

Machine Id
TL-42 3
 Component
Gearbox
 Fluid
GEAR OIL ISO 320 (--- 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			ST43504	ST43544	ST44710
Sample Date	Client Info			28 Sep 2023	28 Jun 2023	29 Mar 2023
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed	Client Info			N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	2	1	<1
Chromium	ppm	ASTM D5185m	>15	0	0	0
Nickel	ppm	ASTM D5185m	>15	0	<1	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	0	0	<1
Lead	ppm	ASTM D5185m	>100	0	0	0
Copper	ppm	ASTM D5185m	>200	<1	<1	0
Tin	ppm	ASTM D5185m	>25	0	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

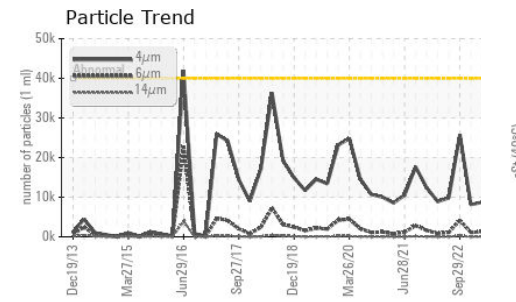
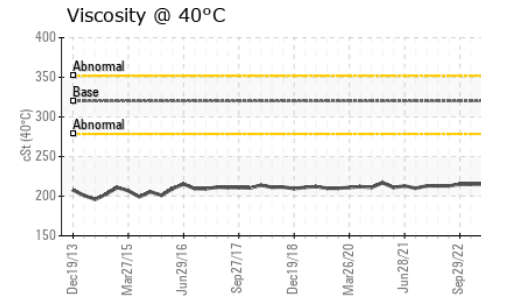
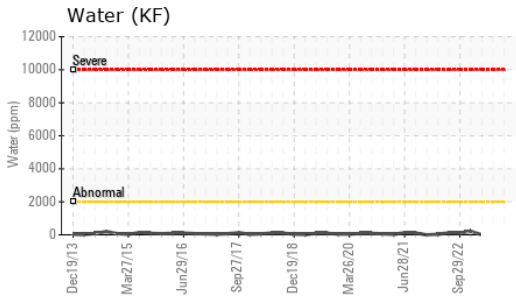
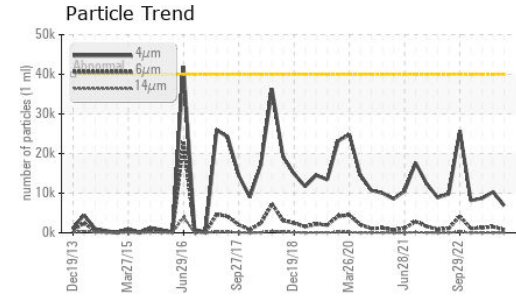
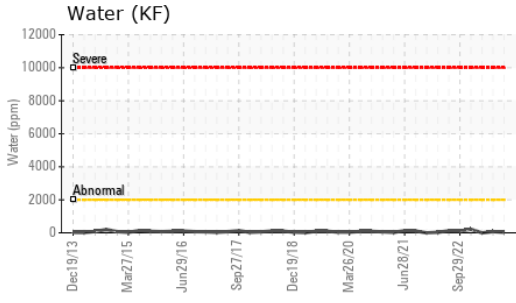
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	50	1	2	2
Barium	ppm	ASTM D5185m	15	0	0	0
Molybdenum	ppm	ASTM D5185m	15	0	0	0
Manganese	ppm	ASTM D5185m		0	0	<1
Magnesium	ppm	ASTM D5185m	50	0	0	<1
Calcium	ppm	ASTM D5185m	50	1	0	<1
Phosphorus	ppm	ASTM D5185m	350	332	333	358
Zinc	ppm	ASTM D5185m	100	<1	0	0
Sulfur	ppm	ASTM D5185m	12500	19138	17644	21315

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	14	13	13
Sodium	ppm	ASTM D5185m		0	0	0
Potassium	ppm	ASTM D5185m	>20	<1	<1	<1
Water	%	ASTM D6304	>0.2	0.003	0.007	0.00
ppm Water	ppm	ASTM D6304	>2000	33.1	74.3	0.00

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>40000	6885	10309	8710
Particles >6µm		ASTM D7647	>5000	797	1517	1264
Particles >14µm		ASTM D7647	>640	38	59	41
Particles >21µm		ASTM D7647	>160	10	15	5
Particles >38µm		ASTM D7647	>40	1	1	1
Particles >71µm		ASTM D7647	>10	0	1	0
Oil Cleanliness		ISO 4406 (c)	>22/19/16	20/17/12	21/18/13	20/17/13

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.85	1.16	1.14	1.23

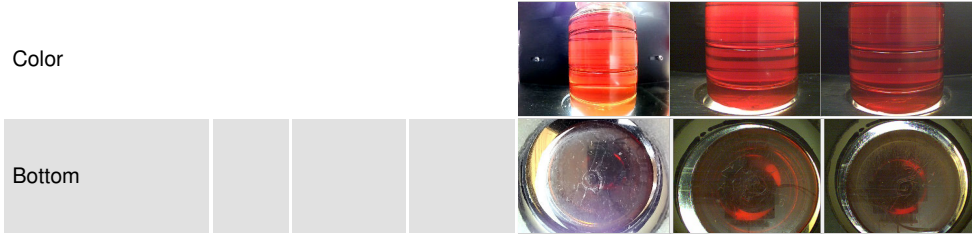
OIL ANALYSIS REPORT



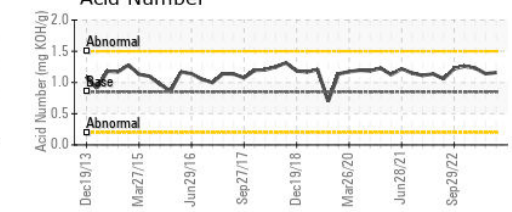
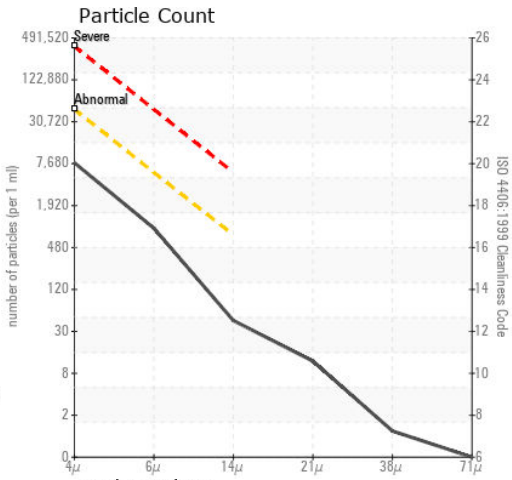
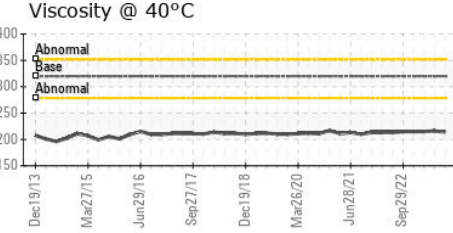
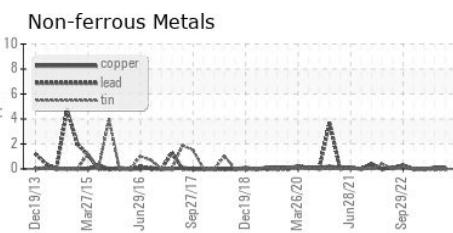
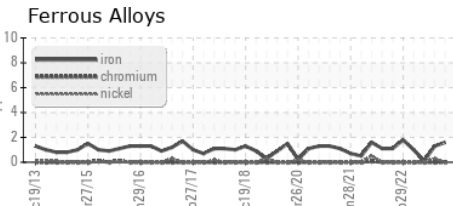
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 320	214	216	215

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ST43504 **Received** : 03 Oct 2023
Lab Number : 05967802 **Diagnosed** : 04 Oct 2023
Unique Number : 10674353 **Diagnostician** : Doug Bogart
Test Package : IND 2 (Additional Tests: KF, PrtCount)

ZAPP PRECISION STRIP INC.
 266 SAMUEL BARNET BLVD.
 DARTMOUTH, MA
 US 02745
 Contact: MARK MEDEIROS
 mark.medeiros@zapp.com
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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)