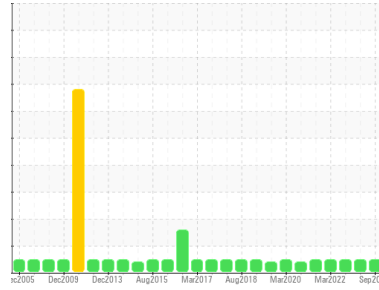




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
ALLIS-CHALMERS U-32 TURBINE BRG

Component
Turbine
Fluid
NOT GIVEN (100 GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

The amount and size of particulates present in the system are acceptable. There is no indication of any contamination 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		WC0845026	WC0786712	WC0731029
Sample Date	Client Info		13 Sep 2023	03 Mar 2023	16 Sep 2022
Machine Age	yrs	Client Info	0	0	0
Oil Age	yrs	Client Info	0	0	0
Oil Changed	Client Info		N/A	N/A	N/A
Sample Status			NORMAL	NORMAL	NORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >15	<1	1	1
Chromium	ppm	ASTM D5185m >4	0	0	0
Nickel	ppm	ASTM D5185m >2	0	0	0
Titanium	ppm	ASTM D5185m	0	0	<1
Silver	ppm	ASTM D5185m	0	0	<1
Aluminum	ppm	ASTM D5185m >10	0	<1	0
Lead	ppm	ASTM D5185m	0	1	0
Copper	ppm	ASTM D5185m >5	1	3	3
Tin	ppm	ASTM D5185m >5	<1	<1	0
Vanadium	ppm	ASTM D5185m	0	0	<1
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	0
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	<1	<1	2
Calcium	ppm	ASTM D5185m	2	15	6
Phosphorus	ppm	ASTM D5185m	14	4	20
Zinc	ppm	ASTM D5185m	6	2	<1
Sulfur	ppm	ASTM D5185m	941	4616	5472

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	<1	<1	2
Sodium	ppm	ASTM D5185m	3	0	1
Potassium	ppm	ASTM D5185m >20	<1	1	0

FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		612	5033	9021
Particles >6µm	ASTM D7647	>1300	112	360	332
Particles >14µm	ASTM D7647	>160	13	10	9
Particles >21µm	ASTM D7647	>40	2	2	2
Particles >38µm	ASTM D7647	>10	0	0	0
Particles >71µm	ASTM D7647	>3	0	0	0
Oil Cleanliness	ISO 4406 (c)	>--/17/14	16/14/11	20/16/10	20/16/10

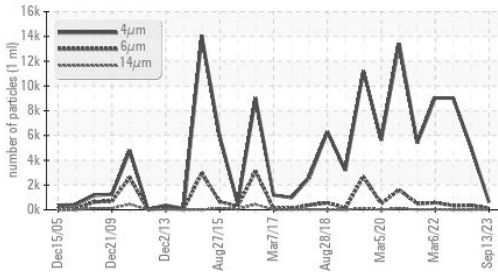
FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.075	0.15	0.15

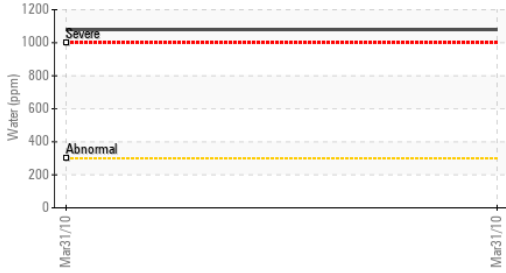


OIL ANALYSIS REPORT

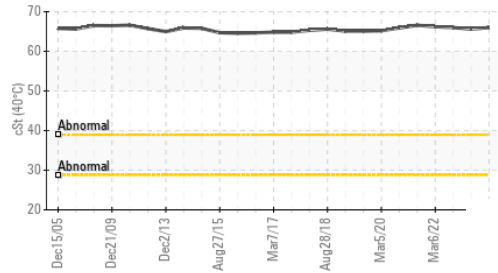
Particle Trend



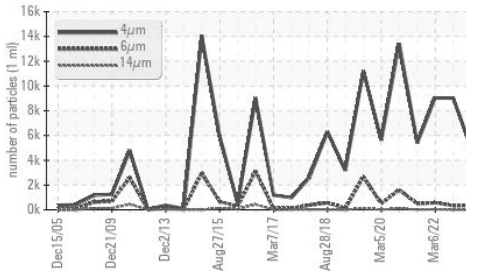
Water (KF)



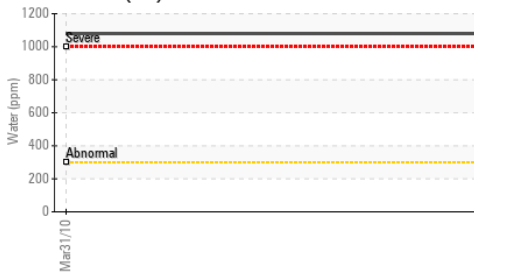
Viscosity @ 40°C



Particle Trend



Water (KF)



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.03	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

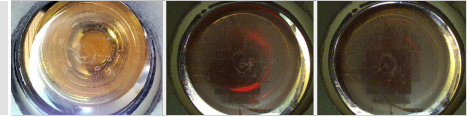
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	66.0	65.6	66.0

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color

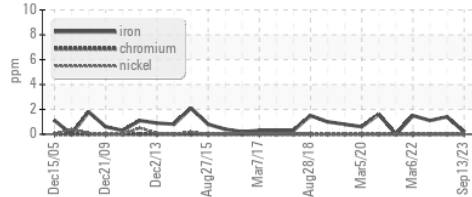


Bottom

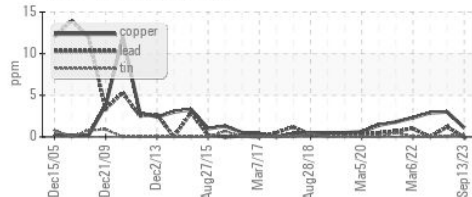


GRAPHS

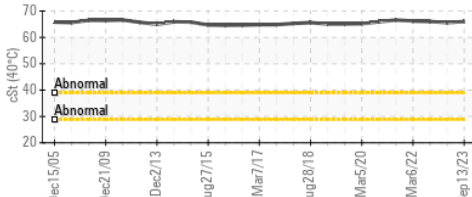
Ferrous Alloys



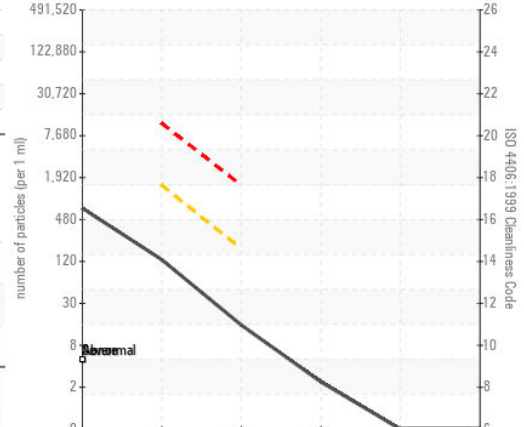
Non-ferrous Metals



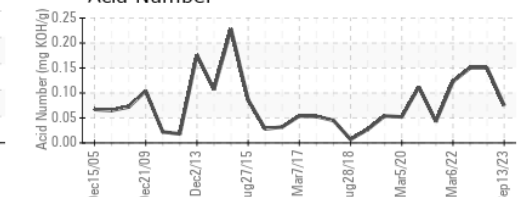
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : WC0845026
 Lab Number : 05960580
 Unique Number : 10661793
 Test Package : PLANT

Received : 25 Sep 2023
 Diagnosed : 27 Sep 2023
 Diagnostician : Don Baldrige

NEW YORK POWER AUTHORITY
 PO BOX 700
 MASSENA, NY
 US 13662
 Contact: ANDY WESTMACOTT
 Andy.Westmacott@nypa.gov
 T: (315)764-6250
 F: (315)764-6612

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)