



OIL ANALYSIS REPORT

Sample Rating Trend



ISO

Machine Id

MCL 5 MOLDING PRESS

Component

Hydraulic System

Fluid

SHELL TELLUS 46 (--- GAL)

DIAGNOSIS

Recommendation

We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

Wear

All component wear rates are normal.

Contamination

There is a moderate amount of particulates (2 to 100 microns in size) present in the oil.

Fluid Condition

The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

SAMPLE INFORMATION	method	limit/base	current	history1	history2
Sample Number	Client Info		TLC0001887	---	---
Sample Date	Client Info		20 Jun 2024	---	---
Machine Age	hrs	Client Info	0	---	---
Oil Age	hrs	Client Info	0	---	---
Oil Changed	Client Info		N/A	---	---
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	0	---	---
Chromium	ppm	ASTM D5185m >20	0	---	---
Nickel	ppm	ASTM D5185m >20	<1	---	---
Titanium	ppm	ASTM D5185m	0	---	---
Silver	ppm	ASTM D5185m	0	---	---
Aluminum	ppm	ASTM D5185m >20	0	---	---
Lead	ppm	ASTM D5185m >20	0	---	---
Copper	ppm	ASTM D5185m >20	9	---	---
Tin	ppm	ASTM D5185m >20	<1	---	---
Vanadium	ppm	ASTM D5185m	0	---	---
Cadmium	ppm	ASTM D5185m	0	---	---

ADDITIVES	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0.0	0	---	---
Barium	ppm	ASTM D5185m 0	0	---	---
Molybdenum	ppm	ASTM D5185m 0	0	---	---
Manganese	ppm	ASTM D5185m	<1	---	---
Magnesium	ppm	ASTM D5185m 11	5	---	---
Calcium	ppm	ASTM D5185m 35	40	---	---
Phosphorus	ppm	ASTM D5185m 266	293	---	---
Zinc	ppm	ASTM D5185m 276	340	---	---
Sulfur	ppm	ASTM D5185m 1847	1028	---	---

CONTAMINANTS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	<1	---	---
Sodium	ppm	ASTM D5185m	3	---	---
Potassium	ppm	ASTM D5185m >20	2	---	---

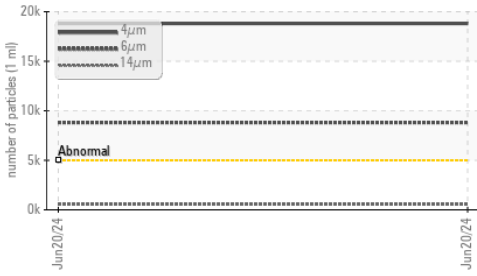
FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	▲ 18808	---	---
Particles >6µm	ASTM D7647	>1300	▲ 8810	---	---
Particles >14µm	ASTM D7647	>160	▲ 534	---	---
Particles >21µm	ASTM D7647	>40	▲ 92	---	---
Particles >38µm	ASTM D7647	>10	2	---	---
Particles >71µm	ASTM D7647	>3	0	---	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	▲ 21/20/16	---	---

FLUID DEGRADATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.36	0.34	---	---

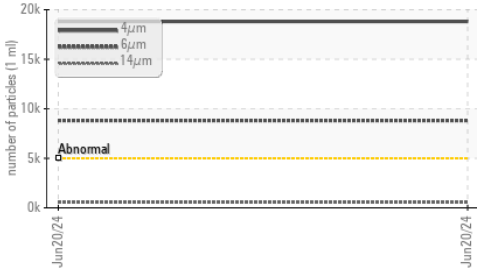


OIL ANALYSIS REPORT

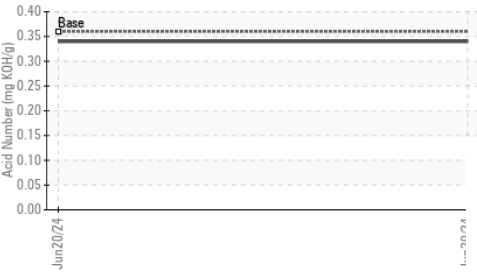
Particle Trend



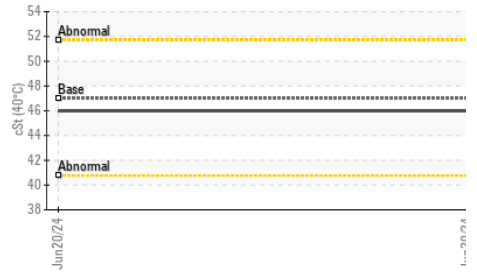
Particle Trend



Acid Number



Viscosity @ 40°C



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	46.99	46.0	---

SAMPLE IMAGES

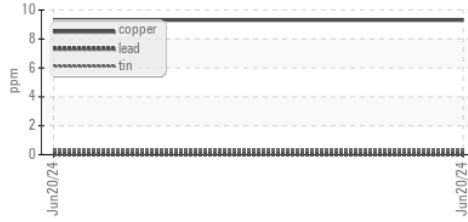
method	limit/base	current	history1	history2
Color			no image	no image
Bottom			no image	no image

GRAPHS

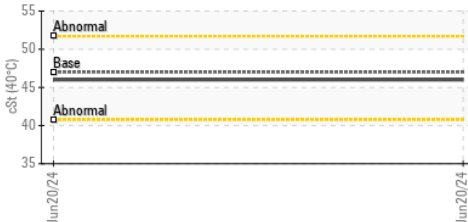
Ferrous Alloys



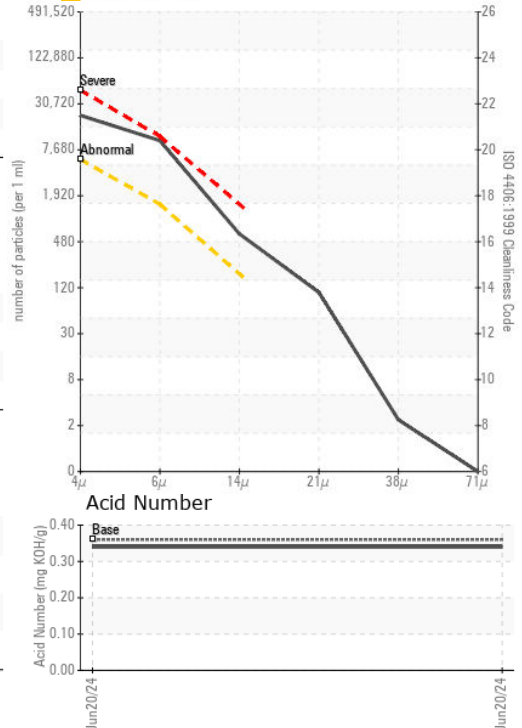
Non-ferrous Metals



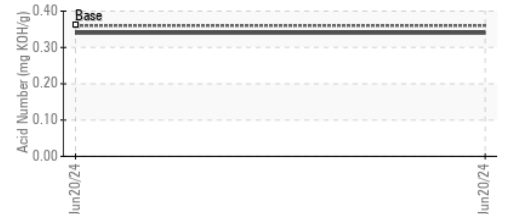
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TLC0001887
Lab Number : 06218206
Unique Number : 11096403
Test Package : PLANT

Received : 24 Jun 2024
Tested : 25 Jun 2024
Diagnosed : 25 Jun 2024 - Wes Davis

AUTONEUM
 1103 POWDERHOUSE RD
 AIKEN, SC
 US 29803

Contact: JEFFREY WASHICK
 jeffrey.washick@autoneum.com

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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