



# OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

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

## RECOMMENDATION

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

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0860350</b>	WC0910244	WC0860338
Sample Date		Client Info		<b>03 Jul 2024</b>	31 May 2024	30 Apr 2024
Machine Age	hrs	Client Info		<b>22617</b>	22421	22239
Oil Age	hrs	Client Info		<b>21188</b>	21174	21172
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>N/A</b>	N/A	Not Changed
Filter Changed		Client Info		<b>N/A</b>	N/A	Not Changed
Sample Status				<b>NORMAL</b>	NORMAL	ABNORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>20	<b>0</b>	0	0
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>10	<b>0</b>	3	0
Lead	ppm	ASTM D5185m	>10	<b>0</b>	<1	0
Copper	ppm	ASTM D5185m	>75	<b>2</b>	<1	0
Tin	ppm	ASTM D5185m	>10	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

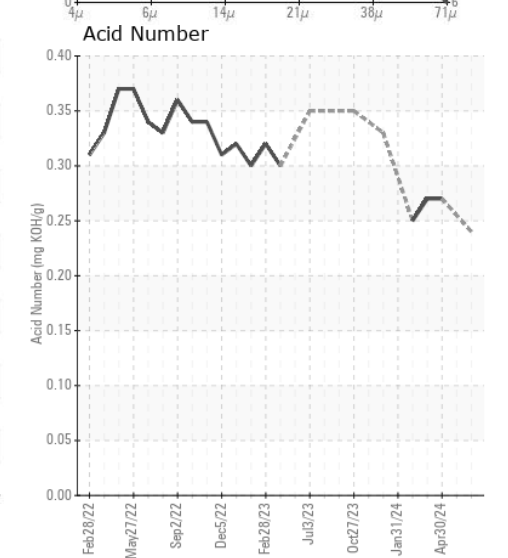
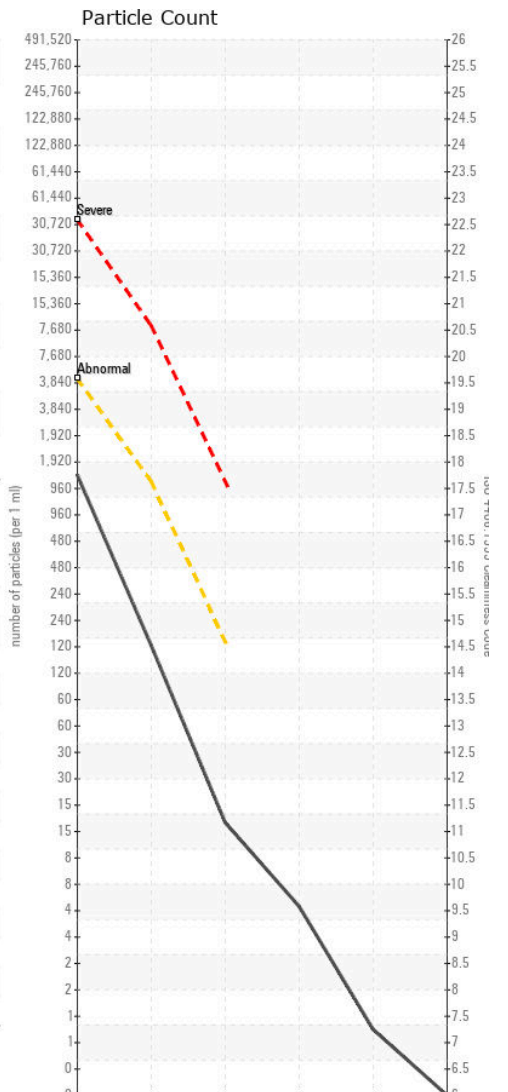
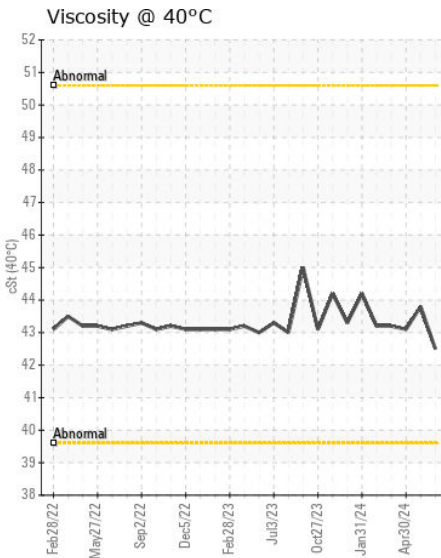
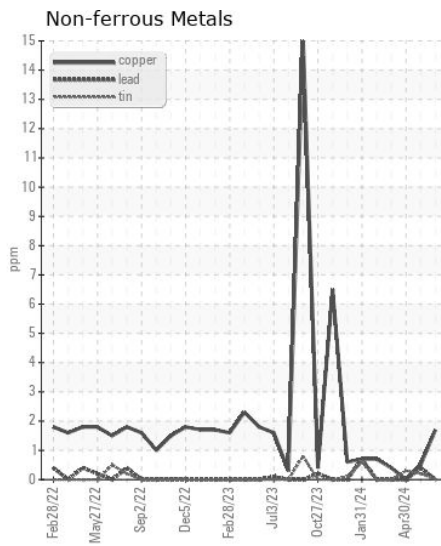
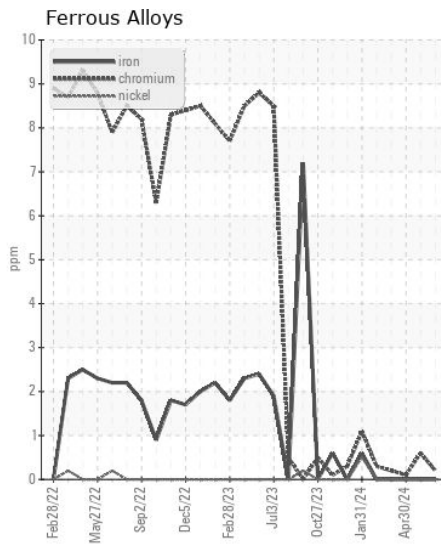
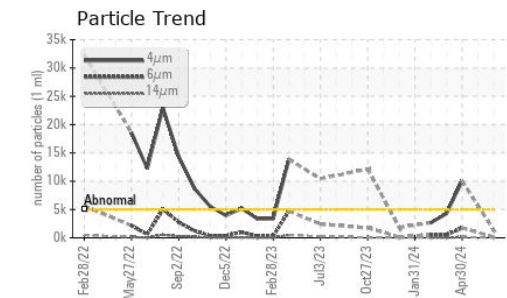
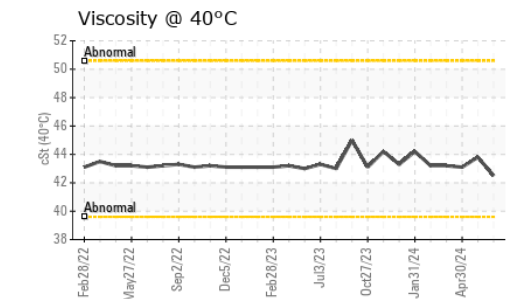
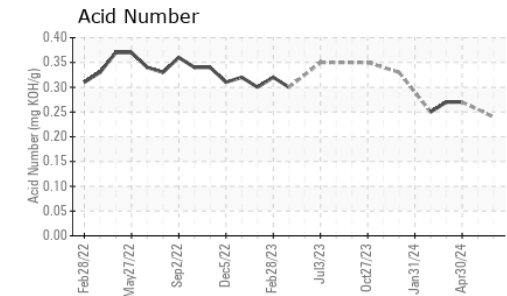
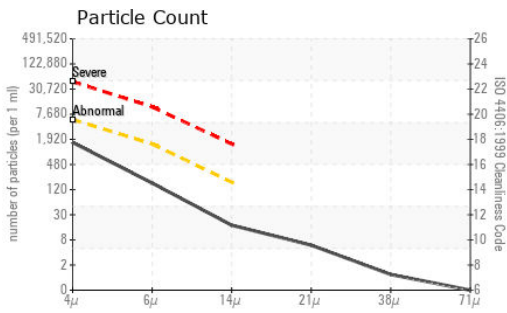
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	<1
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	<1	<1
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>5000	<b>1418</b>	---	▲ 10017
Particles >6µm		ASTM D7647	>1300	<b>152</b>	---	● 1728
Particles >14µm		ASTM D7647	>160	<b>15</b>	---	138
Particles >21µm		ASTM D7647	>40	<b>5</b>	---	49
Particles >38µm		ASTM D7647	>10	<b>1</b>	---	4
Particles >71µm		ASTM D7647	>3	<b>0</b>	---	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>18/14/11</b>	---	▲ 21/18/14
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	<b>NEG</b>	NEG	NEG

## FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>2</b>	0	0
Boron	ppm	ASTM D5185m		<b>0</b>	0	0
Barium	ppm	ASTM D5185m		<b>0</b>	<1	<1
Molybdenum	ppm	ASTM D5185m		<b>0</b>	<1	0
Manganese	ppm	ASTM D5185m		<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185m		<b>3</b>	4	<1
Calcium	ppm	ASTM D5185m		<b>71</b>	87	70
Phosphorus	ppm	ASTM D5185m		<b>337</b>	380	353
Zinc	ppm	ASTM D5185m		<b>401</b>	528	433
Sulfur	ppm	ASTM D5185m		<b>1510</b>	1796	1651
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.24</b>	---	0.27
Visc @ 40°C	cSt	ASTM D445		<b>42.5</b>	43.8	43.1



**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)

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F: