

PROBLEM SUMMARY

Sample Rating Trend

WATER

WALE!

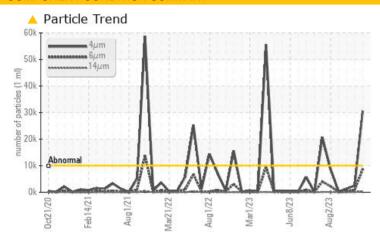
RECYCLED NH3

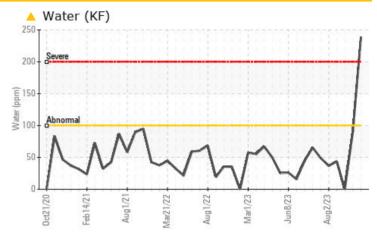
Component

Refrigeration Compressor

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	NORMAL	NORMAL					
Water	%	ASTM D6304	>0.01	△ 0.023	0.009	0.001					
ppm Water	ppm	ASTM D6304	>100	238.7	91.3	0.00					
Particles >4µm		ASTM D7647	>10000	△ 30587	2513	1329					
Particles >6µm		ASTM D7647	>2500	<u> </u>	793	340					
Particles >14μm		ASTM D7647	>320	4 359	54	26					
Oil Cleanliness		ISO 4406 (c)	>20/18/15	22/20/16	19/17/13	18/16/12					

Customer Id: TYSALBAL Sample No.: USP245882 Lab Number: 05994466 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

05 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.



07 Sep 2023 Diag: Doug Bogart

NORMAL



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.



16 Aug 2023 Diag: Doug Bogart

NORMAL



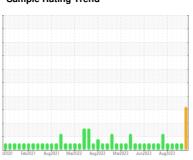
This is a baseline read-out on the submitted sample. AFTER FILTRATION There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.





OIL ANALYSIS REPORT

Sample Rating Trend



WATER



RECYCLED NH3

Refrigeration Compressor

USPI ALT-68 SC (--- GAL)

DIAGNOSIS

Recommendation

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

Contamination

There is a high amount of particulates present in the oil. There is a trace of moisture present in the oil.

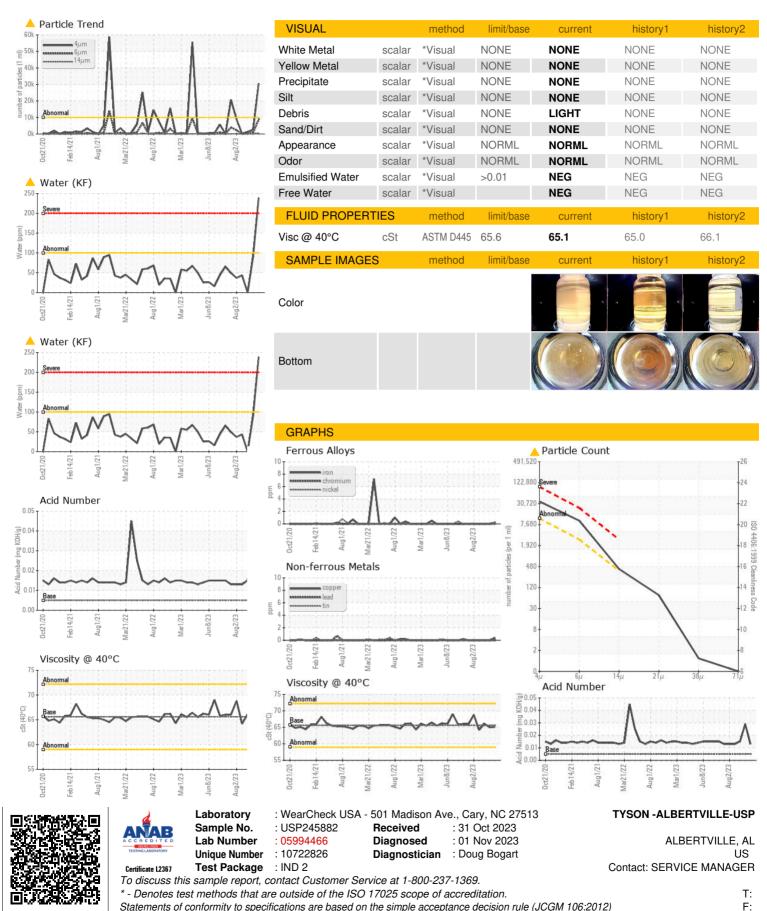
Fluid Condition

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

		t2020 Feb 20	21 Aug2021 Mar2022	Aug2022 Mar2023 Jun2023 J	Aug2023	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		USP245882	USP245876	USP245881
Sample Date		Client Info		21 Oct 2023	05 Oct 2023	07 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				ABNORMAL	NORMAL	NORMAL
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>8	0	0	0
Chromium	ppm	ASTM D5185m	>2	<1	0	0
Nickel	ppm	ASTM D5185m		0	0	0
Titanium	ppm	ASTM D5185m		<1	0	<1
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	>4	<1	0	0
Vanadium	ppm	ASTM D5185m		<1	0	<1
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		0	0	0
Molybdenum	ppm	ASTM D5185m		0	0	0
Manganese	ppm	ASTM D5185m		<1	0	<1
Magnesium	ppm	ASTM D5185m		0	0	<1
Calcium	ppm	ASTM D5185m		0	0	0
Phosphorus	ppm	ASTM D5185m		0	<1	0
Zinc	ppm	ASTM D5185m		0	0	0
Sulfur	ppm	ASTM D5185m	50	10	0	0
CONTAMINANTS						
	•	method	limit/base	current	history1	history2
Silicon		method ASTM D5185m	limit/base >15	current 3	history1	history2
Silicon Sodium	ppm					
	ppm	ASTM D5185m		3	2	2
Sodium	ppm ppm	ASTM D5185m ASTM D5185m	>15 >20	3 1	2	2
Sodium Potassium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	>15 >20 >0.01	3 1 <1	2 0 <1	2 0 <1
Sodium Potassium Water	ppm ppm ppm % ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304	>15 >20 >0.01	3 1 <1 ▲ 0.023	2 0 <1 0.009	2 0 <1 0.001
Sodium Potassium Water ppm Water	ppm ppm ppm % ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304	>15 >20 >0.01 >100	3 1 <1 ▲ 0.023 ▲ 238.7	2 0 <1 0.009 91.3	2 0 <1 0.001 0.000
Sodium Potassium Water ppm Water FLUID CLEANLIN	ppm ppm ppm % ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 method	>15 >20 >0.01 >100 limit/base	3 1 <1 ▲ 0.023 ▲ 238.7	2 0 <1 0.009 91.3 history1	2 0 <1 0.001 0.000 history2
Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm	ppm ppm ppm % ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 method ASTM D7647	>15 >20 >0.01 >100 limit/base >10000	3 1 <1 ▲ 0.023 ▲ 238.7 current ▲ 30587	2 0 <1 0.009 91.3 history1 2513	2 0 <1 0.001 0.000 history2
Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm Particles >6µm	ppm ppm ppm % ppm	ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 ASTM D6304 method ASTM D7647 ASTM D7647	>15 >20 >0.01 >100 limit/base >10000 >2500	3 1 <1 ▲ 0.023 ▲ 238.7 current ▲ 30587 ▲ 8641	2 0 <1 0.009 91.3 history1 2513 793	2 0 <1 0.001 0.000 history2 1329 340
Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm	ppm ppm ppm % ppm	ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 ASTM D6304 method ASTM D7647 ASTM D7647 ASTM D7647	>15 >20 >0.01 >100 limit/base >10000 >2500 >320	3 1 <1 ▲ 0.023 ▲ 238.7 current ▲ 30587 ▲ 8641 ▲ 359	2 0 <1 0.009 91.3 history1 2513 793 54	2 0 <1 0.001 0.00 history2 1329 340 26
Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm	ppm ppm ppm % ppm	ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 ASTM D6304 method ASTM D7647 ASTM D7647 ASTM D7647	>15 >20 >0.01 >100 limit/base >10000 >2500 >320 >80	3 1 <1 ▲ 0.023 ▲ 238.7 current ▲ 30587 ▲ 8641 ▲ 359 64	2 0 <1 0.009 91.3 history1 2513 793 54	2 0 <1 0.001 0.00 history2 1329 340 26 5
Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm Particles >6µm Particles >21µm Particles >38µm	ppm ppm ppm % ppm	ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 ASTM D6304 method ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	>15 >20 >0.01 >100 limit/base >10000 >2500 >320 >80 >20	3 1 <1	2 0 <1 0.009 91.3 history1 2513 793 54 12 0	2 0 <1 0.001 0.00 history2 1329 340 26 5
Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm Particles >6µm Particles >21µm Particles >38µm Particles >71µm	ppm ppm ppm % ppm	ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 method ASTM D7647	>15 >20 >0.01 >100 limit/base >10000 >2500 >320 >80 >20 >4	3 1 <1 △ 0.023 △ 238.7 current △ 30587 △ 8641 △ 359 64 1	2 0 <1 0.009 91.3 history1 2513 793 54 12 0	2 0 <1 0.001 0.000 history2 1329 340 26 5 0



OIL ANALYSIS REPORT



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