



OIL ANALYSIS REPORT

Sample Rating Trend



ISO

Area
COWAN
 Machine Id
COWAN 224532
 Component
Front Differential
 Fluid
NOT GIVEN (--- GAL)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor. Please note that this is a corrected copy for laboratory data updates.

Wear

All component wear rates are normal.

Contamination

There is a high amount of silt (particulates < 14 microns in size) 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	history 1	history 2
Sample Number	Client Info	WC0828680	---	---
Sample Date	Client Info	24 May 2023	---	---
Machine Age	mls Client Info	2005	---	---
Oil Age	mls Client Info	0	---	---
Oil Changed	Client Info	N/A	---	---
Sample Status		ABNORMAL	---	---

WEAR METALS

method	limit/base	current	history 1	history 2
Iron ppm	ASTM D5185m >500	76	---	---
Chromium ppm	ASTM D5185m >10	<1	---	---
Nickel ppm	ASTM D5185m >10	<1	---	---
Titanium ppm	ASTM D5185m	<1	---	---
Silver ppm	ASTM D5185m	<1	---	---
Aluminum ppm	ASTM D5185m >25	1	---	---
Lead ppm	ASTM D5185m >25	3	---	---
Copper ppm	ASTM D5185m >100	7	---	---
Tin ppm	ASTM D5185m >10	<1	---	---
Vanadium ppm	ASTM D5185m	0	---	---
Cadmium ppm	ASTM D5185m	0	---	---

ADDITIVES

method	limit/base	current	history 1	history 2
Boron ppm	ASTM D5185m	270	---	---
Barium ppm	ASTM D5185m	4	---	---
Molybdenum ppm	ASTM D5185m	0	---	---
Manganese ppm	ASTM D5185m	4	---	---
Magnesium ppm	ASTM D5185m	1	---	---
Calcium ppm	ASTM D5185m	11	---	---
Phosphorus ppm	ASTM D5185m	1467	---	---
Zinc ppm	ASTM D5185m	2	---	---
Sulfur ppm	ASTM D5185m	30674	---	---

CONTAMINANTS

method	limit/base	current	history 1	history 2
Silicon ppm	ASTM D5185m >75	34	---	---
Sodium ppm	ASTM D5185m	6	---	---
Potassium ppm	ASTM D5185m >20	3	---	---
Water %	ASTM D6304 >.2	0.048	---	---
ppm Water	ASTM D6304 >2000	484.5	---	---

FLUID CLEANLINESS

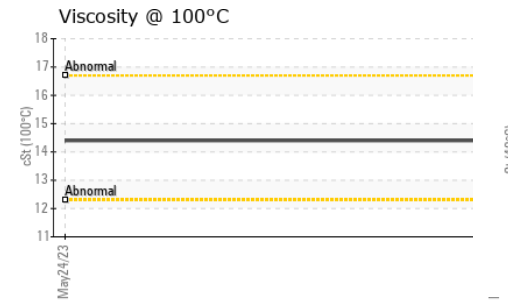
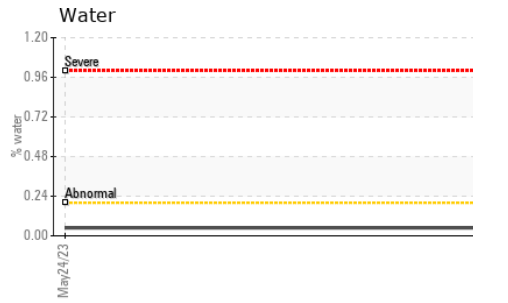
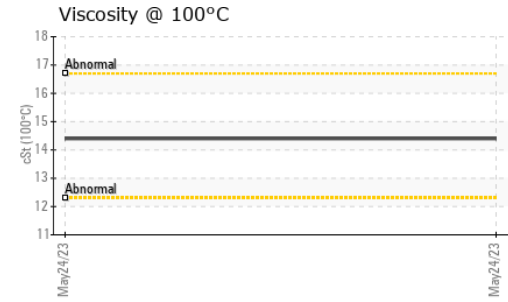
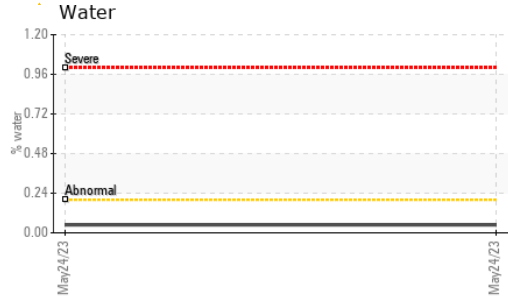
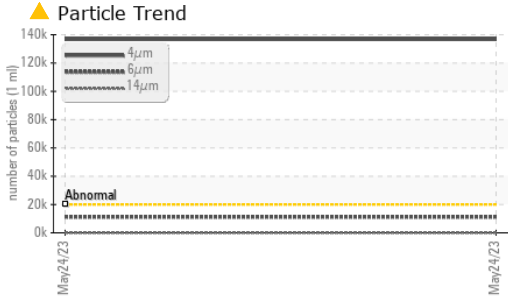
method	limit/base	current	history 1	history 2
Particles >4µm	ASTM D7647 >20000	▲ 136747	---	---
Particles >6µm	ASTM D7647 >5000	▲ 11214	---	---
Particles >14µm	ASTM D7647 >640	38	---	---
Particles >21µm	ASTM D7647 >160	3	---	---
Particles >38µm	ASTM D7647 >40	0	---	---
Particles >71µm	ASTM D7647 >10	0	---	---
Oil Cleanliness	ISO 4406 (c) >21/19/16	▲ 24/21/12	---	---

FLUID DEGRADATION

method	limit/base	current	history 1	history 2
Acid Number (AN) mg KOH/g	ASTM D8045	2.24	---	---



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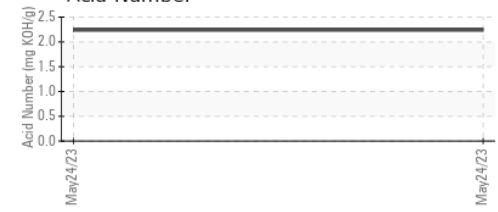
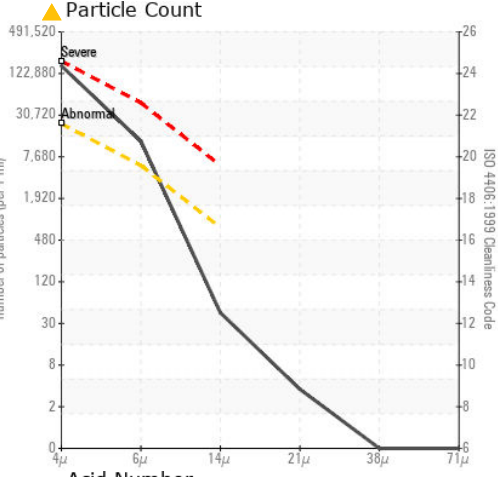
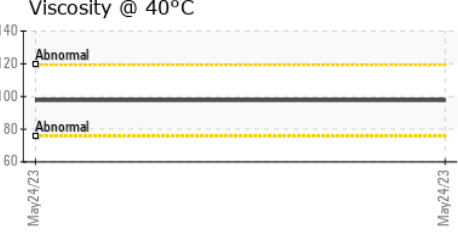
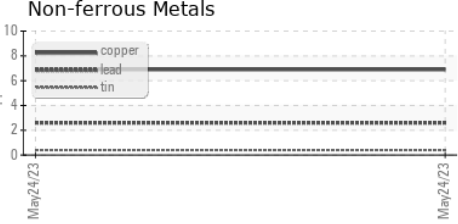
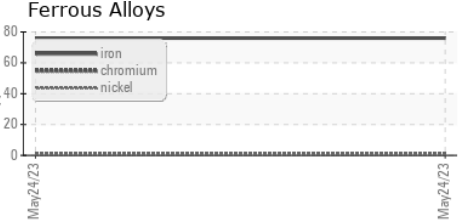


VISUAL	method	limit/base	current	history 1	history 2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	LIGHT	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>.2	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history 1	history 2
Visc @ 40°C	cSt	ASTM D445	97.7	---	---
Visc @ 100°C	cSt	ASTM D445	14.4	---	---
Viscosity Index (VI)	Scale	ASTM D2270	152	---	---

SAMPLE IMAGES	method	limit/base	current	history 1	history 2
Color				no image	no image
Bottom				no image	no image

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0828680 **Received** : 22 Jun 2023
Lab Number : 05881477 **Diagnosed** : 30 Jun 2023
Unique Number : 10526580 **Diagnostician** : Doug Bogart
Test Package : MOB 2 (Additional Tests: KF, KV100, PrtCount, VI)

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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)