

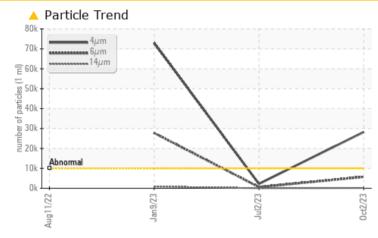
PROBLEM SUMMARY

C3 - SMALL BIRD ER (S/N S0882RFMPTHAA03)

Refrigeration Compressor

USPI ALT-68 SC (--- GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS							
Sample Status			ABNORMAL	NORMAL	ABNORMAL		
Particles >4µm	ASTM D7647	>10000	<u> </u>	2206	▲ 72962		
Particles >6µm	ASTM D7647	>2500	6 5750	603	27749		
Oil Cleanliness	ISO 4406 (c)	>20/18/15	<u> </u>	18/16/12	▲ 23/22/17		

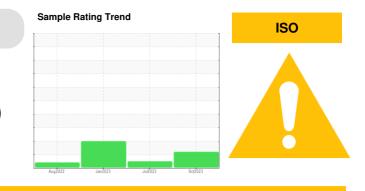
Customer Id: TYSKEYEUF Sample No.: USP0001701 Lab Number: 05968360 Test Package: IND 2



To manage this report scan the QR code

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

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

02 Jul 2023 Diag: Doug Bogart



Resample at the next service interval to monitor.All component wear rates are normal. 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.



09 Jan 2023 Diag: Doug Bogart



We recommend you service the filters on this component. Resample at the next service interval to monitor.All component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.





11 Aug 2022 Diag: Jonathan Hester

We recommend you service the filters on this component. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample.All component wear rates are normal. Moderate concentration of visible dirt/debris present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.





OIL ANALYSIS REPORT

C3 - SMALL BIRD ER (S/N S0882RFMPTHAA03)

Refrigeration Compressor

USPI ALT-68 SC (--- GAL)

DIAGNOSIS

A Recommendation

Resample at the next service interval to monitor.

Wear

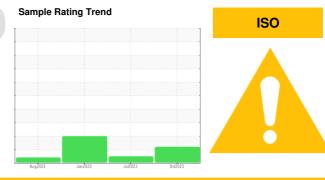
All component wear rates are normal.

Contamination

There is a high amount of silt (particulates < 14 microns in size) present in the oil.

Fluid Condition

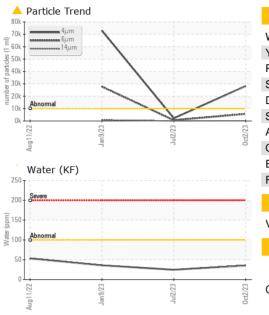
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

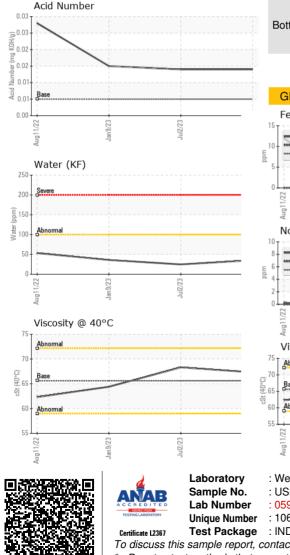


SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		USP0001701	USP250232	USP219347
Sample Date		Client Info		02 Oct 2023	02 Jul 2023	09 Jan 2023
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	NORMAL	ABNORMAL
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>8	0	0	0
Chromium	ppm	ASTM D5185m	>2	0	0	0
Nickel	ppm	ASTM D5185m		<1	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>3	0	0	0
Lead	ppm	ASTM D5185m	>2	0	0	0
Copper	ppm	ASTM D5185m	>8	<1	0	0
Tin	ppm	ASTM D5185m	>0 >4	0	0	0
Vanadium	ppm	ASTM D5185m	27	0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES	I- I-	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	0	0
Barium		ASTM D5185m		0	0	0
	ppm			0	0	
Molybdenum	ppm	ASTM D5185m		0		0
Manganese	ppm	ASTM D5185m		-	<1	0
Magnesium	ppm	ASTM D5185m		0	0	0
Calcium	ppm	ASTM D5185m		0	0	0
Phosphorus	ppm	ASTM D5185m		0	<1	1
Zinc	ppm	ASTM D5185m		0	0	0
Sulfur	ppm	ASTM D5185m	50	0	0	0
CONTAMINANTS	6	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	<1	0	<1
Sodium	ppm	ASTM D5185m		0	0	0
Potassium	ppm	ASTM D5185m	>20	0	0	0
Water	%	ASTM D6304	>0.01	0.003	0.002	0.003
ppm Water	ppm	ASTM D6304	>100	35.3	24.8	35.9
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	<u> </u>	2206	▲ 72962
Particles >6µm		ASTM D7647	>2500	<u> </u>	603	A 27749
Particles >14µm		ASTM D7647	>320	130	27	<u> </u>
Particles >21µm		ASTM D7647	>80	25	5	9 3
Particles >38µm		ASTM D7647	>20	1	0	0
Particles >71µm		ASTM D7647	>4	0	0	0
Oil Cleanliness		ISO 4406 (c)	>20/18/15	22/20/14	18/16/12	▲ 23/22/17
FLUID DEGRADA	ATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974	0.005	0.014	0.014	0.015

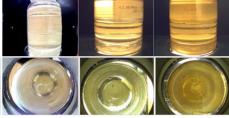


OIL ANALYSIS REPORT

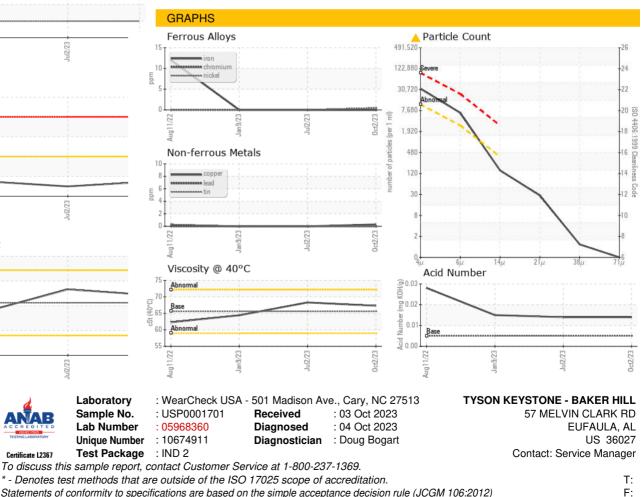




VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	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 PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	65.6	67.3	68.3	64.4
SAMPLE IMAGES	S	method	limit/base	current	history1	history2
					(FR1)	
Color						



Bottom



Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Contact/Location: Service Manager - TYSKEYEUF