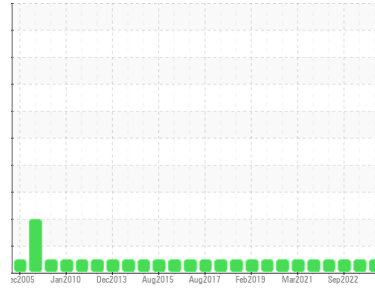




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
BALDWIN U-21 TURBINE BRG

Component
Turbine

Fluid
R&O OIL ISO 68 (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		WC0845048	WC0786734	WC0731007
Sample Date	Client Info		12 Sep 2023	02 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	0	0	0
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	<1	<1
Tin	ppm	ASTM D5185m >5	<1	0	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	1	0	1
Calcium	ppm	ASTM D5185m 5	6	3	0
Phosphorus	ppm	ASTM D5185m 100	11	4	19
Zinc	ppm	ASTM D5185m 25	0	1	0
Sulfur	ppm	ASTM D5185m 1500	3163	2666	3060

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	1	1	0

FLUID CLEANLINESS

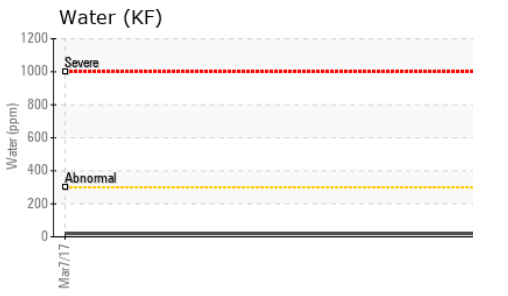
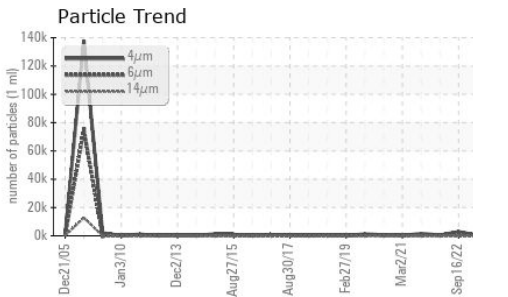
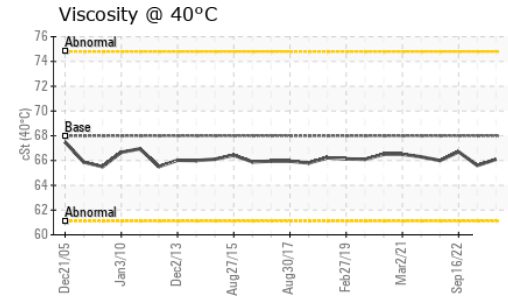
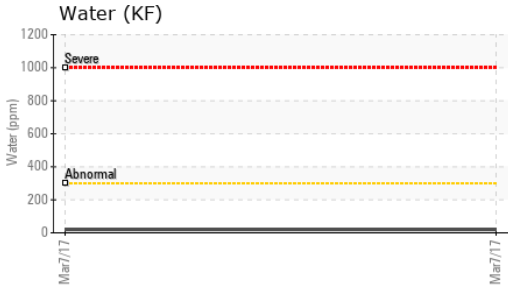
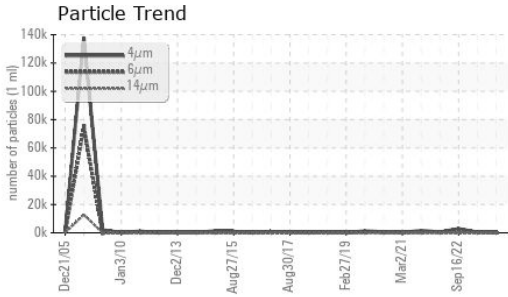
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		140	461	2934
Particles >6µm	ASTM D7647	>1300	45	173	164
Particles >14µm	ASTM D7647	>160	7	25	10
Particles >21µm	ASTM D7647	>40	2	4	3
Particles >38µm	ASTM D7647	>10	0	0	0
Particles >71µm	ASTM D7647	>3	0	0	0
Oil Cleanliness	ISO 4406 (c)	>--/17/14	14/13/10	16/15/12	19/15/10

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.08	0.158	0.189	0.116



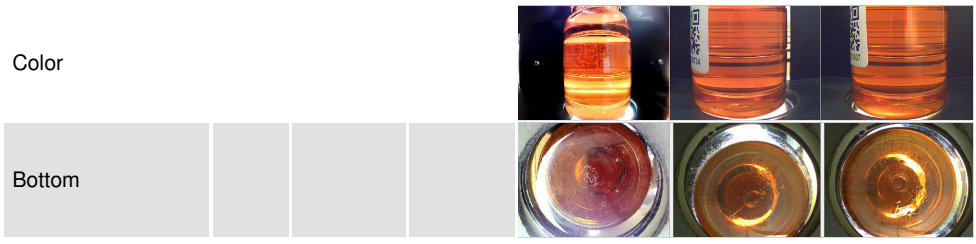
OIL ANALYSIS REPORT



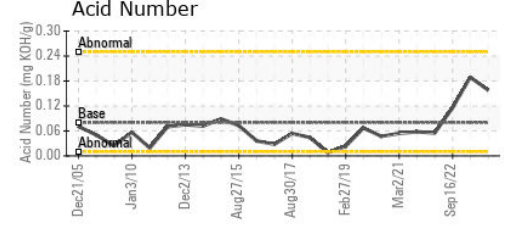
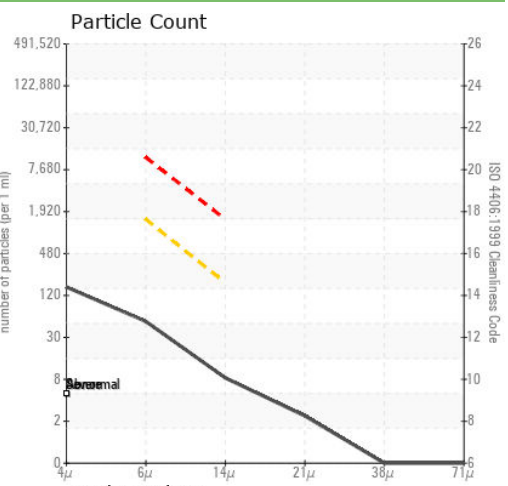
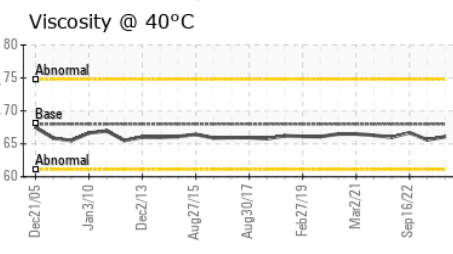
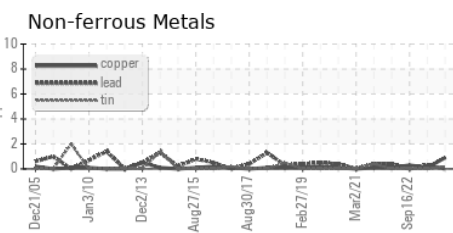
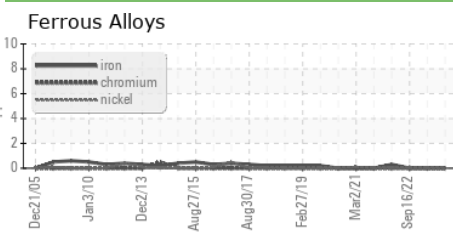
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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 68	66.1	65.6	66.7

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0845048 **Received** : 25 Sep 2023
Lab Number : 05960558 **Diagnosed** : 27 Sep 2023
Unique Number : 10661771 **Diagnostician** : Don Baldrige
Test Package : PLANT

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)