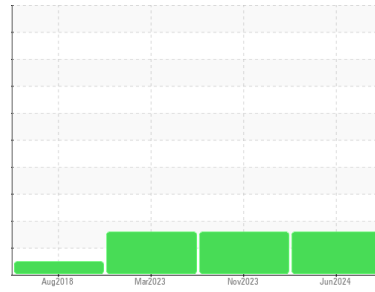




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id
KAESER SFC 75S 4013188 (S/N 1061)
 Component
Compressor
 Fluid
KAESER SIGMA (OEM) M-460 (--- GAL)

DIAGNOSIS

Recommendation

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. 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	KCPA018418	KCPA010271	KCP54008
Sample Date	Client Info	07 Jun 2024	22 Nov 2023	14 Mar 2023
Machine Age	hrs	0	25423	0
Oil Age	hrs	3000	0	0
Oil Changed	Client Info	Changed	N/A	Changed
Sample Status		ABNORMAL	ABNORMAL	ABNORMAL

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >50	<1	0	<1
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	2	0	2
Lead	ppm	ASTM D5185m >10	<1	0	0
Copper	ppm	ASTM D5185m >50	4	0	3
Tin	ppm	ASTM D5185m >10	<1	0	0
Antimony	ppm	ASTM D5185m	---	---	---
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	<1	0	0

ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m 0	0	0	0
Barium	ppm	ASTM D5185m 90	45	58	80
Molybdenum	ppm	ASTM D5185m 0	<1	0	0
Manganese	ppm	ASTM D5185m	<1	0	<1
Magnesium	ppm	ASTM D5185m 100	68	80	81
Calcium	ppm	ASTM D5185m 0	0	5	2
Phosphorus	ppm	ASTM D5185m 0	2	3	9
Zinc	ppm	ASTM D5185m 0	12	1	11
Sulfur	ppm	ASTM D5185m 23500	20744	19093	21308

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >25	1	<1	2
Sodium	ppm	ASTM D5185m	28	26	19
Potassium	ppm	ASTM D5185m >20	7	3	6
Water	%	ASTM D6304 >0.05	0.030	0.024	0.026
ppm Water	ppm	ASTM D6304 >500	304	246	268.2

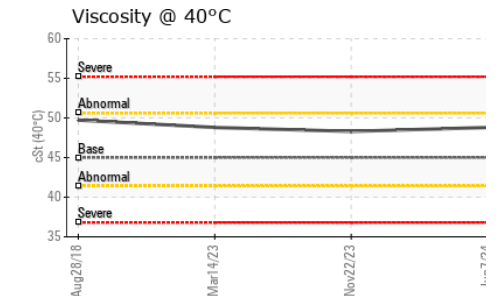
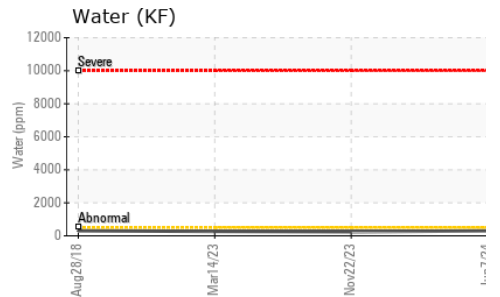
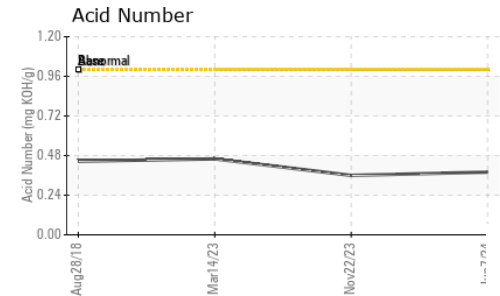
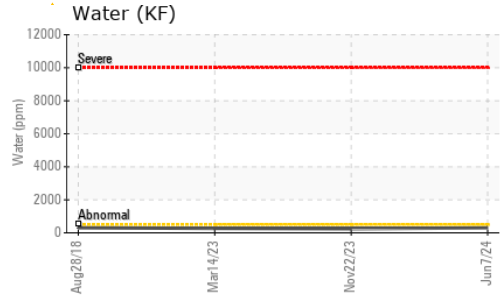
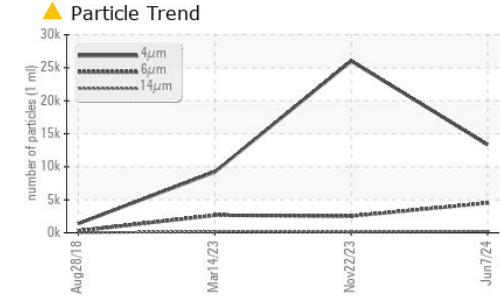
FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	13372	26010	9206
Particles >6µm	ASTM D7647 >1300	▲ 4513	▲ 2519	▲ 2663
Particles >14µm	ASTM D7647 >80	▲ 228	● 106	▲ 171
Particles >21µm	ASTM D7647 >20	▲ 38	▲ 41	▲ 26
Particles >38µm	ASTM D7647 >4	2	1	3
Particles >71µm	ASTM D7647 >3	0	0	0
Oil Cleanliness	ISO 4406 (c) >--/17/13	▲ 21/19/15	▲ 22/19/14	▲ 20/19/15

FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045 1.0	0.38	0.36	0.46

OIL ANALYSIS REPORT

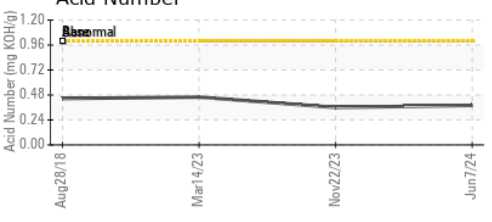
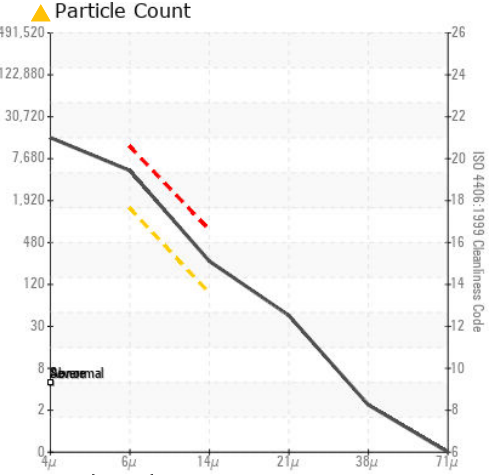
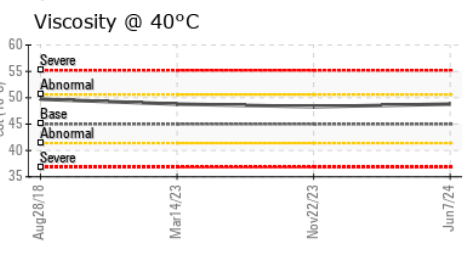
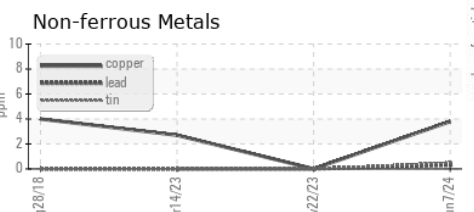
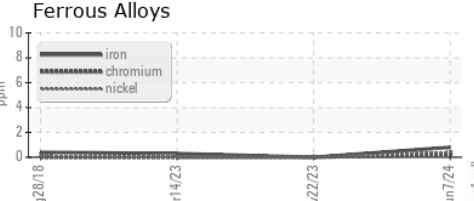


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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 45	48.8	48.3	48.8

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA018418 **Received** : 18 Jun 2024
Lab Number : 06213463 **Tested** : 19 Jun 2024
Unique Number : 11086327 **Diagnosed** : 20 Jun 2024 - Don Baldrige
Test Package : IND 2 (Additional Tests: KF, PrtCount)

COSTCO WHOLESALE
 2222 ENRICO FERMI DR
 SAN DIEGO, CA
 US 92154
 Contact: M. SILVA
 msilva@costco.com

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)