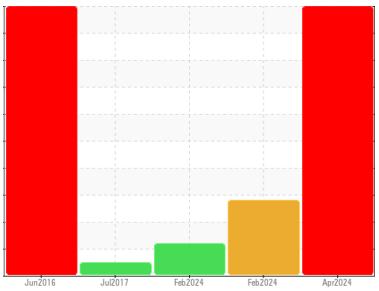
PROBLEM SUMMARY

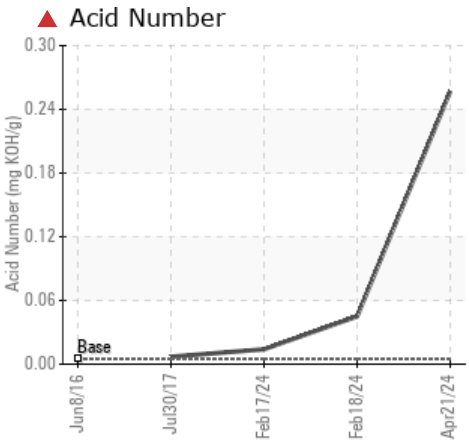
Sample Rating Trend

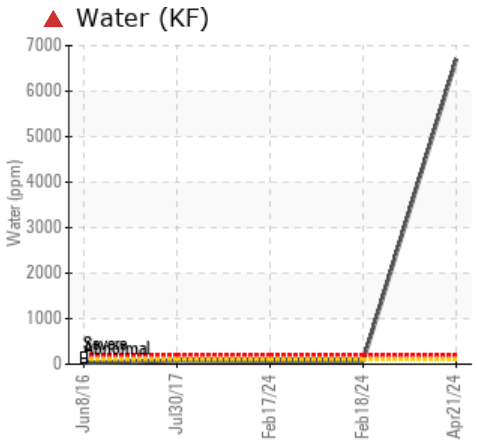


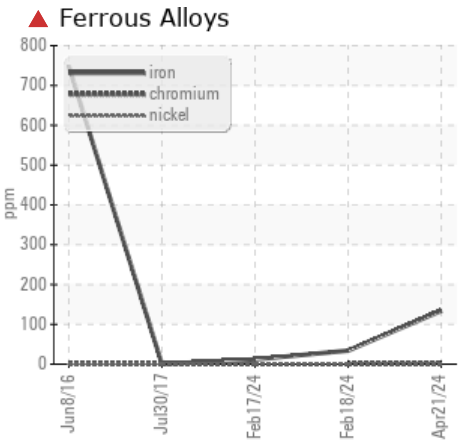
WEAR

Machine Id
RECYCLED NH3 OIL
Component
Refrigeration Compressor
Fluid
USPI ALT-68 SC (--- GAL)

COMPONENT CONDITION SUMMARY







RECOMMENDATION

This is a baseline read-out on the submitted sample. We recommend you service the filters on this component. We were unable to perform a particle count due to a high concentration of particles present in this sample. Barrel 1

PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	ABNORMAL	ABNORMAL
Iron	ppm	ASTM D5185m	>8	▲ **134**	▲ 34	12
Water	%	ASTM D6304	>0.01	▲ **0.669**	0.007	0.007
ppm Water	ppm	ASTM D6304	>100	▲ **6699**	75	71
Acid Number (AN)	mg KOH/g	ASTM D974	0.005	▲ **0.257**	0.045	0.014
Silt	scalar	*Visual	NONE	▲ **MODER**	NONE	NONE

Customer Id: JBSOTT
Sample No.: USP0006370
Lab Number: 06156048
Test Package: IND 2

To manage this report scan the QR code

To discuss the diagnosis or test data:
Jonathan Hester +1 919-379-4092 x4092
jhester@wearcheckusa.com

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

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Filter	---	---	?	We recommend you service the filters on this component.
Alert	---	---	?	We were unable to perform a particle count due to a high concentration of particles present in this sample.

HISTORICAL DIAGNOSIS

WEAR

18 Feb 2024 Diag: Doug Bogart
This is a baseline read-out on the submitted sample. BARREL 3The iron level is abnormal. There is a high amount of particulates present in the oil. The oil viscosity is lower than normal. Confirmed. The AN level is acceptable for this fluid.

view report

ISO

17 Feb 2024 Diag: Doug Bogart
This is a baseline read-out on the submitted sample. BARREL 2. There is a high amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

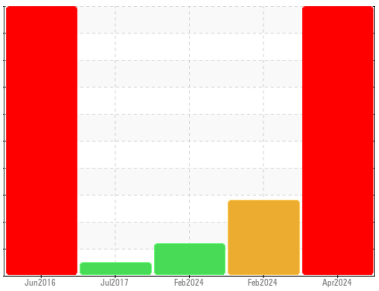
NORMAL

30 Jul 2017 Diag: Doug Bogart
This is a baseline read-out on the submitted sample. There is no indication of any contamination in the component. The amount and size of particulates present in the system is 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

Machine Id
RECYCLED NH3 OIL
Component
Refrigeration Compressor
Fluid
USPI ALT-68 SC (--- GAL)

DIAGNOSIS

Recommendation
This is a baseline read-out on the submitted sample. We recommend you service the filters on this component. We were unable to perform a particle count due to a high concentration of particles present in this sample. Barrel 1

Wear
The iron level is severe.

Contamination
Appearance is hazy. There is a high concentration of water present in the oil. There is a moderate amount of visible silt present in the sample.

Fluid Condition
The AN level is above the recommended limit.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**USP0006370**	USP0006937	USP0006936
Sample Date		Client Info		**21 Apr 2024**	18 Feb 2024	17 Feb 2024
Machine Age	mls	Client Info		**0**	0	0
Oil Age	mls	Client Info		**0**	0	0
Oil Changed		Client Info		**N/A**	N/A	N/A
Sample Status				**SEVERE**	ABNORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>8	▲ **134**	▲ 34	12
Chromium	ppm	ASTM D5185m	>2	**<1**	0	0
Nickel	ppm	ASTM D5185m		**<1**	<1	<1
Titanium	ppm	ASTM D5185m		**<1**	0	0
Silver	ppm	ASTM D5185m	>2	**0**	0	0
Aluminum	ppm	ASTM D5185m	>3	**2**	<1	<1
Lead	ppm	ASTM D5185m	>2	**<1**	<1	<1
Copper	ppm	ASTM D5185m	>8	**1**	0	0
Tin	ppm	ASTM D5185m	>4	**<1**	<1	<1
Antimony	ppm	ASTM D5185m		**---**	---	---
Vanadium	ppm	ASTM D5185m		**<1**	0	0
Cadmium	ppm	ASTM D5185m		**<1**	0	0

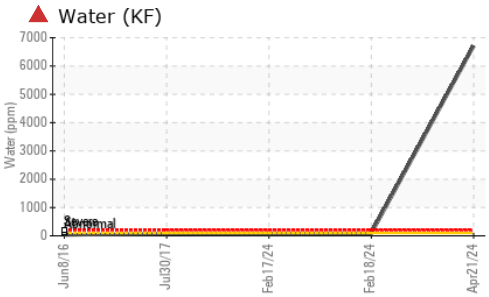
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**0**	0	0
Barium	ppm	ASTM D5185m		**<1**	0	0
Molybdenum	ppm	ASTM D5185m		**<1**	0	0
Manganese	ppm	ASTM D5185m		**1**	<1	0
Magnesium	ppm	ASTM D5185m		**<1**	1	1
Calcium	ppm	ASTM D5185m		**1**	1	0
Phosphorus	ppm	ASTM D5185m		**2**	0	0
Zinc	ppm	ASTM D5185m		**7**	0	0
Sulfur	ppm	ASTM D5185m	50	**0**	3	3

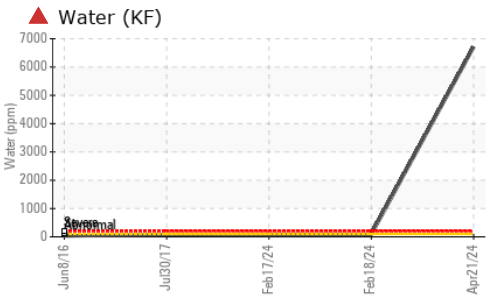
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	**5**	4	2
Sodium	ppm	ASTM D5185m		**<1**	<1	<1
Potassium	ppm	ASTM D5185m	>20	**1**	2	2
Water	%	ASTM D6304	>0.01	▲ **0.669**	0.007	0.007
ppm Water	ppm	ASTM D6304	>100	▲ **6699**	75	71

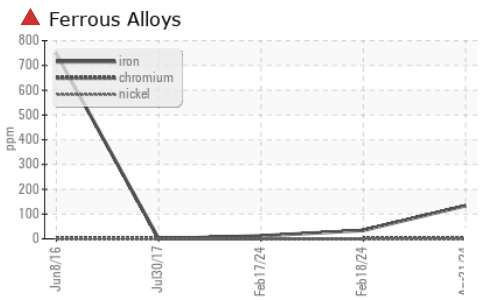
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	---	▲ 242591	▲ 72111
Particles >6µm		ASTM D7647	>2500	---	▲ 112937	▲ 11179
Particles >14µm		ASTM D7647	>320	---	▲ 556	61
Particles >21µm		ASTM D7647	>80	---	10	7
Particles >38µm		ASTM D7647	>20	---	0	0
Particles >71µm		ASTM D7647	>4	---	0	0
Oil Cleanliness		ISO 4406 (c)	>20/18/15	---	▲ 25/24/16	▲ 23/21/13

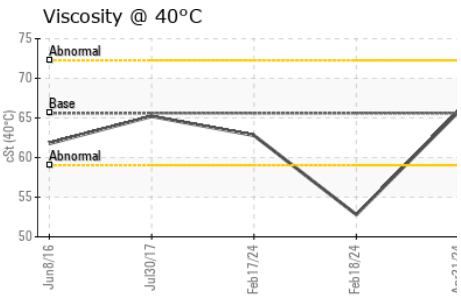
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974	0.005	▲ **0.257**	0.045	0.014

OIL ANALYSIS REPORT







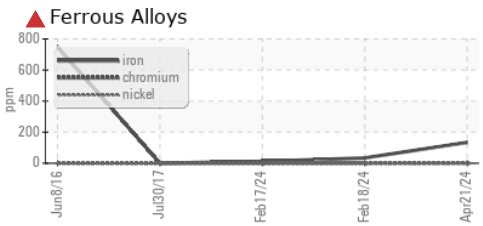


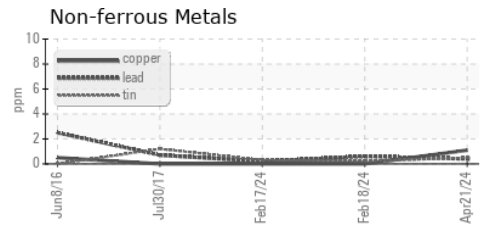
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	▲ **MODER**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	LIGHT	LIGHT
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Appearance	scalar	*Visual	NORML	● **HAZY**	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

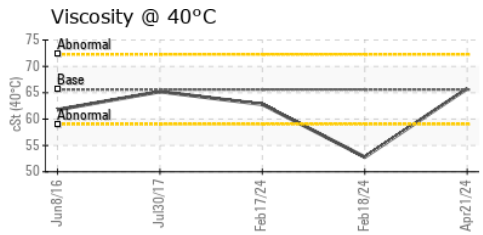
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	65.6	**65.8**	● 52.8	62.8

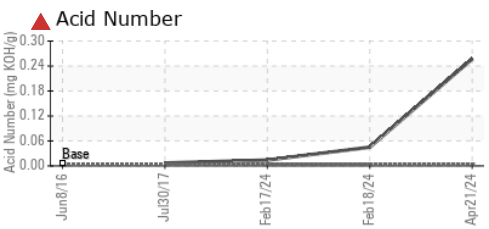
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS









Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : USP0006370
Lab Number : 06156048
Unique Number : 10991471
Test Package : IND 2

Received : 22 Apr 2024
Tested : 24 Apr 2024
Diagnosed : 24 Apr 2024 - Jonathan Hester

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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