



# OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Area  
**Co-Gen - Utilities**  
Machine Id  
**32-1800 GE TURBINE**

Component  
**Steam Turbine**  
Fluid  
**Mobil DTE-832 ISO32 TURBINE OIL (1300 GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>PE0001468</b>	PE0000989	PE0000890
Sample Date		Client Info		<b>21 Dec 2023</b>	25 Jul 2023	04 May 2023
Machine Age	hrs	Client Info		<b>10</b>	10	10
Oil Age	hrs	Client Info		<b>10</b>	10	10
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>N/A</b>	N/A	N/A
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	ATTENTION	ABNORMAL

## WEAR

All component wear rates are normal.

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

## CONTAMINATION

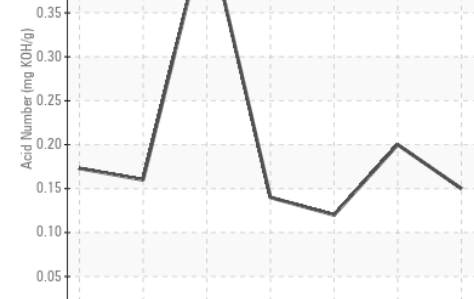
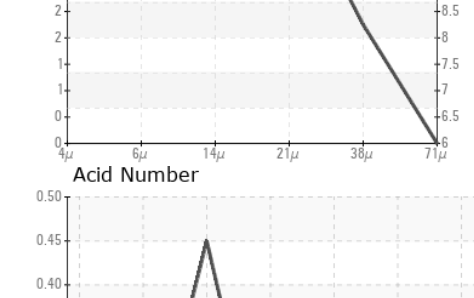
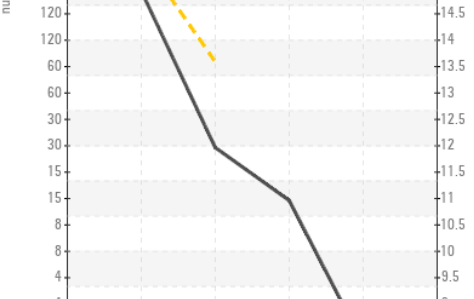
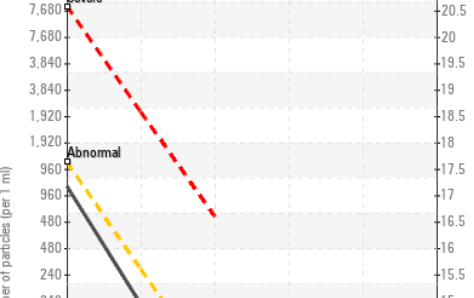
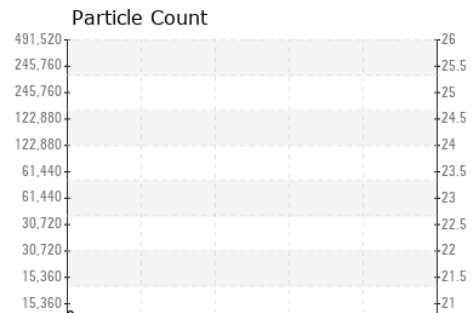
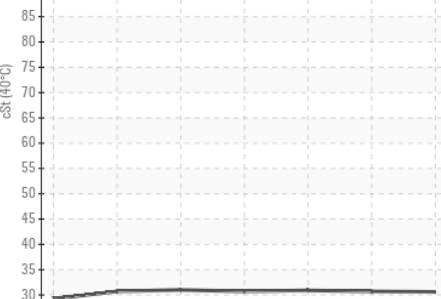
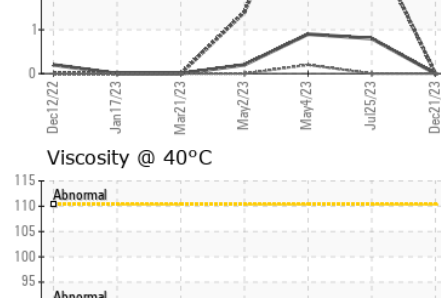
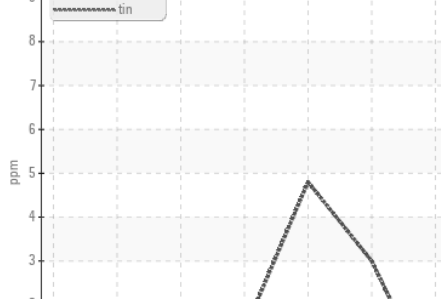
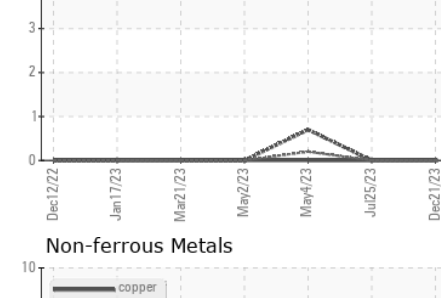
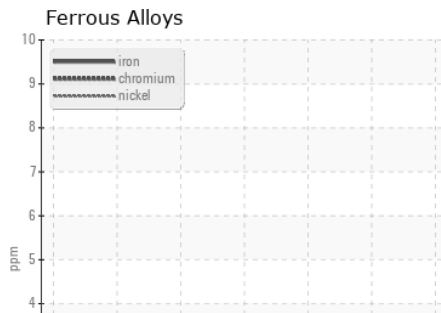
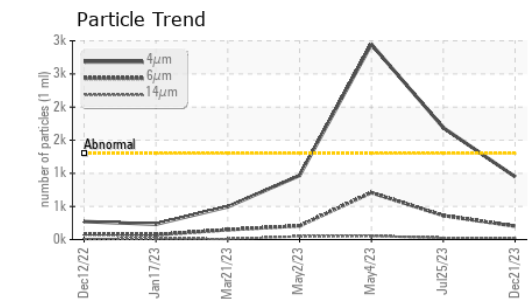
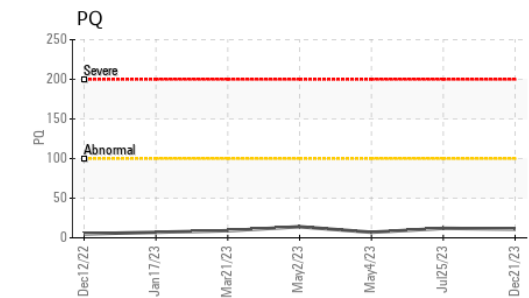
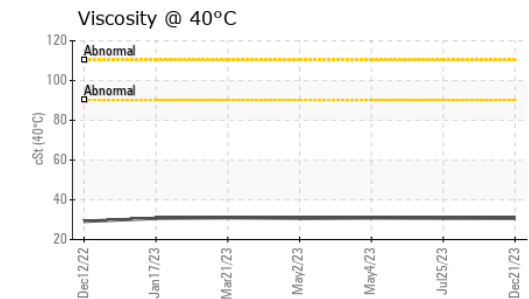
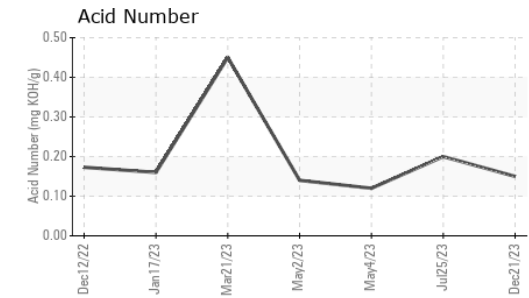
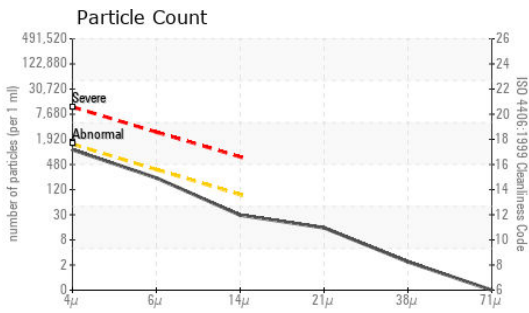
The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>15	<b>0</b>	<1	1
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	<1	3
Water		WC Method	>0.03	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>1300	<b>948</b>	▲ 1689	▲ 2947
Particles >6µm		ASTM D7647	>320	<b>202</b>	▲ 363	▲ 708
Particles >14µm		ASTM D7647	>80	<b>26</b>	25	54
Particles >21µm		ASTM D7647	>20	<b>13</b>	9	16
Particles >38µm		ASTM D7647	>4	<b>2</b>	1	0
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>17/15/13	<b>17/15/12</b>	▲ 18/16/12	▲ 19/17/13
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.03	<b>NEG</b>	NEG	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		<b>1</b>	<1	1
Boron	ppm	ASTM D5185m		<b>0</b>	0	<1
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>0</b>	0	0
Manganese	ppm	ASTM D5185m		<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185m		<b>0</b>	<1	0
Calcium	ppm	ASTM D5185m		<b>0</b>	0	0
Phosphorus	ppm	ASTM D5185m		<b>1055</b>	1029	1082
Zinc	ppm	ASTM D5185m		<b>0</b>	0	0
Sulfur	ppm	ASTM D5185m		<b>0</b>	7	0
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.15</b>	0.20	0.12
Visc @ 40°C	cSt	ASTM D445		<b>30.6</b>	30.7	30.9



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PE0001468 **Received** : 08 Jan 2024  
**Lab Number** : 06054778 **Diagnosed** : 10 Jan 2024  
**Unique Number** : 10820727 **Diagnostician** : 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)