



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
367876 - CARLISLE BRAKE [2010455483]
 Machine Id
KAESER 5478237 - CARLISLE BRAKE (S/N 1031)
 Component
Compressor
 Fluid
KAESER SIGMA (OEM) M-460 (28 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		APC06148071	APCI2270277	APCI2270280
Sample Date		Client Info		05 Mar 2024	10 Jul 2017	06 Apr 2017
Machine Age	hrs	Client Info		0	11231	9254
Oil Age	hrs	Client Info		18712	8130	6220
Filter Age	hrs	Client Info		6756	1910	2086
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	0	0	0
Chromium	ppm	ASTM D5185m	>10	<1	<1	0
Nickel	ppm	ASTM D5185m	>3	<1	0	0
Titanium	ppm	ASTM D5185m	>3	<1	0	0
Silver	ppm	ASTM D5185m	>2	0	<1	<1
Aluminum	ppm	ASTM D5185m	>10	2	0	<1
Lead	ppm	ASTM D5185m	>10	<1	2	2
Copper	ppm	ASTM D5185m	>50	8	4	4
Tin	ppm	ASTM D5185m	>10	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

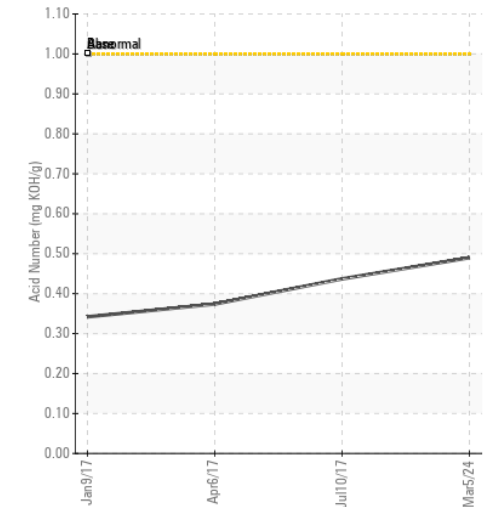
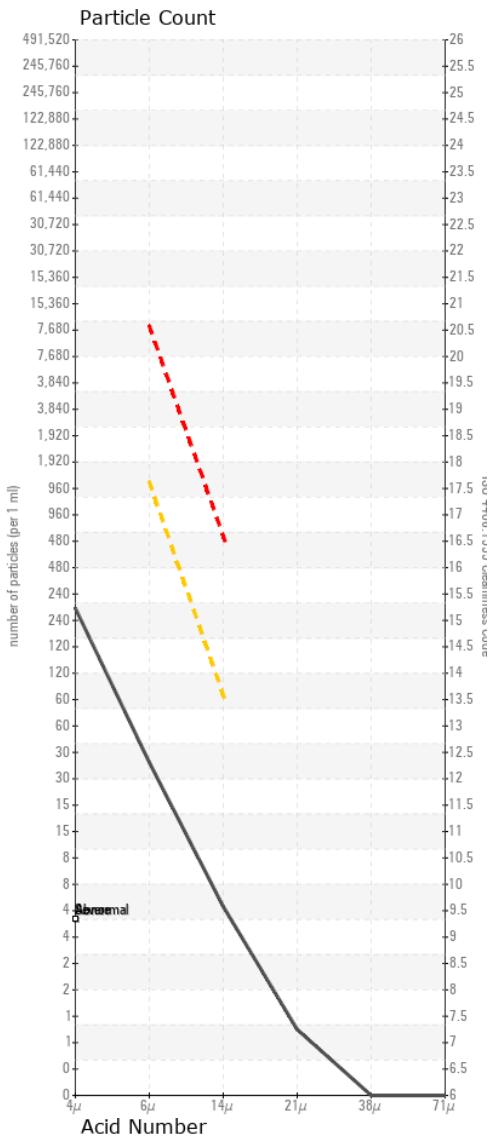
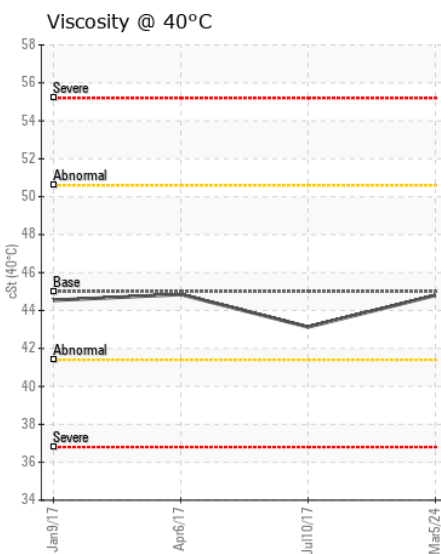
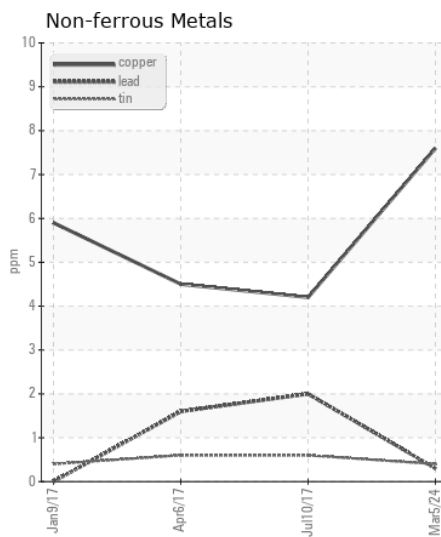
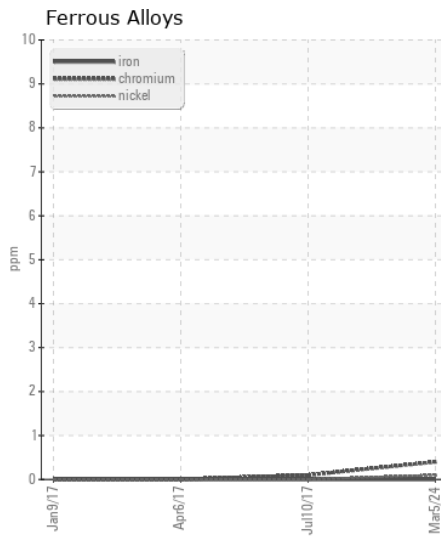
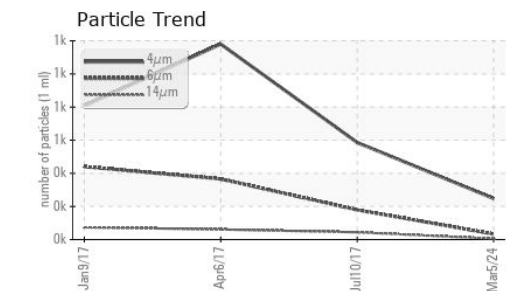
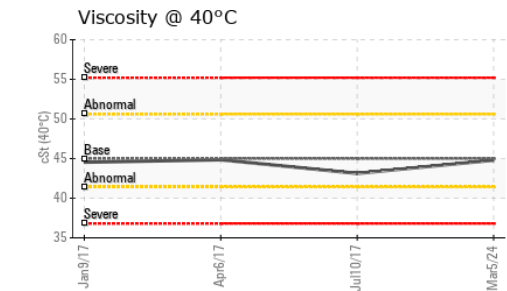
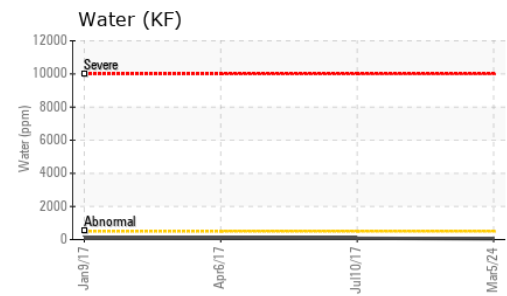
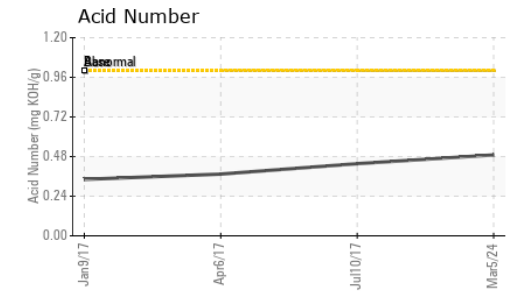
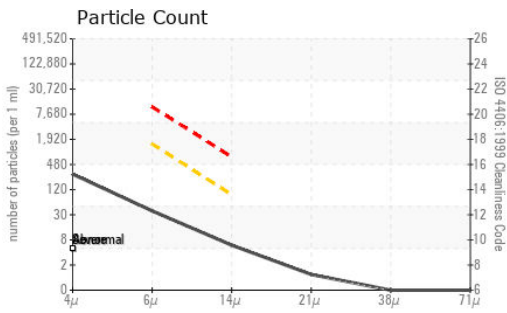
There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

Silicon	ppm	ASTM D5185m	>25	<1	0	1
Potassium	ppm	ASTM D5185m	>20	<1	2	<1
Water	%	ASTM D6304	>0.05	0.004	0.008	0.009
ppm Water	ppm	ASTM D6304	>500	48	80	90
Particles >4µm		ASTM D7647		248	586	1180
Particles >6µm		ASTM D7647	>1300	33	179	366
Particles >14µm		ASTM D7647	>80	5	44	61
Particles >21µm		ASTM D7647	>20	1	22	20
Particles >38µm		ASTM D7647	>4	0	3	3
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	--/17/13	15/12/10	16/15/13	17/16/13
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	>0.05	NEG	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		0	0	<1
Boron	ppm	ASTM D5185m	0	0	<1	0
Barium	ppm	ASTM D5185m	90	0	0	<1
Molybdenum	ppm	ASTM D5185m	0	<1	0	0
Manganese	ppm	ASTM D5185m		0	<1	0
Magnesium	ppm	ASTM D5185m	100	0	<1	0
Calcium	ppm	ASTM D5185m	0	5	0	<1
Phosphorus	ppm	ASTM D5185m	0	11	111	2
Zinc	ppm	ASTM D5185m	0	3	0	1
Sulfur	ppm	ASTM D5185m	23500	16194	6717	3751
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	0.49	0.437	0.374
Visc @ 40°C	cSt	ASTM D445	45	44.8	43.13	44.85



Certificate L2367

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

Sample No. : APC06148071

Lab Number : 06148071

Unique Number : 10978149

Test Package : IND 2 (Additional Tests: KF, PrtCount)

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)

Received : 12 Apr 2024

Tested : 15 Apr 2024

Diagnosed : 17 Apr 2024 - Jonathan Hester

AIR PRODUCTS AND CHEMICALS INC - ALLENTOWN

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