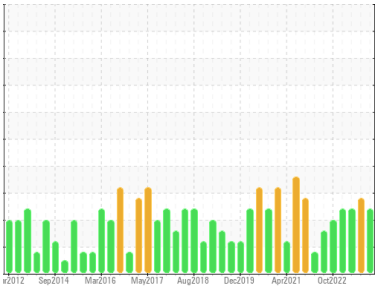
PROBLEM SUMMARY

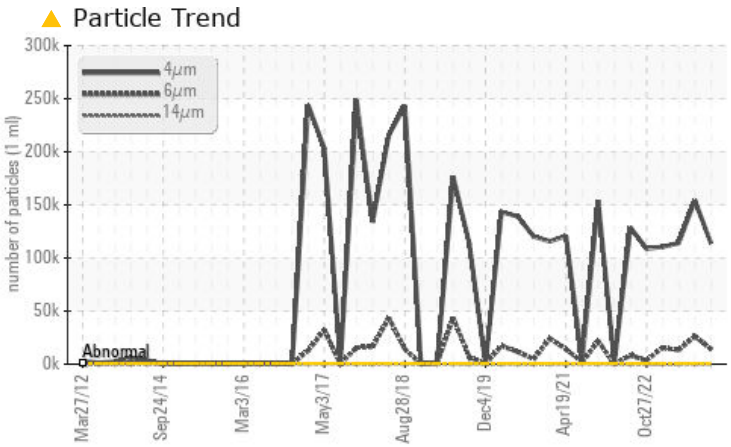
Sample Rating Trend

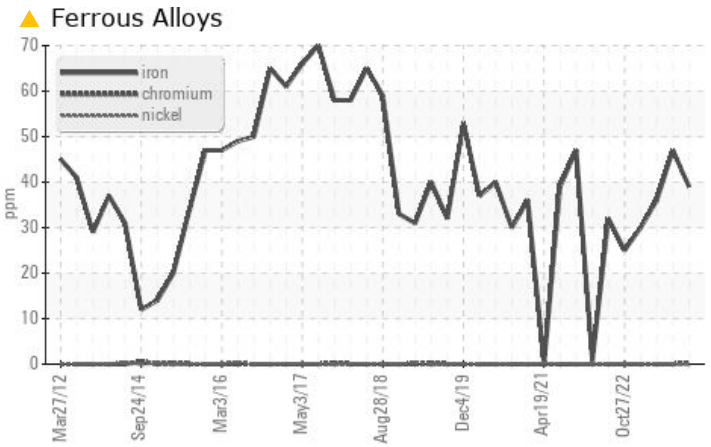


WEAR

Area
Morony
Machine Id
MRN01 Turbine Guide Bearing
Component
Case Drain Turbine Bearing
Fluid
CONOCO TURBINE OIL 68 (30 GAL)

COMPONENT CONDITION SUMMARY





RECOMMENDATION

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

PROBLEMATIC TEST RESULTS

Sample Status				**ABNORMAL**	ABNORMAL	ABNORMAL
Iron	ppm	ASTM D5185m	>20	▲ **39**	▲ 47	▲ 36
Particles >4µm		ASTM D7647	>640	▲ **113782**	▲ 154142	▲ 114118
Particles >6µm		ASTM D7647	>160	▲ **14190**	▲ 26425	▲ 13392
Particles >14µm		ASTM D7647	>40	▲ **46**	▲ 70	▲ 48
Oil Cleanliness		ISO 4406 (c)	>16/14/12	▲ **24/21/13**	▲ 24/22/13	▲ 24/21/13

Customer Id: PPLBUT
Sample No.: WC0843439
Lab Number: 05994339
Test Package: IND 2

To manage this report scan the QR code

To discuss the diagnosis or test data:
Angela Borella +1 800-237-1369
angela.borella@wearcheckusa.com

To change component or sample information:
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Filter	---	---	?	We recommend you service the filters on this component if applicable.

HISTORICAL DIAGNOSIS

15 Jul 2023 Diag: Don Baldridge

WEAR

We recommend you service the filters on this component. Resample at the next service interval to monitor.The iron level is abnormal. All other component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

---

01 May 2023 Diag: Don Baldridge

WEAR

We recommend you service the filters on this component. Resample at the next service interval to monitor.The iron level is abnormal. All other component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

---

18 Jan 2023 Diag: Don Baldridge

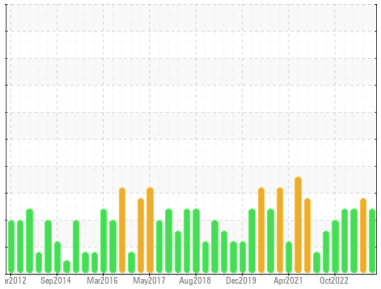
WEAR

We recommend you service the filters on this component. Resample at the next service interval to monitor.The iron level is abnormal. All other component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

OIL ANALYSIS REPORT

Sample Rating Trend



WEAR

Area
Morony
Machine Id
MRN01 Turbine Guide Bearing
Component
Case Drain Turbine Bearing
Fluid
CONOCO TURBINE OIL 68 (30 GAL)

DIAGNOSIS

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

Wear
The iron level is abnormal. All other component wear rates are normal.

Contamination
There is a high amount of particulates present 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		**WC0843439**	WC0715265	WC0757810
Sample Date		Client Info		**17 Oct 2023**	15 Jul 2023	01 May 2023
Machine Age	hrs	Client Info		**0**	0	0
Oil Age	hrs	Client Info		**0**	0	0
Oil Changed		Client Info		**N/A**	N/A	N/A
Sample Status				**ABNORMAL**	ABNORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	▲ **39**	▲ 47	▲ 36
Chromium	ppm	ASTM D5185m	>20	**<1**	0	0
Nickel	ppm	ASTM D5185m	>20	**0**	0	0
Titanium	ppm	ASTM D5185m		**0**	0	0
Silver	ppm	ASTM D5185m		**0**	0	0
Aluminum	ppm	ASTM D5185m	>20	**<1**	0	0
Lead	ppm	ASTM D5185m	>20	**2**	3	3
Copper	ppm	ASTM D5185m	>20	**<1**	<1	<1
Tin	ppm	ASTM D5185m	>20	**1**	<1	<1
Vanadium	ppm	ASTM D5185m		**0**	0	0
Cadmium	ppm	ASTM D5185m		**0**	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**0**	0	0
Barium	ppm	ASTM D5185m		**19**	2	0
Molybdenum	ppm	ASTM D5185m		**0**	0	0
Manganese	ppm	ASTM D5185m		**<1**	<1	<1
Magnesium	ppm	ASTM D5185m		**0**	<1	0
Calcium	ppm	ASTM D5185m		**0**	0	0
Phosphorus	ppm	ASTM D5185m		**44**	11	9
Zinc	ppm	ASTM D5185m		**21**	1	0
Sulfur	ppm	ASTM D5185m		**0**	14	11

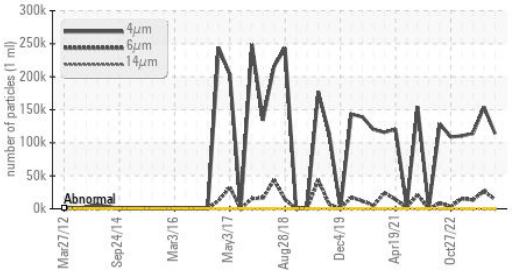
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	**8**	8	8
Sodium	ppm	ASTM D5185m		**2**	0	0
Potassium	ppm	ASTM D5185m	>20	**<1**	0	<1

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>640	▲ **113782**	▲ 154142	▲ 114118
Particles >6µm		ASTM D7647	>160	▲ **14190**	▲ 26425	▲ 13392
Particles >14µm		ASTM D7647	>40	▲ **46**	▲ 70	▲ 48
Particles >21µm		ASTM D7647	>10	**7**	▲ 12	8
Particles >38µm		ASTM D7647	>3	**0**	0	0
Particles >71µm		ASTM D7647	>3	**0**	0	0
Oil Cleanliness		ISO 4406 (c)	>16/14/12	▲ **24/21/13**	▲ 24/22/13	▲ 24/21/13

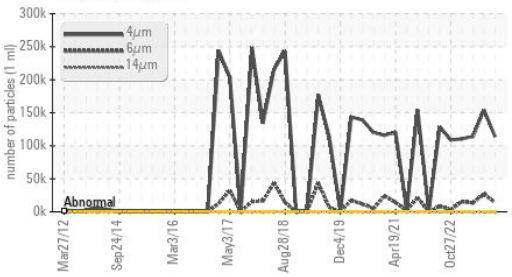
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.08	**0.088**	0.08	0.172

OIL ANALYSIS REPORT

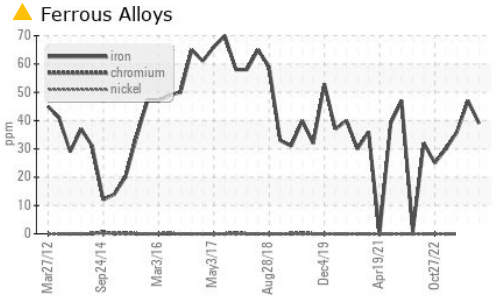
Particle Trend



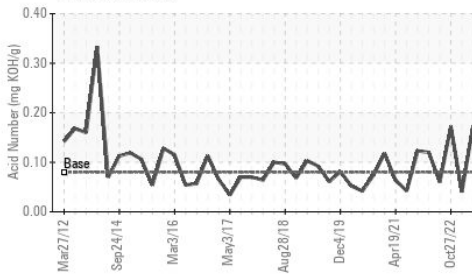
Particle Trend



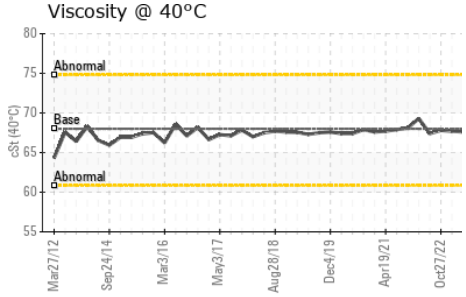
Ferrous Alloys



Acid Number

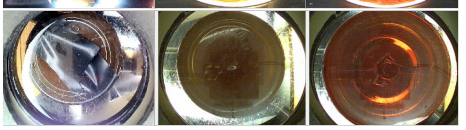


Viscosity @ 40°C



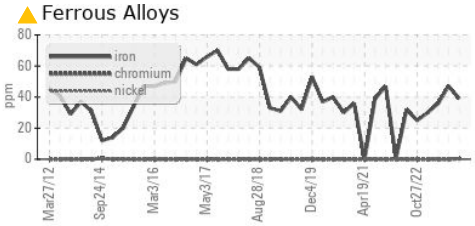
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Appearance	scalar	*Visual	NORML	**NORML**	NORML	NORML
Odor	scalar	*Visual	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	*Visual	>2	**NEG**	NEG	NEG
Free Water	scalar	*Visual		**NEG**	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	68	**67.8**	68.0	67.6

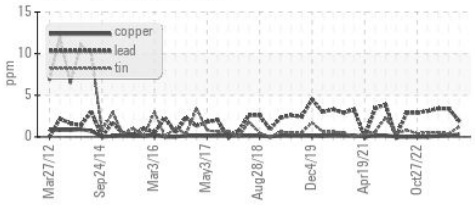
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

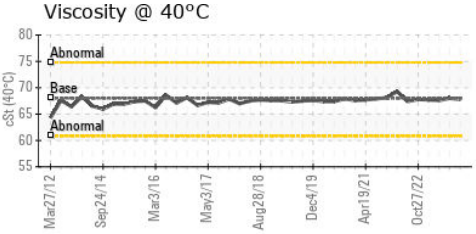
Ferrous Alloys



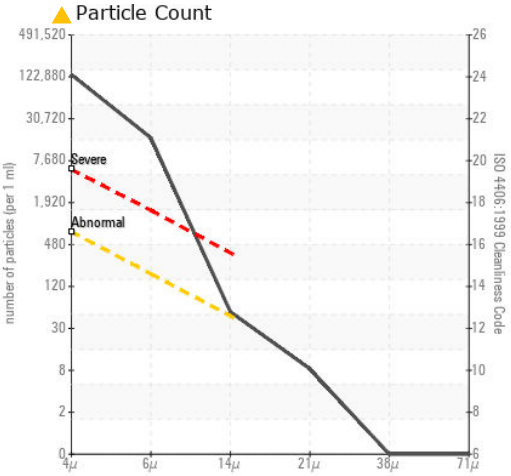
Non-ferrous Metals



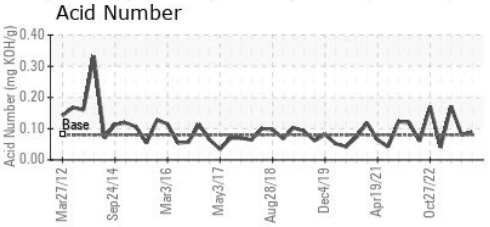
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0843439 **Received** : 31 Oct 2023
Lab Number : 05994339 **Diagnosed** : 01 Nov 2023
Unique Number : 10722699 **Diagnostician** : Angela Borella
Test Package : IND 2 (Additional Tests: PrtCount)

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)

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