



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id  
**FRICK C-4 (S/N SGC23170239)**  
 Component  
**Refrigeration Compressor**  
 Fluid  
**FRICK COMPRESSOR OIL #3 (165 GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>USP0011422</b>	USP0003636	USP244810
Sample Date		Client Info		<b>08 May 2024</b>	07 Nov 2023	12 Jun 2023
Machine Age	hrs	Client Info		<b>51825</b>	0	56714
Oil Age	hrs	Client Info		<b>0</b>	0	55592
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>N/A</b>	N/A	Changed
Filter Changed		Client Info		<b>N/A</b>	N/A	Changed
Sample Status				<b>ABNORMAL</b>	ABNORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>8	<b>13</b>	12	18
Chromium	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>3	<b>&lt;1</b>	0	0
Lead	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>8	<b>0</b>	0	<1
Tin	ppm	ASTM D5185m	>4	<b>&lt;1</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

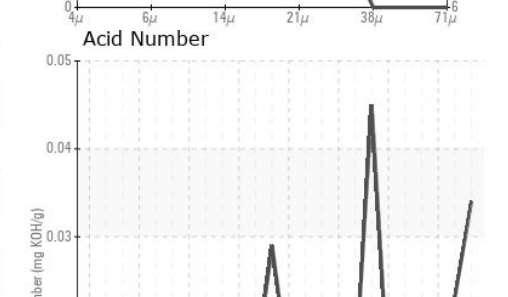
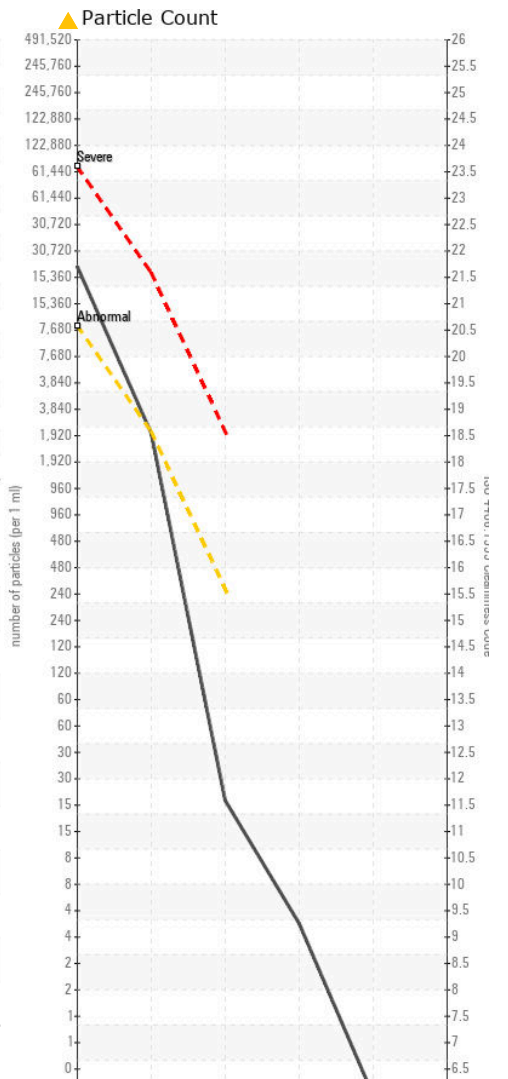
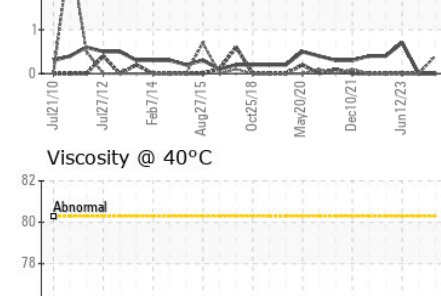
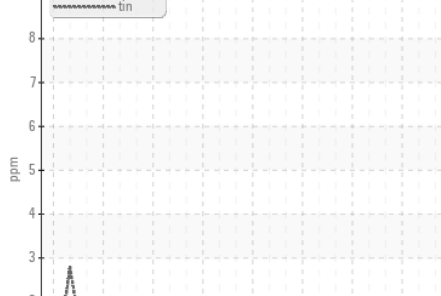
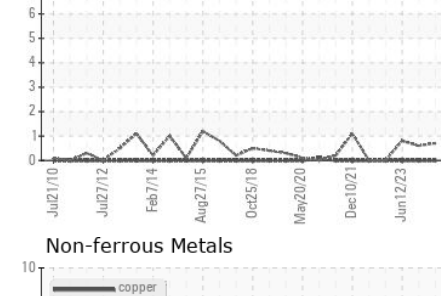
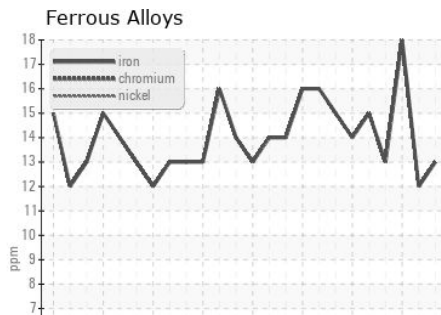
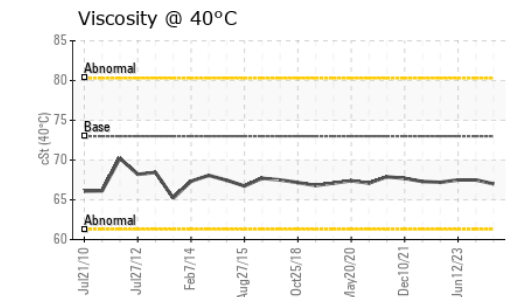
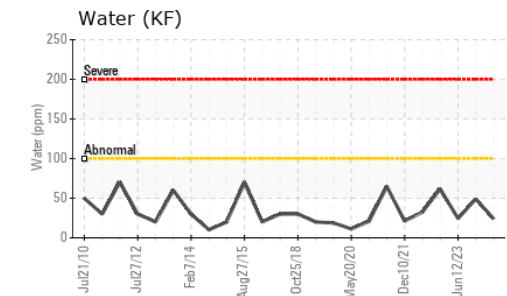
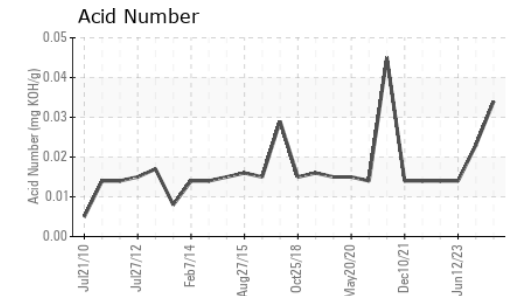
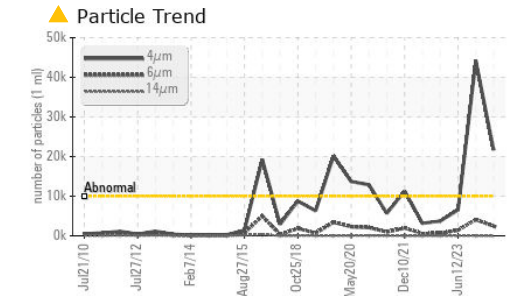
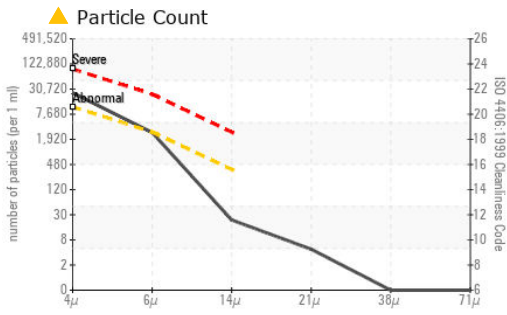
There is a high amount of silt (particulates < 6 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	2
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	0	<1
Water	%	ASTM D6304	>0.01	<b>0.002</b>	0.004	0.002
ppm Water	ppm	ASTM D6304	>100	<b>24</b>	49.0	24.4
Particles >4µm		ASTM D7647	>10000	<b>▲ 21673</b>	▲ 44157	6547
Particles >6µm		ASTM D7647	>2500	<b>2445</b>	● 4109	1410
Particles >14µm		ASTM D7647	>320	<b>20</b>	20	28
Particles >21µm		ASTM D7647	>80	<b>4</b>	4	6
Particles >38µm		ASTM D7647	>20	<b>0</b>	0	0
Particles >71µm		ASTM D7647	>4	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>20/18/15	<b>▲ 22/18/11</b>	▲ 23/19/11	20/18/12
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.01	<b>NEG</b>	NEG	NEG

## FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		<b>1</b>	0	0
Boron	ppm	ASTM D5185m		<b>0</b>	0	0
Barium	ppm	ASTM D5185m		<b>1</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>0</b>	0	0
Manganese	ppm	ASTM D5185m		<b>1</b>	<1	0
Magnesium	ppm	ASTM D5185m		<b>0</b>	<1	0
Calcium	ppm	ASTM D5185m		<b>0</b>	1	0
Phosphorus	ppm	ASTM D5185m		<b>0</b>	1	<1
Zinc	ppm	ASTM D5185m		<b>11</b>	20	35
Sulfur	ppm	ASTM D5185m		<b>1441</b>	1204	2016
Acid Number (AN)	mg KOH/g	ASTM D974		<b>0.034</b>	0.023	0.014
Visc @ 40°C	cSt	ASTM D445	73	<b>67.0</b>	67.5	67.5



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : USP0011422

Lab Number : 06177199

Unique Number : 11023252

Test Package : IND 2

Received : 13 May 2024

Tested : 14 May 2024

Diagnosed : 14 May 2024 - Doug Bogart

AMERICOLD LOGISTICS

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To discuss this sample report, contact Customer Service at 1-800-237-1369.

\* - 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)