



OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area
COWAN
 Machine Id
COWAN 224535
 Component
Rear Differential
 Fluid
NOT GIVEN (--- GAL)

DIAGNOSIS

▲ Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

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	WC0828687	---	---
Sample Date	Client Info	23 May 2023	---	---
Machine Age	mls	Client Info	281	---
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	7	---
Chromium	ppm	ASTM D5185m >10	<1	---
Nickel	ppm	ASTM D5185m >10	<1	---
Titanium	ppm	ASTM D5185m	0	---
Silver	ppm	ASTM D5185m	0	---
Aluminum	ppm	ASTM D5185m >25	0	---
Lead	ppm	ASTM D5185m >25	0	---
Copper	ppm	ASTM D5185m >100	0	---
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	107	---
Barium	ppm	ASTM D5185m	0	---
Molybdenum	ppm	ASTM D5185m	0	---
Manganese	ppm	ASTM D5185m	1	---
Magnesium	ppm	ASTM D5185m	191	---
Calcium	ppm	ASTM D5185m	1	---
Phosphorus	ppm	ASTM D5185m	1803	---
Zinc	ppm	ASTM D5185m	0	---
Sulfur	ppm	ASTM D5185m	32208	---

CONTAMINANTS

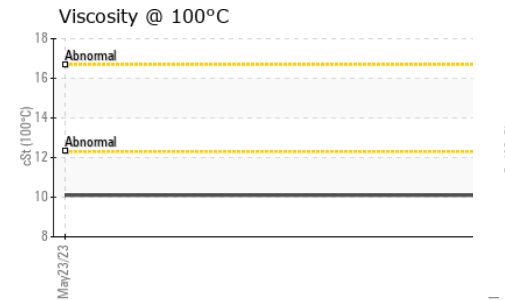
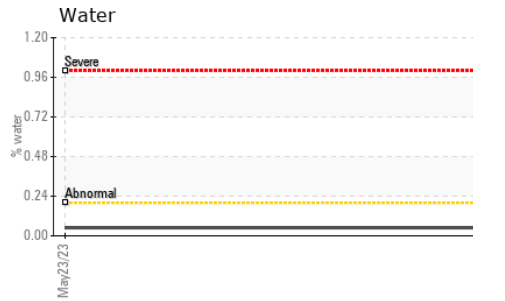
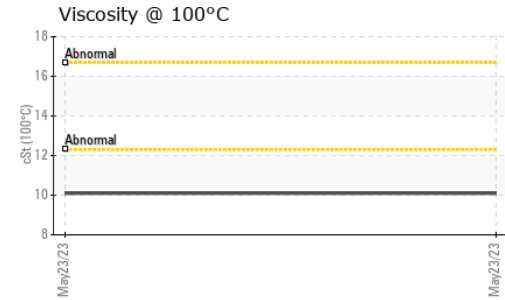
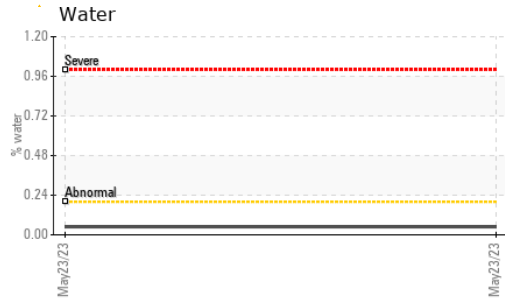
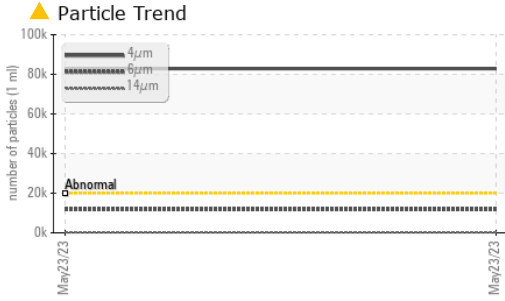
method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185m >75	6	---
Sodium	ppm	ASTM D5185m	1	---
Potassium	ppm	ASTM D5185m >20	2	---
Water	%	ASTM D6304 >.2	0.049	---
ppm Water	ppm	ASTM D6304 >2000	495.2	---

FLUID CLEANLINESS

method	limit/base	current	history 1	history 2
Particles >4µm	ASTM D7647	>20000	▲ 82863	---
Particles >6µm	ASTM D7647	>5000	▲ 11800	---
Particles >14µm	ASTM D7647	>640	260	---
Particles >21µm	ASTM D7647	>160	44	---
Particles >38µm	ASTM D7647	>40	0	---
Particles >71µm	ASTM D7647	>10	0	---
Oil Cleanliness	ISO 4406 (c)	>21/19/16	▲ 24/21/15	---

FLUID DEGRADATION

method	limit/base	current	history 1	history 2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.70	---

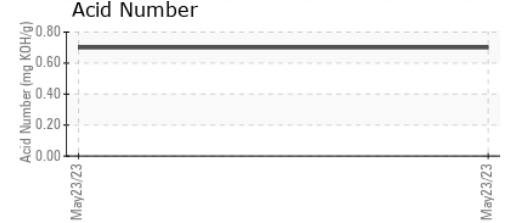
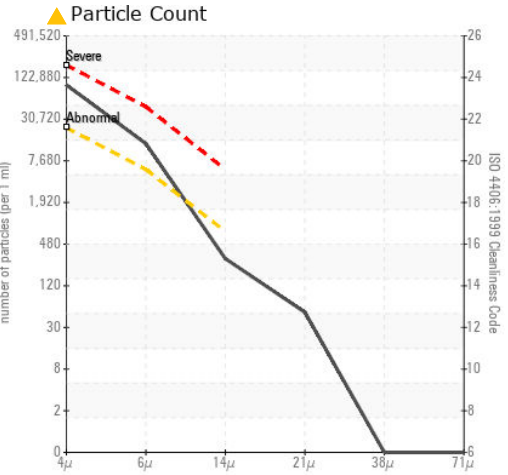
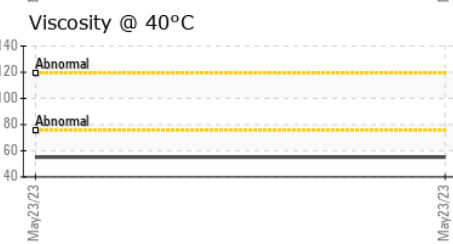
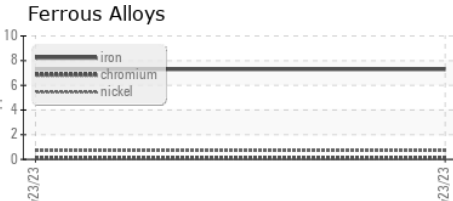


VISUAL	method	limit/base	current	history 1	history 2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	LIGHT	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*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	55.1	---	---
Visc @ 100°C	cSt	ASTM D445	10.1	---	---
Viscosity Index (VI)	Scale	ASTM D2270	173	---	---

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. : WC0828687 **Received** : 22 Jun 2023
Lab Number : 05881472 **Diagnosed** : 30 Jun 2023
Unique Number : 10526575 **Diagnostician** : Jonathan Hester
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)