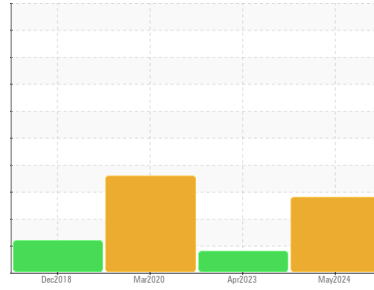




OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id
KAESER SM 15 6216209 (S/N 1004)
 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
 An increase in the copper level is noted. All other 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			KCPA018154	KCP53605	KCP24763
Sample Date	Client Info			21 May 2024	17 Apr 2023	13 Mar 2020
Machine Age	hrs	Client Info		6161	2708	437
Oil Age	hrs	Client Info		3453	1367	189
Oil Changed	Client Info			Changed	Changed	Changed
Sample Status				ABNORMAL	ATTENTION	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	0	0	<1
Chromium	ppm	ASTM D5185m	>10	0	<1	0
Nickel	ppm	ASTM D5185m	>3	0	<1	0
Titanium	ppm	ASTM D5185m	>3	0	<1	0
Silver	ppm	ASTM D5185m	>2	0	0	<1
Aluminum	ppm	ASTM D5185m	>10	0	0	<1
Lead	ppm	ASTM D5185m	>10	0	<1	0
Copper	ppm	ASTM D5185m	>50	32	10	2
Tin	ppm	ASTM D5185m	>10	0	<1	<1
Antimony	ppm	ASTM D5185m		---	---	0
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		0	<1	0

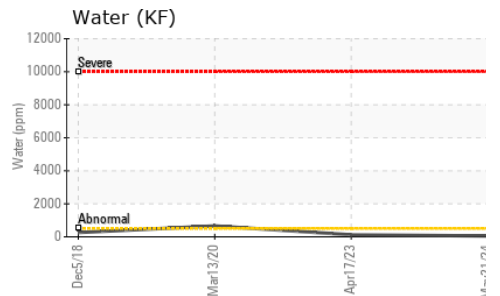
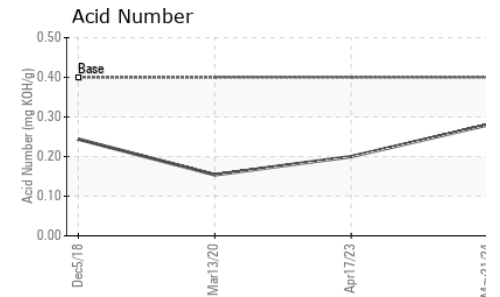
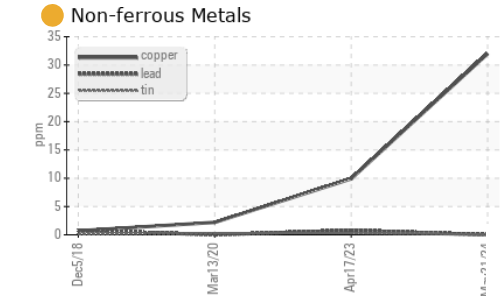
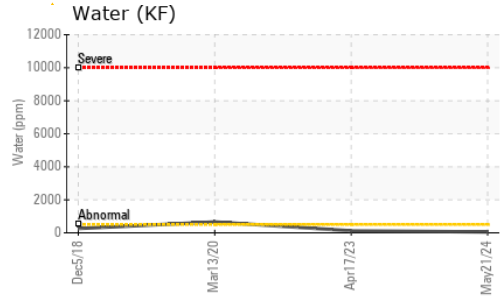
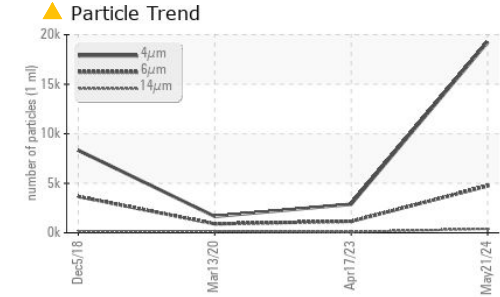
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	0	<1
Barium	ppm	ASTM D5185m	90	0	0	3
Molybdenum	ppm	ASTM D5185m		0	0	<1
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m	90	4	19	11
Calcium	ppm	ASTM D5185m	2	0	0	1
Phosphorus	ppm	ASTM D5185m		1	<1	2
Zinc	ppm	ASTM D5185m		13	28	38
Sulfur	ppm	ASTM D5185m		21113	22291	14912

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	0	<1	<1
Sodium	ppm	ASTM D5185m		3	17	18
Potassium	ppm	ASTM D5185m	>20	<1	6	2
Water	%	ASTM D6304	>0.05	0.005	0.012	▲ 0.066
ppm Water	ppm	ASTM D6304	>500	52	122.6	▲ 660

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		19254	2886	1653
Particles >6µm		ASTM D7647	>1300	▲ 4737	1158	900
Particles >14µm		ASTM D7647	>80	▲ 403	● 86	● 153
Particles >21µm		ASTM D7647	>20	▲ 128	17	● 51
Particles >38µm		ASTM D7647	>4	▲ 12	0	● 7
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>--/17/13	▲ 21/19/16	● 19/17/14	● 17/14

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.4	0.28	0.20	0.154

OIL ANALYSIS REPORT

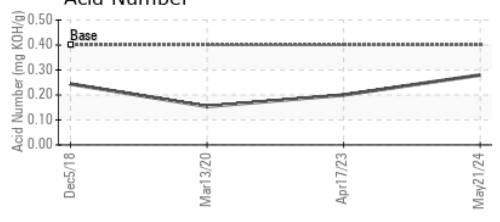
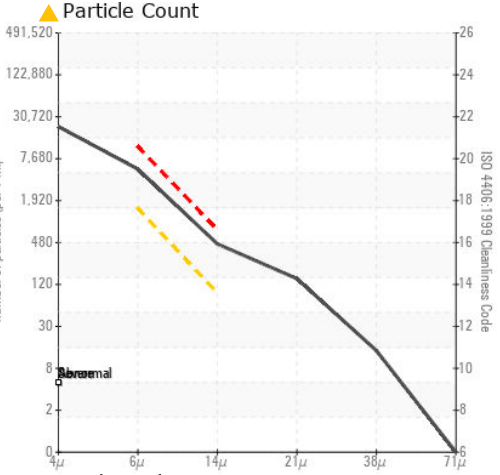
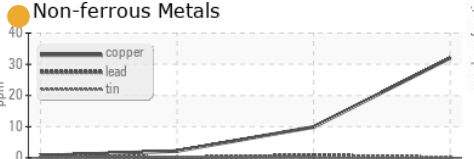


PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	HAZY
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	0.2%
Free Water	scalar	*Visual	NEG	NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	46	43.7	43.9

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA018154 **Received** : 31 May 2024
Lab Number : 06196670 **Tested** : 03 Jun 2024
Unique Number : 11058793 **Diagnosed** : 03 Jun 2024 - Don Baldrige
Test Package : IND 2 (Additional Tests: KF, PrtCount)

DUCTMATE INDUSTRIES
 300 SE 15TH ST
 WAGONER, OK
 US 74467
 Contact: C. PENDLETON
 cpendleton@dmicompanies.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)