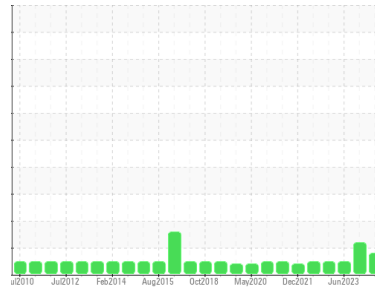




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id
FRICK C-4 (S/N SGC23170239)

Component
Refrigeration Compressor

Fluid
FRICK COMPRESSOR OIL #3 (165 GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is a high amount of silt (particulates < 6 microns in size) 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 INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		USP0011422	USP0003636	USP244810
Sample Date	Client Info		08 May 2024	07 Nov 2023	12 Jun 2023
Machine Age	hrs	Client Info	51825	0	56714
Oil Age	hrs	Client Info	0	0	55592
Oil Changed	Client Info		N/A	N/A	Changed
Sample Status			ABNORMAL	ABNORMAL	NORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >8	13	12	18
Chromium	ppm	ASTM D5185m >2	0	0	0
Nickel	ppm	ASTM D5185m	<1	<1	<1
Titanium	ppm	ASTM D5185m	0	0	0
Silver	ppm	ASTM D5185m >2	0	0	0
Aluminum	ppm	ASTM D5185m >3	<1	0	0
Lead	ppm	ASTM D5185m >2	0	0	0
Copper	ppm	ASTM D5185m >8	0	0	<1
Tin	ppm	ASTM D5185m >4	<1	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	1	0	0
Molybdenum	ppm	ASTM D5185m	0	0	0
Manganese	ppm	ASTM D5185m	1	<1	0
Magnesium	ppm	ASTM D5185m	0	<1	0
Calcium	ppm	ASTM D5185m	0	1	0
Phosphorus	ppm	ASTM D5185m	0	1	<1
Zinc	ppm	ASTM D5185m	11	20	35
Sulfur	ppm	ASTM D5185m	1441	1204	2016

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	<1	<1	2
Sodium	ppm	ASTM D5185m	1	0	0
Potassium	ppm	ASTM D5185m >20	0	0	<1
Water	%	ASTM D6304 >0.01	0.002	0.004	0.002
ppm Water	ppm	ASTM D6304 >100	24	49.0	24.4

FLUID CLEANLINESS

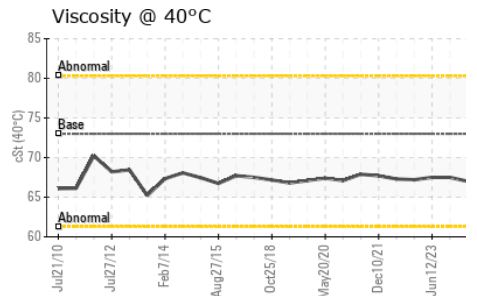
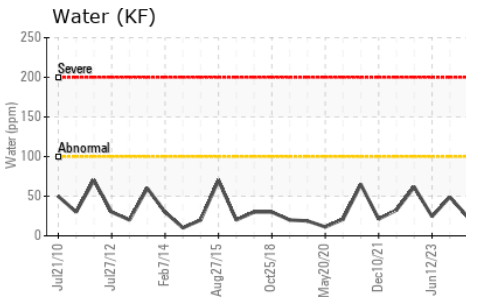
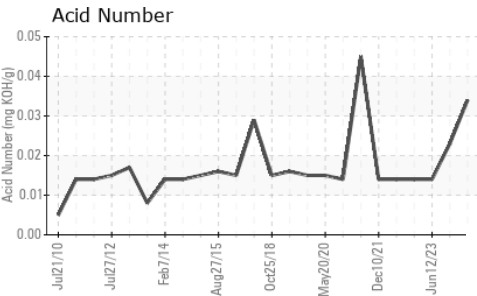
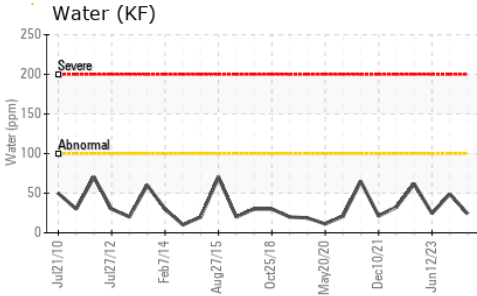
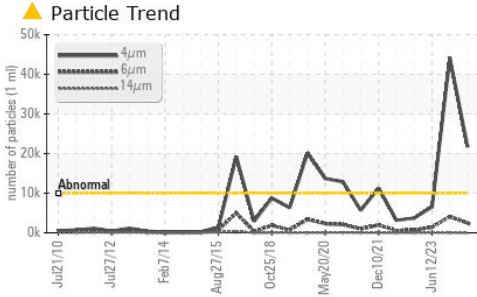
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	▲ 21673	▲ 44157	6547
Particles >6µm	ASTM D7647	>2500	2445	● 4109	1410
Particles >14µm	ASTM D7647	>320	20	20	28
Particles >21µm	ASTM D7647	>80	4	4	6
Particles >38µm	ASTM D7647	>20	0	0	0
Particles >71µm	ASTM D7647	>4	0	0	0
Oil Cleanliness	ISO 4406 (c)	>20/18/15	▲ 22/18/11	▲ 23/19/11	20/18/12

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974	0.034	0.023	0.014



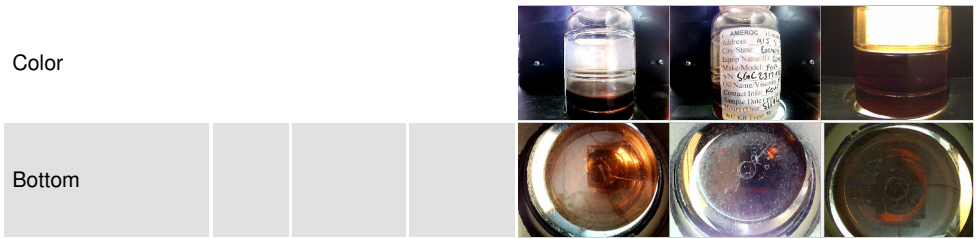
OIL ANALYSIS REPORT



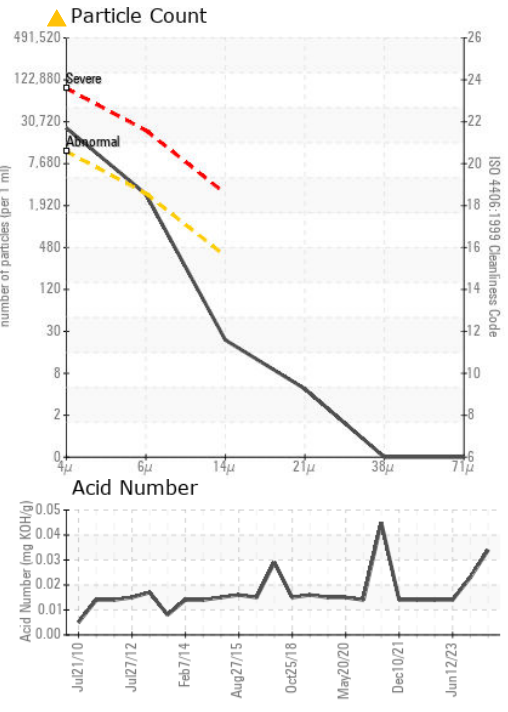
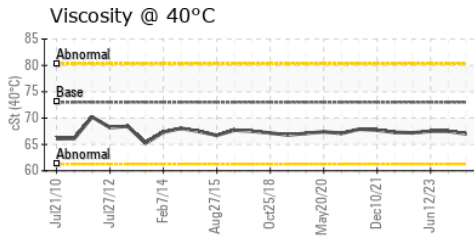
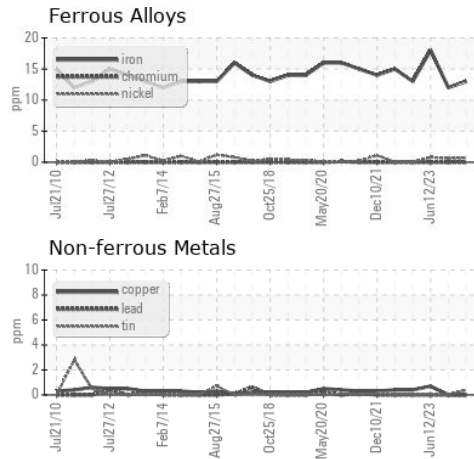
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.01	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 73	67.0	67.5	67.5

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



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
 915 S CARON RD
 ROCHELLE, IL
 US 61068
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 kevin.thurman@americold.com
 T: (815)826-0888
 F: (815)562-1081

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)