

Machine Id

**11**

Component

**Hydraulic System**

Fluid

**AW HYDRAULIC OIL ISO 32 (--- GAL)**

**DIAGNOSIS**

**Recommendation**

Resample at the next service interval to monitor.

**Wear**

All component wear rates are normal.

**Contamination**

There is no indication of any contamination in the component. The amount and size of particulates present in the system 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			<b>ST43870</b>	ST43817	ST44677
Sample Date	Client Info			<b>27 Sep 2023</b>	28 Jun 2023	29 Mar 2023
Machine Age	hrs	Client Info		<b>0</b>	0	0
Oil Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed	Client Info			<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

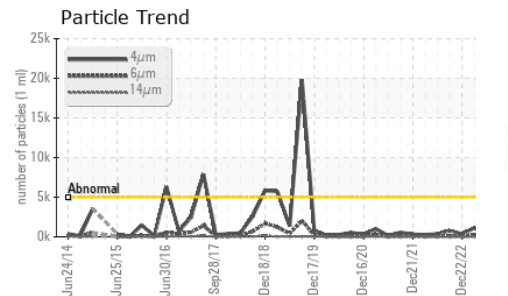
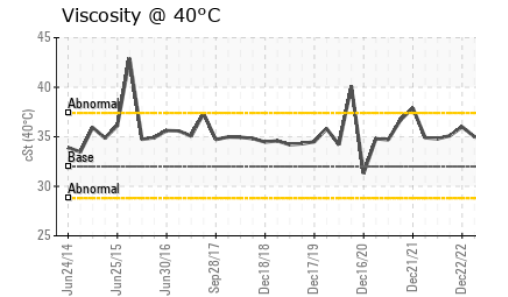
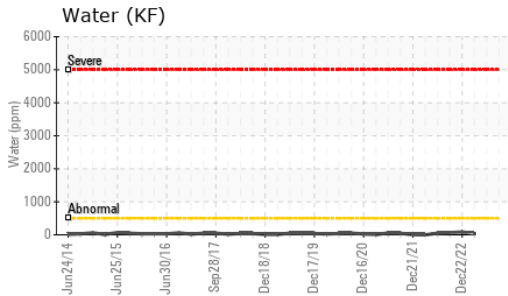
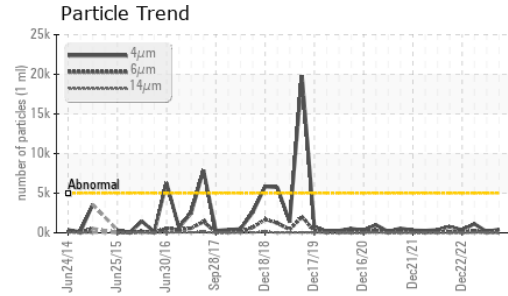
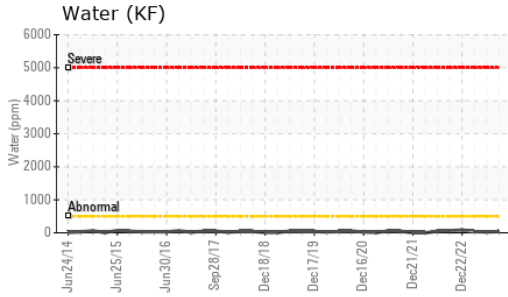
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	0
Chromium	ppm	ASTM D5185m	>20	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m	>20	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>0</b>	0	<1
Lead	ppm	ASTM D5185m	>20	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	0
Tin	ppm	ASTM D5185m	>20	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	5	<b>0</b>	0	0
Barium	ppm	ASTM D5185m	5	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	5	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m		<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185m	25	<b>2</b>	0	2
Calcium	ppm	ASTM D5185m	200	<b>38</b>	35	43
Phosphorus	ppm	ASTM D5185m	300	<b>55</b>	52	62
Zinc	ppm	ASTM D5185m	370	<b>25</b>	23	17
Sulfur	ppm	ASTM D5185m	2500	<b>323</b>	313	11

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	<1
Sodium	ppm	ASTM D5185m		<b>0</b>	0	0
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	0
Water	%	ASTM D6304	>0.05	<b>0.003</b>	0.003	0.003
ppm Water	ppm	ASTM D6304	>500	<b>38.2</b>	26.1	36.0

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	<b>443</b>	157	1118
Particles >6µm		ASTM D7647	>1300	<b>87</b>	58	247
Particles >14µm		ASTM D7647	>320	<b>7</b>	9	21
Particles >21µm		ASTM D7647	>80	<b>2</b>	2	7
Particles >38µm		ASTM D7647	>20	<b>1</b>	0	1
Particles >71µm		ASTM D7647	>4	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/15	<b>16/14/10</b>	14/13/10	17/15/12

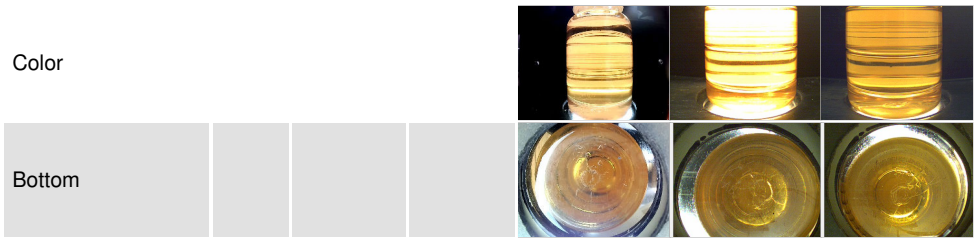
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	<b>0.14</b>	0.13	0.14



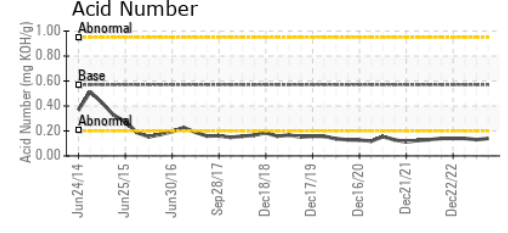
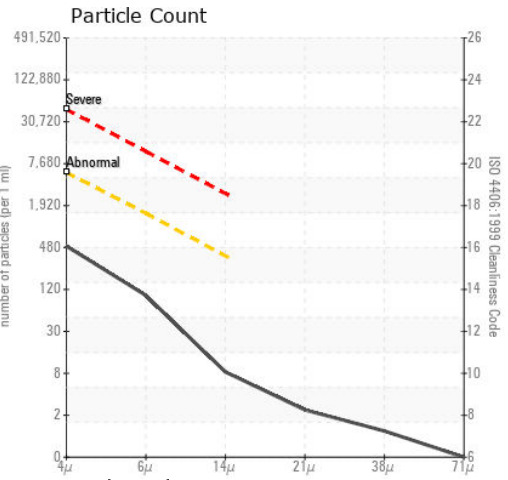
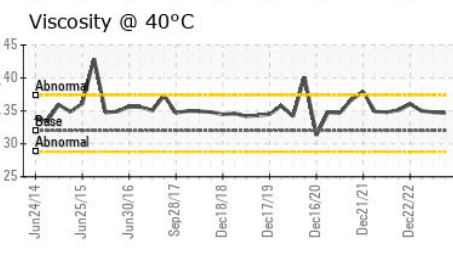
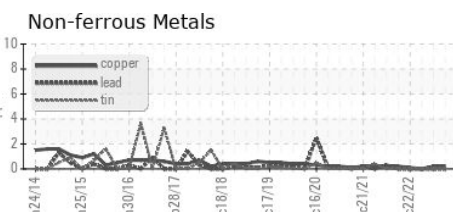
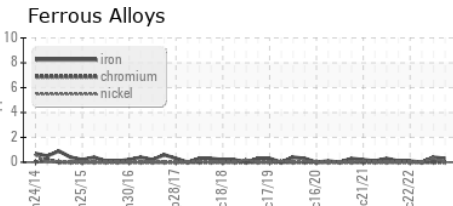
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	32	34.7	34.8

SAMPLE IMAGES	method	limit/base	current	history1	history2
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## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : ST43870 **Received** : 03 Oct 2023  
**Lab Number** : 05967817 **Diagnosed** : 04 Oct 2023  
**Unique Number** : 10674368 **Diagnostician** : Doug Bogart  
**Test Package** : IND 2 ( Additional Tests: KF )

**ZAPP PRECISION STRIP INC.**  
 266 SAMUEL BARNET BLVD.  
 DARTMOUTH, MA  
 US 02745  
 Contact: MARK MEDEIROS  
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 T: (888)647-3700  
 F: (508)998-6310

Certificate L2367  
 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)