



Machine Id
TUMBLER (S/N 93)

Component
Hydraulic System

Fluid
NOT GIVEN (--- GAL)



DIAGNOSIS

Recommendation

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

Wear

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

Contamination

The amount and size of particulates present in the system are acceptable. There is no indication of any contamination 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		PTK0004831	---	---
Sample Date	Client Info		10 Nov 2023	---	---
Machine Age	mths	Client Info	0	---	---
Oil Age	mths	Client Info	0	---	---
Oil Changed	Client Info		Not Changed	---	---
Sample Status			ABNORMAL	---	---

CONTAMINATION	method	limit/base	current	history1	history2
Water	WC Method	>0.05	NEG	---	---

WEAR METALS	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >20	2	---	---
Chromium	ppm	ASTM D5185m >20	<1	---	---
Nickel	ppm	ASTM D5185m >20	0	---	---
Titanium	ppm	ASTM D5185m	0	---	---
Silver	ppm	ASTM D5185m	0	---	---
Aluminum	ppm	ASTM D5185m >20	<1	---	---
Lead	ppm	ASTM D5185m >20	0	---	---
Copper	ppm	ASTM D5185m >20	▲ 82	---	---
Tin	ppm	ASTM D5185m >20	0	---	---
Vanadium	ppm	ASTM D5185m	<1	---	---
Cadmium	ppm	ASTM D5185m	0	---	---

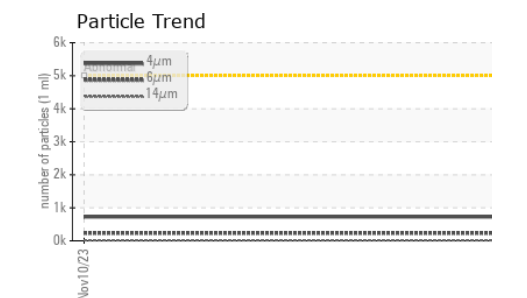
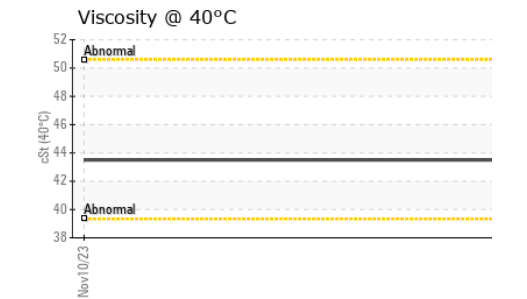
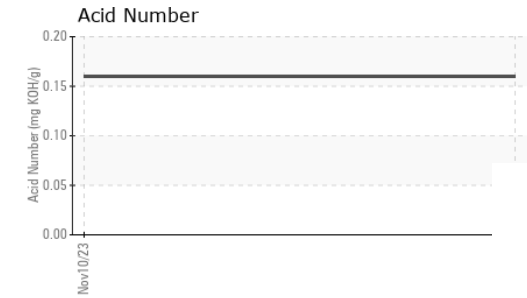
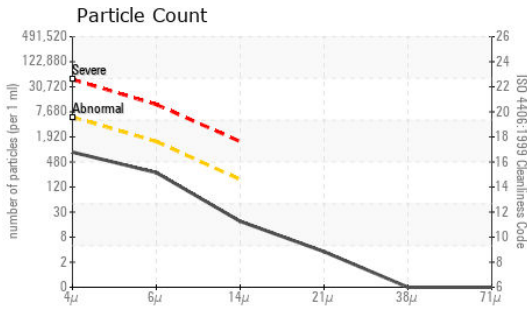
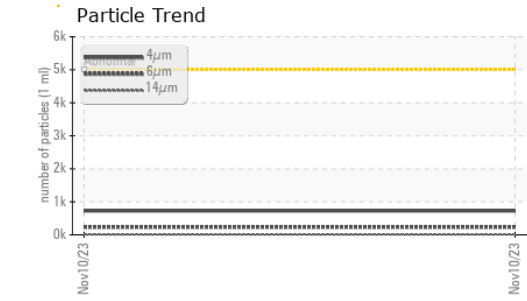
ADDITIVES	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	---	---
Barium	ppm	ASTM D5185m	0	---	---
Molybdenum	ppm	ASTM D5185m	10	---	---
Manganese	ppm	ASTM D5185m	0	---	---
Magnesium	ppm	ASTM D5185m	0	---	---
Calcium	ppm	ASTM D5185m	47	---	---
Phosphorus	ppm	ASTM D5185m	234	---	---
Zinc	ppm	ASTM D5185m	243	---	---
Sulfur	ppm	ASTM D5185m	1417	---	---

CONTAMINANTS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	3	---	---
Sodium	ppm	ASTM D5185m	<1	---	---
Potassium	ppm	ASTM D5185m >20	0	---	---

FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	726	---	---
Particles >6µm	ASTM D7647	>1300	234	---	---
Particles >14µm	ASTM D7647	>160	16	---	---
Particles >21µm	ASTM D7647	>40	3	---	---
Particles >38µm	ASTM D7647	>10	0	---	---
Particles >71µm	ASTM D7647	>3	0	---	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	17/15/11	---	---

FLUID DEGRADATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.16	---	---

OIL ANALYSIS REPORT



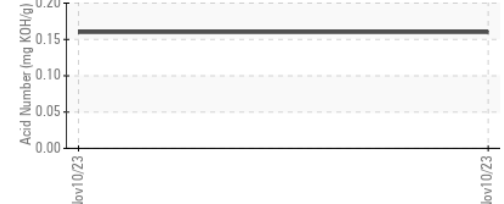
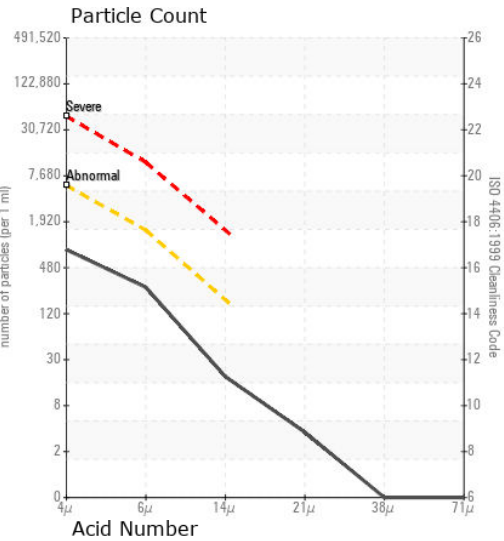
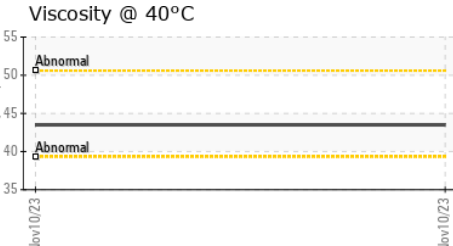
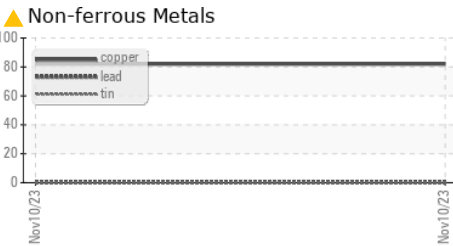
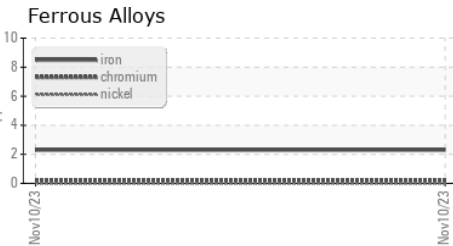
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.05	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	43.5	---	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
---------------	--------	------------	---------	----------	----------

Color		no image	no image
Bottom		no image	no image

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PTK0004831 **Received** : 20 Nov 2023
Lab Number : 06012349 **Diagnosed** : 22 Nov 2023
Unique Number : 10751493 **Diagnostician** : Don Baldrige
Test Package : MOB 2

OLD CASTLE APG - CPM
 4110 192ND ST E
 TACOMA, WA
 US 98446
 Contact: JULIEN LALONDE
 julien.lalonde@oldcastle.com
 T:
 F: (253)847-2595

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)