

# **OIL ANALYSIS REPORT**

## SYSTEM 2 <sup>Machine Id</sup> 2C6 (S/N 10240K92633222) Component

## **Refrigeration Compressor** USPI ALT-68 SC (120 GAL)

#### Recommendation

Resample at the next service interval to monitor.

#### Wear

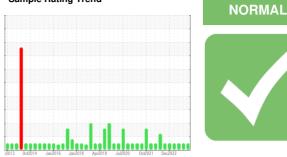
All component wear rates are normal.

#### 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.



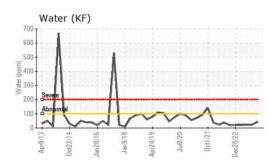


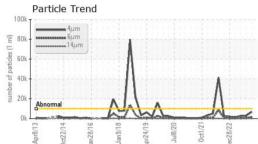
Sample Rating Trend

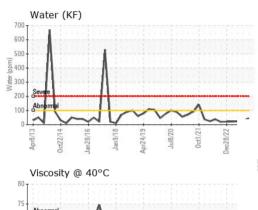
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2		
Sample Number		Client Info		USP0005014	USP0001639	USP05890861		
Sample Date		Client Info		15 Jan 2024	04 Oct 2023	04 Jul 2023		
Machine Age	hrs	Client Info		0	0	0		
Oil Age	hrs	Client Info		0	0	0		
Oil Changed		Client Info		N/A	N/A	N/A		
Sample Status				NORMAL	NORMAL	NORMAL		
WEAR METALS		method	limit/base	current	history1	history2		
Iron	ppm	ASTM D5185m	>8	4	6	2		
Chromium	ppm	ASTM D5185m	>2	<1	0	0		
Nickel	ppm	ASTM D5185m		0	0	<1		
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	<1	<1		
Tin	ppm	ASTM D5185m	>4	0	0	0		
Vanadium	ppm	ASTM D5185m		0	0	0		
Cadmium	ppm	ASTM D5185m		0	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		0	0	0		
Magnesium	ppm	ASTM D5185m		0	0	0		
Calcium	ppm	ASTM D5185m		0	0	0		
Phosphorus	ppm	ASTM D5185m		0	0	<1		
Zinc	ppm	ASTM D5185m		0	0	<1		
Sulfur	ppm	ASTM D5185m	50	0	0	0		
CONTAMINANTS		method	limit/base	current	history1	history2		
Silicon	ppm	ASTM D5185m	>15	0	<1	0		
Sodium	ppm	ASTM D5185m		0	0	0		
Potassium	ppm	ASTM D5185m	>20	0	<1	<1		
Water	%	ASTM D6304	>0.01	0.004	0.002	0.002		
ppm Water	ppm	ASTM D6304	>100	44	23.4	22.5		
FLUID CLEANLIN	ESS	method	limit/base	current	history1	history2		
Particles >4µm		ASTM D7647	>10000	6723	2857	2554		
Particles >6µm		ASTM D7647	>2500	1530	606	425		
Particles >14µm		ASTM D7647	>320	49	26	12		
Particles >21µm		ASTM D7647	>80	8	6	3		
Particles >38µm		ASTM D7647	>20	0	1	0		
Particles >71µm		ASTM D7647	>4	0	0	0		
Oil Cleanliness		ISO 4406 (c)	>20/18/15	20/18/13	19/16/12	19/16/11		
FLUID DEGRADATION method limit/base current history1 history2								
Acid Number (AN)	mg KOH/g	ASTM D974	0.005	0.014	0.011	0.012		

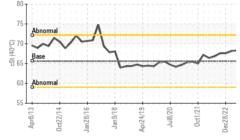


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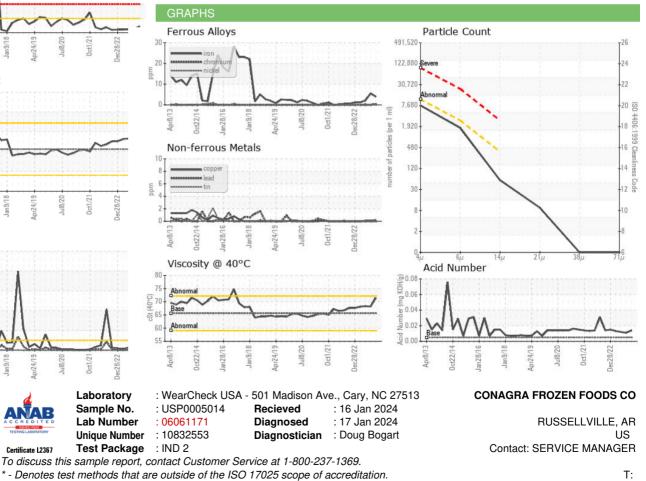




### Particle Trend 100 Ê 80 ticles (1 60 ţ 40 Abnorm

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 PROPER	ΓIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	65.6	71.4	68.2	68.3
SAMPLE IMAGES n		method	limit/base	current	history1	history2
Color				A Cartan	•	
Detterre			1			

Bottom



\* - 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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