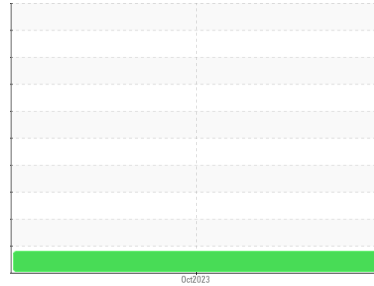




PROBLEM SUMMARY

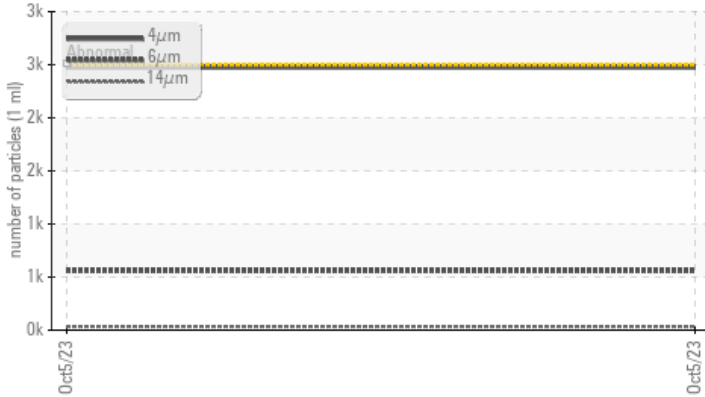
Area
[181972-N2STV4W]
 Machine Id
HYDRO GENERATOR UNIT 1
 Component
Thrust Bearing
 Fluid
SHELL TURBO T ISO 68 (1000 GAL)

Sample Rating Trend



COMPONENT CONDITION SUMMARY

▲ Particle Trend



RECOMMENDATION

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

PROBLEMATIC TEST RESULTS

Sample Status				ATTENTION	---	---
Particles >6µm	ASTM D7647	>320		▲ 560	---	---
Oil Cleanliness	ISO 4406 (c)	>18/15/13		▲ 18/16/12	---	---
PrtFilter					no image	no image

Customer Id: USACLI
 Sample No.: PH05980376
 Lab Number: 05980376
 Test Package: PLANT



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Jonathan Hester +1 919-379-4092 x4092
jhester@wearcheckusa.com

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



OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area
[181972-N2STV4W]
 Machine Id
HYDRO GENERATOR UNIT 1
 Component
Thrust Bearing
 Fluid
SHELL TURBO T ISO 68 (1000 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 a moderate amount of silt (particulates < 14 microns in size) 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	PH05980376	---	---
Sample Date	Client Info	05 Oct 2023	---	---
Machine Age	hrs Client Info	0	---	---
Oil Age	hrs Client Info	0	---	---
Oil Changed	Client Info	N/A	---	---
Sample Status		ATTENTION	---	---

WEAR METALS

method	limit/base	current	history1	history2
Iron ppm ASTM D5185m	>85	0	---	---
Chromium ppm ASTM D5185m	>20	0	---	---
Nickel ppm ASTM D5185m	>20	<1	---	---
Titanium ppm ASTM D5185m		0	---	---
Silver ppm ASTM D5185m		0	---	---
Aluminum ppm ASTM D5185m	>40	0	---	---
Lead ppm ASTM D5185m	>60	<1	---	---
Copper ppm ASTM D5185m	>7	0	---	---
Tin ppm ASTM D5185m	>40	0	---	---
Vanadium ppm ASTM D5185m		0	---	---
Cadmium ppm ASTM D5185m		0	---	---

ADDITIVES

method	limit/base	current	history1	history2
Boron ppm ASTM D5185m		0	---	---
Barium ppm ASTM D5185m		0	---	---
Molybdenum ppm ASTM D5185m		0	---	---
Manganese ppm ASTM D5185m		0	---	---
Magnesium ppm ASTM D5185m		0	---	---
Calcium ppm ASTM D5185m		2	---	---
Phosphorus ppm ASTM D5185m		5	---	---
Zinc ppm ASTM D5185m		0	---	---
Sulfur ppm ASTM D5185m		167	---	---

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon ppm ASTM D5185m	>20	3	---	---
Sodium ppm ASTM D5185m		1	---	---
Potassium ppm ASTM D5185m	>20	<1	---	---

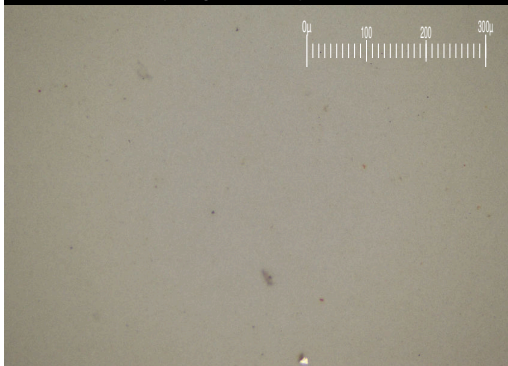
FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm ASTM D7647	>2500	2475	---	---
Particles >6µm ASTM D7647	>320	▲ 560	---	---
Particles >14µm ASTM D7647	>80	33	---	---
Particles >21µm ASTM D7647	>20	9	---	---
Particles >38µm ASTM D7647	>4	1	---	---
Particles >71µm ASTM D7647	>3	0	---	---
Oil Cleanliness ISO 4406 (c)	>18/15/13	▲ 18/16/12	---	---

FLUID DEGRADATION

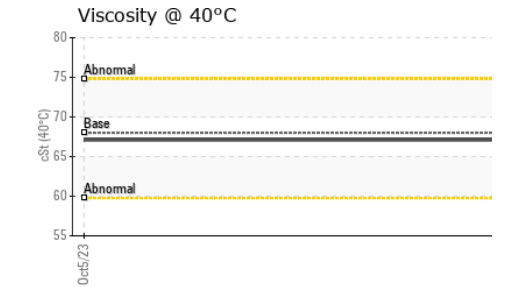
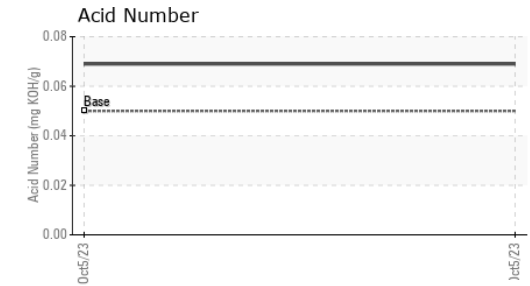
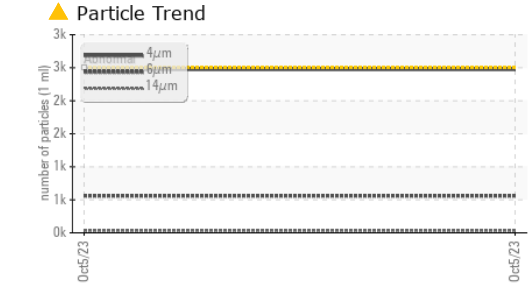
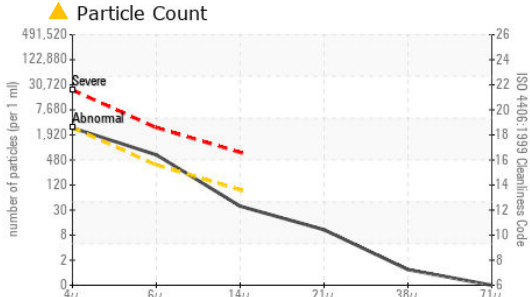
method	limit/base	current	history1	history2
Acid Number (AN) mg KOH/g ASTM D8045	.05	0.069	---	---

Particle Filter (Magn: 200 x)





OIL ANALYSIS REPORT



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PH05980376 **Received** : 16 Oct 2023
Lab Number : **05980376** **Diagnosed** : 19 Oct 2023
Unique Number : 10697671 **Diagnostician** : Jonathan Hester
Test Package : PLANT (Additional Tests: FilterPatch, PrtFilter)

USACE WHITNEY POWER PLANT
 285 CR 3602
 CLIFTON, TX
 US 76634
 Contact: CHAD BRUNO
 chad.j.bruno@usace.army.mil
 T: (254)622-3268
 F:

Certificate L2367
 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)

VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---
Precipitate	scalar	*Visual	NONE	NONE	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>2	NEG	---	---
Free Water	scalar	*Visual		NEG	---	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 68	67.1	---	---

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

GRAPHS

