

# **OIL ANALYSIS REPORT**



# WEAR

## Area ER-1 Machine Id C-1 (S/N 0114)

#### Component Refrigeration Compressor Fluid FRICK COMPRESSOR OIL #3 (130 GAL)

### DIAGNOSIS

#### Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor.

## 🔺 Wear

The iron level is abnormal.

#### Contamination

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

#### **Fluid Condition**

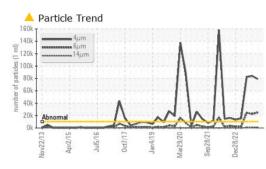
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

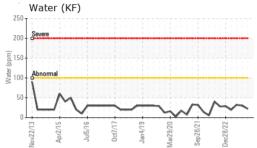
# 

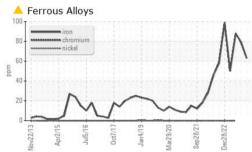
SAMPLE INFOR Sample Number Sample Date							
	MATION	method	limit/base	current	history1	history2	
Sample Date		Client Info		USP0005031	USP0001657	USP255236	
		Client Info		02 Jan 2024	26 Sep 2023	28 Jun 2023	
Machine Age	hrs	Client Info		30170	28648	26871	
Oil Age	hrs	Client Info		0	0	0	
Oil Changed		Client Info		N/A	N/A	N/A	
Sample Status				ABNORMAL	ABNORMAL	ABNORMA	
WEAR METALS		method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>8	<b>6</b> 3	<b>1</b> 79	<u> </u>	
Chromium	ppm	ASTM D5185m	>2	<1	0	0	
Nickel	ppm	ASTM D5185m		0	<1	<1	
Titanium	ppm	ASTM D5185m		0	0	0	
Silver	ppm	ASTM D5185m	>2	0	0	0	
Aluminum	ppm	ASTM D5185m	>3	0	0	<1	
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	<1	
Molybdenum	ppm	ASTM D5185m		0	0	0	
Manganese	ppm	ASTM D5185m		0	<1	<1	
Magnesium	ppm	ASTM D5185m		0	0	0	
Calcium	ppm	ASTM D5185m		0	0	0	
Phosphorus	ppm	ASTM D5185m		0	0	0	
Zinc	ppm	ASTM D5185m		0	2	0	
Sulfur	ppm	ASTM D5185m		0	16	42	
CONTAMINANT	S	method	limit/base	current	history1	history2	
	ppm	ASTM D5185m	\15				
	l= l=			0	<1	0	
Silicon	ppm	ASTM D5185m	210	0	<1 0	0	
Silicon Sodium	ppm ppm		>20	-			
Silicon Sodium Potassium	ppm	ASTM D5185m ASTM D5185m	>20	0 <1	0 0	0	
Silicon Sodium Potassium Water		ASTM D5185m	>20 >0.01	0	0	0	
Silicon Sodium Potassium Water	ppm % ppm	ASTM D5185m ASTM D5185m ASTM D6304	>20 >0.01	0 <1 0.002	0 0 0.003	0 1 0.003 32.3	
Silicon Sodium Potassium Water ppm Water FLUID CLEANLII	ppm % ppm	ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304	>20 >0.01 >100	0 <1 0.002 22	0 0 0.003 29.9	0 1 0.003 32.3	
Silicon Sodium Potassium Water ppm Water FLUID CLEANLII Particles >4µm	ppm % ppm	ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 method	>20 >0.01 >100 limit/base >10000	0 <1 0.002 22 current	0 0 0.003 29.9 history1	0 1 0.003 32.3 history2	
Silicon Sodium Potassium Water ppm Water FLUID CLEANLII Particles >4µm Particles >6µm	ppm % ppm	ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 method ASTM D7647	>20 >0.01 >100 limit/base >10000	0 <1 0.002 22 current 79147	0 0 0.003 29.9 history1 ▲ 83885	0 1 0.003 32.3 history2 ▲ 82049	
Silicon Sodium Potassium Water ppm Water FLUID CLEANLII Particles >4µm Particles >6µm Particles >14µm	ppm % ppm	ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 <b>method</b> ASTM D7647 ASTM D7647	>20 >0.01 >100 limit/base >10000 >2500 >320	0 <1 0.002 22 <u>current</u> ▲ 79147 ▲ 24924	0 0.003 29.9 history1 ▲ 83885 ▲ 22632	0 1 0.003 32.3 history2 ▲ 82049 ▲ 24625	
Silicon Sodium Potassium Water ppm Water FLUID CLEANLII Particles >4µm Particles >6µm Particles >14µm Particles >21µm	ppm % ppm	ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 <b>method</b> ASTM D7647 ASTM D7647 ASTM D7647	>20 >0.01 >100 limit/base >10000 >2500 >320	0 <1 0.002 22 <u>current</u> ▲ 79147 ▲ 24924 ▲ 1056	0 0.003 29.9 history1 ▲ 83885 ▲ 22632 ▲ 635	0 1 0.003 32.3 history2 ▲ 82049 ▲ 24625 ▲ 629	
Silicon Sodium Potassium Water ppm Water FLUID CLEANLII Particles >4µm Particles >6µm Particles >14µm Particles >21µm Particles >38µm	ppm % ppm	ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 Method ASTM D7647 ASTM D7647 ASTM D7647	>20 >0.01 >100 limit/base >10000 >2500 >320 >80	0 <1 0.002 22 <u>current</u> ▲ 79147 ▲ 24924 ▲ 1056 ▲ 167	0 0.003 29.9 history1 ▲ 83885 ▲ 22632 ▲ 635 ▲ 99	0 1 0.003 32.3 history2 ▲ 82049 ▲ 24625 ▲ 629 52	
Silicon Sodium Potassium Water ppm Water FLUID CLEANLII Particles >4µm Particles >6µm Particles >14µm Particles >21µm Particles >38µm Particles >71µm	ppm % ppm	ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	>20 >0.01 >100 limit/base >10000 >2500 >320 >80 >20	0 <1 0.002 22 current ▲ 79147 ▲ 24924 ▲ 1056 ▲ 167 0	0 0.003 29.9 history1 ▲ 83885 ▲ 22632 ▲ 635 ▲ 99 1	0 1 0.003 32.3 history2 ▲ 82049 ▲ 24625 ▲ 629 52 0	
Silicon Sodium Potassium Water ppm Water	ppm % ppm NESS	ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	>20 >0.01 >100 <b>limit/base</b> >10000 >2500 >320 >80 >20 >4	0 <1 0.002 22 current ▲ 79147 ▲ 24924 ▲ 1056 ▲ 167 0 0	0 0.003 29.9 history1 ▲ 83885 ▲ 22632 ▲ 635 ▲ 99 1 0	0 1 0.003 32.3 history2 ▲ 82049 ▲ 24625 ▲ 629 52 0 0 0	



# **OIL ANALYSIS REPORT**







0.04

0.04

(B/H0X gm)

0.02

0.02 Poid 1

0.01

0.00

250

200

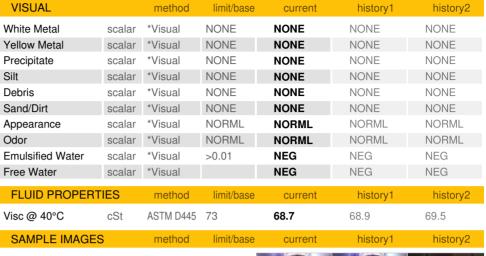
Ē 150

Nater 100

50

Jov27/

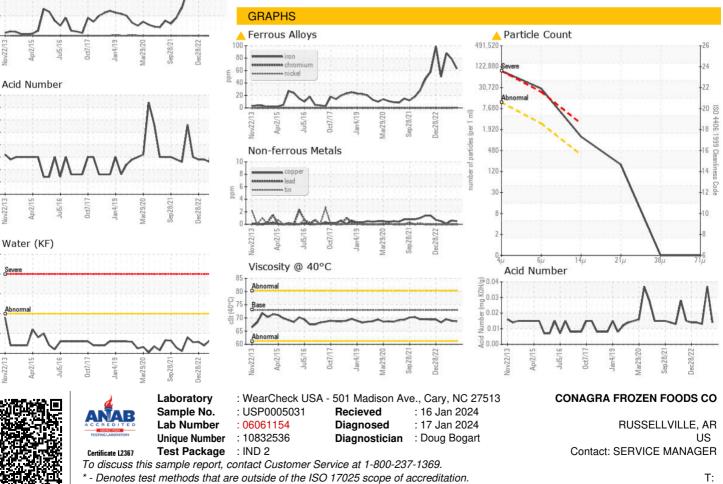
Water (KF)



Color



Bottom



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

F: