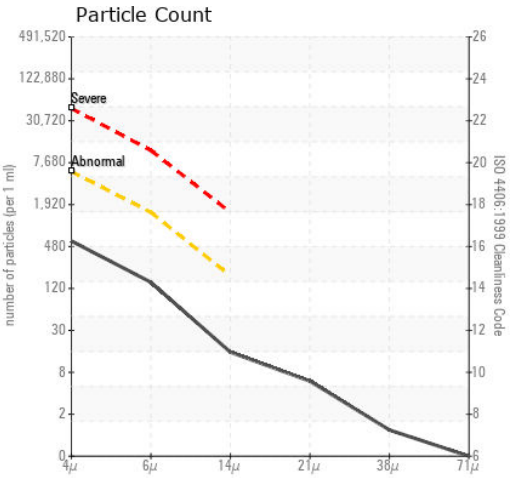
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	100	▲ **36.9**	▲ 41.5	▲ 41.2

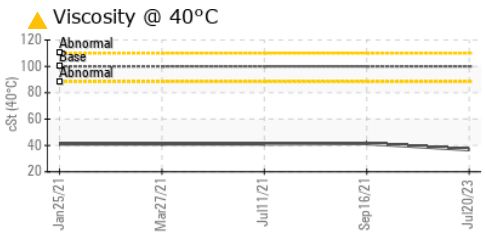
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

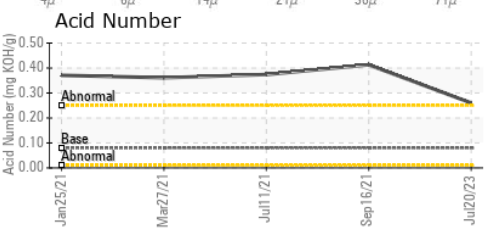
GRAPHS











Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0769244 **Received** : 02 Oct 2023
Lab Number : 05966288 **Diagnosed** : 03 Oct 2023
Unique Number : 10672839 **Diagnostician** : Don Baldridge
Test Package : IND 2 (Additional Tests: KF)

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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