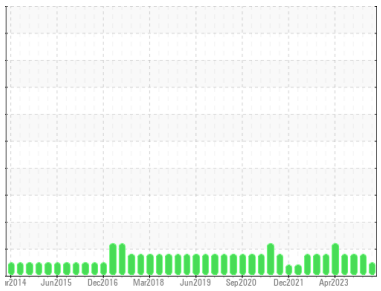
STAUFF FILTRATION TECHNOLOGY

OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL

Machine Id
42 IN FURNACE 42
Component
Gearbox
Fluid
GEAR OIL ISO 220 (--- GAL)

DIAGNOSIS

Recommendation
Resample at the next service interval to monitor.

Wear
All component wear rates are normal.

Contamination
The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

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		**ST46352**	ST43721	ST43879
Sample Date		Client Info		**26 Mar 2024**	20 Dec 2023	26 Sep 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**	ATTENTION	ATTENTION

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	**32**	28	30
Chromium	ppm	ASTM D5185m	>15	**<1**	0	<1
Nickel	ppm	ASTM D5185m	>15	**0**	0	0
Titanium	ppm	ASTM D5185m		**0**	0	0
Silver	ppm	ASTM D5185m		**0**	0	0
Aluminum	ppm	ASTM D5185m	>25	**2**	0	0
Lead	ppm	ASTM D5185m	>100	**0**	0	0
Copper	ppm	ASTM D5185m	>200	**<1**	<1	<1
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	**6**	7	7
Barium	ppm	ASTM D5185m	15	**0**	0	0
Molybdenum	ppm	ASTM D5185m	15	**0**	0	0
Manganese	ppm	ASTM D5185m		**<1**	<1	<1
Magnesium	ppm	ASTM D5185m	50	**1**	0	<1
Calcium	ppm	ASTM D5185m	50	**17**	13	12
Phosphorus	ppm	ASTM D5185m	350	**468**	443	405
Zinc	ppm	ASTM D5185m	100	**10**	1	9
Sulfur	ppm	ASTM D5185m	12500	**7643**	6547	6837

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	**3**	3	3
Sodium	ppm	ASTM D5185m		**4**	3	4
Potassium	ppm	ASTM D5185m	>20	**6**	3	5
Water	%	ASTM D6304	>0.2	**0.010**	0.015	0.017
ppm Water	ppm	ASTM D6304	>2000	**109**	154	177.8

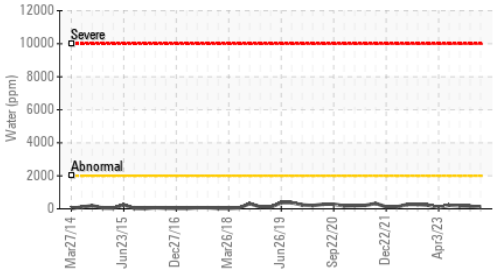
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>40000	**38120**	41469	43788
Particles >6µm		ASTM D7647	>5000	**3254**	3431	3860
Particles >14µm		ASTM D7647	>640	**102**	100	41
Particles >21µm		ASTM D7647	>160	**27**	28	5
Particles >38µm		ASTM D7647	>40	**1**	1	2
Particles >71µm		ASTM D7647	>10	**0**	0	1
Oil Cleanliness		ISO 4406 (c)	>22/19/16	**22/19/14**	23/19/14	23/19/13

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.85	**0.80**	0.73	0.73

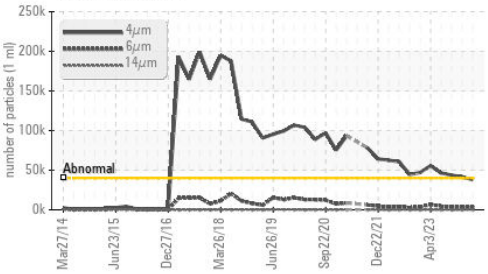
STAUFF
FILTRATION TECHNOLOGY

OIL ANALYSIS REPORT

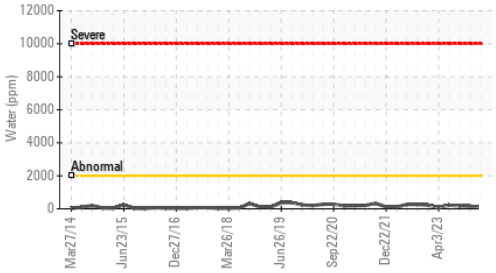
Water (KF)



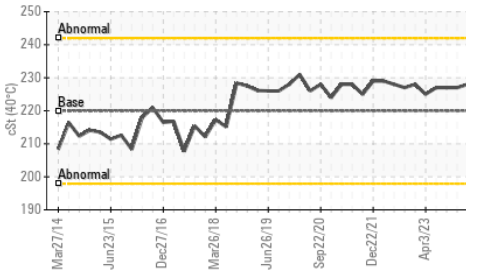
Particle Trend



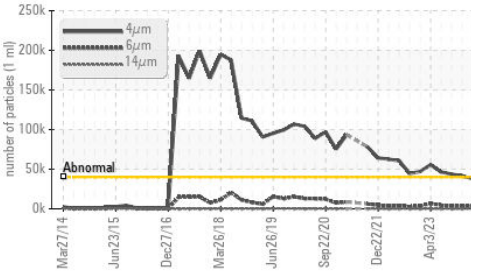
Water (KF)



Viscosity @ 40°C

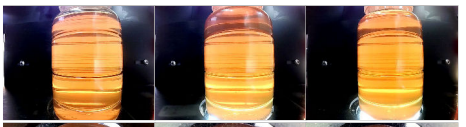
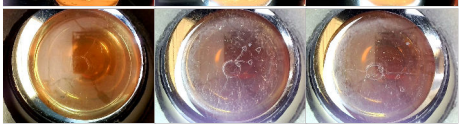


Particle Trend



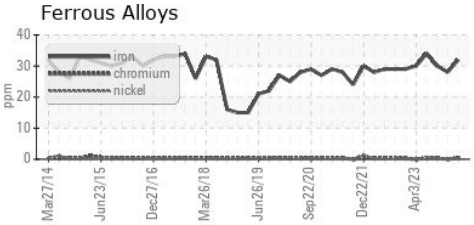
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt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

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	220	**228**	227	227

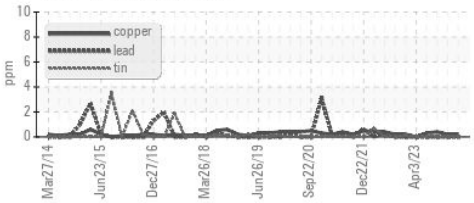
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

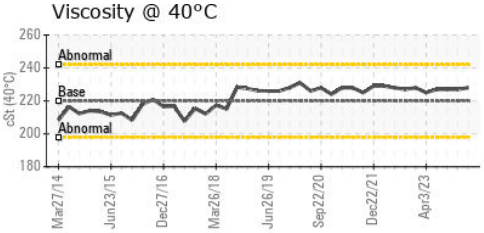
Ferrous Alloys



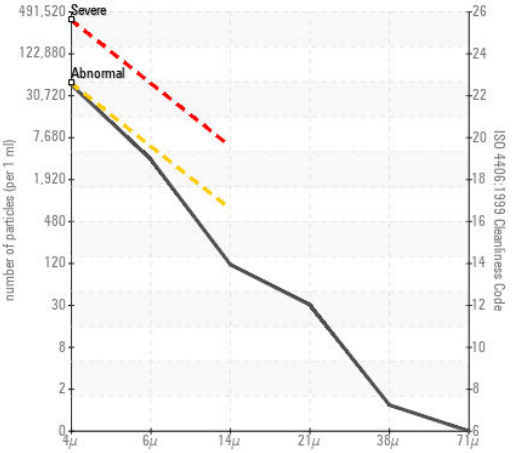
Non-ferrous Metals



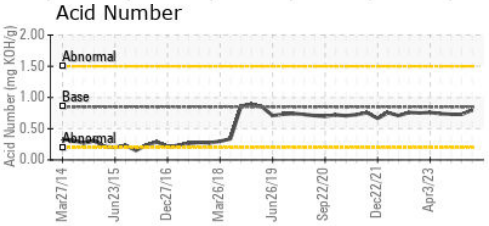
Viscosity @ 40°C



Particle Count



Acid Number



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ST46352 **Received** : 03 Apr 2024
Lab Number : 06137429 **Tested** : 04 Apr 2024
Unique Number : 10956894 **Diagnosed** : 05 Apr 2024 - Don Baldridge
Test Package : IND 2 (Additional Tests: KF, PrtCount)

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)

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DARTMOUTH, MA
US 02745
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Report Id: ZAPDAR [WUSCAR] 06137429 (Generated: 04/05/2024 18:01:55) Rev: 1
Contact/Location: Greg Walton - ZAPDAR