



OIL ANALYSIS REPORT

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

Area  
**STEAM AND POWER**  
 Machine Id  
**230.0063 #6 Turbine Dehydrator**  
 Component  
**Diesel Engine**  
 Fluid  
**{not provided} (--- GAL)**

**RECOMMENDATION**

We recommend you service the filters on this component. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample.

**WEAR**

All component wear rates are normal.

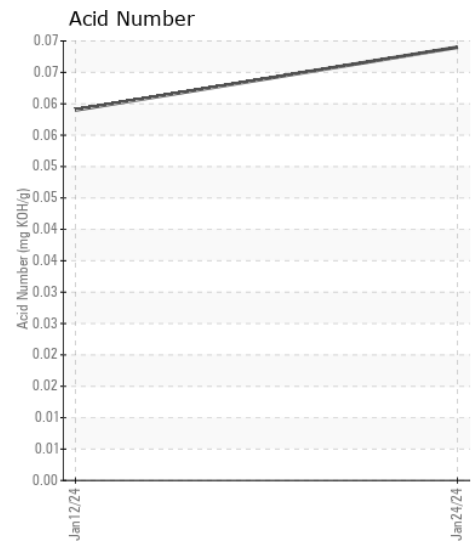
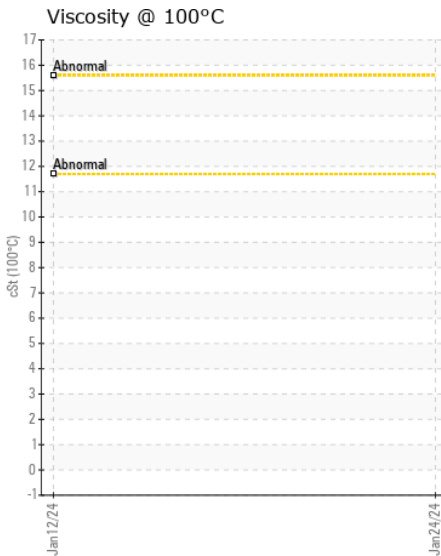
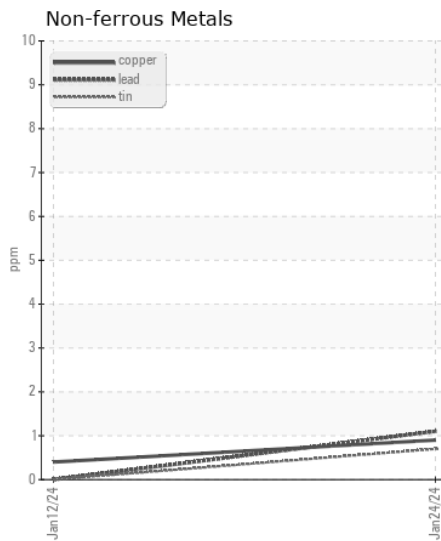
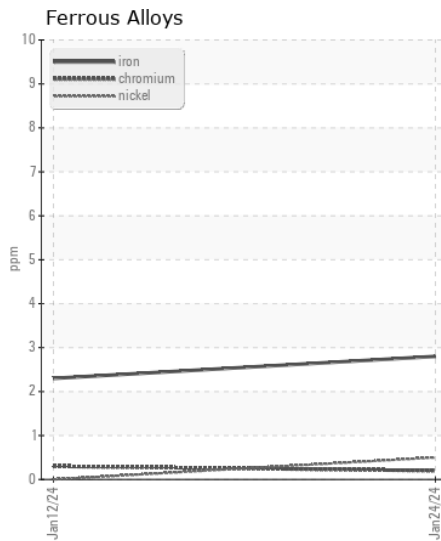
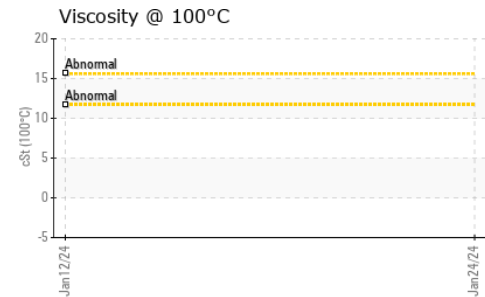
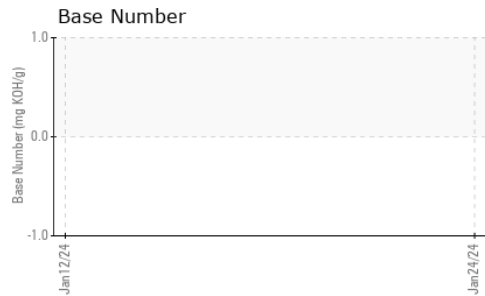
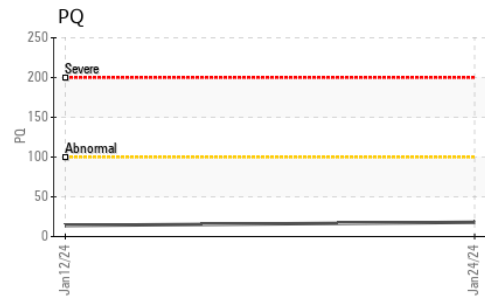
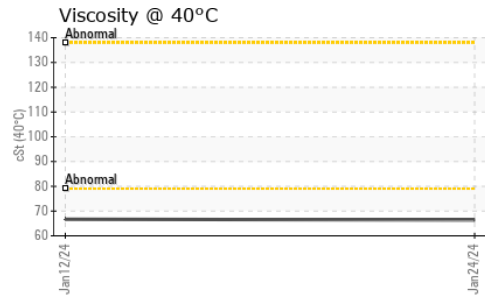
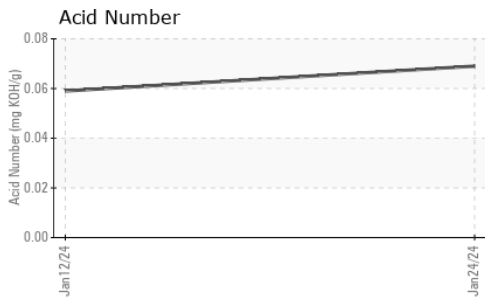
**CONTAMINATION**

Moderate concentration of visible dirt/debris present in the oil.

**FLUID CONDITION**

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

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>PE0003952</b>	PE0003951	---
Sample Date		Client Info		<b>24 Jan 2024</b>	12 Jan 2024	---
Machine Age	hrs	Client Info		<b>0</b>	0	---
Oil Age	hrs	Client Info		<b>0</b>	0	---
Filter Age	hrs	Client Info		<b>0</b>	0	---
Oil Changed		Client Info		<b>Not Changd</b>	Not Changd	---
Filter Changed		Client Info		<b>N/A</b>	N/A	---
Sample Status				<b>ABNORMAL</b>	ABNORMAL	---
PQ		ASTM D8184		<b>18</b>	14	---
Iron	ppm	ASTM D5185m	>100	<b>3</b>	2	---
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	---
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	0	---
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	---
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m	>20	<b>2</b>	3	---
Lead	ppm	ASTM D5185m	>40	<b>1</b>	0	---
Copper	ppm	ASTM D5185m	>330	<b>&lt;1</b>	<1	---
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	0	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Silicon	ppm	ASTM D5185m	>25	<b>&lt;1</b>	<1	---
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	---
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	---
Water		WC Method	>0.2	<b>NEG</b>	NEG	---
Glycol		WC Method		<b>NEG</b>	NEG	---
Particles >4µm		ASTM D7647	>20000	<b>---</b>	▲ 14064	---
Particles >6µm		ASTM D7647	>5000	<b>---</b>	▲ 5314	---
Particles >14µm		ASTM D7647	>640	<b>---</b>	▲ 485	---
Particles >21µm		ASTM D7647	>160	<b>---</b>	▲ 150	---
Particles >38µm		ASTM D7647	>40	<b>---</b>	5	---
Particles >71µm		ASTM D7647	>10	<b>---</b>	0	---
Oil Cleanliness		ISO 4406 (c)	>21/19/16	<b>---</b>	▲ 21/20/16	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Debris	scalar	*Visual	NONE	▲ <b>MODER</b>	LIGHT	---
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	0.2%	---
Sodium	ppm	ASTM D5185m		<b>0</b>	<1	---
Boron	ppm	ASTM D5185m		<b>0</b>	0	---
Barium	ppm	ASTM D5185m		<b>13</b>	0	---
Molybdenum	ppm	ASTM D5185m		<b>&lt;1</b>	0	---
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	0	---
Magnesium	ppm	ASTM D5185m		<b>0</b>	<1	---
Calcium	ppm	ASTM D5185m		<b>2</b>	2	---
Phosphorus	ppm	ASTM D5185m		<b>32</b>	0	---
Zinc	ppm	ASTM D5185m		<b>0</b>	12	---
Sulfur	ppm	ASTM D5185m		<b>170</b>	166	---
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.069</b>	0.059	---
Visc @ 40°C	cSt	ASTM D445		<b>66.4</b>	66.7	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PE0003952  
**Lab Number** : 06085959  
**Unique Number** : 10873404  
**Test Package** : PLANT ( Additional Tests: FT-IR, ICP, KV100, KV40, PQ, PrtCount, SCREENING)

**Received** : 12 Feb 2024  
**Tested** : 15 Feb 2024  
**Diagnosed** : 15 Feb 2024 - Jonathan Hester

**Port Townsend Paper Corporation**  
 100 Mill Rd  
 Port Townsend, WA  
 US 98368  
 Contact: LONNIE LOREE  
 lonnie.loree@ptpc.com  
 T: (907)738-6506  
 F:

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)