



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Area
STEAM AND POWER
 Machine Id
236.0006 #6 STEAM TURBINE GENERATOR

Component
Steam Turbine
 Fluid
SHELL TURBO T ISO 68 (--- GAL)

RECOMMENDATION

We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PE0003953	PE0003950	PE0000299
Sample Date		Client Info		24 Jan 2024	12 Jan 2024	14 Feb 2023
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Chngd	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	ABNORMAL	NORMAL

WEAR

All component wear rates are normal.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
PQ		ASTM D8184		14	16	---
Iron	ppm	ASTM D5185m	>15	2	1	1
Chromium	ppm	ASTM D5185m	>4	<1	<1	0
Nickel	ppm	ASTM D5185m	>2	<1	0	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>10	2	3	0
Lead	ppm	ASTM D5185m		<1	0	0
Copper	ppm	ASTM D5185m	>5	<1	<1	<1
Tin	ppm	ASTM D5185m	>5	<1	0	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

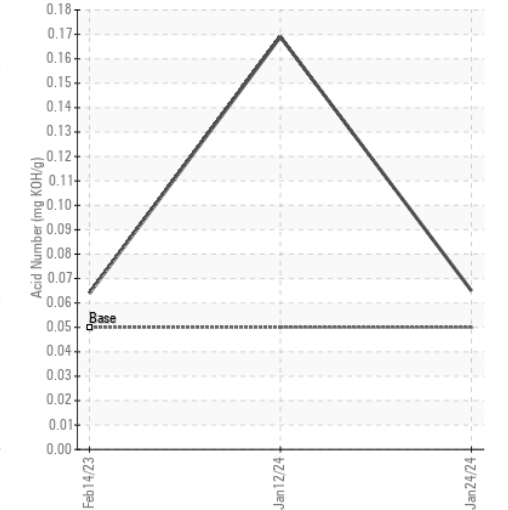
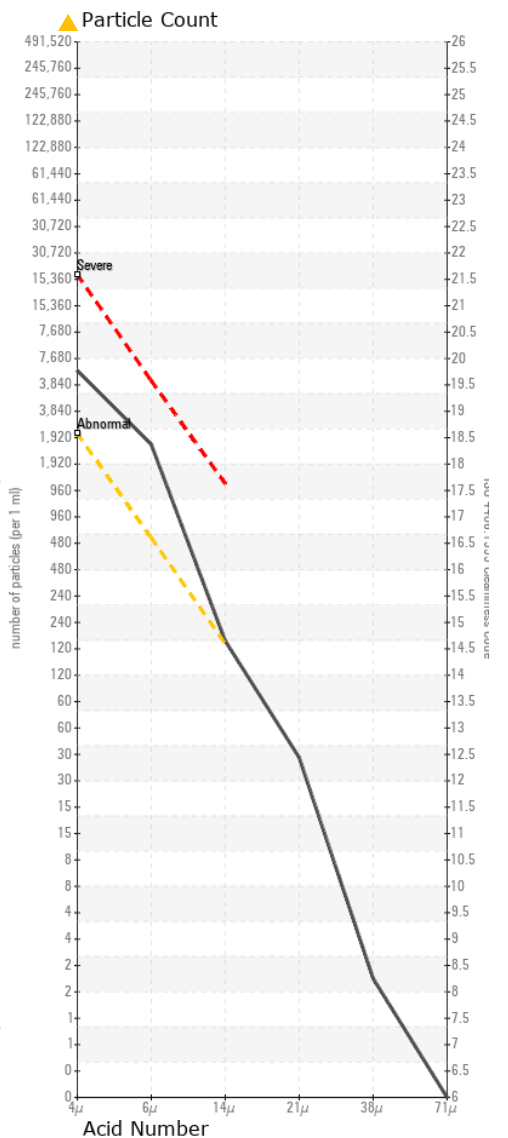
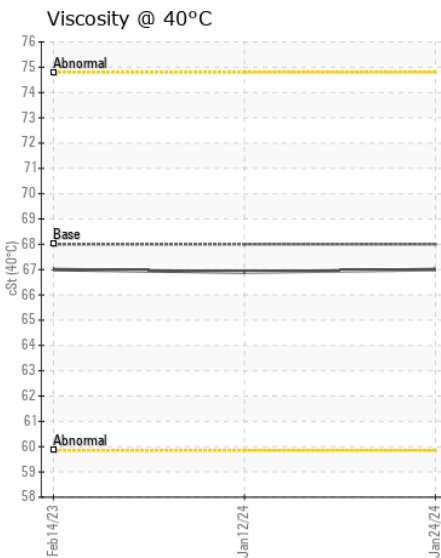
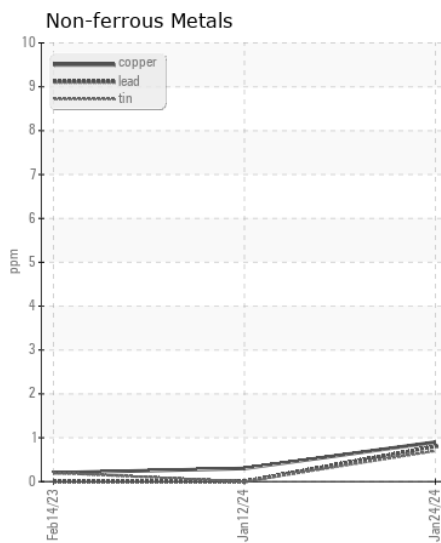
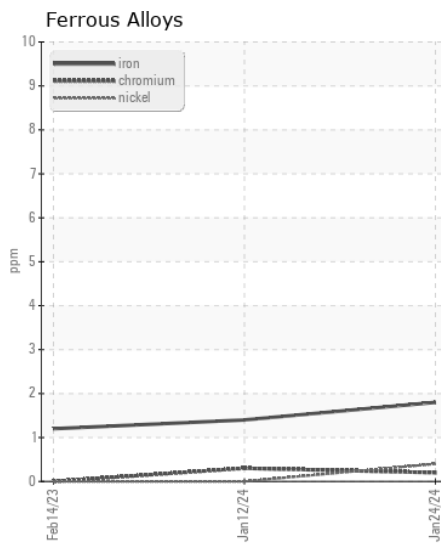
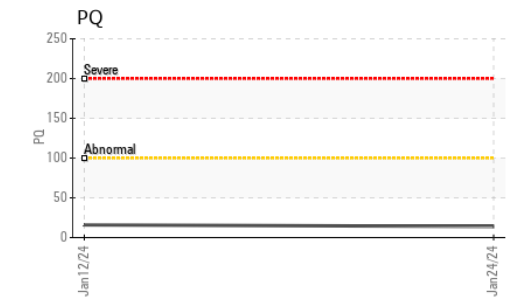
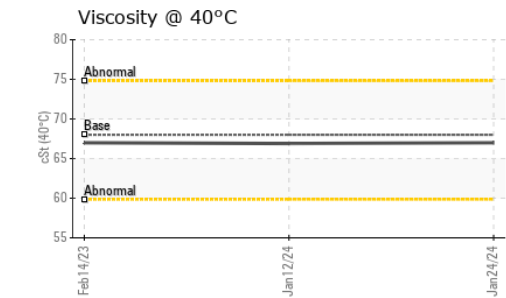
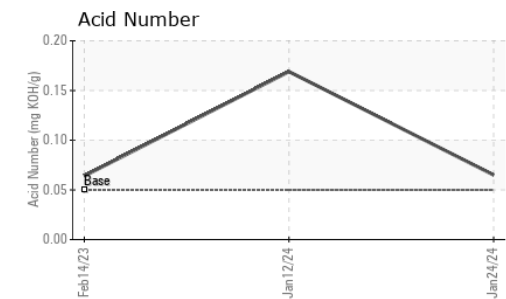
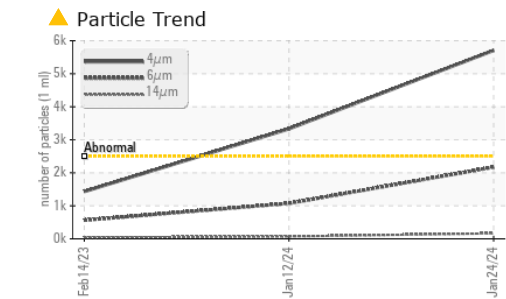
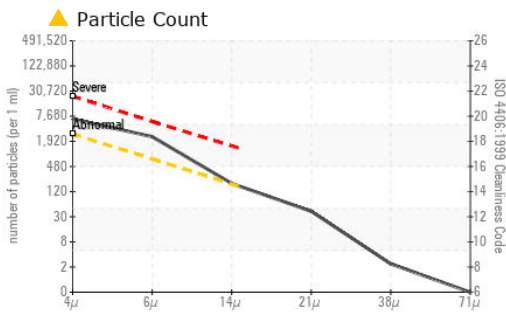
There is a high amount of particulates present in the oil.

Silicon	ppm	ASTM D5185m	>15	<1	0	<1
Potassium	ppm	ASTM D5185m	>20	<1	<1	1
Water		WC Method	>0.03	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>2500	▲ 5707	▲ 3332	1432
Particles >6µm		ASTM D7647	>640	▲ 2170	▲ 1073	563
Particles >14µm		ASTM D7647	>160	▲ 166	70	40
Particles >21µm		ASTM D7647	>40	36	17	8
Particles >38µm		ASTM D7647	>10	2	0	0
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>18/16/14	▲ 20/18/15	▲ 19/17/13	18/16/12
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT	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	0.2%	NEG

FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		0	0	0
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m		13	0	0
Molybdenum	ppm	ASTM D5185m		<1	0	0
Manganese	ppm	ASTM D5185m		<1	0	0
Magnesium	ppm	ASTM D5185m		0	<1	<1
Calcium	ppm	ASTM D5185m		<1	<1	1
Phosphorus	ppm	ASTM D5185m		30	0	13
Zinc	ppm	ASTM D5185m		<1	8	10
Sulfur	ppm	ASTM D5185m		110	104	169
Acid Number (AN)	mg KOH/g	ASTM D8045	.05	0.065	0.169	0.064
Visc @ 40°C	cSt	ASTM D445	68	67.0	66.9	67.0



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PE0003953 **Received** : 12 Feb 2024
Lab Number : 06085960 **Tested** : 13 Feb 2024
Unique Number : 10873405 **Diagnosed** : 13 Feb 2024 - Don Baldrige
Test Package : PLANT (Additional Tests: ICP, KV40, PQ, PrtCount, SCREEN)

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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)