

Machine Id  
**SL-42 20**

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>ST43878</b>	ST43710	ST44669
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>&lt;1</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

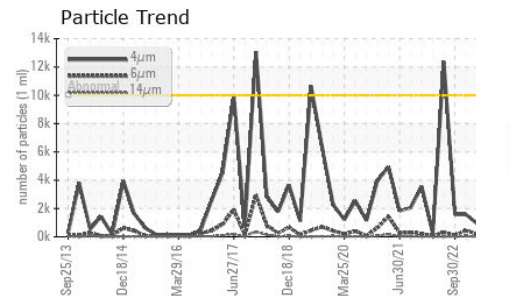
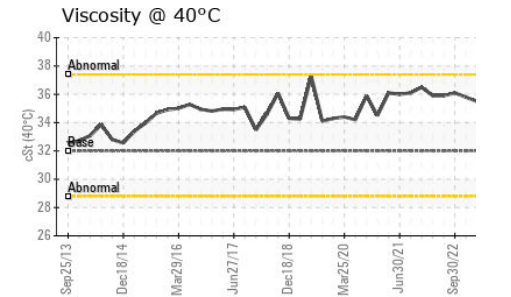
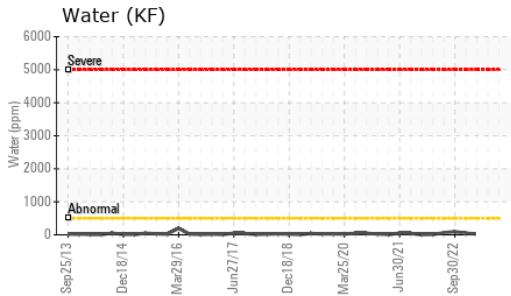
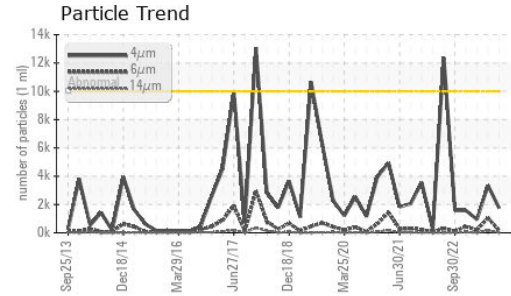
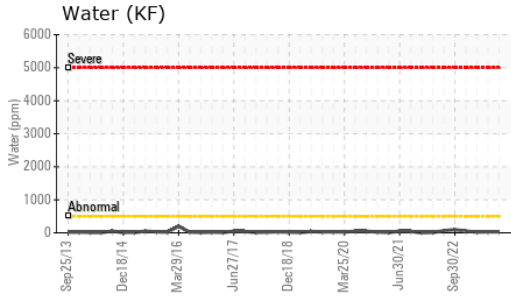
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	5	<b>0</b>	0	0
Barium	ppm	ASTM D5185m	5	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	5	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m		<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185m	25	<b>0</b>	0	<1
Calcium	ppm	ASTM D5185m	200	<b>37</b>	30	34
Phosphorus	ppm	ASTM D5185m	300	<b>74</b>	65	79
Zinc	ppm	ASTM D5185m	370	<b>62</b>	43	45
Sulfur	ppm	ASTM D5185m	2500	<b>689</b>	567	521

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	<b>&lt;1</b>	0	<1
Sodium	ppm	ASTM D5185m		<b>0</b>	0	<1
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	0
Water	%	ASTM D6304	>0.05	<b>0.003</b>	0.003	0.002
ppm Water	ppm	ASTM D6304	>500	<b>27.9</b>	28.9	22.2

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	<b>1753</b>	3344	949
Particles >6µm		ASTM D7647	>1300	<b>156</b>	1053	194
Particles >14µm		ASTM D7647	>160	<b>11</b>	155	14
Particles >21µm		ASTM D7647	>40	<b>4</b>	57	4
Particles >38µm		ASTM D7647	>10	<b>1</b>	3	0
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>20/17/14	<b>18/14/11</b>	19/17/14	17/15/11

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	<b>0.14</b>	0.15	0.16

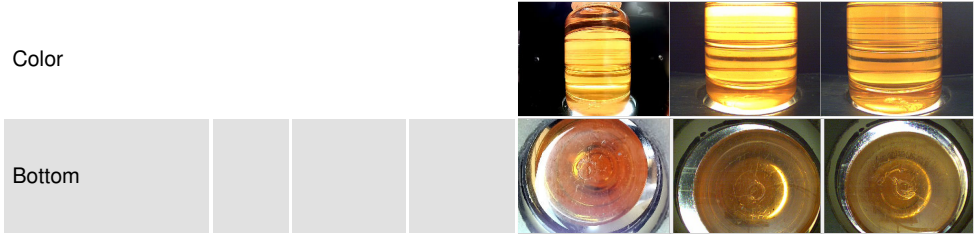
# OIL ANALYSIS REPORT



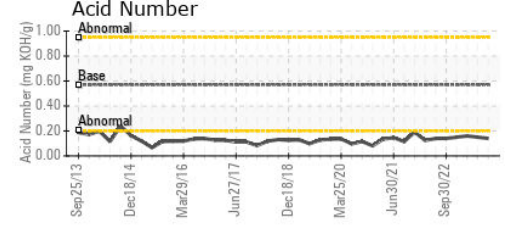
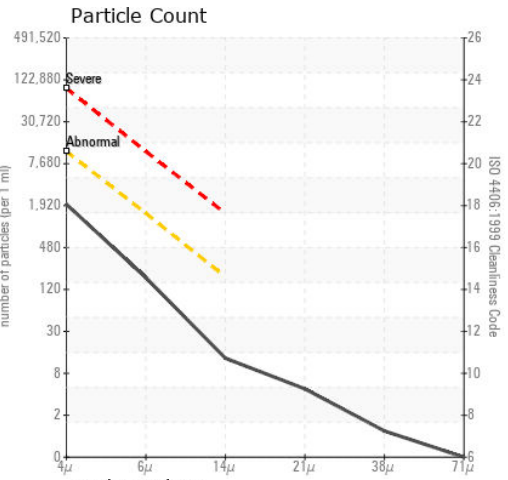
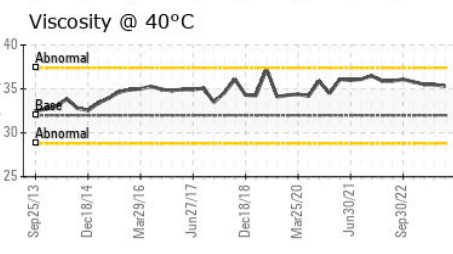
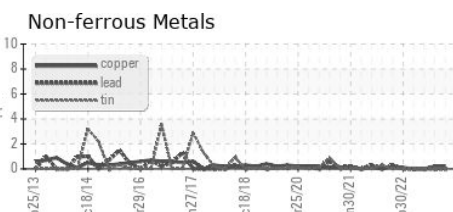
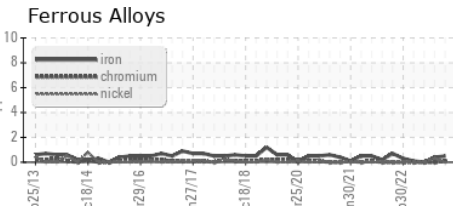
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	35.3	35.5	35.5

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



## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : ST43878 **Received** : 03 Oct 2023  
**Lab Number** : 05967815 **Diagnosed** : 04 Oct 2023  
**Unique Number** : 10674366 **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  
 mark.medeiros@zapp.com  
 T: (888)647-3700  
 F: (508)998-6310

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)