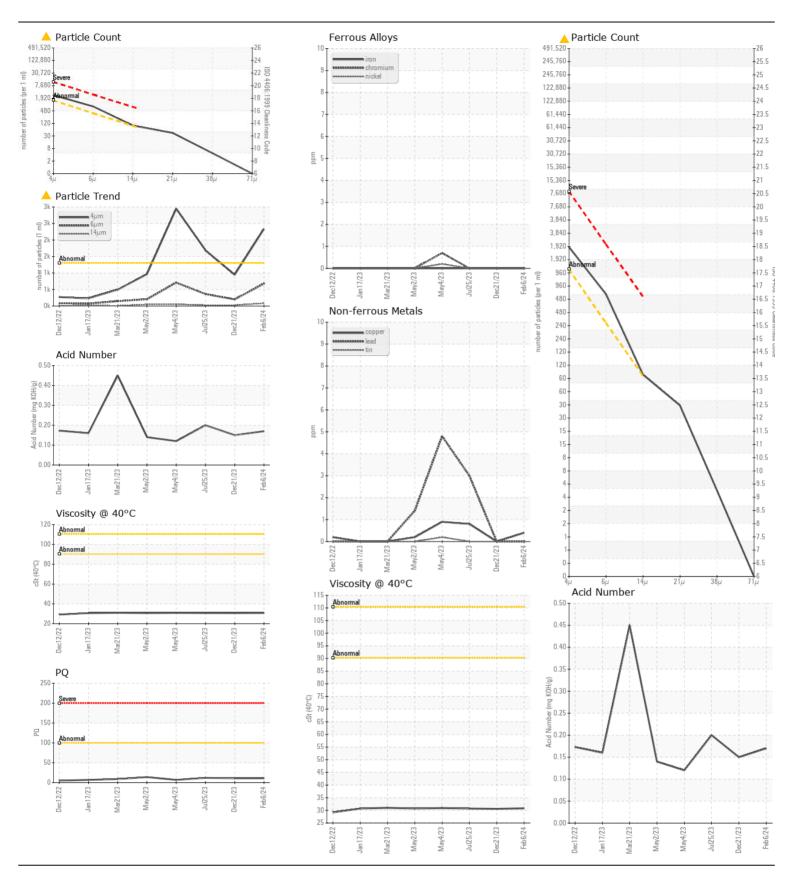
**WEAR** CONTAMINATION **FLUID CONDITION** 

**NORMAL ABNORMAL NORMAL** 

## Co-Gen - Utilities Machine Id 32-1800 GE TURBINE

Steam Turbine

	)						
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
We recommend you service the filters on this component. Resample at the next service interval to monitor.	Sample Number		Client Info		PE0001532	PE0001468	PE0000989
	Sample Date		Client Info		06 Feb 2024	21 Dec 2023	25 Jul 202
	Machine Age	hrs	Client Info		10	10	10
	Oil Age	hrs	Client Info		10	10	10
	Filter Age	hrs	Client Info		0	0	0
	Oil Changed		Client Info		N/A	N/A	N/A
	Filter Changed		Client Info		N/A	N/A	N/A
<u> </u>	Sample Status				ABNORMAL	NORMAL	ATTENTION
WEAR	PQ		ASTM D8184		11	11	12
	Iron	ppm	ASTM D5185m	>15	0	0	0
All component wear rates are normal.	Chromium	ppm	ASTM D5185m	>4	0	0	0
	Nickel	ppm	ASTM D5185m	>2	0	0	0
	Titanium	ppm	ASTM D5185m		0	0	0
	Silver	ppm	ASTM D5185m		0	0	0
	Aluminum	ppm	ASTM D5185m	>10	0	0	0
	Lead	ppm	ASTM D5185m		0	0	3
	Copper	ppm	ASTM D5185m	>5	<1	0	<1
	Tin	ppm	ASTM D5185m	>5	0	0	0
	Vanadium	ppm	ASTM D5185m		0	0	<1
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m	>15	0	0	<1
JOHT AMILITATION	Potassium	ppm	ASTM D5185m		0	0	<1
There is a high amount of particulates present in the oil.	Water	le le	WC Method		NEG	NEG	NEG
	Particles >4µm		ASTM D7647		<b>2336</b>	948	<b>1689</b>
	Particles >6µm		ASTM D7647		<b>▲</b> 681	202	▲ 363
	Particles >14µm		ASTM D7647	>80	<b>83</b>	26	25
	Particles >21µm		ASTM D7647	>20	<b>A</b> 37	13	9
	Particles >38µm		ASTM D7647	>4	4	2	1
	Particles >71µm		ASTM D7647		0	0	0
	Oil Cleanliness		ISO 4406 (c)		<b>18/17/14</b>	17/15/12	<b>1</b> 8/16/1
	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	NORM
	Odor	scalar	*Visual	NORML	NORML	NORML	NORM
	<b>Emulsified Water</b>	scalar	*Visual	>0.03	NEG	NEG	NEG
LUD CONDITION	Sodium	nnm	ACTM DE10Em		4	4	
FLUID CONDITION		ppm	ASTM D5185m ASTM D5185m		1	1 0	<1
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.	Boron Barium	ppm			0	0	
	Molybdenum	ppm	ASTM D5185m ASTM D5185m		0	0	0
	Manganese	ppm	ASTM D5185m		0	0	0
	Magnesium	ppm	ASTM D5165III		0	0	<1
	Calcium	ppm	ASTM D5165III		1	0	0
	Phosphorus	ppm	ASTM D5165III		969	1055	1029
	Zinc	ppm	ASTM D5165III		0	0	0
	Sulfur	ppm	ASTM D5185m		21	0	7
	Acid Number (AN)	mg KOH/g	ASTM D3163111 ASTM D8045		0.17	0.15	0.20
	Visc @ 40°C	cSt	ASTM D6045		30.8	30.6	30.7
	VISC @ 40°C	COL	A3 1 W D445		30.0	30.0	30.7





Certificate L2367

Laboratory Sample No.

: PE0001532 Lab Number : 06085349

Unique Number : 10872794

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received **Tested** 

Diagnosed

: 12 Feb 2024 : 12 Feb 2024 - Doug Bogart

Test Package: PLANT (Additional Tests: ICP, KV40, PQ, PrtCount, SCREEN)

: 09 Feb 2024

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)

**MCKINLEY PAPER COMPANY** 

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