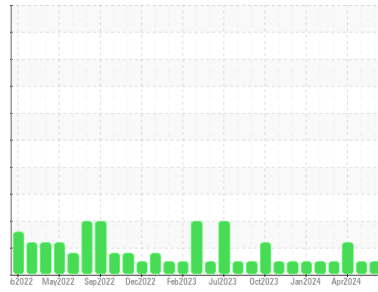




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
BOLLENGRAF
 Component
Hydraulic System
 Fluid
GULF AW 46 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Wear

All component wear rates are normal.

Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

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		WC0860350	WC0910244	WC0860338
Sample Date	Client Info		03 Jul 2024	31 May 2024	30 Apr 2024
Machine Age	hrs	Client Info	22617	22421	22239
Oil Age	hrs	Client Info	21188	21174	21172
Oil Changed	Client Info		N/A	N/A	Not Changd
Sample Status			NORMAL	NORMAL	ABNORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.1	NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >20	0	0	0
Chromium	ppm	ASTM D5185m >10	<1	<1	<1
Nickel	ppm	ASTM D5185m >10	0	0	0
Titanium	ppm	ASTM D5185m	0	0	0
Silver	ppm	ASTM D5185m	0	0	0
Aluminum	ppm	ASTM D5185m >10	0	3	0
Lead	ppm	ASTM D5185m >10	0	<1	0
Copper	ppm	ASTM D5185m >75	2	<1	0
Tin	ppm	ASTM D5185m >10	0	<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	0	<1	<1
Molybdenum	ppm	ASTM D5185m	0	<1	0
Manganese	ppm	ASTM D5185m	0	0	<1
Magnesium	ppm	ASTM D5185m	3	4	<1
Calcium	ppm	ASTM D5185m	71	87	70
Phosphorus	ppm	ASTM D5185m	337	380	353
Zinc	ppm	ASTM D5185m	401	528	433
Sulfur	ppm	ASTM D5185m	1510	1796	1651

CONTAMINANTS

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

FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	1418	---	▲ 10017
Particles >6µm	ASTM D7647	>1300	152	---	● 1728
Particles >14µm	ASTM D7647	>160	15	---	138
Particles >21µm	ASTM D7647	>40	5	---	49
Particles >38µm	ASTM D7647	>10	1	---	4
Particles >71µm	ASTM D7647	>3	0	---	0
Oil Cleanliness	ISO 4406 (c)	>19/17/14	18/14/11	---	▲ 21/18/14

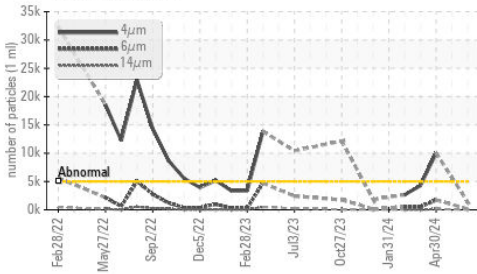
FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.24	---	0.27

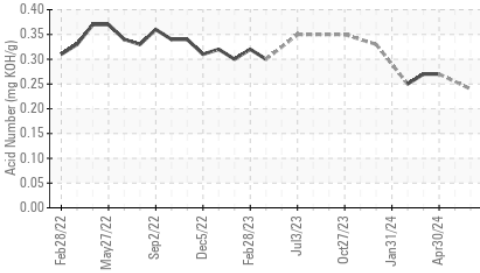


OIL ANALYSIS REPORT

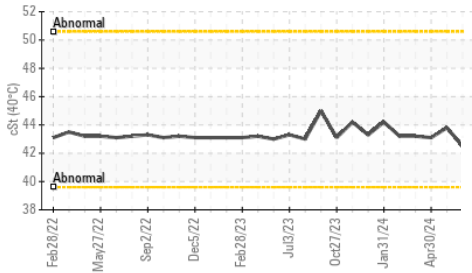
Particle Trend



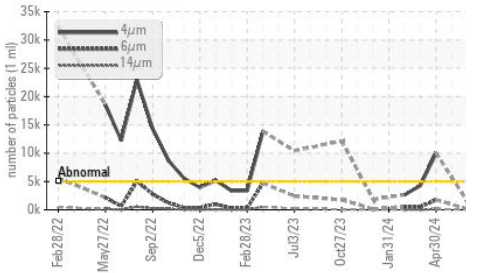
Acid Number



Viscosity @ 40°C



Particle Trend



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

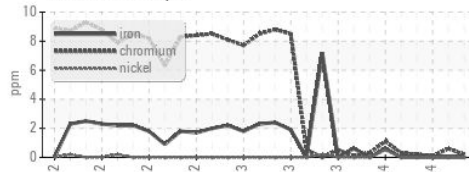
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	42.5	43.8	43.1

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

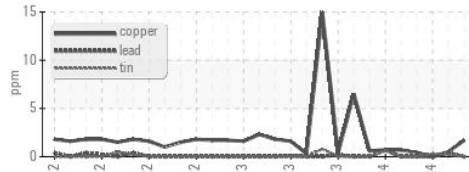
Color			no image	no image	no image
Bottom			no image	no image	no image

GRAPHS

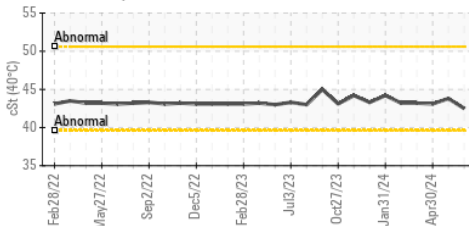
Ferrous Alloys



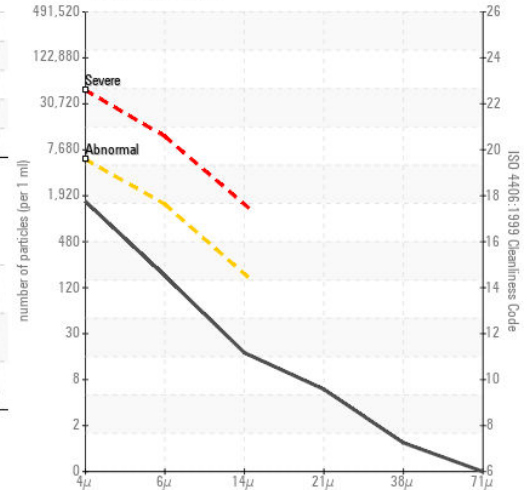
Non-ferrous Metals



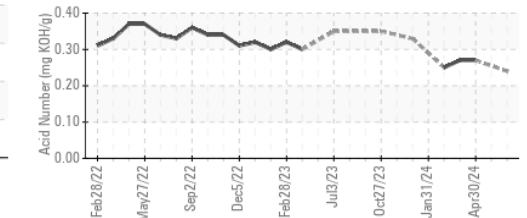
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : WC0860350
 Lab Number : 06236228
 Unique Number : 11125062
 Test Package : MOB 2

Received : 15 Jul 2024
 Tested : 18 Jul 2024
 Diagnosed : 18 Jul 2024 - Wes Davis

ONEIDA HERKIMER SOLID WASTE
 80 LELAND AVENUE
 UTICA, NY
 US 13502
 Contact: Service Manager

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)

T:
F: