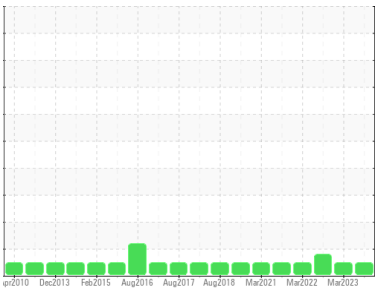
OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL

Area
TURBINE PIT
Machine Id
BALDWIN U-29 TURBINE BRG
Component
Turbine
Fluid
R&O OIL ISO 68 (200 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		**WC0845032**	WC0786718	WC0731023
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	ATTENTION

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	<1
Lead	ppm	ASTM D5185m		**<1**	1	0
Copper	ppm	ASTM D5185m	>5	**2**	1	1
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	5	**0**	0	0
Barium	ppm	ASTM D5185m	5	**0**	0	0
Molybdenum	ppm	ASTM D5185m	5	**<1**	<1	<1
Manganese	ppm	ASTM D5185m		**<1**	0	1
Magnesium	ppm	ASTM D5185m	5	**2**	2	3
Calcium	ppm	ASTM D5185m	5	**6**	6	0
Phosphorus	ppm	ASTM D5185m	100	**13**	9	24
Zinc	ppm	ASTM D5185m	25	**0**	5	7
Sulfur	ppm	ASTM D5185m	1500	**441**	377	343

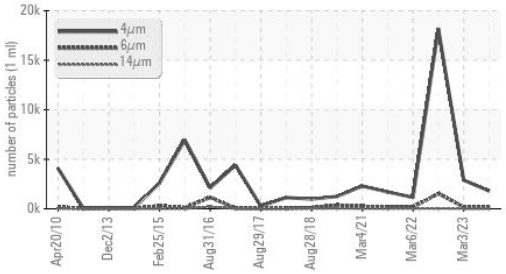
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	**<1**	0	<1
Sodium	ppm	ASTM D5185m		**3**	0	<1
Potassium	ppm	ASTM D5185m	>20	**2**	1	0

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		**1791**	2902	18157
Particles >6µm		ASTM D7647	>1300	**231**	192	▲ 1535
Particles >14µm		ASTM D7647	>160	**8**	5	31
Particles >21µm		ASTM D7647	>40	**2**	1	5
Particles >38µm		ASTM D7647	>10	**0**	0	0
Particles >71µm		ASTM D7647	>3	**0**	0	0
Oil Cleanliness		ISO 4406 (c)	>--/17/14	**18/15/10**	19/15/10	▲ 21/18/12

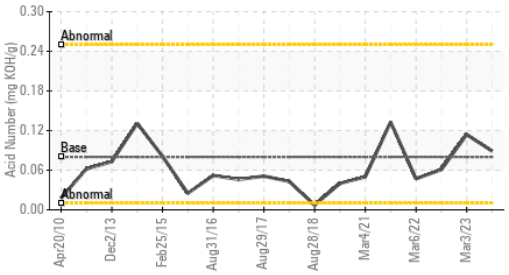
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.08	**0.089**	0.114	0.061

OIL ANALYSIS REPORT

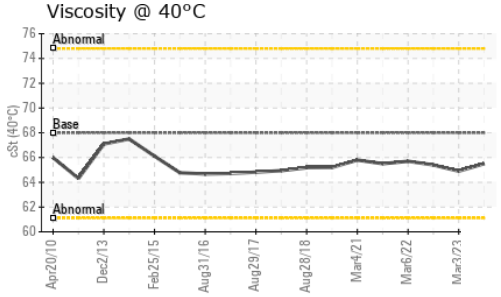
Particle Trend



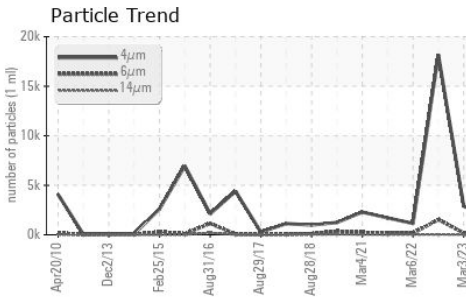
Acid Number



Viscosity @ 40°C

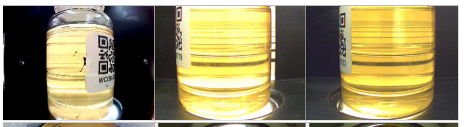
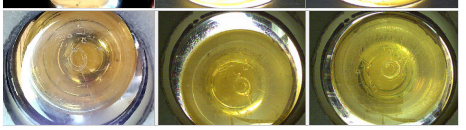


Particle Trend



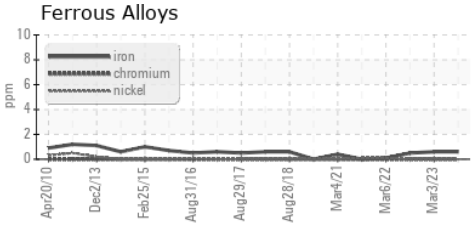
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt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

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	68	**65.5**	64.9	65.4

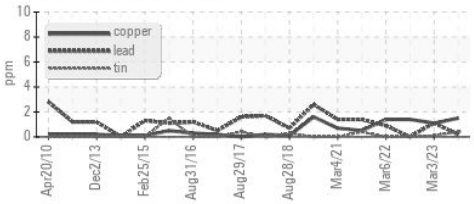
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

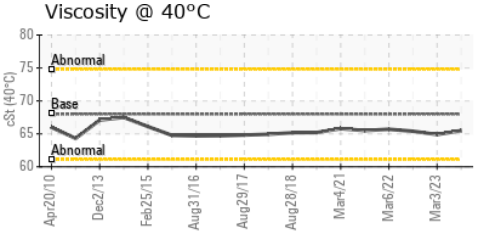
Ferrous Alloys



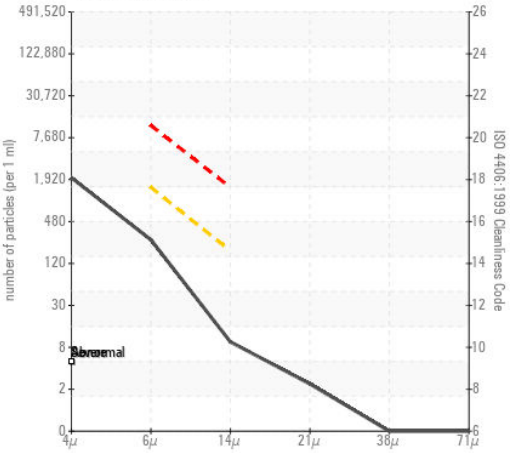
Non-ferrous Metals



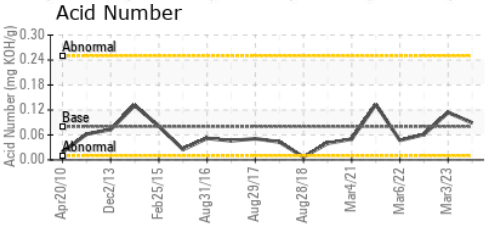
Viscosity @ 40°C



Particle Count



Acid Number



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0845032
Lab Number : 05960574
Unique Number : 10661787
Test Package : PLANT

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

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)

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