



OIL ANALYSIS REPORT

WEAR	ATTENTION
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
CARRIER CITY OF NET CHILLER 1 (S/N 2576)

Component
Refrigeration Compressor

Fluid
MINERAL OIL (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample. (Customer Sample Comment: Annual test)

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0758427	WC0507720	WCI2307144
Sample Date		Client Info		20 Dec 2023	26 Oct 2020	25 Jan 2019
Machine Age	hrs	Client Info		5097	3605	0
Oil Age	hrs	Client Info		5097	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	Changed	N/A
Filter Changed		Client Info		N/A	Changed	N/A
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL

WEAR

The copper level is marginal. All other component wear rates are normal.

Iron	ppm	ASTM D5185m	>8	<1	3	2
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	>3	0	0	<1
Lead	ppm	ASTM D5185m	>2	<1	3	4
Copper	ppm	ASTM D5185m	>8	16	80	154
Tin	ppm	ASTM D5185m	>4	1	3	3
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

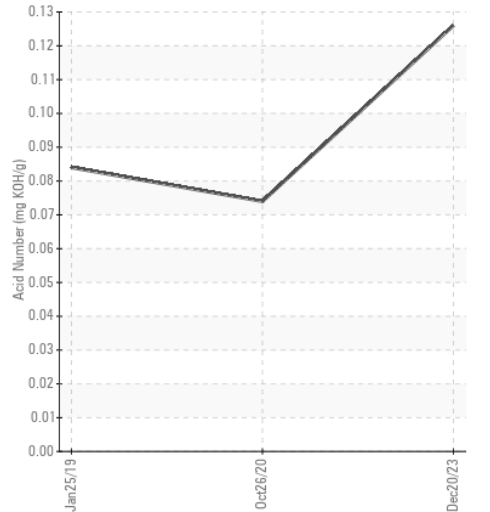
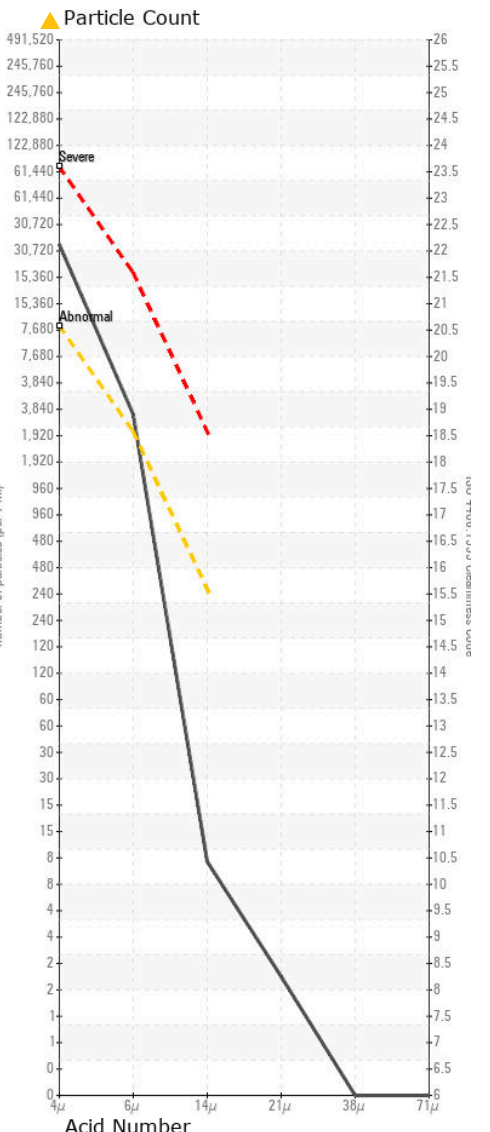
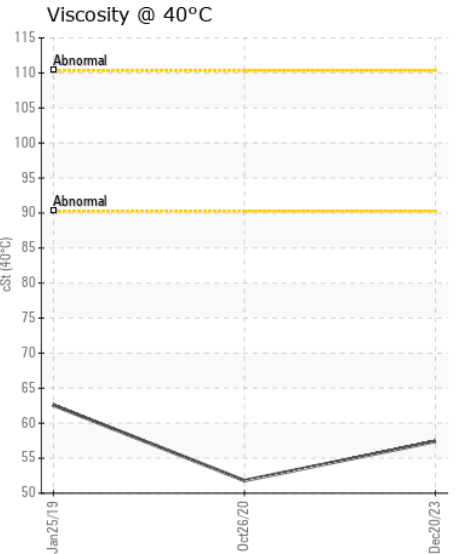
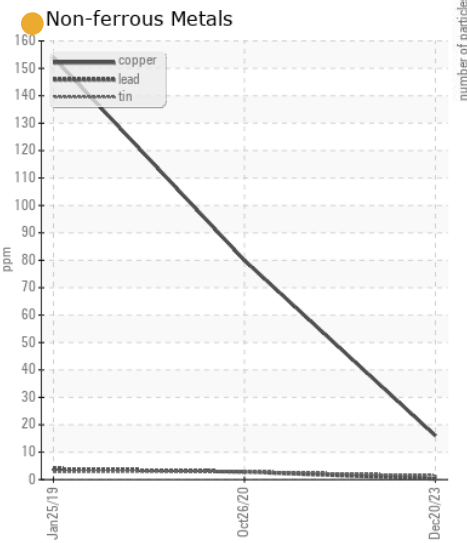
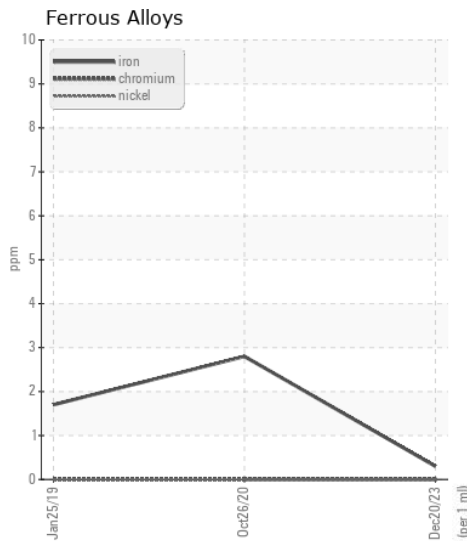
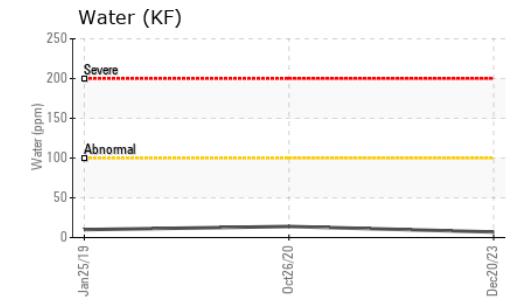
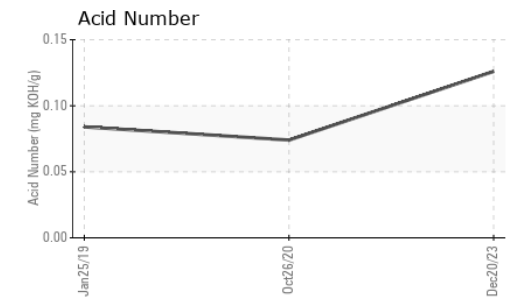
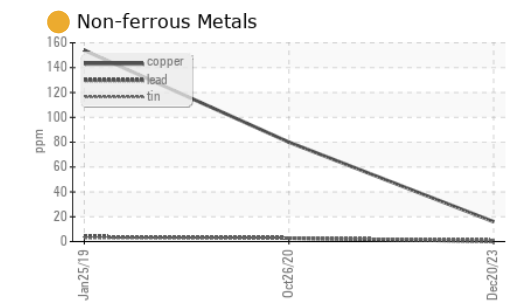
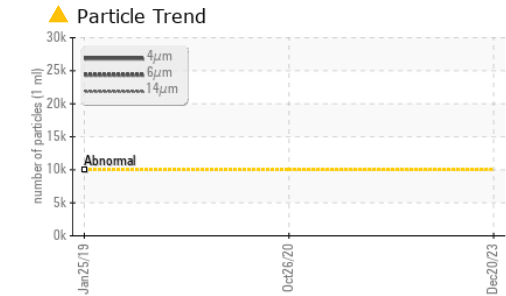
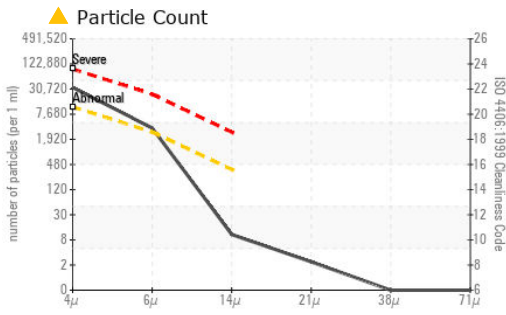
There is a high amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>15	5	6	12
Potassium	ppm	ASTM D5185m	>20	0	2	0
Water	%	ASTM D6304	>0.01	0.001	0.001	0.001
ppm Water	ppm	ASTM D6304	>100	7	14.0	10
Particles >4µm		ASTM D7647	>10000	29050	---	---
Particles >6µm		ASTM D7647	>2500	3126	---	---
Particles >14µm		ASTM D7647	>320	9	---	---
Particles >21µm		ASTM D7647	>80	2	---	---
Particles >38µm		ASTM D7647	>20	0	---	---
Particles >71µm		ASTM D7647	>4	0	---	---
Oil Cleanliness		ISO 4406 (c)	>20/18/15	22/19/10	---	---
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

FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		1	0	0
Boron	ppm	ASTM D5185m		0	0	<1
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		0	0	0
Manganese	ppm	ASTM D5185m		<1	<1	0
Magnesium	ppm	ASTM D5185m		<1	<1	0
Calcium	ppm	ASTM D5185m		2	3	0
Phosphorus	ppm	ASTM D5185m		33	77	90
Zinc	ppm	ASTM D5185m		0	34	59
Sulfur	ppm	ASTM D5185m		837	908	1477
Acid Number (AN)	mg KOH/g	ASTM D974		0.126	0.074	0.084
Visc @ 40°C	cSt	ASTM D445		57.4	51.8	62.56



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0758427
Lab Number : 06048956
Unique Number : 10809564
Test Package : PLANT
Received : 02 Jan 2024
Tested : 03 Jan 2024
Diagnosed : 03 Jan 2024 - Angela Borella

DAIKIN APPLIED - AUBURN HILLS
 3955 PINNACLE COURT SUITE 300
 AUBURN HILLS, MI
 US 48326
 Contact: MICHELLE MANN
 michelle.mann@daikinapplied.com
 T: (248)364-4532
 F: (248)364-4530

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)