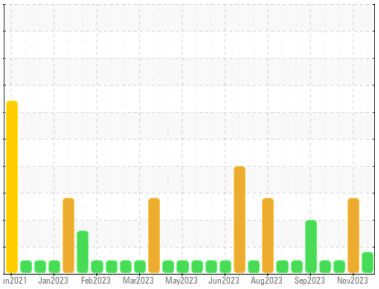
PROBLEM SUMMARY

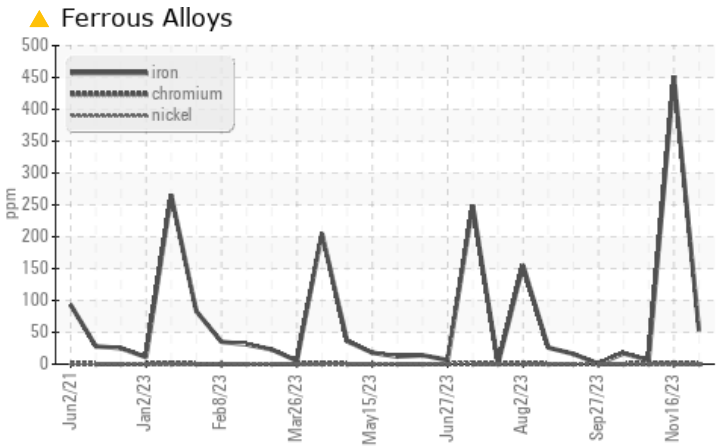
Sample Rating Trend



WEAR

Area
PHS AND PLS SYSTEM
Machine Id
RECYCLED NH3 SYSTEM 2
Component
Refrigeration Compressor
Fluid
USPI ALT-68 SC (--- GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

This is a baseline read-out on the submitted sample.

PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	ABNORMAL	NORMAL
Iron	ppm	ASTM D5185m	>8	▲ 53	▲ 452	6

Customer Id: SMITAR
Sample No.: USP0003954
Lab Number: 06026497
Test Package: IND 2

To manage this report scan the QR code

To discuss the diagnosis or test data:
Doug Bogart +1 (800)237-1369 x4016
dougb@wearcheckusa.com

To change component or sample information:
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

16 Nov 2023 Diag: Doug Bogart

WEAR

This is a baseline read-out on the submitted sample.The iron level is abnormal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid.

view report

30 Oct 2023 Diag: Doug Bogart

NORMAL

This is a baseline read-out on the submitted sample. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

02 Oct 2023 Diag: Doug Bogart

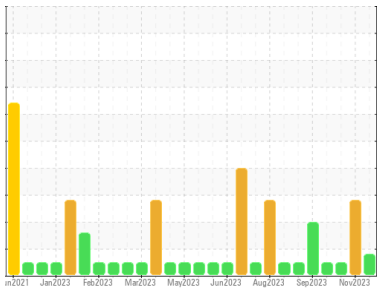
NORMAL

This is a baseline read-out on the submitted sample. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

OIL ANALYSIS REPORT

Sample Rating Trend



WEAR

Area
PHS AND PLS SYSTEM
Machine Id
RECYCLED NH3 SYSTEM 2
Component
Refrigeration Compressor
Fluid
USPI ALT-68 SC (--- GAL)

DIAGNOSIS

Recommendation
This is a baseline read-out on the submitted sample.

Wear
The iron level is abnormal.

Contamination
There is no indication of any contamination in the oil. The amount and size of particulates present in the system are 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		**USP0003954**	USP0003641	USP0002950
Sample Date		Client Info		**04 Dec 2023**	16 Nov 2023	30 Oct 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				**ABNORMAL**	ABNORMAL	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>8	▲ **53**	▲ 452	6
Chromium	ppm	ASTM D5185m	>2	**0**	<1	<1
Nickel	ppm	ASTM D5185m		**0**	0	0
Titanium	ppm	ASTM D5185m		**<1**	0	<1
Silver	ppm	ASTM D5185m	>2	**0**	<1	0
Aluminum	ppm	ASTM D5185m	>3	**0**	<1	0
Lead	ppm	ASTM D5185m	>2	**0**	0	0
Copper	ppm	ASTM D5185m	>8	**0**	0	<1
Tin	ppm	ASTM D5185m	>4	**0**	0	<1
Vanadium	ppm	ASTM D5185m		**<1**	<1	<1
Cadmium	ppm	ASTM D5185m		**0**	<1	<1

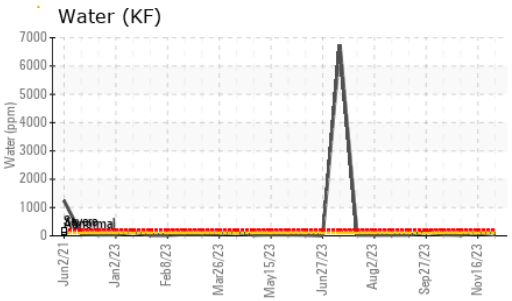
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**0**	0	0
Barium	ppm	ASTM D5185m		**0**	0	0
Molybdenum	ppm	ASTM D5185m		**0**	0	0
Manganese	ppm	ASTM D5185m		**0**	1	<1
Magnesium	ppm	ASTM D5185m		**0**	2	0
Calcium	ppm	ASTM D5185m		**0**	2	0
Phosphorus	ppm	ASTM D5185m		**0**	1	0
Zinc	ppm	ASTM D5185m		**0**	11	0
Sulfur	ppm	ASTM D5185m	50	**0**	6	3

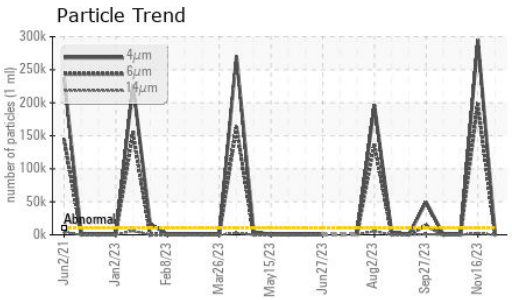
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	**2**	3	3
Sodium	ppm	ASTM D5185m		**<1**	2	1
Potassium	ppm	ASTM D5185m	>20	**0**	2	<1
Water	%	ASTM D6304	>0.01	**0.004**	0.009	0.003
ppm Water	ppm	ASTM D6304	>100	**42**	97.0	25.2

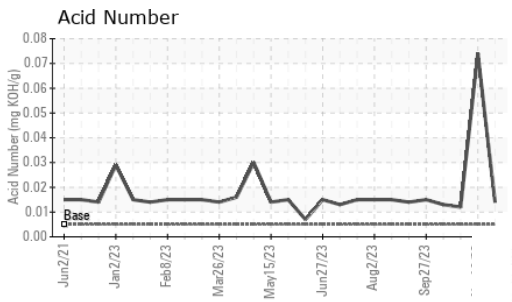
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	**1196**	▲ 294784	390
Particles >6µm		ASTM D7647	>2500	**119**	▲ 198310	94
Particles >14µm		ASTM D7647	>320	**9**	▲ 2278	10
Particles >21µm		ASTM D7647	>80	**2**	▲ 90	5
Particles >38µm		ASTM D7647	>20	**0**	3	1
Particles >71µm		ASTM D7647	>4	**0**	0	0
Oil Cleanliness		ISO 4406 (c)	>20/18/15	**17/14/10**	▲ 25/25/18	16/14/10

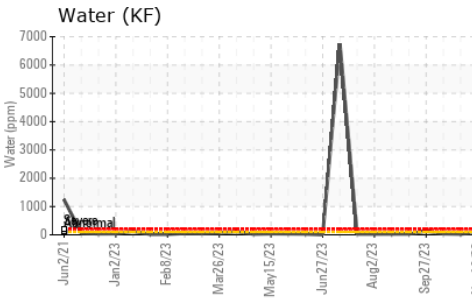
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974	0.005	**0.014**	0.074	0.012

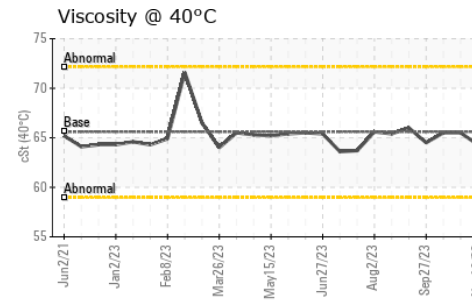
OIL ANALYSIS REPORT







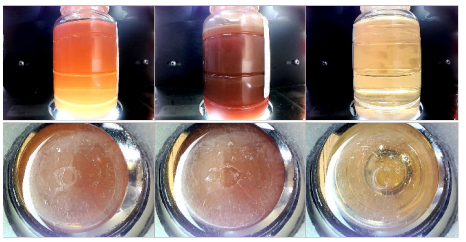




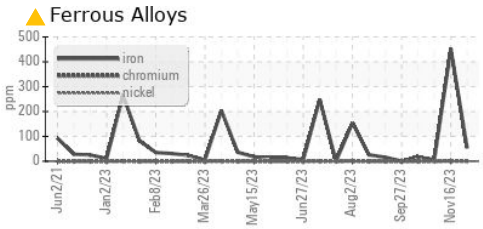
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Appearance	scalar	*Visual	NORML	**NORML**	NORML	NORML
Odor	scalar	*Visual	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	*Visual	>0.01	**NEG**	NEG	NEG
Free Water	scalar	*Visual		**NEG**	NEG	NEG

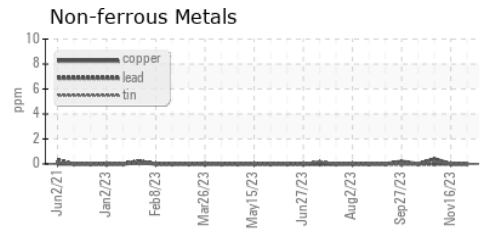
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	65.6	**64.2**	64.3	65.5

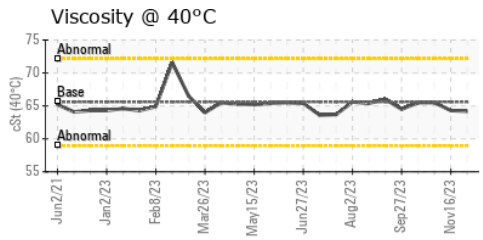
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

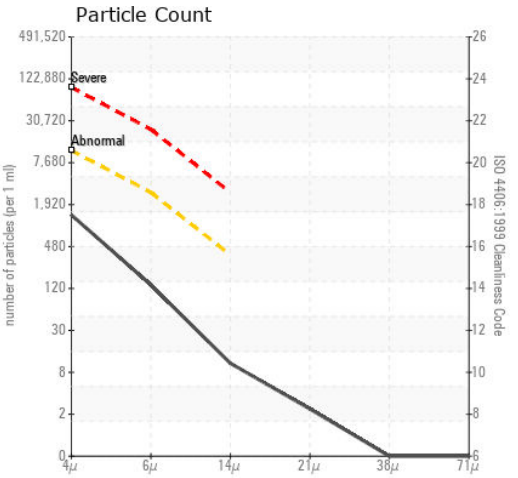


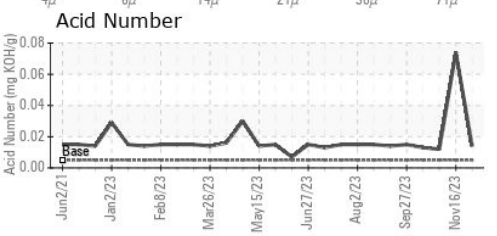
GRAPHS











Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : USP0003954
Lab Number : 06026497
Unique Number : 10776288
Test Package : IND 2

Received : 06 Dec 2023
Diagnosed : 07 Dec 2023
Diagnostician : Doug Bogart

Certificate L2367

SMITHFIELD FOOD - TARHEEL
15855 HWY. 87 WEST
TARHEEL, NC
US 28392
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)

T:
F: