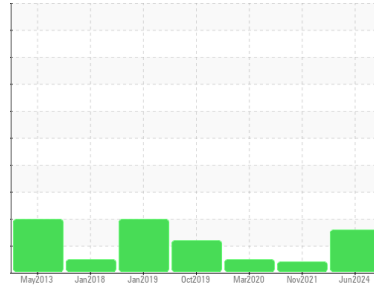




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id

KAESER SM10 3887396 (S/N 1669)

Component

Compressor

Fluid

KAESER SIGMA (OEM) S-460 (--- GAL)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

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 INFORMATION

method	limit/base	current	history1	history2	
Sample Number	Client Info	KCPA018028	KCP43707	KCP25214	
Sample Date	Client Info	11 Jun 2024	18 Nov 2021	11 Mar 2020	
Machine Age	hrs	Client Info	93617	83364	69501
Oil Age	hrs	Client Info	0	6000	3194
Oil Changed	Client Info	Changed	Changed	Changed	
Sample Status		ABNORMAL	ABNORMAL	NORMAL	

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >50	<1	0	0
Chromium	ppm	ASTM D5185m >10	<1	0	0
Nickel	ppm	ASTM D5185m >3	<1	0	0
Titanium	ppm	ASTM D5185m >3	<1	0	0
Silver	ppm	ASTM D5185m >2	<1	0	0
Aluminum	ppm	ASTM D5185m >10	3	<1	0
Lead	ppm	ASTM D5185m >10	<1	0	0
Copper	ppm	ASTM D5185m >50	6	6	9
Tin	ppm	ASTM D5185m >10	<1	0	0
Antimony	ppm	ASTM D5185m	---	0	0
Vanadium	ppm	ASTM D5185m	<1	0	0
Cadmium	ppm	ASTM D5185m	<1	0	0

ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	0	0	26
Barium	ppm	ASTM D5185m 90	1	18	0
Molybdenum	ppm	ASTM D5185m	<1	0	0
Manganese	ppm	ASTM D5185m	<1	0	0
Magnesium	ppm	ASTM D5185m 90	10	47	16
Calcium	ppm	ASTM D5185m 2	0	<1	<1
Phosphorus	ppm	ASTM D5185m	2	2	2
Zinc	ppm	ASTM D5185m	16	24	18
Sulfur	ppm	ASTM D5185m	19343	16200	14997

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >25	<1	0	0
Sodium	ppm	ASTM D5185m	1	9	3
Potassium	ppm	ASTM D5185m >20	2	0	0
Water	%	ASTM D6304 >0.05	0.006	0.016	0.010
ppm Water	ppm	ASTM D6304 >500	67	162.3	104.6

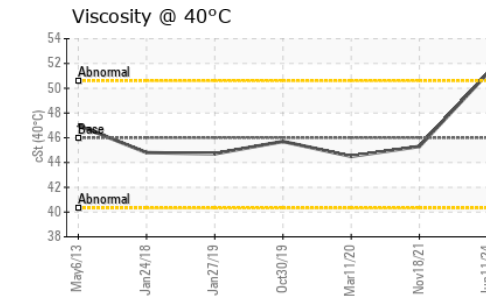
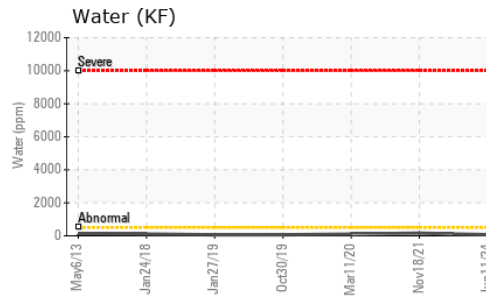
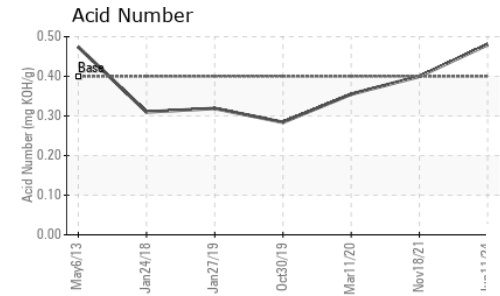
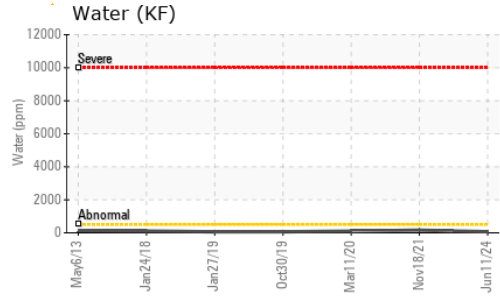
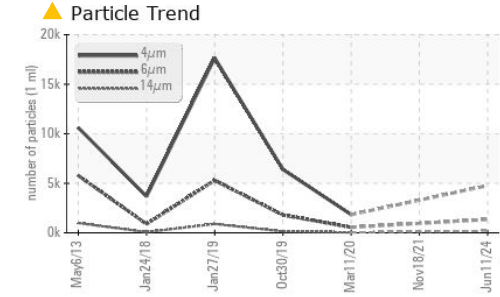
FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	4768	---	1834
Particles >6µm	ASTM D7647 >1300	▲ 1352	---	551
Particles >14µm	ASTM D7647 >80	▲ 187	---	37
Particles >21µm	ASTM D7647 >20	▲ 71	---	11
Particles >38µm	ASTM D7647 >4	4	---	0
Particles >71µm	ASTM D7647 >3	0	---	0
Oil Cleanliness	ISO 4406 (c) >--/17/13	▲ 19/18/15	---	16/12

FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045 0.4	0.48	0.40	0.355

OIL ANALYSIS REPORT

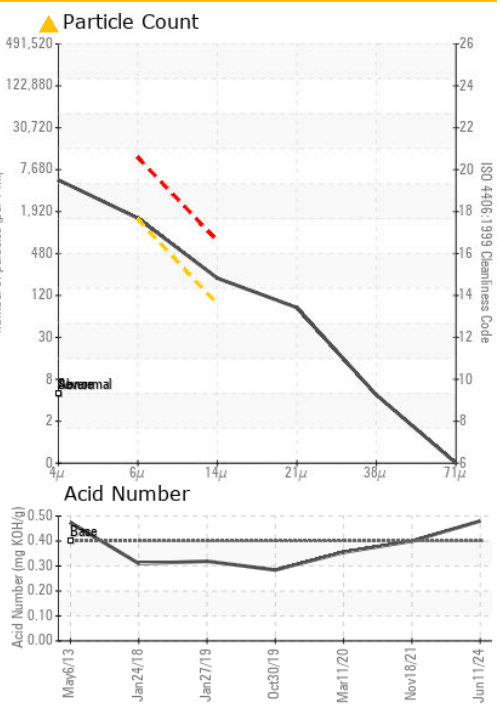
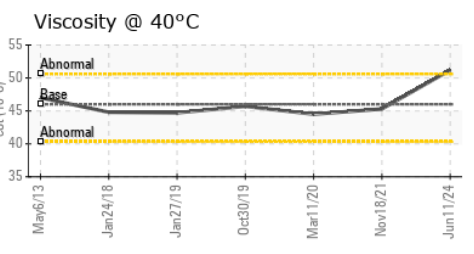
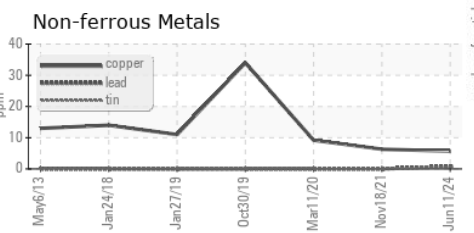
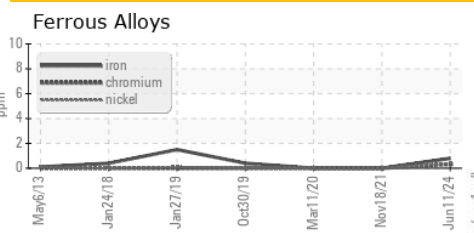


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	46	51.2	45.3

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA018028 **Received** : 21 Jun 2024
Lab Number : 06217282 **Tested** : 25 Jun 2024
Unique Number : 11090146 **Diagnosed** : 25 Jun 2024 - Don Baldrige
Test Package : IND 2 (Additional Tests: KF, PrtCount)

CARMAX
 SW FRWY 6909
 HOUSTON, TX
 US 77074
 Contact:

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)