

### **OIL ANALYSIS REPORT**

#### Sample Rating Trend



# ELSC-11 (DUAL WITH ELSC-12) (S/N MK4E-136)

**Refrigeration Compressor** 

USPI 1009-68 SC (--- GAL)

#### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

#### Contamination

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

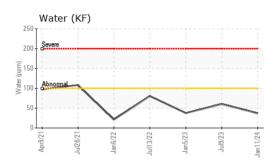
#### Fluid Condition

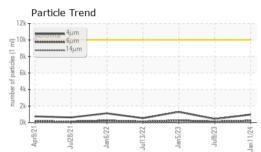
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

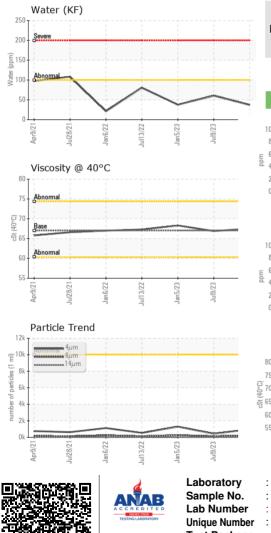
SAMPLE INFORM	<b>IATION</b>	method	limit/base	current	history1	history2
Sample Number		Client Info		USP0004944	USP255459	USP247792
Sample Date		Client Info		11 Jan 2024	09 Jul 2023	05 Jan 2023
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>8	0	3	<1
Chromium	ppm	ASTM D5185m	>2	0	0	0
Nickel	ppm	ASTM D5185m		0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>2	0	0	<1
Aluminum	ppm	ASTM D5185m		0	1	0
Lead	ppm	ASTM D5185m	>2	0	0	0
Copper	ppm	ASTM D5185m		0	0	0
Tin	ppm	ASTM D5185m	>4	0	0	0
Vanadium	ppm	ASTM D5185m	~7	0	0	0
Cadmium		ASTM D5185m		0	0	0
	ppm				-	-
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	0
Magnesium	ppm	ASTM D5185m		0	0	0
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	25	52	0
CONTAMINANTS	3	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	0	<1	<1
Sodium	ppm	ASTM D5185m		0	<1	<1
Potassium	ppm	ASTM D5185m	>20	0	<1	0
Water	%	ASTM D6304	>0.01	0.003	0.006	0.003
ppm Water	ppm	ASTM D6304	>100	37	60.4	37.6
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		976	429	1288
Particles >6µm		ASTM D7647	>2500	233	121	260
Particles >14µm		ASTM D7647	>640	20	6	11
Particles >21µm		ASTM D7647	>160	8	1	4
Particles >38µm		ASTM D7647	>40	0	0	0
Particles >71µm		ASTM D7647	>10	0	0	0
Oil Cleanliness		ISO 4406 (c)	>20/18/16	17/15/11	16/14/10	17/15/11
FLUID DEGRADA		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974	0.005	0.014	0.014	0.015



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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	67	67.5	66.9	68.3
SAMPLE IMAGES		method	limit/base	current	history1	history2
Color						AT A STATE OF A STATE

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